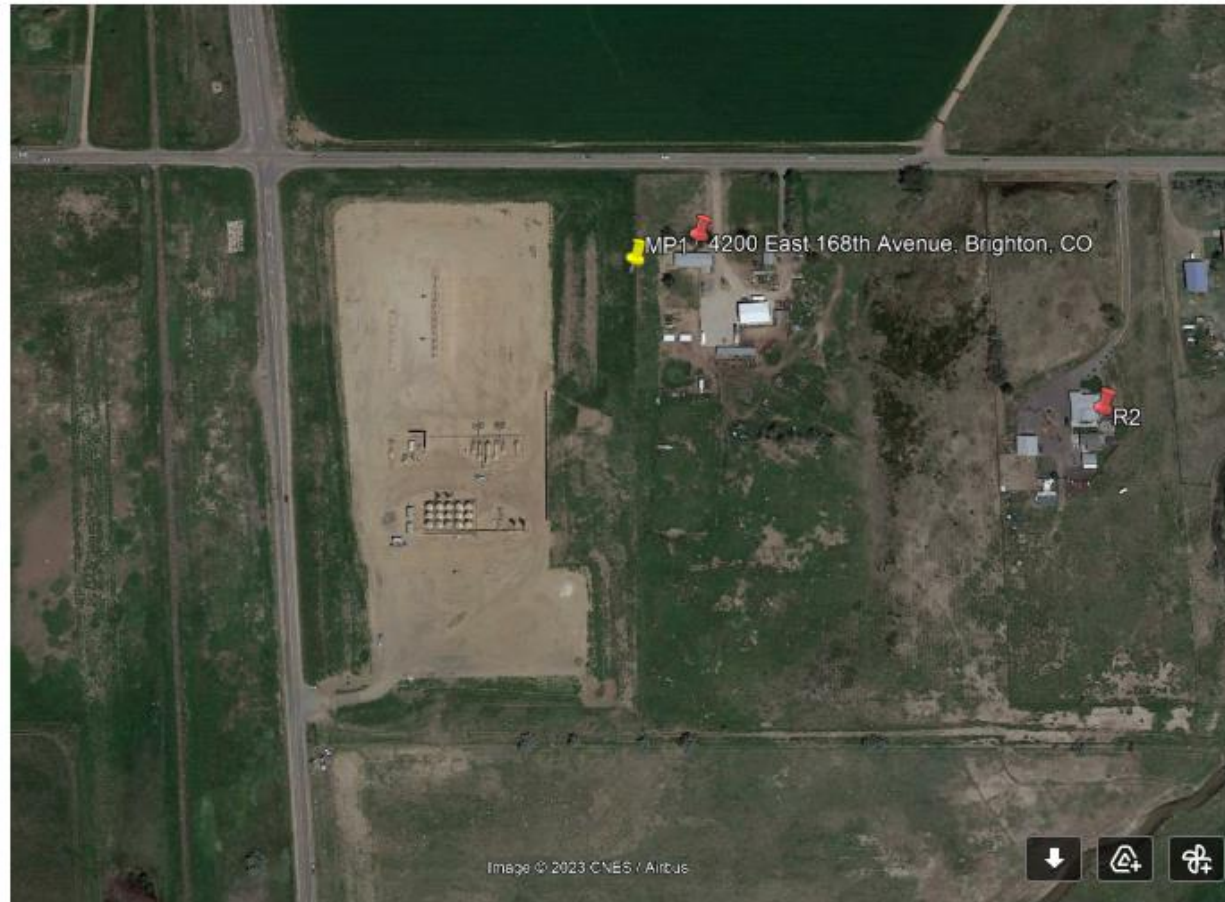


PDC Energy 3rd Party Sound Study

Based on the GW method (following COGCC), **the Rio pad IS NOT COMPLIANT**. Daytime and nighttime C-weighted levels exceed COGCC Maximum Permissible Noise Levels (MPNL), whereas A-weighted levels are below MPNL.

General info is as follows:

- Monitor and complainant location with respect to the Rio pad are shown in the figure below (4200 East 168th Avenue, Brighton, CO - approx. 255 ft East of the Rio pad)
- Time frame covered is May 23rd 12:00 pm to May 24th, 10:47 am.
- Maximum Permissible Noise Levels for drilling, completions, and flowback operations are **65dBA/65dBC Daytime**; **60dBA/65dBC nighttime**
- The first table below shows the monitor levels (with data points removed where wind speeds exceed 5 mph, per COGCC guidelines)
- The second table shows the noise levels extrapolated to 25 ft from 4200 East 168th Avenue per COGCC guidelines. These are the levels checked against compliance requirements.



Raw Monitor Data (filtered for wind per COGCC code)

Description	23-May	24-May	Overall Average
Average Wind Speed (mph)	2.3	1.8	2.1
A-Weighted Levels			
Daytime – LA _{Day} (dBA) (7:00 a.m. - 7:00 p.m.)	52.8	53.2	53.0
Nighttime – LA _{Night} (dBA) (7:00 p.m. - 7:00 a.m.)	51.9	51.4	51.6
C-Weighted Levels			
Daytime – LC _{Day} (dBC) (7:00 a.m. - 7:00 p.m.)	76.5	75.0	75.9
Nighttime – LC _{Night} (dBC) (7:00 p.m. - 7:00 a.m.)	75.2	74.4	74.7

Extrapolated Levels (to 25ft from 4200 East 168th Avenue per COGCC code)

Description	23-May	24-May	Overall Average
Average Wind Speed (mph)	2.3	1.8	2.1
A-Weighted Levels			
Daytime – LA _{Day} (dBA) (7:00 a.m. - 7:00 p.m.)	49.7	50.0	49.8
Nighttime – LA _{Night} (dBA) (7:00 p.m. - 7:00 a.m.)	48.8	48.2	48.5
C-Weighted Levels			
Daytime – LC _{Day} (dBC) (7:00 a.m. - 7:00 p.m.)	73.4	71.8	72.8
Nighttime – LC _{Night} (dBC) (7:00 p.m. - 7:00 a.m.)	72.1	71.2	71.6