

State of Colorado Oil and Gas Conservation Commission

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403313706

Receive Date:

04/27/2023

Report taken by:

RICK ALLISON

Site Investigation and Remediation Workplan (Supplemental Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Closure request is not available for an Initial Site Investigation and Remediation Workplan.

OPERATOR INFORMATION

Name of Operator: <u>PDC ENERGY INC</u>	Operator No: <u>69175</u>	Phone Numbers
Address: <u>1099 18TH STREET SUITE 1500</u>		Phone: <u>(303) 860-5800</u>
City: <u>DENVER</u>	State: <u>CO</u>	Zip: <u>80202</u>
Contact Person: <u>Karen Olson</u>	Email: <u>tasfillremediationcontractor@pdce.com</u>	Mobile: <u>()</u>

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 22464 Initial Form 27 Document #: 402965674

PURPOSE INFORMATION

- ☐ Rule 913.c.(1): Pit or Cuttings Trench closure.
- ☒ Rule 913.c.(2): Buried or partially buried vessel closure, which will be by removal.
- ☐ Rule 913.c.(3): Remediation of Spill and Releases pursuant to Rule 912.
- ☐ Rule 913.c.(4): Land treatment of Oily Waste pursuant to Rule 905.e.
- ☐ Rule 913.c.(5): Closure of Centralized E&P Waste Management Facilities pursuant to Rule 907.h.
- ☐ Rule 913.c.(6): Remediation of impacted Groundwater pursuant to Rule 915.e.(3).D, and the contaminant concentrations in Table 915-1.
- ☐ Rule 913.c.(7): Investigation and remediation of natural gas in soil or Groundwater.
- ☐ Rule 913.c.(8): When requested by the Director due to any potential risk to soil, Groundwater, or surface water.
- ☒ Rule 913.c.(9): Decommissioning of Oil and Gas Facilities.
- ☐ Rule 913.g: Changes of Operator.
- ☐ Rule 915.b: Request to leave elevated inorganics in situ.
- ☐ Other: _____

SITE INFORMATION

No ☐ Multiple Facilities ☐

Facility Type: <u>LOCATION</u>	Facility ID: <u>472211</u>	API #: _____	County Name: <u>WELD</u>
Facility Name: <u>Noffsinger 11, 31-33</u>		Latitude: <u>40.449607</u>	Longitude: <u>-104.556693</u>
		** correct Lat/Long if needed: Latitude: <u>40.449596</u>	Longitude: <u>-104.556882</u>
QtrQtr: <u>NENW</u>	Sec: <u>33</u>	Twp: <u>6N</u>	Range: <u>64W</u>
		Meridian: <u>6</u>	Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SM

Most Sensitive Adjacent Land Use Agricultural

Is domestic water well within 1/4 mile? No

Is surface water within 1/4 mile? No

Is groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

Surface Water: Owl Creek - 1,440' E; Occupied Building: 835' NNE; FWS Wetlands: 1,440' E Riverine (R4SBC).

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- ☒ E&P Waste ☐ Other E&P Waste ☐ Non-E&P Waste
- ☒ Produced Water ☐ Workover Fluids
- ☒ Oil ☐ Tank Bottoms
- ☐ Condensate ☐ Pigging Waste
- ☐ Drilling Fluids ☐ Rig Wash
- ☐ Drill Cuttings ☐ Spent Filters
- ☐ Pit Bottoms
- ☐ Other (as described by EPA)

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	GROUNDWATER	Refer to Table 5 & Figure 2	Confirmation Groundwater Sampling
Yes	SOILS	Refer to Tables 1-4 & Figures 1&2	Confirmation Soil Sampling

