TOPSOIL PROTECTION PLAN

Dorado 36

Contents

Appendices

1. Introduction

Bison Oil & Gas IV (Bison) contracted H2E Incorporated (H2E) to prepare this document to satisfy the requirements of ECMC Rules 304.c.(14) for developing a topsoil protection plan in accordance with the requirements of ECMC Rule 1002.c, accompanying the Form 2A to demonstrate the Commission's Rules for the operation of the proposed oil and gas location in a manner that protects and minimizes adverse impacts to public health, safety, welfare, the environment, and wildlife resources.

H2E field staff are experienced and competent in describing and classifying field soils and determining suitable topsoil depth. This document was reviewed by H2E's Reclamation Program Manager, Clay Wood, a Certified Professional in Rangeland Management (CPRM #CP20-001) and a Certified Ecological Restoration Practitioner (CERP #0392).

2. Desktop Classification of Soils

To determine anticipated site characteristics for the location, Geographic Information System (GIS) data from the Natural Resource Conservation Service (NRCS) along with aerial photography was overlain on the site's proposed disturbance boundary to derive potential ecological site descriptions (ESDs) and NRCS soil map units. A desktop review of the proposed project area indicates the presence of three soil map units across the well pad:

- 65% Vona sandy loam (3 to 9 percent slopes)
- 27% Vona loamy sand (3 to 9 percent slopes)
- 7% Tassel loamy fine sand (5 to 20 percent slopes)

The Vona sandy loam (3 to 9 percent slopes) soil map unit typical profile shows an anticipated H1 depth of 0 to 6 inches consisting of sandy loam, where it transitions to an H2 (6 to 15 inches) consisting of fine sandy loam. The depth to a restrictive feature is more than 80 inches. The drainage class is well drained, and the available water capacity is moderate (about 6.4 inches). This soil type has a hydrologic soil group classification of Group A - soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.

The Vona loamy sand (3 to 9 percent slopes) soil map unit typical profile shows an anticipated A horizon depth of 0 to 7 inches consisting of loamy sand, where it transitions to an Bt1 horizon (7 to 14 inches) consisting of sandy loam. The depth to a restrictive feature is more than 80 inches. The drainage class is well drained, and the available water capacity is moderate (about 6.4 inches). This soil type has a hydrologic soil group classification of Group A - soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.

The Tassel loamy fine sand (5 to 20 percent slopes) soil map unit typical profile shows an anticipated H1 depth of 0 to 7 inches consisting of loamy fine sand, where it transitions to an H2 (7 to 19 inches) consisting of fine sandy loam. The depth to a restrictive feature is 10 to 20 inches to paralithic bedrock. The drainage

class is well drained, and the available water capacity is very low (about 2.1 inches). This soil type has a hydrologic soil group classification of Group D - soils having very slow infiltration rates when thoroughly wetted, consisting chiefly of (1) clayey soils with high swelling capacity or potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

Slopes in the project area range from 0-20%. The risk of susceptibility to erosion/runoff is low to moderate based on K factor values; the overall erosion hazard is slight.

See Appendix A for soils/erosion maps. The NRCS soils reports can be found as an attachment to the form 2A.

3. Field Classification & Methodology

H2E field staff excavated soil test pits by hand to determine actual topsoil depths across the proposed project location. At least one test pit is excavated within each NRCS soil type across the project area. Soil samples were collected from the topsoil and subsoil horizons at each test pit location for laboratory analysis. Test pits were used as a starting point to compare NRCS soil data regarding topsoil depth with field-verified topsoil depths and determine the amount of salvageable topsoil. The methodology involves considering ecological site descriptions, plant communities, apparent soil depths, and any other indicators that soil type and depth characteristics are changing and digging additional test pits as needed to ascertain soil types or depths. Based on field conditions and developments, a representative number of soil samples are also taken throughout the areas of the planned disturbance using a one-piece probe soil sampler (push probe) to confirm test pit findings and to ascertain more precise boundaries of topsoil types and depths.

3.1. Test Pit #1 Tassel loamy fine sand (5 to 20 percent slopes)

Test pit #1 was excavated to a depth of 15 inches. A distinct color and texture change was observed at a depth of 4 to 5 inches, where the soil changed from a grayish brown color (10YR 5/2) with a loamy sand texture to a light yellowish brown color (10YR 6/4) and a sandy loam texture. The NRCS soil report typical profile shows an H1 horizon ranging from 0 to 7 inches consisting of loamy fine sand, which then transitions to fine sandy loam (7 to 19 inches), which corresponds to field observations. Several soil probe samples were also taken throughout the project area, which also identified a color/texture change occurring around 4 to 5 inches throughout the project area.

3.2. Test Pit #2 Vona sandy loam (3 to 9 percent slopes)

Test pit #2 was excavated to a depth of 19 inches. A distinct color change was observed at a depth of 5 inches, where the soil changed from a light brownish gray color (10YR 6/2) to a brown color (10YR 4/3). No change in texture was observed – topsoil and subsoil were textured as sandy loam. The NRCS soil report typical profile shows an H1 horizon ranging from 0 to 6 inches consisting of sandy loam, which then transitions to an H2 of sandy loam (6 to 15 inches), which corresponds to field observations. A number of soil probe samples were also taken throughout the project area, which also identified a color change occurring around 5 inches throughout the project area.

3.3. Test Pit #3 Vona loamy sand (3 to 9 percent slopes)

Test pit #3 was excavated to a depth of 17 inches. A distinct color and texture change was observed at a depth of 4 to 5 inches, where the soil changed from a grayish brown color (10YR 5/2) with a loamy sand texture to a brown color (10YR 5/3) and a sandy loam texture. The NRCS soil report typical profile shows an H1 horizon ranging from 0 to 7 inches consisting of loamy sand, which then transitions to fine sandy loam (7 to 14 inches), which corresponds to field observations. Several soil probe samples were also taken throughout the project area, which also identified a color/texture change occurring around 4 to 5 inches throughout the project area.

3.4. Test Pit Findings Summary

The Dorado location exists entirely within a disturbed grassland/rangeland with an apparent topsoil horizon depth of 4 to 5 inches across the project area. Per ECMC regulation 1002.b.(2), "the topsoil horizon or top six (6) inches, whichever is deeper, will be separated and stored to facilitate subsequent reclamation;" therefore, the top six (6) inches will be stripped across the project area.

Soil sample lab analytical results can be found in Appendix C. Locations of the test pits, push-probe points, and overall topsoil depth across the project area are shown in Appendix B – Test Pit Location Map. See Appendix D for the test pit photo documentation and Appendix E for the Test Pit and Soil Probe Field Form, which documents field observations.

3.5. Total Estimated Topsoil Salvage

The estimated total volume of topsoil to be salvaged is 13,375 cubic yards.

4. Topsoil Stockpile and Protection

ECMC regulations for topsoil stockpile construction state, "All stockpiled soils shall be protected from degradation due to contamination, compaction and, to the extent practicable, from wind and water erosion during drilling and production operations. Best management practices to prevent weed establishment and to maintain soil microbial activity shall be implemented."

During initial pad construction, the topsoil will be stripped from the disturbance area and stored onsite (in the northern corner of the pad) for future use during pad pull-back and interim reclamation. All stockpiled topsoil will be protected from degradation due to contamination, compaction, and, to the extent practicable, from wind and water erosion. This will be achieved initially by applying cat-tracking to the topsoil pile and using additional BMPs if needed. The topsoil stockpile will be 8 feet tall and will have 3:1 slopes. Bison will maintain a weed mitigation maintenance schedule to prevent the establishment of weeds on the topsoil pile. Bison will consult with the landowner and coordinate with the Weld County Weed Control Division as needed if/when conducting weed management activities in compliance with the Colorado Noxious Weed Act. During pad pull-back and interim reclamation phases, the topsoil pile will be respread over the non-working surface. The reclaimed area will be seeded/mulched in order to achieve permanent stabilization. A topsoil pile will remain in the northern corner of the pad following interim reclamation, which will be seeded/mulched for long-term stabilization and will be used at the time of final reclamation of the location. See the SWMP Construction Layout Drawings, included in Appendix F, for the specific location of the topsoil stockpile during the construction and interim phases.

5. Seedbed Preparation & Seeding

After decompaction, the top 3-4 inches of soil will be prepared for seed application using a high-speed disk and/or a mulcher as needed. Straw mulch will be applied and crimped to topsoil adding further stabilization and increasing moisture retention. Seedbed will be void of earthen clods and firm enough to keep seed from being applied to deeply. Soil samples can be collected and analyzed prior to seed application to identify any amendments needed. Compost and fertilizer can be applied based on current site conditions and on an as needed basis.

