

## Eagle Pad Community Outreach Plan

### Location

Extraction Oil and Gas, Inc. (Extraction), a wholly owned subsidiary of Civitas Resources, Inc. is proposing a new oil & gas operation consisting of one well pad with 19 horizontal wells. The new development is located north of E. 120<sup>th</sup> Ave, between Picadilly Road and Gun Club Rd. in Adams County.



### Community Outreach Planning

As a longtime operator in Colorado, local community relationships are extremely important to Extraction. Our Community Outreach plan is comprised of best management practices that are as inclusive as possible to reach any impacted landowners.

On August 12, 2025, Extraction held a pre-application neighborhood meeting for the Eagle Pad Oil and Gas Facility. The meeting was held at the Adams County Government Center in Brighton, CO 80601 which sits approximately 6 miles from the proposed location. The meeting was held from 6:00 p.m. to approximately 7:30 p.m. The invitation was sent to 84 addresses on July 25, 2025, arriving two weeks prior to the event. Five members of the public, a representative from Adams County and five representatives from Extraction were in attendance. Poster boards were on display detailing drilling,



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casing / cementing program, and completions. Handouts were available illustrating proposed drilling and completion layouts and the location once wells are in production. Additionally, there was a GIS station that allowed landowners to zoom in on their own property to see where it is in relation to facilities and other aspects of the project.

Extraction is committed to transparent and consistent community outreach. To that end, we will have a dedicated project website that will be regularly updated to provide news and detailed updates. We will conduct quarterly meetings once the Oil and Gas Facility Permit is approved with Adams County. We will send Activity Notices prior to each phase of development throughout the

To encourage feedback, notices will include several methods for recipients to provide feedback, i.e. the Civitas Community Relations phone number and email address, a postage paid return envelope, or a QR code linked to a response form.

Any feedback from these notices will be logged and brought to the project team for consideration. All areas of feedback will be extensively tracked, including any applicable mitigation measures that are undertaken by the project team. It's our overall goal to incorporate community feedback into operations plans where we can.

### Community Outreach Commitments

In an effort to maintain above-and-beyond contact to area residents, Extraction is committed to the following communication vehicles:

- Quarterly meeting once the Oil and Gas Facility Permit is approved with Adams County
- A website dedicated to the Eagle Pad Project that will provide regular updates
- Activity Notices sent to arrive at least two weeks before each stage of the project
- Several methods of receiving feedback and questions from the public (Community Relations phone number and email, a postage paid return envelope, or a QR code linked to a response form)

### Sample Neighborhood Communication

Extraction is seeking approval from the Adams County Community & Economic Development Department and the Colorado Energy Carbon Management Commission to construct a new oil & gas well pad, off E 120<sup>th</sup> Ave. between Picadilly Rd. and Gun Club Rd. in Adams County.

Safe and responsible operations are at the core of our company values. Above all, our approach is defined by our commitment to working with our communities. You will receive regular updates as the project continues describing the next phase of operations, the estimated timeline and what you might see when that phase begins.

Your feedback is important to us. Please do not hesitate to contact us with questions about this proposed development. You can reach us via email at [CommunityRelations@civiresources.com](mailto:CommunityRelations@civiresources.com) or via phone at 720-279-9842.



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## Site-specific Impact Mitigation and Best Management Practices by Phase

### **Construction**

#### **Site Specific Impact Mitigation**

- Minimal Access Road will need to be constructed.
- Use of construction equipment will use Tier IV engines.

#### **Best Management Practices**

- Freshwater will be used as a dust suppressant, when necessary, on the pad and access road.
- Extraction will conduct additional avian surveys prior to the commencement of construction to ensure no conflicts have developed since the prior survey(s).
- Topsoil stockpiles will be stabilized with appropriate vegetation to provide both short- and long-term stabilization to prevent erosion.
- Tracking controls will be installed at the entrance of the access the road to prevent mud-tracking and associated dust on the public roadway.

### **Drilling**

#### **Site-specific Impact Mitigation**

- Rig will utilize grid power.
- Use of Group III drilling fluids.

#### **Best Management Practices**

- Installation of polyethylene liner on location during drilling operations. The drilling rig and associated equipment (including fluid storage area) will be placed atop the liner.
- Utilize closed-loop, pit-less fluid management system.
- Remove drilling cuttings daily.
- Lighting will be angled in a downward manner and placed at reasonable heights to limit the halo effect off location.
- Sound walls will be utilized around the well pad, although noise compliance can be met without.

### **Completions**

#### **Site-specific Impact Mitigation**

- Extraction will utilize a Tier IV (or equivalent) completions fleet.



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### Best Management Practices

- Extraction will install a polyethylene liner across portions of the location as an isolation barrier. The completion fleet and associated equipment (including fluid storage areas) will be placed atop the liner.
- Use of sealed containers (e.g., sandboxes) for the storage and transportation of sand used in hydraulic fracturing.
- Any gas encountered during flowback will be routed to a gas sales pipeline or combusted with a minimum of 98% destruction efficiency.
- Lighting will be angled in a downward manner and placed at reasonable heights to limit the halo effect off location.
- Sound walls will be utilized around the well pad, although noise compliance can be met without.

### Production

#### Site-specific Impact Mitigation

- Utilize compressed air pneumatics for all pneumatic actuation on location.
- Utilize pipeline for oil and gas takeaway.
- Utilize a pressurized maintenance vessel during maintenance operations.
- Will not install permanent lighting, thereby reducing light pollution and disturbance to nearby receptors during the production period.
- Facility will run on grid power.

### Best Management Practices

- Equipment will be painted “desert tan” (or similar) to avoid creating a marked contrast with the surrounding landscape.
- Wells, facilities, and equipment will be equipped to be shut in remotely.
- Tankless facility.
- Bulk and test facility design reduces number of separators which decreases facility footprint.
- Development of a site-specific SPCC plan.

### Proposed Construction Timeline (subject to change)

- 4Q2026 – Construct Pad and prepare for drilling operations
- 1Q2027 (phase 1) & 3Q2028 (phase 2) – Commence drilling operations
- 3Q2027 (phase 1) & 4Q2028 (phase 2)– Commence completion operations
- 4Q2027 – Complete completion operations, begin production operations

Eagle Oil and Gas Facility  
Conceptual Review / Pre-Application Meeting Summary  
July 23, 2025

Attendees: Adams County - Gregory Dean, Katie Keefe, Laurie Clark, David Dittmer, Megan Grant, Greg Barnes; State Land Board (SLB) – Steve Freese; CO Energy and Carbon Management Commission (ECMC) – Rebecca Treitz, Stephen Schwarz, Dan Sharon, Sarah Brady; CO Department Public Health and Environment (CDPHE) – Tessa Sorensen; Extraction – Jeff Annable, Claude Boiteau, Lilah Huning, John Piekara

Greg Dean began the Conceptual Review by providing an overview of Adams County Oil and Gas Facility (OGF) permitting process. He confirmed with ECMC that this meeting would satisfy the requirements of ECMC rule 301.f.(3), therefore a second pre-application meeting held by ECMC Director will not be necessary. Below is a summary of agency comments, questions and discussions.

ECMC (Treitz, Sharon, Schwarz):

- Asked if we considered Alma (existing Location approximately one mile north) as a possible alternative versus constructing a new site. Extraction responded that Alma wouldn't be technically feasible to reach all of the targeted minerals, and that location is within 2,000' of 3 residential building units (RBUs). Adams County commented that an OGF would also have to be filed if more wells were to be added.
- Asked Extraction to include the entire neighborhood in the E/2 section 2 2S 66W in the area of evaluation for cumulative impacts and address any potential impacts to the temple to the west, in section 35. County and Extraction confirmed the whole neighborhood in E/2 section 2 will be invited to the County required Community meeting in August. Also asked Extraction to discuss any cumulative impacts associated with the auto repair shop, Flatrock Training Center, concrete plant and Denver International Airport in the permits.
- Pointed out the disproportionately impacted community (DIC) spatial data on maps was from 2023 and should be using 2024 data. These maps will be updated.
- Questioned the need for oil tanks and if oil would be piped or hauled. Extraction responded oil will be piped.

- Discussed produced water will likely be trucked, but Extraction is still evaluating.
- Asked Adams County on preferred timing of OGF to state permitting. Adams County is amenable to concurrent permitting but requests their OGF be approved prior to an ECMC hearing.
- Surface Use Agreement (SUA) or oil and gas lease to be used for right to construct? Extraction said will be the SUA.
- Can Extraction utilize a rig on grid power here. Extraction said they are still working on an agreement with the power company, but grid power will be used.

CDPHE (Sorensen):

- Would like Extraction to provide number of RBUs within 1 mile in OGF application.
- Reiterated to use the most current DIC data.
- More questions and conversations will occur during the ECMC consultation.

SLB (Freese):

- No major questions at this time.
- Working to finalize the SUA.

Adams County (Dean)

- Described the alternate site analysis of the three locations evaluated by Extraction. Please note, this is required per Adams County Code but will not have any ECMC rule 304.b.(2).(B) triggers for an alternative location analysis. The following positives and negatives were identified for each location by Adams County:
  - Applicant Desired Location:
    - (+) No residential building units, building unit parcels, schools, or platted residential development within 2,000-feet
    - (+) No HPH within 2,000-feet
    - (+) shortest access road
    - (+) shortest pipeline corridor needed to connect to existing pipelines (2,000-feet)
    - (-) Mapped wetland within 1,000-feet of the edge of disturbance
    - (-) located within the Natural Resource Conservation Overly, a natural resources review would be required.
  - Alternative Location 1:
    - (+) No residential building units, building unit parcels, schools, or platted residential development within 2,000-feet
    - (+) Not within the Natural Resource Conservation Overly
    - (+) No HPH with 2,000-feet

- (-) mapped wetland within 1,200-feet from the edge of disturbance
- (-) additional wetlands within 2,000-feet of this alternative site
- (-) more surface disturbance with longer access road compared to desired location (2,640-feet vs. 500-feet) and longer pipeline route with a road crossing necessary (1-mile vs 2,000 feet)
- (-) Disproportionally Impacted Community within 0.5 mile
- Alternative Location 2:
  - (+) shorter haul route than Alt 1 (1,800 feet vs 2,640 feet)
  - (-) 12 existing RBUs or building unit parcels and 200+ platted residential lots within 2,000-feet (Commerce City)
  - (-) designated wetland within 500-feet to the west of alternative location
  - (-) within the 2025 aquatic native species conservation waters area and HPH area
  - (-) immediately adjacent to a FEMA floodplain near Third Creek
  - (-) longest pipeline route of all presented alternatives (2 miles vs 2,000-feet)
  - (-) proposed access road within the floodplain
  - (-) Mineral development not technologically feasible relative to desired location. This would require an additional facility to be built to access minerals fully
- Provided further information that if the proposed site is chosen to permit Extraction will need to submit the alternate site analysis in the OGF. The OGF will have to go in front of the Board of County Commissioners for a waiver due to being within 2,000' feet of an environmentally sensitive area (national wetlands inventory (NWI) mapped wetland).
- A traffic impact fee will be implemented based on well count and status of pipeline to and from the location. If Extraction requests a lowered fee a study by a 3<sup>rd</sup> party must be submitted.
- Does ECMC want to be invited to the Community meeting? ECMC responded it isn't required but would appreciate the invitation. Extraction will send an invitation to ECMC.

#### Adams County (Dittmer)

- Road improvements will be needed on E 120<sup>th</sup> if used for hauling. Acceleration and/or deceleration lanes may also be necessary.
- SLB will need to dedicate 20' to the County along their property line and E 120<sup>th</sup> Ave.
- Extraction will need to acquire an address for the property for emergency response purposes.
- Will need easements for access to the detention pond to inspect as necessary.

- Layflat water lines cannot be in the County ROW. Crossing ROW is acceptable with appropriate approvals.

#### Adams County (Clark)

- Extraction will need a COR400000 permit from CDPHE. Extraction has secured this permit.
- Traffic impact study will be needed here. Improvements to E 120<sup>th</sup> and possibly Picadilly will be needed based on the study results.
- Will need site plans stamped by a professional engineer.
- Extraction can start the engineering permit at any time.
- Will need an access permit from the County to access the site.

#### Adams County (Grant)

- Need to coordinate with the FAA due to proximity to Denver Airport. Extraction has proactively reached out to the FAA and airport staff about potential requirements.
- Air permitting status in the OGF would be helpful, with a table showing the permits and status.
- This location is in a Natural Resources Conservation Overlay. Resources Review is needed by a qualified professional. Extraction has engaged a third-party firm and no impacts are anticipated.
- The Board of County Commissioners will look for compliance with plans, including but not limited to emergency response plan (ERP), waste management plans, odor plans, light plans, noise plans, spill response plans and others that are required. The ERP must be reviewed and approved by the fire rescue for this area.
- Need to ensure dust is minimized and no mud tracking on County roads.
- In OGF address setbacks to residences, school and childcare facilities. Extraction confirmed none are in the setbacks.
- GUDI and Type III wells confirmed to be greater than the setback required.
- The P&A wells and if flowlines remain should be shown on the site plans.

#### Adams County (Barnes & Dean)

- Be sure to submit Landscape Plan. Address lack of tree planting due to conversations with Denver International Airport to avoid conflict with nesting birds and air travel.
- Future land use is compatible with oil and gas activity. Make a note of this on the OGF.



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## **Eagle Pad Cumulative Impact Analysis**

Section 36, Township 1 South, Range 66 West  
Adams County, CO

**This cumulative impacts analysis was submitted to the ECOM and addresses an area of evaluation that Extraction believes adequately meets the assessment requirements of Adams County Development Standards and Regulations Section 4-11-02-03-03-21 (Cumulative Impacts). Therefore, this cumulative impacts analysis is being submitted as substantially equivalent as permissible under provision “c” of this section.**

## Table of Contents

<b>1.0 Introduction</b> .....	<b>4</b>
<b>2.0 Impacts of Past, Present, or Reasonably Foreseeable Development</b> .....	<b>5</b>
2.1 Past Developments .....	5
2.2 Current Developments .....	5
2.3 Reasonably Foreseeable Future Developments .....	6
<b>3.0 Air Resources</b> .....	<b>7</b>
3.1 Phases of Oil & Gas Development .....	8
<b>4.0 Public Health Impacts</b> .....	<b>16</b>
4.1 Potential Public Health Impact Discussion .....	16
4.2 Cumulative Impact Reduction .....	16
<b>5.0 Water Resources</b> .....	<b>17</b>
5.1 Water Sourcing .....	17
5.2 Groundwater Protection .....	18
5.3 Surface Water Protection .....	19
<b>6.0 Wildlife Resources and Ecosystems</b> .....	<b>21</b>
6.1 Potential Impacts to Wildlife Resources and Ecosystems.....	21
6.2 Environmental Review, Field Studies, and Desktop Analysis .....	21
<b>7.0 Biological and Soil Resources</b> .....	<b>25</b>
7.1 Soil Resources.....	25
7.2 Biological Resources .....	26
7.3 Best Management Practices .....	27
<b>8.0 Public Welfare</b> .....	<b>31</b>
8.1 Noise.....	31
8.2 Light.....	32
8.3 Odor .....	33
8.4 Dust.....	35
8.5 Recreation & Scenic Values.....	35
<b>9.0 Transportation Cumulative Impacts Analysis</b> .....	<b>37</b>
9.1 Description of Planned Transportation Routes.....	37
9.2 Current Traffic Volumes and Future Impacts .....	37
9.3 Traffic Impacts Reduction Best Management Practices.....	38
<b>10.0 Climate Cumulative Impacts Analysis</b> .....	<b>39</b>
10.1 Greenhouse Gas (GHG) Intensity Target Compliance.....	39
10.2 Estimated GHG Emissions .....	39
10.3 GHG Best Management Practices.....	40
<b>11.0 Beneficial Impacts</b> .....	<b>41</b>
Wells to be Plugged and Abandoned .....	41
Facilities or Equipment to be Decommissioned and Removed .....	41
Access Roads, Flowlines, Gathering Lines, or Pipeline Infrastructure to be Removed and Reclaimed .....	41
Additional Information for Cumulative Impacts Evaluation.....	41

Summary .....	41
<b>12.0 Cumulative Impacts Analysis Summary .....</b>	<b>43</b>
<b>13.0 Plain Language Summary .....</b>	<b>45</b>
<b>14.0 Proposed Best Management Practices .....</b>	<b>47</b>
14.1 Public Health Cumulative Impacts Mitigation Measures.....	47
14.2 Construction .....	47
14.3 Drilling .....	47
14.4 Completions .....	48
14.5 Production .....	48
14.6 Noise Mitigation .....	49
14.7 Odor Mitigation.....	50
14.8 Dust Mitigation .....	51
14.9 Transportation BMPs .....	51
14.10 Waste Management.....	52
14.11 Fluid Leak Detection .....	53
14.12 Topsoil Protection .....	53
14.13 Stormwater / Erosion Control.....	54
14.14 Wildlife .....	55
<b>References.....</b>	<b>57</b>
<b>Colorado Department of Public Health and Environment Colorado Enviroscreen Report Summary ....</b>	<b>58</b>
<b>Cumulative Impact Analysis Maps.....</b>	<b>59</b>

## 1.0 Introduction

All human activities carry the potential for cumulative impacts to public health and environment.

Extraction Oil and Gas, Inc. (Extraction) acknowledges the importance of considering cumulative impacts and in accordance with Adams County Development Standards and Regulations Section 4-11-02-03-03-21 and the Oil and Gas Conservation Act, §§34-60-101-143, relevant regulations, including Colorado Energy & Carbon Management Commission (ECMC) Rules 304.c.(19) and 303.a.(5), and has prepared this cumulative impact analysis for the Eagle Pad.

### EXPERT-LED PLANNING FOR MINIMIZED IMPACTS

The Operator assembles teams of specialists in fields such as air quality, wildlife biology, and cultural resources during the planning stages of every project. These experts guide the selection of well and facility locations to first avoid, then minimize, then mitigate potential adverse cumulative impacts from the outset.

### PROJECT LIFECYCLE FOCUS ON IMPACT REDUCTION

The Operator's commitment to responsible development extends throughout the project lifecycle. These subject matter experts remain involved to ensure that potential adverse cumulative impacts are identified, and when possible, avoided entirely. If complete avoidance is not achievable, The Operator prioritizes minimizing and mitigating incremental adverse impacts through various Best Management Practices (BMPs).

### BALANCING DEVELOPMENT WITH ENVIRONMENTAL PROTECTION

The Operator strives to strike a balance between responsible subsurface resource development and minimizing the above-ground footprint of its operations. The development of the Eagle Pad will protect and minimize adverse impacts to public health, safety, the environment, and wildlife resources.

### AREA OF EVALUATION

The Operator, in preparing this cumulative impacts analysis, is utilizing an Area of Evaluation (AOE) of 2.5 miles for water resources and 1 mile for all other resources, as specified in ECMC Rule 315.b.(2)A.i. At the request of the ECMC, the 1 mile buffer was expanded to the west to include an entire neighborhood (all of E/2 Section 2 2S66W) outside 1 mile and the Sikh Temple. These evaluation areas were deemed appropriate during the Pre-Application Meeting held on 07/23/2025.

### DETAILED AVOIDANCE, MINIMIZATION, AND MITIGATION STRATEGIES

This Cumulative Impact Analysis (CIA) outlines the Operator's project plan in detail. It covers facility design, operational procedures, and ongoing maintenance practices, all specifically tailored to avoid, minimize, and mitigate adverse cumulative impacts throughout each development phase. The plan will also provide a roadmap for avoiding, minimizing, or mitigating potential impacts to public health and environment, including the impacts to air quality, water quality, climate, noise, odor, wildlife, and biological resources.

## 2.0 Impacts of Past, Present, or Reasonably Foreseeable Development

This section evaluates historical, existing, and reasonably foreseeable developments within the AOE to assess potential cumulative environmental, social, and infrastructural impacts associated with the development of the Eagle Pad siting. By analyzing past land use trends, current industrial activities, and future projects with documented development timelines, this review identifies interaction effects between the proposed oil and gas operations and other past, present or reasonably foreseeable future activities.

### 2.1 Past Developments

The AOE surrounding the Eagle Pad has historically been utilized for agriculture along with oil and gas exploration and production activities, such as drilling and completion operations. Additionally, low density residential is within the AOE. The majority of the oil and gas pads in the AOE have been reclaimed. Past oil and gas operations in the AOE include the installation of midstream infrastructure such as pipelines and process facilities to minimize impacts from these operations. In addition to the midstream infrastructure there are 14 active wells on 2 different locations that were developed, and 42 wells in the AOE have been plugged. In addition to energy development, the AOE has traditionally supported agricultural uses, notably for growing crops.

These past development activities were evaluated to consider the potential for incremental impacts on the following resources:

*Air Quality:* Emissions from pre-production, production, and maintenance operations. Methane emissions from cattle operations

*Terrestrial Wildlife Habitats:* Habitat fragmentation due to surface disturbance.

*Aquatic Ecosystems:* Proximity to aquatic ecosystems and whether there were any impacts to the ecosystems as a result of spills or runoff into nearby water bodies. Notably, no historical impacts from spills or runoff to aquatic ecosystems were identified in the AOE.

*Soil Conditions:* Soil compaction, disturbance, and potential contamination from industrial activities.

### 2.2 Current Developments

The AOE includes two active oil and gas production pads: one location has 12 producing wells and 1 shut-in well, and the other has a shut-in well. Associated production facilities such as flowlines, storage tanks, and compressors are also present within the area. These operations contribute to incremental impacts to the environment through ongoing activities such as production and maintenance emissions and truck traffic emissions. Agriculture operations add to emissions through farming equipment. Additionally, there is a concrete contractor and a car repair shop within the AOE that both have the potential to negatively affect air quality.

Current developments have an incremental impact on the following resources:

*Air Quality:* Continued emissions from production equipment, farming operations, car repair shop and concrete contractor.

*Terrestrial Wildlife Habitats:* Ongoing habitat disruption due to operational infrastructure.

*Aquatic Ecosystems:* Risks of sediment laden runoff or spills into nearby wetlands or streams.

*Soil Conditions:* Continued soil disturbance from operational activities.

## 2.3 Reasonably Foreseeable Future Developments

An analysis of publicly available information indicates no reasonably foreseeable future developments within the AOE beyond the current activities proposed for the Eagle Pad. Adams County truck traffic is expected to increase due to population growth and expanded oil and gas activities as explained in section 9.2.3. No new permits or planned projects have been identified that would contribute additional impacts to the area in the near future. Section 36 is zoned A-3 (agricultural) by Adams County with no reasonably foreseeable developments on this property planned by either the Colorado State Land Board (SLB) or Adams County. The SLB plans to begin cattle grazing in the near future on this property.

There are approximately 900 acres within the AOE zoned “DIA” by Adams County. Some of the permitted uses in the DIA district include:

- Airline freight and cargo operations
- Rental car facilities
- Food preparation kitchens for airlines
- Maintenance and support services for airport operations

There are currently no open land use cases with Adams County for development on these parcels. Therefore, cumulative impacts are expected to remain consistent with those caused by historical and current developments unless new projects are proposed or initiated in this region.

## 3.0 Air Resources

Ambient air quality is a complex tapestry woven from the interplay of pollutant emissions, regulations, and environmental factors. The quantity and chemical properties of pollutants released locally and upwind may significantly influence air quality. Regulations act as a control mechanism, limiting allowable emissions from various sources. However, the story doesn't end there. Topography, with its mountains and valleys, plays a crucial role in pollutant transport and dispersion, potentially creating pockets of higher concentrations. Meteorological factors like wind speed, air turbulence, and mixing depths further influence how pollutants move and disperse, ultimately affecting their ambient concentrations. Land use, whether agricultural fields, urban landscapes, or forests, also plays a part, impacting how pollutants interact with surfaces and disperse into the atmosphere. This intricate interplay between emissions, regulations, and environmental factors ultimately dictates the air quality we breathe.

A review of the AOE found no current or ongoing air quality monitoring reports conducted by relevant or local government agencies, adjacent Operators that are in exceedance of their NO<sub>x</sub> intensity targets, or any Title V operating permits.

Operator is currently below the NO<sub>x</sub> Intensity Target as of the date of the filing of the proposed Oil and Gas Development Plan (OGDP) for the Eagle Pad and is considered “over-compliant” with ECMC Rule 316.b.

The surrounding area is zoned agricultural and “DIA” and is primarily used for growing crops, grazing, oil and gas mineral development and low density residential. While current air emissions are limited primarily to oil and gas operations, ranching operations, and a vehicle repair shop, the Eagle Pad has the potential to increase air pollutant concentrations. The BMPs outlined in this section for all operational phases aim to minimize and mitigate these impacts. Significant incremental impacts to air quality are not expected, and the Operator will comply with all applicable state and local monitoring requirements. The proposed operations are not anticipated to exceed or contribute to the exceedance of any applicable health standards to residences, businesses or other building units within the AOE.

The ECMC has requested Extraction evaluate impacts from the car repair facility and a concrete business to the west of the proposed location. The concrete business will not be affecting local air quality. This company performs work at residences and businesses, not at this property. The car repair shop may have impacts on air quality contributing to particulate matter, volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). VOCs and HAPs could be emitted from paints and solvents, and particulate matter could be airborne from sanding and welding.

This section addresses in detail the potential air quality impacts associated with each development phase associated with the construction of the Eagle Pad. The Cumulative Impacts Data Evaluation Repository (CIDER) provides a comprehensive record of estimated emissions (“Bottom Up” estimates) for each phase. Additionally, the Form 2B accompanying this OGDP details the estimated air emissions specifically generated by this location. This combined information allows for a thorough assessment of potential incremental impacts to air quality.

## 3.1 Phases of Oil & Gas Development

The following section describes the life cycle of a well pad. The Pre-Production Operations phases (i.e., construction, drilling, and completions) comprise a much shorter time than the Production Operations phase and subsequent abandonment.

### 3.1.1 PRE-PRODUCTION OPERATIONS

#### 3.1.1.1 CONSTRUCTION

##### *Timing and Description*

Well pad construction will take place over an estimated period of approximately six (6) weeks and will consist of the construction of a graded, level surface for wells and support equipment.

During the construction phase of the pad, there will be limited air emissions. Emissions will be limited to those resulting from the use of earth-moving equipment (i.e., internal combustion engines) and dust generated from construction activities and vehicular traffic. These types of emissions are consistent with those generated during agricultural activities or other land development activities.

##### *Cumulative Impact Reduction*

The siting of this pad will allow for the following cumulative impact reductions:

- Utilization of a short access road directly off E. 120<sup>th</sup> Ave to the pad avoids the need for greater disturbance by constructing a longer road from an existing access point to the east on the parcel.
- The presence of an existing two-phase pipeline service near the proposed site helps minimize potential air quality impacts. This established infrastructure eliminates the need to construct a completely new midstream line, thereby preventing additional emissions and avoiding further earth disturbance that would otherwise be required for the installation of new midstream equipment.

##### *Enhanced Systems and Practices*

- The equipment used to build the pad will be Tier IV emission rated.
  - This signifies the equipment meets the strictest standards for off-road diesel engines, minimizing air pollution from construction activities.

##### *Best Management Practices*

Additionally, the Operator will utilize the following standard best practice procedures to minimize incremental impacts associated with the construction phase of pre-production activities.

- The Operator will utilize freshwater on the access road to minimize dust.
  - **Impact Minimization Description:** Helps suppress dust by keeping the road surface moist, which reduces the amount of dust particles becoming airborne. This practice minimizes airborne particulate matter emissions, thereby minimizing impacts to air quality in the surrounding area.
- Mud-tracking devices will be incorporated on the road access before the apron.

- **Impact Minimization Description:** Prevents mud from being carried onto road surfaces. This reduces dust generation caused by vehicle movement, thereby minimizing airborne particulate matter and thereby minimizing impacts on air quality in the surrounding area.
- Speed will be limited to 20mph as required by Extraction’s posted signs on the private access roads leading to and from the location.
- **Impact Minimization Description:** Reduces vehicle-generated dust by minimizing the disturbance of road surfaces. This reduction in dust helps minimize emissions of particulate matter, thereby minimizing impacts on air quality in the surrounding area.

### 3.1.1.2 DRILLING

#### *Timing and Description*

This phase encompasses moving in a drilling rig and associated ancillary equipment for the purposes of drilling the proposed wells from surface to the proposed total depth. Each well usually takes 4 to 6 days to drill to total depth. During drilling operations, air emissions can be summarized in three (3) categories:

- Emissions resulting from the use of the associated drilling support equipment (i.e., front end loader, crane, etc.),
- Emissions resulting from drilling operations (i.e., mud break-out, pipe connections, etc.), and
- Dust emissions generated from vehicular traffic.

#### *Enhanced Systems and Practices*

The Operator will utilize the following Enhanced Systems and practices to minimize incremental impacts to air resources that are associated with the drilling phase.

- All drill rig engines and/or turbines with a manufacturer’s design rate greater than or equal to 50 horsepower will be powered by grid power or non-fossil fuel generated power
  - **Impact Minimization Description:** Reduces air quality impacts by minimizing emissions of pollutants typically associated with fossil fuel combustion. This approach supports cleaner operations and helps lower the release of particulate matter and greenhouse gases near the drilling site.
- The Operator will cover trucks transporting drill cuttings.
  - **Impact Minimization Description:** Minimizes air quality impacts by preventing dust, particulate matter, and potential VOC from becoming airborne during transport. This practice reduces the release of contaminants into the air, supporting cleaner air around the site and along the haul route.
- The Operator will employ pipe cleaning procedures when removing drill string from the well.
  - **Impact Minimization Description:** Minimizes the exposure of VOC to the atmosphere, thereby reducing emissions and minimizing air quality impacts.

- The Operator will use International Oil and Gas Producers Group III drilling fluid or a drilling fluid that has less than 0.5% total aromatic content and a polycyclic aromatic hydrocarbon (PAH) content less than 0.001%
  - **Impact Minimization Description:** This low-aromatic drilling fluid minimizes particulate matter generation and odorous compound releases, resulting in cleaner air quality around the drilling site. By virtually eliminating PAHs and reducing aromatic compounds by up to 90% compared to conventional drilling fluids, this BMP provides substantial protection for local air quality and public health.

#### *Best Management Practices*

The Operator will utilize the following best management practice and site-specific equipment to reduce cumulative impacts associated with the drilling stage of development.

- The Operator will utilize a closed loop, pit-less fluid management system.
  - **Impact Minimization Description:** Reduces air quality impacts by containing drilling fluids within sealed tanks, eliminating open pits that emit VOCs and dust. This system minimizes odors and airborne contaminants, ultimately minimizing impacts to air quality in the surrounding area.
- The Operator will remove drill cuttings daily.
  - **Impact Minimization Description:** Minimize air quality impacts by preventing the accumulation of materials that can potentially emit VOCs.

#### 3.1.1.3 COMPLETIONS

During the completion stage, the wellbore and target geological formation are carefully prepared and optimized to facilitate efficient oil and gas production. This critical phase involves several key activities:

*Hydraulic Fracturing:* A process that injects fluid at high pressure to create fractures in the rock formation, allowing trapped oil and gas to flow more easily.

*Wellbore Cleanup (drill-out, tube-up):* Removing drilling debris and installing production tubing within the wellbore to transport oil and gas to the surface.

*Well Flowback:* Recovering fluids used during hydraulic fracturing and initial wellbore cleanup.

#### HYDRAULIC FRACTURING

##### *Timing and Description*

Hydraulic fracturing, or stimulation of the reservoir, utilizes high-pressure fluid injected through hydraulic pumps and portable equipment to create cracks in rock formations around the wellbore, enhancing oil and gas flow. To optimize efficiency during this process, wells are stimulated in groups of three to four, but each undergoes individual fracturing in multiple stages lasting approximately eleven days per group (depending on wellbore length and fracturing parameters).

The Operator is committed to minimizing air quality impacts. Potential emissions during completion operations originate from three sources:

- Emissions resulting from internal combustion engines that power hydraulic pumps and other associated equipment.
- Emissions resulting from wellhead and related operations (i.e., swapping equipment, wellbore preparation between stages, etc.).
- Dust emissions generated from the use of sand and vehicular traffic.

#### *Enhanced Systems and Practices*

The Operator will utilize the following Enhanced Systems and practices to minimize incremental impacts to air resources that are associated with the Hydraulic Fracturing phase.

- The Operator will utilize Tier IV equivalent or better rated completion equipment.
  - **Impact Minimization Description:** Minimizes air quality impacts by utilizing more efficient engines that emit less emissions of nitrogen oxides (NOx), particulate matter, and other pollutants.
- The Operator will transport fresh water for completion operations using lay-flat pipelines, significantly reducing truck traffic and the associated emissions and dust generation.
  - **Impact Minimization Description:** Minimizes air quality impacts by reducing truck traffic, emissions, and dust generation.
- The Operator will use sand management technology and/or procedures including, but not limited to, closed-loop sandbox technology to reduce the generation and release of silica dust at the Oil and Gas Location.
  - **Impact Minimization Description:** Minimizes air quality impacts by reducing the generation and release of silica dust.

#### *Best Management Practices*

The Operator is committed to minimizing air quality impacts throughout hydraulic fracturing operations by utilizing the following Best Management Practices:

- The Operator will employ "block and isolate" practices whenever possible on equipment, piping, and tank connections to prevent leaks and fugitive emissions.
  - **Impact Minimization Description:** Minimizes air quality impacts by reducing the likelihood of unintended releases of gases or vapors, thereby preventing fugitive emissions and protecting local air quality.

## DRILL-OUT & TUBE-UP

### *Timing and Description*

The drill-out process utilizes a coiled-tubing unit (CTU) to drill out the plugs that were installed in the horizontal wellbore following each stage of the well stimulation. It takes between 3-4 days to drill out a horizontal well in the DJ Basin. Throughout this process, the wellbore is overbalanced whereby the pressure within the wellbore is greater than the reservoir pressure which prevents the reservoir fluids and gases from entering the wellbore. It is possible that minor amounts of reservoir fluids will be entrained in the wellbore fluid and brought to the surface.

Once all the plugs have been drilled out from the horizontal wellbore, production tubing will be installed. Production tubing can usually be installed in one (1) day for a single well. Installation of production tubing is done when the wellbore is pressurized thereby requiring specialized equipment.

It has been the Operator's experience that these practices employed during drill-out and tube-up result in negligible emissions into the atmosphere.

### *Best Management Practices*

The Operator will utilize the following BMPs to reduce cumulative impacts associated with the drill-out and tube-up process.

- The Operator will employ the best practice of "block and isolate" whenever possible on equipment, piping, and/or tank connections.
  - **Impact Minimization Description:** Minimizes air quality impacts by reducing the likelihood of unintended releases of gases or vapors, thereby preventing fugitive emissions and protecting local air quality.
- Any fluids or gases generated during this phase will be routed to an emissions-controlled tank (i.e., oil, water) or to a combustion device (i.e., gas) with a destruction efficiency of at least 98%.
  - **Impact Minimization Description:** Minimizes air quality impacts by capturing and containing volatile emissions, preventing their direct release into the atmosphere. The controlled combustion of gases effectively destroys harmful pollutants, including VOCs and hazardous air pollutants (HAPs).

## WELL FLOWBACK

### *Timing and Description*

This process typically takes between 30 to 60 days before the temporary equipment is removed and the well produces primarily oil and gas with small amounts of produced water. Flowback is essential to bring a well into production. Here's what happens during this stage:

*Temporary Equipment:* Sand knockouts (SKOs) and a frac tank are installed to assist in "cleaning up the well."

*Well Cleanup:* The well produces large amounts of water along with small amounts of sand, oil, and gas. The SKOs remove sand from the production stream before it enters the separator.

*Emptying the SKOs:* Just like a full kitchen garbage can, SKOs need to be emptied periodically. Compressed air blows the sand into an open-top tank for temporary storage. The open-top tank is then loaded onto a truck and hauled to an approved disposal facility.

*Transition to Production:* Once the well is clean, temporary equipment is removed, and the well primarily produces oil and gas with minimal water.

#### *Cumulative Impact Reduction Best Management Practices*

The Operator will utilize the following measures to minimize incremental impacts to Air Resources in the area.

- The well stream will be routed through permanent production equipment, and all salable produced gas is directed into a sales pipeline. This eliminates the need for venting or flaring salable gas.
  - **Impact Minimization Description:** Minimizes air quality impacts by eliminating venting or flaring of gas to the atmosphere ultimately minimizing the generation of VOCs, greenhouse gases, and HAPs.

### 3.1.2 PRODUCTION OPERATIONS

#### *Timing and Description*

This is the final and longest phase of the well pad's operation and can continue for as long as 30 years. During this phase, oil and gas are continuously produced from the wells and separated into individual components for transport. Here's a breakdown of the process:

*Three-Phase Separation:* The well stream, a mixture of oil, gas, and water, is separated into these three individual components.

*Gas Routing:* Once separated from liquids, the captured natural gas will travel to the new gas sales pipeline installed before production begins. To meet the pressure requirements for transport in midstream pipelines, the gas may sometimes need compression. This compression often occurs alongside additional separation processes that squeeze more gas out of the liquid mixture extracted from the well, improving overall natural gas recovery efficiency.

*Oil Storage and Transport:* Separated oil is then sent to tanks, stored briefly then directed to a dedicated pipeline, eliminating emissions associated with truck traffic.

*Water Handling:* Produced water is then sent to onsite storage tanks and then trucked to the nearest commercial water location.

*Automated Monitoring:* The entire production process is continuously monitored by an automated system that tracks parameters like pressure, temperature, flow rates, and more. This 24/7 monitoring allows for quick identification and response to any potential issues. If something deviates from acceptable ranges, alarms are triggered, and personnel are notified. Depending on the problem, Operators can take steps to isolate it, redirect the process, or shut down wells, equipment, or the entire facility to prevent emission events and protect public health and safety.

#### *Enhanced Systems and Practices*

The Operator will utilize the following enhanced systems and practices to minimize incremental impacts to air resources in the area:

- The Operator will have adequate and committed pipeline takeaway capacity for all produced oil and gas.
  - **Impact Minimization Description:** Minimizes air quality impacts by reducing emissions associated with oil loadout and truck traffic through adequate and committed pipeline takeaway capacity for all produced oil and gas.
  - **Impact Minimization Description:** This will minimize the potential of soil and surrounding area from being contaminated with PFAS in the unlikely event of a fire.
- If PFAS Chemical-containing foam is unavoidably used at a location, the Operator will:
  - Properly characterize the site to determine the level, nature, and extent of contamination.
  - Perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions; and
  - Properly capture and dispose of PFAS Chemical-contaminated soil and fire and flush water.
    - **Impact Minimization Description:** These measures collectively minimize adverse impacts to public health and the environment by preventing PFAS chemicals from contaminating water, soil, and habitat. Proper disposal ensures long-term environmental protection.
- The Operator will use grid power or onsite solar power for all permanent powered production equipment onsite, excluding external combustion sources
  - **Impact Minimization Description:** Powering permanent production equipment with grid—while excluding external combustion sources—demonstrably lowers air pollution, reduces greenhouse gas emissions, minimizes noise and odor impacts, and supports the protection of wildlife and biological resources.

For ozone mitigation on Colorado Department of Public Health and Environment (CDPHE)-forecasted high ozone days, the Operator will, as practicable:

- Eliminate use of VOC paints and solvents.
  - **Impact Minimization Description:** Avoiding volatile organic compound (VOC) paints and solvents during these days reduces emissions of ozone precursors, helping to lower ground-level ozone formation and protect public health.

- Minimize vehicle and engine idling.
  - **Impact Minimization Description:** Reducing engine idling decreases emissions of NOx and VOCs that contribute to ozone pollution, improving air quality for nearby communities and sensitive populations.
- Minimize truck traffic and worker traffic.
  - **Impact Minimization Description:** Limiting traffic reduces the release of ozone-forming pollutants and particulate matter, as well as dust that can exacerbate ozone impacts, minimizing local air pollution and exposure.
- Postpone the refueling of fleet or personal transit vehicles on Location.
  - **Impact Minimization Description:** Deferring refueling activities reduces potential VOC emissions from fuel vapors, helping to control ozone precursor emissions during vulnerable ozone periods.
- Suspend or delay the use of non-essential fossil fuel powered ancillary equipment (excluding safety-critical or site/Well integrity-critical operations); and
  - **Impact Minimization Description:** Temporarily halting non-essential fossil fuel equipment use lowers NOx and VOC emissions, thereby mitigating ozone formation and improving air quality.
- Reschedule non-essential operational activities such as preventative maintenance and tank cleaning.
  - **Impact Minimization Description:** Delaying these activities prevents additional emissions of ozone precursors, reducing the cumulative impact on air quality and public health during sensitive ozone forecast periods.

### *Best Management Practices*

The Operator will utilize the following Best Management Practices to minimize incremental impacts to air resources in the area:

- The Operator will utilize vapor recovery units (VRUs) during maintenance operations, eliminating gas that would otherwise be vented to the atmosphere during maintenance operations.
  - **Impact Minimization Description:** This practice eliminates the venting of gas to the atmosphere during maintenance, thereby reducing emissions of methane and VOCs. It helps protect air quality and public health by controlling harmful air pollutants and minimizing climate impacts associated with greenhouse gas release.
- Wells, facilities, and equipment will be equipped to be shut-in remotely.
  - **Impact Minimization Description:** Remote shut-in capability allows for rapid response to operational issues, minimizing unintentional releases of gases or fluids. This reduces potential air and water contamination, lowers environmental risks, and enhances overall site safety and operational control.
- The Operator will utilize a bulk separator/three phase meter design that minimizes permanent disturbance and permanent production emissions.
  - **Impact Minimization Description:** This design reduces the physical footprint of production equipment, limiting habitat disruption and surface disturbance. Additionally, it lowers ongoing emissions by optimizing separation processes, contributing to improved air quality and reduced environmental impact throughout the lifecycle of operations.

- Operator will utilize Oil Tank VRUs (Blowers).
  - **Impact Minimization Description:** Captures gases typically vented from oil storage tanks and directs them either to a combustion device with 98% efficiency or into a gas sales pipeline.

## 4.0 Public Health Impacts

### 4.1 Potential Public Health Impact Discussion

Colorado has some of the nation's leading air regulations that seek to address public health concerns related to air quality impacts from oil and gas development. These regulations are a result, in part, of scientific studies, and continued operational advancements. The CDPHE conducted air monitoring near oil and gas sites in 2017, finding pollutant concentrations below established safe thresholds. However, in 2019 CDPHE conducted dispersion modeling that suggested the potential for hypothetical health risks under rare meteorological conditions and with technologies no longer permitted at 2,000 feet from operations.

To mitigate potential risks to public health, the Operator employs advanced emission-reduction technologies, including closed-loop flowback systems that eliminate open tanks and reduce volatile organic compound (VOC) emissions by 95% during pre-production. Independent air quality assessments, such as the 2019 collaboration with CTEH, LLC, confirmed compliance with health guidelines from the Agency for Toxic Substances and Disease Registry (ATSDR). Further validation comes from the Colorado Air Monitoring Mobile Lab (CAMML), which independently verifies air quality data during operations.

The proposed Eagle Pad has **no public health receptors** (e.g., homes, schools) within 0.5 miles, and fifty-three (53) rural residences between 2,000 feet and 1 mile, substantially minimizing community exposure risks.

### 4.2 Cumulative Impact Reduction

The enhanced systems and practices and BMPs proposed for the Eagle Pad combined with the proposed monitoring below and the absence of residential receptors within half a mile of the pad surface, effectively eliminate any potential public health impacts associated with this development.

*Pre-Production Monitoring:* Continuous air monitoring will be implemented around the well pad even before construction operations begin.

- **Impact Minimization Description:** Implementing continuous air monitoring around the well pad prior to the start of construction operations establishes baseline air quality data. This proactive practice enables accurate differentiation between existing ambient conditions and potential operational emissions. Additionally, continuous monitoring allows us to detect and quantify any emissions generated in real time, supporting timely mitigation and adaptive management to minimize adverse impacts.

*Ongoing Monitoring:* Air monitoring will continue for the life of the wells, providing data to ensure our operations are not creating adverse cumulative impacts on the surrounding area. The terms and conditions of the extended monitoring exceeding state requirements will be agreed upon with Adams County.

- **Impact Minimization Description:** This sustained monitoring enables detection of any cumulative air quality impacts from the highest volume production time, ensuring early identification and mitigation of potential adverse effects.

*Regulatory Oversight:* The air monitoring plan will be submitted to the CDPHE and Adams County for review and approval, ensuring it meets all regulatory requirements.

- **Impact Minimization Description:** Ensures that monitoring meets all regulatory standards, providing effective oversight of emissions and air quality. This regulatory oversight helps identify and address potential air quality impacts promptly, ensuring compliance and protection of public health.

## 5.0 Water Resources

There are above and below ground mechanisms by which hydraulic fracturing activities have the potential to impact water resources. These mechanisms include water withdrawals in times of, or in areas with, low water availability; spills of hydraulic fracturing fluids or produced water; below ground migration of liquids and gases resulting from poor wellbore construction practices; and inadequate treatment and discharge of wastewater.

The Operator has not identified any past, present, or reasonably foreseeable impacts that have or will cause contamination to the surface or ground water sources.

### 5.1 Water Sourcing

Water is a major component of most hydraulic fracturing operations. It typically makes up more than 90% of the mass injected into a well. The water used in hydraulic fracturing activities represents less than 1% of total annual water use and consumption in the United States. Coordination with other water users is necessary to minimize potential conflicts with end users – i.e., agriculture, irrigation, etc.

#### 5.1.1 WATER MINIMIZATION

The Operator prioritizes water conservation in its completion operations and has changed its wellbore spacing strategy. The current methodology has helped minimize impacts that result from water acquisition by using fewer wells but maximizing the resource development of the wells.

### 5.1.2 WATER RECYCLING

The Operator is committed to reducing its environmental impact and is actively exploring innovative water recycling technologies to achieve this goal. Efforts are focused on determining whether these technologies can be implemented in a sustainable manner while complying with state and local regulations. Currently, the Operator is assessing the feasibility of incorporating water recycling at the proposed location, with an emphasis on minimizing secondary cumulative impacts from transporting recycled water to the site. A finalized plan will be submitted either prior to the hearing or through a Form 4 sundry to maintain compliance with the relevant rules and regulations.

## 5.2 Groundwater Protection

Groundwater is a vital resource, and its protection is paramount during oil and gas well drilling operations. Colorado mandates a strict casing and cementing programs for all wells drilled within the State. This ensures isolation of the wellbore from usable groundwater sources.

The following types of groundwaters require isolation from the wellbore and all potential flow zones:

- Domestic Use-Quality,
- Agricultural Use-Quality,
- Surface Water Quality Protection,
- Potentially Usable Quality pursuant to 5 C.C.R. §1002-41,
- Groundwater that has not been classified by statute but exhibits total dissolved solids less than 10,000 mg/l.

The Operator uses steel surface casing that is set to a depth at least fifty (50) feet below the base of the deepest known groundwater subject to the above-captioned criteria. Surface casing is usually set at 2500' below ground surface and typically correlates with the regional base of the Fox Hills, or the base of the Upper Pierre aquifer (or its correlative geologic unit). Once the casing is set, it is fully cemented in place using the displacement method thereby placing specialized cement from the bottom of the 9-5/8" casing back to surface.

The ECMC reviews all Form 2 (Permit to Drill) Applications for adequate surface casing setting depths and cementing programs based on the following factors:

- Subsurface ground water maps prepared by the State Water Engineer,
- Offset well data,
- All available water well data.

Offset wells are all existing wells within 1,500 feet of the completed portions of the proposed wells. The Operator and the ECMC take further steps to ensure groundwater protection by reviewing these offset wells. This review confirms that the offset wells have sufficient protections in place, including:

- Proper plugging and abandonment of wells no longer in use.
- Adequate casing and cementing of all other existing wells.

Prior to operations, the Operator will check for depth of ground water and soil suitability. The estimated

depth of the water table is more than 40ft. This estimate is based on data from the water wells in the vicinity of the Eagle Pad.

### 5.3 Surface Water Protection

Oil and gas development can pose risks to surface waters through accidental spills or increased soil erosion. The Operator prioritizes protecting surface water and implements several mitigation measures. The Operator enlisted biologists and hydrologists to conduct a comprehensive site assessment. This assessment included a detailed field survey within a 500-foot radius and a broader desktop survey covering a 2.5-mile radius of the area surrounding the proposed location for Eagle Pad. A number of water features were notated within 2.5 miles the nearest of each feature listed below. Please see the following page for further information.

#### Nearest Water Features within the Area of Evaluation

<u>Feature Type</u>	<u>Nearest to WPS</u>
Intermittent Stream	1,181 feet east - downgradient
NWI Freshwater Pond/NHD Stream (Intermittent)/ Potential Wetland	1,133 feet southeast - upgradient
NHD Stream (Intermittent) / NWI Riparian Corridor / 100-Yr Floodplain	8,167 feet southwest - downgradient
NHD Stream	10,644 feet northeast - downgradient
Barr Lake / NWI Riparian Corridor / NWI Wetland	10,185 feet northwest - downgradient

These water bodies support uses for aquatic life, raptors, recreation, and agriculture. There are no immediate impairments listed within the AOE. Potential impacts from pre-production and production activities include sedimentation from earthwork near intermittent streams, spills into wetlands from accidental releases of hydrocarbons or produced water.

The potential for impacts or contamination to the upgradient nearby NWI Freshwater Pond/NHD Stream (Intermittent)/ Potential Wetland is low due to the inability for a potential leak to flow uphill. In addition to the downgradient intermittent stream being over 1,000 feet away, minimizing potential impacts, the Operator has developed a Stormwater Protection Plan and robust Fluid Leak Detection Plan which are included with Form 2A. These plans specify the actions that will be taken to prevent sedimentation and, should a leak occur, to contain it and prevent it from traveling beyond the site.

Beyond these plans, the Operator intends to implement the following robust procedures throughout the development phase to further minimize potential impacts on nearby surface waters.

#### 5.3.1 PREVENTING SPILLS AND LEAKS

The Operator prioritizes preventing spills and leaks through various containment measures. During drilling and completion stages, a large polyethylene liner isolates the drilling rig, equipment, and storage areas. This liner captures any potential spills, preventing them from reaching the ground.

#### 5.3.2 ENGINEERED CONTAINMENT FOR PRODUCTION FACILITIES

For the production phase, the Operator will utilize two produced water tanks and four in its production facility minimizing the potential for leaks and spills and will utilize a robust, engineered containment system around the produced water tanks and the separators. This system features post-driven perimeter walls with a geotextile base, all coated with a durable polyurea liner. This liner is resistant to punctures, UV rays, weather extremes, and common oil and gas chemicals.

- These practices minimize the risk of contamination to groundwater and surface water, safeguards biological resources and wildlife habitats, and upholds air quality by preventing volatilization of production fluids, thereby supporting public health and water resources.

#### 5.3.3 SPILL RESPONSE PLAN

Despite these preventative measures, the Operator recognizes the possibility of accidental spills. A comprehensive spill response plan ensures a swift and effective response. In case of a release, immediate notification goes to designated personnel who initiate a series of response procedures. These procedures prioritize stopping the discharge at the source whenever safe to do so. Spill response resources are then deployed to contain the spill, assess the impact, and develop a clear path for cleanup and disposal. The Operator maintains a comprehensive record of all spills, including documentation, lab analyses, and proper waste disposal.

- **Impact Minimization Description:** The comprehensive spill response plan ensures rapid containment and cleanup of accidental releases, prevention of contaminants from entering and degrading groundwater and surface water quality. By stopping spills promptly, deploying appropriate resources, and properly managing cleanup and disposal, the plan protects aquatic ecosystems, safeguards water resources, and preserves water quality.

#### 5.3.4 STORMWATER SEDIMENTATION AND PROTECTION

The Operator prioritizes preventing negative impacts on nearby surface water features through a comprehensive stormwater management plan. This plan incorporates sediment controls to prevent runoff laden with sediment from reaching these water bodies.

- **Impact Minimization Description:** The comprehensive stormwater management plan employs sediment controls to prevent sediment-laden runoff from reaching nearby surface water bodies, thereby protecting water resources.

For more specific details on the stormwater control measures planned for this site, please refer to the Stormwater and Erosion Control Plan.

In summary, the Operator prioritizes protecting surface water resources at the Eagle Pad through preventative measures and a robust spill response plan.

## 6.0 Wildlife Resources and Ecosystems

The proposed site is situated within agricultural rangeland in unincorporated Adams County. This property has a long-standing history of use and management as agricultural rangeland, and such management practices will be maintained.

### 6.1 Potential Impacts to Wildlife Resources and Ecosystems

#### 6.1.1 TERRESTRIAL WILDLIFE RESOURCES AND ECOSYSTEMS

Oil and gas operations can disrupt wildlife and ecosystems in several ways:

*Habitat Fragmentation and Loss:* Construction of well pads, roads, and pipelines can fragment and diminish wildlife habitat.

*Disturbance:* Noise, light pollution, and human activity can stress wildlife, affecting their breeding, feeding, and migration patterns.

*Spills and Leaks:* Accidental spills of produced water, oil and completion fluids can contaminate water sources and soil, harming wildlife and their food sources.

These impacts can affect a wide range of wildlife, including birds, mammals, reptiles, amphibians, and insects.

#### 6.1.2 AQUATIC WILDLIFE RESOURCES AND ECOSYSTEMS

Oil and Gas operations have the potential to impact aquatic wildlife and ecosystems in the following ways:

*Water Contamination:* Spills of oil, completion fluids, or produced water can pollute rivers, streams, wetlands and lakes. These contaminants can be toxic to fish, invertebrates, and other aquatic life, disrupting food chains and causing population decline.

*Sedimentation:* Activities like road construction and well pad clearing can increase erosion, leading to increased sediment runoff into waterways. This sediment can smother fish eggs and other aquatic life, reducing oxygen levels in the water and harming overall ecosystem health.

### 6.2 Environmental Review, Field Studies, and Desktop Analysis

#### 6.2.1 TERRESTRIAL WILDLIFE REVIEW, FIELD STUDIES, AND DESKTOP ANALYSIS

A robust environmental review was completed by a third-party consultant during the initial planning phase for the proposed location. Based on desktop analyses and field investigations, it was determined that the proposed site is not located within a mapped Colorado Parks and Wildlife (CPW) High Priority Habitat (HPH) or within suitable habitat for raptors and migratory bird nesting. No other potential conflicts were identified regarding the presence State/Federal Sensitive, Threatened, or Endangered species. More information regarding the environmental review and analysis can be found in the Wildlife Protection Plan attached to the Form 2A.

*Eagles:* Field surveys found no bald eagle or golden eagle nests nor nesting activities within ½ mile of the proposed site expansion.

*Burrowing Owls:* Nest was identified within 1/2 mile of the proposed site.

*Other Raptors:* A Swainson's hawk nest was observed within 1/4 mile of the proposed site.

*Migratory Birds:* No nests nor nesting activities were observed during the field assessment. Suitable migratory bird nesting habitat is present near the proposed site.

#### 6.2.2 AQUATIC WILDLIFE REVIEW, FIELD STUDIES, AND DESKTOP ANALYSIS

A review of the area surrounding the proposed location, including desktop analysis and field investigations, identified no mapped potential aquatic habitats within 1,000 feet, and two (2) potential aquatic habitats within 1,200' of the WPS. This feature is depicted on the Hydrology Map attached to the Form 2A.

*Intermittent Stream:* Three intermittent streams that could feed into Barr Lake.

#### 6.3 CUMULATIVE IMPACTS ANALYSIS

The AOE for wildlife resources and ecosystems does not encompass any HPH, therefore any existing facilities are also outside of HPH. The nearest HPH to the AOE is to the southwest of the WPS and is aquatic native species conservation waters associated with Third Creek.

#### 6.4 BEST MANAGEMENT PRACTICES

##### *Pre-Construction Wildlife Surveys Planned*

Based on the findings, a consulting biologist recommended additional wildlife surveys before operations begin. These surveys will focus on nesting raptors and other migratory birds (details in the Wildlife Mitigation Plan). The Operator will incorporate these surveys into pre-construction planning and deploy a biologist before construction starts.

- **Impact Minimization Description:** The incorporation of additional wildlife surveys focusing on nesting raptors and migratory birds, as recommended by the consulting biologist, allows the Operator to identify sensitive species and habitats before construction begins. By deploying a biologist during pre-construction planning, this practice minimizes disturbances to wildlife and supports the protection of vulnerable avian populations

##### *Active Nest Management*

If active nests are discovered, the Operator will collaborate with the relevant agency to determine appropriate next steps, potentially including site-specific mitigation measures.

- **Impact Minimization Description:** If active nests are discovered, collaborating with the relevant agency to determine appropriate next steps, including potential site-specific mitigation measures, ensures that sensitive wildlife—particularly nesting birds—are protected from disturbance. This cooperative approach helps safeguard critical reproductive periods.

#### *Land Management and Reclamation*

The Operator's weed management and interim reclamation plans aim to minimize disruption to existing vegetation and preserve topsoil. Interim reclamation, involving replanting with the input of the landowner, will occur shortly after production begins. The goal is to revegetate the area in a way that matches its original conditions and supports continued agricultural use of the land.

- **Impact Minimization Description:** The Operator's weed management and interim reclamation plans minimize disruption to native vegetation and preserve topsoil, supporting habitat stability for local wildlife. Replanting with landowner input shortly after production helps restore native plant communities, maintaining habitat quality and connectivity that sustain biological resources and protect wildlife populations.

#### *Habitat Disturbance Minimization*

The Operator designed the project to minimize its footprint. Extraction has worked cooperatively with the surface owner, Colorado State Land Board, in siting the Eagle location and access therefore minimizing disturbance to the extent practical.

- **Impact Minimization Description:** By siting the Eagle location in this portion of the property, the Operator minimizes any habitat fragmentation, thereby protecting local wildlife by preserving critical habitat nearby and reducing displacement. Additionally, installing full wrap sound walls during operations mitigates noise and light disturbances to any wildlife present in the area.

#### *Spill Prevention Measures*

The Operator will utilize its robust set of spill protection and response measures to aid in preventing potential discharges of fluids off location. In the unlikely event of a spill on location, The Operator has implemented BMPs to capture discharged fluids before reaching any surface waters (*see Water Resources section*).

- **Impact Minimization Description:** The Operator's spill protection and response measures prevent the release of fluids off location, thereby reducing the risk of contamination to wildlife habitats and minimizing exposure of animals to harmful substances. In the event of a spill, capturing discharged fluids before they reach surface waters helps preserve aquatic ecosystems and maintains safe, healthy environments for local wildlife and biological resources.

#### *Stormwater Sedimentation and Protection*

The Operator prioritizes preventing negative impacts on nearby surface water features through a comprehensive Stormwater Management Plan. This plan incorporates sediment controls to prevent runoff laden with sediment from reaching these water bodies. For more specific details on the stormwater control measures planned for this site, please refer to the Stormwater Management Plan.

- **Impact Minimization Description:** The Operator's comprehensive Stormwater Management Plan incorporates sediment controls that prevent sediment-laden runoff from reaching nearby surface water bodies, thereby protecting aquatic habitats essential to local wildlife. By minimizing erosion and turbidity, the plan helps preserve water quality and maintain healthy

ecosystems that support biological resources and wildlife populations

#### *Platte River Stewardship*

Civitas Resources, Inc, parent company of the Operator, is an active member of the South Platte Water Related Activities Program (“SPWRAP”), a Colorado nonprofit corporation established by Colorado water users for the purpose of representing water users’ interests and partnering with the State of Colorado to implement the Platte River Recovery Implementation Program in central Nebraska. This program provides a venue and mechanism to address possible Endangered Species Act issues on and along the Platte River including to assist in the recovery of threatened or endangered species within this important river corridor and elsewhere in the river basin. Additional information about this unique organization can be found here - <http://cospwrap.org/> .

- **Impact Minimization Description:** This involvement demonstrates Civitas Resources, Inc.’s commitment to protecting wildlife resources and biological diversity in key water ecosystems.

## 7.0 Biological and Soil Resources

### 7.1 Soil Resources

#### 7.1.1 QUALITATIVE BASELINE EVALUATION OF SOIL TYPES

The AOE contains fifteen NRCS soil units:

<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
ArB	Ascalon loamy sand, 0 to 3 percent slopes	50.0	2.0%
ArC	Ascalon loamy sand, 3 to 5 percent slopes	36.0	1.4%
AsB	Ascalon sandy loam, 0 to 3 percent slopes	299.9	11.7%
AsC	Ascalon sandy loam, 3 to 5 percent slopes	21.5	0.8%
AsD	Ascalon sandy loam, 5 to 9 percent slopes	91.8	3.6%
AvC	Ascalon-Vona sandy loams, 1 to 5 percent slopes	658.0	25.7%
Bt	Blakeland-Truckton association	334.3	13.1%
IW	Intermittent water	7.3	0.3%
Lu	Loamy alluvial land	139.2	5.4%
TtB	Truckton loamy sand, 0 to 3 percent slopes	308.9	12.1%
TtC	Truckton loamy sand, 3 to 5 percent slopes	60.7	2.4%
TtD	Truckton loamy sand, 5 to 9 percent slopes	59.4	2.3%
VnB	Vona loamy sand, 0 to 3 percent slopes	42.1	1.6%
VnD	Vona loamy sand, 3 to 9 percent slopes	413.1	16.1%
VsD	Vona-Ascalon loamy sands, 3 to 9 percent slopes	36.2	1.4%
<b>Totals for Area of Interest</b>		<b>2,558.5</b>	<b>100.0%</b>

The dominant soil types are Ascalon-Vona sandy loams, 1 to 5 percent slopes, Vona loamy sand, 3 to 9 percent slopes, Blakeland-Truckton association, Truckton loamy sand, 0 to 3 percent slopes, and Ascalon sandy loam, 0 to 3 percent slopes comprising nearly 80% of the AOE. These soils are generally well drained with low runoff potential.

#### 7.1.2 QUANTIFICATION OF SURFACE DISTURBANCE BY SOIL TYPE

The proposed disturbance will be 17.03 acres, with impacts distributed as follows:

- Blakeland – Truckton association: 6.19 acres disturbed, accounting for approximately 36% of the disturbance.
- Truckton loamy sand, 0 to 3 percent slopes: 5.72 acres of disturbance, accounting for approximately 34% of the disturbance.
- Ascalon sandy loam, 0 to 3 percent slopes: 5.12 acres of disturbance, accounting for approximately 30% of the disturbance.

Post-reclamation, permanent disturbance will total 6.52 acres, while interim reclamation will restore vegetation and soil functionality across 10.51 acres.

#### 7.1.3 CUMULATIVE SOIL IMPACTS FROM PAST/FUTURE DEVELOPMENT

*Historical impacts:* Previous oil and gas activities, agricultural operations and residential development in Adams County have compacted soils and disturbed native soils within the AOE.

*Future impacts:* There are no reasonably foreseeable future developments that will have an impact on soil resources.

## 7.2 Biological Resources

### 7.2.1 SWAP HABITAT EVALUATION

The AOE intersects key habitats identified in Colorado’s State Wildlife Action Plan (SWAP):

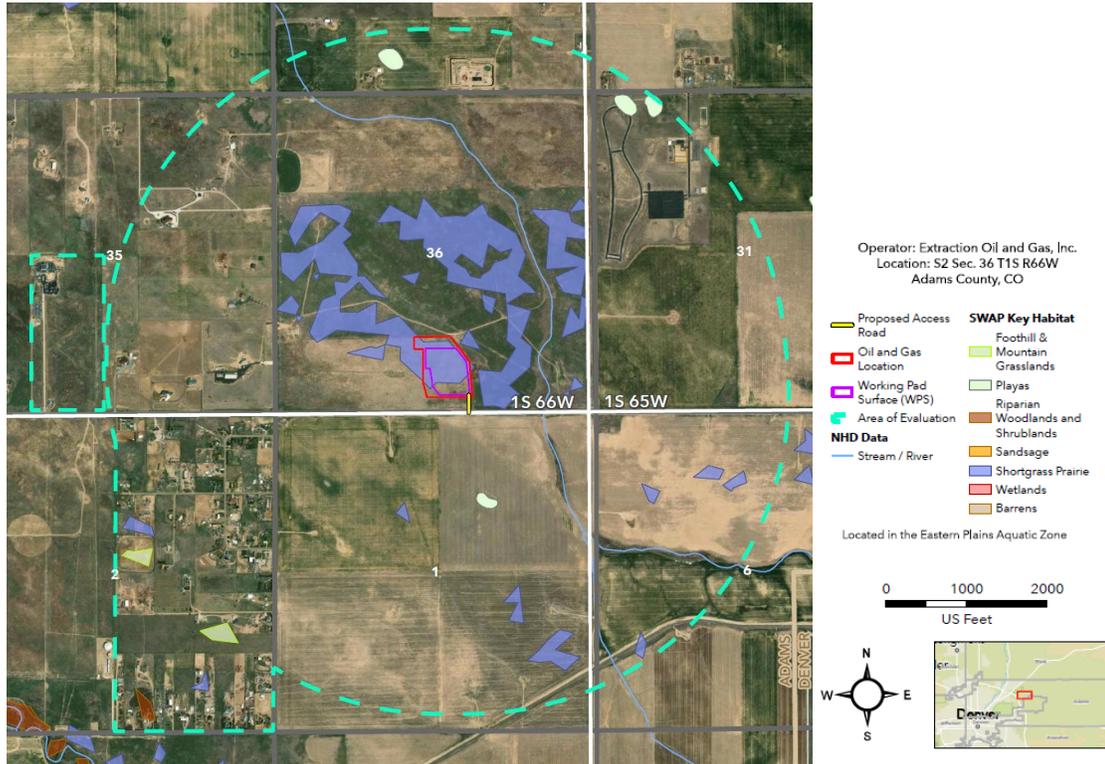
*Shortgrass Prairie:* Most SWAP habitat in the AOE. 11.28 acres will be disturbed from this development.

*Woodlands and Shrublands:* Found in the southwest within the AOE, and could provide habitat for a variety of species, such as nesting raptors.

*Eastern Plains Streams:* Intermittent streams are present within the AOE and may provide habitat and resources for various aquatic and terrestrial species. Near the proposed location it was field verified there is no ordinary water mark present.

*Foothill and Mountain Grasslands:* Very limited presence mapped in the AOE in agricultural and disturbed land.

*Playas:* There are mapped playas in the north and near the center of the AOE. Much of this land is disturbed and playas may not be present.



The proposed development will disturb vegetation across a total of 17.03 acres, with 11.28 acres mapped as Shortgrass Prairie habitat:

*Short-term disturbance (temporary):* Vegetation removal across 10.51 acres, which will be restored during interim reclamation.

*Long-term disturbance (permanent):* Permanent disturbance is 6.52 acres, primarily for permanent production operations.

### 7.2.2 CUMULATIVE BIOLOGICAL RESOURCES IMPACTS FROM PAST/FUTURE DEVELOPMENT

*Historical impacts:* Shortgrass Prairie habitats have been fragmented by previous oil and gas activities, agricultural practices and residential development in Adams County, reducing forage availability for wildlife.

*Future impacts:* This oil and gas development will require the removal of some shortgrass prairie habitat. Extraction’s reclamation efforts will restore vegetative cover and reduce erosion risks over time.

### 7.3 Best Management Practices

To mitigate incremental impacts on soil resources and SWAP habitats, Extraction proposes the following BMPs:

## STOCKPILE MANAGEMENT

- Topsoil will be stockpiled along the northern portion of the proposed pad.
- Perimeter erosion control devices will be installed within 5 to 10 feet of the stockpile toe to prevent soil migration.
- Stockpiles will be stabilized with seeding and mulching within 14 days of construction.
- Regular inspections will ensure erosion control measures are functioning properly, and repairs will be made as needed.
  - **Impact Minimization Description:** Stockpiling topsoil in a controlled location preserves the nutrient-rich upper soil layer essential for reclamation and future vegetation growth. Installing perimeter erosion controls and stabilizing stockpiles with seeding and mulching prevents soil erosion and sediment loss, maintaining soil structure and fertility. Regular inspections and timely repairs ensure these measures function effectively, protecting soil resources

## SEEDING

- State Land Board specified seed mix will be used to establish vegetation on disturbed areas and stockpiles.
- Drill seeding is the preferred method for ensuring uniform seed placement.
- Re-seeding will occur as necessary to achieve widespread, uniform vegetative cover.
- Temporary cover crops may be planted to stabilize soils until permanent vegetation is established.
  - **Impact Minimization Description:** The listed BMPs cumulatively protect soil resources by establishing and maintaining robust vegetation cover that stabilizes disturbed soils and stockpiles. Using a State Land Board recommended seed mix ensures native, site-appropriate plants that promote soil health, while drill seeding guarantees uniform seed distribution for effective growth. Re-seeding and planting temporary cover crops provide continuous soil stabilization during vegetation establishment, preventing erosion, preserving soil structure, and maintaining fertility until permanent vegetation is fully established.

## MULCHING

- Straw or hay mulch will be applied after seeding to protect soil from erosion and retain moisture.
- Mulch will be crimped into the soil and sprayed with tackifier for added stability.
- Mulching will be monitored and re-applied as necessary until vegetation is established.
  - **Impact Minimization Description:** The listed mulching BMPs cumulatively protect soil resources by shielding the soil surface from erosion and moisture loss during the critical period after seeding. Applying straw or hay mulch acts as a physical barrier against wind and water erosion while retaining soil moisture essential for seed germination and plant growth. Crimping mulch into the soil and applying a tackifier enhances mulch stability, preventing displacement, and ongoing monitoring with re-application ensures continuous protection until vegetation is well established, thereby maintaining soil structure and fertility.

## SURFACE ROUGHENING AND VERTICAL TRACKING

- Horizontal grooves or ridges will be created on disturbed soils to reduce runoff velocity, trap sediment, and improve infiltration.

- Vertical tracking by tracked vehicles will create a roughened surface texture on slopes to further minimize erosion risks.
- Surface roughening is prohibited on topsoil stockpiles or areas where topsoil has already been placed.
  - **Impact Minimization Description:** The listed BMPs cumulatively protect soil resources by physically modifying the soil surface to slow runoff, trap sediment, and enhance water infiltration. Creating horizontal grooves or ridges reduces the speed of water flow, minimizing soil erosion and sediment loss, while vertical tracking by tracked vehicles roughens slope surfaces to further stabilize soil and prevent erosion. Together, these practices protect soil structure, maintain fertility, and promote faster vegetation recovery, supporting long-term soil and ecosystem stability.

#### WEED MANAGEMENT

- Stockpiles and reclaimed areas will be monitored for noxious weeds during regular inspections.
- Weeds will be treated mechanically (e.g., mowing) when plant height exceeds 6 inches or before seed development.
- Chemical treatment with broadleaf herbicides will only occur in spot-specific situations where mechanical methods are not feasible.
  - **Impact Minimization Description:** The listed BMPs cumulatively protect soil resources and ecosystem health by actively monitoring and controlling noxious weeds that threaten native vegetation and soil stability. Regular inspections enable early detection of invasive plants, while mechanical treatments like mowing prevent weed seed production and spread without harming soil structure. Chemical herbicide use is limited to targeted, spot-specific applications where mechanical methods are insufficient, minimizing chemical impacts and supporting successful long-term reclamation and native habitat restoration.

#### EROSION CONTROL

- Silt fences, straw wattles, and other erosion control measures will be installed around disturbed areas to prevent sediment migration.
- Stormwater BMPs, including perimeter controls and sediment traps, will remain in place until final stabilization is achieved.
- A more permanent detention basin will be installed at the time of interim reclamation.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by using temporary and permanent stormwater controls to prevent sediment migration and manage runoff, which protects water quality, reduces downstream sedimentation, and supports successful reclamation and long-term site stability.

#### INTERIM RECLAMATION

- Approximately six (6) inches of salvaged topsoil will be redistributed across interim reclamation areas.
- The soil will be tilled to prepare a seedbed before drill seeding with a State Land Board recommended seed mix.

- Interim reclamation areas will be monitored regularly to ensure vegetation establishment meets regulatory requirements.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by redistributing salvaged topsoil, preparing the seedbed, and seeding with required mixes, which restores soil productivity, promotes successful vegetation establishment, and supports long-term reclamation success.

#### SPILL PREVENTION AND RESPONSE

- Spill prevention measures include proper equipment maintenance and secondary containment for hazardous materials.
- In the event of a spill, contaminated soils will be promptly removed or remediated using approved methods such as bioremediation.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by implementing spill prevention through proper equipment maintenance and secondary containment systems that limit material release. In the event of a spill, prompt removal or remediation of contaminated soils using approved methods such as bioremediation reduces environmental contamination, which protects soil and water quality, minimizes ecological harm, and supports site recovery and long-term stability.

## 8.0 Public Welfare

The following narrative is intended to supplement the above-described resources and potential impacts. Although this information is contained elsewhere within the application materials, brief summaries of impacts and mitigations for several key areas, often referred to as nuisances, are:

### 8.1 Noise

#### PRE- PRODUCTION POTENTIAL IMPACT

Heavy equipment mobilization, pad construction (bulldozers, graders) and access road development, drilling operations, and completion operations.

#### PRODUCTION POTENTIAL IMPACT

Relative to ambient, intermittent temporary increases in sound levels are expected during ongoing production operations that are generated from compressors, separators, and other production equipment.

