



STATE OF
COLORADO

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

Timbro 1717 Document 401601637

7 messages

Heather Mitchell <HMitchell@verdadoil.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Wed, Oct 16, 2019 at 11:12 AM

Hi Doug – per our conversation yesterday – we are reducing our number of tanks on this pad to 3 oil tanks, 14 water tanks. I will send a revised drawing shortly.

Also, the BUO within 1500' is the property of the surface owner.

Please let me know if you need anything further.

Thanks,

Heather Mitchell

Regulatory Manager

Verdad Resources

HMitchell@verdadoil.com

720-845-6917

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Heather Mitchell <HMitchell@verdadoil.com>

Wed, Oct 16, 2019 at 12:03 PM

Heather,

What are the size of the tanks (in barrels). Objective Criteria 8 is for 18+ tanks or greater than 5,200 barrels of storage capacity.

Also 3 oil tanks and 14 water tanks seems odd. Is oil being piped from the location, but not Produced water?

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/>

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Heather Mitchell <HMitchell@verdadoil.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Wed, Oct 16, 2019 at 1:16 PM

Yes we would not have a water line, so we would need the tanks primarily for water storage. Standardly we use 400 bbls tanks. This make is over the limit anyway. Let me confirm one more time.

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Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Heather Mitchell <HMitchell@verdadoil.com>

Wed, Oct 16, 2019 at 2:47 PM

Heather,

Finished up my review of this location and have a couple more things I'd like addressed to go along with the tank count and updated Location Drawing.

1) In the Water Resources section, the estimated depth to groundwater is listed as 1,800 feet. A review of the water well permit this was depth taken from appears to indicate this is the top of the Upper Pierre Aquifer and not indicative of how shallow groundwater likely is in this area. There are not many water wells that report a static water level in this area, But I did manage to identify water well Permit #12-WCB located approximately 8,900 feet to the east with a static water level of 155 feet. Therefore, I would like to change the estimated depth to groundwater from 1,800 feet to 155 feet.

2) Verdad has provided a BMP that indicates: "*During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site. No cuttings will be stored on location.*" Please provide me with a copy of the Waste Management Plan mentioned in this BMP. Additionally, you have included an Operator comment that states "*Verdad will provide a land application Facility # or beneficial reuse ID prior to drilling and disposal of water based cuttings or fluids via a Form 4 Sundry.*" This contradicts what is stated in the BMP about water based cuttings disposal. Please confirm how water based cuttings and fluids will be disposed of.

3) Given the proximity of the Building Unit to this location, will Verdad consider revising the noise mitigation BMP to provide more protection from nuisance noise than just the placement of rig generators as far as possible. I understand the BU owner is also the Surface Owner, but I think Verdad can do a little more noise mitigation than that fairly easily.

4) Depending on what you find out concerning the number/volume of tankage, I may follow-up with you on additional BMPs to address them as this location may still meet Criteria #8.

Please respond by November 1, 2019. If you have any questions, please contact me. Thank you.

Doug Andrews
Oil & Gas Location Assessment Specialist - Northeast Colorado



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Heather Mitchell <HMitchell@verdadoil.com>

Thu, Oct 17, 2019 at 8:36 AM

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

Hi Doug - please see my revisions below and the revised attachments.

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

Sent: Wednesday, October 16, 2019 2:48 PM

To: Heather Mitchell <HMitchell@VerdadOil.com>

Subject: Re: Timbro 1717 Document 401601637

Heather,

Finished up my review of this location and have a couple more things I'd like addressed to go along with the tank count and updated Location Drawing.

1) In the Water Resources section, the estimated depth to groundwater is listed as 1,800 feet. A review of the water well permit this was depth taken from appears to indicate this is the top of the Upper Pierre Aquifer and not indicative of how shallow groundwater likely is in this area. There are not many water wells that report a static water level in this area, But I did manage to identify water well Permit #12-WCB located approximately 8,900 feet to the east with a static water level of 155 feet. Therefore, I would like to change the estimated depth to groundwater from 1,800 feet to 155 feet. **That is fine.**

2) Verdad has provided a BMP that indicates: "*During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site. No cuttings will be stored on location.*" Please provide me with a copy of the Waste Management Plan mentioned in this BMP. Additionally, you have included an Operator comment that states "*Verdad will provide a land application Facility # or beneficial reuse ID prior to drilling and disposal of water based cuttings or fluids via a Form 4 Sundry.*" This contradicts what is stated in the BMP about water based cuttings disposal. Please confirm how water based cuttings and fluids will be disposed of. **Yes – please remove this language and we have removed them on our 2As going forward. Waste management plan attached and it is consistent with commercial disposal.**

3) Given the proximity of the Building Unit to this location, will Verdad consider revising the noise mitigation BMP to provide more protection from nuisance noise than just the placement of rig generators as far as possible. I understand the BU owner is also the Surface Owner, but I think Verdad can do a little more noise mitigation than that fairly easily. **Verdad will commit to quiet frac fleets.**

4) Depending on what you find out concerning the number/volume of tankage, I may follow-up with you on additional BMPs to address them as this location may still meet Criteria #8. **We have reduced the number of tanks on this location to 10 oil and 6 water tanks. The volume still exceeds as they are 400 bbls tanks. Revised location drawing attached. No changes to the cultural distances.**

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2 attachments



LO_TIMBRO_1717_LOC_DRAWING_REV4.pdf
3361K



VR WMP 10.09.19.pdf
55K

Andrews - DNR, Doug <doug.andrews@state.co.us>
To: Heather Mitchell <HMitchell@verdadoil.com>

Mon, Oct 21, 2019 at 9:26 AM

Heather,

In an email reply for the Onion-Berg-Gourd Form 2A you indicated that Verdad will be doing the following for all their Form 2As now. Will you confirm that I can also add theses two BMPs to the Timbro 1717 Form 2A as well.

Verdad will employ automated tank gauges to allow for the gauging of liquids without opening the thief hatch. This will minimize the number of times a thief hatch will be opened and further reduce the vapor emissions from tank.

Verdad wells have remote shut-in capabilities to mitigate spills and safety issues. Remote shut-in will allow Verdad to immediately shut a well in the event of a reported problem on location or in the event of a potential threat such as a grass fire or flood.

Doug Andrews

Oil & Gas Location Assessment Specialist - Northeast Colorado



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Heather Mitchell <HMitchell@verdadoil.com>
To: "Andrews - DNR, Doug" <doug.andrews@state.co.us>

Mon, Oct 21, 2019 at 9:28 AM

Confirmed.

Let me know if you need anything else.

Thanks,

Heather Mitchell

Regulatory Manager

Verdad Resources

HMitchell@verdadoil.com

720-845-6917

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