Seed application will be performed using a disc seed drill equipped with depth bands, capable of direct seed placement no deeper than ¼ to ¾ inches, and functioning packer wheels with row spacing not exceeding 8 inches to adequately cover and stabilize the seed. Seeding will follow interim reclamation and be conducted during a spring or fall planting window to achieve maximum germination rates.

The seed mix to be used at the subject location was derived through consultation with the NRCS and can be found in the Stormwater Management Plan Appendix.

6. BMPs

Site-specific BMPs related to topsoil at the location are consolidated and provided in this section. The following list of BMPs are anticipated to be employed at the subject location.

- Cat-tracking/equipment-tracking will be used as a temporary stabilization measure of the topsoil pile.
- Seed/mulch will be used as a permanent stabilization measure of the topsoil pile.
- Weed mitigation will be performed (mowing and/or spraying) on a routine basis per Bison's seasonal schedule and on an ad-hoc basis when necessary. Routine inspection throughout the life of the pad will be used to identify when action is needed beyond the routine weed mitigation schedule. Bison will also coordinate with Weld County's Weed Division, when necessary, in compliance with the Colorado Noxious Weed Act.
- Compaction will be limited to maintain microbial activity within the topsoil pile, and the topsoil stockpile will be seeded/mulched to promote vegetation growth.

Appendix A

Soils Maps

BISON IV OPERATING

Stormwater Management Plan
Soils Map

Dorado Pad

N W E S

Date: 6/6/2024

0 0.15 0.3

Miles

1:9,890

Prepared by:

NHD Flowline

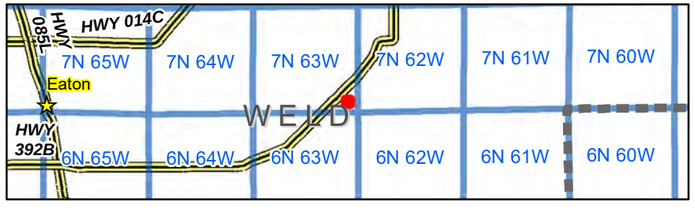
Wetland

Map Unit Name:

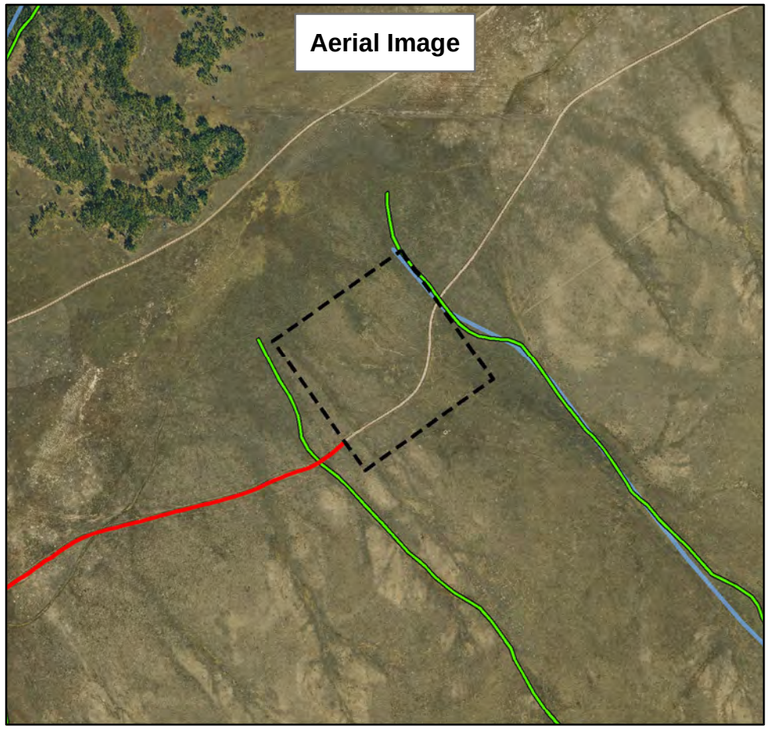
- Haverson loam, 0 to 3 percent slopes | 95120
- Nunn clay loam, 0 to 6 percent slopes | 95134
- Tassel loamy fine sand, 5 to 20 percent slopes | 95158
- Vona loamy sand, 3 to 9 percent slopes | 95168
- Vona sandy loam, 3 to 9 percent slopes | 95170

K Factor Value Groupings (Approximate):

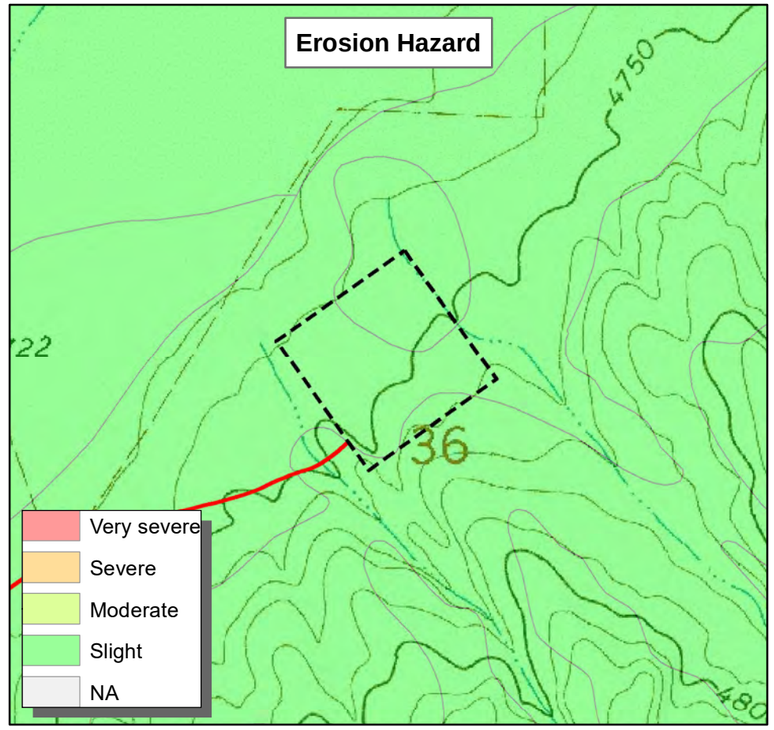
Low susceptibility to erosion/runoff: ≤ 0.2
Moderate susceptibility to erosion/runoff: > 0.2 - 0.4
High susceptibility to erosion/runoff: > 0.4

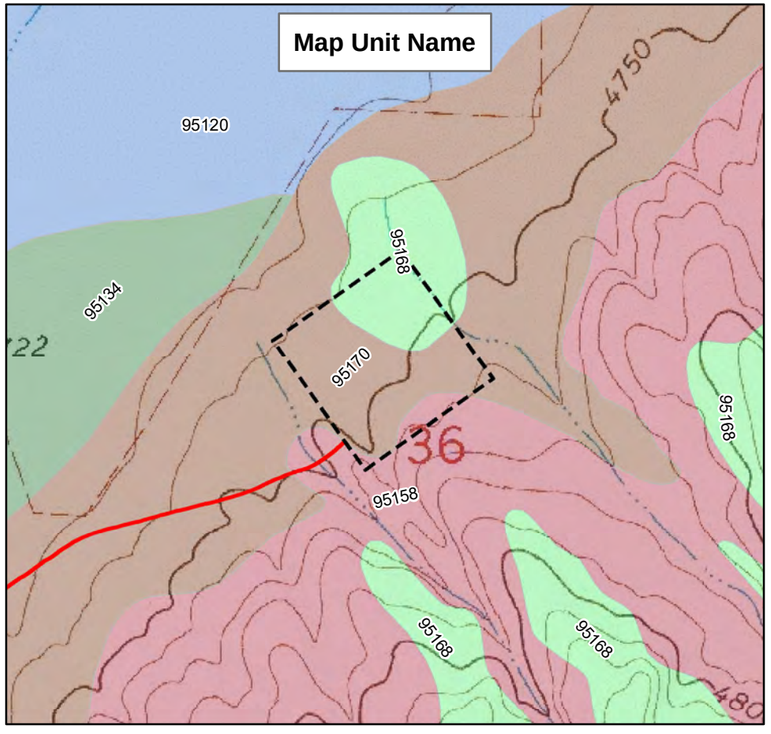


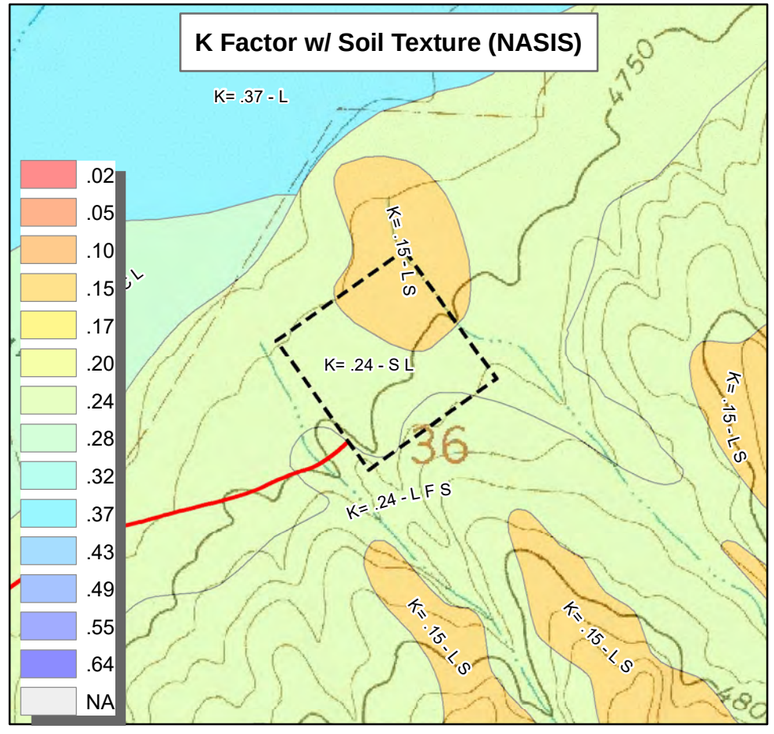
Document Name: BOG_Soils_V2 User Name: nwilson