#### HUMAN RECEPTOR IMPACTS

No (0) RBUs exist within 0.5 miles, and fifty-three (53) RBUs are located between 2,000 feet and 1 mile. Predictive modeling shows noise at these RBUs will remain below ECMC limits regarding pre-production and production operations.

#### WILDLIFE RECEPTOR IMPACTS

The site does not lie within a CPW-designated HPH, but raptors and migratory birds have been identified near the location. Excessive noise has the potential to disrupt ungulate foraging and increases stress hormones, reducing habitat use.

#### REASONABLY FORSEEABLE FUTURE DEVELOPMENT IMPACTS

Based on the analysis conducted on the AOE for the Eagle Pad, there are no identified reasonably foreseeable future developments by third parties within the defined AOE that would contribute additional noise impacts beyond those already analyzed for existing conditions and the proposed Eagle operations.

#### NOISE MODELING

The Operator utilized sound signatures from the anticipated equipment that will be utilized during pre-production and production operations to model the sound that will be generated around the location. The proposed site-specific equipment and the sound walls allow for the proposed location to be in compliance with ECMC and the relevant local government regulations regarding noise.

The DIA and Flatrock Regional Training Center (FRTC) act to increase naturally occurring ambient noise levels in the area (compared to ambient levels in this area if these two agencies/facilities did not exist). Thus, the net effect of the DIA and FRTC with respect to any proposed oil and gas operations/facilities in the same area is that the noise impact of any proposed oil and gas operations is smaller since ambient noise levels are already elevated due to the presence of the DIA and FRTC. This applies to both human and wildlife cumulative noise impact considerations.

#### MITIGATION

- **Grid Power.** The Operator will utilize electric grid power to energize the drill rig and the facilities minimizing noise sources on the planned location during pre-production and permanent production operations.
- **Sound Walls.** The operator will install full wrap sound walls.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by utilizing grid power to reduce noise sources during drilling, and production operations, and by installing full-wrap sound walls, which reduces disturbance to wildlife, protects habitat quality, and supports ecosystem stability.

## 8.2 Light

#### PRE- PRODUCTION POTENTIAL IMPACT

The drilling and completions phases occur 24 hours per day, which means lighting is required by regulation for worker safety during nighttime hours. Illuminating the location may cast halos or shadows that are perceptible from a distance. Headlights on vehicles may also be visible during the overnight hours when vehicles enter/exit location.

#### PRODUCTION POTENTIAL IMPACT

Artificial lighting at the well pad during production operations may create light impacts through halos, shadows, or headlights from entering/exiting vehicles.

#### HUMAN RECEPTOR IMPACTS

No (0) RBUs exist within 0.5 miles, and fifty-three (53) RBUs are located between 2,000 feet and 1 mile. Predictive modeling shows light at these RBUs will remain below ECMC limits regarding pre-production and production operations.

#### WILDLIFE RECEPTOR IMPACTS

The site lies near habitat for raptors and migratory birds. Excessive light has the potential to disrupt ungulate foraging and increases stress hormones, reducing habitat use.

#### REASONABLY FORSEEABLE FUTURE DEVELOPMENT IMPACTS

Based on the analysis conducted on the AOE for the Eagle Development, there are no identified reasonably foreseeable future developments by third parties within the defined AOE that would contribute additional light impacts beyond those already analyzed for existing conditions and the proposed Eagle operations.

#### LIGHT MODELING

The Operator utilized lighting specs from the anticipated equipment that will be utilized during pre-production and production operations to model the light that will be generated around the location. The proposed site-specific equipment and the sound walls allow for the proposed location to be in compliance with ECMC and the relevant local government regulations regarding light.

#### MITIGATION

- *Lighting Orientation.* Lights will be angled in a downward manner to limit the ‘halo effect’ from impacting nearby receptors.
- *Lighting Height.* Lights on location and those affixed to the sound walls will be placed at reasonable heights to limit ‘light spillage’ off location.
- *Essential Use Only.* Only lights necessary to maintain a safe and regulatory compliant working environment will be used.
- *No Permanent Lighting.* No permanent lighting is planned to be installed at this location, minimizing ongoing lighting impacts.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by directing lights downward, limiting light height, and using only essential temporary lighting, which reduces halo effect and light spillage, minimizes disturbance to nearby receptors and wildlife, and supports preservation of night-time conditions and habitat quality.

### 8.3 Odor

#### PRE- PRODUCTION POTENTIAL IMPACT

Temporary odoriferous emissions during drilling and completions operations may be anticipated; these odors can generally be characterized as having a “petroleum scent” or a “burning metal” scent. Additionally, exhaust from diesel powered equipment may be identifiable from time to time.

#### PRODUCTION POTENTIAL IMPACT

Occasional odors similar to those experienced during drilling and completion may occur.

### HUMAN RECEPTOR IMPACTS

No (0) RBUs exist within 0.5 miles, and fifty-three (53) RBUs are located between 2,000 feet and 1 mile. It is not predicted that the RBUs within 1 mile will encounter any odor impacts as a result of the proposed operations. Due to the use of Group III mud and distance from RBUs, including the neighborhood to the southwest of the intersection of Picadilly Road and East 120<sup>th</sup> Avenue and the Sikh Temple, no odor issues are anticipated.

### WILDLIFE RECEPTOR IMPACTS

The site lies near habitat for raptors and migratory birds. Excessive odor has the potential to disrupt ungulate foraging and increases stress hormones, reducing habitat use.

### REASONABLY FORSEEABLE FUTURE DEVELOPMENT IMPACTS

Based on the analysis conducted on the AOE for the Eagle Development, there are no identified reasonably foreseeable future developments by third parties within the defined AOE that would contribute additional odor impacts beyond those already analyzed for existing conditions and the proposed Eagle operations.

### BEST MANAGEMENT PRACTICES

- *Closed Loop Systems.* The Operator will utilize closed-loop fluid management systems.
- *Low-Emission Drilling Fluids.* The Operator will utilize IOGP Group III drilling fluids.
- *Prompt Waste Removal.* The Operator will remove drill cuttings on a daily basis or as soon as waste containers are full.
- *Pipe Cleaning Procedures.* The Operator will employ pipe cleaning procedures when removing drill pipe from the hole.
- *Electric Operations.* The Operator will utilize utility power for drilling operations and production facilities which eliminates potential odors from on-site combustion engines.
- *Pneumatic Systems.* The Operator will employ instrument air pneumatics which removes the need to vent gas during valve operation and reduces the potential for odor release.
- *Closed-Loop Maintenance.* The Operator will use a dedicated maintenance vessel to capture gas during maintenance procedures, preventing it from escaping into the atmosphere.
- *Minimal Tanks.* The Operator plans to only have two (2) produced water tanks and four (4) hydrocarbon storage tanks. Piping oil will minimize the source of potential odors associated with tank emissions.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by reducing gas and odor releases and eliminating internal combustion engines, which minimizes odor impacts on surrounding receptors.

## 8.4 Dust

### PRE- PRODUCTION POTENTIAL IMPACT

Dust generated from the movement of equipment and materials on location may occur; vehicular traffic may generate dust while traversing the access road.

### PRODUCTION POTENTIAL IMPACT

Dust generated from the movement of equipment and materials on location during maintenance operations may occur; vehicular traffic may generate dust while traversing the access road.

### BEST MANAGEMENT PRACTICES

- *Mud Tracking Control.* The Operator will install vehicle tracking controls at the entrance of the access road.
- *Dust Suppression.* The Operator will use freshwater as a dust suppressant on the pad and access road as atmospheric conditions warrant. This will serve to minimize potential dust generated from the location.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by controlling mud tracking and suppressing dust, which reduces off-site material transport, minimizes airborne particulates, and limits potential impacts on surrounding receptors.

## 8.5 Recreation & Scenic Values

Oil and gas development can introduce several changes that can negatively impact recreation and scenic values. These include:

*Visual alterations:* Drilling rigs, wellheads, and pipelines create physical structures that can disrupt the natural landscape. This can be particularly significant in areas valued for scenic beauty or wilderness experiences.

*Noise disruptions:* Machinery and vehicles used in oil and gas operations generate noise that can detract from the tranquility of recreational areas.

*Reduced visitation:* Studies suggest a correlation between oil and gas development and decreased visitation rates in nearby recreational areas. This could be due to a combination of the factors mentioned above.

### 8.5.1 Recreation

No recreational areas are found within the AOE.

### 8.5.2 SCENIC VALUES

The construction of the well pad in association with the installation of the necessary equipment and facilities will have little effect on the viewshed to the west as there are no homes within a mile to the east. Depending on the vantage point of the observer, the proposed project may slightly modify the viewshed when looking to the southwest. However, the viewshed will not be “blocked;” the observer should be able to reposition themselves for a vantage point that is free and clear of the proposed location. No permanent impacts are anticipated.

## 9.0 Transportation Cumulative Impacts Analysis

### 9.1 Description of Planned Transportation Routes

The proposed Eagle Pad will utilize the following transportation route for hauling equipment and materials:

*Haul Route (to location):*

- From I-76, east on E. 152<sup>nd</sup> Avenue. South on Picadilly Road, then left on E 120<sup>th</sup> Avenue to the access road on the left. All existing roads are paved. Please note, traffic will not be allowed to continue west on East 120<sup>th</sup> Avenue past the Sikh Temple or south on Picadilly Road past East 120<sup>th</sup> Avenue.

*Vehicle Types:*

- Tractor trailers and light-duty vehicles for personnel and equipment.

*Route Characteristics:*

- Existing paved roads maintained by Adams County Public Works and Colorado Department of Transportation (CDOT).

### 9.2 Current Traffic Volumes and Future Impacts

#### 9.2.1 CURRENT CONDITIONS:

- Highway 76 near East 152<sup>nd</sup> Avenue experiences traffic volumes of approximately 44,000 vehicles per day southwest of Exit 22, with volumes decreasing further northeast (CDOT stations 103393 and 103394).
- East 152<sup>nd</sup> Avenue east of Highway 76 is a two-lane, paved, rural arterial roadway. Based on data available from Adams County traffic count station TC-0145 located between Highway 76 and Picadilly Road, average daily traffic on East 152<sup>nd</sup> Avenue was 1,063 vehicles per day in 2024.
- Picadilly Road south of East 152<sup>nd</sup> Avenue is a two-lane, paved, rural arterial roadway. Based on data available from Adams County traffic count station TC-0146 located between East 144<sup>th</sup> Avenue and East 132<sup>nd</sup> Avenue, average daily traffic on Picadilly Road was 1,063 vehicles per day in 2024.
- The proposed traffic plan includes a short section of East 120<sup>th</sup> Avenue. East 120<sup>th</sup> Avenue is a 2 lane paved principal arterial roadway. Based on data available from Adams County traffic count station TC-0143 located east of Tower Road, average daily traffic on East 120<sup>th</sup> Avenue was 3,564 vehicles per day in 2024.
- There are two oil and gas facilities in this area that currently utilize a portion of the haul route for the proposed Eagle Pad. The locations, Alma 1S-66-2524 Pad (ECMC Location ID: 449925) and Warbler Pad (ECMC Location ID: 483031), are currently in the production phase and cumulative traffic from these locations in addition to the new traffic associated with Eagle development is anticipated to be negligible.

#### 9.2.2 PROJECTED IMPACTS FROM OIL/GAS OPERATIONS:

- Short-term: During pre-production operations truck traffic will peak at 98 daily truck trips during the completion phase, increasing traffic on the haul route.
- Long-term: It is not anticipated there will be a significant impact to traffic on the primary haul route during production operations due to the presence of two-phase takeaway, and the predicted low water production associated with these wells.

#### 9.2.3 REASONABLY FORESEEABLE FUTURE DEVELOPMENT:

- There are no reasonably foreseeable developments that has the potential to increase traffic in the area.

### 9.3 Traffic Impacts Reduction Best Management Practices

- Operator will utilize lay flat-water pipeline to minimize traffic impacts during pre-production operations.
- Operator will utilize two-phase takeaway to minimize truck traffic normally associated with hauling product off location.
  - **Impact Minimization Description:** The listed BMPs minimize impacts by using lay-flat water pipeline and two-phase takeaway systems, which reduce truck traffic, minimize dust and emissions, and limit potential impacts on surrounding receptors and road infrastructure.

## 10.0 Climate Cumulative Impacts Analysis

### 10.1 Greenhouse Gas (GHG) Intensity Target Compliance

Extraction (a subsidiary of Civitas Resources, Inc.) is currently below its GHG intensity targets as of April 2025.

### 10.2 Estimated GHG Emissions

The proposed operations are estimated to generate the following GHG emissions:

#### *Stationary Sources*

- Stationary Sources:
  - Pre-Production
    - CO<sub>2</sub> – 45,009.71 tons
    - Methane – 11.25 tons
  - Production Operations
    - CO<sub>2</sub> – 10,116.39 tons/year
    - Methane 488.74 tons/year
- Mobile Sources:
  - Pre-Production and Interim Reclamation
    - Truck Miles – 1,183,020 diesel truck miles
    - CO<sub>2</sub> (1.617kg CO<sub>2</sub>/Mile) – 1,912.94 tons
  - Production
    - Truck Miles – 40,303 diesel truck miles
    - CO<sub>2</sub> (1.617kg CO<sub>2</sub>/Mile) – 66.10 tons/year

### 10.3 GHG Best Management Practices

Operator's proposed operations include the following climate impact reductions:

- Operator will utilize existing Two-Phase (Oil and Gas) Takeaway during production operations
  - **Impact Minimization Description:** This minimizes impacts by utilizing nearby hydrocarbon midstream infrastructure, which avoids extensive new construction and associated greenhouse gas emissions, and by reducing truck traffic normally required to haul produced product, which decreases emissions, roadway wear, and potential impacts on surrounding receptors.
- Electric drilling rig and electrified facilities
  - **Impact Minimization Description:** No greenhouse gas emissions will occur at the location from the drilling rig and be reduced at permanent production facilities.
- Tier IV equivalent completion fleet
  - **Impact Minimization Description:** This BMP minimizes impacts by utilizing more efficient engines, which burn less fuel and reduce greenhouse gas emissions.

Three phase meter/bulk separator facility design

- **Impact Minimization Description:** Minimizes the amount of gas that is burned during production operations ultimately reducing the amount greenhouse gas generation during production operations.

## 11.0 Beneficial Impacts

### Wells to be Plugged and Abandoned

As part of the proposed OGD, there are five (5) Wells planned for plugging and abandonment, although no wells will be plugged and abandoned within a DIC, but two (2) wells are in HPH.

### Facilities or Equipment to be Decommissioned and Removed

There are six (6) Facilities / Locations planned for decommissioning and removal as part of the proposed OGD, although no location will be decommissioned or removed within a DIC, but two (2) Locations are in HPH.

### Access Roads, Flowlines, Gathering Lines, or Pipeline Infrastructure to be Removed and Reclaimed

There are plans for removal and reclamation of all access roads, flowlines, gathering lines, and pipeline infrastructure associated with the six (6) Locations to be reclaimed. No oil and gas related infrastructure will be removed within a DIC. The wells and Locations in HPH will have associated infrastructure removed as well benefiting the HPH.

### Additional Information for Cumulative Impacts Evaluation

At this stage, there is no additional information utilized by Civitas Resources, Inc. or its subsidiaries necessary for the Commission in evaluating cumulative impacts from the proposed Location.

### Summary

As currently planned by Civitas Resources, Inc. and its subsidiaries, the proposed OGD will include plugging and abandonment of wells, decommissioning of facilities, reclamation of locations, and removal and reclamation of infrastructure.

The following wells to P&A\* and Locations are listed below.

Well Name	API Number	Location ID
HSR-TR RANCH 16-3	001-09237	320407
HSR-CUNNINGHAM 7-10	001-09313	320436
HSR LAWSON 8-3	001-09189	320391
HSR-TR RANCH 10-3	001-09307	320433
HSR-LUNNON 2-3	001-09314	320437
N/A	N/A	452732

\* Plugging and abandonment of wells will occur within one year following initial production from all proposed wells within their respective spacing units.

## 12.0 Cumulative Impacts Analysis Summary

This analysis evaluates the combined impacts of the proposed Eagle Pad development based on the evaluations and data required under ECMC Rules 315.b.(2).E-G. It identifies cumulative impacts that cannot be avoided, minimized, or mitigated, while considering key resource areas such as air quality, water resources, wildlife, and public health.

### **Air Resources**

The proposed operations will contribute to incremental air emissions during pre-production and production phases. While Best Management Practices (BMPs) such as an electric drilling rig and Tier IV-compliant equipment and closed-loop systems are implemented to minimize emissions, cumulative impacts include:

- *Construction Phase:* Dust and emissions from equipment and vehicular traffic.
- *Drilling Phase:* Emissions from drilling rig's associated equipment, and vehicular traffic.
- *Production Phase:* Long-term emissions from compressors, separators, and other production equipment.

Despite these measures, the construction of the Eagle Pad may increase localized air pollutant concentrations. However, adherence to BMPs and monitoring ensures no significant cumulative air quality impacts are anticipated, nor impacts to public health.

### **Water Resources**

Hydraulic fracturing activities pose risks to both surface and groundwater through potential spills, erosion, or wellbore migration. Mitigation strategies include:

- Comprehensive groundwater isolation via casing and cementing.
- Spill prevention measures such as polyethylene liners during drilling and completions.
- Stormwater management plans to prevent sedimentation into nearby swales and intermittent streams.

While no past or present contamination has been identified within the AOE, cumulative impacts on water resources remain minimal due to robust mitigation efforts.

### **Wildlife Resources**

The proposed location does not lie within any CPW mapped HPH, or habitat of any protected species. Cumulative impacts include:

- Habitat disturbance from construction activities.
- Noise and light disturbances affecting wildlife behavior.

BMPs aimed to minimize these impacts include sound walls, pre-construction wildlife surveys, and avoidance of HPH.

### **Public Health**

The nearest residential receptors are over 0.5 miles from the site, significantly reducing direct exposure risks. Advanced emission-reduction technologies (e.g., closed-loop systems) further mitigate potential health impacts from VOCs or other pollutants. Continuous air monitoring before and during operations and until these wells are P&A ensures compliance with health standards.

### **Transportation**

Pre-production activities will temporarily increase traffic volumes on paved county roads, contributing to congestion. Long-term traffic impacts are minimized by utilizing nearby two-phase takeaway infrastructure for oil and gas. Despite these measures, short-term transportation-related cumulative impacts during peak construction phases remain unavoidable. Minimal long-term cumulative impacts will occur due to produced water hauling.

### **Climate Impacts**

The project will generate greenhouse gas (GHG) emissions during both pre-production and production phases. Estimated GHG emissions include:

- Pre-production: 37,569.73 tons of CO<sub>2</sub>.
- Production: 1,601.08 tons/year of CO<sub>2</sub>.

BMPs such as Tier IV-compliant equipment, utility powered drilling rig, two phase takeaway, three phase meter/bulk separator facility design, and utility powered production equipment reduce emissions intensity but do not eliminate all climate-related cumulative impacts.

### **Unmitigated Cumulative Impacts**

While extensive efforts have been made to avoid or minimize adverse effects through BMPs and enhanced systems:

- Short-term air quality degradation during construction phases is unavoidable.
- Temporary increases in traffic congestion and dust generation during pre-production cannot be fully mitigated.

These residual impacts highlight the importance of ongoing monitoring and adaptive management to address unforeseen cumulative effects over time.

### **Conclusion**

The Eagle Pad construction employs advanced BMPs to minimize cumulative impacts, aligning with ECMC's 2024 rules requiring robust protections for public health and the environment. While short-term impacts (e.g., construction dust, traffic) remain unavoidable, ongoing monitoring and compliance with state standards ensure responsible development.

## 13.0 Plain Language Summary

This summary explains how the proposed oil and gas operations at the Eagle Pad may combine with past, present, and future activities to affect the environment and community. Below is a simplified breakdown of key impacts and how they're being addressed:

### Air Quality

- *What's Happening:* Equipment and trucks during construction, drilling, and production will release some emissions. Some construction emissions will be avoided due to the location already existing. For example, the Operator does not need to construct an access road.
- *Mitigation:* An electric drilling rig, advanced emission-control equipment (like Tier IV engines), electric-powered production equipment, and reduced truck traffic by using pipelines.
- *Residual Impact:* Short-term dust and emissions during construction (~2 months) may temporarily affect local air quality.

### Water Resources

- *What's Happening:* Small risk of spills or groundwater contamination during drilling and hydraulic fracturing.
- *Mitigation:* Protective liners under equipment, sealed well casings, and spill response plans.
- *Residual Impact:* There is a minimal risk of accidental spills, despite safeguards.

### Wildlife & Habitats

- *What's Happening:* The pad is near potential raptor and migratory bird habitat. Construction noise and light could disrupt wildlife.
- *Mitigation:* Sound walls, pre-construction wildlife surveys, and replanting disturbed areas.
- *Residual Impact:* 7.37 acres of permanent potential habitat loss after interim reclamation.

### Public Health

- *What's Happening:* No homes nor schools (0) within 0.5 miles. Fifty-three (53) rural homes are 2,000 feet - 1 mile away.
- *Mitigation:* Air monitoring before and during operations to ensure pollutants stay below safety limits.
- *Residual Impact:* No expected health risks due to distance and monitoring.

### Traffic

- *What's Happening:* More trucks on paved county roads during construction pre-production operations.
- *Mitigation:* Using pipelines to transport oil and gas long-term, reducing truck trips.
- *Residual Impact:* Temporary congestion on local roads, long-term minimal traffic from produced water trucks.

### Climate

- *What's Happening:* Operations will release greenhouse gases (GHGs) like CO<sub>2</sub>.
- *Mitigation:* Efficient equipment, utility powered rig and facilities, minimization of new midstream infrastructure buildout.
- *Residual Impact:* Estimated 37,569.73 tons of CO<sub>2</sub> during setup and 1,601.08 tons/year during production.

### What Can't Be Fully Avoided

- *Habitat Loss:* No HPH loss from this project, but possible habitat for other species could be impacted.
- *Short-Term Air & Noise:* Dust and equipment noise during pre-production operations.
- *Construction Traffic:* Temporary increases in road use near the site.

### How We're Ensuring Safety

- *Monitoring:* Air quality checks before, during, and after operations, and monitored for life of the wells..
- *Technology:* Electric equipment, spill-proof designs, and closed-loop systems to prevent leaks.
- *Compliance:* Following all state and local rules and working with agencies like Adams County, CPW, CDPHE and ECOM.

### Conclusion

The Eagle Pad will use advanced practices to reduce its environmental footprint. While some short-term impacts are unavoidable, ongoing monitoring and technology will help protect air, water, wildlife, and the community. Extraction remains committed to responsible energy development in Adams County.

## 14.0 Proposed Best Management Practices

### 14.1 Public Health Cumulative Impacts Mitigation Measures

- The Operator will monitor this pad during each operational phase through its FLIR camera program to verify that sites are operating correctly and in compliance with regulations.
- The Operator will implement a continuous air monitoring plan that will be compliant with the requirements outlined in CDPHE Regulation 7.
- The Operator will monitor the location for the life of the wells with details to be defined in coordination with Adams County.

### 14.2 Construction

- The Operator will conduct additional avian surveys prior to the commencement of construction to ensure no conflicts have developed since the prior survey.
- Use of freshwater to minimize the generation and transportation of dust.
- Topsoil will be stockpiled on location with slopes not greater than 3:1.
- Topsoil stockpiles will be stabilized with appropriate vegetation to provide both short- and long-term stabilization to prevent erosion.
- Tracking controls will be installed at the entrance of the access the road to prevent mud-tracking and associated dust emissions on the public roadway.
- Speed will be limited to 20mph as required by Extraction's posted signs on the private access roads leading to and from the location.
- Prior to drilling operations a sound barrier (minimum rating of STC-30) will be installed around the pad site.
- The equipment used to build the pad will be Tier IV emission rated.

### 14.3 Drilling

- Utilize closed-loop, pit-less fluid management system.
- Use of freshwater to minimize the generation and transportation of dust.
- All drill rig engines and/or turbines with a manufacturer's design rate greater than or equal to 50 horsepower will be powered by grid power or non-fossil fuel generated power.
- The Operator will install a polyethylene liner across portions of the location as an isolation barrier. The drilling rig and associated equipment (including fluid storage areas) are placed atop the liner.
- Lighting will be angled in a downward manner to limit the halo effect off location.
- Lights will be placed at reasonable heights to limit spillage off location.

- The Operator will use International Oil and Gas Producers Group III drilling fluid or a drilling fluid that has less than 0.5% total aromatic content and a polycyclic aromatic hydrocarbon content less than 0.001%
- The Operator will cover trucks transporting drill cuttings.
- The Operator will employ pipe cleaning procedures when removing drill string from the well.
- The Operator will remove drill cuttings on a daily basis or as soon as waste containers are full.

#### 14.4 Completions

- The Operator will utilize Tier IV or equivalent rated completion equipment.
- A “quiet completions fleet” will be used for hydraulic fracturing operations.
- Employ the practice of “block and isolate” whenever possible on equipment, piping, and/or tank connections.
- Use of sealed containers (e.g., sandboxes) for the storage and transportation of sand used in hydraulic fracturing.
- Any gas encountered during flowback will be routed to a gas sales pipeline or combusted with a minimum of 98% destruction efficiency.
- Any fluids encountered during flowback will be sent to the oil and produced water pipelines that will service the location.
- Use of freshwater to minimize the generation and transportation of dust.
- The Operator will install a polyethylene liner across portions of the location as an isolation barrier. The completion fleet and associated equipment (including fluid storage areas) will be placed atop the liner.
- The Operator will transport fresh water for completion operations using lay-flat pipelines, significantly reducing truck traffic and the associated emissions and dust generation.
- Lighting will be angled in a downward manner to limit the halo effect off location.
- Lights will be placed at reasonable heights to limit spillage off location.

#### 14.5 Production

- During flowback, the well stream will be routed through permanent production equipment, and all salable produced gas is directed into a sales pipeline. This eliminates the need for venting or flaring salable gas.
- The Operator will install an oil pipeline to the location prior to first production.
- The Operator will utilize compressed air pneumatics for all pneumatic actuation on location.

- The Operator will utilize a pressurized maintenance vessel during maintenance operations.
- The Operator will electrify the permanent production facilities.
- Development of a site-specific SPCC plan.
- Wells, facilities, and equipment will be equipped to be shut in remotely.
- The Operator will conduct additional avian surveys prior to the commencement of construction to ensure no conflicts have developed since the prior survey(s).
- Equipment will be painted “desert tan” (or similar) to avoid creating a marked contrast with the surrounding landscape.
- The Operator will not install permanent lighting.
- If PFAS Chemical-containing foam is unavoidably used at a location, the Operator will:
  - Properly characterize the site to determine the level, nature, and extent of contamination.
  - Perform appropriate soil and water sampling to determine whether additional characterization is necessary and inform the need for and extent of interim or permanent remedial actions; and
  - Properly capture and dispose of PFAS Chemical-contaminated soil and fire and flush water.
- The Operator will use grid power or onsite solar power for all permanent powered production equipment onsite, excluding external combustion sources
- For ozone mitigation on Colorado Department of Public Health and Environment (CDPHE)-forecasted high ozone days, the Operator will, as practicable:
  - Eliminate use of VOC paints and solvents.
  - Minimize vehicle and engine idling.
  - Minimize truck traffic and worker traffic.
  - Postpone the refueling of fleet or personal transit vehicles on Location.
  - Suspend or delay the use of non-essential fossil fuel powered ancillary equipment (excluding safety-critical or site/Well integrity-critical operations); and
  - Reschedule non-essential operational activities such as preventative maintenance and tank cleaning.

## 14.6 Noise Mitigation

- Extraction conducted a Noise Impact Assessment (NIA) for each phase of operations (drilling, completions, and production) to assess operational noise levels against the maximum permissible dBA and dBC noise levels stated in the regulation. Each phase of operation will comply with the MPNLs as summarized in Table 4 in Section 2 of this document.

- Prior to commencement of drilling and completion activities, a full-perimeter, engineered sound wall consisting of approximately 2,580 linear feet of 32-foot-tall, STC32 wall and 40 linear feet of 24-foot-tall, STC32 wall will be installed around the edges of the well pad to reduce noise levels in the area.
- Extraction will utilize an electric completions fleet powered by on-site natural gas generators for all completions operations.
- Flowback operations and equipment were reviewed as part of this Noise Mitigation Plan (NMP). The wells will flow back directly to the permanent facility. Perimeter sound walls will be left in place until drill out is complete and flows are initiated to appropriately manage noise levels for this operation.
- A pre-operational ambient sound level survey was conducted at the two locations outlined in Figure 2 of Section 7 to quantify pre-existing A- and C-weighted sound levels.
- If the drilling rig or completions fleet is changed prior to commencement of operations, the mitigation measures employed will be equally or more protective.
- Extraction will post contact information to receive and address noise complaints arising from preproduction operations around the clock, 24 hours, 7 days per week. Upon receipt of a complaint, either directly to Extraction, or from Adams County, an Extraction representative will contact the associated stakeholder within 48 hours of receipt.

## 14.7 Odor Mitigation

- Operator will use a filtration system and additives in the drilling and fracturing fluids that minimize odors.
- Operator shall utilize a closed-loop, pit-less mud system for managing drilling fluids.
- Operator shall employ the use of drilling fluids with low to negligible aromatic content (IOGP Group III) during drilling operations after the surface casing is set and freshwater aquifers are protected.
- Operator shall remove drill cuttings daily and as soon as waste containers are full.
- Operator shall employ pipe cleaning procedures when removing drill pipe from the hole; these procedures may include “wiping” the pipe before racking it in the derrick.
- If a justified complaint is received, Operator may increase concentration of odor-mitigating additives in mud system.
- Operator will utilize a pneumatic air system to actuate the facilities on location.
- Operator will utilize oil and gas takeaway eliminating odors associated with truck load out.

## 14.8 Dust Mitigation

- On Location, dust suppression during high traffic periods on site will be accomplished by the application of water to the well pad and exposed earthen surfaces to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of only freshwater unless otherwise requested and approved as applicable.
- Off Location, dust suppression during high traffic periods on site will be accomplished by the application of approved methods to the access road(s) and haul route to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of, but may not be limited to, the use of fresh water and/or magnesium chloride as a dust suppressant.
- To minimize sand-related dust emissions, the operator will be utilizing containerized box technology for sand transport, storage and use during the completions phase. These sand containers (“sand boxes”) are sealed containers that protect the sand from exposure to wind and prevent dust generation.
- The operator will post an access road speed limit not to exceed 20 miles per hour to minimize fugitive dust emissions from vehicle traffic traveling on the access road.
- The operator will perform regular inspections and road maintenance to ensure the integrity of the access road and associated features is maintained throughout the life of this project. Maintenance consists of re-compacting the road base/recycled asphalt mix on an as-needed basis.
- The operator will install and maintain vehicle tracking controls (e.g. - coarse aggregate, a tracking pad, paved apron, or cattle guard) to further reduce and remove loose mud and dirt on construction equipment and vehicles servicing location.
- The pad will be plated with aggregate road base material to further minimize fugitive dust.

## 14.9 Transportation BMPs

- Operator will post an access road speed limit not to exceed 20 miles per hour from vehicle traffic traveling on the access road.
- Drivers will observe posted speed limits on unpaved roads to avoid or minimize fugitive dust.
- Drivers will cover and secure loads to prevent debris from entering roadways.
- Use fresh water for dust mitigation on access roads.
- Regular road maintenance such as grading and adding aggregate road base as necessary.

## 14.10 Waste Management

- All onsite waste containers will be compatible with stored contents and labeled appropriately with a description of the waste listed on the label. All containers will be inspected regularly to ensure they are in good condition and free of excessive wear, structural issues, or other defects that may impact their effectiveness.
- Consistent with good materials and waste management practices, the Operator maintains records of material/waste source, transporter, and final disposition or disposal. These records are maintained under usual and customary practice and are made available upon request. See attached list of waste disposal facilities that the Operator has active waste disposal profiles with. Depending on operational considerations, the type of waste in question, and approved disposal profiles, the Operator may send waste to one or more approved facilities on a single, individual project.
- The Operator minimizes the generation of waste by ensuring that material products are fully used for their intended purpose. If unused materials remain following an activity, contractors are required to take unused product with them for reuse at the next applicable project. Contractors are contractually required to comply with applicable material and waste management practices.
- In the event of an unintended release of material by a contractor, the Operator requires the contractor to report the release, and to remediate impacts in accordance with applicable cleanup standards. The Operator tracks all contractor releases to closure by requiring formal documentation, supported by laboratory analysis demonstrating cleanup of site impacts, any required waste characterization, waste disposal approval, and manifests or load tickets tracking waste from source, through transport, to final disposal.
- If there are unanticipated hazardous waste streams not listed in the attached Waste Streams Spreadsheet, the hazardous waste will be stored and disposed of in compliance with all rules and regulations applicable to that specific waste.
- Produced water with no commercial value or reuse potential is typically disposed of via underground injection. In all instances, produced water is disposed of at an offsite location(s) via properly permitted disposal facilities including but not limited to UIC wells intended specifically for produced water disposal.
- Soils impacted with produced fluids will be transported offsite for disposal at a disposal facility permitted to receive E&P waste. All incidents are reported in accordance with ECMC 900-Series Rules.
- All drill cuttings generated during drilling operations are transported offsite with proper manifesting for disposal at facilities properly permitted to receive E&P waste. Drilling fluids will be stored on-site and recycled for use in future drilling operations.
- All surface trash, debris, and material not intrinsic to the operation of the oil and gas facility shall be removed stored in a roll off container or other trash bin and disposed of at a commercial solid waste disposal location.

#### 14.11 Fluid Leak Detection

- During drilling, completion, and production operations, regular Auditory, Visual, and Olfactory Monitoring (AVO) inspections are performed on equipment containing hydrocarbons, fluids, or associated chemicals. AVO inspections include taking the time to look, smell and listen for leaks.
- Operator utilizes a polyethylene liner beneath the drilling rig during drilling operations and beneath the areas where completions equipment (including pump trucks and other heavy equipment) during completion operations to ensure there is an impermeable layer between the rig and the earth. The use of this liner prevents hydrocarbons and other fluids from reaching the soil in the unlikely event a leak does occur. The liner is inspected for integrity throughout drilling operations and maintenance/repair to the liner occurs as needed.
- Routine SPCC inspections will be conducted and documented pursuant U.S. EPA requirements. The location will be equipped with a SCADA system that allows for remote monitoring and shut-in capabilities.
- Operator has developed a robust Leak Detection and Repair (LDAR) program, which utilizes Forward Looking Infrared (FLIR®) cameras to identify and fix leaks. These inspections will begin during the drilling phase and continue throughout the life of the Oil & Gas Location.

#### 14.12 Topsoil Protection

- Stockpile Management - Topsoil will be stockpiled along the northern portion of the proposed pad. To mitigate topsoil loss and migration of soil offsite, the stockpile will be contained using a perimeter erosion control device. Perimeter erosion controls will remain in place at any time the stockpile is not being actively accessed and until vegetative cover is established. Erosion control devices shall be placed within 5-10 feet of the toe of slope.
- Seeding - Once topsoil segregation and stockpiling are complete, the soil will be seeded with the specified seed mix (see Appendix E). Establishing vegetative cover will help to stabilize the soil, reduce wind, and water erosion, minimize sheet flow and rill erosion, and reduce overall surface runoff. The stockpile will be regularly monitored for noxious weed growth. Re-seeding will occur as necessary, over the course of the project life to achieve widespread, uniform vegetative cover.
- Mulching - Post seeding, a layer of straw or hay mulch will be installed via crimping along the base of the stockpile, in order to promote seed germination and further stabilization of the soil. Mulching helps to mitigate the impacts of rainfall and increase soil moisture retention. Mulching will be monitored and re-applied as necessary, until vegetative growth is established.
- Surface Roughening and Vertical Tracking - Surface roughening creates horizontal grooves and ridges in the soil to reduce runoff velocity, encourage infiltration and trap sediment. This practice will be implemented on the proposed topsoil stockpile location, on the eastern border of the disturbance area.

#### 14.13 Stormwater / Erosion Control

- Berms: External ditches and berms will be constructed along the perimeter of the Eagle Pad project site to ensure that runoff remains on-site and is diverted to the sediment traps and detention basin area.
- Ditches: External ditches and berms will be constructed around the perimeter of the Eagle Pad project site to ensure that runoff remains on-site and is diverted to sediment traps and the detention basin area. Temporary diversion ditches will collect and drain on-site stormwater to sediment traps and outlets. Treated stormwater will exit the sediment traps onto undisturbed ground where the natural contours will drain away from the project area. Ditches shall have a minimum slope of 0.5%, 12" depth minimum, and 2:1 slope.
- Sediment Trap: Three 20 feet by 20 feet by 3 feet deep sediment traps are recommended for this project during the construction phase. Sediment traps will be reclaimed during the production phase.
- Stormwater Detention Basin:
  - During the construction phase, stormwater from the well pad and production facility will drain to the stormwater detention basin located west of the well pad. The outlet will consist of two 12-inch diameter high-density polyethylene (HDPE) pipes. One will have an orifice cap to control release rates and one will have no orifice cap. Anti-seep collars should be used to prevent seepage through the berm and outlet slopes should be protected using geotextile fabric or riprap in order to prevent erosion along the embankment.
  - During the production phase, stormwater from the reclaimed well pad and production facility will drain to the stormwater detention basin located west and south of the reclaimed well pad. The outlet will consist of two 12-inch diameter HDPE pipes. One will have an orifice cap to control release rates and one will have no orifice cap. Anti-seep collars should be used to prevent seepage through the berm and outlet slopes should be protected using geotextile fabric or riprap in order to prevent erosion along the embankment.
- Riprap Apron: This site will have riprap aprons located at the outlet of the pipe outlets for the stormwater detention basins during both the construction and production phases.
- Sediment Control Logs: Straw wattles may be placed around the perimeter of stockpiles during both the construction and production phases to further control erosion and minimize sediment transport.
- Seeding and Mulching: Permanent seeding will be applied to all topsoil stockpiles and reclaimed areas during the production phase.
- Vehicle Tracking Control: Vehicle tracking control will be implemented where the proposed access road intersects East 120th Avenue.

#### 14.14 Wildlife

- During drilling, completion, and production operations, regular Auditory, Visual, and Olfactory Monitoring (AVO) inspections are performed on equipment containing hydrocarbons, fluids, or associated chemicals. AVO inspections include taking the time to look, smell and listen for leaks.
- Operator utilizes a polyethylene liner beneath the drilling rig during drilling operations and beneath the areas where completions equipment (including pump trucks and other heavy equipment) during completion operations to ensure there is an impermeable layer between the rig and the earth. The use of this liner prevents hydrocarbons and other fluids from reaching the soil in the unlikely event a leak does occur. The liner is inspected for integrity throughout drilling operations and maintenance/repair to the liner occurs as needed.
- Routine Spill Prevention, Control, and Countermeasure (SPCC) inspections will be conducted and documented pursuant U.S. EPA requirements. The location will be equipped with a Supervisory Control and Data Acquisition (SCADA) system that allows for remote monitoring and shut-in capabilities.
- Operator has developed a robust Leak Detection and Repair (LDAR) program, which utilizes Forward Looking Infrared (FLIR®) cameras to identify and fix leaks. These inspections will begin during the drilling phase and continue throughout the life of the Oil & Gas Location.
- Any spill or release reported to the ECOM shall also be reported to Adams County Local Government Department (LGD).
- Project personnel will not intentionally harm, harass, or otherwise disturb wildlife.
- The Operator will provide general wildlife compliance training and resources to relevant project personnel, including contractors.
- • Project personnel will report any injured or orphaned wildlife discovered at the project location.
- The Operator will consult with CPW or other appropriate wildlife agency personnel, as needed, should any new significant constraints or concerns arise.
- The Operator will employ qualified biologists and subject matter experts as needed to ensure compliance with wildlife protection measures and expectations.
- The project site will not include drilling pits, production pits, or other pits associated with oil and gas operations.
- If a trench is left open for more than 5 consecutive days during pipeline construction, the Operator will install wildlife escape ramps at a minimum of one ramp per 0.25 miles of trench.
- Associated flowlines and utility lines will not occur within any perennial streams identified as aquatic HPH.

- The stormwater BMPs that the Operator will implement for this project site include: a Grading, Erosion, and Sediment Control (GESCC) Plan and Drainage Study Plan to address stormwater.
- If vegetation removal occurs during the nesting season (April 1 to August 31), the Operator will conduct migratory bird nest clearance surveys prior to vegetation removal. Vegetation removal work must start within 7 days of a nest clearance survey. If work has not started, the area will need to be re-surveyed for nests. If nests are located, the Operator will implement nest protection BMPs. These BMPs will include the appropriate species specific (varies by bird species) work zone buffers around the nest.
- If construction occurs during June through September, milkweeds within the project site will be transplanted (outside of the monarch breeding season) to the adjacent habitat outside of the project site (upon surface owner approval). If the milkweeds cannot be transplanted, the milkweeds within the project site will be surveyed for monarch eggs, caterpillars, and adults. If no monarch eggs, caterpillars, or adults are observed, then the milkweed will be removed prior to construction.
- This location will use gas and oil takeaway pipelines.
- There will be no permanent lighting.
- Permanent production facilities will be powered by utility power.
- A full-wrap sound wall will be installed and will remain in place through the duration of development operations.
- Light sources used during development activities will be placed inward and downward, within the sound wall wrap.
- The Operator has committed to conducting raptor nest, migratory bird nest, and swift fox den surveys prior to construction (outlined in Table 4). If active nests or dens are found within species-specific buffer zones, CPW will be consulted and appropriate protection BMPs will be implemented.

## References

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## Colorado Department of Public Health and Environment Colorado EnviroScreen Report Summary

The EnviroScreen report for this census block group indicates a moderate cumulative burden, with a Colorado EnviroScreen Percentile Score of 66.91. This places the community above 66.91% of other census block groups statewide in terms of combined environmental and population vulnerability. While not automatically classified as disproportionately impacted under Air Quality Regulation 3, the score suggests elevated environmental and health-related concerns that merit consideration in project planning and mitigation.

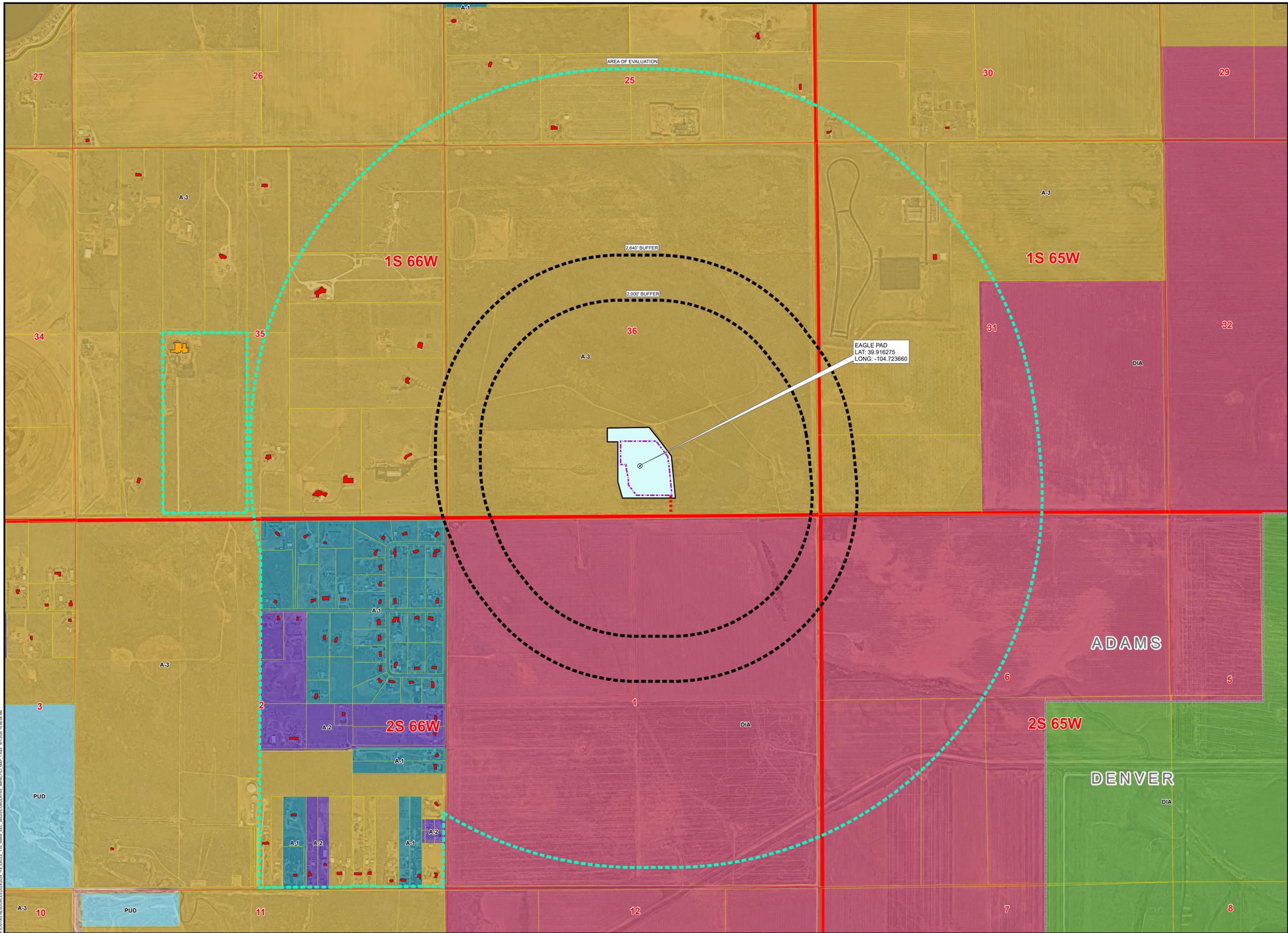
Component scores reveal notable environmental stressors. The Environmental Effects score (70.60) and Sensitive Populations score (70.93) are particularly high, pointing to both physical environmental burdens and population health sensitivities. Air toxics emissions rank in the 79th percentile, and fine particulate pollution is in the 92nd percentile—indicating significant air quality concerns. Proximity to oil and gas operations (65.37 percentile) and Risk Management Plan sites (71.77 percentile) further elevate the potential for cumulative impacts. Other indicators such as impaired streams and rivers (76.31 percentile) and diabetes prevalence (78.71 percentile) reinforce the need for targeted mitigation.

Demographic indicators show a mixed vulnerability profile. While low income and educational attainment percentiles are moderate (37.10 and 31.70 respectively), the population under age 5 ranks in the 87.70 percentile, suggesting a higher proportion of young children who may be more susceptible to environmental exposures. Heart disease and low birth weight also score above the 65th percentile, underscoring public health sensitivities.

In response to these findings, the Operator identified and implemented Best Management Practices (BMPs) and Environmental Stewardship Practices (ESPs) to reduce incremental impacts. These include dust suppression measures, containment of drilling fluids, and pipeline transport to reduce truck emissions. Operational adjustments such as remote shut-in capabilities and maintenance scheduling further support proactive environmental management.

By leveraging the EnviroScreen data, the Operator was able to assess the community's vulnerability profile, prioritize mitigation strategies, and ensure that development proceeds in a manner that is both environmentally responsible and sensitive to local health and social conditions.

## Cumulative Impact Analysis Maps



- Legend**
- PROPOSED REFERENCE POINT
  - ACCESS ROAD
  - WORKING PAD SURFACE
  - OIL AND GAS LOCATION
  - BUFFER
  - AREA OF EVALUATION
  - SCHOOL FACILITY
  - HEALTH FACILITY
  - CHILD CARE FACILITY
  - RESIDENTIAL BUILDING UNIT
  - BUILDING UNIT
  - HIGH OCCUPANCY BUILDING UNIT
  - PARCEL BOUNDARY
  - COUNTY BOUNDARY
  - DISPROPORTIONATELY IMPACTED COMMUNITY (ENVIROSCREEN 2.0)
- ADAMS COUNTY ZONING**
- A-1 - AGRICULTURAL-1
  - A-2 - AGRICULTURAL-2
  - A-3 - AGRICULTURAL-3
  - DIA - DENVER INTERNATIONAL AIRPORT
- COMMERCE CITY ZONING**
- PUD - PLANNED UNIT DEVELOPMENT DISTRICT
- DENVER ZONING**
- DIA - AIRPORT (DIA)

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 LONG: -104.723660

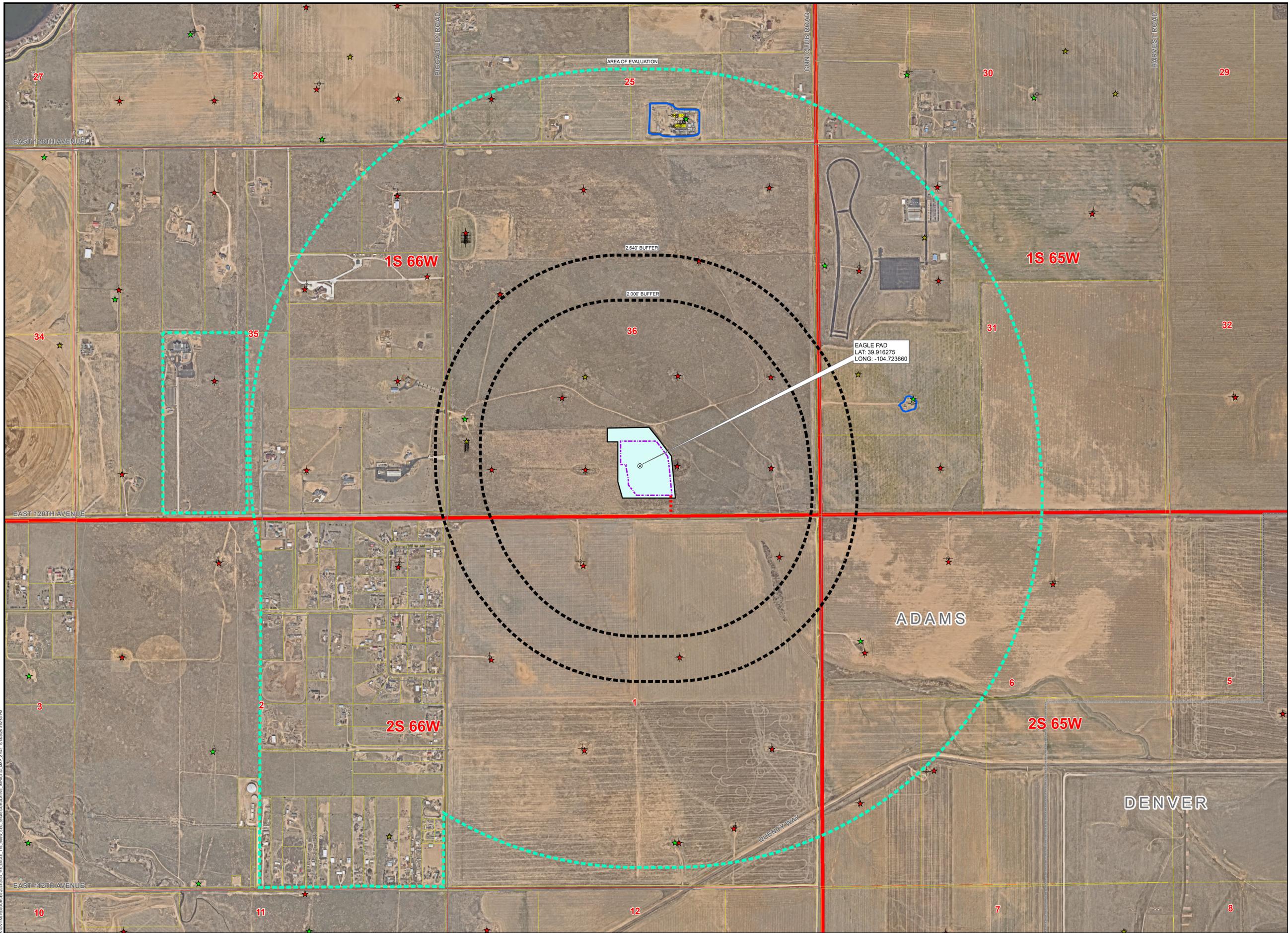
**EAGLE PAD  
 CUMULATIVE IMPACT MAP 1  
 RULE 315.b.B. i, ii, iii, vii and xi  
 ADAMS COUNTY, COLORADO**

Prepared For:

**609 Consulting, LLC**  
 LOVELAND OFFICE  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331  
 SHERIDAN OFFICE  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

Drawn by: KMG Date: 13 Jun 2025 NAD83 CO-NR  
 Revised: KMG Date: 4 Aug 2025 Scale: 1" = 600ft

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- Legend**
- PROPOSED REFERENCE POINT
  - ACCESS ROAD
  - WORKING PAD SURFACE
  - OIL AND GAS LOCATION
  - BUFFER
  - AREA OF EVALUATION
  - HIGHWAYS
  - ROADS
  - INDUSTRIAL FACILITY
  - INDUSTRIAL FACILITY NON OIL AND GAS
  - PARCEL BOUNDARY
  - COUNTY BOUNDARY
- OIL AND GAS LOCATIONS**
- STATUS
- ★ ACTIVE LOCATION
  - ★ ABANDONED LOCATION
  - ★ CLOSED LOCATION
- ECMC WELLS**
- STATUS
- ⊗ ABANDONED LOCATION
  - ⊗ ACTIVE
  - ⊗ DOMESTIC
  - ★ DRILLING
  - ⊗ DRY AND ABANDONED
  - ◆ INJECTING
  - PERMITTED
  - ⊗ PLUGGED AND ABANDONED
  - PRODUCING
  - ⊗ SHUT IN
  - ⊗ TEMPORARILY ABANDONED
  - WAITING ON COMPLETION

EAGLE PAD  
 LAT: 39.916275  
 LONG: -104.723660

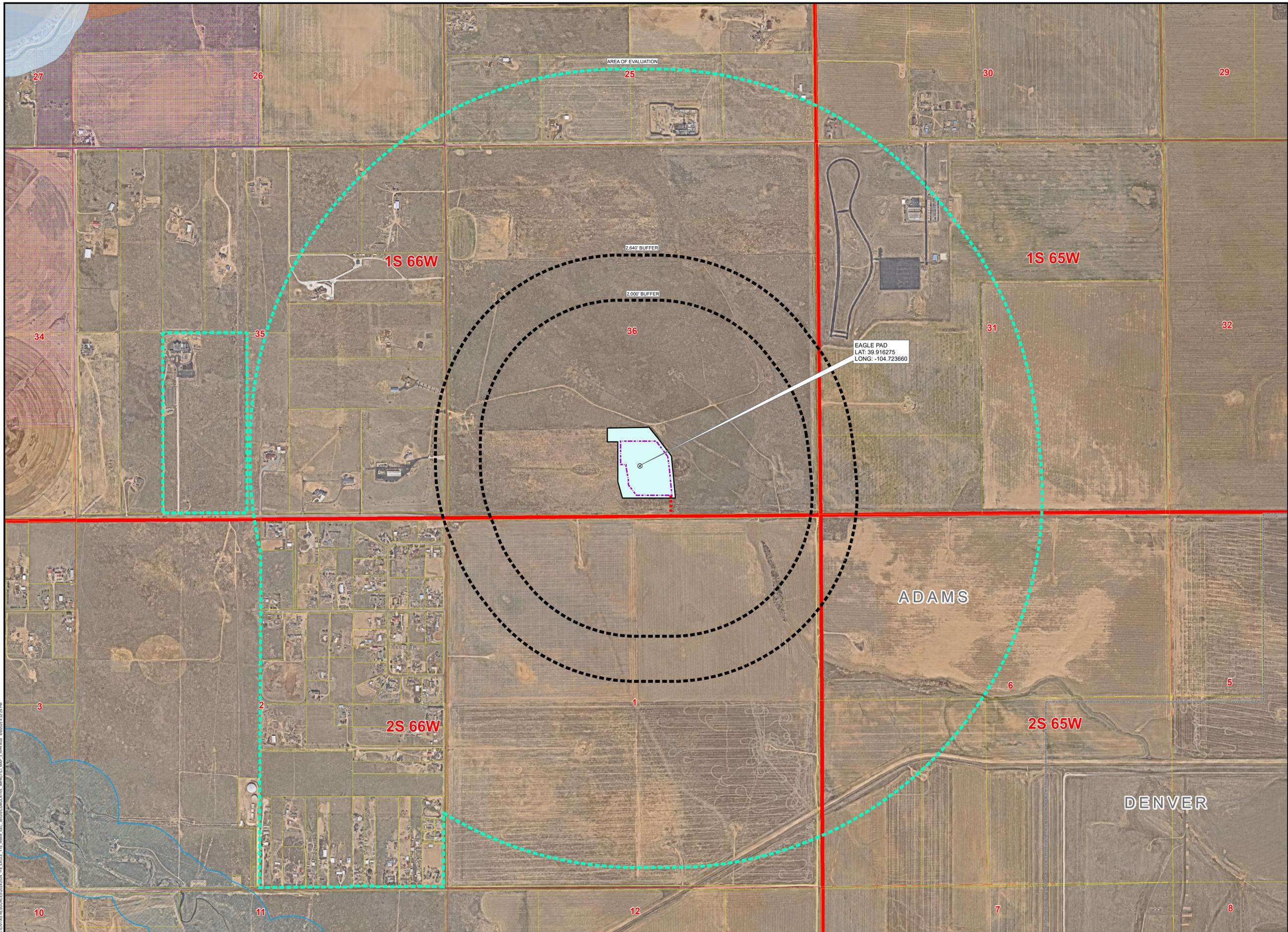
**EAGLE PAD  
 CUMULATIVE IMPACT MAP 2  
 RULE 315.b.B. i, viii, ix, x and xi  
 ADAMS COUNTY, COLORADO**

Prepared For:

**609 Consulting, LLC**  
 LOVELAND OFFICE  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331  
 SHERIDAN OFFICE  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

Drawn by: KMG Date: 13 Jun 2025 NAD83 CO-NR  
 Revised: KMG Date: 4 Aug 2025 Scale: 1" = 600ft

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- Legend**
- PROPOSED REFERENCE POINT
  - ACCESS ROAD
  - WORKING PAD SURFACE
  - OIL AND GAS LOCATION
  - BUFFER
  - AREA OF EVALUATION
  - PARCEL BOUNDARY
  - COUNTY BOUNDARY
  - AQUATIC NATIVE SPECIES CONSERVATION WATERS
  - AQUATIC SPORTFISH MANAGEMENT WATERS
  - BALD EAGLE ROOST SITE
  - CPW STATE WILDLIFE AREAS AND STATE PARKS

**EAGLE PAD  
CUMULATIVE IMPACT MAP 3  
RULE 315.b.B. i, iv and xi  
ADAMS COUNTY, COLORADO**

Prepared For:  
**CIVITAS**  
 Extraction Oil & Gas, Inc.

**609 Consulting, LLC**

**LOVELAND OFFICE**  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331

**SHERIDAN OFFICE**  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

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 Revised: KMG Date: 4 Aug 2025 Scale: 1" = 600ft

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## **Eagle Pad**

### **Dust Mitigation Plan**

Section 36, Township 1 South, Range 66 West  
Adams County, CO

## Introduction

In accordance with Adams County Development Standards and Regulations Section 4-11-02-03-03-03-17 and Colorado Energy & Carbon Management Commission (ECMC) Rule 427, Extraction Oil and Gas, Inc (Extraction) provides the following information outlining existing conditions at the proposed Oil and Gas Location as well the best practices that will be employed to meet the dust mitigation requirements in these rules.

- NRCS Soil Survey data shows the access road, location, and disturbance area consists of the following soils:
  - Type A
    - Blakeland-Truckton association
  - Type B
    - Truckton loamy sand, 0 to 3 percent slopes
  - Type C
    - Ascalon sandy loam, 0 to 3 percent slopes
- The Operator will post an access road speed limit not to exceed 20 miles per hour to minimize fugitive dust emissions from vehicle traffic traveling on the access road.
- The Operator will perform regular inspections and road maintenance to ensure the integrity of the access road and associated features is maintained throughout the life of this project. Maintenance consists of re-compacting the road base/recycled asphalt mix on an as-needed basis.

Please refer to the associated Traffic Study for the estimated truck trips for each phase of development.

## Well Pad Construction Phase

Fugitive dust emissions associated with well pad construction are generally caused by soil excavation, earthwork and site development activities. The Operator will minimize dust emissions throughout all phases of well pad construction including dust resulting from the use of unimproved road surfaces. Dust suppression during initial construction will be accomplished by the application of freshwater to the access road(s) and exposed earthen surfaces to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of only freshwater unless otherwise requested and approved as applicable.

The initial disturbance area of the Oil and Gas Facility will be 17.03 acres.

The surface of the well pad surface of the Location (~10.65 acres) will be covered with Class 6 aggregate material or recycled asphalt. The use of this material greatly reduces the generation and transport of dust.

At the entrance to the location, the Operator will install and maintain vehicle tracking controls (e.g. - coarse aggregate, a tracking pad, or cattle guard) to further reduce and remove loose mud and dirt on construction equipment and vehicles servicing location. These controls reduce and minimize the tracking of dirt and mud on public roads. The tracking controls are continually maintained and remain in place during pre-production operations. Topsoil stockpiles will be seeded, straw mulched and crimped in order to promote the establishment of plants and associated vegetation used to stabilize the stockpiles and prevent the origination of dust and other erosion from occurring.

## Well Drilling and Completions Phases

Once the well pad is constructed and covered with aggregate or recycled asphalt, dust emissions will be minimal. Little if any dust emissions are anticipated during the drilling phase. The only notable source of dust during the completions phase is associated with handling of proppant (e.g. - north white sand) that is used during hydraulic fracturing.

To minimize sand-related dust emissions, the Operator will be utilizing containerized box technology for sand transport, storage and use during the completions phase. These sand containers (“sand boxes”) are sealed containers that protect the sand from exposure to wind and prevent dust generation. While fracturing operations are taking place, sand is dispensed from the sand boxes using transport hoses that keep the sand contained with a sealed system and not exposed to the wind or other atmospheric conditions. The sand is then pumped directly down the wellbore. Using this configuration, the Operator is able to avoid surface stockpiles of unused sand that could generate fugitive dust emissions when subjected to periodic wind events.

## Interim Reclamation Phase

Once the wells have been put into production, the Oil and Gas Location will be partially reclaimed to 6.52 acres; only those areas necessary for production and maintenance operations will remain. During interim reclamation, earthmoving activities will be required to reduce the original footprint of the well pad. The movement of earthen materials may create dust. As described above for well pad construction, dust will be controlled on an as-needed basis through application of freshwater on disturbed soils and exposed surfaces.

Those previously disturbed areas that have been graded will be stabilized and revegetated. Revegetated areas may return to prior agricultural use or usage pursuant to the contractual provisions between the operator and the State Land Board (surface owner).

## Production Phase

During the production phase, traffic in and out of the Oil and Gas Location will be limited. Typical maintenance and production operations require one small pickup truck per day. Occasionally, larger trucks and associated equipment may be required for maintenance or workover activities, in addition to produced water trucks, which should be less than four trucks per day after the first several months of production.

As a result, long term traffic-related dust will be minimal if not insignificant. As described above, vehicle tracking control (e.g. - coarse aggregate, a paved apron, or cattle guard) will be maintained after the terminus of the apron to minimize tracking of dirt or mud onto public roads. Should dirt or mud tracking on public roads occur, the Operator will use a street sweeper to clean the road surface and minimize the potential for dust generation from muddy roads.

## Proposed Best Management Practices

1. On Location, dust suppression during high traffic periods on site will be accomplished by the application of water to the well pad and exposed earthen surfaces to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of only freshwater unless otherwise requested and approved as applicable.
2. Off Location, dust suppression during high traffic periods on site will be accomplished by the application of approved methods to the access road(s) and haul route to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of, but may not be limited to, the use of fresh water and/or magnesium chloride as a dust suppressant.
3. To minimize sand-related dust emissions, the operator will be utilizing containerized box technology for sand transport, storage and use during the completions phase. These sand containers (“sand boxes”) are sealed containers that protect the sand from exposure to wind and prevent dust generation.
4. The operator will post an access road speed limit not to exceed 20 miles per hour to minimize fugitive dust emissions from vehicle traffic traveling on the access road.

5. The operator will perform regular inspections and road maintenance to ensure the integrity of the access road and associated features is maintained throughout the life of this project. Maintenance consists of re-compacting the road base/recycled asphalt mix on an as-needed basis.
6. The operator will install and maintain vehicle tracking controls (e.g. - coarse aggregate, a tracking pad, paved apron, or cattle guard) to further reduce and remove loose mud and dirt on construction equipment and vehicles servicing location.
7. The pad will be plated with aggregate road base material to further minimize fugitive dust.



CIVITAS

**Extraction Oil and Gas, Inc.**

**SITE SAFETY AND EMERGENCY ACTION  
PLAN**

District Office  
650 Southgate Drive  
Windsor, CO, 80550

**Eagle Pad**

ADAMS COUNTY, COLORADO

## **Table of Contents**

Section 1 - Signature Page

Section 2 - Site specific information

- a.** Site Safety Requirements
- b.** Emergency muster/assembly point(s)
- c.** 911 Address and GPS coordinates
- d.** Site description, equipment list, and storage information
- e.** Nearby schools and other High Occupancy Buildings
- f.** Directions to project locations and Map.
- g.** Location of SOS sheets
- h.** Location of sign-in sheets, JSA, safety forms

Section 3 - Maps & Documents

- a)** Site Map
  - i. 250', 500', 1,000' Buffer zones and location of nearest Building Unit(s)
  - ii. Access Map and Muster point(s)
  - iii. 2500' Buffer zone

Section 4 - List of Emergency Contacts

- a)** Extraction Oil and Gas, Inc. contact information.
- a)** Extraction Oil and Gas, Inc. community/media relations contact information
- b)** First responder contact information
- c)** Regulatory contact information
- d)** Nearest hospital
- e)** Spill response organization contact information.

Section 5 - Spill Response and Reporting

- a)** Spill Response
- b)** Spill Reporting
  - Water Resources Exhibit

Section 6 - Reportable storage quantities

- a)** Reportable quantities
- b)** Tier II Reporting

Section 7 - Evacuation Information

- a)** Evacuation plan procedures (public)

Section 8 - Coordination with First Responder Agencies

**SECTION 1**  
**SIGNATURE PAGE**

<b>Extraction Oil and Gas, Inc.</b>			
<b>Name</b>	<b>Signature</b>	<b>Title</b>	<b>Date</b>
Lisa David	<i>Lisa David</i>	Director, PSM and Emergency Management	09/16/25
<b>Fire District</b>			
<b>Name</b>	<b>Signature</b>	<b>Title</b>	<b>Date</b>

**SECTION2**  
**SITE SPECIFIC INFORMATION**

**a) Site Safety Requirements and General Information**

The minimum personal protective equipment (PPE) to enter any Extraction Oil and Gas, Inc. production location includes a hard hat, safety glasses, safety toe boots, fire resistant clothing (FRC), and a 4-gas monitor. All contractors and visitors are responsible for providing their employees with the appropriate training on and use of PPE while on Extraction Oil and Gas, Inc. locations. In addition, all contract personnel entering an Extraction Oil and Gas, Inc. location to perform work must understand and abide by Extraction Oil and Gas, Inc.'s contractor expectations relating to environmental, health, and safety requirements.

The primary hazards that any person must be aware of while on an Extraction Oil and Gas, Inc. production location include, but are not limited to, the potential for the release of hydrocarbon gases and/or liquids from production equipment/tanks, heavy truck and equipment traffic, loud noise, high pressures, and the potential for a flash fire. These hazards can vary depending on the work being performed.

**b) Emergency Muster/Assembly point(s)**

**Eagle Pad**

Muster point is at the entrance to location. Muster locations will be identified during all safety briefings.

**c) 911 Address and GPS coordinates**

**API#** - Pending

**Legal Description** – SE ¼ SW ¼ & SW ¼ SE ¼ Section 36, T1S, R66W, 6th P.M.

**Address** – Pending

**Lat/Long:** Lat: 39.916939° N      Long: -104.723452° W      Elevation: 5212ft

**d) Site description**

The Eagle Pad is an Extraction Oil and Gas, Inc. oil and gas production facility that will have 19 horizontal oil and gas wells. Oil will be stored on site briefly and it will be transported off-site via pipeline. Some produced water will be stored on site and can be referenced in the following equipment list.

Equipment Type
Nineteen horizontal wells
Three gas lift meter buildings
Eight vapor recovery units
Nineteen 3-phase meters
Two sales gas meters
Four gas scrubbers
Two bulk treaters
Four separators
Three knock outs (low and high pressure, and crank case)
Two ECDs
Two pumps (recycle and crank case)
One instrument air skid
Four blowers
Two LACT
One electrical rack
One vapor recovery tower
One maintenance vessel
Two water tanks
Four oil tanks
One modular large volume tank (MLVT)
Two temporary generators
Eight temporary 500bbl produced water tanks
One temporary ECD (for temp) produced water tanks
Two Pig Launchers
Two Sales Meters
One Buyback Meter

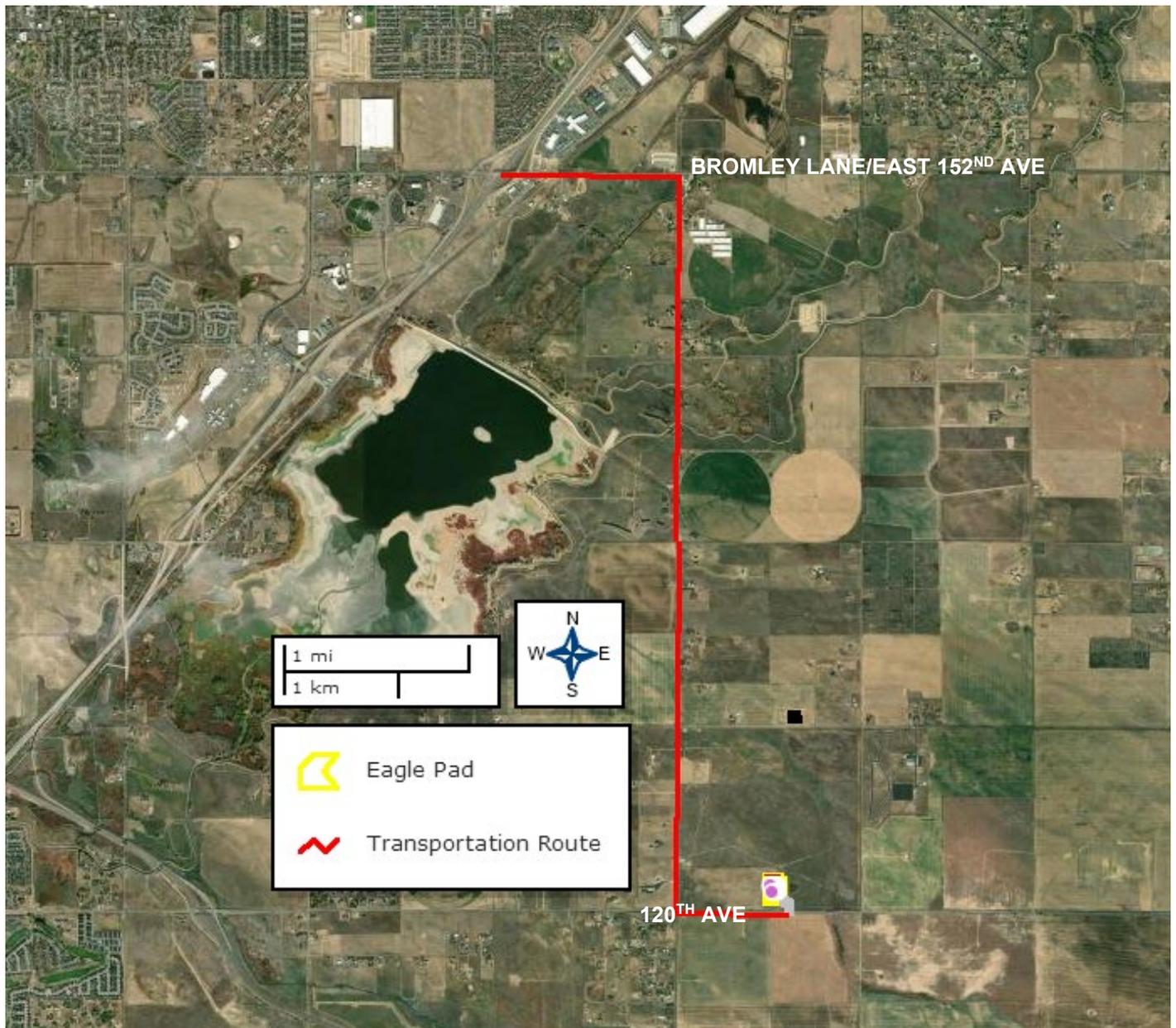
e) **Nearby schools and other High Occupancy Buildings**

No Schools within 2500' of this location

No Residence within 2500' this location

f) **Directions to Project Locations**

**Eagle Pad** – Take exit 22 off of I-76 to Bromley Lane/East 152<sup>nd</sup> Ave and proceed in an Easterly direction for 0.9 miles to Picadilly Rd and continue south for 4.0 miles to East 120<sup>th</sup> Ave. Exit left and continue East for 0.6 miles to the proposed access road to the North.



