

**STATE OF
COLORADO****Andrews - DNR, Doug <doug.andrews@state.co.us>**

Surface Disturbance Discussion w/ Noble

4 messages

Holly Hill <Holly.Hill@nblenergy.com>

Mon, Nov 5, 2018 at 4:40 PM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Denise Arthur - DNR <denise.arthur@state.co.us>, Margaret Ash - DNR <margaret.ash@state.co.us>, John Noto - DNR <john.noto@state.co.us>, "mike.leonard@state.co.us" <mike.leonard@state.co.us>

Cc: Ryan Antonio <Ryan.Antonio@nblenergy.com>, Cody Ball <Cody.Ball@nblenergy.com>, Mike Rodine <Michael.Rodine@nblenergy.com>, Jan Kulmann <Jan.Kulmann@nblenergy.com>

Good Afternoon –

I want to thank COGCC for meeting with Noble today to discuss the surface disturbance on the following well pads:

Pad Name	2A Doc #
LD15-17 Pad	401721170
LD15-09 Pad	401721169
LD07-04 Pad	401749034
LD07-01 Multi	401698442
LD05-13 Pad	401698411
LD05-15 Pad	401698200

Please find action items from today's meeting listed below:

- Noble will email Doug Andrews true acreage numbers for interim reclamation for the pads listed above
- Noble will email updated plats for 2 well pads (15-09 and 05-15) where initial surface disturbance can be reduced
- Noble will look into acquiring a Discharge Permit on the 07-01 EcoNode
- Noble will provide to COGCC a justification explanation for surface disturbance on locations that cannot be reduced in size for surface disturbance (i.e. subsurface concerns; SUA consistencies, etc)
- Going forward, if the construction grade is > 10% for proposed locations, Noble will provide a construction layout configuration plat to COGCC when applying for a 2A
- Going forward, Noble will take 2-3 samples at a proposed location to determine the level of topsoil (if it's 6" or more)

Please let me know if I have missed anything, or more importantly misstated anything. Thanks!

Holly Hill

EHSR - DJ Regulatory Supervisor

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Holly Hill <Holly.Hill@nblenergy.com>

Sun, Nov 18, 2018 at 5:09 PM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Denise Arthur - DNR <denise.arthur@state.co.us>, Margaret Ash - DNR <margaret.ash@state.co.us>, John Noto - DNR <john.noto@state.co.us>, "mike.leonard@state.co.us" <mike.leonard@state.co.us>

Cc: Ryan Antonio <Ryan.Antonio@nblenergy.com>, Cody Ball <Cody.Ball@nblenergy.com>, Mike Rodine <Michael.Rodine@nblenergy.com>, Jan Kulmann <Jan.Kulmann@nblenergy.com>, Abby Bazin <Abby.Bazin@nblenergy.com>

All –

Noble wishes to follow-up on some of the discussion items regarding Surface Disturbance for the pads indicated in the original email below.

1. Please find true acreage numbers for initial surface disturbance and interim surface disturbance for the following locations (NOTE the highlighted locations indicate changes that have been made to previous surface disturbance plans):

Pad Name	2A Doc #	Initial Disturbance	Interim Disturbance
LD15-17 Pad	401721170	21.2 acres	14.3 acres
LD15-09 Pad	401721169	5.1 acres	0.8 acres
LD07-04 Pad	401749034	21.9 acres	7.10 acres
LD07-01 Multi	401698442	21.3 acres	13.8 acres (the 2A has an error and states 13.0 acres which is incorrect)
LD05-13 Pad	401698411	7.7 acres	0.8 acres
LD05-15 Pad	401698200	7.9 acres	0.8 acres

2. Please find attached updated plat for the 2 well pads (LD15-09 and LD05-15) where proposed initial surface disturbance can be reduced, which is further discussed below:
 - LD 05-15 Disturbance Area Dimensions Reduced:
 - West side of the disturbance area will shrink to 5' from the top of the cut in the NW Corner.
 - North side of the disturbance area will shrink to 50' from the top of the cut on the NE Corner.
 - This will give us adequate room to store topsoil in that area.
 - East side of the disturbance area will shrink to 40' from the base of the fill on the SE Corner.
 - This will give us enough room for storm water