All data is from the NRCS soil surveys and is useful for overview purposes only. Onsite verifications are required to confirm accuracy when used for planning.







Appendix B

Test Pit Location Map

BISON IV OPERATING

Topsoil Management Plan

Dorado Pad

Prepared by:

N W E S

0 260 520

Feet

Editor: nwilson

File: BOG_SOILS_MGMT_PLAN_V1

Scale:1:2,310

Date: 6/6/2024

Soil Test Pit

Soil Probe Point

Road - Proposed

Construction Boundary

Riverine

Waterway

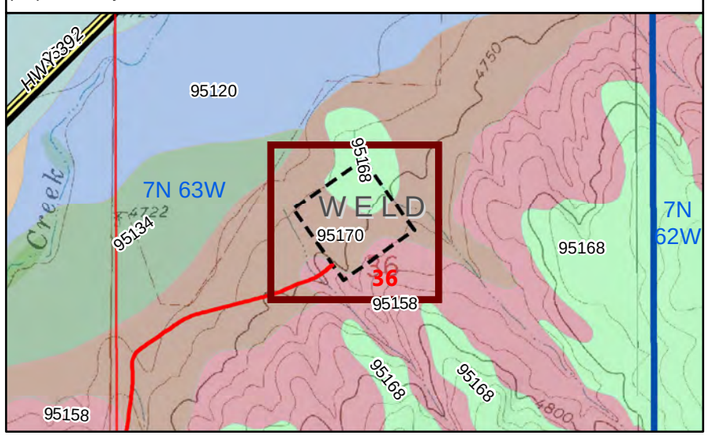
Topsoil Depths

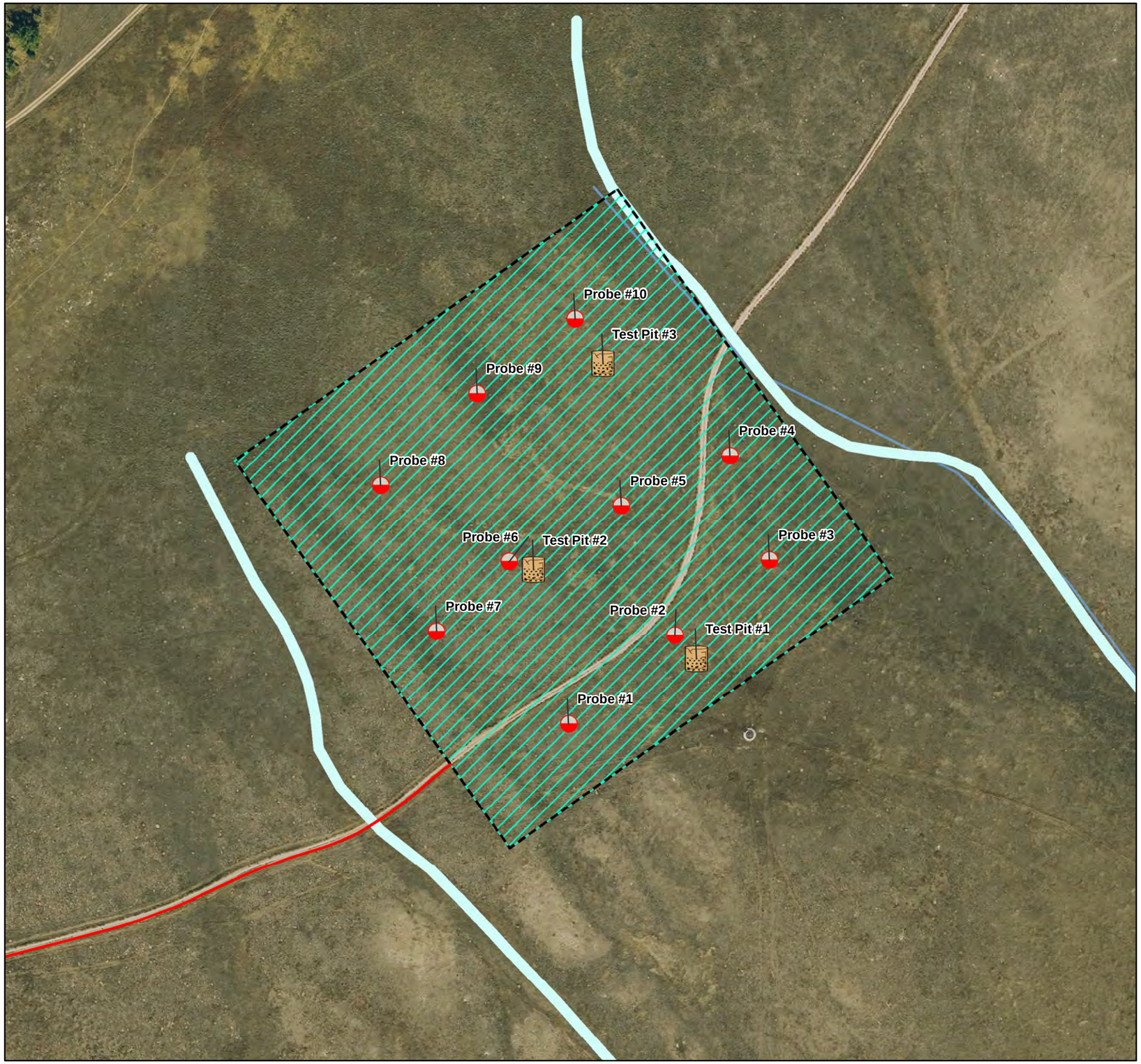
6"

Map Unit Name

- Avar fine sandy loam | 95175
- Haverson loam, 0 to 3 percent slopes | 95120
- Nunn clay loam, 0 to 6 percent slopes | 95134
- Tassel loamy fine sand, 5 to 20 percent slopes | 95158
- Vona loamy sand, 0 to 3 percent slopes | 95167
- Vona loamy sand, 3 to 9 percent slopes | 95168
- Vona sandy loam, 3 to 9 percent slopes | 95170

Note: Disturbance boundary's scale is approximate and primarily for representation purposes only.





Appendix C

Soil Sample Analytical

Division of Environmental Testing
2115 N Scranton St Suite 3040A
Aurora, CO 80045
800-440-5184

August 20, 2024

7100 Broadway Bld 1, Suite C-PH
Denver CO 80221
630-824-8716
shockett@h2eincorporated.com

Project Manager : Cameron Denison
Project Name : Bison-Dorado
Project Number : N/A

Attached are the analytical results for Bison-Dorado N/A received by Elevation Diagnostics, Division of Environmental Testing on August 15, 2024. This is associated with Elevation's number AA11182 .

The results were analyzed under the guidelines of various methods. These methods are identified in the report as follows: "SW" is referring to the EPA's SW-846 Compendium; "EPA" is referring to 40 CFR part 136; "HACH" is referring to a method which was validated by HACH®; "SM" is referring to a revision of the Standard Methods For the Examination of Water and Wastewater; and "ASTM" is referring to the standard test method set forth by ASTM International.

The analytical results in this report apply specifically to the samples listed in the attached Chain of Custody. This report may only be duplicated in full.

Any deviations to sample integrity, method specifications, or Elevation Diagnostics's standard operating procedures are documented in the report below.

Please contact us for any questions or comments concerning the content of this report.

