



July 5, 2022

Mr. Rick Allison

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, STE 801
Denver, CO 80203

**Re: Nickerson 4 Pit & Location Closure Report
Tindall Operating Company - Operator # 88380
Skim Pit (#111633) & Location (#326976)
Legal: SWNW Sec 18-7N-R58W**

Dear Mr. Allison:

On behalf of Tindall Operating Company, GIS Peace has prepared this Closure Report to document closure activities of the Skim Pit (Pit) and Location to request official COGCC closure of the Pit (#111633) and Location (#326976) so that regrading and reclamation activities can begin. This report summarizes remediation details including sample locations, analyte suites, and analytical results for closure of the Nickerson 4 Skim Pit (Facility ID111633) at the Nickerson Location (Site) (Facility ID 326976). Pit closure activities were initiated with the submittal and approval of Closure Form 27 # (402718247).

Pit Characterization and Remediation Activities

Characterization of the Pit began on October 18, 2021, with the excavation of the Pit walls in order to visually assess possible impacts and to collect confirmation soil samples.

Four (4) soil samples (N, S, E, W) were collected from the sidewalls of the Pit in the four cardinal directions and one from the base (B) of the Pit excavation. The soil samples were field screened for volatile organic compound (VOC) concentrations using a Photoionization Detector (PID) and then submitted to Summit Scientific Laboratory in Golden, Colorado, for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, trimethylbenzene 1,2,4, trimethylbenzene 1,3,5, total petroleum hydrocarbons (TPH) – gasoline range organics (GRO) in accordance with United States Environmental Protection Agency (USEPA) Method 8260B, and TPH – diesel range organics (DRO) in accordance with USEPA Method 8015. Remediation activities continued October 22, 2021, with the further excavation of the Pit to collect the B @ 25 confirmation soil sample.

On October 25, 2021, COGCC inspection revealed that stockpiled soils had exceeded 10 Cubic Yards (CY) resulting in the designation of a spill. A Form 19 # (402854046) was filed and the required notifications were made to the landowner, local authorities, and wildlife officials.

On October 26, 2021, additional soil sampling was performed to comply with COGCC COA. *If impacted or oily soil is discovered during the pit investigation, Operator will analyze soil samples for complete Table 915-1 (Soil TPH(C6-C36), Organics in Soil, metals in Soil, Soil Suitability. Operator will show locations of all samples, including background samples, on future maps.*



Geospatial Consulting Services

Results from the additional soil sampling performed October 26, 2021, and additional analysis on existing Pit sidewall samples revealed exceedance of Table 915-1 standards for soil suitability parameters and metals.

On November 16, 2021, in response to a Pit Closure Request COGCC Doc # (402871793) outlined additional COGCC COA's.

Based on COGCC site observations, and information from area water wells, COGCC agrees to the use of Table 915-1 Residential Soil Screening Levels for organics and metals in soil.

Soil suitability parameters exceed Table 915-1 for pH and SAR. Operator will demonstrate soil suitability conditions in the root zone at a depth based on crops to be grown at the location. If Operator proposes to leave material with elevated soil suitability parameter in-situ, Operator will submit a Reclamation Plan on a Form 27 Supplemental for Director approval.

Closure request removed. Operator shall demonstrate that arsenic in soil samples from pit are within site-specific background levels through additional background and/or pit sampling.

On December 11, 2021, additional excavation and sampling was performed along Pit walls to remove arsenic and collect confirmation samples. Three additional background samples were collected via hand auger techniques between 2-3' bgs within the main root zone of the wheat crop from east, west, and south of the site as illustrated within Figure 1.

Results from the additional background sampling on 12/11/2021 (Background South) elevated the arsenic soil standard (1.25xbackground) to above the results for the N and S walls, and samples collected following excavation revealed that the E and W walls are also below arsenic standards. Soils contaminated with arsenic weighing 86.2 tons or 64 cubic yards were hauled for disposal and 4 waste manifests dated 01/04/2022 are included within Exhibit B.

Soil suitability sampling performed December 11, 2021, following the removal of arsenic soils revealed the E wall dropped below background and /or Table 915-1 standards for sodium and SAR.

On March 31, 2022, additional excavation was performed along Pit walls to remove soils along the N and S walls which exhibited sodium and SAR above Table 915-1 standards. Soils were deposited in the bottom of the Pit (below 3' bgs) and confirmation samples collected revealed Sodium and SAR dropped below standards.

On April 19, 2022, a sodium sample collected via hand auger techniques 3' west of the W wall at 3' bgs exhibited sodium levels below standards. Soils to the east of the W sample will be deposited in the bottom of the Pit (below 3' bgs) prior to regrading and reclamation of the Location. Pit and background sample location photos are included within the Nickerson Closure Photo Log.



Tank and Gas Equipment Removal and Characterization Activities

Characterization of the tank location began on October 18, 2021, with the excavation of a shallow trench across the tank pad to visually assess possible impacts. Two locations were field screened for hydrocarbon impacts. The gas equipment was excavated and removed, and two locations were field screened for hydrocarbon impacts. The production gas equipment and tank pad gravel were removed and disposed. In addition, at COGCC request, a soil sample was collected from the tank pad and submitted for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, trimethylbenzene 1,2,4, trimethylbenzene 1,3,5, total petroleum hydrocarbons (TPH) – gasoline range organics (GRO) in accordance with United States Environmental Protection Agency (USEPA) Method 8260B, and TPH – diesel range organics (DRO) in accordance with USEPA Method 8015. Field screening data and analytical results are included within the Nickerson Closure Soil Analytical Summary Table 1, and photos are included within the Nickerson Closure Photo Log.

Analytical Results

Sample results from initial excavation and sampling revealed the base sample from the Pit (B), exceeded Table 915-1 standards for GRO / TPH. Sidewall samples exhibited non detect concentrations for the complete Table 915-1 organic compounds in soils. Following additional excavation soil sample B @ 25 was collected which exhibited concentrations below Table 915-1 organic compounds in soils Residential Soil Screening Level Concentrations. The tank battery sample (TB) also exhibited non detect concentrations for the COGCC approved reduced Table 915-1 suite.

Metals in soils analysis revealed that Pit sidewall confirmation samples as well as the four background samples exceed Table 915-1 arsenic levels. The N and S walls remain below the elevated background value and following additional excavation and sampling the E and W walls are also below the background-based standard.

Soil Suitability for Reclamation analysis revealed that sodium levels for Pit sidewall confirmation samples exceed Table 915-1 standards for the N, S, and W. SAR results exceed the 915-1 standard at the N and S walls only.

Field screening data, Pit confirmation sample results, and the tank battery sample results are included within the Nickerson 4 Closure Soil Analytical Summary Table 1 - Organics. Complete Table 915-1 results are included within the Nickerson 4 Pit Closure Table 915-1 Soil Analytical Summary. The analytical reports are included within Exhibit A, disposal waste manifests for 15 loads totaling 415.49 tons are included as Exhibit B, and photos of the Pit, tank pad, and gas equipment excavations are included within the Nickerson Closure Photo Log.



Conclusions

Analytical results included herein confirm that hydrocarbon impacts are no longer present at concentrations above Residential Table 915-1 standards at the Nickerson 4 Pit, as well as the tank battery, and gas equipment locations. Additional excavation, background sampling, and Pit sampling have demonstrated that arsenic levels are within 1.25X site-specific background levels. Soil suitability sampling reveals the Pit walls exhibit sodium and SAR below Table 915-1 standards. Therefore, Tindall Operating Company requests the official COGCC closure of the Nickerson 4 Pit (FID 111633), and the associated Location (FID 326976) so that regrading and reclamation activities can begin. Following closure of the Pit and Location, Site soil suitability sampling for reclamation outlined within the Closure plan will be performed and submitted to COGCC under separate cover.

Please contact me at (303) 854-7337 if you have any questions regarding this report or require additional information.

Sincerely,
GIS Peace LLC,

A handwritten signature in blue ink, appearing to read "Carter Peace", is written over a light blue horizontal line.

Carter Peace
GIS Peace Environmental Scientist

Attachments:

Figure 1 – Site & Sample Locations
Table 1- Nickerson 4 Closure Soil Analytical Summary - Organics
Table 2- Nickerson 4 Pit Closure Table 915-1 Soil Analytical Summary
Nickerson Closure Photo Log
Exhibit A – Analytical Reports
Exhibit B – Waste Disposal Manifests



Legend

- ★ Site Location
- Pit Closure Sample Location
- Reclamation Sample Location
- Background Sample Location
- ▭ County Boundary



Tindall Operating Company
 Nickerson 4
 Weld County, Colorado

DATE: 1/18/2022
 DESIGNED BY: C. Peace
 DRAWN BY: N. Peace



Site and Sample Locations

Figure 1

**TABLE 1 - TINDALL OPERATING COMPANY
NICKERSON 4 CLOSURE
SOIL ANALYTICAL RESULTS SUMMARY - ORGANICS**

Sample ID	Date Sampled	PID ⁽¹⁾	Depth (bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4 Trimethyl benzene	1,3,5 Trimethyl benzene	Napthalene	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	TPH ⁽²⁾ (mg/kg)
COGCC standards for soil (mg/kg)⁽³⁾				1.2	490	5.8	58	30	27	2	500	500	500	500
NICKERSON 4 PIT CLOSURE														
TB Screen N	10/18/2021	0.1	3'	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾
TB Screen S	10/18/2021	0.0	3'	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾
GL Screen N	10/18/2021	0.0	3'	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾
GL Screen S	10/18/2021	0.0	3'	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾	NA ⁽⁴⁾
N	10/18/2021	4.2	8'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50
S	10/18/2021	0.5	8'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50
E	10/18/2021	0.6	8'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50
W	10/18/2021	2.7	8'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50
B	10/18/2021	1440	23'	<0.0020	0.032	4.0	0.063	87	1.5	0.090	2,100	460	NA ⁽⁴⁾	2,560
B@25	10/22/2021	110	25'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50
TB	10/26/2021	0.0	25'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<0.50	<0.50	<50

1. PID = Photo-ionization detector

2. TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO and DRO concentrations.

3. Standards for soil are taken from Table 915-1, effective January 15, 2021.

4. NA - Not analyzed

COGCC = Colorado Oil and Gas Conservation Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

GRO = Total volatile petroleum hydrocarbons - gasoline range organics

DRO = Total extractable petroleum hydrocarbons - diesel range organics

mg/kg = Milligrams per kilogram

bgs = Below ground surface

BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards.

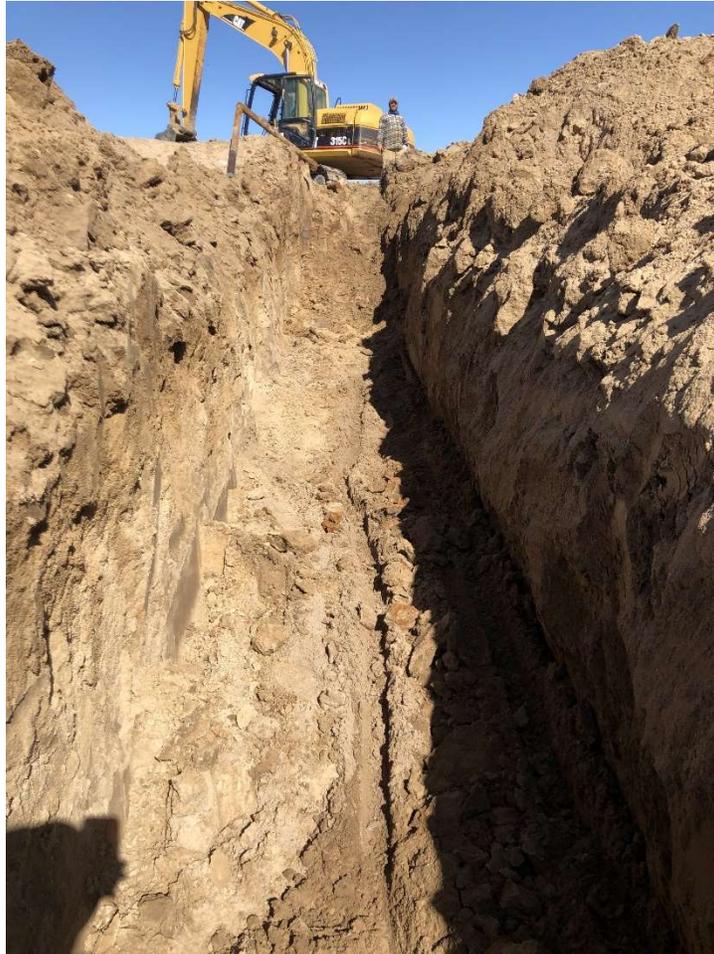
**TINDALL OPERATING COMPANY
NICKERSON 4 PIT CLOSURE
TABLE 915-1 SOIL ANALYTICAL RESULTS SUMMARY**