**g) Location of SDS sheets**

Depending on the operations taking place on location, the chemicals that may be present will vary. Regardless, hazard communication is a critical safety measure and Safety Data Sheets (SDS's) will be available from the Company Representative present or the contractor performing work on location. All SDS sheets are available through the following link, but can only be accessed by Civitas employees- <https://chemmanagement.ehs.com/9/52B6C4F1-9454-4F70-86F1-15370D01243A>

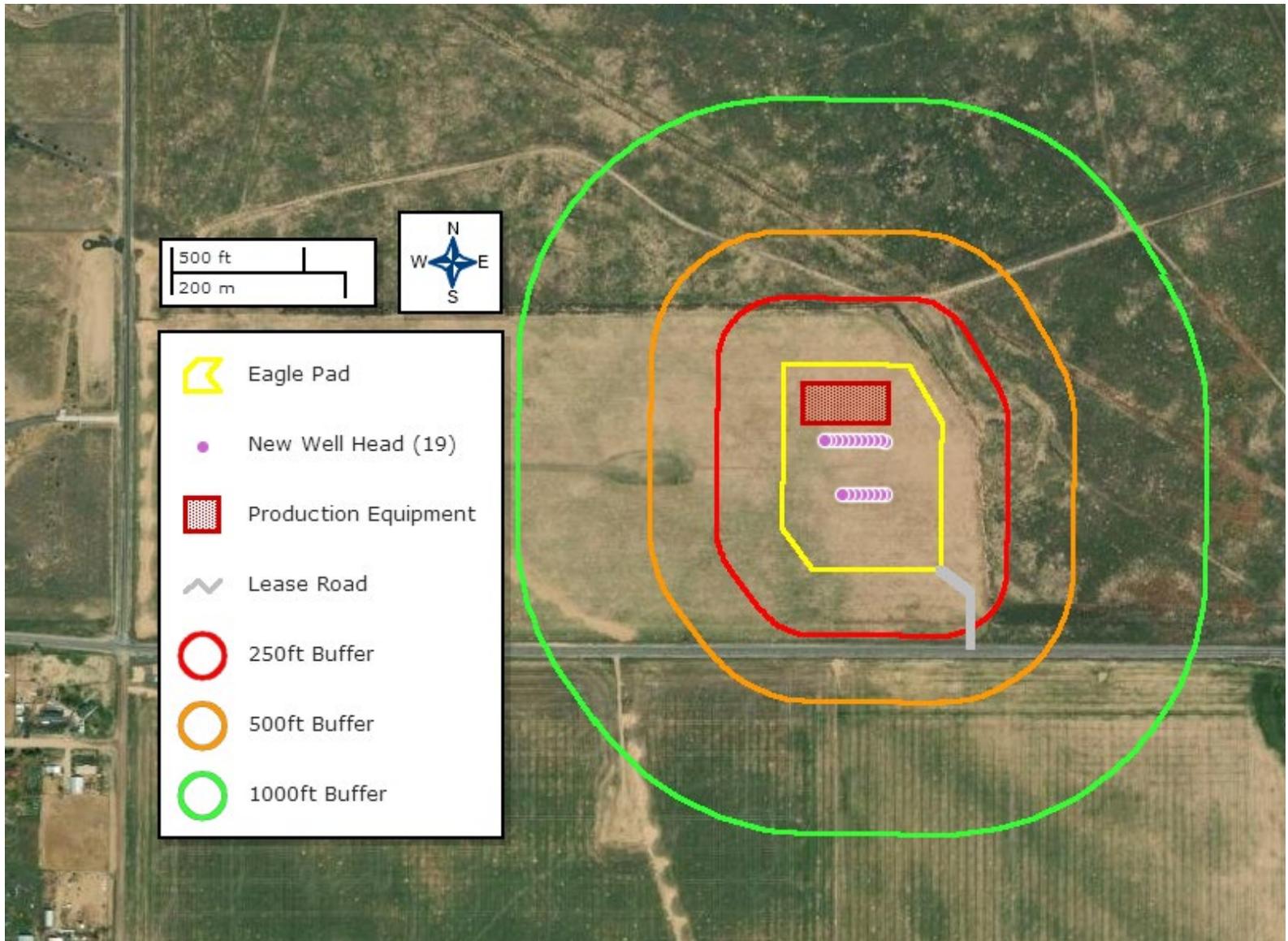
**h) Sign-In Sheets, JSAs, and Safety Forms**

During drilling and completion activities all employees and approved visitors to the **Eagle Pad** will be required to enter through a manned security checkpoint at the location entrance where they will be required to sign in and will be provided with a detailed safety briefing of current operations and all safety precautions that must be adhered to while on location. In addition, all who enter the location must also sign out upon their departure. Security personnel are required to account for all persons entering or leaving location during active operations and in the event of an incident.

Once drilling and completion activities are finalized, the site will transition to its production phase and no unauthorized personnel will be allowed on location without first contacting a company representative. At this point, the primary chemicals stored on site will be crude oil and produced water.

Job Safety Analysis (JSA'S) are written every day, per task, or per shift if work crews are working 24/7 and can be found on location. This is performed by each contractor and kept in their files for review.

**Section 3- Maps**  
Eagle  
250ft, 500ft, 1000ft, Buffer



# Eagle Pad Access Map and Muster Point



**2500ft Buffer Map**



**Section 4**

**List of Emergency Contacts**

**a) Extraction Oil and Gas, Inc.**

Name	Office Phone	Emergency/Cell
Field Office 650 Southgate Drive Windsor, Co. 80550	NA	303-659-7740
Extraction Oil and Gas, Inc. EHS on call emergency number	NA	720-927-1813
PSM, Emergency Management Director- Lisa David	NA	Cell 307-689-0000
EHS- Manager: Ivan Steinke	NA	Cell 970-381-5114

**b) Extraction Oil and Gas, Inc. community/media relations**

Name	Office	Cell Phone
Rich Coolidge	NA	303-312-8561

**c) First Responders**

Name	Emergency	Non-Emergency Dispatch	Office Number
Brighton Fire Rescue District	911	303-288-1535	303-659-4101
Adams County Sheriff	911	303-288-1535	303-654-1850
Adams County OEM	911	303-288-1535	720-523-6600
Colorado State Patrol	911	303-239-4501	719-775-2964

**d) Regulatory Contacts**

Name	Office Phone	Cell Phone
Adams County Local Government Designee- Greg Dean	720-523-6891	none
ECMC	303-894-2100	none
CDPHE	877-518-5608	none
Colorado Parks & Wildlife	303-291-7227	none
National Response Center	800-424-8802	none

**e) Medical Facilities**

Name	Office Phone	Cell Phone
Intermountain Health Platte Valley Hospital	303-498-1600	NA
UCHealth Emergency Room, Commerce City	303-286-6920	NA

**f) Spill Response Organization**

Name	24/7 Emergency	Non-Emergency
EnviroServe	800-488-0910	NA

**g) Fire, explosion, associated with loss of well control.**

Name	Office Phone
Brighton Fire Rescue District	911 or 303-288-1535
Wild Well Control, Inc.	281-353-5481
Northern Colorado Medical Facility (Burn Unit)	970-810-4121
Adams County Office of Emergency Management	911 or 720-523-6600

**h) Government Agencies**

Name	Office Phone
Adams County Sheriff	911 or 303-654-1850
ECMC	303-894-2100
CDPHE	877-518-5608
Adams County OEM	911 or 720-523-6600

**i) Railroad Emergency Response**

Name	Office Phone
Union Pacific Railroad	888-877-7267

## Section 5 Spill Response and Clean Up

### a) Spill Response

There are multiple types of hydrocarbons which can be released/spilled during oil and gas production and exploration. Most commonly released are unrefined products such as crude oil and produced water. Refined petroleum products such as diesel, gasoline, and motor oil spills are less common, but still equally important to mitigate. If a spill is found reportable, it will be mitigated in accordance with Colorado Energy and Carbon Management Commission (ECMC) and Colorado Department of Public Health and Environment (CDPHE) guidelines.

Once a release has been identified, it will be immediately stopped and contained if possible and is safe to do so. When containing a spill; pig blankets, snakes, absorbent materials, or earthen berms will be constructed around the release to keep material from spreading. These materials will be provided by APEX and the contract company and kept on-site. Diligent efforts will be made to minimize contact with live vegetation or open water if release is outside of secondary containment structures.

In the event of a large incident requiring outside assistance, Extraction Oil and Gas, Inc. has contracted with Wild Well Control who possesses a working knowledge of oil and gas operations, emergency response and Incident Command. Once notified Wild Well Control personnel can be on location from 6 to 12 hours.

### b) Spill Reporting

What determines a reportable spill and to whom does the report go?

- Spill and leaks shall be reported to the local fire department by using 911 in accordance with the provisions contained in the adopted International Fire Code.
  - ***IFC § 5704.2.7.10 Leak reporting.*** *A consistent or accidental loss of liquid, or other indication of a leak from a tank or system, shall be reported immediately to the fire department, the fire code official and other authorities having jurisdiction.*
- A spill/release will be reported to the ECMC if released material is property of Extraction Oil and Gas, Inc. and meets the ECMC reporting thresholds (see below), an example would be crude oil released from a separator or produced water from a water vault.
- A spill/release will be reported to the Adams County LEPC if released material is

property of Extraction Oil and Gas, Inc. and meets the ECMC reporting thresholds (see below),

- A spill/release will be reported to the CDPHE if released material is in the custody of a third party for spills that meet CDPHE reporting thresholds, are of any size that impact or threaten to impact waters of the state, a residence or occupied structure, livestock or public byway. An example would be an oil hauler over filling a truck and spills product onto the ground next to a flowing irrigation ditch.

Spills are reportable to the ECMC in the following circumstances:

1. the spill or release impacts or threatens to impact any waters of the state, a residence or occupied structure, livestock, or a public byway.
2. a spill or release in which 1 barrel or more is released outside of berms or other secondary containment; or
3. any spill or release of 5 barrels or more. If the spill impacts or threatens to impact waters of the state (which include surface water, ground water and dry gullies or storm sewers leading to surface water), it must also be reported immediately to CDPHE (25-8-601 CRS).
4. Petroleum releases of 25 gallons or more

Once a spill is determined reportable, there is a 24-hour deadline to make initial notification to the ECMC or CDPHE depending on product ownership. Spills/releases in the custody of Extraction Oil and Gas, Inc. will be reported by a Company representative. Spills/releases in the custody of a third party will be reported by the responsible company's EHS Department to the appropriate agency and to Extraction Oil and Gas, Inc.

These regulatory guidelines will be strictly followed by Extraction Oil and Gas, Inc. and any contractors operating under Extraction Oil and Gas, Inc.'s guidance during all activities.

## **Section 6**

### **Reportable quantities**

#### **a) Reportable quantities**

Mandated by Section 312 of the Emergency Planning and Community Right-To-Know Act (EPCRA) - also known as SARA Title III - the Tier II form captures information about the types, quantities, and locations of hazardous chemicals at a given facility. The form also lists contact information for the facility's designated emergency point-of-contact.

Any facility that is required to maintain MSDSs (or SDSs) under the Occupational Safety and Health Administration (OSHA) regulations for hazardous chemicals stored or used in the workplace.

Facilities with chemicals in quantities that equal or exceed the lists of lists thresholds must report.

- Propane, benzene, propene, and methane are on the lists and are known to be in crude oil. In addition, diesel is on the lists and may be stored on sites during construction.

#### **b. Reportable requirements**

If your facility meets the requirements under 40 CFR, you must submit your Tier II report to the state every year before March 1<sup>ST</sup>.

These regulatory guidelines will be strictly followed by Extraction Oil and Gas, Inc. and any contractors operating under Extraction Oil and Gas, Inc.'s guidance during all activities.

## Section 7

### Evacuation Information

**a. Evacuation Plan Procedures (public)**

The procedure to be used in alerting nearby persons in the event of any occurrence that could pose a threat to life or property will be arranged and completed with public officials in detail.

In the event of an actual emergency, the following steps will be immediately taken:

1. The Extraction Oil and Gas, Inc. representative will immediately notify proper authorities, including the fire department, sheriff's office, highway patrol, and any other public officials as described above and will enlist their assistance in warning residents and transients in the calculated radius of exposure.
2. Extraction Oil and Gas, Inc. will coordinate with local authorities to warn residents' down- wind of the location and within radius of exposure from the well site. Additional evacuation zones may be necessary as the situation warrants.
3. The Extraction Oil and Gas, Inc. representative will coordinate with appropriate emergency personnel to divert traffic in the vicinity away from the potentially dangerous area. No trespassing and warning signs will be posted at the entrance to the well site. The contract company will monitor essential and non-essential traffic on-site.
4. General:
  - a. The area included within the radius of exposure is the zone with the maximum potential hazard. When it is determined that conditions exist which create an additional area (beyond the initial zone of maximum potential hazard) vulnerable to possible hazard, public areas in the additional hazardous area will be evacuated.
  - b. In the event of a disaster, after the public areas have been evacuated and traffic stopped, it is expected that local civil authorities will have arrived and within a few hours will have assumed direction of and control of the public, including all public areas. Extraction Oil and Gas, Inc. will fully cooperate with these authorities and will exert every effort by careful advice to such authorities to prevent panic or rumors.
  - c. Extraction Oil and Gas, Inc. will dispatch appropriate personnel to the disaster site as soon as possible. The company's personnel will cooperate with and provide such information to civil authorities as they might require.

## **Section 8**

### **Coordination with First Responder Agencies**

- a) Extraction Oil and Gas, Inc. will communicate site construction, drill spud, completion operations and Production Turn-In-Line dates to Brighton Fire Rescue District and the Adams County Office of Emergency Management for coordination/communication with local first responders. These dates will be provided a minimum of 7 business days prior to commencement or change in oil and gas development operations.
- b) In the event of an emergency requiring First Responders, Unified Command will be established between the Extraction Oil and Gas, Inc. appointed company man on location and First Responders present. Unified Command post will be established based on conditions present at the time of incident.
- c) While foam is not currently supplied for oil and gas emergency response, Extraction Oil and Gas, Inc. is an active member of Colorado Preparedness and Response Network (CPRN), and a solution is being sought through a cooperative effort including other operators, First Responders and Adams County. Extraction Oil and Gas, Inc. has an established source of foam sitting at our Hub Facility off WCR -6 and WCR – 7.
- d) Extraction Oil and Gas, Inc., EHS representative and first responders identified in this Site Safety and Emergency Action Plan have reviewed this plan and discussed coordination efforts in the event of an emergency requiring first responder assistance.
- e) Extraction Oil and Gas, Inc. will provide training or walkthroughs as requested by the local first responders.



URBAN  
SOLUTION  
GROUP

## **Ambient Monitoring Report**

Eagle Pad  
Adams County, Colorado

Prepared for:

Extraction Oil & Gas Inc.  
555 17<sup>th</sup> Street, Suite 3700  
Denver, CO 80202

\*Extraction Oil & Gas Inc. operates as a wholly owned subsidiary of Civitas Resources Inc.

Prepared by:

Urban Solution Group, LLC  
3301 Lawrence Street, Suite 3  
Denver, CO 80205

July 22, 2025



# Table of Contents

1. Introduction.....	1
2. Summary.....	2
3. Ambient Monitoring Results .....	3
4. Notations .....	5
Appendix 1 – Summary Data and Charts .....	6
Appendix 2 – Sound Fundamentals .....	9
Appendix 3 – Glossary.....	12

**Report Submitted to:**

John Piekara  
Civitas Resources, Inc.  
(303) 294-7824  
jpiekara@civiresources.com

**Report Contact:**

Hezekiah George  
Urban Solution Group  
(720) 749-2916  
hezekiah.george@urbansolutiongroup.com

## 1. Introduction

Urban Solution Group, LLC (Urban) was commissioned by **Extraction Oil & Gas Inc.** (Extraction) to document the ambient A-weighted and C-weighted sound pressure levels at two locations adjacent to the Eagle Pad in Adams County, Colorado. Key location information is presented below.

**Pad Location:** SE1/4 SW1/4 & SW1/4 SE1/4 SEC. 36, T1S, R66W, 6TH P.M.

**Duration:** 120 Hours:

Starting at 12:00 a.m. Friday, July 4, 2025

Ending at 12:00 a.m. Wednesday, July 9, 2025

**Monitoring Point (MP) Coordinates:** MP1: 39° 55' 5.1234"N, 104° 43' 58.8354"W

MP2: 39° 54' 52.416"N, 104° 43' 58.5474"W

**Figure 1. Aerial View of Ambient Monitoring Locations and Proposed Eagle Location**



## 2. Summary

Urban collected sound pressure level (SPL) measurements at two locations near the Eagle Pad to document A- and C-weighted sound levels. This reporting period analyzed sound measurements collected from July 4, 2025, at 12:00 a.m., to July 9, 2025, at 12:00 a.m. inclusive. Figure 1 on the previous page shows the monitoring points in relation to the Eagle Pad. Table 1 below shows the overall A- and C-weighted SPL averages (Leq) for the 120-hour monitoring period. The SPL averages presented in this table show the overall sound levels when wind was below five (5) miles per hour. The raw data was filtered to remove data points where wind speeds exceeded five miles per hour, per ECMC guidelines.

**Table 1. Overall Study, Sound Level Averages**

Location	Daytime Averages (Leq)		Nighttime Averages (Leq)		Overall Averages (Leq)	
	dBA	dBC	dBA	dBC	dBA	dBC
Monitoring Point 1	47.8	61.7	46.2	60.8	47.1	61.3
Monitoring Point 2	54.8	66.1	55.3	63.5	55.0	65.0

### 3. Ambient Monitoring Results

Urban conducted a 120-hour ambient sound monitoring study from 12:00 a.m. Friday, July 4, 2025, to 12:00 a.m. Wednesday, July 9, 2025, to monitor and document local ambient sound levels at two nearby locations using Type 1 SvanTek noise monitoring stations. The sound level meters collect measurements of both A- and C-weighted sound pressure levels (SPL) and were each calibrated before and after the measurement period. Wind data was recorded with a weather station attached to the sound level meter at Monitoring Point 1 situated approximately 2,180 feet northwest of the Eagle Pad. The wind is assumed to be the same at all monitor locations.

The Eagle Pad is located north of East 120<sup>th</sup> Ave and east of Picadilly Road, in Adams County, CO. The closest major road, E-470, is a toll road that sees a high amount of traffic and is located approximately 2.25 miles west of the Eagle Pad.

The sound level meters are set to record audio files when the sound pressure levels exceed 55 dBA in the daytime (7:00 a.m. – 7:00 p.m.) and 50 dBA in the nighttime (7:00 p.m. – 7:00 a.m.). Based on the recordings, the most common sounds for the monitoring locations include vehicle traffic and airplanes.

The filtered A- and C-weighted daily sound level averages for Monitoring Points 1 and 2 can be found on the following page in Table 2 and Table 3, respectively. The average values presented in these tables are based on filtered data, such that any measurements taken with wind speeds in excess of five miles per hour were removed from the averages reported (per ECMC guidelines). Figure 2 to Figure 3 in Appendix 1 contain charts with the unfiltered hourly averages and wind speeds for each of the monitoring points.

**Table 2. Filtered Daily and Overall Sound Level Averages for Monitoring Point 1**

Description	Day 1	Day 2	Day 3	Day 4	Day 5	Overall Average
Average Wind Speed (mph)	3.0	3.3	3.7	3.2	2.7	<b>3.2</b>
<b>A-Weighted Levels</b>						
Daytime – LA <sub>Day</sub> (dBA) (7:00 a.m. - 7:00 p.m.)	46.5	49.0	45.0	48.9	48.6	<b>47.8</b>
Nighttime – LA <sub>Night</sub> (dBA) (7:00 p.m. - 7:00 a.m.)	44.7	45.8	46.1	48.8	46.8	<b>46.2</b>
Overall LA <sub>eq</sub> (dBA)	45.6	47.0	45.5	48.9	47.9	<b>47.1</b>
<b>C-Weighted Levels</b>						
Daytime – LC <sub>Day</sub> (dBC) (7:00 a.m. - 7:00 p.m.)	59.7	61.0	59.9	63.5	62.3	<b>61.7</b>
Nighttime – LC <sub>Night</sub> (dBC) (7:00 p.m. - 7:00 a.m.)	56.7	59.9	64.1	64.6	59.5	<b>60.8</b>
Overall LC <sub>eq</sub> (dBC)	58.2	60.3	62.3	63.9	61.2	<b>61.3</b>

**Table 3. Filtered Daily and Overall Sound Level Averages for Monitoring Point 2**

Description	Day 1	Day 2	Day 3	Day 4	Day 5	Overall Average
Average Wind Speed (mph)	3.0	3.3	3.7	3.2	2.7	<b>3.2</b>
<b>A-Weighted Levels</b>						
Daytime – LA <sub>Day</sub> (dBA) (7:00 a.m. - 7:00 p.m.)	52.9	55.1	52.1	56.5	55.5	<b>54.8</b>
Nighttime – LA <sub>Night</sub> (dBA) (7:00 p.m. - 7:00 a.m.)	52.0	53.8	53.6	58.5	57.8	<b>55.3</b>
Overall LA <sub>eq</sub> (dBA)	52.4	54.2	52.9	57.3	56.7	<b>55.0</b>
<b>C-Weighted Levels</b>						
Daytime – LC <sub>Day</sub> (dBC) (7:00 a.m. - 7:00 p.m.)	63.7	65.4	63.8	68.5	66.6	<b>66.1</b>
Nighttime – LC <sub>Night</sub> (dBC) (7:00 p.m. - 7:00 a.m.)	60.0	61.3	62.0	67.1	66.1	<b>63.5</b>
Overall LC <sub>eq</sub> (dBC)	61.9	63.0	63.1	68.1	66.4	<b>65.0</b>

#### 4. Notations

The services provided for this project were performed in accordance with generally accepted professional consulting services. No warranty, expressed or implied, is made or intended, by rendition of these consulting services or by furnishing oral or written reports of the findings made. Sound level meter and accompanying equipment serial numbers, along with calibration information, may be provided upon request. Urban Solution Group generated this report for the exclusive use of Extraction Oil & Gas Inc.

## Appendix 1 – Summary Data and Charts

**Figure 2. Chart of Unfiltered Hourly Averages for Monitoring Point 1**

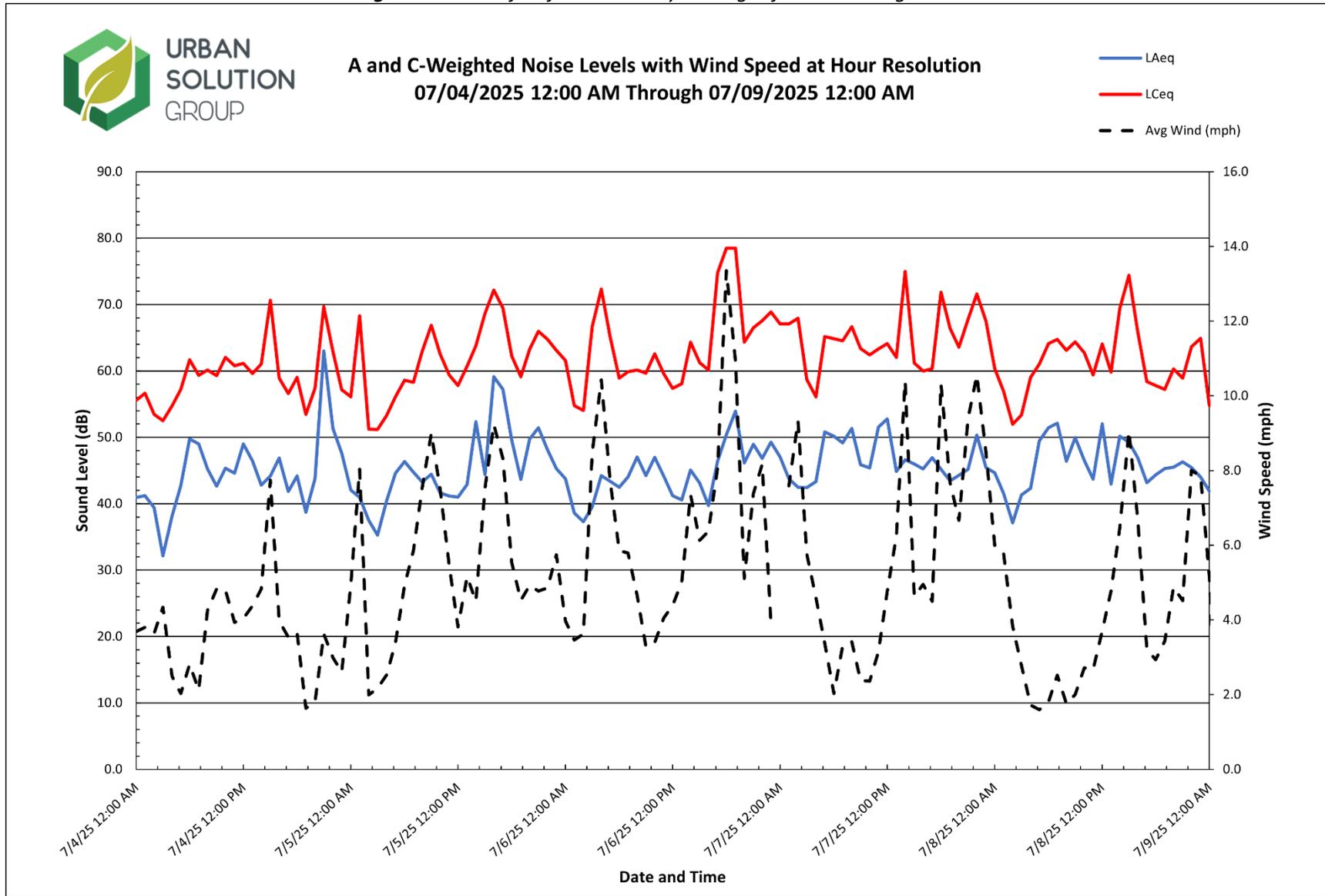
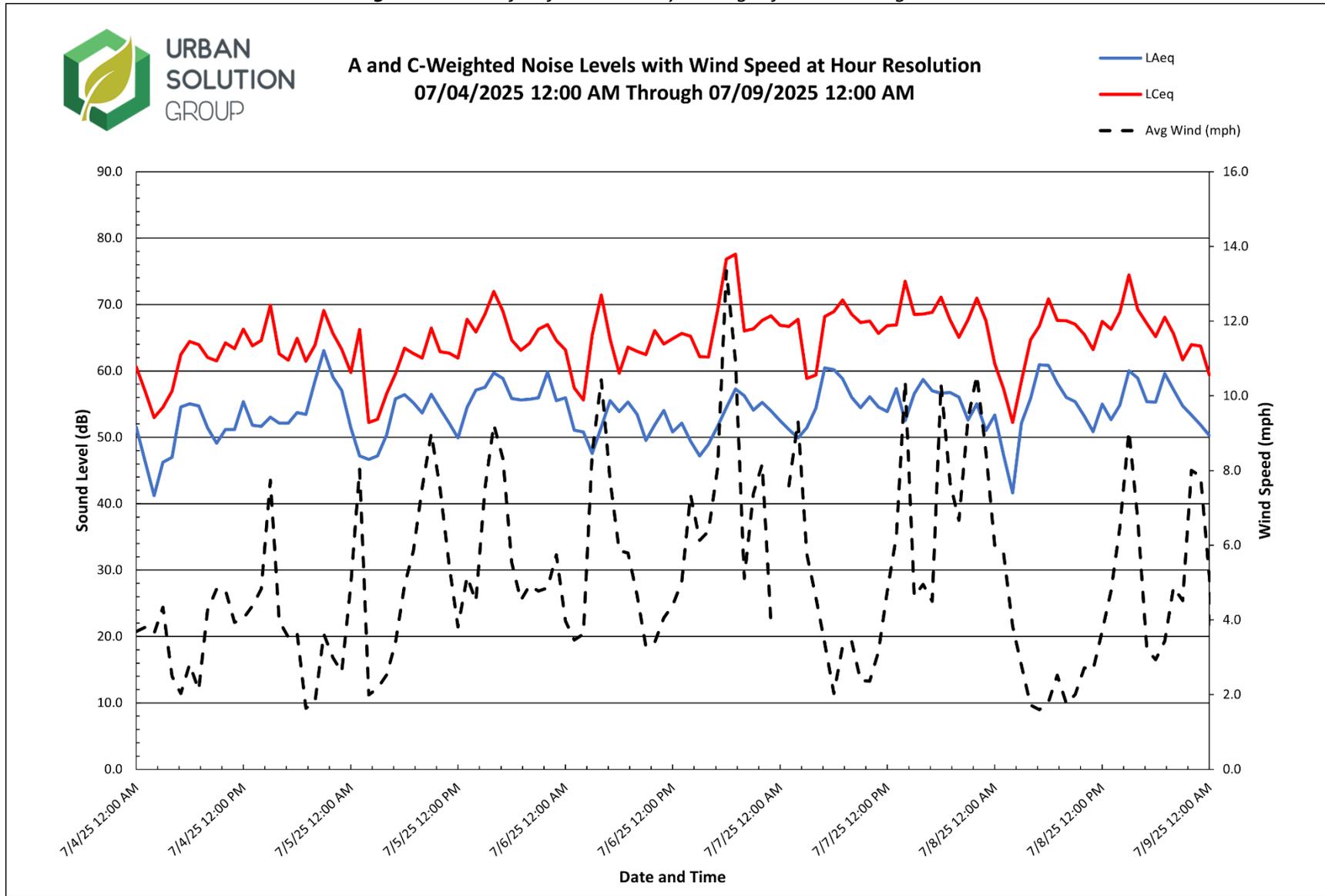


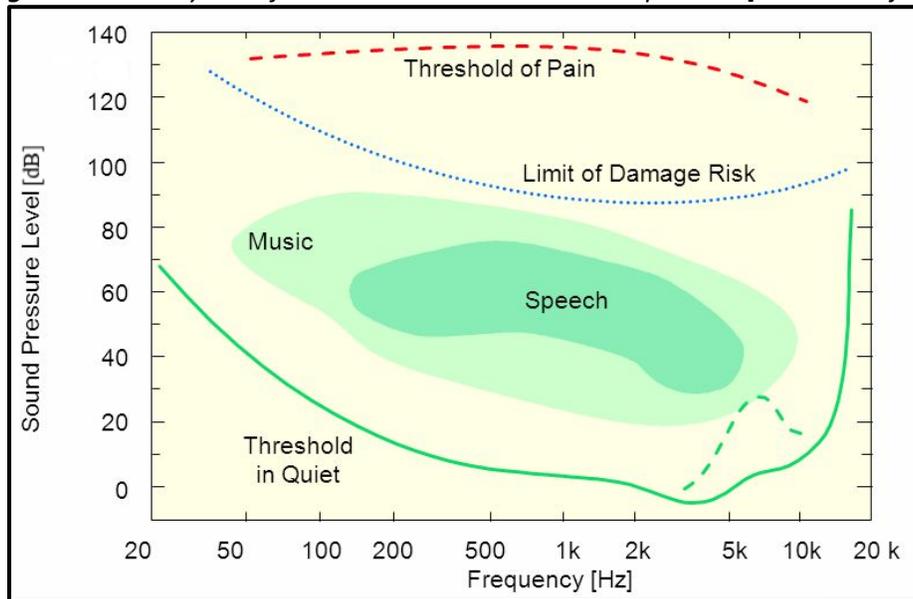
Figure 3. Chart of Unfiltered Hourly Averages for Monitoring Point 2



## Appendix 2 – Sound Fundamentals

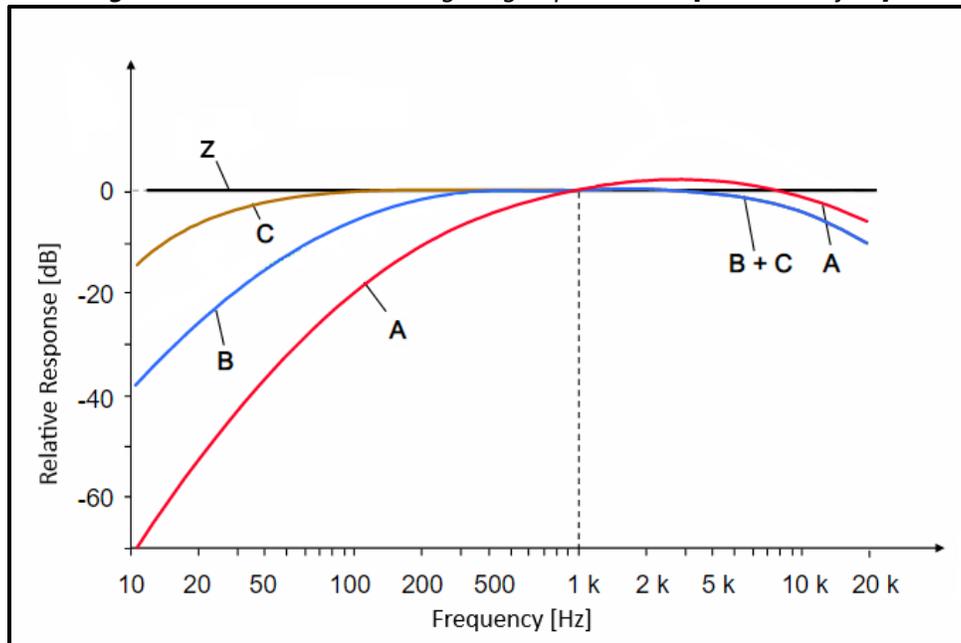
Sound is a series of vibrations transmitted through the air, or other medium, and can be heard when they are processed by the human ear. There are two important properties that describe sound; frequency and amplitude. Frequency is determined by the rate of movement and is measured in cycles per second, which is known as Hertz (Hz). A healthy human ear can hear 20 Hz – 20,000 Hz (Figure A). The sensation associated with frequency is commonly referred to as the pitch of a sound. High frequencies produce a higher pitch and vice versa. The amplitude of a sound is determined by the maximum displacement of air molecules produced by the vibrations. These displacements lead to pressure fluctuations in air, which are expressed in decibels (dB). Decibels are a logarithmic ratio of sound pressure over the standard threshold of hearing. The more energy a sound has, the larger the pressure fluctuations, resulting in a louder sound.

**Figure A. Auditory Field for a Human Ear at Various Frequencies [Bruel and Kjaer]**



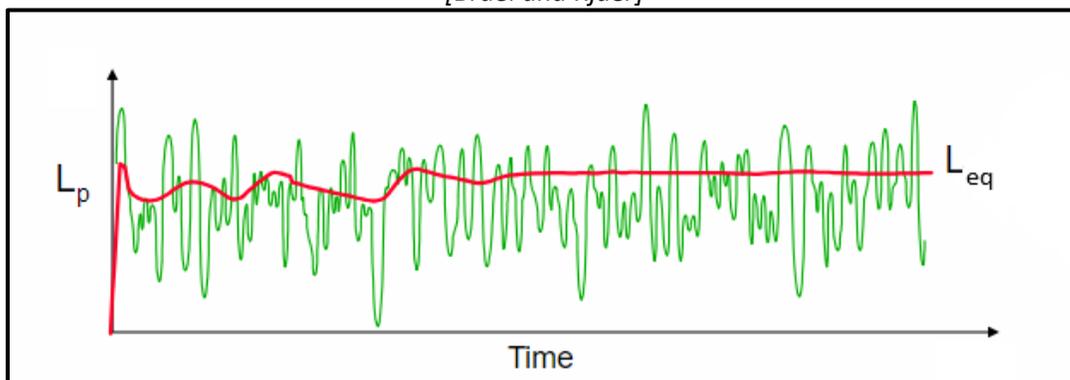
Frequency weightings are applied to measurements to provide a better match between measured results and human perception. Each weighting, in relation to their frequency components, allows for a consistent measurement of the different type of noise sources. A-weighted decibel sound pressure levels (dBA) are measurements recorded from a sound level meter measuring sounds similar to the response of the ear (Figure B). While C-weighted (dBC) measurements are for low-frequency components.

**Figure B. Common Sound Weightings Up to 20 kHz [Bruel and Kjaer]**



Each measurement has an exponential time factor. Slow time weighting is the most common for environmental noise measurements and will be used for these measurements. For recording over long periods of time, the sound level meter records each weighted decibel reading with an equivalent, or average, continuous sound level reading ( $L_{eq}$ ).  $L_{eq}$  represents the same energy as the actual time varying sound signal (Figure C).  $L_{Aeq}$  refers to the equivalent continuous sound level for an A-weighted measurement.

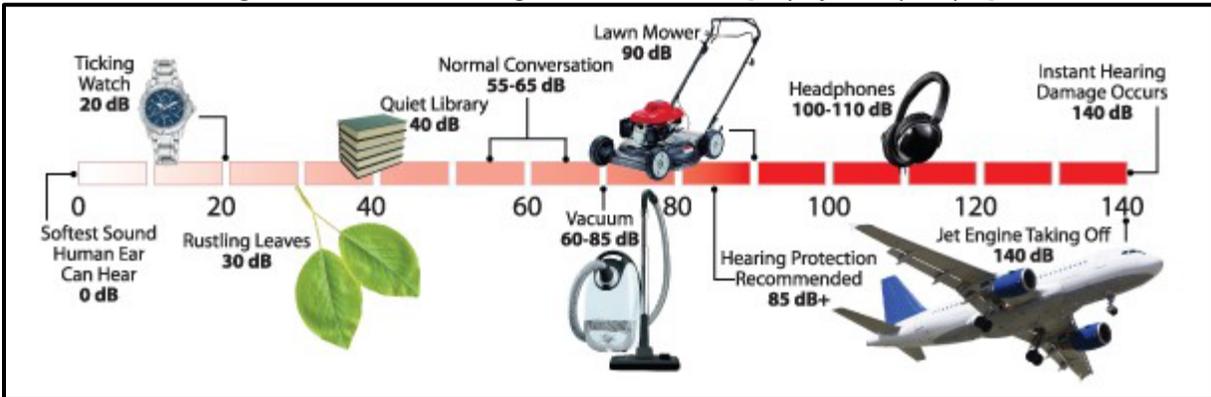
**Figure C: Sound Level Recording Displaying  $L_{eq}$ , Steady-State Sound Level, Over a Noise Measurement [Bruel and Kjaer]**



Environmental noise is a combination of various noise sources. These sources may include; vehicle traffic, aircraft flyovers, wind, weather disturbances, commercial or industrial activities, and other short-term events. These sources create “background noise”. Background noise varies throughout

the day, generally following the cycle of human activity. Figure D presents typical A-weighted (dBA) sound levels for multiple sources of sound.

**Figure D: Common A-weighted Sound Levels [City of Albuquerque]**



## Appendix 3 – Glossary

### Ambient Noise

All noises that exist in an area and are not related to regulated operations and facilities. Ambient noise includes sound from other industrial noise not subject to this directive, transportation sources, animals and nature.

### Average Sound Level

See Energy Equivalent Sound Level.

### A-weighted sound level

The sound level as measured on a sound level meter using a setting that emphasizes the middle frequency components similar to the frequency response of the human ear.

### Calibration

A procedure used for the adjustment of a sound level meter using a reference source of a known sound pressure level and frequency. Calibration must take place before and after the sound level measurements.

### C-weighted Sound Level

The C-weighting approximates the sensitivity of human hearing for relatively loud sounds. The C-weighted sound level is also commonly used to assess low- frequency noise in conjunction with the A-weighted sound level.

### Day Night Sound Level (Ldn)

Is the average noise level over a 24-hour period. The noise between the hours of 22:00 and 07:00 is artificially increased by 10 dB. The nighttime noise is weighted to consider the decrease in community background noise.

### Daytime Average Sound Level

The time-averaged A-weighted sound level measured between the daytime hours, usually defined as 7:00 am to 7:00 pm.

### Decibel (dB)

A unit of measure of sound pressure that compresses a large range of numbers into a more meaningful scale. The basic unit of measurement for sound levels.

### dBA

The decibel (dB) sound pressure level filtered through the A filtering network to approximate human hearing response. See dB and A-weighted Sound Level.

### dBC

The decibel (dB) sound pressure level filtered through the C filtering network. See Decibel and C-weighted Sound Level.

**Energy Equivalent Sound Level ( $L_{eq}$ )**

The  $L_{eq}$  is regarded as the average sound pressure level, where the single sound level value represents an amount of energy equal to that of an entire time-varying acoustic signal over a given period.

**Facility**

Any operation used in exploration, processing, development and transportation of energy resources.

**Frequency**

The number of oscillations per second for a sound wave.

**Impulse Noise**

Unwanted, instantaneous sharp sounds that create sudden impulses of pressure similar to gunfire and explosions.

**Noise Reduction**

The numerical difference, in decibels, of the average sound pressure levels between two locations on either side of a sound wall, or silencer, etc.

**Nighttime Average Sound Level ( $L_{night}$ )**

The time-averaged A-weighted sound level measured between the nighttime hours, usually defined as 7:00 pm to 7:00 am.

**Ldn**

See Day night sound level.

**Leq**

See Energy Equivalent Sound Level.

**Noise**

Generally understood as unwanted sound.

**Noise Impact Assessment (NIA)**

Identifies the expected sound level emitted from operations, and receptor points are placed in locations related to compliance. It also identifies what the permissible sound level is and how it was calculated.

**Noise Reduction Coefficient (NRC)**

A single number rating of the sound absorption properties for a material. An NRC value of zero indicates the material is purely reflective. An NRC value of one indicates perfect absorption.



### **Octave Band**

An octave band is a frequency band that spans one octave. A band is said to be an octave in width when the upper band frequency is twice the lower band frequency. Octave bands are commonly used in engineering acoustics. The nine common octave bands used for the study of industrial noise are identified by their center frequencies as 31.5Hz, 63Hz, 125Hz, 250 Hz, 500 Hz, 1000 Hz, 2000 Hz, 4000 Hz, and 8000 Hz.

### **Point Source**

A source that radiates sound from a single point. Generally used to model equipment when looking at the sound impact over a large area.

### **Receiver**

A person or piece of equipment that is affected by noise.

### **Sound**

A series of vibrations transmitted through the air, or other medium, and can be heard when they are processed by the human ear.

### **Sound Level Meter (SLM)**

An instrument that contains a microphone and filter used to measure sound levels, using standard frequency-weightings and exponentially weighted time averaging.

### **Sound Power Level**

A physical measurement of the amount of power a sound source radiates into the surrounding air. It is the rate at which sound energy is emitted, or received, per unit time.

### **Sound Pressure Level (SPL)**

The sound level received at a given location. The decibel equivalent of the rate of sound pressure waves at a measured location, usually with a microphone.

### **Sound Transmission Class (STC)**

An integer rating that measures how well a barrier or building partition attenuates sound. Indicates how well a barrier is at stopping sound from transmitting through it.

### **1/3 Octave Band**

The 1/3 octave band analysis provides a finer breakdown of sound energy distribution (compared to full octave band) as a function of frequency.



**URBAN  
SOLUTION  
GROUP**

## **Adams County Development Standards & Regulations Noise Management Plan**

**Eagle Pad  
Adams County, Colorado**

Prepared for:

Extraction Oil & Gas Inc.  
555 17<sup>th</sup> Street, Suite 3700  
Denver, CO 80202

\*Extraction Oil & Gas Inc. operates as a wholly owned subsidiary of Civitas Resources Inc.

Prepared by:

Urban Solution Group, LLC  
3301 Lawrence Street, Suite 3  
Denver, CO 80205

December 2, 2025

REV2



## RECORD OF REVISIONS

Rev#	Date	By	Summary of Revisions
0	2025/07/16	GFS	Initial Release
1	2025/10/13	BJP	Updated BMPs
2	2025/12/02	BJP	Updated equipment information

# TABLE OF CONTENTS

1	Executive Summary .....	1
2	Regulations and Noise Standards Summary.....	2
	Adams County Development Standards and Regulations Section 4-11-02-03-03-14 – Brief Overview .....	2
	Colorado ECMC Rule 423 Noise Regulation – Brief Overview .....	4
	Compliance Summary (Unadjusted) .....	6
	Maximum Permissible Noise Levels (Adjusted) - Summary.....	7
3	Summary of BMPs and Mitigation to be Implemented .....	8
4	Site Information.....	9
5	Compliance Points .....	10
6	Estimated Operations & Duration Schedule .....	11
7	Ambient Sound Level Survey .....	12
8	Noise Impact Assessment.....	14
	Methodology.....	14
	Equipment Information and Site Layouts .....	15
	Drilling Noise Model Results .....	16
	Completions Noise Model Results .....	21
	Production Noise Model Results.....	26
	Flowback Operations Review.....	29
9	Continuous Monitoring / Complaint Resolution .....	30
10	Conclusion .....	30
11	Notations .....	30
	Appendix 1 – Equipment Layouts .....	31
	Appendix 2 – Ambient Data and Charts.....	35
	Appendix 3 – Sound Fundamentals .....	38
	Appendix 4 – Glossary.....	41

**Report Submitted to:**

John Piekara  
Civitas Resources, Inc.  
(303) 294-7824  
jpiekara@civiresources.com

**Report Contact:**

Gareth Svanda  
Urban Solution Group  
(720) 749-2916  
gareth.svanda@urbansolutiongroup.com

## 1 EXECUTIVE SUMMARY

Urban Solution Group, LLC (Urban) was commissioned to prepare a Noise Management Plan (NMP) for the proposed Eagle Pad to be operated by **Extraction Oil & Gas Inc.** (Extraction), a wholly owned subsidiary of Civitas Resources, Inc. (Civitas). Extraction is proposing to develop oil and natural gas wells at the Eagle Pad located in Adams County, Colorado. The purpose of this plan is to assess predicted environmental noise impacts from the proposed operations on the surrounding area as compared to the maximum permissible noise level (MPNL) limits described in the Adams County Development Standards and Regulations Section 4-11-02-03-03-14 Noise Regulation.

To facilitate this work, the following analyses were completed:

- Pre-operational ambient sound level survey for the surrounding area
- Completion of a full site-specific Noise Impact Assessment (NIA) with individual models for:
  - Drilling operations with the Patterson-UTI APEX 1500 Series Drilling Rig
  - Completions operations with a Halliburton Zeus Electric Fleet powered by on-site natural gas generators
  - Production operations with the equipment and layout proposed by Extraction
- Specification of Best Management Practices (BMPs) that will be implemented at the proposed Eagle location such that all operations comply with the noise regulation and minimize the environmental noise impact on the surrounding area

The results of the analyses with full implementation of the BMPs for the Eagle location are summarized as follows:

Analysis Type	Result
Noise points of compliance	<ul style="list-style-type: none"> <li>• There are no property line boundaries where there exists a qualifying residential building unit on the parcel within 2,000 feet of the Eagle location. Therefore, there are no noise points of compliance.</li> </ul>
Pre-Operational Ambient Sound Level Survey	<ul style="list-style-type: none"> <li>• Ambient sound levels were measured at two locations near the site.</li> <li>• Ambient adjustments apply to all phases of operation as shown in Table 4.</li> </ul>
Drilling Operations NIA	<ul style="list-style-type: none"> <li>• Compliant without mitigation. However, Extraction to erect full-perimeter wall consisting of 2,580 linear feet of 32-foot-tall, STC32 engineered sound wall and 40 linear feet of 24-foot-tall, STC32 engineered sound wall to reduce the environmental noise impact as part of BMPs.</li> </ul>
Completions Operations NIA	<ul style="list-style-type: none"> <li>• Compliant without mitigation. However, Extraction to erect full-perimeter wall consisting of 2,580 linear feet of 32-foot-tall, STC32 engineered sound wall and 40 linear feet of 24-foot-tall, STC32 engineered sound wall to reduce the environmental noise impact as part of BMPs.</li> </ul>
Flowback Operations	<ul style="list-style-type: none"> <li>• Flowing back directly to permanent facility; leave perimeter sound walls in place until flows are initiated.</li> </ul>
Production Operations NIA	<ul style="list-style-type: none"> <li>• Compliant without mitigation.</li> </ul>

## 2 REGULATIONS AND NOISE STANDARDS SUMMARY

Noise for energy related facilities located in Adams County, Colorado, is regulated through the Adams County Development Standards and Regulations Section 4-11-02-03-03-14 noise regulation (Adams County Regulation). This regulation sets the MPNLs, which limit noise emitted from energy facilities over a specified period, as measured at noise compliance points. These allowable limits are dependent on the land use zoning within the study area as defined in the Colorado Energy and Carbon Management Commission (ECMC) Rule 423 series noise regulation. An overview of the Adams County Regulation is presented below, followed by an overview of the ECMC regulation.

### **Adams County Development Standards and Regulations Section 4-11-02-03-03-03-14 – Brief Overview**

The Operator shall control noise levels as follows:

- a. Prior to operations Operator shall obtain a baseline noise study that encompasses at least five (5) days, one of those days being a weekend. The Operator may use the baseline noise study submitted with the Development Application to fulfill this requirement, if that noise study is completed within twelve (12) months of any ground disturbing activities.
- b. Beginning with construction and up to production, the County will require continuous noise monitoring for all oil and gas facilities located with one-half mile (1/2), or greater depending on the location, nature, and size of the facility, of the property line of any existing residences, schools, state licensed daycares or high occupancy building units. The County may require continuous noise monitoring be conducted by an approved third-party consultant based on the location, nature, and size of the facility.
- c. The Operator shall conform to ECMC Regulations for noise level.
- d. The Operator shall post 24-hour, 7 days per week contact information to deal with all noise complaints arising from Operator's oil and gas facility. Such posting shall be visible from the public rights-of-way.
- e. For Oil and Gas Facilities located within 2,000 feet of a land use or zoning designation boundary the Operator shall be required to comply with the lower maximum permissible noise level as defined in ECMC regulations for noise of that corresponding land use or zone district. For locations within 2,000 feet of a land use or zoning designation boundary, noise must be attenuated to the maximum permissible noise levels for the corresponding land use or zone district, as specified in ECMC rules, at the land use designation boundary as determined by the Director of Community and Economic Development.
- f. The Operator shall update the noise modeling study or noise impact analysis if the planned or actual equipment at the Oil and Gas Facility is expected to produce noise levels that will



exceed those previously presented to the County or if the noise modeling study or noise impact analysis was completed more than twelve (12) months prior to any ground disturbing activities.

- g. To ensure the Operator controls noise to the allowable levels set forth above, one or more of the following may be required based on the location, nature, and size of the facility:
- a. Acoustically insulated housing or cover enclosing the motor or engine;
  - ii. Noise management plan identifying hours of maximum noise emissions, type, frequency, and level of noise to be emitted, and proposed mitigation measures;
  - iii. Obtain all power from utility line power or renewable sources;
  - iv. Utilize the most current equipment to minimize noise impact during drilling, completions, and all phases of operation including the use of "Quiet Fleet" noise mitigation measures for completions;
  - v. Sound walls around well drilling and completion activities to mitigate noise impacts;
  - vi. Restrictions on the unloading of pipe or other tubular goods between 6:00 p.m. and 8:00 a.m.;
  - vii. Any abatement measures required by ECMC for high-density areas, if applicable.
  - viii. The use of electric drill rigs.
  - ix. Tier 4 or better diesel engines, diesel and natural gas co-fired Tier 2 or Tier 3 engines, natural gas fired spark ignition engines, or electric line power for hydraulic fracturing pumps.
  - x. Use of quiet design mufflers (also referred to as hospital grade or dual dissipative) or equivalent.
  - xi. The use of liquefied natural gas dual fuel hydraulic fracturing pumps.
- h. Professional Consultant(s) Required: The baseline noise study and noise modeling shall be prepared by one (1) or more professionals deemed professionally qualified by the Community and Economic Development Department. Each professional shall be deemed qualified by the Department of Community and Economic Development based on education, professional certifications, experience in the field, and their understanding of the Adams County oil and gas regulations and ECMC rules pertaining to noise. The County shall maintain a list of qualified professional consultants. The applicant for an Oil and Gas Facility shall select one (1) or more individuals from the County's list of qualified consultants to prepare the required baseline noise studies and noise modeling reports.



- i. Professional qualifications for review and consideration may be submitted to the County by the sound professional, the applicant, or the Operator.

**Colorado ECMC Rule 423 Noise Regulation – Brief Overview**

Section 4-11-02-03-03-14 of the Adams County noise code states that all Oil and Gas Operations will comply with the maximum permissible noise levels (MPNLs) outlined by the Colorado ECMC. Table 1 below shows the MPNLs unless otherwise required by Rule 423.

**Table 1. Maximum Permissible Noise Levels (Colorado ECMC Table 423-1)**

Zone	Daytime (7:00 a.m. – 7:00 p.m.)	Nighttime (7:00 p.m. – 7:00 a.m.)
Residential/Rural/State Parks & Wildlife Areas	55 dB(A)	50 dB(A)
Commercial/Agricultural	60 dB(A)	55 dB(A)
Light industrial	70 dB(A)	65 dB(A)
Industrial	80 dB(A)	75 dB(A)
All Zones	60 dB(C)	60 dB(C)

Exceptions to these MPNLs for Drilling, Completions and Flowback Operations are outlined in section 423.b (2) as follows:

- A. In Residential/Rural or Commercial/Agricultural, MPNLs will be 60 dBA in the hours between 7:00 p.m. to 7:00 a.m. and 65 dBA in the hours between 7:00 a.m. to 7:00 p.m.; and
- B. In all zones MPNLs will be 65 dBC in the hours between 7:00 p.m. to 7:00 a.m. and 65 dBC in the hours between 7:00 a.m. to 7:00 p.m.

These MPNLs are applied at “noise points of compliance”. These points are chosen as outlined in section 423.a (5) of the Regulation:

(5) For proposed Oil and Gas Locations with a Working Pad Surface within 2,000 feet of one or more Residential Building Units (RBUs), at least one, and no more than six noise points of compliance where monitors will be located. Operators will identify noise points of compliance using the following criteria:

- A. Provide one noise point of compliance in each direction in which an RBU is located within 2,000 feet of the proposed Working Pad Surface.
- B. Noise points of compliance will be located at least 350 feet from the Working Pad Surface, and no less than 25 feet from the exterior wall of the RBU that is closest to the Working Pad Surface. If a Surface Owner or tenant refuses to provide the Operator with access to install a noise monitor, then the noise point of compliance will be located at either the next-closest RBU or an alternative location approximately the same distance and direction from the Working Pad Surface.

Demonstration of compliance with noise level limits during operation is outlined in section 423.c (2) as follows:

A. In response to a complaint or at the Director's request, Operators will measure sound levels at 25 feet from the complainant's occupied structure towards the noise source for low frequency (dBC) indicated issues. For high frequency (dBA) measurement will be at the nearest point of compliance. For equipment installed at Oil and Gas Locations subject to a Form 2A approved prior to January 15, 2021, after the Commencement of Production Operations, no single piece of equipment will exceed the MPNLs listed in Table 423-1 as measured at a point 350 feet from the equipment generating the noise in the direction from which the complaint was received.

Finally, adjustments to the MPNLs based on the measured pre-existing ambient noise levels is allowed. However, the new maximum allowable noise levels for permanent facilities such as Production Operations are capped and based on cumulative noise levels. Ambient adjustments and cumulative noise levels are outlined in section 423.d of the Regulation as follows:

d. Cumulative Noise. All noise measurements will be cumulative.

(1) Noise measurements taken at noise points of compliance designated pursuant to Rule 423.a.(5) will take into account ambient noise, rather than solely the incremental increase of noise from the facility targeted for measurement.

(2) At new or substantially modified Oil and Gas Locations where ambient noise levels at noise points of compliance designated pursuant to Rule 423.a.(5) already exceed the noise thresholds identified in Table 423-1, then Operators will be considered in compliance with Rule 423, unless at any time their individual noise contribution, measured pursuant to Rule 423.c, increases noise above ambient levels by greater than 5 dBC and 5 dBA between 7:00 p.m. and 7:00 a.m. or 7 dBC and 7 dBA between 7:00 a.m. and 7:00 p.m. This Rule 423.d.(2) does not allow Operators to increase noise above the maximum cumulative noise thresholds specified in Table 423-2 after the Commencement of Production Operations.

(3) After the Commencement of Production Operations, if ambient noise levels already exceed the MPNLs identified in Table 423-1, under no circumstances will new Oil and Gas Operations or a significant modification to an existing Oil and Gas Operations raise cumulative ambient noise above the following:



**Table 2. Maximum Cumulative Noise Levels (Colorado ECMC Table 423-2)**

Zone	Daytime (7:00 a.m. – 7:00 p.m.)	Nighttime (7:00 p.m. – 7:00 a.m.)
Residential/Rural/State Parks & Wildlife Areas	65 dB(A)	60 dB(A)
Commercial/Agricultural	70 dB(A)	65 dB(A)
Light industrial	80 dB(A)	75 dB(A)
Industrial	90 dB(A)	85 dB(A)
All Zones	75 dB(C)	70 dB(C)

**Compliance Summary (Unadjusted)**

There are no property line boundaries within 2,000 feet of the Eagle location where there exists a qualifying residential building unit (RBU) on the parcel. Therefore, there are no compliance points.

The location is zoned with an agricultural land use designation based on information from the Adams County Zoning Department. The applicable MPNLs are summarized in Table 3 below.

**Table 3. Compliance Summary, Maximum Permissible Noise Levels (Unadjusted)**

Zone	Operation	Daytime (7:00 a.m. – 7:00 p.m.)	Nighttime (7:00 p.m. – 7:00 a.m.)
Commercial/Agricultural	Drilling, Completions & Flowback	65 dB(A)	60 dB(A)
		65 dB(C)	65 dB(C)
	Production	60 dB(A)	55 dB(A)
		60 dB(C)	60 dB(C)

### **Maximum Permissible Noise Levels (Adjusted) - Summary**

The results of the ambient sound level survey for the Eagle location are presented in Section 7 of this document.

The Adams County noise regulation defers to the Colorado ECMC Regulation to set MPNLs at oil and gas locations. Section 423.d(2) of the Colorado ECMC Regulation allows for adjustments to the MPNLs if the measured ambient sound levels exceed the noise thresholds in Table 423-1. Colorado ECMC code allows for an adjustment of 7 dBA/dBC during daytime, and 5 dBA/dBC during nighttime for all operations (though production operations are also constrained by the cumulative maximums in Table 423-2 of Colorado ECMC Rule 423).

All adjusted MPNLs for the corresponding ambient measuring points are presented in Table 4 below.

**Table 4. Adjusted Maximum Permissible Noise Levels for the Eagle Location**

Phase	Receptor	Ambient Monitor Point #	Maximum Permissible Noise Levels	
			dBA	dBC
Construction, Drilling, and Completions	--	1	65 Day / 60.0 Night	<b>68.7</b> Day / <b>65.8</b> Night
	--	2	65 Day / <b>60.3</b> Night	<b>73.1</b> Day / <b>68.5</b> Night
Production	--	1	60 Day / 55 Night	<b>68.7</b> Day / <b>65.8</b> Night
	--	2	60 Day / <b>60.3</b> Night	<b>73.1</b> Day / <b>68.5</b> Night

### 3 SUMMARY OF BMPS AND MITIGATION TO BE IMPLEMENTED

Best Management Practices (BMPs) are practices that are designed to prevent or reduce impacts caused by oil and gas operations on the environment and wildlife, and to minimize adverse impacts to public health, safety, and welfare.

The BMPs that Extraction plans to implement for the proposed Eagle site are as follows:

- Extraction conducted a Noise Impact Assessment (NIA) for each phase of operations (drilling, completions, and production) to assess operational noise levels against the maximum permissible dBA and dBC noise levels stated in the regulation. Each phase of operation will comply with the MPNLs as summarized in Table 4 in Section 2 of this document.
- Prior to commencement of drilling and completion activities, a full-perimeter, engineered sound wall consisting of approximately 2,580 linear feet of 32-foot-tall, STC32 wall and 40 linear feet of 24-foot-tall, STC32 wall will be installed around the edges of the well pad to reduce noise levels in the area.
- Extraction will utilize an electric completions fleet powered by on-site natural gas generators for all completions operations.
- Flowback operations and equipment were reviewed as part of this Noise Mitigation Plan (NMP). The wells will flow back directly to the permanent facility. Perimeter sound walls will be left in place until drill out is complete and flows are initiated to appropriately manage noise levels for this operation.
- A pre-operational ambient sound level survey was conducted at the two locations outlined in Figure 2 of Section 7 to quantify pre-existing A- and C-weighted sound levels.
- If the drilling rig or completions fleet is changed prior to commencement of operations, the mitigation measures employed will be equally or more protective.
- Extraction will post contact information to receive and address noise complaints arising from preproduction operations around the clock, 24 hours, 7 days per week. Upon receipt of a complaint, either directly to Extraction, or from Adams County, an Extraction representative will contact the associated stakeholder within 48 hours of receipt.



## 4 SITE INFORMATION

The proposed Eagle location will be located north of East 120<sup>th</sup> Ave and east of Picadilly Road, in Adams County, CO. The location is zoned with an Agricultural land use designation based on information from the Adams County online zoning portal. The closest major road, E470, is a toll road that sees a high amount of traffic and is located approximately 2.25 miles west of the Eagle Pad.

The Eagle location is slated for drilling, completions, and production operations. Drilling is planned utilizing the Patterson-UTI APEX 1500 Series Drilling Rig, and completions will be carried out with the Halliburton Zeus Electric fleet (HES Zeus Fleet). Planned production equipment is provided in Figure 15 of Appendix 1.

Detailed location information is presented below, and an aerial view of the proposed location is shown in Figure 1 below.

- Location:** SE1/4 SW1/4 & SW1/4 SE1/4 SEC. 36, T1S, R66W, 6TH P.M.
- Drilling Rig:** Patterson-UTI APEX 1500 Series Drilling Rig
- Completions Equipment:** HES Zeus Fleet
- Production Equipment:** Details provided in Figure 15 of Appendix 1
- Pad Location Coordinates:** 39.916939°, -104.723452°
- Regulation Noise Target:** Adams County Regulation Section 4-11-02-03-03-14

**Figure 1. Aerial View of the Proposed Eagle Location**



## 5 COMPLIANCE POINTS

The MPNLs for all operations are applied at noise compliance points. These compliance points are chosen as outlined in the Adams County Regulation. The compliance points for both A- and C-weighted compliance are located at property line boundaries of existing RBUs located within 2,000 feet of the oil and gas location or qualifying RBUs located within 2,000 feet of the location. There are no qualifying RBUs or property line boundaries within 2,000 feet of the oil and gas location that contain qualifying RBUs. Therefore, there are no noise points of compliance.



## 6 ESTIMATED OPERATIONS & DURATION SCHEDULE

The following tables reflect Extraction’s planned construction and operations schedule for the Eagle location at the time of this Noise Management Plan. The schedules below include an estimated duration of each stage of operation, including construction, drilling, completion, flowback, and production, for both phases of operations.

The wells will flow back directly to the permanent facility instead of being directed to temporary tanks on the well pad. Therefore, there are no flowback operation dates or durations listed in Table 5 or Table 6.

**Table 5. Extraction’s Planned Operations Schedule Phase 1**

Phase	Duration (Days)	Estimated Start Date
Construction	40	Q4 2026
Drilling	68	Q1 2027
Completion	55	Q3 2027
Flowback	N/A	N/A
Production	9,125 (25 years)	Q4 2027

**Table 6. Extraction’s Planned Operations Schedule Phase 2**

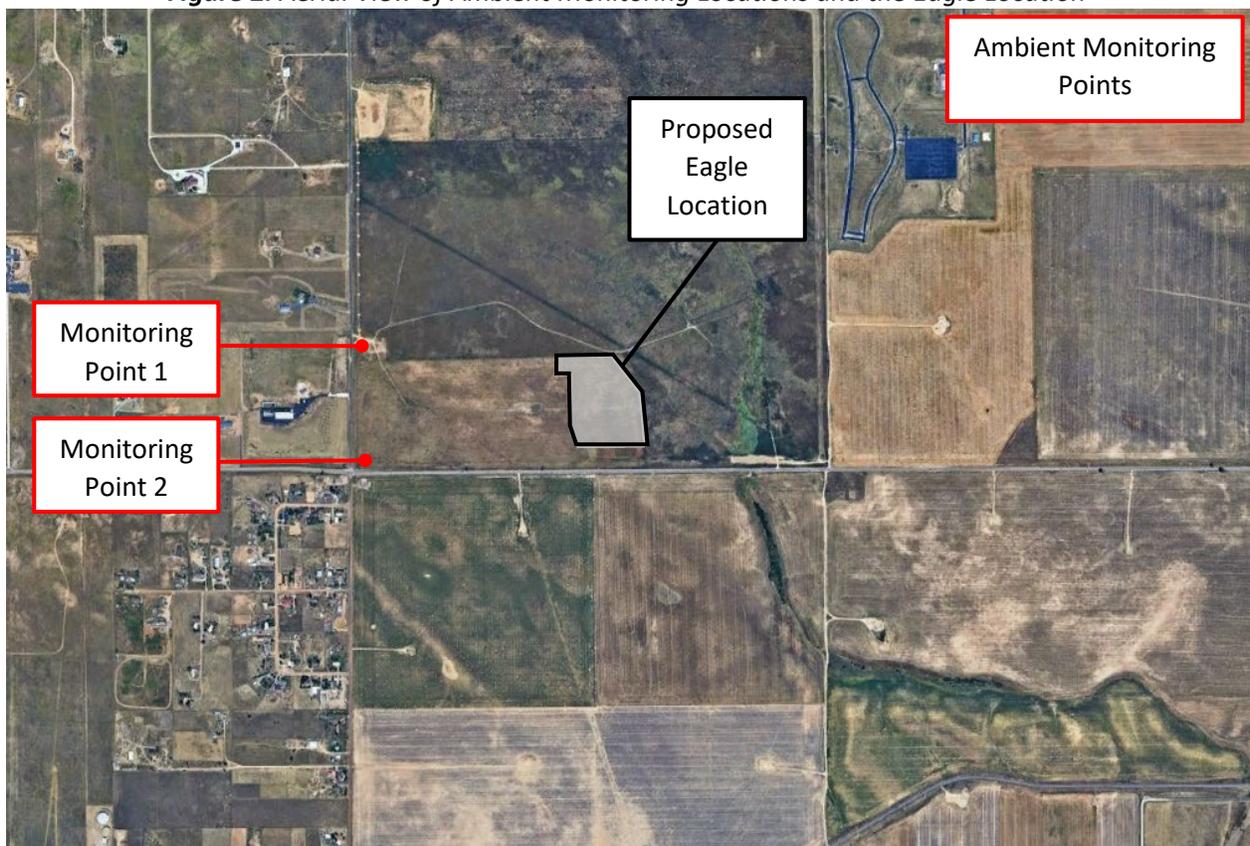
Phase	Duration (Days)	Estimated Start Date
Drilling	37	Q3 2028
Completion	25	Q4 2028
Flowback	N/A	N/A
Production	9,125 (25 years)	Q1 2029

## 7 AMBIENT SOUND LEVEL SURVEY

The Adams County Regulation requires that the operator conduct a background ambient noise survey to establish baseline conditions for both A-scale and C-scale noise levels near the site. Urban conducted a 5-day (120-hour) ambient sound monitoring study to monitor and document pre-operational ambient sound levels using Type 1 noise monitoring stations. The sound level meters collect measurements of both A- and C-weighted decibel levels at each monitoring location and are calibrated before and after the measurement period. The Leq average values are calculated by averaging 1-minute Leq noise levels when the wind speed is below 5 miles per hour, per ECMC guidelines and environmental acoustical engineering best practices.

The ambient monitoring locations in relation to the Eagle location are shown in Figure 2 below. A-weighted and C-weighted sound levels were collected at each of the locations from Friday, July 4, 2025, at 12:00 a.m., to Wednesday, July 9, 2025, at 12:00 a.m., inclusive. Wind speed, direction, and other environmental data was recorded with a weather station attached to the sound level meter at Monitoring Point 1 situated approximately 2,180 feet west of the edge of the Eagle location.

**Figure 2. Aerial View of Ambient Monitoring Locations and the Eagle Location**



In addition to the ambient noise levels acquired, the sound level meters (SLMs) were set to record audio files when the levels exceed 55 dBA in the daytime (7:00 a.m. – 7:00 p.m.) and 50 dBA in the nighttime (7:00 p.m. – 7:00 a.m.). Based on the recordings, the most common sounds for the monitoring locations include vehicle traffic and aircraft flyovers.

Measured A- and C-weighted sound pressure level averages were not filtered for aircraft flyover events as these sounds can be considered part of the commonly occurring ambient acoustical environment. Because the Eagle site and the ambient monitoring locations are in close proximity to Denver International Airport [DIA], and there are frequent, audible aircraft flyovers in the area (as observed in the recorded audio files), measurements taken during these flyovers were included in the ambient noise data processing.

Table 7 below presents the overall A- and C-weighted averages (Leq) for the 120-hour monitoring period for both ambient monitoring locations. The averages shown represent the overall sound levels when the wind speed was below five (5) miles per hour. Data was filtered to remove values when wind speeds exceed five (5) miles per hour (as well as during periods of rain, thunder, etc.), per ECMC guidelines and environmental acoustical engineering best practices.

**Table 7. Overall Leq Background Ambient Noise Levels (Filtered for Wind Speed, Etc.)**

Location	Daytime Averages (Leq)		Nighttime Averages (Leq)		Overall Averages (Leq)	
	dBA	dBC	dBA	dBC	dBA	dBC
Monitoring Point 1	47.8	61.7	46.2	60.8	<b>47.1</b>	<b>61.3</b>
Monitoring Point 2	54.8	66.1	55.3	63.5	<b>55.0</b>	<b>65.0</b>

Figure 16 to Figure 17 in Appendix 2 contain charts with the unfiltered hourly averages and wind speeds for each of the monitoring points.

## 8 NOISE IMPACT ASSESSMENT

A Noise Impact Assessment (NIA) was conducted for the proposed Eagle location using a three-dimensional computer noise modeling software. This is a predictive model to aid in ascertaining the environmental impact of the proposed facility during all planned operations on the surrounding environment. The results of this assessment will compare the predicted levels of the Eagle location operations to the permissible noise level limits described in the Adams County noise regulation.

A brief explanation of the methodology is presented first, followed by noise model results for drilling, completions, and production.

### **Methodology**

All computer models and predicted noise levels generated for the assessment are developed with the commercial noise modeling software SoundPLAN 9.1. The ISO 9613-1 and 2 international standards are utilized in this software as they are widely accepted both internationally as well as in North America. The algorithms used in the commercial software package are based on methods and theory accepted in the environmental acoustics community. Both detailed equipment technical information and location specific topography, are used to generate comprehensive noise predictions that take into account environmental conditions, buildings, ground cover and barriers (natural, topographical, and otherwise). Note that actual field measurements may differ from modeled noise levels on any given day due to ever changing environmental factors and other noise sources in the study area not explicitly in the computer model. Table 8 below lists the conditions used in the model.

**Table 8. Conditions Used in SoundPLAN 9.1 Software**

Parameter	Modeled Input and Description
Temperature	55°F – Represents typical summer nighttime temperature
Topography	Modeled as is, with proposed location modified per grading plan
Wind Velocity	2.2 - 11.2 mph – ISO 9613 uses a slight downwind condition from each noise source to each receiver
Wind Direction	From the noise source to the receptor points
Relative Humidity	40% - Typical summer nighttime relative humidity
Ground Absorption	Ranges from 0.0 for water bodies & major roadways up to 1.0 for thick grasslands

It is assumed that facility operating conditions do not change significantly between the daytime and nighttime periods. The resulting predicted noise levels are compared to the MPNLs outlined in the regulation to determine if the subject facility is compliant.

The noise levels generated in this predictive model are strictly from oil and gas operations at the proposed facility. Pre-existing sound sources such as those from animals, weather, road traffic, and all other ambient sounds are not included in the noise models.

There are no qualifying RBUs or property line boundaries within 2,000 feet of the Eagle location where there exists a qualifying RBU on the parcel, and therefore, there are no receptors included in the NIA. The closest RBU is an occupied residence located approximately 2,700 feet southwest of the edge of the Eagle location.

### **Equipment Information and Site Layouts**

Drilling operations at the Eagle location are carried out using the Patterson-UTI APEX 1500 Series Drilling Rig. The sound power levels used in this NIA are taken from a sound signature report prepared by Urban. The drilling equipment layout for the Eagle Pad is shown in Figure 13 of Appendix 1.

Completions operations at the Eagle location are carried out using the HES Zeus Fleet powered by on-site natural gas generators. The sound power levels used for the HES Zeus Fleet in this NIA are taken from a sound signature report prepared by Urban. The completions equipment layout for the Eagle Pad is shown in Figure 14 of Appendix 1.

Production operations at the Eagle location are implemented per the equipment layout supplied by Extraction. The sound power levels used for the production equipment in this NIA are taken from the Urban Solution Group internal database. The production equipment layout for the Eagle Pad is shown in Figure 15 of Appendix 1.

Sound power levels used in each of the noise models were derived from sound pressure level measurements made for each noise source in the field. For each source, sound pressure levels were measured at specific locations on predefined measurement surfaces surrounding each noise source in accordance with applicable ANSI and ISO standards. After raw data from the field was collected, it was uploaded to a computer for further analysis and post processing. Calculated sound power levels were entered into SoundPLAN 9.1 where they are adjusted slightly to align theoretical sound pressure levels produced by the model with the actual sound pressure levels collected on site. This additional calibration step was done to ensure potential noise contamination from neighboring equipment during data collection was removed from reported sound power levels for each piece of equipment.

