

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	
Received 01/14/15	
REM 8871	
Document 2313658	
OGCC Employee:	
<input type="checkbox"/> Spill	<input type="checkbox"/> Complaint
<input type="checkbox"/> Inspection	<input type="checkbox"/> NOAV
Tracking No:	

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 Operator Number: <u>10433</u>	Contact Name and Telephone: <u>Wayne Bankert (wbankert@laramie-energy.com)</u>
Name of Operator: <u>Piceance Energy LLC</u>	No: <u>970-812-5310</u>
Address: <u>1512 Larimer Street #1000</u>	Fax: <u>303-339-4399</u>
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>	
API Number: _____ County: <u>Garfield</u>	
Facility Name: <u>Federal 31-01</u> Facility Number: <u>335165</u>	
Well Name: _____ Well Number: _____	
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>NENE, Sec 31, T6S, R93W, 6th PM</u> Latitude: <u>39.489332</u> Longitude: <u>-107.811397</u>	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Condensate, 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.): Non- Irrigated Cropland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Torrorthents-Rock outcrop complex, steep

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):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>2,875 sq. feet. ~30 feet bgs.</u>	<u>Soil borings, field screen readings</u>
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

REMEDIATION WORKPLAN

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

Describe how source is to be removed:
See Attachment A.

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 A.



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 A.

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 A.

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 A

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

See Attachment A.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 1/7/15 Date Site Investigation Completed: 1/9/15 Date Remediation Plan Submitted: 1/14/2015
Remediation Start Date: 1/14/2015 Anticipated Completion Date: 8/1/2016 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: Wayne P Bankert Signed: Wayne P. Bankert
Title: Senior Reg. and Env. Coordinator Date: 1/14/2015

OGCC Approved: _____ Title: EPS Northwest Date: 1/14/15

COAs: Land treatment of contaminated soil must be permitted by surface owner
Cut/borrow area for backfill is limited to previously disturbed soils-no new expansion of pad footprint

Facility Name: Federal 31-01
Facility ID#: 335165
Spill/Release Doc #: 400759851

Name of Operator: Piceance Energy LLC
Latitude: 39.489332 Longitude: -107.811397
NENE, Sec 31, T6S, R93W, 6th PM

COGCC Operator #: 10433
County: Garfield

Form 27 Attachment A:

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

Refer to the previously submitted COGCC Spill/Release Report Form 19 #400759851 submitted on 12/29/14.

A site characterization was conducted the week of 1/5/15 to determine the vertical and lateral extent of the hydrocarbon impacts. A total of 13 soil borings were advanced into the subsurface soil within and around the area of impact. Field screen readings and visual observations were utilized to determine the extent of the impacts. See attached map for borehole locations and impacted area.

Describe how source is to be removed:

All tanks within the tank battery were drained of fluid and the secondary containment and liner were removed. The tanks will be moved from the former containment area to allow for remediation activities.

The impacted gravel bedding material and liner will be removed and disposed of at an approved permitted disposal facility.

The impacted soil beneath the former containment structure and a small area to the east will be excavated and managed in accordance with all applicable rules and regulations regarding solid waste. Field screen equipment will be utilized to guide excavation activities to ensure compliance with Table 910-1 of the COGCC 900 series rule. When it is determined that all impacted soil has been removed; confirmation soil samples will be collected from the north, south, east, and west side walls and from the bottom of the excavation and analyzed for COGCC Table 910-1 parameters.

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, in-situ bioremediation, burning of oily vegetation, etc.:

Due to winter conditions the excavated material will be stockpiled on-site until the spring of 2015. When temperatures have moderated for successful treatment; the excavated soil will be placed into a land treatment unit (LTU) constructed onsite and remediated to below COGCC Table 910-1 standards by utilizing ex-situ remediation technologies. Ex-situ remediation practices may include applying bioremediation product to the impacted soil and tilling the impacted soil via a tractor. Field screen readings and soil samples will be collected from the LTU to monitor the status of the remediation. When field screen readings indicate that the soil is below COGCC Table 910-1 standards, confirmation samples will be collected from the impacted soil and submitted for the COGCC Table 910-1 analytical suite.

Facility Name: Federal 31-01
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If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Groundwater was not encountered during the site characterization event and is not expected to be encountered during the excavation. However, should it be observed or determined that groundwater impacts exist an appropriate site specific monitoring and remediation plan will be developed and submitted for approval.

An ephemeral drainage, currently dry and covered in ice and snow, lies north east of the location. When and if flow in the drainage resumes, a monitoring plan will be developed to collect surface water samples and water quality readings from the drainage. Visual observations of the hillside below the location will occur in the spring of 2015 to determine the presence of any seeps which may be associated with the release.

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.

Piceance Energy would like to request permission to utilize soil from the reclaimed cut slope portion of the location (south side) for backfill material. This would result in considerable savings in transportation costs, backfill material costs, and additional truck traffic.

Upon successful treatment of the impacted soils, Piceance energy would propose beneficial re-use of these soils to re-contour cut slope side to its original grade. The re-contoured cut slope would then be re-seeded with an approved seed mix.

