



COGCC Rule 502.b
Variance Request for
1001.c Surface Owner Waiver

Well Name: Susan 1-23 Well

API #: 05-123-12902 Location ID: 323356

Prepared for:
PDC Energy Inc.

Prepared by:
Duraroot, LLC

Date:
June 2020



June 26, 2020

Director Jeff Robbins
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: COGCC Rule 502.b Variance Request for 1001.c Surface Owner Waiver
Well Name: Susan 1-23 API #: 05-123-12902 Location ID: 323356
Section 23: SENE, Township 5 North, Range 65 West, 6th P.M.
Weld County, Colorado

Dear Director Robbins,

PDC Energy, Inc. (PDC) has obtained a Surface Owner Waiver under Rule 1001.c for final reclamation of the former Susan 1-23 well location. PDC has plugged and abandoned (P&A) the wellhead and reclaimed the well pad in accordance with the requirements of Rule 1004.a. Furthermore, in accordance with the surface owner's request (see Attachment A), PDC has left the access road and production facility in place.

Due to the surface owner's final reclamation requests of the location, we are requesting your approval for a variance from the requirements of Rule 1004.a, Rule 1004.c (1), and Rule 1004.e pursuant to Rule 1001.c. The documents attached to this letter for the former Susan 1-23 location were developed in accordance with the December 17, 2019, version of the Colorado Oil and Gas Conservation Commission's (COGCC's) Rule 1001.c: Surface Owner Waiver for Final Reclamation guidance document (Operator Guidance Document).

Attachment A: Executed Final Reclamation Agreement

Attachment A is a signed and executed agreement that PDC has entered with the surface owner (Mr. Gary Alles) regarding the location's final reclamation efforts and the request to leave the access road and production facility in place. Attachment A, along with Exhibit A, fulfills the four (4) requirements listed in Sections 3.1, 3.3, 3.4, and 3.8 of the Guidance Document.

Attachment B: Operator Demonstration

Attachment B, along with all figures and Exhibits A and B, fulfills the requirements of Sections 3.5 and 3.6 of the Guidance Document to waive compliance with specified provisions of Rule 1004, via a Variance. Attachment B contains the required supporting documentation to demonstrate that granting this final reclamation variance for applicable requirements of Rule 1004 will not negatively impact public health, public safety, public welfare, the environment, or wildlife.

PDC has made a good faith effort to provide the necessary information and evidence requested in the December 17, 2019, version of the COGCC Rule 1001.c: Surface Owner Waiver for Final Reclamation guidance document for the Director to evaluate our request for waiving specified provisions of Rule 1004 to fulfill the surface owner's request for final reclamation.

If you have any questions or concerns about PDC's variance request, please do not hesitate to contact me.

Sincerely,

Phillip Porter, CATMM

Phillip Porter
Senior Environmental Representative – Wattenberg
PDC Energy, Inc.

Attachments:

Attachment A: Executed Final Reclamation Agreement
Attachment B: Operator Demonstration
Exhibit A: Facility Photos and Aerial Imagery
Exhibit B: Well Abandonment - Subsequent Form 6

Attachment A:
Executed Final Reclamation Agreement



District Office
4000 Burlington Avenue
Evans, CO 80620
970-506-9272
www.pdce.com

January 11, 2019

Gary and Susan Alles
26285 County Road 47
Greeley, CO 80631

Re: **Final Reclamation Agreement**
Susan 1-23 (Well API : 05-123-12902)
Township 5 North, Range 65 West, 6th P.M.
Section 23: Part of NE4
Weld County, Colorado

Dear Mr. and Mrs. Alles (the "Surface Owner"):

PDC Energy, Inc. ("PDC") has previously consulted with you concerning the final reclamation of the above-captioned well(s) in accordance with your direction concerning future use of the land and applicable rules of the Colorado Oil and Gas Conservation Commission ("COGCC"). The well(s) were plugged and abandoned and PDC has removed all associated well and production facility equipment from the site(s). Pursuant to COGCC Rule 1001.c, PDC and the Surface Owner, agree to enter into this Final Reclamation Agreement in order to set forth the respective rights and responsibilities of the parties, and to seek COGCC's waiver of compliance with certain 1000-series rules.

