



September 19, 2014
4000-PA006469

Mr. Alex Fischer
Environmental Supervisor, West Region
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: GRMR- Beaver Durham 2 Production Facility
API Number: 05-081-06985
SESE, 31, 5N, 90W, 6th PM
Form 19 Document Number 400613684

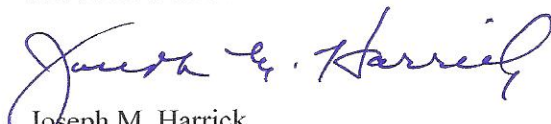
Dear Mr. Fischer:

Penn Environmental and Remediation, Inc. (Penn E&R) on behalf of GRMR Oil and Gas, LLC (GRMR) is providing the enclosed Colorado Oil and Gas Conservation Commission (COGCC) Form 27, Site Investigation and Remediation Work Plan prior to initiation of investigation activities at the above referenced site. As identified on the COGCC Form 19, Document Number 400613684, dated May 22, 2014, SWEPI LP (the prior owner of the well) was in the process of plugging and abandoning (P&A) the existing Beaver Durham 2 crude oil well located in the Waddle Creek field in Moffat County, Colorado. During the P&A activities approximately 22 gallons of crude oil were displaced from the well casing. The displaced oil accumulated in the excavated cellar surrounding the well casing and was later removed using a vacuum truck. No soil samples were collected at the time of the incident therefore, it is not known whether or to what extent the release of crude oil has impacted site soils.

GRMR is proposing site investigation activities to determine whether impacted soils exist in the vicinity of the P&A'd well. The site investigation is intended to identify the extent of impacted soil that may exist to facilitate proper planning of remediation activities, if necessary.

Enclosed is the COGCC Form 27 along with a site location map identifying the location of the well. If you have any questions or require additional information, please contact me at (412) 722-1222 or via email at jharrick@penn-er.com.

Sincerely,
PENN ENVIRONMENTAL AND REMEDIATION, INC.



Joseph M. Harrick
Vice President

Enclosure

JMH:cdb

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State of Colorado
Oil and Gas Conservation Commission



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

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): _____

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV

Tracking No: _____

OGCC Operator Number: 10524

Name of Operator: GRMR

Address: 370 Interlocken Boulevard, Suite 550

City: Broomfield State: CO Zip: 80021

Contact Name and Telephone:

Scott C. Blauvelt

No: (724) 935-8948

Fax: _____

API Number: 05-081-06985

County: Moffat

Facility Name: Beaver Durham

Facility Number: _____

Well Name: Beaver Durham

Well Number: 2

Location: (QtrQtr, Sec, Twp, Rng, Meridian): SESE, 31, 5N, 90W, 6 Latitude: 40.336086 Longitude: -107.530278

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Unknown at this time. Potential Crude Oil and/or Produced Water

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.): Crop LandSoil type, if not previously identified on Form 2A or Federal Surface Use Plan: To be investigated further.Potential receptors (water wells within 1/4 mi, surface waters, etc.): Nearest surface water is a tributary to Williams Fork located approximately 720 feet east of the well pad.

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

Impacted Media (check):

☒ Soils☐ Vegetation☐ Groundwater☐ Surface Water

Extent of Impact:

Unknown at this timeUnknown whether groundwater impacted

How Determined:

Identified during P&A activities

REMEDIALTION WORKPLAN

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

During P&A activities conducted by prior owner, approximately 22 gallons of oil were displaced out of the top of the casing during cementing activities and into the excavated cellar surrounding the well casing. The oil was removed using a vacuum truck, however no soil samples were collected at the time to determine whether site soil had been impacted by the release. See attachment for further description.

Describe how source is to be removed:

Well was plugged and abandoned. It is not known whether soils have been impacted. Impacted soil identified during this investigation will be managed appropriately. See attachment for further description.

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.:

See attachment for further description



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

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REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

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

See attachment for further description.

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.

See attachment for further description.

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:

See attachment for further description

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

See attachment for further description

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>TBD</u>	Date Site Investigation Completed: <u>TBD</u>	Date Remediation Plan Submitted: <u>TBD</u>
Remediation Start Date: <u>TBD</u>	Anticipated Completion Date: <u>TBD</u>	Actual Completion Date: <u>TBD</u>

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

Print Name: Scott C. Blauvelt, P.G.

