

A12-02 PAD  
GEOLOGIC HAZARD MAP



GEOLOGIC HAZARDS: (AS MEASURED FROM THE PROPOSED WORKING PAD SURFACE)	
THERE ARE NO GEOLOGIC HAZARDS WITHIN THE ONE MILE RADIUS	

HAZARD TYPE	DISTANCE (N/A IF >5280')	SOURCE, DESCRIPTION IF <5280'
AVALANCHES	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
LANDSLIDES	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
ROCK FALLS	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
MUDFLOWS	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
UNSTABLE OR POTENTIALLY UNSTABLE SLOPES	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
SEISMIC EFFECTS	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
RADIOACTIVITY	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
GROUND SUBSIDENCE	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS
MINE EXTENT	N/A	COGCC GIS, WELD COUNTY PROPERTY PORTAL, CO GEOLOGIC SURVEY MAPS

COLLAPSIBLE SOILS ARE EXTENSIVE BEYOND REASONABLE MAP  
SCALE (DATA SOURCE: CGS)

THE FOLLOWING SOURCES HAVE BEEN CONSULTED TO DETERMINE IF ANY HAZARDS EXIST AND TO ASCERTAIN THE BOUNDARIES  
OF ANY IDENTIFIED HAZARDS:

**COGCC GIS:** [https://cogccmap.state.co.us/cogcc\\_gis\\_online/](https://cogccmap.state.co.us/cogcc_gis_online/)  
**Weld County Property Portal:** <https://www.co.weld.co.us/maps/propertyportal/>  
**Colorado Geological Survey:** ON-001 -- Colorado Earthquake and Fault Map  
<https://cgsarcimage.mines.edu/ON-001/>  
ON-006-01 -- Statewide Landslide Inventory Map  
<https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=9dd73db7fbc34139abe51599396e2648>  
ON-006-06 -- Colorado Historic Coal Mines  
<https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=1891e3149eda44af9dc8af81c4dc58a8>  
ON-B-40M -- Radioactive Mineral Occurrences of Colorado and Bibliography  
<https://cologeosurvey.maps.arcgis.com/apps/webappviewer/index.html?id=c5381e1335284d63bfa5d4b018b3372f>  
CLIENT PROVIDED DATA MAY ALSO BE UTILIZED BEYOND THESE SOURCES.

DISCLAIMER:  
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES.  
PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED  
UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.



FIELD  
DATE:  
05-21-21  
  
DRAWN BY:  
IJM  
  
DRAWING  
DATE:  
07-14-21  
  
CHECKED BY:  
CSG

SITE NAME:  
A12-02 PAD  
  
SURFACE LOCATION:  
NW 1/4 NE 1/4 SEC. 12, T6N, R64W, 6TH P.M.  
WELD COUNTY, COLORADO

DATA SOURCE:  
AERIAL IMAGERY: NAIP 2019  
GEOLOGIC HAZARDS: COUNTY GIS, COGIS, USGS GIS  
  
PUBLICLY AVAILABLE DATA SOURCES HAVE NOT  
BEEN INDEPENDENTLY VERIFIED BY ASCENT.

LEGEND:  
● = PROPOSED WELL  
— = SECTION LINE  
— = TOWNSHIP LINE

5280' RADIUS FROM WPS  
OIL & GAS LOCATION  
WORKING PAD SURFACE

COLLAPSIBLE SOILS  
EXTENT OF COLLAPSIBLE SOILS

PREPARED FOR:  
**noble energy**



**To: Mo Montoya and Ann Feldman regarding DP139 and DP140**

Referring: COGCC Operator Guidance in accordance to Rule 304.b(7).1 and 304.c.(21)

**In regards to Location (A12-02 Pad) in Township 6N, Range 64W, and Sections 12, for Chevron's Drilling Plan 139 and 140:**

**NO SIGNIFICANT HAZARDS HAVE BEEN IDENTIFIED:**

I, Cody Allen, certify that I am a Professional Geologist, having met the educational 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 surrounding area provided by Ascent Geomatic Solutions, and identify no Geologic Hazards within a one mile radius. Sources provided include: The COGCC GIS, Weld County Property Portal, and Colorado Geologic Survey Maps. Hazards types investigated include avalanches, landslides, rock falls, mudflows, unstable slopes, seismic effects, radioactivity, ground subsidence, and mine extents as published by the above sources.