	Table 915 ⁽¹⁾ Standard (Residential)	BACKGROUND NORTH 10/26/21	BACKGROUND EAST 12/11/21	BACKGROUND WEST 12/11/21	BACKGROUND SOUTH 12/11/21	N 10/18/21	S 10/18/21	E 10/18/21	W 10/18/21	B @ 25 10/22/21	N 12/11/21	W 12/11/21	E 12/11/21	S 12/11/21	N 1/4/22	S 1/4/22	W 1/4/22	N 3/31/22	S 3/31/22	W 4/14/22
SOIL SUITABILITY FOR RECLAMATION																				
Boron	2	0.218	NA ⁽³⁾	NA ⁽³⁾	NA ⁽³⁾	0.48	0.633	0.0314	1.26	0.685	NA ⁽³⁾									
Hexavalent Chromium	0.3	<0.30	NA ⁽³⁾	NA ⁽³⁾	NA ⁽³⁾	<0.30	<0.30	<0.30	<0.30	<0.30	NA ⁽³⁾									
Calcium	<1.25 x Background	99.5 (124.375) ⁽⁴⁾	41.0 (124.375) ⁽⁴⁾	29.8 (124.375) ⁽⁴⁾	33.3 (124.375) ⁽⁴⁾	34.5	7.0	12.8	12.5	11.8	13.10	25.40	4.11	9.22	27.0	52.2	58.6	5.59	2.16	NA ⁽³⁾
Magnesium	<1.25 x Background	26.4 (33) ⁽⁴⁾	8.72(33) ⁽⁴⁾	7.69 (33) ⁽⁴⁾	2.05 (33) ⁽⁴⁾	8.08	1.95	3.01	2.50	2.47	2.82	4.23	1.05	2.01	6.22	8.19	20.2	1.63	0.48	NA ⁽³⁾
Sodium	<1.25 x Background	10.2 (12.75) ⁽⁴⁾	2.36(47) ⁽⁴⁾	37.6 (47) ⁽⁴⁾	0.129 (47) ⁽⁴⁾	187	161	488	476	354	155	320	42	303	134	308	128	8.51	1.17	10.2
Sodium Adsorption Ratio	<6	0.235	0.087	1.59	>0.00100	7.45	13.9	31.90	32.10	24.50	10.1	15.5	4.74	23.6	6.05	10.5	3.68	4.48	1.02	NA ⁽³⁾
% Solids	NA	96.6	93.3	96.1	94.7	93.4	88.2	90.0	92.4	91.0	92.8	93.5	92.0	92.2	93.7	91.7	94.5	93.7	91.7	NA ⁽³⁾
Specific Conductance (EC)	<4	1.360	0.493	0.519	0.387	1.27	0.711	2.52	2.61	1.740	1.19	2.34	0.31	2.20	1.10	2.51	1.76	1.10	2.51	NA ⁽³⁾
pH	6-8.3	7.56 (9.45) ⁽⁴⁾	7.80 (9.45) ⁽⁴⁾	8.21 (9.45) ⁽⁴⁾	7.94 (9.45) ⁽⁴⁾	8.21	8.95	8.49	8.48	8.76	8.31	8.02	7.71	8.21	7.59	7.68	7.55	7.59	7.68	NA ⁽³⁾

Notes:

1. Standards for soil are taken from Table 915-1, effective January 15, 2021.
 2. TPH - Total volatile and extractable petroleum hydrocarbons. Value calculated by adding GRO, ORO, and DRO concentrations.
 3. NA - Not analyzed
 4. (3.1625)⁽⁴⁾ Calculated 1.25 x Background Value
- COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
GRO = Total volatile petroleum hydrocarbons - gasoline range organics
DRO = Total extractable petroleum hydrocarbons - diesel range organics
mg/kg = Milligrams per kilogram
bgs = Below ground surface
BOLD = Analytical result is in exceedance of COGCC Table 915-1 soil standards.

TINDALL OPERATING COMPANY
NICKERSON 4 LOCATION CLOSURE
SWNW Sec 18 - T 7N - R 58W
Gas Equipment Removal Photos



Gas equipment removal 10/18/2021



Capped gas equipment line following removal 10/18/2021

TINDALL OPERATING COMPANY

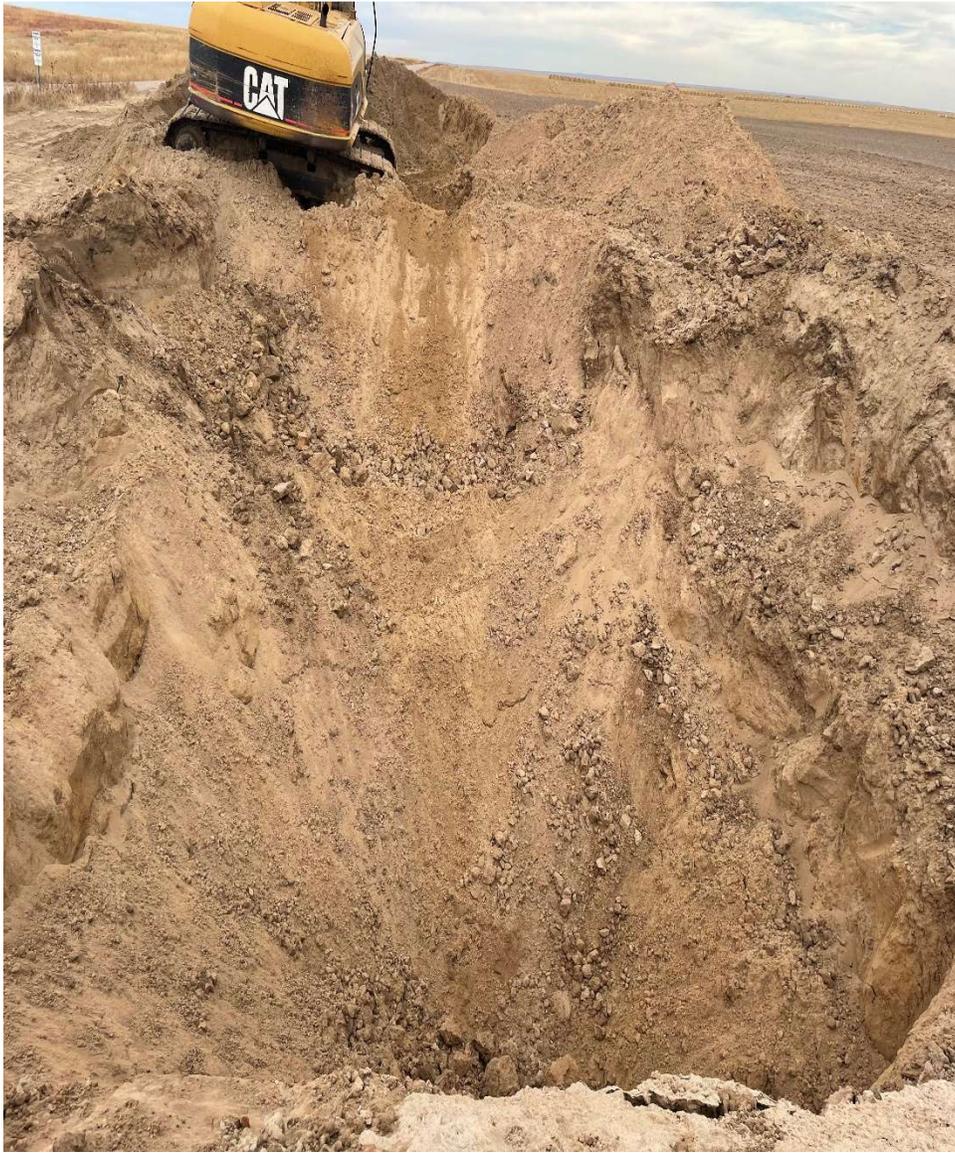
NICKERSON 4 PIT CLOSURE

SWNW Sec 18 - T 7N - R 58W

Pit Closure Photo Log



Pit looking east 10/18/2021



Pit walls 10/18/2021

TINDALL OPERATING COMPANY
NICKERSON 4 LOCATION CLOSURE
SWNW Sec 18 - T 7N - R 58W
Background Sample Photos



Background South 12/11/2021



Background East 12/11/2021



Background West 12/11/2021

TINDALL OPERATING COMPANY

NICKERSON 4 PIT CLOSURE

SWNW Sec 18 - T 7N - R 58W

Pit Closure Photos



Pit looking east 12/11/2021



Pit looking north 12/11/2021



Pit looking west 12/11/2021

TINDALL OPERATING COMPANY

NICKERSON 4 PIT CLOSURE

SWNW Sec 18 - T 7N - R 58W

Pit Closure Photos



Sodium sample collected on West wall 4/19/2022

Exhibit A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

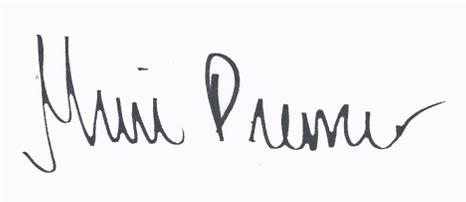
October 25, 2021

Carter Peace
GIS Peace
2951 Niagara St
Denver, CO 80207

RE: Nickerson 4
Work Order #2110277

Enclosed are the results of analyses for samples received by Summit Scientific on 10/18/21 14:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N	2110277-01	Soil	10/18/21 00:00	10/18/21 14:15
S	2110277-02	Soil	10/18/21 00:00	10/18/21 14:15
E	2110277-03	Soil	10/18/21 00:00	10/18/21 14:15
W	2110277-04	Soil	10/18/21 00:00	10/18/21 14:15
B	2110277-05	Soil	10/18/21 00:00	10/18/21 14:15

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2116277

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: **GLS PEACE**

Project Manager: **C. PEACE**

Address:

E-Mail:

City/State/Zip:

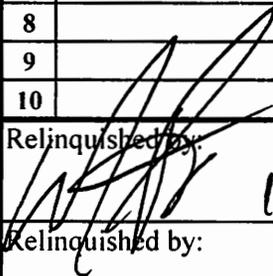
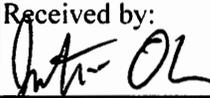
Phone:

Project Name: **NICKERSON 4**

Sampler Name: **CJP**

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other							
1	ZINC	10/18/21		1			X			X				X	X		24 HR TAT ON B SAMPLE		
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: 	Date/Time: 10/18/21 1300	Received by:	Date/Time:	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input checked="" type="checkbox"/> 24 hours <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: 17.9°C Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by:	Date/Time:	Received by: 	Date/Time: 10/18/21 14:15		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

Sample Receipt Checklist

S2 Work Order# 2110277

Client: GIS Peace Client Project ID: Wicherson 4

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C) 17.9

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

Rush sample "B"

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

Jms
Custodian Printed Name or Initials

10/18/21
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

N
2110277-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0333	10/18/21	10/21/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.8 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0359	10/19/21	10/20/21	EPA 8015M	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

S
2110277-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0333	10/18/21	10/21/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		115 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0359	10/19/21	10/20/21	EPA 8015M	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		109 %	30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

E
2110277-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0333	10/18/21	10/21/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.0 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0359	10/19/21	10/20/21	EPA 8015M	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		106 %	30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

W
2110277-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0333	10/18/21	10/21/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0359	10/19/21	10/20/21	EPA 8015M	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		105 %	30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

B
2110277-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0333	10/18/21	10/18/21	EPA 8260B	
Toluene	0.032	0.0050	"	"	"	"	"	"	
Ethylbenzene	4.0	0.50	"	100	"	"	"	"	
Xylenes (total)	0.063	0.010	"	1	"	"	"	"	
1,2,4-Trimethylbenzene	87	5.0	"	1000	"	"	"	"	
1,3,5-Trimethylbenzene	1.5	0.50	"	100	"	"	"	"	
Naphthalene	0.090	0.0038	"	1	"	"	"	"	
Gasoline Range Hydrocarbons	2100	50	"	100	"	"	"	"	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		115 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		209 %	21-167		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	460	50	mg/kg	1	BEJ0334	"	10/19/21	EPA 8015M	

Date Sampled: **10/18/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		109 %	30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0333 - EPA 5030 Soil MS

Blank (BEJ0333-BLK1)

Prepared: 10/18/21 Analyzed: 10/19/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0367		"	0.0400		91.8	23-173			
Surrogate: Toluene-d8	0.0402		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0387		"	0.0400		96.8	21-167			

LCS (BEJ0333-BS1)

Prepared: 10/18/21 Analyzed: 10/19/21

Benzene	0.0603	0.0020	mg/kg	0.0750		80.4	70-130			
Toluene	0.0721	0.0050	"	0.0750		96.2	70-130			
Ethylbenzene	0.0724	0.0050	"	0.0750		96.6	70-130			
m,p-Xylene	0.142	0.010	"	0.150		94.8	70-130			
o-Xylene	0.0701	0.0050	"	0.0750		93.5	70-130			
1,2,4-Trimethylbenzene	0.0688	0.0050	"	0.0750		91.8	70-130			
1,3,5-Trimethylbenzene	0.0668	0.0050	"	0.0750		89.1	70-130			
Naphthalene	0.0742	0.0038	"	0.0750		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0424		"	0.0400		106	23-173			
Surrogate: Toluene-d8	0.0441		"	0.0400		110	20-170			
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400		100	21-167			

Matrix Spike (BEJ0333-MS1)

Source: 2110278-01

Prepared: 10/18/21 Analyzed: 10/19/21

Benzene	0.0633	0.0020	mg/kg	0.0750	ND	84.4	70-130			
Toluene	0.0844	0.0050	"	0.0750	ND	113	70-130			
Ethylbenzene	0.0763	0.0050	"	0.0750	ND	102	70-130			
m,p-Xylene	0.148	0.010	"	0.150	ND	98.6	70-130			
o-Xylene	0.0736	0.0050	"	0.0750	ND	98.2	70-130			
1,2,4-Trimethylbenzene	0.0736	0.0050	"	0.0750	ND	98.1	70-130			
1,3,5-Trimethylbenzene	0.0709	0.0050	"	0.0750	ND	94.5	70-130			
Naphthalene	0.0826	0.0038	"	0.0750	ND	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0440		"	0.0400		110	23-173			
Surrogate: Toluene-d8	0.0451		"	0.0400		113	20-170			
Surrogate: 4-Bromofluorobenzene	0.0409		"	0.0400		102	21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0333 - EPA 5030 Soil MS

