



RULE 304.E. SUBSTANTIALLY EQUIVALENT INFORMATION COVER SHEET

Boomhog 8-59 3 Oil and Gas Development Plan

Boomhog 8-59 3 Pad: NWSW Section 3, Township 8 North, Range 59 West

Form 2A Doc #403456631

Weld County, Colorado

The attached 1041 WOGLA Application is being submitted as a substantially equivalent document to the Transportation Plan required by ECMC Rule 304.c.(6).

This document was developed for the Weld County 1041 WOGLA.

This document does not conform to ECMC rules or guidance in the following ways:

None.

This document should be accepted as substantially equivalent:

The attached Required Information Part D (Pages 26-28) within the 1041 WOGLA Application 1041WOGLA22-0045 and the attached Weld County Access Permit application (contains all of the substantially equivalent information required as an equivalent traffic planning document pursuant to Rule 304.c.(6).



- Bison will limit construction activities during wet periods to avoid excess disturbance of areas surrounding operations.
- Unless specifically requested by the landowner, the proposed access road and well pad will be contoured and revegetated to a stable condition.
- Bison will regrade cut and fill areas awaiting reclamation to match pre-existing contours to the nearest extent possible to provide long term erosion control and site stability.
- Bison will grade the topsoil stockpile to ensure that all surfaces can be stabilized safely and effectively.
- Bison will stabilize and maintain areas needed for production operations or for subsequent drilling operations to minimize dust and erosion to the extent possible.
- Bison will implement a Spill Prevention, Control, and Countermeasure plan to protect soil from potential spills.

Vegetation

- Bison will confirm that erosion and sedimentation controls are implemented as necessary before and after seeding operations, as detailed in the site-specific SWMP.
- Bison will monitor and maintain the vegetation on the topsoil stockpiles to promote native vegetation and to suppress invasive and noxious weeds.

Public Welfare – General

- To minimize the possibility of fires during the construction phase, equipment, including welding trucks, will be equipped with fire extinguishers and spark arresters.
- Vehicle users associated with the oil field will be instructed to travel at low speed and remain on existing roads and the well pad at all times.
- Bison will use SCADA to reduce the frequency of vehicle trips to the Oil and Gas location to monitor well operations.
- Bison will implement a Transportation Plan to guide the management of transportation throughout the implementation of the proposed project.

Light

- Light fixtures mounted on the equipment will be angled in a downward direction.
- Use of LED fixtures, as feasible, to reduce skyglow.
- Position lights in a downward direction where vertical light is not required.
- Angle light away from off-site buildings.
- Reduce lighting within well pad to the minimal level for safe pre-production activity.
- Direct lights to drilling and completion tasks only.

D. Please provide a description of the kind of vehicles (type, size, weight) that will access the Oil and Gas Location during drilling and completion operations and define the haul route. This description shall include the following information:

- 1. The number of round trips/day (Round trip = 1 trip in and 1 trip out) expected for each vehicle (type, size, weight) passenger cars/pickups, tandem trucks, semi-truck/trailer/RV.**



The duration of drilling and completion activity at this site is estimated to be approximately 120 days for drilling and approximately 55 days for completion and flowback and will range from passenger cars and pickups (i.e., passenger vehicles), to tandem trucks (i.e., single unit vehicles), and semi-truck/trailers (i.e., multiple unit trucks). All 12 wells will be drilled consecutively during one occupation (no demobilization and remobilizations of drill rigs). Estimated truck trips during each phase of the project are included in the table below.

Notably, Bison's use of a Main Line Valve Tank and lay flat water lines during completions will eliminate a significant amount of truck traffic. Specifically, by piping water to the Location and storing it in the MLVT for completions, Bison is eliminating more than 35,000 water haul truck trips. Bison is also reducing truck trips during production by using pipeline takeaway for fluids. On average, pipeline takeaway will eliminate more than 61,000 truck trips over the life of the project.

