



**GEOTEK ENGINEERING
& TESTING SERVICES, INC.**
909 East 50th Street North
Sioux Falls, South Dakota 57104
605-335-5512 Fax 605-335-0773

July 8, 2026

CHS Inc
5500 Cenex Drive
Inver Grove Heights, MN 55077

Attn: Mr. Gary Perowitz

Subj: Spill Response
Highway 16 and 394th St
Mount Vernon, SD
DANR File No. #2026.063
GeoTek #26-0743

Dear Mr. Perowitz:

Introduction

This letter presents the results of the agriculture chemical release testing and excavation observations performed at the referenced site. This work was performed in accordance with your verbal request on May 4, 2026. Additional copies are being sent as noted below.

Site Location

The project site is located at the junction of Highway 16 and 394th Street just west of Mount Vernon, SD in Davison County. A topographical site location map is provided as Figure 1.

Background Information

A critical tank failure caused a release of Lumen agriculture chemical along the road, shoulder and into the ditch. An estimated 1500 gallons was released, mostly onto the roadway. The truck pulled over once the rupture happened and the impacted area of ditch was due to runoff from where the truck parked in spite of floor dry being applied by the driver to mitigate flow. An aerial photo of the site and surrounding area is provided as Figure 2.

PROJECT RESULTS

Site Visit (5-04-26)

On May 4, 2026 GeoTek mobilized to the site of the incident to find CHS employees awaiting our arrival after having placed floor dry around the truck which was hauling the tank. A work plan was discussed consulting CHS, Davison County Emergency Management as well as the DANR, and the decision was made to assess the impacted area and hire an excavation contractor soon to remove feasible amounts of impacted material.

Photos of the site are attached in Appendix A.

Excavation Observations (5-08-26)

On May 8, 2026, GeoTek mobilized a representative to the site to observe the excavation of contaminated material by Schoenfelder Construction. The excavation reached a maximal depth of 2'. The impacted shoulder required surficial scrapes near the impacted ditch area. A composite sample (9 total sub-samples) was taken from the base of the excavation. Approximately 24.41 tons of affected spoil was hauled to the Tri-County Landfill. The landfill ticket can be found in Appendix B.

Soil Sampling and Laboratory Analysis

A composite soil sample was taken from the floor of the excavation and sent for analysis of Total Nitrogen and Total Phosphorus. Laboratory analysis of this sample shows percentages of Total Nitrogen (0.190% or 1900 ppm) and Total Phosphorus (0.745% or 7450 ppm). The laboratory report is provided in Appendix C.

CONCLUSIONS

The immediate response coordination facilitated by CHS, DANR and Davison County Emergency Management led to excavation being scheduled Friday the same week of release. Excavation to a maximal depth of 2' was achieved to remove a bulk of feasible contamination while allowing vegetation growth once backfilled.

RECOMMENDATIONS

Based on the information presented above we recommend any contamination levels below the base of excavation be allowed to attenuate naturally and no further remediation actions be pursued.

STANDARD OF CARE

Recommendations contained in this report represent our professional opinions. These opinions are based on information currently available and arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

REMARKS

Description of the methods used during the project is attached in Appendix D. Soil samples obtained during our work will be retained in this office for a period of thirty days from the date of this report. They will then be discarded unless we are notified otherwise.

GeoTek Engineering and Testing Services, Inc. appreciates the opportunity to have been of service on this project. If you have comments or questions concerning this letter or the project, please contact our office
(1-605-335-5512).

GEOTEK ENGINEERING & TESTING SERVICES, INC.

This report was reviewed by:



Andrew D. Uttecht
Staff Scientist
SD Petroleum Assessor #17481



Daniel R. Hanson
SD PE/CPRR #4829
General Manager

cc: DANR, Pierre, Attn: Jamison Smith
DANR, Pierre, Attn: Marshall Brown
Davison County Emergency Management, Mitchell, Attn: Karen Wegleitner

Table 1
Soil Analytical Data
Total Nitrogen & Phosphorus %
Highway 16 and 394th St
Mount Vernon, SD
GeoTek #26-0743

Sample Location and depth	Date Sampled	Depth	Total Nitrogen	Total Phosphorus
Composite	05-08- 2026	2'	0.190	0.745

