



Questions & Answers: Boulder County Third Draft Preliminary Comprehensive Drilling Plan (CDP) Jan. 11 Surface Owner Meeting

Included below is a summary of questions and responses from our surface owner meeting on Jan. 11 – this includes questions received via phone caller, web portal submission and email. In addition to this document, the presentation deck and audio recording from the telephone town hall-style meeting is available under the CDP tab of our website, www.crestonepeakresources.com.

We welcome your ongoing feedback and questions – please reach out to us via email (bouldercdp@crestonepr.com) or by phone at 720-410-8537.

Why did Crestone reduce the number of wells and/or move all of the oil and gas locations to Highway 52?

After reviewing feedback and comment from surface owners within and near the CDP area, and from stakeholder groups like the Colorado Department of Public Health and Environment (CDPHE), the Town of Erie, Boulder County and the Colorado Oil and Gas Conservation Commission (COGCC), we conducted an in-depth review and alternatives analysis of the potential locations. We reviewed the options to deliver revised proposed oil and gas locations along the south side of Highway 52, while also reducing the size of the CDP, number of potential oil and gas locations, wellsites and wells.

	Preliminary Drafts 1 & 2	Preliminary Draft 3
Number of potential oil and gas locations	6	4
Number of wellsites	6	5
Number of wells	180	140
Potential oil and gas locations off Highway 52	3 out of 6 (72 wells)	4 out of 4 (140 wells)
Size of CDP area	12 square miles	10 square miles

It's important to remember that the oil and gas locations outlined in this third draft are proposed, not final – just as feedback from CDP stakeholders helped shape the third draft preliminary plan, surface owners and other stakeholder groups can provide written comment through Friday, Jan. 19 via the COGCC website. We will submit a final CDP with our final proposed oil and gas locations to the COGCC on Jan. 29.

One of the potential oil and gas locations is in a floodplain – how have the associated risks been evaluated and addressed?

We understand the level of concern about floodplains, and that's why we've done significant analysis with respect to placing an oil and gas location in this area.

Potential risks associated with a floodplain location are addressed as part of the wellsite design characteristics. We'll work with an engineer to design the well pad and ensure compliance with relevant commission rules, including orienting the wellsite to minimize potential flood impact



and ensuring equipment is inventoried and properly anchored. Additionally, we've mitigated the risks associated with on-site storage of hydrocarbons (crude oil, natural gas and natural gas liquids) by eliminating tanks and instead utilizing pipelines.

We'll work with the COGCC and the Army Corps of Engineers to ensure all appropriate measures are taken ahead of operations in that area.

Why are the setbacks from buildings/homes smaller in the third draft preliminary CDP compared to the first two draft preliminary CDPs?

At the beginning of the CDP process, we took a comprehensive look at the entire area and used constraints analysis with factors like 1,000-foot setbacks to determine the potential oil and gas locations. Feedback on the first two draft preliminary CDPs, and the changes you see in the third draft preliminary CDP, reflect stakeholder requests to move the potential oil and gas locations to Highway 52.

Three out of the four proposed oil and gas locations maintain the 1,000-foot buffer, but one location is less than 1,000 feet from occupied structures but more than the COGCC's 500-foot setback requirement. It is not possible to situate the oil and gas locations on Highway 52 while maintaining a 1,000-foot buffer around all four-proposed oil and gas locations.

Why are potential oil and gas locations on Boulder County Open Space? How are you able to drill there legally?

Crestone owns the mineral rights under these portions of Boulder County Open Space in the CDP area. Under Colorado law, mineral rights owners have the right to "reasonable access" on the surface in order to develop underlying minerals. As a mineral rights leasehold owner, we can use the surface as is reasonably necessary per Colorado's Reasonable Accommodation Act.

We have provided Boulder County underlying leases demonstrating our Open Space mineral rights. Additionally, we have reached out to Boulder County to include them in the process with respect to potential oil and gas locations on Boulder County Open Space. At this point, they have politely declined to engage in that conversation. If our CDP receives state approval by the COGCC, we will begin the Boulder County Land Use Review process, and we'll look forward to engaging with the County at that time.