Matrix Spike Dup (BEJ0333-MSD1)	Source: 2110278-01			Prepared: 10/18/21 Analyzed: 10/19/21						
Benzene	0.0615	0.0020	mg/kg	0.0750	ND	82.0	70-130	2.79	30	
Toluene	0.0861	0.0050	"	0.0750	ND	115	70-130	2.01	30	
Ethylbenzene	0.0758	0.0050	"	0.0750	ND	101	70-130	0.671	30	
m,p-Xylene	0.148	0.010	"	0.150	ND	98.5	70-130	0.162	30	
o-Xylene	0.0737	0.0050	"	0.0750	ND	98.3	70-130	0.122	30	
1,2,4-Trimethylbenzene	0.0732	0.0050	"	0.0750	ND	97.6	70-130	0.490	30	
1,3,5-Trimethylbenzene	0.0712	0.0050	"	0.0750	ND	94.9	70-130	0.422	30	
Naphthalene	0.0889	0.0038	"	0.0750	ND	119	70-130	7.38	30	
Surrogate: 1,2-Dichloroethane-d4	0.0459		"	0.0400		115	23-173			
Surrogate: Toluene-d8	0.0437		"	0.0400		109	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		102	21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0334 - EPA 3550A

Blank (BEJ0334-BLK1)

Prepared: 10/18/21 Analyzed: 10/19/21

C10-C28 (DRO) ND 50 mg/kg

LCS (BEJ0334-BS1)

Prepared: 10/18/21 Analyzed: 10/19/21

C10-C28 (DRO) 473 50 mg/kg 500 94.6 70-130

Matrix Spike (BEJ0334-MS1)

Source: 2110283-01

Prepared: 10/18/21 Analyzed: 10/19/21

C10-C28 (DRO) 408 50 mg/kg 500 37.8 74.0 70-130

Matrix Spike Dup (BEJ0334-MSD1)

Source: 2110283-01

Prepared: 10/18/21 Analyzed: 10/19/21

C10-C28 (DRO) 441 50 mg/kg 500 37.8 80.7 70-130 7.90 20

Batch BEJ0359 - EPA 3550A

Blank (BEJ0359-BLK1)

Prepared: 10/19/21 Analyzed: 10/21/21

C10-C28 (DRO) ND 50 mg/kg

LCS (BEJ0359-BS1)

Prepared: 10/19/21 Analyzed: 10/21/21

C10-C28 (DRO) 462 50 mg/kg 500 92.5 70-130

Matrix Spike (BEJ0359-MS1)

Source: 2110251-03

Prepared: 10/19/21 Analyzed: 10/21/21

C10-C28 (DRO) 485 50 mg/kg 500 86.9 79.6 70-130

Matrix Spike Dup (BEJ0359-MSD1)

Source: 2110251-03

Prepared: 10/19/21 Analyzed: 10/21/21

C10-C28 (DRO) 479 50 mg/kg 500 86.9 78.5 70-130 1.08 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4

Project Number: [none]
Project Manager: Carter Peace

Reported:
10/25/21 10:11

Notes and Definitions

- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 03, 2021

Carter Peace

GIS Peace

2951 Niagara St

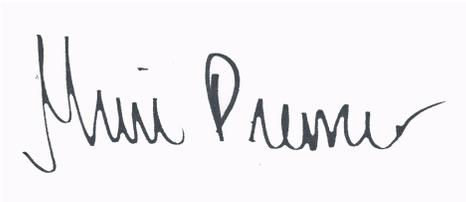
Denver, CO 80207

RE: Nickerson 4 Pit Closure

Work Order #2110386

Enclosed are the results of analyses for samples received by Summit Scientific on 10/22/21 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B@25	2110386-01	Soil	10/22/21 00:00	10/22/21 16:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

S₂

2110386

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Client: GIS PEACE

Project Manager: C. PEACE

Page 1 of 1

Address:

E-Mail:

City/State/Zip:

Phone: Project Name: NICKERSON 4 PIT CLOSURE

Sampler Name: CSJ Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested					Special Instructions	
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	GBTX 8260	DRO 8015	INAPTHURUM	124 TMB		135 TMB
1	BW25	10/22/21		1			X			X			X	X	X	X	X	HOLD BW 28 + BW 30 UNTIL RESULTS FOR BW 25
2	BW28			1			X			X			X	X	X	X	X	HOLD
3	BW30			1			X			X			X	X	X	X	X	HOLD
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10/22/21 1600</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10/22/21 1600</u>		Turn Around Time (Check)			Notes:							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Same Day			72 hours =							
Relinquished by:		Date/Time:		Received by:		Date/Time:		24 hours <u>X</u>			Standard =							
Relinquished by:		Date/Time:		Received by:		Date/Time:		48 hours			Sample Integrity:							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Temperature Upon Receipt: <u>8.1</u>			RESULTS MONDAY							
Relinquished by:		Date/Time:		Received by:		Date/Time:		Samples Intact: <u>Yes</u> No										

S₂

Sample Receipt Checklist

S2 Work Order# 2110380

Client: GIS Peace Client Project ID: Nickerson 4 Pit Closure

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C)	8.1
-----------	-----

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	On ice.
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24 hour
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):
Rush sample B@25, hold the rest.

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

JB
Custodian Printed Name or Initials

10/22/21
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

B@25
2110386-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0464	10/22/21	10/23/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		136 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0465	10/22/21	10/22/21	EPA 8015M	
C10-C28 (DRO)	ND	50	"	"	"	"	"	"	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

B@25
2110386-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0509	10/26/21	10/27/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.0152	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		68.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.54	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

B@25
2110386-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	1.46	0.215	mg/kg dry	1	BEJ0504	10/25/21	10/26/21	EPA 6020B
Barium	58.4	0.430	"	"	"	"	"	"
Cadmium	ND	0.215	"	"	"	"	"	"
Copper	2.37	0.430	"	"	"	"	"	"
Lead	4.56	0.215	"	"	"	"	"	"
Nickel	2.40	0.430	"	"	"	"	"	"
Selenium	0.537	0.280	"	"	"	"	"	"
Silver	ND	0.0215	"	"	"	"	"	"
Zinc	13.1	0.430	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0550	10/27/21	10/27/21	EPA 7196A	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/22/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.9		%	1	BEJ0498	10/25/21	10/26/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0464 - EPA 5030 Soil MS

Blank (BEJ0464-BLK1)

Prepared: 10/22/21 Analyzed: 10/24/21

Benzene	ND	0.0020	mg/kg								
Toluene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
Naphthalene	ND	0.0038	"								
Gasoline Range Hydrocarbons	ND	0.50	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0417		"	0.0400		104		23-173			
<i>Surrogate: Toluene-d8</i>	0.0459		"	0.0400		115		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0356		"	0.0400		88.9		21-167			

LCS (BEJ0464-BS1)

Prepared: 10/22/21 Analyzed: 10/24/21

Benzene	0.0723	0.0020	mg/kg	0.0750		96.4		70-130			
Toluene	0.0847	0.0050	"	0.0750		113		70-130			
Ethylbenzene	0.0794	0.0050	"	0.0750		106		70-130			
m,p-Xylene	0.154	0.010	"	0.150		103		70-130			
o-Xylene	0.0689	0.0050	"	0.0750		91.8		70-130			
1,2,4-Trimethylbenzene	0.0699	0.0050	"	0.0750		93.2		70-130			
1,3,5-Trimethylbenzene	0.0728	0.0050	"	0.0750		97.1		70-130			
Naphthalene	0.0898	0.0038	"	0.0750		120		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0398		"	0.0400		99.4		23-173			
<i>Surrogate: Toluene-d8</i>	0.0476		"	0.0400		119		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0396		"	0.0400		99.1		21-167			

Matrix Spike (BEJ0464-MS1)

Source: 2110386-01

Prepared: 10/22/21 Analyzed: 10/24/21

Benzene	0.0705	0.0020	mg/kg	0.0750	ND	94.0		70-130			
Toluene	0.0790	0.0050	"	0.0750	ND	105		70-130			
Ethylbenzene	0.0801	0.0050	"	0.0750	ND	107		70-130			
m,p-Xylene	0.153	0.010	"	0.150	ND	102		70-130			
o-Xylene	0.0677	0.0050	"	0.0750	ND	90.3		70-130			
1,2,4-Trimethylbenzene	0.0676	0.0050	"	0.0750	ND	90.2		70-130			
1,3,5-Trimethylbenzene	0.0723	0.0050	"	0.0750	ND	96.4		70-130			
Naphthalene	0.0972	0.0038	"	0.0750	ND	130		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0398		"	0.0400		99.4		23-173			
<i>Surrogate: Toluene-d8</i>	0.0467		"	0.0400		117		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0377		"	0.0400		94.3		21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0464 - EPA 5030 Soil MS

Matrix Spike Dup (BEJ0464-MSD1)	Source: 2110386-01			Prepared: 10/22/21 Analyzed: 10/24/21						
Benzene	0.0627	0.0020	mg/kg	0.0750	ND	83.6	70-130	11.8	30	
Toluene	0.0697	0.0050	"	0.0750	ND	92.9	70-130	12.5	30	
Ethylbenzene	0.0710	0.0050	"	0.0750	ND	94.6	70-130	12.2	30	
m,p-Xylene	0.138	0.010	"	0.150	ND	91.9	70-130	10.5	30	
o-Xylene	0.0596	0.0050	"	0.0750	ND	79.5	70-130	12.7	30	
1,2,4-Trimethylbenzene	0.0758	0.0050	"	0.0750	ND	101	70-130	11.4	30	
1,3,5-Trimethylbenzene	0.0630	0.0050	"	0.0750	ND	84.0	70-130	13.8	30	
Naphthalene	0.0912	0.0038	"	0.0750	ND	122	70-130	6.31	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0418</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0445</i>		<i>"</i>	<i>0.0400</i>		<i>111</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0372</i>		<i>"</i>	<i>0.0400</i>		<i>92.9</i>	<i>21-167</i>			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BEJ0465 - EPA 3550A

Blank (BEJ0465-BLK1)

Prepared: 10/22/21 Analyzed: 10/23/21

C10-C28 (DRO)	ND	50	mg/kg							
C10-C28 (DRO)	ND	50	"							
C28-C36 (ORO)	ND	50	"							

LCS (BEJ0465-BS1)

Prepared: 10/22/21 Analyzed: 10/23/21

C10-C28 (DRO)	405	50	mg/kg	500	31.2	131	70-130			
C10-C28 (DRO)	405	50	"	500	31.2	131	70-130			

Matrix Spike (BEJ0465-MS1)

Source: 2110386-01

Prepared: 10/22/21 Analyzed: 10/23/21

C10-C28 (DRO)	685	50	mg/kg	500	31.2	131	70-130	17.4	20	QM-07
C10-C28 (DRO)	685	50	"	500	31.2	131	70-130	17.4	20	QM-07

Matrix Spike Dup (BEJ0465-MSD1)

Source: 2110386-01

Prepared: 10/22/21 Analyzed: 10/23/21

C10-C28 (DRO)	575	50	mg/kg	500	31.2	109	70-130	17.4	20	
C10-C28 (DRO)	575	50	"	500	31.2	109	70-130	17.4	20	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0509 - EPA 5030 Soil MS

Blank (BEJ0509-BLK1)

Prepared & Analyzed: 10/26/21

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0357		"	0.0333	107	40-150				
Surrogate: Fluoranthene-d10	0.0262		"	0.0333	78.5	40-150				

LCS (BEJ0509-BS1)

Prepared & Analyzed: 10/26/21

Acenaphthene	0.0339	0.00500	mg/kg	0.0333	102	31-137				
Anthracene	0.0334	0.00500	"	0.0333	100	30-120				
Benzo (a) anthracene	0.0319	0.00500	"	0.0333	95.7	30-120				
Benzo (a) pyrene	0.0323	0.00500	"	0.0333	96.9	30-120				
Benzo (b) fluoranthene	0.0347	0.00500	"	0.0333	104	30-120				
Benzo (k) fluoranthene	0.0350	0.00500	"	0.0333	105	30-120				
Chrysene	0.0314	0.00500	"	0.0333	94.1	30-120				
Dibenz (a,h) anthracene	0.0326	0.00500	"	0.0333	97.7	30-120				
Fluoranthene	0.0355	0.00500	"	0.0333	106	30-120				
Fluorene	0.0318	0.00500	"	0.0333	95.5	30-120				
Indeno (1,2,3-cd) pyrene	0.0277	0.00500	"	0.0333	83.1	30-120				
Pyrene	0.0334	0.00500	"	0.0333	100	35-142				
1-Methylnaphthalene	0.0375	0.00500	"	0.0333	113	35-142				
2-Methylnaphthalene	0.0355	0.00500	"	0.0333	107	35-142				
Surrogate: 2-Methylnaphthalene-d10	0.0384		"	0.0333	115	40-150				
Surrogate: Fluoranthene-d10	0.0320		"	0.0333	96.0	40-150				

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0509 - EPA 5030 Soil MS

Matrix Spike (BEJ0509-MS1)	Source: 2110277-01			Prepared & Analyzed: 10/26/21						
Acenaphthene	0.0266	0.00500	mg/kg	0.0333	ND	79.8	31-137			
Anthracene	0.0251	0.00500	"	0.0333	ND	75.4	30-120			
Benzo (a) anthracene	0.0244	0.00500	"	0.0333	ND	73.3	30-120			
Benzo (a) pyrene	0.0245	0.00500	"	0.0333	ND	73.5	30-120			
Benzo (b) fluoranthene	0.0254	0.00500	"	0.0333	ND	76.1	30-120			
Benzo (k) fluoranthene	0.0262	0.00500	"	0.0333	ND	78.7	30-120			
Chrysene	0.0246	0.00500	"	0.0333	ND	73.7	30-120			
Dibenz (a,h) anthracene	0.0226	0.00500	"	0.0333	ND	67.7	30-120			
Fluoranthene	0.0268	0.00500	"	0.0333	ND	80.3	30-120			
Fluorene	0.0269	0.00500	"	0.0333	ND	80.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0204	0.00500	"	0.0333	ND	61.3	30-120			
Pyrene	0.0265	0.00500	"	0.0333	ND	79.4	35-142			
1-Methylnaphthalene	0.0282	0.00500	"	0.0333	ND	84.5	15-130			
2-Methylnaphthalene	0.0273	0.00500	"	0.0333	ND	81.8	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0307		"	0.0333		92.2	40-150			
Surrogate: Fluoranthene-d10	0.0253		"	0.0333		75.8	40-150			

