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 PDC Energy Inc.
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Annual Reclamation Assessment Report (2022)

COGCC Location Name (ID)	MATT-64N67W /24NWSW (331001)
Operator Location Name	Matt 1 Well Pad & Facility
COGCC Operator Name (ID)	PDC ENERGY, INC (69175)
Legal Description	NWSW Sec. 24 T4N-R67W
Well Pad Geographic Coordinates (WGS84)	40.295627/ -104.846841
Facility Pad Geographic Coordinates (WGS84)	40.294865/-104.848239

Mr. Porter,

Confluence Compliance Companies, LLC (Confluence) prepared this Annual Reclamation Assessment Report (Report) for PDC Energy Inc. (PDC) to document the results of reclamation monitoring and maintenance activities on the above-referenced location (Location). Though this is a single report for a single Colorado Oil and Gas Conservation Commission (COGCC) record, there are two distinct disturbances which are being managed separately. This approach will be evident throughout the Report in plural references to disturbances and reports. It is Confluence’s understanding that PDC completed facility decommissioning and final reclamation of all aspects of the Location disturbances following well plugging and abandonment on June 20, 2014. Following those efforts, the surface owner expressed concerns regarding final reclamation status. In response to this expressed concern, PDC entered into an agreement with the COGCC to increase annual reclamation monitoring and maintenance activities to expedite compliance with COGCC Rule 1004 requirements for final reclamation. This report was prepared to document those efforts for 2022.

Included with this Report is a review of methodologies used to evaluate reclaimed surfaces, results of those evaluations and associated maintenance tasks, and recommendations for how to proceed with the information presented. Attached are Vegetation Progress Evaluations (VPE) comparisons of Location disturbances (Reclaimed Surfaces) and their associated reference areas (Reference Areas).

Methods

To confirm the scope of work (SOW), following receipt of the reclamation project assignment, Confluence personnel completed a desktop review of the Reclaimed Surfaces for the co-permitted well pad and facility portions of the Location. The desktop review examined PDC and COGCC records, and aerial imagery to define all elements of the reclaimed Location disturbance (Reclaimed Surfaces) and their associated Reference Areas. Onsite VPEs were then conducted to document site conditions of the Reclaimed Surfaces compared to the Reference Areas. The VPE methodology is an internal protocol developed by Confluence that

collects a wide field of qualitative variables that are used to assess if a location is approaching reclaim conditions that satisfy final reclamation standards per COGCC Rule 1004.d. If the location passes the VPE, a Qualitative Vegetation Survey (QVS) is recommended. If the location does not pass the VPE, Confluence makes recommendations to facilitate improved site conditions. If a QVS is recommended, a bullseye target tool is used to collect vegetation survey data at 50 survey points along each transect. Foliar and basal cover, along with non-vegetated and noxious weed occurrences, are documented at each survey point within the Reclaim Transects (2) and Reference Transects (2); 100 survey points are recorded within the Reclaimed Surface(s) and 100 survey points are recorded within the Reference Area(s). The QVS survey methodology employed by Confluence is based on the step-point method described in an interagency technical reference published by the Bureau of Land Management (BLM, 1996) and accepted by COGCC.

Noxious weeds listed by the Colorado Department of Agriculture are excluded from the percent of reference vegetative coverage calculations, per COGCC Rule 1004.d. Undesirable cover includes species identified by the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) as introduced and not native to the lower 48 states, and not considered beneficial for reclamation purposes. All other vegetation not classified as noxious or undesirable, is identified by growth habit (grass, forb, shrub) and is considered desirable vegetative cover.

The VPE was completed to identify reclamation concerns, if present, develop maintenance plans to correct identified issues, if applicable, and determine whether a Quantitative Vegetation Survey (QVS) is warranted. Included with the attached VPE are maintenance tasks and/or recommendations to improve reclamation status on the Reclaimed Surfaces.

Based on issues identified on the Reclaimed Surfaces, a QVS was not conducted on either location. The purpose of a QVS assessment is to determine if the Reclaimed Surfaces have met required conditions to request closure of the reclamation project with the COGCC. The QVS methodology employed by Confluence is in alignment with COGCC standards and is based on the step-point method described in an interagency technical reference published by the Bureau of Land Management (BLM).

Results

On May 26, 2022, VPEs were completed on the Reclaimed Surfaces. The VPEs confirmed that all equipment had been removed from the Location and evidence of standard reclamation practices was observed. Observations of reclamation implementation included removal of road base, compaction alleviation, and cross drill seeding with straw mulch and amendment application.

The former well location exhibited moderate germination and establishment of seeded grasses, though inter-plant distances were increased in the Reclaimed Surface than that of the Reference. Slight subsidence was observed at the former well location and a maintenance task was recommended to correct grading issues on the location. Additionally, proactive weed management was recommended at the former well location in the associated maintenance task to prevent and suppress further noxious and undesirable species encroachment from the adjacent Reference.



The former facility site exhibited moderate germination with stressed early establishment of seeded grasses. Inter-seeding and amendment application were recommended at the former facility site to increase desirable vegetation cover and proactive weed management was recommended to prevent and suppress further noxious and undesirable species encroachment from the adjacent Reference. The attached Vegetation Progress Evaluation reports illustrate documented Location conditions and recommended maintenance, and include photos and other assessment details.

