

Caerus Piceance, LLC
Wildlife Mitigation Plan
August 2021

Prepared by:

Caerus Piceance, LLC

&

C-K Associates, LLC

In Cooperation with

Colorado Parks and Wildlife



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Caerus Piceance LLC Wildlife Mitigation Plan

Introduction and Signatory Page

To meet the requirements of the new Colorado Oil and Gas Conservation Commission (COGCC) 1200 Series Rules (effective January 15, 2021), Caerus Piceance LLC (Caerus), has developed a revised North Piceance Wildlife Mitigation Plan (WMP) that will cover operations by Caerus on Caerus' North Parachute Ranch property (NPR) and the properties owned by Caerus Cross Timbers LLC (previously owned by XTO), and any additional asset(s) acquired in the future operated by Caerus. This WMP will address each of the required elements listed within the COGCC 1200 Series Rules. This WMP will detail the methodology behind the percent reduction to Indirect Impacts, for the implementation of Best Management Practices (BMPs). This WMP will also detail the established credit value for mitigation projects to offset Direct and Indirect Impacts. Caerus and Colorado Parks and Wildlife (CPW) have cooperatively developed BMPs, mitigation projects and an overall process to value projects. This WMP has a 3-year life span that can be re-established at the end of term.

The WMP may be modified by agreement of both CPW and Caerus. Any such modification to the WMP shall not be effective unless agreed to in writing by both parties in an approved Record of Modification (Attachment A). This WMP is subject to such modifications as may be required by changes in Federal or State law, or their implementing regulations. Any such required modification shall automatically be incorporated into and be part of this WMP on the effective date of such change as if fully set forth herein and the parties agree to take all actions necessary to comply with the changes to Federal or State law, or their implementing regulations.

The term of this WMP expires on the date indicated below. Either party may terminate its agreement to this WMP upon 30 days written notice to the other party. Upon expiration of the 30 days, all future obligations of the parties under this WMP are terminated. However, and notwithstanding such termination, the parties remain obligated and are required to continue to comply with the terms and conditions of this WMP for operations conducted pursuant to an approved Form 2A or associated permit that was approved during the effective period of this WMP.

It is expressly understood and agreed by the parties that, except for rights of enforcement by the COGCC set forth above, nothing in this WMP shall give or allow any claim or right of action by any other third party.

The waiver of any breach of a term or condition of this WMP by a party shall not be construed or deemed a waiver of any subsequent breach of a term or condition, nor shall it impact in any way the rights of enforcement by the COGCC.

This WMP is intended to be an overarching document that will encompass future Caerus development projects. Site specific mitigation requirements will be addressed for each project and added as an appendix to the WMP.

This WMP is the complete integration of all understandings between the parties. No prior or contemporaneous addition, deletion, or any other amendment thereto shall have any force or effect unless embodied herein in writing.

The signatories hereto warrant that they possess the legal authority to enter into this WMP and that they have taken all actions required by the respective parties' procedures, by-laws or applicable law to exercise that authority, and to lawfully authorize the undersigned signatory to execute this WMP and bind the party to its terms and conditions. The persons executing this WMP on behalf of the parties warrant that such persons have full authorization to execute this WMP.

Signatures:
Caerus Piceance, LLC

Lindsey Rider
EHS Manager

Date

Colorado Parks and Wildlife

J.T. Romatzke
Northwest Region Manager

Date

Effective Date: 8/26/2021

Expiration Date: 8/26/2024

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Northwest Region Manager

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Wildlife Mitigation Plan Following the New January 15, 2021 Protection of Wildlife Resources 1200 Series

The purposes of this WMP are to state that Caerus will adhere to Rule requirements under 1201.b.(1)-(4), 1202 and 1203.

CPW will consult with Caerus regarding proposed oil and gas operations in areas of High Priority Habitats (HPH) associated with this WMP. Site specific consultation will be covered in the specific project mitigation plans, found within the Appendices.

1201.b.(1)-(4) Wildlife Mitigation Plan

(1) Pre-Application Consultation and Alternative Location Analysis

Caerus has maintained a long-standing working relationship with CPW and appreciates the objectives set by CPW for protecting wildlife resources. This WMP and supplemental Compensatory Mitigation Plans (CMP), represents that working relationship. Caerus will continue to engage CPW in pre-application consultation and alternative location analysis. As a proactive step, Caerus worked with CPW to develop a Wildlife Resource Matrix that helps assess, avoid, minimize, and mitigate impacts to wildlife. The wildlife matrix methodology is found in Attachment B. Project specific consultation will be detailed in the compensatory mitigation plans, found within the Appendices.

(2) Description of Best Management Practices

The BMPs implemented by Caerus represents a commitment to the ecological environment through responsible energy development and management. BMPs provide minimization measures to reduce Direct and Indirect adverse impacts. In consultation with CPW, several BMPs have been recognized as benefits to the ecological landscape. These BMPs have been assigned a percent reduction to be applied to indirect adverse impact acres (*as calculated on page 13*).

The following BMPs and percent reductions were developed jointly with CPW.

Best Management Practice Categories	Percent Reduction For Indirect Impacts	BMP Category Abbreviation For Tracking
Traffic Management (<i>SCADA, Liquids Distribution, & Traffic Timing</i>)	20%	T
Drilling Technologies (<i>high efficiency rigs, closed loop drilling & other</i>)	5%	DT
Greenhouse Gas/Emissions Management	5%	GH
Water Quality Management	10%	WQ
Habitat & Wildlife Management Practices	20%	HW
Voluntary Measures for Additional Reduction:		
Timing & Siting Considerations (<i>e.g. seasonal & daily timing limits</i>)	25%	VTS
Total Percent Reduction Range:	60% - 85%	

The following is a list of all BMPs, and other steps taken by Caerus to reduce disturbance. These BMPs provide multiple natural resource benefits and promote adaptive management of the landscape (Caerus Overall Management Figure 1). The majority, if not all BMPs listed are voluntary and are outside of the regulations that currently apply to Oil and Gas development. The parenthesized and bolded abbreviations at the end of each BMP provides a correlation to the BMP categories agreed upon by CPW.

1) Operational BMPs

- a) Three-phase gathering systems, where economically and technically feasible, to reduce footprint remaining during production phase, eliminate traffic, and reduce venting and potential spills. **(WQ, T, GH, HW)**
- b) Remote well control and monitoring to reduce traffic through work/project prioritization and increase emergency response efficiency. **(WQ, T, GH, HW)**
- c) Solar panels as an alternate energy source for on-location production equipment. **(T, GH)**
- d) Temporary surface water delivery lines to reduce truck traffic. **(T, HW, WQ, GH)**
- e) Remote completions to reduce the size of pad needed for simultaneous operations. **(T, HW)**
- f) Average well pad surface disturbance of 0.5 acres or fewer per well (well pad disturbance does not include associated pipelines, access roads, or facilities) wherever possible. **(HW)**
- g) Where feasible, electric power will be used at existing and future compressor stations to reduce on-site emissions. **(GH)**
- h) Use of gas lift to automate some production activities, reduces traffic to the well-site and reduces gas vented to the atmosphere by reducing the frequency of the “blow down / unloading” of a well. **(T, GH)**
- i) Prohibit Caerus employees and contractors from carrying projectile weapons (including bows) on Caerus property, except during company-organized events. **(HW)**
- j) Prohibit pets on Caerus property. **(WQ, HW)**
- k) Reduce traffic impacts by carpooling personnel to project locations, when appropriate and feasible. **(T)**
- l) When feasible, reduce additional surface disturbance by utilization of the staging/storage yard at the TLQ and the Caerus gravel pit (TS5 R96W section 34). **(HW)**
- m) Strategically apply fugitive dust control measures on the NPR to reduce coating of vegetation and deposition in water sources, including enforcing established speed limits on private Caerus roads. **(WQ, HW)**
- n) Caerus has volunteered to be a member of One Future and The Environmental Partnership. These voluntary programs require a commitment to reduce methane emissions. Caerus will report reduction targets and annual metrics through the Caerus ESG Report. **(GH)**

2) Pad Development

- a) New directional drilling technology, such as longer reaches, shorter total depth times, and natural gas-powered rigs, when possible. **(WQ, T, GH, HW, DT)**
- b) Reoccupy existing pads if/when possible. **(HW)**
- c) Simultaneous drilling and completions activities may be employed to shorten the disturbance time necessary to drill, complete, and bring the pad to production. **(T, HW, DT)**
- d) Green completions to reduce venting of natural gas to atmosphere during completions. **(GH)**
- e) Project Canary will be used for fence line air monitoring during pre-production operations on all new locations. **(GH)**
- f) Toe berms of adequate size on all fill slopes facing and or adjacent to potential water to contain any erosion from the fill slope. **(WQ, HW)**
- g) Topsoil windrows on all new facility construction for perimeter control to divert to terminal discharge points. **(WQ, HW)**
- h) Hydraulic mulch or armoring on all exterior slopes adjacent to waterways. **(WQ, HW)**
- i) Follow the North Parachute Ranch Integrated Vegetation Management Guidance Document for interim and final reclamation practices, including identifying appropriate seed mixes and invasive weed control measures. Selection of seed mixes will be based upon the type of ecosystem affected. **(HW)**

3) Pipeline Construction

- a) Gathering line placement adjacent to roads wherever possible unless the existing road is adjacent to waterways. **(WQ, HW)**
- b) Multiple gathering lines placed in a single trench to minimize disturbance and construction times for multiple lines. **(T, HW, WQ)**
- c) Trench plugs (sloped to allow wildlife or livestock to exit the trench should they enter) at known wildlife or livestock trails to allow safe crossing on long spans of open trench. **(HW)**
- d) Pipelines installed at right angles to the drainages, wetlands, and perennial water bodies. **(WQ, HW)**
- e) Equipment bridges for pipeline construction made from either clean rock and flume pipes or timber equipment mats with flume pipes. **(WQ)**
- f) Horizontal directional drill techniques at perennial water bodies and wetland complexes. **(WQ, DT)**
- g) In-stream construction activity limited to 24 hours for waterbodies less than ten feet wide and to 48 hours for waterbodies greater than ten feet wide at locations where horizontal boring is not feasible. **(WQ, HW, VTS)**
- h) A minimum of five feet of soil cover maintained between the pipeline and the lowest point of the drainage or water body channel. **(WQ)**

4) Road and Pad Construction

- a) Existing roads used in lieu of new construction wherever feasible. **(HW, WQ)**
- b) All access roads and facilities other than well pads seeded in a timely manner after construction has been completed and seeding of all topsoil on pad construction. **(WQ, HW)**

5) Aquatic Resources

- a) Water sampling to monitor for changes in water quality. Sampling will occur at a minimum annually within areas of development activity. Existing and new water sampling data will be maintained by Caerus. **(WQ)**
- b) Use two or more stormwater best management practices on new disturbance to control sediment runoff and control or contain any potential spills, wherever surface disturbance must occur within a riparian habitat, as defined by the presence of riparian associated vegetation. **(WQ, HW)**
- c) Relocate temporary travel routes necessary for development (such as secondary access routes) and long-term travel routes, wherever feasible, away from riparian habitat (as defined by vegetation) at the time of interim reclamation. **(WQ, HW, T)**
- d) Maintain spill response kits at strategic locations adjacent to riparian areas or other centralized locations. **(WQ, HW)**
- e) Install engineering controls (one-way valves, installed draw hoses with screened intakes, overhead loading, and loading from tanks) on all water points from Parachute Creek to prevent contamination. **(WQ, HW)**
- f) Use voluntary timing limitations for cutthroat trout. **(HW, WQ, VTS)**
- g) Block low water crossing at Light Gulch to eliminate unnecessary traffic through Parachute Creek. (Completed 2010). **(WQ, T, HW)**
- h) Use existing head gates and analyze the strategic use of additional head gates on road culverts as a tertiary containment (these are not the culverts in the waterway but draining to the waterway during storm events). **(WQ, HW)**

- 6) Wildlife Resources
 - a) Perform biological site surveys (on-site) for each new development, using the most recent data sets for wildlife and aquatic resources (the report format is based upon Federal on-site surveys). **(WQ, HW)**
 - b) Perform pre-disturbance surveys when the on-site inspection and commencement of disturbance occur in different field seasons (e.g., new raptor nests), using the most recent data sets for wildlife and aquatic resources. **(WQ, HW, VTS)**
 - c) Use the Wildlife Resources Matrix (Attachment B) and Caerus' wildlife resources database and maps to identify and document (where appropriate) potential impacts or concerns during the project planning phase for proposed drilling operations, new or existing locations to be used for siting completions operations, and construction of roads, pads and pipelines. The Wildlife Resource Matrix reflects a prioritization of species habitat sensitivity as agreed upon by CPW and Caerus. **(WQ, HW, VTS)**

- 7) Black Bear
 - a) Conduct regular contractor and employee training with respect to wildlife awareness. **(HW)**
 - b) Reinforce training at worksite tailgate meetings, monthly safety meetings, and the Environmental Health and Safety (EHS) hazard identification program, and through the use of signs. **(HW)**

- 8) Mule Deer and Elk
 - a) Avoid disturbance of big game production areas and winter range wherever possible, but this will be a secondary consideration to preserving sage-grouse habitat. **(HW, VTS)**
 - b) Prior to construction of new surface structures within five primary migratory corridors (Figure 2) Caerus will consult with CPW consistent with the Wildlife Resource Matrix in Attachment B. **(HW, VTS)**
 - c) Only essential traffic will be permitted to access sites throughout the NPR where no active operations are occurring. **(HW, T)**

- 9) Raptors
 - a) New development will require raptor surveys if appropriate habitat exists per Caerus' Initial Baseline Assessment (ISA) process. **(HW)**
 - b) Perform pre-disturbance raptor surveys prior to interim and final reclamation. **(HW, VTS)**
 - c) When feasible and appropriate, single pass presence/absence surveys may be conducted for high priority species; this snapshot may not meet the standards of the nest occupancy survey. **(HW, VTS)**
 - d) Schedule the commencement of development activity for the time of year outside of average breeding seasons for the species of concern, if the duration of operations on a location prevents seasonal avoidance (e.g., during drilling and completion operations that exceed 12 months per location). **(HW, VTS)**

- 10) Greater Sage-Grouse: Caerus will adhere to the following best practices for GrSG mitigation and monitoring for Caerus operations.
 - a) Where feasible, raptor perch deterrents will be installed on cross arms of power poles and other documented raptor perches, such as radio towers, where birds are noted perching. Monitor all structures exceeding six feet in height within occupied GrSG habitat for the presence of perching raptors or ravens. Perch deterrents need not be installed if they pose a safety issue (e.g., on the handrails of a tank battery). **(HW)**

- b) Locate new pads outside occupied GrSG habitat wherever possible or in habitat that is already disturbed. **(HW, VTS)**
- c) Implement three-phase-gathering on existing locations, where economically and technically feasible, to reduce onsite facilities and increase the acreage put into interim reclamation. **(T, HW, DT)**
- d) Apply a 1-mile radius No-Disturbance buffer around active lek sites (documented activity by CPW in the last five years) from 5:00 AM to 9:00 AM, March 15 through May 15. Where practicable, traffic and other disturbances will be restricted during this date range after sunset when GrSG are congregating around the lek until 9:00 AM the following morning when birds depart the lek. **(HW, T, VTS)**
- e) Restrict New Disturbance within nesting and brood-rearing habitat as much as possible from April 15 to July 1. **(HW, VTS)**
- f) Site New Disturbance using topographic features to shield leks from new disturbance whenever feasible. **(HW)**
- g) Schedule cross-country pipeline construction and installation (not including lines along roads) outside of the Critical Habitat Season. **(HW, VTS)**
- h) Use interim reclamation to redevelop, as quickly as possible, ground cover that provides for secure ground movements of GrSG and is an effective precursor to the reestablishment of appropriate sagebrush cover. Detailed guidelines and practices for interim and final reclamation are outlined in Caerus' North Parachute Ranch Integrated Vegetation Management Guidance. **(HW)**
- i) Reseed disturbances exceeding 15 feet in width in mapped occupied GrSG grouse habitat with local sagebrush seed, where topography and weather conditions allow safe access to do so. **(HW)**
- j) The following are approved exceptions to the above-described schedules and practices:
 - a. Well maintenance south of the Upper West Fork will not be considered New Disturbance but will be minimized to the extent practicable during the Critical Habitat Season. **(HW, VTS)**
 - b. Response to emergencies (an immediate threat to life, property, or the environment) will not be considered New Disturbance and will be permitted without timing limitations. **(WQ, HW)**
- k) Definitions of Terms
 - a. "Critical Habitat Season" means the time period from March 15 to July 1 each year.
 - b. "New Disturbance" means any new activity that will cause or leave a long-term and noticeable change to the landscape, including construction of access roads, gathering facilities and pipelines, and any drilling or completion activities.
 - c. "Disturbance" includes, but is not limited to, noise, lights, vehicle traffic and New Disturbance, as defined above.

