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

MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Tellier Gravel Pit	**MINE/PROSPECTING ID#:** M-1998-058	**MINERAL:** Sand and gravel and material for construc	**COUNTY:** Routt
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** September 20, 2024	**INSP. TIME:** 08:00
OPERATOR: Oldcastle SW Group, Inc. dba United Compa	**OPERATOR REPRESENTATIVE:** Jesse Farmer	**TYPE OF OPERATION:** 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** None	**BOND AMOUNT:** $104,116.00	
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None	
INSPECTOR(S): Brock Bowles	**INSPECTOR'S SIGNATURE:** 	**SIGNATURE DATE:** October 11, 2024	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS---------- N	(FN) FINANCIAL WARRANTY-------- N	(RD) ROADS---------- N
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- Y	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- N	(SF) PROCESSING FACILITIES------- N	(TS) TOPSOIL---------- Y
(MP) GENL MINE PLAN COMPLIANCE- N	(FW) FISH & WILDLIFE---------- N	(RV) REVEGETATION---- Y
(SM) SIGNS AND MARKERS---------- N	(SP) STORM WATER MGT PLAN---- N	(RS) RECL PLAN/COMP-- N
(ES) OVERBURDEN/DEV. WASTE--------- N	(SC) EROSION/SEDIMENTATION--- N	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- N	(OD) OFF-SITE DAMAGE----------N	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This inspection was conducted by Brock Bowles of the Division of Reclamation, Mining and Safety (Division). Jesse Farmer of United Companies (Operator) was present for the inspection. The Tellier Pit is located about 3 1/2 mile east of Milner. The site is a 112c operation with 25 acres permitted and the post-mining land use is pastureland. At the time of the inspection, it was warm, sunny and the ground was dry.

The landowner, Mr. Tellier, requested this inspection. Mr. Tellier was concerned about the quantity of topsoil used to reclaim the pit area. See the topsoil section below for more details.

Backfilling and Grading:
The pit consists of two main pit areas, a north pit and a south pit. The pits areas are separated by a 50-foot-wide gas line easement. The easement was not disturbed except the very east end where the pit access road crosses it. The slopes of the pit areas were graded 3h:1v on the west and south sides (photo 1). The sides of the gas line easement were also graded 3h:1v. No erosion features were noted in these areas.
The east and north sides of the pit area are open to the unnamed drainage that flows to the north.
The northern pit floor is sloped towards the drainage on the north and east sides. The western side is sloped to the west where it is intercepted by a drainage channel and directed to the northern wetland area, then eventually into the unnamed drainage.
The southern pit area is sloped to the west where the water is directed into a wetland area along the western side (photo 2). A drainage pipe has been installed that drains the wetland area to the unnamed drainage along the eastern boundary of the pit area.

Hydrologic Balance:
The southern pit area is sloped to the west and south where the water is collected by a channel and directed to a wetland area along the western side of the pit area (see photo 2 for locations of wetland structures). The channel and wetland area have a dense stand of cattails. A couple of little frogs and ducks were seen in the wetland area.
A buried drainage pipe has been installed from the wetland to the natural unnamed drainage. The inlet to the drainage pipe from the wetland was not located in the dense foliage. The drainage pipe directs the water to the northeast into a sump area which is located south of the gas line easement and just west of the access road. The sump area also contained dense foliage. A transfer box with a gate valve was located in the sump area. Water could be heard running through the transfer box, although it was hard to see the water in the box due to the thick vegetation around it. Water is then directed from the transfer box to the unnamed drainage east of the sump area. The top of the outlet pipe was seen but it was under water. It is assumed the water was discharging due to the area around the outlet pipe was flooded.

Revegetation:
One of the topsoil stockpiles was located along the northern fence line while the mine was in operation. The footprint of this former stockpile is currently covered in a dense, tall stand of kochia (photo 3).

Topsoil:
The landowner of the Tellier Pit, Mr. Tellier, requested the Division conduct an inspection of the pit because he felt the topsoil had not been adequately replaced by the operator before the site had been seeded. Mr. and Mrs. Tellier met me at the pit at 8 am on the morning of the inspection. I met with Jesse Farmer of United Companies during a separate meeting at 9 am on the same day.