Based on previous VPE and QVS results, PDC reported completion of the following maintenance on Location:

- Spring 2021: Herbicide application and inter-seeding throughout the well pad.
- Summer 2021: Inter-seeding throughout bare regions of the Reclaimed Surface.
- Fall 2021: Location mowed in conjunction with hay harvesting.
- Spring 2022: Herbicide application completed on the well pad and both locations mowed.
- Summer 2022: Subsidence corrected at well head, interseeding completed on both locations.

On September 16, 2022, additional VPEs were completed. The former well location showed signs of recent maintenance activities and the subsidence issues observed in the spring had been repaired. Both the Reclaim and the Reference areas had been mowed. The low vegetative height and overall condition made making an accurate evaluation of vigor and overall cover challenging. A spring 2023 assessment will be required to fully understand the reclamation trajectory at this location. Continued weed management was recommended at the former well location to prevent and suppress further noxious and undesirable species encroachment and establishment.

The former facility site exhibited moderate germination with stressed establishment of seeded grasses. Bare areas were observed, and inter-seeding and amendment application were recommended at the former facility site to increase desirable vegetation cover and proactive weed management was recommended to suppress further noxious and undesirable species encroachment from the adjacent Reference. Additionally, the landowner stockpile of road base remains within the facility reclaim. This stockpile is depositing sediment onto the reclaim area and impacting germination and overall reclamation success.

The attached VPE reports illustrate documented Location conditions and recommended maintenance, and include photos and other assessment details. Additional attachments to this annual report include a Topographic Location Map, a Reclamation Site Diagram, and a Reclamation Survey Photo Log.

Analysis and Recommendations

Based on the results of the VPE reports the reclaimed well pad and the reclaimed facilities pad do not meet final reclamation standards as defined by COGCC Rule 1004. The primary concern at both reclaim areas is vegetative coverage on the Reclaimed Surface relative to Reference Area cover. Both locations show positive progress towards acceptable overall vegetative cover. As the well and facility share a Location ID and are co-permitted, final reclamation for the Location should be approached simultaneously. Ongoing weed management is suggested for both reclaim areas



to minimize or prevent vegetation composition degradation due to potential encroachment and establishment of noxious and undesirable weeds from the surrounding Reference. Inter-seeding and amendment application is also recommended for both reclaim areas to increase total desirable vegetation cover. Additionally, perimeter controls are recommended to be installed surrounding the road base stockpile remaining within the facility reclaim.

Confluence appreciates the opportunity to provide environmental consulting services on this project. If you have any questions about our methodology, the results of this assessment, or our conclusions, please let me know.

Respectfully,



Chris Jones
Reclamation Program Manager
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Attachments

1. Topographic Location Map
2. Reclamation Site Diagram
3. Reclamation Survey Photo Log



Topographic Location Map

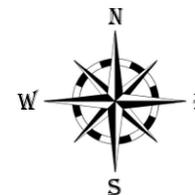


Topographic Location Map

PDC Energy Inc.(69175)