### **Drilling Noise Model Results**

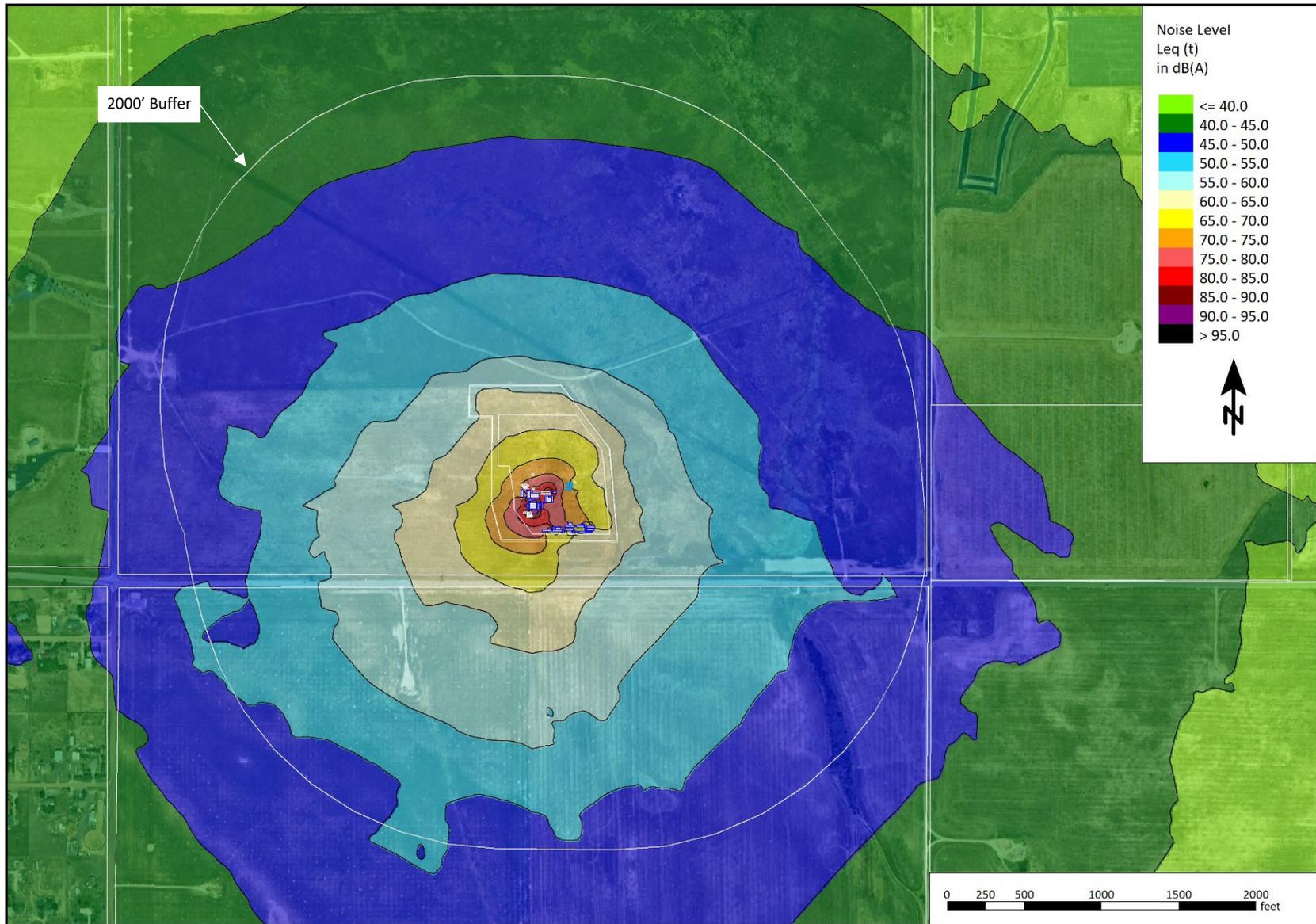
Results for both unmitigated and mitigated drilling operations are presented below. The predicted levels only include sound levels from drilling operations and do not include ambient noise or noise contributions from other sources outside of the planned operations.

Though there are no parcels containing RBUs within 2,000 feet of the location, Extraction will implement a full perimeter sound wall for the Eagle location regardless. This full perimeter sound wall is not needed for compliance, but Extraction considers the area to be higher risk regarding noise sensitivity and is implementing the full perimeter sound wall to reduce the environmental noise impact on the surrounding area. The sound wall layout is shown in Figure 13 of Appendix 1 and consists of approximately 2,580 linear feet of 32-foot-tall, engineered sound wall rated at STC32 and 40 linear feet of 24-foot-tall, engineered sound wall rated at STC32.

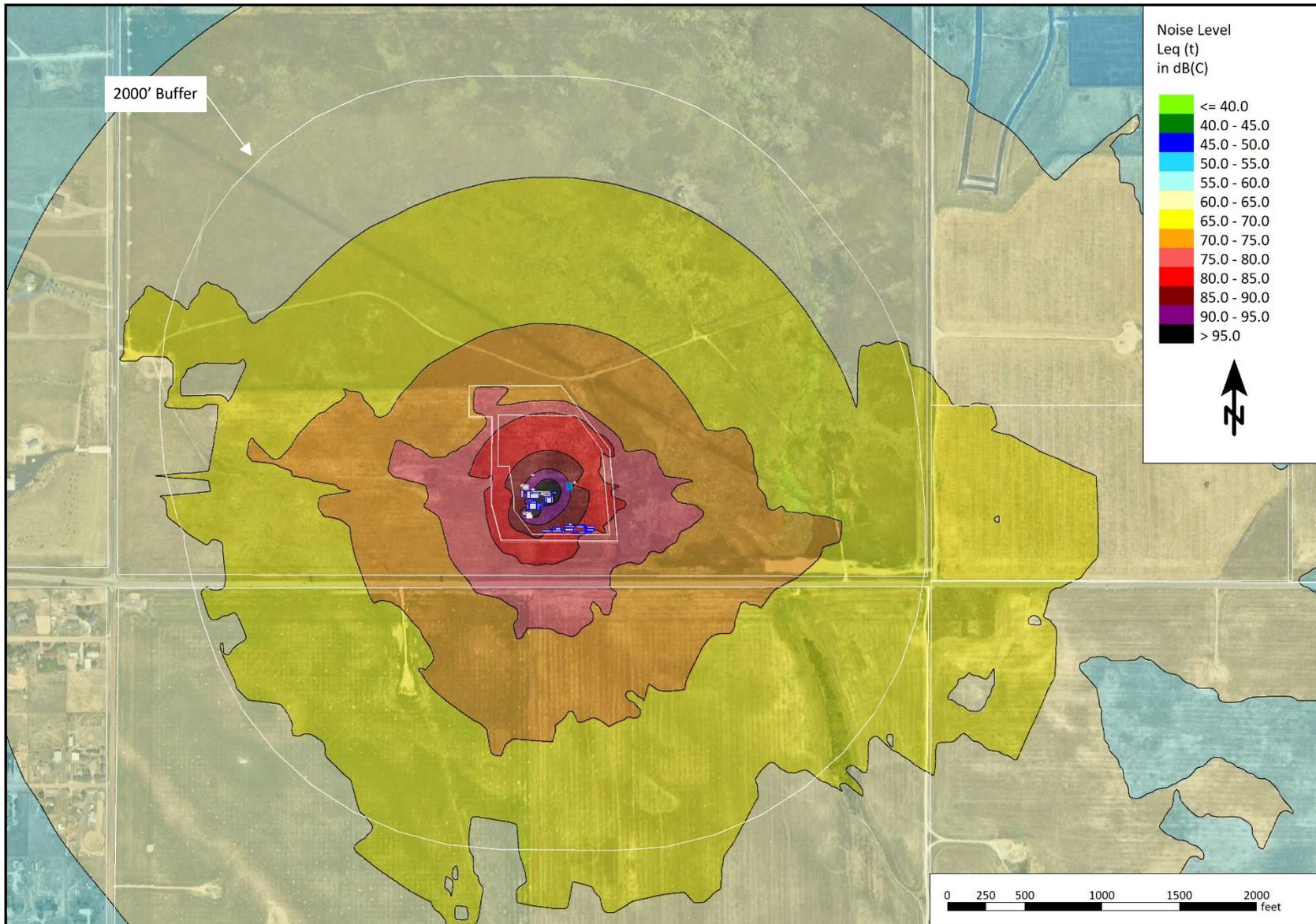
There are no parcels containing RBUs within 2,000 feet of the proposed Eagle location and thus, there is no tabular data presented in this section. Instead, noise contour maps are provided for the area surrounding the Eagle location. The contours are provided in 5 dB increments with the color scale indicating the sound level of each contour. Unmitigated drilling operations noise contour maps are presented in Figure 3 and Figure 4, whereas mitigated contours are shown in Figure 5 and Figure 6.



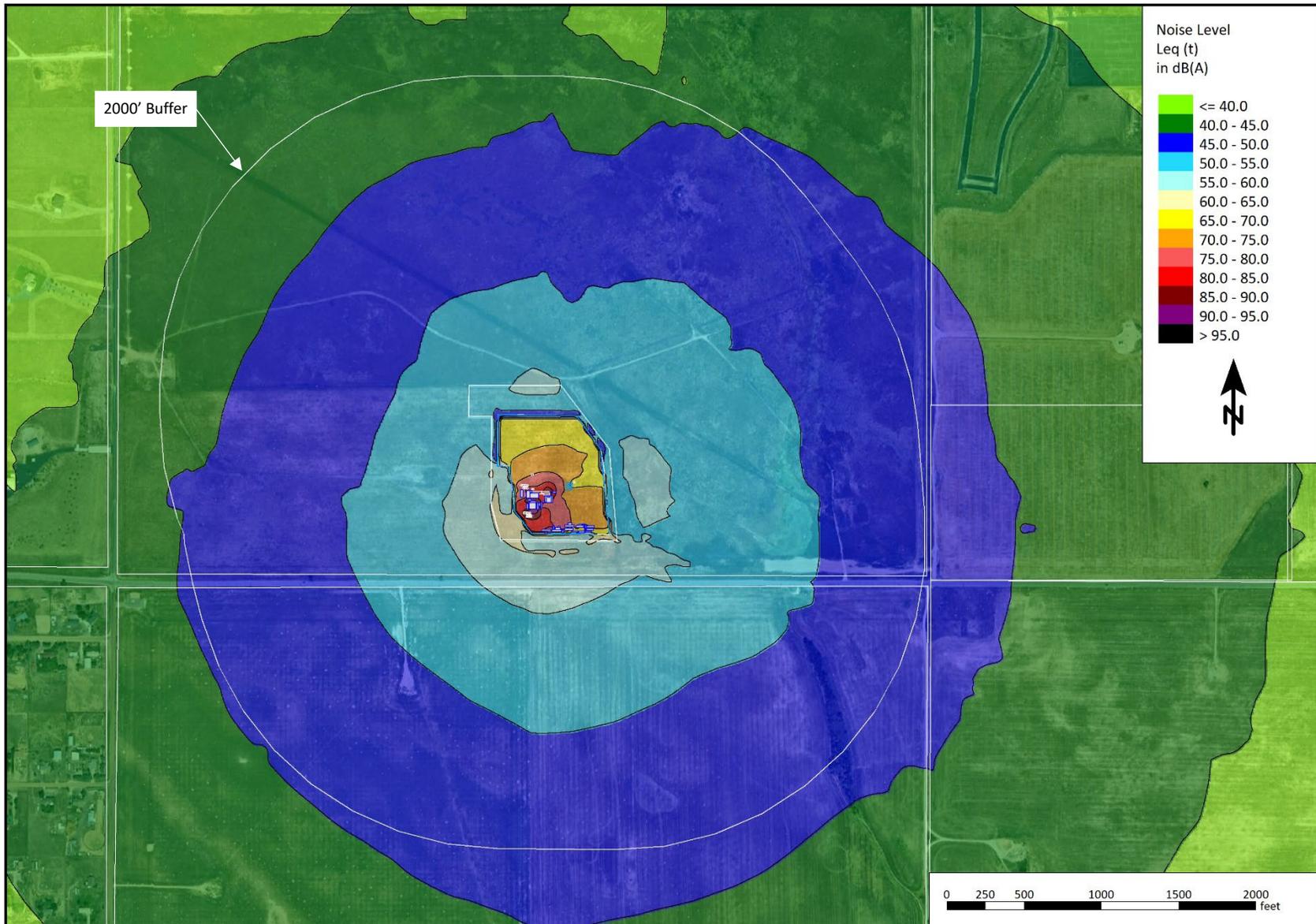
Figure 3. Unmitigated Drilling Noise Contour Map (dBA)



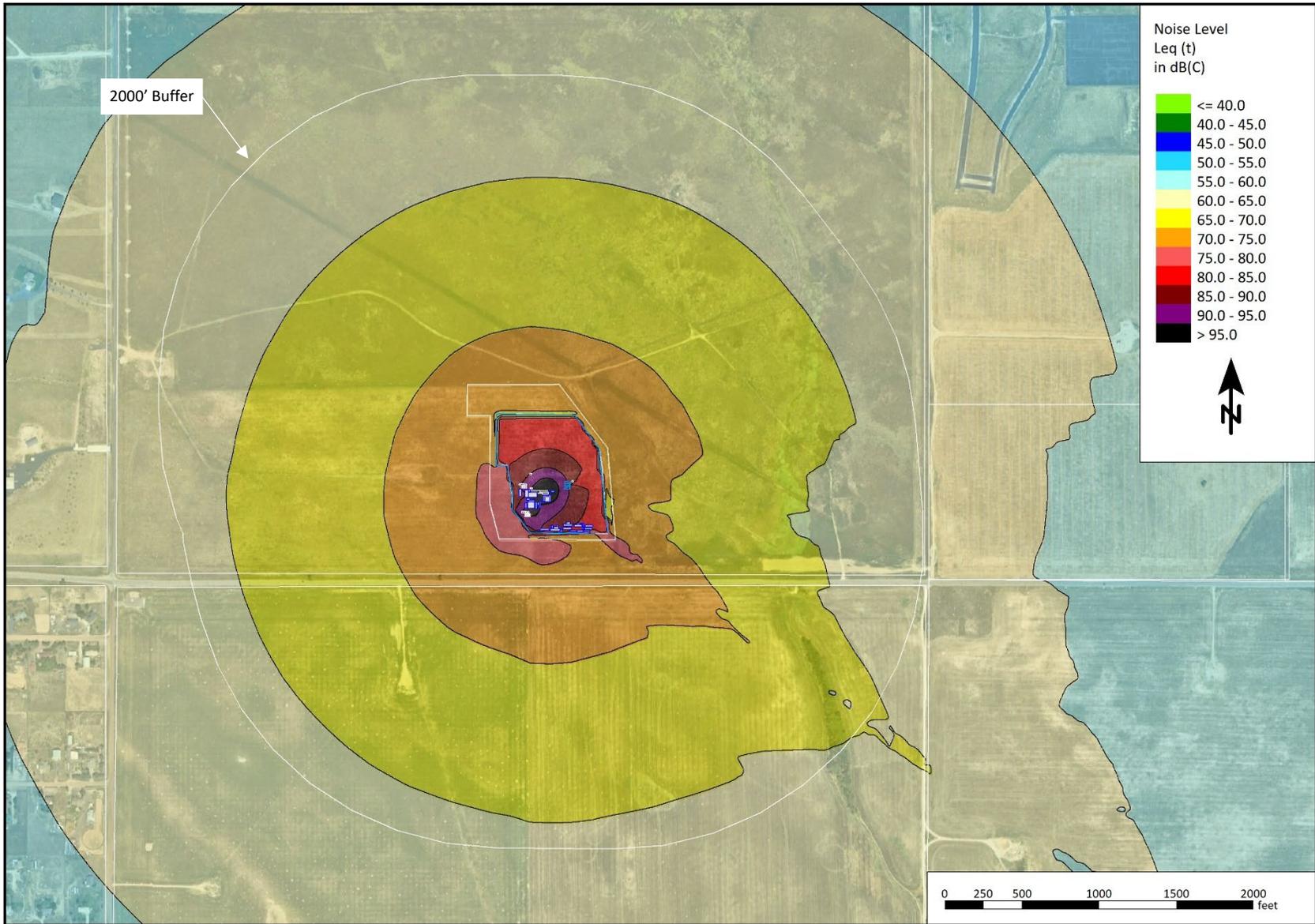
**Figure 4. Unmitigated Drilling Noise Contour Map (dBC)**



**Figure 5. Mitigated Drilling Noise Contour Map (dBA)**



**Figure 6. Mitigated Drilling Noise Contour Map (dBC)**



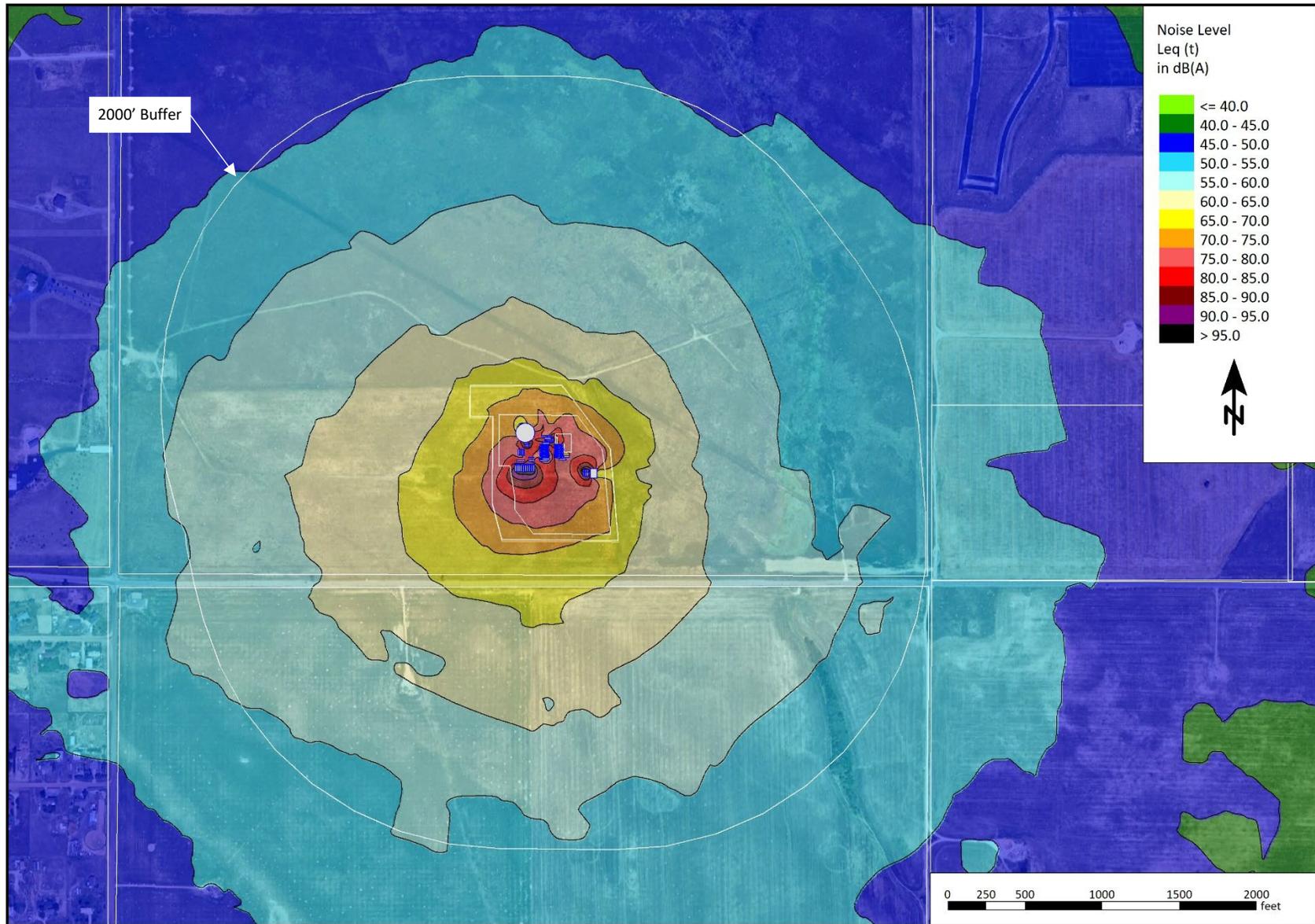
### **Completions Noise Model Results**

Results for both unmitigated and mitigated completions operations are presented below. The predicted levels only include sound levels from completions operations and do not include ambient noise or noise contributions from other sources outside of the planned operations.

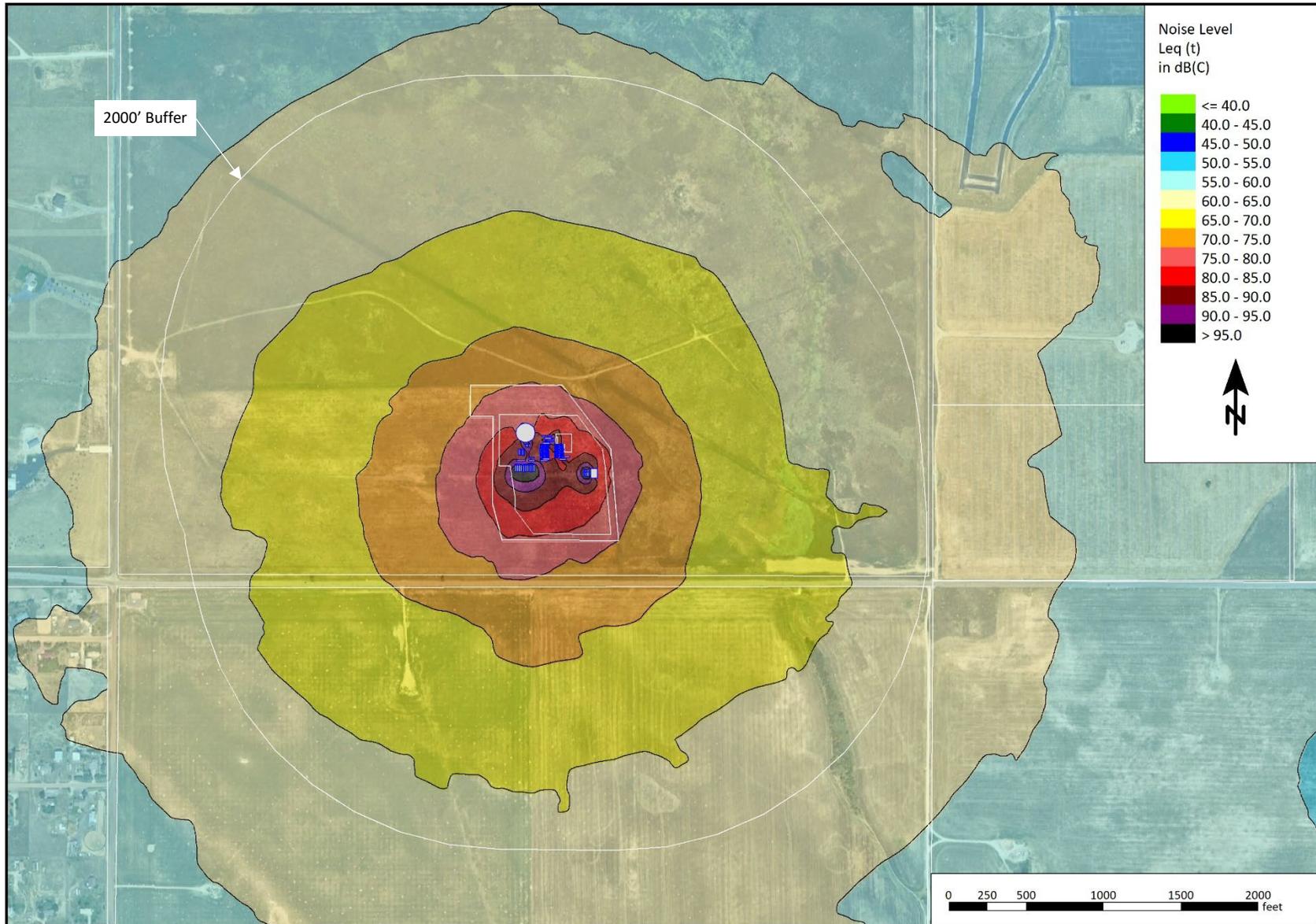
Though there are no parcels containing RBUs within 2,000 feet of the location, Extraction will implement a full perimeter sound wall for the Eagle location regardless. This full perimeter sound wall is not needed for compliance, but Extraction considers the area to be higher risk regarding noise sensitivity and is implementing the full perimeter sound wall to reduce the environmental noise impact on the surrounding area. The sound wall layout is shown in Figure 14 of Appendix 1 and consists of approximately 2,580 linear feet of 32-foot-tall, engineered sound wall rated at STC32 and 40 linear feet of 24-foot-tall, engineered sound wall rated at STC32.

There are no parcels containing RBUs within 2,000 feet of the proposed Eagle location and thus, there is no tabular data presented in this section. Instead, noise contour maps are provided for the area surrounding the Eagle location. The contours are provided in 5 dB increments with the color scale indicating the sound level of each contour. Unmitigated completions operations noise contour maps are presented in Figure 7 and Figure 8, whereas mitigated contours are shown in Figure 9 and Figure 10.

**Figure 7. Unmitigated Completions Noise Contour Map (dBA)**



**Figure 8. Unmitigated Completions Noise Contour Map (dBC)**



**Figure 9. Mitigated Completions Noise Contour Map (dBA)**

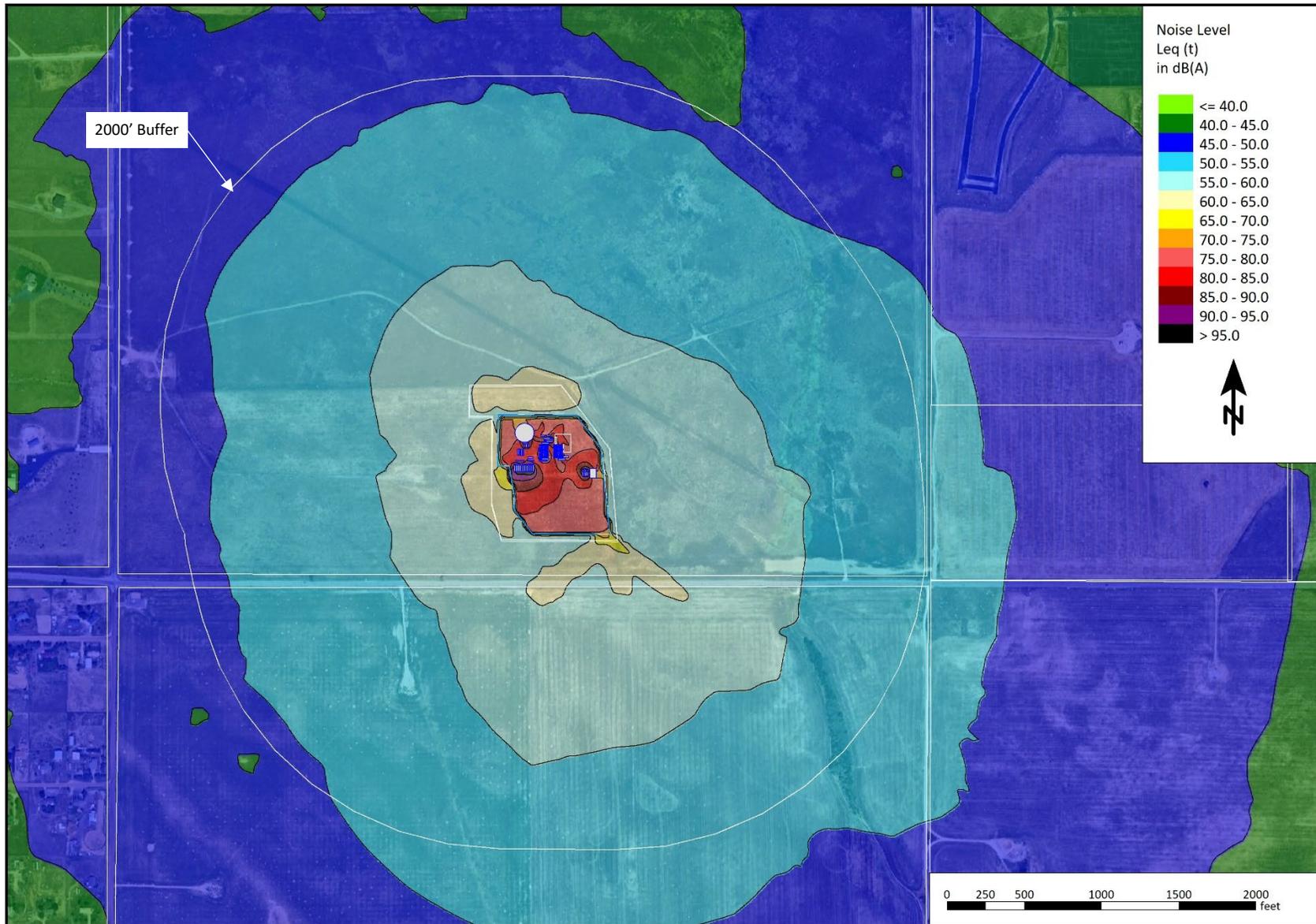
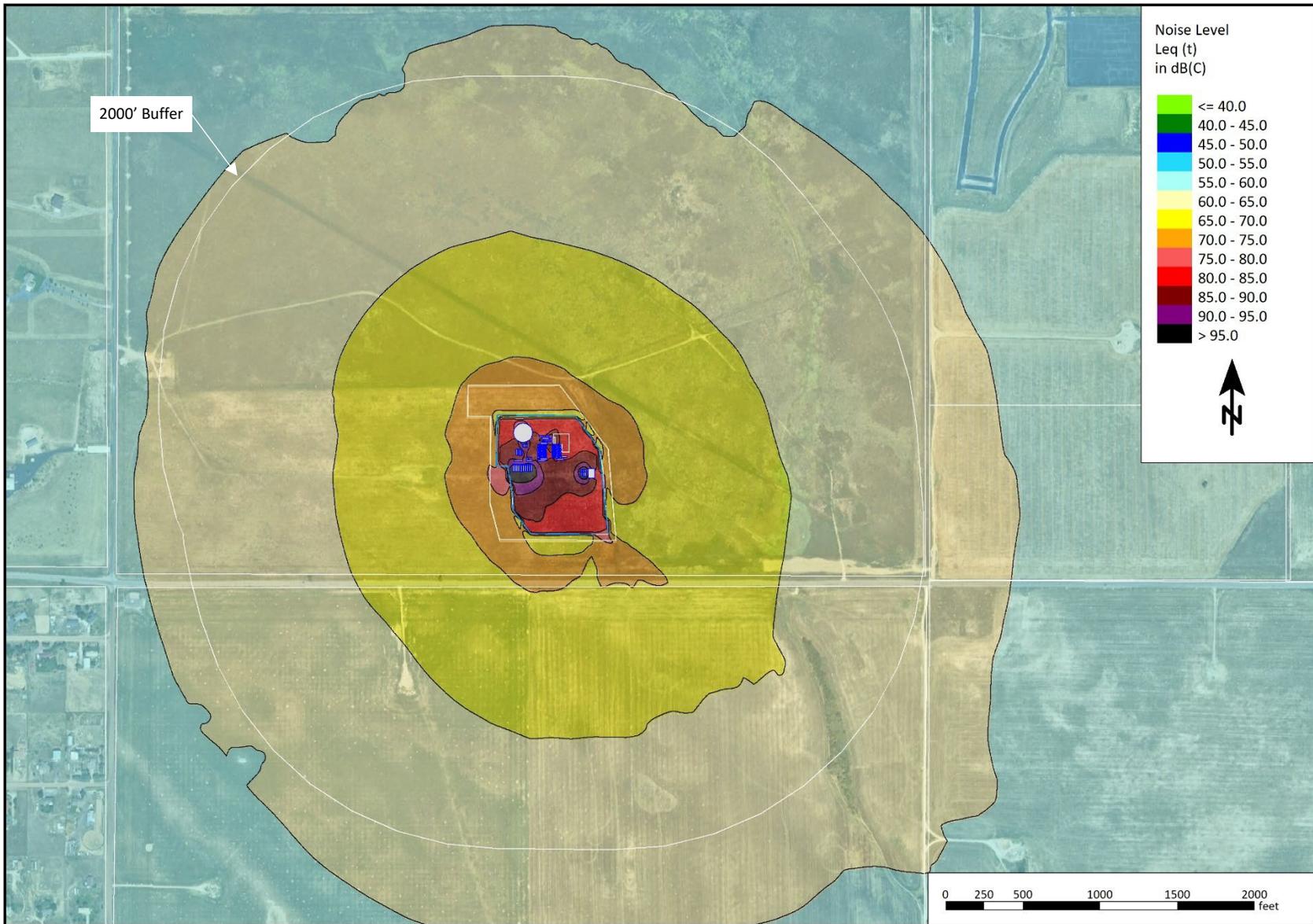


Figure 10. Mitigated Completions Noise Contour Map (dBC)



### **Production Noise Model Results**

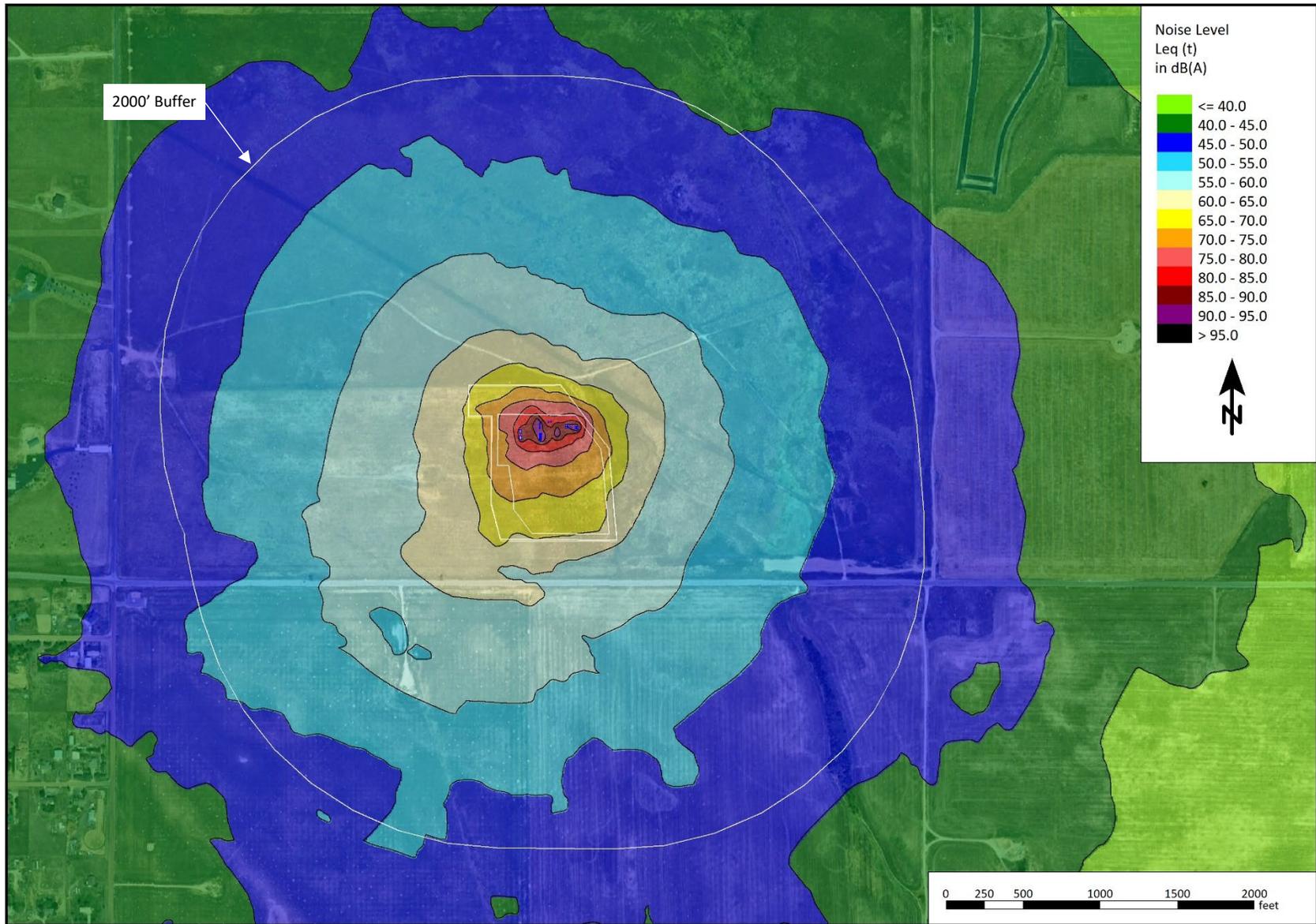
Results for unmitigated production operations are presented below. The predicted levels only include sound levels from production operations and do not include ambient noise or noise contributions from other sources outside of the planned operations.

The results demonstrate that unmitigated production operational noise levels are below the MPNLs and thus, do not require mitigation.

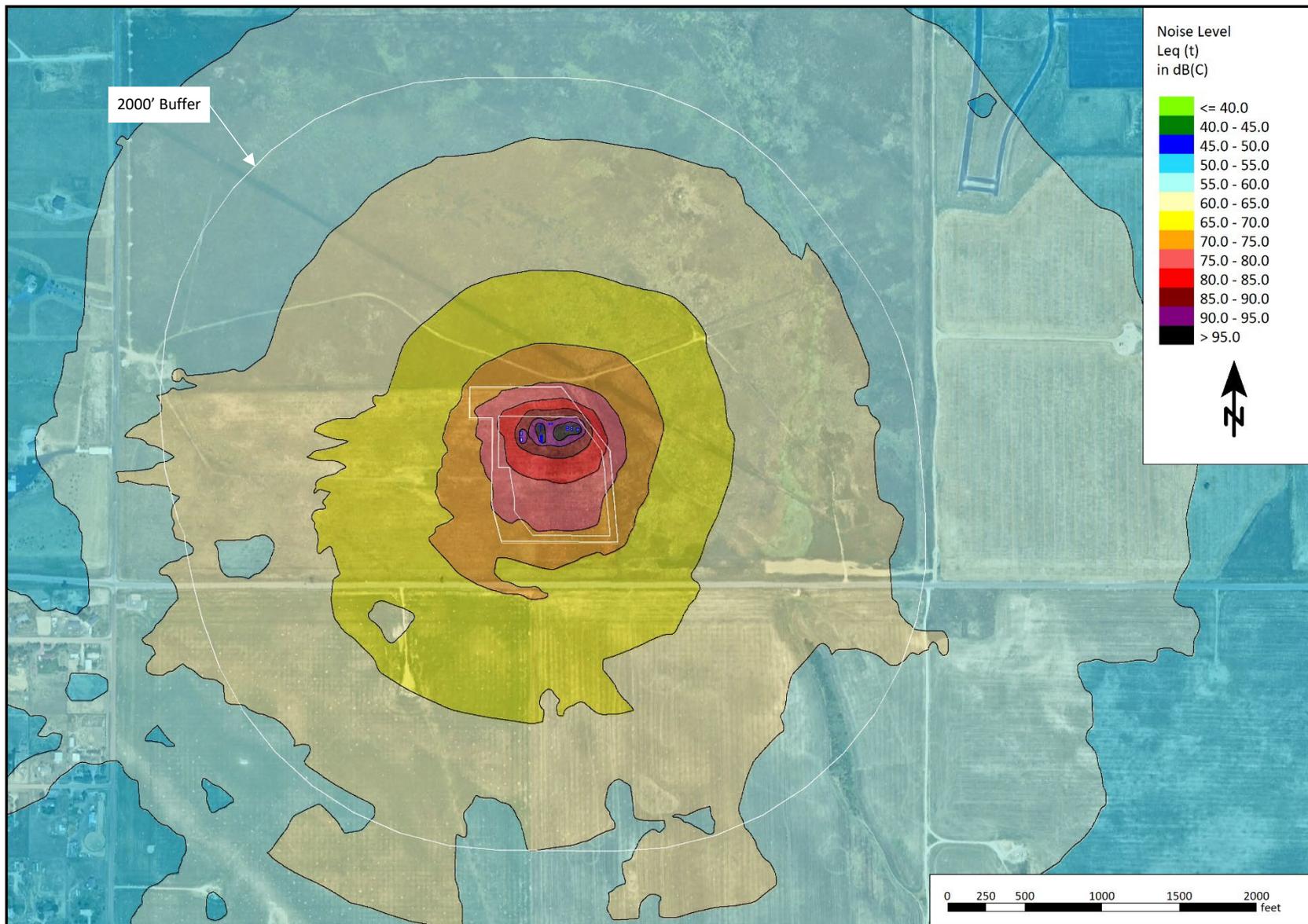
There are no parcels containing RBUs within 2,000 feet of the proposed Eagle location and thus, there is no tabular data presented in this section. Instead, noise contour maps are provided for the area surrounding the Eagle location. The contours are provided in 5 dB increments with the color scale indicating the sound level of each contour. Unmitigated production operations noise contour maps are presented in Figure 11 and Figure 12.



Figure 11. Unmitigated Production Noise Contour Map (dBA)



**Figure 12. Unmitigated Production Noise Contour Map (dBC)**



### ***Flowback Operations Review***

A review of flowback operations was carried out by Urban based on information supplied by Extraction. It was determined that flowback can be reduced to two simple, successive, operations from a noise perspective; these are “drill out” and “surface flow”. Both flowback operational components were assessed, and it was found that neither warrant noise modeling. The surface flow portion of the flowback operation will not be directed to temporary tanks as is usually done, but instead will flow directly to the newly constructed production facility.

## **9 CONTINUOUS MONITORING / COMPLAINT RESOLUTION**

There are no RBUs within a half mile of the proposed Eagle location. Thus, there is no requirement to conduct continuous monitoring.

Extraction will post contact information to receive and address noise complaints arising from preproduction operations around the clock, 24 hours, 7 days per week. Upon receipt of a complaint, either directly to Extraction or from Adams County, Extraction will contact the associated stakeholder within 48 hours of receipt.

## **10 CONCLUSION**

The results of the proactive planning, noise modeling, and implementation of Best Management Practices as discussed in this NMP indicate that noise levels generated by Extraction's proposed oil and gas operations at the Eagle location are expected to comply with permissible noise levels required by the Adams County noise regulation for all operations proposed (drilling, completions, flowback, and production).

## **11 NOTATIONS**

The services provided for this project were performed in accordance with generally accepted professional consulting services. No warranty, expressed or implied, is made or intended by rendition of these consulting services or by furnishing oral or written reports of the findings made. Urban Solution Group generated this report for the exclusive use of Extraction Oil & Gas Inc.



## **Appendix 1 – Equipment Layouts**



Figure 13. Drilling Equipment and Soundwall Layout for the Patterson Automated Walking Rig System

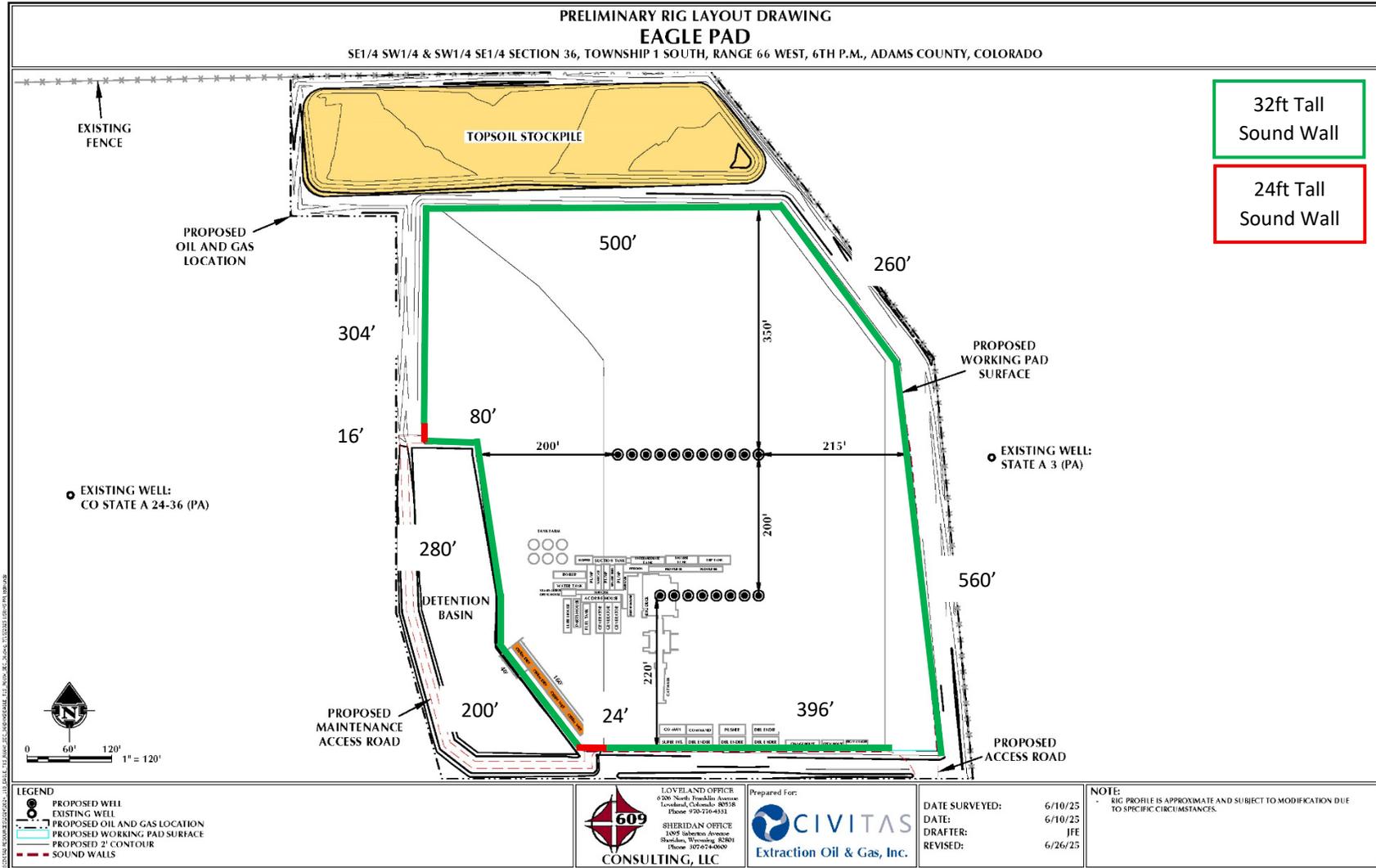
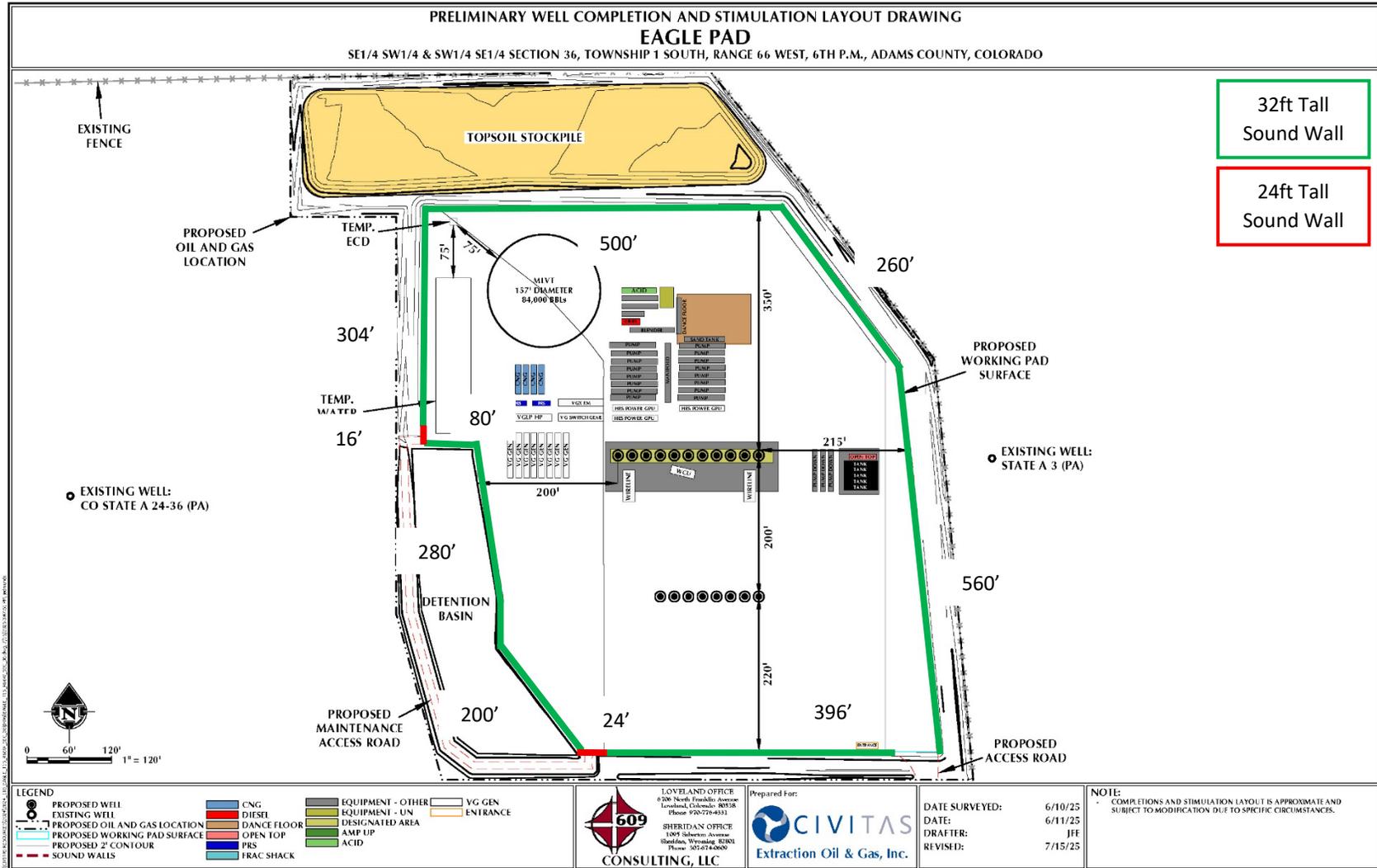
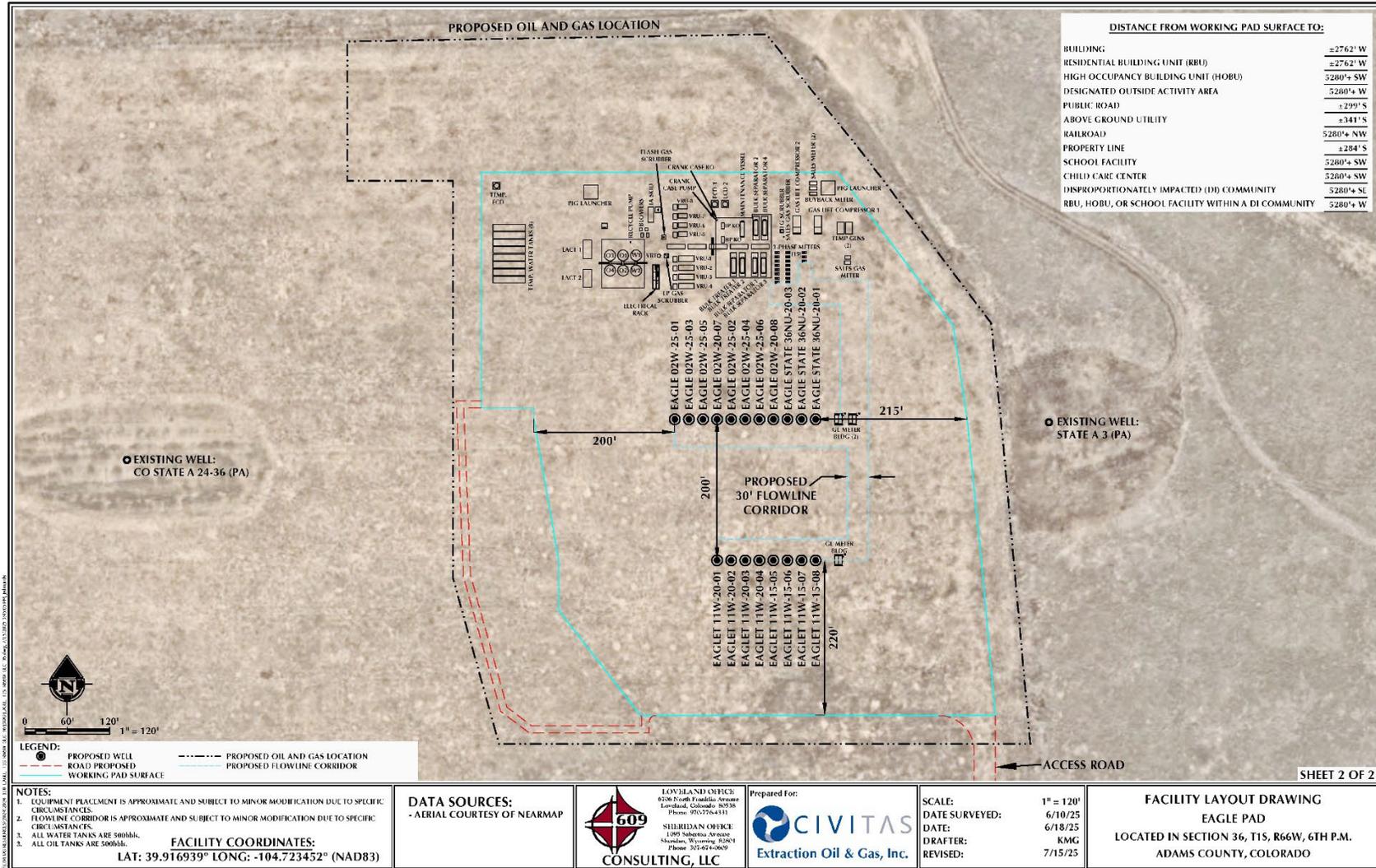


Figure 14. Completions Equipment and Soundwall Layout for the HES Zeus Fleet



**Figure 15. Production Equipment Layout**



## **Appendix 2 – Ambient Data and Charts**



Figure 16. Chart of Unfiltered Hourly Averages for Monitoring Point 1

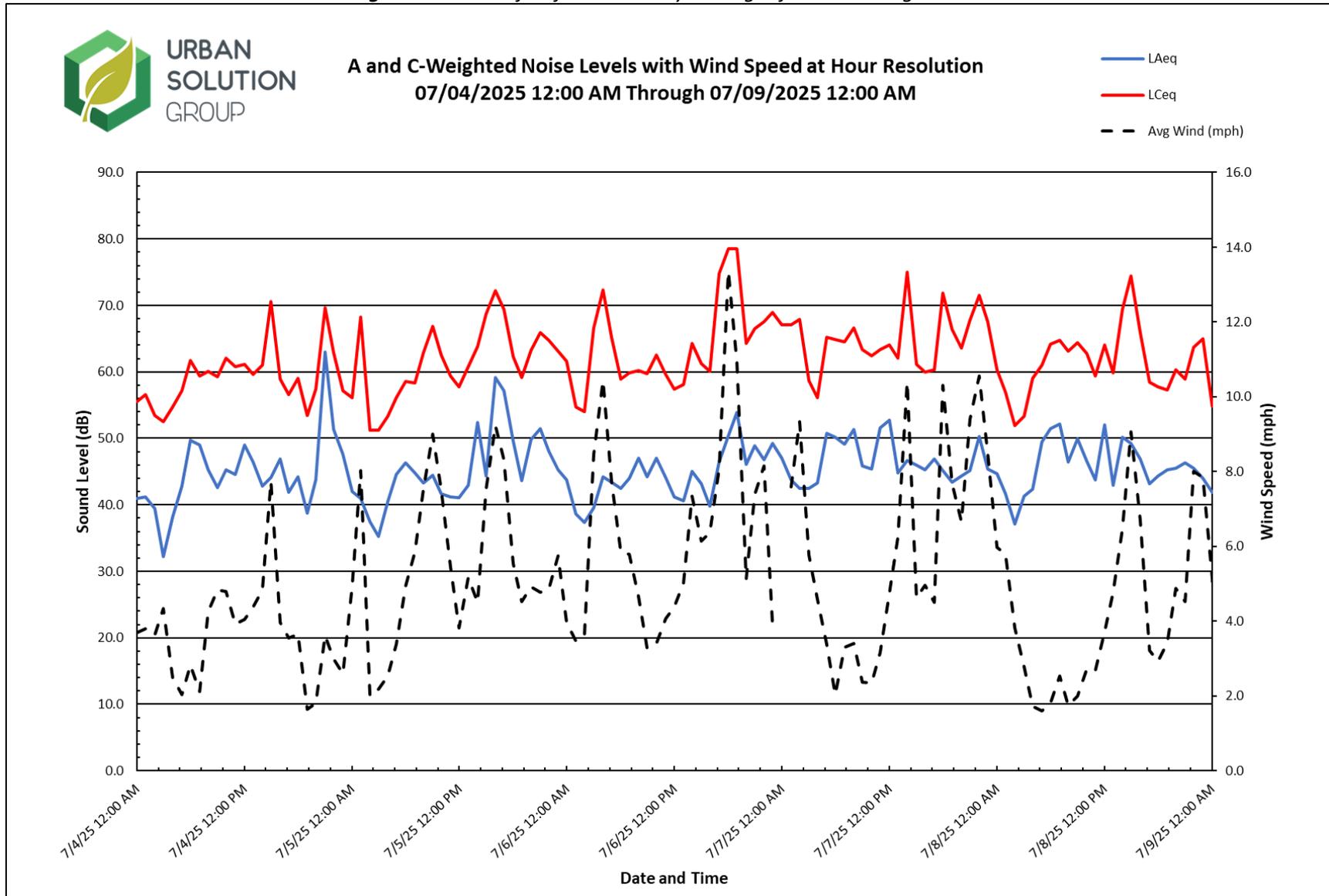
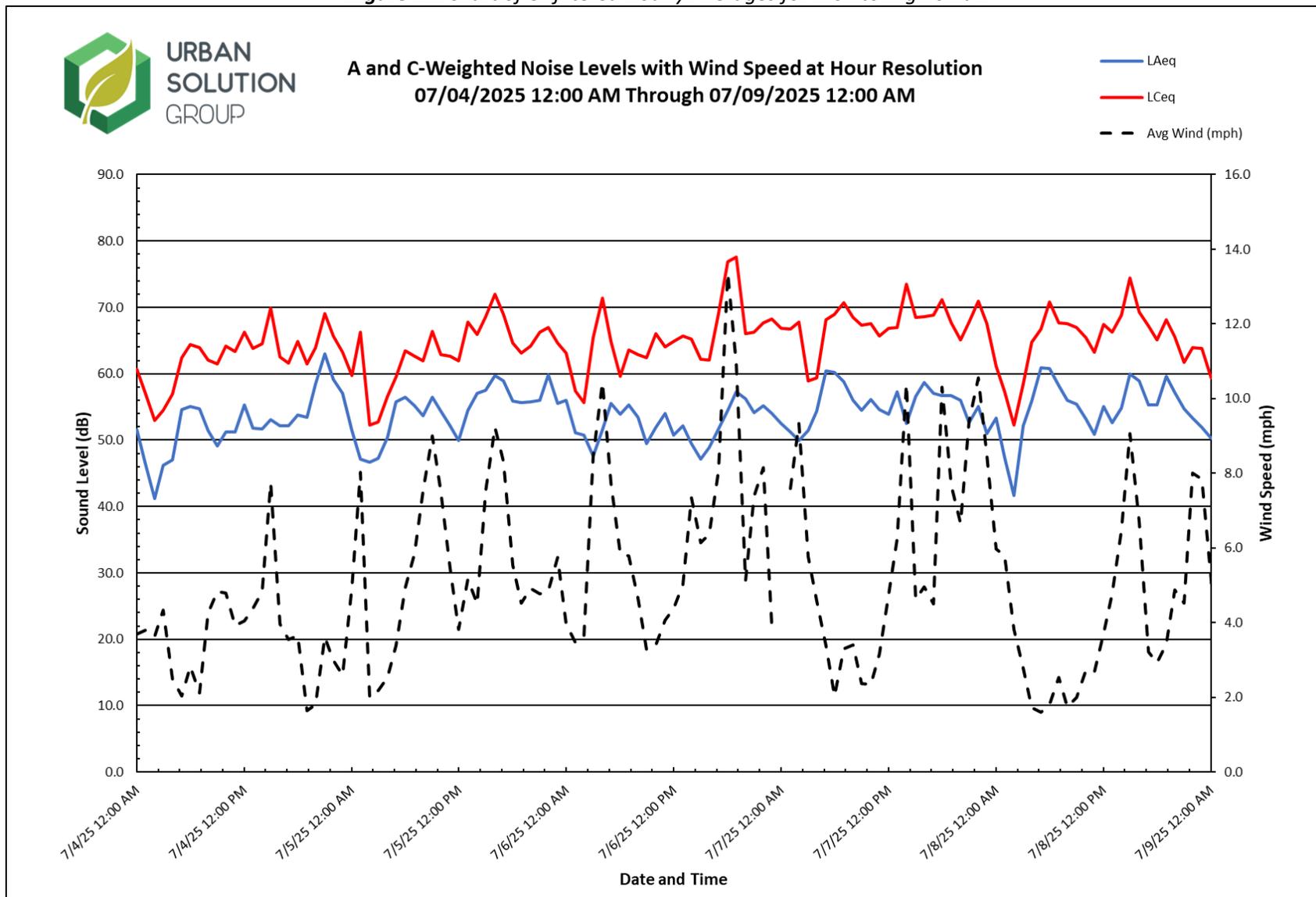


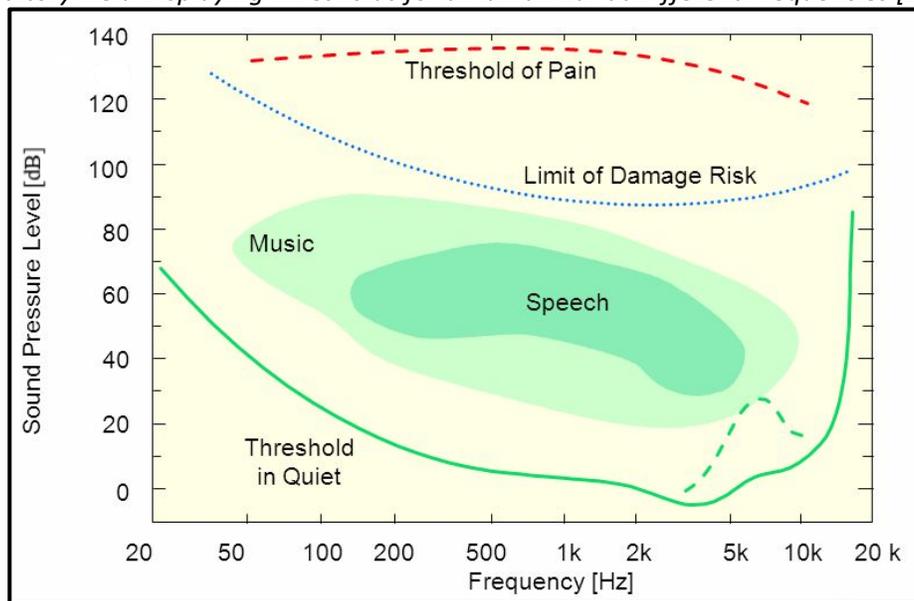
Figure 17. Chart of Unfiltered Hourly Averages for Monitoring Point 2



### **Appendix 3 – Sound Fundamentals**

Sound is a series of vibrations transmitted through the air, or other medium, and can be heard when they are processed by the human ear. There are two important properties that describe sound; frequency and amplitude. Frequency is determined by the rate of movement and is measured in cycles per second, which is known as Hertz (Hz). A healthy human ear can hear 20 Hz – 20,000 Hz (Figure A). The sensation associated with frequency is commonly referred to as the pitch of a sound. High frequencies produce a higher pitch and vice versa. The amplitude of a sound is determined by the maximum displacement of air molecules produced by the vibrations. These displacements lead to pressure fluctuations in air, which are expressed in decibels (dB). Decibels are a logarithmic ratio of sound pressure over the standard threshold of hearing. The more energy a sound has, the larger the pressure fluctuations, resulting in a louder sound.

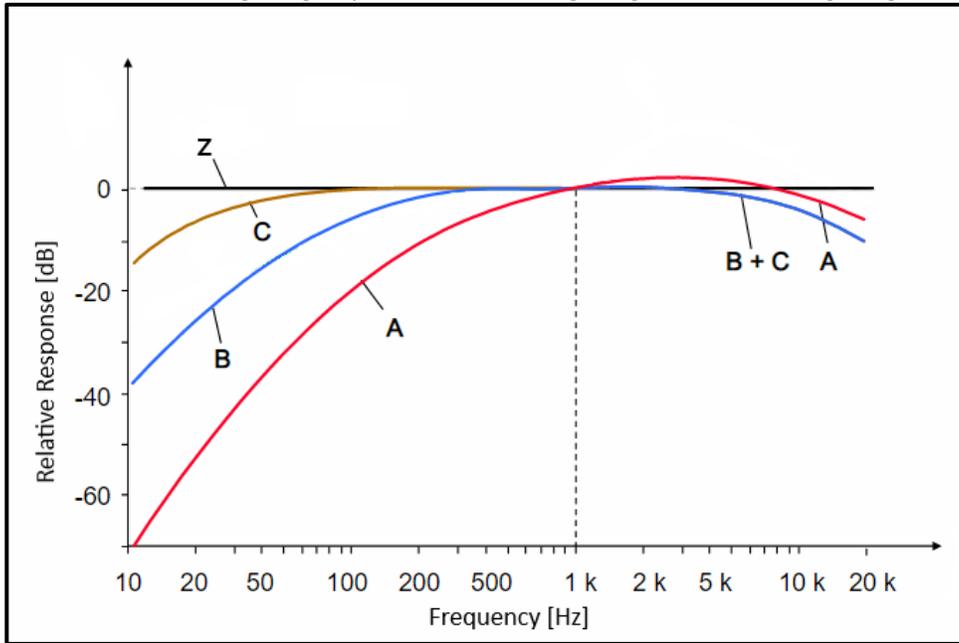
**Figure A: Auditory Field Displaying Thresholds for a Human Ear at Different Frequencies [Bruel and Kjaer]**



Frequency weightings are applied to measurements to provide a better match between measured results and human perception. Each weighting, in relation to their frequency components, allows for a consistent measurement of the different type of noise sources. A-weighted decibel sound pressure levels (dBA) are measurements recorded from a sound level meter measuring sounds similar to the response of the ear (Figure B). While C-weighted (dBC) measurements are for low-frequency components.

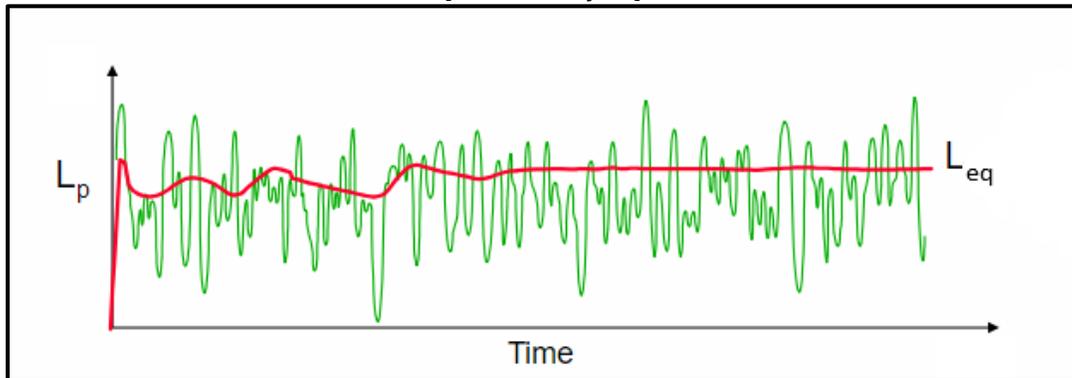


**Figure B: Common Sound Weightings Up to 20 kHz, Z-Weighting Means No Weighting [Bruel and Kjaer]**



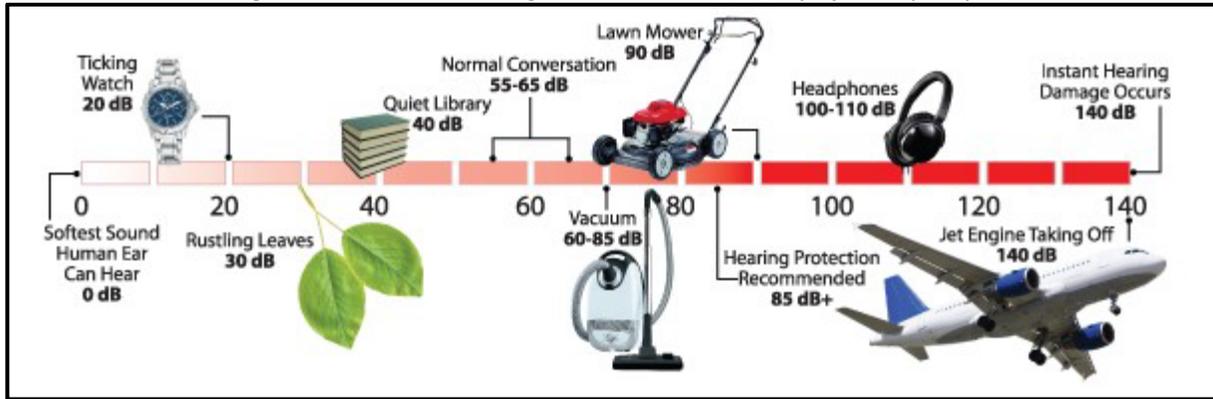
Each measurement has an exponential time factor. Slow time weighting is the most common for environmental noise measurements and will be used for these measurements. For recording over long periods of time, the sound level meter records each weighted decibel reading with an equivalent, or average, continuous sound level reading ( $L_{eq}$ ).  $L_{eq}$  represents the same energy as the actual time varying sound signal (Figure C).  $L_{Aeq}$  refers to the equivalent continuous sound level for an A-weighted measurement.

**Figure C: Sound Level Recording Displaying  $L_{eq}$ , a Steady-State Sound Level, Over a Noise Measurement [Bruel and Kjaer]**



Environmental noise is a combination of various noise sources. These sources may include; vehicle traffic, aircraft flyovers, wind, weather disturbances, commercial or industrial activities, and other short-term events. These sources create “background noise”. Background noise varies throughout the day, generally following the cycle of human activity. Figure D below presents typical A-weighted (dBA) sound levels for common sources of sound.

Figure D: Common A-weighted Sound Levels [City of Albuquerque]



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## **Appendix 4 – Glossary**

### **Ambient Noise**

All noises that exist in an area and are not related to regulated operations and facilities. Ambient noise includes sound from other industrial noise not subject to this directive, transportation sources, animals and nature.

### **Average Sound Level**

See Energy Equivalent Sound Level.

### **A-weighted sound level**

The sound level as measured on a sound level meter using a setting that emphasizes the middle frequency components similar to the frequency response of the human ear.

### **Calibration**

A procedure used for the adjustment of a sound level meter using a reference source of a known sound pressure level and frequency. Calibration must take place before and after the sound level measurements.

### **C-weighted Sound Level**

The C-weighting approximates the sensitivity of human hearing for relatively loud sounds. The C-weighted sound level is also commonly used to assess low- frequency noise in conjunction with the A-weighted sound level.

### **Day Night Sound Level (Ldn)**

Is the average noise level over a 24-hour period. The noise between the hours of 22:00 and 07:00 is artificially increased by 10 dB. The nighttime noise is weighted to consider the decrease in community background noise.

### **Daytime Average Sound Level**

The time-averaged A-weighted sound level measured between the daytime hours, usually defined as 7:00 am to 7:00 pm.

### **Decibel (dB)**

A unit of measure of sound pressure that compresses a large range of numbers into a more meaningful scale. The basic unit of measurement for sound levels.

### **dBA**

The decibel (dB) sound pressure level filtered through the A filtering network to approximate human hearing response. See dB and A-weighted Sound Level.

### **dBC**

The decibel (dB) sound pressure level filtered through the C filtering network. See Decibel and C-weighted Sound Level.



**Energy Equivalent Sound Level ( $L_{eq}$ )**

The  $L_{eq}$  is regarded as the average sound pressure level, where the single sound level value represents an amount of energy equal to that of an entire time-varying acoustic signal over a given period.

**Facility**

Any operation used in exploration, processing, development and transportation of energy resources.

**Frequency**

The number of oscillations per second for a sound wave.

**Impulse Noise**

Unwanted, instantaneous sharp sounds that create sudden impulses of pressure similar to gunfire and explosions.

**Noise Reduction**

The numerical difference, in decibels, of the average sound pressure levels between two locations on either side of a sound wall, or silencer, etc.

**Nighttime Average Sound Level ( $L_{night}$ )**

The time-averaged A-weighted sound level measured between the nighttime hours, usually defined as 7:00 pm to 7:00 am.

**Ldn**

See Day night sound level.

**Leq**

See Energy Equivalent Sound Level.

**Noise**

Generally understood as unwanted sound.

**Noise Impact Assessment (NIA)**

Identifies the expected sound level emitted from operations, and receptor points are placed in locations related to compliance. It also identifies what the permissible sound level is and how it was calculated.