The original permit application was submitted to the Division in 1998. In the application, a Natural Resources

Conservtion Service report identified the soils on the site prior to mining as 66C-Foidel loam (see attached NRCS 1995 Report). The soil is described as dark, grayish brown, clay loam and 24" thick. The NRCS has updated the soil description for the area of the pit which is documented on the Web Soil Survey (https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx). The updated classification of the soil is called Rabbitears loam from 0-22 inches. According to the soil description, gravel is not seen in the profile until 26 inches deep (see attached description).

The permit application calls for topsoil to be replaced at an average depth of at least 1 foot (see attached Exhibit E, 3(a)).

Mr. Tellier hired a third-party consultant, NorthWest Colorado Consultants, Inc., to conduct a soil survey to determine the amount of topsoil that was re-applied across the site. NWCC concluded that the required depth of topsoil was not replaced on the site (see attached report).

The Division observed that gravelly material covered large sections of the pit floor surface area. Rocks ranging in size from ½ inch to 3 inches in diameter were observed (photo 4). The soil surface also appeared to have areas of dense clay. This was evident by the hardness of the soil and stunted plant growth compared to adjacent areas (photo 5). Several of the test holes used by NWCC for their report were observed (photo 6). Mr. Tellier dug into some of these test holes with a hand shovel to clear out the debris that settled in the holes. The holes were about 6 inches deep. Rocks and gravelly material were observed throughout the depth of the holes along with clods of clay.

Mr. Tellier dug a test hole in his alfalfa field, which is also classified as 68- Rabbitears loam, to show what Rabbitears loam looks like (photo 7). The test hole is located about 25 feet south of the southern permit boundary (see attached map). The soil in this test hole was consistent with the NRCS soil description for Rabbitears loam. Rocks were not observed on the surface of the soil nor were any seen in the hole. The soil texture was consistent, no clods of clay were seen.

The Division has determined that topsoil has not been replaced to an average depth of at least 1 foot across the mine site.

The Division (Brock Bowles and Zach Trujillo) met with the Operator (Tyra Bartuska, Jason Burkey, Jeff Boone, Jesse Farmer, Thomas Davis and Ben Langenfeld) on a video conference on September 27, 2024, to discuss what was observed at the site and the requirements of the permit. The Division is meeting with the Operator again on October 24, 2024, to discuss the next steps.

PHOTOGRAPHS

Photo 1 – Southwest corner of south pit, side slopes graded 3h:1v.

