



STATE OF
COLORADO

Wein - DNR, Clayton <clayton.wein@state.co.us>

New Horizon North Mine, C-2010-089, SL-4 Inspection Report

1 message

Wein - DNR, Clayton <clayton.wein@state.co.us>

Thu, Apr 18, 2024 at 10:20 AM

To: "Tennyson, Tony (Colowyo)" <ttennyson@tristategt.org>

Good morning Tony,

Attached is my inspection report for the SL-4 Bond Release Inspection at the New Horizon North Mine. Please feel free to contact me if you have any questions or concerns.

Sincerely,

Clayton Wein

Environmental Protection Specialist



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

P 303.866.3567 x 8185 | F 303.832.8106

1313 Sherman Street, Room 215, Denver, CO 80203

clayton.wein@state.co.us | <https://www.drms.colorado.gov>



C-089, New Horizon North Mine SL-04 Bond Release Inspection Report_CCW.pdf

4296K



PERMIT INFORMATION

Permit Number: C-2010-089 Mine Name: New Horizon North Mine Operator: Elk Ridge Mining and Reclamation, LLC Operator Address: Mr. Tony Tennyson P.O. Box 628 27646 West 5th Avenue Nucla, CO 81424	County: Montrose Operation Type: Surface Permit Status: Active Ownership: Private
	Operator Representative Present: Tony Tennyson
Operator Representative Signature: (Field Issuance Only) 	

INSPECTION INFORMATION

Inspection Start Date: March 6, 2024 Inspection Start Time: 10:15 Inspection End Date: March 6, 2024 Inspection End Time: 12:50		Inspection Type: Coal Partial Inspection Inspection Reason: Surety Release Requested Weather: Clear	
Joint Inspection Agency: OSM		Joint Inspection Contacts: Andrew Monroy	
Post Inspection Agency: OSM		Post Inspection Contacts: Andrew Monroy	
Inspector(s): Clayton Wein Todd Jesse		Inspector's Signature: <i>Clayton Wein</i> Signature Date: 4/18/2024	

Inspection Topic Summary

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

N - Air Resource Protection

N - Availability of Records

Y - Backfill & Grading

N - Excess Spoil and Dev. Waste

N - Explosives

R - Fish & Wildlife

R - Hydrologic Balance

Y - Gen. Compliance With Mine Plan

N - Other

N - Processing Waste

N - Roads

R - Reclamation Success

N - Revegetation

N - Subsidence

N - Slides and Other Damage

N - Support Facilities On-site

Y - Signs and Markers

N - Support Facilities Not On-site

N - Special Categories Of Mining

N - Topsoil

COMMENTS

This report documents the Division's observations and data collected during a bond release inspection at the New Horizon North Mine (NHN). The inspection was conducted on March 6, 2024 by Clayton Wein and Todd Jesse of the Division. Elk Ridge Mining and Reclamation (ERMR) was represented at the inspection by Tony Tennyson. The Office of Surface Mining, Reclamation and Enforcement (OSMRE) was represented during the inspection by Andrew Monroy. The landowners Joe Garvey, Loraine Garvey and Dustin Garvey were also present for the inspection. The weather was clear with a temperature of 55° F. The ground conditions were dry.

The SL-04 Bond Release (SL-4) requested the release of 34.0 acres that were backfilled, graded, topsoiled and seeded in 2023. The release also requested 1.2 acres for Phase I, II and III release for an access road and a supporting discharge pipe under AA Road that are approved to remain as a permanent post-mining features. The Division used the Field Maps application from ESRI to collect elevation data points and topsoil depth locations to help verify the reclamation was completed as approved in the C-2010-089 Permit Application Package. Results of the data are discussed below. Please see Table 1 on page 16 of this report for all data points collected during the inspection. Attached to the end of this report is the map titled New Horizon Mine Phase I Map. This map shows the locations of the data points from Table 1.

FISH and WILDLIFE – Rule 4.18:

Throughout the inspection of the NHN Mine, several sets of deer and elk tracks were observed. Along with the tracks numerous piles of deer and elk scat were observed.

HYDROLOGIC BALANCE - Rule 4.05

Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

The reclamation of Pond 001 consisted of reducing the pond to the size of a stock pond approved at the

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

request of the landowners. The pond is located at the southwestern corner of the permit area. The pond was stable with no major erosional concerns. There are minor rills on the pond's embankments. Some vegetation was on the pond embankments to help stabilize the embankments. Rills on the embankments of stock ponds is common and none of the rills observed indicated a potential to create damage to the pond. Discussions with the Garveys indicated that they were not concerned with the rills and that they were happy with the reclamation of the pond. The reclamation work performed at Pond 001 was included in the Phase I release request for SL-4.

RECLAMATION SUCCESS - Rule 4.15, Rule 3:

Phase I Reclamation

Reclamation consisting of backfilling, grading, replacing topsoil and seeding occurred at the NHN Mine in 2023. The 34 acres of land reclaimed boarder the west, south and eastern portions of the current permit area. On the western portion, Pond 002 and the west ditch were reclaimed. On the southern portion Pond 001 was reclaimed and on the eastern portion the east ditch was reclaimed. The post mining land use for all 34 acres is approved to be dryland pasture. This delineation can be viewed on Map 2.05.5-1 in the permit application package. The topsoil replacement requirement is approved to be 1.2 feet or 14.4 inches. The delineation of topsoil depth replacement requirements can be viewed on Map 2.05.4(2)(d)-1 of the permit application package. The approved post mining topography slopes gently to the north, west, south and east from a topographical highpoint located in the central eastern portion of the permit area. The currently approved post mining topography can be viewed on Map 2.05.4-1 in the approved permit application package.

Topsoil:

A total of 7 topsoil depth samples were measured in the field. Please not all topsoil sample location data can be found in Table 1 at the end of this report. The Division recorded data points on two devices to ensure that data was collected in an area with little to no cell phone signal. Thus, sample location points have a combined name. Two samples were taken in the southern portion of the requested release area. These were points 110ts-1/111 and 114ts-2/115. Both of these locations yielded a topsoil depth greater that the 1.2 feet required. 110ts-1/111 measured to be 16 inches deep. 110ts-1/111 was measured in the southern permit area. 114ts-2/115 measured to be 15.5 inches deep. 114ts-2/115 was measured in a portion of the reclaimed area of Pond 001. Sample locations 119ts-3/120, 121ts-4/122 were taken within the area of the reclaimed west ditch. Sample location 119ts-3/120 yielded a result of 12 inches. This sample was below the required topsoil depth of 14.4 inches. Discussions at this location with the landowners and ERMR indicated that this location was in the middle of the reclamation work and was used by the reclamation workers to travers back and forth across the reclamation. The workers likely compacted the topsoil by traveling on it frequently. The landowners expressed that they were not concerned about the depth of this topsoil in this location and were pleased with the work that ERMR had completed. Sample location 121ts-4/122 yielded a depth of 17 inches of topsoil. This location exceeded the required topsoil depth. Sample point 123/124ts-5 was taken in the location of the reclaimed pond 002. The topsoil depth at this location was measured to be 16 inches, exceeding the minimum topsoil depth requirement. Sample locations 127/128ts-6 and 131ts-7/133 were taken on the eastern portion of the reclamation in and adjacent to the reclaimed east ditch. Both locations recorded a topsoil depth of 15 inches. Surpassing the minimum topsoil depth requirement. In total 6 of the 7 locations sampled exceeded the minimum topsoil depth requirement and one location reached 83.3% of

