CRESTONE PEAK
RESOURCES

GEOLOGIC HAZARD PLAN

Submitted with Form 2A Application for the

Blue 3-65 33-32-31

Plan Date: August 26, 2021

Submittal Date: September 15, 2021

Crestone Peak Resources' Geologic Hazard Plan was developed in accordance with COGCC Rule 304.c(21)

Geosyntec consultants

engineers | scientists | innovators

RULE 304.C.(21) - GEOLOGIC HAZARDS PLAN

BLUE 3-65 33-32-31

Aurora, Colorado

Prepared for

Crestone Peak Resources
1801 California Street
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Denver, CO 80202

Prepared by

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August 2021

PROFESSIONAL GEOLOGIST CERTIFICATION

I certify that I am a Professional Geologist, having met the education requirements and professional work experience required by C.R.S. § 23-41-208(b). I certify that the Geologic Hazard Plan described herein is, to the best of my knowledge, accurate and complete.

8/25/2021

Martina K. Litasi, PG[WY] (PG-4007) Date
Senior Geologist

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ACRONYMS AND ABBREVIATIONS

bgs	Below ground surface
BMP	Best Management Practices
CGS	Colorado Geological Survey
CDPHE	Colorado Department of Public Health and Environment
COGCC	Colorado Oil and Gas Conservation Commission
NRC	United States Nuclear Regulatory Commission
SWMP	Storm Water Management Plan
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WPS	Working Pad Surface

1. INTRODUCTION

Geosyntec Consultants, Inc. ("Geosyntec") was retained by Crestone Peak Resources (Crestone) to develop a Geologic Hazards Plan (the "Plan") pursuant to Colorado Oil and Gas Conservation Commission (COGCC) Rule 304.c.(21) and 304.b.(7).I. ("the Rules') for the Blue 3-65 33-32-31 Site (the "Well Site") located in the NW 1/4 of the SW 1/4 of Section 34 in Township 3S, Range 65W, 6th Principal Meridian.

1.1 Purpose and Scope

As defined in § 24-65.1-103(8), C.R.S., a "Geologic Hazard" means a geologic phenomenon which is so averse to past, current, or foreseeable construction or land use as to constitute a significant hazard to public health and safety or to property. The term includes but is not limited to (a) avalanches, landslides, rock falls, mudflows, and unstable or potentially unstable slopes; (b) seismic effects; (c) radioactivity; and (d) ground subsidence.

As stated in the Rules:

> Rule 304.c.(21) - If the Operator identifies any Geologic Hazards pursuant to Rule 304.b.(7).I, the Operator will submit a Geologic Hazard plan describing proposed mitigation measures.[1]

The purpose of this Plan is to evaluate the geologic hazards at and within a 1-mile radius of the Well Site and working pad surface (WPS) by reviewing available documents and literature on geologic conditions at the Well Site and outlining mitigation measures for the hazards identified.

1.2 Site Conditions and Developments

As shown on the Geologic Hazard Maps (Blue 3-65 33-32-31 Geologic Hazards – Map 1 and Map 2), the Well Site is in the City of Aurora, Colorado, and is operated by Crestone. The Well Site is currently undeveloped with plans for an access road to connect to the existing access road to the Mustang Compressor Station under development to the east. The remaining land around the Well Site is primarily agricultural land or commercial development. The Well Site is proposed for construction of a new well pad.

Well Site development will consist of installing an access road, constructing an approximate 345 by 605 foot well pad, drilling seven oil and gas extraction wells, and installing associated water and oil tank batteries, hookups, and staging and storage areas. Anticipated grading is expected to consist of cuts and fill slopes on the order of 4 horizontal (H):1 vertical (V) (8 feet, or less in height) to establish pad grades and drainage.

[1] Colorado Oil and Gas Conservation Commission, 2021. Rules – Permitting Process 300 Series. January 15, 2021.

2. SITE CHARACTERIZATION

This section describes the geology and hydrogeology at the Well Site.

2.1 Site Geology

Geology in the area of the Well Site generally consists of Quaternary-age (Upper Pleistocene) Eolian Loess (windblown silt and fine sand with lesser amounts of clay) overlaying the Paleocene and Upper Cretaceous Denver and Dawson Formations consisting of claystone, siltstone, sandstone and andesitic (volcanic) conglomerates (i.e., sedimentary bedrock). It is noted that Montmorillonitic clay in the formation swells when wet and can cause damage to roads and structures (USGS, 1979). Based on the nearby First Creek and Box Elder Creek drainages to the west and east, respectively, it is likely that the Well Site is located on or near a ridge between two drainage basins.