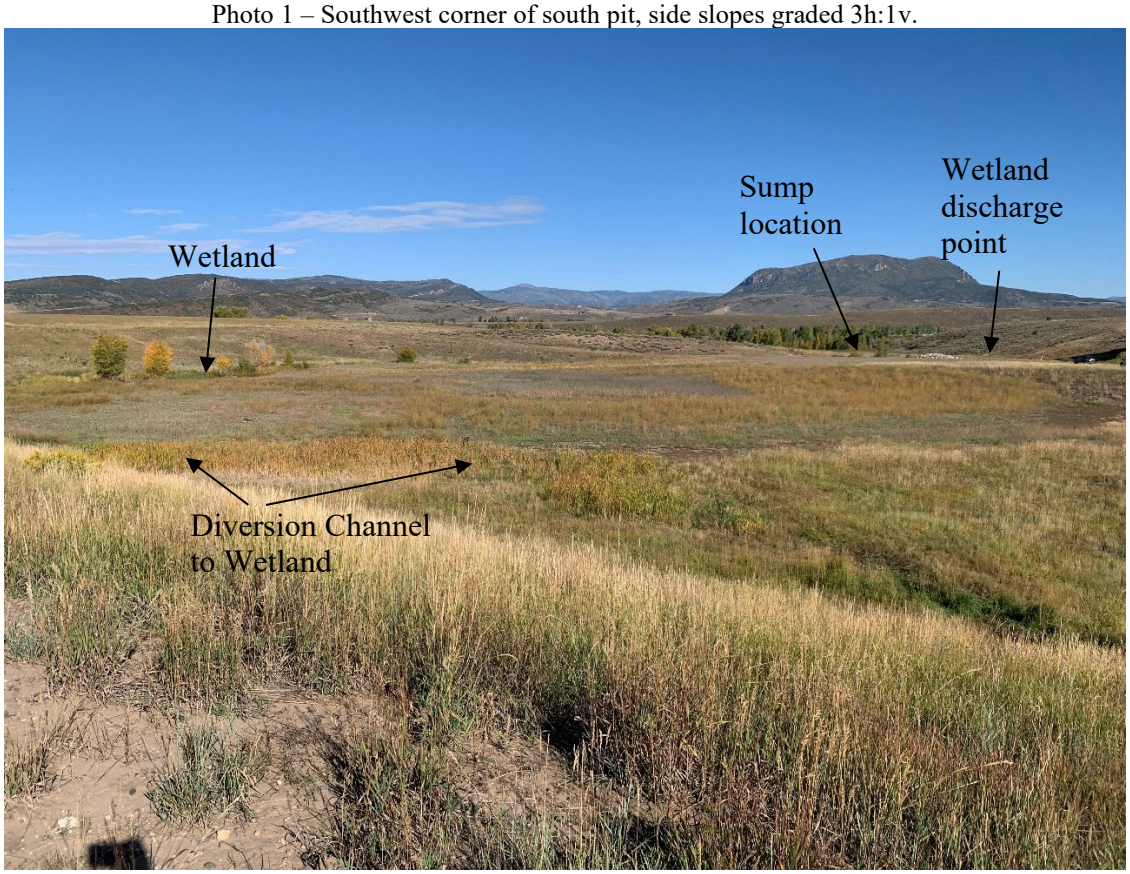

Photo 2 – South pit, facing north, wetland structure locations

Photo 3 – A tall stand of kochia growing in the location of the former topsoil stockpile along the northern fence line

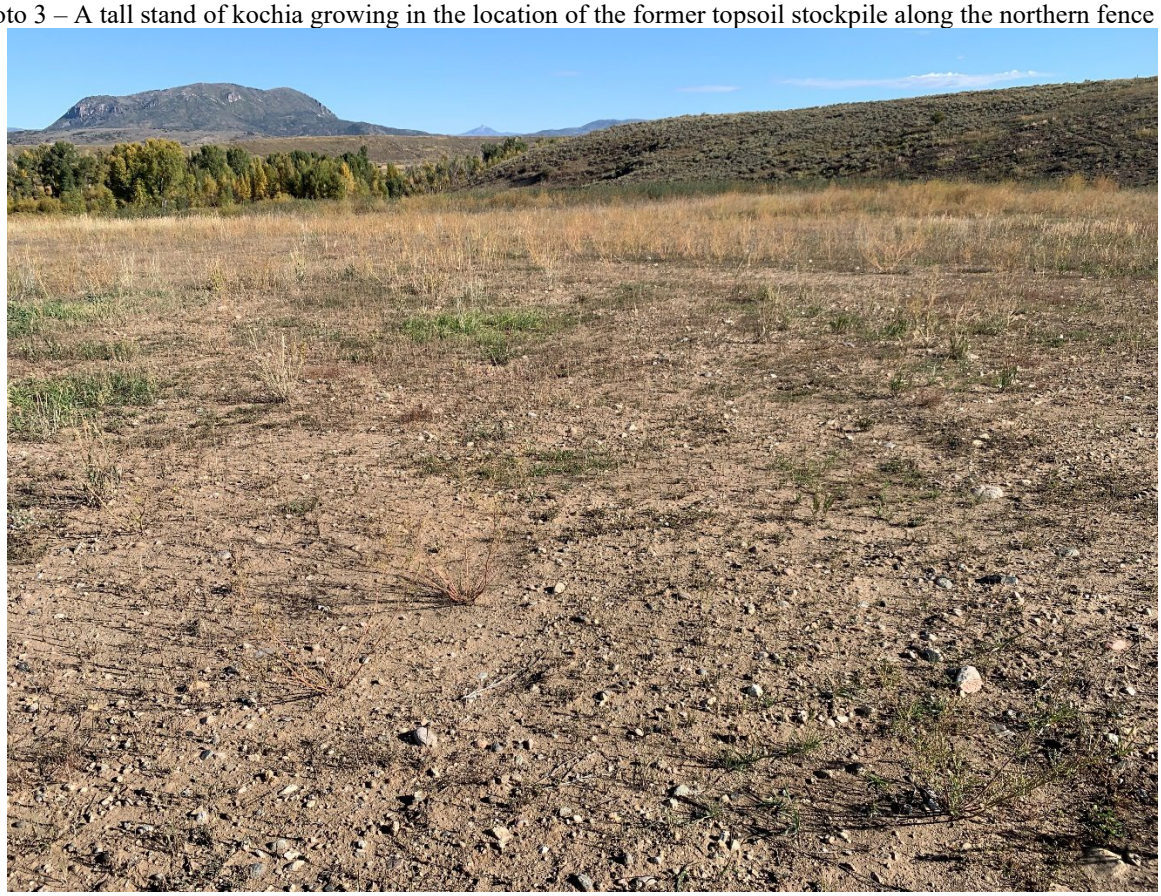

Photo 4 – North pit area (facing northeast) has a significant amount of rocks

Photo 5 – hard packed soil and sparse vegetation along southern permit boundary

Photo 6 – One of the test holes used for the NWCC report.

