



B9E P&A project

Fischer - DNR, Alex <alex.fischer@state.co.us>

Thu, Sep 9, 2021 at 2:51 PM

To: Blair Rollins <brollins@caerusoilandgas.com>

Cc: Brett Middleton <bmiddleton@caerusoilandgas.com>, "Araza - DNR, Steven" <steven.arauza@state.co.us>, Aaron Trujillo - DNR <aaron.trujillo@state.co.us>

Thanks Blair.

On Thu, Sep 9, 2021 at 1:16 PM Blair Rollins <brollins@caerusoilandgas.com> wrote:

Hi Alex – I feel the email you sent provides enough direction for Caerus to proceed on a path to closure. Thank you for providing it and we will begin preparing the outlined information.

Thank you,

Blair Rollins

Environmental Specialist

Caerus Operating LLC

143 Diamond Avenue

Parachute, CO 81635

P: 970-285-2925 | M: 970-640-6919 | E: brollins@caerusoilandgas.com



From: Fischer - DNR, Alex <alex.fischer@state.co.us>

Sent: Thursday, September 9, 2021 12:17 PM

To: Blair Rollins <brollins@caerusoilandgas.com>

Cc: Brett Middleton <bmiddleton@caerusoilandgas.com>; Araza - DNR, Steven <steven.arauza@state.co.us>; Aaron Trujillo - DNR <aaron.trujillo@state.co.us>

Subject: Re: B9E P&A project

Blair-

Steven is out in the field today. Do you want to still discuss the B9E P&A project or does the email I sent provide direction?

Alex

Blair,

API 045-13329 F2 approved 10/08/2004.

The following COAs are on the F27 (Doc #402722447):

*Per Rule 913.b.(2), the Operator will conduct sampling and analysis of soil, and groundwater-- if encountered, to determine the horizontal and vertical extent of any contamination in excess of the cleanup concentrations in Table 915-1 for soil and groundwater. **The Operator shall analyze samples for the complete Table 915-1 list and shall delineate the extent of impacts using the Table 915-1 Protection of Groundwater Soil Screening Level Concentrations.***

If historical impacts are discovered, operator shall report historical impacts via an eForm 19 (Initial w/ Supplemental) and shall collect representative soil samples for the complete Table 915-1 list. This eForm 19 may include a closure request referencing the Remediation Project number assigned upon approval of this report..

Operator shall collect sample(s) from comparable, nearby non-impacted native soil for purposes of establishing background soil conditions including pH, electrical conductivity (EC) and sodium adsorption ratio (SAR), per Rule 915.e.(2).D.

Review of the analytical provided the following constituents are above 915-1 using the Protection of Groundwater Soil Screening Level Concentrations.

Sample Results:

- Sample Results 01 Base @10'

pH = 10.2

Barium = 176 mg/kg; 82 mg/lg = *Protection of Groundwater Soil Screening Level Concentrations*

Arsenic = 2.43 mg/kg; 0.29 mg/kg = *Protection of Groundwater Soil Screening Level Concentrations*

- Sample Results 02 SS01@9'

pH = 9.67

Barium = 14,300 mg/kg; 82 mg/lg = *Protection of Groundwater Soil Screening Level Concentrations*

Lead = 15.4 mg/kg; 14 mg/kg = *Protection of Groundwater Soil Screening Level Concentrations*

Selenium = 1.84 mg/kg; 0.26 mg/kg = *Protection of Groundwater Soil Screening Level Concentrations*

Arsenic = 2.52 mg/kg; 0.29 mg/kg = *Protection of Groundwater Soil Screening Level Concentrations*

If you have demonstrated that there is no pathway for communication with Groundwater, then only pH and Arsenic exceed Table 915-1 in both of the samples collected.

I have reviewed the well file including the surface use agreement (SUA) and there is no mention of burying drill cuttings on location. That said, the Rules (2001) at that time under Interim Reclamation allowed for the burial of material on location. Additionally, any E&P waste had to be compliant with Table 901-1 constituents.