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

the required amount. Discussions with the landowners indicated that they were pleased with the topsoil depths. The Landowners stated that they were not concerned about the depth of the topsoil at 119ts-3/120 and were ok with the amount of topsoil presently on the ground. Please see the Photographs section of this report for images of the topsoil samples taken during the inspection (Photos 1 through 7).

Post Mining Topography/Backfill and Grading:

Post mining topography is approved to slope gently to the north, west, south and east from a highpoint located in the central eastern portion of the permit area. The southern portion of the permit area was observed to be sloping gently to the south. The slope was consistent and there were no sections with erosional features. The upper portions of the reclamation blended smoothly with the existing reclaimed dryland pasture to the north. There were no sections with differential settling. Pond 001 was located in the southwest corner of the permit area. The pond was reclaimed reducing it to the size of a stock pond at the request of the Landowners. The topography surrounding the stock pond slope to the south. The edges of the reclamation blended smoothly with the embankments of the pond. There were no rills or other erosional concerns identified on the reclaimed slopes. There were no observed sections of differential settling in that area. The west ditch extended from Pond 001 north to a saddle and then down gradient north from the saddle to Pond 002. The reclamation from the stock pond to the saddle gently sloped to the west and south. The reclamation was stable with no erosional features. The reclamation blended smoothly with the dryland pasture to the east. No areas with differential settling were observed. The remaining reclamation from the saddle north to the reclaimed Pond 002 sloped gently to the west and mostly to the north. The reclaimed area was free of erosion and stable. No indications of differential settling were identified. The reclamation blended well with the dryland pasture to the north. The area where pond 002 and a topsoil stockpile to the east of the pond were reclaimed to slope to the west and north. The reclamation sloped gently to the west and north with no erosional features. The site was stable with no differential settling observed. The reclamation blended well with the dryland pasture to the east and south. The east ditch was approved to slope gently to the south and slightly to the east. The reclamation was stable and had no areas with differential settling. No erosional features were observed. The reclamation sloped gently to the south and ever so slightly to the east. The reclamation blended well at the boundary with the dryland pasture to the west.. The reclamation at the southeast corner bends from the eastern permit boundary to the southern permit boundary. The reclamation in this area was approved to slope primarily to the south and slightly to the southeast. The reclamation followed the approved plans and sloped mostly to the south and the southeast portion sloped gently to the southeast. The section of reclamation had no erosion and was stable. No differential settling had occurred. The northwest section of this reclamation blended well with the adjacent dryland pasture. In general the topography observed during the inspection closely resembled that of the approved post mining topography (Map 2.05.4-1. The Division discussed with the Landowners the contours of the reclamation. They indicated to the Division that they were pleased with the outcome of the reclamation work. They further stated that they had no concerns regarding the reclamation being applied for under the SL-4 Bond Release Application. Please see the Photographs section of this report for the observations of the reclamation taken during the inspection (Photos 8 through 15).

Phase I, II and III Reclamation:

Phase I, II and III bond release was requested on 1.2 acres associated with an access road and a supporting discharge pipe under AA Road. The two structures are located in the southwestern part of the permit boundary.

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Both structures have been approved to remain as permanent post-mining features as requested by the landowner, ERM. The two structures will remain in their current configuration. The Discharge pipe under AA Road was in good condition and clear of obstructions. The inlet to the pipe is lined with riprap. The riprap was in good condition and no erosion was observed. The inlet to the pipe was stable. The outlet from the pipe was also lined with riprap. The outlet was stable and there were no indications of erosion. The riprap liner was in good repair. The access road leads south from AA road and continues to the south to a stock pond. The road was stable with no erosional concerns. There were no off-site impacts observed. For visuals of the Access road and the supporting drainage pipe please see the Photographs section of this report (Photos 16 through 18).

DOCUMENTS RECEIVED: None

OTHER (SPECIFY): None

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were initiated as a result of this inspection, nor are any pending.

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

PHOTOGRAPHS

Photo 1: Topsoil Sample 110ts-1/111.