According to the United States Department of Agriculture (USDA) Web Soil Survey[2], surficial soils at the Well Site consist primarily of Platner loam (3-5% slopes) and Adena-Colby silt loams (0-3% slopes). These soils are classified as well-drained Eolian deposits in Hydrologic Soil Group C, which has a low to moderately high infiltration rate.

2.2 Site Hydrogeology

According to the Colorado Geological Survey (CGS) and USDA, typical annual rainfall in northeastern Colorado where the Well Site is located does not exceed 20 inches (e.g., semi-arid high prairie). Mean annual precipitation at the Well Site is approximately 13 to 19 inches.

The Well Site is located in the Coyote Run watershed and lies outside the associated floodplain (Uintah, 2021). Within one-half mile of the Well Site[3] there are at least five permitted wells, two are reported as domestic and one as a geotechnical log on the south side of Interstate 70, and two are reported as domestic wells to the southwest and northeast of the Well Site. The domestic water wells are drilled to depth over 300 feet below the ground surface (bgs) and no shallow groundwater monitoring wells are reported within one-half mile of the Well Site. According to the Fish & Wildlife Service Wetlands Mapper[4], the drainage north of the Well Site is part of a wetland that extends to the east and north (classification code: R4SBA; riverine intermittent streambeds that have brief periods of surface water, but the water table usually lies well below ground surface). Topography of the Well Site slopes from west/southwest to east/northeast. Therefore, surface water is projected to flow toward a tributary of Prairie Dog Draw to the northeast that eventually drains to Box Elder Creek. The Site-specific Stormwater Management Plan identifies First Creek (2,226 feet west of the Well Pad) as the primary receiving water (Apex, 2021); however, the Drilling Operations Site Plan (Sheet 3) shows surface water flow to the northeast, and active

[2] https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed 7/30/2021)
[3] https://maps.dnrgis.state.co.us/dwr/Index.html?viewer=mapviewer (accessed 8/10/2021)
[4] https://www.fws.gov/wetlands/data/mapper.html (accessed 7/30/2021)

stormwater permit COR401103 identifies Box Elder Creek, Kiowa Creek, and the South Platte River as receiving waters.

Shallow groundwater at the Site is projected to flow to the northeast toward the Prairie Dog Draw, similar to surface water flow. Regional shallow groundwater is projected to flow to the north and northwest towards the South Platte River (USGS, 1996 and USGS, 1979). Regional depth to groundwater at and around the Well Site is generally more than 20 feet bgs and commonly more than 100 feet bgs (USGS, 1983). The moderately permeable Denver aquifer is the principal source of groundwater and depending on well construction, may yield as much as 200 gallons per minute[5]. Nearby water wells are screened in the Laramie Fox Hills and Arapahoe aquifers.

[5] https://pubs.usgs.gov/ha/ha730/ch_c/C-text6.html (accessed 7/30/2021)

3. POTENTIAL GEOLOGICAL HAZARDS

This section summarizes the potential geological hazards identified at the Well Site WPS.

3.1 Avalanches, Landslides, Rock Falls, Mudflows or Unstable Slopes

Based on the Well Site location and conditions summarized below, avalanches, landslides, rockfalls, mud flows, or debris fan hazards are not anticipated at the Site and are not considered significant hazards.

The WPS is generally flat and slopes gently to the east/northeast. Existing and planned cut slopes and soil piles are proposed to be inclined at 4H:1V. Steeper slopes are not planned and do not currently exist in order to ensure that there is no slope instability hazard to the current or proposed development.

3.2 Faults and Seismic Activity

It is unlikely that significant damage to surficial and underground structures or utilities could occur at the WPS from seismic events or ground surface rupture from faults and therefore is not a significant hazard.

