

D.C. Dozer Service LLC

1403 Fillmore Street

Sterling, CO 80751

(970) 580 – 0062

Troutman0231@msn.com

February 10, 2018

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

RE: Investment Equipment LLC. - Bull Field Reclamation Project

Dear Mr. Young,

D.C. Dozer Service is pleased to provide you with results of remediation activities conducted at the Bowl Field well sites operated by Investment Equipment LLC located in Logan County, section 31 township 10N range 53W 6 PM. There is three well sites and one tank battery with a production pit. The three well sites have been plugged and abandoned, and all tanks and equipment have been removed from the three well sites and tank battery. This report below explains the environmental remediation activities performed to close out the facilities mentioned above, reclamation seeding of these facilities, and also the continue monitoring of the sites until final reclamation closure is achieved.

Work Performed

Production Pit

On November 30th, 2017, D.C. Dozer Service began construction to close out the production pit at the Seal State #1 tank battery site. With water still in the pit, we proceeded to dig a sump, in order to drain the water away from the middle of the pit so a sample could be pulled from the bottom. We allowed the pit to dry for 6 days and then proceeded with sampling on December 5, 2017. Samples for TPH and BTEX were pulled from the bottom of the pit at a depth of 10 feet and 4 wall samples at a depth of 6 feet from the top of the berm. Samples came back On December 14, 2017 (figure 1) with the south wall (WP – SW#1) failing for DRO at a quantity of 1060 mg/kg and the west wall (WP – WW#1) failing for DRO at a quantity of 553 mg/kg. The rest of the samples passed at levels under COGCC table 910 – 1. We then proceeded with excavation of the south and west walls using visual indication to identify the removal of contaminated soil until clean soil was located. Samples were then collected for TPH - DRO on December 21, 2017 from the west wall at a depth of 6 feet 6 inches from the top of the berm

and the south wall at a depth of 8 feet from the top of the berm. Approximately an area 110 feet by 10 feet was excavated 6 inches on the west wall and an area 60 feet by 10 feet on the south wall was excavated 2 feet in depth. This gave us 4 loads of contaminated soil that was hauled to Buffalo Ridge landfill for disposal, totaling 84.61 tons of disposed soil. Samples were returned on January 4, 2018 (figure 2) with passing results at quantities of 79.8 mg/kg and 46.1 mg/kg. Following the clean sample results we continued on to sample our pH, EC, and SAR in all 4 berm walls along with each wall's footprint. These samples were actually taken on December 5, 2017 and we received results on December 14, 2017 (figure 3). Results showed in all samples high EC ranging with quantities from 4.94 to 23.44 mmhos/cm. Our pH levels all came back within COGCC table 910 – 1 along with SAR except the south wall footprint (WP SW FP 1) came back at 21.16 for SAR. Further investigation of the site continued with collecting a background sample and also an additional south wall footprint sample at a depth of 1 to 2 feet from surface. Results were received on December 29, 2017 (figure 4) with results showing our background sample's EC at 0.94 mmhos/cm and the south wall footprint (WP SW FP 2) at 52.11 for SAR. With these results we decided to formulate a plan of excavating the south wall footprint at a depth of 3 feet and pushing this soil into the pit first. We then continued to backfill the pit by pushing in the south wall, then the west wall, the east wall, and finally the north wall, which had the best in-organic sample results. With the north wall on top we were able to insure all salt impacted soil was below 3 feet from surface. Finally we brought in 108.29 tons (4 loads) of topsoil to replace the soil that was removed and disposed of. This soil was used to cap the top of the pit area for optimal opportunity with reclamation seeding. Finally, the area was final graded and confirmation samples were pulled on January 30, 2018. Sample results were received February 1, 2018 (figure 5) with all results well within the standards for COGCC table 910 -1.

Reclamation Seeding

All disturbed areas including the 3 well sites, two tank batteries, two production pit areas, and connecting roads were all cross ripped, tilled, planted with a dryland pasture mix and western wheatgrass, as requested by the landowner. Finally, straw mulch was laid and crimped into the ground for storm water erosion, introduction of organic matter, and a snow catch in order to collect moisture for spring growth.

Conclusion

Based on the aforementioned activities that have been completed, we look to close out Form 27 document # 401346295. We will continue to monitor the sites for storm water erosion and weed control until we have achieved 80% grass growth for final reclamation. All sample results, comparison chart, reclamation and sample location maps, and photo logs are located below in this report. Should you have any questions, please do not hesitate to contact me at 970-580-0062 or troutman0231@msn.com.

Sincerely,
Todd Troutman D.C. Dozer Service

State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

401346295

Receive Date:

07/19/2017

Report taken by:

ROB YOUNG

Site Investigation and Remediation Workplan (Initial Form)

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. However, this shall not preclude the Operator from taking immediate action to protect public health or safety, the environment, wildlife, or livestock.

This Form 27 describes site conditions as currently understood by the Operator; approval of this Form 27 by COGCC is based on the site conditions accurately described herein; any changes in site conditions identified during or subsequent to the performance of the approved workplan may necessitate additional investigation or remediation which shall be described on a supplemental Form 27. This Form 27 is intended to provide basic information regarding the proposed site investigation and remediation actions, but the workplan may be more fully described in attached documentation.

Refer to Rules 340, 905, 906, 907, 908, 909, and 910

OPERATOR INFORMATION

Name of Operator: <u>INVESTMENT EQUIPMENT LLC</u>	Operator No: <u>10330</u>	Phone Numbers
Address: <u>412 W PLATTE AVE</u>		Phone: <u>(970) 867-9007</u>
City: <u>FT MORGAN</u> State: <u>CO</u> Zip: <u>80701</u>		Mobile: <u>(405) 642-9437</u>
Contact Person: <u>JIM CHISHOLM</u>	Email: <u>investmentequipment@gmail.com</u>	

PROJECT, PURPOSE & SITE INFORMATION

PROJECT INFORMATION

Remediation Project #: 10288Initial Form 27 Document #: 401346295

PURPOSE INFORMATION

- | | |
|--|--|
| <input type="checkbox"/> 901.e. Sensitive Area Determination | <input type="checkbox"/> 909.c.(5), Rule 910.b.(4): Remediation of impacted ground water |
| <input checked="" type="checkbox"/> 909.c.(1), Rule 905: Pit or PW vessel closure | <input type="checkbox"/> Rule 909.e.(2)A.: Notice completion of remediation in accordance with Rule 909.b. |
| <input type="checkbox"/> 909.c.(2), Rule 906: Spill/Release Remediation | <input type="checkbox"/> Rule 909.e.(2)B.: Closure of remediation project |
| <input type="checkbox"/> 909.c.(3), Rule 907.e.: Land treatment of oily waste | <input type="checkbox"/> Rule 906.c.: Director request |
| <input type="checkbox"/> 909.c.(4), Rule 908.g.: Centralized E&P Waste Management Facility closure | <input type="checkbox"/> Other _____ |

SITE INFORMATION

N Multiple Facilities (in accordance with Rule 909.c.)

Facility Type: <u>PIT</u>	Facility ID: <u>118952</u>	API #: _____	County Name: <u>LOGAN</u>
Facility Name: <u>SEAL STATE 1</u>	Latitude: <u>40.802636</u>	Longitude: <u>-103.336178</u>	
** correct Lat/Long if needed: Latitude: _____		Longitude: _____	
QtrQtr: <u>NENW</u>	Sec: <u>31</u>	Twp: <u>10N</u>	Range: <u>53W</u> Meridian: <u>6</u> Sensitive Area? <u>Yes</u>

SITE CONDITIONS

General soil type - USCS Classifications SMMost Sensitive Adjacent Land Use RANGELANDIs domestic water well within 1/4 mile? YesIs surface water within 1/4 mile? YesIs groundwater less than 20 feet below ground surface? Yes

Other Potential Receptors within 1/4 mile

--

SITE INVESTIGATION PLAN

TYPE OF WASTE:

- | | | |
|--|--|--|
| <input type="checkbox"/> E&P Waste | <input checked="" type="checkbox"/> Other E&P Waste | <input type="checkbox"/> Non-E&P Waste |
| <input type="checkbox"/> Produced Water | <input type="checkbox"/> Workover Fluids | |
| <input type="checkbox"/> Oil | <input type="checkbox"/> Tank Bottoms | |
| <input type="checkbox"/> Condensate | <input type="checkbox"/> Pigging Waste | |
| <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rig Wash | |
| <input type="checkbox"/> Drill Cuttings | <input type="checkbox"/> Spent Filters | |
| | <input checked="" type="checkbox"/> Pit Bottoms | |
| | <input type="checkbox"/> Other (as described by EPA) | |

DESCRIPTION OF IMPACT

Impacted?	Impacted Media	Extent of Impact	How Determined
UNDETERMINED	SOILS	Potential salinity and/or oily dirt	Soil samples

INITIAL ACTION SUMMARY

Description of initial action or emergency response measures take to abate, investigate, and/or remediate impacts associated with E&P Waste.