Matrix Spike Dup (BEJ0509-MSD1)	Source: 2110277-01			Prepared & Analyzed: 10/26/21						
Acenaphthene	0.0218	0.00500	mg/kg	0.0333	ND	65.4	31-137	19.9	30	
Anthracene	0.0212	0.00500	"	0.0333	ND	63.5	30-120	17.1	30	
Benzo (a) anthracene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	12.7	30	
Benzo (a) pyrene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	12.2	30	
Benzo (b) fluoranthene	0.0226	0.00500	"	0.0333	ND	67.7	30-120	11.6	30	
Benzo (k) fluoranthene	0.0233	0.00500	"	0.0333	ND	69.8	30-120	12.0	30	
Chrysene	0.0213	0.00500	"	0.0333	ND	64.0	30-120	14.1	30	
Dibenz (a,h) anthracene	0.0201	0.00500	"	0.0333	ND	60.3	30-120	11.7	30	
Fluoranthene	0.0224	0.00500	"	0.0333	ND	67.3	30-120	17.6	30	
Fluorene	0.0220	0.00500	"	0.0333	ND	66.0	30-120	19.9	30	
Indeno (1,2,3-cd) pyrene	0.0174	0.00500	"	0.0333	ND	52.2	30-120	15.9	30	
Pyrene	0.0227	0.00500	"	0.0333	ND	68.2	35-142	15.2	30	
1-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	75.0	15-130	11.8	50	
2-Methylnaphthalene	0.0244	0.00500	"	0.0333	ND	73.1	15-130	11.3	50	
Surrogate: 2-Methylnaphthalene-d10	0.0257		"	0.0333		77.0	40-150			
Surrogate: Fluoranthene-d10	0.0220		"	0.0333		66.0	40-150			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0531 - EPA 3050B

Blank (BEJ0531-BLK1)

Prepared: 10/26/21 Analyzed: 10/27/21

Boron ND 0.0100 mg/L

LCS (BEJ0531-BS1)

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 5.12 0.0100 mg/L 5.00 102 80-120

Duplicate (BEJ0531-DUP1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 1.47 0.0100 mg/L 1.48 0.584 20

Matrix Spike (BEJ0531-MS1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 6.23 0.0100 mg/L 5.00 1.48 95.1 75-125

Matrix Spike Dup (BEJ0531-MSD1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 6.33 0.0100 mg/L 5.00 1.48 97.1 75-125 1.59 25

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike	Source		%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEJ0504 - EPA 3050B

Blank (BEJ0504-BLK1)

Prepared: 10/25/21 Analyzed: 10/26/21

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Selenium	ND	0.260	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							

LCS (BEJ0504-BS1)

Prepared: 10/25/21 Analyzed: 10/26/21

Arsenic	44.2	0.200	mg/kg wet	40.0	111	80-120
Barium	41.8	0.400	"	40.0	105	80-120
Cadmium	2.31	0.200	"	2.00	115	80-120
Copper	43.8	0.400	"	40.0	109	80-120
Lead	18.7	0.200	"	20.0	93.5	80-120
Nickel	43.7	0.400	"	40.0	109	80-120
Selenium	3.68	0.260	"	4.00	92.1	80-120
Silver	1.99	0.0200	"	2.00	99.7	80-120
Zinc	47.8	0.400	"	40.0	119	80-120

Duplicate (BEJ0504-DUP1)

Source: 2110277-01

Prepared: 10/25/21 Analyzed: 10/26/21

Arsenic	1.37	0.221	mg/kg dry	1.17	16.5	20
Barium	64.6	0.442	"	57.5	11.6	20
Cadmium	0.104	0.221	"	0.101	2.64	20
Copper	2.60	0.442	"	2.48	4.67	20
Lead	5.99	0.221	"	5.06	16.7	20
Nickel	3.39	0.442	"	3.35	1.18	20
Selenium	0.642	0.287	"	0.537	17.8	20
Silver	0.00943	0.0221	"	0.00967	2.53	20
Zinc	13.3	0.442	"	13.8	3.03	20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEJ0504 - EPA 3050B

Matrix Spike (BEJ0504-MS1)

Source: 2110277-01

Prepared: 10/25/21 Analyzed: 10/26/21

Arsenic	51.3	0.221	mg/kg dry	44.2	1.17	114	75-125			
Barium	98.4	0.442	"	44.2	57.5	92.5	75-125			
Cadmium	2.80	0.221	"	2.21	0.101	122	75-125			
Copper	50.7	0.442	"	44.2	2.48	109	75-125			
Lead	30.6	0.221	"	22.1	5.06	115	75-125			
Nickel	52.8	0.442	"	44.2	3.35	112	75-125			
Selenium	4.83	0.287	"	4.42	0.537	97.1	75-125			
Silver	2.31	0.0221	"	2.21	0.00967	104	75-125			
Zinc	63.9	0.442	"	44.2	13.8	113	75-125			

Matrix Spike Dup (BEJ0504-MSD1)

Source: 2110277-01

Prepared: 10/25/21 Analyzed: 10/26/21

Arsenic	49.5	0.221	mg/kg dry	44.2	1.17	109	75-125	3.62	25
Barium	113	0.442	"	44.2	57.5	125	75-125	13.4	25
Cadmium	2.74	0.221	"	2.21	0.101	119	75-125	2.21	25
Copper	48.9	0.442	"	44.2	2.48	105	75-125	3.54	25
Lead	26.5	0.221	"	22.1	5.06	97.1	75-125	14.2	25
Nickel	51.0	0.442	"	44.2	3.35	108	75-125	3.42	25
Selenium	4.89	0.287	"	4.42	0.537	98.4	75-125	1.23	25
Silver	2.27	0.0221	"	2.21	0.00967	102	75-125	1.66	25
Zinc	65.7	0.442	"	44.2	13.8	118	75-125	2.77	25

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEJ0550 - 3060A Mod

Blank (BEJ0550-BLK1)

Prepared & Analyzed: 10/27/21

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BEJ0550-BS1)

Prepared & Analyzed: 10/27/21

Chromium, Hexavalent 23.5 0.30 mg/kg wet 25.0 94.0 80-120

Duplicate (BEJ0550-DUP1)

Source: 2110277-01

Prepared & Analyzed: 10/27/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BEJ0550-MS1)

Source: 2110277-01

Prepared & Analyzed: 10/27/21

Chromium, Hexavalent 28.7 0.30 mg/kg dry 27.6 ND 104 75-125

Matrix Spike Dup (BEJ0550-MSD1)

Source: 2110277-01

Prepared & Analyzed: 10/27/21

Chromium, Hexavalent 29.3 0.30 mg/kg dry 27.6 ND 106 75-125 1.90 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 11/03/21 15:31

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source		%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEJ0498 - General Preparation

Duplicate (BEJ0498-DUP1)

Source: 2110386-01

Prepared: 10/25/21 Analyzed: 10/26/21

% Solids	93.0		%		92.9			0.0527		20	
----------	------	--	---	--	------	--	--	--------	--	----	--

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:31

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 03, 2021

Carter Peace

GIS Peace

2951 Niagara St

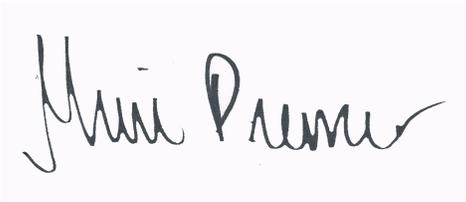
Denver, CO 80207

RE: Nickerson 4 Pit Closure

Work Order #2110440

Enclosed are the results of analyses for samples received by Summit Scientific on 10/26/21 13:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large, stylized initial 'M'.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB	2110440-01	Soil	10/26/21 00:00	10/26/21 13:00
N	2110440-02	Soil	10/26/21 00:00	10/26/21 13:00
S	2110440-03	Soil	10/26/21 00:00	10/26/21 13:00
E	2110440-04	Soil	10/26/21 00:00	10/26/21 13:00
W	2110440-05	Soil	10/26/21 00:00	10/26/21 13:00
B@25	2110440-06	Soil	10/26/21 00:00	10/26/21 13:00
BACKGROUND	2110440-07	Soil	10/26/21 00:00	10/26/21 13:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S₂

Sample Receipt Checklist

S2 Work Order# 2110440

2110440

Client: GIS Peace Client Project ID: Nickerson 4 Pit Closure

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C)	20
-----------	----

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

AT
Custodian Printed Name or Initials

10.26.21
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

TB
2110440-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEJ0592	10/28/21	10/29/21	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		74.9 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		99.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.8 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BEJ0593	10/28/21	10/29/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		103 %		30-150		"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

N
2110440-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0570	10/28/21	10/30/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		63.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		58.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.408	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

N
2110440-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.16	0.214	mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B	
Barium	133	0.428	"	"	"	"	"	"	
Cadmium	ND	0.214	"	"	"	"	"	"	
Copper	2.97	0.428	"	"	"	"	"	"	
Lead	6.22	0.214	"	"	"	"	"	"	
Nickel	3.10	0.428	"	"	"	"	"	"	
Selenium	0.647	0.278	"	"	"	"	"	"	
Silver	ND	0.0214	"	"	"	"	"	"	
Zinc	12.8	0.428	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	34.5	0.0535	mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	8.08	0.0535	"	"	"	"	"	"	
Sodium	187	0.0535	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	7.45	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

N
2110440-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.4		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.27	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.21		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

S
2110440-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0570	10/28/21	10/30/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		77.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		65.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.633	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

S
2110440-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.37	0.227	mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B	
Barium	80.8	0.453	"	"	"	"	"	"	
Cadmium	ND	0.227	"	"	"	"	"	"	
Copper	2.85	0.453	"	"	"	"	"	"	
Lead	5.94	0.227	"	"	"	"	"	"	
Nickel	2.75	0.453	"	"	"	"	"	"	
Selenium	0.537	0.295	"	"	"	"	"	"	
Silver	ND	0.0227	"	"	"	"	"	"	
Zinc	12.5	0.453	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	7.00	0.0567	mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	1.95	0.0567	"	"	"	"	"	"	
Sodium	161	0.0567	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.9	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

S
2110440-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.2		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.711	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.95		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

E

2110440-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0570	10/28/21	10/30/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		73.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		66.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0314	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

E
2110440-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.50	0.222	mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B	
Barium	116	0.445	"	"	"	"	"	"	
Cadmium	ND	0.222	"	"	"	"	"	"	
Copper	3.14	0.445	"	"	"	"	"	"	
Lead	5.72	0.222	"	"	"	"	"	"	
Nickel	3.00	0.445	"	"	"	"	"	"	
Selenium	0.626	0.289	"	"	"	"	"	"	
Silver	ND	0.0222	"	"	"	"	"	"	
Zinc	13.8	0.445	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.8	0.0556	mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	3.01	0.0556	"	"	"	"	"	"	
Sodium	488	0.0556	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 10/26/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	31.9	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

E

2110440-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.0		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.52	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.49		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

W
2110440-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0570	10/28/21	10/30/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		68.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		63.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.26	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

W
2110440-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.52	0.216	mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B	
Barium	129	0.433	"	"	"	"	"	"	
Cadmium	ND	0.216	"	"	"	"	"	"	
Copper	3.33	0.433	"	"	"	"	"	"	
Lead	6.14	0.216	"	"	"	"	"	"	
Nickel	3.32	0.433	"	"	"	"	"	"	
Selenium	0.619	0.281	"	"	"	"	"	"	
Silver	ND	0.0216	"	"	"	"	"	"	
Zinc	15.4	0.433	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.5	0.0541	mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	2.50	0.0541	"	"	"	"	"	"	
Sodium	476	0.0541	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	32.1	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

W
2110440-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.4		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.61	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.48		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

B@25
2110440-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0570	10/28/21	10/30/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		58.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		52.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.685	0.0100	mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

B@25
2110440-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	2.01	0.220	mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B
Barium	72.4	0.440	"	"	"	"	"	"
Cadmium	ND	0.220	"	"	"	"	"	"
Copper	3.26	0.440	"	"	"	"	"	"
Lead	6.29	0.220	"	"	"	"	"	"
Nickel	3.13	0.440	"	"	"	"	"	"
Selenium	0.532	0.286	"	"	"	"	"	"
Silver	ND	0.0220	"	"	"	"	"	"
Zinc	14.3	0.440	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	11.8	0.0550	mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	2.47	0.0550	"	"	"	"	"	"	
Sodium	354	0.0550	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	24.5	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

B@25
2110440-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.0		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.74	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.76		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

BACKGROUND
2110440-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	0.218	0.0100		mg/L	1	BEJ0531	10/26/21	10/27/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.98	0.207		mg/kg dry	1	BEJ0521	10/26/21	10/27/21	EPA 6020B	
Barium	61.1	0.414		"	"	"	"	"	"	
Cadmium	ND	0.207		"	"	"	"	"	"	
Copper	4.88	0.414		"	"	"	"	"	"	
Lead	6.15	0.207		"	"	"	"	"	"	
Nickel	2.78	0.414		"	"	"	"	"	"	
Selenium	0.613	0.269		"	"	"	"	"	"	
Silver	ND	0.0207		"	"	"	"	"	"	
Zinc	23.5	0.414		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BEK0007	11/01/21	11/01/21	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	99.5	0.0517		mg/L dry	1	BEJ0508	10/26/21	10/28/21	EPA 6020B	
Magnesium	26.4	0.0517		"	"	"	"	"	"	
Sodium	10.2	0.0517		"	"	"	"	"	"	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