Photo 7 – Test hole in adjacent field showing Rabbitears loam.

Inspection Contact Address
Jesse Farmer
Oldcastle SW Group, Inc. dba United Companies
2273 River Road
Grand Junction, CO 81505

Enclosure: NRCS 1995 Report
NRCS soil description- Rabbitears loam
Exhibit E of Permit M-1998-058
NWCC report
Soil map

United States
Department of
Agriculture

Natural
Resources
Conservation
Service

P. O. Box 773389
Steamboat Springs
Colorado, 80477

INVENTORY AND EVALUATION OF

PROPOSED GRAVEL PIT
(Luke Tellier)

Prepared for Routt County

In Cooperation With The

ROUTT COUNTY SOIL CONSERVATION DISTRICT

at the request of

Brandy Eisenbart

LOCATION

NE1/4, NW1/4 of Sec 17, T6N, R85W

Prepared by

Fiedld and Soil Survey Staff of the

USDA Natural Resources Conservation Service

July 14, 1995

1 N scale: 1" = 2000'

125 W.
X25A
93A
ELK RIVER
66C
2E
2F
49A
AW
YAMPA RIVER
RIO GRANDE WESTERN
25A
66C
50C
GP
110
89
COW CREEK
2VC
2VD
2C
27A
F10
35D
D10
2B
50F
53F
68D
XBD
103
88F
68F
109
104
66D
68C
2VF
45
33

Routt County Soil Conservation District
P. O. Box 779 - Steamboat Springs, Colorado 80477
Phone (303) 879-3225

SOILS

66C--Foidel loam, 3 to 15 percent slopes. This deep, well drained soil is on alluvial fans, plateaus, and benches.

Typically, the surface layer is dark grayish brown loam 24 inches thick. The upper 24 inches of the subsoil is brown clay loam, The lower part to a depth of 60 inches or more is yellowish brown clay loam. Permeability of this Foidel soil is moderately slow. Effective rooting depth is 60 inches or more. Available water capacity is high. Runoff is slow, and the hazard of water erosion is slight.

VEGETATION

The proposed gravel pit site is dominated by pasture grass species that included western wheatgrass, streambank wheatgrass, smooth brome and Kentucky bluegrass. Forbs found on the site were yarrow, lupine, whitetop, canada thistle and hounds tongue. The site produces approximately 1500lbs/ac. of forage per acre.

A concern of the large amount of whitetop present could be spend with the gravel if the whitetop is not controlled before gravel mining begins.

RECLAMATION PLAN

Before mining of gravel starts, the top 12 inches of topsoil should be stripped, stockpiled, and seeded with 20 lbs/ac of Pubescent Wheatgrass (Luna Variety) for future use.

The disturbed area should first be shaped with no slopes steeper than 3:1. Following shaping the topsoil should be spread evenly over all disturbed areas. Following topsoil spreading the site should be fertilized with a minimum of 40 lbs of nitrogen and 10 lbs available phosphorous per acre. Then the area should be disced to incorporate the fertilizer.

SEED MIX & MULCHING

If seeding is to be done in the spring, it should be done as soon as conditions at the site permit, no later than May 15th. If seeding is to be done in the fall, it should be done no earlier than October 15 but before the ground freezes.

Species	Variety	% of mix	Pure Live Seed LBS/AC
Smooth Bromegrass	Manchar	25	3.5*
Pubescent Wheatgrass	Luna	50	9.0
Streambank Wheatgr.	Sodar	25	4.0

* Above rates are drilled rates. If seed is broadcast, rates should be doubled.

After the areas are seeded they should be covered with straw mulch at a rate of 2,000 lbs/ac. The straw should be scattered evenly over the site, then lightly disced to crimp the straw into the soil.