1003.. INTERIM RECLAMATION

General Debris and waste materials other than de minimis amounts, including, but not limited to. concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe and cable, as well as equipment associated with the drilling, re-entry or completion operations shall be removed. All E&P waste shall be handled according to the 900 Series rules. All pits, cellars, rat holes, and other bore holes unnecessary for further lease operations, excluding the drilling pit, will be backfilled as soon as possible after the drilling rig is released to conform with surrounding terrain. On crop land, if requested by the surface owner, guy line anchors shall be removed as soon as reasonably possible after the completion rig is released. All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor. Material may be burned or buried on the premises only with the prior written consent of the surface owner, and with prior written notice to the surface tenant. Such burning or burial may be prohibited by other applicable law.

Assuming you have demonstrated that there is no pathway for communication with Groundwater, the path forward would be to address the historical impacts with a F19 (see the COA above), collect comparable samples from nearby non-impacted native soil for establishing background soil conditions (see the COA above), secure written consent from the surface owner (per Rule 1003 in 2001) to allow for the burial of the cuttings (E&P waste.), and provide a 915.b. Soil Suitability Reclamation Plan.

Alex

On Wed, Sep 1, 2021 at 2:00 PM Blair Rollins <brollins@caerusoilandgas.com> wrote:

Alex – as requested, attached please find the laboratory analytical report and the sample location map for the B9E P&A project.

Thank you,

Blair Rollins

Environmental Specialist

Caerus Operating LLC

143 Diamond Avenue

Parachute, CO 81635

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From: Fischer - DNR, Alex <alex.fischer@state.co.us>

Sent: Wednesday, September 1, 2021 7:58 AM

To: Blair Rollins <brollins@caerusoilandgas.com>

Cc: Brett Middleton <bmiddleton@caerusoilandgas.com>; Arauza - DNR, Steven <steven.arauza@state.co.us>

Subject: Re: B9E P&A project

Blair-

Also, please provide the analytical and a map on the Location where the cuttings were encountered.

Thanks

Alex

On Wed, Sep 1, 2021 at 5:50 AM Blair Rollins <brollins@caerusoilandgas.com> wrote:

Alex – attached please find the B9E Form 27 for P&A activities which includes the API and Location ID as requested. We look forward to catching up with you next week. Thank you.

Thank you,

Blair Rollins

Environmental Specialist

Caerus Operating LLC

143 Diamond Avenue

Parachute, CO 81635



From: Fischer - DNR, Alex <alex.fischer@state.co.us>
Sent: Tuesday, August 31, 2021 2:55 PM
To: Blair Rollins <brollins@caerusoilandgas.com>
Cc: Brett Middleton <bmiddleton@caerusoilandgas.com>; Arauza - DNR, Steven <steven.arauza@state.co.us>
Subject: Re: B9E P&A project

Blair,

I think the 9th at your scheduled time should work. Please provide me the API and Location ID: of B9E yet this week so I can be prepared.

Alex

On Tue, Aug 31, 2021 at 12:52 PM Blair Rollins <brollins@caerusoilandgas.com> wrote:

Hi Alex,

I wanted to reach out and see if you are available sometime next week to discuss the B9E P&A project and thoughts for a plan moving forward? During flowline and wellhead field investigation, drill cuttings were encountered. A representative sample of the material was collected and pH was the only analyte which exceeded COGCC Table 915-1 standards.

We currently have a regularly scheduled Remediation meeting with the COGCC on September 9th at 1:30 PM if that works for your schedule. If not, I am sure Brett and I can move our schedule to meet with you and Steven. Please let me know and I will send out a meeting request.

Thank you,

Blair Rollins

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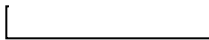
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Alex Fischer, P.G.

Environmental Supervisor, Western Colorado



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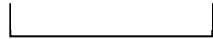
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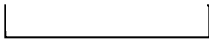
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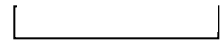
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