Thank you,

Elevation Diagnostics, Division of Environmental Testing

Chain of Custody Form

Elevation Diagnostics

2115 North Scranton Street Suite 3040A Aurora, CO 80045
800.440.5184

Client: H2E Incorporated
Address: 6800 Broadway, Unit 109
City/State/ZIP: Denver, CO 80221
Phone: 224-399-5586
Project Contact: Cameron Denison

Project Name: Bison-Dorado
Project Location: Cornish, CO
Collector Name: William Sweeney

					Preservative				Matrix			Analysis Requested									Notes
Sample ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO_3	None	Other ___	Water	Soil	Other ___	SAR, EC, ESP, CEC	pH, Organic Matter	NO3-N, NH4	CaCO3, Texture	HWS Boron	Chloride	Cu, Fe, Mn, P, K, Zn			
1	Test Pit #1 Topsoil	5/2/24	9:30 AM				x			x											RUSH!!
2	Test Pit #1 Subsoil	5/2/24	9:30 AM				X			X											
3	Test Pit #2 Topsoil	5/2/24	10:15 AM				X			X											
4	Test Pit #2 Subsoil	5/2/24	10:15 AM				X			X											
5	Test Pit #3 Topsoil	5/2/24	11:30 AM				X			X											
6	Test Pit #3 Subsoil	5/2/24	11:30 AM				X			X											
7																					
8	AA111182-1	AA111183-1	AA111184-1	AA111185-1								AA111186-1									
9																					
10												AA111187-1									

Relinquished By: William Sweeney
Date/Time: 8/15/24 9:05 AM WB

Relinquished By:
Date/Time:

Relinquished By:
Date/Time:

Scan to Deliver Samples

Lab Use Only

Observed Temperature Upon Receipt: 24.3°C
Corrected Temperature Upon Receipt: 25.6°C
Thermometer #: EDXEQ238
Correction Factor: +1.3°C

Samples Intact: (Yes) No
pH Checked: Yes (No)
pH Adjusted: Yes (No)
Name/Lot Number of Adjustment: 2024-08-15-001

Division of Environmental Testing
2115 N Scranton St Suite 3040A
Aurora, CO 80045
800-440-5184

FINAL RESULTS REPORT

Report Date : 8/20/2024
Report Time : 12:41

Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

Sample ID / Analyte Name	Customer ID	Collected / Analysis Start		Dilution	Result	Units	MDL	Method Ref. / Recovery
AA11182-1	Test Pit #1 Topsoil	**Collected :** 05/02/2024	09:30					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	50.63	ppm	0.500	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	8.72	ppm	0.500	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	34.02	ppm	0.500	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	845.35	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA
Ammonia-Nitrogen, Soil		08/19/2024	13:30		<1.00	mg/kg	1.00	
Calcium Carbonate		08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity		08/19/2024	13:35		0.07	NH4/L	0.00	
Chloride, Soils		08/20/2024	10:04		11.81	mg/kg	5.00	HACH 10291
ESP		08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron		08/16/2024	11:55		0.18	mg/kg	0.050	Boron Hot Water Extraction
Nitrate-Nitrogen, Soil		08/19/2024	13:23		17.68	mg/kg	0.30	HACH 10206
Organic Matter		08/19/2024	16:57		0.73	%OC	0.26	Walkley Black
pH, Soils Temperature		08/15/2024	14:17		20.5	°C		
pH, Soils		08/15/2024	14:17		5.74	S.U.	0.01	EPA 9045D
SAR - Calcium		08/19/2024	13:43	10.00	4.27	mEq/L	0.000	EPA 6020B
SAR - Magnesium		08/19/2024	13:43	10.00	1.40	mEq/L	0.000	EPA 6020B
SAR - Sodium		08/19/2024	13:43	10.00	0.10	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		08/19/2024	13:43	10.00	0.06		0.000	EPA 6020B
Soil Conductivity		08/16/2024	15:35		0.986	mmhos/cm		USDA 60
Soil Texture		08/19/2024	15:46		Sandy Loam			Hydrometer
AA11183-1	Test Pit #1 Subsoil	**Collected :** 05/02/2024	09:30					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	11.48	ppm	0.500	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	428.78	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA
Ammonia-Nitrogen, Soil		08/19/2024	13:32		<1.00	mg/kg	1.00	
Calcium Carbonate		08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity		08/19/2024	13:35		0.05	NH4/L	0.00	
Chloride, Soils		08/20/2024	10:04		<5.00	mg/kg	5.00	HACH 10291
ESP		08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron		08/16/2024	11:55		0.15	mg/kg	0.050	Boron Hot Water Extraction
Nitrate-Nitrogen, Soil		08/19/2024	13:26		<0.30	mg/kg	0.30	HACH 10206
Organic Matter		08/19/2024	16:57		<0.26	%OC	0.26	Walkley Black
pH, Soils Temperature		08/15/2024	14:17		20.3	°C		
pH, Soils		08/15/2024	14:17		7.41	S.U.	0.01	EPA 9045D
SAR - Calcium		08/19/2024	13:43	10.00	2.46	mEq/L	0.000	EPA 6020B
SAR - Magnesium		08/19/2024	13:43	10.00	0.57	mEq/L	0.000	EPA 6020B

Division of Environmental Testing
2115 N Scranton St Suite 3040A
Aurora, CO 80045
800-440-5184

FINAL RESULTS REPORT

Report Date : 8/20/2024
Report Time : 12:41

Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

Sample ID / Analyte Name	Customer ID	Collected / Analysis Start		Dilution	Result	Units	MDL	Method Ref. / Recovery
SAR - Sodium		08/19/2024	13:43	10.00	0.10	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		08/19/2024	13:43	10.00	0.08		0.000	EPA 6020B
Soil Conductivity		08/16/2024	15:35		0.443	mmhos/cm		USDA 60
Soil Texture		08/19/2024	15:46		Sandy Loam			Hydrometer
AA11184-1	Test Pit #2 Topsoil	**Collected :** 05/02/2024	10:15					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	103.66	ppm	0.500	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	37.20	ppm	0.500	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	66.55	ppm	0.500	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	868.23	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA
Ammonia-Nitrogen, Soil		08/19/2024	13:32		<1.00	mg/kg	1.00	
Calcium Carbonate		08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity		08/19/2024	13:35		0.11	NH4/L	0.00	
Chloride, Soils		08/20/2024	10:06		40.36	mg/kg	5.00	HACH 10291
ESP		08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron		08/16/2024	11:55		0.14	mg/kg	0.050	Boron Hot Water Extraction
Nitrate-Nitrogen, Soil		08/19/2024	13:26		57.11	mg/kg	0.30	HACH 10206
Organic Matter		08/19/2024	16:57		1.35	%OC	0.26	Walkley Black
pH, Soils Temperature		08/15/2024	14:55		20.1	°C		
pH, Soils		08/15/2024	14:55		4.90	S.U.	0.01	EPA 9045D
SAR - Calcium		08/19/2024	13:43	10.00	6.58	mEq/L	0.000	EPA 6020B
SAR - Magnesium		08/19/2024	13:43	10.00	2.12	mEq/L	0.000	EPA 6020B
SAR - Sodium		08/19/2024	13:43	10.00	0.12	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		08/19/2024	13:43	10.00	0.06		0.000	EPA 6020B
Soil Conductivity		08/16/2024	15:35		1.536	mmhos/cm		USDA 60
Soil Texture		08/19/2024	15:46		Sandy Loam			Hydrometer
AA11185-1	Test Pit #2 Subsoil	**Collected :** 05/02/2024	10:15					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	8.25	ppm	0.500	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	552.59	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA
Ammonia-Nitrogen, Soil		08/19/2024	13:32		<1.00	mg/kg	1.00	
Calcium Carbonate		08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity		08/19/2024	13:35		0.04	NH4/L	0.00	
Chloride, Soils		08/20/2024	10:06		<5.00	mg/kg	5.00	HACH 10291
ESP		08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron		08/16/2024	11:55		0.27	mg/kg	0.050	Boron Hot Water Extraction

Division of Environmental Testing
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Aurora, CO 80045
800-440-5184