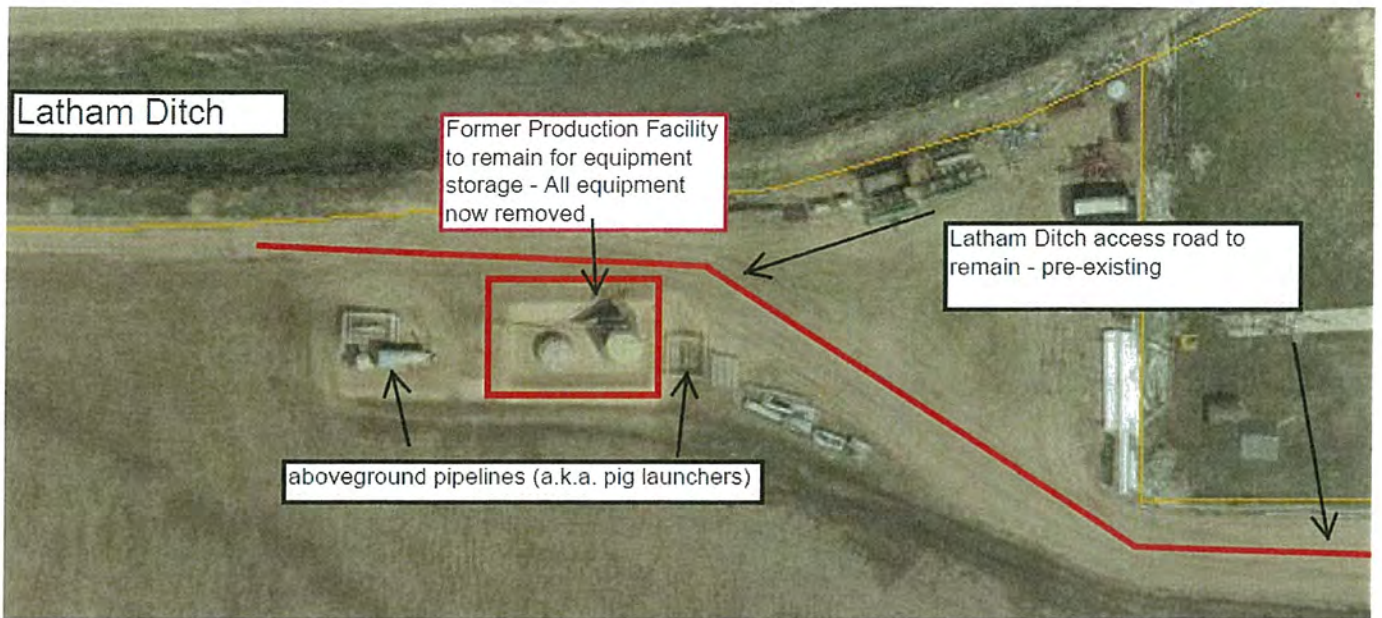
The specific portion of the oil and gas location, see attached photographs labeled as Exhibit A (the "Location") subject to this Final Reclamation Agreement and waiver include:

- Former production facility area
- Surface stabilization materials (gravel)

The reasons for Surface Owner entering into this Final Reclamation Agreement and thereby waiving PDC's obligations for additional reclamation required under COGCC Rule 1004 at the Location include:

- Surface Owner requests to retain the former production facility site for farming operations and storage as this site has aboveground pipelines (a.k.a. pig launchers) on the west and east side of the former production facility site. The Surface Owner prefers to not farm in between this remaining equipment.
- The former access road to the north of the production facility is the Latham Ditch access road. This was a shared access and the Latham Ditch road was pre-existing to the production facility. This access will remain for the Latham Ditch.

As the Surface Owner, you acknowledge that the current condition of the property subject to this Final Reclamation Agreement is satisfactory to you. If applicable, you acknowledge responsibility of topsoil protection. Additionally, by executing this letter below, as the Surface Owner, you also acknowledge that



View point looking on former battery site to show aboveground pipelines on East and West side of former production facility.

**Weld County
Access Roads**

If you have elected for limited reclamation and would like to keep a road that either PDC built or an existing road that PDC upgraded and used while our well was in production, please note the following.

Weld County Code may require you to hold a current Access Permit for any access off of a county road onto your property. Currently, there is not an existing Weld County Access Permit for this access.

To apply for a new Access Permit or change the use of the above referenced existing Access Permit with Weld County, please contact:

Weld County Public Works Department
1111 H Street
PO Box 758
Greeley, CO 80632
970-340-6496

Or visit the Weld County website to find the Access Permit Application and to learn more about Access Permits and requirements for approval at:

www.weldgov.com/departments/public_works

Attachment B:
Operator Demonstration

Attachment B



June 26, 2020

**RE: Operator Demonstration for:
Former Susan 1-23 Wellhead and Production Facility
API #: 05-123-12902 Location ID: 323356
Township 5 North, Range 65 West, 6th P.M.
Section 23: SENE
Weld County, Colorado**

The information below addresses the requirements detailed in Sections 3.5 and 3.6 of the Colorado Oil and Gas Conservation Commission's (COGCCs) Rule 1001.c: Surface Owner Waiver for Final Reclamation guidance document (Operator Guidance Document) dated December 17, 2019. Sections 3.5 and 3.6 of the Guidance Document outlines the evaluation of whether public health, safety, and welfare are protected and how significant adverse environmental impacts are prevented if specified provisions of Rule 1004 are waived, via a Variance.

1 – Evidence that all wells on the location have been Plugged and Abandoned (P&A) and that a Form 6 subsequent was submitted for each well.

PDC Energy, Inc. (PDC) certifies that the former Susan 1-23 (Location ID: 323356) well has been P&A as per the COGCC Rules and the Form 6 Subsequent has been submitted and approved (Exhibit B: Document Number 401884924).