Plan to take soil samples from bottom and footprint of pit berms. Will haul off any salty or oily dirt to disposal. Close pit. Reclaim and re-seed.

PROPOSED SAMPLING PLAN

Proposed Soil Sampling

☒ Will soil samples be collected as part of this investigation? (Number, type (grab/composite), analyses, and locations of samples):

Samples will be taken from bottom (2) and sides (4) of pit. Will submit sample site pictures when samples are taken.

Proposed Groundwater Sampling

☐ Will groundwater samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Proposed Surface Water Sampling

☐ Will surface water samples be collected as part of this investigation? (Number, analyses, and locations of samples):

Additional Investigative Actions

☐ Additional alternative investigative actions described in attached Site Investigation Plan (summary):

SITE INVESTIGATION REPORT

SAMPLE SUMMARY

Soil

Number of soil samples collected 0

Number of soil samples exceeding 910-1

Was the areal and vertical extent of soil contamination delineated?

Approximate areal extent (square feet)

NA / ND

 Highest concentration of TPH (mg/kg)

 Highest concentration of SAR

BTEX > 910-1

Vertical Extent > 910-1 (in feet)

Groundwater

Number of groundwater samples collected 0

Was extent of groundwater contaminated delineated? No

Depth to groundwater (below ground surface, in feet)

Number of groundwater monitoring wells installed

Number of groundwater samples exceeding 910-1

 Highest concentration of Benzene (µg/l)

 Highest concentration of Toluene (µg/l)

 Highest concentration of Ethylbenzene (µg/l)

 Highest concentration of Xylene (µg/l)

 Highest concentration of Methane (mg/l)

Surface Water

0 Number of surface water samples collected

 Number of surface water samples exceeding 910-1

If surface water is impacted, other agency notification may be required.

OTHER INVESTIGATION INFORMATION

☐ Were impacts to adjacent property or offsite impacts identified?

☐ Were background samples collected as part of this site investigation?

☐ Was investigation derived waste (IDW) generated as part of this investigation?

Volume of solid waste (cubic yards)

Volume of liquid waste (barrels)

☐ Is further site investigation required?

REMEDIAL ACTION PLAN

SOURCE REMOVAL SUMMARY

Describe how source is to be removed.

Excavate sides and bottom of pit. Dispose of any oily soil and remediate location.

REMEDICATION SUMMARY

Describe how remediation of existing impacts to soil and groundwater is to be accomplished (i.e. summarize remedial action plan). Provide a brief narrative description including: technical justification, schedule for implementation, estimated time to attain NFA status, plus plans and specifications for the selected remedial action technology.

Remove any oily or salty dirt and replace.

Soil Remediation Summary

☒ In Situ

- ☐ Bioremediation (or enhanced bioremediation)
- ☐ Chemical oxidation
- ☐ Air sparge / Soil vapor extraction
- ☐ Natural Attenuation
- ☐ Other _____

☒ Ex Situ

- ☐ Excavate and offsite disposal
- ☐ If Yes: Estimated Volume (Cubic Yards) _____
- ☐ Name of Licensed Disposal Facility or COGCC Facility ID # _____
- ☐ Excavate and onsite remediation
- ☐ Land Treatment
- ☐ Bioremediation (or enhanced bioremediation)
- ☐ Chemical oxidation
- ☐ Other _____

Groundwater Remediation Summary

- ☐ Bioremediation (or enhanced bioremediation)
- ☐ Chemical oxidation
- ☐ Air sparge / Soil vapor extraction
- ☐ Natural Attenuation
- ☐ Other _____

GROUNDWATER MONITORING

If groundwater has been impacted, describe proposed monitoring plan, including # of wells or sample points, monitoring schedule, analytical methods, points of compliance. Attach a groundwater monitoring location diagram.

REMEDATION PROGRESS UPDATE

PERIODIC REPORTING

Frequency: ☐ Quarterly ☐ Semi-Annually ☐ Annually ☐ Other _____

Report Type: ☐ Groundwater Monitoring ☐ Land Treatment Progress Report ☐ O&M Report
☐ Other _____

WASTE DISPOSAL INFORMATION

Was E&P waste generated as part of this remediation? _____

Describe beneficial use, if any, of E&P Waste derived from this remediation project:

Volume of E&P Waste (solid) in cubic yards _____

E&P waste (solid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

Volume of E&P Waste (liquid) in barrels _____

E&P waste (liquid) description _____

COGCC Disposal Facility ID #, if applicable: _____

Non-COGCC Disposal Facility: _____

RECLAMATION PLAN

RECLAMATION PLANNING

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing.

Rip and re-seed.

Is the described reclamation complete? ☐ No _____

Does the reclamation described herein constitute interim or final reclamation of the Oil and Gas Location?

☐ Interim? ☐ Final?

Did the Surface Owner approve the seed mix? ☐ Yes _____

If NO, does the seed mix comply with local soil conservation district recommendations? ☐ Yes _____

IMPLEMENTATION SCHEDULE

PRIOR DATES

Date of Surface Owner notification/consultation, if required. _____

Actual Spill or Release date, if known. _____

SITE INVESTIGATION DATES

Date of Initial Actions described in Site Investigation Plan (start date). _____

Date of commencement of Site Investigation. _____

Date of completion of Site Investigation. _____

REMEDIAL ACTION DATES

Date of commencement of Remediation. 07/19/2017

Date of completion of Remediation. _____

SITE RECLAMATION DATES

Date of commencement of Reclamation. 07/19/2017

Date of completion of Reclamation. _____

OPERATOR COMMENT

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: JIM CHISHOLM

Title: Managing Member

Submit Date: 07/19/2017

Email: investmentequipment@gmail.com

Based on the information provided herein, this Application for Site Investigation and Remediation Workplan complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: ROB YOUNG

Date: 07/27/2017

Remediation Project Number: 10288

COA Type**Description**

	Perform Final Reclamation as per Rule 1004.
	Reclaim the area of salt kill east of the produced water pit.
	After backfilling the produced water pit, collect a minimum of five soil samples for laboratory analysis of pH, EC and SAR to ensure compliance with Table 910-1 allowable levels.
	Collect a minimum of four produced water sidewall and one base soil sample for BTEX and TPH laboratory analysis.

Attachment Check List

Upon approval, the approved Form 27 and all listed attachments will be indexed to the Remediation Project file. Only the approved Form 27 will also be indexed to the related Facilities.

Att Doc Num**Name**

401346295	INVESTIGATION/REMEDATION WORKPLAN (INITIAL)
401356357	FORM 27-INITIAL-SUBMITTED

Total Attach: 2 Files

General Comments**User Group****Comment****Comment Date**

Environmental	Remove and properly dispose oil stained soils and imported gravel associated with the former production tanks and associated facilities.	07/27/2017
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Total: 1 comment(s)

SGS Accutest Mountain States						Dec 14, 2017 17:00 pm	
Job Number:	DA691						
Account:	D.C. Dozer Service						
Project:	Seal State #1 Pit Reclamation						
Project Number:							
						Legend:	Hit
Client Sample ID:		WP-NW#1	WP-SW#1	WP-EW#1	WP-WW#1	WP-B#1	
Lab Sample ID:		DA691-1	DA691-2	DA691-3	DA691-4	DA691-5	
Date Sampled:		12/05/2017	12/05/2017	12/05/2017	12/05/2017	12/05/2017	
Matrix:		Soil	Soil	Soil	Soil	Soil	
MS Volatiles (SW846 8260B)							
Benzene	ug/kg	ND (0.61)	ND (0.65)	ND (0.62)	ND (0.67)	ND (0.67)	
Toluene	ug/kg	ND (1.2)	ND (1.3)	ND (1.2)	ND (1.3)	ND (1.3)	
Ethylbenzene	ug/kg	ND (0.61)	ND (0.65)	ND (0.62)	ND (0.67)	ND (0.67)	
Xylene (total)	ug/kg	ND (1.2)	ND (1.3)	ND (1.2)	ND (1.3)	ND (1.3)	
TPH-GRO (C6-C10)	ug/kg	ND (120)	ND (130)	ND (120)	143 J	155 J	
GC/LC Semi-volatiles (SW846-8015B)							
TPH-DRO (C10-C28)	mg/kg	334	1060	89.8	553	ND (12)	
General Chemistry							
Solids, Percent	%	81.3	76.6	80.5	73.6	73.5	