FINAL RESULTS REPORT

Report Date : 8/20/2024
Report Time : 12:41

Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

Sample ID / Analyte Name	Customer ID	Collected / Analysis Start		Dilution	Result	Units	MDL	Method Ref. / Recovery
Nitrate-Nitrogen, Soil		08/19/2024	13:26		14.99	mg/kg	0.30	HACH 10206
Organic Matter		08/19/2024	16:57		0.27	%OC	0.26	Walkley Black
pH, Soils Temperature		08/15/2024	14:55		20.3	°C		
pH, Soils		08/15/2024	14:55		7.33	S.U.	0.01	EPA 9045D
SAR - Calcium		08/19/2024	13:43	10.00	3.65	mEq/L	0.000	EPA 6020B
SAR - Magnesium		08/19/2024	13:43	10.00	0.83	mEq/L	0.000	EPA 6020B
SAR - Sodium		08/19/2024	13:43	10.00	0.13	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		08/19/2024	13:43	10.00	0.09		0.000	EPA 6020B
Soil Conductivity		08/16/2024	15:35		0.728	mmhos/cm		USDA 60
Soil Texture		08/19/2024	15:46		Sandy Loam			Hydrometer
AA11186-1	Test Pit #3 Topsoil	**Collected :** 05/02/2024	11:30					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	25.96	ppm	0.500	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	9.39	ppm	0.500	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	19.51	ppm	0.500	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	504.28	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA
Ammonia-Nitrogen, Soil		08/19/2024	13:32		<1.00	mg/kg	1.00	
Calcium Carbonate		08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity		08/19/2024	13:35		0.07	NH4/L	0.00	
Chloride, Soils		08/20/2024	10:08		<5.00	mg/kg	5.00	HACH 10291
ESP		08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron		08/16/2024	11:55		0.18	mg/kg	0.050	Boron Hot Water Extraction
Nitrate-Nitrogen, Soil		08/19/2024	13:26		9.77	mg/kg	0.30	HACH 10206
Organic Matter		08/19/2024	16:57		0.71	%OC	0.26	Walkley Black
pH, Soils Temperature		08/15/2024	14:55		20.2	°C		
pH, Soils		08/15/2024	14:55		5.91	S.U.	0.01	EPA 9045D
SAR - Calcium		08/19/2024	13:43	10.00	3.55	mEq/L	0.000	EPA 6020B
SAR - Magnesium		08/19/2024	13:43	10.00	1.16	mEq/L	0.000	EPA 6020B
SAR - Sodium		08/19/2024	13:43	10.00	0.13	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		08/19/2024	13:43	10.00	0.09		0.000	EPA 6020B
Soil Conductivity		08/16/2024	15:35		0.808	mmhos/cm		USDA 60
Soil Texture		08/19/2024	15:46		Sandy Loam			Hydrometer
AA11187-1	Test Pit #3 Subsoil	**Collected :** 05/02/2024	11:30					
AB-DTPA Metals - Copper		08/20/2024	10:09	10.00	<5.00	ppm	5.000	AB-DTPA
AB-DTPA Metals - Iron		08/20/2024	10:09	10.00	Not Detected	ppm	0.500	AB-DTPA
AB-DTPA Metals - Manganese		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Phosphorous		08/20/2024	10:09	10.00	<5.00 - RL1	ppm	5.00	AB-DTPA
AB-DTPA Metals - Potassium		08/20/2024	10:09	10.00	373.68	ppm	0.500	AB-DTPA
AB-DTPA Metals - Zinc		08/20/2024	10:09	10.00	Not Detected	ppm	5.000	AB-DTPA

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FINAL RESULTS REPORT

Report Date : 8/20/2024
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Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

Sample ID / Customer ID / Analyte Name	Collected / Analysis Start		Dilution	Result	Units	MDL	Method Ref. / Recovery
Ammonia-Nitrogen, Soil	08/19/2024	13:32		<1.00	mg/kg	1.00	
Calcium Carbonate	08/19/2024	13:07		<0.50	%	0.5	Gravimetric
Cation Exchange Capacity	08/19/2024	13:35		0.04	NH4/L	0.00	
Chloride, Soils	08/20/2024	10:08		Not Detected	mg/kg	5.00	HACH 10291
ESP	08/20/2024	10:46		0	%		Soil Paste Extraction
Hot Water Soluble Boron	08/16/2024	11:55		0.14	mg/kg	0.050	Boron Hot Water Extraction
Nitrate-Nitrogen, Soil	08/19/2024	13:26		4.02	mg/kg	0.30	HACH 10206
Organic Matter	08/19/2024	16:57		0.26	%OC	0.26	Walkley Black
pH, Soils Temperature	08/15/2024	14:55		20.5	°C		
pH, Soils	08/15/2024	14:55		7.60	S.U.	0.01	EPA 9045D
SAR - Calcium	08/19/2024	13:43	10.00	2.54	mEq/L	0.000	EPA 6020B
SAR - Magnesium	08/19/2024	13:43	10.00	0.50	mEq/L	0.000	EPA 6020B
SAR - Sodium	08/19/2024	13:43	10.00	0.11	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio	08/19/2024	13:43	10.00	0.09		0.000	EPA 6020B
Soil Conductivity	08/16/2024	15:35		0.46	mmhos/cm		USDA 60
Soil Texture	08/19/2024	15:46		Sandy Loam			Hydrometer

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Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
AMMONIA_NITROGEN-4412										
DUP	AA11158	<1.00	1.00	mg/kg						
MB	AA11279	-0.29		mg/kg						
LCS	AA11280	1.72		mg/kg	2.00		86.0	80 - 120		
LCS	AA11281	13.03		mg/kg	11.00		118	80 - 120		
AMMONIA_NITROGEN-4413										
DUP	AA11184	<1.00	1.00	mg/kg						
MB	AA11282	-0.27		mg/kg						
LCS	AA11283	1.60		mg/kg	2.00		80.0	80 - 120		
LCS	AA11284	12.96		mg/kg	11.00		118	80 - 120		
BORON-4367										
DUP	AA11182	0.16	0.050	mg/kg					11.765	-15 - 15
MB	AA11207	0.01		mg/kg						
LCS	AA11208	0.90		mg/kg	1.00		90.0	80 - 120		
LCS	AA11209	9.36		mg/kg	9.00		104	80 - 120		
CALCIUM_CARBONATE-4391										
DUP	AA11182	1.12	0.5	%					4.5662	
Matrix Spike	AA11182	1.07	0.5	%	1.00					
CHLORIDE_SOILS-4414										
DUP	AA11158	<5.00	5.00	mg/kg						
MB	AA11285	0.76	5	mg/L						
LCS	AA11286	9.38	5	mg/L	10.00		93.8	80 - 120		
LCS	AA11287	86.13	5	mg/L	90.00		95.7	80 - 120		
CHLORIDE_SOILS-4415										
DUP	AA11184	43.26	5.00	mg/kg					6.9361	-15 - 15
MB	AA11288	0.97	5	mg/L						
LCS	AA11289	8.02	5	mg/L	10.00		80.2	80 - 120		
LCS	AA11290	88.97	5	mg/L	90.00		98.9	80 - 120		
ECSOIL_MMHOS-4383										
DUP	AA11187	0.464		mmhos/cm					0.86580	
LCS	AA11248	10.38		mmhos/cm	10.00		104			
LCS	AA11249	10.4		mmhos/cm	10.00		104			
NITRATE_NITROGEN-4416										
DUP	AA11158	Not Detected	0.30	mg/kg						
MB	AA11291	0.67		mg/kg						
LCS	AA11292	1.26	0.30	mg/kg	1.50		84.0	80 - 120		
LCS	AA11293	12.27	0.30	mg/kg	12.00		102	80 - 120		
NITRATE_NITROGEN-4417										
DUP	AA11184	56.94	0.30	mg/kg					0.29811	-15 - 15
MB	AA11294	0.16		mg/kg						
LCS	AA11295	1.55	0.30	mg/kg	1.50		103	80 - 120		
LCS	AA11296	12.33	0.30	mg/kg	12.00		103	80 - 120		
ORGANIC_MATTER-4388										
DUP	AA11168	5.70							0.17528	
Matrix Spike	AA11168	5.71		mg						
MB	AA11257	-0.31		%						
PH_S-4361										

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Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
DUP	AA11161	8.32	0.01	S.U.					0.2406738868	-5 - 5
LCS	AA11189	6.89	0.01	S.U.	6.86		100	95 - 105		
LCS	AA11190	6.91	0.01	S.U.	6.86		101	95 - 105		
PH_S-4362										
DUP	AA11184	4.87	0.01	S.U.					0.6141248720	-5 - 5
LCS	AA11192	6.89	0.01	S.U.	6.86		100	95 - 105		
LCS	AA11193	6.89	0.01	S.U.	6.86		100	95 - 105		
SOIL_TEXTURE-4410										
DUP	AA11182	Sandy Loam								