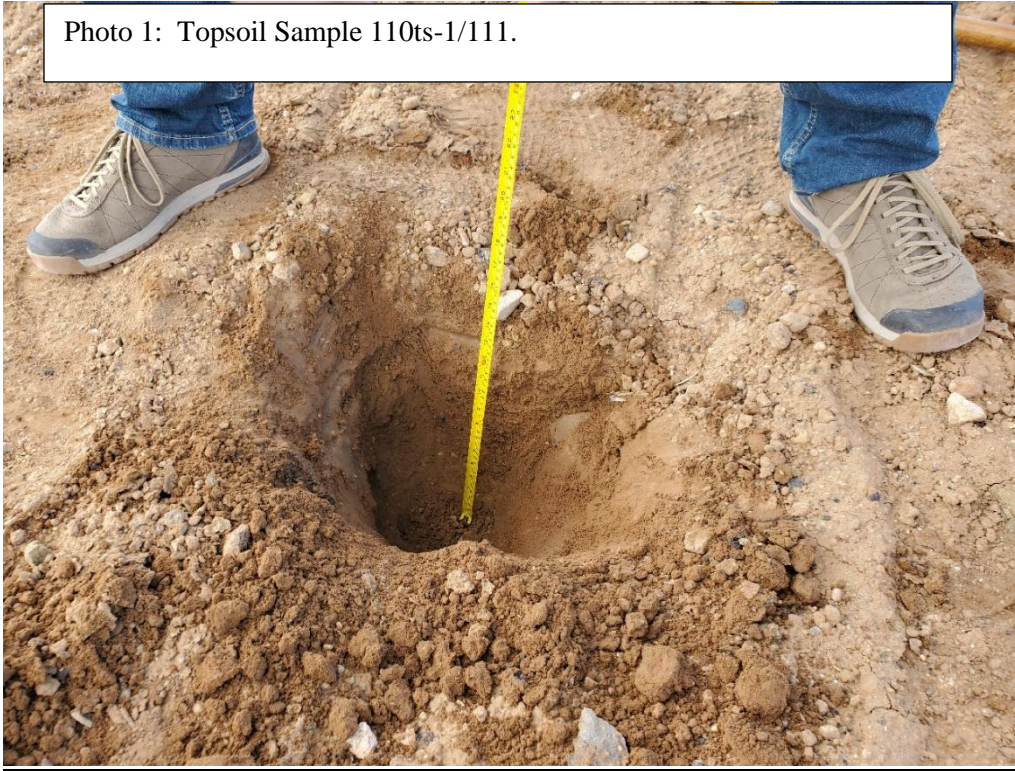
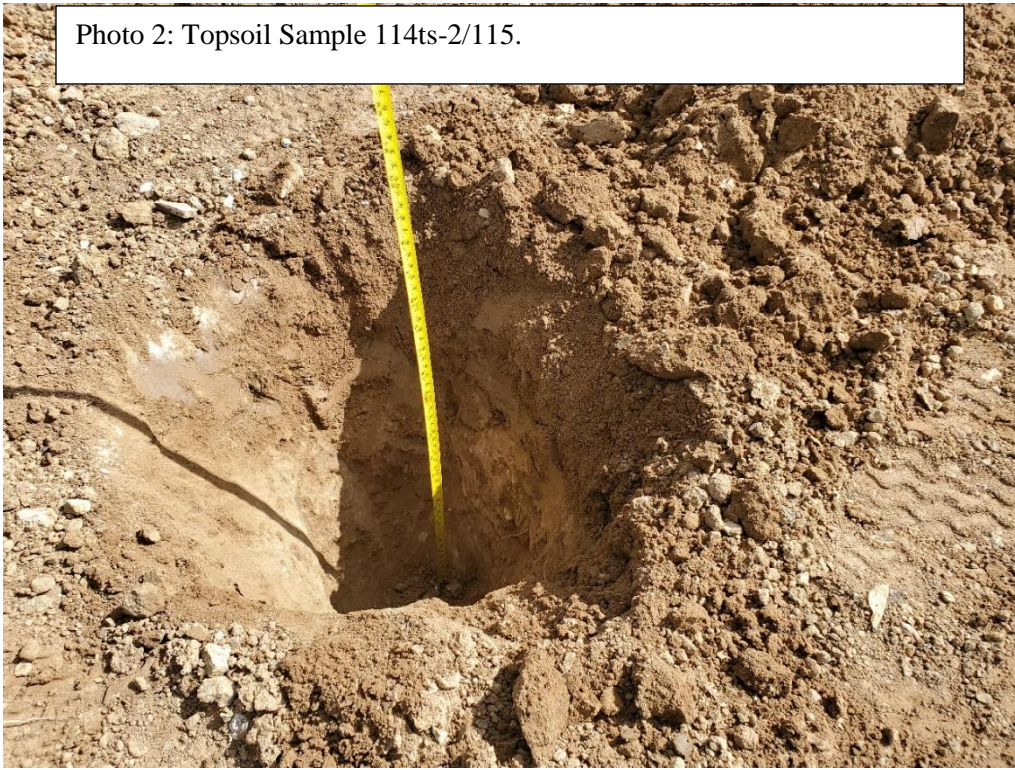


Photo 2: Topsoil Sample 114ts-2/115.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 3: Topsoil Sample 119ts-3/120.

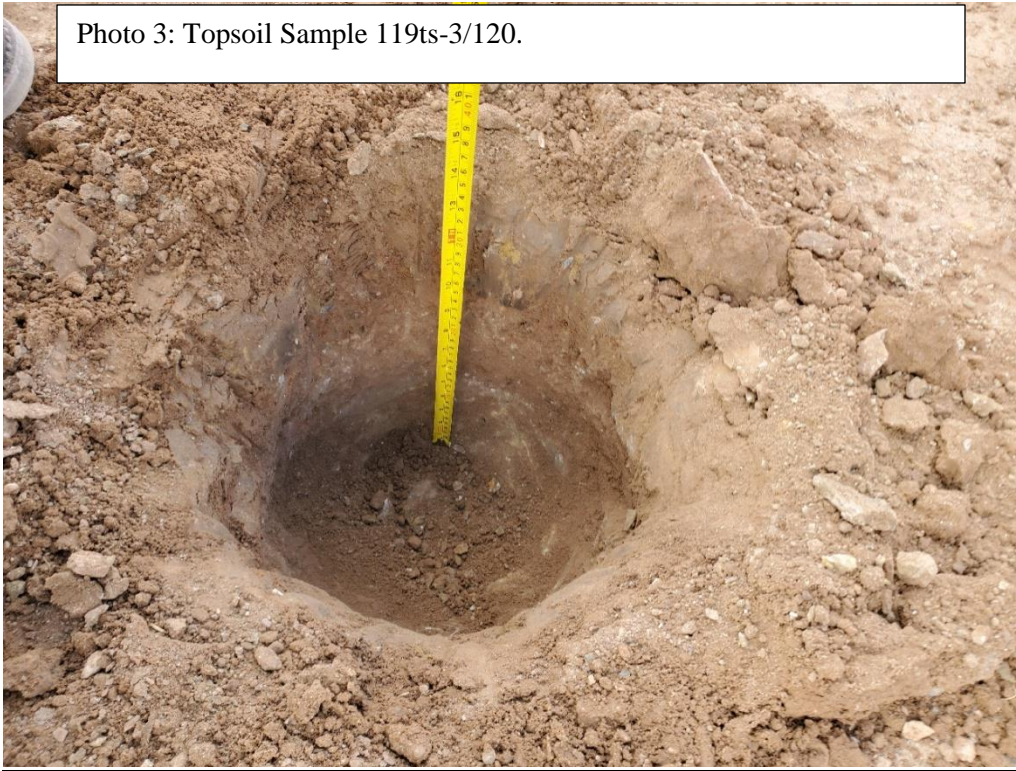
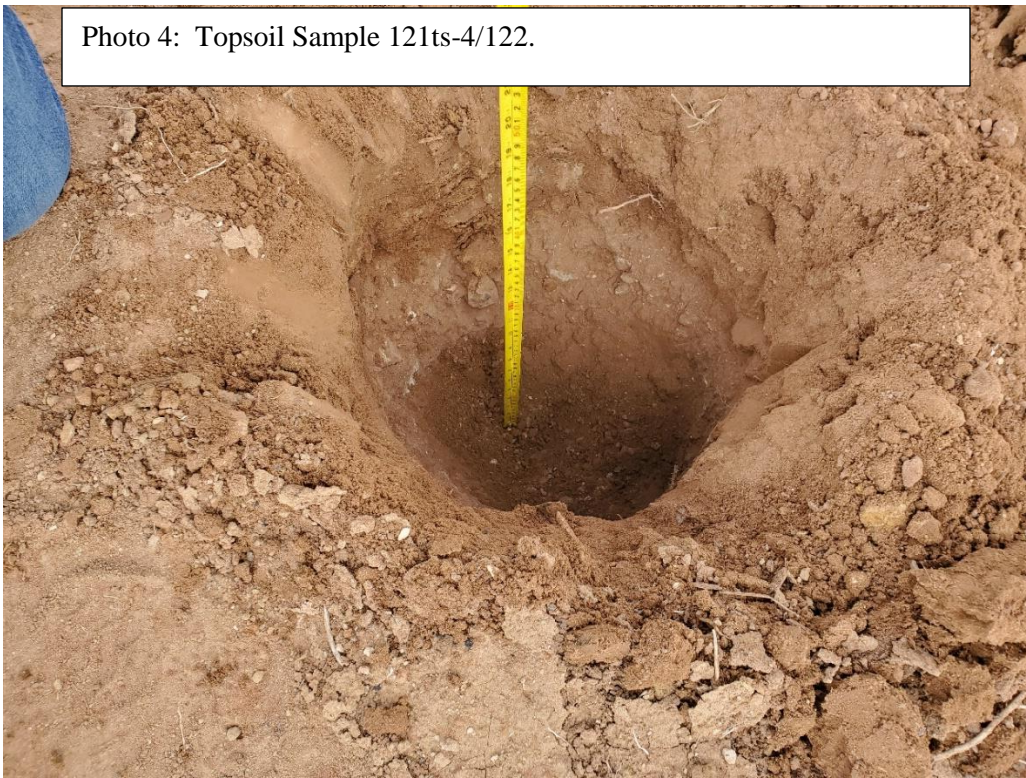