Phase of Development	# of Vehicle Roundtrips (per day)	Passenger car equivalent roundtrips (per day)
Construction Phase: earthwork of pad/facility & access road (20 days +/-)		
Passenger Vehicles ⁽¹⁾	10	10
Single Unit Trucks ⁽²⁾	2	4
Multiple Unit Trucks ⁽³⁾	25 – 30	90
TOTAL roundtrips per day =	42	104
Drilling Phase (~120 days +/-, ~6 - 10 days/well)		
Passenger Vehicles ⁽¹⁾	7	7
Single Unit Trucks ⁽²⁾	3	6
Multiple Unit Trucks ⁽³⁾	7	21
TOTAL roundtrips per day =	17	34
Completion Phase (45 days +/-, ~15 days/4-well zipper frac)		
Passenger Vehicles ⁽¹⁾	20	20
Single Unit Trucks ⁽²⁾	2 – 3	6
Multiple Unit Trucks ⁽³⁾	20 to 150 ⁽⁴⁾	60 - 450
TOTAL roundtrips per day =	42 – 173	86 – 476
Flowback Phase (5 – 10 days +/-)		
Passenger Vehicles ⁽¹⁾	5	5
Single Unit Trucks ⁽²⁾	2	4
Multiple Unit Trucks ⁽³⁾	3	9
TOTAL roundtrips per day =	8	18
Production/Operations Phase (ongoing for life of well, assuming facility is tied-in to distribution/collection system)		
Passenger Vehicles ⁽¹⁾	2	2
Single Unit Trucks ⁽²⁾	0	0
Multiple Unit Trucks ⁽³⁾	0	0
TOTAL roundtrips per day =	2	2

⁽¹⁾ **Passenger Vehicle:** < 20'; gross vehicle weight: 4,500 – 8,500 lbs (Source: CDOT State Highway Access Code [SHAC]), includes standard pickup trucks

⁽²⁾ **Single Unit Truck:** 20' – 40'; gross vehicle weight: 10,000 – 20,000 lbs; = 2 passenger car equivalents (CDOT SHAC)

⁽³⁾ **Multiple Unit Truck:** >40'; gross vehicle weight: 50,000 – 70,000 lbs; = 3 passenger car equivalents (CDOT SHAC)

⁽⁴⁾ Multiple unit truck volume during completion phase dependent upon water transport options, i.e., temporary lay flat line vs. trucking water to location.



- 2. The routes vehicles will travel from the access of the Oil and Gas Location to the nearest county designated arterial or collector roadway or state highway.**

The proposed access point for ingress to the well pad is from Highway 14 north to the unpaved WCR 115, which is the nearest connector road.

- 3. The travel distribution along the identified haul routes (e.g. 50% of traffic will come from the north, 20% from the south, 30% from the east, etc.).**

To access WCR 115 north to the well pad, travel distribution is expected to be 50% of traffic coming from the east on Highway 14 and 50% of traffic coming from the west on Highway 14.

- 4. The time of day when the highest traffic volumes are expected.**

The highest traffic volumes are expected at the beginning and end of daylight hours 6-10 AM and 5-8 PM. During fracking operations, sand delivery via the Sand Box system will be fairly continuous throughout the 24-hr day.

- 5. Describe site-specific traffic reduction measures that will utilized.**

Applicable traffic reduction measures shall be employed, including pipeline takeaway of oil, gas and produced water (rather than trucking) and automation of wells. In addition, all new well sites are remotely monitored 24 hours a day, seven day a week. This monitoring also helps reduce traffic to well sites because Bison personnel can turn wells and equipment on and off, measure at tank levels, verify pressures and temperatures. This remote monitoring reduces daily traffic to the location.