Best Management Practices Reference Summary

T = Traffic Management = 15 references as BMP
DT = Drilling Technologies = 4 references as BMPs
GH = Greenhouse Gas/Emissions Management = 9 references as BMPs
WQ = Water Quality Management = 30 references as BMPs
HW = Habitat & Wildlife Management Practices = 53 references as BMPs
VTS = Voluntary Timing & Siting Considerations = 14 references as BMPs

(3) Description of 1202.b Operating Requirements

Caerus agrees to bore, rather than trench, any flowline and utility crossings of perennial streams identified as aquatic High Priority Habitat unless the Operator obtains a signed waiver from CPW and the Director or Commission approves a Form 4 or Form 2A documenting the relief. When installing culverts or bridges, such structures will not impact or prevent the passage of fish unless otherwise directed by CPW. 1202.a. Operating Requirements

Caerus acknowledges that all operating requirements that apply to the developments; wildlife, habitat and geographical locations will be followed as described by the Rule, as follows.

(1) In black bear habitat, Operators will install and use bear-proof dumpsters and trash receptacles for food-related trash at all facilities that generate trash.

(2) Operators will disinfect water suction hoses and water transportation Tanks withdrawing from or discharging into surface waters (other than contained Pits) used previously in another river, intermittent or perennial stream, lake, pond, or wetland and discard rinse water in an approved disposal facility. Disinfection practices will be repeated prior to completing work and before moving to the next water body. Disinfection will be performed by scrubbing and pre-rinsing equipment away from water bodies to remove all mud, plants, and organic materials and then by implementing one of the following practices:

- A. Spray/soak equipment with a CPW-approved disinfectant solution capable of killing whirling disease spores and other aquatic nuisance species defined by CPW; or
- B. Spray/soak equipment with water greater than 140° Fahrenheit for at least 10 minutes. All equipment and any compartments they contain will be completely drained and dried between each use.

(3) At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or Chemical storage areas within 500 feet of the Ordinary High-Water Mark (“OHWM”) of any river, perennial or intermittent stream, lake, pond, or wetland.

(4) To prevent access by wildlife, including birds and bats, Operators will fence and net or install other CPW-approved exclusion devices on new Drilling Pits, Production Pits, and other Pits associated with Oil and Gas Operations that are intended to contain Fluids.

- A. Such fencing and netting or other CPW-approved exclusion device will be installed within 5 days after the cessation of active drilling and completion activities and maintained until the Pit is removed from service and dried or closed pursuant to the Commission’s 900 Series Rules.
- B. The Director may require an operator to fence and net or install other CPW-approved exclusion devices on an existing Pit if the Director determines that the installation is necessary and reasonable to protect Wildlife Resources based on the analysis required by Rule 909.j, or other information that demonstrates additional protections for Wildlife Resources are appropriate.

- C. Operators will properly maintain and repair all fences, nets, and CPW-approved exclusion devices required by this Rule 1202.a.(4).

(5) For trenches that are left open for more than 5 consecutive days during construction of Pipelines regulated pursuant to the Commission's 1100 Series Rules, Operators will install wildlife escape ramps at a minimum of one ramp per 1/4 mile of trench.

(6) When conducting interim and final Reclamation pursuant to Rules 1003 and 1004, Operators will use CPW-recommended seed mixes for Reclamation when consistent with the Surface Owner's approval and any local soil conservation district requirements.

(7) Operators will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any Relevant Local Government requirements.

(8) Operators will conduct all vegetation removal necessary for Oil and Gas Operations outside of the nesting season for migratory birds (April 1 to August 31). For any vegetation removal that must be scheduled between April 1 to August 31, Operators may implement appropriate hazing or other exclusion measures prior to April 1 to avoid take of migratory birds. If hazing or other exclusion measures are not implemented, Operators will conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting season. If active nests are located, Operators will provide work zone buffers around active nests.

(9) Operators will treat Drilling Pits, Production Pits, and any other Pit associated with Oil and Gas Operations containing water that provides a medium for breeding mosquitoes with Bti (*Bacillus thuringiensis v. israelensis*) or take other effective action to control mosquito larvae that may spread West Nile virus to Wildlife Resources. Such treatment will be conducted in a manner which will not adversely affect aquatic Wildlife Resources.

(10) Operators will employ the following minimum Best Management Practices on new Oil and Gas Locations with a Working Pad Surface located between 500 feet and 1000 feet hydraulically upgradient from a High Priority Habitat identified in Rule 1202.c.(1). Q-S:

- A. Contain Flowback and Stimulation Fluids in Tanks that are placed on a Working Pad Surface in an area with downgradient perimeter berming;
- B. Construct lined berms or other lined containment devices pursuant to Rule 603.o around any new crude oil, condensate, and produced water storage Tanks that are installed after January 15, 2021;
- C. Inspect the Oil and Location on a daily basis, unless the approved Form 2A provides for different inspection frequency or alternative method of compliance;
- D. Maintain adequate Spill response equipment at the Oil and Gas Location during drilling and completion operations; and
- E. Not construct or use any Pits, except that Operators may continue to use existing Pits that were properly permitted, constructed, operated, and maintained in compliance prior to January 15, 2021.

(4) Description of 1203 Mitigation Commitments to Offset Unavoidable Adverse Impacts to Wildlife Resources

1203. Compensatory Mitigation for Wildlife Resources

Direct Impacts

Direct Impacts will be calculated using the Direct Long-Term Disturbance acres (e.g., access route, working pad surface) and the Direct Interim Reclamation Disturbance acres (e.g., pipelines, interim reclaim area of pad).

A credit ratio is established between the projects towards the Direct Long-Term Impacts, Direct Interim Impacts, and Indirect Impacts. Each credit is assumed to be an acre credit unless a different metric is defined by the project. Ratios for Direct and Indirect Impacts have been established jointly with CPW.

- 4:1 credit ratio is established for Direct Long-Term Impacts (4 project credits for 1 acre of Direct Impact)
- 1:1 credit ratio is established for Direct Interim Impacts
- 1:1 credit ratio is established for Indirect Impacts

Indirect Impacts

Caerus is using a Proximity Analysis Methodology (PAM) to determine indirect impact acres for future pad development. This methodology was developed by CK Associates, LLC (CK) and implemented in early compensatory mitigation agreements with CPW. Caerus in consultation with CPW has established the following methodology for this WMP. All Indirect Impact acres are calculated jointly with CPW consultation.

Proximity Analysis Methodology:

- A 0.425-mile buffer (approximately 680 meters) is applied from the edge of the proposed pad disturbance boundary (edge of direct impact). The buffer is segmented into 10 equal distance rings, with the first ring measuring at 0.043 miles out to the tenth ring of 0.425 miles. The 0.425-mile buffer distance was selected based on avoidance distances for greater sage-grouse and is also representative of the avoidance or “reduced use” distances applied by CPW for calculating indirect impacts to big game species.
- Each ring has a percent acre total, the first ring measuring at 0.043 miles has a 100%-acre count with the second ring at 0.085 miles having a 90%-acre count and sequentially at the outer buffer distance of 0.425 miles the percent acre count is 10%. The reasoning for the 100% to 10% reduction of acres going out from the pad edge of disturbance is to recognize disturbance to wildlife is higher in the near field and diminishes in the far field. The process also considers the probability of wildlife presence. This step provides the Indirect Impact acre baseline for each pad.
- Overlap of buffer area is eliminated from existing and/or proposed pads or other Direct Impact disturbances, such as roads. This removes double counting of Indirect Impact acres.
- An elevation criterion is established within the analysis; (1) if a 100 – foot elevation drop occurs from the edge of the disturbance boundary, all acres beyond that point are removed from the indirect acre baseline, (2) if a 10-foot elevation gain is achieved excluding an

immediate hill or ridge, all acres beyond that point are removed from the Indirect Impact acre baseline. The 10-foot elevation gain will be applied in concurrence with CPW.

- The remaining Indirect Impact acre buffer is reviewed jointly with CPW to apply a final removal of acres based on the probability of adverse disturbance to wildlife. In the far field of the 0.425-mile buffer based on topography and elevation changes, noise and line of sight as a factor for wildlife disturbance is greatly diminished.
- The remaining acres become the Indirect Impact acres for compensatory mitigation consideration, absent the application of BMP percent reduction to Indirect Impact acres. Based on an operator’s BMP valuation with CPW (0-85%), the BMP percent reduction is applied to the Indirect Impact acres to calculate the actual Indirect Impact acres for compensatory mitigation.
- Project specific Indirect Impact acres will be detailed in the compensatory mitigation plans, found within the Appendices of this WMP.

Caerus Mitigation Projects

Direct and Indirect Impacts can be offset by a habitat mitigation fee and/or by implementing a compensatory mitigation project(s). As part of the 3-year WMP, Caerus in agreement with CPW has identified projects and credit values (see table below) to be used to offset Direct and Indirect Impacts. New mitigation projects can be added to the WMP with agreement from CPW.

Caerus and CPW agreed on the value of project types for wildlife resources on Caerus property. Each project was assigned a credit value based on either scale of acres, wildlife use, and/or agreement of value. All projects will have a lifespan criterion assigned depicting one or more of the following credit categories:

- 1-time credit with no expiration
- 3-year lifespan upon implementation
- Annual accumulation for a 3-year running total
- Generated annually with no accumulation (i.e. must be used within the same calendar year they are generated)

Caerus Mitigation Projects	Credits	No expiration 1-time credits ¹	3-year lifespan for annual credits ²	Earn annually	3-year total forecast
Brush removal	196	Yes	No	No	196
Square S allotment	954	Yes	No	No	954
Middle Fork Meadows	30	No	Yes	Yes	90
Spring and/or Guzzler	80	Yes	No	No	80 ⁴
Water Well	160	Yes	No	No	160 ⁴
Off ROW Weed Management	95	No	Yes	Yes	285 ⁵
Grazing Monitoring and Ranch Manager	300 ³	No	No	Yes	300

1. 1-time credit projects have no expiration date.
2. Annual credit projects have a 3-year lifespan upon implementation. These credits can rollover to next WMP agreement.
3. Designated projects may have annual credit lifespan (12 months).
4. Assumes one project completed in lifespan of WMP. Credits are allocated when project is constructed/implemented.
5. Assumes same number of acres are treated each year.

Caerus and CPW will meet each year to confirm project credits generated and used, in addition to any new projects for consideration and implementation. Caerus will maintain a working spreadsheet that will track projects, credits, and debits to offset impacts from future development.

Project Descriptions

Brush Removal – This project is site-specific within greater sage-grouse (GrSG), elk, and mule deer habitat. Caerus will mechanically treat 196 acres of habitat by removing mature serviceberry/gamble oak stands, while maintaining existing sagebrush vegetation using a hydro-axe and heavy equipment. This is a onetime project receiving 196 no expiration credits. See **Caerus Piceance LLC Development 1 – Compensatory Mitigation Plan for the Expanded Liberty Unit (ELU) Development Plan** for details regarding the project.

Square S Allotment – CPW and Caerus have agreed on a credit exchange for animal unit months (AUMs) within the Square S grazing allotment in the Piceance Basin of Rio Blanco County. CPW believes that full control of grazing rights within the Square S Allotment would provide expanded range management options, reduce user conflicts, and enhance forage and escape cover for wildlife. The acreage consists of approximately 79,630 acres with a total of 3,522 base AUMs. Caerus currently retains 1,083 AUMs and CPW retains 2,439 AUMs. As of July 8, 2021, Caerus agreed to exchange their 1,083 AUMs for 954 mitigation credits through a letter of intent agreement with CPW. The signing of this WMP document codifies the agreement between CPW and Caerus to exchange the Square S grazing AUMs. Following the finalization of this agreement, Caerus and CPW staff will complete the necessary paperwork with the Bureau of Land Management to transfer the base AUMs into CPW's ownership. This is a onetime project receiving 954 credits with no expiration.

Middle Fork Meadows – This is a 30-acre tract located on Parachute Creek. Caerus maintains this acreage through vegetation maintenance and irrigation providing big game an annual and reliable food source during migration. The area is within several CPW wildlife boundaries for elk and mule deer. This is an annual project that receives 30 credits per year. The credits have a 3-year lifespan that may extend beyond the expiration of the current WMP agreement.

Water Management Projects – Water source management is critical for wildlife and vegetation within the Caerus operational boundary. To maintain wildlife movement and sustainability of vegetation, water source spacing is part of Caerus' adaptive management plans. The objective of this project is to establish a water source at locations where water is lacking to maintain animal movement throughout the range. Wildlife movement reduces over grazing and provides seasonal vegetation recovery. It is recognized that mule deer will travel up to one and half miles for water, but elk prefer to stay within a half mile of a water source. A half-mile radius range is equivalent to 320 acres and a one-mile range is equivalent to 640 acre spacing for which big game will travel for water. Caerus and CPW have agreed to the following water management projects and credits:

- **Spring and/or Guzzler** – Caerus may improve a natural spring or install a guzzler to improve wildlife habitat where water is needed. Caerus and CPW agree each spring improvement or guzzler project will generate 80 onetime credits with no expiration.

- **Water Well** – Caerus may install a water well to improve wildlife habitat where water is needed. Wells can be more reliable than a spring or guzzler but require ongoing maintenance. Caerus and CPW agree each new well will generate 160 onetime credits with no expiration.

Off ROW Weed Management – Caerus conducts annual weed control treatment in areas not associated with oil and gas operations. A team may traverse 1,000 acres to spray herbicide on weeds to eliminate patches and seed source. The credits for this project are based on area physically sprayed with a 2.5 multiplier to account for the larger area benefiting from weed control. The total area sprayed will change each year based on need. For example, in 2020 Caerus completed weed control on 1,000 acres while spraying a total of 38 acres of weeds. Based on the 2020 data, Caerus would have earned 95 credits with a 3-year lifespan. Each year Caerus will present to CPW the acres sprayed for conversion into credits using the 2.5 multiplier. The project generates onetime credits with a 3-year lifespan.

Grazing Monitoring and Ranch Manager – The ranch manager is a fulltime Caerus professional that provides oversight and ensures that BMPs are monitored. Under the Ranch Manager’s guidance, Caerus implements a holistic management approach between operations and wildlife resources. The ranch manager oversees grazing lease agreements within the Caerus operational boundary to ensure livestock utilization does not impact other wildlife resources. Existing and new lease agreements include provisions to (1) limit AUMs, (2) prevention of overgrazing, (3) manage the use of salt blocks to protect vegetation, (4) identify any weed treatment operations consistent with the North Parachute Ranch Integrated Vegetation Management Guidance Document, and (5) implementation of other habitat management practices. Monitoring includes fence inspections, periodic range checks for trespass livestock or unexpected issues, and grazing utilization baskets to determine when livestock should be removed from a geographical area. Grazing monitoring reports will be provided to CPW to assist in the management of big game. While the Ranch Manager position is filled, Caerus will annually generate 300 credits with a 12-month lifespan.

CPW Access – CPW requests access to Caerus property for scientific studies and special hunts. Caerus recognizes the need for CPW access and will determine the credits associated with the access on a case-by-case basis depending on the type of access, location, and duration. Additional mitigation credits from access agreements can be added via amendment at the time of approval.

Attachment A - Record of Modification

Attachment B - Wildlife Resource Matrix

Species/Habitat Concern Rating	1	6	5	4	3	2
	2	7	6	5	4	3
	3	8	7	6	5	4
	4	9	8	7	6	5
	5	10	9	8	7	6
		5	4	3	2	1
	Potential Impact Rating					

- 1) Using the NPR Wildlife Map, identify intersects between the proposed drilling operation, location of a completions operation, or construction of roads, pads or pipelines, and the spatial/temporal concerns related to each known wildlife resource concern (use [Worksheet 1](#) or the NPR WMP Wildlife Matrix Analyses spreadsheet).
- 2) Use the above matrix to calculate the Rating Total (Species/Habitat Concern Rating + Potential Impact Rating).
- 3) If the Rating Total ≥ 6 and cannot be reduced through avoidance of the specified temporal/spatial concerns, further evaluation is needed. [Caerus EHS](#) staff will be consulted.
- 4) If the Rating Total ≥ 8 Caerus' Development Lead should be notified.
- 5) If the Rating Total ≥ 8 specific input will be sought from CPW and documented on [Worksheet 2](#).

CAERUS PICEANCE, LLC
Wildlife Matrix Potential Impact Rating Guidelines

Species/Habitat Concern	Concern Rating	Timing of Disturbance	Potential Impact Rating
Sage Grouse:			
Within 1.0 mile radius of active lek site	5	March 15 to May 15 (breeding season)	5
		After May 15, before March 15	4
		Surface Structures	5
		Subsurface structures	4
Within occupied habitat	4	April 15 to July 15 (nesting/brood season)	4
		December 15 to Mar 15 (wintering)	4
		After July 15, before December 15	3
Within unoccupied potential habitat	3		2
Raptors:			
Note: Pre-construction surveys will be needed starting in March.			
Within 0.25 miles of a Coopers Hawk (COHA) nest	4	April 1 to August 15 (breeding/nesting season)	3
		After August 15, before April 1	2
Within 0.33 miles of a Red-tailed Hawk (RTHA) nest	4	March 1 to July 15 (breeding/nesting season)	3
		After July 15, before March 1	2
Within 0.25 miles of a Sharp-shinned Hawk (SSHA) nest	4	April 1 to August 15 (breeding/nesting season)	3
		After August 15, before April 1	2
Within 0.5 mile of a Golden Eagle (GOEA) nest complex	5	December 15 to July 15 (breeding/nesting season)	4
		After July 15, before December 15	3
Within 0.25 miles of a Northern Harrier (NOHA) nest	4	April 1 to August 15 (breeding/nesting season)	3
		After August 15, before April 1	2
Within 0.5 miles of a Peregrine Falcon (PEFA) nest complex	5	March 15 to July 31 (breeding/nesting season)	4
		After July 31, before March 15	3

Species/Habitat Concern	Concern Rating	Timing of Disturbance	Potential Impact Rating
Within 0.25 miles of a Great Horned Owl (GHOW) nest	3	March to August	2
		After August, before March	1
Within 0.25 miles of a Long-eared Owl (LEOW) nest	4	March 1 to July 15 (breeding/nesting season)	3
		After July 15, before March 1	2
Within 0.25 miles of a Northern Pygmy Owl (NOPO) nest	4	March 15 to July 15 (breeding/nesting season)	3
		After July 15, before March 15	2
Within 0.25 of any inactive nest of an undetermined species	4		3
May require removal of nest	5		4
Riparian Habitat:			
Colorado River Cutthroat Habitat: Disturbance within 300 feet of the natural high water mark	5		3
Colorado River Cutthroat Habitat: Disturbance within the natural high water mark	5	June 1 to September 1 (spawning season)	5
		After September 1, before June 1	4
Big Game (Deer and Elk):			
Within mapped production areas	3	April 15 to July 15	4
		After July 15, before April 15	3
Within winter range areas	4	After April 15, before January 1	3
		January 1 to April 15	4
Within key migration routes	4	Permanent surface structures	4
		Subsurface structures	4

Appendix A

Caerus Piceance LLC Development 1 – Compensatory Mitigation Plan

Expanded Liberty Unit (ELU) Development Plan

Caerus Piceance LLC Development 1

Compensatory Mitigation Plan

Expanded Liberty Unit (ELU) Development Plan

Caerus Piceance, LLC (Caerus) has developed this Compensatory Mitigation Plan (Plan) to meet the objectives of the Colorado Oil and Gas Conservation Commission’s (COGCC) Rule 1203.b. – Compensatory Mitigation for Wildlife Resources. This Plan was developed in coordination with Colorado Parks and Wildlife (CPW) and the White River Field Office Bureau of Land Management (WRFO BLM). The Plan covers development that will fall within the Expanded Liberty Unit (ELU), on private surface, owned by Conoco Philips.

Within the ELU, Caerus is proposing three new well pads (O13, M12, A18) with a total of 98 APDs and a Central Delivery Point (CDP) pad (G13). The O13, M12, and A18 well pads would be centrally located around the proposed G13 CDP which would be used to support drilling, completions and well production operations for the proposed wells. Total disturbance for the ELU development can be found below in Table 1 - Estimated Surface Disturbance in the Expanded Liberty Unit. Caerus has received approved Federal APDs for the ELU wells. Caerus will be submitting COGCC Form 2’s and 2A’s, that meet the new COGCC permitting requirements.

All pads are located on private surface (overlying Federal minerals) with an estimated total new surface disturbance of 80.9 acres. Location maps can be found in Appendix A.

Table 1. Estimated Surface Disturbance in the Expanded Liberty Unit

Project Component	Total Disturbance During the Construction Phase (acres)	Direct Long-Term Disturbance During the Production Phase - After Interim Reclamation (acres)	Direct Interim Disturbance – Disturbance that will be Interim Reclaimed (acres)	Disturbance After Abandonment/ Final Reclamation (acres)
O13 Well Pad*	7.2 (existing)	2.2 (existing)	5.0 (existing)	0
Access Roads	1.0 (existing)	0.6 (existing)	0.4 (existing)	0
Pipelines	7.3	0	7.3	0
Subtotal for the O13 Location	7.3	0.0	7.3	0
A18 Well Pad	11.3	3.2	8.1	0
Access Roads	6.2	6.0	0.2	0
Pipelines	9.3	0	9.3	0
Subtotal for the A18 Location	26.8	9.2	17.6	0
M12 Well Pad	11.2	2.5	8.7	0
Access Roads	2.8	2.4	0.4	0
Pipelines	9.1	0	9.1	0
Subtotal for the M12 Location	23.1	4.9	18.2	0
G13 CDP Pad	10.4	10.4	0	0
Access Roads	0.2	0	0.2	0
Pipelines ²	13.1	0.2	12.9	0
Subtotal for the G13 Location	23.7	10.6	13.1	0
Total for the Expanded Liberty Unit	80.9	24.7	56.2	0

* The O13 pad and access roads would be constructed completely within an already existing, much larger disturbance. Therefore, those portions are not being counted as new disturbance.

1203.b.(1) A. Plan Objective/Mitigation Goal

The Plan objective and mitigation goal is to provide a project combined with adaptive management features that is equivalent or greater than the Direct and Indirect Impacts. Mitigation project selection criteria should provide multiple benefits to wildlife resources in areas of disturbance to reduce behavioral changes and maintain wildlife presence and movement. In cooperation with CPW, Caerus seeks to identify mitigation projects that are durable over time and that meet wildlife resource needs through multiple benefits.

For this planned development, Caerus will mitigate the direct habitat loss by implementing 196 acres of brush removal in and adjacent to high priority habitat for elk, mule deer, and greater sage-grouse (GrSG), on Caerus owned surface. The 196 acres of hydro-axe treatment of mature serviceberry/Gamble oak stands will expand existing breeding/brood-rearing habitat, increase native forb composition, increase forage, reduce corvid perches, etc. This mitigation project can be quickly implemented and provides years of multiple benefits while increasing connectivity of habitat.

The WRFO BLM Environmental Assessment (EA) completed in November 2020, provides additional supporting information for the mitigation objectives for the ELU development. (BLM Environmental Assessment DOI-BLM-CO-N050-2020-0052-EA.)

Avoidance and Minimization

Avoidance and minimization were both used in the planning of each location. Caerus has agreed to avoid Barnes Ridge where there are several active GrSG leks. The ELU development is located to the East of Barnes Ridge with a distance greater than one mile and natural terrain features (valleys and ridges) separating the locations from the active lek sites. As an additional mitigation measure, Caerus has agreed to construct sound barriers by berming soil between applicable pad locations and lek locations to the north and west.

Caerus consistently looks to minimize impacts by reoccupying existing locations. The O13 has been located entirely within the existing TLQ Site. No new disturbance will be required for construction of the O13.

Compensatory Mitigation

Unavoidable impacts that cannot be mitigated through avoidance and/or minimization are accounted for through additional mitigation efforts. As discussed in the Compensatory Mitigation for Wildlife Resources section of the overarching Caerus Wildlife Mitigation Plan (WMP), a credit ratio has been established between the projects towards the Direct Long-Term Impacts, Direct Interim Impacts, and Indirect Impacts. Each credit is assumed to be an acre credit unless a different metric is defined by the project.

- 4:1 credit ratio is established for Direct Long-Term Impacts (4 project credits for 1 acre of Direct Impact)
- 1:1 credit ratio is established for Direct Interim Impacts
- 1:1 credit ratio is established for Indirect Impacts

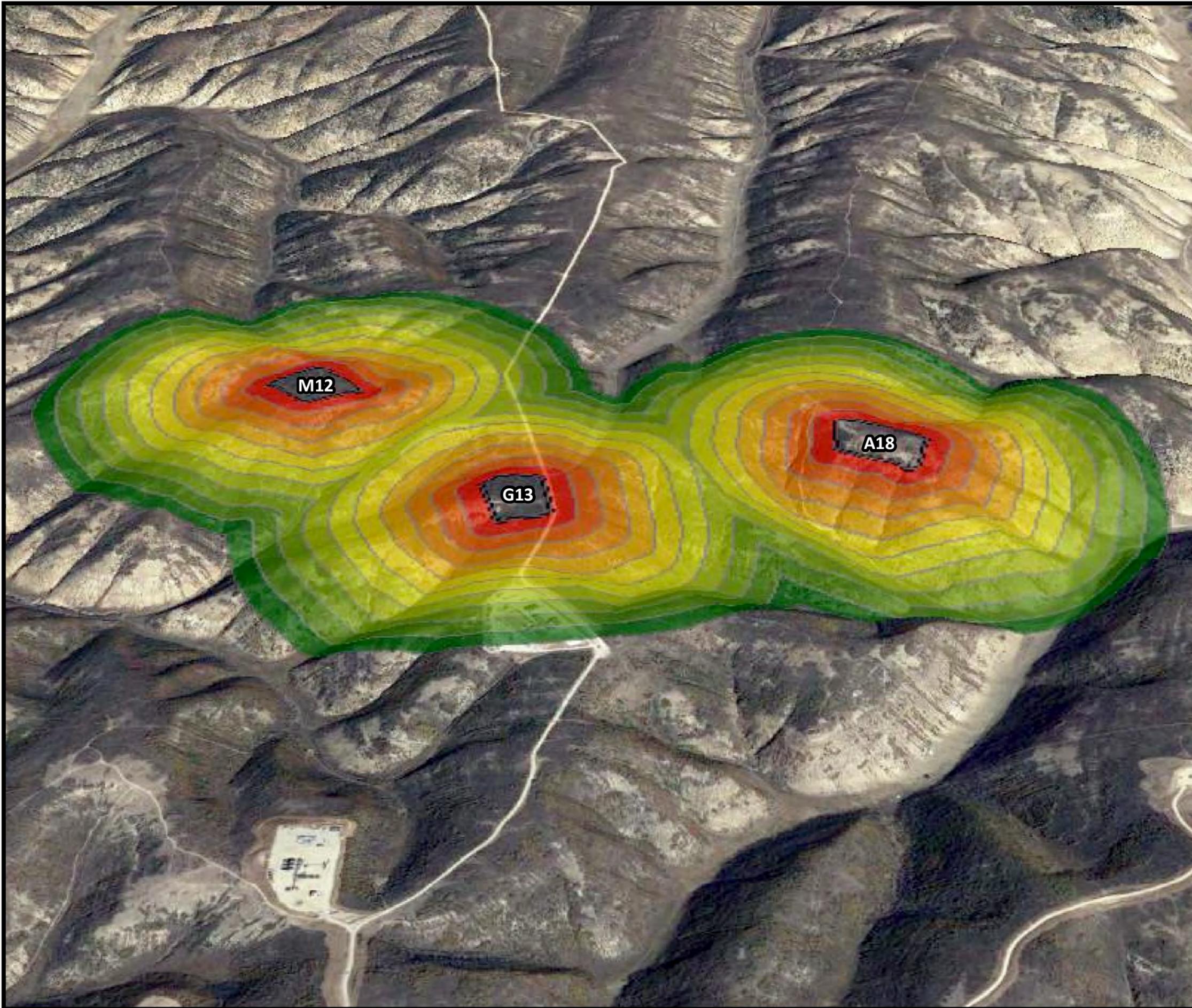
Direct Impacts

As shown in Table 1 - Estimated Surface Disturbance in the Expanded Liberty Unit, Direct Impacts from the four ELU locations, total 24.7 acres for Direct Long-Term Disturbance acres. At a ratio of 4:1, the project credits required to offset impacts, total 98.8. The Direct Interim Disturbance acres totaled 56.2. The calculated Direct Impacts for the ELU development project, total 155 acres. These totals are depicted below in Table 2 – Mitigation Acres to Disturbance Acres.

Indirect Impacts

The Caerus WMP details the Proximity Analysis Methodology (PAM) that was used to calculate the Indirect Impact acres for the ELU developments. Figure 1 provides the 0.425-mile buffer with removal of all boundary overlaps for pads M12, G13 and A18. This figure also provides a depiction of topography and elevation changes associated with the pads. Figure 2 provides the removal of buffer acres below the 100-foot elevation drop from the edge of the pad disturbance. Figure 3 depicts the remaining Indirect Impact acres for compensatory mitigation prior to applying BMP percent reduction.

Caerus has established a BMP percent reduction range between 60% to 85%. The habitat and wildlife benefits from the BMPs have been established jointly with the CPW into a percent reduction that is applied to Indirect Impact acres. The Indirect Impact acres calculated from PAM are 271.33 acres. In agreement with CPW, an 85% BMP reduction is applied to the 271.33 acres resulting in 40.69 acres requiring compensatory mitigation for the ELU development.



Buffer Distance (Mile)

- 0.043
- 0.085
- 0.128
- 0.17
- 0.213
- 0.255
- 0.298
- 0.34
- 0.383
- 0.425

New Pads A18, M12, and G13

Buffer Distance (mi)	Total Acres	Indirect Impact Percent	Indirect Impact Acres
0.043	53.92	100%	53.92
0.085	74.14	90%	66.73
0.128	97.92	80%	78.34
0.170	117.17	70%	82.02
0.213	141.70	60%	85.02
0.255	156.37	50%	78.19
0.298	156.29	40%	62.52
0.340	151.04	30%	45.31
0.383	158.26	20%	31.65
0.425	159.46	10%	15.95

Total Indirect Impact Acres = 599.63
 Edge of Disturbance Direct Impact Acres = 33.35

Imagery: Vivid Maxar 4/3/2018 (ESRI)

Caerus Piceance, LLC
 Parachute, Colorado

2021 Wildlife Mitigation Project

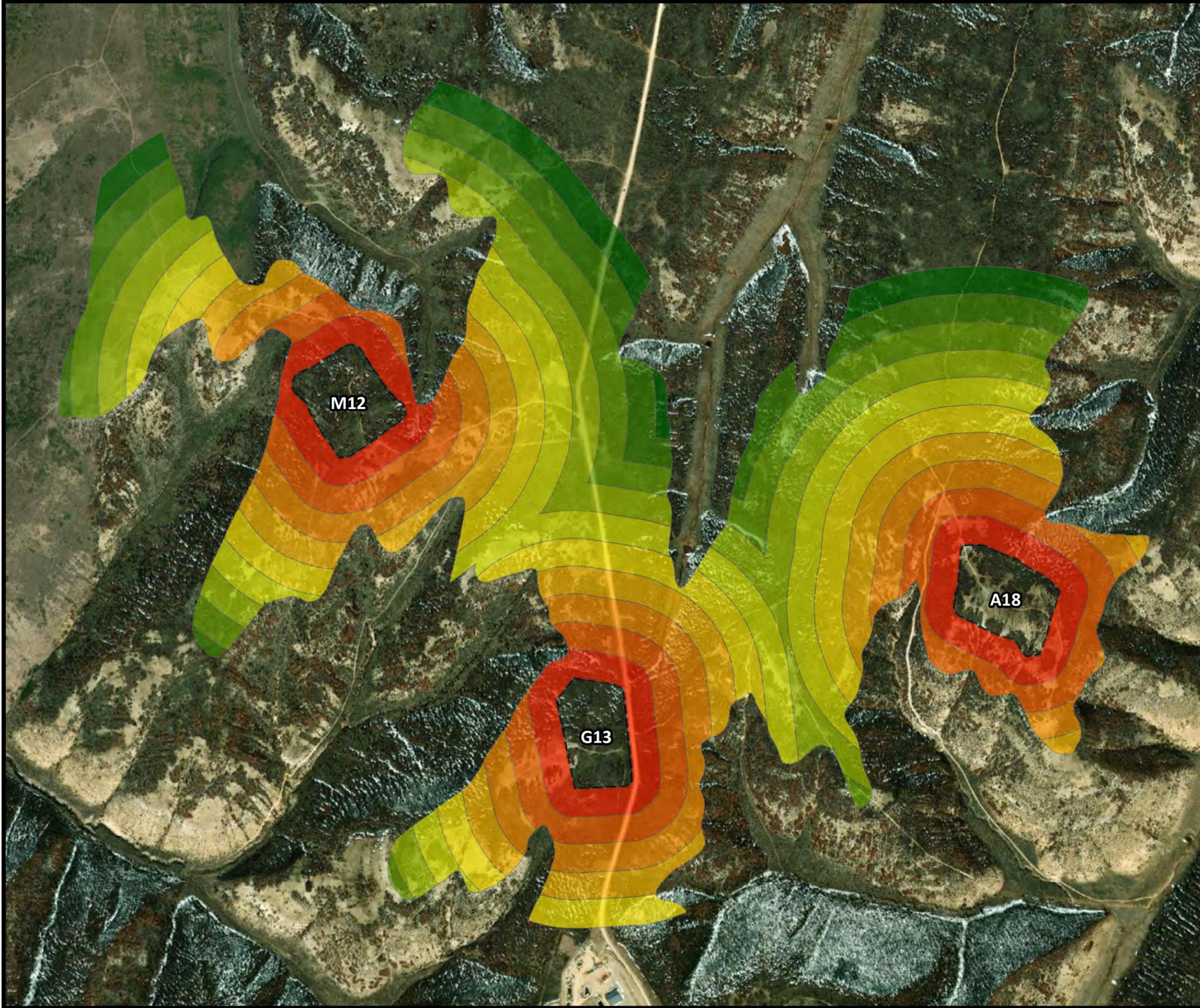
Indirect Impact 0.425 Mile Buffer Analysis with Elevation

Rio Blanco County, Colorado



Drawn: CAL Checked: BKR
 Date: 8/2/2021 Approved: KEN
 Dwg. No.: CA6702-18720-12

Figure 1



Buffer Distance (Mile)

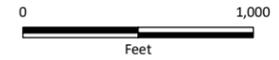
- 0.043
- 0.085
- 0.128
- 0.17
- 0.213
- 0.255
- 0.298
- 0.34
- 0.383
- 0.425

Edge Of Disturbance (33.35 acres)

New Pads A18, M12, and G13

Buffer Distance (mi)	Total Acres	Indirect Impact Percent	Indirect Impact Acres
0.043	51.93	100%	51.93
0.085	57.79	90%	52.01
0.128	58.86	80%	47.09
0.170	57.06	70%	39.94
0.213	62.56	60%	37.54
0.255	65.28	50%	32.64
0.298	60.63	40%	24.25
0.340	51.65	30%	15.50
0.383	39.90	20%	7.98
0.425	27.65	10%	2.77

Total Indirect Impact Acres = 311.64
Edge of Disturbance Direct Impact Acres = 33.35



Imagery: Vivid Maxar 4/3/2018 (ESRI)

Caerus Piceance, LLC
Parachute, Colorado

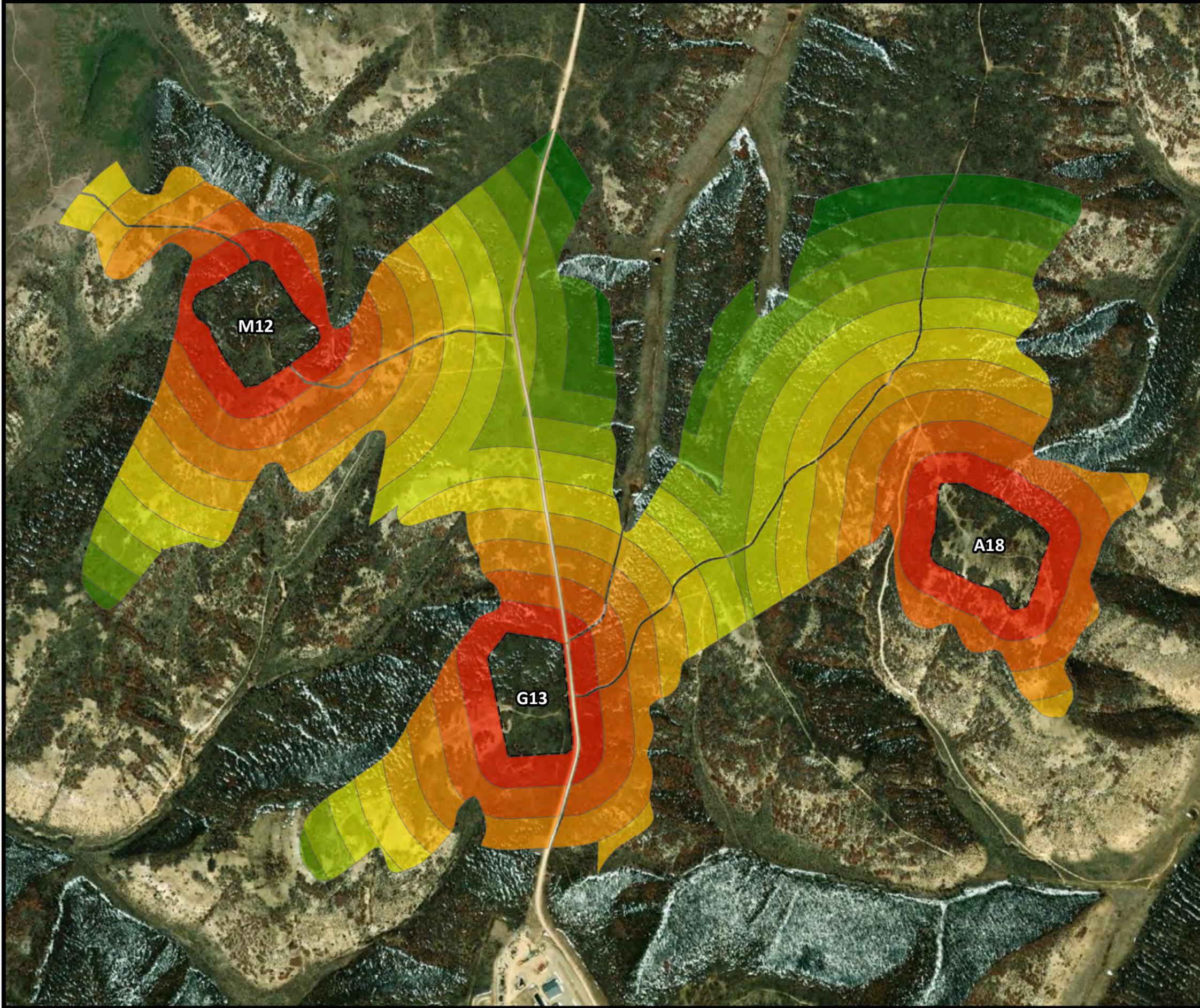
2021 Wildlife Mitigation Project

Indirect Impact 0.425 Mile Buffer Analysis with 100 Foot Elevation Adjustment

Rio Blanco County, Colorado



Drawn: CAL	Checked: BKR
Date: 8/2/2021	Approved: KEN
Dwg. No.: CA6702-18720-13	Figure 2



Buffer Distance (mi)

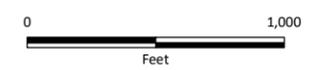
- 0.043
- 0.085
- 0.128
- 0.17
- 0.213
- 0.255
- 0.298
- 0.34
- 0.383
- 0.425

Edge Of Disturbance (33.35 acres)

New Pads A18, M12, and G13

Buffer Distance (mi)	Total Acres	Indirect Impact Percent	Indirect Impact Acres
0.043	50.98	100%	50.98
0.085	57.17	90%	51.45
0.128	58.16	80%	46.53
0.170	50.35	70%	35.25
0.213	51.24	60%	30.74
0.255	49.16	50%	24.58
0.298	40.14	40%	16.06
0.340	31.72	30%	9.52
0.383	24.03	20%	4.81
0.425	14.24	10%	1.42

Total Indirect Impact Acres = 271.33
Edge of Disturbance Direct Impact Acres = 33.35



Imagery: Vivid Maxar 4/3/2018 (ESRI)

Caerus Piceance, LLC
Parachute, Colorado

2021 Wildlife Mitigation Project

Indirect Impact 0.425 Mile Buffer Analysis with Noise and Line of Site Adjustment

Rio Blanco County, Colorado



Drawn: CAL	Checked: BKR
Date: 8/2/2021	Approved: KEN
Dwg. No.: CA6702-18720-14	Figure 3

Table 2. Mitigation Acres to Disturbance Acres

Disturbance Type	Total Acres	Ratio for Mitigation	Total Mitigation Acres
Direct Long-Term Impact Acres	24.7	4:1	98.8
Direct Interim Impact Acres	56.2	1:1	56.2
Indirect Impact Acres	40.69	1:1	40.69
Totals	114.25		195.69

General Schedule

Table 3 summarizes Caerus' proposed construction and drilling schedule; however, the exact timeframes may change based on factors such as construction of supporting infrastructure, market conditions and weather. The brush treatment project will be completed in 2021, therefore the habitat improvements will be in place before the construction of the ELU locations.

Table 3. Estimated Construction and Drilling Schedule

Unit	Pad Name	Construction Start Date	Drilling Start Date
Expanded Liberty	O13 Well Pad (existing)	September 2022	July 2023
	M12 Well Pad	September 2025	July 2026
	A18 Well Pad	September 2023	July 2024
	G13 CDP Pad	September 2022	N/A

1203.b.(1) B. Coordination and Concurrence with CPW and BLM

Caerus has maintained a long-standing working relationship with CPW and places high value on the mitigation projects that have been conducted to offset wildlife impacts in the Piceance Basin. Caerus and CPW have worked together under the North Parachute Ranch Wildlife Mitigation Plan (NPR WMP) since 2009. Caerus worked with CPW to develop a wildlife matrix that helps assess, avoid, minimize, and mitigate impacts to wildlife. Caerus has and will continue to employ the BMPs within the NPR WMP.

When Senate Bill 181 passed, Caerus applied the Director's Criteria Review to all locations. Even though Caerus and CWP had pre-existing agreements and robust procedures in place for location evaluation, Caerus consulted with CPW on every single location regardless of habitat type.

For the ELU development project, Caerus held on-sites for each location. Caerus, CPW, BLM and COGCC were in attendance. The on-sites occurred on the following date:

- ELU O13 496 Well Pad - 06/02/2020
- ELU A18 495 Well Pad - 06/02/2020
- ELU G13 496 CDP Pad - 06/02/2020
- ELU M12 496 Well Pad - 06/02/2020

Avoidance, minimization, and mitigation were discussed at each location. Dave Kubeczko - COGCC Location Assessment Specialist, Danielle Newman - CPW Land Use Specialist, Diane Mastin Dixon – CO BLM Sage-Grouse Natural Resource Specialist, Shawn Wisner – BLM Wildlife Biologist, and Tim Barrett – BLM Natural Resource Specialist, attended and participated in the wildlife discussions for each of the proposed locations. The group agreed that the best option for offsetting direct impacts was to employ a brush removal project to open up areas in an effort to improve and expand high priority habitat.

Follow-up meetings occurred 12/8/20, 5/12/21, and 6/16/2021 to discuss the specific details of the Brush Treatment Project. Taylor Elm – CPW Northwest Region Energy Liaison, Danielle Newman, Diane Mastin, Shawn Wisner and Caerus representatives participated in the discussion. The project scope is defined below.

1203.b.(1) C. Treatment Area Selection

The treatment area was selected based on the following criteria:

- The treatment areas must be within elk and mule deer habitat, and greater sage-grouse High Priority Habitat.
- The treatment area must be located on areas with less than 30% slope.
- The treatment area will be selected in higher value breeding and brood rearing habitat as well as areas that can promote expansion of currently occupied habitat.

The treatment area was field verified by the Caerus, CPW and BLM representatives listed above. The large ridge tops located within Township 4S, Range 96W, Sec 24, 25 and 26, and Township 4S, Range 95W, Sec. 19, 30, and 31 were identified as the primary target areas for the brush removal. A total of 196 acres has been delineated for treatment. The Brush Mitigation Area Map can be found as Appendix A.

1203.b.(1) D. - Site Protection Instrument

The treatment areas are located on Caerus owned and controlled surface. The treatment areas will be logged and maintained in the Caerus GIS database and GIS files will be shared with CPW. The treatment areas will be inspected annually to assess re-growth and to monitor for noxious weeds. The treatment area will be included in the Caerus Grazing Utilization Monitoring Program and data collected will be shared with CPW during the annual meeting.

1203.b.(1) E. - Baseline Information on Wildlife Resources

The ELU locations fall within the following High Priority Habitats listed in COGCC Rule 1202.D.

- 1202.D(2) Elk production and winter concentration area
- 1202.D(3) Mule deer winter concentration and severe winter range
- 1202.D(5) Greater sage-grouse priority habitat management area

The brush treatment areas fall within these same high priority habitats. Baseline imagery maps of the treatment areas can be found in Appendix B. Photos will be taken prior to treatment and maintained with all records associated with this Compensatory Mitigation Plan.

1203.b.(1) F. - Mitigation Schedule and Workplan

Upon construction of the BJU B26-496 well pad, Caerus will mow/masticate 196 acres of brush within the identified treatment areas. The entire 196 acres of mitigation will be completed in 2021, prior to the construction of the ELU well pads listed in this Plan. Caerus will re-treat the areas at the time of final reclamation. Records for treatment will be maintained with this plan in Appendix C.

1203.b.(1) G.- Maintenance Plan

The brush treatment areas will be added to the Caerus Weed Management Program. The brush removal areas will be inspected annually, and noxious weed treatments will be employed as required. Pesticide application records will be maintained and will be made available upon request.

1203.b.(1) H. - Performance Standards

196 acres will receive hydro-axe and mowing treatment of mature Serviceberry/Gamble oak stands adjacent to existing high-value habitats. Existing sagebrush vegetation will be left undisturbed, to the maximum extent possible. The treated area will expand existing breeding/brood-rearing habitat, increase native forb composition,

increase forage, reduce corvid perches, etc. The treatment areas will be monitored annually, and noxious weeds will be treated accordingly.

1203.b.(1) I. – Monitoring and Reporting Requirements

The brush treatment areas will be included in the Caerus Grazing Monitoring program. Transect data and photo documentation will be collected annually. Annual reports will be presented in the annual CPW meeting. All pesticide application records will be maintained and made available upon request.

1203.b.(1) J. – Long-term Management Plan

The brush treatment areas will have the initial treatment complete in 2021. The treatment areas will be monitored and treated for annual weeds. The treatment area will be retreated at the time of final reclamation. All records will be maintained with this Plan.

1203.b.(1) K. - Adaptive Management Plan

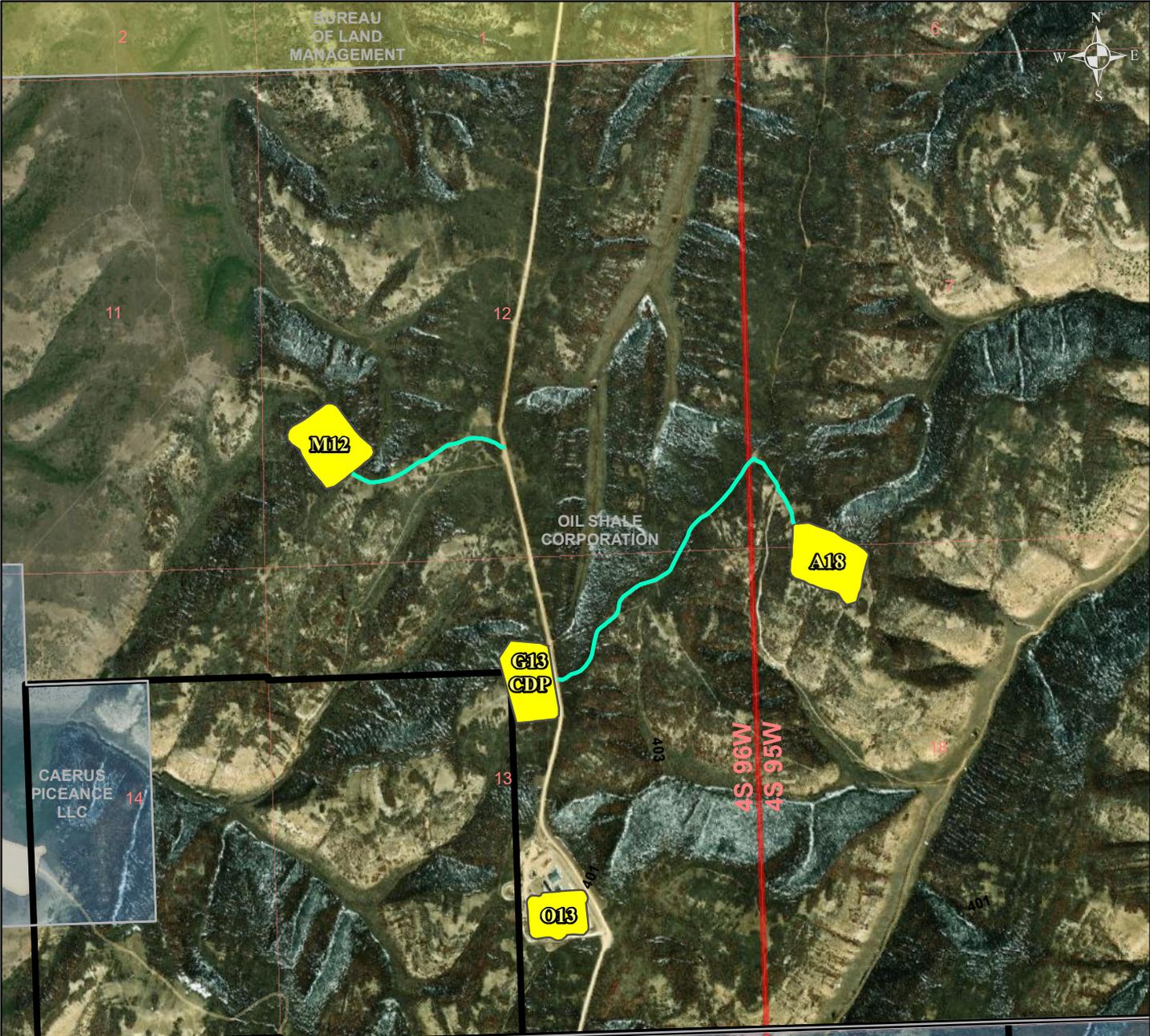
Caerus, CPW and BLM agree that flexibility is needed as these mitigation requirements are carried out over the lifetime of this plan. The results of this mitigation project may influence future mitigation requirements based on the following criteria:

1. Monitoring results of initial treatments
2. New information/data from CPW research and/or field staff
3. Climatic events/changes (e.g. fire, drought, etc.)
4. Changes to wildlife population status or BLM disturbance thresholds

1203.b.(1) L. – Financial Assurances

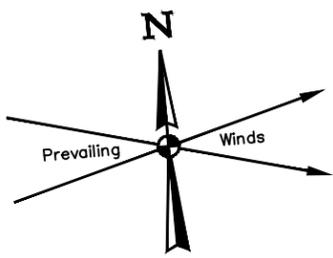
Caerus will be financially responsible for all costs associated with this brush removal project. This includes the cost for the initial and final brush hydro-axing and mowing, annual monitoring, weed control, and any costs associated with the maintenance of this compensatory mitigation plan.

Appendix A - Location Maps



- Projected Caerus Access Route
- Projected Caerus Pad
- Oil and Gas Units
- County Parcel
- Township
- Section





Proposed Secondary Access Road

Proposed Access Road

SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance	
Well Site Pad (including cuts/fills)	N/A	N/A		±7.054
Topsoil Stockpiles & Secondary Stormwater Containment Berm	N/A	N/A		±1.751
Remaining Area (In Surface Use Area)	N/A	N/A		±2.313
Proposed Access Road	±1,960'	30'		±1.350
Proposed Secondary Access Road	±2,117'	30'		±1.458
Proposed Gas Lift Line (In Pipeline Corridor)	±2,550'	N/A	N/A	N/A
Proposed Gas Lift Line (On B26 496 Pad)	±129'	N/A	N/A	N/A
Proposed Gas Pipeline (In Pipeline Corridor)	±2,579'	100'		±5.921
Proposed Gas Pipeline (On B26 496 Pad)	±124'	N/A	N/A	N/A
Proposed Water Pipeline (In Pipeline Corridor)	±2,571'	N/A	N/A	N/A
Proposed Water Pipeline (On B26 496 Pad)	±126'	N/A	N/A	N/A
Proposed 3-Phase (In Pipeline Corridor)	±1,645'	N/A	N/A	N/A
Proposed HP Frac Pipeline (In Pipeline Corridor)	±2,563'	N/A	N/A	N/A
Proposed HP Frac Pipeline (On B26 496 Pad)	±127'	N/A	N/A	N/A
Proposed Surface Flowback Pipeline (In Pipeline Corridor)	±2,556'	N/A	N/A	N/A
Proposed Surface Flowback Pipeline (On B26 496 Pad)	±128'	N/A	N/A	N/A
Total Acres of Disturbance				±19.847

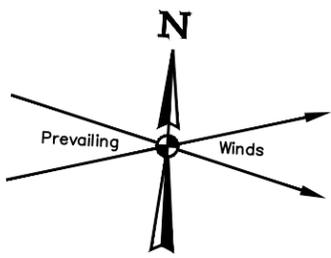
Caerus Oil & Gas LLC

BJU M23A 496 PAD
W 1/2 SW 1/4, SECTION 23, T4S, R96W, 6th P.M.
GARFIELD COUNTY, COLORADO

SURVEYED BY	BART HUNTING, D.S.	03-18-20	SCALE
DRAWN BY	T.L.L.	06-12-20	1" = 100'
SURFACE USE DISTURBANCE SUMMARY			EXHIBIT



UELS, LLC
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 Vernal, UT 84078 * (435) 789-1017



Proposed Secondary Access Road

Existing Road

Proposed 3-Phase

Proposed Pipeline Corridor 100' Wide ROW For M23A 496 Pad

Proposed Access Road

Existing Road Upgrade

BJU F26 495 Frac Support Pad

SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
Well Site and Frac Support Pads (including cuts/fills)	N/A	N/A	±7.151
Topsoil Stockpiles & Secondary Stormwater Containment Berm	N/A	N/A	±1.094
Remaining Area (In Surface Use Area)	N/A	N/A	±2.370
Proposed Access Road	±185'	30'	±0.127
Proposed Secondary Access Road	±842'	30'	±0.580
Proposed Gas Lift Line (In Pipeline Corridor)	±458'	N/A	N/A
Proposed Gas Lift Line (On Pad)	±481'	N/A	N/A
Proposed Gas Lift Line (In Pipeline Corridor)	±296'	100'	±0.680
Proposed Gas Pipeline (In Pipeline Corridor)	±1,829'	100'	±4.199
Proposed Gas Pipeline (On Pad)	±480'	N/A	N/A
Proposed Water Pipeline (In Pipeline Corridor)	±1,828'	N/A	N/A
Proposed Water Pipeline (On Pad)	±481'	N/A	N/A
Proposed 3-Phase (In M23A 496 Pipeline Corridor)	±942'	N/A	N/A
Proposed 3-Phase (On Pad)	±122'	N/A	N/A
Proposed HP Frac Pipeline (In Pipeline Corridor)	±646'	N/A	N/A
Proposed HP Frac Pipeline (On Pad)	±481'	N/A	N/A
Proposed Surface Flowback Pipeline (In Pipeline Corridor)	±638'	N/A	N/A
Proposed Surface Flowback Pipeline (On Pad)	±481'	N/A	N/A
Total Acres of Disturbance			±16.201

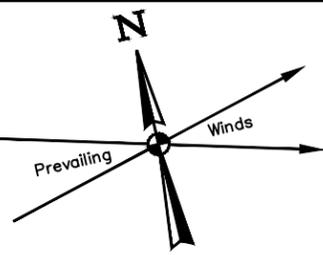
Caerus Oil & Gas LLC

BJU B26 496 PAD
NE 1/4 NW 1/4, SECTION 26, T4S, R96W, 6th P.M.
GARFIELD COUNTY, COLORADO

SURVEYED BY	DAYTON SLAUGH, K.H.	03-09-20	SCALE
DRAWN BY	T.L.L.	07-08-20	1" = 100'
SURFACE USE DISTURBANCE SUMMARY			EXHIBIT

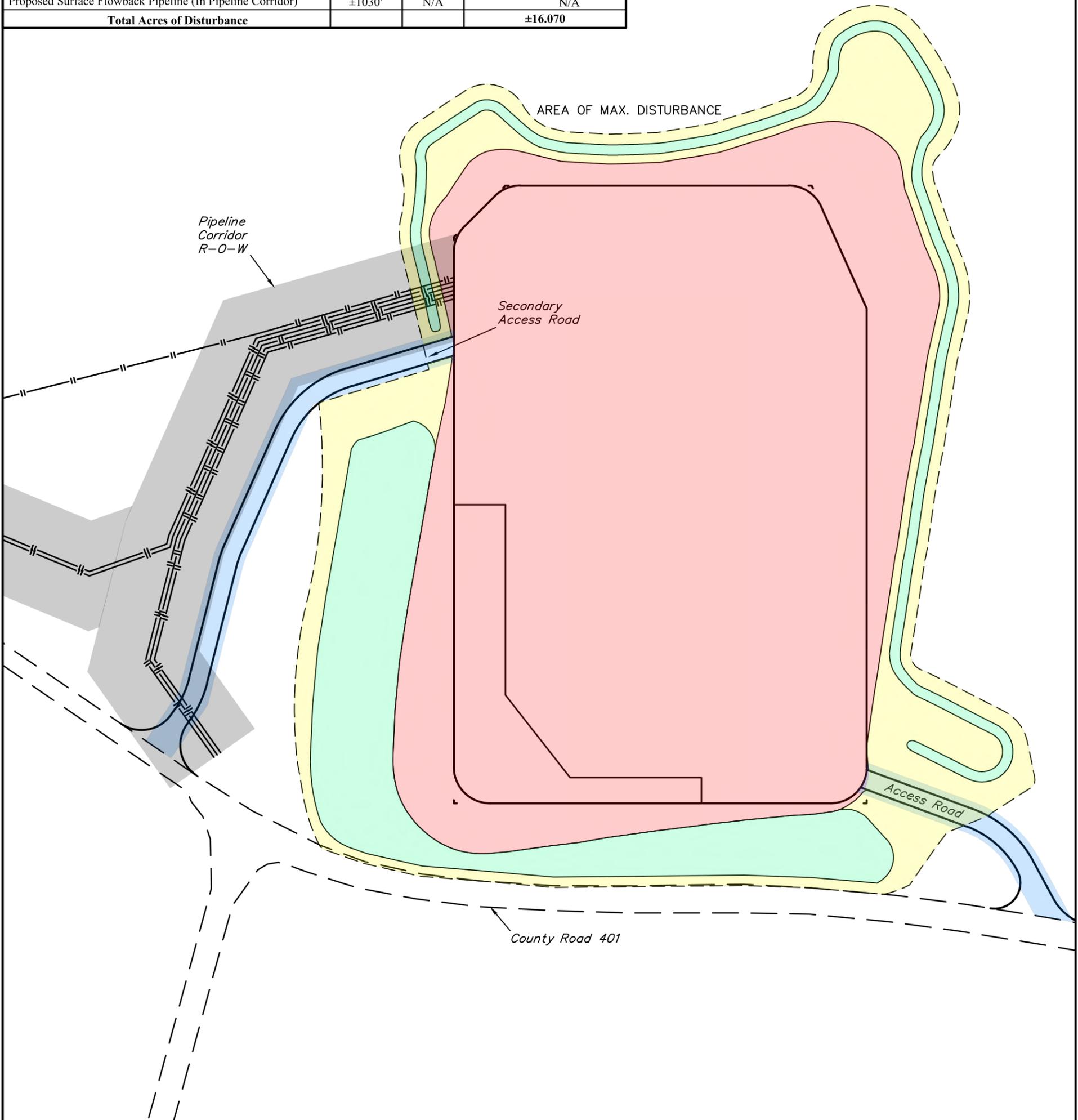


UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
Well Site Pad (including cuts/fills)	N/A	N/A	±7.032
Topsoil Stockpile & Secondary Stormwater Containment Berm	N/A	N/A	±1.584
Remaining Area (In Surface Use Area)	N/A	N/A	±1.754
Proposed Access Road	240'	30'	±0.165
Proposed Secondary Access Road	531'	30'	±0.366
Proposed Gas Lift Line (In Pipeline Corridor)	±618'	N/A	N/A
Proposed Gas Pipeline (Outside Pipeline Corridor)	±169'	100'	±0.388
Proposed Gas Pipeline (In Pipeline Corridor)	±458'	N/A	N/A
Proposed Water Pipeline (In Pipeline Corridor)	±636'	N/A	N/A
Proposed 3 Phase Line (In Pipeline Corridor)	±2070'	100'	±4.752
Proposed HP Frac Pipeline (In Pipeline Corridor)	±1058'	N/A	N/A
Proposed Surface Flowback Pipeline (Outside Pipeline Corridor)	±25'	50'	±0.029
Proposed Surface Flowback Pipeline (In Pipeline Corridor)	±1030'	N/A	N/A
Total Acres of Disturbance			±16.070



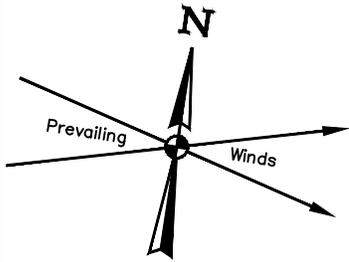
Caerus Oil & Gas LLC

BJU P25 496 PAD
SE 1/4 SE 1/4, SECTION 25, T4S, R96W, 6th P.M.
GARFIELD COUNTY, COLORADO

SURVEYED BY	DAYTON SLAUGH, D.P.	03-17-20	SCALE
DRAWN BY	T.L.L.	05-20-20	1" = 100'
SURFACE USE DISTURBANCE SUMMARY			EXHIBIT 1

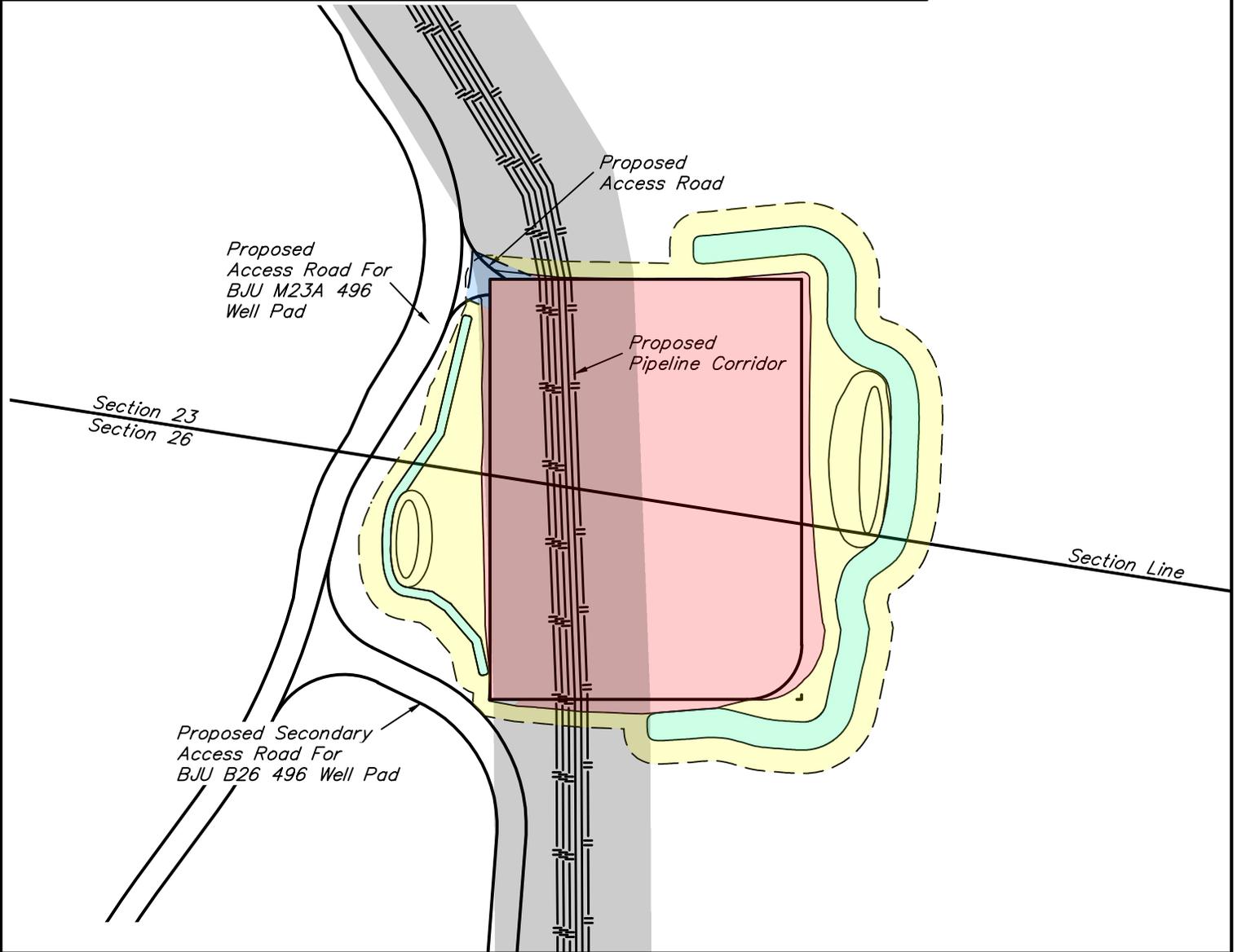


UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
CDP Pad (including cuts/fills)	N/A	N/A	±1.339
Topsoil Stockpile & Secondary Stormwater Containment Berm	N/A	N/A	±0.264
Remaining Area (In Surface Use Area)	N/A	N/A	±0.742
Proposed Access Road	29'	30'	±0.020
Total Acres of Disturbance			±2.365



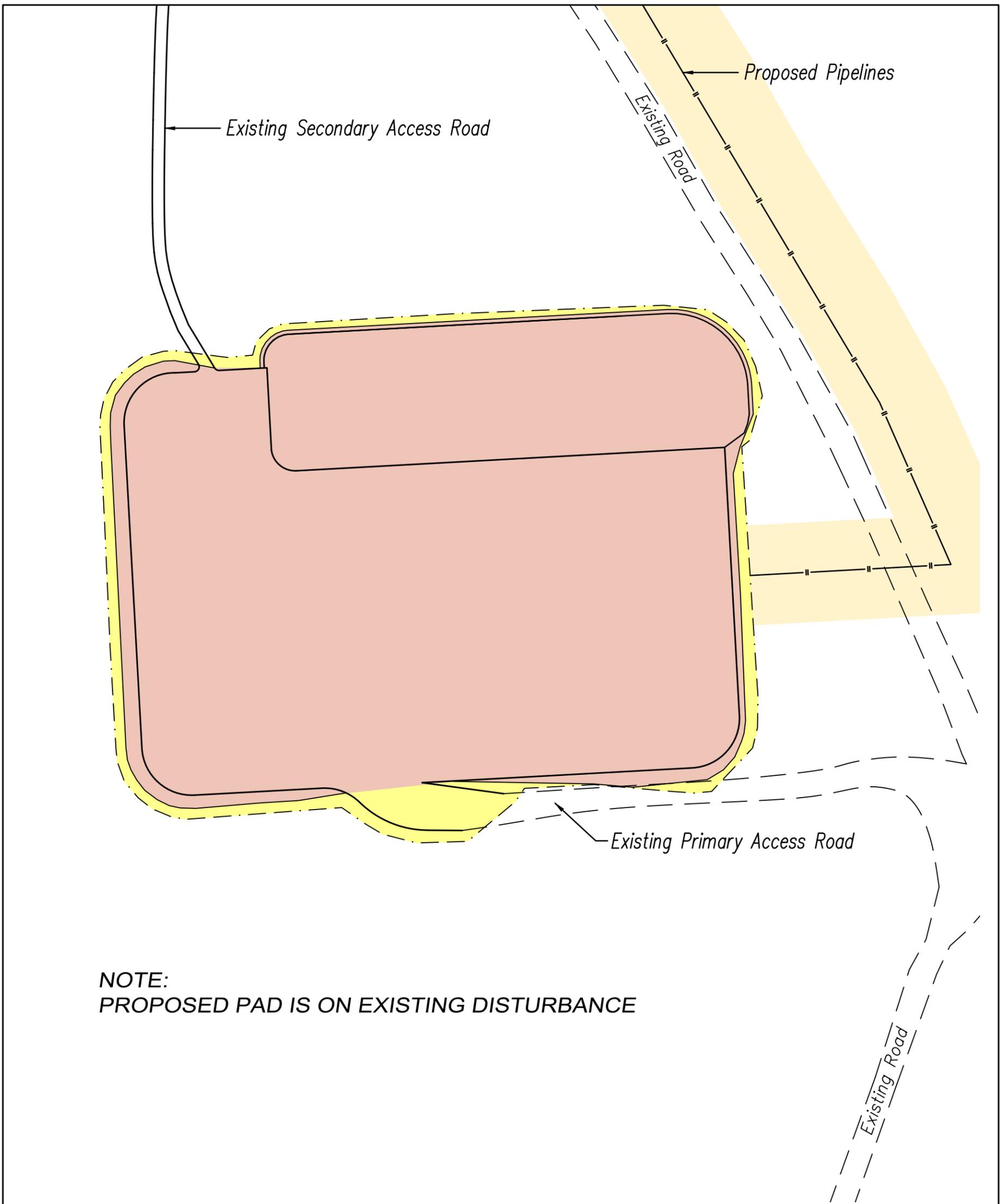
Caerus Oil & Gas LLC

BJU N23 496 CDP PAD
SE 1/4 SW 1/4, SECTION 23, T4S, R96W, 6th P.M.
NE 1/4 NW 1/4, SECTION 26, T4S, R96W, 6th P.M.
GARFIELD COUNTY, COLORADO



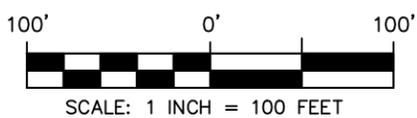
UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DENNIS PETTY, C.R.	05-13-20	SCALE
DRAWN BY	T.L.L.	07-23-20	1" = 100'
SURFACE USE DISTURBANCE SUMMARY			EXHIBIT 1



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
Well Site Pad (including cuts/fills)	N/A	N/A	±6.602
Remaining Area (In Surface Use Area)	N/A	N/A	±0.598
Pipelines (From G13-496 CDP Site to ELU 013-496 Pad)	± 3188'	100'	±7.319
TOTAL ACRES OF DISTURBANCE			± 14.519



WASATCH SURVEYING ASSOCIATES
906 MAIN STREET, EVANSTON, WY 82930
(307) 789-4545

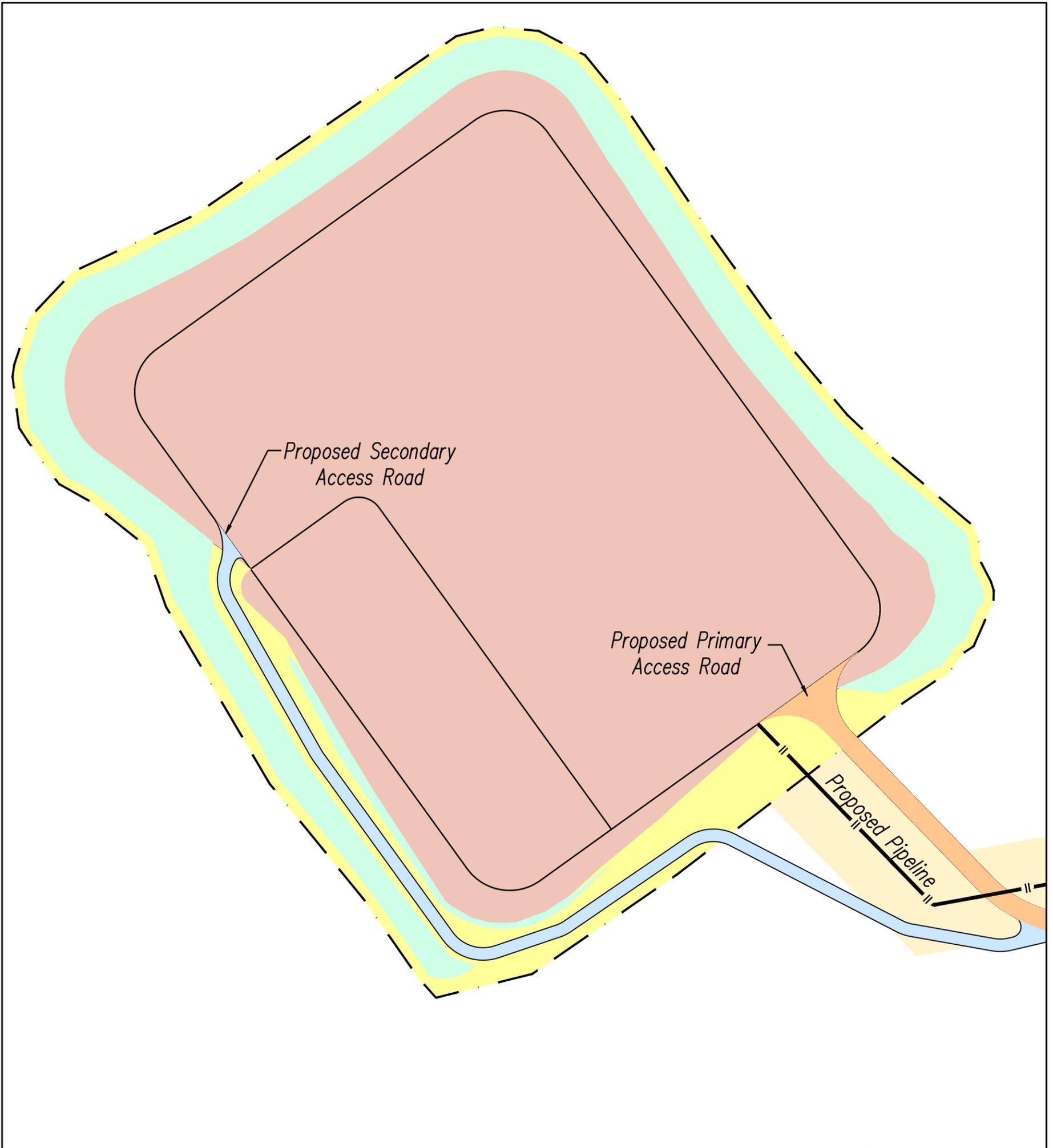


CAERUS OIL & GAS LLC

ELU 013 496 WELL PAD
W1/2 SE1/4, SECTION 13, T4S, R96W, 6TH P.M.
RIO BLANCO COUNTY, COLORADO

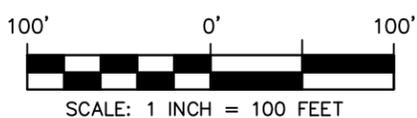
SURFACE USE DISTURBANCE SUMMARY

SURVEYED BY: JT/BT	DATE: 5/18/20	EXHIBIT
DRAWN BY: SGT	DATE: 7/01/20	PROJECT NO: 20-13-05



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
Well Pad Site (including cuts/fills)	N/A	N/A	 ±8.416
Topsoil Stockpiles & Secondary Stormwater Containment Berm	N/A	N/A	 ±1.635
Remaining Area (In Surface Use Area)	N/A	N/A	 ±1.148
Proposed Primary Access Road (Outside of Surface Use Area)	±1720'	60'	 ±2.369
Proposed Primary Access Road (In Surface Use Area)	N/A	N/A	 ±0.054
Proposed Secondary Access Road (Outside of Surface Use Area)	± 344'	20'	 ±0.158
Proposed Secondary Access Road (In Surface Use Area)	N/A	N/A	 ±0.207
Proposed Pipeline	±4420'	90'	 ±9.132
TOTAL ACRES OF DISTURBANCE			± 23.119



WASATCH SURVEYING ASSOCIATES
 906 MAIN STREET, EVANSTON, WY 82930
 (307) 789-4545

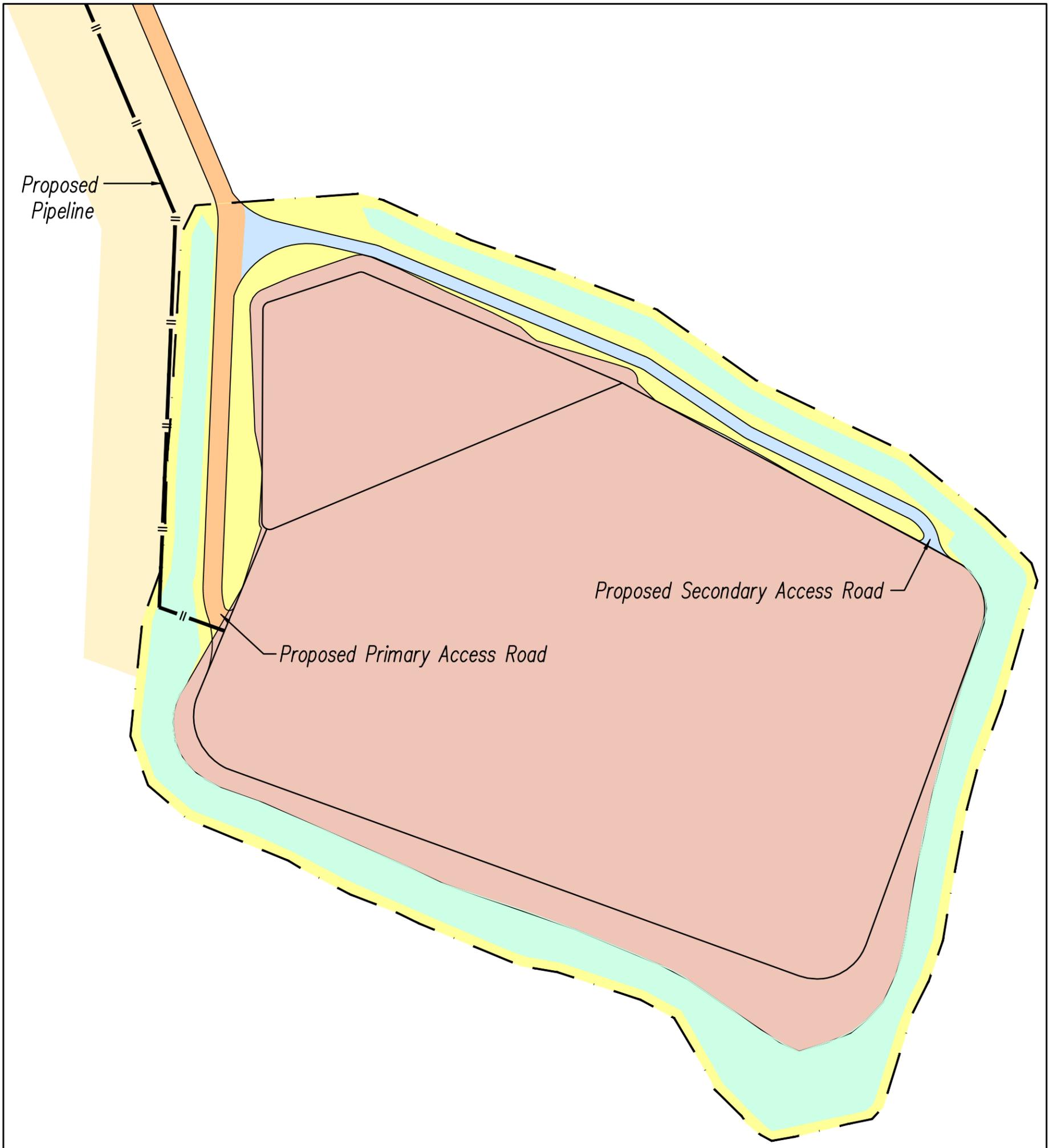


CAERUS OIL & GAS LLC

ELU M12 496 WELL PAD
 W1/2 SW1/4 SECTION 12, T4S, R96W, 6TH P.M.
 RIO BLANCO COUNTY, COLORADO

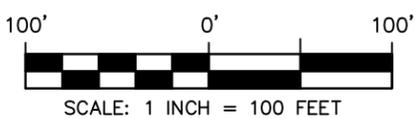
SURFACE USE DISTURBANCE SUMMARY

SURVEYED BY: JT/BT	DATE: 4/02/20	EXHIBIT
DRAWN BY: SGT	DATE: 10/05/20	PROJECT NO: 20-13-03



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
Well Pad Site (including cuts/fills)	N/A	N/A	 ± 8.320
Topsoil Stockpiles & Secondary Stormwater Containment Berm	N/A	N/A	 ± 1.695
Remaining Area (In Surface Use Area)	N/A	N/A	 ± 1.278
Proposed Primary Access Road (Outside of Surface Use Area)	± 4210	60	 ± 5.798
Proposed Primary Access Road (In Surface Use Area)	N/A	N/A	 ± 0.182
Proposed Secondary Access Road	N/A	N/A	 ± 0.235
Proposed Pipeline	± 4500	90'	 ± 9.298
TOTAL ACRES OF DISTURBANCE			± 26.806



WASATCH SURVEYING ASSOCIATES
 906 MAIN STREET, EVANSTON, WY 82930
 (307) 789-4545

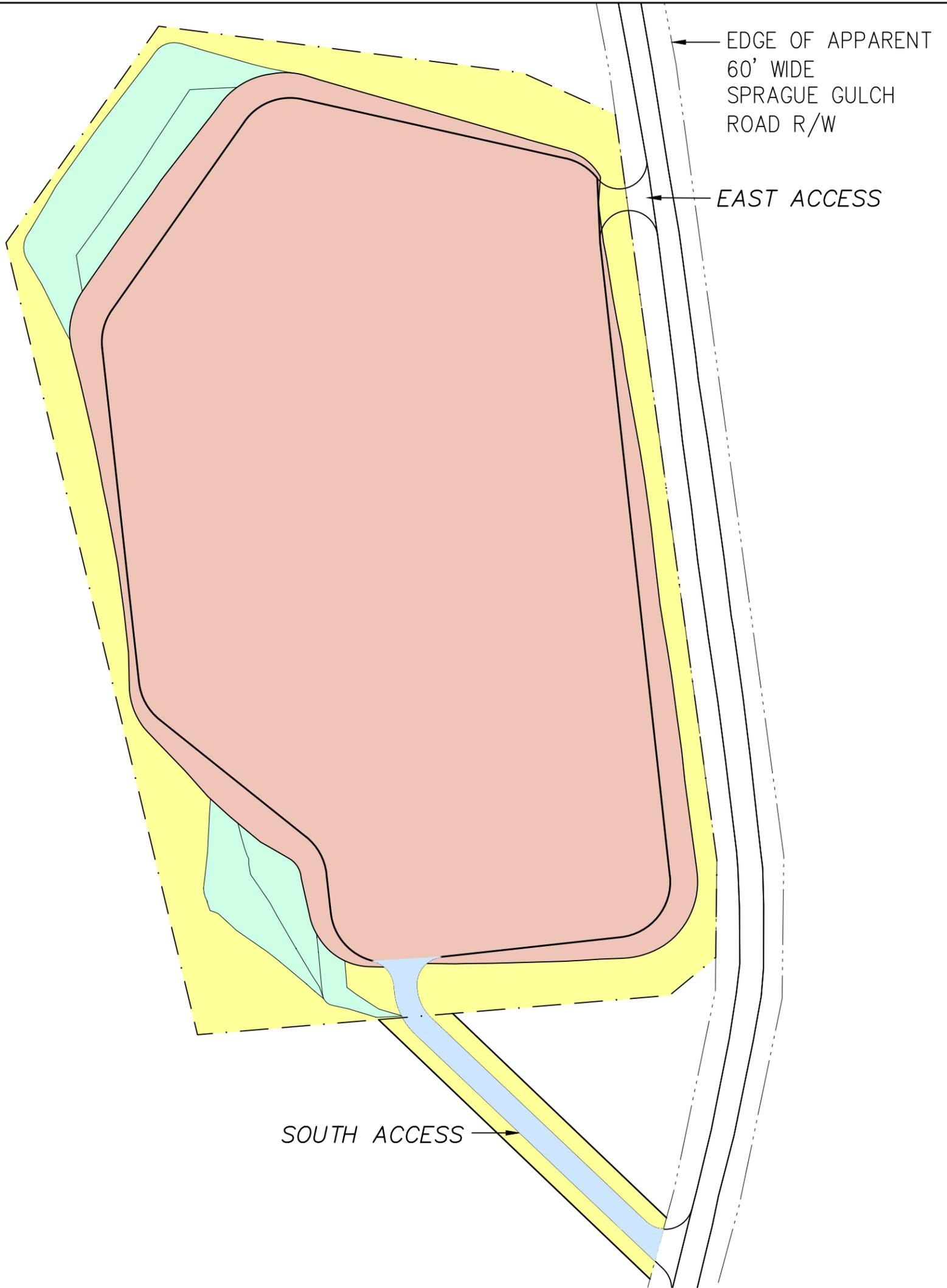


CAERUS OIL & GAS LLC

ELU A18 495 WELL PAD
 LOT 3 (NW1/4 NW1/4),
 SECTION 18, T4S, R95W, 6TH P.M.
 RIO BLANCO COUNTY, COLORADO

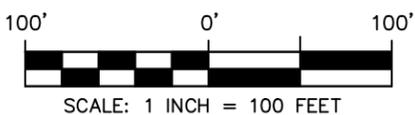
SURFACE USE DISTURBANCE SUMMARY

SURVEYED BY: JT/BT	DATE: 5/18/20	EXHIBIT
DRAWN BY: SGT	DATE: 9/03/20	PROJECT NO: 20-13-04



SURFACE USE DISTURBANCE SUMMARY (SUDS)

	Length (ft)	Width (ft)	Approx. Acres of Disturbance
CDP Site (including cuts/fills)	N/A	N/A	± 7.785
Topsoil Stockpiles & Secondary Stormwater Containment Berm	N/A	N/A	± 0.690
Remaining Area (In Surface Use Area)	N/A	N/A	± 1.900
South Access Road	± 356'	20'	± 0.170
TOTAL ACRES OF DISTURBANCE			± 10.545



CAERUS OIL & GAS LLC

G13 CDP SITE
 LOTS 2 & 3, SW1/4 NE1/4, & THE SE1/4 NW1/4
 SECTION 13, T4S, R96W, 6TH P.M.
 RIO BLANCO COUNTY, COLORADO

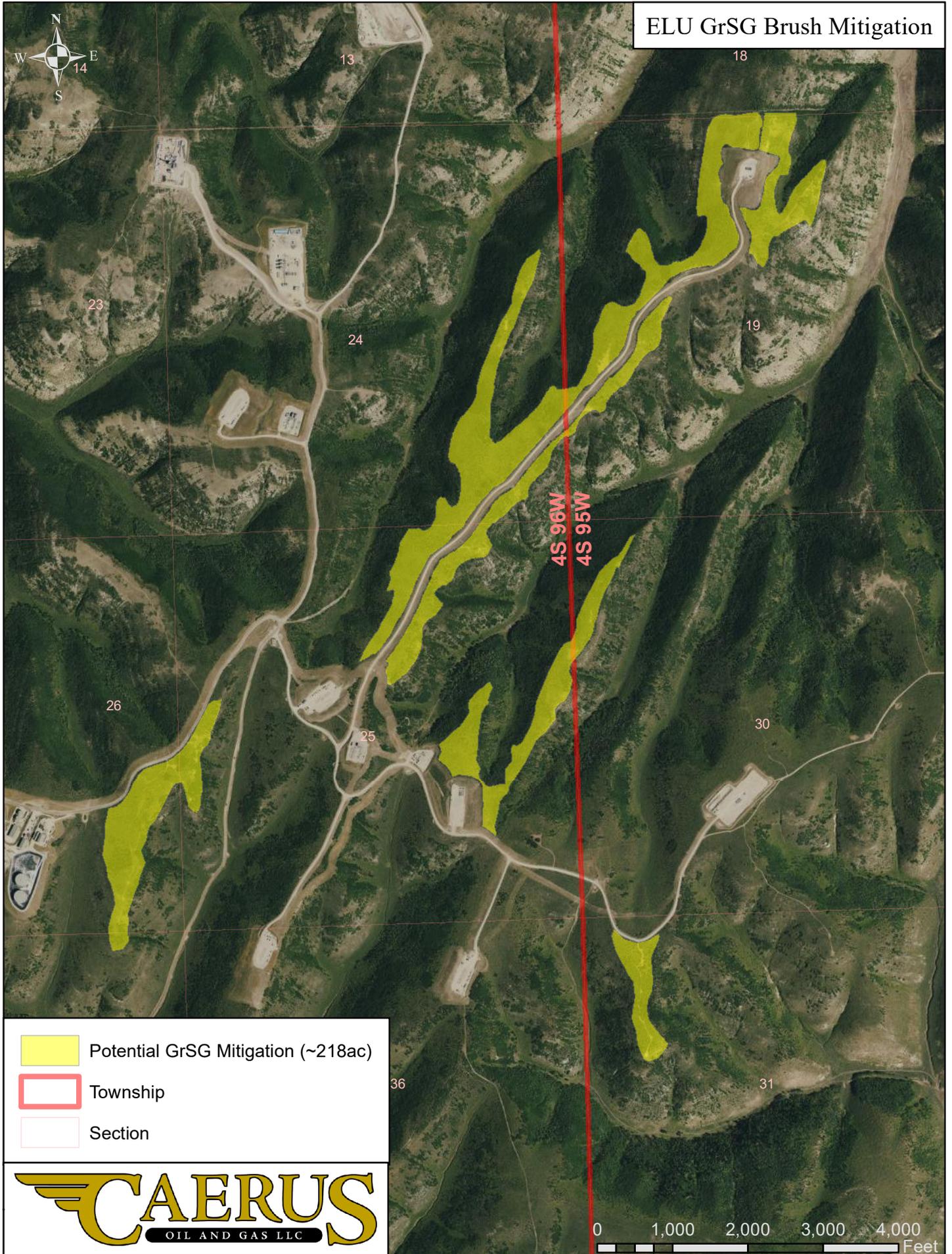
SURFACE USE DISTURBANCE SUMMARY

SURVEYED BY: JT/BT	DATE: 6/02/20	EXHIBIT
DRAWN BY: SGT	DATE: 7/07/20	PROJECT NO: 20-13-06



WASATCH SURVEYING ASSOCIATES
 906 MAIN STREET, EVANSTON, WY 82930
 (307) 789-4545

ELU GrSG Brush Mitigation



-  Potential GrSG Mitigation (~218ac)
-  Township
-  Section



Appendix B - Brush Mitigation Area Photos



DATE: 6/11/2021
day, month, year

PASTURE: storycouch/Girls Claims
pasture, allotment, general location

PLOT: C19 area
unique plot name or number (something you will remember)

BEARING: North west
e.g. 35°, up/down, down/up, southward, etc.

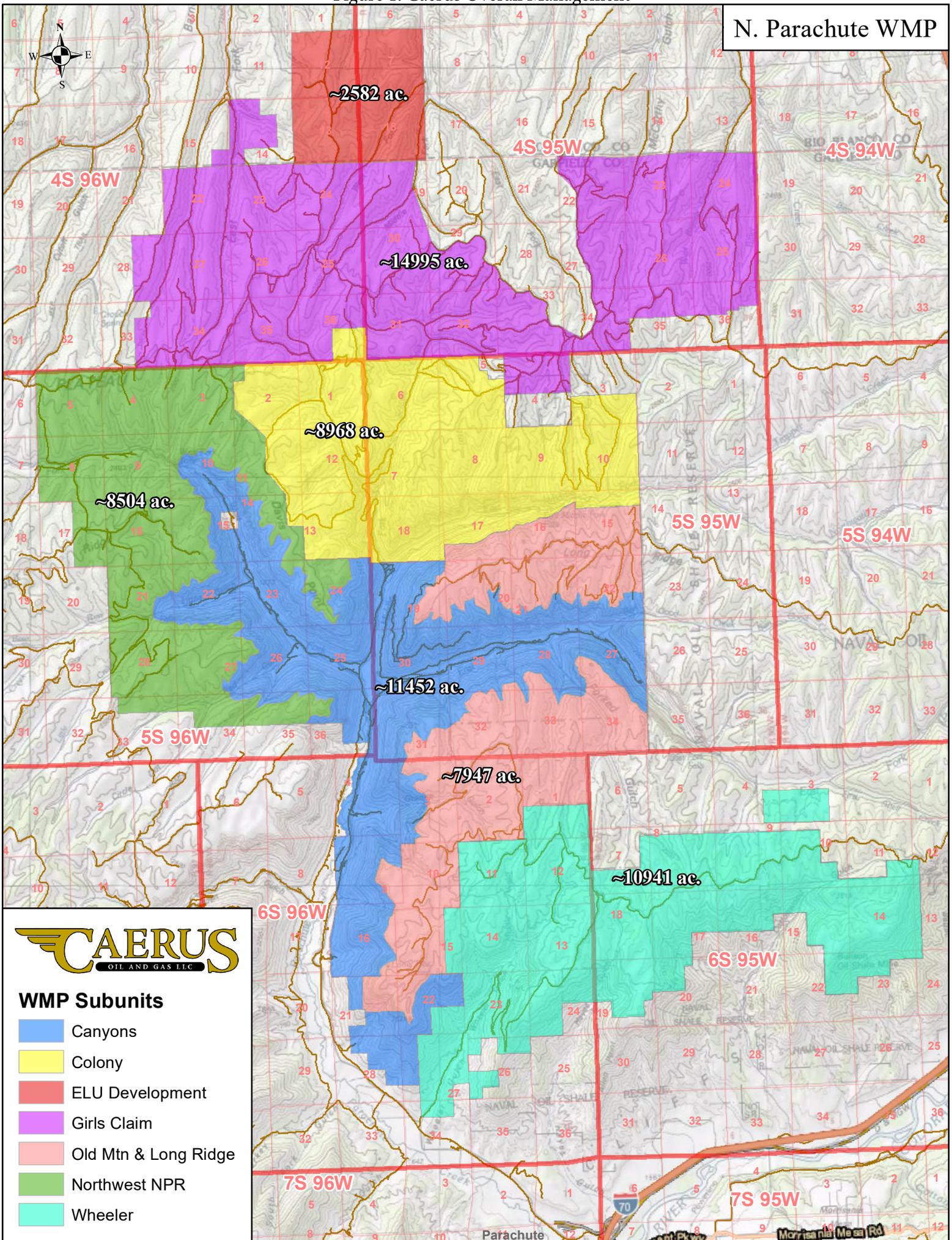
GPS or PLSS: 39.68117, -108.11226
distance, angle, description (bearing, range, section)

Appendix C - Brush Mitigation Area Records

Figures

Figure 1. Caerus Overall Management

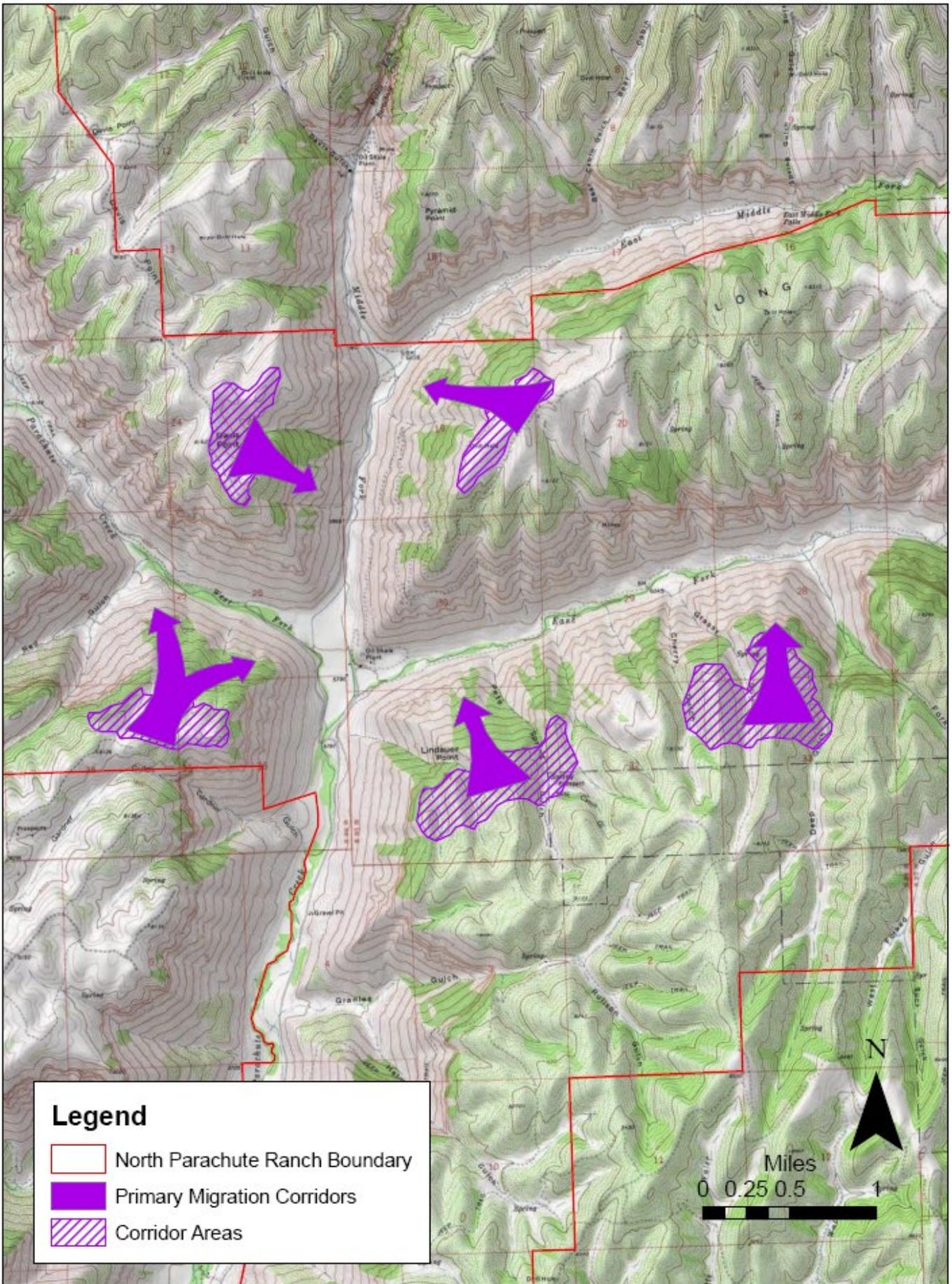
N. Parachute WMP



WMP Subunits

- Canyons
- Colony
- ELU Development
- Girls Claim
- Old Mtn & Long Ridge
- Northwest NPR
- Wheeler

Figure 2. Five Primary Migratory Corridors on the NPR



Appendix B

ELU A18 495

Supplemental Site-Specific Information to Wildlife Plan

**Supplemental Site-Specific Information to Wildlife Plan
Expanded Liberty Unit (ELU) A18-495 Well Pad
Lot 3, Sec. 18, T4S, R95W
Rio Blanco County, Colorado**

Oil and Gas Location Information:

- Surface Management Agency: Fee
- Minerals: Federal
- Number of Wells to be Drilled: 35 New
- Pad Status (New or Existing): New
- Site Elevation: 8,039 ft.
- Planned Construction Start Date: 9/2023
- Planned Drilling and Completions Start Date: 7/2024
- Planned Interim Reclamation Start Date: Fall 2025
- Total acres of disturbance oil and gas location (OGL): 11.3 acres
- Total acres of disturbance working pad surface (WPS): 3.2 acres
- Total acres of disturbance access roads (AR): 6.2 acres
- Total acres of disturbance pipeline corridors (PC): 9.3 acres
- Total acres of disturbance production pad area (PPA): 3.2 acres

High Priority Habitat (HPH) Name	Estimated Acreage Disturbed
Elk Winter Concentration Area HPHD	15.5
Elk Production Area HPHD	15.5
Mule Deer Winter Concentration Area HPHD	15.5
Mule Deer Severe Winter Range HPHD	10.02
Greater Sage Grouse Priority Habitat Management Area HPHD	15.5

Alternative Location Analysis:

Caerus, CPW and the WRFO reviewed the A18 495 location at an in-field onsite on June 2, 2020 and were in agreement that the proposed location was the most suitable location to develop natural gas wells which would also minimize potential direct and indirect impacts to wildlife. Additionally, the surface disturbance and cumulative impacts of this Oil and Gas Location and the associated wells was fully analyzed in the WRFO's Environmental Assessment, Final Decision and Finding of No Significant Impact, dated November 25, 2020. Furthermore, Caerus and CPW have continued to endeavor with pre-consultation meetings about the proposed location on December 8, 2020, May 12, 2021, and June 13, 2021, in order to draft a Wildlife Mitigation Plan pursuant to Rule 1201.b and a Compensatory Mitigation Plan pursuant to COGCC Rule 1203.

Due to the pre-consultation meetings Caerus has held with CPW regarding the aforementioned location, and because the WRFO has rendered a Final Decision of No Significant Impact, Caerus requested that CPW waive the COGCC ALA requirement in Rule 304.b.(2).B.viii. CPW waived the ALA requirement on April 27, 2022 which CPW executed on the same day. The signed waiver letter has been provided with the submittal of the A18 495 OGDG.

Direct and Indirect Mitigation:

Caerus has developed a Compensatory Mitigation Plan (Plan) to meet the objectives of the Colorado Oil and Gas Conservation Commission's (COGCC) Rule 1203.b. – Compensatory Mitigation for Wildlife Resources. This Plan was developed in coordination with Colorado Parks and Wildlife (CPW) and the White River Field Office Bureau of Land Management (WRFO BLM). The Plan covers direct and indirect impacts associated with the Expanded Liberty Unit (ELU) Development Plan. The A18 495 direct and indirect impacts are detailed within the Plan which can be found in Appendix

A of the Wildlife Mitigation Plan. Caerus will mitigate the direct habitat loss by implementing 196 acres of brush removal in and adjacent to high priority habitat for elk, mule deer, and greater sage-grouse (GrSG), on Caerus owned surface. The 196 acres of hydro-axe treatment of mature serviceberry/Gamble oak stands will expand existing breeding/brood-rearing habitat, increase native forb composition, increase forage, reduce corvid perches, etc. This mitigation project can be quickly implemented and provides years of multiple benefits while increasing connectivity of habitat. The WRFO BLM Environmental Assessment (EA) completed in November 2020, provides additional supporting information for the mitigation objectives for the ELU development. (BLM Environmental Assessment DOI-BLMCO-N050-2020-0052-EA.)

Additionally, the following Best Management Practices will be employed at the A18-495. (These BMPs are listed in the 2A under Operator Proposed Wildlife BMPs)

Species	BMP Type	Description
GREATER SAGEGROUSE	Wildlife - Avoidance	Avoidance and minimization were both used in the planning of each location. Caerus has agreed to avoid Barnes Ridge where there are several active GrSG leks. This location is located ~3-miles to the East of Barnes Ridge with a distance greater than 1-mile and natural terrain features (valleys and ridges) separating the locations from the active lek sites.
GREATER SAGEGROUSE	Wildlife - Minimization	The operator agrees to reclaim/restore greater sage-grouse habitats with native shrubs, grasses, and forbs identified by CPW that contribute to optimal greater sage-grouse habitat and other wildlife appropriate to the ecological site. In order to offset any direct impacts planned disturbance may cause, Caerus has already removed brush on Caerus owned surface near the location to provide sage-grouse habitats with native shrubs, grasses and forbs as a condition for BLM EA and the Compensatory Mitigation Plan.
GREATER SAGEGROUSE	Wildlife - Minimization	If oil and gas construction must occur within greater sage-grouse primary general habitat management areas (PHMA and GHMA), the operator agrees to conduct oil and gas construction outside the period between March 1st and July 15th. Caerus will complete pad construction and interim/final reclamation activities between July 15 th and December 15th; avoiding the greater sage grouse wintering, breeding, and nesting periods that occur during this timeframe.
GREATER SAGEGROUSE	Wildlife - Minimization	Only essential traffic will be permitted to access sites throughout the North Parachute Ranch where no active operations are occurring. As a general Caerus practice, essential visits to the well pad and production pad will occur between 10 AM and 4 PM during the leking, nesting and early brood rearing season (March 1st - June 30th) within 1.0-mile of an active lek
GREATER SAGEGROUSE	Wildlife - Minimization	To reduce truck traffic, Caerus will utilize a three-phase gathering system to transfer product fluids from this oil and gas location to the ELU G13-496 Central Delivery Point where produced water will then be transferred through the existing pipeline system to the Divide Road Water Treatment Facility located to the southwest of this location for treatment and recycling of produced water. Additionally, Caerus will utilize solar panels to reduce the need for additional powerlines and use remote telemetry to reduce the need for daily well site visitation.
GREATER SAGEGROUSE	Wildlife - Minimization	Use interim reclamation to redevelop, as quickly as possible, ground cover that provides for secure ground movements of GrSG and is an effective precursor to the re-establishment of appropriate sagebrush cover. Caerus will also reseed disturbances exceeding 15-feet in width mapped in the occupied GrSG habitat with local sagebrush seed, where topography and weather conditions allow safe access to do so.
GREATER SAGEGROUSE	Wildlife - Minimization	Where feasible raptor perch deterrents will be installed on cross arms or power poles and other documented raptor perches, such as radio towers, where birds are noted perching. Caerus will monitor all structures exceeding 6-feet in high occupied in GrSG habitat for the presence of perching raptors or ravens. However, note perch deterrents will not be installed if they pose a safety issue (such as on handrails or tank batteries).
MULE DEER & ELK	Wildlife - Minimization	Caerus will continue to provide access to CPW research personnel for ongoing mule deer research and predator research on the North Parachute Ranch, and other Caerus owned property.

MULE DEER & ELK	Wildlife - Minimization	Caerus will consult with CPW and BLM prior to any construction of new surface structures within five primary migratory corridors detailed in the attached Wildlife Management Plan. Caerus will place multiple gathering lines into a single trench to minimize disturbance and construction. Caerus will install trench plugs (sloped to allow wildlife or livestock to exit the trench should they enter) at known wildlife or livestock trails to allow safe crossing on long spans of open trench, when trenches are open longer than 48-hours.
MULE DEER & ELK	Wildlife - Minimization	Only essential traffic will be permitted to access sites through the North Parachute Ranch where no active operations are occurring.
MULE DEER & ELK	Wildlife - Minimization	Caerus will implement three-phase gathering at the ELU G13-496 CDP to reduce the need for onsite separation and fluid storage production facilities and reduce the need for increased acreage put into reclamation. Furthermore, centralized facilities significantly reduce the need for truck traffic that would have been necessary to transport produced water off-location for re-use or disposal.
MULE DEER & ELK	Wildlife - Minimization	Through Caerus' ranch manager, Caerus will manage all grazing lease agreements for the North Parachute Ranch under a consistent monitoring program to ensure that livestock utilization does not negatively impact other natural wildlife resources. Monitoring will include fence inspections, repairs, and improvements; periodic range checks for trespassing cattle or unexpected issues; the use of grazing baskets to determine the percentage of grazing usage so that livestock may be timely removed from an area; continuing the development and maintenance of water sources as a result of Caerus operations; and adopting grazing management guidelines, including grazing lease deferrals, to protect existing wildlife habitat resources. Existing and new lease agreements include provisions to: 1) limit animal grazing unit months; 2) prevent overgrazing; 3) manage the use of salt blocks to protect vegetation; 4) conduct any weed treatment operations consistent with the North Parachute Ranch Integrated Vegetation Management Guidance Document; and 5) utilize sound management practices.
MULE DEER & ELK	Wildlife - Minimization	Pets will be prohibited on Caerus property.
MULE DEER & ELK	Wildlife - Minimization	If new oil and gas construction must occur within CPW-mapped elk production areas, the operator agrees to conduct new oil and gas construction outside the time period from May 15th through June 30 th .
MULE DEER & ELK	Wildlife - Mitigation	Caerus conducts annual weed control treatment in areas not associated with oil and gas operations. A team will typically traverse 1000-acres to spray herbicide on weeds to eliminate patches and seed source.
MULE DEER & ELK	Wildlife - Minimization	Remote well control and monitoring (SCADA) will be employed to reduce traffic.
BLACK BEAR	Wildlife - Avoidance	The operator agrees to report bear conflicts immediately to CPW staff.
BLACK BEAR	Wildlife - Avoidance	The operator will store all garbage, trash, and debris in enclosed bear proof trash containers and transported to an approved disposal facility once per week during drilling and completions operations. No garbage, trash, and debris will be disposed of on location. The well site and access road will be kept free of trash and debris at all times.
BLACK BEAR	Wildlife - Avoidance	Caerus will conduct regular contractor and employee training with respect to black bear awareness, which will be reinforced during ongoing trainings at worksite tailgate meetings, monthly safety meetings, and EHS hazard identification programs.