Photo 4: Topsoil Sample 121ts-4/122.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 5: Topsoil Sample 123/124ts-5.

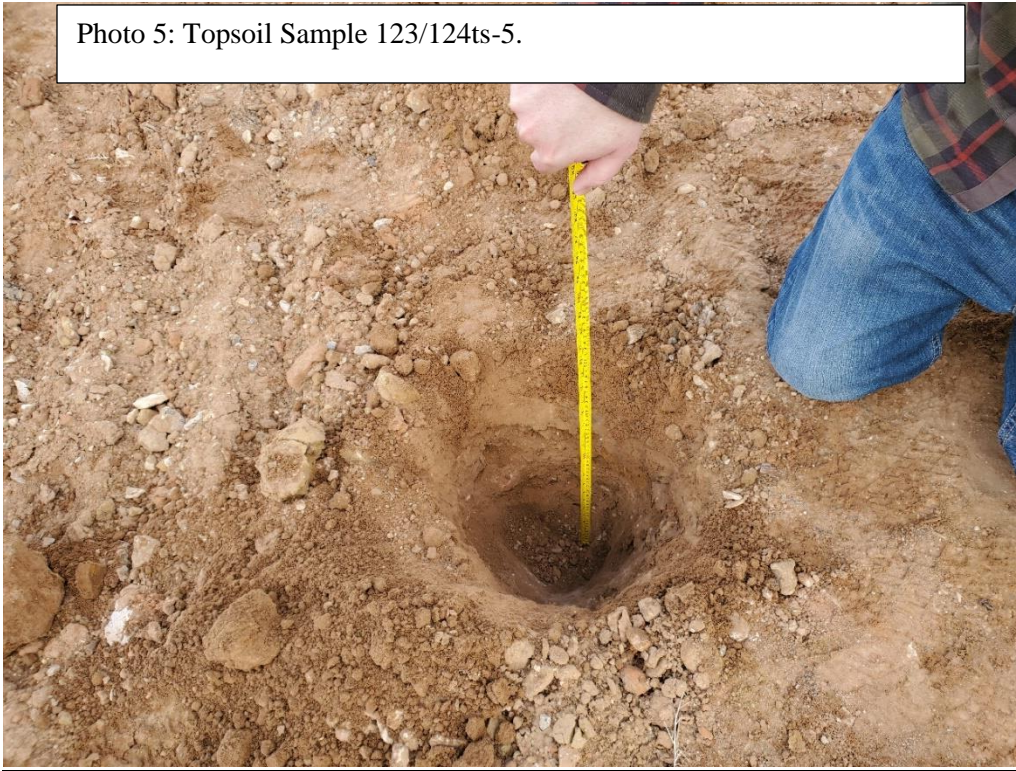
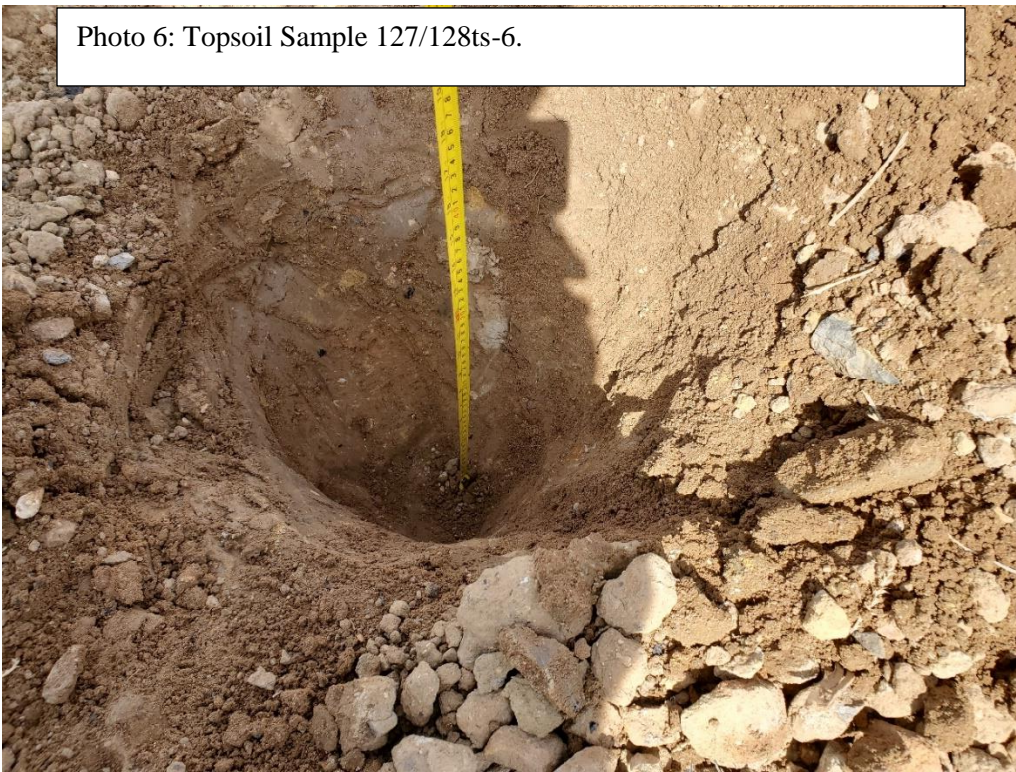


Photo 6: Topsoil Sample 127/128ts-6.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 7: Topsoil Sample 131ts-7/133.

