

STATE OF
COLORADO

Andrews - DNR, Doug <doug.andrews@state.co.us>

COGCC Form 2A review of Mallard Exploration's Koloa Pad location - Doc #402230071

6 messages

Andrews - DNR, Doug <doug.andrews@state.co.us>

Fri, Dec 6, 2019 at 10:24 AM

To: Erin Mathews <emathews@mallardexploration.com>, Regulatory Team <regulatory@ascentgeomatics.com>

Erin & Justin,

I have reviewed the referenced Form 2A Oil & Gas Location Assessment and have the following comments.

1) In the Water Resources section Mallard has indicated the estimated depth to groundwater is 189 feet based on water well Permit #82316-F. A review of the water well permit for the nearest water well (Permit #23214-) indicates a depth to groundwater of 84 feet. Therefore, I would like to change the estimated depth to groundwater from 189 feet to 84 feet.

2) This location meets Objective Criteria #5c due to being within the Upper Crow Creek Designated Groundwater Basin. Please provide a BMP that discusses how any spills will be minimized and contained during drilling operations so as to prevent impact to groundwater and native soils. For example, a temporary liner placed under and around the drill rig?

Please respond to this correspondence by December 20, 2019. If you have any questions, please contact me. Thank you.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado

**COLORADO**
Oil & Gas Conservation
Commission
Department of Natural Resources

303.894.2100 Ext. 5180

1120 Lincoln St., Suite 801, Denver, CO 80203

doug.andrews@state.co.us | <http://cogcc.state.co.us/>**Andrews - DNR, Doug** <doug.andrews@state.co.us>

Fri, Dec 6, 2019 at 10:35 AM

To: Erin Mathews <emathews@mallardexploration.com>, Regulatory Team <regulatory@ascentgeomatics.com>

Erin & Justin,

Forgot to include this before I hit the send button.

3) The Location Drawing and Hydrology Map identify a nearby surface water feature as a low lying area. This surface water feature is mapped on the National Wetlands Inventors as a Freshwater Emergent Wetland. Please provide revised Location Drawing and Hydrology Map that label this surface water feature as a Freshwater Emergent Wetland.

Doug Andrews

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doug.andrews@state.co.us | <http://cogcc.state.co.us/>

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Justin Garrett <jgarrett@ascentgeomatics.com>

Tue, Dec 10, 2019 at 9:25 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Erin Mathews <emathews@mallardexploration.com>, Regulatory <regulatory@ascentgeomatics.com>

Doug –

Please accept the attached revised Hydrology Map calling out the water feature as you have requested.

Thank you

Justin Garrett

Regulatory Analyst

Ascent Geomatics Solutions (Formerly PFS)

Office: 303.928.7128

8620 Wolff Court

Westminster, CO 80031

TBPLS Firm Registration No. 10194123



From: Andrews - DNR, Doug <doug.andrews@state.co.us>

Sent: Friday, December 6, 2019 10:35 AM

To: Erin Mathews <emathews@mallardexploration.com>; Regulatory <regulatory@Ascentgeomatics.com>

Subject: Re: COGCC Form 2A review of Mallard Exploration's Koloa Pad location - Doc #402230071

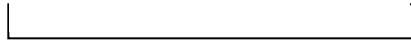
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On Fri, Dec 6, 2019 at 10:24 AM Andrews - DNR, Doug <doug.andrews@state.co.us> wrote:

Erin & Justin,

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 **Koloa Pad 8N61W15 Hydrology Map.pdf**
742K

Andrews - DNR, Doug <doug.andrews@state.co.us>

Tue, Dec 10, 2019 at 9:45 AM

To: Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Erin Mathews <emathews@mallardexploration.com>, Regulatory <regulatory@ascentgeomatics.com>

Thanks Justin. Heard anything back from Mallard concerning my COMment #1 & #2 yet?

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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Erin Mathews <emathews@mallardexploration.com>

Tue, Dec 10, 2019 at 9:47 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>

Doug,

I have been discussing your questions with the team. I should have a formal response back to you by the end of the day.

Thanks,

Erin

Erin Mathews, PE

VP of Development

Mallard Exploration

1400 16th St. Suite 300 Denver, CO 80202

W: 720.543.7959 | C: 970.302.6171 | E-mail: emathews@mallardexploration.com



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Erin Mathews <emathews@mallardexploration.com>

Tue, Dec 10, 2019 at 11:32 AM

To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>, Justin Garrett <jgarrett@ascentgeomatics.com>

Cc: Regulatory <regulatory@ascentgeomatics.com>

Doug,

In response to comment #1, please change the depth of groundwater to 89 feet.

In response to comment #2, please add the following BMP:

During drilling and completions operations a temporary impermeable synthetic or geosynthetic liner will be utilized under equipment.

Please let us know if you have any additional questions.

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