

From: [Steven Arauza - DNR](#)
To: ["Ed Ingve"](#)
Cc: ["jbcrog@aol.com"](#); [John Axelson - DNR](#)
Subject: RE: Bird State Drilling Pit (remediation project #9615)
Date: Monday, February 27, 2017 11:04:00 AM

Good morning, Ed.

Thank you for providing the sample location for the 12/29/2016 confirmation sample. The Analytical Report that you provided on 2/17/2017 indicates a TPH-DRO concentration of 967 mg/kg remaining in the scraped area. This concentration exceeds the maximum allowable TPH concentration of 500 mg/kg listed in Table 910-1, thereby demonstrating non-compliance with the COGCC's 900-Series rules and with John's sampling requirement.

The area needs to be scraped again and the material removed must be properly disposed off site. The gray material may have been removed, but the laboratory report confirms that the underlying material has been impacted, so waste manifests should also be provided to the COGCC. After additional material is removed, sample in the same approximate location as the last two samples and have the new sample analyzed for TPH. This sampling requirement will not be satisfied until a confirmation sample demonstrates compliance with Table 910-1 for TPH. Provide analytical results to the COGCC within 60 days of this email.

You may attach the photos to a FIRR form in response to my latest inspection to document compliance with my request for analytical results. This would satisfy the inspection report corrective action, but the subject area remains out of compliance with Table 910-1.

Feel free to contact me if you have any questions about this sampling requirement.

Thank you,

Steven J. Arauza, P.G.
Environmental Protection Specialist I



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From: Ed Ingve [<mailto:ed@renegadeoilandgas.com>]
Sent: Sunday, February 26, 2017 4:22 PM
To: 'Steven Arauza - DNR'
Cc: 'JB Condill'
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Steve,

I have attached a picture from the 9/30/2016 non compliant sample location, a picture from the 12/29/2016 sample location and an aerial view of the 12/29/2016 sample location. The sample submitted was from soil beneath the mud contaminated dirt after it was scraped. The sample location was as close to the original sample location from 9/30/2016 as possible. It was very obvious by the color of the mud contaminated area (gray) and the non impacted soil (brown/tan) which soil needed to be scraped off and removed.

I believe this completes the sampling requirement that John requested with regards to the pit remediation itself. I realize there may have to be additional sampling performed when the workover rig pad is reclaimed.

If this is to your satisfaction I will attach these pictures to a FIRR form in response to your inspection of the lease to demonstrate corrective action compliance. Let me know if this works.

Ed

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Friday, February 24, 2017 1:31 PM
To: Ed Ingve; jbcrog@aol.com
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Hi Ed and JB,

I haven't heard from you in a week. Could you provide additional info regarding the laboratory report that you sent last week (see my email below).

-Steve

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Friday, February 17, 2017 2:29 PM
To: 'Ed Ingve'; 'jbcrog@aol.com'
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Good afternoon, Ed and JB.

Thank you for the soil manifests and laboratory report. I will have these documents uploaded to the file for Remediation Project #9615.

Could you confirm the corresponding sample location for this laboratory report? Was this a sample of the stockpiled material referenced in Inspection Report #681700279 or was this a confirmation sample for the remaining soil adjacent to the former pit location that John requested?

If this was the confirmation sample, please submit a photo and diagram of the sample location.

Thank you,
Steve

From: Ed Ingve [<mailto:ed@renegadeoilandgas.com>]
Sent: Friday, February 17, 2017 7:37 AM
To: 'Steven Arauza - DNR'
Cc: 'JB Condill'
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Steven,

Please find attached both the soil sample analysis and disposal manifests for the above remediation project. I also included the email from JB Condill from Accutest as it has the summary results for the sample (a little easier to decipher).

I will also file a FIRR in response your inspection of the lease from 1/20/2017 and submitted 2/1/2017 (inspection number 401199876).

I think we are close to finishing and closing this drill pit remediation situation.

Any questions please feel free to call.

Ed

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Wednesday, January 18, 2017 9:34 AM
To: Ed Ingve
Cc: jbcrog@aol.com
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Thank you for the update, Ed.

Has the reclaimed mud adjacent to the pit been scraped and properly disposed of, per John's email? If so, please submit waste disposal documentation.

What is the status of the soil stock pile that had been documented in the 11/15/2016 Field Inspection Report (doc #673714408)?

-Steve

From: Ed Ingve [<mailto:ed@renegadeoilandgas.com>]
Sent: Thursday, January 12, 2017 5:34 PM
To: 'Steven Arauza - DNR'
Cc: 'JB Condill'
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Steven,

Sorry for the delayed response. The workover is still on going. The pit remediation has been complete but the final soil sample from our lab are not in yet and are overdue. Your email has

prompted me to investigate where our results are. Once received the pit paperwork can be filed. Was hoping to completely wrap the pit part of this prior to responding.