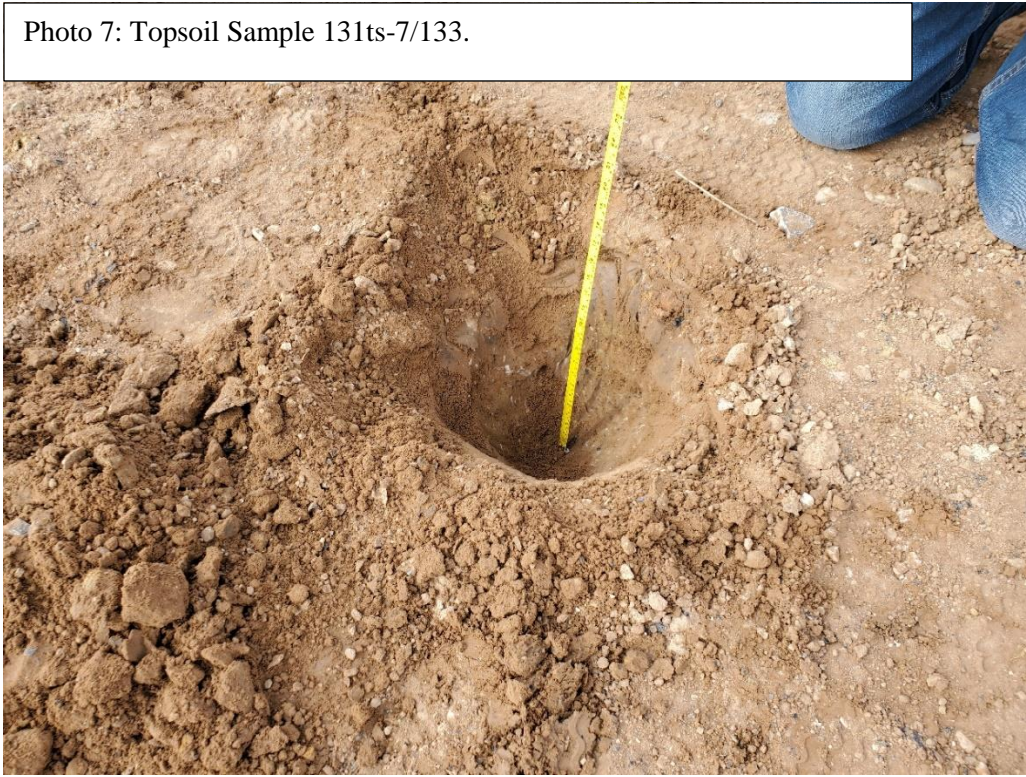
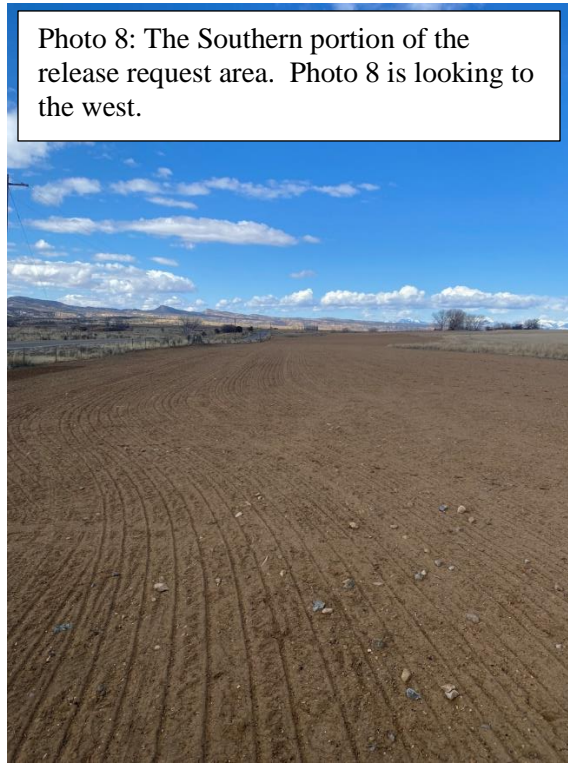


Photo 8: The Southern portion of the release request area. Photo 8 is looking to the west.



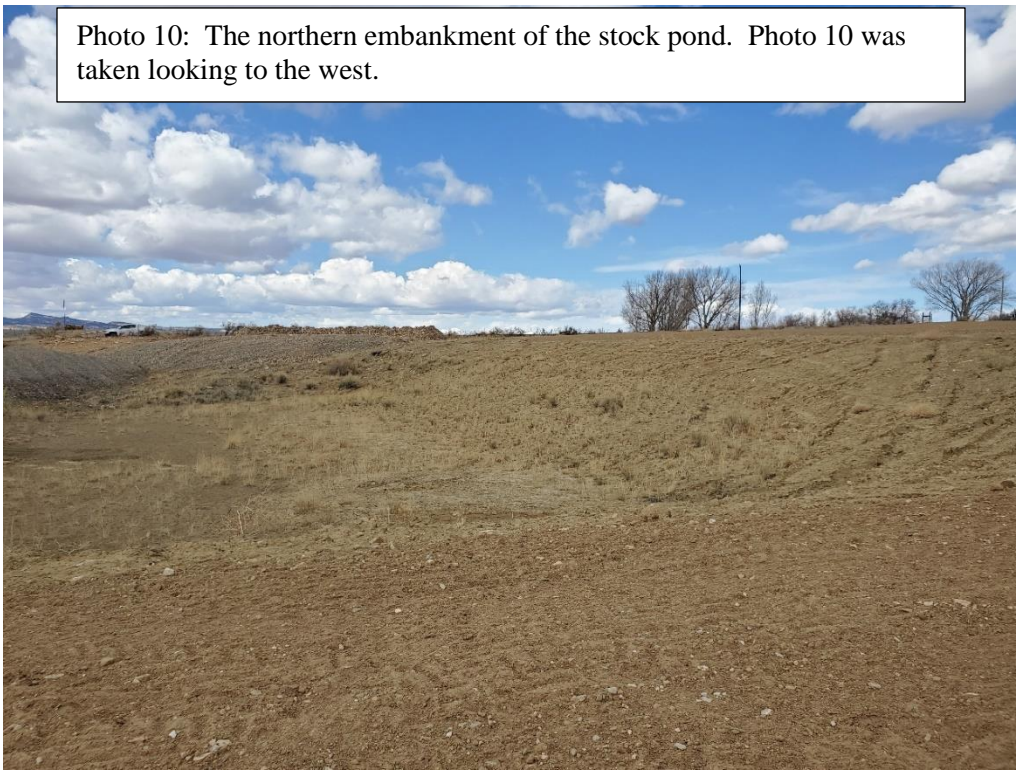
Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 9: The southern release request area. Photo 9 is looking to the east.