Seed cost will be approx. $50-60/acre

WEED CONTROL

The area seeded should have some type of weed control done during the first growing season following planting. My recommendation is 1/10 oz. of Ally with 1/4 lb of 2,4-D per acre when the annual broadleaf weeds are 2-3 inches tall. This should be sprayed on in aqueous suspension at the rate or 12 gal per acre with the recommended amount of surfactant included in the mix.

Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

68C—Rabbitears loam, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0gy
Elevation: 6,560 to 8,040 feet
Mean annual precipitation: 20 to 24 inches
Mean annual air temperature: 38 to 41 degrees F
Frost-free period: 30 to 70 days
Farmland classification: Not prime farmland

Map Unit Composition

Rabbitears and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rabbitears

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from sandstone and shale

Typical profile

A1 - 0 to 7 inches: loam
A2 - 7 to 22 inches: loam
Bt1 - 22 to 26 inches: sandy clay loam
Bt2 - 26 to 38 inches: gravelly clay loam
Bt3 - 38 to 54 inches: gravelly sandy clay loam
C - 54 to 60 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 6c
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: C
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Minor Components

Winevada

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY228CO - Mountain Loam
Hydric soil rating: No

Hunchback

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: No

Jerry

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

Data Source Information

Soil Survey Area: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
Survey Area Data: Version 13, Aug 23, 2023

Consultants.

Existing Disturbance. Two areas of existing disturbance are found in the proposed mine plan area. These are the existing ranch road and the existing gravel pits which were used for personal, non-commercial use and did not trigger any permitting action.

All drainage from the proposed mine area will either initially be discharged into an excavated diversion ditch or diversion ditches which will be directed into sediment ponds which form the perimeter of the mine plan area. These ditches correspond to the outermost edge of the planned disturbance and is depicted on Map 3, Tellier Gravel Pit - Mine Plan Map. All of the surface drainage will be directed through one of three sedimentation ponds before it is discharged into the unnamed drainage containing jurisdictional wetlands, which runs through the property. All of the surface water flowing off the mine disturbance area will be routed into this diversion ditch and through the sedimentation ponds to ensure that the wetland area is no affected by sedimentation.

EXHIBIT E
Reclamation Plan

The proposed reclamation plan for this mine is shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map. Based upon the exploration drill hole data, on average, approximately 8.4 feet of overburden will be replaced on the mine areas, with a range of between 3.5 and 15 feet. The location of the two shallow wetland areas, requested by the Colorado Division of Wildlife are also shown on this map, along with the proposed shoreline configuration. On average, 1.2 feet of topsoil exist on the site this material will be salvaged and utilized for final reclamation.

1. Overburden Replacement. Due to the nature of this gravel deposit, it anticipated that approximately 20 percent of the materials to be excavated will be returned to the pit areas as waste or as backfill materials. When overburden is replaced in the excavated pit areas these materials will be reapplied along the edges of the excavated pond area. As mentioned previously, the primary emphasis will be on placing fill along the eastern property boundary. If sufficient fill is available then one or two islands will be constructed in the middle of the pond area. In addition, a minor amount of clean fill material generated from off-site construction projects may be hauled and used to backfill the excavated mine pit areas at this location.

2. Reclaimed Slopes. As recommended by Ms. Elizabeth Miller, the local Wildlife Manager of the Colorado Division of Wildlife, slopes along the perimeter of the pond area will be left in a non-uniform configuration. Maximum slopes will not exceed 3:1 to ensure slope stability. Flatter slopes will be periodically constructed

along the shoreline of the pond area. The extent of these flat areas will be somewhat limited due to the need to limit the growth of cattails on this location.

3. Revegetation. The intended post-mining land use of the site will be consistent with the current land use of the site, namely that of rangeland.

(a) Thickness of Reapplied Topsoil. The thickness of reapplied topsoil will range from approximately one feet to upwards of 1.5 feet with an average depth of at least 1 foot as recommended by the NRCS.

(b) Seedbed Preparation. Following the reapplication of topsoil these sites will be ripped with either a dozer with a ripper bar, a motor grader or a tractor with a chisel plow to eliminate compaction. The depth of ripping will be consistent with the depth of reapplied topsoil to ensure that the quality of topsoil is not diluted by mixing with less desirable subsurface soil materials. Following the completion of the seedbed preparation operations, the sites will be seeded as described below.