2 – Evidence that all oil and gas equipment has been removed, including flowline and gathering risers.

PDC certifies that all oil and gas equipment, including flowline and gathering risers, has been removed from the location where the final reclamation variance is being requested. Exhibit A consists of facility photos taken on February 13, 2019, that demonstrate all equipment has been removed.

3 – Evidence that all trash and debris belonging to the operator or its agents has been removed.

PDC certifies that all trash and debris belonging to PDC or any of our contractors or agents has been removed from the location where the final reclamation variance is being requested. Exhibit A consists of facility photos taken on February 13, 2019, that demonstrate all trash and debris has been removed.

4 – Evidence that noxious weeds have been controlled as required by Rule 1004.

PDC certifies that noxious weeds have been controlled and/or removed from the location and will be managed by PDC until approval of this final reclamation variance. Exhibit A consists of

facility photos taken on February 13, 2019, that demonstrate noxious weed control on the location.

5 – Documentation of Good Faith Surface Owner Consultation regarding final reclamation pursuant to Rule 306.f.

Attachment A, accompanied by Exhibit A, provides the “Final Reclamation Agreement” provided to and signed by the surface owner (Mr. Gary Alles) on February 1, 2019, for the former Susan 1-23 wellhead and production facility documenting good faith consultation with the surface owner.

6 – Documentation of existing state of reclamation.

PDC certifies that the location has been reclaimed in accordance with the request of the surface owner (see Attachment A). The surface owner requested that PDC not remove/ reclaim the access road to the former Susan 1-23 production facility, nor the production facility pad. The former access road to the north of the production facility is the Latham Ditch access road. This was a shared access and the Latham Ditch road was pre-existing to the production facility. This access will remain for the Latham Ditch. The former production facility is small in size and consists of approximately 0.17 acres.

P&A for the Susan 1-23 wellhead was finalized on March 1, 2019. All associated well and production facility equipment has been removed. Exhibit A consists of facility photos taken on February 13, 2019, that demonstrate the existing state of reclamation on the former Susan 1-23 wellhead and production facility.

7 – Evidence that site is stabilized and stormwater management is adequate pending COGCC’s final sign-off reclamation inspection.

The former Susan 1-23 well has been P&A and reclaimed in accordance with Rule 1004. The former Susan 1-23 production facility is located approximately 0.10 mile west of Weld County Road 47 on the Latham Ditch access road. The road surface is compacted and covered with road base gravel for stabilization.

The former production facility is small in size and consists of approximately 0.17 acres. The facility is on the northern edge of an agricultural field and the surface owner would like to use the pad as a staging area for agricultural equipment. The pad surface is compacted and covered with road base gravel for stabilization. The pad is surrounded by cropland to the south and west, while graveled Latham Ditch access road lies to the north and east.

PDC will maintain the location to ensure proper stabilization and stormwater management until this variance is approved and all conditions of approval are fulfilled. Exhibit A consists of facility photos taken on February 13, 2019, that demonstrate current site conditions, including adequate site stabilization and stormwater management.

8 – Operator analysis of protection of public health, safety, and welfare; and prevention of significant adverse environmental impacts.

PDC has evaluated potential impacts to public health, safety, and welfare as well as potential significant adverse environmental impacts to this final reclamation variance to Rule 1004 [except Rules 1004.c.(4) and 1004.c.(5)]. Based on the explanation below, PDC has determined that a variance from the applicable requirements of Rule 1004 for the former Susan 1-23

(Location ID: 323356) production facility and access road would have NO NEGATIVE IMPACTS on public health, public safety, public welfare, environment, or wildlife.

Public Health Analysis

The specified final reclamation variance request from Rule 1004 is minor and with COGCC approval will maintain protection of public health. The location is on private property and, according to the "Surface Owners" COGCC GIS mapping layer, does not require any consultations with the Colorado Department of Public Health and Environment (CDPHE) or Colorado's Division of Water Resources (DWR).

Public Safety Analysis

The specified final reclamation variance request from Rule 1004 is minor and will maintain protection of public safety. The location is surrounded by rural residential and agricultural land. The former access road has a small surface imprint of approximately 0.10 mile on private property. The former access road is the Latham Ditch access road, which was a shared access. The Latham Ditch road was pre-existing to the production facility and will remain for the Latham Ditch.

The former Susan 1-23 production facility is located approximately 0.10 mile west of Weld County Road 47 on the Latham Ditch access road. The production facility has been decommissioned and all equipment removed. The surface is stabilized with gravel. The former Susan 1-23 wellhead, located at 40.38653, -104.62337, has been P&A and reclaimed (see Exhibits A and B).

Public Welfare Analysis

The specified final reclamation variances requested from Rule 1004 are minor requests that maintain the protection of public welfare. The location is on private property and will be returned to agricultural use by the surface owner. The location is zoned "Agricultural" by Weld County and the surface owner's desired use of the land is consistent with Weld County land use zoning standards.