**In regards to (A12-10 Pad) in Township 6N, Range 64W, and Sections 12, for Chevron's Drilling Plan 139 and 140:**

**NO SIGNIFICANT HAZARDS HAVE BEEN IDENTIFIED:**

I, Cody Allen, certify that I am a Professional Geologist, having met the educational 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 surrounding area provided by Ascent Geomatic Solutions, and identify no Geologic Hazards within a one mile radius. Sources provided include: The COGCC GIS, Weld County Property Portal, and Colorado Geologic Survey Maps. Hazards types investigated include avalanches, landslides, rock falls, mudflows, unstable slopes, seismic effects, radioactivity, ground subsidence, and mine extents as published by the above sources.

**In regards to Location (A12-07 Facility in Township 6N, Range 64W, and Sections 7, for Chevron's Drilling Plan 140:**

**NO SIGNIFICANT HAZARDS HAVE BEEN IDENTIFIED:**

I, Cody Allen, certify that I am a Professional Geologist, having met the educational 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 surrounding area provided by Ascent Geomatic Solutions, and identify no Geologic Hazards within a one mile radius. Sources provided include: The COGCC GIS, Weld County Property Portal, and Colorado Geologic Survey Maps. Hazards types investigated include avalanches, landslides, rock falls, mudflows, unstable slopes, seismic effects, radioactivity, ground subsidence, and mine extents as published by the above sources.

Date: August 30th, 2021



**Cody Allen**

Senior Geologist - RBU

**Mobile: 281-382-5220**

**Email: [cody.allen@chevron.com](mailto:cody.allen@chevron.com)**

**<https://www.chevron.com>**

## Attachment 1: Professional Credentials

### **Cody L. Allen**

◆ Denver, CO.

◆ (720)-284-8758 (cell)

◆ [cody.allen@chevron.com](mailto:cody.allen@chevron.com)

## **WORK EXPERIENCE**

---

**2021-Present** Rockies Business Unit, Senior Geologist A&D, Chevron, Denver, CO  
**2020-2021** U.S. Onshore Exploration Manager, Noble Energy Inc., Houston, TX  
**2017-2020** Business Development, Geoscience Supervisor, Noble Energy Inc., Houston, TX  
**2016- 2017** New Ventures Mexico Exploration, Senior Geologist; Team Lead, Noble Energy Inc.,  
**2012-2016** Gulf of Mexico Exploration, Geologist 3, Noble Energy Inc., Houston, TX  
**2011-2012** Eastern Mediterranean Development, Geologist 2, Noble Energy Inc., Houston, TX  
**2010-2011** Gulf Coast and West Texas Exploration/ Development, Geologist 1, Noble Energy Inc.  
**2008-2009** Geologist, Noble Energy Inc., Denver, CO  
**2006-2008** Geophysical Engineer, Colog Inc, Denver, CO

## **EDUCATION**

---

### **Colorado State University: (2008-2010)**

**Master of Science**, Geosciences, 2010

Thesis: Timing and Genesis of Fractures in the Niobrara Formation, Northeastern Front Range and Denver Basin, Colorado (GPA: 3.83)

### **Western State Colorado University: (2002-2005)**

**Bachelor of Arts**, Geology, 2005.

Senior Thesis: Structure and Depositional Analysis of the Triassic Moenkopi Formation, Gateway, CO to Fisher Towers, Utah (Overall GPA: 3.16, GPA in major: 3.38)

## **O&G and LEADERSHIP TRAINING**

---

### **Harvard ManagerMentor; Business Review Modules:**

**Courses:** Work Place Ethics, Strategic Thinking, Innovation and Creativity, Difficult Interactions, Crisis Management, Global Collaboration

### **Nautilus, SCA, Rose and NBL In-house Training:**

**Courses:** Unconventional Resource and Risk assessment, Geochemistry and Petroleum System Modeling, Salt Tectonics Field Seminar (Nova Scotia), Deepwater Depositional System Stratigraphy for Exploration and Development, Reservoir Engineering for Geoscientists, Gravity and Magnetism for the Oil Industry, Petrophysics, Rock Physics for Seismic Interpretation, Subsurface Geological Mapping  
Several others

**Software Skills:** Petra, Transform, Spotfire, Geoframe IESX, Petrel, Kingdom Suite SMT, RokDoc, ArcGIS,

## **HONORS/AWARDS**

---

2018, 2011 Noble Energy Internal Technology Conference "Talk of the Year" award  
2017, 2016, 2015 Nominee for Noble Energy Mentor of the Year award  
2016 Noble "LEAD" Program Graduate for future company leaders  
2016 Noble Energy Geologic Steering Committee Member  
2014, 2015 Noble Energy Technology Conference Chairman  
2012 Desk and Derrick certificate of appreciation, Guest Speaker for North Harris County  
2005 Rocky Mountain Association of Geologists "Outstanding Senior Student"