INVESTMENT EQUIPMENT LLC
SEAL STATE 1 PIT REMEDIATION
LOGAN COUNTY, CO
NENW SEC 31 10N 53W
REMEDATION PROJECT # 10288
TPH AND BTEX SAMPLES TAKEN ON DECEMBER 14, 2017

Sample Comparison Chart

Sample Name	Tested For	Test Result	Cogcc Max Concentration Level
WP – NW #1	TPH – DRO TPH – GRO BTEX	DRO – 334 mg/kg GRO – ND Benzene – ND Toluene – ND Ethylbenzene – ND Xylene – ND	TPH < 500 mg/kg 0.17 mg/kg – Benzene 85 mg/kg – Toluene 100 mg/kg – Ethylbenzene 175 mg/kg – Xylene
WP – SW #1	TPH – DRO TPH – GRO BTEX	DRO – 1060 mg/kg GRO – ND Benzene – ND Toluene – ND Ethylbenzene – ND Xylene – ND	TPH < 500 mg/kg 0.17 mg/kg – Benzene 85 mg/kg – Toluene 100 mg/kg – Ethylbenzene 175 mg/kg – Xylene
WP – EW #1	TPH – DRO TPH – GRO BTEX	DRO – 89.8 mg/kg GRO – ND Benzene – ND Toluene – ND Ethylbenzene – ND Xylene – ND	TPH < 500 mg/kg 0.17 mg/kg – Benzene 85 mg/kg – Toluene 100 mg/kg – Ethylbenzene 175 mg/kg – Xylene
WP – WW #1	TPH – DRO TPH – GRO BTEX	DRO – 553 mg/kg GRO – 143 ug/kg = .143 mg/kg Benzene – ND Toluene – ND Ethylbenzene – ND Xylene – ND	TPH < 500 mg/kg 0.17 mg/kg – Benzene 85 mg/kg – Toluene 100 mg/kg – Ethylbenzene 175 mg/kg – Xylene
WP – B #1	TPH – DRO TPH – GRO BTEX	DRO – ND GRO – 155 ug/kg = .155 mg/kg Benzene – ND Toluene – ND Ethylbenzene – ND Xylene – ND	TPH < 500 mg/kg 0.17 mg/kg – Benzene 85 mg/kg – Toluene 100 mg/kg – Ethylbenzene 175 mg/kg – Xylene

INVESTMENT EQUIPMENT

Bowl Field

Legend

Seal State #1

25

54

Seal State #1

Google Earth

©2016 Google

4000 ft

N

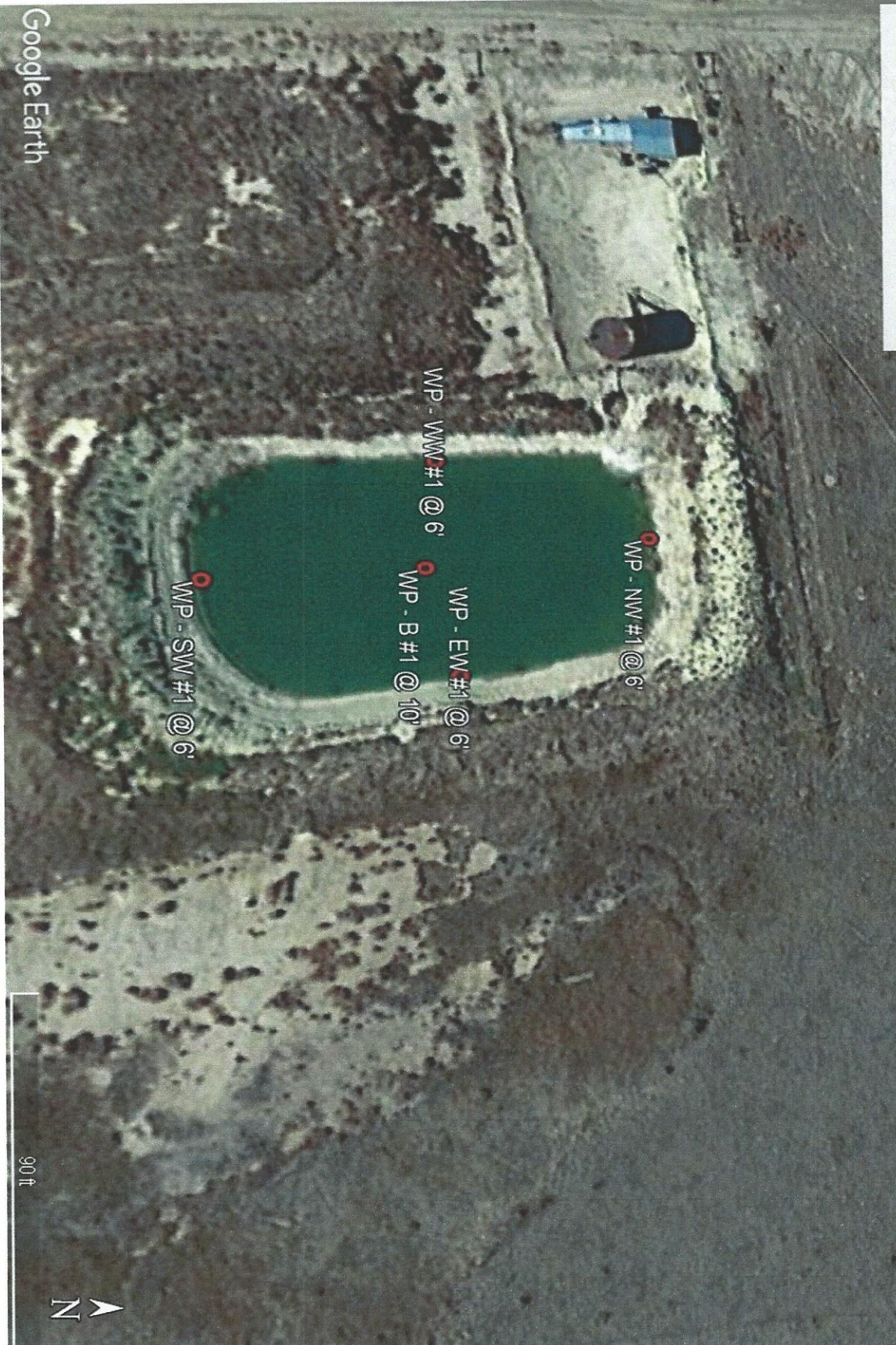


INVESTMENT EQUIPMENT

Seal State #1 Pit Remediation
Remediation Project 10288

Legend

- WATER PIT SAMPLES



Requested Facility: Buffalo Ridge☐ Unsure Profile Number: 125626CO☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: _____**A. GENERATOR INFORMATION (MATERIAL ORIGIN)**

1. Generator Name: Investment Equipment LLC
2. Site Address: Bowl Field Sec 31 10N 53W
(City, State, ZIP) Sterling CO 80751
3. County: Logan
4. Contact Name: Jim Chisem
5. Email: _____
6. Phone: (405) 642-9437 7. Fax: _____
8. Generator EPA ID: _____ ☒ N/A
9. State ID: _____ ☒ N/A

C. MATERIAL INFORMATION

1. Common Name: Contaminated Soil from tank removal
Describe Process Generating Material: ☐ See Attached

Oil and water are pumped out of the ground at the well head and sent down the flow line to the separator. At the separator, oil is sent on to the production tanks and the water is sent to the skim tank. We are currently closing this

2. Material Composition and Contaminants: ☐ See Attached

1. Contaminated soil from tank removal	100 %
2.	
3.	
4.	

Total comp. must be equal to or greater than 100% ≥100%
3. State Waste Codes: _____ ☒ N/A
4. Color: brown
5. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☒ N/A
7. pH: _____ to _____ ☒ N/A
8. Strong Odor: ☐ Yes ☒ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°–199°F ☒ ≥200° ☒ N/A