Environment

The former Susan 1-23 wellhead and production facility do not fall within a Rule 317B Public Water System Protection area, according to the COGCC GIS “PWS 317B” mapping layer. The former Susan 1-23 production facility is approximately 60 feet from the nearest surface water (Latham Ditch) according to several COGCC GIS “Water Resources” mapping layers (Figure 1).

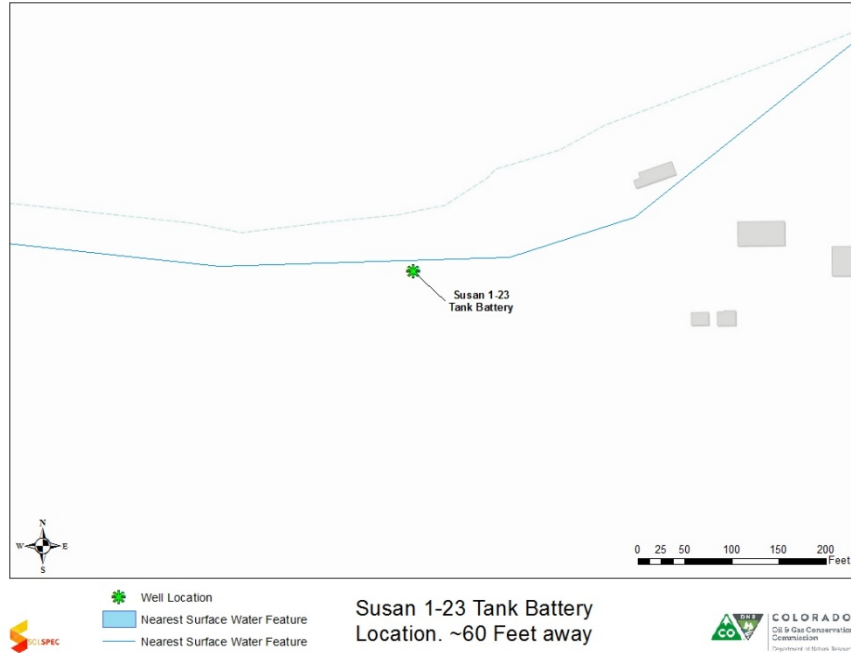


Figure 1. Distance to nearest surface water feature for the former Susan 1-23 production facility.

The former Susan 1-23 wellhead and production facility do not fall within a defined FEMA, State, or Weld County 100-Year Floodplain, according to COGCC GIS “Floodplain” mapping layers and Weld County Floodplain data (Figure 2).

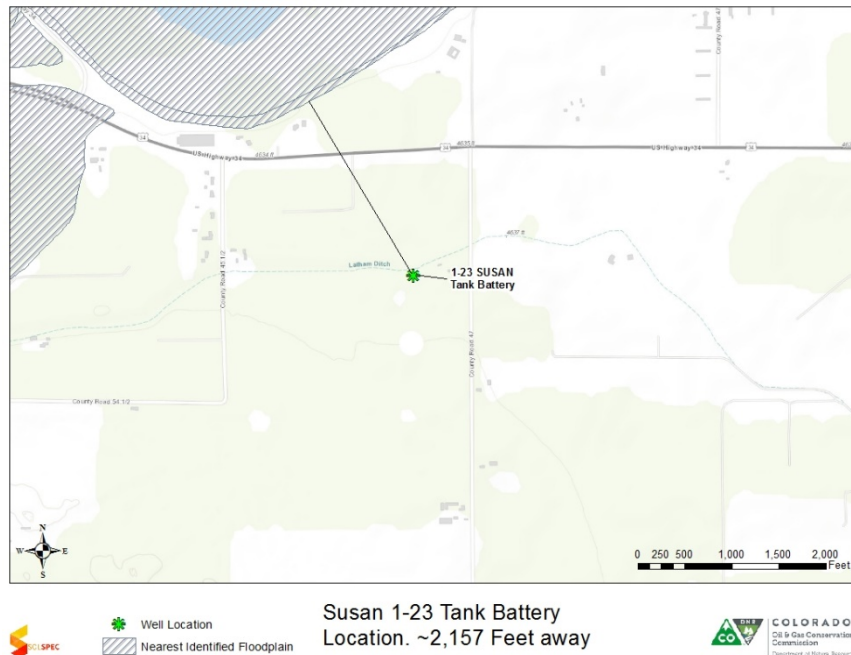


Figure 2. Distance to nearest 100-Year Floodplain for the former Susan 1-23 production facility.

The former Susan 1-23 production facility is approximately 299 feet west of the nearest groundwater well, according to COGCC GIS “DWR_Wells” mapping layer, which is based on Colorado’s DWR information (Figure 3).

