

FORM

27

Rev 6/99



State of Colorado

Oil and Gas Conservation Commission

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



#7934

FOR OGCC USE ONLY

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Pit Closure

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No:

OGCC Operator Number: 10323

Name of Operator: Entek GRB, LLC

Address: 535 16th Street, Suite 620

City: Denver State: CO Zip: 80202

Contact Name and Telephone:

Kristen Stocks

No: (307) 200-1930

Fax: (866) 435-9424

API Number: 05-107-06221

County: Routt

Facility Name: Federal

Facility Number: 17551 Location ID: 316781

Well Name: Focus Ranch Unit Federal #12-1

Well Number: 12-1

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWSE 12 11N, 88, 6th Latitude: 40.92249 Longitude: -107.20673

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Drilling fluid with crude oil

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): undeveloped rangeland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan:

Potential receptors (water wells within 1/4 mi, surface waters, etc.): none

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):



Soils



Vegetation



Groundwater



Surface Water

Extent of Impact:

residual drilling materials contained within lined pit

How Determined:

visual observation

REMEDIAL WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Residual drilling fluid materials and water (primarily from precipitation events) are present in the HDPE lined pit located on the Focus Ranch Unit Federal 12-1 well pad (see Figure 1 for pit location). When access to the location is allowed (anticipated to be in July 2013), the water will be pumped from the lined pit into the adjacent holding tanks, prior to transporting offsite for proper disposal.

Describe how source is to be removed:

To minimize the impact of the TPH impacted material on areas adjacent to the Focus Ranch Unit Federal 12-1 pit, residual drilling material from one side of the pit (excavation side) will be excavated and placed in the other side of the pit (stockpile side). Once in the stockpile side of the pit, all residual drilling materials will be uniformly mixed with clean soils. Once uniform mixing has been completed, the HDPE liner located over the excavation side will be removed and transported off-site for proper disposal at the Baggs landfill.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Once the residual material has been removed from the excavation side, the excavation side bottom and sidewalls will be visually inspected for oil staining. Any visually identified oil stained materials will be excavated, placed in the stockpile side and mixed with clean soil. Confirmatory soil samples (discrete) will be collected from 2 locations in the excavation side and sampled for Table 910-1 parameters. In addition, 2 confirmatory soil samples (composite) of the uniformly mixed material located in the stockpile side will be sampled for Table 910-1 parameters. If all sample results are at or below Table 910-1 soil standards, stockpiled material will be excavated, placed and compacted in the excavation side. Once all material has been removed from the stockpile side, confirmatory soil samples (discrete) will be collected from 2 locations in the pit bottom and sampled for Table 910-1 parameters. If all sample results are at or below Table 910-1 soil standards, the stockpile side will be backfilled.

Submit Page 2 with Page 1



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

Page 2

REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Depth to groundwater in the vicinity of the Federal 12-1 pit location is reported to be greater than 100'. Accordingly, it is unlikely that groundwater has been impacted by the residual drilling materials.

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. Use additional sheet for description if required.

The residual drilling materials will be placed in the pit, compacted and backfilled with clean fill material. Once backfilled, the former pit surface will be shaped and graded to match the existing grade around the perimeter of the pit. Once activity at the well location has ceased, the ground surface will be roughened and broadcast seeded in accordance with revegetation procedures included in the Entek Storm Water Management Plan (SWMP). Well location restoration and revegetation shall be conducted in a manner consistent with BLM Best Management Practices for Noxious and Invasive Weed Prevention and the SWMP.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe: _____

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Placed in pit, compacted and covered with a minimum of 2' clean fill.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 6/1/13	Date Site Investigation Completed: 6/07/13	Date Remediation Plan Submitted: 6/12/13
Remediation Start Date: 9/1/13	Anticipated Completion Date: 11/1/13	Actual Completion Date: _____

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

Print Name: Kristen Stocks

Signed: _____

Title: Sr. Engineer

Date: 6/12/13

OGCC Approved: _____

Title: _____

Date: 8/16/13

See Attached Conditions of Approval

Document Number: 1949189

Enteck GRB, LLC

Focus Ranch Unit Federal 12-1 Drilling Pit Closure Location ID: 316781

Form 27 Conditions of Approval (COAs)

- Operator shall notify the COGCC 72 hours prior to beginning pit closure activities.
- It is stated by the Operator that *"Based on visual observation we do not think the liner is significantly compromised especially below the water surface* but that will be better assessed with the required discrete samples that we will obtain and analyze."