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☐ Yes
Please identify applicable samples and/or lab reports:

2. Other information attached (such as MSDS)? ☐ Yes

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Todd Troutman Date: 07/18/2017Title: OperatorCompany: D.C. Dozer Service**B. BILLING INFORMATION**☐ SAME AS GENERATOR

1. Billing Name: D.C. Dozer Service
2. Billing Address: 1403 Fillmore Street
(City, State, ZIP) Sterling CO 80751
3. Contact Name: Todd Troutman
4. Email: tommytroutman27@yahoo.com
5. Phone: (970) 580-0062 6. Fax: _____
7. WM Hauled? ☐ Yes ☒ No
8. P.O. Number: _____
9. Payment Method: ☒ Credit Account ☐ Cash ☐ Credit Card

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☒ No
Code: _____
2. State Hazardous Waste? ☐ Yes ☒ No
Code: _____
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☒ Yes* ☐ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☒ No
5. From an industry regulated under Benzene NESHAP? ☐ Yes* ☒ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☒ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☒ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☒ No
***If Yes, see Addendum (page 2) for additional questions and space.**
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No
a. Regulated by 40 CFR 761? ☐ Yes ☐ No
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No
11. Contains Asbestos? ☐ Yes ☒ No
→ If Yes: ☐ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

F. SHIPPING AND DOT INFORMATION

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 200
☐ Tons ☒ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 20 cubic yard belly dumps
4. USDOT Proper Shipping Name: ☒ N/A

Certification Signature



Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: 125626CO

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

facility and when the tanks were removed, left over oil and water in the connecting valves leaked on to the ground causing our contaminated soil. All equipment and lines are located on location.

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	
	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☐ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☐ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)?

☐ Yes ☐ No

→ If Yes, please check **one** of the following:

☐ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))

☐ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.

2. State Hazardous Waste → Please list all state waste codes:

3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:

☐ Delisted Hazardous Waste

☒ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: **E and P exempt**

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.

a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.

☐ Yes ☐ No

b. Does this material contain benzene?

☐ Yes ☐ No

1. If yes, what is the flow weighted average concentration?

_____ ppmw

c. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1–9.99 Mg ☐ ≥10 Mg

d. Is this waste soil from a remediation?

☐ Yes ☐ No

1. If yes, what is the benzene concentration in remediation waste?

_____ ppmw

e. Does the waste contain >10% water/moisture?

☐ Yes ☐ No

f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

g. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption:

h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g:



EXPLORATION AND PRODUCTION WASTES - EXEMPT / NON-EXEMPT CHECKLIST

Generator Name: Investment Equipment LLC

Profile Number: 125626CO

Generator Signature: 

Date: 7/18/17

INSTRUCTIONS: Check all boxes that apply to your waste.

Exempt E&P Wastes:

- ☐ Produced Water
- ☐ Drilling Fluids
- ☐ Drill Cuttings
- ☐ Rig wash
- ☐ Drilling fluids and cuttings from offshore operations disposed of onshore
- ☐ Geothermal production fluids
- ☐ Hydrogen sulfide abatement wastes from geothermal energy production
- ☐ Well completion, treatment, and stimulation fluids
- ☒ Basic sediment, water, and other tanks bottoms from storage facilities that hold product and exempt waste.
- ☐ Accumulated materials such as hydrocarbons, solids, sands, and emulsion from production separators, fluid treating vessels, and production impoundments
- ☒ Pit sludge's and contaminated bottoms from storage or disposal of exempt wastes.
- ☐ Gas plant dehydration wastes, including glycol-based compounds, glycol filters, and filter media, backwash, and molecular sieves.
- ☐ Workover Wastes
- ☐ Gas plant sweetening wastes for sulfur removal, including amines, amine filters, amine filter media, backwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge
- ☐ Spent filters, filter media, and backwash (assuming the filter itself is not hazardous and the residue in it is from an exempt waste stream.
- ☐ Pipe scale, hydrocarbon solids, hydrocarbon solids, hydrates, and other deposits removed from piping and equipment prior to transportation
- ☐ Produced sand
- ☐ Packing fluids
- ☒ Hydrocarbon-bearing soil
- ☐ Pigging wastes from gathering lines
- ☐ Wastes from subsurface gas storage and retrieval, except for the non-exempt wastes listed below
- ☐ Constituents removed from produced water before it is injected or otherwise disposed of
- ☐ Liquid hydrocarbons removed from the production stream by not from oil refining
- ☐ Gases from the production stream, such as hydrogen sulfide and carbon dioxide, and volatilized hydrocarbons
- ☐ Materials ejected from a producing well during blowdown
- ☐ Waste crude oil from primary field operations
- ☐ Light organics volatilized from exempt wastes in reserve pits, impoundments, or production equipment

Non-Exempt Wastes

- ☐ Unused fracturing fluids or acids
- ☐ Gas plant cooling Tower cleaning wastes
- ☐ Painting wastes
- ☐ Oil and gas service company wastes such as empty drums, drum rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- ☐ Vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste
- ☐ Refinery wastes
- ☐ Liquid and solid wastes generated by crude oil and tank bottom reclaimers¹
- ☐ Used equipment lubricating oil
- ☐ Waste compressor oil, filters and blowdown
- ☐ Used hydraulic fluids
- ☐ Waste in transportation pipeline related pits
- ☐ Caustic or acid cleaners
- ☐ Boiler cleaning wastes
- ☐ Boiler refractory bricks
- ☐ Boiler scrubber fluids, sludge's, and ash
- ☐ Incinerator ash
- ☐ Laboratory wastes
- ☐ Pesticide wastes
- ☐ Radioactive tracer wastes
- ☐ Drums, insulation, and miscellaneous solids

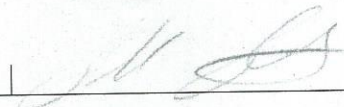
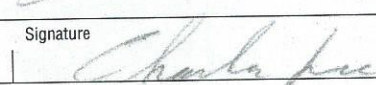
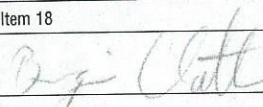
¹Although non-E&P wastes generated from crude oil and tank bottom reclamation operations (e.g., waste equipment cleaning solvent) are non-exempt, residuals derived from exempt wastes (e.g., produced water separated from tank bottoms) are exempt. For a further discussion, see the Federal Register notice, "Clarification of the Regulatory Determination for Waste from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy," March 22, 1993, Federal Register Volume 58, Pages 15284 to 15287.

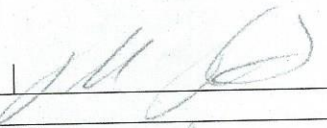

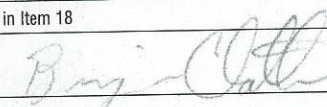
GENERATOR

TRANSPORTER

DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N / A	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Waste Tracking Number 386585	
5. Generator's Name and Mailing Address INVESTMENT EQUIPMENT LLC 1403 FILLMORE ST STERLING CO 80751			Generator's Project Address (if different than mailing address) INVESTMENT EQUIPMENT LLC BOWL FIELD SEC 31 10N 53W STERLING CO 80751			
Generator's Phone: (405) 642-9437			Transporter Phone (970) 550-0062			
6. Transporter 1: Complete Company Name and Address D.C. Dozer Service 1403 Fillmore St. Sterling CO 80751			Transporter Phone			
7. Transporter 2: Complete Company Name and Address			Facility's Phone:			
8. Designated Disposal Facility Name and Site Address Buffalo Ridge Landfill 11655 WCR 59 Keenesburg CO 80643			(303) 732-0218			
9. Waste Shipping Name, Description, & Profile Number		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
1. NON REGULATED SOLID (CONTAMINATED SOIL FROM TANK REMOVAL) 12562600				22.65	Tons	
2.						
13. Regulatory Agency: Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Co 80222-1530			Emergency Notification: CHEMTREC (800) 424-9300 24-hour Toll Free Number			
14. Bill to & Account Number: Customer Acct #: B 315 Customer Name: DC DOZER SERVICE						
15. Contractor/Generator Certification: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation according to applicable national and state governmental regulations. I hereby certify that the above described waste is not a hazardous waste defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.						
Generator's/Officer's Printed/Typed Name			Signature		Month	Day Year
Todd Troutman					1	5 18
16. Transporter Acknowledgement of Receipt of Materials			Signature		Month	Day Year
Transporter 1 Printed/Typed Name			Charles Lee		1	4 18
Transporter 2 Printed/Typed Name			Signature		Month	Day Year
17. Special Handling Instructions						
18. Discrepancy Indication Space:					19. Ticket # 999.808	
Initials of Person noting discrepancy			Signature		Date	
20. Management Method/Location Landfill _____ Monofill _____ Location: _____						
21. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18						
Printed/Typed Name BC			Signature 		Month	Day Year
					2	5 18

