

**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**  
**10/9/2012**

## 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: 10120Name of Operator: Noble Energy, Inc.Address: 2115 117th AveCity: Greeley State: CO Zip: 80634

Contact Name and Telephone:

Jacob EvansNo: 720-587-2026Fax: 303-228-4286API Number: 05-123-12728County: WeldFacility Name: Angelina GFacility Number: 323216Well Name: Angelina RomeroWell Number: 1,2Location: (QtrQtr, Sec, Twp, Rng, Meridian): NWNW Sec. 3, T4N, R65W Latitude: 40.34668 Longitude: -104.65658

### TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): CondensateSite 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.): PastureSoil type, if not previously identified on Form 2A or Federal Surface Use Plan: topsoil underlain by sand and gravelPotential receptors (water wells within 1/4 mi, surface waters, etc.): S. Branch Union Ditch, Lower Latham Reservoir

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

Impacted Media (check):

☒ Soils☐ Vegetation☒ Groundwater☐ Surface Water

Extent of Impact:

Within Location Boundary ~10 feetOn location with impacts extending north

How Determined:

ExcavationMonitoring Wells

### REMEDIALATION WORKPLAN

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

See Form 19

Describe how source is to be removed:

In 2010, impacted soil was excavated. Noble intends to activated air sparging and soil vapor extraction in September 2012 to address residual groundwater impacts.

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.:

Impacted soil was excavated and removed in 2010. Air sparging and soil vapor extraction will be employed to remediate impacted groundwater.



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.):**

Six existing monitoring wells are used to monitor groundwater quality at the site. These wells are monitored on a quarterly basis for BTEX by EPA method 8260

**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.

After soil excavation in 2010, the site was recontoured and put back in service. Only pasture to the north will be affected by air sparging and soil vapor extraction wells.

**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:

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

Impacted soil was transported to Waste Management's Buffalo Ridge landfill in Keenesburg, Colorado

**IMPLEMENTATION SCHEDULE**

Date Site Investigation Began: <u>August 2010</u>	Date Site Investigation Completed: <u>October 2010</u>	Date Remediation Plan Submitted: <u>10/9/2012</u>
Remediation Start Date: <u>10/1/2012</u>	Anticipated Completion Date: <u>2013</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: Jacob Evans Signed: Jacob Evans  
Title: Senior Environmental Specialist Date: 10/9/2012

OGCC Approved: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_