Signed: _____

Title: General Manager, EHS

Date: 09/19/14

OGCC Approved: _____

Title: EPS I

Date: 9/23/14

See DATA ENTERED Rem # for COA's

Beaver Durham 2
GRMR (Operator)
Former Beaver Durham Well 2 (API No 05-081-06985)
Form 27 (Site Investigation and Remediation Workplan)
Narrative Attachment
Document Date – 9/4/2014

REMEDIATION WORKPLAN

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

On or about May 21, 2014 during the plugging and abandoning of this well by the previous owner (SWEPI LP), approximately 22 gallons of oil was displaced out of the top of the casing into the excavated cellar surrounding the well casing. It was the opinion of the field personnel at the time that cement pumped into the well to seal it caused the oil displacement. The adjacent crop land was being irrigated at the time of these P&A activities and water entered the cellar and mixed with the oil. A vacuum truck was used to recover the accumulated oil and water from the cellar. Reportedly, no further oil discharged from the well and the well was subsequently sealed to complete P&A activities. No soil samples were collected at the time to determine whether any soil impacts had occurred. Please refer to Initial Spill/Release Report (Form 19) No. 400613684, dated 5/22/2014.

At the request of GRMR, Penn Environmental and Remediation, Inc. (Penn E&R) plans to assess the soil surrounding the former well to determine whether impacted soils exist and, if so, characterize the magnitude and extent of contamination. The area surrounding the well will be assessed by advancing soil borings using hollow stem augers. Soil will be sampled continuously using steel split spoon samplers. The samples will be field screened for potential hydrocarbon impacts and logged by a Penn E&R geologist or environmental scientist. Field screening will consist of using a photo-ionization detector (PID) to evaluate each sample interval for the presence of volatile organic vapors. Soil samples with the highest PID results will be submitted for laboratory analysis conducted in accordance with COGCC Rule 910. Samples will be analyzed for Diesel Range Organics (DRO), Gasoline Range Organics (GRO), Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), Toxicity Characteristic Leachate Procedure (TCLP) metals and TCLP Volatile Organic Compounds.

Describe how source is to be removed:

Impacted materials identified during the site investigation will be evaluated in accordance with COGCC Rule 910. Depending upon the assessed magnitude and extent of impacts present, soils may be remediated in-situ, removed using heavy equipment and remediated on site, or removed for off-site disposal at a properly permitted disposal facility. Successful remediation will be confirmed through the collection and analysis of confirmation samples in accordance with COGCC Rule 910. These activities will be described in a Form 4 (Sundry Notice/Notification of Completion) for this remediation project.

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.:

The selected remediation approach will be dependent on both technical and economic feasibility. All remediation activities will be verified with sample collection and laboratory analysis conducted in accordance with COGCC Rule 910. When necessary, monitoring will be conducted in accordance with an approved monitoring plan and

analytical suite. Specifics on the selected remediation approach and confirmation sample results will be provided in a Form 4 (Sundry Notice/Notification of Completion) for this project.

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

It is unknown at this time whether groundwater has been impacted or to what extent. If it is determined during the investigation that groundwater is impacted, GRMR will provide additional details of proposed monitoring through an updated Form 27 filing or through a Form 4 Sundry Notice.

Describe reclamation plan. Discuss existing and new grade re-contouring; 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.