**Noise Reduction Coefficient (NRC)**

A single number rating of the sound absorption properties for a material. An NRC value of zero indicates the material is purely reflective. An NRC value of one indicates perfect absorption.

### **Octave Band**

An octave band is a frequency band that spans one octave. A band is said to be an octave in width when the upper band frequency is twice the lower band frequency. Octave bands are commonly used in engineering acoustics. The nine common octave bands used for the study of industrial noise are identified by their center frequencies as 31.5Hz, 63Hz, 125Hz, 250 Hz, 500 Hz, 1000 Hz, 2000 Hz, 4000 Hz, and 8000 Hz.

### **Point Source**

A source that radiates sound from a single point. Generally used to model equipment when looking at the sound impact over a large area.

### **Receiver**

A person or piece of equipment that is affected by noise.

### **Sound**

A series of vibrations transmitted through the air, or other medium, and can be heard when they are processed by the human ear.

### **Sound Level Meter (SLM)**

An instrument that contains a microphone and filter used to measure sound levels, using standard frequency-weightings and exponentially weighted time averaging.

### **Sound Power Level**

A physical measurement of the amount of power a sound source radiates into the surrounding air. It is the rate at which sound energy is emitted, or received, per unit time.

### **Sound Pressure Level (SPL)**

The sound level received at a given location. The decibel equivalent of the rate of sound pressure waves at a measured location, usually with a microphone.

### **Sound Transmission Class (STC)**

An integer rating that measures how well a barrier or building partition attenuates sound. Indicates how well a barrier is at stopping sound from transmitting through it.

### **1/3 Octave Band**

The 1/3 octave band analysis provides a finer breakdown of sound energy distribution (compared to full octave band) as a function of frequency.





Extraction Oil and Gas, Inc.

**Eagle Pad  
Odor Mitigation Plan**

Section 36, Township 1 South, Range 66 West  
Adams County, CO

## Potential Receptors

Operator will strive to minimize or eliminate odor from being a nuisance to the residences in the area of the proposed working OGF. Prevailing wind direction is coming from the south at this location (*source: Western Regional Climate Center, Denver, CO*). The highest risk for odor nuisances would be for the residential building units to the north of the pad.

## Development Phase

Operator will comply with the requirements of Colorado Energy and Carbon Management Commission (ECMC) Rule 426 during development through the mitigation methods outlined below. In addition to what is being proposed, Operator reserves the right to incorporate evolving technologies aimed at reducing odor during operations should conditions warrant additional controls. The Operator will endeavor to prevent odors from emanating from the Oil and Gas Location by proactively addressing known sources of odor – i.e., drilling mud.

The Operator will use a filtration system and additives to the drilling and fracturing fluids to minimize odors. Use of fragrance to mask odors is prohibited. In order to meet the requirements of ECMC Rule 426, Operator shall implement the following measures:

- Operator shall utilize a closed-loop, pit-less mud system for managing drilling fluids.
- Operator shall employ the use of drilling fluids with low to negligible aromatic content (IOGP Group III) during drilling operations after the surface casing is set and freshwater aquifers are protected.
- Operator shall remove drill cuttings daily and as soon as waste containers are full.
- Operator shall employ pipe cleaning procedures when removing drill pipe from the hole; these procedures may include “wiping” the pipe before racking it in the derrick.

In the event a person living in the area or in the direction of prevailing winds from the Oil & Gas Location’s pad complains of odor, Operator shall assess current operations and atmospheric conditions at the time of the complaint to determine whether the odor may have been caused by the Operator’s operations. Once a preliminary determination is made, the Operator will provide its findings to the complainant, the Adams County Community and Economic Department within 24 hours. If the complaint is justified and unable to be resolved, Operator will work with the Director on necessary and reasonable actions to reduce odor including but not limited to the following:

- The Operator may utilize a mud-chiller to reduce odor breakout.
- Operator may add or increase concentration of odor-mitigating additives in mud system.

## Production Phase

Operator will comply with the requirements of Adams County Development Standards and Regulations Section 4-11-02-03-03-16 and ECMC Rule 426 during development by utilizing the following best management practices outlined below. The primary source of odors during the production phase is gas that is vented during maintenance or normal production operations.

- The operator will install an oil pipeline to the location prior to first production. Reducing odor emissions associated with truck traffic and the transfer of oil from storage tanks to tanker trucks.
- The operator will utilize compressed air pneumatics for all pneumatic actuation on location. Eliminating the use of natural gas vented to the atmosphere during valve actuation and associated processes.
- The operator will utilize a pressurized maintenance vessel during maintenance operations. Eliminating gas that would otherwise be vented to the atmosphere during maintenance operations.
- The operator will electrify the permanent production facilities.

## Additional Air Quality Requirements

Operator will submit an Air Monitoring plan to the Colorado Department of Public Health and Environment which will be approved prior to construction. The air monitoring will be in place prior to construction through 6 months of production.

## Proposed Best Management Practices

1. Operator will use a filtration system and additives in the drilling and fracturing fluids that minimize odors.
2. Operator shall utilize a closed-loop, pit-less mud system for managing drilling fluids.
3. Operator shall employ the use of drilling fluids with low to negligible aromatic content (IOGP Group III) during drilling operations after the surface casing is set and freshwater aquifers are protected.
4. Operator shall remove drill cuttings daily and as soon as waste containers are full.
5. Operator shall employ pipe cleaning procedures when removing drill pipe from the hole; these procedures may include “wiping” the pipe before racking it in the derrick.
6. If a justified complaint is received, Operator may utilize a mud-chiller to reduce odor breakout and/or add or increase concentration of odor-mitigating additives in mud system.
7. The operator will install an oil pipeline to the location prior to first production. Reducing odor emissions associated with truck traffic and the transfer of oil from storage tanks to tanker trucks.
8. The operator will utilize compressed air pneumatics for all pneumatic actuation on location. Eliminating the use of natural gas vented to the atmosphere during valve actuation and associated processes.
9. The operator will utilize a pressurized maintenance vessel during maintenance operations. Eliminating gas that would otherwise be vented to the atmosphere during maintenance operations.
10. The operator will electrify the permanent production facilities.



## DEVELOPMENT APPLICATION FORM

### Application Type:

<input type="checkbox"/> Conceptual Review	<input type="checkbox"/> Preliminary PUD	<input type="checkbox"/> Temporary Use
<input type="checkbox"/> Subdivision, Preliminary	<input type="checkbox"/> Final PUD	<input type="checkbox"/> Variance
<input type="checkbox"/> Subdivision, Final	<input type="checkbox"/> Rezone	<input type="checkbox"/> Conditional Use
<input type="checkbox"/> Plat Correction/ Vacation	<input type="checkbox"/> Special Use	<input type="checkbox"/> Other: _____

**PROJECT NAME:**

### APPLICANT

Name(s):  Phone #:

Address:

City, State, Zip:

2nd Phone #:  Email:

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### OWNER

Name(s):  Phone #:

Address:

City, State, Zip:

2nd Phone #:  Email:

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### TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)

Name:  Phone #:

Address:

City, State, Zip:

2nd Phone #:  Email:

---

**DESCRIPTION OF SITE**

Address:

City, State, Zip:

Area (acres or square feet):

Tax Assessor Parcel Number

Existing Zoning:

Existing Land Use:

Proposed Land Use:

Have you attended a Conceptual Review? YES  NO

If Yes, please list PRE#:

I hereby certify that I am making this application as owner of the above described property or acting under the authority of the owner (attached authorization, if not owner). I am familiar with all pertinent requirements, procedures, and fees of the County. I understand that the Application Review Fee is non-refundable. All statements made on this form and additional application materials are true to the best of my knowledge and belief.

Name:  Date:

Owner's Printed Name

Name:



Owner's Signature

**The applicant hereby affirms that the Operator and its associated subcontractors and affiliates have complied with applicable worker safety training and certification requirements as outlined in Adams County Development Standards and Regulations Sec. 4-11-02-03-03. Records and documentation of compliance are available and will be provided to the County upon request.**

Name:  Date:

Owner's Printed Name

Name:



Owner's Signature



**Eagle Pad Community Open House  
August 12, 2025  
Brighton, CO**

On August 12, 2025, Civitas hosted an in-person open house for landowners near the Eagle Pad. An invitation was sent first class postage to 84 landowners three weeks prior to the meeting.



**CIVITAS**  
**EAGLE PAD - ADAMS COUNTY**  
**COMMUNITY OPEN HOUSE**

---

Civitas Resources would like to invite you to come and meet Civitas representatives to learn more about the company's development plan for the Eagle Pad project in Adams County.

The Eagle Pad - Adams County is a new Oil & Gas project. This will be an opportunity to ask questions from subject matter experts and understand the project scope and timelines.

**IN-PERSON OPEN HOUSE**  
**August 12th, 2025 from 6:00PM to 7:30PM**  
**Adams County Government Building**  
**4430 S Adams Parkway**  
**Brighton, CO 80601**

*Please enter at the west side conference doors and look for room Platte River B.*

**Contacts:**

<b>Civitas Resources</b> Community Outreach - 720-279-9842 communityrelations@civiresources.com	<b>Adams County</b> Greg Dean Oil & Gas Administrator 720-523-6891 gdean@adcogov.org
---	--

[www.civiresources.com](http://www.civiresources.com)

The event was held at the Adams County Government Center in Brighton from 6:00-7:30PM, with five Civitas representatives from multiple technical disciplines in attendance. There were seven attendees and each one was able to meet with Civitas subject matter experts to get an overview of the project and have any questions answered. Additionally, there was a GIS station that allowed landowners to zoom in on their own property to see where it is in relation to facilities and other aspects of the project. The format allowed people to ask questions specific to their property and proximity to the project. Some questions and comments were:

Where is this project?
How deep are the wells?
Will this impact my well water?
What is the surface land being used for now?
Will I feel anything at my house during drilling or completions?
How long will the pad be developed?
Will each well have its own surface wellhead?

Where is the produced fluid be taken?
What waste will be generated?
Where is the water for completions coming from?
Will you be using water from local aquifers?
Is this a new location or expanding an old one?
What is the project timeline?
Can you show me the haul route?
How do you P&A wells?
Can we pave the gravel roads?
What type of monitoring will you do?
"I am concerned about the truck traffic"
"Now that I know where this is, I'm happy"

PHOTOS FROM THE EVENT







# CIVITAS

## **EAGLE PAD - ADAMS COUNTY COMMUNITY OPEN HOUSE**

---

**Civitas Resources would like to invite you to come and meet Civitas representatives to learn more about the company's development plan for the Eagle Pad project in Adams County.**

**The Eagle Pad - Adams County is a new Oil & Gas project. This will be an opportunity to ask questions from subject matter experts and understand the project scope and timelines.**

### **IN-PERSON OPEN HOUSE**

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**Adams County Government Building  
4430 S Adams Parkway  
Brighton, CO 80601**

*Please enter at the west side conference doors and look for room Platte River B.*

### **Contacts:**

#### **Civitas Resources**

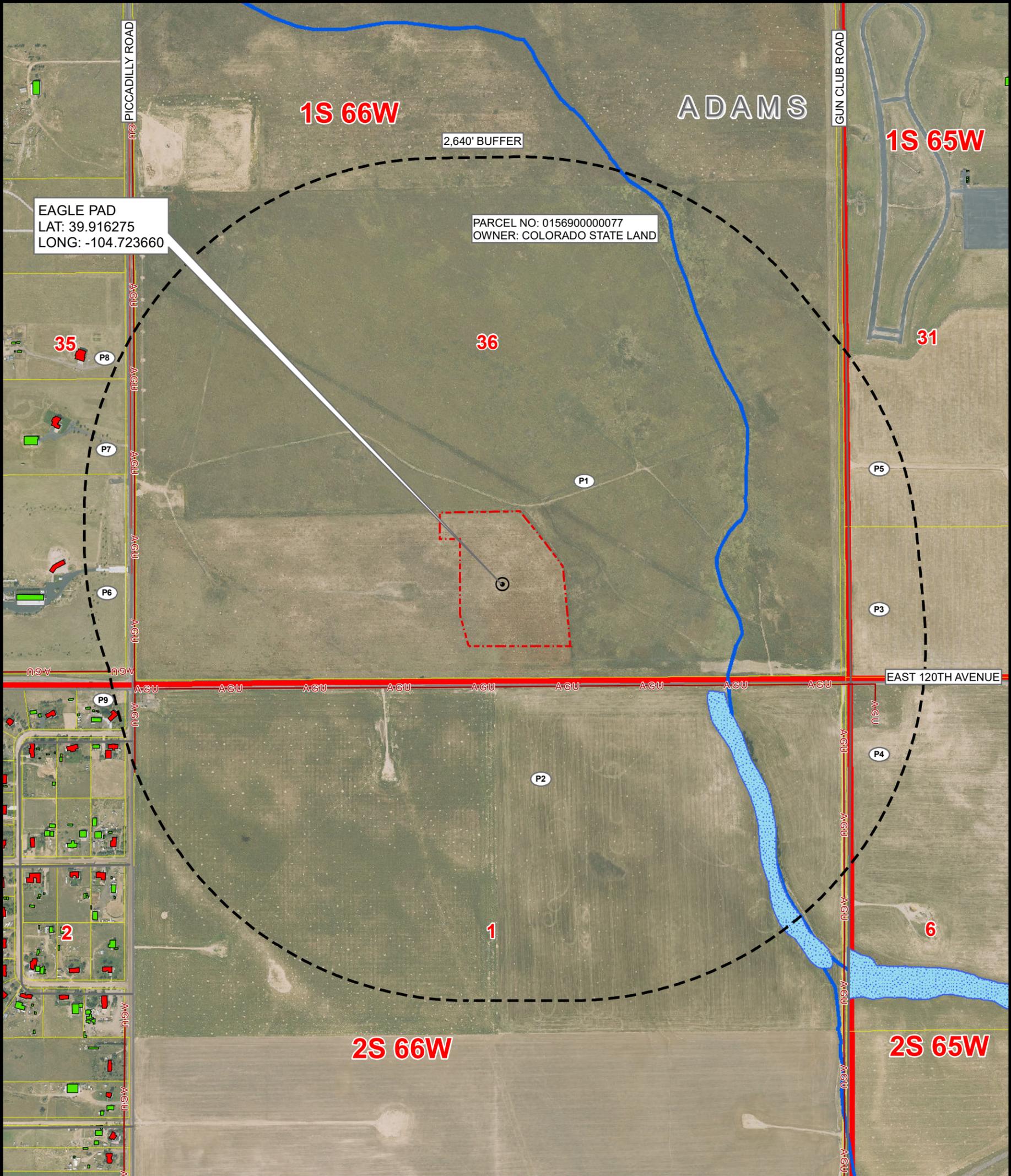
**Community Outreach - 720-279-9842  
communityrelations@civiresources.com**

#### **Adams County**

**Greg Dean  
Oil & Gas Administrator  
720-523-6891  
gdean@adcogov.org**

# EAGLE PAD

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



Legend	
	PROPOSED REFERENCE POINT
	PROPOSED OIL AND GAS LOCATION
	BUFFER
	BUILDING
	NON-RESIDENTIAL BUILDING UNIT
	RESIDENTIAL BUILDING UNIT
	HEALTH FACILITY
	SCHOOL FACILITY
	CHILD CARE FACILITY
	AGU- ABOVE GROUND UTILITY
	PUBLIC ROAD
	RAILROAD
	DITCH/CANAL/DRAINAGE
	DISPROPORTIONATELY IMPACTED COMMUNITY
	PARCEL BOUNDARY
	JURISDICTIONAL BOUNDARY
	RULE 411.b 2640' BUFFER
	100-YEAR FLOODWAY
	100-YEAR FLOODPLAIN
	COUNTY BOUNDARY
	RIPARIAN CORRIDOR
	DELINEATED WETLANDS
	RIVERINE CORRIDOR
	FRESHWATER EMERGENT WETLAND
	FRESHWATER FORESTED/SHRUB WETLAND
	OTHER
	LAKE
	FRESHWATER POND

NOTE:  
THIS MAP IS A COMPILATION OF PUBLICLY AVAILABLE DATA. THE ACCURACY AND COMPLETENESS OF SAID DATA HAS NOT BEEN VERIFIED BY 609 CONSULTING, LLC. EXISTING CONDITIONS MAY DIFFER FROM WHAT IS SHOWN.

Prepared For:



LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331  
SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



K:\CIVITAS RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36\GIS\LA\MAPS\ADAMS COUNTY PRE APPEAL\_EAGLE\_ALA\_MAP\_LOCATION\_ANALYSIS\_MAP\_PROPOSED\_LOCATION\_MAP(SHEET 1).mxd 6/10/2025 1:00:59 PM



STATE OF COLORADO  
STATE BOARD OF LAND COMMISSIONERS

**SURFACE USE AGREEMENT**  
**OT 117566**  
**Non-State and Pooled or Communitized Minerals**

THIS SURFACE USE AGREEMENT (“**Agreement**”), dated this 9th day of August, 2025, (“**Effective Date**”) is made by and between the State of Colorado, acting by and through the Colorado State Board of Land Commissioners, whose address is 1127 Sherman Street, Suite 300, Denver, CO 80203, herein called the “**State Land Board**”, and, Extraction Oil and Gas, Inc, whose address is 555 17<sup>th</sup> Street, Suite 3700, Denver, CO 80202, herein called the “**Operator**”.

WHEREAS, the State Land Board represents that it is the surface owner and in possession of the surface estate in all or part of the following lands located in Adams County, Colorado (the “**Property**”):

Subdivision CS2, Section 36, Township 1S, Range 66W

WHEREAS, the State Land Board acknowledges that the Operator has certain rights to conduct oil and gas operations under the terms of oil and gas lease(s) underlying or adjacent to the Property;

WHEREAS, the State Land Board and the Operator, together also herein be called the “**Parties**”, desire to facilitate development of the oil and gas resources based on reasonable access and use of the Property, and to reach an understanding and agreement regarding the Operator’s surface access and use and to minimize disturbance associated with oil and gas operations.

NOW, THEREFORE, in consideration of the terms and conditions cited below, the State Land Board and the Operator agree as follows:

1. Surface Rights

The State Land Board agrees to allow the Operator reasonable use of a portion of the Property to build well pad(s), tank batteries, access road(s); construct pipelines, flowlines, gathering lines and powerlines; and to drill, complete, produce and operate vertical, directional or horizontal wells (the “**Operations**”). Operations on the Property shall be confined to a limited portion of the surface of the Property exclusively reserved for Operations (the “**Operations Area**”), together with an “**Access Corridor**,” as necessary, for access roads and associated lines, containing 17.21 acres which is further identified on Exhibit A. The Operator shall have the exclusive right to utilize the Operations Area provided the State Land Board may use the balance of the Property and the Access Corridor for State Land Board purposes that do not materially interfere with Operations. Furthermore, the Operator shall have the right to access and use the Property in “Emergency Situations”. Emergency Situations is defined as situations that require immediate attention in order to protect human life or prevent further degradation of the land.

2. Subsurface Easement

To the extent the State Land Board owns the sub-surface rights underlying the Property, the State Land Board hereby grants the Operator a sub-surface easement for passage of any portion of the directional or horizontal wellbore for a well located on the Operations Area through the State Land Board owned sub-surface. If a wellbore from a well located on the Operations Area leaves the sub-surface boundaries of one State Land Board oil and gas lease and enters lands covered under a separate oil and gas lease or leases, the State Land Board grants an easement to allow the wellbore

to travel and produce from all applicable leases, provided such easement does not conflict with the terms of any State Land Board lease now in effect.

### 3. Term

This Agreement shall have a primary term of three (3) years (the “**Primary Term**”) and shall continue for so long thereafter as any well utilizing the Operations Area continues to produce oil or gas. If, after the expiration of the Primary Term of this Agreement, production from all wells utilizing the Operations Area should cease for any cause for a period of more than two (2) years, the State may terminate this Agreement, provided that the Operator may request annual one-year extensions to this Agreement by (i) providing evidence of compliance with ECMC Rule 417 - Mechanical Integrity Testing for Shut-in Wells, which may be in the form of ECMC Form 21 - Mechanical Integrity Test and, (ii) paying the State Land Board, in addition to the Annual Payment, \$1,000 per acre of the Operations Area.

If the Operator fails to commence Operations on the Operations Area during the Primary Term by established production from wells located on the Operations Area or from off-site Wells utilizing facilities located on the Operations Area, this Agreement will terminate at the end of the Primary Term.

Upon termination of Operations, this Agreement shall remain in effect as to other terms and conditions until all wells are plugged and abandoned and the reclamation and clean-up requirements set out in the “**Reclamation**” section below have occurred consistent with the Colorado Energy and Carbon Management Commission (the “ECMC”) regulations then in effect, and to the reasonable satisfaction of the State Land Board.

Agreement extensions in the absence of oil or gas production or in the event that the Operator fails to comply with 3.i and 3.ii above may be granted at the sole discretion of the State Land Board.

### 4. Payments to the State Land Board

- A. Initial Damage Payment - On the Effective Date of the Agreement the Operator shall pay the State Land Board \$127,725.00, based on the surface use rates set forth on Exhibit B for surface damage, impact and use of the Operations Area.
- B. Well Payments - In addition to the Initial Damage Payment, the Operator shall pay the State Land Board a one-time payment for any and all wells located on the Operations Area based on the rates set forth on Exhibit B. Well Payments are due on the next annual anniversary date of the Effective Date following the well spud date, defined as when the drill bit contacts the ground to start the process to drill for and install surface casing.
- C. Annual Payment - The Operator shall pay the State Land Board annually, on or before each anniversary of the Effective Date for so long as this Agreement remains in effect, an Annual Payment of \$12,772.50, calculated based on the rates set forth on Exhibit B. The State Land Board may accept, in lieu of Annual Payments, a lump-sum one-time payment on the Effective Date of this Agreement, at the sole and absolute discretion of the State Land Board.
- D. Access Corridor Payment: The operator shall pay a one-time Access Corridor Payment to the State Land Board of \$900.00, based on the rates set forth on Exhibit B, for access roads, pipeline and powerline easements, and all other disturbances outside the Operations Area.

Payment shall be made on the Effective Date of the Agreement and the Operator may be subject to either the SUA or a separate Right-of-Way (“ROW”) agreement. Operator shall consult with and obtain approval from the State Land Board for Access Corridors and shall cooperate with the State Land Board regarding the location and construction timing for any pipeline burial in order to minimize surface disturbance, and shall pay the State Land Board based on the compensation schedule set forth on Exhibit B. For accuracy of measurement, Operator shall provide an As-Built Survey and the Access Corridor Payment may be adjusted accordingly.

- E. Production Facilities Payment - Upon written approval by the State Land Board, the Operator shall pay the State Land Board a one-time payment for each well located off the Operations Area (“**Off-Site Wells**”) that uses facilities located on the Operations Area, including without limitation, tanks and compressors, and all associated oil and gas production and operational facilities (the “Production Facilities”), calculated based on Exhibit B (“**Production Facilities Payment**”). The State Land Board’s written approval and the Production Facilities Payment are due prior to constructing pipelines or producing hydrocarbons from Off-Site Wells to the facilities located on the Operations Area and such use will be granted at the State Land Board’s sole and absolute discretion.
- F. Rental Adjustment - On the tenth anniversary of this Agreement and every fifth anniversary date thereafter the Annual Payment shall be increased based on the change in Consumer Price Index - All Urban Consumers, “CPI-U” (CUUR0000SA4) (Base Period 1982-84=100) (the “Index”), as first published by the U. S. Department of Labor, Bureau of Labor Statistics, for the five year period preceding such anniversary date.

On the tenth anniversary of this agreement and annually thereafter the Annual Payment may be reduced based on a reduction in size of the Operations Area due to interim reclamation subject to written approval by the State Land Board’s District Manager or their appointee.

## 5. Excess Damage

If the Operations cause damage to (i) the Property located outside of the Operations Area or (ii) any other State Land Board-owned surface, or (iii) personal property located on Property outside of the Operations Area and Access Corridor, or if Operator’s surface use exceeds the use contemplated herein, causing damage, including without limitation damage or destruction of land, crops, livestock, structures, buildings, fences, culverts, concrete ditches, irrigation systems, and natural water ways, Operator shall repair or replace the damaged property, or shall pay reasonable compensation to the State Land Board or the owner of such personal property for the replacement or repair of the damaged property. Failure to timely repair, replace or pay for additional damages may result in termination of this Agreement subject to notice and cure rights contained in paragraph 20.

## 6. Consultation

- A. Surface Owner - Prior to execution of this Agreement, Operator shall meet with a State Land Board representative to define the Operations Area and Access Corridor as set forth on Exhibit A. Except for Emergency Situations, Operators shall be confined to the Operations Area and Access Corridor, and any change to Exhibit A requires prior consultation and written approval of the State Land Board. Except as indicated in paragraph 28, the State Land Board does not waive any ECOM surface owner consultation requirements, and the Operator shall not seek a variance to any required consultation without the advance written approval of the State Land Board.

- B. Colorado Parks and Wildlife - Prior to executing this Agreement, Operator shall consult with Colorado Parks and Wildlife (CPW) representatives as required by ECMC Rules, and as required by the State Land Board, to determine if the Property contains CPW mapped High Priority Habitat (HPH) and/or occurrences of Federally-listed Endangered, Threatened, or Candidate Wildlife. The Operator shall review the Colorado Natural Heritage Program (CNHP) data to identify animal and plant species of concern. Evidence of such consultation and review and the Operator's design measures and best management practices (BMPs) to be employed to avoid and minimize adverse impacts to biological resources, species, and habitats must be attached to this Agreement as Exhibit C. The Parties mutually agree that any violation or non-compliance with the Exhibit C design measures and BMPs, in whole or in part, arising directly or indirectly from the use, occupation or control of the Property and the Operations Area, by the Operator or the Operator's Contactors is a default of this Agreement and the State Land Board may terminate this Agreement, subject to notice and cure rights contained in paragraph 20. In addition, the Parties mutually agree that Operator will pay liquidated damages of \$1,000 per day for any such violation of or non-compliance with the Exhibit C design measures and BMPs.

7. As-Built Information

No later than 90 days after completion of construction of the well site, Production Facilities, access roads and pipelines, individually or together, or concurrently upon an Operator's submission of an As-Built Survey to the ECMC, whichever is earlier, the Operator shall provide the State Land Board with a certified plat showing the actual dimensions of the Operations Area and the Access Corridor and the total number of acres disturbed ("**As-Built Survey**"). Should the operator need to use lands to conduct additional operations outside of the area defined in the As-Built Survey, the Operator must obtain written approval from the State Land Board and the State Land Board can require a new As-Built Survey to include the additional acreage being used.

8. Operational Standards

At all times the Operator and its Contractors shall enter and use the Property, including the Operations Area, and shall conduct all Operations thereon, in a good, careful, safe, and workmanlike manner, in compliance with applicable state rules and regulations including those of the ECMC, the Colorado Air Quality Control Commission and any other State or Federal agency with jurisdiction over Operations, the applicable oil and gas lease(s), and this Agreement. Operator shall strive to identify and use the best management practices then available for surface management of oil and gas operations. The term "Contractors" shall include any third party and its employees, agents and affiliates that are retained, engaged or employed by the Operator to conduct Operations on the Property.

- A. Limitation - The Operator shall use the Operations Area only for Operations as depicted and detailed on Exhibit A. No Operations, compressors, pipelines, powerlines, access roads, facilities, and equipment beyond those provided for on Exhibit A are allowed without the prior written consent of the State Land Board, except for Emergency Situations.
- B. Compliance - Operator shall inform all Contractors of the standards contained herein. Should any Contractor fail to comply with Operator's obligations set forth herein, Operator shall be responsible and liable to the State Land Board for resulting damages.
- C. Road standards - To the extent technically feasible, as agreed to by the Parties, Operator shall use existing roads to access the Operations Area and Access Corridor, except for Emergency

## Situations.

- I. Access roads shall be limited to approximately thirty-feet, being fifteen feet on each side of the centerline, and shall be constructed along the boundary lines of the Property, or along the section lines of the Property, to the extent technically feasible, as agreed by the Parties.
  - II. Culverts shall be installed at ditch and drainage crossings, and shall be sized to prevent obstruction to the free flow of the volumes of water being carried, inclusive of flood stages. If existing culverts are damaged or destroyed Operator agrees to promptly repair or replace such culverts.
  - III. Upon the State Land Board's written request, the Operator shall construct cattle guards at all places where Operator requires access through the State Land Board's fences. Permanent gates shall be installed at each point where an access road intersects perimeter or cross fences. If the State Land Board or Operator elects to lock any gate on the access road, keys shall be provided to the other party.
  - IV. All access roads shall be kept and maintained free from ruts. Access roads shall be compacted and an adequate amount of crushed aggregate and lighter gravel shall be added on top of the surface of the access road to minimize rutting and damage to the surface.
  - V. During dry months, Operator shall apply fresh water (or water to a standard suitable for irrigation purposes) to the surface of the access roads to reasonably limit dissemination of dust.
  - VI. The use and construction of any access roads shall not include a right of use by the general public. Operator shall be responsible for maintaining all access roads and any existing roads utilized by Operator, at Operator's sole cost and expense.
  - VII. Operator shall impose a reasonable speed limit, not to exceed twenty miles per hour on the access road, and Operator shall be responsible for all traffic on the access road occurring in connection with Operations, including without limitation any damage to livestock or growing crops.
- D. Water Protection - Operator shall protect all water sources and conveyance structures, and test water quality in accordance with ECMC rules and regulations. All water sampling and testing shall be completed at Operator's expense by a reputable testing consultant selected by the Operator.
- E. Fencing - To exclude livestock, upon the State Land Board's request, Operator shall fence any drill site, or if production is established, any well site, with a wildlife friendly four strand wire fence secured by posts at appropriate intervals. Pits must be separately fenced and netted according to the State Land Board's specifications to protect birds and wildlife. Final fencing materials shall be determined based on best management practices for the protection of

wildlife agreed to by the Parties.

- F. Production Containment - Operator will install and maintain steel containment rings around production tanks and associated facilities, and install steel berms and an impervious synthetic liner within bermed areas and use best management practices to prevent any hydrocarbon substances from infiltrating soil or ground water.
- G. Buried Pipelines - Operator shall bury all pipelines to a minimum depth of 36 inches.
- H. Additional Surface Installations - At the State Land Board's request, Operator shall install additional screening, fencing, and landscaping around a wellsite to minimize noise and aesthetic impacts.
- I. Prohibited Activities - The Operator and its Contractors may not hunt, fish, or possess firearms, alcoholic beverages, or illegal drugs on the Property.
- J. Weed Control - The Operator shall keep the Operations Area and Access Corridor free of weeds as required by ECMC Rule 1003(f). Noxious weeds shall be sprayed within two (2) weeks of any request by the State Land Board for such spraying.
- K. Trash and Debris - Operator shall keep the Operations Area free from trash and debris and shall provide for periodic removal of all trash and debris from the Operations Area.
- L. Erosion Control - If the State Land Board identifies portions of the Property where Operations have caused erosion Operator agrees to take reasonable measures to control erosion, including without limitation installation of soil berms or diversions, mulching, seeding or soil binders.
- M. Storage Prohibited - The Operator shall not store any oil and gas equipment, machinery, vehicles, pipe or other item on the Operations Area that is not required in connection with Operations, without the prior written consent of the State Land Board.
- N. Unmanned Aerial Systems - The State Land Board maintains the right to access, inspect and monitor the Leased Land at all reasonable times, utilizing all reasonable means and methods, including but not limited to gate counters, game cameras and Unmanned Aerial Systems (UAS). The use of UAS will be in accordance with applicable Federal Aviation Administration (FAA) rules and regulations. The Operator shall cooperate with the State Land Board and will not interfere with all reasonable means and methods of access, inspection and monitoring, including the State Land Board's actions necessary to comply with FAA rules and regulations.

## 9. Reclamation

Prior to initiating reclamation activities, Operator agrees to consult with the State Land Board. The Operator shall reclaim the Operations Area and the Access Corridor(s) and other associated impacted State Land Board-owned land for damages resulting from the Operator's Operations, at its sole expense as nearly as practicable to its original condition. Interim and final reclamation shall be to the satisfaction of the State Land Board and shall, at a minimum, comply with all appropriate reclamation regulations, including ECMC Reclamation Regulation Series 1000 and Series 1100, and any more stringent reclamation regulations adopted by the ECMC while this Agreement is in effect.

Additional interim and final reclamation requirements and standards, if any, are attached hereto as Exhibit D.

The existence of this Agreement shall not relieve the Operator of its obligation to fully comply with all of the ECMC Rules.

10. Other Lessees

Subject to Section 1 of this Agreement, Operator acknowledges that the State Land Board may have granted rights of surface use to additional third-parties. The State Land Board will provide Operator, upon request from the Operator, with the necessary information regarding any rights granted to additional third-parties. The Operator must use reasonable efforts to minimize the impact of its Operations on the other surface lessees and their surface use(s).

11. Assignment

This Agreement is assignable, in whole or in part, by either party, subject to the following:

A. The Operator may assign this Agreement in whole or in part with written consent of the State Land Board. Such consent will not be unreasonably withheld. The Operator may assign its rights in the Agreement only following written disclosure to the assignee of the existence of this Agreement, and such assignment must be expressly subject to the assignee's assumption of all terms, conditions and obligations of this Agreement.

B. The State Land Board may assign or convey its interest in the Property or any portion thereof only following written disclosure to the assignee of the existence of this Agreement, and such assignment or conveyance must be expressly subject to all terms and conditions of this Agreement, and the assumption by such assignee or grantee of all obligations of the State Land Board under this Agreement.

12. Successors and Assigns

When the word Operator is used in this Agreement, it shall also mean the successors and assigns of the Operator, including but not limited to its employees and officers, agents, affiliates, Contractors, subcontractors and/or purchasers. This Agreement shall be binding upon and inure to the benefit of the heirs, successors and assigns of the Parties.

13. Confidentiality

The existence and terms of this Agreement may be a public record and subject to the Colorado Open Records Act ("CORA"), C.R.S. § 24-72-200.1, et. seq. Data, maps, surveys, and other information prepared by or furnished to the State Land Board pursuant to this Agreement are subject to the confidentiality provisions of C.R.S. § 36-1-138(2). The Operator may record a memorandum or redacted form evidencing the existence of this Agreement.

14. Governing Law/Venue

This Agreement shall be interpreted according to the laws of the State of Colorado. Venue for any dispute shall be the City and County of Denver.

15. Written Modifications

This Agreement, including its Exhibits, may only be amended in writing signed by both Parties. All notices to either party shall be in writing addressed to the Parties at the address first set forth below.

16. Notices

Any notice or other communication given by either party to the other relating to this Agreement shall be in writing, delivered by U.S. mail or sent by reputable overnight courier, to such other party at the respective addresses set forth in this Agreement (or at such other address as may be designated from time to time by written notice given in the manner provided in this Agreement). If sent by certified mail, return receipt requested, such notice shall be deemed effective on receipt.

If to the State Land Board:

Colorado State Board of Land Commissioners

Attention: Oil and Gas Leasing Manager

1127 Sherman St., #300

Denver, CO 80203

If to Operator:

Extraction Oil and Gas, Inc

555 17<sup>th</sup> Street, Suite 3700

Denver, CO 80202

#### 17. Governmental Immunity

Liability for claims or injuries to persons or property arising from the negligence of the State of Colorado, its departments, institutions, agencies, boards, officials, and employees is controlled and limited by the provisions of the Governmental Immunity Act, C.R.S. § 24-10-101 et seq., and the risk management statutes, C.R.S. § 24-30-1501 et seq., as amended. No term or condition of this Agreement will be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Governmental Immunity Act as applicable now or hereafter amended.

#### 18. Indemnification

The Operator assumes all liability arising from the use, occupation or control of the Property by Operator under this Agreement. This assumption includes, but is not limited to, liability for all personal injuries (including death) and environmental and property damage and destruction. The Operator agrees to defend, indemnify and hold harmless the State Land Board from and against any and all liabilities, losses, damages, liens, expenses, claims, demands, debts, obligations, fines, penalties, suits or actions, judgments, and costs of any kind whatsoever arising from the use, occupation or control of the Property, caused by any act, omission or neglect of Operator, or Operator's employees, agents, guests, invitees, contractors or assigns. The Operator further agrees to indemnify the State Land Board for any costs, including costs of suit and fees for consultants, experts, and attorneys, incurred by the State Land Board in terminating or canceling, enforcing obligations or defending itself against any matter arising under this Agreement caused or permitted by Operator or Operator's employees, agents, guests, invitees, contractors or assigns. This provision shall survive termination, cancellation or relinquishment of this Agreement and any cause of action by the State Land Board to enforce it shall not be deemed to accrue until the State Land Board's actual discovery of said liability, claim, loss, damage, or exposure. This indemnity is in addition to any other indemnity provided for in this Agreement. The Operator will not be responsible for any liability caused by persons granted other uses of the Property by the State Land Board.

#### 19. Insurance

The Operator, at its sole cost and expense, shall during the entire term of this Agreement procure, pay for and keep in full force and effect an occurrence based general liability insurance policy from an insurance carrier licensed to do business in Colorado, in an amount not less than one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) aggregate. The Operator, at its sole cost and expense, shall during the entire term of this Agreement procure, pay for and keep in full force and effect a property insurance policy from an insurance carrier licensed to do business in Colorado covering all insurable improvements owned by the State Land Board located on the Property in an

amount not less than necessary to cover the replacement cost. All policies shall name the State Land Board as an additional insured, shall provide that the coverage is primary and noncontributory over any other insurance coverage available to the State Land Board, its agents and employees and shall include a clause waiving all rights of recovery, under subrogation or otherwise against the State Land Board, its agents and employees. Failure to buy and maintain the required insurance is a default of this Agreement. Before starting work under this Agreement, Operator shall, at the State Land Board's request, furnish a certificate of liability insurance, referencing the agreement number and reflecting the above requirements. The State Land Board may alter any requirements of this section to meet the requirements of the Colorado Governmental Immunity Act or any requirements determined by the Colorado Office of Risk Management.

## 20. Bond

Without impacting the requirements of the ECMC, prior to accessing the Property and commencing construction and Operations, the State Land Board will require Operator to file a good and sufficient bond in the initial minimum amount of \$25,000 securing the state against loss of rents or other loss or waste, or occupation of the land for more than thirty days after the cancellation or expiration of the lease by Operator, on up to five acres of the Property. The Bond amount will increase at a rate of \$5,000 per acre or fraction thereof for surface disturbance and damage in excess of five acres. The Operator may satisfy this individual lease bond obligation by maintaining a blanket bond with Lessor in an amount determined by Lessor. The State Land Board may accept cash, a surety bond, or a bank irrevocable letter of credit and will require that such bond be held in full force and effect after the termination or expiration of this Agreement until such time that the State Land Board has approved final reclamation of the Operations Area. The State Land Board agrees to take into account any additional bonding requirements imposed for the protection of the surface estate, provided there is no obligation that the State Land Board will reduce the bond amount.

## 21. Default and Remedies

- A. In addition to any defaults specified in other sections of this Agreement, the failure of Operator to comply with or to perform any of its obligations under this Agreement in whole or in part or in a timely or satisfactory manner may constitute a default.
- B. The State Land Board may also determine the Operator is in default any time the ECMC issues to the Operator a Notice of Alleged Violation relating to the Operator's Operations on or connected to the Property.
- C. The State Land Board shall promptly notify the Operator in writing of any default under this Agreement. Operator shall immediately commence and diligently pursue action calculated to cure the claimed default and prosecute such action as necessary to fully remedy and cure such default to the reasonable satisfaction of the State Land Board within 60 days after service of written default notice. Operator will contact the State Land Board within 10 days after service of written notice to the Operator by the State Land Board if the cure will reasonably require more than 60 days to complete or if concurrent corrective actions required by the ECMC may require an extension to the 60 day cure period.
- D. If Operator fails to cure the default as provided in this Paragraph 20.C., the State Land Board may:
  - I. Declare this Agreement terminated and the Operator shall surrender and peaceably deliver to the State Land Board the Property and the Operations Area, in accordance

with and subject to the terms of this Agreement, and such Property shall be in good condition.

- II. Require the Operator to pay \$1,000.00 per day of the Default as Liquidated Damages commencing on the date that the Default occurs and ending on date that the Operator has fully remedied and cured the default to the reasonable satisfaction of the State Land Board or when the Parties have otherwise reached an agreement to settle the default. Whenever Liquidated Damages are available in this Agreement, the Parties have agreed that the State Land Board's actual damages, in the event of the Operator's Default, would be extremely difficult or impracticable to determine. After negotiation, the Parties have agreed that, considering all the circumstances existing on the date of this Agreement, this amount is a reasonable estimate of the damages that the State Land Board would incur in such event. Each party specifically confirms the accuracy of the statements made above and each party has had the opportunity to be represented by counsel to explain, at the time this Agreement was made, the consequences of this Liquidated Damages provision. The Parties represent that they have either retained legal counsel, or have declined to do so.
  - III. Enforce the terms of this Agreement through specific performance.
  - IV. Seek damages for the failure to comply with the terms of this Agreement.
  - V. Require payment from the bond required in Paragraph 19.
  - VI. Seek all other available remedies in law and equity.
- E. The State Land Board's rights and remedies, including those not specifically described, available in law or equity shall be cumulative, and the State Land Board may pursue any or all of such rights and remedies at the same time or separately. Nothing in this Paragraph 20 relieves the Operator of any responsibility for the final reclamation of the Property and the Operations Area and the Access Corridors, or the requirement to comply with all ECMC rules and regulations.

## 22. Title and Condition

The Operator enters into this Agreement with the Property in its "as is" condition with all faults, including the environmental condition of the Property. The State Land Board makes, and the Operator affirms that the State Land Board has made no representations or warranties, express or implied, of any kind whatsoever with regard to the title or condition of the Property or its fitness or suitability for any particular use. The Operator acknowledges that it is solely responsible for performing its own due diligence and for becoming fully familiar with the title, encumbrances and condition of the Property and any applicable restrictions, uses, or other conditions that might affect the Operator's development or use for a particular purpose.

## 23. Force Majeure

If performance of this Agreement or of any obligation hereunder is prevented or substantially restricted or interfered with by reason of an event of "Force Majeure" (defined below), the affected party, upon giving notice to and receiving approval from the other party, shall be excused from such performance to the extent of and for the duration of such prevention, restriction or interference for a period not to exceed ten (10) years, provided Force Majeure shall not excuse the obligation to timely pay the Annual Payment that shall continue to be due as set forth herein. The

affected party shall use its reasonable efforts and due diligence to avoid or remove such causes of nonperformance, and shall continue performance hereunder whenever such causes are removed. “**Force Majeure**” means flood, drought, earthquake, storm, fire, tornado, lightning, windstorm, unusually inclement weather or other natural catastrophe; acts of God, casualty or accident; war, sabotage, vandalism, civil strife or other violence; strikes or labor disputes; or any law, order, proclamation, regulation, ordinance, action, demand or requirement of any government agency or utility. Such determination of Force Majeure shall be at the State Land Board’s reasonable sole discretion.

24. No Partnership or Joint Venture

This Agreement does not create any agent-principal or principal-agent relationship, joint venture, partnership, or other similar relationship between the State Land Board and the Operator, and neither party shall have the power to bind the other except as expressly set forth in this Agreement.

25. Partial Invalidity

If any term, covenant, condition or provision of this Agreement or the application thereof to any person or circumstance shall at any time or to any extent be invalid or unenforceable, the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those to which it is held invalid or unenforceable shall not be affected and each term, covenant, condition and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

26. Severability and Survival of Terms

No waiver of any right under this Agreement shall be effective for any purpose unless in writing signed by the party possessing the right, and no such waiver shall be construed to be a waiver of any subsequent provision, right, or term of this Agreement. Failure of the State Land Board or the Operator to complain of any act or omission on the part of the other party, no matter how long the same may continue, shall not be deemed to be a waiver of any of its rights under this Agreement. No waiver by the State Land Board or the Operator at any time, express or implied, of any breach of any provision of this Agreement shall be deemed a waiver of a breach of any other provisions of this Agreement or a consent to any subsequent breach of the same or any other provision.

27. Entire Agreement

This Agreement and all addenda, exhibits, and schedules attached hereto, contains the entire agreement with respect to the subject matter. No oral statement or prior written matter shall have any force or effect, with an exception being for a separate Right of Way (“ROW”) agreement. The Operator agrees that it is not relying on any representations or agreements other than those contained in this Agreement.

28. Counterparts

This Agreement may be executed in any number of multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement.

29. Signatures

Signatures required in this Agreement shall be either original “wet” handwritten signatures or digital signatures in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules. If any signatory

signs this Agreement using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Agreement by reference.

30. Rules and Laws

The terms and conditions of this Agreement shall be performed and exercised subject to all applicable federal, state, and local laws, rules, regulations, orders, local ordinances or resolutions applicable to and binding upon the administration of lands owned by the State of Colorado, and to laws, rules and regulations governing oil and gas operations in Colorado, including, but not limited to, the rules and regulations of the ECMC. The Operator must immediately forward any notice of noncompliance or violation related to Operations on the Property to the State Land Board. Should the Operator have a good faith dispute with any local government or authority, other than the State Land Board, regarding the application of a rule, regulation, ordinance, order or ruling, the State Land Board shall not consider the good faith contest or appeal of such rule, regulation, ordinance, order or ruling a violation of this Agreement while any appeal or other recognized legal or administrative process is pending to resolve the dispute.

The State Land Board shall approve all ECMC required waivers that are consistent with the terms of this Agreement and the Exhibit A Operations on the Operations Area. Waivers for operations outside of or in conflict with this Agreement may be approved at the State Land Board's absolute and sole discretion.

IN WITNESS WHEREOF, the State Land Board and the Operator, by their signatures below, agree to the terms of this Agreement:

EXTRACTION OIL & GAS, INC

By:   
Signature

August 26, 2025  
Date

Sean Casper  
Printed Name

Surface Land Manager  
Title

STATE OF COLORADO BY THE  
STATE BOARD OF LAND COMMISSIONERS

By:   
Steve Freese, Minerals Field Specialist

Date: 8/29/25

SURFACE USE AGREEMENT  
OT 117566

EXHIBIT A  
OPERATIONS, OPERATIONS AREA AND ACCESS CORRIDOR(S)

EXHIBIT B  
PAYMENTS

EXHIBIT C  
CONSULTATION  
DESIGN MEASURES AND BMPs

EXHIBIT D  
RECLAMATION (None Attached)

## Table of Contents for Exhibit A, B, and C

27 Pages

### Exhibit A

Page 1-2	Location drawing
Page 3-4	Facility layout drawing
Page 5	Access road map
Page 6-7	Access road pictures
Page 8	Reference area map
Page 9-10	Reference area photos
Page 11-13	Multi well plan

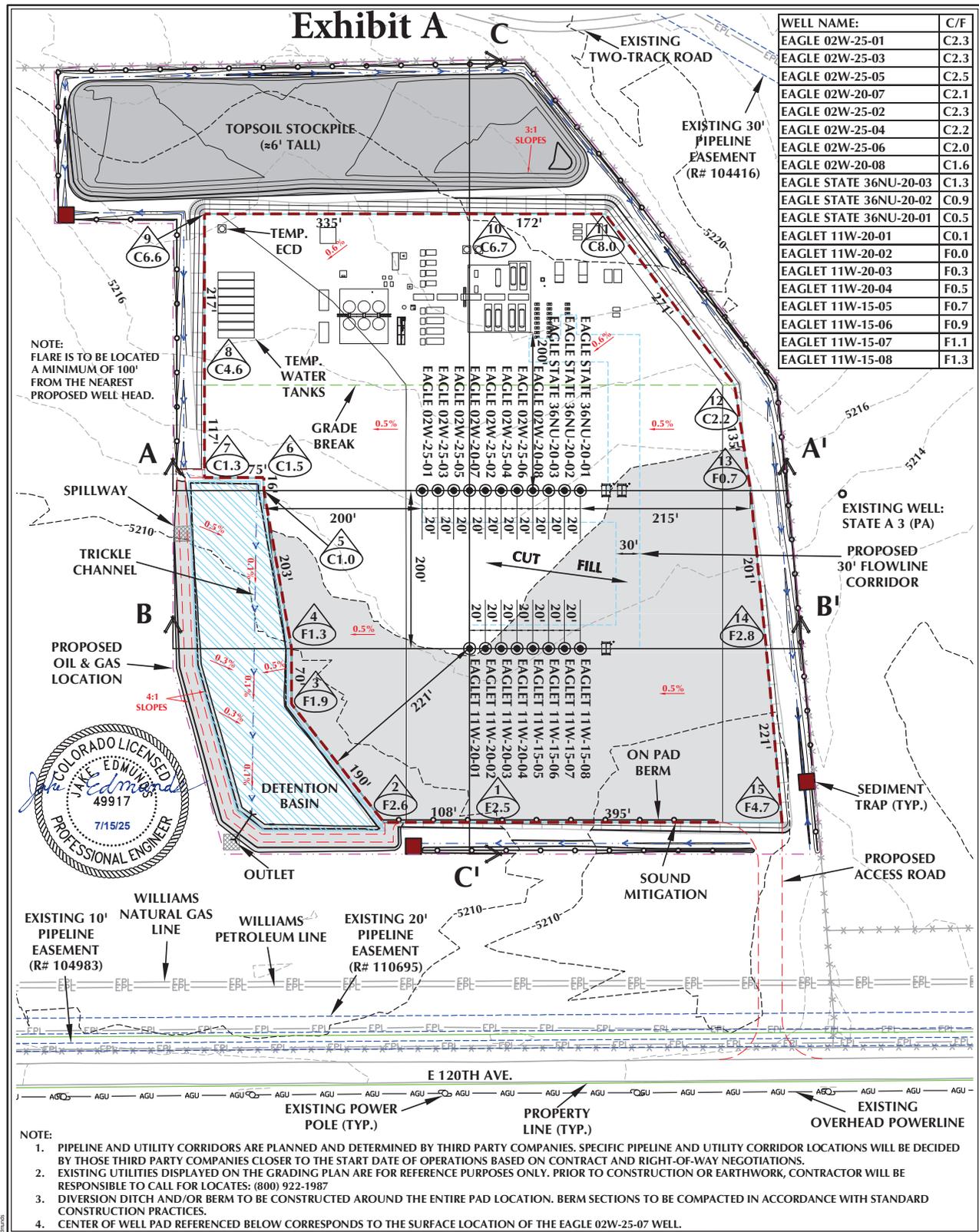
### Exhibit B

Page 14	Surface use agreement pay table
Page 15-16	Payment calculators

### Exhibit C

Page 17	Minimum mineral percentage acknowledgement
Page 18-27	CPW review letter

# Exhibit A



**NOTE:**

1. PIPELINE AND UTILITY CORRIDORS ARE PLANNED AND DETERMINED BY THIRD PARTY COMPANIES. SPECIFIC PIPELINE AND UTILITY CORRIDOR LOCATIONS WILL BE DECIDED BY THOSE THIRD PARTY COMPANIES CLOSER TO THE START DATE OF OPERATIONS BASED ON CONTRACT AND RIGHT-OF-WAY NEGOTIATIONS.
2. EXISTING UTILITIES DISPLAYED ON THE GRADING PLAN ARE FOR REFERENCE PURPOSES ONLY. PRIOR TO CONSTRUCTION OR EARTHWORK, CONTRACTOR WILL BE RESPONSIBLE TO CALL FOR LOCATES: (800) 922-1987
3. DIVERSION DITCH AND/OR BERM TO BE CONSTRUCTED AROUND THE ENTIRE PAD LOCATION. BERM SECTIONS TO BE COMPACTED IN ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICES.
4. CENTER OF WELL PAD REFERENCED BELOW CORRESPONDS TO THE SURFACE LOCATION OF THE EAGLE 02W-25-07 WELL.

**EAGLE PAD - CONSTRUCTION LAYOUT DRAWING - PLAN VIEW**

**PAD QUANTITIES AND DESIGN PARAMETERS**  
 EXISTING GRADE @ CENTER OF WELL PAD = 5214.5'  
 FINISHED GRADE @ CENTER OF WELL PAD = 5212.4'  
 CUT/FILL SLOPES = 3:1; EXCEPT AS NOTED  
 SHRINKAGE FACTOR = 1.10  
 SWELL FACTOR = 1.00  
 OIL AND GAS LOCATION AREA = 17.03 ACRES  
 WORKING PAD SURFACE = 10.65 ACRES  
 ACCESS ROAD DISTURBANCE AREA = 0.18 ACRES  
 PIPELINE/UTILITY CORRIDOR AREA = SEE NOTE 1

**PAD QUANTITIES**  
 TOTAL CUT FOR PAD = 26,990 C.Y.  
 TOTAL FILL FOR PAD = 26,990 C.Y.  
 TOPSOIL @ 10" DEPTH = 17,406 C.Y.  
 TOTAL IMPORT = 0 C.Y.  
 PLATING MATERIAL VOLUME TO BE ADDED TO PAD = 8,590 C.Y.  
 TO BE ADDED TO ROAD = 196 C.Y. (ASSUMING 6" DEPTH)

**LEGEND**

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- - - PROPOSED CONTOURS (2' INTERVAL)
- EPL EXISTING PIPELINE
- WORKING PAD SURFACE
- EXISTING FENCE
- DIVERSION DITCH
- BERM

**LEGEND**

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- - - PROPOSED CONTOURS (2' INTERVAL)
- EPL EXISTING PIPELINE
- WORKING PAD SURFACE
- EXISTING FENCE
- DIVERSION DITCH
- BERM

**LEGEND**

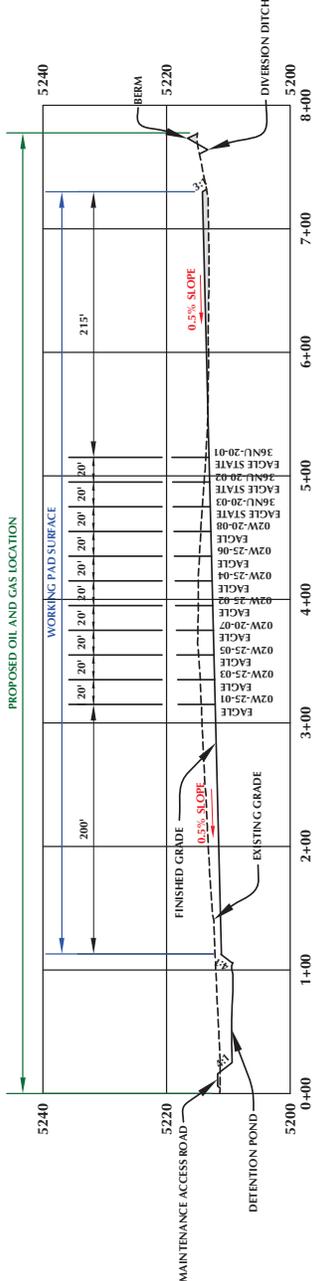
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- - - PROPOSED CONTOURS (2' INTERVAL)
- EPL EXISTING PIPELINE
- WORKING PAD SURFACE
- EXISTING FENCE
- DIVERSION DITCH
- BERM

**EAGLE PAD**  
 CONSTRUCTION LAYOUT DRAWING - PLAN VIEW  
 LOCATED IN SESW & SWSE  
 SECTION 36, T1S, R66W, 6TH P.M.  
 ADAMS COUNTY, COLORADO

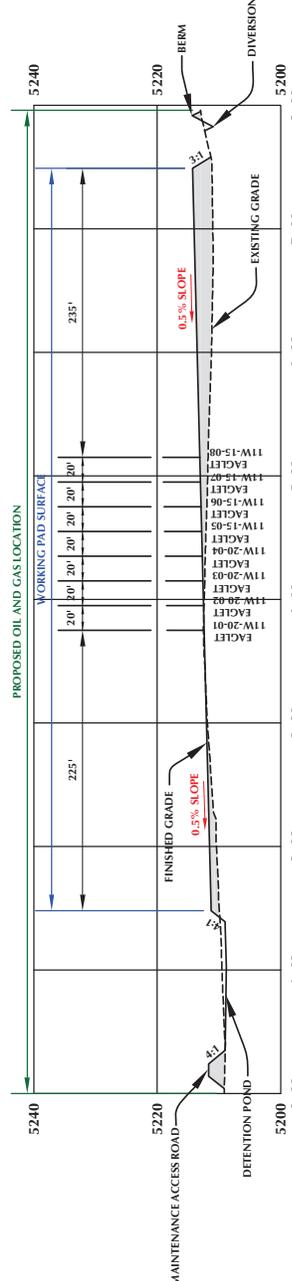
Prepared For:  
  
 Extraction Oil & Gas, Inc.

LOVELAND OFFICE  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone: 970-776-4331  
 SHERIDAN OFFICE  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone: 307-674-6069

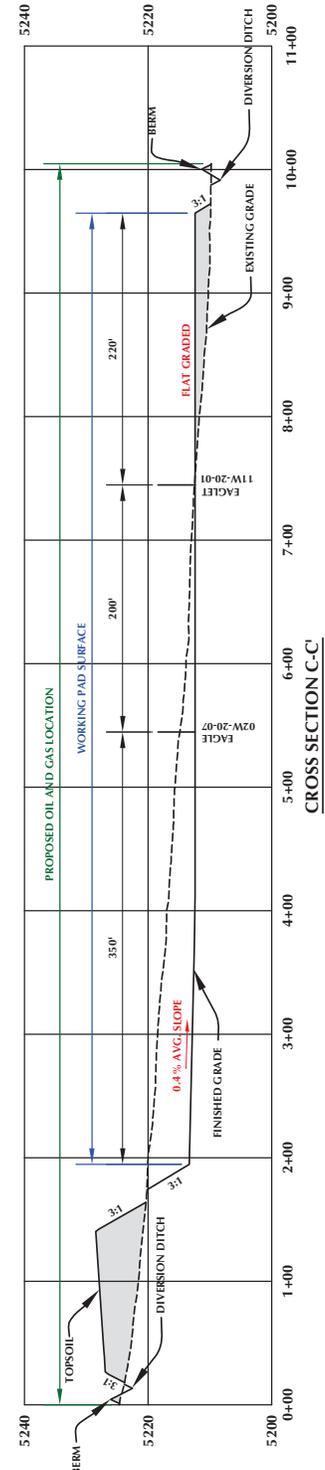
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 2' CONTOURS  
 SCALE: 1"=120' DATE: 6/18/25 SHEET NO: 1 OF 1  
 REVISED: JFE 7/15/25



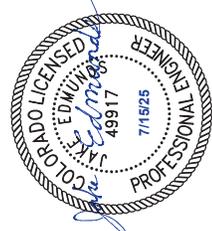
CROSS SECTION A-A'



CROSS SECTION B-B'



CROSS SECTION C-C'



**EAGLE PAD**

CONSTRUCTION LAYOUT DRAWING - CROSS SECTIONS  
 LOCATED IN S&W & SWSE  
 SECTION 36, T1S, R66W, 6TH P.M.  
 ADAMS COUNTY, COLORADO

NOTES:

Prepared For:



LOVELAND OFFICE  
 6705 North Juniper Street  
 Phone: 970.276.4331



SHERIDAN OFFICE  
 1095 Sherman Avenue  
 Phone: 970.274.6069

HORIZONTAL SCALE: 1" = 100'  
 VERTICAL SCALE: 1" = 20'

DATE: 6/18/25  
 SHEET NO: 1 OF 1









ACCESS ROAD PICTURE OF EAGLE PAD - CAMERA ANGLE NORTH (INTO PROPERTY)



ACCESS ROAD PICTURE OF EAGLE PAD - CAMERA ANGLE EAST

K:\CIVITAS RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36\PHOTOS\EAGLE\_PHOTOS.dwg, 6/17/2025 3:22:28 PM, kpopke

<p><b>EAGLE PAD</b></p>	<p>Prepared For:</p> 	 <p><b>CONSULTING, LLC</b></p> <p>SHERIDAN OFFICE 1095 Saberton Avenue Sheridan, Wyoming 82801 Phone 307-674-0609</p> <p>LOVELAND OFFICE 6706 North Franklin Avenue Loveland, Colorado 80538 Phone 970-776-4331</p>
<p>ACCESS ROAD PICTURES EAGLE 02W-25-01, EAGLE 02W-25-03, EAGLE 02W-25-05, EAGLE 02W-20-07, EAGLE 02W-25-02, EAGLE 02W-25-04, EAGLE 02W-25-06, EAGLE 02W-20-08, EAGLE STATE 36NU-20-03, EAGLE STATE 36NU-20-02, EAGLE STATE 36NU-20-01, EAGLET 11W-20-01, EAGLET 11W-20-02, EAGLET 11W-20-03, EAGLET 11W-20-04, EAGLET 11W-15-05, EAGLET 11W-15-06, EAGLET 11W-15-07, EAGLET 11W-15-08 LOCATED IN SECTION 36, T1S, R66W, 6TH P.M. ADAMS COUNTY, COLORADO</p>	<p>SCALE: NTS      DATE: 6/17/25</p> <p>REVISED:</p>	<p>SHEET NO: <b>1</b>      1 OF 2</p>



2025-06-05 09:16

ACCESS ROAD PICTURE OF EAGLE PAD - CAMERA ANGLE SOUTH



2025-06-05 09:17

ACCESS ROAD PICTURE OF EAGLE PAD - CAMERA ANGLE WEST

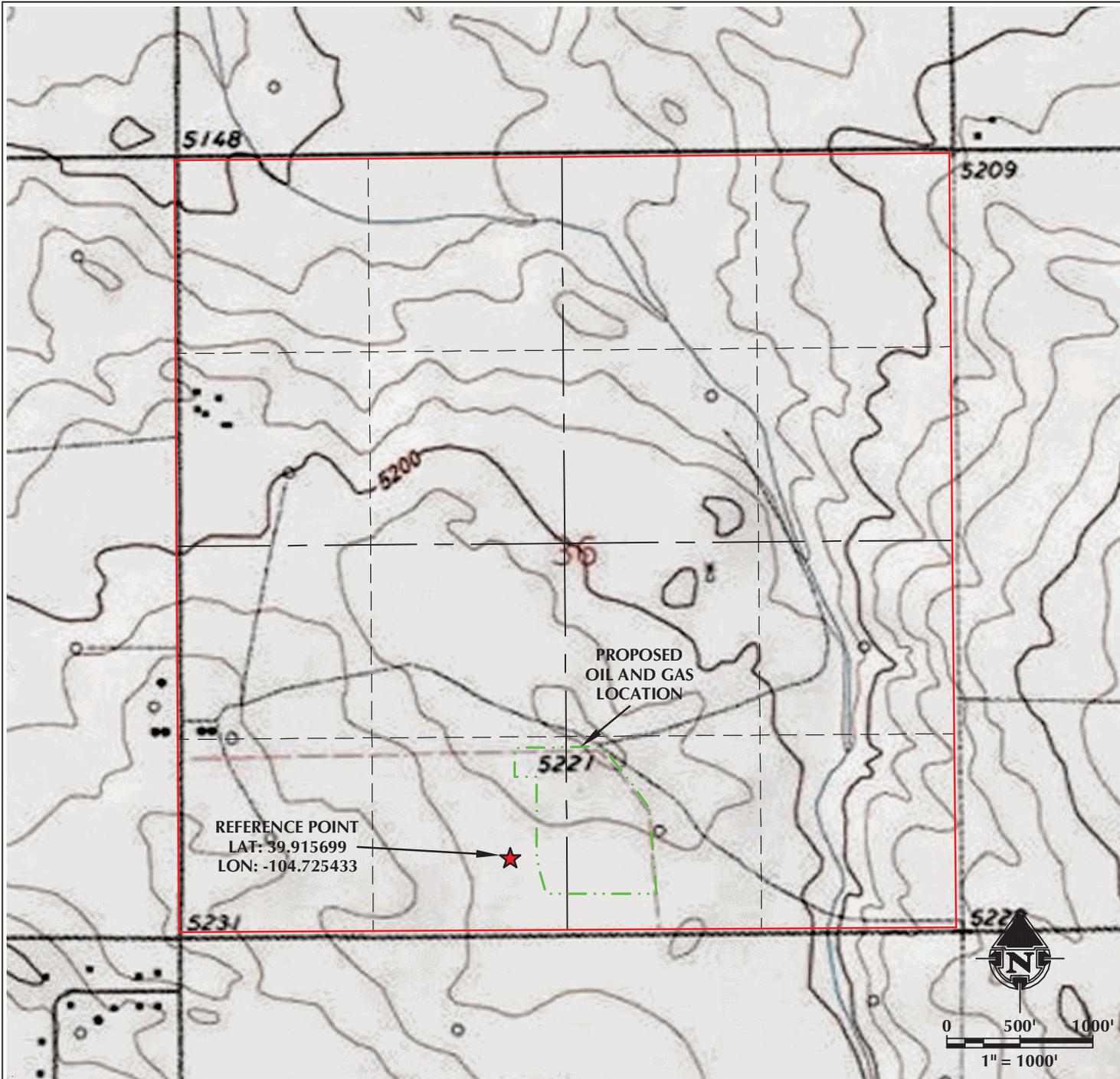
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<p><b>EAGLE PAD</b></p>	<p>Prepared For:</p>  <p><b>CIVITAS</b> Extraction Oil &amp; Gas, Inc.</p>	 <p><b>609 CONSULTING, LLC</b> SHERIDAN OFFICE 1095 Saberton Avenue Sheridan, Wyoming 82801 Phone 307-674-0609</p> <p>LOVELAND OFFICE 6706 North Franklin Avenue Loveland, Colorado 80538 Phone 970-776-4331</p>
<p>ACCESS ROAD PICTURES EAGLE 02W-25-01, EAGLE 02W-25-03, EAGLE 02W-25-05, EAGLE 02W-20-07, EAGLE 02W-25-02, EAGLE 02W-25-04, EAGLE 02W-25-06, EAGLE 02W-20-08, EAGLE STATE 36NU-20-03, EAGLE STATE 36NU-20-02, EAGLE STATE 36NU-20-01, EAGLET 11W-20-01, EAGLET 11W-20-02, EAGLET 11W-20-03, EAGLET 11W-20-04, EAGLET 11W-15-05, EAGLET 11W-15-06, EAGLET 11W-15-07, EAGLET 11W-15-08 LOCATED IN SECTION 36, T1S, R66W, 6TH P.M. ADAMS COUNTY, COLORADO</p>	<p>SCALE: NTS      DATE: 6/17/25</p> <p>REVISED:</p>	<p>SHEET NO: <b>2</b>      2 OF 2</p>

# REFERENCE AREA MAP

## EAGLE PAD

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



### LEGEND

- PROPOSED OIL AND GAS LOCATION
- SECTION LINE
- SECTION 1/4 LINE
- SECTION 1/4 1/4 LINE
- REFERENCE POINT

K:\CIVITAS\RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36.DWG, T1S\_R66W\_SEC\_36.dwg, 6/17/2025 4:35:46 PM, kg985



**609 CONSULTING, LLC**  
LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609

DATE SURVEYED: 6/10/25  
DATE: 6/17/25  
DRAFTER: GLK  
REVISED:

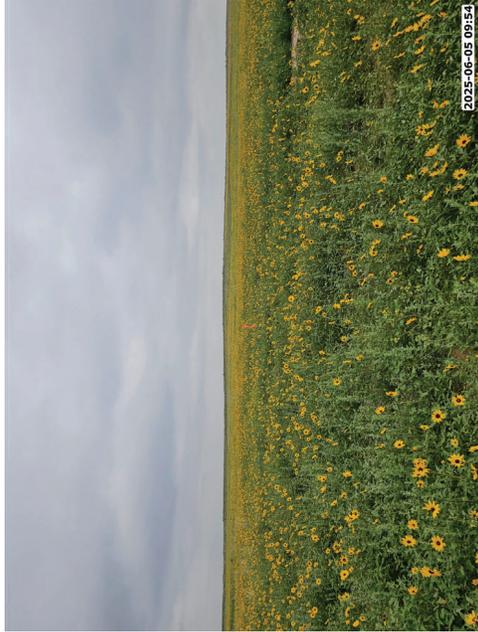
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OF USGS

PREPARED FOR:



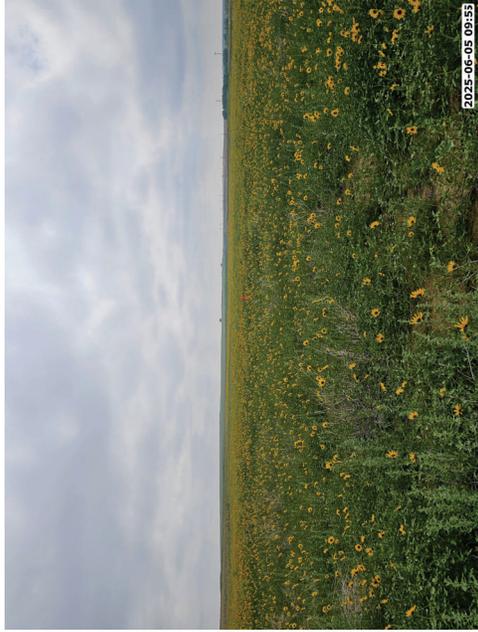
REFERENCE AREA PICTURES  
**EAGLE PAD**

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



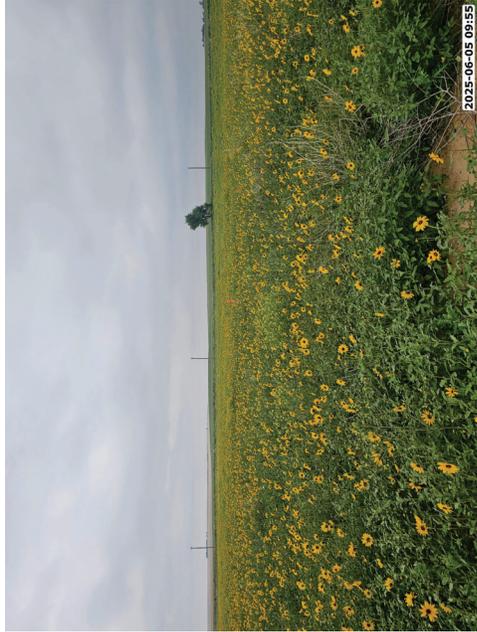
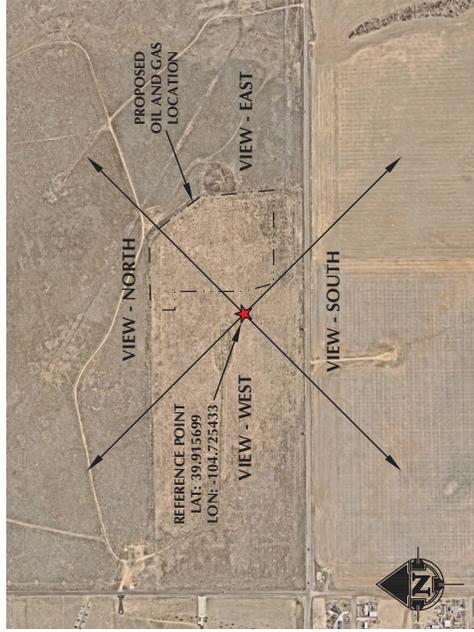
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VIEW - NORTH



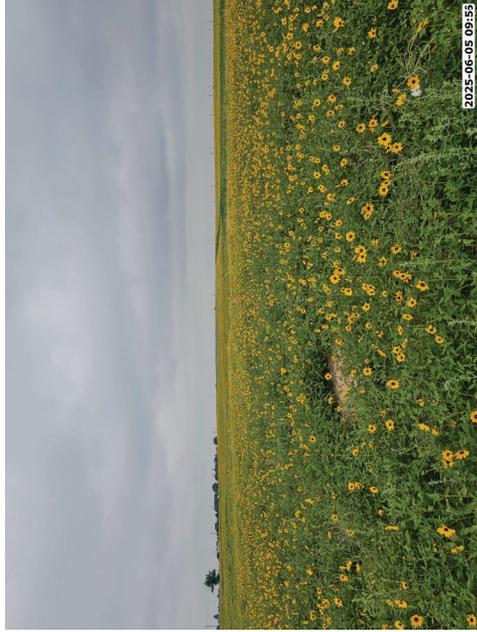
2025-06-05 09:55

VIEW - EAST



2025-06-05 09:55

VIEW - SOUTH



2025-06-05 09:55

VIEW - WEST



LOVELAND OFFICE  
 600 West 17th Street, Suite 200  
 Loveland, Colorado 80538  
 Phone: 970-776-4331

SHERIDAN OFFICE  
 1095 Suburban Avenue, Suite 101  
 Sheridan, Wyoming 82801  
 Phone: 307-674-6069

Prepared For:  
**CIVITAS**  
 Extraction Oil & Gas, Inc.