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

On January 25, 2022, a release was discovered at the separator flowline riser during decommissioning activities and abandonment of the Noffsinger 11-33 wellhead and flowline. Based on the results collected during site investigation and excavation activities, PDC determined that the Noffsinger 11, 31-33 tank battery will be decommissioned and not be rebuilt. Due to the status change, and size of the excavation extent, confirmation soil samples and photos were not collected during the removal of the production equipment. However, all former production equipment was within the excavation extent footprint. During excavation activities, groundwater was encountered in the excavation at approximately 12 feet below ground surface (bgs). To date, a total of 4,182 cubic yards (cy) of impacted material were excavated and transported to the North Weld Waste Management Facility and Buffalo Ridge Landfill for disposal under PDC waste manifests. In addition, groundwater vacuum recovery was conducted concurrent to excavation activities and to date 5,850 barrels (bbls) of groundwater were removed from the excavation and transported to NGL C4 for disposal under PDC waste manifests. On January 24, 2022, one soil sample (SEP01-FL) was collected from the separator flowline riser at approximately 8 feet bgs and was submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, and TPH (C6-C36). Analytical results indicated that organic compound concentrations exceeded the applicable COGCC Table 915-1 standards. Between January 25 and February 15, 2022, three (3) soil samples (SS01, SS11, & SS19) were collected from impacted source material between approximately 9 feet and 10 feet bgs. The samples were submitted for laboratory analysis analysis of the full COGCC Table 915-1 analyte suite. Analytical results indicated preliminary COCs for the historic release as: BTEX, 1,2,4-TMB, 1,3,5-TMB, naphthalene, TPH (C6-C36), chrysene, fluorene, 1-M, 2-M, pH, arsenic, and barium.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

- ☒ Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Between January 25 and March 7, 2022, twenty-two soil samples (TP02, TP07, TP09-TP12) were collected from test pits (Figure 1) at depths ranging from 6' to 14.5' bgs to delineate the extent of impacts. Soil samples were submitted for laboratory analysis of BTEX, 1,2,4-TMB, 1,3,5-TMB, naphthalene, TPH. In addition, Soil samples (SS02, SS09, SS10) were submitted for additional laboratory analysis of chrysene, fluorene, 1-M and 2-M. Following test-pit advancement activities, excavation extent soil samples (SS17-SS18, SS22-SS24, SS27-SS29, SS32-SS33, SS39-SS40, SS43, SS45-SS49, SS53-SS54, SS57-SS61, SS67-SS68, SS76-SS80) were collected from the base and sidewalls of the final excavation extent and submitted for laboratory analysis of the above mentioned COCs.

Proposed Groundwater Sampling

- ☒ Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

On January 25, 2022, one groundwater sample (GW01) was collected from the excavation and submitted for laboratory analysis of BTEX, Naphthalene, 1,2,4-TMB and 1,3,5-TMB. Analytical results indicated that organic compounds were in exceedance of the applicable COGCC Table 915-1 standards.

Proposed Surface Water Sampling

- ☐ Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

- ☐ Additional alternative investigative actions described in attached Site Investigation Plan (summary):

Following a COA issued on Initial Form 27 document #402965674 and subsequent communication with the COGCC, soil samples (SS12-SS16 & SS20-SS21, SS25-SS26, SS30-SS31, SS34-SS38, SS41-SS42, SS44, SS50-SS52, SS55-SS56, SS62-SS66, SS69-SS75, & SS81-SS83) were submitted for laboratory analysis of the full COGCC Table 915-1 analytical suite. Soil samples (SS84-SS87) were collected from the excavation sidewalls at 2.5 feet bgs and submitted for laboratory analysis of pH, EC, SAR, and boron. Final analytical results indicate that organic compound concentrations were below the applicable COGCC Table 915-1 Protection of Groundwater SSLs in soil samples from the final excavation extent.

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 104

Number of soil samples exceeding 915-1 34

Was the areal and vertical extent of soil contamination delineated? No

Approximate areal extent (square feet) 16720

NA / ND

-- Highest concentration of TPH (mg/kg) 390

-- Highest concentration of SAR 2.87

BTEX > 915-1 Yes

Vertical Extent > 915-1 (in feet) 14

Groundwater

Number of groundwater samples collected 1

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet) 12

Number of groundwater monitoring wells installed 0

Number of groundwater samples exceeding 915-1 1

-- Highest concentration of Benzene (µg/l) 1700

-- Highest concentration of Toluene (µg/l) 44

-- Highest concentration of Ethylbenzene (µg/l) 2.6

-- Highest concentration of Xylene (µg/l) 110

Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

0 Number of surface water samples exceeding 915-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

☐ Were impacts to adjacent property or offsite impacts identified?

☒ Were background samples collected as part of this site investigation?

Eleven background soil samples (BKG02 & BKG03) were collected upgradient of the excavation between 2.5' and 14' bgs and submitted for laboratory analysis of Table 915-1 metals. Soil samples collected from BKG03 were submitted for additional analysis of pH. Analytical results indicated pH, arsenic, and barium were in exceedance of the applicable regulatory standards in native soil on site.

