FORM 27 Rev 5/22

State of Colorado
Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 404370831
Receive Date: 09/27/2025
Report taken by: Abdul Elnajdi

Site Investigation and Remediation Workplan (Initial 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 ECMC 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 INFORMATON

Name of Operator: BONANZA CREEK ENERGY OPERATING COMPANY LLC Operator No: 8960

Phone Numbers

Address: 555 17TH STREET SUITE 3700 Phone: (720) 315-8934

City: DENVER State: CO Zip: 80202 Mobile: ( )

Contact Person: Luke Kelly Email: LKelly@Civiresources.com

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 43243 Initial Form 27 Document #: 404370831

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.
- [X] 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: SPILL OR RELEASE Facility ID: 481037 API #: County Name: WELD

Facility Name: State Pronghorn 41-32 CPF 11/2/21 Latitude: 40.362615 Longitude: -104.224924

** correct Lat/Long if needed: Latitude: Longitude:

QtrQtr: NENE Sec: 32 Twp: 5N Range: 61W Meridian: 6 Sensitive Area? No

SITE CONDITIONS

General soil type - USCS Classifications: SM Most Sensitive Adjacent Land Use: Range Land

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? No

Other Potential Receptors within 1/4 mile

NA

SITE INVESTIGATION PLAN

TYPE OF WASTE:

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

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
Yes	SOILS	TBD	Laboratory Analysis

INITIAL ACTION SUMMARY

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

9/27/2025 Update - Due to the size of the updated summary please see the attached Initial Action Summary

On November 2, 2021 at approximately 1330 hours produced fluids were seen surfacing around a produced water riser at the State Pronghorn CPF 41-32. The line was immediately shut-in and evacuated.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

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

Site assessment soil samples will be collected from within the investigation area to achieve vertical delineation. Historic soil sample locations ([PW-CS-01 @ 8'], [PW-CS-08 @ 8.5'], [PW-CS-06 @ 3'], and [PW-CS-09 @ 8.5']) represent horizontal points of compliance north, east, south, and west of the documented pH exceedance. Soil samples will be collected at 1' greater below ground surface (bgs) than the previous soil samples to achieve vertical delineation adjacent to previous sample location (PW-CS-FS-03 @ 10'). See the Proposed Sample Map attached to this form for approximate sample locations. All soil samples will be analyzed for full ECMC Table 915-1 analytes and will be compared to GWSSLs. Upon landowner access and approval, at least four (4) additional background soil samples will be collected from homogenous soil horizons and/or corresponding excavation sample depths from nearby offsite and undisturbed locations.

Proposed Groundwater Sampling

[X] Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

The nearest water well (Permit # 227566) with a recorded static water level is located approximately 4,000 feet north of the State Pronghorn 41-32 Pad. The recorded static water level of this well is 250 feet. However, Bonanza proposes to set one temporary monitoring well during delineation activities. The temporary monitoring well will be installed to a maximum depth of drilling refusal or 25 feet bgs, whichever is encountered first to determine regulatory screening levels. If groundwater is encountered a sample will be collected from the temporary monitoring well and analyzed for full ECMC Table 915-1 groundwater analytes.

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):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected: 23

Number of soil samples exceeeding 915-1: 12

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

Approximate areal extent (square feet): 0

NA / ND

-- Highest concentration of TPH (mg/kg): 9360

-- Highest concentration of SAR: 103

BTEX > 915-1: No

Vertical Extent > 915-1 (in feet): 0

Groundwater

Number of groundwater samples collected: 0

Was extent of groundwater contaminated delineated? No

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

Number of groundwater monitoring wells installed:

Number of groundwater samples exceeding 915-1:

NA Highest concentration of Benzene (µg/l):

NA Highest concentration of Toluene (µg/l):

NA Highest concentration of Ethylbenzene (µg/l):

NA Highest concentration of Xylene (µg/l):

NA 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?

One (1) background soil sample was collected

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

Volume of solid waste (cubic yards): Volume of liquid waste (barrels):

☒ Is further site investigation required?

Yes, please see the Proposed Sampling Plan section of this form for details on future sampling.

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

The impacted material will be removed through mechanical excavation.

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.

Once vertical and lateral delineation is complete and a project scope is developed; Bonanza will outline a detailed remediation strategy in a subsequent Form 27.