The proposed draft plan encompasses nearly 100 percent of Crestone's mineral rights in the CDP area, so as of now these are our only plans for energy development in Boulder County.

Does Crestone have experience operating well pads of this proposed size, with this many wells? What is the average size of well pads in Crestone's current operations?

Through the CDP process, we look at a geographic area of land as compared to the traditional approach, which develops land on a section-by-section, unit-by-unit or well-by-well basis. The advantages include looking at land on a larger scale to ensure development includes consolidated well pads and facilities specific to that area.

In planning these new oil and gas locations, we're able to draw from experience in DJ Basin operations and scale the number of wells as needed. Current operations at our well pad near the intersection of County Road 5 and Highway 52 are similar in size to our proposed Section Two.



Sections One and Three will be about 30 to 40 percent bigger based on attributes or efficiencies specific to their locations.

How will traffic management and, specifically, the addition of more trucks on local roads be addressed?

We're working on plans for traffic management, grounded in traffic analysis specific to the final oil and gas locations. We consult with outside engineering firms to provide this expertise, they will then propose the least impactful routes. This will be included in the final CDP, and will be subject to review and approval by the COGCC and local government.

Among the major mitigation measures being considered to reduce truck traffic is leveraging pipelines and tankless facilities – both help minimize truck traffic to/from drilling sites. Instead of by truck, Crestone intends to pipe water to oil and gas locations. Crestone will remove hydrocarbons from oil and gas locations via pipeline. Additionally, to manage day-to-day traffic and promote safety at the proposed site, we hope to establish routes with right-hand turns only – meaning trucks avoid crossing traffic.

How will waste from sites be disposed of – for example, will trucks carrying drill cuttings be properly covered?

Yes, any truck leaving an oil and gas location with waste material will be properly secured and covered.

Solid waste (like drill cuttings and drilling mud) will be disposed of at a licensed, third-party disposal facility. Liquid waste (like flowback and produced water) will be disposed of at a licensed, third-party injection facility. No drill cuttings, drilling mud or produced water will be disposed of in Boulder County. Additional detail on the proposed drill cuttings management plan can be found in the third draft preliminary CDP.

How will Crestone mitigate emergency risks to residents close to the potential oil and gas locations?

An emergency response plan is a requirement for both the COGCC and Boulder County permitting processes. While we are still determining locations of the potential wellsites, mitigation and emergency response measures will be included in the final CDP – we will consult with local emergency responders, just as we do on all of our locations, prior to submission of the final CDP.

What steps will be taken to mitigate odor, light pollution and noise?

We utilize several mitigation strategies based on our experience in the DJ Basin, the latest technologies and industry best practices. For example, we've installed 40-foot sound walls and odor-masking products, which help alleviate and neutralize odors. We also do baseline testing and ongoing monitoring to ensure we are in compliance with state regulations.

Additional mitigation steps will be addressed in the final CDP, and we welcome your comments and feedback as we continue to address your concerns.

How much fresh water will be used annually?

The amount of fresh water used in our operations will be dependent on the final approved plan and oil and gas locations, subject to review and approval by the COGCC and Boulder County



process. We do recognize water as a critical resource and recycle or reuse water as often as possible in our DJ Basin operations.

For more information on our approach to water safety and water conservation, visit the Community Relations tab on our website.

What mud will be used in the drilling process, in light of prior odor complaints?

While it's too early in the process to confirm the type of drilling mud we'll use, we are looking at products similar to what we've used at other DJ Basin operations.

Due to the potential for odor from oil-based mud, we'll utilize a variety of mitigation measures, like installing chillers, enclosed mud tanks and walls to contain potential odors. We're continually evaluating opportunities to improve our operations, so we will take a look at alternatives so that we continue to maintain compliance with regulations while also listening to feedback from our neighbors.

Will electric drilling rigs be utilized in Boulder County operations?

The type of rig used in operations typically depends on available infrastructure – like supply of electricity – at the well pad. Once our potential oil and gas locations are finalized and approved by the COGCC, we will begin to evaluate infrastructure to the final well pad and determine the type of rig.