Between December 15, and December 20, 2022, four soil borings (BKG04-BKG07) were advanced to a depth of approximately 14 feet bgs to assess soil suitability constituents and metals concentrations in native soil on site. Twenty-four soil samples were collected at depths ranging from 2.5 feet and 14 feet bgs and were submitted for laboratory analysis of pH, EC, SAR, boron, and the Table 915-1 metals suite.

Background soil analytical results indicated that pH, arsenic, barium, cadmium, lead, and selenium were in exceedance of the applicable regulatory standards in native soil on site.

☒ Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards) 4182

Volume of liquid waste (barrels) 5850

☒ Is further site investigation required?

Between December 15, and December 20, 2022, 20 monitoring wells (BH01-BH20) were installed to delineate dissolved-phase hydrocarbon impacts within and adjacent to the former excavation extent. Lithologic descriptions and volatile organic compound (VOC) concentrations measured using a photoionization detector (PID) were recorded for each monitoring well. Due to elevated PID readings recorded during installation activities, a soil sample was collected from monitoring well BH18 from the interval exhibiting the highest VOC concentrations as well as, from the terminus of the soil boring. Two soil samples were submitted for laboratory analysis of BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, TPH(C6-C36), chrysene, fluorene, 1-M, 2-M, pH, arsenic, barium, cadmium, and lead.

Soil analytical results indicated that organic compound concentrations, pH, and cadmium were in compliance with the applicable COGCC Table 915-1 regulatory standards in monitoring well BH18. Arsenic, barium, and lead concentrations were in exceedance of the applicable regulatory standards in monitoring well BH18.

Background analytical results indicated that pH was in exceedance of the applicable regulatory standard in all five background soil boring locations. Additionally, 2 out of 3 waste characterization samples (SS11 and SS19) are below the background pH levels recorded in 7 background soil sample locations. The remaining 4 confirmation soil samples in exceedance of background pH levels are within 0.1 of background soil sample BKG07 @ 9'. Based on this data, the pH levels recorded in confirmation samples collected from the final excavation extent are not a result of oil and gas operations and indicative of native soil conditions.

REMEDIAL ACTION PLAN

Does this Supplemental Form 27A include changes to a previously approved Remedial Action Plan? No

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Between January 25 and March 7, 2022, a total of 4,182 cubic yards (CY) of impacted material were excavated and transported to the North Weld Waste Management Facility and Buffalo Ridge Landfill for disposal under PDC waste manifests. In addition, groundwater vacuum recovery was conducted concurrent to the excavation activities and to date 5,850 barrels (bbls) of groundwater were removed from the excavation and transported to NGL C4 for disposal under PDC waste manifests.

REMEDIATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

Per the condition of approval (COA) issued by the COGCC in the approved Supplemental Form 27 (Document No. 403101510), samples were collected from each monitoring well during installation activities at approximately 2.5 feet bgs. Twenty soil samples were submitted to Summit for analysis of pH, EC, SAR, and boron. Soil analytical results indicated that inorganic concentrations were in compliance with the applicable regulatory standards or below background concentrations in all 20 monitoring well locations.

Based on analytical results received from the initial groundwater monitoring assessment, monitored natural attenuation was the selected remediation strategy during the fourth quarter 2022 and will remain the selected remediation strategy through the first quarter 2023.

Soil Remediation Summary

☐ In Situ

☒ Ex Situ

Bioremediation (or enhanced bioremediation)

Yes Excavate and offsite disposal

Chemical oxidation

If Yes: Estimated Volume (Cubic Yards) 4182

Air sparge / Soil vapor extraction

Name of Licensed Disposal Facility or COGCC Facility ID #

Natural Attenuation

Excavate and onsite remediation

Other

Land Treatment

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Other

Groundwater Remediation Summary

Bioremediation (or enhanced bioremediation)

Chemical oxidation

Air sparge / Soil vapor extraction

Yes Natural Attenuation

Other

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

PDC will conduct quarterly groundwater monitoring at the 20 site monitoring wells (BH01 - BH20) until closure criteria are met. Groundwater samples will be submitted for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB by EPA Method 8260B, chloride and sulfate anions by EPA Method 300.0 and total dissolved solids (TDS) by Method SM 2540C in accordance with Table 915-1.