Soil Remediation Summary

☐ **In Situ** ☐ **Ex Situ**

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ Natural Attenuation

_____ Other _____

_____ Excavate and offsite disposal

If Yes: Estimated Volume (Cubic Yards) _____

Name of Licensed Disposal Facility or ECMC Facility ID # _____

_____ Excavate and onsite remediation

_____ Land Treatment

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Other _____

Groundwater Remediation Summary

_____ Bioremediation (or enhanced bioremediation)

_____ Chemical oxidation

_____ Air sparge / Soil vapor extraction

_____ 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.

REMEDIATION PROGRESS UPDATE

PERIODIC REPORTING

Approved Reporting Schedule:

[X] 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.

The General Liability coverage within the Civitas Resources, Inc. insurance program includes coverage for bodily injury, property damage, and pollution clean-up costs arising from qualifying pollution events of a sudden and accidental nature subject to a $1,000,000 per occurrence limit and $2,000,000 aggregate limit. The Civitas Resources, Inc. insurance program includes Excess Liability coverage of $110,000,000 per occurrence and in the aggregate which sits over the sudden and accidental pollution within the General Liability coverage. It is the opinion of Civitas Resources, Inc. that this total tower of limit is adequate to address the costs of remediation associated with any qualifying pollution event.

Operator anticipates the remaining cost for this project to be: $ 20000

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:

NA

Volume of E&P Waste (solid) in cubic yards 95

E&P waste (solid) description E&P impacted soil

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility: Buffalo Ridge

Volume of E&P Waste (liquid) in barrels 0

E&P waste (liquid) description NA

ECMC Disposal Facility ID #, if applicable:

Non-ECMC Disposal Facility:

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.

The release occurred on an active oil and gas facility. Reclamation will take place in accordance to the ECMC 1000 series rules following facility decommissioning.

Is the described reclamation complete? No

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.

Proposed date of completion of Reclamation.

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. 11/02/2021

Actual Spill or Release date, or date of discovery. 11/02/2021

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). 11/02/2021

Proposed site investigation commencement. 12/26/2025

Proposed completion of site investigation. 03/26/2026

REMEDIAL ACTION DATES

Proposed start date of Remediation. 05/01/2026

Proposed date of completion of Remediation. 09/22/2026

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:

OPERATOR COMMENT

In accordance with Rule 206.a, Civitas Resources, Inc. completed an assessment and identified discrepancies in data previously submitted to the ECMC for this site that were prepared by a third-party consultant without the knowledge and beyond the reasonable control of Civitas Resources, Inc. The following discrepancies were identified in the third-party consultant's report (document #403099809) attached to ECMC Form 19 #403099807.

• Sample ID Background-01@5': The arsenic concentration of 1.61 mg/kg was altered to 2.29 mg/kg within the lab report (Origins # Y112332-01) on pages 11 and 80.
• Sample ID PW-CS-09@8.5': The pH concentration of 6.69 SU was altered to 7.86 SU within the lab report (Origins # Y206356-01) on pages 5, 9, and 136.
• Sample ID PW-CS-FS-03@10': The pH concentration of 5.84 SU was altered to 7.67 SU within the lab report (Origins # Y206356-01) on pages 5, 9, and 139.

The analytical result alterations for sample ID PW-CS-FS-03@10' resulted in an exceedance becoming a non-exceedance. The analytical result alterations for sample ID PW-CS-09@8.5' did not result in an exceedance becoming a non-exceedance. The alterations to the background soil sample did not result in assessment soil sample exceedances becoming non-exceedances when compared to the adjusted background threshold value. It is within the ECMC's discretion if a background sample result is to be accepted as an adjusted threshold value. The identified data anomalies were allegedly altered by the third-party consultant.

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

Signed: Luke Kelly Title: Env Advisor

Submit Date: 09/27/2025 Email: LKelly@Civiresources.com

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

ECMC Approved: Abdul Elnajdi Date: 11/21/2025

Remediation Project Number: 43243

COA Type	Description
0 COA	

ATTACHMENT 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.

Att Doc Num	Name
404370831	INVESTIGATION/REMEDIATION WORKPLAN (INITIAL)
404370833	REMEDIAL ACTION PLAN
404370834	SOIL SAMPLE LOCATION MAP
404370835	SITE INVESTIGATION PLAN
404370836	ANALYTICAL RESULTS
404370837	ANALYTICAL RESULTS
404370838	ANALYTICAL RESULTS
404370840	SOIL SAMPLE LOCATION MAP
404370841	ANALYTICAL DATA SUMMARY TABLE(S)
404370842	ANALYTICAL DATA SUMMARY TABLE(S)
404446374	FORM 27-INITIAL-SUBMITTED

Total Attach: 11 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)