

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: 96155

Name of Operator: Whiting Oil & Gas Corporation

Address: 1700 Broadway, Suite 2300

City: Denver State: CO Zip: 80290

Contact Name and Telephone:

Mark Keyes

No: 970-407-3007

Fax: 432-686-6586

API Number: 05-123-38060 - 38067

County: Weld

Facility Name: Razor 27J Well Pad

Facility Number: 434267

Well Name: Razor (8 Well Pad)

Well Number: 27J

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWSE 27 T10N R58W Latitude: 40.808650 Longitude: -103.848944

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): 99% flowback water and 1% 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.): Rangeland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Epping silt loam, 0-9% slopes and Kim Mitchell, 0-6% slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Unnamed/Intermittent drainage located approximately 1,300 feet south (down-gradient)

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

Impacted Media (check):



Soils

Extent of Impact:

50' x 20'

How Determined:

Visually/Soil Samples collected on 3/3/15 and 3/9/15



Vegetation



Groundwater



Surface Water

REMEDIALATION WORKPLAN

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

Soil was scraped from the surface where the release occurred and placed on a liner. An earthen berm was constructed around the soil placed on the liner. Refer to the Form 19 Supplemental (Document # 400796717).

Describe how source is to be removed:

Source removal was conducted by scraping impacted soils based on staining, odors, and laboratory analytical results.

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.:

Remediation was accomplished through impacted soil removal. Confirmation soil samples were collected and analyzed for GRO, DRO, BTEX, SAR, EC, and pH. A soil shredder will be brought on-site to treat the impacted soil, which will be sampled for the analytes discussed above. Once results are below Table 910-1 concentration levels, the soil will be returned and recompact on location.



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

OGCC Employee: _____

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

N/A - Groundwater was not impacted.

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.

Following on-site soil shredding activities and confirmation sampling, the clean soil will be replaced and recompact on location. The site will be reclaimed in accordance with the COGCC 1000 series rules.

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:

Impacted soils have been scraped from the surface where the release occurred. Analytical results of confirmation soil samples show that all organic and inorganic compounds analyzed for are below their respective COGCC Table 910-1 concentration levels.

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

A soil shredder will be brought on-site to treat the impacted soil, which will be sampled for the analytes discussed above prior to being returned and recompact on location.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 2/13/2015 Date Site Investigation Completed: _____ Date Remediation Plan Submitted: Not Applicable
Remediation Start Date: _____ Anticipated Completion Date: _____ 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: Rylee Wagoner Signed: [Signature]
Title: Field Regulatory Manager Date: 2/15/15

OGCC Approved: _____ Title: _____ Date: _____