

FORM
27
Rev 6/99



State of Colorado
Oil and Gas Conservation Commission



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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.

OGCC Employee:
 Spill Complain
 Inspection NOAV
Tracking No: 7364

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

OGCC Operator Number: <u>52530</u>	Contact Name and Telephone: <u>Ryan Warner</u>
Name of Operator: <u>Maggie Operating, Inc</u>	No: <u>970 669-6308</u>
Address: <u>2707 South County Road 11</u>	Fax: <u>970 669-6396</u>
City: <u>Loveland</u> State: <u>CO</u> Zip: <u>80537</u>	
API Number: <u>05-121-06222</u> County: <u>Washington</u>	
Facility Name: <u>Little Beaver Unit</u> Facility Number: <u>ID 316988</u>	
Well Name: _____ Well Number: _____	
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>G 2S 56W 5NW4</u> Latitude: _____ Longitude: _____	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): crude oil & 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.): dry land farming

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.): _____

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

Impacted Media (check):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>TBD</u>	<u>Remove liner, test soil (TPM)</u>
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):
Removed Fluid and injected into system

Describe how source is to be removed:
Once liner is removed soil will be tested and excavated

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.:
All contaminated soils will be brought to waste management landfill. Produced water injected into system



Tracking Number: Name of Operator: Maggie Operating OGCC Operator No: 52530 Received Date: 10/18/2012 Well Name & No: Little Bear 41 05-12-06222 Facility Name & No: Little Bear Unit 316988

REMEDIATION WORKPLAN (Cont.)

OGCC Employee: R. Allison

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

No groundwater observed.

IF encountered during remediation, will test for BTEX

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.

Will backfill with supplementary fill dirt if necessary and grade to match adjacent ground.

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? [X] Y [] N If yes, describe:

Follow up with lab results

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

WM - Ault Landfill.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 7/16/12 Date Site Investigation Completed: Date Remediation Plan Submitted: 10/18/12 Remediation Start Date: 10/25/12 Anticipated Completion Date: 12/25/12 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: Ryan Warner Signed: Ryan Warner Title: VP Date: 10/18/12

OGCC Approved: Richard Allison Title: Location Specialist Date: 10/23/2012

See the attached Conditions of Approval.

October 23, 2012

Magpie Operating, Inc. #52530

Little Beaver Unit #41; API 05-121-06222

Form 27 (Doc# 2614085) Conditions of Approval for Pit Closure:

1. Provide documentation of the total volume of fluids removed from the pit and disposed.
2. Provide documentation of the disposal of any oil waste removed from either the pit or the location.
3. Soil samples shall be collected in accordance with Rule 910, and shall include the following samples at a minimum:
 - a. Two discrete soil samples shall be collected from the pit after all impacted material has been removed.
 - b. A minimum of two discrete soil samples shall be collected from the trench connecting the wellhead and the pit to document removal of oily waste.
4. The soil samples shall be analyzed for the following:
 - a. Total petroleum hydrocarbons (TPH) – gasoline range, diesel range and oil range organics
 - b. Benzene, toluene, ethylbenzene, and total xylenes (BTEX)
 - c. Polynuclear aromatic hydrocarbons (PAH) on Table 910-1
 - d. Inorganics in soil including electrical conductivity (EC), sodium adsorption ratio (SAR), and pH
5. Shallow ground water is present. Therefore, if ground water is encountered while excavating material from pit, a ground water sample shall be collected and analyzed for the following:
 - a. Total petroleum hydrocarbons (TPH) – gasoline range, diesel range and oil range organics
 - b. Benzene, toluene, ethylbenzene, and total xylenes (BTEX)
 - c. Inorganics including total dissolved solids (TDS), chlorides and sulfates
6. After oily waste has been removed from the pit and soil samples verify compliance with Table 910-1, submit a closure report with the following information:
 - a. A detailed diagram showing the soil sample locations include depths of sample collection
 - b. A table summary of soil sample results and a comparison to Table 910-1 standards
 - c. Documentation of the disposal of pit fluids
 - d. Documentation of the disposal of oily waste at a landfill as proposed on this Form 27
7. The pit can be backfilled and the surface restored after the closure report has been received and approved by the COGCC.