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N / A		2. Page 1 of 1		3. Emergency Response Phone 800-424-9300		4. Waste Tracking Number 386584			
		5. Generator's Name and Mailing Address INVESTMENT EQUIPMENT LLC 1403 FILLMORE ST STERLING CO 80751 (405) 642-9437		Generator's Project Address (if different than mailing address) INVESTMENT EQUIPMENT LLC BOWL FIELD SEC 31 10N 53W STERLING CO 80751							
GENERATOR		6. Transporter 1: Complete Company Name and Address D.C. Dozer Service 1403 Fillmore St Sterling, CO 80751						Transporter Phone (970) 580-0062			
		7. Transporter 2: Complete Company Name and Address						Transporter Phone			
TRANSPORTER		8. Designated Disposal Facility Name and Site Address Buffalo Ridge Landfill 11655 WCR 59 Keenesburg CO 80643 (303) 732-0218						Facility's Phone:			
		9. Waste Shipping Name, Description, & Profile Number						10. Containers		11. Total Quantity	
DESIGNATED FACILITY		1. NON REGULATED SOLID (CONTAMINATED SOIL FROM TANK REMOVAL) 12562600						No.		Type	
		2.									
DESIGNATED FACILITY		13. Regulatory Agency: Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Co 80222-1530						Emergency Notification: CHEMTREC (800) 424-9300 24-hour Toll Free Number			
		14. Bill to & Account Number: Customer Acct #: B 315 Customer Name: DC DOZER SERVICE									
DESIGNATED FACILITY		15. Contractor/Generator Certification: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation according to applicable national and state governmental regulations. I hereby certify that the above described waste is not a hazardous waste defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.									
		Generator's/Officer's Printed/Typed Name Todd Trautman						Signature 		Month Day Year 1 5 18	
DESIGNATED FACILITY		16. Transporter Acknowledgement of Receipt of Materials									
		Transporter 1 Printed/Typed Name Charlie Lee						Signature 		Month Day Year 1 4 18	
DESIGNATED FACILITY		Transporter 2 Printed/Typed Name						Signature		Month Day Year	
DESIGNATED FACILITY		17. Special Handling Instructions									
		18. Discrepancy Indication Space:									
DESIGNATED FACILITY		Initials of Person noting discrepancy _____ Signature _____						Date _____			
		19. Ticket # 999771									
DESIGNATED FACILITY		20. Management Method/Location Landfill _____ Monofill _____ Location: _____									
		21. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18 Printed/Typed Name BC						Signature 		Month Day Year 1 5 18	

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number N / A		2. Page 1 of		3. Emergency Response Phone 800-424-9300		4. Waste Tracking Number 386587			
		5. Generator's Name and Mailing Address INVESTMENT EQUIPMENT LLC 1403 FILLMORE ST STERLING CO 80751 (405) 642-9437		Generator's Project Address (if different than mailing address) INVESTMENT EQUIPMENT LLC BOWL FIELD SEC 31 10N 53W STERLING CO 80751							
TRANSPORTER		6. Transporter 1: Complete Company Name and Address D.C. Dozer Service 1403 Fillmore St. Sterling CO 80751 (970) 580-0066						Transporter Phone			
		7. Transporter 2: Complete Company Name and Address						Transporter Phone			
DESIGNATED FACILITY		8. Designated Disposal Facility Name and Site Address Buffalo Ridge Landfill 11655 WCR 59 Keenesburg CO 80643 (303) 732-0218						Facility's Phone:			
		9. Waste Shipping Name, Description, & Profile Number		10. Containers		11. Total Quantity		12. Unit Wt./Vol.			
GENERATOR		1. NON REGULATED SOLID (CONTAMINATED SOIL FROM TANK REMOVAL) 12562600		No.		Type		20.93 Tons			
		2.									
GENERATOR		13. Regulatory Agency: Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Co 80222-1530						Emergency Notification: CHEMTREC (800) 424-9300 24-hour Toll Free Number			
		14. Bill to & Account Number: Customer Acct #: B 315 Customer Name: DC DOZER SERVICE									
TRANSPORTER		15. Contractor/Generator Certification: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation according to applicable national and state governmental regulations. I hereby certify that the above described waste is not a hazardous waste defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.									
		Generator's/Officer's Printed/Typed Name Todd Troutman						Signature 		Month Day Year 1 5 18	
TRANSPORTER		16. Transporter Acknowledgement of Receipt of Materials									
		Transporter 1 Printed/Typed Name Leonard Torres						Signature 		Month Day Year 1 5 18	
TRANSPORTER		Transporter 2 Printed/Typed Name						Signature		Month Day Year	
DESIGNATED FACILITY		17. Special Handling Instructions									
		18. Discrepancy Indication Space:						19. Ticket # 999 805			
DESIGNATED FACILITY		Initials of Person noting discrepancy _____ Signature _____						Date _____			
		20. Management Method/Location Landfill _____ Monofill _____ Location: _____									
DESIGNATED FACILITY		21. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18									
		Printed/Typed Name BC						Signature 		Month Day Year 1 5 18	

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator ID Number
N / A

2. Page 1 of 1

3. Emergency Response Phone
800-424-9300

4. Waste Tracking Number

386586

5. Generator's Name and Mailing Address
**INVESTMENT EQUIPMENT LLC
1403 FILLMORE ST
STERLING CO 80751**

Generator's Project Address (if different than mailing address)
**INVESTMENT EQUIPMENT LLC
BOWL FIELD SEC 31 10N 53W
STERLING CO 80751**

Generator's Phone:

(405) 642-9437

6. Transporter 1: Complete Company Name and Address

D.C. Dozer Service 1403 Fillmore St. Sterling, CO 80751

Transporter Phone

(970) 580-0062

7. Transporter 2: Complete Company Name and Address

Facility's Phone:

8. Designated Disposal Facility Name and Site Address
**Buffalo Ridge Landfill
11655 WCR 59
Keenesburg CO 80643**

(303) 732-0218

9. Waste Shipping Name, Description, & Profile Number

10. Containers

No.

Type

11. Total
Quantity

12. Unit
Wt./Vol.

1. **NON REGULATED SOLID
(CONTAMINATED SOIL FROM TANK REMOVAL)
12562600**

19.22 Tons

2.

13. Regulatory Agency: **Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Co 80222-1530**

**Emergency Notification:
CHEMTREC (800) 424-9300
24-hour Toll Free Number**

14. Bill to & Account Number:

Customer Acct #: B 315 Customer Name: DC DOZER SERVICE

15. Contractor/Generator Certification:

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation according to applicable national and state governmental regulations.

I hereby certify that the above described waste is not a hazardous waste defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.