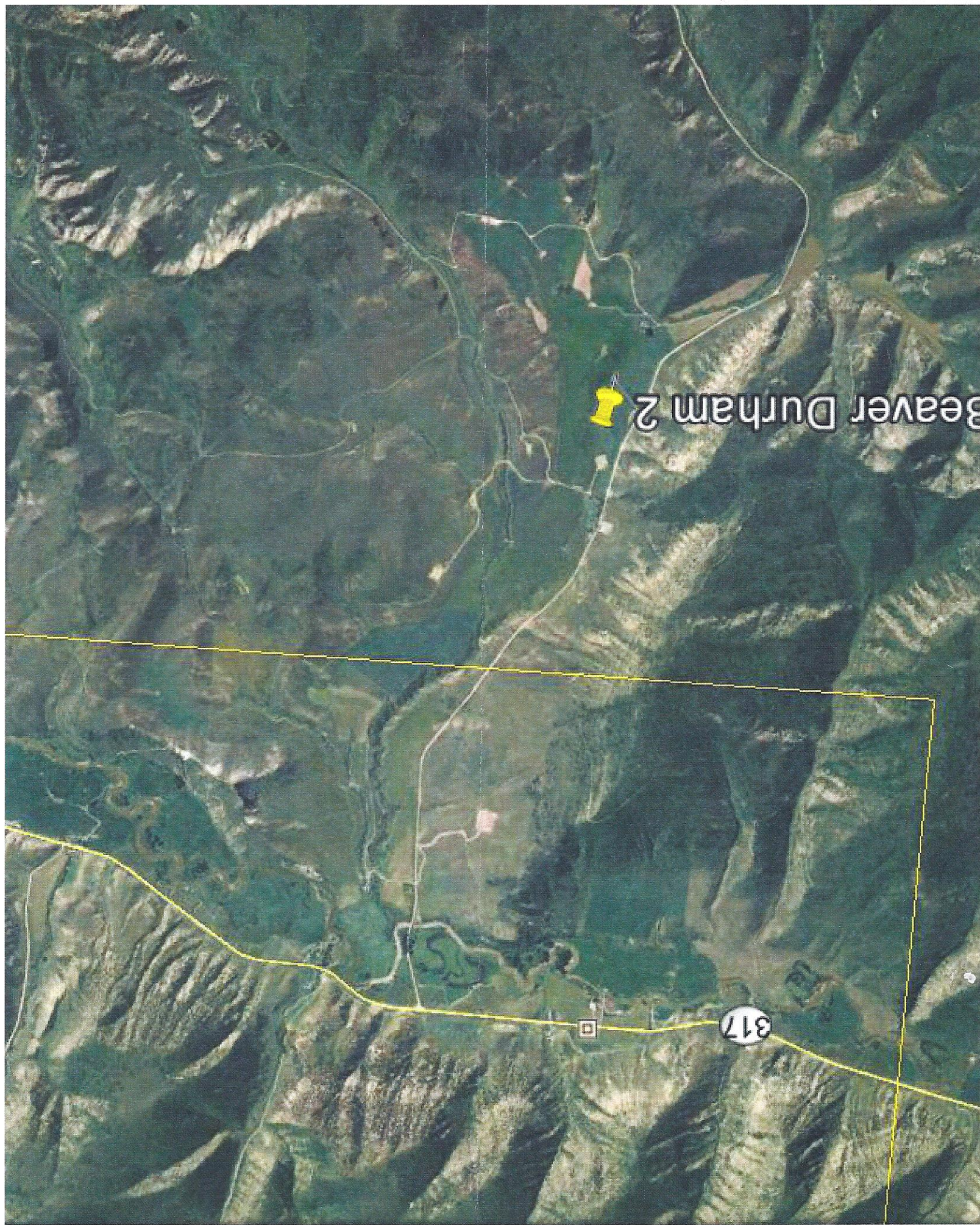
Areas of excavation will be backfilled with suitable fill material to original pre-excavation grades and contoured to promote adequate drainage. Backfilling will occur by placement of approximately 1 foot lifts. The lifts will be compacted using heavy equipment until no visible movement of the fill is observed. All disturbed areas will be reseeded using native seed species as approved for use by Moffat County and the surface landowner, upon completion of grading if seasonal weather conditions allow. If seasonal conditions are not conducive to seeding, seeding will be delayed until weather conditions allow seeding to survive (seeding will not occur during extreme heat of summer or after winter weather conditions have taken hold). Ongoing visual monitoring will be conducted to ensure re-vegetation is successful, and noxious weed abatement activities will be conducted as necessary.

Attach sample and analytical results taken to verify remediation of impacts. Show locations of samples on an on-site schematic or drawing. Is further site investigation required? If so, describe:

The site investigation for this project will be carried out as described above. All analytical data collected in support of this remediation project will be provided to the COGCC on the required COGCC forms. A site diagram showing the location of collected samples will also be provided.

Final disposition of E&P waste (land treated and disposed on-site, name of licensed disposal facility, recycling, reuse, etc.):

If generated, final disposition of E&P waste will be detailed in a Form 4 (Sundry Notice/Notification of Completion).



Beaver Durham 2

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