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Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
METALS_ABDTPA-4424										
AA11158										
Dup	Copper	<5.00	5.000	ppm		<5.00				
Dup	Iron	5.84	0.500	ppm		5.76			1.38	
Dup	Manganese	11.75	0.500	ppm		11.36			3.38	
Dup	Phosphorous	6.19	0.500	ppm		6.18			0.162	
Dup	Potassium	1742.30	0.500	ppm		1715.71			1.54	
Dup	Zinc	Not Detected	0.500	ppm		Not Detected				
AA11184										
Dup	Copper	<5.00	5.000	ppm		<5.00				
Dup	Iron	112.54	0.500	ppm		103.66			8.21	
Dup	Manganese	32.20	0.500	ppm		37.20			14.4	
Dup	Phosphorous	68.79	0.500	ppm		66.55			3.31	
Dup	Potassium	819.55	0.500	ppm		868.23			5.77	
Dup	Zinc	Not Detected	0.500	ppm		Not Detected				
AA11185										
Dup	Copper	<5.00	5.000	ppm		<5.00				
Dup	Iron	<5.00	5.00	ppm		<5.00				
Dup	Manganese	<5.00	5.00	ppm		<5.00				
Dup	Phosphorous	7.77	0.500	ppm		8.25			5.99	
Dup	Potassium	526.32	0.500	ppm		552.59			4.87	
Dup	Zinc	Not Detected	0.500	ppm		Not Detected				
AA11315										
MB	Copper	0.06		ppm						
MB	Iron	0.19		ppm						
MB	Manganese	0.00		ppm						
MB	Phosphorous	-0.04		ppm						
MB	Potassium	0.05		ppm						
MB	Zinc	3.60		ppm						
AA11317										
LCS	Copper	55.30		ppm			92.2			
LCS	Iron	58.81		ppm			98.0			
LCS	Manganese	64.28		ppm			107			
LCS	Phosphorous	66.03		ppm			110			
LCS	Potassium	59.30		ppm			98.8			
LCS	Zinc	65.19		ppm			109			
AA11318										
LCS	Copper	52.23		ppm			87.0			
LCS	Iron	54.03		ppm			90.0			
LCS	Manganese	53.46		ppm			89.1			
LCS	Phosphorous	51.29		ppm			85.5			
LCS	Potassium	49.51		ppm			82.5			
LCS	Zinc	59.04		ppm			98.4			
SAR-4419										
AA11171										
Dup	Calcium	3.17		mEq/L	3.17	3.01			5.18	

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Project Manager: Cameron Denison **Project Name:** Bison-Dorado **Project Number:** N/A

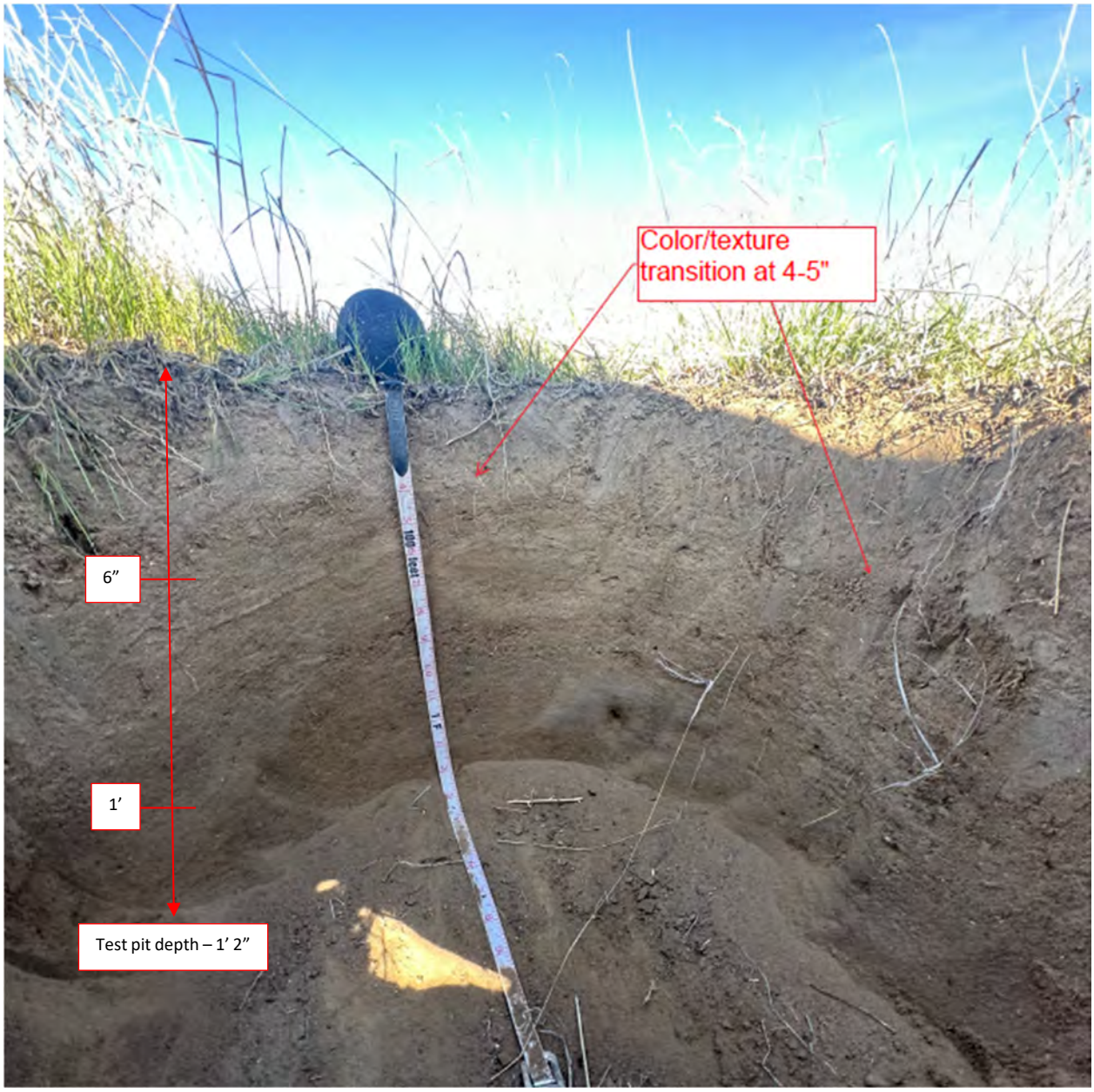
QC Report

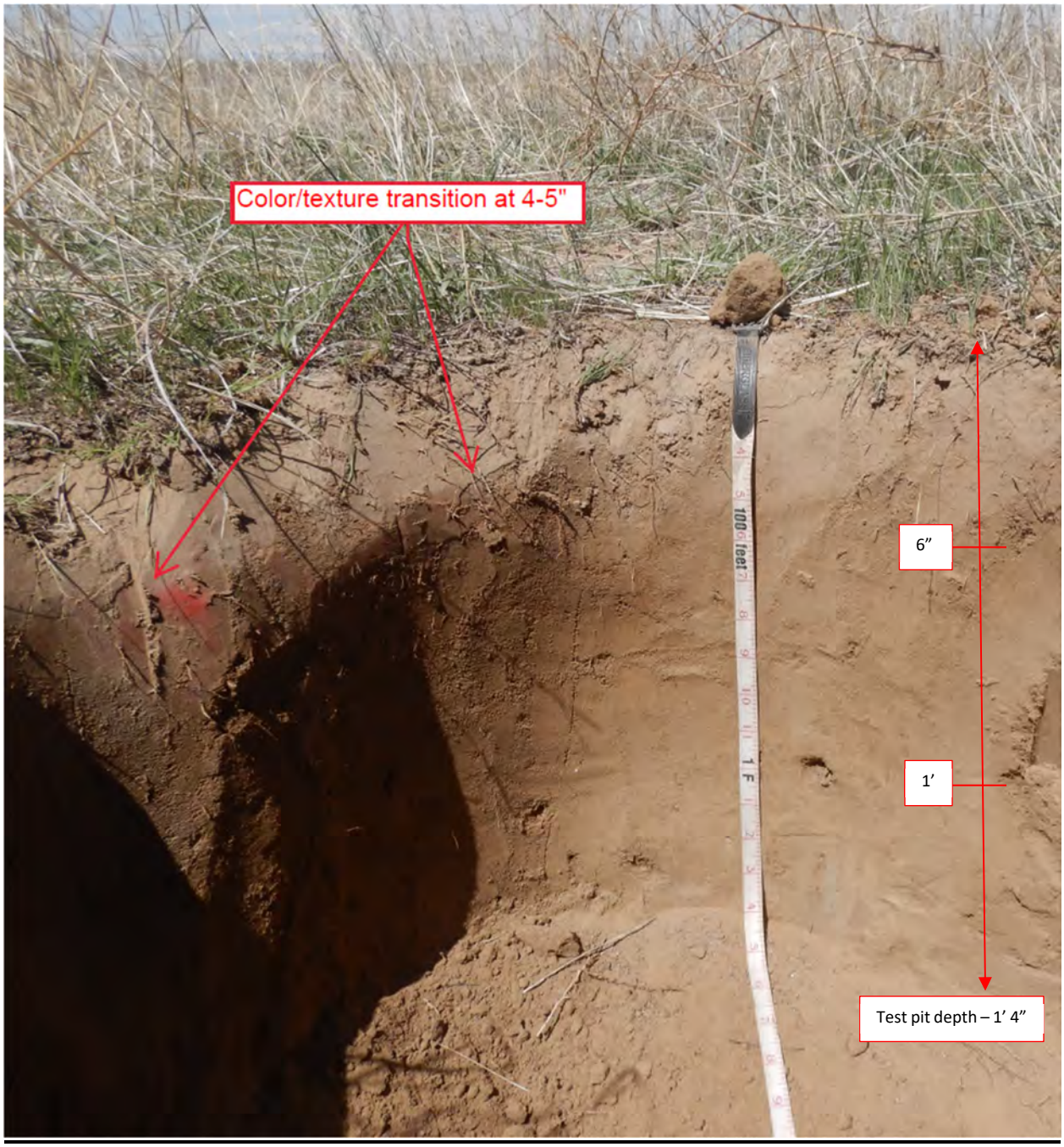
QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Dup	Magnesium	1.78		mEq/L	1.78	1.70			4.60	
Dup	Sodium	0.22		mEq/L	0.22	0.21			4.65	
AA11187										
Dup	Calcium	2.50		mEq/L	2.50	2.54			1.59	
Dup	Magnesium	0.50		mEq/L	0.50	0.50			<%MDL%	
Dup	Sodium	0.11		mEq/L	0.11	0.11			<%MDL%	
AA11297										
MB	Calcium	0.01		mEq/L						
MB	Magnesium	0.01		mEq/L						
MB	Sodium	0.02		mEq/L						
AA11298										
LCS	Calcium	8.17		ppm			81.7			
LCS	Magnesium	8.14		ppm			81.4			
LCS	Sodium	8.36		ppm			83.6			
AA11299										
LCS	Calcium	446.61		ppm			89.3			
LCS	Magnesium	446.40		ppm			89.3			
LCS	Sodium	449.97		ppm			90.0			