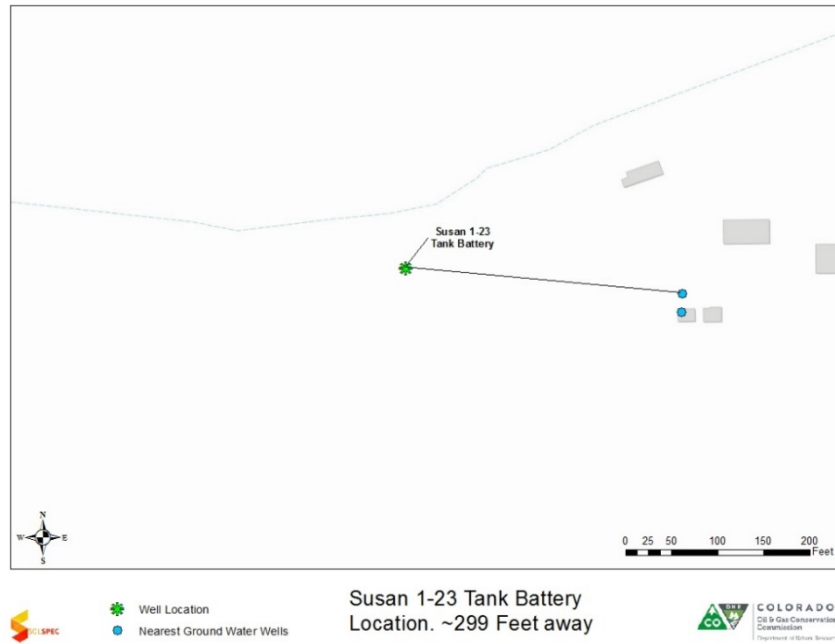


Figure 3. Distance to nearest groundwater well for the former Susan 1-23 production facility.

Wildlife

The former Susan 1-23 wellhead and production facility are not within a defined “Restricted Surface Occupancy” (RSO) or “Sensitive Wildlife Habitat” (SWH) area as identified in the COGCC GIS “CPW_RSO” and “CPW_SWH” mapping layers (Figure 4). The nearest defined SWH area is approximately 2,087 feet to the northwest.

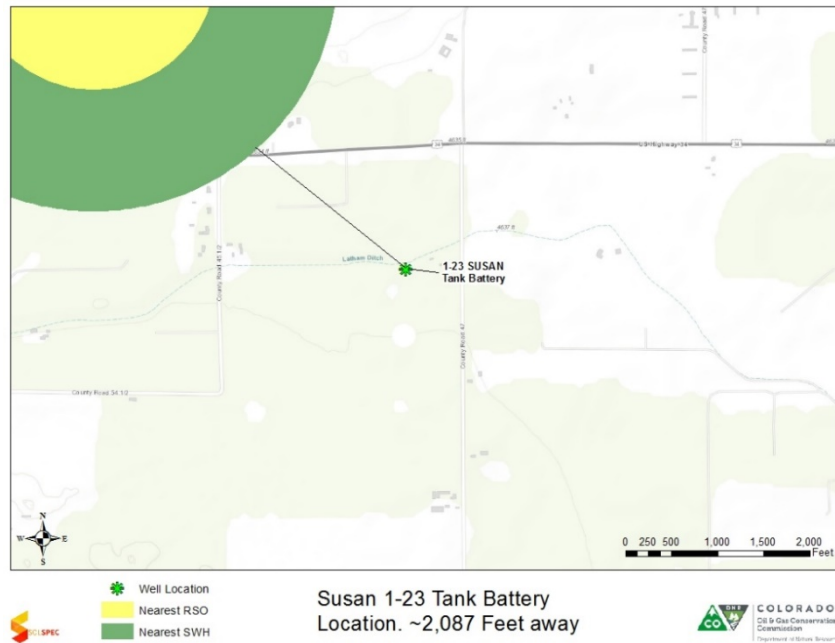


Figure 4. Distance to nearest Restricted Surface Occupancy (RSO) or Sensitive Wildlife Habitat (SWH) for the former Susan 1-23 production facility.

Based on this evaluation it has been established that:

- given the small size of the location (approximately 0.17 acres);
- the nature of the variance;
- the surface owner's plans for the location; and
- the fact that the location is on private property;

Granting this final reclamation variance for the former Susan 1-23 wellhead and production facility (Location ID: 323356) would have NO NEGATIVE IMPACTS on public health, public safety, public welfare, environment, or wildlife.

Exhibit A:
Facility Photos and Aerial Imagery

Exhibit A: FACILITY PHOTOS

PREPARED FOR: PDC ENERGY INC.



Facility:

Facility Type:

Legal Description:

Date of Assessment:

COGCC Location ID#:

County:

Date Prepared:

Exhibit A: FACILITY PHOTOS

PREPARED FOR: PDC ENERGY INC.