As indicated on the CGS Colorado Earthquake and Fault Map Server[6], no known active faults and no earthquakes have been reported at or within a 1-mile radius of the Site. The closest earthquakes reported in the area were located approximately four miles to the northwest and northeast near Denver International Airport in 1962, 1963, and 1966 ranging from IV to VI on the Modified Mercalli Intensity Scale. According to the United States Geological Survey (USGS) 2018 Long-term National Seismic Hazard Map[7], eastern Colorado has a "lowest hazard" rating. The closest active fault to the Well Site is the Golden Fault (Quaternary-age), which lies approximately 30 miles to the west.

3.3 Radioactivity

Radioactivity is not a significant hazard identified at this Well Site.

According to the Colorado Department of Public Health and Environment (CDPHE), based on construction types, indoor radon measurements, geology, soil, and aerial radiation measurements, Colorado is located in Radon Zone 1 indicating a high radon potential (>4 picocuries per liter) for indoor radon. Inhabited structures or other indoor facilities are not planned for the Well Site.

According to the United States Nuclear Regulatory Commission (NRC), there are no operating nuclear power reactors, fuel cycle facilities, uranium and recovery facilities in Colorado. There is one USGS operated research and test reactor in Denver and four facilities undergoing

[6] https://cgsarcimage.mines.edu/ON-001/ (accessed 7/30/2021)
[7] https://www.usgs.gov/media/images/2018-long-term-national-seismic-hazard-map (accessed 7/30/2021)

decommissioning including the Schwartzwalder Mine (uranium mine) in Jefferson County, Cotter Uranium Mill in Canyon City, Hecla Mining Company – Durita Facility in Naturita, and Umetco Uravan (uranium mill) in Uravan, Colorado. CDPHE continues to monitor the Rocky Flats Superfund Site (nuclear weapons production) in Jefferson County, Colorado that was closed in 2006 and is currently a wildlife refuge. The Well Site is located 30 miles or more from Rocky Flats and the other facilities, except for the USGS facility in Denver; however, it is unlikely that these facilities would impact the Well Site.

3.4 Subsidence and Collapsible Soils

Subsidence and collapsible soils are a potential geologic hazard at the Site and are estimated as low risk.

Ground subsidence is a process characterized by the downward displacement of surface material caused by natural phenomena such as removal of underground fluids, natural consolidation, or dissolution of underground minerals such as salt or limestone (karst) or by man-made phenomena such as underground mining.

CGS maps[8] show areas of coal extraction and mine subsidence hazards. There are two small undetermined areas to the northwest and within one mile of the Well Site (see Map 1) due to historical mining activities; however, it is unlikely that subsidence from historical mine workings would occur at the Well Site as the undermined areas are more than a half mile from the WPS. Additionally, the Scranton Mine is located over one mile northwest of the Well Site as shown on Map 2. Proposed horizontal boreholes appear to also be located south of the undetermined areas.

Collapsible soils are generally dry, low density, silty soils with high void space or air gaps between the soil grains where the soil particle binding agents are highly sensitive to the ingress of water. When exposed to and weakened by water, the binding agents break, soften, or dissolve such that the soil grains shear against each other and re-orient in tighter, denser, configurations. This reconfiguration causes a net volume decrease in the soil mass that, in turn, results in settlement of the ground surface (CGS, 2018). Collapsible soils are a frequent cause of ground settlement. Surficial and underground structures or utilities developed on these soils can be impacted by differential settlement, and strain can build until the feature bends, distorts, or breaks.

According to the CGS[9], there are no case histories of collapsible soils in and around the Blue Site; however, soils at the Well Site are mapped to be eolian (wind-blown) deposits (e.g. Loess) that have the potential for settlement and hydrocompaction when water infiltrates the soil. The potential for ground surface movement and damage to the existing and proposed improvements due to collapsible soils should be evaluated during Well Site design-level geotechnical evaluations of near surface soils.

[8] https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=1891e3149eda44af9dc8af81c4dc58a8 (accessed 7/30/2021)
[9] https://www.arcgis.com/apps/webappviewer/index.html?id=a6f816b35fb64d3da096e84af661f070 (accessed 7/30/2021)

3.5 Expansive Soils and Rock

Although not identified in the COGCC definition of "Geologic hazard," the CGS identifies geologic hazards to include expansive soils and rocks (i.e., swelling clays in bedrock or surficial deposits) as potential geologic hazards in the Front Range area of Colorado. At this Well Site, this geologic hazard is estimated to be low risk.