Thanks, Ed

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Thursday, January 12, 2017 11:21 AM
To: Ed Ingve
Cc: jbcrog@aol.com
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Good morning Ed and JB,

I haven't heard any response to my inquiry from last month. What is the status of remediation and workover operations at the Bird-State facility?

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Monday, December 12, 2016 3:16 PM
To: 'Ed Ingve'
Cc: jbcrog@aol.com
Subject: RE: Bird State Drilling Pit (remediation project #9615)

Good afternoon Ed and JB,

I am writing to inform you that I am back in the office and will serve as your COGCC contact for correspondence regarding Remediation #9615.

The November 3rd email from John Axelson (below) indicates COGCC approval to close the subject pit and provides additional sampling requirements for the subject site. John's email instructed Renegade to scrape and properly dispose of the material located adjacent to the pit and to collect confirmation samples of the underlying soil to document compliance with Table 910-1. **Has the impacted material (adjacent to the pit) been scraped and disposed of yet? If not, what is the anticipated timeframe for removal of that material and collection of confirmation samples?**

Additionally, John's email requires sampling of cuttings that had been reused on-site to be conducted after work is completed on the well. **What is the status of the work on the well? What is your anticipated timeframe for sampling the reused cuttings?**

A Field Inspection Report from 11/15/2016 (doc #673714408) suggests that the pit had been backfilled and closed by the date of that inspection. It also documents the presence of an unidentified soil stockpile near the entrance to the site, which had neither an underlying liner nor an earthen berm. **What is the status of the soil stockpile that had been observed during the 11/15/2016 Field Inspection? Did the stockpile consist of clean fill material or impacted waste?**

If you have any questions, feel free to give me a call.

Thanks,

Steven J. Arauza, P.G.
Environmental Protection Specialist I



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From: Axelson - DNR, John [<mailto:john.axelson@state.co.us>]
Sent: Thursday, November 03, 2016 2:42 PM
To: Ed Ingve
Cc: JB Condill; Steven Arauza - DNR; EnviroScan, OGCC
Subject: Re: Bird State Drilling Pit (remediation project #9615)

Ed,

Sorry for the slow reply - I told you I would send an email as follow up to our conversation last week.

Based on the sample results provided, Renegade has COGCC approval to close the subject pit.

Regarding the mud sample collected adjacent to the pit, TPH, pH, and SAR exceed the COGCC Table 910-1 standards. As a result, that material should be scraped up and properly disposed off site. To verify that remaining soils comply with Table 910-1, please collect one additional soil sample from the underlying material after the mud is removed. Sample in the same approximate location as the last sample. Analyze it for TPH, pH & SAR.

Regarding any cuttings that were incorporated on site that may have been used for pad construction, please collect a sufficient number of samples from the areas on the pad where the cuttings were used and analyze them for TPH - GRO & DRO, BTEX, SAR, pH & EC. You can wait to perform this sampling until you have completed the work on the well. Assuming the samples comply with Table 910-1 standards you can perform final site grading and interim reclamation. If the samples do not comply, then you will need to propose remediation to either remove/dispose the cuttings or treat on site. I would suggest dividing the pad into quadrants and collect 4 representative samples.

Regarding the request to get written permission from the surface owner Rule 907.d.(3). That rule is specific to land application of water based bentonitic fluids. Cuttings are often sampled and left in the drilling pit or incorporated on site as long as sampling demonstrates compliance with Table 910-1. That activity does not generally require written authorization from the surface owner, unless you have a specific requirement in your lease with the State Land Board to do that. As a result, COGCC will not require written authorization from the surface owner.

Regarding the pit report Form 15. I will try to get it pushed through the system with the

information you provided. I will let you know if additional information will be required.

When you have finished the pit closure and additional sampling/analysis, please submit the following information with a reference to Rem #9615:

1. Disposal documentation for the mud removed from the location and disposed off site.
2. Sample location diagram depicting the location of all samples collected.
3. Lab reports for the analysis of the additional soil samples requested.
4. Site photos of the pit after closure and the area where the mud was removed.

If you have any questions, please give me a call. Thank you for your cooperation with these issues.

John E. Axelson, P.G.
East Environmental Supervisor



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Cc. Rem #9615 - Correspondence

On Tue, Oct 25, 2016 at 1:56 PM, Ed Ingve <ed@renegadeoilandgas.com> wrote:
Hey John,

I guess you have become the point person for this. If you could review the soil sample analysis attached and confirm that this drill pit is ok to close I will try to get this done by the end of the week.

Call me after you have had a chance to review.

