



1199 Main Avenue, Ste 101  
Durango, CO 81301  
970-828-4732

April 7, 2017

## **Chevron – Mid Continent San Juan Basin Unit**

### **Crader 3-3 (API # 05-067-09614) Ignacio - Blanco Field: Rule 1004 Waiver Request**

#### **Sundry Notice Form 4 Attachment**

Tegre has been retained by Chevron Mid-Continent San Juan Basin Unit to analyze the Crader 3-3 location and access road for a waiver of Colorado Oil & Gas Conservation Commission (COGCC) Rule 1004 regarding final reclamation. The request is being made to the COGCC Director by Chevron via a Rule 502.b variance request.

This report provides backup documentation concerning current site conditions, proposed mitigations and a discussion of the impacts to public health, safety, welfare, wildlife and the environment from the proposed action. Our analysis concludes that there are no significant impacts from the overall proposal with the proposed mitigation being implemented prior to waiver approval.

Work entailed a site visit on April 4, 2017 and review of various mapping data and site specific data available from Chevron and COGCC. The analysis was conducted by Michael Matheson, P.G., a professional geologist with 30 years of natural resource experience in the San Juan Basin.

#### **Requirements for Waiver from Rule 1004 Final Reclamation**

- 1) Evidence that all wells on the location are plugged and abandoned, and a Form 6 subsequent was submitted for each well.
  - a. *The access road and well location were constructed in 2008. However, the well and production equipment were never installed.*
- 2) Evidence that all oil & gas equipment has been removed from the location, including flow lines and gathering line risers.
  - a. *Oil & gas equipment was generally not installed on the location. The operator has removed spools of poly pipe stored on the location.*

- 3) Evidence that all trash and debris belonging to the operator or its agents have been removed from the location.
  - a. *Broken pallets and other trash have been removed from the location.*
- 4) Evidence that noxious weeds have been controlled as required by Rule 1004.
  - a. *The location has been managed for weeds. There are no noxious weeds found on the location.*
- 5) Documentation showing the operator consulted in good faith with the surface owner regarding final reclamation pursuant to Rule 306.f. Information describing the consultation (who, what, where, when) should be provided. If a consultation did not occur, documentation describing the operator's efforts to consult with the surface owner should be provided.
  1. A clear description of the specific portions of an access road or oil and gas location for which the surface owner is waiving the operator's obligation to perform interim or final reclamation.
  2. A brief explanation of the surface owner's reasons for waiving the operator's obligation to perform interim or final reclamation for the specified portions of an access road or oil and gas location.
  3. The surface owner's acknowledgement that the current condition of the portions of the access road or oil and gas location subject to the waiver is satisfactory to the surface owner.
  4. The surface owner's acknowledgement that:
    - a. All active portions of the oil and gas location and all oil and gas operations remain under the jurisdiction of the Colorado Oil and Gas Conservation Commission; and
    - b. The surface owner may not impede ingress to or egress from the active oil and gas location or interfere with the safe conduct of oil and gas operations on the location.
  5. In addition to items 1 through 4, above, if an operator intends to seek a variance under Rule 502.b. to be relieved from its obligation to comply with specified provisions of Rule 1004 – Final Reclamation Well Sites and Associated Production Facilities – the following information should be included in a written agreement:
    - a. The surface owner's acknowledgement that the surface owner knowingly, and forever, waives all reclamation protections otherwise afforded by the specified provisions of Rule 1004; and
    - b. A brief description of the operator's plans for compliance with the specified provisions of Rule 1004 on areas of the oil and gas locations or access roads that are not subject to the variance.

*See documentation of surface owner consultation and acknowledgement of waiver provided separately by Chevron.*

- 6) Documentation of the existing state of reclamation for the entire location.
  - a. *See attached Site Plan and Photos. Also #8 below.*
- 7) Evidence the oil and gas location is stabilized and any required stormwater management controls are in place and can function properly prior to COGCC's scheduled final reclamation inspection.
  - a. *See attached Site Plan and Photos. Also #8 below.*
- 8) The operator's analysis of how public health, safety, and welfare will be protected and significant adverse environmental impacts prevented even if compliance with the specified provisions of Rule 1004 receive a variance. COGCC would expect an analysis of the following types of issues to be included: 1) the specific nature of the location, including urban vs. rural, proximity to surface water, wildlife areas, 317B area, or sensitive area classification; and 2) comparative benefits of re-contouring vs. reseeded.

### Nature of the Location

The Crader 3-3 (API # 05-067-09614) location is situated in a suburban area undergoing redevelopment from rural residential and small acreage rural to urban density. The location is bounded by BLM land to the west and the City of Durango Three Springs area to the east, north and south. A major powerline and substation as well as the Crader 3-2 well location are near the subject site (see attached Site Map). Lots to the south are similar to the property the location is situated on with rural residential development and non-cropland, unirrigated dryland pasture. The subject location landowner has a horse stable and riding arena business on the property and the property is actively grazed year-round. Portions of the subject property east of the location are irrigated. The portion of the property with the subject well location is non-cropland, unirrigated dryland pasture. An irrigation ditch crosses the access road for the location below the well pad and has a functional culvert crossing.