Qualifier	Explanation
H1	Sample received outside of regulatory holding time.
H2	Sample analyzed outside of regulatory holding time due to a laboratory error.
P1	Sample received outside temperature requirements, 0-6°C.
P2	Sample received unpreserved.
P3	Broken or leaking sample container.
P4	Sample improperly collected
P5	Sample incorrectly preserved
B1	Blank failed high, indicating possible high bias in sample results.
B2	Blank failed low, indicating possible low bias in sample results.
MS	Matrix Spike / Matrix Spike Duplicate recovery and/or RPD limit exceeded, indicating potential matrix interference.
D1	Duplicate RPD limit exceeded due to low sample concentration.
D2	Duplicate RPD limit exceeded due to matrix interference.
S	Surrogate recovery failed, indicating potential matrix interference.
RL1	Reporting limits raised due to matrix interference.
RL2	Reporting limits raised due to limited sample.
U	Sample result less than method detection limit.
J	Sample result less than reporting limit but higher than method detection limit.
E	Electronic loss or corruption of data.
I	Subcontracted sample

Appendix D

Soil Test Pit Photos




Color/texture transition at 4-5"
6”
1’
Test pit depth – 1’ 4”

Appendix E

Test Pit/Probe Soils Field Log

Soil Test Pit/Probe Field Form

Facility/Site Name: Dorado
Operator: Bison IV Operating
Date: 5/1/2024
Eval. Company: H2E Incorporated
Number of test pits: 3

TEST PIT 1 (Tassel loamy fine sand, 5 to 20 percent slopes)

Pit Depth: 15"

H1 Horizon
- **Horizon Depth:** 4-5"
- **Ribbon Length:** N/A
- **Feel:** gritty
- **Texture:** loamy sand
- **Munsell Color [dry]:** 10YR 5/2 grayish brown

H2 Horizon
- **Horizon Depth:** 5"-15"
- **Ribbon Length:** less than 2.5 cm
- **Feel:** gritty
- **Texture:** sandy loam
- **Munsell Color [dry]:** 10YR 6/4 light yellowish brown

- **Horizon Change Description:** color change from a light grayish brown to a light yellowish brown
- **Method of Excavation:** shovel
- **Weather Conditions:** 47F, Sunny, 16 mph winds
- **Ground Surface Slope:** 5 to 20 percent slopes

NRCS Soils Report
H1 - 0 - 7" loamy fine sand
H2 - 7 - 19" fine sandy loam
H3 - 19 - 23" weathered bedrock
Topsoil (A) Munsell Color (typical):
light brownish gray (10YR 6/2) dry
dark grayish brown (10YR 4/2) moist
Typical Range:
Hue: 10YR or 2.5Y
Value: 4 to 7 dry, 3 or 6 moist
Chroma: 2 to 4
Subsoil (C) Munsell Color (typical):
light gray (10YR 7/2) dry
grayish brown (10YR 5/2) moist
Typical Range:
Hue: 10YR, 2.5Y, or 5Y
Value: 5 to 8 dry, 4 or 7 moist
Chroma: 2 to 3

TEST PIT 2 (Vona sandy loam, 3 to 9 percent slopes)

Pit Depth: 19"

H1 Horizon
- **Horizon Depth:** 5"
- **Ribbon Length:** less than 2.5 cm
- **Feel:** gritty
- **Texture:** sandy loam
- **Munsell Color [dry]:** 10YR 6/2 light brownish gray

H2 Horizon
- **Horizon Depth:** 5"-15"
- **Ribbon Length:** less than 2.5 cm
- **Feel:** gritty
- **Texture:** sandy loam
- **Munsell Color [dry]:** 10YR 4/3 brown

- **Horizon Change Description:** color change from a light grayish brown to a brown around 5"
- **Method of Excavation:** shovel
- **Weather Conditions:** 47F, Sunny, 16 mph winds
- **Ground Surface Slope:** 3 to 9 percent slopes

NRCS Soils Report
H1 - 0 - 6" sandy loam
H2 - 6 - 15" fine sandy loam
H3 - 15 - 60" loamy sand
Topsoil (A) Munsell Color (typical):
light brownish gray (10YR 6/2) dry
dark grayish brown (10YR 4/2) moist
Typical Range:
Hue: 10YR or 2.5Y
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 4
Subsoil (Bt) Munsell Color (typical):
brown (10YR 5/3) dry
brown (10YR 4/3) moist
Typical Range:
Hue: 7.5YR to 2.5Y
Value: 4 to 6 dry, 4 to 5 moist
Chroma: 2 to 4

TEST PIT 3 (Vona loamy sand, 3 to 9 percent slopes)

Pit Depth: 17"

H1 Horizon
- **Horizon Depth:** 5"
- **Ribbon Length:** N/A
- **Feel:** gritty
- **Texture:** loamy sand
- **Munsell Color [dry]:** 10YR 5/2 grayish brown

H2 Horizon
- **Horizon Depth:** 5"-17"
- **Ribbon Length:** less than 2.5 cm
- **Feel:** gritty
- **Texture:** sandy loam
- **Munsell Color [dry]:** 10YR 5/3 brown

- **Horizon Change Description:** color change from a grayish brown to a brown around 5"
- **Method of Excavation:** shovel
- **Weather Conditions:** 53F, Sunny, 16 mph winds
- **Ground Surface Slope:** 3 to 9 percent slopes

NRCS Soils Report
A - 0 - 7" loamy sand
Bt1 - 7 - 14" sandy loam
Bt2 - 14 - 20" sandy loam
Topsoil (A) Munsell Color (typical):
light brownish gray (10YR 6/2) dry
dark grayish brown (10YR 4/2) moist
Typical Range:
Hue: 10YR or 2.5Y
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 4
Subsoil (Bt) Munsell Color (typical):
brown (10YR 5/3) dry
brown (10YR 4/3) moist
Typical Range:
Hue: 7.5YR to 2.5Y
Value: 4 to 6 dry, 4 to 5 moist
Chroma: 2 to 4

Probe Log: list changes in color and or texture include at what depth changes occur

Number of soil probes: 10

Soil Probe 1: Slight color change around 5", from a light grayish brown to light brown	**Soil Probe 11:**
Soil Probe 2: Slight color change at 5", from a light grayish brown to light brown; Slight composition change at 5" from loamy sand to sandy loam	**Soil Probe 12:**
Soil Probe 3: No visible color change; Slight composition change around 5" from Sandy Loam to Fine Sandy Loam	**Soil Probe 13:**
Soil Probe 4: No visiible color/composition change	**Soil Probe 14:**
Soil Probe 5: No visible color/composition change	**Soil Probe 15:**
Soil Probe 6: Slight color around 5" from light grayish brown to light brown	**Soil Probe 16:**
Soil Probe 7: Slight color change around 5" from light grayish brown to light brown	**Soil Probe 17:**
Soil Probe 8: No visible color/composition change	**Soil Probe 18:**
Soil Probe 9: Color change around 4" from brown to lighter brown	**Soil Probe 19:**
Soil Probe 10: Slight color change around 6" from light grayish brown to grayish light brown	**Soil Probe 20:**