E. Describe plans for interim and final reclamation of the proposed Oil and Gas Location.

Interim reclamation for the Boomhog Location will commence as soon as practicable and, at minimum, within 6 months following drilling and subsequent operations. Debris, waste material, and equipment associated with drilling, re-entry, and completion operations will be removed from the facility. All disturbed, non-working areas affected by drilling or subsequent operations, except those areas needed for production operations or for subsequent drilling operations to be commenced within 12 months, shall be reclaimed as nearly as practical to their original condition or their designated final land use. The disturbed areas will be reseeded with species consistent with the plant community identified during the baseline vegetation survey in the first favorable season following rig demobilization. Areas needed for production operations or for subsequent drilling operations to be commenced within 12 months will be stabilized and maintained to minimize dust and erosion to the extent possible.

Within 90 days subsequent to plugging and abandonment of the Boomhog Location, superfluous debris and equipment shall be removed from the site. Bison will restore the surface of the Land affected by such terminated operations as near as possible to the previous state that existed prior to operations, and as approved by the surface owner.



Weld County Dept. of Planning Services
 1555 N. 17th Ave.
 Greeley, CO 80631
 Phone: (970)400-6100
 Fax: (970)304-6498

ACCESS PERMIT APPLICATION FORM

Property Owner

Name Wade E Castor and Deland Castor
 Company _____
 Address 22791 Highway 39
 City Weldona State CO Zip 80653-7908
 Phone _____
 E-mail _____

Information

The access is on CR 115
 Nearest intersection: CR 115 & CR HWY 14
 Distance from intersection: 25,344 ft.
 Parcel number: 053903000013
 Section/Township/Range: 3/8N/59W
 Total number of existing accesses to parcel: 0
 Total number of proposed accesses: 1
 Latitude 40.69060 Longitude -103.971747
 Planning/building case number _____

Description of Work

Access for proposed 12-well Boomhog 8-59 3 Pad oil & gas location.

Authorized Agent/Applicant (if different from Owner)

Name Katie Gillen
 Company Bison IV Operating, LLC
 Address 518 17th Street, Suite 1800
 City Denver State CO Zip 80202
 Phone 720.644.6997 ext. 6-8
 E-mail kgillen@bisonog.com

Proposed Access Information

Culvert size & type (15" CMP/RCP min.) _____
 Materials used to construct access _____
 Access construction schedule _____
 Approx. width of access 20'

Proposed Access Count

Residential _____
 Commercial _____
 Oil and Gas 1
 Agricultural _____
 Temporary _____

Existing Access Count

Residential _____
 Commercial _____
 Oil and Gas _____
 Agricultural _____

Required Attached Documents

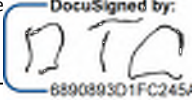
- Property map or sketch (template available on pg. 2) indicating all proposed and existing accesses
- Access Pictures (N, S, E, & W at the location where the access meets a county maintained road)
- Access Authorization Form (Not required if the application is signed by the property owner)
- Additional application materials may be required by the Department of Planning Services.