Facility:

Facility Type:

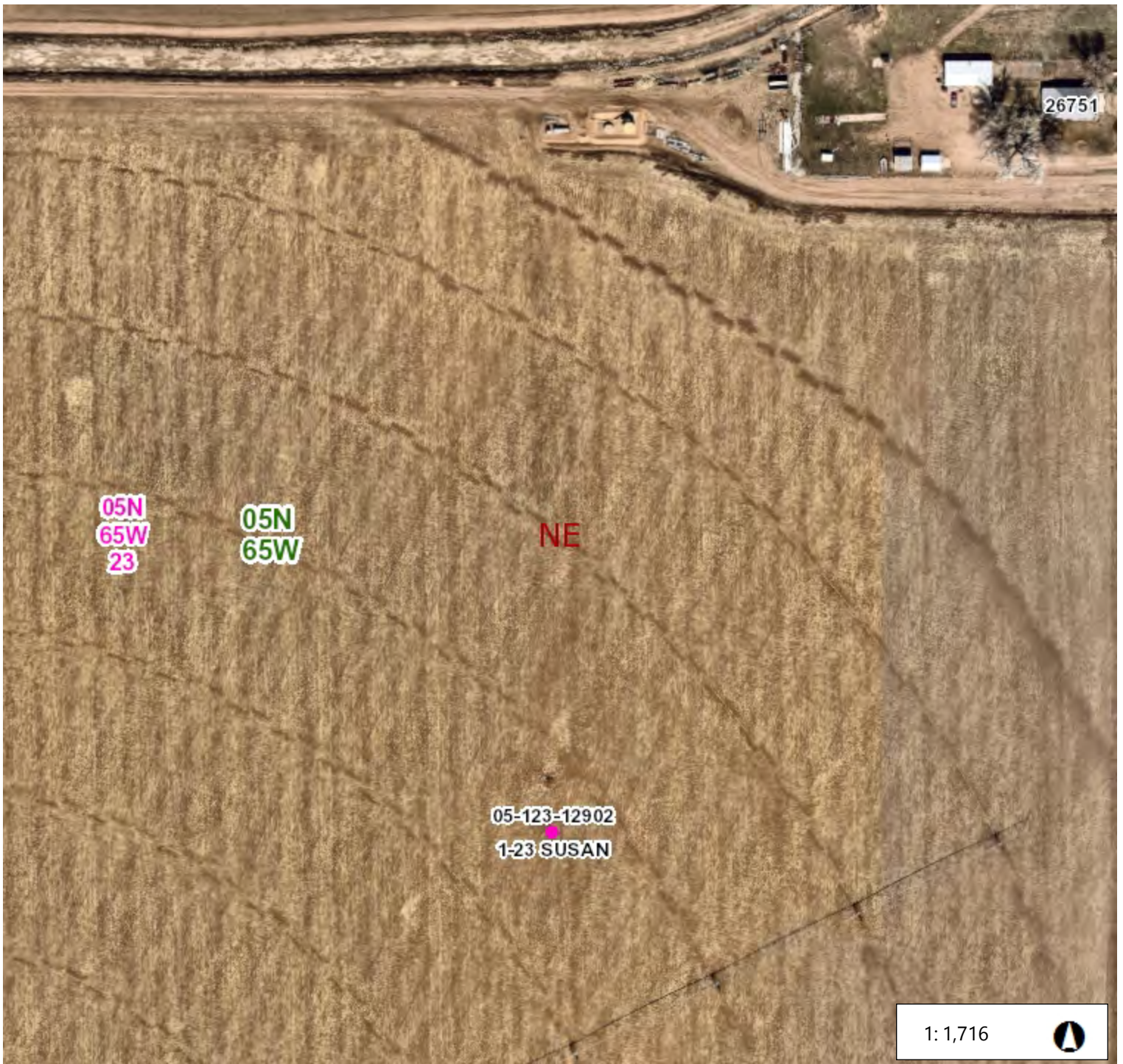
Legal Description:

Date of Assessment:

COGCC Location ID#:

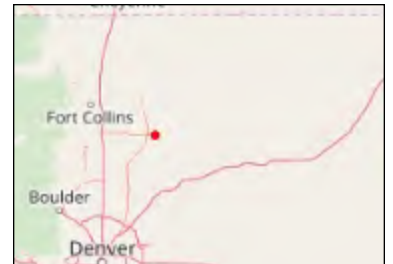
County:

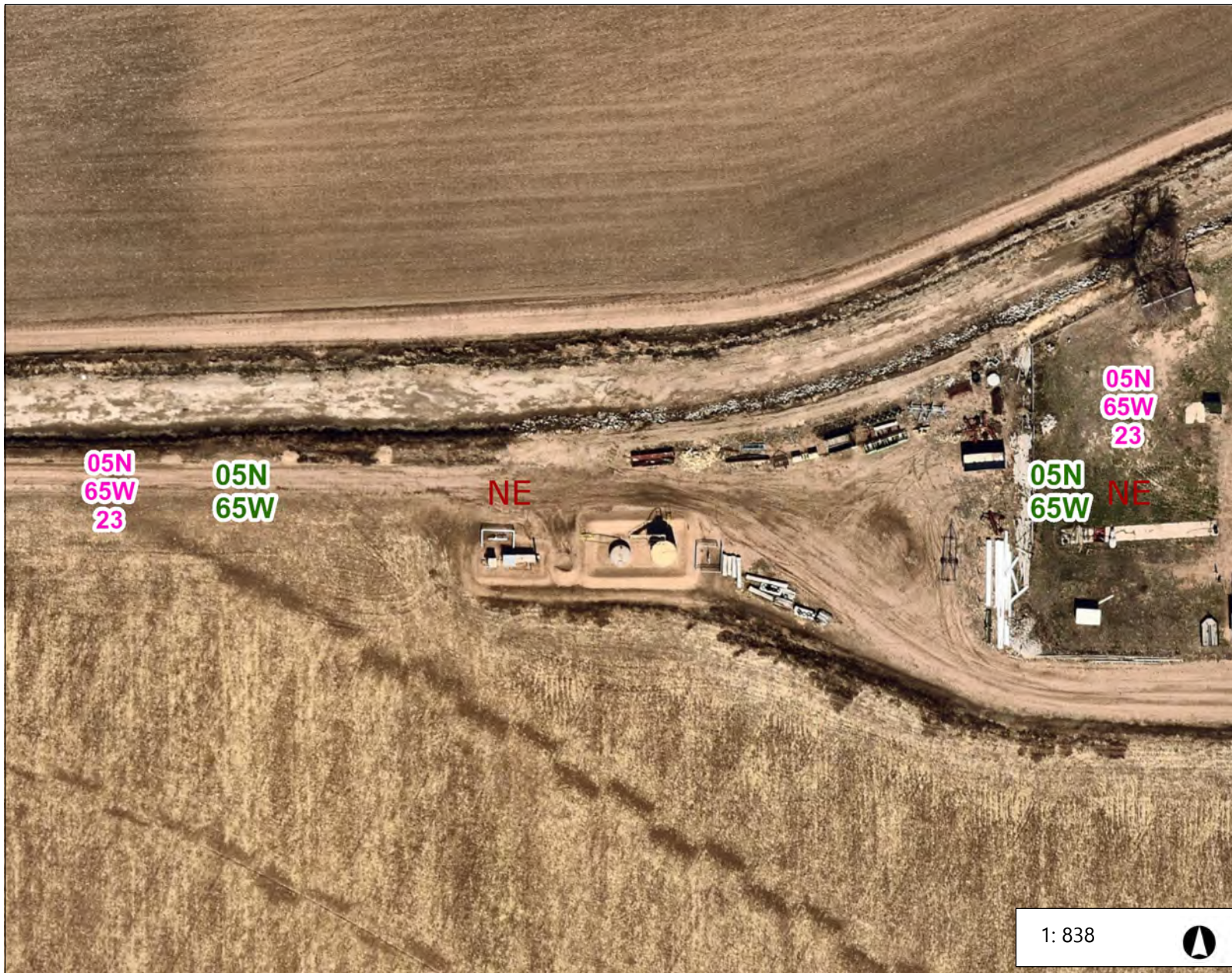
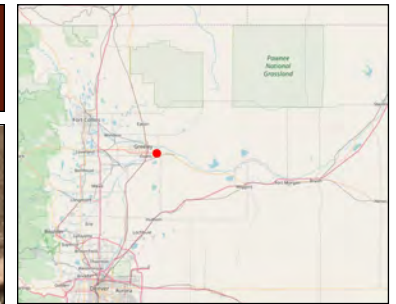
Date Prepared:



Legend

- | | | |
|-----------------|------------------|-------------------------------------|
| API Label | Township / Range | Oil and Gas Wells - Inactive |
| Well Name Label | Section | Abandoned Location |
| | Quarter Section | Plugged and Abandoned |
| | County Boundary | Dry and Abandoned |
| | | Other |
| | Highway | |

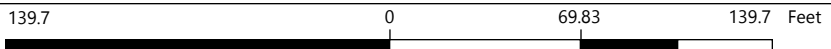




Legend

- API Label
- Well Name Label
- ▲ Weld Oil and Gas Location As
- Oil and Gas Wells - Inactive
 - Abandoned Location
 - Plugged and Abandoned
 - Dry and Abandoned
 - Other
- Highway
- Township / Range
- Section
- Quarter Section
- County Boundary

1: 838 



Notes

Exhibit B:

Well Abandonment – Subsequent Form 6

Document Number:
401884924

Date Received:
12/21/2018

WELL ABANDONMENT REPORT

This form is to be submitted as an Intent to Abandon whenever an abandonment is planned on a borehole. After the abandonment is complete, this form shall again be submitted as a Subsequent Report of the actual work completed. The approved intent shall be valid for six months after the approval date, after that period, a new intent will be required. Attachments required with the Intent to Abandon are wellbore diagrams of the current configuration and the proposed configuration with plugs set.

A Subsequent Report of Abandonment shall indicate the actual work completed. Attachments required with a Subsequent Report are a wellbore diagram showing plugs that were set and casing remaining in the hole, the job summaries from all plugging contractors used, including wireline and cementing (third party verification) and any logs that may have been run during abandonment.