Appendix F

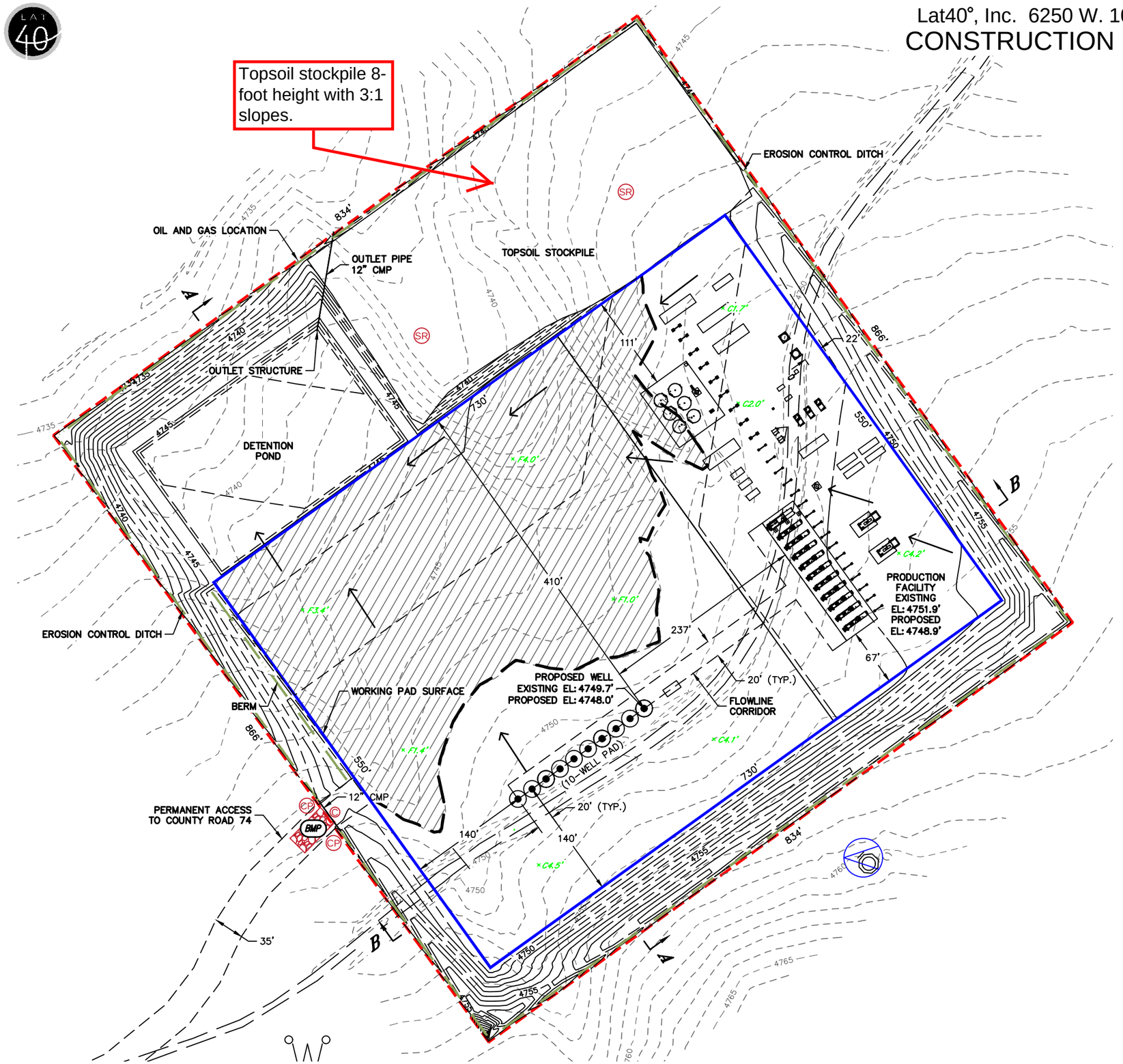
SWMP Construction Layout Drawings (Showing Topsoil Stockpile Locations and BMP's)

Lat40°, Inc. 6250 W. 10th Street, Unit 2, Greeley, CO 970-515-5294

CONSTRUCTION LAYOUT DRAWINGS - PLAN VIEW

DORADO 36 PAD
BISON OIL & GAS IV

Q: SENW
SECTION: 36
TOWNSHIP: 7N
RANGE: 63W
6TH. P.M.
WELD COUNTY, CO



CUT VOLUME: 19,228 CY
FILL VOLUME: 19,228 CY
EXPORT VOLUME: 0 CY
TOPSOIL (6") VOLUME: 13,375 CY
GRAVEL (6") IMPORT: 7,435 CY

SEE PROPOSED GRADING PLAN FOR ADDITIONAL INFORMATION AS PREPARED BY OTHERS

OIL AND GAS LOCATION: ±16.6 ACRES
WORKING PAD SURFACE: ±9.2 ACRES
PERMANENT ACCESS ROAD: ±3.5 ACRES

LEGEND

- WORKING PAD SURFACE
- OIL AND GAS LOCATION
- FILL
- INSTALL SEDIMENT BASIN
- DITCH/BERM
- EXISTING CONTOUR – 1' INTERVAL
- PROPOSED CONTOUR – 1' INTERVAL
- CUT/FILL LINE
- SR SURFACE ROUGHENING
- CP INSTALL CULVERT PROTECTION/RIP RAP
- C INSTALL CULVERT
- FLOW ARROW
- ECB INSTALL EROSION CONTROL BLANKET
- *XX.X PROPOSED CUT/FILL DEPTH
- BMP VEHICLE TRACKING BMP

NOTE:
1. Ground elevations are based on an observed GPS elevation (NAVD 1988 DATUM).
2. No offsite flowlines proposed.
3. Third party custody transfer occurs at LACT for oil.
4. Third Party custody transfer occurs at meter for gas.

N
0 120
1"=120'

DATE: 11/6/2024
PROJECT#: 2023151

Lat40°, Inc. 6250 W. 10th Street, Unit 2, Greeley, CO 970-515-5294

OIL AND GAS FACILITIES LAYOUT DRAWING

DORADO 36 PAD

BISON OIL & GAS IV

Q: SENW
SECTION: 36
TOWNSHIP: 7N
RANGE: 63W
6TH. P.M.
WELD COUNTY, CO

OIL AND GAS LOCATION
TOPSOIL STOCKPILE
OUTLET PIPE 12" CMP
OUTLET STRUCTURE
DETENTION POND
SEEDED & STABILIZED
TEMPORARY MLVT 157' DIAMETER
WORKING PAD SURFACE
PERMANENT ACCESS TO COUNTY ROAD 74
12" CMP
SEEDED & STABILIZED
35'
PIG LAUNCHER/RECEIVER
EROSION CONTROL DITCH
OIL LACT
2-WATER LACTS
VAPOR KOT
2-EQDs
2-LOADS
VRT
RECYCLE PUMP
DEHY/KO
FUEL GAS SCRUBBER
3-VRUs
ELECTRICAL SKID
4-OIL TANKS
2-PRODUCTION WATER TANKS
2-IA SKIDS
2-PIG LAUNCHER/RECEIVERS
COOLER
PIPE RACK
2-METERS
3-GENERATORS
ELECTRICAL SKID
2-GAS LIFT COMPRESSORS
OIL POLISHER
SALES GAS SCRUBBER
10-SEPARATORS
PRODUCTION FACILITY
GAS LIFT METER
FLOWLINE CORRIDOR
(10-WELL PAD)
EROSION CONTROL DITCH
240'
111'
270'
550'
140'
170'
20' (TYP.)
67'
67'
240'
60'
542'
20' (TYP.)
80'
350'
41'
60'
46'
80'
80'
R80'
4745
4740
4735
4750
4765
4760

SEE PROPOSED GRADING PLAN FOR ADDITIONAL INFORMATION AS PREPARED BY OTHERS

OIL AND GAS LOCATION: ±16.6 ACRES
RECLAIMED AREA: ±11.3 ACRES
TOPSOIL STOCKPILE: ±2.5 ACRES
DETENTION POND: ±1.1 ACRES
ADDITIONAL AREA/SLOPES: ±7.7 ACRES
UNRECLAIMED AREA: ±5.3 ACRES

LEGEND

- INTERIM WORKING PAD SURFACE
- WORKING PAD SURFACE
- OIL AND GAS LOCATION
- FILL
- RECLAIMED AREA – SEEDED & STABILIZED
- DITCH/BERM
- EXISTING CONTOUR – 1' INTERVAL
- PROPOSED CONTOUR – 1' INTERVAL
- CUT/FILL LINE
- CP CULVERT PROTECTION/RIP RAP
- C CULVERT
- FLOW ARROW
- BMP VEHICLE TRACKING BMP

N

0 120

1"=120'

NOTE:
1. Ground elevations are based on an observed GPS elevation (NAVD 1988 DATUM).
2. All equipment is PROPOSED unless otherwise noted.

DATE: 11/6/2024
PROJECT#: 2023151