FORM 27 Rev 6/99

#7990

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

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ 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): legacy production pit; Pit ID 116584 and 116585

OGCC Operator Number: 78110
Name of Operator: SWEPI LP
Address: 4582 S. Ulster Street Parkway, Suite 1400
City: Denver State: CO Zip: 80237

Contact Name and Telephone:
Charles Cornell
No: 303-222-6365
Fax: 303-222-6346

API Number: 05-081-05180
Facility Name: Durham-64N90W8NESE
Well Name: Durham

County: Moffat
Facility Number: 312762 = location ID Pit Facility 116584 116585
Well Number: #1

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NESE, S8, T4N, R90W, 6th PM Latitude: 40.328978 Longitude: -107.521458

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): unknown at this time; potentially crude oil and/or 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.): uncultivated rangeland and agricultural/hay field

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: To be investigated further

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Nearest downgradient surface water measured at approx. 1410 ft to the West

No water wells identified within 1/4 mile of location; nearest water well identified approx. 5000 ft to SW of location

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

Impacted Media (check):	Extent of Impact:	How Determined:
☐ Soils	unknown at this time	
☐ Vegetation		
☐ Groundwater	unknown whether GW impacted	
☐ Surface Water		

REMEDIATION WORKPLAN

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

See attachment for further description of proposed initial action

Describe how source is to be removed:

See attachment for further description

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 for further description

Submit Page 2 with Page 1

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State of Colorado
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1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109

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

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 for further description

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 for further description

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 for further description

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

See attachment for further description

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: Sept 2013	Date Site Investigation Completed: TBD	Date Remediation Plan Submitted: TBD
Remediation Start Date: TBD	Anticipated Completion Date: TBD	Actual Completion Date: TBD

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

Print Name: Charles Comell Signed: _____

Title: Sr. Environmental & Regulatory Specialist Date: 9/18/2013

OGCC Approved: _____ Title: Env. Sup. Date: 9/19/13

Provide the GPS coordinates for the suspected legacy pits as indicated on figure 2.

COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.
820 Megan Avenue Unit B
Rifle, Colorado 81650
T 970 285 9985 / F 970 285 2467

Durham 1 (Location ID - 312762)
SWEPI LP (Operator – 78110)
Legacy Production Pit – Pit IDs 116584 & 116585
Form 27 (Site Investigation and Remediation Workplan)
Narrative Attachment
Document Date – 9/17/2013

REMEDIATION WORKPLAN

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

Using the Colorado Oil & Gas Conservation Commission (COGCC) database, site photographs provided by the COGCC, and historical aerial photographs obtained from COGCC's COGIS system, Shell has identified a production pit on the Durham 1 (Site) well pad that was closed without proper clearance sampling or permit approvals. The approximate pit location is illustrated on a Site Map provided as Figure 2.

At the request of SWEPI LP, LT Environmental Inc. (LTE) plans to assess the potential for impacted soil at the Site by advancing soil borings using hollow stem auger. The soil borings will be logged by a LTE geologist and will be field-screened for potential petroleum hydrocarbon impacts. The soil from each boring will be characterized by visually inspecting soil samples collected in steel split spoons and screened using a photo-ionization detector (PID) to monitor the soil headspace for the presence of volatile organic vapors. Soil samples will be collected in 5 foot intervals as the boring is advanced, with field-screening to determine the highest PID results. Soil samples with the highest PID results will be submitted for laboratory analysis conducted in accordance with COGCC Rule 910.

Describe how source is to be removed:

Any impacted material identified would be evaluated upon discovery and depending upon assessed extent would be removed using heavy equipment and remediated onsite, remediated in-situ, or disposed of offsite at a permitted disposal facility. Successful completion of remediation efforts will be demonstrated through sample collection and laboratory analysis conducted in accordance with COGCC Rule 910. These activities would be described in the Sundry Notice / Notification of Completion for this remediation project.

Any petroleum impacts from drilling and production operations identified during assessment activities would be documented and reported on the required COGCC forms after initial field activities gather additional information.

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.:

The selected remediation approach will vary based on economic and technical feasibility. All remediation activities are verified with sample collection and laboratory analysis, conducted in accordance with COGCC Rule 910, and when necessary under an approved monitoring plan and

analytical suite. Specifics on the selected remediation approach and clearance results would be provided in a Form 4 (Sundry Notice or Notification of Completion) for this project.

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

In the event that petroleum impacts from drilling and production activities are identified in groundwater, a vertical and lateral extent would be determined, and an appropriate in-situ remediation and monitoring plan would be prepared and submitted to the COGCC.

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.