OGCC Operator Number: 69175 Contact Name: Valerie Danson

Name of Operator: PDC ENERGY INC Phone: (970) 506-9272

Address: 1775 SHERMAN STREET - STE 3000 Fax: _____

City: DENVER State: CO Zip: 80203 Email: valerie.danson@pdce.com

For "Intent" 24 hour notice required, Name: _____ Tel: _____

COGCC contact: Email: _____

API Number 05-123-12902-00

Well Name: SUSAN Well Number: 1-23

Location: QtrQtr: SENE Section: 23 Township: 5N Range: 65W Meridian: 6

County: WELD Federal, Indian or State Lease Number: 68180

Field Name: WATTENBERG Field Number: 90750

Notice of Intent to Abandon Subsequent Report of Abandonment

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.386389 Longitude: -104.623333

GPS Data:
Date of Measurement: 05/04/2010 PDOP Reading: 1.8 GPS Instrument Operator's Name: Chuck Kraft

Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other _____

Casing to be pulled: Yes No Estimated Depth: _____

Fish in Hole: Yes No If yes, explain details below

Wellbore has Uncemented Casing leaks: Yes No If yes, explain details below

Details: _____

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	6955	6961	11/14/2016	B PLUG CEMENT TOP	6580
NIOBRARA	6663	6864	11/14/2016	B PLUG CEMENT TOP	6580

Total: 2 zone(s)

Casing History

Casing Type	Size of Hole	Size of Casing	Weight Per Foot	Setting Depth	Sacks Cement	Cement Bot	Cement Top	Status
SURF	12+1/4	8+5/8	24	351	270	351	0	VISU
1ST	7+7/8	4+1/2	11.6	7,037	220	7,037	6,085	CBL
S.C. 1.1				600	220	600	0	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6580 with 2 sacks cmt on top. CIBP #2: Depth _____ with _____ sacks cmt on top.
CIBP #3: Depth _____ with _____ sacks cmt on top. CIBP #4: Depth _____ with _____ sacks cmt on top.
CIBP #5: Depth _____ with _____ sacks cmt on top.

NOTE: Two(2) sacks cement required on all CIBPs.

Set 10 sks cmt from 2315 ft. to 2183 ft. Plug Type: CASING Plug Tagged:
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged:
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged:
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged:
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged:

Perforate and squeeze at 2500 ft. with 105 sacks. Leave at least 100 ft. in casing 2315 CICR Depth
Perforate and squeeze at 1600 ft. with 159 sacks. Leave at least 100 ft. in casing 1115 CICR Depth
Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 73 sacks half in. half out surface casing from 1115 ft. to 0 ft. Plug Tagged:

Set 2 sacks at surface

Cut four feet below ground level, weld on plate Above Ground Dry-Hole Marker: Yes No

Set _____ sacks in rat hole Set _____ sacks in mouse hole

Additional Plugging Information for Subsequent Report Only

Casing Recovered: _____ ft. _____ inch casing Plugging Date: 11/30/2018
of _____

*Wireline Contractor: C&J Energy Services *Cementing Contractor: C&J Energy Services

Type of Cement and Additives Used: Class G 15.8 PPG Cement & Type III 14.8 PPG Portland Cement

Flowline/Pipeline has been abandoned per Rule 1105 Yes No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Susan 1-23 (05-123-12902)/Plugging Procedure
Producing Formation: Codell: 6955'-6961' Niobrara: 6663'-6864'
Upper Pierre Aquifer: 376'-1345'
TD: 7085' PBTD: 7012'
Surface Casing: 8 5/8" 24# @351' w/ 270 sxs cmt
Production Casing: 4 1/2" 11.6# @ 7037' w/ 220 sxs cmt (TOC @ 6085' - CBL).
Annular Fill cement @ 600' w/ 220 sxs cmt (TOC @ Surface' - CBL).
Existing CIBP @ 6580' w/ 2 sxs cmt (11/14/2016).

Procedure:

1. MIRU TIH with perforation gun. Shoot lower squeeze holes at 2500'and upper squeeze holes at 2300'.
2. Set CICR at 2315'. RU cementing company. Sting in and pump 115 sxs 15.8#/gal CI G cement. Sting out and pump cement on top of CICR. TOC at 2183'.
3. TIH with perforation gun. Shoot lower squeeze holes at 1600'and upper squeeze holes at 1100'.
4. Set CICR at 1115'. RU cementing company. Sting in and pump 232 sxs 14.8#/gal Type III cement. Sting out and pump cement on top of CICR. (Pierre coverage from 1600'-1100'). Cement circulate to surface.
5. Cut surface casing 6' below ground level and weld on cap.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Valerie Danson

Title: Reg Tech Date: 12/21/2018 Email: valerie.danson@pdce.com

Based on the information provided herein, this Well Abandonment Report (Form 6) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:

Date: 3/1/2019

CONDITIONS OF APPROVAL, IF ANY:

<u>COA Type</u>	<u>Description</u>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401884924	FORM 6 SUBSEQUENT SUBMITTED
401884947	CEMENT JOB SUMMARY
401884952	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)