When exposed to water, bentonite and montmorillonite (weathered volcanic ash) clays can expand up to 20% by volume and exert a force up to 30,000 pounds per square inch which can cause damage to structures and other improvements[10]. Due to the composition of the underlying bedrock, Geosyntec reviewed the potential for swelling or expansive soils for the Well Site (Hart, 1974). While the windblown deposits have a low swell potential, the thickness of the windblown deposits may be variable, therefore bedrock with a higher swell potential may be less than 10 feet below the surface in some areas. The potential for ground surface movement and damage to the existing and proposed improvements due to expansive soil and rock should be evaluated during Well Site design-level geotechnical evaluations of near surface materials.

3.6 Flooding

Due to the proximity of the Well Site to an identified floodplain, the potential for flooding at the WPS was evaluated and is not considered a significant hazard.

The WPS is located approximately 0.9 miles from the nearest identified floodplain[11]. There is an approximate grade of 3% from the Well Site to the floodplain (Uintah, 2021). Given the distance between the WPS and the floodplain, erosion from a flood event is not expected to impact the Well Site. During a heavy precipitation event at the Well Site or within the 1-mile radius of the WPS, it is highly unlikely surface water that contacts the WPS would comingle with flood waters due to the distance, elevation change, shallow slope, and soils drainage in the area.

[10] https://coloradogeologicalsurvey.org/hazards/expansive-soil-rock/ (accessed 7/30/2021)
[11] https://msc.fema.gov/portal/home (accessed 7/30/2021)

4. MEASURES TAKEN TO AVOID, MINIMIZE, OR MITIGATE IMPACTS OF GEOLOGIC HAZARDS

4.1 Subsidence and Collapsible Soils

Based on available USDA soil information, it is likely that potentially moisture-sensitive Eolian surficial soils are present at the Well Site and may be prone to settlement from compressible or collapsible soil conditions. If left in place during construction, these soils will likely not be suitable to support structures and/or improvements at the Well Site. Soil and stormwater management for purposes of oil and gas development can greatly mitigate risks due to collapsible soils. Crestone will implement best management practices (BMPs) during development of the Well Site to mitigate impacts from potential collapsible soils. During drilling operations, current Crestone pad construction practice places Soilcrete® in a roughly 60 foot wide by 150 foot long rectangle to support the drilling rig loads and in the remainder of the pad, plastic/rubber and oak mats are placed under the drill rig substructure and other ancillary third party equipment. Improvements, including but not limited to, shallow foundations, concrete slabs, equipment anchor points, driveways and storage areas, etc. will need to be constructed on either sub-excavated, moisture conditioned and adequately placed and compacted native soils or on engineered fill, or on piles embedded into bedrock. The type, depth, and extent of sub-excavation and replacement fill, and compaction levels or pile configurations will be specified in design-level geotechnical plans and drawings. Additionally, adequate surface drainage will be designed and installed in accordance with a Surface Water Management Plan (SWMP) to reduce ponding and infiltration of water into the surficial soils. The SWMP will identify surface grading and completion, utilization of swales, spillways, diversion ditches, and retention ponds to channelize and contain stormwater. Following construction, Crestone will complete daily inspections at the Well Site to identify and document any changes in ground surface (e.g., erosion, depressions, pooling water) an implement corrective actions.

Undermined areas for subsidence due to historical mining activity are located within one mile, but greater than one half mile, from the Well Site. Based on the proposed WPS, it is not expected that drilling will impact these areas. However, Crestone will be aware of the potential to encounter underground mine void spaces and will monitor geologic conditions while drilling.

4.2 Expansive Soils and Rock

If expansive soils and/or rock are observed at the Well Site, BMPs will be implemented during construction to mitigate impacts to structures and/or improvements. Expansive soils and rock may be removed and replaced with compacted engineered fill or pre-wetted native soil. If expansive soils are not removed and will remain in place, they can be mechanically or chemically stabilized. Soil and stormwater management for purposes of oil and gas development can greatly mitigate risks due to expansive soils and rock. Ground improvements required for slabs or foundations will be specified in design-level geotechnical plans and drawings. Adequate surface drainage will be designed and installed in accordance with a SWMP to reduce ponding and infiltration of water into the sub-surface soils. The SWMP will identify surface grading and completion, utilization of

swales, spillways, diversion ditches, and retention ponds to channelize and contain stormwater. Following construction, Crestone will complete daily inspections at the Well Site to identify and document any changes in ground surface (e.g., mounding or other changes to ground surface conditions, damage to structures or improvements) an implement corrective actions.