Based on the statement above, a discrete soil sample shall be collected the in area from beneath the compromised liner. The sample should be analyzed for the 910-1 constituents.

- Discrete soils samples shall be collected to adequately characterize the sidewalls of the pit. Samples shall be analyzed for the 910-1 constituents.
- Discrete soils samples shall be collected to adequately characterize the mixing of the pit contents and/or impacted material. The COGCC will not accept composite samples. Samples shall be analyzed for the 910-1 constituents.
- Discrete soils samples shall be collected to adequately characterize the base of the pit. Samples shall be analyzed for the 910-1 constituents.
- Waste manifest shall be submitted to the COGCC along with a final report including a summary of the analytical sampling in addition to the complete analytical report.

Document Number: 1949169, Enteck GRB, LLC

Focus Ranch Unit Federal 12-1 Drilling Pit Closure Location ID: 316781



STATE OF
COLORADO

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

RE: FW: Emailing: COGCC Pit Closure FRU 12-1 Well Location

1 message

Kristen Stocks <KStocks@entekenergy.com>

Tue, Jul 9, 2013 at 6:46 AM

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

Cc: Kim Parsons <KParsons@entekenergy.com>, David Smith <DSmith@entekenergy.com>, "Deakins, Lucy H." <ldeakins@fulbright.com>, Kris Neidel - DNR <kris.neidel@state.co.us>, Sean O'Hearn <sean.ohearn@enertiacg.com>

Alex,

Sorry for the confusion. I attached the incomplete document when I previously sent this to you. Attached at current are 2 things, first is the complete document with the first and second page of the Form 27 as well as a map and 2 pit photographs. The second is the Clayton Williams mud report. Below I have answered your questions in blue. Please let me know if you need anything else concerning this pit to help complete this document.

Thank you!

Kristen W. Stocks

Sr. Engineer – Entek Energy

Cell: 307 200 1930

E Fax: 866 435 9424

Slater, CO 81653

Denver, CO 80202

kstocks@entekenergy.com



From: Fischer - DNR, Alex [mailto:alex.fischer@state.co.us]
Sent: Monday, July 08, 2013 3:38 PM
To: Kristen Stocks
Cc: Kim Parsons; David Smith; Deakins, Lucy H.; Kris Neidel - DNR
Subject: Fwd: FW: Emailing: COGCC Pit Closure FRU 12-1 Well Location

Kristen,

Only page two of the Form 27 was attached.

I need to review my notes from our meeting:

- How was the depth to groundwater at approximately 100 feet determined? This depth was determined by our Geologist per the logs to be greater than 100'.
- Has there at least been a desk top review for potential receptors (ie, springs, seeps, wells, stock ponds, etc.) Recently we have done an EA in this area for the BLM and it did not identify any potential receptors.
- Will there not be any sampling of the E&P waste for constituents listed in Table 910-1? Has this been done already? If so, please provide the information. Yes, there will be sampling, this should be explained on page 1, now that it is appropriately attached. This sampling is consistent with sampling that was done during our pit closures in 2011.
- I believe that oil based mud was used in the drilling of the well. Clayton Williams Drilled this well in October of 2006. The attached mud report from that operation just as the well is TD'd and the hole is prepared to run logs indicates that it was water based mud. The based on my personal visual observation last year the contents of the pit do not have any indicators of oil residue. Photos are attached on page 3.
- Did the pit not have a liner that was compromised? (Again, I need to review your photos and my notes.) Page 1 of this gives some explanation. Based on visual observation we do not think the liner is significantly compromised especially below the water surface but that will be better assessed with the required discrete samples that we will obtain and analyze.
- If there is a liner, COGCC does not allow the liner to be buried in place. Handling and proper disposal is described on page 1 of form 27 that is now attached.
- Have the residual drilling materials proposed to be placed in the pit and buried been sampled for those constituents listed in Table 910-1? Page 1 of form 27 describes the proposed material handling and sampling procedures.
- Is the surface owner in agreement and do you have written approval for merely placing E&P waste in the pit and covering it. Once the appropriate samples have been obtained and analyzed, and meet applicable COGCC regulations, they will be mixed in place (see description on page 1) as the materials in the FRU 3-1 and SD Federal 24-9 have been. Both of these wells, which have previously been closed on BLM land have followed the same pit closure process as we are proposing here. Shawn Wiser with the Little Snake River BLM is our contact at that office and we will request her acknowledgement for this additional pit upon your request.

I understand the access situation, but the pit shall be closed in accordance to the COGCC Rules. I have included Rule 905 below and suggest that the 900 Series and 1000 Series Rules be reviewed for pit closure and reclamation.

We have operations meetings this week and the following week I have various commitments and will be traveling. We should regroup and discuss a closure plan.

At this time the Form 27 cannot be approved.

Thanks

Alex

905. CLOSURE OF PITS, AND BURIED OR PARTIALLY BURIED PRODUCED WATER VESSELS.

a. Drilling pits shall be closed in accordance with the 1000-Series Rules.

b. Pits not used exclusively for drilling operations, buried or partially buried produced water vessels, and emergency pits shall be closed in accordance with an approved Site Investigation and Remediation Workplan, Form 27. The workplan shall be submitted for prior Director approval and shall include a description of the proposed investigation and remediation activities in accordance with Rule 909. Emergency pits shall be closed and remediated as soon as the initial phase of emergency response operations are complete or process upset conditions are controlled.

(1) Operators shall ensure that soils and ground water meet the concentration levels of Table 910-1.

(2) Pit evacuation. Prior to backfilling and site reclamation, E&P waste shall be treated or disposed in accordance with Rule 907.

(3) Liners shall be disposed as follows:

A. Synthetic liner disposal. Liner material shall be removed and disposed in accordance with applicable legal requirements for solid waste disposal.

B. Constructed soil liners. Constructed soil liner material may be removed for treatment or disposal, or, where left in place, the material shall be ripped and mixed with native soils in a manner to alleviate compaction and prevent an impermeable barrier to infiltration and ground water flow and shall meet soil standards listed in Table 910-1.

(4) Soil beneath the low point of the pit must be sampled to verify no leakage of the managed fluids. Soil left in place shall meet the standards listed in Table 910-1.

c. Discovery of a spill/release during closure. When a spill/release is discovered during closure operations, operators shall report the spill/release on the Spill/Release Report, Form 19, in accordance with Rule 906. Leaking pits and buried or partially buried produced water vessels shall be closed and remediated in accordance with Rules 909. and 910.

d. Unlined drilling pits. Unlined drilling pits shall be closed and reclaimed in accordance with the 1000 Series rules and operators shall ensure that soils and ground water meet the concentration levels in Table 910-1.

——— Forwarded message ———

From: **Kristen Stocks** <KStocks@entekenergy.com>

Date: Tue, Jul 2, 2013 at 10:45 AM

Subject: FW: Emailing: COGCC Pit Closure FRU 12-1 Well Location

To: "alex.fischer@state.co.us" <alex.fischer@state.co.us>

Cc: Kim Parsons <KParsons@entekenergy.com>, David Smith <DSmith@entekenergy.com>, "Deakins, Lucy H." <Ideakins@fulbright.com>