- LD 15-09 Disturbance Area Dimensions Reduced:
 - West side of the disturbance area will shrink to 50' from the top of the cut on the NW Corner.
 - This will give us enough room to store topsoil in that area.
 - North side of the disturbance area will shrink to 40' from the top of the cut on the NW Corner.
 - This will give us enough room for Storm Water and Topsoil Storage.
 - South side of the Well Pad will Shrink to 225' from the Southernmost Well.
 - This will minimize the Cut in the SW Corner of the Well Pad drastically.
 - We will then shrink the disturbance area to 5' from the top of the cut.
- 3. Noble understands that COGCC has concerns that the sediment traps for these pads are too large and has requested that Noble obtain a discharge permit to reduce the pad size. Noble has a construction stormwater permit through CDPHE, which is the permit that allows stormwater discharges. The permit requires Noble to implement control measures, some of which are depicted on the grading maps. Noble also intends to install sediment traps, which are not shown. The sediment traps are sized to meet the requirements of the CDPHE permit. In some cases, the pad slopes can be used to help form the sidewall of a sediment trap. However, the layout of the sediment traps are based on topography, site layout and grading, and other factors.
- 4. Noble understand that COGCC has concerns regarding the size of the proposed locations. Primarily, from an economic incentive, it is in Noble's best interest to build smaller locations because they cost less. The size of the proposed locations represent the most efficient way to place adequate production facilities for locations that, in the beginning stages of planning with the surface owner, contemplated a larger well count. Additionally, the proposed locations were designed to provide safe and efficient ingress and egress onto the locations for inspections and routine maintenance, as well as providing adequate space to store topsoil for eventual reclamation efforts. Moreover, the proposed locations will also provide the most efficient use of surface should Noble intend to re-occupy the well pads to develop infill wells, which is very much a consideration for future planning efforts as Noble looks to continued and sustained operations in the DJ Basin. For specific considerations related to these projects, note that the LD07-01 well pad has a 15-foot cut in the northwest corner and a 13-foot fill in the southeast corner. The LD07-01 Econode pad has a 15-foot cut in the northwest corner and a 12-foot cut in the southeast corner. The contours shown along the northwest and southeast corners of each pad are the 3:1 slopes that extend from the pad(s) to the surrounding natural grade. Noble believes the 3:1 sidewall slopes are necessary, particularly on large cuts and fills. The 3:1 slopes reduce the likelihood of potential slope failures, reduce erosion, and are easier to maintain.
- 5. Going forward, if the construction grade is > 10% for proposed locations, Noble will provide a construction layout configuration plat to COGCC when applying for a 2A as discussed.
- 6. Going forward, Noble will take 2-3 samples at a proposed location to determine the level of topsoil (if it's 6" or more) as discussed.

Please let me know if you have any questions, and have a wonderful Holiday!

Holly Hill

EHSR - DJ Regulatory Supervisor

1625 Broadway, Suite 2200

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From: Holly Hill

Sent: Monday, November 5, 2018 4:41 PM

To: 'Andrews - DNR, Doug' <doug.andrews@state.co.us>; Denise Arthur - DNR <denise.arthur@state.co.us>; Margaret Ash - DNR <margaret.ash@state.co.us>; John Noto - DNR <john.noto@state.co.us>; 'mike.leonard@state.co.us' <mike.leonard@state.co.us>

Cc: Ryan Antonio <Ryan.Antonio@nblenergy.com>; Cody Ball <Cody.Ball@nblenergy.com>; Mike Rodine <Michael.Rodine@nblenergy.com>; Jan Kulmann <Jan.Kulmann@nblenergy.com>

Subject: Surface Disturbance Discussion w/ Noble

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11 attachments



ACCESS ROAD-AERIAL LD05-15.pdf
359K



ACCESS ROAD-TOPO LD05-15.pdf
322K



Grading Plan 05-15 (11.14.18).pdf
480K



HYRDOLOGY MAP LD05-15.pdf
398K



ACCESS ROAD-AERIAL LD15-09.pdf
415K



ACCESS ROAD-TOPO LD15-09.pdf
578K



GRADING PLAN 15-09.pdf
484K



HYRDOLOGY MAP LD 15-09.pdf
521K



LOCATION DRAWING 15-09.pdf
423K



Proposed Scaled Facility LD15-09.pdf
490K



LOCATION DRAWING 05-15.pdf

361K


Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Holly Hill <Holly.Hill@nblenergy.com>

Tue, Nov 27, 2018 at 2:47 PM

Holly,

Can you resend your response to Item #1. The image is not displaying correctly for me so I cannot see what it is showing for true acreage numbers. Thanks.

Doug Andrews
Oil & Gas Location Assessment Specialist - Northeast Colorado

co_dnr_div_ogcc_300_rgb_ltrhd_v3

303.894.2100 Ext. 5180
1120 Lincoln St., Suite 801, Denver, CO 80203
doug.andrews@state.co.us | <http://cogcc.state.co.us/>

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7 attachments

Pad Name	2A Doc #	Initial Disturbance	Interim Disturbance
LD25-17 Pad	401731170	21.2 acres	38.9 acres
LD25-20 Pad	401731169	5.3 acres	0.0 acres
LD27-24 Pad	40174808a	21.8 acres	7.23 acres
LD27-02 Multi	401898437	21.3 acres	13.8 acres (The 2A has an error and states 13.0 acres which is incorrect)
LD45-13 Pad	403650461	7.7 acres	0.8 acres
LD45-15 Pad	403668380	7.8 acres	0.8 acres

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26K



image006.jpg
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image006.jpg
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image009.jpg
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Pad Name	2A Doc #	Initial Disturbance	Interior Disturbance
LD05-17 Pad	401711170	21.2 acres	15.5 acres
LD05-20 Pad	401711169	5.1 acres	0.8 acres
LD07-04 Pad	401748086	21.8 acres	7.30 acres
LD07-05 Multi	401898442	21.3 acres	13.8 acres (the 2A has an error and states 13.0 acres which is incorrect)
LD05-13 Pad	401898441	7.7 acres	0.8 acres
LD05-10 Pad	401898380	7.8 acres	0.8 acres

image002.png
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COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

image003.jpg
5K

Holly Hill <Holly.Hill@nblenergy.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Tue, Nov 27, 2018 at 2:52 PM

Hi Doug –

Sorry about that. I have attached the spreadsheet I created that captured the acreage. Let me know if you need anything else.

Thanks!

Holly Hill
EHSR - DJ Regulatory Supervisor

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From: Andrews - DNR, Doug <doug.andrews@state.co.us>
Sent: Tuesday, November 27, 2018 2:47 PM
To: Holly Hill <Holly.Hill@nblenergy.com>
Subject: EXTERNAL: Re: Surface Disturbance Discussion w/ Noble

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 **207 and 209 acreage.xlsx**
25K