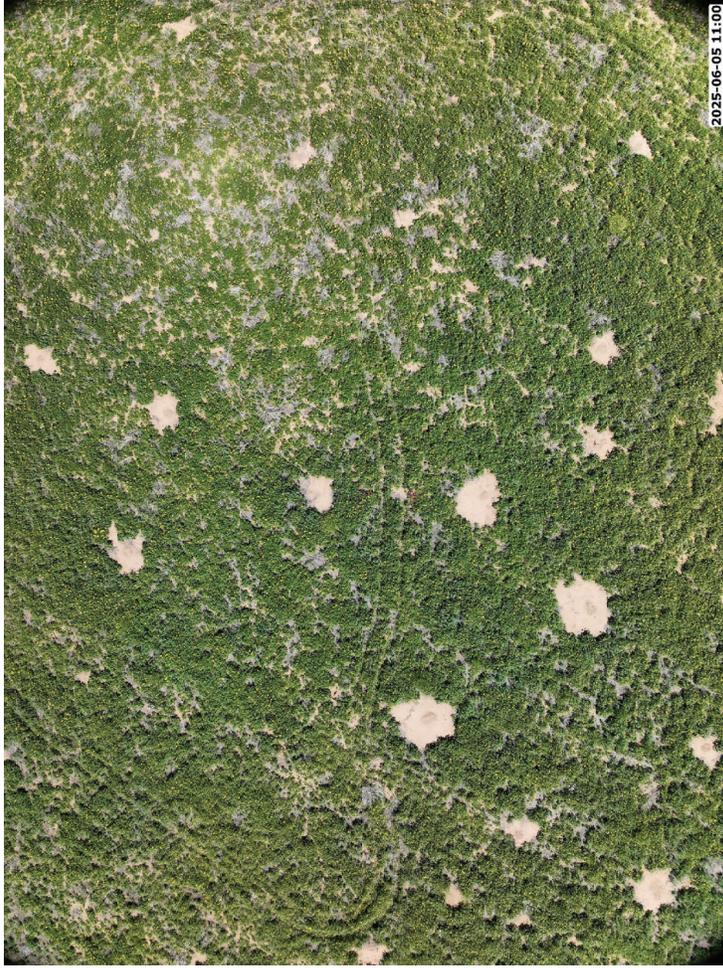
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 DATE: 6/17/25  
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 REVISED:

DATA SOURCES:  
 -AERIAL IMAGERY COURTESY OF NEARMAP.

REFERENCE AREA PICTURES

EAGLE PAD

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



VIEW - OVERHEAD (DRONE)



VIEW - CLOSE UP

LOVELAND OFFICE  
600 South Colorado Avenue  
Loveland, Colorado 80538  
Phone: 970-776-4331

SHERIDAN OFFICE  
1095 Suberton Avenue  
Sheridan, Wyoming 82801  
Phone: 307-674-6069

Prepared For:

**CIVITAS**  
Extraction Oil & Gas, Inc.

DATE SURVEYED: 6/10/25  
DATE: 6/17/25  
DRAFTER: CLK  
REVISED:



# DIRECTIONAL WELL PLAT (ECMC) / MULTI-WELL PLAN (OGED) SECTIONS 35 & 36, T1S, R66W & SECTIONS 1, 2, 3, 4, 9, 10, 11 & 12, T2S, R66W, 6TH P.M. ADAMS COUNTY, COLORADO

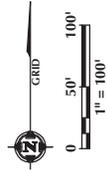
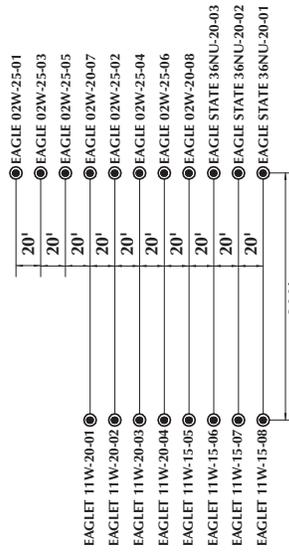
**WELL NOTES:**

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HEEL LOCATION: 351' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 351' FNL, 100' FWL (SEC. 4, T2S, R66W)  
EAGLE 02W-25-03  
SURFACE HOLE LOCATION: 706' FSL, 2523' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1659' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 1659' FNL, 100' FWL (SEC. 4, T2S, R66W)  
EAGLE 02W-25-05  
SURFACE HOLE LOCATION: 706' FSL, 2503' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 2313' FSL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 2313' FSL, 100' FWL (SEC. 4, T2S, R66W)  
EAGLE 02W-20-07  
SURFACE HOLE LOCATION: 706' FSL, 2483' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1005' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 1005' FNL, 1220' FEL (SEC. 4, T2S, R66W)  
EAGLE 02W-25-02  
SURFACE HOLE LOCATION: 706' FSL, 2443' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1005' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 1005' FNL, 100' FWL (SEC. 4, T2S, R66W)  
EAGLE 02W-25-04  
SURFACE HOLE LOCATION: 706' FSL, 2433' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1659' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 1659' FNL, 100' FWL (SEC. 4, T2S, R66W)

EAGLE 02W-20-08  
SURFACE HOLE LOCATION: 706' FSL, 2403' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 351' FNL, 2540' FWL (SEC. 2, T2S, R66W)  
BOTTOM HOLE LOCATION: 351' FNL, 1220' FEL (SEC. 4, T2S, R66W)  
EAGLE STATE 36NU-20-03  
SURFACE HOLE LOCATION: 705' FSL, 2383' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 100' FNL, 2181' FEL (SEC. 36, T1S, R66W)  
BOTTOM HOLE LOCATION: 100' FNL, 345' FWL (SEC. 36, T1S, R66W)  
EAGLE STATE 36NU-20-02  
SURFACE HOLE LOCATION: 705' FSL, 2363' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 100' FNL, 1263' FWL (SEC. 36, T1S, R66W)  
BOTTOM HOLE LOCATION: 100' FNL, 1263' FWL (SEC. 36, T1S, R66W)  
EAGLE STATE 36NU-20-01  
SURFACE HOLE LOCATION: 705' FSL, 2343' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 100' FNL, 345' FWL (SEC. 36, T1S, R66W)  
BOTTOM HOLE LOCATION: 100' FNL, 2181' FWL (SEC. 36, T1S, R66W)  
EAGLE 11W-20-01  
SURFACE HOLE LOCATION: 506' FSL, 2485' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 351' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 351' FNL, 1220' FEL (SEC. 9, T2S, R66W)  
EAGLE 11W-20-02  
SURFACE HOLE LOCATION: 506' FSL, 2465' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1005' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 1005' FNL, 1220' FEL (SEC. 9, T2S, R66W)  
EAGLE 11W-20-03  
SURFACE HOLE LOCATION: 506' FSL, 2445' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1659' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 1659' FNL, 1220' FEL (SEC. 9, T2S, R66W)

EAGLE 11W-20-04  
SURFACE HOLE LOCATION: 506' FSL, 2425' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 2313' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 2313' FNL, 1220' FEL (SEC. 9, T2S, R66W)  
EAGLE 11W-15-05  
SURFACE HOLE LOCATION: 506' FSL, 2405' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 2313' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 2313' FNL, 100' FWL (SEC. 10, T2S, R66W)  
EAGLE 11W-15-06  
SURFACE HOLE LOCATION: 505' FSL, 2385' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1659' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 1659' FNL, 100' FWL (SEC. 10, T2S, R66W)  
EAGLE 11W-15-07  
SURFACE HOLE LOCATION: 505' FSL, 2365' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 1005' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 1005' FNL, 100' FWL (SEC. 10, T2S, R66W)  
EAGLE 11W-15-08  
SURFACE HOLE LOCATION: 505' FSL, 2345' FEL (SEC. 36, T1S, R66W)  
HEEL LOCATION: 351' FNL, 2540' FWL (SEC. 11, T2S, R66W)  
BOTTOM HOLE LOCATION: 351' FNL, 100' FWL (SEC. 10, T2S, R66W)

**WELL HEAD SPACING DETAIL**



**609**  
LOVELAND OFFICE  
675 North Lincoln Avenue  
Loveland, Colorado 80538  
Phone: 970-776-4331

**SHERIDAN OFFICE**  
1095 Sherman Avenue  
Sheridan, Colorado 80449  
Phone: 307-674-0609

**CONSULTING, LLC**

Prepared For:

**CIVITAS**  
Extraction Oil & Gas, Inc.

**WELL PAD - EAGLE PAD**

DIRECTIONAL WELL PLAT (ECMC) /  
MULTI-WELL PLAN (OGED)  
EAGLE 02W-25-01, EAGLE 02W-25-03,  
EAGLE 02W-25-05, EAGLE 02W-25-07,  
EAGLE 02W-25-02, EAGLE 02W-25-04, EAGLE STATE 36NU-20-02,  
EAGLE STATE 36NU-20-03, EAGLE STATE 36NU-20-04, EAGLE 11W-20-02,  
EAGLE 11W-20-03, EAGLE 11W-20-04, EAGLE 11W-15-05,  
EAGLE 11W-15-06, EAGLE 11W-15-07 & EAGLE 11W-15-08  
LOCATED IN SECTIONS 35 & 36, T1S, R66W &  
SECTIONS 1, 2, 3, 4, 9, 10, 11 & 12, T2S, R66W, 6TH P.M.  
ADAMS COUNTY, COLORADO

DRAWN BY:	SJM	CHECKED BY:	RRE
DATE DRAFTED:	6/18/25	DATE SURVEYED:	6/10/25
REVISED:		FEE NAME:	24-118
			1B OF 1



# Exhibit B

## SURFACE USE AGREEMENT PAYMENT TABLE

Fee Category	Tier 1	Tier 2	Tier 3
	State has a mineral interest of greater than or equal to 50% but less than 100% <sup>5</sup>	State has a mineral interest of greater than 10% but less than 50%	State has a mineral interest of less than or equal to 10% <sup>4</sup>
<b>Initial Damage Payment:</b> Initial well pad or facility payment per acre	\$5,000	\$7,500	TBD
<b>Well Payments:</b> Well payment per well <sup>1</sup>	\$5,000 one-time	\$7,500 one-time	TBD
<b>Annual Payment:</b> Rental due per year	10% of initial well pad or facility payment	10% of initial well pad or facility payment	TBD
<b>Access Corridor Payment:</b> Access roads, pipeline and powerline easements, and other off-pad disturbances	\$5,000 per acre or ROW pricing <sup>2</sup> , one-time payment	\$5,000 per acre or ROW pricing <sup>2</sup> , one-time payment	TBD
<b>Production Facilities Payment:</b> Off-property wells producing through an onsite Production Facility <sup>3</sup>	\$5,000 per well, one-time payment	\$7,500 per well, one-time payment	TBD

- (1) Payment is due on or before the next annual anniversary date after the spud of a well.
- (2) \$5,000 per acre or the Standard State ROW rates, whichever is greater; may be subject to either the SUA or a separate ROW agreement.
- (3) Requires prior written approval by the State Land Board and payment before any construction may begin. Please refer to the COGCC Rules and Regulations for the definition of Production Facility.
- (4) All applications that fall into the Tier 3 category require that the proposed fee structure be submitted to the Board for approval.
- (5) SUAs are not required when the state has 100% mineral ownership or when wellbores are contained entirely within state minerals.

# Exhibit B

## Acreage and Annual Payment Calculator

**Instructions:** Please fill out all of the sections that are highlighted in yellow. In the well column input the well name and the percentage of State Land Board Minerals that will be produced. If there are more spaces then wells please leave them blank and do not enter "0". Please enter all numbers to the third decimal point to insure accuracy. The total initial payment and the annual rental payment will then be automatically calculated. Please note that if the total State percentage of minerals is 10% or less then board approval will be required and this chart should not be used.

Input each wells State Mineral Percentage that runs into this facility Please only enter one well per row. Example 0%=0, 49%=49, 100%=100, Leave unused rows blank.		Fee Schedule	
Well Name	%	Percentage of State Minerals	Charge per Acre
EAGLE STATE 36NU-20-01	100.000	10% to 0% State minerals	Board Approval
EAGLE STATE 36NU-20-02	100.000	Greater then 10% but less then 50% State Minerals	\$7,500.00
EAGLE STATE 36NU-20-03	100.000	50% or greater but less then 100% State Minerals	\$5,000.00
EAGLE 02W-25-01	0.000	100% State Minerals	\$0.00
EAGLE 02W-25-03	0.000		
EAGLE 02W-25-05	0.000		
EAGLE 02W-20-07	0.000		
EAGLE 02W-25-02	0.000		
EAGLE 02W-25-04	0.000	Input the proposed total disturbance to the third decimal point below.	
EAGLE 02W-25-06	0.000	Input the total acreage of the pad	17.030
EAGLE 02W-20-08	0.000	Input the total acreage of all pipeline easements, access roads, and other disturbances NOT on the pad	0.180
EAGLET 11W-20-01	0.000	Calculated Total State Percentage from previous column	15.789
EAGLET 11W-20-02	0.000	Well pad cost per acre based to State Percentage	\$7,500.00
EAGLET 11W-20-03	0.000	Off well pad cost per acre for off well pad disturbances	\$5,000.00
EAGLET 11W-20-04	0.000	Initial payment due for well pad disturbance	\$127,725.00
EAGLET 11W-15-05	0.000	One time payment due for off well pad disturbance	\$900.00
EAGLET 11W-15-06	0.000		
EAGLET 11W-15-07	0.000		
EAGLET 11W-15-08	0.000		
<b>Final Calculated Payments</b>			
Total initial payment due for all planned construction			\$128,625.00
Annual Rental Payment due on anniversary date			\$12,772.50
The calculated State percentage will automatically be carried over and input.			

## Exhibit B

Total Well Payment Calculator			
Percentage of State Minerals	Enter the number of wells running into the State Facility for each category	Charge per well	Total Payments
10% to 0% State minerals	16	\$10,000	\$160,000.00
Greater than 10% but less than 50% State Minerals		\$7,500	\$0.00
50% or greater but less than 100% State Minerals		\$5,000	\$0.00
100% State Minerals	3	\$0	\$0.00
		Total Well Payment*	\$160,000.00

\*Well Payments are due on the next annual anniversary date of the Effective date following spud. This number assumes full development.

# Exhibit C

July 24, 2025

State Board of Land Commissioners  
Attn: Steve Freese  
1127 Sherman Street, Suite 300  
Denver, Colorado 80203

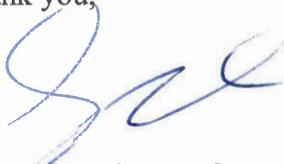
Dear Mr. Freese,

This letter is to confirm that Extraction Oil & Gas, Inc. and the Colorado State Land Board (SLB) agree that the total percentage of wellbore drilled from the Eagle pad located in SESW & SWSE Section 36, Township 1 South, Range 66 West must at all times contain a share of SLB minerals greater than ten percent. The share of SLB minerals will be calculated by inputting the percentages of the drilled wells into the Exhibit B acreage and annual payment calculator. Extraction Oil & Gas, Inc. understands that if the total percentage of wellbore drilled is ever equal to or below ten percent then all associated leases will be considered in default and may be terminated by the SLB.

In addition, Extraction Oil & Gas, Inc. understands that the surface disturbance payment consideration for this SUA was determined based on the SLB percentage of all of the planned wells as calculated on Exhibit B. Partial development of this SUA has the potential to change the percentage of SLB minerals drilled and therefore the charge per acre as outlined on Exhibit B and referenced below. Any additional payment will be due on the next anniversary date of this lease. Extraction Oil & Gas, Inc. understands that at no time will the State Land Board issue a refund in the event that the SLB percentage lowers the per acre cost.

Fee Schedule	
Percentage of State Minerals	Charge per Acre
10% to 0% State minerals	Board Approval
Greater then 10% but less then 50% State Minerals	\$7,500.00
50% or greater but less then 100% State Minerals	\$5,000.00
100% State Minerals	\$0.00

Thank you,



Jeremy Sonnier, Surface Land Advisor  
Extraction Oil & Gas, Inc., a wholly owned subsidiary of  
Civitas Resources, Inc.

---

**From:** Marette - DNR, Brandon <brandon.marette@state.co.us>  
**Sent:** Thursday, June 20, 2024 3:29 PM  
**To:** Lilah Hubbard  
**Cc:** Lexi Hamous-Miller - DNR; Nathan Bennett; Jeremy Sonnier; Claude Boiteau; Jeff Annable; Hannah Posey - DNR  
**Subject:** Re: Burrowing Owl HPH Exemption Request

Good afternoon Lilah,

Thanks for your email. I would agree BOWls probably aren't using that location this year.

Therefore, CPW is willing to waive the BOWl nesting season if this fall, Civitas fills in the PD holes within the development area. If not, CPW would ask for Civitas to do another round of surveys next spring. Either way, please do a final BOWl check within 2 weeks prior to construction.

Regards,

**Brandon B. Marette, CWB<sup>®</sup>**  
**Northeast Region Energy Liaison**



Direct [\(720\) 880-0819](tel:7208800819)

[6060 Broadway, Denver, CO 80216](https://www.state.co.us/cpw/6060-Broadway-Denver-CO-80216)

[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)

[CPW's Energy Webpage](#)

[CPW's Wildlife Movements Webpage](#)



**THINK SAFETY FIRST!**



On Thu, Jun 13, 2024 at 12:34 PM Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)> wrote:

Good afternoon Brandon,

RPG completed the additional burrowing owl survey on 6/11/24: no burrowing owls nor prairie dogs were observed during the survey. To summarize, RPG has conducted four (4) burrowing owl surveys between 5/20/24 - 6/11/24, and all have been negative for burrowing owl activity (and prairie dog activity).

Please let us know if you have any other questions or if CPW approves this request to waive the HPH requirements for this project.

Thank you for your time,

**Lilah Hubbard**

Natural Resource Specialist

Cell 510-734-4733  
555 17<sup>th</sup> Street | Suite 3700 | Denver, CO | 80202  
[www.civitasresources.com](http://www.civitasresources.com) | NYSE: CIVI



---

**From:** Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)>  
**Sent:** Thursday, June 6, 2024 12:05 PM  
**To:** Marette - DNR, Brandon <[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)>  
**Cc:** Lexi Hamous-Miller - DNR <[lexi.hamous-miller@state.co.us](mailto:lexi.hamous-miller@state.co.us)>; Nathan Bennett <[nbennett@civiresources.com](mailto:nbennett@civiresources.com)>;  
Jeremy Sonnier <[jsonnier@civiresources.com](mailto:jsonnier@civiresources.com)>; Claude Boiteau <[cboiteau@civiresources.com](mailto:cboiteau@civiresources.com)>; Jeff Annable  
<[jannable@civiresources.com](mailto:jannable@civiresources.com)>  
**Subject:** Re: Burrowing Owl HPH Exemption Request

Hi Brandon,

RPG has scheduled an additional survey for 6/11/24.

This project is still in the early planning stage: we do not yet have a surface use agreement with SLB, but we wanted to be proactive and request input from CPW early on regarding the HPH to ensure we have a path forward for this project. We also hope that this early consultation with CPW will help answer any questions that SLB may have regarding the HPH.

We hope to begin the OGD process later this year or early next year, but the timeline will depend on the agreements and other preliminary steps.

Other Civitas team members have been copied on this email in case you have additional project-related questions.

Thank you,

**Lilah Hubbard**

Natural Resource Specialist  
Cell 510-734-4733  
555 17<sup>th</sup> Street | Suite 3700 | Denver, CO | 80202  
[www.civitasresources.com](http://www.civitasresources.com) | NYSE: CIVI



---

**From:** Marette - DNR, Brandon <[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)>  
**Sent:** Wednesday, June 5, 2024 2:28 PM  
**To:** Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)>  
**Cc:** Lexi Hamous-Miller - DNR <[lexi.hamous-miller@state.co.us](mailto:lexi.hamous-miller@state.co.us)>; Nathan Bennett <[nbennett@civiresources.com](mailto:nbennett@civiresources.com)>;  
Jeremy Sonnier <[jsonnier@civiresources.com](mailto:jsonnier@civiresources.com)>; Claude Boiteau <[cboiteau@civiresources.com](mailto:cboiteau@civiresources.com)>; Jeff Annable  
<[jannable@civiresources.com](mailto:jannable@civiresources.com)>  
**Subject:** Re: Burrowing Owl HPH Exemption Request

Yes, please, could you have RPG do one more survey next week?

What's the proposed development and time frame?

Regards,

Brandon B. Marette, **CWB**<sup>®</sup>  
Northeast Region Energy Liaison



Direct [\(720\) 880-0819](tel:7208800819)

[6060 Broadway, Denver, CO 80216](https://www.state.co.us/6060Broadway)

[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)

[CPW's Energy Webpage](#)

[CPW's Wildlife Movements Webpage](#)



**THINK SAFETY FIRST!**



On Wed, Jun 5, 2024 at 1:00 PM Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)> wrote:

Hi Brandon,

Thank you for the question. The surveys were conducted on 5/20/24, 6/3/24, and 6/4/24. We typically aim to have surveys conducted approximately one week apart (per CPW-recommended protocol), but the second survey was delayed in this case due to a schedule conflict. We can schedule additional surveys if that's what you would suggest.

Please let me know if you have any other questions.

Thank you,

**Lilah Hubbard**

Natural Resource Specialist

Cell 510-734-4733

555 17<sup>th</sup> Street | Suite 3700 | Denver, CO | 80202

[www.civitasresources.com](http://www.civitasresources.com) | NYSE: CIVI



---

**From:** Marette - DNR, Brandon <[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)>

**Sent:** Wednesday, June 5, 2024 12:44 PM

**To:** Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)>

**Cc:** Lexi Hamous-Miller - DNR <[lexi.hamous-miller@state.co.us](mailto:lexi.hamous-miller@state.co.us)>; Nathan Bennett <[nbennett@civiresources.com](mailto:nbennett@civiresources.com)>; Jeremy Sonnier <[jsonnier@civiresources.com](mailto:jsonnier@civiresources.com)>; Claude Boiteau <[cboiteau@civiresources.com](mailto:cboiteau@civiresources.com)>; Jeff Annable <[jannable@civiresources.com](mailto:jannable@civiresources.com)>

**Subject:** Re: Burrowing Owl HPH Exemption Request

Good afternoon Lilah,

Thanks for your email.

Were the surveys separated by a week? (e.g., 3 weeks total)

Regards,

**Brandon B. Marette, **CWB**<sup>®</sup>**

## Northeast Region Energy Liaison



LIVE LIFE  
OUTSIDE

Direct [\(720\) 880-0819](tel:7208800819)

[6060 Broadway, Denver, CO 80216](https://www.state.co.us/6060-Broadway-Denver-CO-80216)

[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)

[CPW's Energy Webpage](#)

[CPW's Wildlife Movements Webpage](#)



**THINK SAFETY FIRST!**



On Wed, Jun 5, 2024 at 12:02 PM Lilah Hubbard <[lhubbard@civiresources.com](mailto:lhubbard@civiresources.com)> wrote:

Hi Brandon and Lexi,

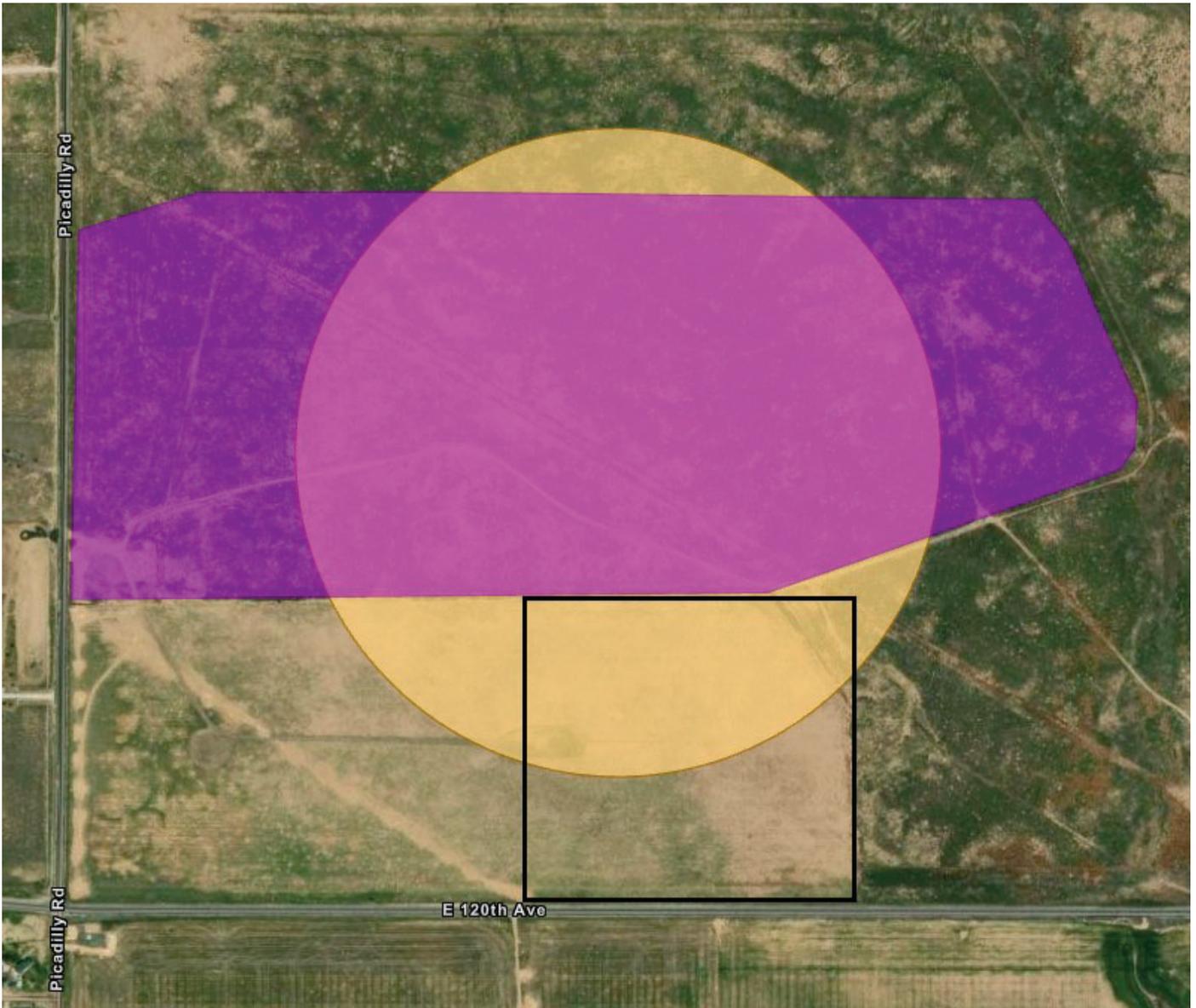
Civitas is working on potential development plans in the southern half of Sec 36 of T1S R66W in Adams County. Civitas' wildlife consultant, RPG Resources, conducted preliminary assessments to survey the mapped Burrowing Owl Active Nest Site High Priority Habitat (HPH) and to survey for other potential wildlife resources.

RPG completed three burrowing owl surveys, and all three surveys were negative for burrowing owl presence. They also noted the following: *The majority of the burrows from the historic prairie dog colony are collapsed, however there are some open burrows suitable for nesting scattered within the mapped habitat. Overall, this habitat is poor quality nesting habitat with vegetation approximately 1 foot tall throughout the entire field. There was no sign of burrowing owl (white wash, pellets, feathers) observed, nor was there sign of recent activity at the prairie dog burrows.*

The purple polygon below represents the overall boundaries of the field-verified habitat, as mapped by RPG, and the orange circle represents the HPH polygon / historic nest buffer. The black box is Civitas' current area of focus, so there is minimal chance that any open burrows would be physically impacted.

Based on the lack of activity in this HPH (and overall poor quality of this habitat), Civitas would like to request exemption from ECMC HPH requirements for this development. (Please note: prior to any dirt disturbance, additional surveys will be conducted, and we will follow up with CPW if new wildlife concerns are identified.)

Please let me know if you have any questions. Thank you for your time.



**Purple polygon** = RPG-mapped overall habitat

**Orange polygon** = HPH polygon

**Black box** = Civitas' current area of focus





2024-06-03 09:30:33  
+39.919841 -104.728771  
146° SE  
Adams County



2024-06-03 09:36:05  
+39.919833 -104.729694  
91° E  
Adams County

Thank you,

**Lilah Hubbard**  
Natural Resource Specialist

Cell 510-734-4733

555 17<sup>th</sup> Street | Suite 3700 | Denver, CO | 80202

[www.civitasresources.com](http://www.civitasresources.com) | NYSE: CIVI



CIVITAS



Re: Request for review 36 1S 66W due 7/10/24

1 message

Marette - DNR, Brandon <brandon.marette@state.co.us>

Mon, Jul 8, 2024 at 9:04 AM

To: "Freese - DNR, Steve" <steve.freese@state.co.us>

Cc: Lilah Hubbard <lhubbard@civiresources.com>, Lexi Hamous-Miller - DNR <lexi.hamous-miller@state.co.us>, Hannah Posey - DNR <hannah.posey@state.co.us>

Good morning Steve,

While CPW appreciates the BOwl surveys Civitas performed this year, one year's worth of no activity at the burrows doesn't necessitate an exemption from the HPH layer. Therefore, should permitting timelines push into the 2025 nesting season, CPW recommends another round of BOwl surveys (three surveys separated by a week) if initial construction and mobilization occur between March 15 and August 31.

Regards,

Brandon B. Marette, CWB®
Northeast Region Energy Liaison



LIVE LIFE OUTSIDE

Direct (720) 880-0819
6060 Broadway, Denver, CO 80216
brandon.marette@state.co.us
CPW's Energy Webpage
CPW's Wildlife Movements Webpage



THINK SAFETY FIRST!



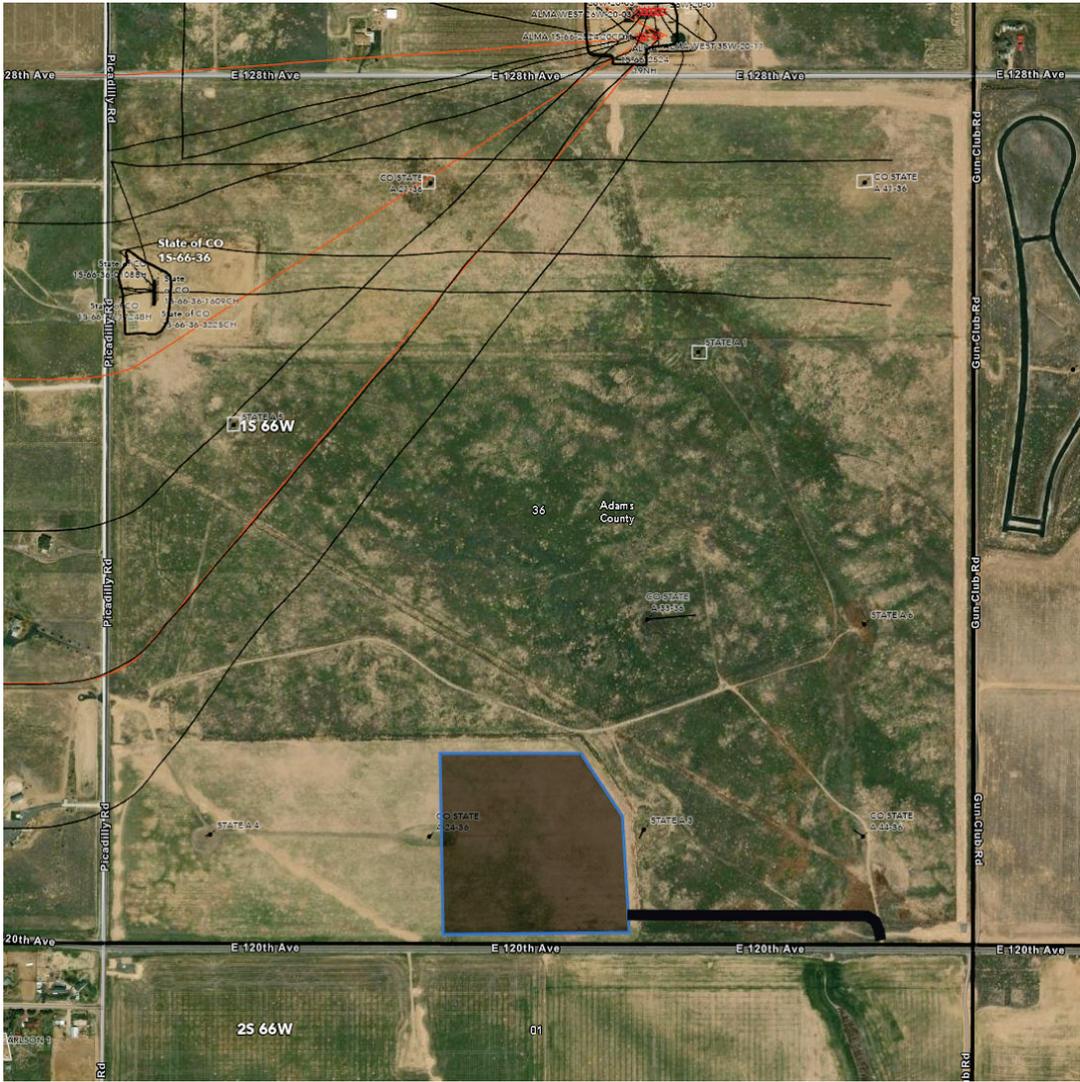
(Upcoming days off or in the field: 7/10; 7/15-17)

On Mon, Jun 10, 2024 at 7:28 AM Freese - DNR, Steve <steve.freese@state.co.us> wrote:

Brandon,

I have an operator interested in an oil and gas location in 36 1S 66W. The road is highlighted in black below and will follow an area that was previously disturbed for pipeline construction. The pad is outlined in blue and will be located in lands that have historically been farmed. Could you please provide any comments or concerns by 7/10/24? If you would like to meet onsite please let me know as soon as possible so we can get that scheduled.

I believe Lilah Hubbard with Civitas has also reached out to you regarding this pad on 6/5/24 requesting an exemption to the HPH based on surveys that they have performed.



Thank you,

**Steve Freese**  
Minerals Field Specialist  
Colorado State Board of Land Commissioners  
C [303.905.2808](tel:303.905.2808)  
[1127 Sherman Street, Suite 300, Denver, CO 80203](mailto:Steve.Freese@state.co.us)  
[Steve.Freese@state.co.us](mailto:Steve.Freese@state.co.us)

### Proof of Ownership

State Land Board ownership originated from the federal land grant at statehood (as was nearly all Sections 16 and 36 of each township). BLM patent/serial no. COCOAA 000001 44.



Extraction Oil and Gas, Inc.

Visual Aesthetics Plan

Eagle Pad

Section 36, Township 1 South, Range 66 West

Adams County, CO

## **Introduction**

Per Adams County Development Standards and Regulations, Section 4-11-02-03-03-18, and the Colorado Energy and Carbon Management Commission's (ECMC), Rule 425, all permanent equipment at new and existing Oil and Gas Facilities, regardless of construction date, which are observable from any public highway, road, or publicly- maintained trail, will 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.

## **Visual Mitigation**

Thirty-two foot walls will be utilized for drilling, completions and flowback operations around the majority of the well pad. Please refer to the site plans for the wall placement. Although not necessary to meet noise compliance, the walls will provide further sound mitigation and offer visual screening from E. 120<sup>th</sup> Ave, Picadilly Rd and Gun Club Rd. and the residents in the vicinity of this proposed oil and gas location. The wall color will blend with the natural background of the area.

During pre-production operations the drill rig's derrick will be visible above the walls, and some other equipment may be visible during completions. During production, the permanent equipment will blend in with the surrounding landscape and be compatible with the other uses on the property. The following pages show renderings of drilling operations and while the wells are on production from multiple locations in the area.

## **Landscaping Plan**

The landscaping proposed will be a six-foot tall wooden fence on eastern, southern and western sides of the well pad after interim reclamation. Extraction requests administrative relief from any additional fencing on the due to the distance to other homes on the northern side. No trees will be planted as to not provide attractants to birds which could be hazardous to air travel associated with Denver International Airport. Please see fence and landscaping details on the attached drawings.

EAGLE PAD  
LANDSCAPE PLAN

1/2 SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO

OWNER: ADAMS COUNTY  
PARCEL NUMBER: 015690000068  
ZONING: A-3  
LAND USE: EXEMPT

OWNER: DAVIDSON JOHN R AND  
DAVIDSON KAREN L  
PARCEL NUMBER: 0156925300003  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: HUNTER SARA E AND  
HUNTER JEFF D  
PARCEL NUMBER: 0156925300004  
ZONING: A-3  
LAND USE: RESIDENTIAL

OWNER: GARCIA MARIA ALMA  
PARCEL NUMBER: 0156925400003  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: ARTHUR B HENRY TRUST  
PARCEL NUMBER: 0156925400004  
ZONING: A-3  
LAND USE: RESIDENTIAL

OWNER: MATHIS BETTY H  
PARCEL NUMBER: 0156700000233  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: TRINH MEILING  
PARCEL NUMBER: 0156730300002  
ZONING: A-3  
LAND USE: RESIDENTIAL

EAST 128TH AVENUE

OWNER: LUONG ANDY  
PARCEL NUMBER: 0156935100003  
ZONING: A-3  
LAND USE: RESIDENTIAL

OWNER: SARVESTANI NASSER  
HAJI  
PARCEL NUMBER: 0156935100002  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: SARVESTANI NASSER  
HAJI  
PARCEL NUMBER: 0156935100004  
ZONING: A-3  
LAND USE: RESIDENTIAL

OWNER: COLORADO STATE LAND  
PARCEL NUMBER: 0156900000077  
ZONING: A-3  
LAND USE: EXEMPT

OWNER: SCOTT MICHAEL P AND  
SCOTT LORI A  
PARCEL NUMBER: 0156935100005  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: SHELBOURN MARVIN R  
AND SHELBOURN SONDRRA R  
PARCEL NUMBER: 0156935400002  
ZONING: A-3  
LAND USE: AGRICULTURAL

OWNER: LUCERO JAY E  
PARCEL NUMBER: 0156935400004  
ZONING: A-3  
LAND USE: RESIDENTIAL

OWNER: RODRIGUEZ ANSELMO  
AND DEL VAL EDITH  
PARCEL NUMBER: 0156935400003  
ZONING: A-3  
LAND USE: AGRICULTURAL

APPROXIMATE  
PROPERTY LINE  
(TYP.)

OWNER: ADAMS COUNTY  
PARCEL NUMBER: 0156731300001  
ZONING: A-3  
LAND USE: EXEMPT

PROPOSED  
DETENTION  
POND

EAST 120TH AVENUE

LEGEND

- EXISTING FENCE
- PROPOSED OIL AND GAS LOCATION
- EXISTING STRUCTURE
- DITCH / POND
- SUBJECT PARCEL PROPERTY LINE
- PROPOSED WELL
- PROPOSED FACILITY EQUIPMENT
- INTERIM RECLAMATION BOUNDARY
- PROPOSED 6' WOOD FENCE
- PROPOSED TOPSOIL STOCKPILE
- PROPOSED ACCESS ROAD



0 300' 600' 1" = 300'

GENERAL NOTES:

- PUBLICLY AVAILABLE DATA SOURCES HAVE NOT BEEN INDEPENDENTLY VERIFIED BY 609 CONSULTING, LLC.
- ORIGINAL DOCUMENT SIZE: 24" x 36"
- DUE TO THE PROXIMITY OF THIS PROJECT TO DENVER INTERNATIONAL AIRPORT NO TREES WILL BE PLANTED TO MINIMIZE HAZARDOUS WILDLIFE ATTRACTANTS FOR NESTING BIRDS AND REDUCING POTENTIAL CONCERN FOR AIR TRAFFIC IN THE AREA.

LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609

CONSULTING, LLC

Prepared For:

Extraction Oil & Gas, Inc.

DRAWING REVISIONS		
REV.	DATE	DESCRIPTION
1	7/3/25	CONCEPTUAL REVIEW
2	11/19/25	CONCEPTUAL REVIEW

EAGLE PAD  
LANDSCAPE PLAN

DATE: 11/19/25 SHEET NO: 1 OF 2

SURVEY DATE: 6/10/25





**Extraction Oil and Gas, Inc.  
Eagle Pad - Proposed Well Pad and Access Road  
Water and Wildlife Protection Plan  
Adams County, Colorado  
November 19, 2025**



Prepared for:

*Extraction Oil and Gas, Inc. (Civitas Resources, Inc.)  
555 17<sup>th</sup> Street, Suite 3700  
Denver, CO 80202*



Prepared by:

*HWA Wildlife Consulting, LLC  
2308 South 8<sup>th</sup> Street  
Laramie, WY 82070  
[www.hwa-wildlife.com](http://www.hwa-wildlife.com)  
(307) 742-5440*



## TABLE OF CONTENTS

	<u>Page</u>
1. Introduction .....	1
2. Project Site .....	1
3. Operating Requirements.....	2
4. Wetlands, Riparian Habitat, and Other Waters of the U.S. ....	6
5. FEMA: 100-Year Floodplain .....	8
6. ECMC: High Priority Habitats and Other Protected Resources.....	8
7. Migratory Birds .....	8
8. Raptors.....	9
9. Threatened, Endangered, and Sensitive Species (USFWS).....	10
10. Threatened, Endangered, and Sensitive Species (CPW) .....	12
11. Summary of Findings .....	12
12. Best Management Practices.....	12
13. Literature Cited.....	14

## TABLES

Table 1.	Potential riparian habitat features within 2,000 feet of the max disturbance.....	7
Table 2.	Raptor nests within 0.5 miles of the project site.....	10
Table 3.	USFWS T&E species with the potential to occur within or near the project site .....	11
Table 4.	Crestone has committed to the following wildlife surveys if construction begins during the wildlife survey timing window.....	14

## FIGURES

Figure 1.	Wetland and riparian data around Extraction’s proposed Eagle Pad.....	15
Figure 2.	FEMA floodplain data around Extraction’s proposed Eagle Pad .....	16
Figure 3	High Priority Habitat around Extraction’s proposed Eagle Pad .....	17
Figure 4.	Wildlife habitat around Extraction’s proposed Eagle Pad during 2025.....	18



## TABLE OF CONTENTS – Continued

### APPENDIX A

Photos of the proposed Eagle Pad and associated habitat

### APPENDIX B

Cultural Resources Report

The following table describes acronyms and abbreviations that are used throughout this report.

<b>Acronym</b>	<b>Meaning</b>
BMP	Best management practices
CPW	Colorado Parks and Wildlife
CVCP	Colorado Vegetation Classification Project
ECMC	Energy and Carbon Management Commission
FEMA	Federal Emergency Management Agency
HPH	High Priority Habitat (CPW)
HWA	HWA Wildlife Consulting, LLC
Max Disturbance	The maximum disturbance for the well pad
NHD	National Hydrology Dataset (USGS)
NWI	National Wetland Inventory (USFWS)
OHWM	Ordinary high water mark
Project Site	The maximum disturbance for the well pad and access road
T&E	Threatened and endangered species (USFWS)
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WPS	Working pad surface (pad disturbance area during development)



## 1. Introduction

Extraction Oil and Gas, Inc. (wholly owned subsidiary of Civitas Resources, Inc.; hereafter referred to as “Extraction” or “the Operator”) is developing oil and gas resources within Adams County, Colorado. HWA Wildlife Consulting, LLC (HWA) completed a Water and Wildlife Protection Plan in 2025 for the proposed Eagle Pad. This effort included a desktop analysis using online resources and field data collected by HWA on May 14, 21, and 28 and November 19, 2025. The HWA field surveys included:

- Black-tailed prairie dogs (*Cynomys ludovicianus*) - colony delineation surveys within 0.25 miles of the project site.
- Raptor nests - nest search surveys within 0.5 miles of the project site.
- Burrowing owl (*Athene cunicularia*) nest surveys – three rounds of surveys within potential nesting habitat (e.g., prairie dog colonies) within 0.25 miles of the project site following Colorado Parks and Wildlife’s (CPW) *Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls - 2021* protocol.
- Threatened and endangered species - presence/absence surveys and habitat assessment surveys within 0.25 miles of the project site.
- Wetland/riparian habitat – wetland and riparian habitat surveys (including wetland delineations) within 2,000 feet of the project site.
- Opportunistic sightings - all species observed within 0.5 miles of the project site were documented.

This Water and Wildlife Protection Plan focuses on waters/wetlands and sensitive wildlife and plant species of management concern to the Bureau of Land Management-Royal Gorge Field Office (BLM-RGFO), CPW, Colorado State Land Board, Adams County, Energy and Carbon Management Commission (ECMC; formerly referred to as the COGCC), and the U.S. Fish and Wildlife Service (USFWS), within and around the project site (Figures 1-4). This plan addresses Adams County’s requirements related to wildlife and natural resources for oil and gas locations.

## 2. Project Site

The project site is located in Section 36 T1S:R66W (Figures 1-4). Max disturbance, well pad, or oil and gas location refer to the maximum disturbance area for the well pad. Working pad surface refers to the pad disturbance area during development. Project site refers to the well pad and access road (proposed access road). The well pad is located approximately 250 feet north of E 120<sup>th</sup> Avenue and 3.1 miles east of E-470. The closest major drainage, Third Creek, is located approximately 1.5 miles southwest of the well pad and Barr Lake is located approximately 1.9 miles northwest of the well pad. The habitat within the project site consists of a mix of native and non-native (i.e., weedy) grassland habitat. The abundance of non-native species within the project site is likely a result of the area being tilled for agricultural purposes in the past (based on historical aerial imagery). Currently, the vegetation within the project site would be classified as a fallow field. No riparian habitat occurs within or near the project site. Photos of the project site and surrounding habitats are included in Appendix A.



### 3. Operating Requirements

This section covers Adams County’s environmental requirements for oil and gas operations. This section covers the well pad and proposed access road. This section does not cover flowlines or pipelines that are permitted separately. Section 12 covers the environmental commitments, Best Management Practices (BMPs), and wildlife surveys to which Extraction has committed.

#### 3.1 Water Quality Measures

During the drilling and pad construction phase the water supply source will be groundwater from the Rangeview Metropolitan District (39.650200, -104.659873), with a volume of 24,500 barrels. During the completions phase the water supply source will be surface water from FRICO (39.95392778, - 104.74666667) with a volume of 8.4 million barrels.

Extraction is requesting Adams County grant Extraction the flexibility to recycle produced water on the pad to use for well completions on this location. Extraction is not committing to recycling at the pad or utilizing recycled water, but rather seeking permission for the operations should it be logistically feasible. Extraction would attempt to utilize approximately 5% recycled produced water for well completions, therefore reducing the amount of freshwater used. This could result in approximately 420,000bbl less water from the FRICO source which draws from Barr Lake. It is anticipated that raw produced water would be trucked from other Extraction (or sister companies’) oil and gas locations in the area to the project site. The water would be offloaded to temporary 500bbl tanks, minimally treated, blended with fresh water then used for well stimulations. All recycling equipment will be staged on liners and within the limits of permitted disturbance as illustrated in the completions site plan. The produced water would only be on this location during completions operations for the Eagle Pad wells with no storage longer than necessary for this pre-production stage. Additionally, Extraction will not use this pad to recycle water which would then be transferred to another location.

Groundwater will be sampled in accordance with the ECMC’s Rule 615. Initial and periodic groundwater samples will be collected from up to four water sources within a half-mile radius of proposed site, prioritizing proximity, type, and aquifer diversity. Sampling will occur before drilling, at specific intervals after completion, and post-abandonment. Analysis will include testing for pH, dissolved gases, hydrocarbons, and various chemical constituents. Refer to the ECMC’s Rule 615 for more information.

#### 3.2 Resources Review

According to Adams County’s *Development Standards and Regulations – 2020* document, a site-specific Resources Review is required for projects located within the Natural Resources Conservation Overlay (NRCO) district map. The NRCO is described as a general location of (1) important wildlife areas; (2) designated floodplains and associated riparian areas; and (3) important reservoir sites to provide wetlands and other habitat areas. The Resources Review was designed to provide resource protection standards, standards of the NRCO, and agricultural and cultural resource preservation objectives. The entire project site is located within the NRCO district. Therefore, a Resources Review is included in this Water and Wildlife Protection Plan.



The following is a list of the Resources Review requirements (*italic text*), as outlined in Section 4-14-02-03 of Adams County’s *Development Standards and Regulations – 2020* document as well as the Operator’s plans to address each applicable requirement (**bold text**).

1. *General Content: A Resources Review shall describe the existing conditions of the property, describe the development proposal and the rationale for the location of proposed open space, if applicable, and a description of how the proposal meets all the applicable standards and objectives of this Section and the Adams County Comprehensive Plan.*

**Section 2 provides a description of the project site. The location of the project site was chosen due to it occurring within previously disturbed land (i.e., tilled), its distance to sensitive environmental resources, and its close proximity to a paved road (120<sup>th</sup>) which will result in less habitat fragmentation. The well pad will include multiple wells resulting in fewer well pads being needed in the immediate vicinity of the project. The project site’s close proximity to an existing road, occurring within previously disturbed land, it being a multiple well pad, and its distance to sensitive natural resources will result in minimal impacts to sensitive wildlife, plant, and aquatic resources in the area. The project site does not overlap Adams County Open Space.**

2. *Site Specific Content: A Resources Review for all proposed developments not otherwise exempted, shall contain the following components, as applicable to the property proposed for development and the proposed project.*
  - a. *Individual Protected Resources Component: The Resources Review for property containing protected resources shall contain an individual protected resources component including maps and/or plans depicting the location of water bodies, one hundred (100) year floodplains, and wetlands. This component also shall describe the level to which all resources are either conserved or developed, depict the setbacks/buffers of all resources for which setbacks/buffers are required, and contain a mitigation plan, if applicable.*

**The project site is not within any Federal Emergency Management Agency (FEMA)-mapped floodplain (Figure 2). Two USFWS National Wetland Inventory (NWI)/U.S. Geological Surveys (USGS) National Hydrography Dataset (NHD) mapped features were documented within 2,000 feet of the max disturbance (Table 1, Figure 1).**

**Feature #1, NWI-mapped riverine/NHD-mapped stream (intermittent) habitat, is located 1,134 feet east of the max disturbance. Feature #1 was verified not to be present at the time of the field survey. Feature #1 had no riparian vegetation, no water, no defined bed and bank, and no OHWM, indicating that this area would not qualify as riparian habitat (Appendix A, Photos 1-4).**



Feature #2, NWI-mapped freshwater pond/NHD-stream (intermittent) is mapped 1,076 feet southeast of the max disturbance. Using the U.S. Army Corps of Engineers (USACE) wetland delineation manual protocols, HWA identified one wetland within Feature #2 that was documented 1,702 feet from the max disturbance. Feature #2, is located upgradient, and across a paved road, from the max disturbance. Feature #2 included one HWA-mapped wetland within the central portion of the feature and cropland habitat along the northern and southern portions of the feature (Appendix A, Photos 5-9).

HWA supports waiving the 2,000-foot setback for wetlands and riparian habitat (e.g., water bodies) due to the following:

- No downgradient wetland or riparian habitat occurs within 2,000 feet of the max disturbance.
  - The max disturbance for the well pad is located >1,700 feet from any wetland or riparian habitat and outside CPW-mapped aquatic High Priority Habitat (HPH).
  - The two NWI/NHD-mapped riparian habitat features within 2,000 feet of the max disturbance are not anticipated to be impacted by operations.
  - Only one wetland occurs within 2,000 feet of the max disturbance. The HWA-mapped wetland is 1,702 feet away from the max disturbance, upgradient, across a paved road, and surrounded by crops to the north and south indicating that it is an isolated wetland feature.
  - The project site is located entirely outside of the FEMA-mapped floodplains. The closest FEMA-mapped floodplain is located approximately 1.4 miles to the southwest.
  - The closest major drainage (Third Creek) is located approximately 1.5 miles to the southwest.
  - The stormwater BMPs that the Operator will implement for this project site include: a Grading, Erosion, and Sediment Control (GESC) Plan and Drainage Study Plan to address stormwater.
- b. *NRCO Component: A Resources Review shall contain a NRCO component including a site-specific review identifying the location of areas used by wildlife as habitat or migration routes and any area protected by the NRCO District, and plans identifying how the proposed development on the land complies with the standards of the NRCO District.*

Figures 3 and 4 display sensitive natural resources habitat within and around the project site. Sections 4-11 cover sensitive natural resources within and around the project site in detail. No CPW-designated High Priority Habitats (HPHs) occur within or near the project site. Section 12 includes environmental commitments, BMPs, and wildlife surveys to further promote the protection of wildlife, to avoid unnecessary impacts on the environment, to mitigate potential impacts to sensitive species, and to comply with the



standards of the NRCO District. Wildlife surveys and seasonal restrictions have been applied (see Resource Management Recommendations and Table 4) to minimize impacts to sensitive species. Potential adverse impacts to the ecosystem are expected to be minimal if the appropriate surveys are followed, seasonal restrictions are implemented (when possible), invasive species are managed, temporary disturbances are reclaimed (e.g., interim reclamation), and BMPs are followed.

- c. *Cultural Resources Component: A Resources Review shall contain a cultural resources component including a written review of the proposed development, depicts the locations of all cultural resources and includes plans identifying how the proposed development on the land complies with the standards of the Cultural Resources subsection.*

**A Class I and Class III cultural resources survey was conducted as part of a due diligence study in order to determine if the project site contained intact archaeological resources or historic properties that may be eligible for listing to the National Register of Historic Places (National Register).**

**In June 2025, a comprehensive Cultural Resources study was completed for the project site. The Cultural Resources study included a Class I literature review and synthesis and a Class III intensive archaeological survey of the project site to identify any archaeological sites that are potentially eligible for inclusion in the National Register. The Class I literature review did not identify any previously documented cultural resources or surveys in or within 100 feet of the project site. The Class III intensive archaeological survey did not identify any cultural resources in or within 100 feet of the project site.**

**Based on the findings, no additional cultural investigations are recommended and there are no recommended restrictions to the proposed project site. The full cultural resources report is included in Appendix B.**

- d. *Agricultural Component: A Resources Review shall contain an agricultural component identifying the location of agricultural land and describes related agricultural operations, such as irrigation practices, occurring on the land.*

**The project site is located within lands that have been historically used for unirrigated hay production based on historical imagery. The project site is zoned as A-3 Agriculture land by Adams County. As discussed above, the project site is dominated by a mix of native and non-native (i.e., weedy) grassland habitat and is not currently being used for agricultural purposes. The abundance of non-native species within the project site is likely a result of the area being tilled for agricultural purposes in the past. Currently, the site would be classified as a fallow field. No signs of irrigation were identified using aerial imagery.**



The project site is compatible with Adams County’s goal to preserve and maintain agricultural lands to the greatest extent possible. Drilling multiple wells from one centralized location reduces Extraction’s footprint and leaves more land available for agriculture and wildlife. Once drilling is completed, interim reclamation will occur to minimize the long-term disturbance area. Once the well pad is plugged and abandoned, all the well pad related equipment will be removed, and the area will be reclaimed to its pre-disturbance condition per ECMC standards and regulations. Agricultural operations can still occur around the project site during operations and once the project site has been reclaimed, within the project site’s footprint.

- 3. Recommendations: A Resources Review shall contain recommendations for mitigating any negative impacts of the proposed development on the natural, cultural and agricultural resources. The review also shall contain recommendations for resolving conflicting objectives when the Resources Review identifies areas where such conflicts exist.*

The project site will not impact, or will have minimal impacts, to riparian features (water bodies, wetlands, and water of the U.S), floodplains, cultural resources, long-term agricultural operations, sensitive wildlife and plant species, or CPW HPHs. Sections 4-11 cover sensitive natural resources within and around the project site in detail, as well as resource management recommendations where applicable. Section 12 includes environmental commitments, BMPs, and surveys to further promote the protection of wildlife, to avoid unnecessary impacts on the environment, to mitigate potential impacts to sensitive species, and to comply with the standards of the NRCO District. Wildlife surveys and seasonal restrictions have been applied (see Resource Management Recommendations and Table 4) to minimize impacts to sensitive species. Potential adverse impacts to the ecosystem are expected to be minimal if the appropriate surveys are followed, seasonal restrictions are implemented (when possible), invasive species are managed, temporary disturbances are reclaimed (e.g., interim reclamation), and BMPs are followed.

#### **4. Wetlands, Riparian Habitat, and Other Waters of the U.S.**

Wetlands, riparian areas (e.g., water bodies), waters of the U.S, and FEMA-mapped floodplains do not occur within the project site (Figures 1 and 2). No riparian habitat characteristics such as riparian vegetation, hydrology, or hydric soils were observed within or near the project site during field surveys in 2025. The closest major drainage to the project site is Third Creek, located approximately 1.5 miles to the southwest.

Potential wetland, riparian, and waters of the U.S. habitat features were identified using aerial imagery, USFWS NWI, USGS NHD, and HWA potential riparian habitat (mapped by HWA during field surveys). The outer boundary of HWA potential riparian habitat was mapped using the outer edge of the riparian vegetation or the ordinary high water mark (OHWM) boundary (if riparian vegetation was not present). Wetlands were delineated by HWA using the USACE wetland delineation manual protocols.



HWA surveyed two potential riparian habitat features located within 2,000 feet of the max disturbance (Figure 1).

#### Potential Riparian Habitat – Within 2,000 Feet

Two NWI/NHD-mapped features were documented within 2,000 feet of the max disturbance (Table 1, Figure 1, Appendix A).

Feature #1, NWI-mapped riverine/NHD-mapped stream (intermittent) habitat, is located 1,134 feet east of the max disturbance. Feature #1 was verified not to be present at the time of the field survey. Feature #1 had no riparian vegetation, no water, no defined bed and bank, and no OHWM, indicating that this area would not qualify as riparian habitat (Appendix A, Photos 1-4).

Feature #2, NWI-mapped freshwater pond/NHD-stream (intermittent) is mapped 1,076 feet southeast of the max disturbance. HWA identified one wetland within Feature #2 that was documented 1,702 feet from the max disturbance. Feature #2, and the one wetland within the feature, is located upgradient, and across a paved road, from the max disturbance. Feature #2 included one HWA-mapped wetland within the central portion of the feature and cropland habitat along the northern and southern portions of the feature (Appendix A, Photos 5-9).

Table 1. Potential riparian habitat features within 2,000 feet of the max disturbance.

Feature Number	Feature Classification	Distance and Direction from the Max Disturbance	Field Observations (within 2,000 feet of the Max Disturbance)
Feature #1	NWI R5UBH Riverine/NHD Stream (Intermittent)	1,134 feet east (downgradient).	Feature 1 was verified not to be present at the time of the field survey. It had no riparian vegetation, no water, no defined bed and bank, and no OHWM.
Feature #2	NWI PUSAf Freshwater Pond/NHD Stream (Intermittent) Feature/HWA Wetland Feature	1,076 feet (actual distance based on field wetland delineation surveys = <b>1,702</b> feet) southeast (upgradient).	Feature 2 was field verified to contain a wetland. One wetland was field delineated within the feature. The areas up and down drainage of the delineated wetland did not contain the appropriate riparian vegetation, water, soils, defined bed and bank, or OHWM to be classified as a wetland.

#### Resource Management Recommendations

Due to the findings described above and in Section 3.2.2.a, no additional actions are recommended.

No wetlands, waterbodies, or waters of the U.S. would be directly impacted, therefore a Clean Water Act Section 404 permit should not be required to perform construction activities at the project site.



## 5. FEMA: 100-Year Floodplain

The project site is outside of the FEMA-mapped 100-year floodplain (Figure 2). The closest FEMA-mapped floodplain is located approximately 1.4 miles southwest along Third Creek.

### Resource Management Recommendations

Due to the project site being located outside of the FEMA-mapped floodplains, no permitting associated with construction within a floodplain should be required.

## 6. ECMC: High Priority Habitats and Other Protected Resources

The oil and gas location is not located within any CPW designated HPH areas (Figure 3). The area around the project site was formally designated as burrowing owl HPH, however it was removed from the 2025 HPH data. This is likely due to the former prairie dog colony in the area that is now inactive, is overgrown by vegetation, and the majority of the burrows are now caved in (photos 10-13 in Appendix A). Burrowing owls typically utilize active prairie dog colonies (with open burrows) for nesting and prefer areas with sparse vegetation for detecting predators. During the three burrowing owl ground surveys conducted in 2025, no burrowing owl individuals or nests were observed within 0.25 miles of the project site (CPW's recommended buffer zone, CPW 2020). No active prairie dog colonies occur within 0.25 miles of the project site.

### Resource Management Recommendations

High Priority Habitats do not occur within or near the project site and no burrowing owls were observed within 0.25 miles of the project site. Due to historical burrowing owl observations, burrowing owl surveys are recommended if construction occurs during the CPW-recommended burrowing owl nesting season (March 15 – October 31).

## 7. Migratory Birds

During field surveys conducted in 2025, HWA documented all bird species detected (visual or aural) within 0.5 miles of the project site. Sixteen bird species were documented: Brewer's blackbird (*Euphagus cyanocephalus*), burrowing owl, cliff swallow (*Petrochelidon pyrrhonota*), grasshopper sparrow (*Ammodramus savannarum*), great blue heron (*Ardea herodias*), horned lark (*Eremophia alpestris*), house sparrow (*Passer domesticus*), killdeer (*Charadrius vociferus*), lark sparrow (*Chondestes grammacus*), mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo hamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), Swainson's hawk (*Buteo swainsoni*), vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*), and yellow warbler (*Setophaga petechia*).

The USFWS IPaC report identified twelve Birds of Conservation Concern (BCC) with the potential to be present within or near the project site: bald eagle (*Haliaeetus leucocephalus*), broad-tailed hummingbird (*Selasphorus platycercus*), chimney swift (*Chaetura pelagica*), Clark's grebe (*Aechmophorus clarkii*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila*



*chrysaetos*), grasshopper sparrow, long-billed curlew (*Numenius americanus*), northern harrier (*Circus hudsonius*), pectoral sandpiper (*Calidris melanotos*), red-headed woodpecker (*Melanerpes erythrocephalus*), and thick-billed longspur (*Rhynchophanes mccownii*) (USFWS 2025a).

No bald eagle, golden eagle, or ferruginous hawk nests occur within 0.5 miles of the project site (CPW's recommended buffer zone, CPW 2020). Potential eagle nesting habitat (e.g., large/mature tree stands and cliffs) does not occur within 0.5 miles of the project site. Potential ferruginous hawk nesting habitat does occur within 0.5 miles of the project site where there are eroded drainages and small isolated trees, however no ferruginous hawk nests or individuals were observed during the field survey. Broad-tailed hummingbirds have been observed in Adams County, however no suitable nesting habitat (e.g., trees and large shrubs) occurs within or near the project site. Potential chimney swift nesting habitat (e.g., chimneys, hollow trees, and caves) does not occur within or near the project site. Suitable habitat (e.g., open water) for Clark's grebes does not occur within or near the project site. Grasshopper sparrows were observed during field surveys and potentially suitable nesting habitat does occur in the area. Therefore, grasshopper sparrows have the potential to be impacted if construction occurs during the nesting season. Long-billed curlews were not observed during field surveys and sightings in this area are rare. No northern harrier nests or suitable nesting habitat (e.g., large wet meadows) occur within 0.25 miles of the project site (CPW recommended buffer zone, CPW correspondence). Pectoral sandpipers, a migrant species of Colorado, are unlikely to occur within or near the project site due to a lack of suitable habitat (e.g., marshes) in the area. Suitable habitat (e.g., large tree stands) for red-headed woodpeckers does not occur within or near the project site. Potential habitat (e.g., shortgrass prairies) for thick-billed longspurs does occur within and near the project site, however they were not observed during field surveys.

### Resource Management Recommendations

If construction activities start between April 1 and August 31, CPW recommends surveys for migratory bird nests. Construction work must start within 7 days of a migratory bird nest survey. If construction activities start between February 1 and July 31, CPW recommends surveys for nesting raptors in and within 0.5 miles of the project site. In addition to general raptor nest surveys, due to the historic prairie dog colony that is located in the area, CPW recommends burrowing owl surveys between March 15 and October 31 before any construction begins.

## **8. Raptors**

Based on CPW raptor nest restriction buffers (CPW 2020) and the known raptor species near the project site, eagle nests and ferruginous hawk nests within 0.5 miles of the project site, red-tailed hawk nests within 0.33 miles of the project site, and all other raptor nests within  $\leq 0.25$  miles of the project site could have applicable seasonal restriction buffers if active nests were found.

During the raptor nest (including burrowing owl nest) ground surveys conducted on May 14, 21, and 28, 2025, two raptor nests were located within 0.5 miles of the project site (Table 2, Figure 4, Appendix A).



Swainson’s hawk (*Buteo swainsoni*) nest #388 was in good condition, comprised of small sticks, located in a cottonwood tree (*Populus* sp.), and had an incubating adult in the nest during the surveys (photo 14 in Appendix A). Burrowing owl nest #387 was in good condition, located within an active prairie dog colony, and had an adult near the nest and sign at the nest burrow (i.e., pellets, mite, and prey remains) during the surveys (photo 15 in Appendix A).

Table 2. Raptor nests within 0.5 miles of the project site.

Nest ID	Species	Status	Distance to Project Site	Nest	
		2025		Substrate	Condition
384	Unknown Raptor	Outside of Season	0.34	Cottonwood	Fair
<b>385</b>	Unknown Raptor	Outside of Season	0.27	Cottonwood	Poor

Nest ID (**Bold** text) - CPW raptor nest restriction buffer overlaps project site (excluding gone nests)

### Resource Management Recommendations

Based on CPW raptor nest restriction buffers (CPW 2020), the following restriction buffers could apply to the project site, if these nests become re-occupied (excluding nests that were documented as gone during the field surveys):

- Swainson’s hawk nest #388 (within 0.25 miles of the well pad): for large industrial disturbances (drilling rig, residential construction, etc.), no permitted, authorized, or human encroachment activities within 0.25 miles of the nest site during the nesting season (April 1 through July 31).

If construction activities start between February 1 and July 31, CPW recommends surveys for nesting raptors within 0.5 miles of the project site (CPW 2020). In addition to general raptor nest surveys, burrowing owl surveys are recommended if construction occurs during the CPW-recommended burrowing owl nesting season (March 15 – October 31).

### **9. Threatened, Endangered, and Sensitive Species (USFWS)**

No USFWS critical habitats occur within the project site (USFWS 2025a). The USFWS IPaC report lists seven threatened and endangered (T&E), proposed T&E, or candidate species that have the potential to be affected by construction and drilling operations at the project site (Table 3) (USFWS 2025a). Six of the seven species have a low likelihood of occurring within the project site either due to habitat not occurring in the area, the species not occurring during the breeding season, or they have not been documented within or near the project site (see “Occurrence Potential” in Table 3). Monarch butterflies (*Danaus plexippus*), listed as proposed threatened under the Endangered Species Act, have a moderate likelihood of occurring within the project site, during June through September (Chu and Jones 2011), due to two patches of showy milkweed (*Asclepias speciosa*) occurring within the project site (Figure 4). Two patches of showy milkweed (a host plant for monarchs), which collectively contained 29 individual plants, were documented during the field surveys (photos 16 and 17 in Appendix A). Monarchs could utilize the showy milkweeds for reproducing (e.g., egg laying).



Table 3. USFWS T&amp;E species with the potential to occur within or near the project site.

Species (Status)	Habitat	Occurrence Potential
<b>Birds</b>		
Piping plover (Threatened) - <i>Charadrius melodus</i>	Lakes and barren river sandbars.	<b>Low.</b> Suitable habitat is not located within or near the project site.
Whooping crane (Endangered) - <i>Grus americana</i>	Does not breed in Colorado. Migrates between winter range (Texas and Arkansas) and summer range (Canada). Requires a variety of wetland habitats (USFWS 2025b).	<b>Low.</b> Could potentially fly over during migration but unlikely to be impacted due to the lack of suitable habitat within the project site.
<b>Fishes</b>		
Pallid sturgeon (Endangered) - <i>Scaphirhynchus albus</i>	Large rivers and large river tributaries (USFWS 2025b).	<b>Low.</b> Suitable habitat does not exist within or near the project site. Downstream impacts are unlikely if the project does not involve consumptive water use from the Platte River tributaries.
<b>Insects</b>		
Monarch butterfly (Proposed Threatened) - <i>Danaus plexippus</i>	Diverse vegetation with abundant nectar sources and milkweed (their host plant).	<b>Moderate.</b> Two patches of milkweeds (29 total plants) were documented within the project site. Monarchs are typically associated with larger milkweed patches, however they could reproduce within the project site (during June through September) due to the presence of milkweeds (Chu and Jones 2011).
Suckley's bumble bee (Proposed Endangered) - <i>Bombus suckleyi</i>	Diverse vegetation with abundant nectar sources and the presence of other bumble bee colonies. They are an obligate social parasite of social bumble bees (USFWS 2025b).	<b>Low.</b> Suckley's bumble bees have not been documented within Adams County or within the bordering counties (Wright et al. 2017). In Colorado, Suckley's occur at 6,000 to 10,500 feet in elevation (Wright et al. 2017) which is above the project site's elevation (~5,210 feet in elevation). Suckley's are unlikely to occur within the project site because they are associated with the higher elevations along the foothills and the Rocky Mountains in this area.
<b>Plants</b>		
Ute ladies'-tresses (Threatened) - <i>Spiranthes diluvialis</i>	Moist meadows associated with perennial stream terraces, floodplains, and oxbows (USFWS 2025b).	<b>Low.</b> Suitable habitat does not exist within or near the project site. The closest potential habitat is located along Third Creek to the southwest.
Western prairie fringed orchid (Threatened) - <i>Platanthera praeclara</i>	Unplowed, calcareous prairies and sedge meadows. Not known to occur in Colorado (USFWS 2025b).	<b>Low.</b> Suitable habitat does not exist within or near the project site. Downstream impacts are unlikely if the project does not involve consumptive water use from the Platte River tributaries.

### Resource Management Recommendations

Six of the seven T&E species identified by the USFWS have a low probability of occurring within or near the project site (see “Occurrence Potential” in Table 3). However, monarch butterflies have a moderate probability of occurring. To prevent direct impacts to monarchs, the following best management practices will be followed:



- If construction occurs during June through September, milkweeds within the project site will be transplanted (outside of the monarch breeding season) to the adjacent habitat outside of the project site (upon surface owner approval). If the milkweeds cannot be transplanted, the milkweeds within the project site will be surveyed for monarch eggs, caterpillars, and adults. If no monarch eggs, caterpillars, or adults are observed, then the milkweed will be removed prior to construction.

## 10. Threatened, Endangered, and Sensitive Species (CPW)

In addition to the species mentioned earlier in this report, three additional species on the CPW threatened, endangered, and species of special concern (sensitive species) list were evaluated (CPW 2025): black-tailed prairie dog, northern leopard frog (*Lithobates pipiens*), and swift fox. All three species are listed as species of State Special Concern (not a statutory category).

No active prairie dog colonies are located within 0.25 of the project site. The closest active prairie dog colony is located approximately 0.45 miles to the northeast (Figure 4). No suitable northern leopard frog habitat (e.g., features containing water) was documented within or near the project site during field surveys. No swift fox individuals or dens were documented within or near the project site during field surveys.

### Resource Management Recommendations

Prairie dog colonies and northern leopard frog habitat do not occur within or near the project site. There is potential swift fox denning habitat near the project site. HWA recommends conducting a swift fox den survey prior to construction activities.

## 11. Summary of Findings

Potentially suitable habitat for the following sensitive wildlife resources were documented within or near the project site: nesting raptors, nesting migratory birds, potential monarch butterfly habitat, and potential swift fox denning habitat. Wildlife surveys and seasonal restrictions have been applied (see Resource Management Recommendations and Table 4) to minimize impacts to these sensitive species. Potential adverse impacts to the ecosystem are expected to be minimal if the appropriate surveys are followed, seasonal restrictions are implemented (when possible), invasive species are managed, temporary disturbances are reclaimed (e.g., interim reclamation), and BMPs are followed.

The project site will not impact wetlands, riparian habitat, waters of the U.S., cultural resources, or CPW-designated HPH.

## 12. Best Management Practices

The Operator has committed to the following environmental commitments, BMPs, and surveys to further promote the protection of wildlife and to avoid unnecessary impacts on the environment:



- During drilling, completion, and production operations, regular Auditory, Visual, and Olfactory Monitoring (AVO) inspections are performed on equipment containing hydrocarbons, fluids, or associated chemicals. AVO inspections include taking the time to look, smell and listen for leaks.
- Operator utilizes a polyethylene liner beneath the drilling rig during drilling operations and beneath the areas where completions equipment (including pump trucks and other heavy equipment) during completion operations to ensure there is an impermeable layer between the rig and the earth. The use of this liner prevents hydrocarbons and other fluids from reaching the soil in the unlikely event a leak does occur. The liner is inspected for integrity throughout drilling operations and maintenance/repair to the liner occurs as needed.
- Routine Spill Prevention, Control, and Countermeasure (SPCC) inspections will be conducted and documented pursuant U.S. EPA requirements. The location will be equipped with a Supervisory Control and Data Acquisition (SCADA) system that allows for remote monitoring and shut-in capabilities.
- Operator has developed a robust Leak Detection and Repair (LDAR) program, which utilizes Forward Looking Infrared (FLIR®) cameras to identify and fix leaks. These inspections will begin during the drilling phase and continue throughout the life of the Oil & Gas Location.
- Any spill or release reported to the ECMC shall also be reported to Adams County Local Government Department (LGD).
- Project personnel will not intentionally harm, harass, or otherwise disturb wildlife.
- The Operator will provide general wildlife compliance training and resources to relevant project personnel, including contractors.
- Project personnel will report any injured or orphaned wildlife discovered at the project location.
- The Operator will consult with CPW or other appropriate wildlife agency personnel, as needed, should any new significant constraints or concerns arise.
- The Operator will employ qualified biologists and subject matter experts as needed to ensure compliance with wildlife protection measures and expectations.
- The project site will not include drilling pits, production pits, or other pits associated with oil and gas operations.
- If a trench is left open for more than 5 consecutive days during pipeline construction, the Operator will install wildlife escape ramps at a minimum of one ramp per 0.25 miles of trench.
- Associated flowlines and utility lines will not occur within any perennial streams identified as aquatic HPH.
- The stormwater BMPs that the Operator will implement for this project site include: a Grading, Erosion, and Sediment Control (GESC) Plan and Drainage Study Plan to address stormwater.
- If vegetation removal occurs during the nesting season (April 1 to August 31), the Operator will conduct migratory bird nest clearance surveys prior to vegetation removal. Vegetation removal work must start within 7 days of a nest clearance survey. If work has not started, the area will need to be re-surveyed for nests. If nests are located, the Operator will implement nest protection BMPs. These BMPs will include the appropriate species specific (varies by bird species) work zone buffers around the nest.