BACKGROUND

2110440-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.235	0.00100	units	1	BEJ0577	10/28/21	10/28/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.6		%	1	BEJ0528	10/26/21	10/27/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.36	0.0100	mmhos/cm	1	BEJ0555	10/27/21	10/27/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/26/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.56		pH Units	1	BEJ0554	10/27/21	10/27/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0592 - EPA 5030 Soil MS

Blank (BEJ0592-BLK1)

Prepared: 10/28/21 Analyzed: 10/29/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0251		"	0.0400		62.7	23-173			
<i>Surrogate: Toluene-d8</i>	0.0380		"	0.0400		94.9	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0333		"	0.0400		83.2	21-167			

LCS (BEJ0592-BS1)

Prepared: 10/28/21 Analyzed: 10/29/21

Benzene	0.0556	0.0020	mg/kg	0.0750		74.2	70-130			
Toluene	0.0915	0.0050	"	0.0750		122	70-130			
Ethylbenzene	0.0740	0.0050	"	0.0750		98.7	70-130			
m,p-Xylene	0.140	0.010	"	0.150		93.2	70-130			
o-Xylene	0.0629	0.0050	"	0.0750		83.9	70-130			
1,2,4-Trimethylbenzene	0.0583	0.0050	"	0.0750		77.8	70-130			
1,3,5-Trimethylbenzene	0.0632	0.0050	"	0.0750		84.2	70-130			
Naphthalene	0.0566	0.0038	"	0.0750		75.4	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0316		"	0.0400		79.1	23-173			
<i>Surrogate: Toluene-d8</i>	0.0416		"	0.0400		104	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0367		"	0.0400		91.7	21-167			

Matrix Spike (BEJ0592-MS1)

Source: 2110387-01

Prepared: 10/28/21 Analyzed: 10/29/21

Benzene	0.0572	0.0020	mg/kg	0.0750	ND	76.3	70-130			
Toluene	0.0671	0.0050	"	0.0750	ND	89.5	70-130			
Ethylbenzene	0.0712	0.0050	"	0.0750	ND	95.0	70-130			
m,p-Xylene	0.137	0.010	"	0.150	ND	91.1	70-130			
o-Xylene	0.0629	0.0050	"	0.0750	ND	83.9	70-130			
1,2,4-Trimethylbenzene	0.0608	0.0050	"	0.0750	ND	81.1	70-130			
1,3,5-Trimethylbenzene	0.0637	0.0050	"	0.0750	ND	84.9	70-130			
Naphthalene	0.0737	0.0038	"	0.0750	ND	98.3	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0332		"	0.0400		83.0	23-173			
<i>Surrogate: Toluene-d8</i>	0.0405		"	0.0400		101	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0375		"	0.0400		93.8	21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0592 - EPA 5030 Soil MS

Matrix Spike Dup (BEJ0592-MSD1)	Source: 2110387-01			Prepared: 10/28/21 Analyzed: 10/29/21						
Benzene	0.0597	0.0020	mg/kg	0.0750	ND	79.6	70-130	4.31	30	
Toluene	0.0696	0.0050	"	0.0750	ND	92.8	70-130	3.69	30	
Ethylbenzene	0.0738	0.0050	"	0.0750	ND	98.4	70-130	3.48	30	
m,p-Xylene	0.140	0.010	"	0.150	ND	93.0	70-130	2.15	30	
o-Xylene	0.0649	0.0050	"	0.0750	ND	86.5	70-130	3.10	30	
1,2,4-Trimethylbenzene	0.0623	0.0050	"	0.0750	ND	83.1	70-130	2.39	30	
1,3,5-Trimethylbenzene	0.0656	0.0050	"	0.0750	ND	87.5	70-130	3.06	30	
Naphthalene	0.0786	0.0038	"	0.0750	ND	105	70-130	6.46	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0334</i>		<i>"</i>	<i>0.0400</i>		<i>83.6</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0416</i>		<i>"</i>	<i>0.0400</i>		<i>104</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0379</i>		<i>"</i>	<i>0.0400</i>		<i>94.7</i>	<i>21-167</i>			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0593 - EPA 3550A

Blank (BEJ0593-BLK1)

Prepared & Analyzed: 10/28/21

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							

LCS (BEJ0593-BS1)

Prepared & Analyzed: 10/28/21

C10-C28 (DRO)	408	50	mg/kg	500	81.7	70-130				
---------------	-----	----	-------	-----	------	--------	--	--	--	--

Matrix Spike (BEJ0593-MS1)

Source: 2110387-01

Prepared & Analyzed: 10/28/21

C10-C28 (DRO)	443	50	mg/kg	500	39.0	80.7	70-130			
---------------	-----	----	-------	-----	------	------	--------	--	--	--

Matrix Spike Dup (BEJ0593-MSD1)

Source: 2110387-01

Prepared & Analyzed: 10/28/21

C10-C28 (DRO)	430	50	mg/kg	500	39.0	78.1	70-130	3.03	20	
---------------	-----	----	-------	-----	------	------	--------	------	----	--

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0570 - EPA 5030 Soil MS

Blank (BEJ0570-BLK1)

Prepared: 10/28/21 Analyzed: 10/29/21

Acenaphthene	ND	0.00500	mg/kg								
Anthracene	ND	0.00500	"								
Benzo (a) anthracene	ND	0.00500	"								
Benzo (a) pyrene	ND	0.00500	"								
Benzo (b) fluoranthene	ND	0.00500	"								
Benzo (k) fluoranthene	ND	0.00500	"								
Chrysene	ND	0.00500	"								
Dibenz (a,h) anthracene	ND	0.00500	"								
Fluoranthene	ND	0.00500	"								
Fluorene	ND	0.00500	"								
Indeno (1,2,3-cd) pyrene	ND	0.00500	"								
Pyrene	ND	0.00500	"								
1-Methylnaphthalene	ND	0.00500	"								
2-Methylnaphthalene	ND	0.00500	"								
Surrogate: 2-Methylnaphthalene-d10	0.0245		"	0.0333	73.6	40-150					
Surrogate: Fluoranthene-d10	0.0228		"	0.0333	68.3	40-150					

LCS (BEJ0570-BS1)

Prepared: 10/28/21 Analyzed: 10/29/21

Acenaphthene	0.0306	0.00500	mg/kg	0.0333	91.7	31-137					
Anthracene	0.0317	0.00500	"	0.0333	95.0	30-120					
Benzo (a) anthracene	0.0301	0.00500	"	0.0333	90.2	30-120					
Benzo (a) pyrene	0.0281	0.00500	"	0.0333	84.2	30-120					
Benzo (b) fluoranthene	0.0287	0.00500	"	0.0333	86.1	30-120					
Benzo (k) fluoranthene	0.0293	0.00500	"	0.0333	87.8	30-120					
Chrysene	0.0297	0.00500	"	0.0333	89.1	30-120					
Dibenz (a,h) anthracene	0.0260	0.00500	"	0.0333	78.1	30-120					
Fluoranthene	0.0339	0.00500	"	0.0333	102	30-120					
Fluorene	0.0336	0.00500	"	0.0333	101	30-120					
Indeno (1,2,3-cd) pyrene	0.0206	0.00500	"	0.0333	61.8	30-120					
Pyrene	0.0306	0.00500	"	0.0333	91.8	35-142					
1-Methylnaphthalene	0.0323	0.00500	"	0.0333	96.8	35-142					
2-Methylnaphthalene	0.0313	0.00500	"	0.0333	93.8	35-142					
Surrogate: 2-Methylnaphthalene-d10	0.0298		"	0.0333	89.5	40-150					
Surrogate: Fluoranthene-d10	0.0286		"	0.0333	85.8	40-150					

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0570 - EPA 5030 Soil MS

Matrix Spike (BEJ0570-MS1)	Source: 2109394-03			Prepared: 10/28/21 Analyzed: 10/29/21					
Acenaphthene	0.0206	0.00500	mg/kg	0.0333	ND	61.7	31-137		
Anthracene	0.0220	0.00500	"	0.0333	ND	66.0	30-120		
Benzo (a) anthracene	0.0228	0.00500	"	0.0333	ND	68.3	30-120		
Benzo (a) pyrene	0.0212	0.00500	"	0.0333	ND	63.7	30-120		
Benzo (b) fluoranthene	0.0218	0.00500	"	0.0333	ND	65.3	30-120		
Benzo (k) fluoranthene	0.0223	0.00500	"	0.0333	ND	67.0	30-120		
Chrysene	0.0228	0.00500	"	0.0333	ND	68.4	30-120		
Dibenz (a,h) anthracene	0.0200	0.00500	"	0.0333	ND	60.1	30-120		
Fluoranthene	0.0254	0.00500	"	0.0333	ND	76.3	30-120		
Fluorene	0.0242	0.00500	"	0.0333	ND	72.7	30-120		
Indeno (1,2,3-cd) pyrene	0.0158	0.00500	"	0.0333	ND	47.4	30-120		
Pyrene	0.0232	0.00500	"	0.0333	ND	69.5	35-142		
1-Methylnaphthalene	0.0220	0.00500	"	0.0333	ND	65.9	15-130		
2-Methylnaphthalene	0.0217	0.00500	"	0.0333	ND	65.1	15-130		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0219</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>65.6</i>	<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0217</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>65.0</i>	<i>40-150</i>		

Matrix Spike Dup (BEJ0570-MSD1)	Source: 2109394-03			Prepared: 10/28/21 Analyzed: 10/29/21					
Acenaphthene	0.0223	0.00500	mg/kg	0.0333	ND	67.0	31-137	8.30	30
Anthracene	0.0225	0.00500	"	0.0333	ND	67.4	30-120	2.08	30
Benzo (a) anthracene	0.0232	0.00500	"	0.0333	ND	69.6	30-120	1.83	30
Benzo (a) pyrene	0.0220	0.00500	"	0.0333	ND	65.9	30-120	3.49	30
Benzo (b) fluoranthene	0.0226	0.00500	"	0.0333	ND	67.8	30-120	3.73	30
Benzo (k) fluoranthene	0.0234	0.00500	"	0.0333	ND	70.3	30-120	4.76	30
Chrysene	0.0232	0.00500	"	0.0333	ND	69.6	30-120	1.81	30
Dibenz (a,h) anthracene	0.0204	0.00500	"	0.0333	ND	61.1	30-120	1.60	30
Fluoranthene	0.0259	0.00500	"	0.0333	ND	77.7	30-120	1.90	30
Fluorene	0.0251	0.00500	"	0.0333	ND	75.3	30-120	3.57	30
Indeno (1,2,3-cd) pyrene	0.0160	0.00500	"	0.0333	ND	47.9	30-120	1.13	30
Pyrene	0.0240	0.00500	"	0.0333	ND	72.0	35-142	3.56	30
1-Methylnaphthalene	0.0240	0.00500	"	0.0333	ND	72.1	15-130	9.01	50
2-Methylnaphthalene	0.0231	0.00500	"	0.0333	ND	69.2	15-130	6.12	50
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0247</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>74.2</i>	<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0220</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>65.9</i>	<i>40-150</i>		

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0531 - EPA 3050B

Blank (BEJ0531-BLK1)

Prepared: 10/26/21 Analyzed: 10/27/21

Boron ND 0.0100 mg/L

LCS (BEJ0531-BS1)

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 5.12 0.0100 mg/L 5.00 102 80-120

Duplicate (BEJ0531-DUP1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 1.47 0.0100 mg/L 1.48 0.584 20

Matrix Spike (BEJ0531-MS1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 6.23 0.0100 mg/L 5.00 1.48 95.1 75-125

Matrix Spike Dup (BEJ0531-MSD1)

Source: 2110277-01

Prepared: 10/26/21 Analyzed: 10/27/21

Boron 6.33 0.0100 mg/L 5.00 1.48 97.1 75-125 1.59 25

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0521 - EPA 3050B

Blank (BEJ0521-BLK1)

Prepared: 10/26/21 Analyzed: 10/27/21

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Selenium	ND	0.260	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							

LCS (BEJ0521-BS1)

Prepared: 10/26/21 Analyzed: 10/27/21

Arsenic	45.1	0.200	mg/kg wet	40.0		113	80-120			
Barium	38.3	0.400	"	40.0		95.7	80-120			
Cadmium	2.15	0.200	"	2.00		107	80-120			
Copper	42.0	0.400	"	40.0		105	80-120			
Lead	17.8	0.200	"	20.0		88.8	80-120			
Nickel	41.5	0.400	"	40.0		104	80-120			
Selenium	3.59	0.260	"	4.00		89.9	80-120			
Silver	1.87	0.0200	"	2.00		93.5	80-120			
Zinc	47.5	0.400	"	40.0		119	80-120			

Duplicate (BEJ0521-DUP1)

Source: 2110360-01

Prepared: 10/26/21 Analyzed: 10/27/21

Arsenic	26.2	0.203	mg/kg dry		27.9		6.16	20		
Barium	85.8	0.407	"		95.7		11.0	20		
Cadmium	3.57	0.203	"		3.35		6.39	20		
Copper	31.0	0.407	"		34.1		9.60	20		
Lead	221	0.203	"		248		11.8	20		
Nickel	5.84	0.407	"		6.62		12.5	20		
Selenium	1.51	0.264	"		1.46		2.94	20		
Silver	0.769	0.0203	"		0.758		1.48	20		
Zinc	818	0.407	"		1330		47.5	20		QM-02

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEJ0521 - EPA 3050B

Matrix Spike (BEJ0521-MS1)