Seeding will be performed depending on when the ripping and topsoil reapplication operations are completed. Either fall or early spring seeding periods will be utilized. If the seedbed preparation is completed during the summer or fall, then seeding will begin in the fall after fall frosts arrive. If the seedbed preparation is completed during the winter or early spring then spring seedings will be completed when the soil is dry enough to work, yet still somewhat moist.

Soil amendments such as supplemental fertilizers will be applied only if soil tests reveal a deficiency for the identified plant nutrients for the plants to be seeded. In the event that tests indicate a nutrient deficiency, then supplemental fertilizers will be applied at the levels recommended by the Colorado State University Soils Testing Laboratory.

© Species and Rates of Plants to be Seeded. The basic seed mixture will follow the recommendations contained in the USDA-NRCS report which is discussed in Exhibit 1, Supporting Documentation, with the exception that dry land alfalfa or yellow sweetclover will be added at the rate of 1 pound of per live seed per acre.

(d) Seeding Method. Preference will be directed towards drill seeding of all sites which are artificially seeded at this location. In the event that drill seeding cannot be completed then the site will be broadcast seeded at the rates specified in the USDA-NRCS recommendations.

(e) Mulching. Due to the high amount of organic matter found in these topsoils and absence of slope which would contribute to erosion, there is no need for mulch to be applied to the topsoil stockpiles at this site. At the time of final

reclamation all of the revegetated areas will be mulched with either clean straw or native hay mulch.

(f) Shrub and Tree Plantings. Since the site is presently devoid of trees, the reclamation plan will not consist of the planting any shrubs or trees on any reseeded sites. Willows, Narrowleaf Cottonwoods and other wetlands species will be planted along the perimeter of the two proposed wetland sites at a density of one plant with one hundred foot centers as recommended by the Colorado Division of Wildlife.

4. Proposed Structures. The only proposed structure which will remain following the cessation of all mining operations will be the proposed wetland areas. The approximate configuration of these depressional ponds is shown on Map 4, Tellier Gravel Pit - Reclamation Plan. Due to the irregular configuration of the mine plan area the resulting shoreline will be irregular in shape, increasing the potential edge effect and value of the site for wildlife.

5. Reclamation Plans for Dewatering Ditches. At the commencement of mining operations, the dewatering ditch, constructed prior to the initiation of all mining operations will consist of an abrupt highwall, with the inside of the ditch being mined away. However, since mining operations will along this axis these sites will be among the first sites which will be reclaimed. The overburden materials removed from the commercial gravel deposits will then be placed in these areas to ensure that all final slopes are less than 3:1.

6. Reclamation Costs. Pursuant to instructions given to Kent Crofts by Greg Squire of the Division of Minerals and Geology, no reclamation costs have been calculated in connection with this permit application. During a recent meeting held in the Division's offices, we were instructed not to waste our time doing this analysis since the Division now has a computer program which simplifies this evaluation and which they must use in the determination of the amount of the reclamation bond. Since the existing access road will remain in an unimproved state, no reclamation costs of this item will be necessary. The only reclamation costs which will be incurred in this operation will be the regrading of the pits, reapplication of topsoil and revegetation.

Post Mining Slopes. The approximate configuration of the post mining slopes for this site are shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map.

Areas of Revegetation. The areas where revegetation will be conducted are shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map. The areas where there will be no upland vegetation established are shown on this map as areas corresponding to wetland areas.

Final Shoreline Configuration. No permanent water bodies are proposed in connection with the reclamation and revegetation efforts at this site. The two proposed wetland areas may be flooded with water during the wetter portions of the year but it is believed that they will not hold water on a year round basis.

Average Thickness of Replaced Overburden. The proposed average thickness of the replaced overburden is 8.4 feet, with a range of between 3.5 and 15 feet and is pictorially shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map.

Average Thickness of Replaced Topsoil. The proposed average thickness of the replaced topsoil will be a minimum of one foot as recommended by the NRCS and is pictorially shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map.

EXHIBIT F
Reclamation Plan Map

The anticipated physical appearance of the site following the cessation of mining, is shown on Map 4, Tellier Gravel Pit - Reclamation Plan Map. This map shows the proposed topography of the site as well as the proposed flow directions of the surface waters on the site.