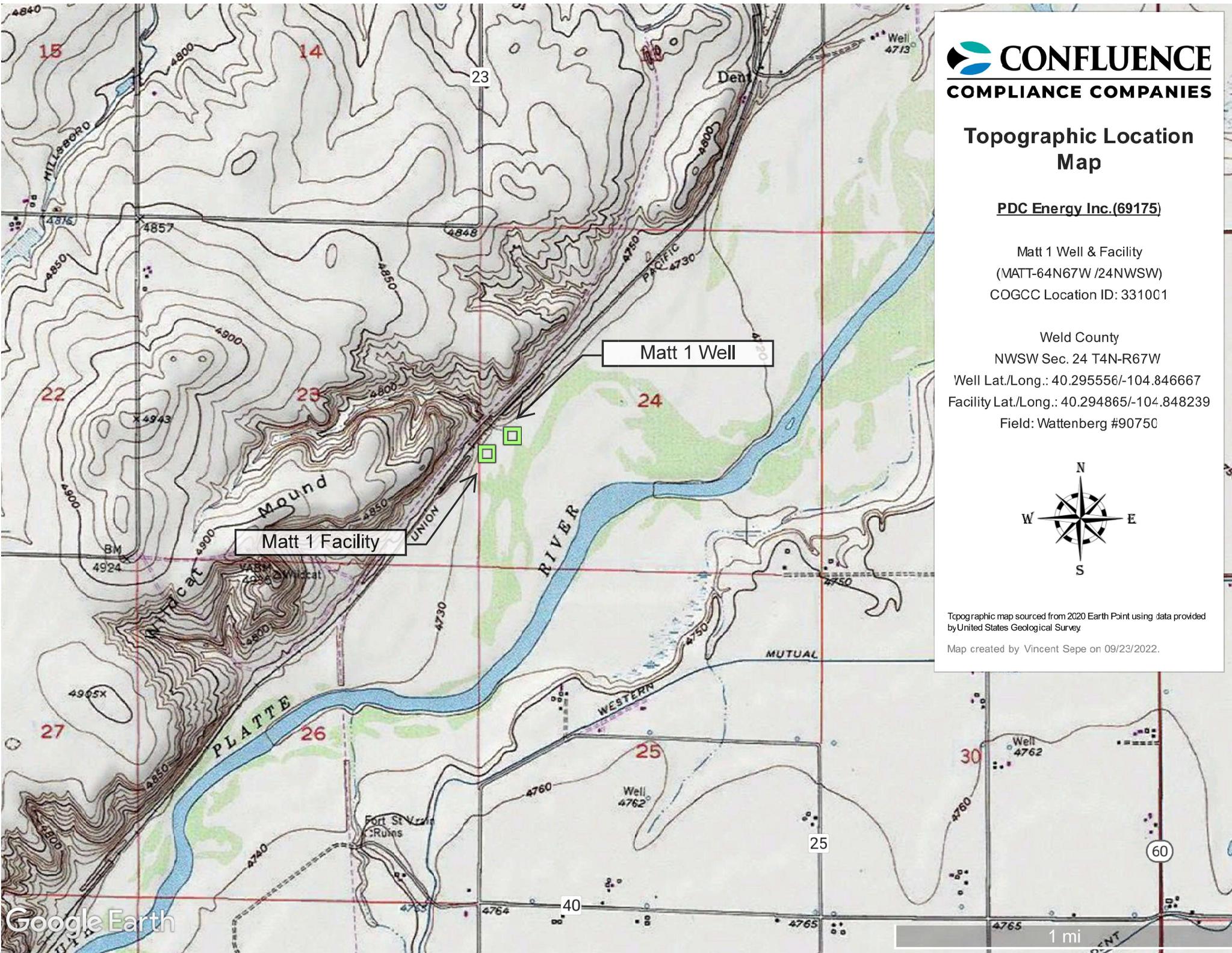
Matt 1 Well & Facility
(MATT-64N67W /24NWSW)
COGCC Location ID: 331001

Weld County
NWSW Sec. 24 T4N-R67W
Well Lat./Long.: 40.295556/-104.846667
Facility Lat./Long.: 40.294865/-104.848239
Field: Wattenberg #90750



Topographic map sourced from 2020 Earth Point using data provided by United States Geological Survey

Map created by Vincent Sepe on 09/23/2022.



Reclamation Site Diagram

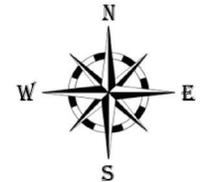


Reclamation Survey Site Diagram

PDC ENERGY, INC (69175)

Matt 1 Well & Facility
(MATT-64N67W /24NWSW)
COGCC Location ID: 331001
Well API: 05-123-20011

Weld County
NWSW Sec. 24 T4N-R67W
Well Lat./Long.: 40.295556/-104.846667
Facility Lat./Long.: 40.294865/-104.848239
Land Use: Non-Crop
Aerial Imagery Date: 06/2021



Legend

-  Directional Drone Photo Point
-  Overhead Drone Photo Point

Spatial data was collected via unmanned aerial system. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and underlying GoogleEarth aerial imagery. The position of illustrated data may have been manually adjusted to align with the aerial imagery in a manner more representative of field conditions for presentation purposes only.

Map created by Vincent Sepe on 09/22/2022.

Reclamation Survey Photo Log





Photos captured on 05/26/2022



Photo Point A: South of well reclaim facing north



Photo Point B: North of well reclaim facing south



Photo Point C: East of well reclaim facing west



Photo Point D: West of well reclaim facing east



Photo Point E: South of well head facing recent maintenance area



Photo Point F: North of well head facing recent maintenance area



Photo Point G: Reference area – South of well reclaim



Photo Point H: Reclaimed disturbance overview



Photos captured on 05/26/2022



Photo Point I: South of facility reclaim facing north



Photo Point J: North of facility reclaim facing south



Photo Point K: West of facility reclaim facing north



Photo Point L: East of facility reclaim facing west



Photo Point M: Sediment deposition from stockpile impacting germination



Photo Point N: Bare areas and greater inter-plant distances



Photo Point O: Compositional overview



Photo Point P: Reclaimed disturbance overview



Photos captured on 09/16/2022



Photo Point A: South of well reclaim facing north



Photo Point B: North of well reclaim facing south



Photo Point C: East of well reclaim facing west



Photo Point D: West of well reclaim facing east



Photo Point E: South of well head facing recent maintenance area



Photo Point F: North of well head facing recent maintenance area



Photo Point G: Reference area – South of well reclaim



Photo Point H: Reclaimed disturbance overview



Photos captured on 09/16/2022



Photo Point I: South of facility reclaim facing north



Photo Point J: North of facility reclaim facing south



Photo Point K: West of facility reclaim facing north



Photo Point L: East of facility reclaim facing west



Photo Point M: Weed infestation – Northwest disturbance



Photo Point N: Weed infestation – Northwest disturbance edge



Photo Point O: Northern disturbance edge & reference



Photo Point P: Reclaimed disturbance overview