Generator's/Officer's Printed/Typed Name

Signature

Month Day Year

Todd Troutman



1 5 18

16. Transporter Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Leonard Jones

Signature

Month Day Year

17. Special Handling Instructions

18. Discrepancy Indication Space:

19. Ticket #

999770

Initials of Person noting discrepancy _____ Signature _____

Date _____

20. Management Method/Location

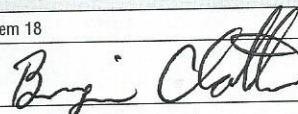
Landfill _____ Monofill _____ Location: _____

21. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18

Printed/Typed Name

BC

Signature



Month Day Year

4 5 18

FIGURE 2

SGS Wheat Ridge, CO		Jan 04, 2018 17:44 pm	
Job Number:	DA1386		
Account:	D.C. Dozer Service		
Project:	Seal State #1 Pit Reclamation		
Project Number:			
		Legend:	Hit
Client Sample ID:		WP-SW-#2	WP-WW-#2
Lab Sample ID:		DA1386-1	DA1386-2
Date Sampled:		12/21/2017	12/21/2017
Matrix:		Soil	Soil
GC/LC Semi-volatiles (SW846-8015B)			
TPH-DRO (C10-C28)	mg/kg	79.8	46.1
General Chemistry			
Solids, Percent	%	82.8	87

INVESTMENT EQUIPMENT LLC
SEAL STATE 1 PIT REMEDIATION
LOGAN COUNTY, CO
NENW SEC 31 10N 53W
REMEDATION PROJECT # 10288
TPH AND BTEX SAMPLES TAKEN ON JANUARY 4, 2018

Sample Comparison Chart

Sample Name	Tested For	Test Result	Cogcc Max Concentration Level
WP – SW #2	TPH – DRO	DRO – 79.8 mg/kg	TPH < 500 mg/kg
WP – WW #2	TPH – DRO	DRO – 46.1 mg/kg	TPH < 500 mg/kg

INVESTMENT EQUIPMENT

Seal State #1 Pit Remediation
Remediation Project 10288

Legend

■ 2ND WATER PIT SAMPLES

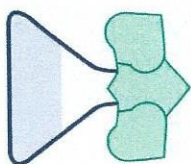


Google Earth

FIGURE 3

20423
DC DOZER SERVICE
1403 FILLMORE ST
STERLING CO 80751

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



NAME : TODD TROUTMAN

DATE RECEIVED: 12/11/2017

DATE REPORTED: 12/14/2017

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	Buffer				ppm	lbs/A	P1	Bicarb	P2	M2	M3
2519694	SEC 31 10 N 53 W	WP EW FP 1	0-8	7.5		H	9.80								
2519695	SEC 31 10 N 53 W	WP EW 1	0-8	7.6		H	7.56								
2519696	SEC 31 10 N 53 W	WP SW FP 1	0-8	8.0		H	6.02								
2519697	SEC 31 10 N 53 W	WP SW 1	0-8	7.9		H	23.44								
2519698	SEC 31 10 N 53 W	WP NW FP 1	0-8	7.9		H	9.14								
2519699	SEC 31 10 N 53 W	WP NW 1	0-8	8.4		H	4.94								

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
2519694										0.7						
2519695										1.5						
2519696										5.3						
2519697										1.6						
2519698										0.9						
2519699										5.0						

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		TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE	ppm	lbs/A	ppm	lbs/A	ppm		
2519694	101.73	40.74	69.78	8.27	11												
2519695	80.52	45.43	53.98	6.80	9												
2519696	19.18	13.53	85.56	21.16	30												
2519697	84.62	66.24	59.07	6.80	9												
2519698	66.96	49.34	64.04	8.40	11												
2519699	18.63	14.74	40.72	9.97	14												
SUGGESTED FERTILIZER RECOMMENDATIONS																	LIME REC

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROPTO BE GROWN	YIELD GOAL										LIME REC				
				N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	CI	60% ECCE			
2519694	SEC 31 10 N 53 W	WP EW FP 1							lbs/A						T/A			
2519695	SEC 31 10 N 53 W	WP EW 1																
2519696	SEC 31 10 N 53 W	WP SW FP 1																
2519697	SEC 31 10 N 53 W	WP SW 1																
2519698	SEC 31 10 N 53 W	WP NW FP 1																
2519699	SEC 31 10 N 53 W	WP NW 1																

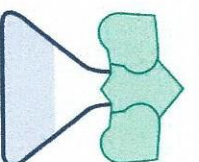
Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab

American Agricultural Laboratory, Inc.

20423
DC DOZER SERVICE
1403 FILLMORE ST
STERLING CO 80751

700 West D Street / PO Box 370 / McCook, Nebraska 69001
Office: 308-345-3670 / FAX: 308-345-7880
www.AmAgLab.com



NAME : TODD TROUTMAN

DATE RECEIVED: 12/11/2017

DATE REPORTED: 12/14/2017

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
2519700	SEC 31 10 N 53 W	WP WW 1	0-8	7.9			8.92								
2519701	SEC 31 10 N 53 W	WP WW FP 1	0-8	6.9			8.52								

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
2519700												2.2							
2519701												0.3							

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				SOIL TEXTURE	CHLORIDE		EXCH. NH4-N	ALUMINUM		TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %			ppm	lbs/A		ppm	lbs/A	
2519700	57.41	45.32	53.23	7.43	10												
2519701	90.15	39.44	66.19	8.22	11												

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC
2519700	SEC 31 10 N 53 W	WP WW 1														60% ECCE
2519701	SEC 31 10 N 53 W	WP WW FP 1														T/A

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab

INVESTMENT EQUIPMENT LLC
 SEAL STATE 1 PIT REMEDIATION
 LOGAN COUNTY, CO
 NENW SEC 31 10N 53W
 REMEDIATION PROJECT # 10288
 INORGANIC SAMPLES TAKEN ON December 5, 2017

Sample Comparison Chart

Sample Name	Tested For	Test Result	Cogcc Max Concentration Level
WP – EW – FP #1	pH SAR EC Calcium Magnesium Sodium	7.5 8.27 9.80 mmhos/cm 101.73 me/l 40.74 me/l 69.78 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – EW #1	pH SAR EC Calcium Magnesium Sodium	7.6 6.80 7.56 mmhos/cm 80.52 me/l 45.43 me/l 53.98 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – SW – FP #1	pH SAR EC Calcium Magnesium Sodium	8.0 21.16 6.02 mmhos/cm 19.18 me/l 13.53 me/l 85.56 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – SW #1	pH SAR EC Calcium Magnesium Sodium	7.9 6.80 23.44 mmhos/cm 84.62 me/l 66.24 me/l 59.07 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – NW – FP #1	pH SAR EC Calcium Magnesium Sodium	7.9 8.40 9.14 mmhos/cm 66.96 me/l 49.34 me/l 64.04 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – NW #1	pH SAR EC Calcium Magnesium Sodium	8.4 9.97 4.94 mmhos/cm 18.63 me/l 14.74 me/l 40.72 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm

INVESTMENT EQUIPMENT LLC
 SEAL STATE 1 PIT REMEDIATION
 LOGAN COUNTY, CO
 NENW SEC 31 10N 53W
 REMEDIATION PROJECT # 10288
 INORGANIC SAMPLES TAKEN ON December 5, 2017

Sample Comparison Chart

WP – WW #1	pH SAR EC Calcium Magnesium Sodium	7.9 7.43 8.92 mmhos/cm 57.41 me/l 45.32 me/l 53.23 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
WP – WW – FP #1	pH SAR EC Calcium Magnesium Sodium	6.9 8.22 8.52 mmhos/cm 90.15 me/l 39.44 me/l 66.19 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm

INVESTMENT EQUIPMENT

Seal State #1 Pit Remediation
Remediation Project 10288

Legend

- ▲ BERM SAMPLES @ TOP OF BERM
- ◆ FOOTPRINT SAMPLES @ ORIGINAL SURFACE

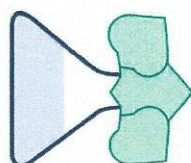


Google Earth

FIGURE 4

20423
DC DOZER SERVICE
1403 FILLMORE ST
STERLING CO 80751

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



NAME : TODD TROUTMAN

DATE RECEIVED: 12/27/2017

DATE REPORTED: 12/29/2017

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH		EL	SOLUBLE SALTS mod. SP mmhos/cm	OM %	NITRATE-N (FIA)		PHOSPHORUS				
				1 : 1 Soil	Buffer Woodruff				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
2526086	WP SW/FP 2		0-8	8.7			5.42								
2526087	BACKGROUND		0-8	7.3		H	0.94								

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	
2526086												13.0						
2526087												0.4						

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE ppm	EXCH. NH4-N ppm	ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE				
2526086	4.85	4.10	110.24	52.11	76									
2526087	4.82	1.90	1.78	0.97	1	0								

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROPTO BE GROWN	YIELD	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC 60% ECCE T/A
2526086	WP SW/FP 2															
2526087	BACKGROUND															

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab

INVESTMENT EQUIPMENT LLC
 SEAL STATE 1 PIT REMEDIATION
 LOGAN COUNTY, CO
 NENW SEC 31 10N 53W
 REMEDIATION PROJECT # 10288
 INORGANIC SAMPLES TAKEN ON December 29, 2017