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:

Confirmation soil samples will be collected from the north, south, east, and west side walls and from the bottom of the excavation to comply with COGCC Table 910-1 standards. Confirmation soil samples will be collected from the impacted soil within the LTU upon completion of the ex-situ remediation. All samples locations will be mapped with a Trimble GPS unit.

Final documentation of investigation and closure activities will be submitted within thirty (30) days after the conclusion of all remediation and reclamation activity in accordance with all applicable sections of Rule 909.

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

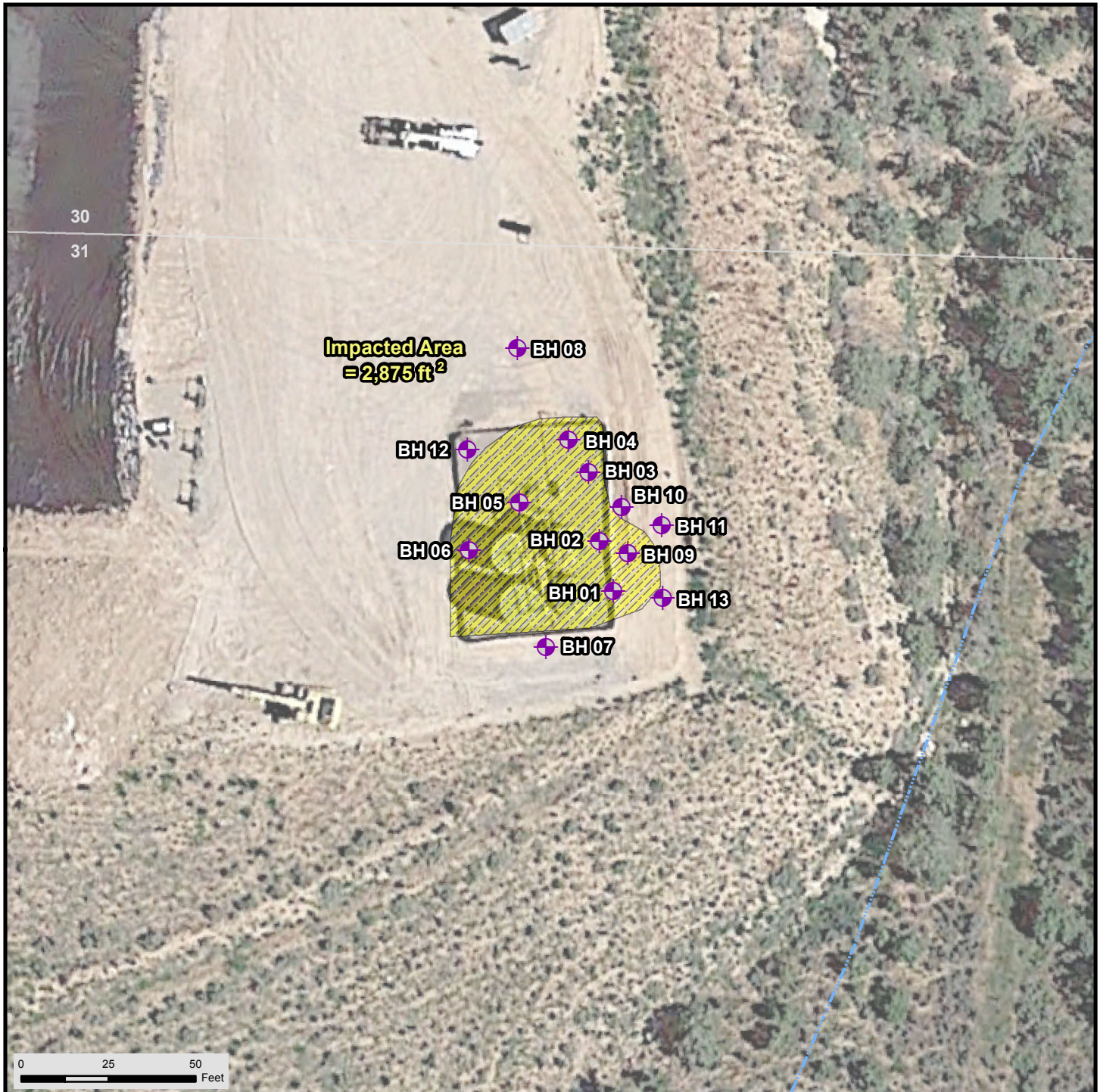
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As noted above, the impacted liner and bedding material will be disposed of at an approved permitted disposal facility.

The impacted soil from the excavation will be utilized for beneficial re-use as stated in the reclamation section of this Form 27.



Piceance Energy Borehole Location Map

Federal 31-01
39.489356 -107.811411
Section 31, Township 6 South, Range 93 West

Soil Bore	Transportation	Hydrography
Impacted Area	CO Highways	Ditch
PLSS	County Roads	Intermittent Stream
Township	Local Streets	Perennial Stream
Section	Access Roads	Waterbody
		Watershed

HRI COMPLIANCE SOLUTIONS, INC.
ENVIRONMENTAL CONSULTANTS

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Author: B. Hall
Revision: 0
Date: 1/12/2015