EXHIBIT G
Water Information

The location of all tributary drainages, wells, springs, stockwater ponds, reservoirs and ditches on the affected site and within two hundred feet of the site are shown on Map 2, Tellier Gravel Pit - Premining Conditions Map. Exploration activities on the proposed mine area have documented that ground water was encountered in 11 of the 15 holes drilled. The depth of groundwater was between 12 and 33 feet deep and is encountered in areas where the gravels overlay the shale. This groundwater discharges into the Yampa River to the north, since there are no spring or seep areas located along the hillside to the north of this site.

Since this will be a wet pit, a dewatering trench will be constructed as shown on Map 3, Tellier Gravel Pit - Mine Plan Map. This trench will be excavated along the south and west boundaries of the property to intercept groundwater which is flowing down dip towards the center of the Yampa Valley. The neighbors to the east have a well located next to their house, but since the bottom of the drainage between the proposed mine area and this well is lower than the proposed limit of dewatering activities it is impossible for this action to intercept their water supply. Waters collected in the dewatering ditch and from runoff off the mine disturbance areas will be directed through a series of proposed sediment ponds before it is discharged into the receiving drainage. As shown on Map 3, Tellier Gravel Pit - Mine Plan Map, all of the drainage flowing off the proposed mine access road will

NorthWest Colorado Consultants, Inc.
Geotechnical / Environmental Engineering • Materials Testing

July 29, 2024

Luke Tellier
25505 RCR 33A
Steamboat Springs, CO 80487

Job Number: 24-13404

Subject: Topsoil Reclamation Observations, Tellier Gravel Pit, 25505 County Road 33A, Routt County, Colorado.

Luke,

This report presents the results of NWCC's Topsoil Reclamation Observations for the Tellier Gravel Pit located at 25505 County Road 33A in Routt County, Colorado.

NWCC understands that gravel mining operations at the site have ceased and two remaining areas were recently reclaimed with topsoil materials and seeded. A site plan showing the two reclaimed areas, south pit and north pit, are shown in Figure #1.

NWCC understands, based on conversations with the client and a review of the Gravel Pit Permit Application and the Technical Adequacy Review and Responses, NWCC understands that the topsoil depths prior to starting mining operations ranged from 1 to 1.5 feet in thickness with an average of 1.2 feet. The topsoil reclamation for the gravel pit required that between 12 and 18 inches of topsoil materials be placed in the disturbed areas to reclaim the site.

Topsoil Reclamation Observations: NWCC visited the project site on July 2, 2024. The client excavated seventeen shallow test holes by hand across the south pit and five shallow test holes across the north pit to evaluate the topsoil reclamation completed in 2023. NWCC observed the excavation of the test holes and measured the depth of the topsoil fill materials. Based on our observations and measurements, the topsoil reclamation materials were generally 1 to 3 inches in thickness across the site. Isolated areas of 4 to 5 inches of topsoil were observed in three of the seventeen holes observed in the south pit. The topsoil materials were underlain by a mixture of clays and gravels. In addition, clays and gravels were mixed into the topsoil materials. Also, significant areas of gravels were observed at the ground surface across both areas. Some debris was also observed across the ground surface. Sparse grasses were observed across the reclaimed area and the vegetation primarily consisted of weeds.

Based on our observations of the test holes advanced across the site, it does not appear the required depth of topsoil fill materials were placed in the reclamation of the site. The topsoil materials should be relatively free of gravels and clay materials and contain organic matter sufficient to promote revegetation.

If you have any questions regarding this report or if NWCC may be of further service, please do not hesitate to contact us.

Sincerely,
NWCC, INC.

Timothy S. Travis, P.E.
Senior Project Engineer

COLORADO LICENSED
BRIAN D. LEN
25750
PROFESSIONAL ENGINEER

Reviewed by Brian D. Len, P.E.
Principal Engineer 7/30/2024

N

NOT TO SCALE

Title: SITE PLAN		**Date:** 7/29/2024	NWCC North West Colorado Consultants, Inc. Geotechnical / Environmental Engineering - Materials Testing
Job Name: Tellier Gravel Pit		**Job No.** 24-13404	(970)879-7888 - Fax (970)879-7891 2580 Copper Ridge Drive Steamboat Springs, Colorado 80487
Location: 25505 County Road 33A, Routt County, Colorado		**Figure** #1	

Tellier Pit, M-1998-058

★ -Approximate location of Mr. Tellier's test hole in soil classified as 68C- Rabbitears loam

Source: Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx