
Chevron



Fluid Leak Detection Plan

Date: 5/15/2025

Location: Brahman OGD / Bodacious State F33-10 Pad

Legal Description: NWSE Section 33, Township 5 North, Range 65 West, 6th P.M., Weld County, Colorado

Location Information

Noble Energy (Noble) is presenting this Fluid Leak Detection Plan for the proposed Brahman OGD, specifically the Bodacious State F33-10 Pad (Bodacious Pad). The Bodacious Pad will consist of eighteen (18) proposed horizontal wells and produce to the Maximus State G04-11 Multi production facility. The anticipated operations schedule is provided below.

Phase	Duration (days)	Estimated Start Date
Construction (Daylight Only)	143 days	3rd Quarter 2026
Drilling	93 days	4th Quarter 2026
Completion	74 days	1st Quarter 2027
Flowback	N/A	Flowing back directly to permanent facility
Production	30 years	2nd Quarter 2027
Interim Reclamation (Daylight Only)	24 days	3rd Quarter 2027

Potentially Impacted Parties

The Working Pad Surface (WPS) of the Bodacious State F33-10 Pad is within 2,000 feet of four (4) Residential Building Units (RBUs), zero (0) High Occupancy Building Units (HOBUs), and zero (0) Designated Outside Activity Areas (DOAAs). The location is not within High Priority Habitat (HPH); however, the access road will be partially within ECOM defined bald eagle roost or communal roost HPH.

Standard Operating Procedures

Drilling and Completion Fluids Procedures and Schedules

Monitoring

- There will be no tanks or separators at this location. Facilities will be located at the Maximus State G04-11 Multi.
- A closed-loop system will be used for drilling operations as required by Rule 408.a.
- Noble Energy will use SCADA to continuously monitor line pressures, flow rates, temperature, and open and closed valve positions. Any irregularities indicating a leak or change in production of oil, water, or gas will trigger immediate action by the SCADA system to shut-in the well/facility until troubleshooting and/or repairs are completed.

Inspection

- All on-site facilities shall be subjected to regularly scheduled instrument-based leak detection and repair (LDAR) inspections.

Testing

- Noble Energy will utilize volumetric testing to identify and locate leaks. This involves measuring the liquid volume which must be added or removed from a system to maintain constant pressure; volume changes unexplained by thermal expansion/contraction will indicate potential leaks.

Maintenance

- Noble Energy utilizes additional engineering controls, which may include use of appropriate materials, corrosion inhibitors, protective coatings, and cathodic protection techniques to minimize the potential for fluid leaks.

Produced Fluids Procedures and Schedules

Monitoring

- Routine site visits will be made by lease operators (aka pumpers) to the well pad for maintenance and inspection. Periodic site inspections will be conducted by third party environmental contractors to look for any signs of potential leaks. Infrared surveys will be used to identify any leaks coming from the flowlines on a regular basis. New flowlines will be hydrotested to manufacturer's recommended levels before being placed into use.
- Noble Energy will use SCADA to continuously monitor line pressures, flow rates, temperature, and open and closed valve positions. Any irregularities indicating a leak or change in production of oil, water, or gas will trigger immediate action by the SCADA system to shut-in the well/facility until troubleshooting and/or repairs are completed.

Inspection

- Flowlines will be inspected per ECMC 1100 regulations.

- Infrared surveys will be used to identify any leaks coming from the flowlines on a regular basis.

Testing

- New flowlines will be hydrotested to manufactures recommended levels before being placed into use.
- Pressure testing of flowlines will be conducted on an annual basis.
- Documented Audible, Visual, and Olfactory (AVO) inspections and optical gas imaging surveys will be conducted monthly by a third-party specialist.

Maintenance

- If a leak is discovered or suspected, the well will be shut-in, and the line will be hydrotested. If hydrotesting confirms a leak, the well will remain shut-in while the leak is located and repaired. The well will be brought back online after the line has passed hydrotesting.

Record Keeping

Spill response includes notifications, reporting, response actions, remediation, and corrective actions. Waste is properly classified as E&P or non-E&P wastes. For E&P waste, all spills greater than 1 barrel (outside containment) or greater than 5 barrels (inside containment) will be reported to the ECMC using a Form 19.

Should remediation be required, a Form 27 will also be submitted. Spills related to non-E&P waste will be managed in accordance with CDPHE and EPA regulations depending on the volume spilled. Noble Energy tracks and cleans up all spills, including those that are not reportable. Noble Energy documents the monitoring process, and copies of inspection and maintenance logs are available upon request.

Records of inspection performed per 40CFR112 will be kept according to the procedure set forth in Noble Energy's written Records Retention Policy, and copies of these records will be kept with the SPCC Plan for a period of three (3) years. Per ECMC rule 206.f.(1), Noble will maintain and keep all records, reports, and underlying data required by Commission's Rules for a period of five years, including those relating to spills and remedial actions.

Site-Specific BMPs

- During pre-production activities, perimeter berms will be constructed around the working pad surface and routed to a detention pond to prevent offsite migration of sediment or contaminants into nearby surface water features. The berms will help contain a potential on-site release and prevent contamination of un-plated soil. Construction details for the berms and detention pond are provided within the site-specific Stormwater Management Plan.
- Per commitment to CPW for protection of the adjacent wetlands/waterway within 500 feet, chemical injection skids will include secondary containment structures.
- The surface of the location will be plated with 3-5 inches of compacted road base aggregate that will deter releases from easily seeping into the soil.
- During drilling and completions operations, a temporary impermeable layer will be utilized under equipment to provide an additional layer of protection against spills. This layer will include cement-modified soils under the drill rig and around wellheads. A synthetic liner will be placed under tank farms, trucks, trailers, and chemical storage. Secondary containment devices, such as duck ponds or equivalent type products, will be used to protect soils under any pipe connections or equipment that carry, mix, or could possibly leak fluids or chemicals.
- Audible, Visual, and Olfactory (AVO) inspections of the facility will be conducted regularly by Noble Energy. Any valve or fitting that is found to be ineffective will be repaired immediately, or well shut-in procedures will be implemented.
- The location will be equipped with remote monitoring and shut-in capabilities.
- All flowlines will be designed/constructed/tested to ASME B31.4 and API 1104 standards. Only materials with Material Test Reports (MTRs) provided by the pipeline supplier will be used in the construction of the flowlines.
- No pits will be used on location; therefore, pit level indicators will not be used on location.
- Spill prevention and response will continue to be addressed in training of employees and contractor personnel on at least an annual basis.