Source: 2110360-01

Prepared: 10/26/21 Analyzed: 10/27/21

Arsenic	99.1	0.203	mg/kg dry	40.7	27.9	175	75-125				QR-03
Barium	160	0.407	"	40.7	95.7	158	75-125				QR-03
Cadmium	6.98	0.203	"	2.03	3.35	178	75-125				QR-03
Copper	96.5	0.407	"	40.7	34.1	153	75-125				QR-03
Lead	438	0.203	"	20.3	248	934	75-125				QM-02
Nickel	49.8	0.407	"	40.7	6.62	106	75-125				
Selenium	5.44	0.264	"	4.07	1.46	97.7	75-125				
Silver	3.03	0.0203	"	2.03	0.758	112	75-125				
Zinc	1930	0.407	"	40.7	1330	NR	75-125				QM-02

Matrix Spike Dup (BEJ0521-MSD1)

Source: 2110360-01

Prepared: 10/26/21 Analyzed: 10/27/21

Arsenic	87.3	0.203	mg/kg dry	40.7	27.9	146	75-125	12.6	25		QR-03
Barium	158	0.407	"	40.7	95.7	154	75-125	0.849	25		QR-03
Cadmium	6.75	0.203	"	2.03	3.35	167	75-125	3.41	25		QR-03
Copper	81.0	0.407	"	40.7	34.1	115	75-125	17.5	25		
Lead	315	0.203	"	20.3	248	325	75-125	32.9	25		QM-02
Nickel	53.3	0.407	"	40.7	6.62	115	75-125	6.88	25		
Selenium	4.94	0.264	"	4.07	1.46	85.6	75-125	9.49	25		
Silver	2.94	0.0203	"	2.03	0.758	107	75-125	3.18	25		
Zinc	1220	0.407	"	40.7	1330	NR	75-125	44.5	25		QM-02

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEK0007 - 3060A Mod

Blank (BEK0007-BLK1)

Prepared & Analyzed: 11/01/21

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BEK0007-BS1)

Prepared & Analyzed: 11/01/21

Chromium, Hexavalent 21.0 0.30 mg/kg wet 25.0 84.0 80-120

Duplicate (BEK0007-DUP1)

Source: 2110262-01

Prepared & Analyzed: 11/01/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BEK0007-MS1)

Source: 2110262-01

Prepared & Analyzed: 11/01/21

Chromium, Hexavalent 27.7 0.30 mg/kg dry 29.5 ND 94.0 75-125

Matrix Spike Dup (BEK0007-MSD1)

Source: 2110262-01

Prepared & Analyzed: 11/01/21

Chromium, Hexavalent 27.7 0.30 mg/kg dry 29.5 ND 94.0 75-125 0.00 20

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0508 - General Preparation

Blank (BEJ0508-BLK1)

Prepared: 10/25/21 Analyzed: 10/27/21

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BEJ0508-BS1)

Prepared: 10/25/21 Analyzed: 10/27/21

Calcium	5.26	0.0500	mg/L wet	5.00	105	70-130
Magnesium	4.67	0.0500	"	5.00	93.4	70-130
Sodium	4.54	0.0500	"	5.00	90.7	70-130

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 11/03/21 15:25

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BEJ0528 - General Preparation

Duplicate (BEJ0528-DUP1)	Source: 2110393-16		Prepared: 10/26/21 Analyzed: 10/27/21	
% Solids	84.9	%	86.4	1.77 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEJ0555 - General Preparation

Blank (BEJ0555-BLK1)

Prepared & Analyzed: 10/27/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEJ0555-BS1)

Prepared & Analyzed: 10/27/21

Specific Conductance (EC) 0.155 0.0100 mmhos/cm 0.150 103 95-105

Duplicate (BEJ0555-DUP1)

Source: 2110411-01

Prepared & Analyzed: 10/27/21

Specific Conductance (EC) 0.464 0.0100 mmhos/cm 0.480 3.43 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEJ0554 - General Preparation

LCS (BEJ0554-BS1)

Prepared & Analyzed: 10/27/21

pH 9.23 pH Units 9.18 101 95-105

Duplicate (BEJ0554-DUP1)

Source: 2110411-01

Prepared & Analyzed: 10/27/21

pH 8.57 pH Units 8.60 0.349 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
11/03/21 15:25

Notes and Definitions

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-02 The RPD and/or percent recovery for this QC sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 28, 2021

Carter Peace

GIS Peace

2951 Niagara St

Denver, CO 80207

RE: Nickerson 4 Pit Closure

Work Order #2112256

Enclosed are the results of analyses for samples received by Summit Scientific on 12/14/21 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background East	2112256-01	Soil	12/11/21 00:00	12/14/21 12:00
Background West	2112256-02	Soil	12/11/21 00:00	12/14/21 12:00
Background South	2112256-03	Soil	12/11/21 00:00	12/14/21 12:00
N	2112256-04	Soil	12/11/21 00:00	12/14/21 12:00
W	2112256-05	Soil	12/11/21 00:00	12/14/21 12:00
E	2112256-06	Soil	12/11/21 00:00	12/14/21 12:00
S	2112256-10	Soil	12/11/21 00:00	12/14/21 12:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

S₂ 2112256

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: GIS PEACE Project Manager: CJP Page 1 of 1
 Address: _____ E-Mail: _____
 City/State/Zip: _____
 Phone: _____ Project Name: NICKERSON 4 PIT CLOSURE
 Sampler Name: CJP Project Number: _____

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions	
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	ARSENIC	pH	EC	SAR		
1	BACKGROUND EAST	12/11/21		↓			X			X				X	X	X		
2	BACKGROUND WEST	↓		↓			X			X				X	X	X		
3	BACKGROUND SOUTH	↓		↓			X			X				X	X	X		
4	N	↓		↓			X			X				X	X	X		
5	W	↓		↓			X			X				X	X	X		
6	E	↓		↓			X			X				X	X	X		
7	N BRG 8	↓		↓			X			X				X	X	X		HOLD*
8	W BRG 8	↓		↓			X			X				X	X	X		HOLD*
9	E BRG 8	↓		↓			X			X				X	X	X		HOLD*
10	S	↓		↓			X			X				X	X	X		

Relinquished by: <u>[Signature]</u>	Date/Time: <u>12/12/21 12:00</u>	Received by: <u>[Signature]</u>	Date/Time: <u>12/13/21 12:00</u>	Turn Around Time (Check): Same Day _____ 72 hours 24 hours _____ Standard <u>X</u> 48 hours _____	Notes: HOLD* PLEASE HOLD FOR POSSIBLE ARSENIC ANALYSIS PENDING OTHER RESULTS
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	Sample Integrity: Temperature Upon Receipt: <u>11.7</u> Samples Intact: <u>(Yes)</u> No	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____		

S₂

2112256

Sample Receipt Checklist

S2 Work Order# _____

Client: GIS PEACE Client Project ID: Nickerson 4 Pit Closure

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C) 11.7

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>ON ICE</u>
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

Custodian Printed Name or Initials

12.14.21
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Background East
2112256-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.07	0.200	mg/kg dry	1	BEL0475	12/21/21	12/23/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	41.0	0.0536	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	8.72	0.0536	"	"	"	"	"	"	
Sodium	2.36	0.0536	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0873	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.3		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.493	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

Background East
2112256-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.80			pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Background West
2112256-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.04	0.200	mg/kg dry	1	BEL0475	12/21/21	12/23/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	29.8	0.0520	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	7.69	0.0520	"	"	"	"	"	"	
Sodium	37.6	0.0520	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.59	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.1		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.519	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

Background West
2112256-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.21			pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Background South
2112256-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.53	0.200	mg/kg dry	1	BEL0475	12/21/21	12/23/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	33.3	0.0528	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	2.05	0.0528	"	"	"	"	"	"	
Sodium	0.129	0.0528	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	ND	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	94.7		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Specific Conductance (EC)	0.387	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

Background South
2112256-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.94		pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

N
2112256-04 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 12/11/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	13.1	0.0539	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	2.82	0.0539	"	"	"	"	"	"	
Sodium	155	0.0539	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 12/11/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.1	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 12/11/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.8		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: 12/11/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.19	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: 12/11/21 00:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.31		pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

W
2112256-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.04	0.200	mg/kg dry	1	BEL0547	12/27/21	12/28/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	25.4	0.0535	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	4.23	0.0535	"	"	"	"	"	"	
Sodium	320	0.0535	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	15.5	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.5		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.34	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

W
2112256-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.02			pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

E
2112256-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.22	0.200	mg/kg dry	1	BEL0547	12/27/21	12/28/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	4.11	0.0544	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	1.05	0.0544	"	"	"	"	"	"	
Sodium	41.6	0.0544	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.74	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.0		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.306	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

E

2112256-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	7.71		pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

S
2112256-10 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	9.22	0.0542	mg/L dry	1	BEL0409	12/17/21	12/23/21	EPA 6020B	
Magnesium	2.01	0.0542	"	"	"	"	"	"	
Sodium	303	0.0542	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	23.6	0.00100	units	1	BEL0544	12/23/21	12/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.2		%	1	BEL0515	12/22/21	12/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.20	0.0100	mmhos/cm	1	BEL0520	12/22/21	12/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/11/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.21		pH Units	1	BEL0519	12/22/21	12/22/21	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Total Metals by EPA 6020B - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEL0475 - EPA 3050B

Blank (BEL0475-BLK1)											
						Prepared: 12/21/21 Analyzed: 12/23/21					
Arsenic	ND	0.200	mg/kg wet								
LCS (BEL0475-BS1)											
						Prepared: 12/21/21 Analyzed: 12/23/21					
Arsenic	44.4	0.200	mg/kg wet	40.0		111	80-120				
Duplicate (BEL0475-DUP1)											
						Source: 2112256-01 Prepared: 12/21/21 Analyzed: 12/23/21					
Arsenic	1.86	0.200	mg/kg dry		2.07			10.7	20		
Matrix Spike (BEL0475-MS1)											
						Source: 2112256-01 Prepared: 12/21/21 Analyzed: 12/23/21					
Arsenic	48.7	0.200	mg/kg dry	42.9	2.07	109	75-125				
Matrix Spike Dup (BEL0475-MSD1)											
						Source: 2112256-01 Prepared: 12/21/21 Analyzed: 12/23/21					
Arsenic	49.1	0.200	mg/kg dry	42.9	2.07	110	75-125	0.736	25		

Batch BEL0547 - EPA 3050B

Blank (BEL0547-BLK1)											
						Prepared: 12/23/21 Analyzed: 12/27/21					
Arsenic	ND	0.200	mg/kg wet								
LCS (BEL0547-BS1)											
						Prepared: 12/23/21 Analyzed: 12/27/21					
Arsenic	39.5	0.200	mg/kg wet	40.0		98.8	80-120				
Duplicate (BEL0547-DUP1)											
						Source: 2112407-01 Prepared: 12/23/21 Analyzed: 12/27/21					
Arsenic	1.64	0.200	mg/kg dry		1.27			25.1	20		QR-03
Matrix Spike (BEL0547-MS1)											
						Source: 2112407-01 Prepared: 12/23/21 Analyzed: 12/28/21					
Arsenic	42.4	0.200	mg/kg dry	43.3	1.27	94.8	75-125				

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

Total Metals by EPA 6020B - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BEL0547 - EPA 3050B

Matrix Spike Dup (BEL0547-MSD1)

Source: 2112407-01

Prepared: 12/23/21 Analyzed: 12/28/21

Arsenic	41.7	0.200	mg/kg dry	43.3	1.27	93.3	75-125	1.59	25	
---------	------	-------	-----------	------	------	------	--------	------	----	--

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BEL0409 - General Preparation

Blank (BEL0409-BLK1)

Prepared: 12/17/21 Analyzed: 12/23/21

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BEL0409-BS1)

Prepared: 12/17/21 Analyzed: 12/23/21

Calcium	4.12	0.0500	mg/L wet	5.00	82.4	70-130				
Magnesium	4.92	0.0500	"	5.00	98.3	70-130				
Sodium	5.45	0.0500	"	5.00	109	70-130				

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 12/28/21 16:58

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source		%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BEL0515 - General Preparation

Duplicate (BEL0515-DUP1)	Source: 2112256-01		Prepared: 12/22/21 Analyzed: 12/23/21		
% Solids	93.5	%	93.3	0.210	20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BEL0520 - General Preparation

Blank (BEL0520-BLK1)

Prepared & Analyzed: 12/22/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEL0520-BS1)

Prepared & Analyzed: 12/22/21

Specific Conductance (EC) 0.143 0.0100 mmhos/cm 0.150 95.1 95-105

Duplicate (BEL0520-DUP1)

Source: 2112256-01

Prepared & Analyzed: 12/22/21

Specific Conductance (EC) 0.483 0.0100 mmhos/cm 0.493 2.13 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BEL0519 - General Preparation

LCS (BEL0519-BS1)

Prepared & Analyzed: 12/22/21

pH 9.11 pH Units 9.18 99.2 95-105

Duplicate (BEL0519-DUP1)

Source: 2112227-01

Prepared & Analyzed: 12/22/21

pH 7.63 pH Units 7.55 1.05 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
12/28/21 16:58

Notes and Definitions

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 10, 2022

Carter Peace

GIS Peace

2951 Niagara St

Denver, CO 80207

RE: Nickerson 4 Pit Closure

Work Order #2201039

Enclosed are the results of analyses for samples received by Summit Scientific on 01/05/22 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N	2201039-01	Soil	01/04/22 00:00	01/05/22 16:00
S	2201039-02	Soil	01/04/22 00:00	01/05/22 16:00
W	2201039-03	Soil	01/04/22 00:00	01/05/22 16:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2201039