How will hydrocarbons – like oil and natural gas – be removed from the oil and gas locations?

As part of our proposed plan, we plan to move the oil and produced water from the well pad to our central gathering facility just east of Erie in Weld County, which we call the Hub. As proposed, we will install new pipelines linking the potential well pads to the Hub to mitigate traffic and ensure safe, tankless well sites. The oil is then transported from the Hub via truck or pipeline to refineries. Visit our website for additional benefits of the Hub.

As for natural gas, we plan to contract with a third-party gathering company for transport from the boundary of our well pads via pipeline to a gas treatment plant – they will ensure all appropriate permitting is in place with relevant local agencies.

Will these be new pipelines? Or, will you be using existing pipelines when possible?

As proposed, we will install new pipelines to move oil and produced water to the Hub. For gas removal, we would like to use existing pipelines, but the determination of which pipelines to use will be up to our third-party gatherer. It is too early in the process to know if we will cohabitate pipelines.

What is the setback guideline for pipelines?

As part of each of our drafts, our pipelines will have a 250-foot buffer from occupied structures, which exceeds the COGCC guideline of a 200-foot buffer.

How many existing wells are currently within the proposed CDP area? What is the plan for those wells?



There are currently 95 producing wells in the proposed CDP area – these are vertical wells accessing the same reservoirs that we will reach with our horizontal wells, making the 95 existing wells redundant. There will be an engineering review for each existing well to ensure obligations to outside partners have been fulfilled. The wells no longer necessary will be plugged, abandoned and then reclaimed.

Can other operators come in through the state regulatory process and drill in the same area?

As proposed, Crestone would be the sole operator of the CDP area. Along with this CDP application, Crestone has filed three drilling and spacing unit applications, which if approved, would allow Crestone to be the sole operator within the CDP area.

Other operators have mineral interests in Boulder County outside the CDP area, but we cannot speak to their plans or whether they intend to develop or not.

The third draft plan states that the seismic studies and subsurface mapping are to begin prior to permit approvals for the CDP. Can you explain this process?

Seismic studies and subsurface mapping need to be conducted over the entirety of the CDP area to adequately plan our wells. To conduct these studies and mapping, we need to obtain surface owner permission.

We plan to begin this process in Spring 2018 with the intent of executing the study in Winter 2019, which will take approximately 30-60 days to complete.

What is the impact of oil and gas operations on property values?

Oil and gas development is not new to the CDP area – there are 95 producing wells in the area currently. We believe energy production will have little or no impact on property values once drilling and completions are finished, the surface areas are reclaimed, and wells are producing, with minimal above-ground infrastructure. We have commissioned a study by Aurora, Colo.-based THK Associates to look at the impact our operations may have on home values, both during operations and after sites are completed. We will share the results of this study once they are available.

Our operations have a large, positive financial impact to Boulder County and local government based on the tax revenues generated. We are commissioning a second study to determine an estimate for the levy amount, severance and tax abatement from the revenue generated. This information will also be made public once the study has been completed.

Why not another in-person meeting as opposed to the telephone town halls?

We believe the telephone town hall meeting is the most efficient and convenient means of connecting with the 700+ surface owners in and near the CDP area and with public officials and other stakeholders. There may be other opportunities to have another in-person meeting during the Boulder County permitting process.

Please remember that these meetings are not the only way to provide feedback. Feedback or questions can be submitted to Crestone via email, which is included on our website; you can also submit comments on our CDP directly to the COGCC via their website or during any COGCC hearings.



We've been capturing feedback during our telephone town halls and are listening to what the community and government and regulatory agencies have to say, as evidenced by the changes in the third draft preliminary plan, with fewer wells, fewer well sites and fewer oil and gas locations, all relocated to the Highway 52 corridor.

Why are these meetings invitation-only? Who was invited to the telephone town halls and why?

Our highest priority is answering questions and hearing concerns from surface owners in and near the CDP area, and ensuring we can take their feedback into account as we continue to formulate our potential plans. We invited more than 740 surface owners to participate in the Jan. 11 telephone town hall meeting, and anyone – whether in or near the CDP area or not – had the option of listening in to the entire call.