Photo 10: The northern embankment of the stock pond. Photo 10 was taken looking to the west.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 11: The southwest corner of the release request area. Photo 11 was taken looking to the east.

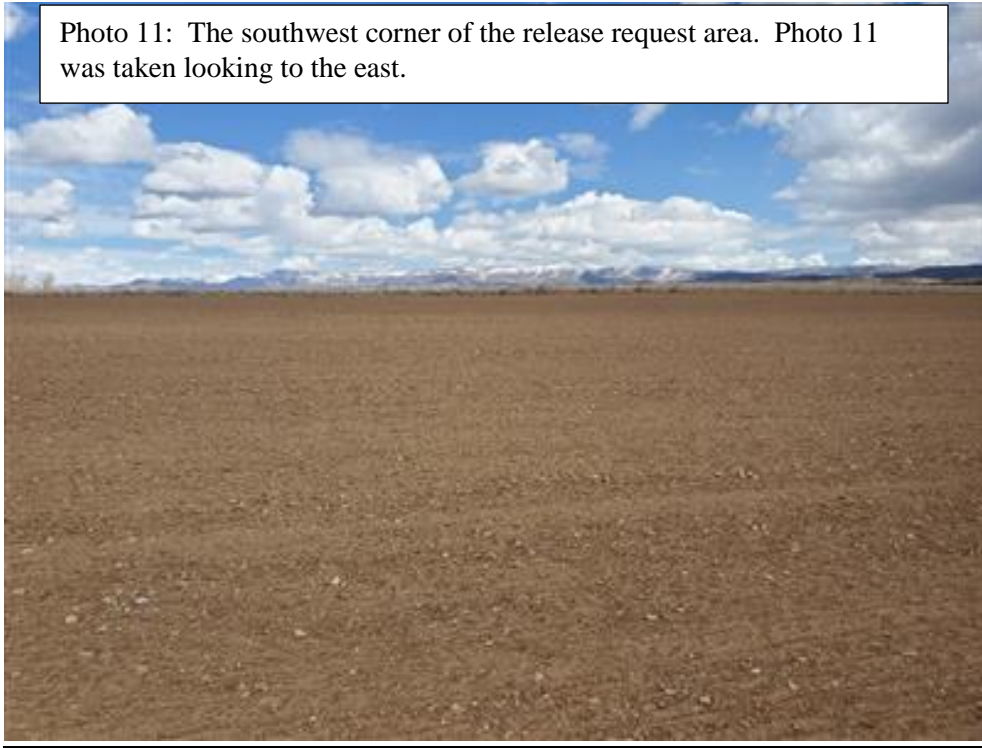
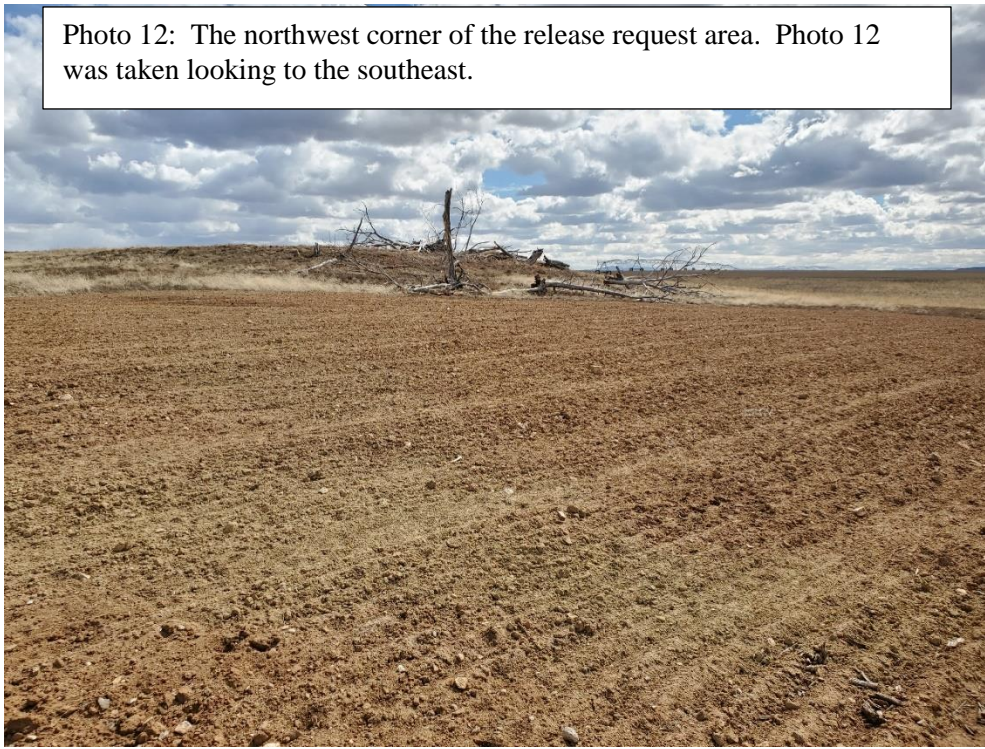


Photo 12: The northwest corner of the release request area. Photo 12 was taken looking to the southeast.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 13: The eastern portion of the release request area. Photo 13 was taken looking to the north.