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: GIS PEACE

Project Manager: C. PEACE

Page 1 of 1

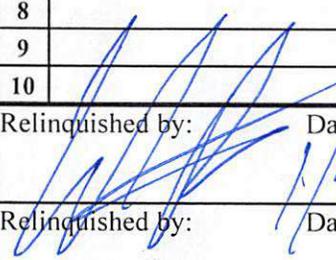
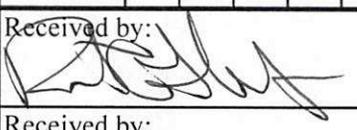
Address: _____ E-Mail: _____

City/State/Zip: _____

Phone: _____ Project Name: NICKERSON 4 PIT COSORT

Sampler Name: GSP Project Number: _____

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested	Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other		
1	N	1/4/22		1			X			X				
2	S	↓		↓			X			X				
3	W	↓		↓			X			X				
4														
5														
6														
7														
8														
9														
10														

Relinquished by: 	Date/Time: <u>1/4/22</u>	Received by: 	Date/Time: <u>1-5-22 1600</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>3.7</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

2201039

Sample Receipt Checklist

S2 Work Order# _____

Client: GIS PEACE Client Project ID: Nickason 4 RT Closure

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C) 3.7

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ICE
Were all samples received intact ⁽¹⁾ ?	-			
Was adequate sample volume provided ⁽¹⁾ ?	-			
If custody seals are present, are they intact ⁽¹⁾ ?	-			
Are samples with holding times due within 48 hours sample due within 48 hours present?		-		
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	-			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	-			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	-			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	-			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			-	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.			-	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.			-	
If dissolved metals are requested, were samples field filtered?			-	

Additional Comments (if any):

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

[Signature]
Custodian Printed Name or Initials

1.5.22
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

N
2201039-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	27.0	0.0533	mg/L dry	1	BFA0094	01/06/22	01/08/22	EPA 6020B	
Magnesium	6.22	0.0533	"	"	"	"	"	"	
Sodium	134	0.0533	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	6.05	0.00100	units	1	BFA0124	01/10/22	01/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.7		%	1	BFA0084	01/06/22	01/06/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.10	0.0100	mmhos/cm	1	BFA0113	01/07/22	01/07/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.59		pH Units	1	BFA0112	01/07/22	01/07/22	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

S
2201039-02 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	52.2	0.0545	mg/L dry	1	BFA0094	01/06/22	01/08/22	EPA 6020B	
Magnesium	8.19	0.0545	"	"	"	"	"	"	
Sodium	308	0.0545	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.5	0.00100	units	1	BFA0124	01/10/22	01/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.7		%	1	BFA0084	01/06/22	01/06/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.51	0.0100	mmhos/cm	1	BFA0113	01/07/22	01/07/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.68		pH Units	1	BFA0112	01/07/22	01/07/22	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

W
2201039-03 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	58.6	0.0529	mg/L dry	1	BFA0094	01/06/22	01/08/22	EPA 6020B	
Magnesium	20.2	0.0529	"	"	"	"	"	"	
Sodium	128	0.0529	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.68	0.00100	units	1	BFA0124	01/10/22	01/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.5		%	1	BFA0084	01/06/22	01/06/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.76	0.0100	mmhos/cm	1	BFA0113	01/07/22	01/07/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/04/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.55		pH Units	1	BFA0112	01/07/22	01/07/22	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BFA0094 - General Preparation

Blank (BFA0094-BLK1)

Prepared: 01/06/22 Analyzed: 01/08/22

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BFA0094-BS1)

Prepared: 01/06/22 Analyzed: 01/08/22

Calcium	5.68	0.0500	mg/L wet	5.00	114	70-130				
Magnesium	5.53	0.0500	"	5.00	111	70-130				
Sodium	5.86	0.0500	"	5.00	117	70-130				

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 01/10/22 15:39

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC			RPD	Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BFA0084 - General Preparation

Duplicate (BFA0084-DUP1)

Source: 2201039-01

Prepared & Analyzed: 01/06/22

% Solids	93.2		%		93.7			0.540	20	
----------	------	--	---	--	------	--	--	-------	----	--

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BFA0113 - General Preparation

Blank (BFA0113-BLK1)

Prepared & Analyzed: 01/07/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFA0113-BS1)

Prepared & Analyzed: 01/07/22

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 100 95-105

Duplicate (BFA0113-DUP1)

Source: 2201039-01

Prepared & Analyzed: 01/07/22

Specific Conductance (EC) 1.08 0.0100 mmhos/cm 1.10 1.47 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 01/10/22 15:39

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BFA0112 - General Preparation

LCS (BFA0112-BS1)

Prepared & Analyzed: 01/07/22

pH 9.16 pH Units 9.18 99.8 95-105

Duplicate (BFA0112-DUP1)

Source: 2201039-01

Prepared & Analyzed: 01/07/22

pH 7.77 pH Units 7.59 2.34 20

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
01/10/22 15:39

Notes and Definitions

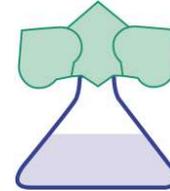
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

American Agricultural Laboratory, Inc.

700 West D Street / PO Box 370 / McCook, Nebraska 69001

Office: 308-345-3670 / FAX: 308-345-7880

www.AmAgLab.com



20423

DC DOZER SERVICE

1403 FILLMORE ST

STERLING CO 80751

NAME : TINDALL OPERATING NICKERSON 4 PIT DATE RECEIVED: 03/31/2022

DATE REPORTED: 04/04/2022

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH		EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA)		PHOSPHORUS						
				1 : 1 Soil	Buffer Woodruff				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm		
3398048	WELD COUNTY SWNW SEC 18 7N 58W	SOUTH WALL	0-8														
3398049	WELD COUNTY SWNW SEC 18 7N 58W	NORTH WALL	0-8														

LAB NUMBER	SULFATE-S Ca-P ppm	NH4OAc (Exchangeable)				DTPA				BORON Sorbitol ppm	EST. CATION EXCHANGE CAPACITY (CEC) me/100g	% SATURATION						
		K ppm	Ca ppm	Mg ppm	Na ppm	Zn ppm	Fe ppm	Mn ppm	Cu ppm			BASE	H	Ca	Mg	K	Na	
3398048																		
3398049																		

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE		EXCH. NH4-N		ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE		ppm	lbs/A	ppm		
3398048	2.16	0.48	1.17	1.02	1	0										
3398049	5.59	1.63	8.51	4.48	5	0										

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD GOAL	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC 60% ECCE T/A
3398048	WELD COUNTY SWNW SEC 18 7	SOUTH WALL														
3398049	WELD COUNTY SWNW SEC 18 7	NORTH WALL														

Approved By: Kevin Grooms

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 26, 2022

Carter Peace

GIS Peace

2951 Niagara St

Denver, CO 80207

RE: Nickerson 4 Pit Closure

Work Order #2204205

Enclosed are the results of analyses for samples received by Summit Scientific on 04/14/22 14:13. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury
President



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
04/26/22 10:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W	2204205-01	Soil	04/14/22 00:00	04/14/22 14:13

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2204205

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: GIS PEACE

Project Manager: C. PEACE

Page 1 of 1

Address: _____ E-Mail: _____

City/State/Zip: _____

Phone: _____ Project Name: NICKERSON 4 PIT CLOSURE

Sampler Name: CJP Project Number: _____

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested					Special Instructions		
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other							
1	<u>W</u>	<u>4/14/22</u>		<u>1</u>			<u>X</u>			<u>X</u>			<u>SODIUM</u>						<u>SATURATED PASTE METHOD.</u>
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>4/14/22 14:13</u>		Received by: <u>Shereen Balu</u>		Date/Time: <u>4/14/22 14:13</u>		Turn Around Time (Check)					Notes:						
Relinquished by: <u>[Signature]</u>		Date/Time: _____		Received by: _____		Date/Time: _____		Same Day _____ 72 hours _____					Standard <u>X</u>						
Temperature Upon Receipt: <u>14.2</u>		Corrected Temperature _____		HNO ₃ lot # _____		Sample Integrity:					Samples Intact: <u>Yes</u> No								
IR gun correction: _____		IR gun #: _____		_____		_____					_____								

S₂

2204205

Sample Receipt Checklist

S2 Work Order# _____

Client: GIS Peace Client Project ID: Nicherson 4 Pit Closure

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other _____ Airbill #: _____

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air Soil/Solid Water Other

Temp (°C) Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6 °C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Metals - SAR Paste
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

S₂
Custodian Printed Name

4/14/22 14:13
Date/Time



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
04/26/22 10:57

W
2204205-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium	10.2	0.0530	mg/L dry	1	BFD0456	04/21/22	04/25/22	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.4		%	1	BFD0422	04/20/22	04/20/22	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
04/26/22 10:57

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BFD0456 - General Preparation

Blank (BFD0456-BLK1)

Prepared: 04/21/22 Analyzed: 04/25/22

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BFD0456-BS1)

Prepared: 04/21/22 Analyzed: 04/25/22

Calcium	5.33	0.0500	mg/L wet	5.00		107	70-130			
Magnesium	5.71	0.0500	"	5.00		114	70-130			
Sodium	5.44	0.0500	"	5.00		109	70-130			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
 2951 Niagara St
 Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
 Project Manager: Carter Peace

Reported:
 04/26/22 10:57

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BFD0422 - General Preparation

Duplicate (BFD0422-DUP1)

Source: 2204123-02

Prepared & Analyzed: 04/20/22

% Solids	92.4		%		92.9			0.577	20	
----------	------	--	---	--	------	--	--	-------	----	--

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



GIS Peace
2951 Niagara St
Denver CO, 80207

Project: Nickerson 4 Pit Closure

Project Number: [none]
Project Manager: Carter Peace

Reported:
04/26/22 10:57

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

Exhibit B

SITE		TICKET		GRID		WEIGHMASTER	
01		46538		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/19/21		10/19/21		9:32	9:32	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130031			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	97820	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	61060	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
30.53	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: <i>Tindall Operating P.O. Box 4507 Englewood, CO 80155</i>			Manifest No.: 130031			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048	Facility Phone No.: (970) 889-0006			
Generator's Name and Mailing Address:	Well or Site Name: <i>Nickerson #4 SWNW Sec 18 7N 58W</i>		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: <i>Jones one</i>	Type: <i>BD</i>	<i>30.53</i>	<i>TONS</i>
	Lat/Long:					
	Waste Name/Waste Type: <i>Hydrocarbon bearing soil</i>					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: <i>Todd Troutman</i>		Signature: 			Date: <i>10/19/21</i>	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: <i>Jones</i>		US EPA ID No.:		Transporter's Phone No.: (include area code) <i>970-571-365</i>	
	Printed/Typed Name: <i>Leonid Jamer</i>		Signature: 			Date: <i>10-19-21</i>
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: <i>Hendra Dill</i>		Signature: 			Date: <i>10.19.21</i>	

Handwritten text at the top left of the page.

Handwritten text in the middle left section.

Handwritten text below the middle left section.

Handwritten text at the bottom left of the page.

Handwritten text at the top right of the page.

Handwritten text in the middle right section.

Handwritten text below the middle right section.

Handwritten text below the previous right section.

Handwritten text below the previous right section.

Handwritten text below the previous right section.

Handwritten text at the bottom center of the page.

Handwritten text at the bottom right of the page.

SITE		TICKET		GRID		WEIGHMASTER			
01		46555		C2F2		KDILL			
DATE IN		DATE OUT		TIME IN		TIME OUT		VEHICLE	ROLL OFF
10/19/21		10/19/21		11:17		11:17		JONES 06B	
REFERENCE						ORIGIN			
EPS04863						MANIFEST #130032			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

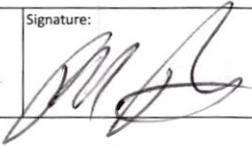
Manual Gross Wt.	101440	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	64680	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
32.34	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address:	Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130032		
	Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048	Facility Phone No.: (970) 889-0006		
	Well or Site Name: Nickerson #4 SWNW Sect 7N S8W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones Old	Type: BD	3234	tons.
	Lat/Long:		Waste Name/Waste Type: Hydrocarbon bearing soil			
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652	
	Printed/Typed Name: Leon Jones		Signature: 			Date: 10-19-21
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
Discrepancy Indication Space:	Discrepancy Indication Space:					
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)					
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above					
Printed/Typed Name: Kendra Dill		Signature: 			Date: 10.19.21	

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

۱۳۰۰

SITE		TICKET		GRID		WEIGHMASTER			
01		46560		C2F2		KDILL			
DATE IN		DATE OUT		TIME IN		TIME OUT		VEHICLE	ROLL OFF
10/19/21		10/19/21		13:05		13:05		JONES 06B	
REFERENCE						ORIGIN			
EPS04863						MANIFEST #130033			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

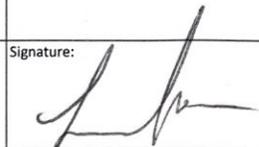
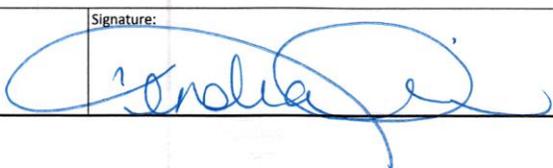
Manual Gross Wt.	97840	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	61080	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
30.54	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC		
Generator	Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130033			
	Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
	Well or Site Name: Nickerson #4 SW/NE Sec 18 7N 58W			Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:			No.: Jong 020	Type: BD	3654	tons
	Lat/Long:			Waste Name/Waste Type: Hydrocarbon bearing soil			
Special Handling Instructions:							
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste							
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21		
Transporter	Transporter Acknowledgement of Receipt of Materials						
	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652		
	Printed/Typed Name: Leonard Jones		Signature: 			Date: 10-19-21	
Disposal Facility	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer						
	Discrepancy Indication Space:						
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
	Printed/Typed Name: Kendrea Dill		Signature: 			Date: 10-19-21	

13131

Handwritten notes in Arabic script, possibly including a date or reference number.