Fourth quarter 2022 groundwater analytical results indicated that organic compound concentrations were in compliance with the applicable COGCC Table 915-1 regulatory standards in all 20 monitoring well locations. TDS and sulfate anion concentrations were in exceedance of the applicable regulatory standards and greater than 1.25x the background concentrations in monitoring wells BH07, BH14, BH18, and BH20. Chloride anion concentrations were in compliance with the applicable regulatory standard in all 20 monitoring well locations.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

☒ Quarterly ☐ Semi-Annually ☐ Annually ☒ Other

☐ Request Alternative Reporting Schedule:

☐ Semi-Annually ☐ Annually ☐ Other

Rule 913.e:

After initial approval of a Form 27, the Operator will provide quarterly update reports in a Supplemental Form 27 to document progress of site investigation and remediation, unless an alternative reporting schedule has been requested by the Operator and approved by the Director. The Director may request a more frequent reporting schedule based on site-specific conditions.

Report Type: ☒ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report

☒ Other

Adequacy of Operator's General Liability Insurance and Financial Assurance

Describe the adequacy of the Operator's general liability insurance and Financial Assurance to fully address the anticipated costs of Remediation, including the estimated remaining cost for this project (below).

If this information has been provided on a Form 27 within the last 12 months, provide the Document Number of that form.

Financial assurance information was included in the approved Supplemental Form 27 (Document No. 403101510). This section and estimate will be updated on an annual basis until closure criteria are achieved.

Operator anticipates the remaining cost for this project to be: \$

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? ☒ Yes

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards

E&P waste (solid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

Volume of E&P Waste (liquid) in barrels

E&P waste (liquid) description

COGCC Disposal Facility ID #, if applicable:

Non-COGCC Disposal Facility:

REMEDIATION COMPLETION REPORT

REMEDIATION COMPLETION SUMMARY

Is this a Final Closure Request for this Remediation Project? ☒ No

If YES:

☐ Compliant with Rule 913.h.(1).

☐ Compliant with Rule 913.h.(2).

☐ Compliant with Rule 913.h.(3).

Do all soils meet Table 915-1 standards?

Does the previous reply indicate consideration of background concentrations?

Does Groundwater meet Table 915-1 standards?

Is additional groundwater monitoring to be conducted? _____

Operator shall comply with the COGCC 1000-Series Reclamation Requirements for all impacted and disturbed areas.

RECLAMATION PLAN

RECLAMATION PLANNING

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

Following tank battery decommissioning and excavation activities, the location was backfilled, compacted, and re-contoured to match pre-existing conditions. The location will be reclaimed in accordance with the COGCC 1000 series.

Is the described reclamation complete? ☒ Yes _____

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

☒ Interim ☐ Final

Did the Surface Owner provide the seed mix? _____

If YES, does the seed mix comply with local soil conservation district recommendations? _____

Did the local soil conservation district provide the seed mix? _____

SITE RECLAMATION DATES

Proposed date of commencement of Reclamation. 01/24/2022

Proposed date of completion of Reclamation. 07/12/2027

IMPLEMENTATION SCHEDULE

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

PRIOR DATES

Date of Surface Owner notification/consultation, if required. 01/25/2022

Actual Spill or Release date, or date of discovery. 01/25/2022

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 01/24/2022

Proposed site investigation commencement. 12/15/2022

Proposed completion of site investigation. 12/20/2022

REMEDIAL ACTION DATES

Proposed start date of Remediation. 01/24/2022

Proposed date of completion of Remediation. 07/12/2027

Per Rule 913.d.(2): Any change from the approved implementation schedule will be requested at least 14 days in advance, and the Operator may not make the change without the Director's approval.

☒ Change from approved implementation schedule per Rule 913.d.(2).

Basis for change in implementation schedule:

Supplemental site investigation and monitoring well installation activities were completed between December 15, and December 20, 2022. No further site investigation activities are planned at this time. Should this change, this section will be updated accordingly.

OPERATOR COMMENT

This Supplemental Form 27 was submitted to summarize quarterly groundwater monitoring activities and analytical results collected during the fourth quarter 2022 at the former Noffsinger 11, 31-33 tank battery location.

Fourth quarter 2022 groundwater analytical results indicated that organic compound and chloride anion concentrations were in compliance with the applicable COGCC Table 915-1 regulatory standards in all 20 monitoring well locations. TDS and sulfate anion concentrations were in exceedance of the applicable regulatory standards and greater than 1.25x the background concentrations in monitoring wells BH07, BH14, BH18, and BH20.