4.3 Contingency Plan

Crestone implements incident action plans as part of its company-wide Emergency Response Plan. While this document goes into further detail, the basic steps to an incident response that may arise from hazardous geologic activity are summarized below.

1. Ensure the Safety of Public and Response Personnel – includes identifying the hazard and potentially any released material, establishing site control (i.e., hot zones, security, necessary evacuations), and developing site safety and health plans including monitoring.
2. Control Source of Spill (if applicable) – includes completing emergency shutdowns, initiating temporary repairs, and transferring product.
3. Manage Coordinated Response Effort – includes ensuring local officials and response support are included in response organization as required, establishing a unified command organization and facilities, and completing and confirming notifications.
4. Maximize Protection of Environmentally Sensitive Areas – includes implementing pre-designated response strategies, identifying resources at risk, and developing and implementing appropriate protection plans.
5. Contain and Recover Spilled Material (if applicable) – includes deploying containment booms, evaluating time-sensitive response technologies, and developing a waste management plan.
6. Remove Oil from Impacted Areas (if applicable)
7. Minimize Economic Impacts – includes considering tourism and local economic impacts throughout response, protecting public and private assets, establishing a damage and claims process.
8. Keep Stakeholders informed of Response Activities – includes providing a forum to obtain stakeholder input and concerns and providing response action details in a timely manner.

4.4 Site-Specific BMPs

Site-specific BMPs include:

- Design-level geotechnical plans and drawings for ground improvements that specify the type, depth, and extent of sub-excavation and replacement fill (either sub-excavated, moisture conditioned and adequately placed and compacted native soils or engineered fill), and compaction levels or configurations of piles driven into bedrock.

- During drilling operations, current Crestone pad construction practice places Soilcrete® in a roughly 60 foot wide by 150 foot long rectangle to support the drilling rig loads, and in the remainder of the pad, plastic/rubber and oak mats are placed under the drill rig substructure and other ancillary third party equipment.
- Provide adequate surface drainage in accordance with a SWMP to reduce ponding and infiltration of water into the surficial soils. The SWMP will identify surface grading and completion, utilization of swales, spillways, diversion ditches, and retention ponds to channelize and contain stormwater.
- Following construction, Crestone will complete daily inspections at the Well Site to identify and document any changes in ground surface (e.g., erosion, depressions, pooling water, heaving, swelling) and implement corrective actions.

5. SUMMARY

Based on the review of the potential and significant geologic hazards near the Well Site, it is Geosyntec's opinion that the Well Site can be safely developed. The significant geologic hazards identified are subsidence and collapsible soils and expansive soils and rock, both of which can be greatly minimized with engineering controls. To safely develop the Well Site, Crestone should:

- Follow stated BMPs in this Plan,
- Draft plans and drawings for geotechnical improvements prior to any Site work. These documents should be reviewed by an engineer with adequate Site and operational knowledge, and
- Carry out periodic inspections by personnel properly trained to identify changes to ground conditions.

6. REFERENCES

Apex Companies, LLC. Crestone Peak Resources Stormwater Management Plan, Submitted with Form 2A Application for Blue 3-65 33-32-31 1BH, 2AH, 2BH, 3AH, 3BH, 4AH, & 4BH, Adams County Colorado, 12 August 2021.

Hart, S.S. Potentially Swelling Soil and Rock in the Front Range Urban Corridor, Colorado, 1974.

Colorado Geological Survey, Collapsible Soils, 2018. https://coloradogeologicalsurvey.org/2018/28848-collapsible-soils/