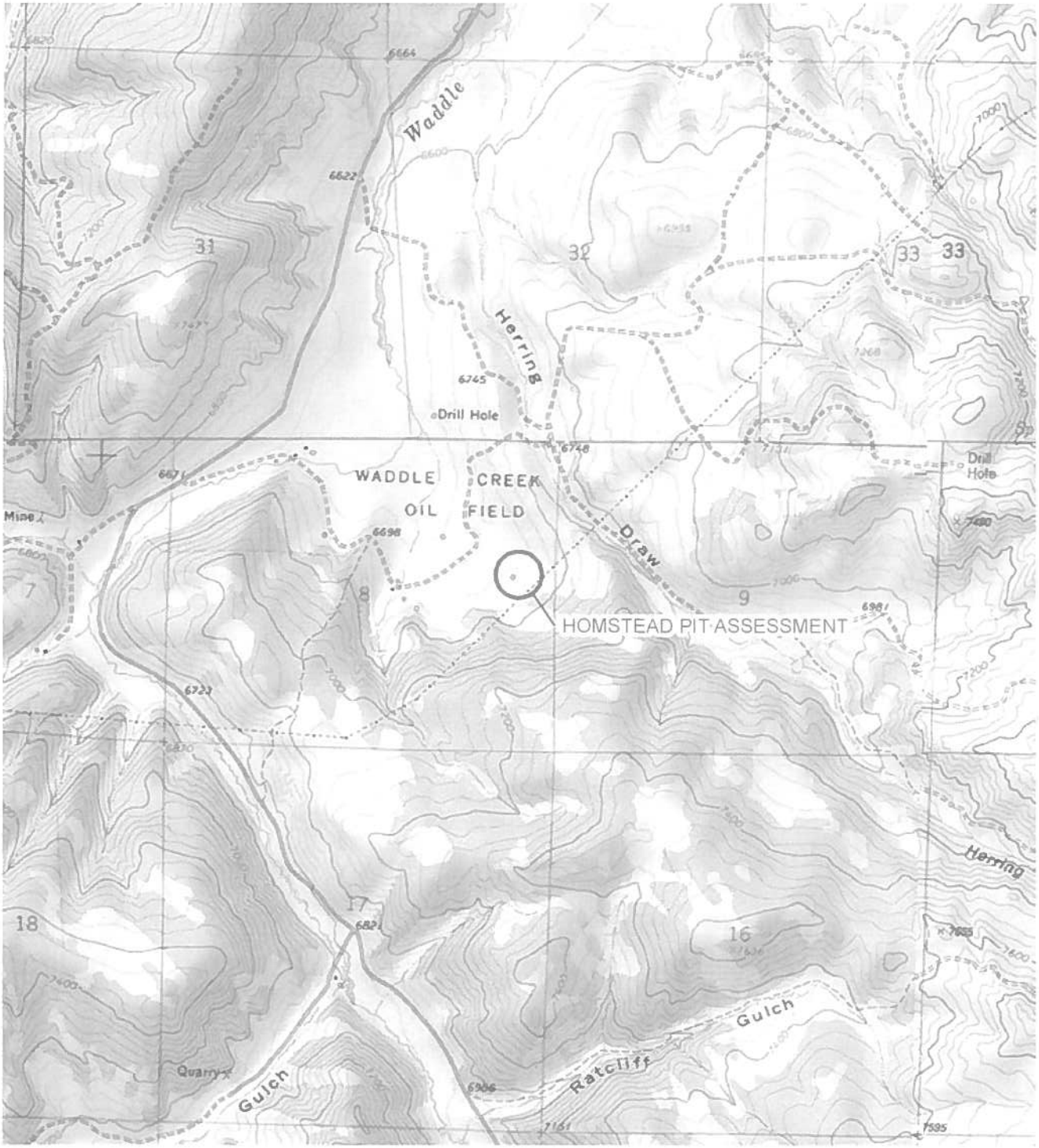
The surface of the pit area appears to have been reclaimed. Soil borings will be backfilled to match existing grade.

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? If yes, describe:

The site investigation for this project will be carried out as described above. All analytical data collected in support of this remediation project will be provided to the COGCC on the required COGCC forms.. A site diagram showing the location of collected samples will also be provided.

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

If generated, final onsite disposition of E&P waste will be detailed in a Form 4 (Sundry Notice or Notification of Completion).



LEGEND

IMAGE COURTESY OF ESRI/USGS

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
HOMSTEAD PIT ASSESSMENT
SENE SEC 8-T4N-R90W
MOFFAT COUNTY, COLORADO
SHELL EXPLORATION AND PRODUCTION COMPANY

P:\Shell E&P\GIS\MXD\034312009_HOMESTEAD_PIT_ASSESSMENT\034312009_FIG01_SL.mxd

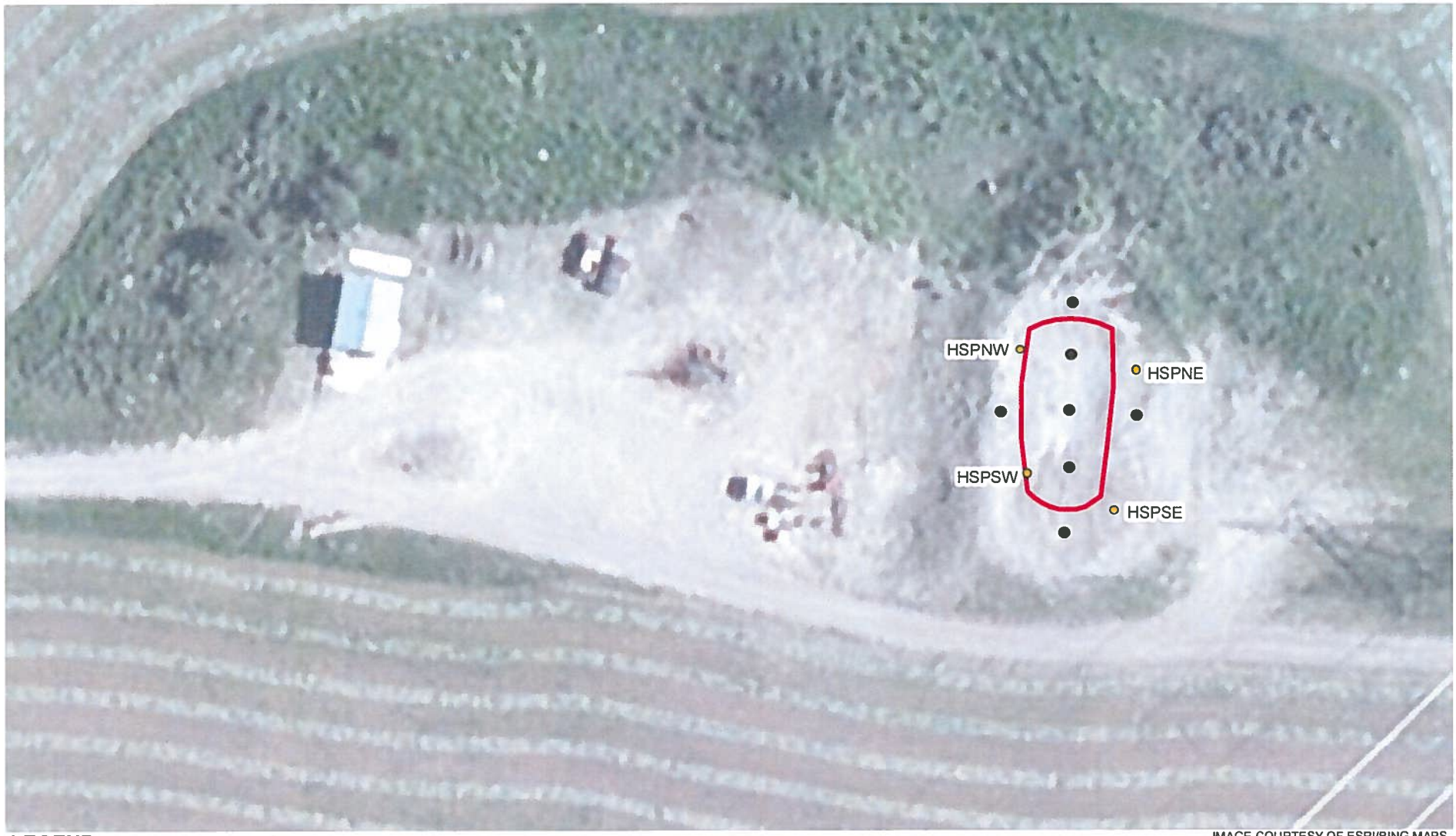


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

- GPS PIT CORNERS
- PROPOSED SOIL BORING
- SUSPECTED LEGACY PIT

0 50 100

Feet

N

FIGURE 2
SITE MAP
HOMSTEAD PIT ASSESSMENT
SENE SEC 8 T4N-R90W
MOFFAT COUNTY, COLORADO
SHELL EXPLORATION AND PRODUCTION COMPANY

P:\Shell E&P\GIS\MXD\034312009_HOMESTEAD_PIT_ASSESSMENT\034312009_FIG02_SITE.mxd

Shell Exploration & Production

SWEPI LP
4582 S. Ulster St., Suite 1400
Stanford Place III
Denver, Colorado 80237-2642
United States

September 18, 2013

Attn: Alex Fischer
Environmental Supervisor, West Region
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: SWEPI LP – Durham #1 Production Facility
API Number: 05-081-05180
NESE, S8, T4N, R90W, 6th PM
Initial Form 27 Submittal – Historical Production Pit Closure Process (Facility ID 116584, 116585)

Dear Mr. Fischer:

SWEPI LP (Shell) is providing the enclosed Colorado Oil and Gas Conservation Commission (COGCC) Form 27, Site Investigation and Remediation Workplan prior to initiation of site investigation activities. During review of COGCC's online database, SWEPI LP identified that historical production pits previous operated at the Durham #1 location. This Form 27 submittal was prepared for the purpose of generating a Remediation Project Number in support of the closure of the Durham #1 production pits (Facility IDs 116584 and 116585) in the Waddle Creek field of operations.

Production pits have not existed at the Durham #1 location since SWEPI LP acquired the production facility from East Resources, the previous owner/operator. SWEPI LP is conducting site investigation activities to begin the process of properly closing the historical production pits that had not been closed with proper clearance sampling or permit approvals. This document presents SWEPI LP's proposed approach to conducting an investigation for potential impacts within the interpreted pit boundary. SWEPI LP is commencing soil excavation and soil sampling activities to identify the extent of impacts, if any, at the Durham #1 production facility as a result of the historical production pits. Review of analytical results from the soil sampling will be conducted as part of closing the legacy production pits that are still considered open in COGCC's online database.

Enclosed is the COGCC Form 27, and a Site Location Map illustrating the general location of the Durham #1 location is provided as Figure 1. Project-specific information related to pit dimensions, associated potential impacts, and any planned remediation activities will be provided in the required COGCC forms after initial field activities gather additional information.

If you have any questions or require additional information, please contact me at (303) 222-6365 or via email at charles.cornell@shell.com.

Sincerely,

Chuck Cornell
Sr. Environmental & Regulatory Specialist

Enclosure

STATE OF COLORADO

Fischer - DNR, Alex <alex.fischer@state.co.us>

RE: SWEPI LP - Form 27 for pit closure - Durham 1 facility

1 message

Charles.Cornell@shell.com <Charles.Cornell@shell.com> Thu, Sep 19, 2013 at 12:55 PM
To: alex.fischer@state.co.us
Cc: kris.neidel@state.co.us

Alex,

Yes, the "Homstead" location is the same as the "Durham #1" location. The field uses the name Homstead 1 to reference that location, so LTE likely used it because that's what Shell calls it internally and I didn't catch that during review. But the Durham 1 and Homstead 1 are the same site.

Attached is the Figure 2.

Thanks,

Chuck Cornell

Shell E&P Company

US Onshore, Sr. Environmental & Regulatory Specialist

4582 S. Ulster Street Parkway, Suite 1400

Denver, CO 80237-2642

Office: 303.222.6365

Cell: 720.413.7091

mailto:charles.cornell@shell.com

From: Fischer - DNR, Alex [mailto:alex.fischer@state.co.us]
Sent: Thursday, September 19, 2013 12:43 PM
To: Cornell, Charles A SEPCO-UAS/E/USON
Cc: Kris Neidel - DNR
Subject: Fwd: SWEPI LP - Form 27 for pit closure - Durham 1 facility

Chuck,

Thanks. The Form 27 Remediation Work Plan references "Site Map" provided as Figure 2. Please provide Figure 2 as it was not included in the submittal.

Figure 1 references the "Homstead Pit Assessment". Is this the same as Durham #1 Production Facility?

Thanks

Alex

------- Forwarded message -------
From: <Charles.Cornell@shell.com>
Date: Wed, Sep 18, 2013 at 2:55 PM
Subject: SWEPI LP - Form 27 for pit closure - Durham 1 facility
To: alex.fischer@state.co.us

Durham 1 well

API 05-081-05180

Facility IDs / Pit IDs 116584 and 116585

Alex,

Attached is SWEPI LP's Form 27 submittal for the initial investigation to be conducted for the closure of the historical production pits on the Durham 1 facility. We are proposing to mobilize a drill rig to collect soil borings using a hollow stem auger. Mobilization of the rig to the field is scheduled for Monday, September 23, 2013.

SWEPI LP is requesting that a Remediation Reference Number be assigned to this historical pit for tracking purposes.

We appreciate your attention to this matter.

Please let me know if you have any questions.

Respectfully,

Chuck Cornell

Shell E&P Company

US Onshore, Sr. Environmental & Regulatory Specialist

4582 S. Ulster Street Parkw ay, Suite 1400

Denver, CO 80237-2642

Office: 303.222.6365

Cell: 720.413.7091

mailto:charles.cornell@shell.com

–

Alex Fischer, P.G.

Environmental Supervisor, Western Colorado

State of Colorado, Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801

Denver, Colorado 80203

office: 303.894-2100 ext. 5138 | fax: 303.894-2109

email: alex.fischer@state.co.us

Fig 2 - Site Map.pdf
266K