Fee schedule

\$150 - Temporary & Residential
 \$300 - Industrial & Commercial

Submit application to accesspermits@weldgov.com

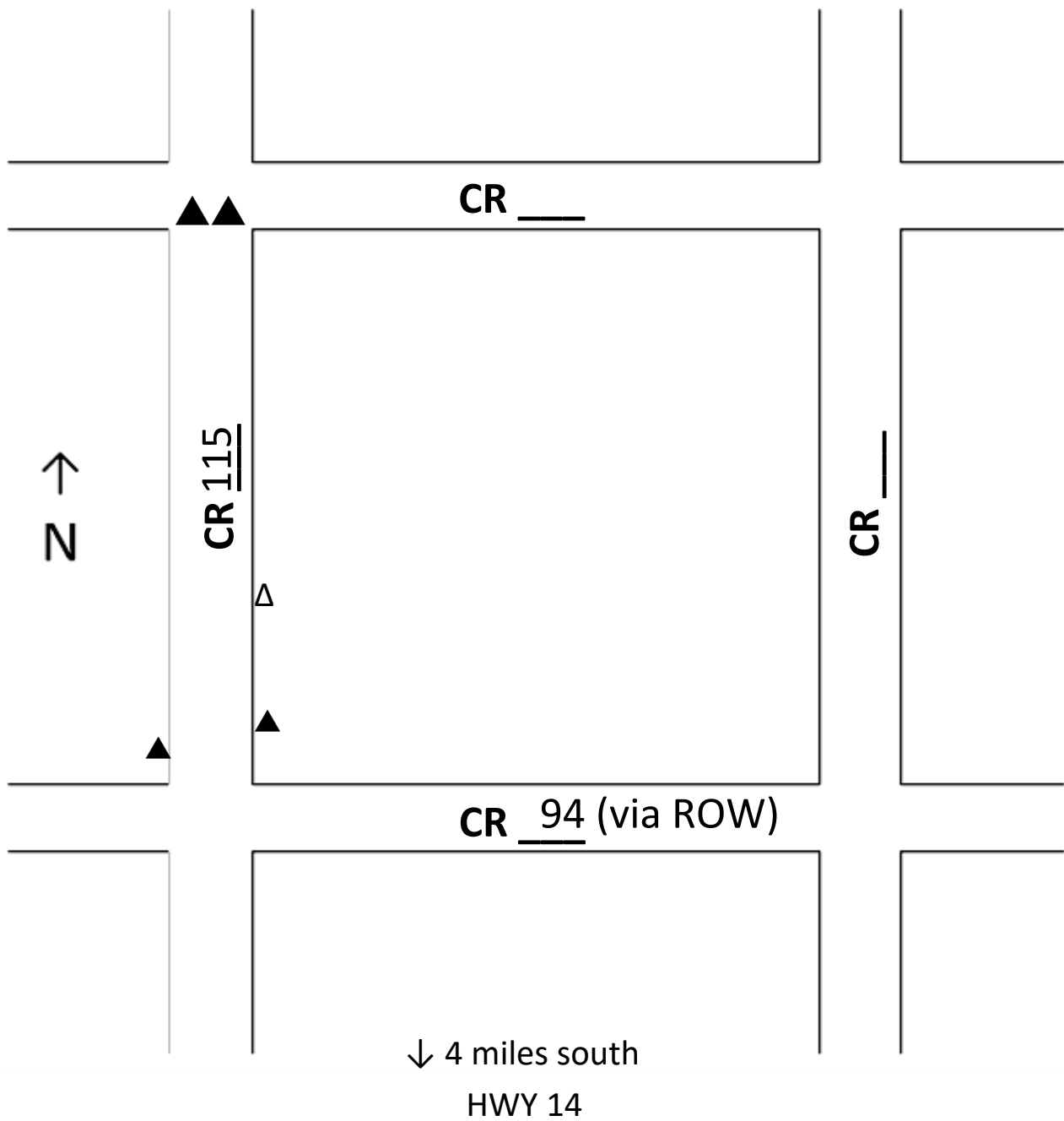
By accepting this permit, the undersigned Property Owner/Authorized Agent, under penalty of perjury, verifies they have received all pages of the permit application; they have read and understand all the permit requirements and provisions set forth on all pages. By virtue of their signature the Property Owner/Authorized Agent is bound by and agree _____ permit requirements and provisions, all Weld County ordinances, and state laws regarding access construction.

Signature  Printed Name June 6th 2023 Date 6/6/2023
 Signature _____ Printed Name _____ Date _____
 (In case of multiple Property Owners/Authorized Agents)

Accesses must be constructed within 1 year of issuance. An extension can be requested from the Weld County Department of Planning Services. Accesses must be in accordance to Chapter 8, Article XIV and Appendix 8-B of County Code 120

Parcel Sketch

▲ = Existing Access Δ = Proposed Access



1041 WOGLA ACCESS PHOTOS



Looking from the roadway into the access location



Looking from the access to the roadway



Looking down the roadway to the left of the access



Looking down the roadway to the right of the access

Well Pad Name: BOOMHOG 8-59 3 PAD

Operator: BISON IV OPERATING, LLC

Location: T8N R59W SEC. 3 NW ¼ SW ¼

Date Taken: 10/13/2022

LAT: 40.69060° N **LONG:** 103.971747° W



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