Results are in percentage (%)
Laboratory results attached in Appendix C

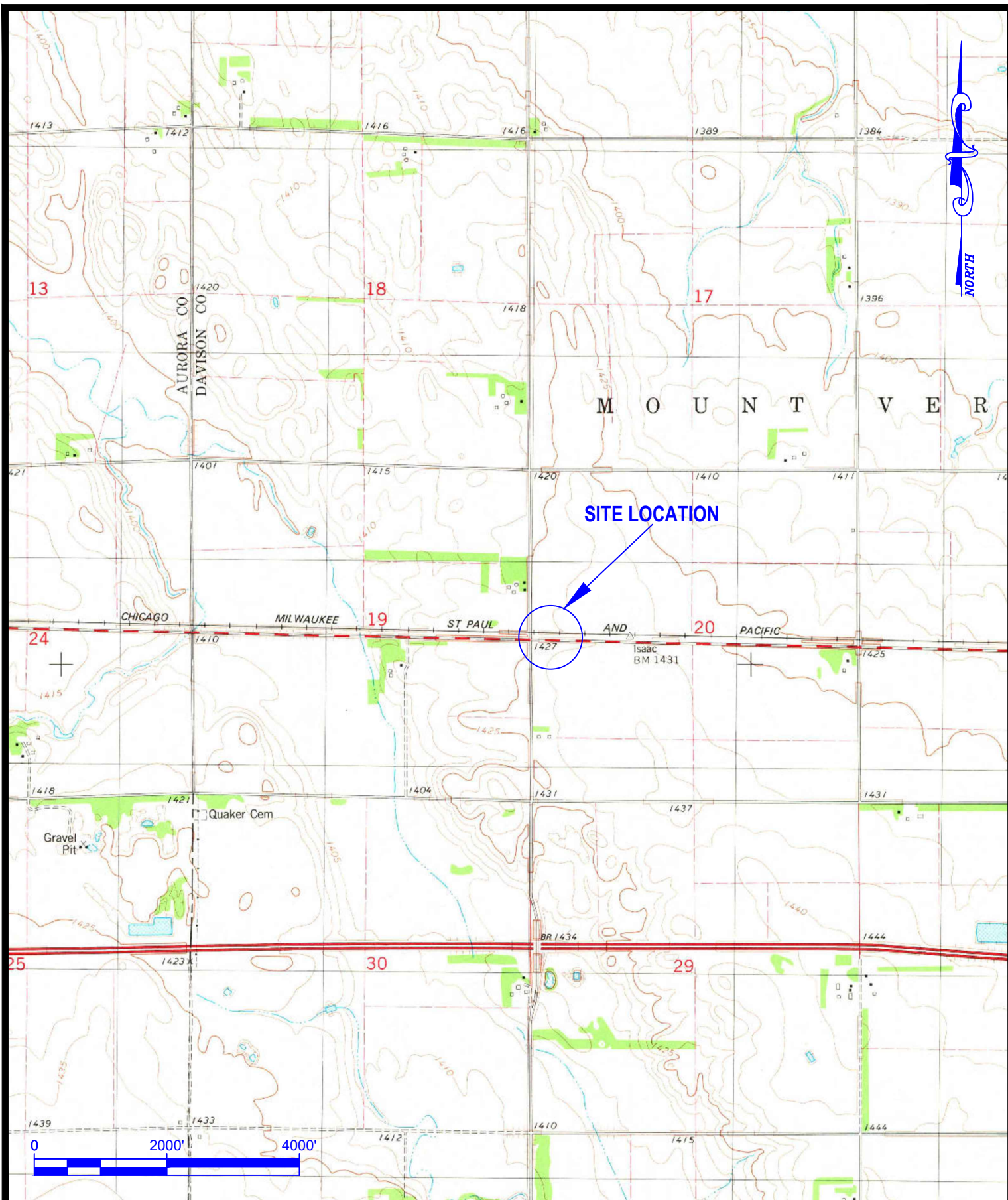


FIGURE 1
TOPOGRAPHIC MAP
SPILL RESPONSE
HIGHWAY 16 & NEAR 394TH AVENUE
NEAR WHITE LAKE, SD

ACAD/GEOTEK/ANDREW/26-0743

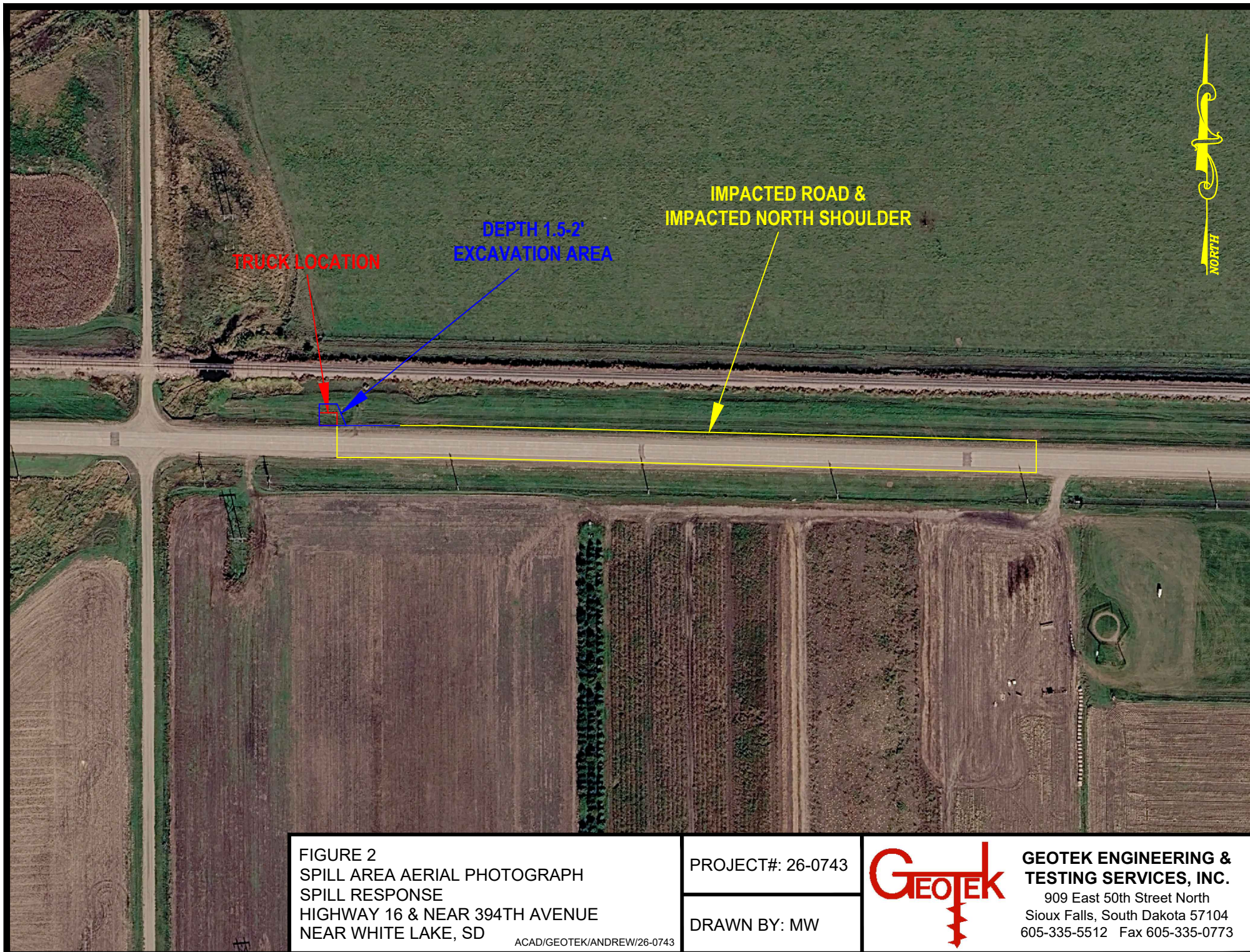
PROJECT#: 26-0743

DRAWN BY: MW



GEOTEK ENGINEERING & TESTING SERVICES, INC.

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394TH AVENUE

COMPOSITE SAMPLE
EXCAVATION AREA

SCRAPED SHOULDER

HIGHWAY 16



FIGURE 3
SPILL AREA ILLUSTRATION
SPILL RESPONSE
HIGHWAY 16 & NEAR 394TH AVENUE
NEAR WHITE LAKE, SD
ACAD/GEOTEK/ANDREW/26-0743

