

From: [Axelson, John](#)
To: [Doug Henderer](#)
Cc: [John Rager \(John@caerusoilandgas.com\)](#); [Dean Haselhorst \(dean@caerusoilandgas.com\)](#); [Baldwin, Debbie](#); [Lindblom, Steven](#); [Scan, OGCC](#)
Subject: RE: Caerus Church #2 Closure Request
Date: Thursday, September 01, 2011 9:44:28 AM
Attachments: [Caerus Washco Church Insp 200319859.pdf](#)
[Caerus Church 2 Analytical Final Report.pdf](#)

Doug,

As I mentioned, I happened to be performing inspections in the area near the Church #2 after we discussed the closure request. I stopped by the location and observed a lot of oil crusted soils and stained material in the landfarm area. As a result I collected three grab samples SS-1, SS-2 & SS-3. Sample SS-1 was from an area exhibiting strong petroleum odor and staining. I also hand dug several potholes throughout the landfarm area and observed conditions similar to the SS-1 location in many of the potholes. Sample SS-2 was from an area that did not exhibit a noticeable odor and very little to no staining. Sample SS-3 was from an area exhibiting slight to moderate odor with some staining. All three samples exceeded the TPH cleanup level of 500 – mg/kg. A sample location diagram and the lab report are attached for reference.

The approximate size of the landfarm area is 110' x 135'. Based on my observations the impacted material is 8" to 12" thick. Based on the thickness, the volume of material being treated is estimated at 366 to 550 cu yds. COGCC does accept composite or discrete grab samples for confirmation of treatment; however, one composite soil sample taken to represent several hundred cubic yards of material is inadequate. Also, the footprint of the treated material extends all the way south to the lease road. If the sample location diagram is correct, it appears that the one composite sample was only collected from the north half of the landfarm area.

Based on my sample results and field observations, COGCC cannot approve the closure request at this time. Please see the corrective actions in the attached inspection. If landfarming is to continue, it will need to be done in strict accordance with Rule 907.e.(2), including regular aeration, addition of microbes, nutrients and moisture as needed and stormwater control. Based on the elevated TPH concentrations and the amount of time it will take to degrade the remaining hydrocarbons to acceptable levels, it might be advisable for Caerus Washco to arrange proper offsite disposal, finish backfilling the remaining pit and complete final reclamation.

If you or any representatives of Caerus Washco would like to meet at the location, I'd be happy to meet you there. If you believe that the one composite sample is representative of the entire volume, we can also discuss a formal sampling plan if Caerus Washco would like to further characterize the material.

Please give me a call if you have any questions.

John Axelson, P.G.
Environmental Protection Specialist, Northeast Region

Colorado Oil & Gas Conservation Commission

Phone: 303-637-7178

Cell: 303-877-9964

Fax: 303-637-7179

Cc: Remediation Project #4301/NOAV #200191177 (Docs Under NOAV)

From: Doug Henderer [mailto:dhenderer@kleinfelder.com]

Sent: Friday, August 26, 2011 9:57 AM

To: Axelson, John

Cc: John Rager (John@caerusoilandgas.com); Dean Haselhorst (dean@caerusoilandgas.com)

Subject: Caerus Church #2 Closure Request

John,

On the behalf of Caerus Oil and Gas please see the attached closure request for the Church #2 site.
A hard copy of the request will follow by mail.

Thank you for your prompt consideration.

Doug

Douglas Henderer, PE
Sr. Principal Professional
300 E. Mineral Ave, Suite 7
Littleton, CO 80122
O| 303.781.8211 x 231
C| 303.809.2427
F| 303.781.1167

