

Objective Criteria Review Memo - Noble Energy Inc

**Tatanka Federal LD13-615 -- Form 2 Application for Permit to Drill (APD) Doc# 402493471
LD15-09 PAD -- Form 4 Sundry to update Location BMPs Doc# 402533688**

**Approved Form 2A Oil & Gas Location Assessment (Doc# 401721169, approved 1/12/2019)
Location ID# 460648**

This memo summarizes COGCC's technical review of the subject well within the context of SB 19-181 and the required Objective Criteria. The Form 2A and four APDs were approved on 1/12/2019. Noble has since submitted this subject refile APD (one of four refile APDs) for this approved Oil & Gas Location.

For Oil & Gas Locations approved prior to SB 19-181, the Objective Criteria apply to any wells proposed on those approved or existing Oil & Gas Locations. This APD meets the following Objective Criteria:

1. (Criteria 5c) Oil and Gas Locations within: a Sensitive Area for water resources. The location is 91' from mapped intermittent streams and 440' from Igo Creek.

The following sections provide details regarding the evaluation of each criterion:

Criteria 5c: Oil and Gas Locations within: a Sensitive Area for water resources.

Site Specific Description of Applicability of Criteria 5c: The location is 91' from mapped intermittent streams.

Site Specific Measures to Address Criteria 5c: The Operator provided BMPs both on the originally approved Form 2A (doc# 401721169) and a newly submitted Form 4 Sundry (doc# 402533688) to mitigate being located in an area with sensitive water resources:

- **Stormwater Management Controls:** Controls will be constructed around the perimeter of the site prior to, or at the beginning of construction. Specific BMP's may include stockpile stabilization, grading, sediment traps, and perimeter barriers. Controls will remain in place until the pad reaches final reclamation.
- **Leak Inspections:** Daily, monthly and annual inspections are performed at each facility component to confirm operational integrity and regulatory compliance.
- **Remote Monitoring/Shut-in:** Automation technology is utilized to monitor any variations in pressures and fluid gauges which could indicate a leak at the facility, well head or flow lines to the production facility. In addition, automation provides remote shut-in capabilities in the event of an emergency.
- **Rig Liner:** Operator will construct the drill pad with 4-6" of clay and 3-5' of road-based cuttings. In addition to the road-based cuttings, Operator will use a 30-mill geosynthetic liner to underly the drill rig, cuttings and mud storage areas.

Summary: Noble provided BMPs that address possible impacts to nearby surface water features. The BMPs include stormwater controls around the location, leak inspections, rig liner in addition to pad constructions, and remote monitoring/shut-in capabilities.

Director Determination: Based on the Objective Criteria review, the Director has determined that this permit application meets the standard for protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.