Alex,

Per our meeting with you on June 3, 2013, I am sending you the Form 27 for the pit closure on the FRU 12-1 location. At that time we indicated that we were working with the BLM to gain access to this location through a GAP application which proposes the creation of a new road to gain access to this well. At current the GAP has

not yet been published for public comment. When we met with you on June 3, we were under the impression that this public comment period was to begin any day and that access would be granted within in a reasonable time frame after that. Since this has not happened as we previously thought, we have continued a parallel path of negotiations with the owner of the previously used route, Mr. Stull of Stull Ranches LLC, to access this well. At current we are in a mediation round with him where we have proposed a one-time access this year to close the pit, perform the required MIT, and test the well. We are hoping to reach an agreement with Mr. Stull for access via this mediation process, in the interim of the BLM approval of our GAP and the anticipated EIS. The form 27 is being sent to you at this point in advance of any known allowed access to hopefully help expedite the process if we are given access via one of the two current ongoing processes.

We appreciate your help with this matter and assure you that if we are allowed access or given BLM approval to build an alternate route we will close this pit in 2013. If neither of these options for access to this well are accomplished this year it will likely be 2014 before we are able to accomplish our goal of this clean up and the necessary MIT on this well.

Thank you for your help!

Kristen W. Stocks

Sr. Engineer – Entek Energy

Cell: 307 200 1930

E Fax: 866 435 9424

kstocks@entekenergy.com



Alex Fischer, P.G.

Environmental Supervisor, Western Colorado

State of Colorado, Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801

Denver, Colorado 80203

office: 303.894-2100 ext. 5138 | fax: 303.894-2109

email: alex.fischer@state.co.us

2 attachments



FRU Fed 12-1_Fig 1 & Form 27.pdf

1736K



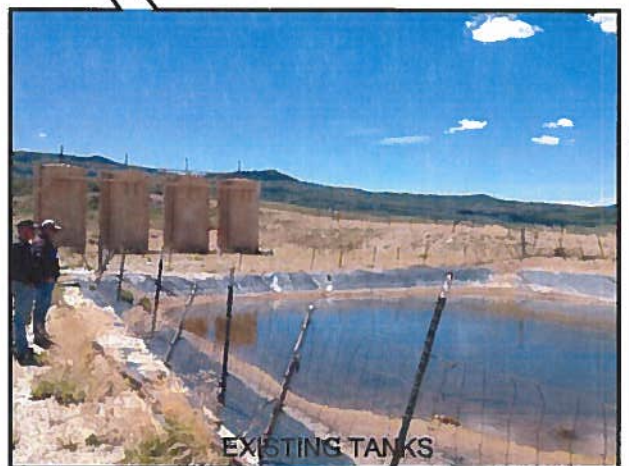
Clayton Williams Focus 12-1 - DDisc.pdf

23K

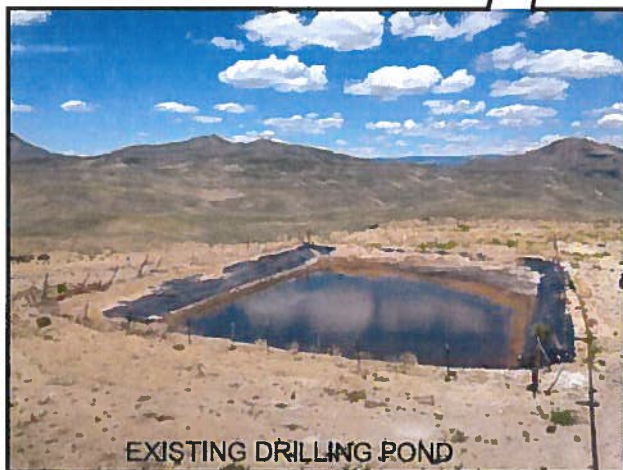


GRAVEL ACCESS ROAD

FEDERAL 12-1 PIT



EXISTING TANKS



EXISTING DRILLING POND

FIGURE 1
ENTEK GRB
FEDERAL 12-1 PIT
FOCUS RANCH UNIT
JUNE 10, 2013



N.T.S.