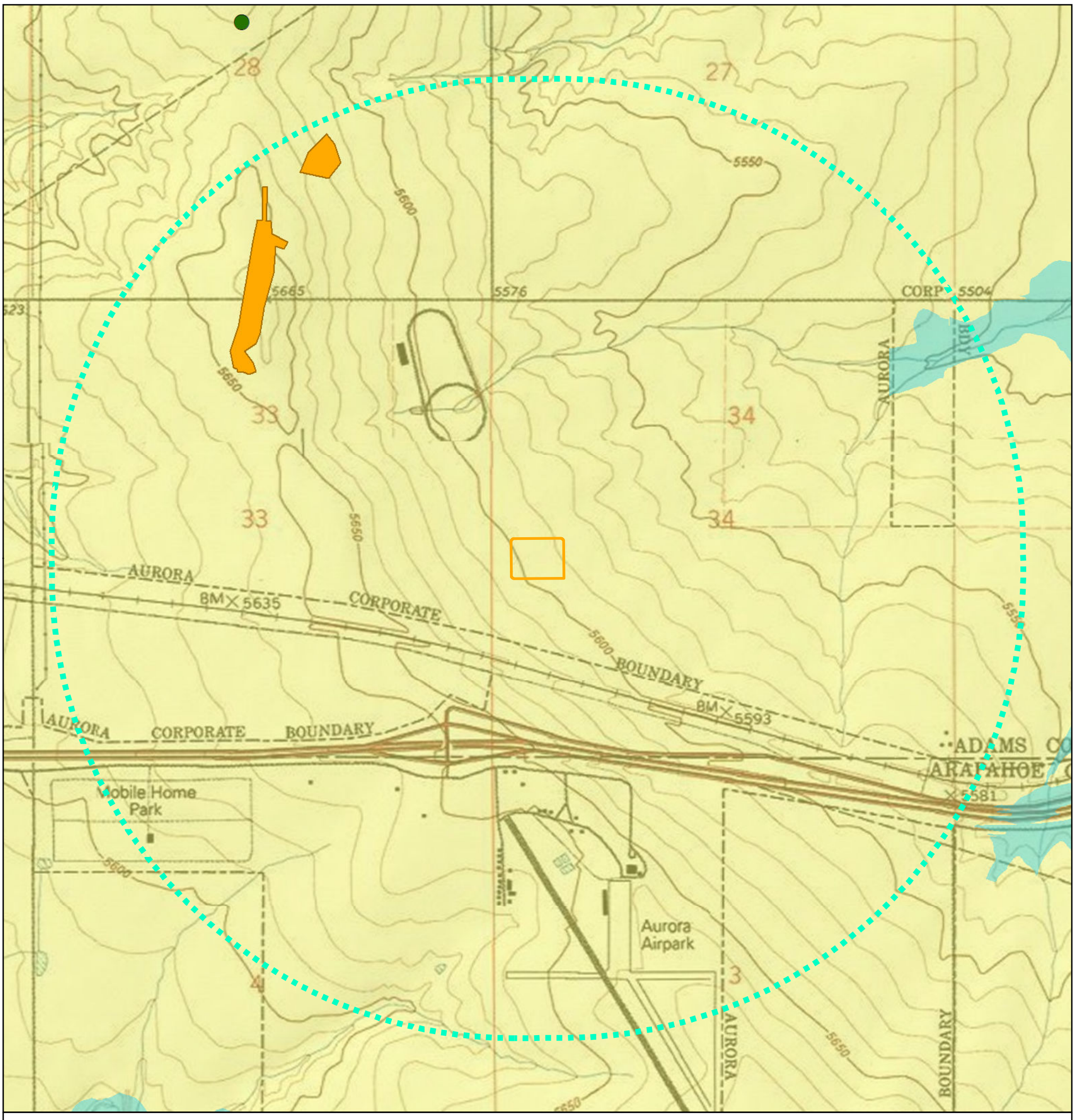
Uintah Engineering & Land Surveying, LLC. Blue 3-65 33-32-31 1BH, 2AH, 2BH, 3AH, 3BH, 4AH, & 4BH Oil & Gas Wells Preliminary Drainage Report, 2021.

United States Geological Survey (USGS). Geologic Map of the Greater Denver Area, Front Range Urban Corridor, Colorado, 1979.

USGS. Miscellaneous Investigations Series Map I-856-K. Depth to Water Table (1976-1977) in the Greater Denver Area, Front Range Urban Corridor, Colorado, 1983.

USGS. Hydrologic Investigations Atlas HA-736, Altitude of the water Table – Sheet 3 of 5. Geohydrology of the Shallow Aquifers in the Denver Metropolitan Area, Colorado, 1996.

