

State of Colorado  
**Oil and Gas Conservation Commission**



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#8438

FOR OGCC USE ONLY  
Received  
5/14/2014  
OGCC Employee:  
 Spill  Complaint  
 Inspection  NOAV  
Tracking No: 2148439

**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>100322</u>	Contact Name and Telephone: <u>Jacob Evans</u>
Name of Operator: <u>Noble Energy Inc</u>	No: <u>303-228-4000</u>
Address: <u>1625 Broadway, Suite 2000</u>	Fax: <u>303-228-4459</u>
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>	

API Number: <u>05-123-11749</u>	County: <u>Weld</u>
Facility Name: <u>Gruen</u>	Facility Number: <u>322623</u>
Well Name: <u>Gruen</u>	Well Number: <u>22-1</u>
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>NWSW Sec 22, T6N, R64W, 6M</u> Latitude: <u>40.4696</u> Longitude: <u>-104.5435</u>	

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Condensate

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.): Pasture

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Sandy clay to 16'

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Water well ~1,850 feet southwest (domestic & stock)

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>40' x 60'</u>	<u>Excavation</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):

During maintenance activities, soil impacts were observed at the well head. Impacted soil was removed between March 17 and 22, 2014. See document# 2148439

Describe how source is to be removed:

Excavation of impacted area was completed on March 22, 2014. Approximately 550 cubic yards of soil were removed. A photoionization detector (PID) was used for field screening of sidewall and floor samples with confirmation soil analyses conducted by eAnalytics Lab of Loveland, CO.

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.:

Excavation completed, soil transported to Waste Management's Ault, CO landfill.



Tracking Number: 2148439 Name of Operator: Noble Energy Inc OGCC Operator No: 100322 Received Date: 5/14/2014 Well Name & No: Gruen 22-1 Facility Name & No:

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.):

Ground water was not impacted. Therefore, no additional ground water investigation is required.

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 surface was recontoured to match the existing grade; topsoil was placed at the surface. Reseeding of the surface will be conducted during the Spring of 2014.

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 Excavation Report dated May 7, 2014 for this site for additional description and laboratory analyses. This site has been fully remediated; therefore, Noble requests a No Further Action determination be provided by the COGCC.

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

All petroleum impacted soil was transported and disposed at Waste Management's landfill in Ault, CO.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 1625 Broadway, Suite 2000 Date Site Investigation Completed: Denver Date Remediation Plan Submitted: CO Remediation Start Date: 80202 Anticipated Completion Date: Jacob Evans Actual Completion Date: 303-228-4000

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

Print Name: 303-228-4459 Signed: Jacob Evans Title: 05-123-11749 Date: Weld

Digitally signed by Jacob Evans DN: CN = Jacob Evans C = AD O = Noble Energy Inc. Date: 2014.05.14 08:35:00 -0600

OGCC Approved: Title: Northeast EPS Date: 5/21/2014