Soil analytical results received for soil samples collected during monitoring well installation activities indicated that organic compound concentrations and cadmium were in compliance with the applicable COGCC Table 915-1 regulatory standards in monitoring well BH18. Arsenic, barium, and lead concentrations were in exceedance of the applicable regulatory standards in monitoring well BH18. Additionally, pH was in compliance with the applicable regulatory standards or below background concentrations in all sample locations.

Background analytical results indicated that pH was in exceedance of the applicable regulatory standard in all five background soil boring locations. Additionally, two out of three waste characterization samples (SS11 and SS19) were observed below the background pH levels recorded in seven background soil sample locations. The remaining four confirmation soil samples in exceedance of background pH levels are within 0.1 of background soil sample BKG07 @9'. Based on this data and the absence of other inorganic constituents (EC and SAR) in exceedance of regulatory standards, the pH levels recorded in confirmation samples collected from the final excavation extent are not a result of oil and gas operations and indicative of native soil conditions. Consequently, PDC is requesting to remove pH as a contaminate of concern.

Statistical analyses of arsenic, barium, cadmium, lead, and selenium concentrations in confirmation soil samples and background samples were conducted. Due to the non-parametric distribution of the data, the Mann-Whitney-Wilcoxon rank-sum test was used to assess if site concentrations were representative of native background conditions. The analyses indicated arsenic, cadmium, lead, and selenium concentrations were not significantly higher than background concentrations and consequently, representative of background conditions. The barium analysis concluded that the site concentrations were significantly higher than background concentrations and, therefore, requires additional evaluation and delineation. Please see the attached Metals Statistical Evaluation for further discussion on the metals assessments and supporting data and diagrams.

Based on this data and the evaluation made in the Metals Statistical Evaluation, the metals concentrations recorded during excavation activities are indicative of native soil conditions and PDC is requesting to remove arsenic, cadmium, lead, and selenium as contaminants of concern for this remediation project. A proposed strategy to delineate and evaluate the barium concentrations in exceedance of the mean background concentrations will be provided in a forthcoming Supplemental Form 27.

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

Signed: Karen Olson

Title: Senior Program Manager

Submit Date: 04/27/2023

Email: taspillremediationcontractor@pdce.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: RICK ALLISON

Date: 05/12/2023

Remediation Project Number: 22464

COA Type

Description

	<p>It appears that soil sample BH18 was included in the background data. Based on the site investigation narrative for the monitoring well installation, BH18 was installed within the excavation footprint and soil samples were collected from BH18 at intervals of observed elevated PID readings. It appears that BH18 data should be included with the confirmation soil sample data (designated as site data in the WMW test).</p> <p>COGCC did not further evaluate the barium result because changing the inclusion of BH18 in one population or another would change several parameters in the WMW test including the S value, and data rankings.</p> <p>Note that if the conclusion regarding barium remains the same and the null hypothesis is not rejected, barium will remain a contaminant of concern. Therefore, PDC should begin monitoring dissolved barium in groundwater.</p>
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	<p>It appears that soil sample BH18 was included in the background data. Based on the site investigation narrative for the monitoring well installation, BH18 was installed within the excavation footprint and soil samples were collected from BH18 at intervals of observed elevated PID readings. It appears that BH18 data should be included with the confirmation soil sample data (designated as site data in the WMW test).</p> <p>COGCC did not further evaluate the lead result because changing the inclusion of BH18 in one population or another would change several parameters in the WMW test including the S value, and data rankings.</p> <p>Note that if the conclusion regarding lead changes and the null hypothesis is not rejected, lead will remain a contaminant of concern. Therefore, PDC should begin monitoring dissolved lead in groundwater.</p>
	<p>For Selenium, PDC has presented a background data count of n=23 and mean of 0.957, where COGCC obtained a count of 35 and mean of 0.87. It appears BKG06 and BKGG7 data are not used. Using the 35 selenium points yields a lower mean, and lower S value, possibly affecting the hypothesis test results.</p> <p>COGCC did not further evaluate the selenium result because changing the population count will affect the mean and the S value, possibly altering the hypothesis test.</p> <p>Note that if the conclusion regarding selenium changes and the null hypothesis is not rejected, selenium will remain a contaminant of concern. Therefore, PDC should begin monitoring dissolved selenium in groundwater.</p>
3 COAs	

Attachment Check List

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

<u>Att Doc Num</u>	<u>Name</u>
403313706	FORM 27-SUPPLEMENTAL-SUBMITTED
403383731	MONITORING REPORT

Total Attach: 2 Files

General Comments

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

Total: 0 comment(s)