MAPS



Geologic Hazards	Notes	Data Source	Data Link
Floodplains	Considered as potential Geologic Hazards and determined by the Professional Geologist to not constitute significant hazards to public health, safety or property, as addressed in the Geologic Hazard Plan.	COGCC	https://cogcc.state.co.us/documents/data/downloads/gis/Floodplain_Colorado_100yr_Preliminary_8_7_2015.zip
Coal Mines and Undermined Mine Areas		Colorado Geologic Survey	https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=1891e3149eda44af9dc8af81c4dc58a8
EG-14 Eolian (wind-blow) deposits	Collapsible Soils within 1-Mile	Colorado Geologic Survey	https://www.arcgis.com/apps/webappviewer/index.html?id=a6f816b35fb64d3da096e84af661f070
EG-14 Cretaceous and Tertiary Formations	Collapsible Soils within 1-Mile	Colorado Geologic Survey	https://www.arcgis.com/apps/webappviewer/index.html?id=a6f816b35fb64d3da096e84af661f070

Certification Statement:

I certify that I am a Professional Geologist, having met the educations requirements and professional work experience required by C.R.S. § 23-41-208(b). I have reviewed information pertaining to this Oil and Gas Location and the surrounding area and have identified Collapsible Soils and Expansive Soils and Rock as Geologic Hazards within a one mile radius.

Signature:_____ Date: 8/25/2021

Blue Working Pad 1 Mile Buffer
Blue Working Pad Surface
Coal Mines (CGS)
Undermined Mine Areas (CGS)
Fault (USGS) - None
Landslide (USGS) - None
Underground Mine (USGS) - None
Radioactive Minerals (CGS) - None
100-Year Floodplain (COGCC)
EG-14 Eolian (wind-blown) deposits &
EG-14 Cretaceous and Tertiary Formations
USGS Topographic Basemap

NW 1/4 SW 1/4 Section 34
T3S, R65W, 6th P.M.
Adams County, Colorado

CRESTONE PEAK RESOURCES

Blue 3-65 33-32-31

Geologic Hazards

Map 1

N W E S

8/23/2021
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0 500 1,000
Feet
Coordinate System: NAD 1983 BLM Zone 13N

Document Path: S:\GIS\Projects\Form2B\Pad\Blue\Blue 3-65 33-32-31 Geologic Hazard Map.mxd

Geologic Hazards	Notes	Data Source	Data Link
Floodplains	Considered as potential Geologic Hazards and determined by the Professional Geologist to not constitute significant hazards to public health, safety or property, as addressed in the Geologic Hazard Plan.	COGCC	https://cogcc.state.co.us/documents/data/downloads/gis/Floodplain_Colorado_100yr_Preliminary_8_7_2015.zip
Coal Mines and Undermined Mine Areas		Colorado Geologic Survey	https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=1891e3149eda44af9dc8af81c4dc58a8
EG-14 Eolian (wind-blow) deposits	Collapsible Soils within 1-Mile	Colorado Geologic Survey	https://www.arcgis.com/apps/webappviewer/index.html?id=a6f816b35fb64d3da096e84af661f070
EG-14 Cretaceous and Tertiary Formations	Collapsible Soils within 1-Mile	Colorado Geologic Survey	https://www.arcgis.com/apps/webappviewer/index.html?id=a6f816b35fb64d3da096e84af661f070

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I certify that I am a Professional Geologist, having met the educations requirements and professional work experience required by C.R.S. § 23-41-208(b). I have reviewed information pertaining to this Oil and Gas Location and the surrounding area, and have identified Collapsible Soils and Expansive Soils and Rock as Geologic Hazards within a one mile radius.

Signature:_____ Date: 8/25/2021

Blue Working Pad 1 Mile Buffer
Blue Working Pad Surface
Coal Mines (CGS)
Undermined Mine Areas(CGS)
Fault (USGS) - None
Landslide (USGS) - None
Underground Mine (USGS) - None
Radioactive Minerals (CGS) - None
100-Year Floodplain (COGCC)
EG-14 Eolian (wind-blown) deposits &
EG-14 Cretaceous and Tertiary Formations
USGS Topographic Basemap

NW 1/4 SW 1/4 Section 34
T3S, R65W, 6th P.M.
Adams County, Colorado

CRESTONE PEAK RESOURCES

Blue 3-65 33-32-31

Geologic Hazards

Map 2

N W E S

8/23/2021

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Coordinate System: NAD 1983 BLM Zone 13N

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