Thanks,
Ed Ingve
Renegade Oil and Gas Company
ed@renegadeoilandgas.com
[303-829-2354](tel:303-829-2354)

----- Forwardedmessage-----

From: Steven Arauza - DNR <steven.arauza@state.co.us>
To: Ed Ingve <ed@renegadeoilandgas.com>, <jbcrog@aol.com>
Cc: John Axelson - DNR <john.axelson@state.co.us>
Date: Fri, 30 Sep 2016 12:58:30 -0600
Subject: RE: Bird State Pit Closure (COGCC Remediation Project #9615)
Good afternoon, Ed and J.B. (cc: John Axelson),

I am writing to inform you that I will be out of the office from October 3rd until December 12th. Since Inspection Report #681700223 and Remediation Project #9615 have corrective action due dates in that timeframe, please submit required materials and any related correspondence directly to John Axelson (john.axelson@state.co.us) from this point on.

Thank you,

Steven J. Arauza, P.G.
Environmental Protection Specialist I



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From: Steven Arauza - DNR [mailto:steven.arauza@state.co.us]
Sent: Thursday, September 08, 2016 3:06 PM
To: 'Ed Ingve'
Cc: 'jbcrog@aol.com'
Subject: RE: Bird State Pit Closure (COGCC Remediation Project #9615)

Hi Ed (CC: J.B.),

In response to the explanation and pit tickets that you've provided to document work completed on the Bird-State Drilling Pit (facility ID #445045), as well as observations made during my 9/7/2016 Environmental Field Inspection (doc #681700223), the COGCC approves a one-time extension of the August 31, 2016 deadline for pit closure to November 1, 2016.

Per our phone conversation this morning, the material that was observed being transported off-site from the SE corner of the drilling pit (photo attached) will need to be sampled and analyzed for pH, EC, SAR, TPH (DRO/GRO), and BTEX. Submit analytical results along with a diagram of the sample location as a supplemental report to Remediation Project #9615.

Additionally, Rule 907.d.(3) allows land application for beneficial reuse *provided* that written authorization is granted by the surface owner. Please provide written authorization for the land application of material that was excavated from the drilling pit.

Field Inspection Report #681700223 provides a corrective action date of October 9, 2016 for the information requested above.

Thank you,
Steven J. Arauza, P.G.

From: Ed Ingve [mailto:ed@renegadeoilandgas.com]
Sent: Wednesday, September 07, 2016 10:32 AM

To: 'Steven Arauza - DNR'
Cc: 'JB Condill'
Subject: RE: Bird State Pit Closure (COGCC Remediation Project #9615)

Hey Steve,

Per your request within a phone conversation I would like to give you a written update about the Bird State pit closure. First I would like to apologize with regards to the update as I incorrectly remembered the drop dead date being the end of September and not the end of August. That is entirely my fault.

That being said the pit remains unclosed but has been remediated. All fluids and solid contents in the pit have been removed and dug out with margins that should give the pit a clean bill of health for closure. We are currently working on the well with a small day work drilling rig in an attempt to fish a dropped drill bit. If and when successful Renegade will need a workover reserve pit when setting a deep string of surface casing for mud returns. Additional BMP's have been performed to the pit per the previous inspection. It is therefore requested that the pit remain in place until the final outcome of the Bird State 32-1 is determined. If you recall the original Form 27 requested a closure deadline of November. It is Renegade's desire to reclaim the original drill pit as soon as possible.

If a pit extension cannot be granted Renegade would like to know if a temporary workover pit request can be made for the existing pit. I don't know if that would allow the original drilling pit paperwork to be closed out and the pit could then be reclassified under workover pit rules.

Renegade appreciates the COGCC working with us to resolve this situation in an amicable way for these unusual circumstances. I'm sure the rules never contemplated the history of a project like the Bird State 32-1. I have attached several invoices regarding the work that has been performed over the last several months.

Thanks, Ed

Renegade Oil and Gas Company
ed@renegadeoilandgas.com
[303-829-2354](tel:303-829-2354)

From: Steven Arauza - DNR [<mailto:steven.arauza@state.co.us>]
Sent: Thursday, September 01, 2016 8:29 AM
To: Ed Ingve
Subject: Bird State Pit Closure (COGCC Remediation Project #9615)

Good morning, Mr. Ingve

This message is intended as a reminder that the Corrective Action due date for Remediation Project #9615 (pit closure at the Bird-State #32-1) passed yesterday, August 31, 2016. The Conditional Approval Letter dated April 18, 2016, COGCC Doc #1727423—attached, required work to be completed by the Corrective Action due date.

What is the status of the pit closure?
Steven J. Arauza, P.G.

Environmental Protection Specialist I



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