The vegetation type is Pinion – Juniper with a heavily grazed grass / forb understory. Grass / forb percent cover in Pinion – Juniper vegetation type is naturally low (0 to 30%). Grass / forb cover in dryland pasture area varies from 20 to 60%. Pasture areas are heavily grazed by landowner livestock. Grass cover on disturbed areas of the well location reflects the low natural cover rates and the effect of livestock grazing. Grass cover and revegetation success is minimal on the rock outcrop of the pad cut slope (which is not unusual). Additional seeding is not proposed by Chevron prior to the final reclamation inspection except as described for stormwater controls below.

Soils are silty clay loam (Zyme clay loam) and rock outcrop of Animas Formation. Zyme loam is moderately erodible. Animas Formation rock outcrop can often express a "badlands" character with minimal vegetation growth. This is reflected in the cut slope of the well location (and other natural slopes in the area) where revegetation efforts have been unsuccessful and would be expected to be minimally successful to unsuccessful as is common in the general area.

There are no wetlands or Sensitive Areas on, or within close proximity of the Crader 3-3. There are no Rule 317B Public Water System Supply Areas on or near the location. The location is in a head water area along Grandview Ridge and no intermittent or perennial streams are located on, adjacent to, or near the Crader 3-3. There are no lakes or ponds near the site except for a stock pond filled from the irrigation ditch that seasonally flows below the well location.

The Crader 3-3 has an active stormwater management system consisting of an upslope stormwater intercept ditch and a stormwater detention pond that collects and manages flow from the well location. These features are functional and will remain in place if the Rule 1004 waiver is granted. The discharge points for the upslope ditch currently exhibit some minor rilling. Several erosion control wattles are currently in place to slow sediment movement. These discharge points will be maintained by Chevron prior to the final reclamation inspection. Work will include

- Regrading rills,
- Placement of energy dissipation rock spreader at the discharge points,
- Seeding of repaired area,
- Placement of biodegradable erosion matting and erosion wattles in the repaired areas.
- Future maintenance of these areas will be the responsibility of the landowner.

The area is not in a designated restricted or sensitive wildlife habitat. The area is habitat for mule deer, black bear and elk winter range. However it is also adjacent to an urbanizing area. The prime wildlife habitat is situated on the BLM land west of the location.

Recontouring the location or additional reseeding of the location area is not proposed except as described above for the stormwater ditch discharge points. The location access road and the well pad will remain as is except for the removal of stored equipment and refuse. The current state of revegetation on the pad and along the access road is consistent with natural vegetation cover in the area and the grazing condition of the overall property. The landowner has uses for the access road and pad as they exist. The pad and road are also consistent with the redevelopment occurring in the area toward a more urban condition.

### Public Health, Safety & Welfare

The proposed Crader 3-3 waiver of Rule 1004 for Final Reclamation will not cause significant impacts to public health, safety and welfare and is reasonably protective from significant environmental or wildlife impacts. The landowner is agreeable to granting the waiver. Keeping the access road and well pad in place is consistent with other non - oil & gas development in the area.

The location was never completed as an operational oil & gas facility. There is no well, pits, pipelines or equipment that could have caused any contamination of the location. It is not unlike any other earth disturbing development activity that has occurred in the area.

There are no nearby sensitive water resources that can be impacted by the continued existence of the well pad and access road. Impacts to area wildlife habitat will not be significantly


affected by the continued use of the well pad and access road any more than other development or land uses occurring in the area (including helicopters at the nearby hospital).

Interim reclamation of the pad and access road has been previously performed and revegetation success is reasonably consistent with the surrounding area and grazing use. There are no noxious weeds located on the pad or road.

Stormwater controls are in place along the access road and on the pad and are properly sized and functional. These will remain. Chevron will perform the maintenance described above to the stormwater ditch discharge points prior to final inspection and granting of the waiver.



Project #: Crader 3-3	Date: April 6, 2017
Scale: NTS	Drawn By: MM


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**Figure 1 - Site & Area Map  
Chevron - Crader 3-3**



 **Chevron Midcontinent, L.P.**  
**CRADER 3-3**  
LEASE #FEE  
API #05-067-09614  
150' FNL & 150' FWL  
NW/NW SEC.02-T34N-R9W  
LAT. 37.24308° LONG. -107.83191°  
LA PLATA CO., COLORADO  
PUBLIC ACCESS RD. HWY #160  
IN CASE OF EMERGENCY CALL 1-800-916-7897 or 911

Photo 1 - Chevron Crader 3-3 Well Sign. View across pad to northeast.



Photo 2 – Crader 3-3 Access Road. To remain. View to north.



Photo 3 – Crader 3-3 Access Rd crossing irrigation ditch. To remain.



Photo 4 - Crader 3-3 cut wall and upper diversion ditch. Materials to be removed. View to north.



Photo 5 – Crader 3-3 graveled pad. To remain. View to northeast.



Photo 6 – Crader 3-3 south fill wall and stormwater pond. View to east.



Photo 7 – Crader 3-3 stormwater detention pond. Functional and to remain. View to east.



Photo 8 – Crader 3-3 pad and cut wall. Stored materials to be removed. View to northwest.



Photo 9 - Crader 3-3 east fill wall. To remain. View to north. Note grazing condition.



Photo 10 – Upper diversion ditch discharge south end. Note rills (to be mitigated) and grazing condition. View to south.



Photo 11 - Upper diversion ditch discharge north end. Note minor rill (to be mitigated). View to east.