PROJECT#: 26-0743
DRAWN BY: MW



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Appendix A



05-04-2026 West Of Spill Site Looking East



05-04-2026 Truck, Tank And Tote Parked Along North Side Of Hwy 16



05-04-2026 Impacted Shoulder And Roadway West Of Truck And Tank



05-04-2026 Impacted Shoulder And Roadway West Of Above Photo



05-04-2026 Impacted Roadway Looking East



05-04-2026 Truck View From East



05-04-2026 Tank Rupture



05-08-2026 Prior To Excavation



05-08-2026 Mid-Excavation



05-08-2026 Post Excavation Awaiting Backfill



05-08-2026 Backfilling



05-08-2026 Excavation Backfilled



05-08-2026 Excavation Backfilled And Shoulder Scraped



05-08-2026 Post Shoulder Scrape Manual Touch Up Work



06-18-2026 Post Hydroseeding

Appendix B

0358466

CUSTOMER'S ORDER NO.						
DEPARTMENT					DATE 5/8/26	
NAME GcoTel					Hauled by Schoenfelder	
ADDRESS					Const.	
CITY, STATE, ZIP						
SOLD BY	CASH	COD	CHARGE	ON ACCT	MDSE RETD	PAID OUT
QUANTITY	DESCRIPTION				PRICE	AMOUNT
1		Contaminated Soil @ 43.80/ton				
2	G	78460				
3	T	35820				
4	N	42,640 21.32 ton				933.82
5						39.22
6						973.04
7	G	62360				
8	T	36180				
9	N	26,180 13.09 ton				573.34
10						24.08
11						597.42
12						
13						(1570.46)
14						
15						
16						
17						
18						
RECEIVED BY						

081219-1

KEEP THIS SLIP FOR REFERENCE

Appendix C



South Dakota Agricultural Laboratories
1335 Western Avenue
Brookings, South Dakota 57006
Phone: 605-692-7325
E-Mail: SDCS@sdaglabs.com

Report Date: 2026-05-19

Final Report

Report Number: 1

Report Of Analysis

Geotek Engineering and Testing Services
909 East 50th Street N
Sioux Falls, SD 57104

Received: 2026-05-12
Reported: 2026-05-19
Package Id: 20260512-006
Case Id:

<u>26S003352</u>	Soil			26-0743 Composite 1.5'-2'	2026-05-08
		<u>Result</u>	<u>LOD</u>	<u>LOQ</u>	<u>Method</u>
Total Moisture		9.25 %			Air Dry
Nitrogen, Total		0.190 %	0.1	0.1	AOAC 993.13
Phosphorus, Total as P2O5		0.745 %	0.06	0.2	AOAC 968.08;931.01 Mod.

Comments: Total Nitrogen outsourced to AgroLab.

Definitions:

ND - Analyte Not Detected

LOD - Limit of Detection, the lowest concentration that can be distinguished from noise

LOQ - Limit of Quantitation, the lowest concentration that can be quantitatively reported

A "J" preceding the result of analysis indicates that the result falls between the LOD and the LOQ and is only an estimate

The results contained in this report relate only to the items tested.

Reviewed and approved by Katie Ahlstrom

The analytical results on this report reflect what was found in the laboratory sample as it was received at the laboratory.

Submitted by the customer:



Fertilizer Sample Submission Form

South Dakota Agricultural Laboratories
1335 Western Avenue
Brookings, SD 57006
SDCS@sdaglabs.com
(605) 692-7325

20260512-006
26S003352

CUSTOMER INFORMATION

Name: Geotek Engineering & Testing Services Inc *Sample ID: Composite
Address: 909 E 50th St N City: Sioux Falls State: SD
Zip: 57104 Phone: (605) 335-5512 **Email: auttedat@geotekeng.com

*Sample ID must be marked clearly on the sample you submit. **Results will be emailed to the provided email address.

BILLING INFORMATION ☒ Check box if billing is the same as the customer information

Name: _____
Address: _____ City: _____ State: _____
Zip: _____ Phone: (____) _____ Email: _____

Minimum of one cup of Fertilizer required- Please send more material if multiple tests are requested.
A \$5 handling fee is applied to all liquid samples. A \$12 handling fee is applied to all solid samples.

Type of Fertilizer (check one):

☐ Liquid	☒ Dry	☐ Custom Blend
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Analysis Requested:

☒ Nitrogen, Total	☐ Calcium
☐ Phosphorus, Available as P2O5	☐ Copper
☒ Phosphorus, Total as P2O5	☐ Iron
☐ Potash, Soluble	☐ Sodium
☐ Boron, Acid Soluble	☐ Magnesium, Acid Soluble
☐ Boron, Water Soluble	☐ Magnesium, Water Soluble
☐ Sulfur	☐ Manganese, Acid Soluble
☐ Water Free	☐ Manganese, Water Soluble
☐ Selenium, Total	☐ Zinc, Acid Soluble
☐ Metals Screen by ICP-OES (As, Cd, Co, Pb, Mo, Ni, Zn)	☐ Zinc, Water Soluble

PLEASE PROVIDE EXPECTED CONCENTRATIONS IF AVAILABLE

Appendix D

METHODS

DECONTAMINATION

Prior to mobilization of the drill rig, the down-hole drilling equipment and associated tools are steam cleaned. Additionally, the down-hole drilling equipment and associated tools are steam cleaned after each boring where contamination is encountered. Also, the split barrel sampler is washed with a tri-sodium phosphate solution and rinsed in potable water after each contaminated sample.