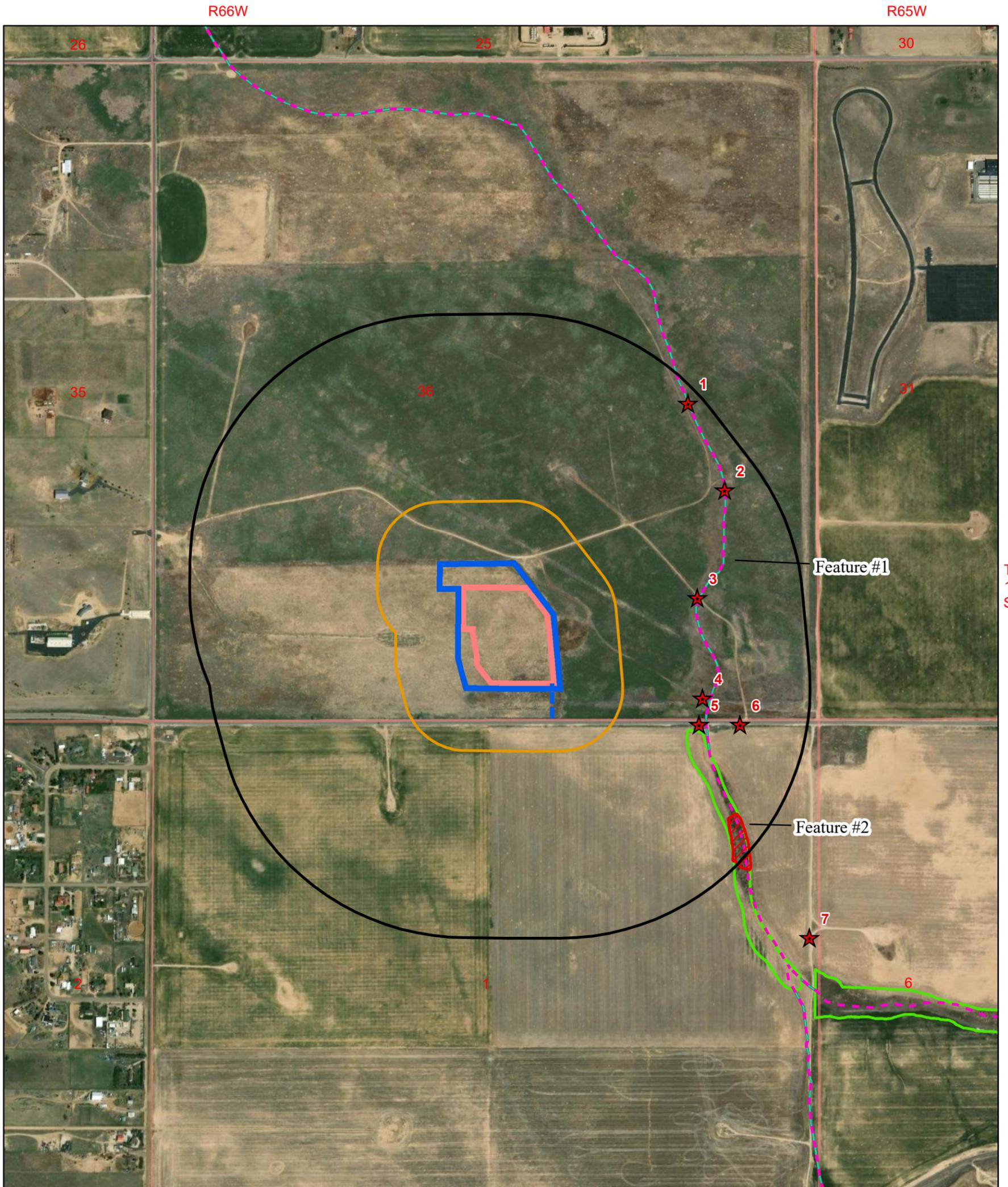
- If construction occurs during June through September, milkweeds within the project site will be transplanted (outside of the monarch breeding season) to the adjacent habitat outside of the project site (upon surface owner approval). If the milkweeds cannot be transplanted, the milkweeds within the project site will be surveyed for monarch eggs, caterpillars, and adults. If no monarch eggs, caterpillars, or adults are observed, then the milkweed will be removed prior to construction.
- This location will use gas and oil takeaway pipelines.
- There will be no permanent lighting.
- Permanent production facilities will be powered by utility power.
- A full-wrap sound wall will be installed and will remain in place through the duration of development operations.
- Light sources used during development activities will be placed inward and downward, within the sound wall wrap.
- The Operator has committed to conducting raptor nest, migratory bird nest, and swift fox den surveys prior to construction (outlined in Table 4). If active nests or dens are found within species-specific buffer zones, CPW will be consulted and appropriate protection BMPs will be implemented.

Table 4. Extraction has committed to the following wildlife surveys if construction begins during the wildlife survey timing window.

<u>Species</u>	<u>Survey Area</u>	<u>Survey Timing Window</u>
Raptor Nests	0.5-Mile Survey Buffer	February 1 – July 31
Burrowing Owl Nests	0.25-Mile Survey Buffer	March 15 – October 31
Migratory Bird Nests	Within the Project Site	April 1 – August 31
Swift Fox Dens	Within the Project Site	Year-round

### 13. Literature Cited

- Colorado Parks and Wildlife (CPW). 2020. Recommended buffer zones and seasonal restrictions for Colorado raptors.
- CPW. 2025. Threatened and endangered list. Available at:  
<https://cpw.state.co.us/learn/Pages/SOC-ThreatenedEndangeredList.aspx>
- Chu, J. R. and S. R. Jones. 2011. Butterflies of the Colorado Front Range. Boulder County Nature Association.
- Wright, A., C. L. Boyd, M. D. Bowers, and V. L. Scott. 2017. The bumble bees of Colorado: a pictorial identification and information guide.



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1  
S

Feature Number	Feature Classification	Distance and Direction from the max disturbance	Field Observations (within 2,000 feet of the max disturbance)
Feature #1	NW1 R5UBH Riverine/NHD Stream (Intermittent) Feature	1,134 feet east (downgradient)	Feature #1 was verified not to be present at the time of the field survey. It had no riparian vegetation, no water, no defined bed and bank, and no OHWM.
Feature #2	NW1 PUSaf Freshwater Pond/NHD Stream (Intermittent)/HWA Wetland Feature	1,076 feet (actual distance based on field wetland delineation surveys = 1,702 feet) southeast (upgradient)	Feature #2 was field verified to contain a wetland. One wetland was field delineated within the feature. The areas up and down drainage of the delineated wetland did not contain the appropriate riparian vegetation, water, soils, defined bed and bank, or OHWM to be classified as a wetland.

**Project Development**

- Max Disturbance (Oil and Gas Location)
- Working Pad Surface (WPS)
- Proposed Access
- 500-Foot Max Disturbance Buffer
- 2,000-Foot Max Disturbance Buffer

**USFWS National Wetlands Inventory**

- Freshwater Pond
- Riverine

**USGS National Hydrography Dataset**

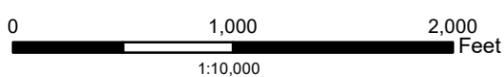
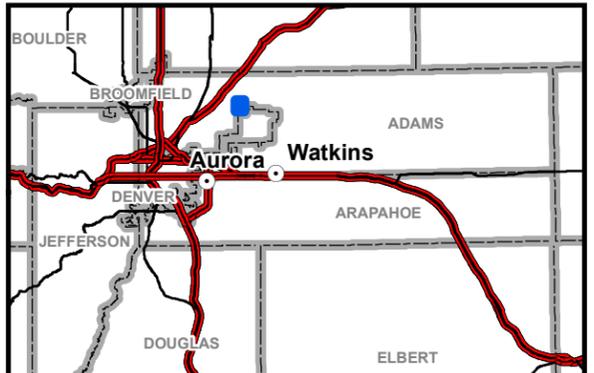
- Stream/River

**HWA Wetland Survey Data**

- Wetland - Field Delineated

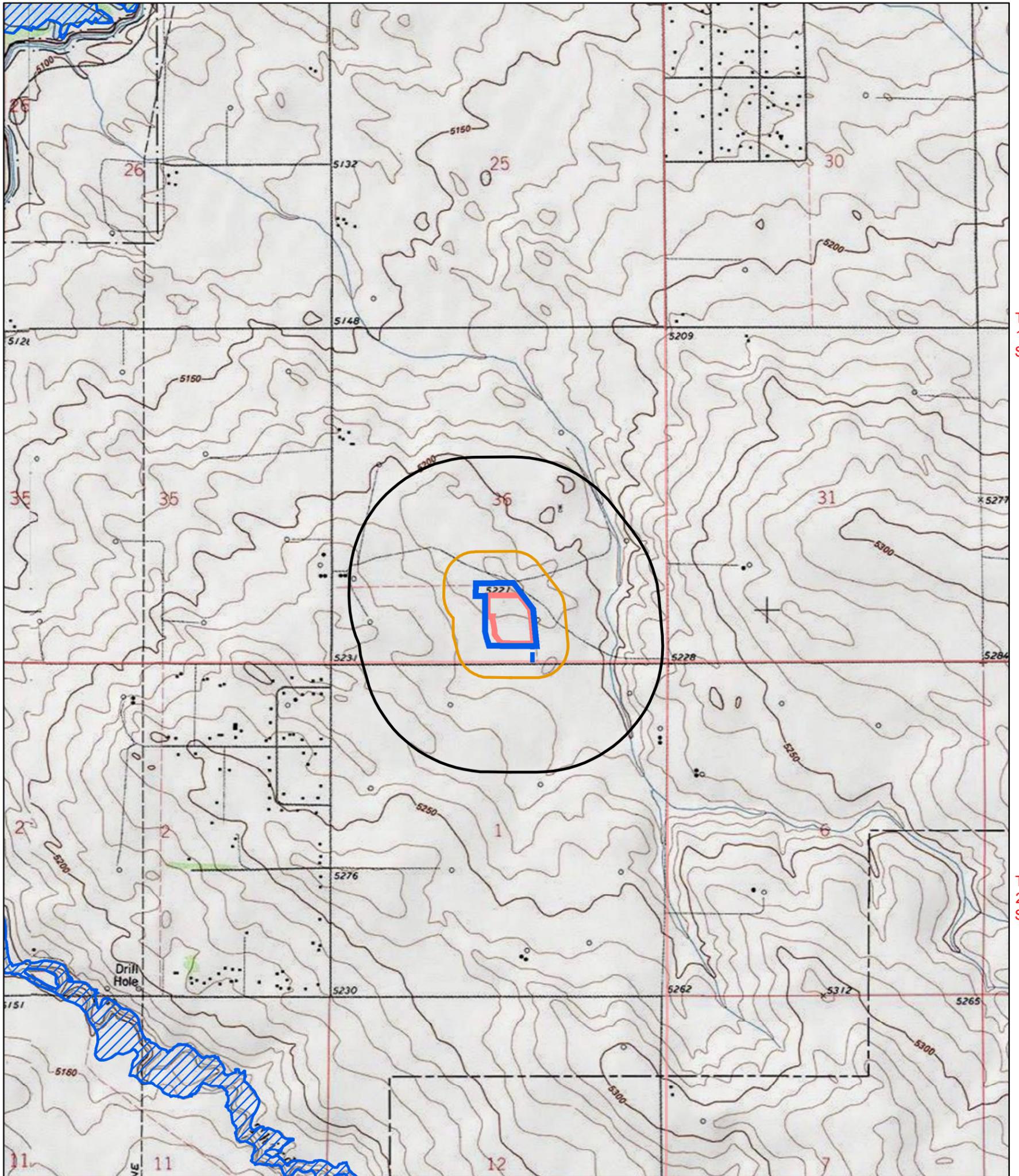
**Riparian Habitat Assessment (HWA)**

- Photo Point



HWA Wildlife Consulting, LLC  
 2308 South 8th St. - Laramie, Wyoming - 82070  
 www.hwa-wildlife.com  
 November 18, 2025

Figure 1. Wetland and riparian data (USFWS NWI, USGS NHD, and HWA wetland survey data) around Extraction's proposed Eagle Pad.



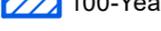
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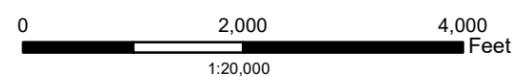
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**Project Development**

-  Max Disturbance (Oil and Gas Location)
-  Working Pad Surface (WPS)
-  Proposed Access Road
-  500-Foot Max Disturbance Buffer
-  2,000-Foot Max Disturbance Buffer

**FEMA Floodplain**

-  100-Year



HWA Wildlife Consulting, LLC  
 2308 South 8th St. - Laramie, Wyoming - 82070  
 www.hwa-wildlife.com  
 July 7, 2025

Figure 2. FEMA floodplain data around Extraction's proposed Eagle Pad.

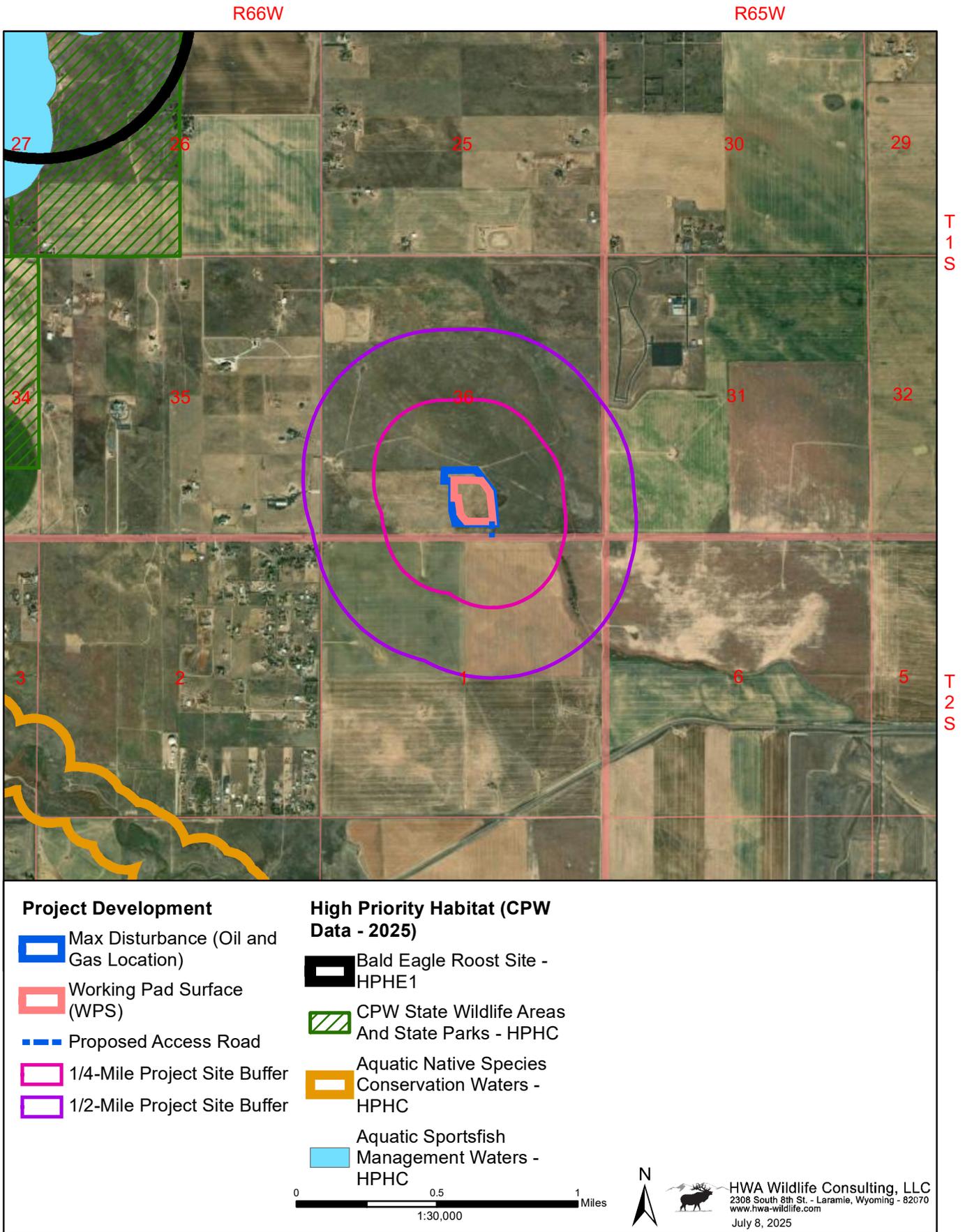


Figure 3. High Priority Habitat around Extraction's proposed Eagle Pad.

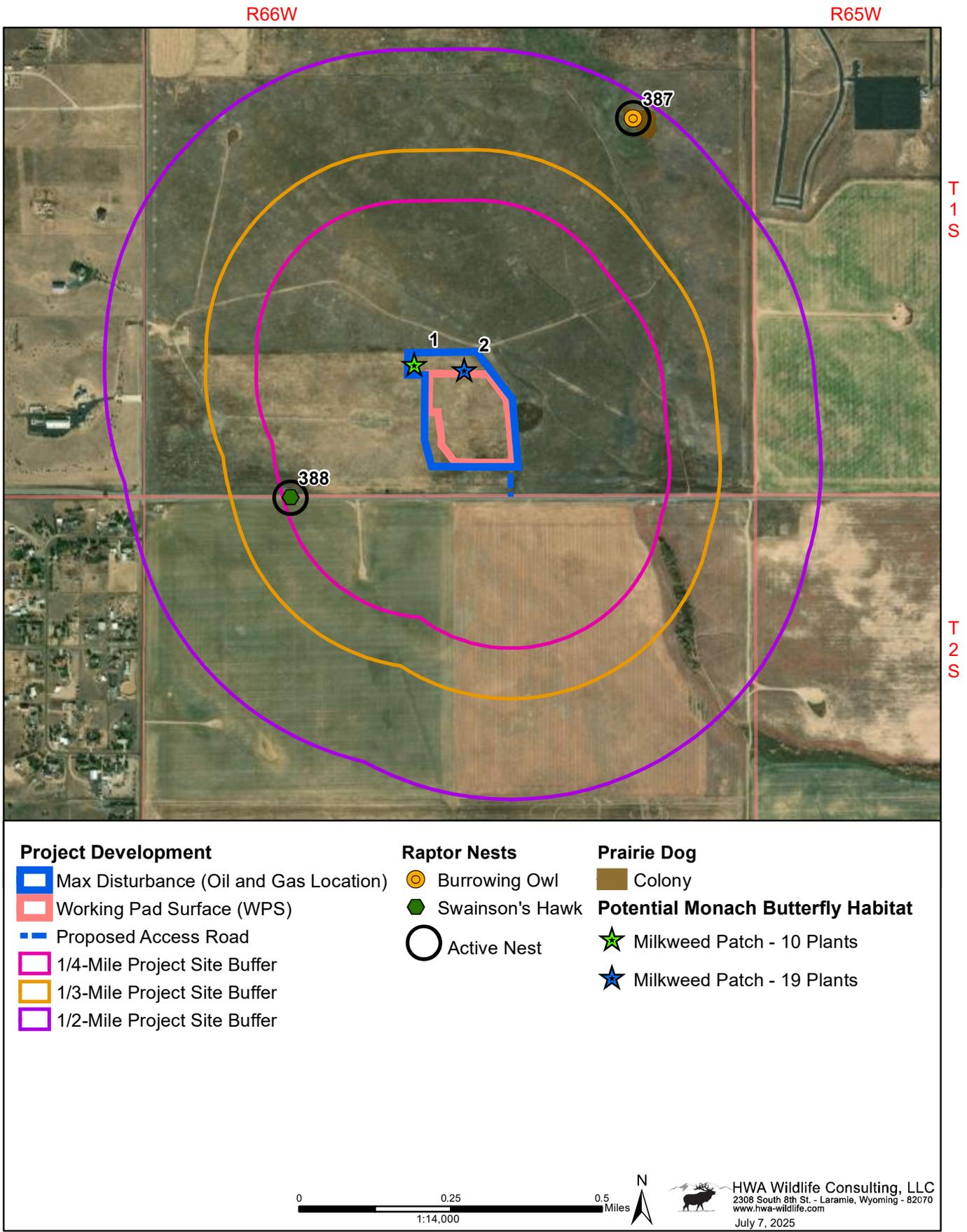


Figure 4. Wildlife habitat around Extraction's proposed Eagle Pad during 2025.

## **Appendix A**

**Photos of the proposed Eagle Pad and associated habitat**



**Photo 1. Riparian Feature #1.**  
Looking south.  
Upland habitat.



**Photo 2. Riparian Feature #1.**  
Looking south.  
Upland habitat.



Photo 3. **Riparian Feature #1.**  
Looking north.  
Upland habitat.



Photo 4. **Riparian Feature #1.**  
Looking south.  
Primarily upland habitat.



Photo 5. **Riparian Feature #2.**  
Looking south.



Photo 6. **Riparian Feature #2.**  
Looking southwest.



Photo 7. **Riparian Feature #2.**  
Looking northwest.



Photo 8. **Riparian Feature #2.**  
Wetland within Riparain Feature #2, that was delineated by HWA. Looking west.



**Photo 9. Riparian Feature #2. Looking south.**



**Photo 10. Looking north from the center of the pad.**



Photo 11. Looking east from the center of the pad.



Photo 12. Looking south from the center of the pad.



Photo 13. Looking west from the center of the pad.



Photo 14. Swainson's hawk nest #388. Looking west.



Photo 15.  
Burrowing owl nest  
#387.



Photo 16.  
Milkweed patch  
#1.



Photo 17.  
Milkweed patch  
#2.

## **Appendix B**

### **Cultural Resources Report**



July 11, 2025

Logan McConnell  
HWA Wildlife Consulting, LLC  
2308 S 8<sup>th</sup> St.  
Laramie, WY 82070

**Subject: Class I & Class III Cultural Resources Survey for the *Eagle Well Pad* Project, Adams County, Colorado**

Dear Mr. McConnell,

Please find attached documentation in fulfillment of a Class I & Class III Cultural Resources study for the Eagle Well Pad Project, located in Adams County, Colorado (Project). Per Colorado Office of Archaeology and Historic Preservation (OAHP) Guidelines, a Limited-Results Cultural Resource Survey Form was completed for the survey, along with supporting documentation including Maps (Appendix A), photo plates of survey conditions (Appendix B), and a formal file search completed by the OAHP (Appendix C).

The proposed Project includes the construction of a well pad and access road. The *Project Area*, spanning 27.7 acres, includes all areas within the parcel that may experience ground-disturbing activities, plus a 100-ft buffer.

As currently defined, the Project is not considered a federal undertaking as defined by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CRF 800). However, a Class I and Class III cultural resources survey was conducted as part of a due diligence study in order to determine if the Project Area contained intact archaeological resources or historic properties that may be eligible for listing to the National Register of Historic Places (National Register) in relation to the Adams County Development Standards and Regulations (4-14-02-06).

In June 2025, Area M completed a comprehensive Cultural Resources study for the proposed Project. The Cultural Resources study included a Class I literature review and synthesis and a Class III intensive archaeological survey of the Project Area within the property boundaries (27.7 acres) to identify any archaeological sites that are potentially eligible for inclusion in the National Register.

Project	County	TRS	Estimated Area
Eagle Well Pad	Adams	T1S R66W S36	27.7 ac

The Class I literature review did not identify any previously documented cultural resources or surveys within the Project Area. The Class III intensive archaeological survey did not identify any cultural resources.



Based on these findings, Area M does not recommend any additional cultural investigations prior to, or during, the development of the parcel subject to this survey. Therefore, Area M recommends that the Project may proceed as planned with no negative impact to cultural resources. If the Project Area is altered, a new report must be rendered.

If you have any questions, or comments, regarding this letter or report, please feel free to contact me.

Sincerely,

**Area M Consulting, LLC**

A handwritten signature in black ink, appearing to read "G. Knudsen", written over a horizontal line.

**Garrett L. Knudsen**  
*President and Principal Investigator*

**AREA M**

651.802.8323

[gknudsen@areamconsulting.com](mailto:gknudsen@areamconsulting.com)

**CLASS I & III CULTURAL RESOURCE STUDY**  
***Eagle Pad Project***  
*Adams County, Colorado*

**Prepared for:**

*HWA Wildlife Consulting, LLC*  
*2308 S 8<sup>th</sup> St.*  
*Laramie, WY 82070*

**Principal Investigator**  
Garrett L, Knudsen

**Report Author**  
Joseph K. Pnewski

*Area M Consulting, LLC*  
*Environmental Consultants*  
*7302 Claredon Drive*  
*Edina, MN 55439*  
[www.aremconsulting.com](http://www.aremconsulting.com)

**AREAM**

*July 2025*

**LIMITED-RESULTS CULTURAL RESOURCE SURVEY FORM**

(Page 1 of 3)

This form (#1420) is for small scale limited results projects - block surveys less than 160 acres with linear surveys under four miles. Additionally, there should be no sites and a maximum of four Isolated Finds. This form must be typed.

---

**I. IDENTIFICATION**

1. Report Title (include County): Class I & Class III Cultural Resources Survey for the Eagle Well Pad Project. Adams County, Colorado
2. Date of Field Work: 6/27/25
3. Form completed by: Joseph Pnewski Date: 7/10/25
4. Survey Organization/Agency: Area M Consulting, LLC  
Principal Investigator: Garrett L. Knudsen  
Principal Investigator's Signature:   
Other Crew: Jonathan Knudsen  
Address: 7302 Claredon Drive Edina, MN 55439
5. Lead Agency / Land Owner: Private Landowner  
Contact: NA  
Address: NA
6. Client: HWA Wildlife Consulting, LLC
7. Permit Type and Number: NA
8. Report / Contract Number: NA
9. Comments: Private Development on Private Land. Survey Request from Adams County for due to location in NRCO District

---

**II. DESCRIPTION OF UNDERTAKING / PROJECT**

10. Type of Undertaking: Class I & Class III Cultural Resources Survey
11. Size of Undertaking (acres): 27.7 Size of Project (if different) \_\_\_\_\_
12. Nature of the Anticipated Disturbance: Well Pad and Access Road Construction
13. Comments: 100 foot buffer surrounding development area

III. PROJECT LOCATION

Please attach a photocopy of USGS Quad. clearly showing the project location. The Quad. should be clearly labeled with the Prime Meridian, Township, Range, Section(s), Quad. map name, size, and date. Please do not reduce or enlarge the photocopy.

14. Description: Located in a former agricultural field and pasture land to the north of E 120th Ave in Commerce City.

15. Legal Location: Quad. Map: Mile High Lakes, CO Date(s): 1966 (eds. 1994)

Principal Meridian: 6th  NM  Ute

NOTE: Only generalized subdivision ("quarter quarters") within each section is needed

Township: 1S Range: 66W Sec.: 36 1/4s SW SW \_\_\_\_\_ ;

Township: \_\_\_\_\_ Range: \_\_\_\_\_ Sec.: \_\_\_\_\_ 1/4s \_\_\_\_\_ ;

Township: \_\_\_\_\_ Range: \_\_\_\_\_ Sec.: \_\_\_\_\_ 1/4s \_\_\_\_\_ ;

If section(s) is irregular, explain alignment method: \_\_\_\_\_

16. Total number of acres surveyed: 34.64

17. Comments: \_\_\_\_\_

IV. ENVIRONMENT

18. General Topographic Setting: Flat Upland

Current Land Use: Fallow Agricultural Field and Pastureland

19. Flora: Weeds - common sunflower, field bindweed, nodding thistle, cheatgrass, russian thistle, mullein

20. Soils/Geology: Sandy Loams and loamy sands

21. Ground Visibility: Variable - 0-70% surface visibility

22. Comments: \_\_\_\_\_

V. LITERATURE REVIEW

23. Location of File Search: SHPO File Search No. 2709 Date: 6/27/25

24. Previous Survey Activity - In the project area: None

In the general region: NA

III. LITERATURE REVIEW (continued)

25. Known Cultural Resources - In the project area: None

In the general region (summarize): One site is present within a 1-mile radius:  
Portion of E 120th Avenue - documented as a historic road.

26. Expected Results: Relatively low archaeological potential. Survey of area is anticipated to be negative for cultural resources.

VI. STATEMENT OF OBJECTIVES

27. The purpose of the Class I & Class III archaeological survey was to determine whether the Project Area contains intact archaeological resources that may be eligible for listing in the National Register.

VII. FIELD METHODS

28. Definitions: Site None Identified

IF None identified

29. Describe Survey Method: Pedestrian Survey of entire Project area at 15 m intervals

VIII. RESULTS

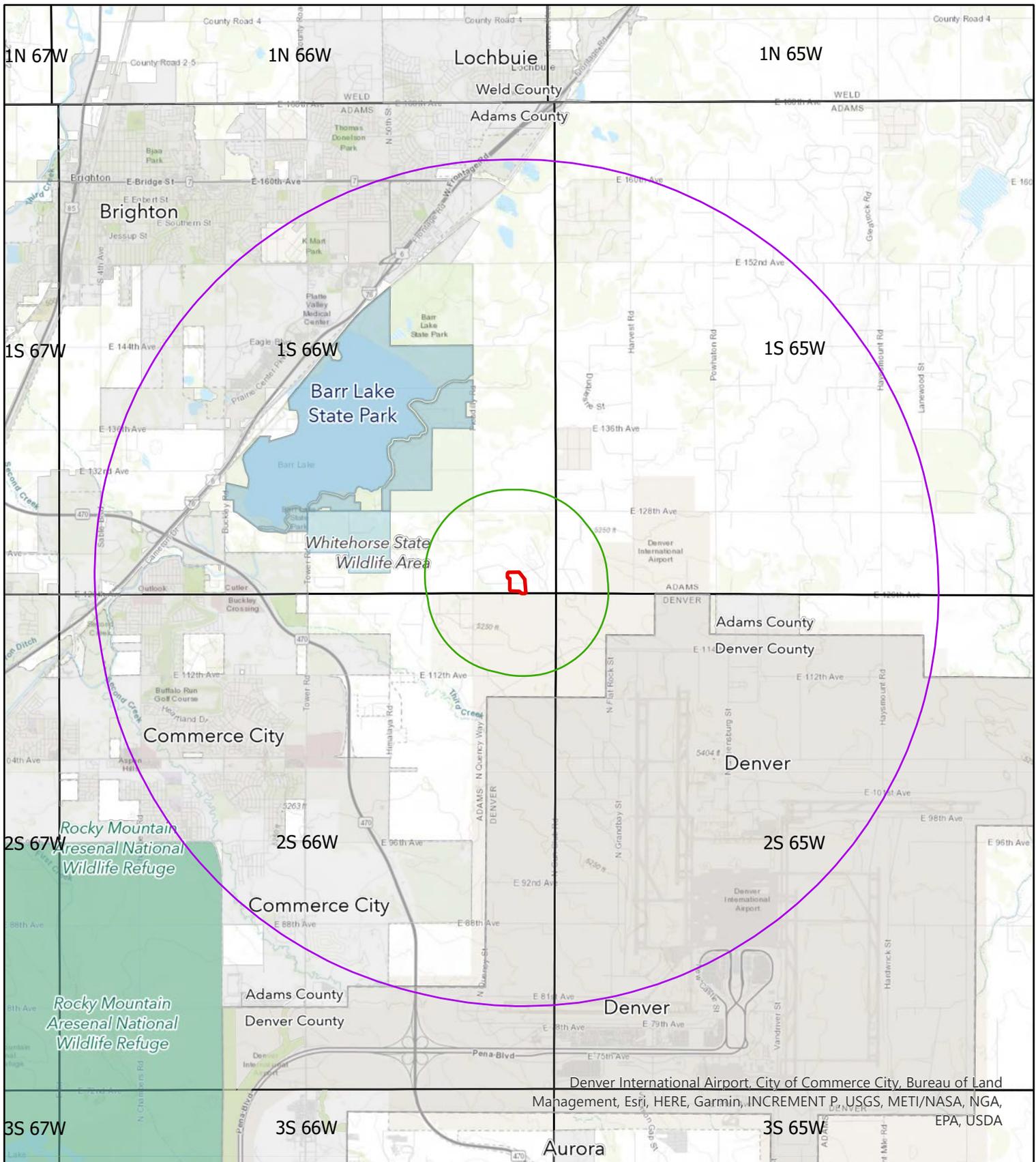
30. List IFs if applicable. Indicate IF locations on the map completed for Part III.

- A. Smithsonian Number: \_\_\_\_\_ Description: \_\_\_\_\_
- B. Smithsonian Number: \_\_\_\_\_ Description: \_\_\_\_\_
- C. Smithsonian Number: \_\_\_\_\_ Description: \_\_\_\_\_
- D. Smithsonian Number: \_\_\_\_\_ Description: \_\_\_\_\_

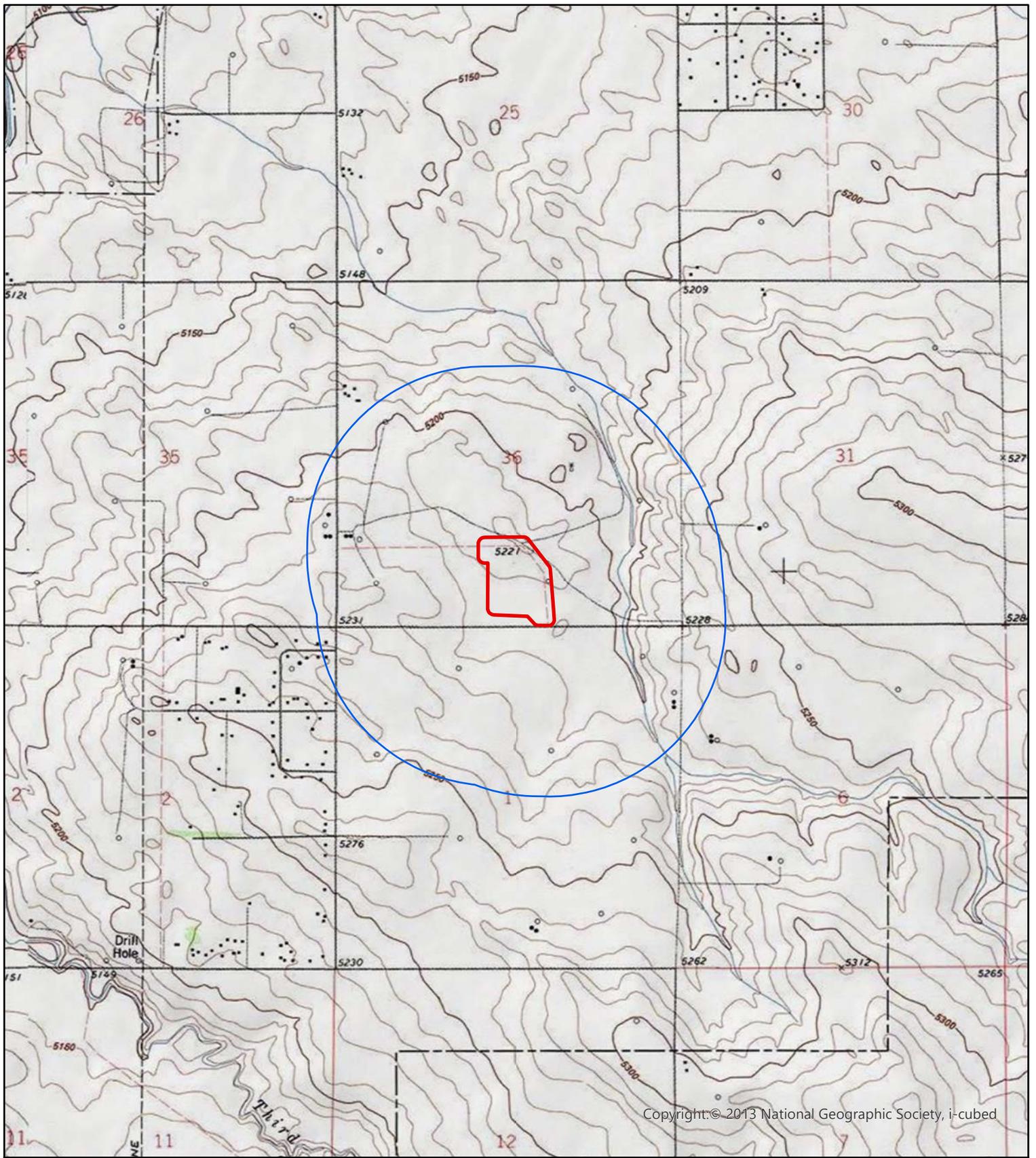
31. Using your professional knowledge of the region, why are there none or very limited cultural remains in the project area? Is there subsurface potential?

The Project Area does not contain any high or significant topography and although a small intermittent drainage is present, the Project Area is over 500 feet from significant water sources resulting in relatively low archaeological potential. Further, the Project Area appears to previously been cultivated suggesting that subsurface potential is low due to an agriculturally disturbed former plowzone. Based on these findings, Area M does not recommend any additional cultural investigations prior to, or during, the development of the parcel subject to this survey. Therefore, Area M recommends that the Project may proceed as planned with no negative impact to cultural resources. If the Project Area is altered, a new report must be rendered.

**Appendix A:**  
**Overview Maps**



<h3>Eagle Pad</h3> <p>Adams County, CO          S36 R1S:R66W          27.7 Acres          39.915842 Lat          -104.723024 Long</p>		<p>★ Project Location</p> <p>▭ Project Site</p> <p>○ 1-Mile Buffer</p>	<p>○ 5-Mile Buffer</p> <p>▭ Township Line</p>	<p>Map 1. Location Map</p> <p>Sources: Esri, TomTom, Garmin, Esri, CGIAR, USGS, EPA, USDA</p>	<p><b>AREAM</b></p>
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**Eagle Pad**

**Cultural Resources Map - 1:24,000 Topographic**

Adams County, CO  
 6 Princ. Meridian  
 T1S R66W S36

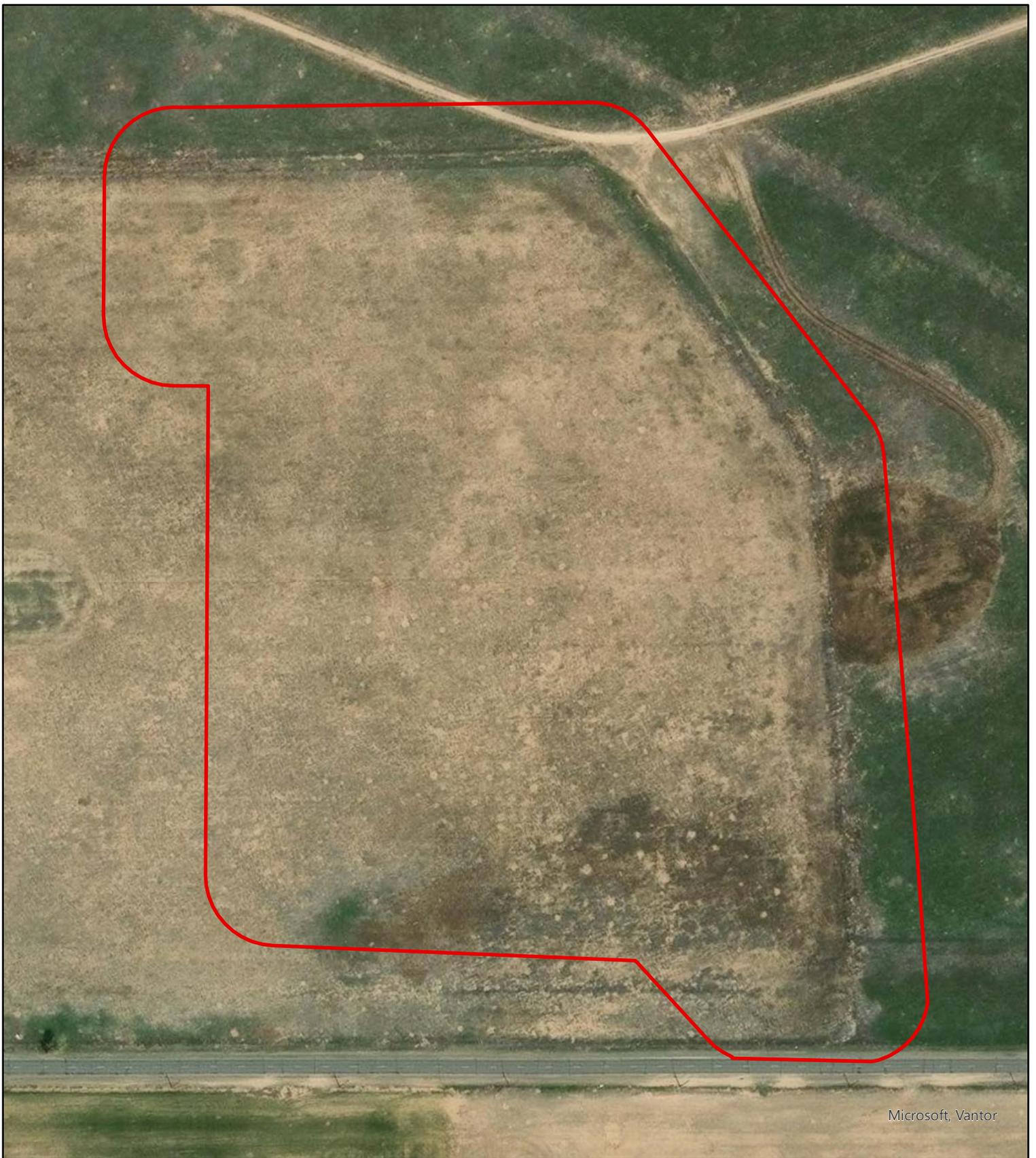
Quad: Mile High Lakes, Co 7.5"  
 Year: 1966 (eds. 1994)

- Project Site
- 0.5-Mile Buffer



**AREAM**





Microsoft, Vantor

### Eagle Pad

### Cultural Resources Map - Aerial

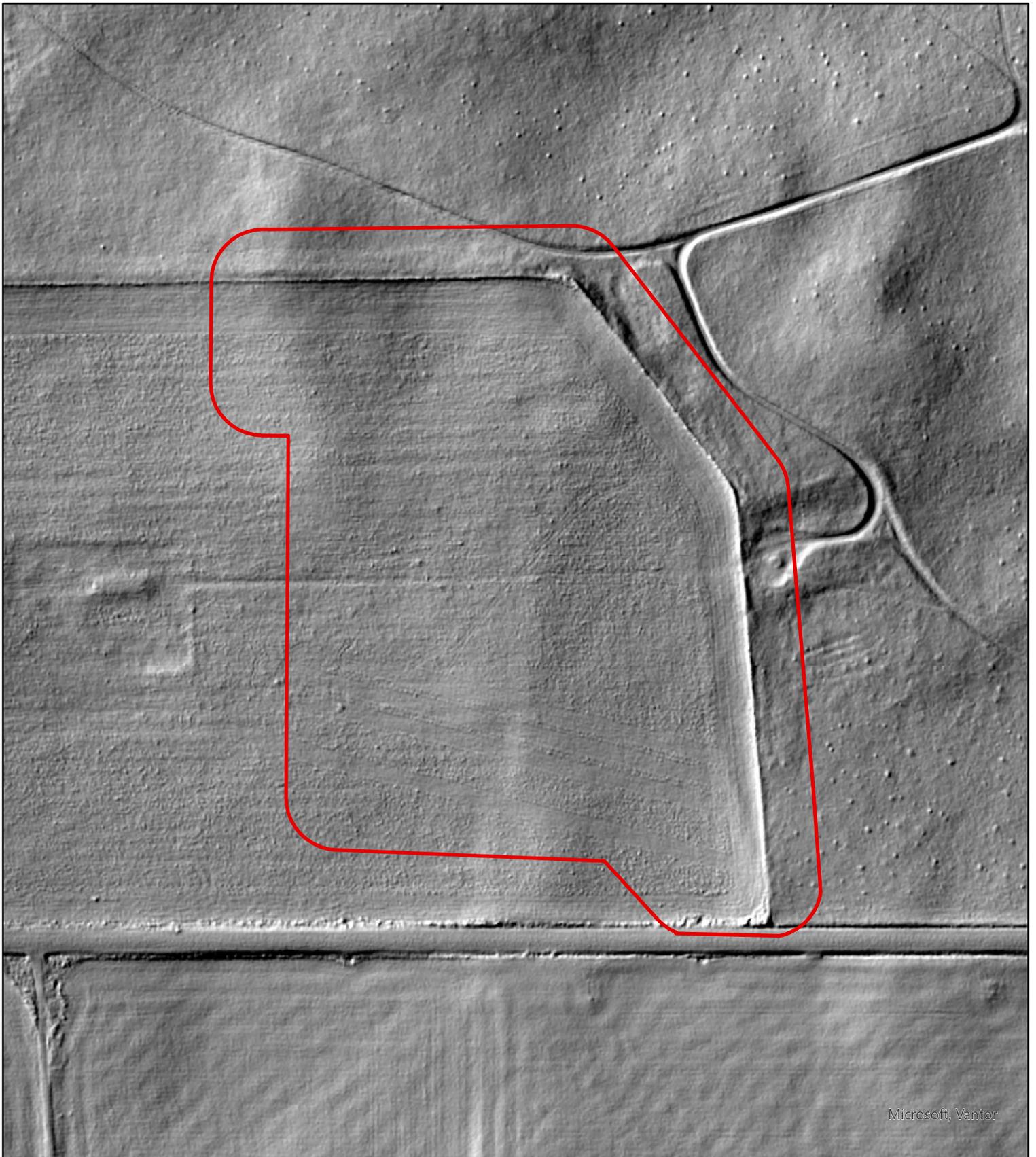
Adams County, CO

 Project Site



**AREA**M

0 55 110 220 Feet  
1:2,200



Microsoft, Vantor

### Eagle Pad

### Cultural Resources Map - LIDAR

Adams County, CO

 Project Site



**AREAM**

0 75 150 300 Feet  
1:3,000

**Appendix B:**

**Archaeological Survey Photo Figures**



**Figure 1. Survey Area Overview, View to the Southwest**



**Figure 2. Survey Area Overview, View to the North**



**Figure 3. Survey Area Overview, View to the West**



**Figure 4. Representative Surface Visibility - Detail**



**Figure 5. Representative Surface Visibility - Detail**

**Appendix C:**

**Colorado Office of Archaeology and Historic Preservation Official File Search**



# History Colorado

Garrett Knudsen  
Area M Consulting, LLC  
7302 Claredon Drive, Edina, Minnesota, 55439

June 27, 2025

Re: Eagle Well Pad Project  
File Search No. 27059

At your request, the Office of Archaeology and Historic Preservation has conducted a search of the Colorado Inventory of Cultural Resources based on your specified search criteria (the area shown in the provided kmz file), located in the following areas:

PM	T	R	S
6th	1S	66W	36

0 sites and 0 surveys were located in the search area(s).

If any site, district, building, structure, object, or survey area was identified within the search area, a spreadsheet of detailed information\* accompanies this letter. Our records may not represent all cultural resources in Colorado, nor can they be considered comprehensive, as most of the state has not been surveyed for cultural resources. There is the possibility that as yet unidentified cultural resources exist within the proposed impact area.

This letter is not considered formal consultation under Section 106 of the National Historic Preservation Act (36 CFR 800) or the Colorado Register of Historic Places (CRS 24-80.1). In the event that there is federal or state agency involvement, please note that it is the responsibility of the agencies to meet the requirements of these regulations.

We look forward to consulting with you regarding the effect of the proposed project on significant cultural resources in accordance with the Advisory Council on Historic Preservation regulations titled "Protection of Historic Properties" or the Colorado Register of Historic Places, as applicable (<http://www.historycolorado.org/consultation-guidance>).

If you have any questions, please contact the Office of Archaeology and Historic Preservation at (303) 866-3392. Thank you for your interest in Colorado's cultural heritage.

Dawn DiPrince  
State Historic Preservation Officer

\*Information regarding significant archaeological resources is excluded from the Freedom of Information Act. As such, legal locations of these resources must not be included in documents for public distribution.



# **Adams County Oil and Gas Facility – Oil and Gas Facility (OGF) Written Narrative**

**Eagle Pad**  
**SESW & SWSE Section 36**  
**Township 1 South Range 66 West**

**Prepared By:** Extraction Oil and Gas, Inc.  
December 10, 2025

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## Introduction

Extraction Oil and Gas, Inc. (Extraction) is submitting an application for an Oil and Gas Facility (OGF) Permit for the proposed Eagle Pad oil and gas location. The application seeks to permit the drilling and completing of up to nineteen (19) horizontal wells and the installation of related surface production equipment on one well pad, that will be serviced by new one access road in Adams County, Colorado. The proposed location is off E 120<sup>th</sup> Ave., approximately halfway between Picadilly and Gun Glub Roads.

These wells and associated production facilities are being proposed on a single pad in the SESW & SWSE Section 36-1S-66W, parcel number 015690000077, owned by the Colorado State Land Board, and is zoned A-3. The horizontal drilling technique eliminates the need to develop additional well pads, thus reducing the overall footprint needed on the surface if otherwise developed with vertical and or directional wells. This well pad and the subsequent 19 wells will develop and produce approximately 3,160 mineral acres across three drilling and spacing units (DSUs) in the Niobrara formation of the Denver-Julesburg (DJ) Basin.

The OGF, pursuant to Section 4-11-02-03-03 of the Adams County Development Standards and Regulations, will include a full Written Narrative of the site preparation, drilling, completion, production, maintenance and final abandonment processes. Additionally, the following plans and documents are included with the OGF permit application: conceptual review summary, neighborhood meeting summary, operations plan which includes the alternative site analysis, emergency preparedness and response plan, transportation plan, mitigation plans (i.e. – noise, light, odor, dust), visual aesthetics plan, community outreach plan, cumulative impacts plan, water and wildlife plans, engineering documents and surface owner documentation. A number of these plans are substantially equivalent to those prepared for Colorado Energy and Carbon Management Commission (“ECMC”) and have been submitted with this application with little to no modifications. Additionally, Extraction will seek approval for an Air Quality Monitoring Plan with Adams County staff and Colorado Department of Health & Environment (“CDPHE”) prior to conducting operations.

## Operating plan

The Operating Plan is divided into the site preparation, drilling phase, protection of fresh water, completion phase, production phase, and the abandonment and reclamation of wells and the site. All operations will be consistent with Adams County code and Colorado Energy and Carbon Management Commission (“ECMC”) rules and regulations. Extraction’s tentative schedule for development is detailed below but is preliminary and likely subject to change.

Timing	Phase 1	Phase 2
Construction	4Q 2026 (~40 days)	
Drill	1Q 2027 (~68 days)	3Q 2028 (~37 days)
Comp	3Q 2027 (~55 days)	4Q 2028 (~25 days)
TIL	4Q 2027	1Q 2029

### **Site Preparation (40 days+)**

The proposed pad will be approximately 17.03 acres in size during construction and drilling and completions operations. Site preparation will include removal of current grass vegetation and stockpiling of topsoil, earthwork operations to grade the pad level for drilling operations, platting the pad with road base material, and construction of a new access road. It is not anticipated that soil fill material will be necessary to construct the location. Additionally, storm water controls and mitigation BMPs will be installed during construction of the pad.

### **Drilling Phase**

A drilling prognosis will be prepared prior to drilling which details the landing points, formation tops, total depths, mud design, and wellbore logging and casing programs for each well.

The drilling phase typically proceeds as follows:

- A conductor rig is moved onto the location to set conductor casing for each well; typically, conductor casing takes one day for every two wells to set. Conductor casing is set at depths of 75-200' and hold back the loose gravels and soil types from falling into the hole. The conductor casing is then cemented to the surface.
- After the conductor casing is set, a surface, or "spudder," rig or drilling rig if the surface rig is unavailable, is moved onto location to set surface casing. It typically takes one day per well to set surface casing.
- For this site, surface casing will be set at least 50 feet below the deepest known aquifer in the area. Surface casing is then run and cemented from this depth to the surface. Typical surface casing designs in this area of the basin are between 1,500' - 2,000' deep.
- Next, the drilling rig is moved onsite and rigged up. Mobilization of the drilling rig typically takes 2 to 4 days and a 24-hour drilling schedule is utilized. Under normal conditions, drilling is anticipated to take approximately 5 to 6 days per well.
- On multi-well pads, the wellheads are planned at 20 feet on center. The rig is set up on the first well to be drilled, then skids or walks to each subsequent well.
- Once the total depth is reached for a well, the drill string is removed from the hole.
- Prior to running production casing, at least one well per pad has open-hole logs run to meet ECMC requirements if an offset well's logs are not available or are insufficient. Logs are run to determine sufficient cement coverage and the stratigraphy of the formation. The objective target formations for this project are mapped and estimated to be between 7000-7600' deep.
- Production casing is then run, set in the hole, and cemented in place to provide integrity

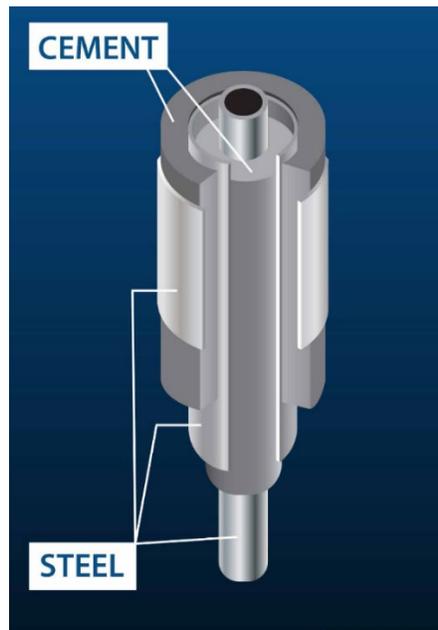
and isolate the deeper hydrocarbon bearing formations.

- Next, the blow out preventer is removed, the well is properly capped and secured and then the rig skids to the next well on the pad.
- Once all wells on site are drilled, cased, cemented and the well heads capped and secured, the drilling rig is demobilized and moved offsite.

### **Protection of Fresh Water**

The ECMC sets forth specific requirements for casing setting depths necessary to protect ground water sources, and all drilling permits ensure that those setting depths have been approved. The Fox Hills sands of the late Cretaceous age are important freshwater aquifers in the western portion of the DJ Basin. In addition, there are numerous discontinuous sands of secondary importance that lie directly below the Fox Hills formation. These groundwater sands are found from the surface to a depth of approximately five hundred (500) feet in the north and eastern portions of the basin and from the surface to a depth of approximately two thousand (2,000) feet or more in the south and western parts of the basin.

In order to ensure the protection of all freshwater resources, 9-5/8" steel surface casing is set to a depth at least fifty (50) feet below the base of the deepest known Fox Hills sands or water well, whichever is deeper, as required by the ECMC and is cemented from the bottom of the pipe up to the surface. The ECMC reviews all drilling permit applications for adequate surface casing setting depths and cementing programs based on subsurface ground water maps prepared by the State Water Engineer, offset well data and all available water well data.



Additionally, the nearest Public Water System well(s) utilizing Groundwater Under Direct Influence of Surface Water or Type III Aquifer sources are over two miles from this OGF.

### **Completion Phase**

Completion operations commence once the production casing cement has had sufficient time to cure. Typically, cement will cure to maximum strength within 72 hours. The quality is verified by a cement bond log (CBL).

Typically, the completion phase proceeds as follows:

- The well is perforated based on an open-hole log analysis. Perforation occurs at a specified intervals and pierces the steel casing, the cement and the formation.
- The well is then fractured hydraulically creating hairline cracks in the formation to produce tiny avenues that allow the hydrocarbons to flow from the formation. Sand is used as a propping agent to preserve the hairline cracks opened in the formation. Typically, six to nine fracturing operations or stages can be completed per day per well, at a rate of up to four wells simultaneously, including time to rig up, pump, and rig down. This process requires multiple, high-pressure, truck-mounted pumps and the associated portable equipment. Once the process is complete, all associated equipment is moved offsite.
- If necessary, tubing is run inside the casing to increase production efficiency. This process typically takes 1 to 3 days.
- The well is then flowed back for approximately 60 days. The length of this process is dependent on the number of wells and the length of the laterals. The flow back water will be trucked offsite to the nearest disposal well with adequate capacity or potentially be recycled and used for stimulations of other wells on this pad.

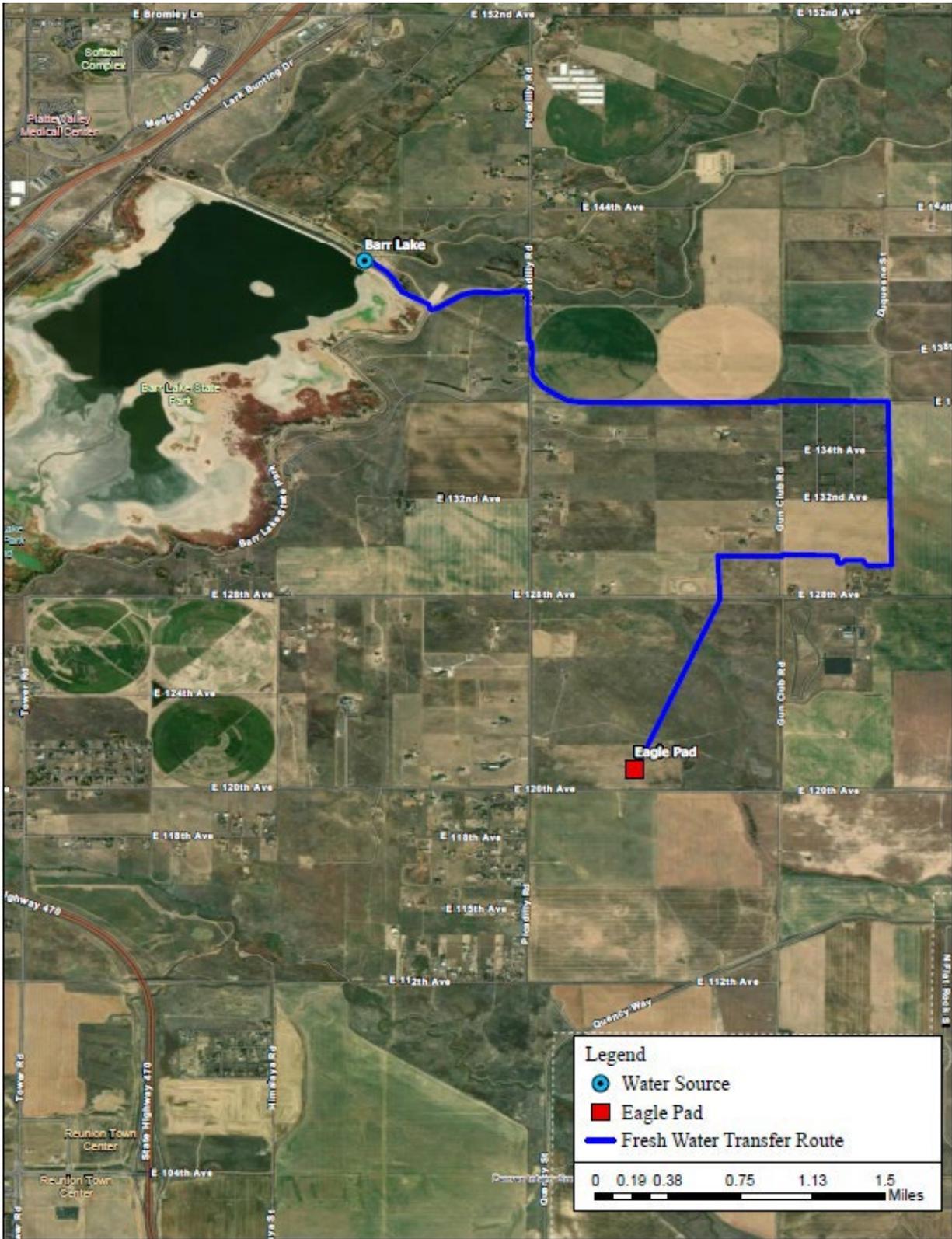
### **Fresh Water Source**

The primary sources will be FRICO and Rangeview Metropolitan District. Extraction will use a combination of surface water and ground water for its drilling and completion operations.

Farmers Reservoir and Irrigation Company, Rangeview Metropolitan District and Extraction have an operating plan for Delivery of Non-Potable Water from Barr Lake and Lowry Storage, respectively. Water from the sources will be transferred via layflat to location. All water coming from these sources is fresh water. The source point for Barr Lake is located in Section 23, T1S, R66W at 39.95392778, -104.74666667, and the source point from the Lowry Storage is in Section 8, T4S, R65W at 39.63611111, -104.58338889.

Extraction estimates that the Eagle Pad location will consume approximately 8,437,500 bbls of water for completions.

The map on the following page shows the planned layflat route which will be used to transport water for completions from Barr Lake.



### **Recycled Produced Water Source and Operations**

ECMC Rules adopted in March of 2025 require operators across the state to increase the usage of recycled or reused produced water and decrease the percentage of fresh water utilized in completions operations. As an alternative to using 100% fresh water for completions, Extraction may recycle produced water on the Eagle pad to use for well completions on this location. Extraction cannot commit to recycling at Eagle or utilizing recycled water, but rather seeking authorization under this OGF for the operations should it be logistically feasible. Any water treated on this pad would be used for Eagle wells only therefore the recycled produced water operations here would not be used to support well completions elsewhere.

If recycling produced water at this location is deemed feasible Extraction would attempt to treat and utilize approximately 5% recycled produced water for well completions, therefore reducing the amount of freshwater used. This could result in approximately 422,000bbl less water from the FRICO source which is drawn from Barr Lake. It is anticipated that raw produced water would be trucked from other Extraction (or sister companies') oil and gas locations in the area to Eagle. Approximately 50 trucks per day would be entering and leaving the location in this scenario. This traffic is accounted for in the traffic memo. Alternatively, water may be sourced from Eagle wells flowing back / producing for use on other Eagle wells. There could be a scenario where the source of produced water is a combination of offsite and onsite water.

#### **Process:**

In either scenario of the source of the produced water, water would be offloaded, minimally treated, blended with fresh water then used for well stimulations. The produced water will be added into the closed top 500bbl influent tanks and then to the recycling unit where it will be treated chemically. A combination of the following will be utilized depending on testing results of influent water chemistry: chlorine dioxide (ClO<sub>2</sub>), sodium hypochlorite (NaClO), tributyl tetradecyl phosphonium chloride (TTPC), flocculant. The water will be then filtered, if needed to remove solids, and afterwards enter the closed top 500bbl effluent tanks to allow residence time for treatment to take place. Water will then be blended with fresh water and pumped downhole for well stimulations. It is anticipated that the source of power used to move water between tanks would be two 25-kilowatt tier IV natural gas generators from the completions fleet. Recycling would occur for the duration of the completions phase of Eagle wells and operations would be conducted 24 hours a day, seven days a week until well stimulations cease.

**Equipment:**

All recycling equipment and truck offloading areas will be staged on liners to mitigate the possibility of any water coming in contact with the ground or leaving the site in case of an incidental release of water. All equipment will be within the limits of permitted disturbance as illustrated in the Recycled Produced Water Layout Drawing here within. The produced water would only be on this location during completions operations for Eagle wells with no storage longer than necessary for this pre-production stage. The following is the list of temporary equipment to be used for the recycling operations:

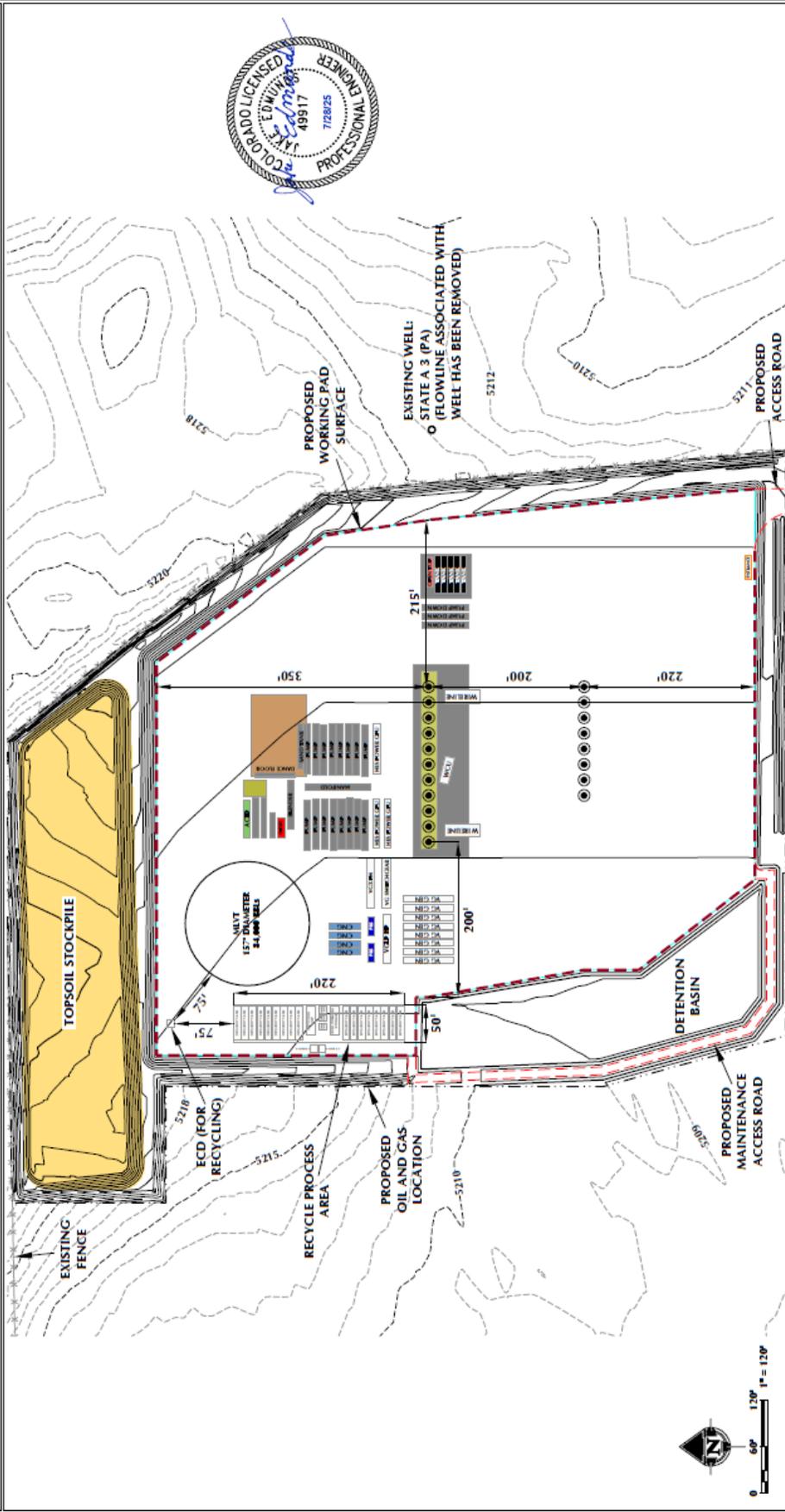
<b>Equipment</b>	<b>Description</b>	<b>Height (ft)</b>
11 Influent tanks (500 bbl tank)	Tank to hold raw produced water	10
11 Effluent tanks (500 bbl tank)	Tank to hold treated produced water for residence time prior to being blended with fresh water	10
Chemical tote	Used to hold chemicals to be used in the treatment process	4
Generators	Provide power to move water between tanks, inject chemicals and power equipment	7
Bulk chemical storage	Used to hold chemicals to be used in the treatment process	12
Recycling unit	Tank where chemicals are blended with raw produced water	10
Enclosed combustion device (ECD)	To be used only on an as-needed basis to incinerate natural gas if there is any associated with water in the tanks	28

**Recycled Produced Water Site Layout:**

The following page illustrates the details of the site plan for the recycling operations during the completions phase in relation to the entire location.

RECYCLED PRODUCED WATER LAYOUT DRAWING  
EAGLE PAD

SE1/4 SW1/4 & SW1/4 SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



EXISTING WELL:  
STATE 3 (PA)  
O (FLOWLINE ASSOCIATED WITH  
WELL HAS BEEN REMOVED)

**LEGEND**

- PROPOSED WELL
- EXISTING WELL
- PROPOSED OIL AND GAS LOCATION
- PROPOSED WORKING PAD SURFACE
- PROPOSED 1' CONTOUR
- CNG
- DIESEL
- DANCE FLOOR
- OPEN TOP
- FRAC BRICK
- EQUIPMENT - OTHER
- VC GEN
- ENTRANCE
- SOUND WALLS
- EXISTING FENCE
- PROPOSED ACCESS ROAD

**NOTE:** RECYCLED PRODUCED WATER LAYOUT IS APPROXIMATE AND SUBJECT TO FUTURE TO BE DETERMINE CIRCUMSTANCE.

**LOVELAND OFFICE**  
509 1/2 South Colorado Street  
Loveland, CO 80538  
Phone: 970-774-1411  
Fax: 970-774-1412

**STERLING OFFICE**  
1000 North 10th Street  
Sterling, CO 80666  
Phone: 970-678-0000

**609 CONSULTING, LLC**

**EAGLE PAD**  
RECYCLED PRODUCED WATER LAYOUT DRAWING

DATE: 7/28/25  
SHEET: 1 OF 1  
SURVEY DATE: 6/10/25  
DRAFTED BY: KMG



## Emissions:

Air emissions from water that has been trucked in are negligible, as this produced water is considered “dead”. The water has already gone through flashing, working and breathing at their respective production facilities before arriving at the Eagle location. “Dead” produced water refers to water that has already been separated from hydrocarbons (oil and gas) and no longer contains sufficient dissolved volatile compounds to produce measurable VOC emissions under normal storage and handling conditions. In other words, it is water that is no longer saturated with hydrocarbons and therefore does not release significant VOCs when transferred or stored.

The flashing process occurs when produced water or hydrocarbon liquids containing dissolved gases or light hydrocarbons are released from higher pressure (e.g., separators) to lower pressure (e.g., atmospheric storage tanks). This rapid pressure drop causes dissolved gases and light hydrocarbons to “flash” into the vapor phase, generating emissions. For produced water that has already been transferred from the separators into storage tanks, this flashing has already occurred and was controlled by the emission control devices (ECDs) installed at the production facility.

Additional emissions can occur from tank working losses—when liquids are added or removed—or from breathing losses caused by daily temperature fluctuations. These emissions are controlled by ECDs at the production facility prior to water transfer.

For reference, AP-42, Section 7.1 (Organic Liquid Storage Tanks) provides guidance on emissions from fixed-roof storage tanks.

Regardless of where the produced water is sourced, the temporary tanks (i.e. – influent tanks, effluent tanks, chemical storage and recycle unit) will be set up with an enclosed combustion device (ECD) to burn the small amounts of hydrocarbons in each influent load from either entrained VOC’s or crude oil from an upset condition, therefore making this a “closed-loop system”. Air emissions from the combustion of hydrocarbons at the ECD will meet the requirements of Regulation 7, notably achieving 95% control efficiency, preventing visual emissions, and incorporating an automatic igniter.

An oxidizer/recycling unit powered by natural gas generators will be used to treat the water chemically. Air emissions from the combustion of fuel gas in the natural gas generators are exempt from air permitting in the state of Colorado due to the generators being used in the pre-production phase and the manufacture’s site-rated horsepower being less than 50 HP. Air emissions from the bulk chemical storage containers are negligible due to Extraction storing the chemicals in stainless steel, ISO tanks with insulated walls. Chemicals will be stored in bulk storage containers on ISO trailers. Extraction will perform water chemistry testing to determine the combination of chemicals needed for treatment. The recycling unit is equipped with pressure bleed offs but would only be used in the event of an upset condition or shutdown to drain the unit but is tied to the water line and ECD during normal operations.

If there are any volatile air emissions from the mixing of produced water with the chemical mixture in the oxidizer/recycling unit, they will decompose quickly in the vapor space of the tanks due to the rapid half-life. The chemically treated water will be sent to closed top effluent storage tanks to allow for contact time. In this part of the process, if there are any volatile air emissions from the contact time of produced water with the chemical mixture in the effluent tanks, they will also decompose quickly due to the rapid half-life. The specific volatile compounds generated depend on the chemical mixture and

concentrations used for treatment. For example, when chlorine dioxide (ClO<sub>2</sub>) is mixed with water, it primarily degrades into chlorite and chlorate, with minimal formation of harmful byproducts such as THMs or HAAs. Although ClO<sub>2</sub> is considered hazardous at high concentrations, it is highly reactive and does not persist long in the environment. The closed-top (fixed-roof) tanks maintain a vapor headspace where volatile compounds can degrade naturally over time. If additional control is needed, the ECD is connected to the vapor space to capture and will treat any remaining volatile compounds.