Sample Comparison Chart

Sample Name	Tested For	Test Result	Cogcc Max Concentration Level
WP – SW – FP #2	pH SAR EC Calcium Magnesium Sodium	8.7 52.11 5.42 mmhos/cm 4.85 me/l 4.10 me/l 110.24 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm
BACKGROUND	pH SAR EC Calcium Magnesium Sodium	7.3 0.97 0.94 mmhos/cm 4.82 me/l 1.90 me/l 1.78 me/l	pH – 6 – 9 SAR - < 12 EC - < 4 mmhos/cm

INVESTMENT EQUIPMENT

Seal State #1 Pit Remediation
Remediation Project 10288

BACKGROUND

Legend

- BACKGROUND SAMPLE
- 2ND FOOTPRINT SAMPLE @ 1' TO 2'

WP - SW - FP #2 @ 1' TO 2'

Google Earth

90 ft

N

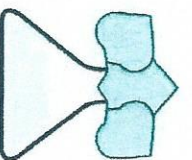
FIGURE 5

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20423
DC DOZER SERVICE
1403 FILLMORE ST
STERLING CO 80761

NAME : SEAL STATE PIT 1 RECLAMATION

DATE RECEIVED: 01/30/2018

DATE REPORTED: 02/01/2018

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	pH		EL	SOLUBLE SALTS		OM LOI %	NITRATE-N (FIA)		PHOSPHORUS				
			Depth Inches	1:1 Soil		mod. SP	mmhos/cm		ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
2529189	NENW SEC 31 10N 33 W	CS SE	0-8	7.4	L	2.98									
2529190	NENW SEC 31 10N 33 W	CS SOUTH	0-8	7.9	L	3.90									
2529191	NENW SEC 31 10N 33 W	CS SW	0-8	8.0	L	3.84									
2529192	NENW SEC 31 10N 33 W	CS WEST	0-8	7.6	L	1.14									
2529193	NENW SEC 31 10N 33 W	CS NW	0-8	7.4	L	2.84									
2529194	NENW SEC 31 10N 33 W	CS NORTH	0-8	8.4	L	2.10									

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
2529189												0.4						
2529190												0.8						
2529191												0.7						
2529192												0.7						
2529193												0.3						
2529194												2.0						

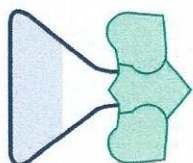
LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE		EXCH. NH4-N		ALUMINUM	TOTAL N
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE	ppm	lbs/A	ppm	lbs/A	ppm	%
2529189	27.47	12.25	36.80	8.26	11	0.2										
2529190	22.41	8.40	41.03	10.45	14	0.4										
2529191	26.14	13.03	33.63	10.13	13	0.4										
2529192	45.89	18.84	61.55	10.82	15	0.0										
2529193	21.95	17.68	40.45	9.71	12	0.3										
2529194	31.57	14.71	61.18	11.80	21	0.8										

SUGGESTED FERTILIZER RECOMMENDATIONS																
LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC 60% ECCE T/A
2529189	NENW SEC 31 10N 33 W	CS SE														
2529190	NENW SEC 31 10N 33 W	CS SOUTH														
2529191	NENW SEC 31 10N 33 W	CS SW														
2529192	NENW SEC 31 10N 33 W	CS WEST														
2529193	NENW SEC 31 10N 33 W	CS NW														
2529194	NENW SEC 31 10N 33 W	CS NORTH														

Analysis By: American Agricultural Lab Recommendations By: American Agricultural Lab

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NAME : SEAL STATE PIT 1 RECLAMATION DATE RECEIVED: 01/30/2018 DATE REPORTED: 02/01/2018

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	pH			EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA)		PHOSPHORUS				
			Depth Inches	1:1 Soil	Buffer Woodruff				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
2529195	NENW SEC 31 10N 33 W	CS NE	0-8	7.9		L	3.72								
2529196	NENW SEC 31 10N 33 W	CS EAST	0-8	7.8		M	2.88								
2529197	NENW SEC 31 10N 33 W	CS MIDDLE	0-8	7.8		M	3.92								

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
2529195										1.9						
2529196										1.0						
2529197										2.8						

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE ppm	EXCH. NH4-N ppm	ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE				
2529195	28.56	12.69	35.05	7.72	10	0.2								
2529196	22.18	9.16	15.78	3.99	5	0								
2529197	30.43	13.37	46.34	9.90	13	0.0								

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROPTO BE GROWN	YIELD	N	P2O5	K2O	S	Zn	MgO	Fe	Mn	Cu	B	Cl	LIME REC 60% ECCE T/A
2529195	NENW SEC 31 10N 33 W	CS NE														
2529196	NENW SEC 31 10N 33 W	CS EAST														
2529197	NENW SEC 31 10N 33 W	CS MIDDLE														

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab

INVESTMENT EQUIPMENT LLC
 SEAL STATE 1 PIT REMEDIATION
 LOGAN COUNTY, CO
 NENW SEC 31 10N 53W
 REMEDIATION PROJECT # 10288
 CONFIRMATION SAMPLES TAKEN ON JANUARY 30, 2018

Sample Comparison Chart

Sample Name	Tested For	Test Result	Cogcc Max Concentration Level
CS - SE	pH SAR EC Calcium Magnesium Sodium	7.4 8.26 2.98 mmhos/cm 27.47 me/l 12.25 me/l 36.80 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - SOUTH	pH SAR EC Calcium Magnesium Sodium	7.9 10.45 3.90 mmhos/cm 22.41 me/l 6.40 me/l 41.03 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - SW	pH SAR EC Calcium Magnesium Sodium	8.0 10.13 3.84 mmhos/cm 26.14 me/l 13.03 me/l 33.63 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - WEST	pH SAR EC Calcium Magnesium Sodium	7.6 10.82 1.14 mmhos/cm 45.89 me/l 18.84 me/l 61.55 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - NW	pH SAR EC Calcium Magnesium Sodium	7.4 9.71 2.84 mmhos/cm 21.95 me/l 17.68 me/l 40.45 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - NORTH	pH SAR EC Calcium Magnesium Sodium	8.4 11.80 2.10 mmhos/cm 31.57 me/l 14.71 me/l 61.18 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm

INVESTMENT EQUIPMENT LLC
 SEAL STATE 1 PIT REMEDIATION
 LOGAN COUNTY, CO
 NENW SEC 31 10N 53W
 REMEDIATION PROJECT # 10288
 CONFIRMATION SAMPLES TAKEN ON JANUARY 30, 2018

Sample Comparison Chart

CS - NE	pH SAR EC Calcium Magnesium Sodium	7.9 7.72 3.72 mmhos/cm 28.56 me/l 12.69 me/l 35.05 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - EAST	pH SAR EC Calcium Magnesium Sodium	7.8 3.99 2.88 mmhos/cm 22.18 me/l 9.16 me/l 15.78 me/l	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm
CS - MIDDLE	pH SAR EC Calcium Magnesium Sodium	7.8 9.90 3.92 mmhos/cm 30.43 me/L 13.37 me/L 46.34 me/L	pH - 6 - 9 SAR - < 12 EC - < 4 mmhos/cm

INVESTMENT EQUIPMENT

Seal State #1 Pit Remediation
Remediation Project 10288

Legend

- CONFIRMATION SAMPLES TAKEN @ SURFACE
- Disturbed Area



Google Earth

BUFFALO BRAND DRYLAND PASTURE MIX

LOT # : G-17013

Mixture/Variety:	Purity %	Germ %	Origin:
DAHURIAN WILDRYE, VNS	24.88	93	CAN
FORAGE PFR. RYEGRASS, AMALON	19.78	90	OR
ORCHARDGRASS, PAUITE	14.61	96	OR
INTERMEDIATE WHEATGRASS, RUSH	14.35	95	WY
SMOOTH BROME, VNS	13.74	88	NE
RUSSIAN WILDRYE, BOZOISKY	09.61	92	WY

Crop: 0.24 % Inert: 2.7 % Weeds: 0.02 % Net Wt. 50.0 #

Noxious Weeds: NONE FOUND

Tested: JAN 2017

Buffalo BRAND SEED

Buffalo Brand Seed

Greeley, CO 80631

(970) 356-47

Labler: Buffalo Brand Seed
Greeley, Colorado

Kind: Western Wheatgrass

Variety: Arriba

Lot #: W33-088-4192C

Seedsman Lot #: SFI-W4

Net Lbs: 50

Test Date: 03/06/2017

Pure Seed:	95.92 %
Weed Seed:	0.00 %
Other Crop:	0.00 %
Inert:	4.08 %
Germination:	90.00 %
Dormant Seed:	2.00 %
Hard Seed:	0.00 %
Total Viable:	92.00 %