SOIL BORING AND SAMPLING

The boreholes are advanced with a truck-mounted, rotary, drill rig using flight auger or hollow stem auger drilling methods. Flight auger and hollow stem auger soil samples are obtained directly from the auger flights during drilling. Split barrel soil samples are obtained by advancing a 2" outside diameter split barrel sampler into the soil a distance of 2 1/2'.

Soil samples for field petroleum vapor scanning are placed in clean, 8 oz. glass jars covered with aluminum foil, and sealed with lids. Sample jar identification labels are completed indicating the job number, boring number, sample number, sample depth, date sampled, and the sampling personnel's initials.

Soil samples for laboratory chemical analysis are placed in laboratory provided containers. Sample container identification labels are completed indicating the job number, sample location, boring number, boring depth, date sampled, analysis required, and sampling personnel's initials.

SOIL SAMPLE ORGANIC VAPOR SCANNING

The recovered soil samples are scanned with a photoionization detector (PID) equipped with a 10.2 eV lamp. The instrument is calibrated for direct readings in parts per million (ppm) of benzene. The instrument has a reported accuracy range under ideal operating conditions of 1 to 2000 ppm.

Following a minimum 10-minute delay after sample collection, the jar is agitated and the PID probe is used to penetrate the aluminum foil following removal of the sample jar lid. The peak reading (usually within 10 seconds) is recorded on the identification label. Samples obtained during unfavorable weather conditions (below 40°F or during precipitation) are warmed and stored in a vehicle or building prior to taking PID readings.

MONITORING WELL DEVELOPMENT

Monitoring well development is performed with dedicated bottom loading bailers. The wells are bailed until relatively sediment free water is produced or until the well became dry. Groundwater level data and sampling information forms are completed during development.

MONITORING WELL EVACUATION AND WATER QUALITY SAMPLING

Stagnant water is evacuated from the wells prior to water quality sampling using a dedicated bottom loading bailer. Water is bailed from the well until three well volumes were removed or until the well becomes dry. Groundwater level data and sampling information forms are completed during sampling.

WATER LEVELS

Water levels in monitoring wells area obtained by using a water level meter (dip meter). The meter consists of a stainless steel electrode or a brass plated probe connected to a polyethylene flap tape (permanently marked to 1/20 of a foot) containing two stainless steel conductors. The probe is lowered into the monitoring well and, when contact is made with the water, the circuit is completed activating a clearly audible buzzer. The distance between the water surface and the top of the riser is measured using the flat tape. All measurements are reported to the nearest 0.01foot.

PRODUCT THICKNESS

Product thickness in monitoring wells is obtained by using an oil-water interface gauge. The gauge consists of a sonic probe connected to a gauging tape (permanently marked to 1/32 of a foot). The probe is lowered into the monitoring well and when the gap in the sonic probe is fully immersed in product, a continuous audible signal will be heard. The distance between the air/product and product/water interfaces and the top of riser is measured using the gauging tape. The product thickness is then determined by subtraction and air/product and product/water interface measurements. All measurements are reported to the nearest 0.01'.

WATER QUALITY SAMPLING

Stagnant water in the wells is removed prior to water quality sampling by using a dedicated, bottom loading bailer. Water is bailed from the well until a minimum of three well volumes are removed or until the well becomes dry. Groundwater level data and sampling information forms are then completed during sampling.

Water quality samples are obtained using the dedicated, bottom loading bailers. Volatile samples are transferred directly from the bailers into laboratory provided, 40 milliliter, purge and trap vials. Semi-volatile samples are collected in laboratory provided containers. Sample container identification labels are then completed indicating the job number, sample location, date sampled, analysis required, and sampling personnel's initials.

CHAIN OF CUSTODY

Analytical sample information is recorded on a chain of custody form following sample collection. The chain of custody record accompanies the samples during transit back to GeoTek's office, during storage, and during any subsequent shipment to a contract laboratory. A copy of the record is always kept by GeoTek. Upon completion of the laboratory analysis, the completed chain of custody record is returned to GeoTek.