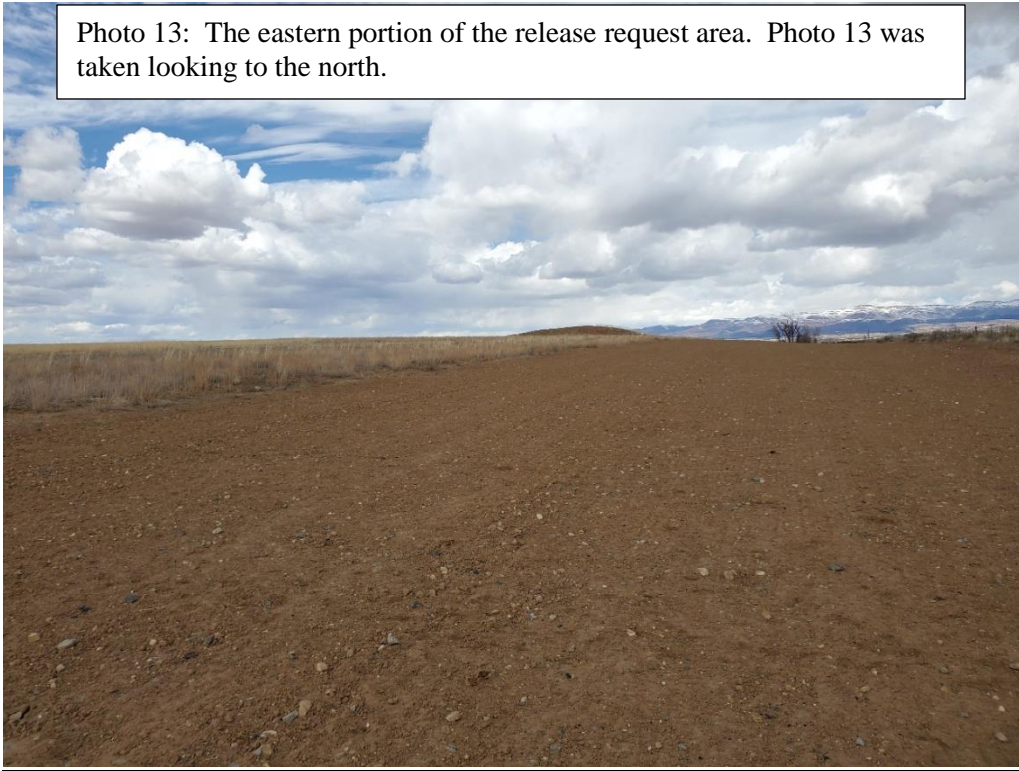


Photo 14: The eastern release request area. Photo 14 was taken looking to the south.



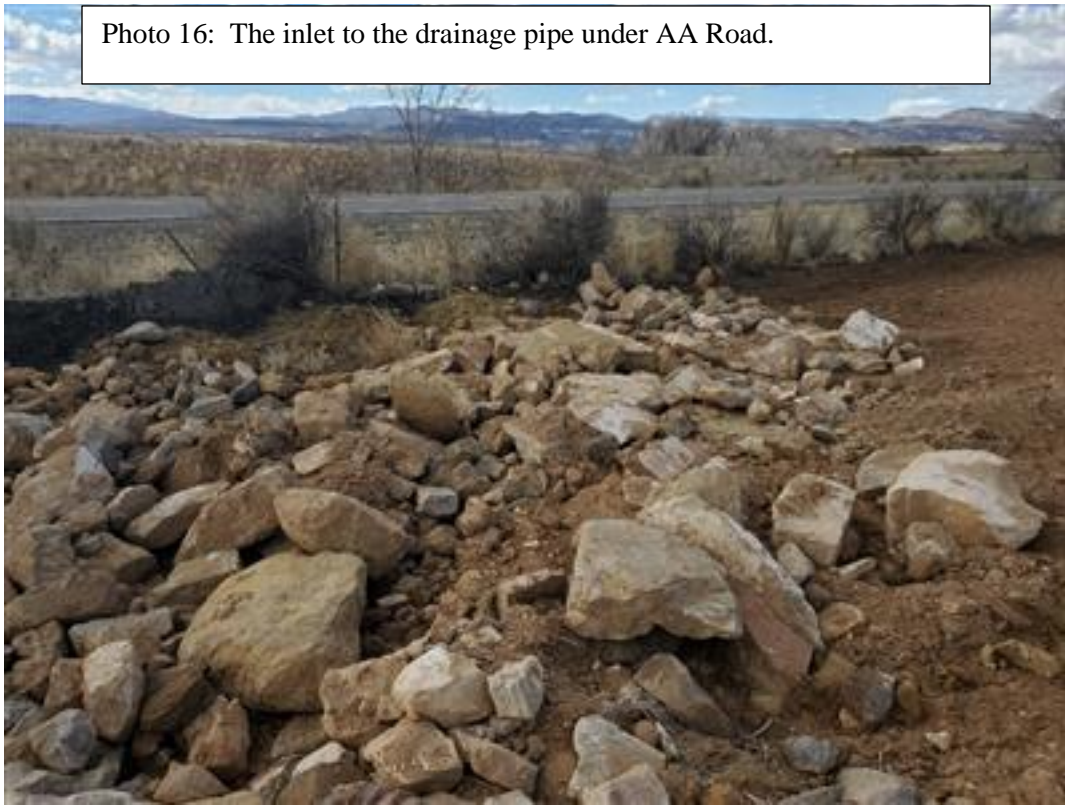
Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 15: The southeast corner of the release request area. Photo 15 was taken looking to the southwest.



Photo 16: The inlet to the drainage pipe under AA Road.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

Photo 17: The outlet to the discharge pipe under AA Road.