Origin: Wyoming

Seal State #1 Pit



Seal State #1 Pit North Wall



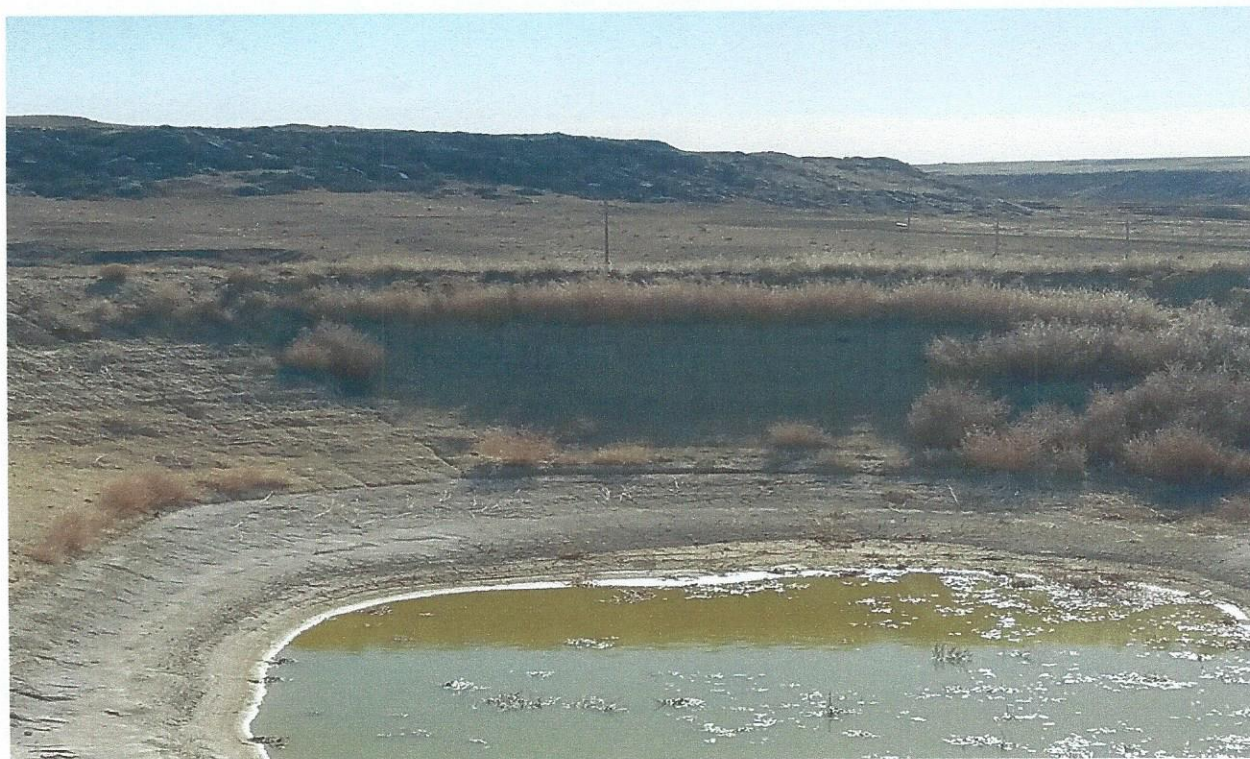
Seal State #1 Pit East Wall



Seal State #1 Pit West Wall



Seal State #1 South Wall



Pit Sump in order to Divert Water



North Wall Sample



East Wall Sample



South Wall Sample



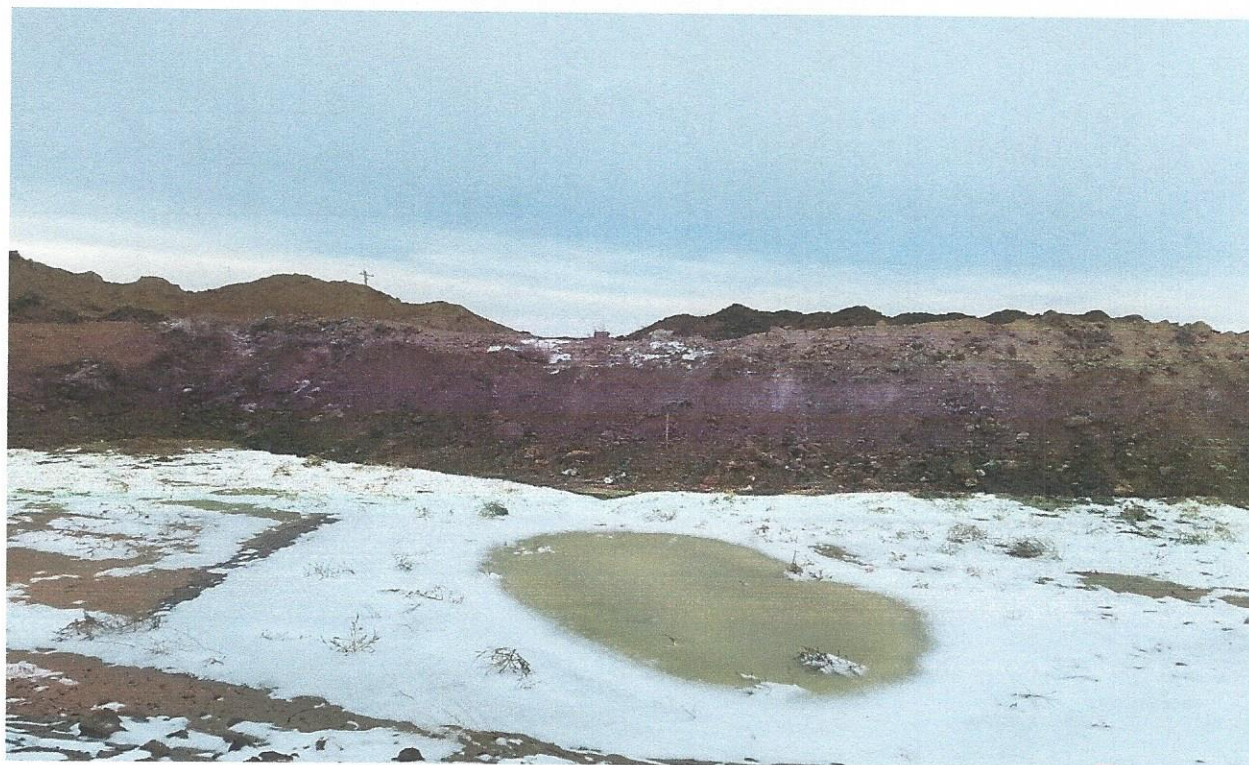
South Wall 2nd Sample



West Wall Sample



West Wall 2nd Sample



Water Pit Bottom Sample



North Wall Inorganics Samples



South Wall Inorganics Samples



South Wall 2nd Foot Print Sample



East Wall Inorganic Samples



West Wall Inorganic Samples



Background Sample



Water Pit Final Grade



Confirmation Samples



Seal State #1 Water pit and Tank Battery Area Planted



Seal State #1 Water Pit and Tank Battery Area Straw Mulch



Main Access Road Ripped and Final Graded



Main Access Road Planted



Main Access Road Straw Mulch



Main Access Road Straw Mulch



Seal State 1 – 31 Well Site Tilled and Planted



Seal State 1 – 31 Well Site Straw Mulch



Connecting Access Road Tilled and Planted



Connecting Access Road Straw Mulch



Cedar Creek Ranch #1 Well Site Tilled and Planted



Cedar Creek Ranch #1 Well Site Straw Mulch



Connecting Access Road Tilled and Planted



Meter Station Planted



Meter Station Straw Mulch



Relief Valve Station Planted



Relief Valve Station Straw Mulch



State Cedar Creek #2 Tank Battery and Pit Area Tilled and Planted



State Cedar Creek #2 Tank Battery and Pit Area Straw Mulch



State Cedar Creek #2 Well Site Tilled and Planted



State Cedar Creek #2 Well Site Straw Mulch



State Cedar Creek #2 Well Site Straw Mulch



Access Road Straw Mulch