ENERTIA
CONSULTING
GROUP

 A Schlumberger Company	Operator : CLAYTON WILLIA Well Name : FOCUS RANCH FE Contractor : LARIAT #15	Field/Area : BUCK PEAK Description : SEC12,T11N,R88W Location : ROUTT CO., CO	Daily Discussion M-I Well : 40559
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10/10/2006	TD = 6860 ft	Day 21
<p>MAINTAIN VISC OF 38-45 W/ POLY-PLUS. IF VISC DROPS BELOW 38 ADD 2 POLY-PLUS & 2 FED-ZAN.</p> <p>MAINTAIN MUD WIEGHT OF 9.4. IF WT RISES OVER 9.5 TURN ON DESANDER & DESILTER UNTIL WIEGHT DROPS TO 9.4 THEN TURN OFF.</p> <p>RIG UP MAKE UP WATER HOSE TO USE RESERVE WATER @ 3-5 GPM.</p> <p>MIX TOURLY: 2 KOH THROUGH CHEM BARREL @ 1HR SK, 8 MY-LO JEL @ 30MIN/SK, 4 FED-PAC @ 1HR/SK, 2 SODA ASH @ 1HR/SK, 20G BLEACH, 2 MYACIDE.</p> <p>MIX SWEEPS: FILL PILL TANK W/ RESERVE WATER, ADD 1 MYACIDE, 6 MI-GEL, 1 LIME, 20 SAWDUST.</p> <p>DRILLING AHEAD, LEFT WITH A MESS.</p>		

10/11/2006	TD = 7908 ft	Day 22
<p>MAITAIN VISC OF 38-45 W/ POLY-PLUS. IS VISC DROPS BELOW 38 ADD 2 POLY-PLUS & 2 FED-ZAN D.</p> <p>MAITAIN MUD WT. OF 9.5 W/ SOLID CONTROL EQUIPMENT. WHEN WIEGHT GETS TO 9.6 TURN ON DESANDER & DESILTER UNTIL WIEGHT GETS BACK TO 9.5.</p> <p>DUMP SAND TRAP ONCE AN HOUR. OPEN VALVE TILL CLEAN MUD COMES OUT THEN CLOSE.</p> <p>MIX TOURLY: 3 KOH @ 1HR/SK, 8 MY-LO JEL @ 30MIN/SK, 4 FED-PAC @ 1HR/SK, 2 SODA ASH @ 30MIN/SK, 3 MYACIDE 1 @ EACH AGGITATOR, 15g BLEACH 5g EACH AGGITATOR.</p> <p>MIX SWEEPS AS FOLLOWS: FILL PILL TANK W/ RESERVE WATER, ADD 6 M-I GEL, 1 LIME, 20 SAWDUST.</p> <p>DRILLING AHEAD N/P</p>		

10/12/2006	TD = 8671 ft	Day 23
<p>MAITAIN VISC W/ POLY-PLUS.</p> <p>MAITAIN MW @ 9.6</p> <p>DUMP SAND TRAP EVERY HOUR. OPEN DUMP UNTIL GOOD MUD COMES OUT THEN CLOSE.</p> <p>RUN DESANDER/DESILTER</p> <p>MIX TOURLY: 3 KOH @ 1HR/SK, 6 MY-LO JEL @ 20MIN/SK, 2 FED-PAC @ 1 HR/SK, 1 LIME @ 1HR/SK, 3 MYACIDE, 15g BLEACH.</p> <p>MIX VOLUME AS FOLLOWS: FILL PILL TANK W/ RESERVE WATER, ADD 2 MYACIDE, 4 MY-LO, 2 FED-PAC.</p> <p>DRILLING</p>		

10/13/2006	TD = 8808 ft	Day 24
<p>TRIPPING TO CONDITION FOR LOGS</p> <p>TRIPPING IN TO CONDITION FOR LOGS</p>		