13132

Handwritten notes in Arabic script.

13133

Handwritten notes in Arabic script.

13134

Handwritten notes in Arabic script.

13135

Handwritten notes in Arabic script, possibly a signature or a concluding statement.

SITE		TICKET		GRID		WEIGHMASTER	
01		46681		C2F2		PGRAF	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
10/22/21	10/22/21	8:13	8:13	JONES 06B			
REFERENCE				ORIGIN			
EPS04863				MANIFEST 130034			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	94500	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	57740	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
28.87	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130034			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048	Facility Phone No.: (970) 889-0006			
Generator's Name and Mailing Address:	Well or Site Name: Nickerson #4 SWNW Sec 18 7N 58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 0673	Type: BD	28.87	Tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter Acknowledgement of Receipt of Materials						
Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652		
Printed/Typed Name: Leonard Jones		Signature: 			Date: 10-22-21	
Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer						
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Paul Grad		Signature: 			Date: 10/21/21	

Handwritten scribbles at the top left of the page.

Handwritten scribbles at the top center of the page.

Handwritten scribbles at the top right of the page.

Handwritten scribbles in the middle left section.

Handwritten scribbles in the middle right section.

Handwritten scribbles in the lower middle left section.

A single handwritten mark in the lower middle center section.

Handwritten scribbles in the lower middle right section.

Handwritten scribbles in the lower left section.

Handwritten scribbles in the lower right section.

Handwritten scribbles in the bottom left section.

Handwritten scribbles in the bottom left section.

Handwritten scribbles in the bottom right section.

SITE		TICKET		GRID		WEIGHMASTER	
01		46690		C2F2		PGRAF	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF		
10/22/21	10/22/21	10:01	10:01	JONES 06B			
REFERENCE				ORIGIN			
EPS04863				MANIFEST 130035			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	94040	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	57280	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
28.64	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130035			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator	Well or Site Name: Nickerson #4 SWNW Sec 18 7N58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: 3005 06	Type: B	28.64	Tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter	Transporter Acknowledgement of Receipt of Materials					
	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970 571-3652	
	Printed/Typed Name: Leonid Jones		Signature: 			Date: 10-22-21
Disposal Facility	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
	Discrepancy Indication Space:					
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)					
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above					
Printed/Typed Name: Paul Grat		Signature: 			Date: 10/21/21	

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

1/10

SITE		TICKET		GRID		WEIGHMASTER	
01		46699		C2F2		PGRAF	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/22/21		10/22/21		12:04	12:04	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST 130036			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

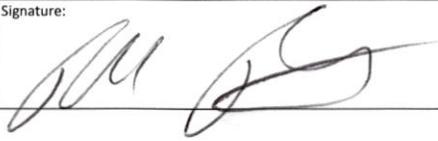
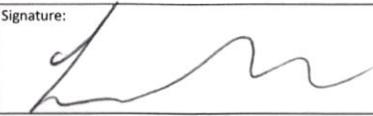
Manual Gross Wt.	96800	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	60040	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
30.02	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130036			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator	Well or Site Name: Nickerson #4 SWNW Sec 18 7N 58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones OG	Type: B	30.2	Tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter	Transporter Acknowledgement of Receipt of Materials					
	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652	
	Printed/Typed Name: Leonard Lence		Signature: 			Date: 10-22-21
Disposal Facility	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
	Discrepancy Indication Space:					
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)					
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above					
Printed/Typed Name: Paul Grat		Signature: 			Date: 10/22/21	

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

SITE		TICKET		GRID		WEIGHMASTER	
01		46856		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/25/21		10/25/21		8:09	8:09	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130037			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

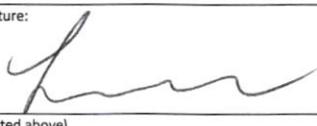
Manual Gross Wt.	96900	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	60140	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
30.07	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130037			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weid County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Name and Mailing Address:	Well or Site Name: Nickerson #4 SK NW 1/4 Sec 18 7N 58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 010	Type: BD	30.07	tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3452	
	Printed/Typed Name: Leonid Jones		Signature: 			Date: 10-25-21
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Kendra Bill		Signature: 			Date: 10.25.21	

Handwritten text in the upper right section of the page.

Handwritten text in the middle right section of the page.

Handwritten text in the lower middle right section of the page.

Large block of handwritten text in the lower right section of the page.

Handwritten text at the bottom right corner.

Handwritten text in the upper left section of the page.

Handwritten text in the middle left section of the page.

Handwritten text in the lower middle left section of the page.

Handwritten text in the lower left section of the page.

Handwritten text at the bottom left corner.

SITE		TICKET		GRID		WEIGHMASTER	
01		46875		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/25/21		10/25/21		9:51	9:51	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130038			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	92120	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	55360	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
27.68	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130038			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Name and Mailing Address:	Well or Site Name: Nickerson #4 SW 1/4 Sec 18 7N 58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 04	Type: 30	2768	tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
	Special Handling Instructions:					
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 		Date: 10/19/21		
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-871-3652	
	Printed/Typed Name: Leonard Jones		Signature: 		Date: 10-25-21	
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Kendrea Dill		Signature: 		Date: 10-25-21		

بسم الله الرحمن الرحيم

الحمد لله رب العالمين

والصلاة والسلام على من لا نبي بعده

وبعد فقد حضر

في يوم الاثنين

العدد

العدد

العدد

العدد

العدد

العدد

العدد

العدد

العدد

SITE		TICKET		GRID		WEIGHMASTER	
01		46882		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/25/21		10/25/21		11:18	11:18	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130039			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	101320	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	64560	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
32.28	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130039			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator	Well or Site Name: Nickerson #4 SW/4 Sec 18 7N 58W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 06	Type: BD	32.28	tons
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter	Transporter Acknowledgement of Receipt of Materials					
	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652	
	Printed/Typed Name: Leonid Jones		Signature: 			Date: 10-25-21
Disposal Facility	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
	Discrepancy Indication Space:					
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)					
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above					
Printed/Typed Name: Kendra Dill		Signature: 			Date: 10.25.21	

Handwritten text on the left side of the page.

Handwritten text on the left side of the page.

Handwritten text on the left side of the page.

Handwritten text on the left side of the page.

Handwritten text at the bottom left of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text on the right side of the page.

Handwritten text at the bottom center of the page.

Handwritten text at the bottom right of the page.

SITE		TICKET		GRID		WEIGHMASTER	
01		46897		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/25/21		10/25/21		12:53	12:53	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130040			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

Manual Gross Wt.	96620	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	59860	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
29.93	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130040			
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Certification:	Well or Site Name: Nickerson #4 SW1/4 Sec 18 T158N		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 06	Type: BD	29.93	tons.
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652	
	Printed/Typed Name: Leonard Jones		Signature: 			Date: 10-25-21
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Moncha Dill		Signature: 			Date: 10.25.21	

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

0.001

SITE		TICKET		GRID		WEIGHMASTER	
01		46910		C2F2		KDILL	
DATE IN		DATE OUT		TIME IN	TIME OUT	VEHICLE	ROLL OFF
10/25/21		10/25/21		14:40	14:40	JONES 06B	
REFERENCE				ORIGIN			
EPS04863				MANIFEST #130041			

1142
D.C. DOZER SERVICE, LLC
TODD TROUTMAN
15502 HWY 14
STERLING, CO 80751

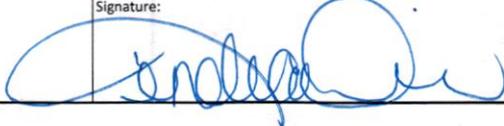
Manual Gross Wt.	93540	Charge Ticket
Stored Tare Wt.	36760	
Net Weight	56780	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
28.39	TON	Exempt Prod Solid				

Job Generator NICKERSON #4 SWNW SEC 18 7N 58
TINDALL OPERATING

SIGNATURE: _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC		
Generator	Generator's Name and Mailing Address: Tindall Operating P.O. Box 4507 Englewood, CO 80155			Manifest No.: 130041			
	Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
	Well or Site Name: Nickerson #4 SWNW Sec 18 7N58W			Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:			No.: Jones 06	Type: BD	28.59	TONS
	Lat/Long:			Waste Name/Waste Type: Hydrocarbon bearing soil			
Special Handling Instructions:							
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste							
Printed/Typed Name: Todd Troutman		Signature: 			Date: 10/19/21		
Transporter	Transporter Acknowledgement of Receipt of Materials						
	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652		
	Printed/Typed Name: Leonid Jones		Signature: 			Date: 10-25-21	
Disposal Facility	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C Dozer						
	Discrepancy Indication Space:						
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Kendra Dill		Signature: 			Date: 10.25.21		

1971

1972

1973

1974

1975

1976

1977

1978

1979

1980

1981

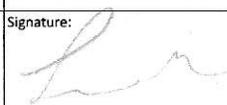
1982

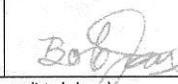
1983

1984

1985

1986

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: D.C. Dozer Service, LLC 15502 HWY 14 Sterling, CO 80751		Tindall Operating P.O. Box 4507 Englerwood, CO 80155		Manifest No.: 133518		
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Name and Mailing Address:	Well or Site Name: Nickerson # 4 SW/NW Sec 18 7N/5E		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 06	Type: SD		ton
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Troutman		Signature: 			Date: 1/4/22	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones		US EPA ID No.:		Transporter's Phone No.: (include area code) 970-571-3652	
	Printed/Typed Name: Leonard Jones		Signature: 			Date: 1-4-22
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C. Dozer Service, LLC					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Lena Burnett		Signature: 			Date: 1-4-22	

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC		
Generator's Name and Mailing Address:	D.C. Dozer Service, LLC 15502 HWY 14 Sterling, CO 80751		<i>Tindall Operating</i> <i>P.O. Box 4507</i> <i>Englewood, CO 80155</i>		Manifest No.: 133520		
	Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
	Well or Site Name: <i>Nickerson #4 SK/NW Sec 18</i> <i>7N 58W</i>		Truck/Haul Container No.: <i>Jones</i> <i>05</i>		Total Quantity <i>25.62</i>		Unit/Wt/Vol <i>tons</i>
	AFE#/Reference#:		Type: <i>SD</i>		Lat/Long:		
	Waste Name/Waste Type: <i>Hydrocarbon bearing soil</i>		Special Handling Instructions:		Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste		
Printed/Typed Name: <i>Todd Troutman</i>		Signature: 		Date: <i>1/4/22</i>			
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: <i>Jones LLC</i>		US EPA ID No.:		Transporter's Phone No.: (include area code) <i>970) 520-7961</i>		
	Printed/Typed Name: <i>Bob Jones</i>		Signature: 		Date: <i>1/4/22</i>		
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C. Dozer Service, LLC						
Discrepancy Indication Space:	Discrepancy Indication Space:						
	Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
	Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: <i>Lena Burnett</i>		Signature: 		Date: <i>1-4-22</i>			

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: D.C. Dozer Service, LLC 15502 HWY 14 Sterling, CO 80751		Tindall Operating P.O. Box 4507 Englewood, CO 80155		Manifest No.: 133516		
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Name and Mailing Address:	Well or Site Name: Nickerson #4 SW/NE Sec 18 7NS&W		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#:		No.: Jones 05	Type: SD	10.65	ton
	Lat/Long:					
	Waste Name/Waste Type: Hydrocarbon bearing soil					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: Todd Treeman		Signature: 			Date: 1/4/22	
Transporter Acknowledgement of Receipt of Materials	Transporter Company Name: Jones LLC		US EPA ID No.:		Transporter's Phone No.: (include area code) 970) 520-7961	
	Printed/Typed Name: Bob Jones		Signature: 			Date: 1/4/22
	Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C. Dozer Service, LLC					
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: Lena Burnett		Signature: 			Date: 1-4-22	

NON-HAZARDOUS WASTE MANIFEST		Generator's EPA ID No.	Profile No.	Page 1 of 1	PAWNEE WASTE LLC	
Generator's Name and Mailing Address: D.C. Dozer Service, LLC 15502 HWY 14 Sterling, CO 80751		Tindall Operating P.O. Box 4507 Englewood, CO 80155		Manifest No.: 133519		
Designated Facility Name and Site Address: Pawnee Waste 47368 County Rd 118 Grover, CO 80729		Weld County USR No.: USR15-0048		Facility Phone No.: (970) 889-0006		
Generator's Name and Mailing Address:	Well or Site Name: <i>Nickerson #4 SK/Nick Sec 18</i>		Truck/Haul Container		Total Quantity	Unit/Wt/Vol
	AFE#/Reference#: <i>7N 58K1</i>		No.: <i>Jones 06</i>	Type: <i>SD</i>	<i>24.27</i>	<i>ton</i>
	Lat/Long:					
	Waste Name/Waste Type: <i>Hydrocarbon bearing soil</i>					
Special Handling Instructions:						
Generator's Certification: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste						
Printed/Typed Name: <i>Todd Troutman</i>		Signature: 			Date: <i>1/4/22</i>	
Transporter Acknowledgement of Receipt of Materials						
Transporter Company Name: <i>Jones</i>		US EPA ID No.:		Transporter's Phone No.: (include area code) <i>970 571-3652</i>		
Printed/Typed Name: <i>Leonard Jones</i>		Signature: 			Date: <i>1-4-22</i>	
Bill To Company Name: (if invoicing is other than the Generator Company listed above) D.C. Dozer Service, LLC						
Discrepancy Indication Space:						
Waste Load Rejection Reason: (complete and attach waste rejection form to facility manifest copy)						
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted above						
Printed/Typed Name: <i>Lena Burnett</i>		Signature: <i>Lena Burnett</i>			Date: <i>1-4-22</i>	