

# Noise MITIGATION PLAN

GMT Exploration Company LLC

**Cinnamon 6-64 19-7**

Sec. 19 T6S R64W (S/2NW/4)

Elbert County, Colorado

Surface: Fee

# GMT Exploration Company LLC Elbert County, Colorado

## Noise Mitigation Plan

### Project Summary:

GMT Exploration Company LLC's (GMT's) proposed Cinnamon 6-64 19-7 Pad "Location" is located in Township 6 South Range 64 West of Section 19 in Elbert County, Colorado. The proposed location is on fee surface with a total Location disturbance of 18.531 acres which includes the active working pad surface area of 7.976 acres. During interim reclamation and the production phase 12.318 acres will be reclaimed leaving a disturbed production area of 6.213 acres. Construction is anticipated to begin no sooner than January 2023.

### Regulations

Noise associated with oil and gas development is regulated by the Colorado Oil and Gas Conservation Commission (COGCC) Rule 423. Operators will submit a noise mitigation plan that demonstrates one or more proposed methods of meeting the maximum permissible noise levels described by this Rule 423 as an attachment to their Form 2As, as required by Rule 304.c.(2). Oil and gas operations at any well site, production facility, or gas facility, will comply with the maximum permissible noise levels listed under Table 423-1 and provided as follows. Additionally, Rule 423.b.(2) state "Unless otherwise required by Rule 423, drilling or completion operations, including Flowback: In Commercial/Agricultural, maximum permissible noise levels will be 55 dbA from 7:00 pm to 7:00 am and 60 dbA from 7:00 am to 7:00 pm.

<b>LAND USE DESIGNATION</b>	<b>7:00 am to next 7:00 pm</b>	<b>7:00 pm to next 7:00 am</b>
Residential/Rural/State Parks & State 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)

**Table 423-1 – Maximum Permissible Noise Levels**

### Project Overview:

GMT is committed to safe and responsible operations. GMT will comply with all applicable regulations of the Colorado Oil and Gas Conservation Commission (COGCC) and Elbert County regulations for mitigating noise. GMT's operations will be conducted in a manner such that noise and vibrations do not constitute a nuisance or hazard to public health, safety, and welfare during all phases of operations.

This Noise Mitigation and Reporting Plan advances GMT's safety policies and provides accountability and transparency to our operations.

The Cinnamon 6-64 19-7 location is zoned Agriculture per Elbert County

***There are not any residential building unit (RBU's) within 2,000 feet of the proposed location.*** The closest residence is approximately 2,083 feet north from the working pad surface. The approximate elevation at the proposed location is 6,200'.

GMT has conducted an Ambient Sound Study and Sound Impact Assessment for the Crystal-Ruby Pad and the Irwin-Taylor Pad. These locations are located within approximately 3 miles from the Cinnamon 6-64-19-7 location. The Sound Impact Assessments for these two pads are being used as a baseline for the Noise Plan for the Cinnamon 6-64 19-7 location and should suffice for analysis of Noise BMP's. The sound study was prepared using the following guidelines:

- Sound level measurements shall be taken three hundred and fifty (350) feet from the noise source or twenty-five (25) feet from nearest structure towards the noise source.
- Sound level measurements shall be taken four (4) feet above ground level.
- Sound levels shall be determined by averaging minute by minute measurements.
- Sound levels that are C-weighted for low frequency shall not exceed 65 dB(C) when measured twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, in the event of a complaint.

### **Compliance with Rule 423.**

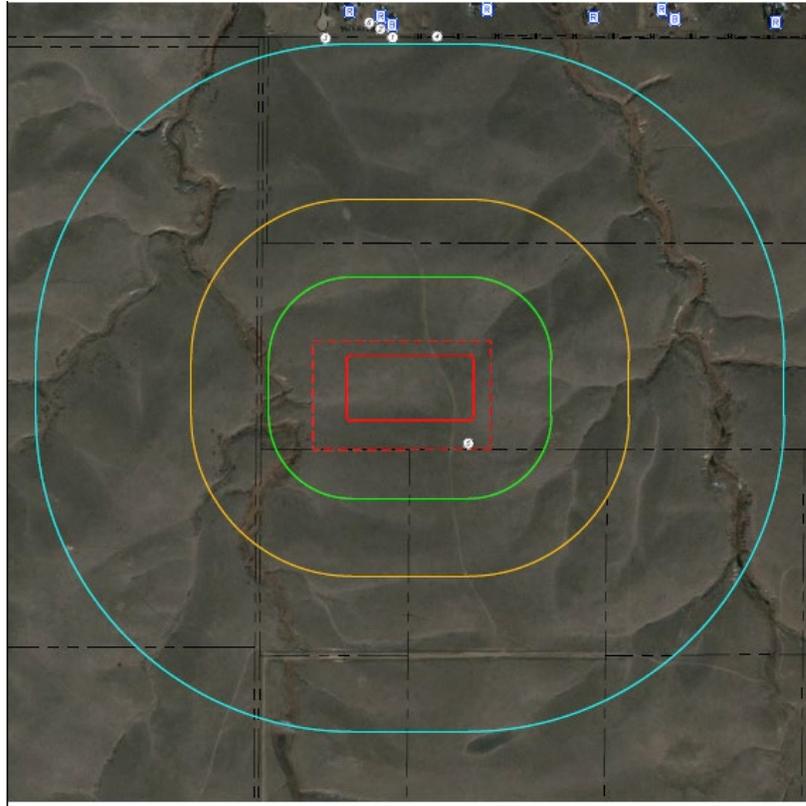
Listed below are the Phases of Operation with the corresponding noise levels.

#### Phases of Operations

Development State	Time Frame	Estimated Decibel Level with Mitigation	
		dBC	dBA
Drilling	10 Days	49-70	38-56
Completion	10 Days	53-71	38-56
Flowback	10 - 14 Days	55 – 60*	45 – 50*
Production	20 Years	55 – 60*	45 – 50*

\*These numbers were not obtained from the Noise Modeling Report. These noise levels are anticipated from previous similar operations.

- 1) The Cinnamon 6-64 19-7 site is located to the west of Highway 21 and south of County Road 186. Figure 1 below shows the vicinity of the Cinnamon location, designated by the red outline. Structures to the north of the proposed site are primarily residential. The closest structure is approximately 2,083 feet north of the proposed site. There are no considerable topographical considerations for this location. The area is somewhat hilly with most homes to the north at similar elevations as the proposed pad.



**Best Management Practices:**

- GMT will install 32' temporary sound walls along the north side of the pad as shown below in Figure 2.

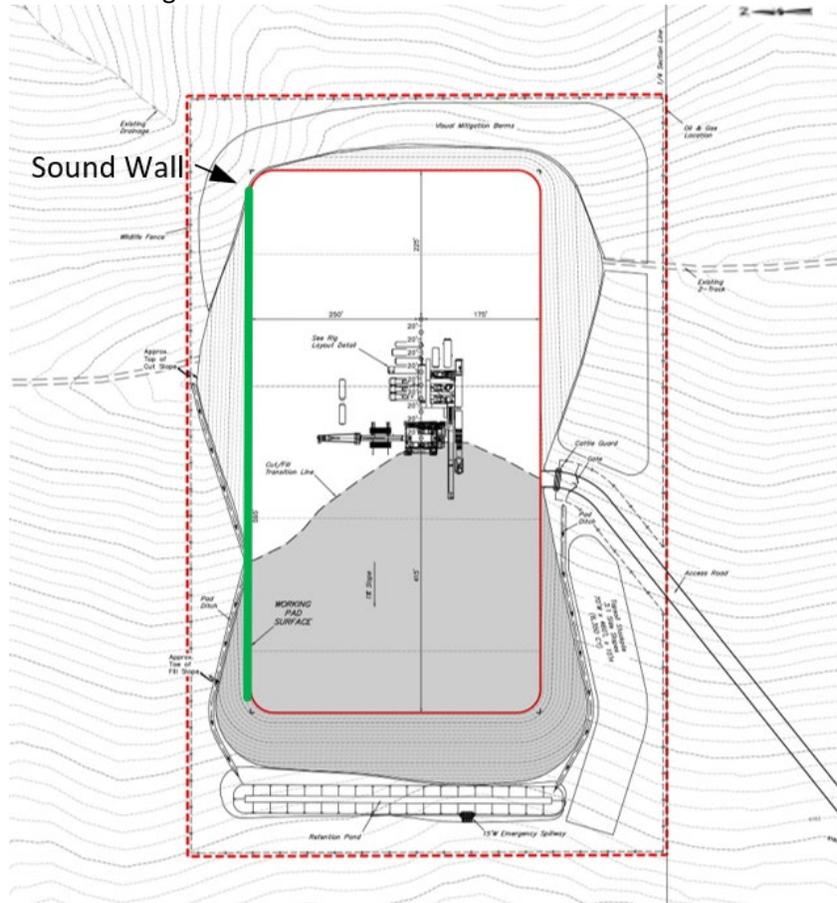


Figure 2. Temporary Sound Wall Placement

- Sound panels, or SK8, will be used on this site to isolate noise from individual pieces of equipment if needed
- Drilling rig engine exhausts are pointed straight up so as not to be directed towards any occupied buildings
- All trucks on location will be prohibited from idling when not in use to prevent unnecessary noise.