The recycled produced water will be blended with fresh water from a temporary modular large volume tank (MLVT) prior to being used in well stimulations. No air emissions are associated with the blending of freshwater and recycled water.

Due to the minimal emissions associated with this operation, it is anticipated odors will be negligible as well and undetectable offsite.

**Benefits:**

A number of benefits may be realized with the recycling operation and use of recycled produced water at the Eagle pad. The primary goal is the reduction of fresh water used in completions operations and use water that would otherwise be sent to disposal. An ancillary benefit could be a reduction of truck miles in the region by hauling water to Eagle for recycling rather than disposal. Many trucks in the area may otherwise be hauling water a further distance from Adams and Arapahoe Counties to a disposal well in Weld County. A reduction of truck miles could also reduce associated traffic, emissions, dust and noise. If it is feasible to use water from other wells onsite, some of the traffic associated with hauling produced water from location could be eliminated.

**Production Phase**

New production facilities are constructed in accordance with ECMC rules and regulations and will be illustrated in the detailed site plan submitted with the OGF. The production facility consists of the following surface equipment listed on the following page.

Equipment Type	Description	Height (ft) - includes base where applicable	Permanent or Temporary
Nineteen horizontal wells	Wellhead above surface.	8	Permanent
Three gas lift meter buildings	Skid to measure and control flow of gas lift to individual wells to aid production	8.5	Permanent
Eight vapor recovery units	Captures and compresses hydrocarbon vapors that would otherwise be vented or flared.	10	Permanent
Nineteen 3-phase meters	Measures production of gas, oil, and water for each well.	5	Permanent
Two sales gas meters	Measures natural gas prior to being sent to pipeline.	8	Permanent
Four gas scrubbers	Pressure vessel used to catch any liquids in the gas.	14	Permanent
Two bulk treaters	Treat crude oil to remove contaminants like water, salts, and solids before it's sent to pipelines.	13	Permanent
Four separators	Separates production fluid into their constituent components of oil, gas and water.	13	Permanent
Three knock outs (low and high pressure, and crank case)	Vessel used to catch any liquids in vent gas prior to ECDs	4	Permanent
Two ECDs	To be used only on an as-needed basis to incinerate natural gas that cannot be captured, processed and sold for commercial resale and/or in the event of an unplanned shut-down of the pad.	28	Permanent
Two pumps (recycle and crank case)	Pump used to recycle tank liquids back through the facility for reprocessing. Used if an upset condition allows off spec fluid to end up in the tanks. Circulate lubricating oil throughout the crankcase of compressor.	2.5	Permanent
One instrument air skid	Compressed air to control valves.	12.5	Permanent
Four blowers	Captures and compresses hydrocarbon vapors from tanks that would otherwise be vented or flared	6	Permanent
Two LACT	Measures and pumps oil into sales pipeline	9	Permanent
One electrical rack	Stand used to mount the various electrical components needed to control the facility.	9	Permanent
One vapor recovery tower	Captures hydrocarbon vapors then routed to a vapor recovery unit (VRU), where they are compressed and sent to sales.	37.5	Permanent
One maintenance vessel	Pressure vessel used on an as-needed basis to catch any liquids during maintenance events prior to waste gas being sent to the ECD.	9	Permanent
Two water tanks	Utilized for storage of produced water.	16.5	Permanent
Four oil tanks	Utilized oil prior to sending to the pipeline.	16.5	Permanent
One modular large volume tank (MLVT)	Temporary fresh water tanks for well completion operations will be used in lieu of historic inground pits or multiple mobile 500 bbl steel tanks.	15	Permanent
Two temporary generators	Generators to be used in the event grid power is not available at facility startup.	8	Temporary
Eight temporary 500bbl produced water tanks	Tanks used temporarily for produced water storage.	10	Temporary
One temporary ECD (for temp) produced water tanks	To be used temporarily to incinerate, versus venting of, natural gas from the temporary produced water tanks.	28	Temporary
Two Pig Launchers	Area where pipeline pigs are launched and received in order to clean the pipelines.	3	Permanent
Two Sales Meters	Measures oil prior to being sent to pipeline.	8	Permanent
One Buyback Meter	Skid to measure gas brought back from pipeline	8	Permanent
Two Gas Lift Compressors	Compressors utilized for gas lift to aid production.	14	Permanent

The wellheads will be connected to the facility via flow lines that will be buried 3 to 4 feet deep. The flow lines are typically 2-inch-diameter schedule 160 welded steel, coated.

Once the production phase of the wells commences, daily monitoring of the wells begins. Daily reports consist of tank measurements, gas production estimates, pressure readings, and general facility care and maintenance. The production phase continues until a well is no longer productive, or it is no longer financially viable to continue production. It is estimated that the average life of each well at this location will be 20 to 30 years.

### **Plugging and Abandonment of Wells & Facilities**

Extraction will plug the wells, remove production equipment, and reclaim the pad when it becomes uneconomical to continue operating the wells. This will include installation of a series of required cement plugs in the wells to eliminate future flow from the well, in accordance with Section 1000 of ECMC rules and regulations. After the well has been plugged, flow lines will be flushed of all hydrocarbons and capped or removed in accordance with Rule 1103 of ECMC rules and regulations. If the separator and tanks on the property surface are no longer needed for other wells, they will be removed. Surface restoration will include removal of any above-ground casing and installation of regulation markers that will not interfere with future surface use.

### **Site Reclamation**

The Eagle pad will have an interim reclamation period which includes re-contouring and reseeding around the edges of the pad but such as to allow for daily operations of the oil and gas facility, access to the wells, maintenance of the facility and wells, work-overs, and normal production activity. The pad size will be reduced to approximately 6.52 acres once the wells are on production.

All tanks and equipment, lines and roads will be removed from the entire multi-well pad location upon permanent cessation of the operator's production and operations at the site. All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or those recommended by the State Land Board as the surface owner. All site reclamation will be in conformance with Adams County standards as well as the ECMC regulations.

### **Weed Control**

All areas, including well heads and production facilities, will be kept free of weeds, rubbish, and other waste material. As much as possible, all areas will be kept free of noxious weeds. If noxious weeds are identified on-site, the area will be treated as soon as possible in an effort to prevent the weed from flowering and spreading. To the greatest extent possible, machinery and equipment will not be parked or staged in weed infested areas.

### **Drainage & Erosion Control**

Proper storm-water controls will be installed around the tank battery and drilling pad during construction. The wellhead access road will be crowned, ditched and graveled, and culverts for cross drainage will be installed. Storm-water controls will also be installed around the spoil piles to prevent sediment migration. No changes in the current drainage patterns are anticipated. A Storm Water/Erosion Control BMP will also been filed with the ECMC as part of the Oil and Gas Location Assessment (ECMC Form 2A).

### **Sanitary Facilities**

Extraction personnel and contractors will utilize portable sanitary toilets and wash stations. No personnel are on the location for a permanent period of time. No city services or permanent sanitary services of any kind are required. All personnel and contractors who visit the site are responsible for picking up and disposing of any debris.

### **Proposed and Alternative Locations**

#### **Preferred Location**

Extraction believes the preferred location is the most suitable site for this proposed OGF. The proposed location will have a short access road and can tie into pipeline on the same parcel. There are no residential residences within one half mile of the location and no parcels within 2,000' which have a residence on them.

The main disadvantage of this location is that there is a National Wetland Inventory (NWI) mapped wetland within 2,000'. A waiver from the Board of County Commissioners will be needed for this proposed OGF. The national hydrography data shows a stream on this parcel. A third-party environmental firm has surveyed this area and has determined there is no ordinary high-water mark and would not be jurisdictional waters of the United States per U.S. Army Corps of Engineers nor considered waters of the state.

Extraction has made contact with the City and County of Denver who is the surface owner where the mapped wetland is located to the southeast. Denver granted access to a third-party environmental consultant to evaluate whether the wetland exists. It was determined the wetland is present but is smaller and further away than the NWI data shows. The NWI mapped wetland is 1,076 feet from the OGF, but the field verification concluded that the distance to this wetland is 1,702 feet away. This wetland is upgradient from the OGF, across a paved road and surrounded by crop lands.

#### **Alternative Location 1**

This location also has no parcels with residences within 2,000 feet but also has the same wetland as the preferred location within 2,000 feet. This location would be closer to the field verified boundary of the

wetland. This parcel is more central to the mineral development area, and drilling would be favorable from this parcel. The remaining disadvantage is that the City and County of Denver has communicated to Extraction, on June 9, 2025, Denver would not entertain an OGF on their property. Therefore, this location must be eliminated as an option.

## **Alternative location 2**

This location has seven residences within 2,000 feet and five additional parcels with residences within 2,000 feet. Other disadvantages of this location include a new pipeline corridor over two and a half miles would be needed, it is within Colorado Parks and Wildlife (CPW) mapped High Priority Habitat, multiple mapped NWI wetlands are within 2,000 feet and there is the possibility of needing another OGF to capture the minerals in section 36 to the north. Lastly, a subdivision has been platted to the west, and homes may be built prior to our development timeline. For these reasons, this site is not preferred.

## **Summary**

Extraction's preferred location is most appropriate to develop the targeted minerals while minimizing overall surface disturbance for OGFs, minimal new access and nearby pipeline takeaway. The surface owner for Alternative Location 1 will not allow oil and gas development on their property, and Alternative Location 2 has numerous receptors within 2,000 feet making it less protective than the preferred location. The Best Management Practices to be utilized at the preferred location will ensure our operations are substantially equivalent to being 2,000 feet from the field verified wetland and will be protective of public health, safety, welfare, the environment and wildlife resources.

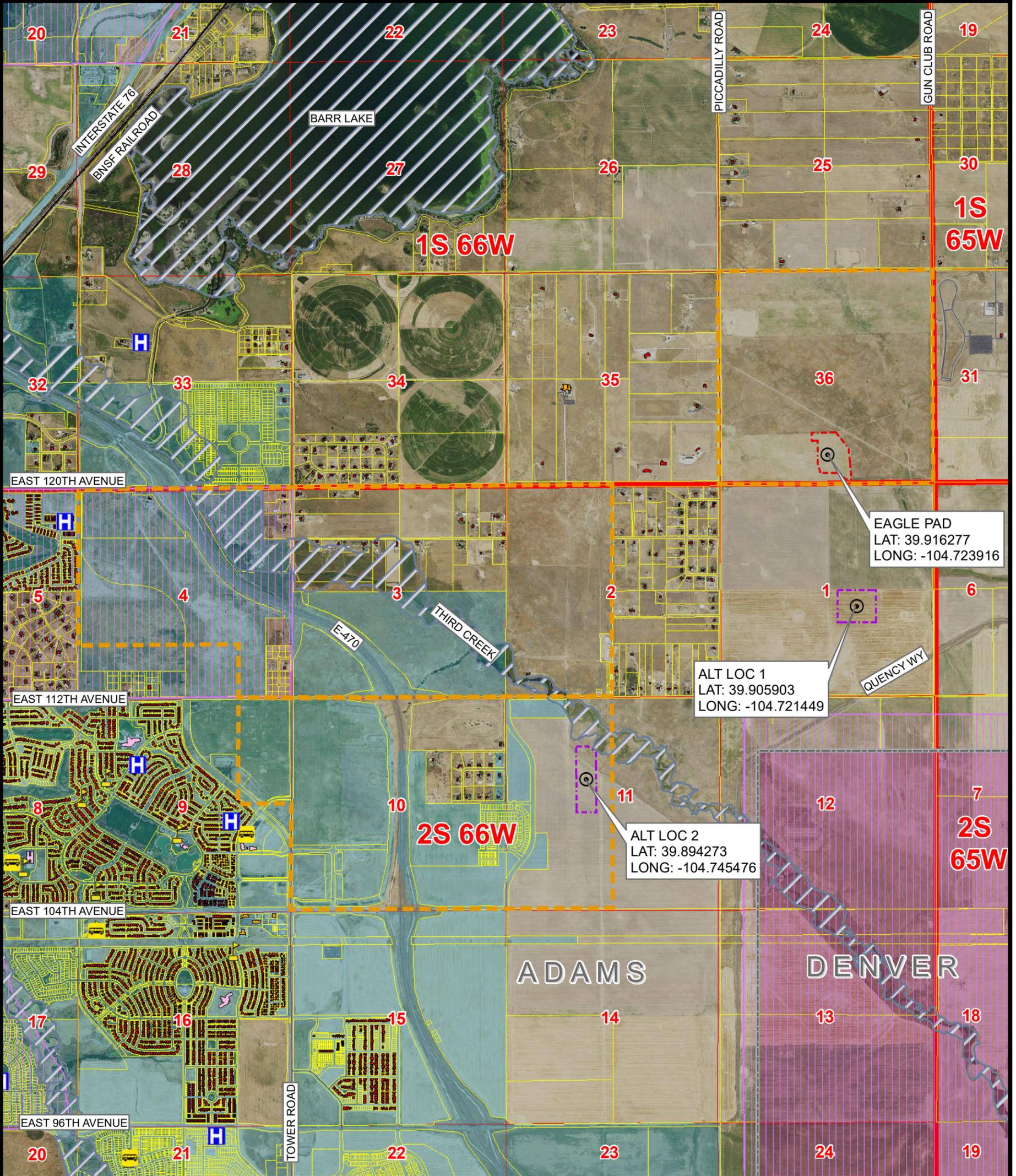
Please see the following pages for site plans of these locations (note, pipeline route is third party and cannot be confirmed at this time).

**The following pages are site maps utilized for the Alternative Location Analysis**

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# ALTERNATIVE LOCATION ANALYSIS - OVERVIEW EAGLE PAD

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



### Legend

- |  |                                |  |                                       |  |                                       |
|--|--------------------------------|--|---------------------------------------|--|---------------------------------------|
|  | PROPOSED REFERENCE POINT       |  | NON-RESIDENTIAL BUILDING UNIT         |  | DISPROPORTIONATELY IMPACTED COMMUNITY |
|  | PROPOSED OIL AND GAS LOCATION  |  | HIGH OCCUPANCY BUILDING UNIT          |  | 100-YEAR FLOODPLAIN                   |
|  | ALTERNATE OIL AND GAS LOCATION |  | RESIDENTIAL BUILDING UNIT             |  | HEALTH FACILITY                       |
|  | PROPOSED MINERAL BOUNDARY      |  | PARCEL BOUNDARY                       |  | SCHOOL FACILITY                       |
|  | COUNTY BOUNDARY                |  | COMMERCE CITY JURISDICTIONAL BOUNDARY |  | CHILD CARE FACILITY                   |
|  | RAILROAD                       |  | DENVER JURISDICTIONAL BOUNDARY        |  |                                       |

NOTE:  
THIS MAP IS A COMPILATION OF PUBLICLY AVAILABLE DATA. THE ACCURACY AND COMPLETENESS OF SAID DATA HAS NOT BEEN VERIFIED BY 609 CONSULTING, LLC. EXISTING CONDITIONS MAY DIFFER FROM WHAT IS SHOWN.

Prepared For:



**Consulting, LLC**

**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331  
**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



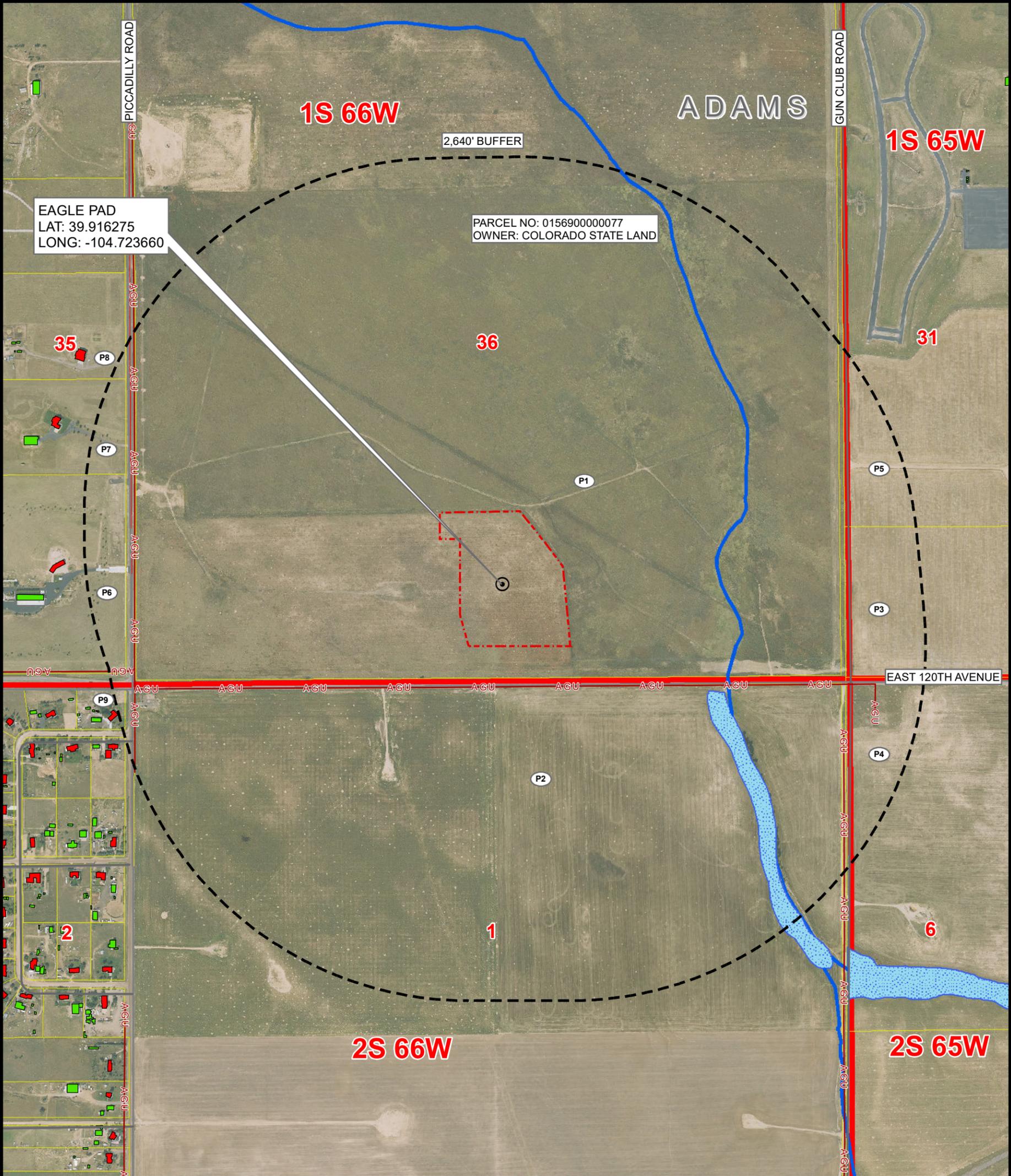
Drawn by: KMG  
Revised:

Date: 17 Mar 2025  
Date:

NAD83 CO-Nft  
Scale: 1" = 2,500ft

# ALTERNATIVE LOCATION ANALYSIS - PROPOSED LOCATION EAGLE PAD

SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



Legend	
	PROPOSED REFERENCE POINT
	PROPOSED OIL AND GAS LOCATION
	BUFFER
	BUILDING
	NON-RESIDENTIAL BUILDING UNIT
	RESIDENTIAL BUILDING UNIT
	HEALTH FACILITY
	SCHOOL FACILITY
	CHILD CARE FACILITY
	AGU- ABOVE GROUND UTILITY
	PUBLIC ROAD
	RAILROAD
	DITCH/CANAL/DRAINAGE
	DISPROPORTIONATELY IMPACTED COMMUNITY
	PARCEL BOUNDARY
	JURISDICTIONAL BOUNDARY
	RULE 411.b 2640' BUFFER
	100-YEAR FLOODWAY
	100-YEAR FLOODPLAIN
	COUNTY BOUNDARY
	RIPARIAN CORRIDOR
	DELINEATED WETLANDS
	RIVERINE CORRIDOR
	FRESHWATER EMERGENT WETLAND
	FRESHWATER FORESTED/SHRUB WETLAND
	OTHER
	LAKE
	FRESHWATER POND

NOTE:  
THIS MAP IS A COMPILATION OF PUBLICLY AVAILABLE DATA. THE ACCURACY AND COMPLETENESS OF SAID DATA HAS NOT BEEN VERIFIED BY 609 CONSULTING, LLC. EXISTING CONDITIONS MAY DIFFER FROM WHAT IS SHOWN.

Prepared For:



**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



K:\CIVITAS RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36\GIS\LA\MAPS\ADAMS COUNTY PRE APPEAL\_EAGLE\_ALA\_MAP\_LOCATION\_ANALYSIS\_MAP\_PROPOSED\_LOCATION\_MAP(SHEET 1).mxd 6/10/2025 1:00:59 PM

**ALTERNATIVE LOCATION ANALYSIS - PROPOSED LOCATION  
EAGLE PAD**

**SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO**

	PARCEL ID	DISTANCE	PARCEL #	OWNER
PROPERTY LINE	P1	±0'	0156900000077	COLORADO STATE LAND
	P2	±104' S	0172300000001	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P3	±2030' E	0156731300001	ADAMS COUNTY
	P4	±2031' E	0172500000012	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P5	±2109' E	0156731200001	ADAMS COUNTY
	P6	±2334' W	0156935400004	LUCERO JAY E
	P7	±2352' W	0156935400002	SHELBOURN MARVIN R AND SHELBOURN SONDR A
	P8	±2540' NW	0156935100005	SCOTT MICHAEL P AND SCOTT LORI A
	P9	±2547' W	0172302008001	VAZQUEZ ARMANDO AND VAZQUEZ ALMA DELIA
RESIDENTIAL/NON-RESIDENTIAL BUILDING UNIT	N/A			
HIGH OCCUPANCY BUILDING UNIT	N/A			
SCHOOL FACILITY	N/A			
PUBLIC ROAD	±96' S (EAST 120TH AVENUE), ±2035' E (GUN CLUB ROAD), ±2276' W (PICCADILLY ROAD)			
ABOVE GROUND UTILITY	±134' S, ±2070' E, ±2264' W, ±2452' W			
RAILROAD	N/A			
DITCH/DRAINAGE/CANAL	±1135' E			
NWI WETLAND	±1024' E, ±1127' E			
FLOODPLAIN	N/A			
HIGH PRIORITY HABITAT	N/A			
OTHER	N/A			

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Prepared For:



**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331  
**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



NAD83 CO-Nft  
Scale: 1" = 750ft

# HAUL ROUTE MAP

## EAGLE PAD

SESW & SWSE SECTION 36, TOWNSHIP 1 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



### LEGEND

- PROPOSED WELL
- ⊠ PROPOSED OIL AND GAS LOCATION
- - - TRAFFIC ROUTE
- - - PIPELINE ROUTE

### TRAVEL PATH:

TAKE EXIT 22 OFF OF I-76 TO BROMLEY LANE / EAST 152ND AVENUE AND PROCEED IN AN EASTERLY DIRECTION FOR 0.9 MILES TO PICADILLY ROAD. EXIT RIGHT ONTO PICADILLY ROAD AND CONTINUE SOUTH FOR 4.0 MILES TO EAST 120TH AVENUE. EXIT LEFT AND CONTINUE EAST FOR 0.6 MILES TO THE PROPOSED ACCESS ROAD TO THE NORTH. EXIT LEFT ONTO THE PROPOSED ACCESS ROAD AND CONTINUE 0.1 MILES TO THE PROPOSED LOCATION.

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**CONSULTING, LLC**  
 LOVELAND OFFICE  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331

SHERIDAN OFFICE  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

DATE SURVEYED: 8/21/24  
 DATE: 4/1/25  
 DRAFTER: JFE  
 REVISED: 6/10/25

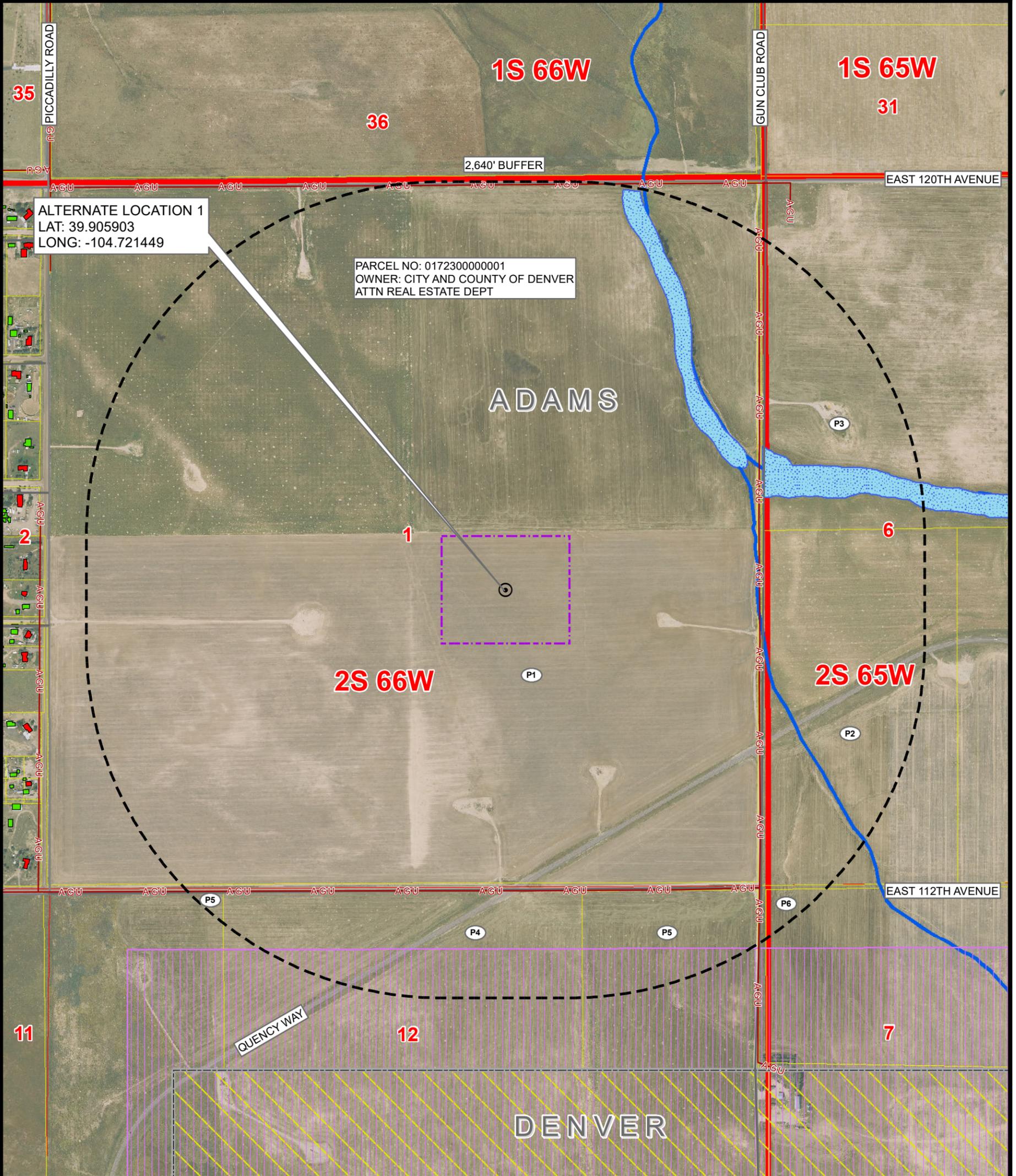
PREPARED FOR:



EXTRACTION OIL & GAS, INC.  
 555 17TH STREET, SUITE 3700  
 DENVER, CO 80202

ALTERNATIVE LOCATION ANALYSIS - ALTERNATE LOCATION 1  
**EAGLE PAD**

SECTION 1, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



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Legend	
	PROPOSED REFERENCE POINT
	ALTERNATE OIL AND GAS LOCATION
	BUFFER
	BUILDING
	NON-RESIDENTIAL BUILDING UNIT
	RESIDENTIAL BUILDING UNIT
	HEALTH FACILITY
	SCHOOL FACILITY
	CHILD CARE FACILITY
	ABOVE GROUND UTILITY
	PUBLIC ROAD
	RAILROAD
	DITCH/CANAL/DRAINAGE
	DISPROPORTIONATELY IMPACTED COMMUNITY
	PARCEL BOUNDARY
	DENVER JURISDICTIONAL BOUNDARY
	RULE 411.b 2640' BUFFER
	100-YEAR FLOODWAY
	100-YEAR FLOODPLAIN
	COUNTY BOUNDARY
	RIPARIAN CORRIDOR
	DELINEATED WETLANDS
	RIVERINE CORRIDOR
	FRESHWATER EMERGENT WETLAND
	FRESHWATER FORESTED/SHRUB WETLAND
	OTHER
	LAKE
	FRESHWATER POND

NOTE:  
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Prepared For:



**LOVELAND OFFICE**  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331  
**SHERIDAN OFFICE**  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609



**ALTERNATIVE LOCATION ANALYSIS - ALTERNATE LOCATION 1  
EAGLE PAD**

**SECTION 1, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO**

	PARCEL ID	DISTANCE	PARCEL #	OWNER
PROPERTY LINE	P1	±0'	0172300000001	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P2	±1423' E	0172500000108	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P3	±1423' E	0172500000012	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P4	±1835' S	0172300000050	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P5	±1837' S ±2461' SW	0172300000051	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
	P6	±2337' SE	0172500000015	CITY AND COUNTY OF DENVER ATTN REAL ESTATE DEPT
RESIDENTIAL/NON-RESIDENTIAL BUILDING UNIT	N/A			
HIGH OCCUPANCY BUILDING UNIT	N/A			
SCHOOL FACILITY	N/A			
PUBLIC ROAD	±1352' SE (QUENCY WAY), ±1380' E (GUN CLUB ROAD), ±1791' S (EAST 112TH AVENUE), ±2623' N (EAST 120TH AVENUE)			
ABOVE GROUND UTILITY	±1409' E, ±1839' S, ±2612' N			
RAILROAD	N/A			
DITCH/DRAINAGE/CANAL	±1350' NE, ±1404' NE			
NWI WETLAND	±1254' NE, ±1352' E, ±1441' NE, ±1459' E, ±2467' N			
FLOODPLAIN	N/A			
HIGH PRIORITY HABITAT	N/A			
OTHER	±2272' S (DISPROPORTIONATELY IMPACTED COMMUNITY)			

K:\CIVITAS RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36\GIS\ALA\MAPS\ADAMS COUNTY PRE APPEAL\ALA\_MAP\_LOCATION\_ANALYSIS\_MAP\_ALT\_1\_MAP(SHEET 2).mxd 4/1/2025 12:44:34 PM

Prepared For:



**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331  
**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



Drawn by: KMG  
Revised:

Date: 1 Apr 2025  
Date:

NAD83 CO-Nft  
Scale: 1" = 750ft

# HAUL ROUTE MAP EAGLE PAD (ALT LOC 1)

NWSE SECTION 1, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



## LEGEND

- PROPOSED WELL
- ▭ PROPOSED OIL AND GAS LOCATION
- - - TRAFFIC ROUTE
- - - PIPELINE ROUTE

## TRAVEL PATH:

TAKE EXIT 34 OFF OF E-470 TO EAST 120TH AVENUE AND PROCEED IN AN EASTERLY DIRECTION FOR 3.1 MILES TO THE PROPOSED ACCESS ROAD TO THE SOUTH. EXIT RIGHT ONTO THE PROPOSED ACCESS ROAD AND CONTINUE 0.5 MILES TO THE PROPOSED LOCATION.

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**609 CONSULTING, LLC**  
LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609

DATE SURVEYED: 8/21/24  
DATE: 4/1/25  
DRAFTER: JFE  
REVISED:

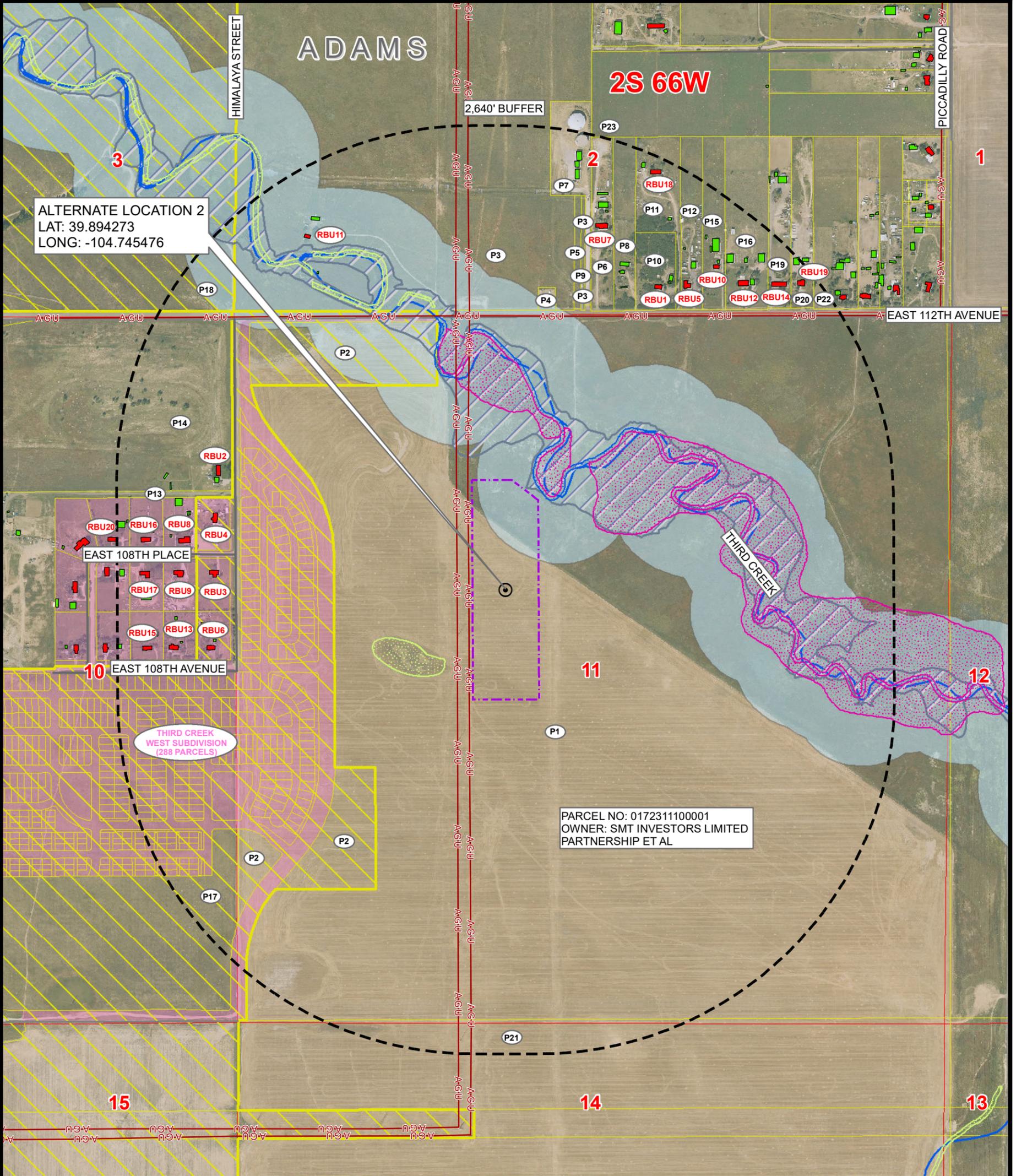
PREPARED FOR:



EXTRACTION OIL & GAS, INC.  
555 17TH STREET, SUITE 3700  
DENVER, CO 80202

# ALTERNATIVE LOCATION ANALYSIS - ALTERNATE LOCATION 2 EAGLE PAD

SECTION 11, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



ALTERNATE LOCATION 2  
LAT: 39.894273  
LONG: -104.745476

PARCEL NO: 0172311100001  
OWNER: SMT INVESTORS LIMITED PARTNERSHIP ET AL

### Legend

- |  |                                |  |                                       |  |   |
|--|--------------------------------|--|---------------------------------------|--|---|
|  | PROPOSED REFERENCE POINT       |  | PUBLIC ROAD                           |  | RIPARIAN CORRIDOR                               |
|  | ALTERNATE OIL AND GAS LOCATION |  | RAILROAD                              |  | DELINEATED WETLANDS                             |
|  | BUFFER                         |  | DITCH/CANAL/DRAINAGE                  |  | RIVERINE CORRIDOR                               |
|  | BUILDING                       |  | DISPROPORTIONATELY IMPACTED COMMUNITY |  | FRESHWATER EMERGENT WETLAND                     |
|  | NON-RESIDENTIAL BUILDING UNIT  |  | PARCEL BOUNDARY                       |  | FRESHWATER FORESTED/SHRUB WETLAND               |
|  | RESIDENTIAL BUILDING UNIT      |  | COMMERCE CITY JURISDICTIONAL BOUNDARY |  | OTHER   |
|  | HEALTH FACILITY                |  | SUBDIVISION                           |  | LAKE  |
|  | SCHOOL FACILITY                |  | RULE 411.b 2640' BUFFER               |  | FRESHWATER POND                                 |
|  | CHILD CARE FACILITY            |  | 100-YEAR FLOODWAY                     |  | 2025 AQUATIC NATIVE SPECIES CONSERVATION WATERS |
|  | AGU - ABOVE GROUND UTILITY     |  | 100-YEAR FLOODPLAIN                   |  |   |
|  |                                |  | COUNTY BOUNDARY                       |  |   |

NOTE: THIS MAP IS A COMPILATION OF PUBLICLY AVAILABLE DATA. THE ACCURACY AND COMPLETENESS OF SAID DATA HAS NOT BEEN VERIFIED BY 609 CONSULTING, LLC. EXISTING CONDITIONS MAY DIFFER FROM WHAT IS SHOWN.

Prepared For:



**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



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**ALTERNATIVE LOCATION ANALYSIS - ALTERNATE LOCATION 2  
EAGLE PAD**

**SECTION 11, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO**

	PARCEL ID	DISTANCE	PARCEL #	OWNER
PROPERTY LINE	P1	±0'	0172311100001	SMT INVESTORS LIMITED PARTNERSHIP ET AL
	P2	±762' N ±888' SW ±1825' SW	0172311200002	SMT INVESTORS LIMITED PARTNERSHIP ET AL
	P3	±1268' N ±1365' N ±1651' N	0172302200002	WARDIH LLC
	P4	±1283' N	0172302007001	ACKARD NORTH LTD C/O COLORADO INTERSTATE GAS COMPANY
	P5	±1356' N	0172302300004	WARDIH LLC
	P6	±1393' NE	0172302000012	TOEDTLI EVA E
	P7	±1413' N	0172302300005	EAST CHERRY CREEK VALLEY WATER AND SANITATION DISTRICT
	P8	±1471' NE	0172302000033	QUILLEN KENNETH AND QUILLEN PAMELA
	P9	±1556' N	0172302300003	SOUTH ADAMS COUNTY WATER AND SANITATION DISTRICT
	P10	±1562' NE	0172302400002	CAIRNS ANTHONY
	P11	±1746' NE	0172302400001	QUILLEN JONATHAN AND QUILLEN BRENNIA
	P12	±1768' NE	0172302002001	BAKER JOE L AND BAKER SHARLENE K
	P13	±1786' W	0172300000281	BAXLEY ROBERT
	P14	±1786' W	0172300000048	RYEL FAMILY PARTNERSHIP LLLP
	P15	±1871' NE	0172302002002	SANCHEZ VICTOR RIVERA AND DE LUNA JULIA KARINA
	P16	±1982' NE	0172302000015	SHRIVER DONALD L
	P17	±1997' SW	0172310200003	SMT INVESTORS LIMITED PARTNERSHIP ET AL
	P18	±2175' NW	0172303400001	TOWER EASTSIDE LLC
	P19	±2225' NE	0172302012001	MARMOLEJO JOEL
	P20	±2357' NE	0172302012002	PEREZ GUTIERREZ JUAN AND PEREZ HERNANDEZ JULIETA
	P21	±2381' S	0172314100001	SMT INVESTORS LIMITED PARTNERSHIP ET AL
	P22	±2487' NE	0172302000026	EVANGELISTA TERESA
	P23	±2627' N	0172302000011	EID TROY A UND 1/3 INT NEKOUIE HASSAN SAM UND 2/3INT
SUBDIVISION	±1032' W (THIRD CREEK WEST SUBDIVISION, 288 PARCELS WITHIN BUFFER)			
RESIDENTIAL/NON-RESIDENTIAL BUILDING UNIT	RBU1 ±1777' NE, RBU2 ±1868' W, RBU3 ±1886' W, RBU4 ±1892' W, RBU5 ±1910' NE, RBU6 ±1915' W, RBU7 ±1982' N, RBU8 ±2096' W, RBU9 ±2145' W, RBU10 ±2161' NE, RBU11 ±2164' NW, RBU12 ±2180' NE, RBU13 ±2185' W, RBU14 ±2354' NE, RBU15 ±2383' W, RBU16 ±2390' W, RBU17 ±2399' W, RBU18 ±2502' NE, RBU19 ±2503' NE, RBU20 ±2639' W			
HIGH OCCUPANCY BUILDING UNIT	N/A			
SCHOOL FACILITY	N/A			
PUBLIC ROAD	±1237' N (EAST 112TH AVENUE), ±1745' W (HIMALAYA STREET), ±1766' W (EAST 108TH PLACE), ±1772' W (EAST 108TH AVENUE)			
ABOVE GROUND UTILITY	±28' W, ±115' W, ±1222' N			
RAILROAD	N/A			
DITCH/DRAINAGE/CANAL	±98' NE (THIRD CREEK), ±1497' NW			
NWI WETLAND	±54' NE, ±210' W, ±1317' N, ±1452' NW, ±1937' NW, ±2044' NW			
NWI RIPARIAN CORRIDOR	±81' NE, ±400' NE, ±404' E, ±805' N, ±996' E			
FLOODPLAIN	±16' NE			
HIGH PRIORITY HABITAT	±0' (2025 AQUATIC NATIVE SPECIES CONSERVATION WATERS)			
OTHER	±759' N (COMMERCE CITY JURISDICTIONAL BOUNDARY)			

K:\CIVITAS RESOURCES\2024\2024\_118\_EAGLE\_T1S\_R66W\_SEC\_36\GIS\ALAIMAPS\ADAMS COUNTY PRE APPEAL\MAP\_ALT\_2\_MAP(SHEET 2).mxd 4/1/2025 4:31:28 PM

Prepared For:



**609**  
**Consulting, LLC**

**LOVELAND OFFICE**  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

**SHERIDAN OFFICE**  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609



Drawn by: KMG Date: 1 Apr 2025  
Revised: Date:

NAD83 CO-Nft  
Scale: 1" = 750ft

# HAUL ROUTE MAP EAGLE PAD (ALT LOC 2)

NENW, SENW & NESW SECTION 11, TOWNSHIP 2 SOUTH, RANGE 66 WEST, 6TH P.M., ADAMS COUNTY, COLORADO



## LEGEND

- PROPOSED WELL
- ▭ PROPOSED OIL AND GAS LOCATION
- - - TRAFFIC ROUTE
- - - PIPELINE ROUTE

### TRAVEL PATH:

TAKE EXIT 34 OFF OF E-470 TO EAST 120TH AVENUE AND PROCEED IN AN EASTERLY DIRECTION FOR 2.5 MILES TO PICCADILLY ROAD TO THE SOUTH. EXIT RIGHT ONTO PICCADILLY ROAD AND PROCEED IN A SOUTHERLY DIRECTION FOR 1.0 MILES TO THE INTERSECTION OF 112TH AVENUE. EXIT RIGHT ONTO EAST 112TH AVENUE AND PROCEED IN A WESTERLY DIRECTION FOR 0.7 MILES TO THE PROPOSED ACCESS ROAD TO THE SOUTH. EXIT LEFT ONTO THE PROPOSED ACCESS ROAD AND CONTINUE 0.3 MILES TO THE PROPOSED LOCATION.

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**609 CONSULTING, LLC**  
LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609

DATE SURVEYED: 8/21/24  
DATE: 4/1/25  
DRAFTER: JFE  
REVISED:

PREPARED FOR:



### **Wildlife & Environmental**

The Eagle pad and its respective production facility are not located within USFWS (United States Fish and Wildlife Service) and CPW mapped layers for sensitive species or High Priority Habitat (HPH). The pad, wells and facilities are outside of the FEMA mapped floodplain area. No wetlands, waters of the state or waters of the United States will be impacted by this development. The location is within the Natural Resource Conservation and a resources review will be submitted with the OGF.

### **Noise Control**

Any operations involving the use of a drilling rig, workover rig, or fracking and any equipment used in the drilling, completion or production of a well are subject to and will comply with the noise regulations set forth by Adams County's Development Standards and Regulations Section 4-11-02-03-03-14 and in ECMC Rule 423.

Idling Equipment – While idling engine/equipment, maintain at the lowest frequency possible, as well as, in a position/location that will prevent sound from carrying to nearby residents.

Unnecessary Sounds – Unnecessary sounds such as honking the horn, revving vehicle engines, loud music, and unwarranted metal hammering/banging are all examples of sound that can create nuisance; failure to eliminate unnecessary sound from location will be subject to an internal compliance assessment if reported by a landowner.

Extraction will utilize 32' sound walls to help further minimize noise and light originating from the location and will also serve as visual mitigation.

Extraction has been in contact with United Power to understand if it is feasible to utilize utility power to energize the drilling rig and production facilities. Extraction commits to grid power for the drilling rig and permanent utility power for the production facility. Noise and emissions will be reduced by energizing the drill rig off utility power. Running the facility off grid power will also reduce noise to run equipment.

Extraction's contract drilling company will comply with ECMC Rules regarding noise abatement. In addition to following the ECMC Rules and Regulations, Extraction, whenever possible, will schedule deliveries and construction traffic to and from the site during daylight hours.

### **Visual and Light Mitigation**

At move-in, rig-up and regularly during Drilling and Completion phases, operator will routinely walk around the outside of the disturbance area to identify and reduce obtrusive lighting from leaving the site where possible.

In the event there are complaints from neighbors regarding obtrusive lighting, Operator is committed to adjust fixtures or install shielding on offending fixtures to minimize the obtrusive lighting where possible. In the event the obtrusive lighting cannot be remedied due to safety concerns, Operator will work with

the complainant to find an amenable solution.

During Completion Phase, temporary light plants will be present and relocated as needed for safe light levels. Operator will continue the perimeter walks to identify and reduce obtrusive lighting levels as possible.

There will be no lighting installed for permanent production operations.

All long-term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public. Portable toilets for use on the Oil and Gas Location during the drilling and completion phases shall be screened by equipment and buildings that are proposed on-location.

Extraction will coordinate with Adams County regarding fencing and landscaping and include the appropriate plans in the OGF submittal.

### **Odor and Air Quality**

In an effort to mitigate potential odor impacts, Operator will use a mud filtration system and/or additives to the drilling and fracturing fluids to minimize odors. The Operator will not use fragrance to mask odors. Operator shall implement one or more of the following measures as necessary:

- Operator shall utilize a closed-loop, pit-less mud system for managing drilling fluids.
- Operator shall remove drill cuttings daily and as soon as waste containers are full.
- Operator shall employ pipe cleaning procedures when removing drill pipe from the wellbore.
- Operator shall employ the use of drilling fluids with low to negligible aromatic contact (IOGP Group III) during drilling operations after the surface casing is set and freshwater aquifers are protected.
- If an odor complaint is filed and determined to be caused by the Operator's operations, Operator will add or increase the concentration of odor-mitigating additives in mud system if otherwise unable to be resolved.

Extraction will comply with all applicable air quality requirements that regulate upstream production facilities. For the Eagle Pad, these will include at a minimum:

- Colorado ECMC Rules
- Air Quality Control Commission 5 CCR 1001-5 Regulation 3
- Air Quality Control Commission 5 CCR 1001-9 Regulation 7
- NSPS 40 CFR Subpart OOOOa
- 40 CFR Part 98 Subpart W for Greenhouse Gas Reporting
- Have an Air Quality Monitoring Program approved by Adams County and CDPHE

All gas encountered during post-separation flowback will be routed to a sales line. It is anticipated that all flowback oil will be produced to permanent infrastructure (i.e., pipeline or production facility), water will be sent to tanks to be hauled to disposal, and emissions will be controlled with a combustor, as necessary.

Equipment design and operation will be the primary path to mitigate emissions during production. Installation of equipment for on-site processing and separation will include instrument-air actuated pneumatic controllers. This location will utilize cutting edge production facilities that utilize utility powered fluid separation facilities which will reduce production operation emissions. Should well maintenance be required, this activity will be sent to a maintenance tank and controlled with an enclosed combustion device.

Extraction maintains a robust leak detection and repair (“LDAR”) program as required by CDPHE using modern leak detection technologies such as infra-red cameras for equipment used on the Well Sites. Extraction will inspect the facility monthly for the first year and will then comply with Colorado Regulation 7. Operator shall conduct continuous pressure monitoring to detect leaks. Extraction will coordinate with Adams County for any additional requirements in an Air Monitoring Plan.

Auditory, Visual, and Olfactory (AVO) monitoring will be conducted monthly by trained staff at the site.

Extraction shall respond to Air Quality Action Day advisories posted by the CDPHE for the Front Range Area by implementing their suggested air emission reduction measures, as feasible. Emission reduction measures shall be implemented for the duration of an air quality Action Day advisory and may include measures such as:

- Minimize vehicle and engine idling
- Reduce truck traffic and worker traffic
- Delay vehicle refueling
- Suspend or delay use of fossil fuel powered ancillary equipment; and postpone construction activities, if feasible

### **Signage**

Extraction will maintain all signage pursuant to Adams County and ECMC Rules and Regulations. Signage Plans and details will be submitted with the OGF.

### **Access Roads & Maintenance**

Extraction maintains all access roads in compliance with Adams County Code. Extraction will obtain the appropriate engineering documentation to establish new access. Access road will be bladed to minimize wet weather damage. Fugitive dust will be kept to a minimum. The lease road leading to the drilling site, facility and surface equipment will be designated and maintained to support fire vehicles, equipment and apparatus. Extraction will work with Adams County Road department to ensure any damage caused by Extraction activity is properly reported .

A traffic impact study and trip generation analysis be will done by a professional engineer prior to and is included in this application. Extraction will pay a traffic impact fee for utilizing Adams County Roads.

### **Waste Disposal**

Extraction will dispose of all wastes in accordance with ECMC and/or the CDPHE rules and regulations. Extraction will provide the County copies of all waste management reports upon request.

### **Fencing and Landscaping**

Extraction proposes the well pad be partially fenced after the location has gone through interim reclamation as required by Adams County's Development Standards and Regulations. Extraction is requesting Administrative Relief from some fencing, and exclusion of landscaping and bufferyards. The plans for fencing and landscaping can be found on the Landscape plans.

Extraction requests no fence on the north side or part of the east side of the OGF. The justification for this request is that the nearest public road to the north is approximately 4,200 feet away from the reclaimed pad, and the nearest home is approximately 4,500 feet away. Additionally, this parcel is approximately one square mile owned by the State Land Board, used for agriculture and grazing with no plans to relinquish any land for development. On the east side of the pad the soil stockpile will be approximately 12 feet tall and tapers to a shorter height the northeast of the pad. We propose adding fence on the east side where the stockpile is less than 6 feet tall, which will be the fence height. The berm should adequately screen the pad where it exceeds 6 feet.

Extraction also requests relief from planting trees or shrubs avoid providing hazardous wildlife attractants due to the proximity of Denver International Airport (DEN). Extraction has proactively had conversations with DEN (Staff Planner and Wildlife Biologist) regarding this location. DEN staff had recommendations to avoid attractants for wildlife such as raptor species, blackbirds/starlings, and geese. DEN also advised against fruit-producing trees and shrubs.

### **Airport Height and Noise Overlay**

The proposed location lies approximately 1.75 miles northwest of the nearest runway at Denver International Airport (DEN). This location will be wholly within both height and noise overly.

Additionally, a Form FAA 7460-1 - Notice of Proposed Construction or Alteration has been filed with the FAA (ASN Number 2025-ANM-3202-OE). On June 17, 2025, the FAA had responded with a determination of no hazard to air navigation these temporary structures (i.e. – drill rig and cranes). FAA has required Extraction to notify the DEN airport manager and air traffic control at least 3 business days prior to rigging up our drill rig.

Lastly, there will be no permanent structures constructed that will be devoted to office use or access to the public in this project site.



Community & Economic Development Department  
Environmental Programs  
4430 S. Adams County Pkwy.  
1st Floor, Suite W2000B  
Brighton, CO 80601-8218  
PHONE 720.523.6800 | FAX 720.523.6967  
adcogov.org

John Piekara  
Civitas Resources  
555 17<sup>th</sup> Street, Suite 3700  
Denver, CO 80202

July 24, 2025

**Subject: PRE2025-00045 Eagle Pad – Conceptual Review Letter**

This letter serves as confirmation that the applicant, Exaction Oil & Gas / Civitas Resources has successfully completed the Conceptual Review meeting for the Subject project on July 23, 2025. This preapplication meeting satisfies the requirements in Adams County Development Standard and Regulations (ACDS&R) Section 2-02-14-04.1, including the Alternative Site Analysis. The applicant therefore may proceed with a Development Application Submittal for the associated Oil and Gas Facility (OGF) permit that complies with all other requirements of the applicable ACDS&R, including a preapplication neighborhood meeting.

External agencies invited:

Energy and Carbon Management Commission (ECMC)  
Department of Public Health and the Environment (CDPHE)  
Parks and Wildlife (CPW)  
State Land Board

*The desired location is not being proposed within a Disproportionately Impacted Community and there are no other local governments within 1-mile.*

If you have any questions about the permitting process, please do not hesitate to contact me at [gdean@adcogov.org](mailto:gdean@adcogov.org) or (720)523-6891.

Gregory Dean  
Adams County, Oil & Gas Administrator

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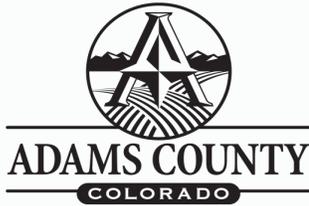
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Charles "Chaz" Tedesco  
DISTRICT 2

Emma Pinter  
DISTRICT 3

Steve J. O'Dorisio  
DISTRICT 4

Lynn E. Baca  
DISTRICT 5



Community & Economic Development Department  
4430 S. Adams County Pkwy.  
1st Floor, Suite W2000B  
Brighton, CO 80601  
PHONE 720.523.6800  
EMAIL [epermitcenter@adcogov.org](mailto:epermitcenter@adcogov.org)  
[adcogov.org](http://adcogov.org)

## Development Review Team Comments

**Date:** 7/17/2025

**Project Number:** PRE2025-00045

**Project Name:** Eagle Pad

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**Commenting Division:** ROW Review

**Name of Reviewer:** David Dittmer

**Date:** 07/17/2025

**Email:**

**Complete**

ROW1: An access permit will be required to tie into county ROW at point of ingress and egress to the property. No access permits have been issued for this section.

ROW2: Pending engineering review:

-Any storm water quality facilities (detention, grass swales, and outfall structures) must be dedicated to the county as an easement. This will require Exhibits for the dedications.

-Pending traffic impacts, East 120th is a Section Line Arterial. A half width of 60' is required. It appears only 40' has been dedicated to the county. Pending review of the TIS, the state will need to convey the other 20' of ROW to the county. The section line is not centered in the ROW, and a survey will be required to verify location of the section line monuments, the existing ROW (cite all deeds), and the difference between existing and 60'. Traffic loads are higher during construction and initial drilling, but heavy haul is still expected for water, etc.

ROW3: A haul route is required to show all roads impacted by construction, heavy hauling, and maintenance activities.

ROW4: An address will need to be requested for the pad for 911 and other first responders.

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**Commenting Division:** Development Engineering Review

**Name of Reviewer:** Laurie Clark

**Date:** 07/17/2025

**Email:**

**Complete**

ENG1: Flood Insurance Rate Map – FIRM Panel # (08001C0365H), Federal Emergency Management Agency, January 20, 2016. According to the above reference, the project site is not located within a delineated 100-year flood hazard zone; a floodplain use permit will not be required.

ENG2: Property is not in Adams County MS4 Stormwater Permit area. A Stormwater Quality (SWQ) Permit is not required, but a State Permit COR400000 WILL be required if one (1) acre or more is disturbed. Applicant is responsible for installation and maintenance of Erosion and Sediment Control BMPs. Builder/developer is responsible for adhering to all the regulations of Adams County Ordinance 11 regarding illicit discharge.

ENG3: A drainage report and drainage plans in accordance to Chapter 9 of the Adams County Development Review Manual are required to be completed by a registered professional engineer and submitted to Adams County for review and final approval. Drainage design shall have no adverse off-site impacts on neighboring properties or the public ROW.

ENG4: The site is located within the Beebe Draw and Barr Lake Tributary Areas OSP Master Drainage Plan. There are open channel and culvert improvements shown that traverse this parcel. All proposed improvements shall be in compliance with the above-named plan. Easements will be required for these improvements. Please work with Mile High Flood District (MHFD) on the required improvements.

ENG5: The applicant is required to complete a traffic trip generation analysis signed and stamped by a professional engineer. If the proposed scope of work shows the use of the site will generate over 20 vehicles per day, then a traffic impact study signed and stamped by a professional engineer will be required.

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**Commenting Division:** Development Engineering Review

**Name of Reviewer:** Laurie Clark

**Date:** 07/17/2025

**Email:**

**Comment**

EGR6: The proposed site improvements are required to go through an engineering review process using the On-Site Grading and Drainage application. The developer is required to submit for review and receive approval of all civil site construction plans and reports. Construction documents shall include, at a minimum, onsite and public improvements construction plans, drainage report, traffic impact study. All construction documents must meet the requirements of the Adams County Development Standards and Regulations. The developer shall submit to the Adams County One Stop Customer Center the following: Engineering Review Application, Engineering Review Fee, a copy of all construction documents, plans and reports in PDF format.

ENG7: If the applicant proposes to import greater than 10 CY of soil to this site, additional permitting is required. Per Section 4-04-02-02, of the Adams County Development Standards and Regulations, a Temporary or Special Use Permit is required to ensure that only clean, inert soil is imported into any site within un-incorporated Adams County. A Conditional Use Permit will be required if the importation exceeds 500,000 CY.

ENG8: All existing and proposed access points onto Adams County maintained right-of-way must be permitted.

ENG9: E 120th Avenue adjacent to the site is classified as a Principal Arterial. Improvements to E 120th Avenue may be required, such as repaving, per the haul route analysis.

ENG10: Piccadilly Road adjacent to the site is classified as a Rural Arterial.

ENG11: The developer is required to construct roadway improvements adjacent to the proposed site such as roadside ditches. Additional roadway improvements will be determined based on the Traffic Impact Study and Adams County typical road sections.

ENG12: An Improvements Agreement may be required for public improvements and onsite drainage facilities if construction costs exceed \$50,000.

ENG13: No building permits will be issued until all public improvements have been constructed, inspected, and preliminarily accepted by the Adams County Public Works Department.

ENG14: The developer is responsible for the repair or replacement of any broken or damaged public infrastructure.

ENG15: All proposed drainage onsite facilities with maintenance access shall be within dedicated easements.

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**Commenting Division:** Environmental Analyst Review

**Name of Reviewer:** Megan Grant

**Date:** 07/17/2025

**Email:**

**Complete**

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The following comments apply to natural resources:

BEIR1. A cross-section of the subject parcel (applicant preferred site) is located within the Adams County Natural Resource Conservation Overlay (NRCO). The NRCO aims to protect important wildlife areas, designated floodplains, riparian corridors, and cultural resources. Refer to Sections 3-43 and 4-14-02 of the Adams County Development Standards and Regulations (ACDSR) for more details.

BEIR2. If disturbance of land not previously developed within the NRCO is greater than one combined (1) acre, then a Resources Review must be completed by a qualified professional consultant prior to application submittal so that it may be taken into consideration. See ACDSR Section 4-14-02-03 for Resources Review methodology. Please provide this information for Adams County review with subsequent permit application(s).

BEIR3. All development must comply with the NRCO buffers/setbacks requirements for individual protected resources provided in ACDSR Section 4-14-02-04-02. Development shall be located out of the riparian plant community along rivers and streams, and outside of the hydric zone in relation to wetlands.

The following comments apply to the airport:

BEIR4. Due to the proximity of the subject parcel to the airport, it is covered by the Airport Height Overlay, which restricts certain building height and development. More information can be found in Section 3-32 of the Adams County Development Standards and Regulations.

a) Landowners may be required to install, operate, and maintain, at the owner's expense, such markers and lights which may be necessary to indicate to flyers the presence of a hazard which affects the aviation facility. This marking and lighting requirement may also extend to objects of natural growth (trees, primarily) on site.

b) An FAA aeronautical study may be required to determine if the proposed development could be a hazard to air navigation.

The applicant shall communicate with the airport and the FAA regarding the proposed project and provide this information to Adams County for review with subsequent permit application(s).

BEIR5. Due to the proximity of the subject parcel to the airport, it is covered by the Airport Noise Overlay (ANO). The residential noise reductions specified in this section would not apply to this proposed project. Refer to ACDSR Section 3-39 for more information.

BEIR6. In accordance with the ANO, a signed "Aircraft Activity Covenant with Disclosure" must be filed prior to issuance of a building permit.

The following comments apply to permits and plans:

BEIR7. The applicant/operator shall follow all applicable hazardous materials management regulations, including CDPHE and ECMC, to ensure proper management of hazardous materials and wastes such that they do not present a significant actual or potential hazard to public health, safety, or environment.

BEIR8. For projects that require an air permit, the applicant shall contact the CDPHE Air Pollution Control Division (APCD) for information and provide copies of permits for Adams County review with subsequent permit application(s). Additional information is available at:

<https://www.colorado.gov/pacific/cdphe/categories/services-and-information/environment/air-quality/air-emissions-business-and-industry>.

If the proposed project is exempt from air permitting requirements, please include this documentation as well.

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**Commenting Division:** Environmental Analyst Review

**Name of Reviewer:** Megan Grant

**Date:** 07/17/2025

**Email:**

**Comment**

BEIR9. The determination of the risks of a release of hazardous materials from the proposed project may include but is not limited to the following considerations:

- a) Plans for compliance with federal and State handling, storage, disposal, and transportation requirements.
- b) Use of waste minimization techniques.
- c) Adequacy of spill prevention and countermeasures, and emergency response plans.

BEIR10. All plans shall be reviewed and approved by the applicable fire district prior to approval in order to determine existing services provide adequate protection. This information will be provided to Adams County for review with subsequent permit application(s).

BEIR11. Emergency Response Plan and Spill Response Plan, or other similar documentation, will be provided for Adams County review with subsequent permit application(s). Please provide a copy of the project Emergency Response Plan (and documentation that a copy has been provided) to the Adams County Office of Emergency Management as the Colorado Designated Emergency Response Authority (DERA).

The following comments apply to construction and operation:

BEIR12. Natural drainage and water areas are visible across the subject parcels. These drainage areas and wildlife habitat should be developed in an environmentally sensitive manner in order to protect natural features and processes, protect and enhance important wildlife corridors, and generally sustain a high-quality natural environment.

BEIR13. Exposure to air pollution is associated with numerous health problems including asthma, lung cancer, and heart disease. Construction and traffic in unpaved areas may contribute to increased fugitive dust emissions. Adams County recommends the applicant utilize all available methods to minimize fugitive dust during all phases of construction and operation.

BEIR14. An inert fill permit must be obtained prior to importing any volume of fill material onto the parcel as part of site development. Permit type will depend on the duration and total volume of fill to be imported to the site. The fill must meet the definition of clean, inert material.

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**Commenting Division:** Environmental Analyst Review

**Name of Reviewer:** Megan Grant

**Date:** 07/17/2025

**Email:**

**Comment**

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BEIR15. Per ACDSR 4-11-02-03-03-03 General Provisions, Oil and Gas Facilities shall be at least 2,000 feet from the property line of any existing residences or platted residential lots, schools or future school facilities, state licensed daycares, high occupancy building units, environmentally sensitive areas, and designated parks and open spaces.

BEIR16. Per ACDSR 4-11-02-03-03-03 General Provisions, Oil and Gas Facilities shall be at least 1,000 feet from groundwater under the direct influence of surface water (GUDI) wells and Type III Aquifer wells as defined by Colorado Water Quality Control Commission and ECMC (formerly COGCC) rules.

The applicant has indicated the nearest Public Water System well(s) utilizing Groundwater Under Direct Influence of Surface Water or Type III Aquifer sources are over two miles from the proposed oil and gas location.

BEIR17. Setbacks will be measured from the edge of the Oil and Gas Location, as defined by the ECMC, the measurement of setbacks will not include the access road.

BEIR18. Administrative Waiver from setback requirements: an administrative waiver may be obtained from the setback requirements if the Operator receives a written waiver from each primary resident and property owner located within the setback. Staff will evaluate the granting of an Administrative Waiver from setback requirements based on the following criteria: (1) the number of affected residents within the setback (2) location of the facility, (3) size of the facility, (4) compatibility of the facility with surrounding land uses; and (5) conformance with the Adams County Comprehensive Plan.

BEIR19. No Administrative Waivers will be issued from setback requirements for school facilities, future school facilities, state licensed daycares, groundwater wells, environmentally sensitive areas or designated parks and open spaces.

BEIR20. For Oil and Gas Facilities that do not meet the above setback requirements: A waiver may be granted by the Board of County Commissioners that complies with the requirements of ACDSR Section 2-02-14-07-07.

The following comments apply to historic oil and gas wells:

It appears that the vertical wells on the subject parcel are owned by the applicant.

BEIR21. There are multiple plugged and abandoned oil and gas wells on the subject parcel. Prior to submittal of a site-specific development plan, all wells on the subject parcel shall be located and surveyed. The wells must be shown on the site plan.

BEIR22. All known oil and gas well flow lines and/or easements shall be graphically depicted on the site-specific development plan. In the interest of public health and safety, Adams County recommends that the applicant locate and verify the status of the flowlines. Due to the age and status of the oil and gas wells on the subject parcel, abandoned flowlines are likely still in place. Historic records review, buried utility location, and flowline identification are highly recommended to prevent encountering flowlines during the proposed project implementation.

BEIR23. Adams County has requirements for residential construction currently, and this may expand to all construction in the future. The applicant should be aware of the standards and regulations, and adherence is recommended for safety and environmental health. On every final plat or site-specific development plan which contains a plugged and abandoned well, there shall be dedicated a well maintenance and workover setback

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depicted on the plat, the dimensions of which shall be not less than fifty feet in width and 100 feet in length. No permanent structures shall be located within this setback. The plugged and abandoned well shall be located in the center of the setback. There shall be public access for ingress and egress to the setback of a width of not less than twenty feet. Refer to Section 4-11-02-03-03-05.2c.

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**Commenting Division:** Parks Review

**Name of Reviewer:** Nolan Egan

**Date:** 07/17/2025

**Email:**

**No Response**

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**Commenting Division:** Long Range Planner Review

**Name of Reviewer:** John Stoll

**Date:** 07/17/2025

**Email:**

**Complete**

LR1: The Future Land Use (FLU) designation for the subject property is Mixed Use Commercial. This future land use designation serves as a land use for areas transitioning to industrial or heavy commercial developments where activities and operations are contained within buildings. Mixed Use Commercial areas often have environmental considerations or are adjacent to more intense industrial uses that do not necessarily support residential uses. Limited residential uses may be acceptable in a vertical mixed-use setting if all environmental conditions and concerns have been remediated and land-use adjacencies are mitigated. Typical zone districts include: C-3, C-4, C-5, I-1. Land Use Adjacencies: Commercial, Institutional, Industrial Low, Industrial Medium, Mixed Use, and Residential High (Limited).

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**Commenting Division:** Building Safety Review

**Name of Reviewer:** Heather Whitaker

**Date:** 07/10/2025

**Email:**

**Complete**

BSD1- Building permits would be required for each structure. Engineered plans will be required to obtain permits.  
BSD2- Applicant should refer to commercial and industrial submittal documents checklist provided on our website.  
BSD3- Current adopted codes are the 2018 International Building Codes and the 2017 National Electrical Code.  
BSD4- Applicant should contact Fire Department for their requirements. This is a separate permit, review, and inspection with your local fire department. Plan review approval from the fire department will be required at time of building permit.  
BSD5- Building height, number of stories, and building area are limited based on type of construction, occupancy, and whether fire sprinklers will be installed. A complete building safety review will be required to determine these limitations with the application of a building permit.

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**Commenting Division:** Neighborhood Services Review

**Name of Reviewer:** Gail Moon

**Date:** 06/24/2025

**Email:** gmoon@adcogov.org

**Complete**

There are no OPEN violation cases at this location at this time. NO COMMENT

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OGA1: Alternative Site Analysis:

Applicant Desired Location:

- (+) No residential building units, building unit parcels, schools, or platted residential development within 2,000-feet
- (+) No HPH within 2,000-feet
- (+) shortest access road
- (+) shortest pipeline corridor needed to connect to existing pipelines (2,000-feet)
- (-) Mapped wetland within 1,000-feet of the edge of disturbance
- (-) located within the Natural Resource Conservation Overlay, a natural resources review would be required.

Alternative Location 1:

- (+) No residential building units, building unit parcels, schools, or platted residential development within 2,000-feet
- (+) Not within the Natural Resource Conservation Overlay
- (+) No HPH with 2,000-feet
- (-) mapped wetland within 1,200-feet from the edge of disturbance
- (-) additional wetlands within 2,000-feet of this alternative site
- (-) more surface disturbance with longer access road compared to desired location (2,640-feet vs. 500-feet) and longer pipeline route with a road crossing necessary (1-mile vs 2,000 feet)
- (-) Disproportionally Impacted Community within 0.5 mile

Alternative Location 2:

- (+) shorter haul route than Alt 1 (1,800 feet vs 2,640 feet)
- (-) 12 existing RBUs or building unit parcels and 200+ platted residential lots within 2,000-feet (Commerce City)
- (-) designated wetland within 500-feet to the west of alternative location

(-) within the 2025 aquatic native species conservation waters area and HPH area

(-) immediately adjacent to a FEMA floodplain near Third Creek

(-) longest pipeline route of all presented alternatives (2 miles vs 2,000-feet)

(-) proposed access road within the floodplain

(-) Mineral development not technologically feasible relative to desired location. This would require an additional facility to be built to access minerals fully

OGA2: The applicant's desired location and both of their alternatives each present the potential for adverse impact to public health, safety, welfare, the environment, and wildlife resources that must be avoided, minimized, and mitigated. Many of these potential adverse impacts could likely be addressed with the implementation of BMPs, COAs, and facility design considerations by the applicant.

OGA3: Staff believes the applicant's desired location and alternative location 1 have overall have the same likelihood of adverse impacts to residents and resources and has the greatest ability to comply with Adams County Development Standards and Regulations. Of the 2 presented alternatives to the applicant's desired location, Staff feels that alternative location 1 appears least impactful followed by alternative location 2.

OGA4: While the applicant's desired location appears to be the least impactful overall, there is no guarantee that this location will be successful if a formal OGF application is filed and must demonstrate compliance with DS&R through the evaluation processes as defined and outlined.

OGA5: Given the presence of wetlands near this proposed site and within the 2,000-foot setback (designated as environmentally sensitive areas by Adams County) this location will likely require Board of County Commissioner approval rather than being eligible for the administrative approval process, should it comply with the remaining DS&R for OGF applications.

OGA6: The County does not consider existence or absence of surface use agreements or an inability to come to such an agreement with the surface landowner when evaluating alternative locations. Alternative Site Analysis only consider potential impacts to public health, safety, welfare, the environment and wildlife.

OGA7: Off-location "well connects" or pipelines will require separate land use approvals.



November 20, 2025

Brighton Fire Rescue District  
500 S. 4th Ave., 3rd Floor  
Brighton, CO 80601

RE: Service to Civitas Resources Oil & Gas Facility – Eagle Pad

Dear Brighton Fire Rescue District Representative,

Civitas Resources (Extraction Oil and Gas, Inc.) is submitting an Oil and Gas Facility application to construct a proposed Oil & Gas Facility and associated infrastructure located in Section 36, Township 1 South, Range 66 West in Adams County, Colorado. Your referral package on the site is enclosed. Access to the site will be to the north off E. 120<sup>th</sup> Ave. approximately halfway between Picadilly Rd. and Gun Club Rd. Once on the property, follow the private access north approximately 250 feet. There will be a 250 foot long, 30 foot wide private access road that will lead north to the well pad. There are nineteen wells planned for this site.

Adams County has asked that we notify Brighton Fire Rescue District of this facility and access route and gain assurance that requisite EMT and fire protection services can be provided to this site.

Upon review of the enclosed referral package, if said service can be provided, we would appreciate you indicating such by signing and returning a copy of this letter. Please do not hesitate to contact me directly at 303-294-7824, [jpiekara@civiresources.com](mailto:jpiekara@civiresources.com), with any questions or comments.

**Emergency services, including EMT and fire protection services can be provided to the Eagle oil and gas facility site via the access route herein described.**

---

Bennett – Watkins Fire Rescue                      Date  
By:  
Its:

Sincerely,

A handwritten signature in blue ink, appearing to read "John Piekara".

John Piekara - Regulatory Advisor (Civitas Resources)

*Suite 3700 – 555 17th St., Denver, CO 80202*

*www.civitasresources.com*

*(Extraction Oil and Gas, Inc. is a wholly owned subsidiary of Civitas Resources, Inc.)*