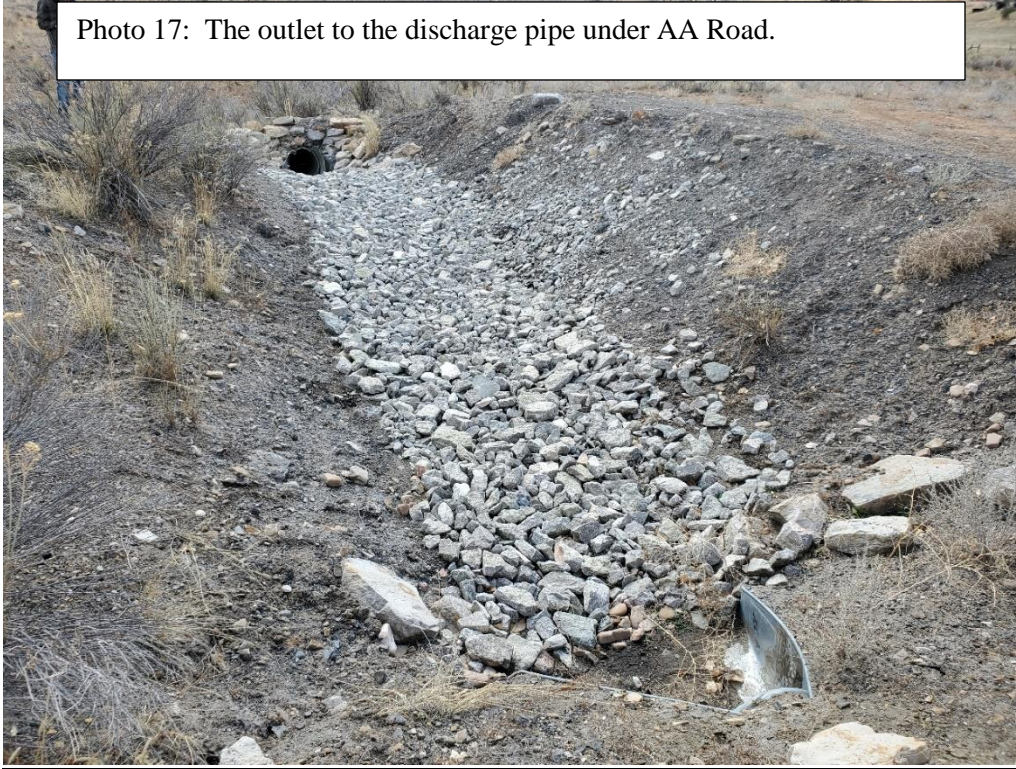


Photo 18: The access road applied for under the release request.



Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

SL-4 Table 1

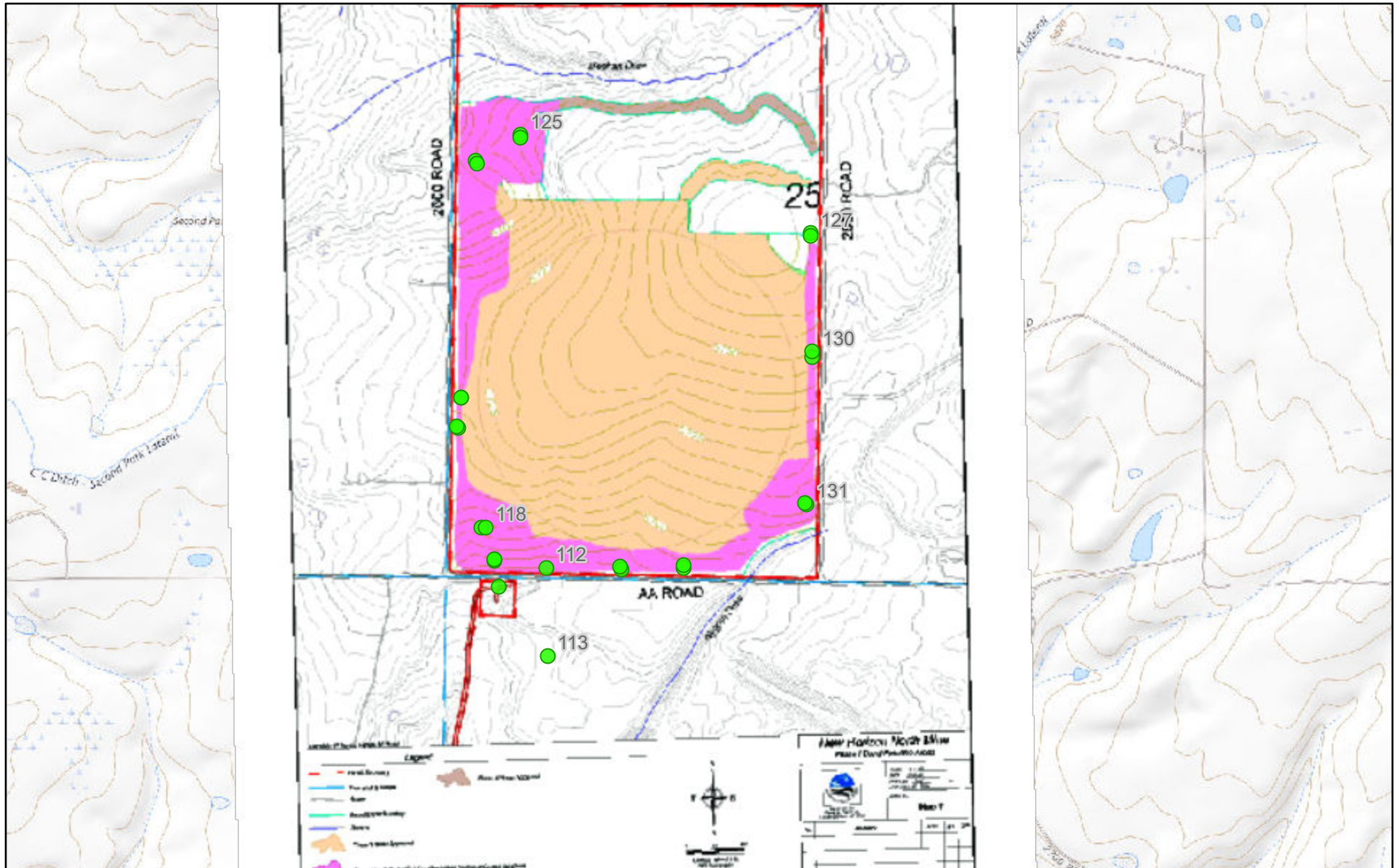
Data Point ID Number	Device Data Point Collected on	Elevation in Meters	Elevation in Feet	Topsoil Depth Measurement in Inches
108-E1	Samsung	1,720.40	5,642.91	NA
109	IPhone	1,734.60	5,689.49	NA
110ts-1	Samsung	1,721.50	5,646.52	16
111	IPhone	1,733.23	5,685.00	16
112	IPhone	1,730.26	5,675.25	NA
114ts-2	Samsung	1,719.20	5,638.98	15.5
115	IPhone	NA	NA	15.5
116e-3	Samsung	1,716.50	5,630.12	NA
117e-4	Samsung	1,723.90	5,654.39	NA
118	IPhone	1,737.59	5,699.30	NA
119ts-3	Samsung	1,730.70	5,676.70	12
120	IPhone	NA	NA	12
121ts-4	Samsung	1,731.30	5,678.67	17
122	IPhone	1,742.09	5,714.06	17
123	IPhone	1,735.60	5,692.77	16
124ts-5	Samsung	1,715.10	5,625.53	16
125	IPhone	1,739.61	5,705.92	NA
126e-5	Samsung	1,722.40	5,649.47	NA
127	IPhone	NA	NA	15
128ts-6	Samsung	1,740.40	5,708.51	15
129e-6	Samsung	1,739.80	5,706.54	NA
130	IPhone	1,753.16	5,750.36	NA
131ts-7	Samsung	1,723.80	5,654.06	15
133	IPhone	1,741.75	5,712.94	15

*On average iPhone data collection for elevation is +10 to +15 meters more that Samsung data collection.

Number of Partial Inspection this Fiscal Year: 6

Number of Complete Inspections this Fiscal Year: 3

New Horizon North Phase 1 Map



4/18/2024

