Turf & Soil Diagnostics

MATERIALS TEST REPORT FOR
Bulldog Field Equipment

Report to: Bulldog Field Equipment
Chad Kropff
4250 Longwood Ave.
Roanoke, VA 24017

Date Received Feb-01-2021
Date Reported Feb-05-2021
Condition of Sample Normal

Particle Size Evaluation*

Lab ID#	Sample Name	% Sand 2.0 - 0.05 mm	% Silt 0.05-0.002mm	% Clay < 0.002mm	Silt : Clay Ratio	USDA Textural Classification	Dry Color
46574-1	Clay Brick Sample	30.0	36.5	33.5	1.1	Clay Loam	10YR 6/6 Brownish Yellow
ASTM F2107 Standard Guide for Skinned Areas (Pitcher's Mound, Batter's Box, Catcher's Box)		-	-	≥ 35	-	-	-

Lab ID#	Sample Name	% Passing mm (US sieve)							
		Gravel 6.3 (1/4")	Gravel 4.0 (5)	Gravel 2.0 (10)	V. Coarse 1.0 (18)	Coarse 0.5 (35)	Medium 0.25 (60)	Fine 0.15 (100)	V. Fine 0.05 (270)
46574-1	Clay Brick Sample	100.0	99.8	94.4	82.6	76.6	72.5	69.0	65.8

Lab ID#	Sample Name	% Retained***							
		Gravel 6.3 (1/4")	Gravel 4.0 (5)	Gravel 2.0 (10)	V. Coarse 1.0 (18)	Coarse 0.50 (35)	Medium 0.25 (60)	Fine 0.10 (140)	V. Fine 0.05 (270)
46574-1	Clay Brick Sample	0.0	0.2	5.4	12.4	6.5	4.3	5.3	1.8

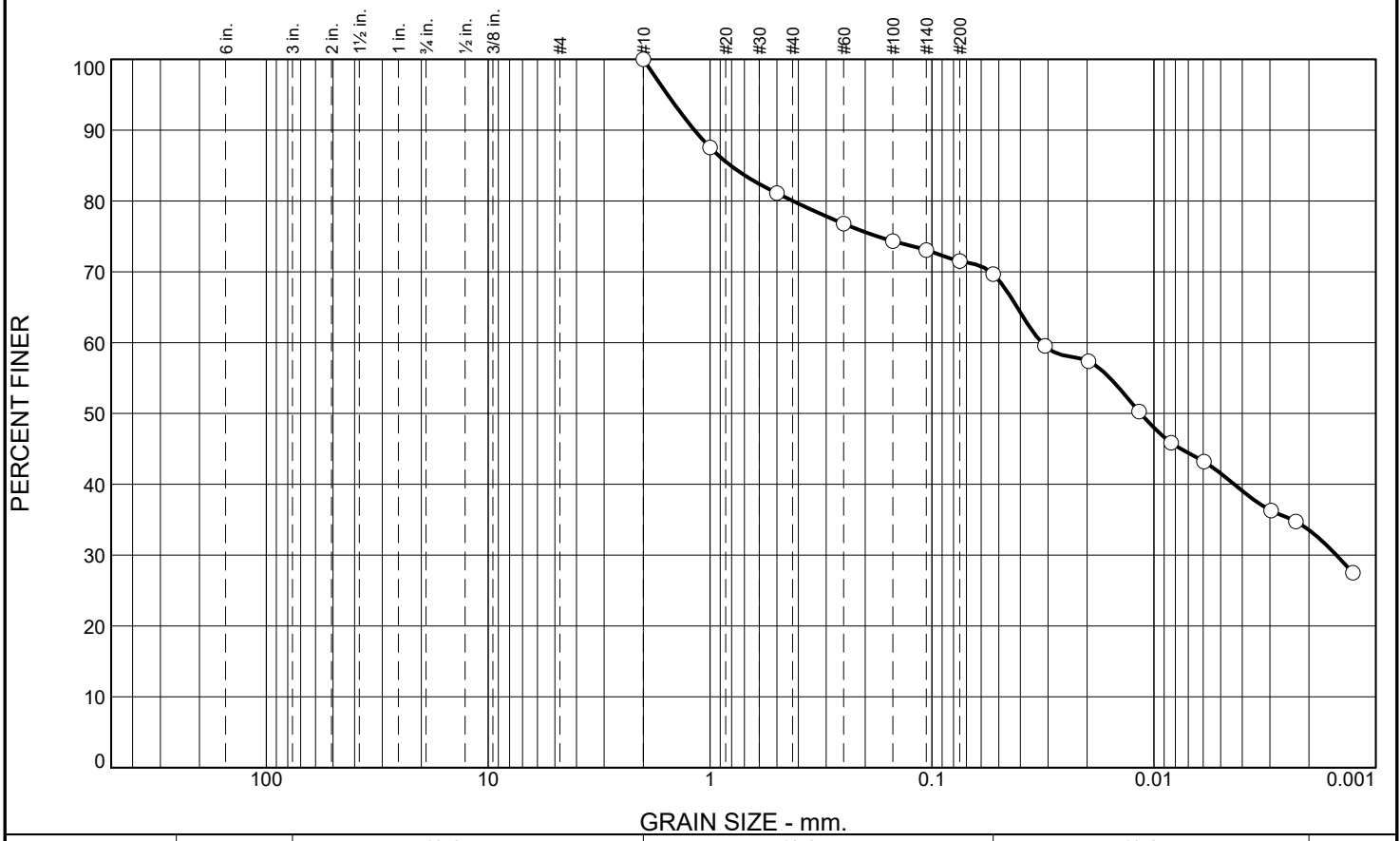
*ASTM F1632 Method B
***Data reported using USDA definitions of soil classification
Samples were tested as received and comments pertain only to the samples shown.
This report may not be reproduced in part, but only in full.
Samples were received with a transmittal letter.

Duane Otto Digitally signed by Duane Otto Date: 2021.02.05 11:24:15 -05'00'

Reviewed by _____

35 King St. Trumansburg, NY 14886 ■ Phone: 855-769-4231
E-mail: lab@turfdiag.com ■ Website: http://www.turfdiag.com

Particle Size Distribution Report



% Stones	% +3"	% Gravel			% Sand					% Silt		% Clay
		Coarse	Medium	Fine	V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Fine	
0.0	0.0	0.0	0.0	0.0	12.4	6.5	4.3	4.0	3.1	12.3	23.9	33.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#18	87.6		
#35	81.1		
#60	76.8		
#100	74.3		
#140	73.1		
#200	71.5		
#270	69.7		
0.0310 mm.	59.5		
0.0197 mm.	57.4		
0.0117 mm.	50.3		
0.0084 mm.	45.9		
0.0060 mm.	43.2		
0.0030 mm.	36.3		
0.0023 mm.	34.7		
0.0013 mm.	27.5		

* (no specification provided)

Soil Description

46574-1 Clay Brick Sample

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.1757 D_{85}= 0.8073 D_{60}= 0.0321
D_{50}= 0.0115 D_{30}= 0.0015 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Test Method: ASTM D422
Percentages based on material that passes #10 sieve per USDA soil definitions.

Sample Number: 46574-1

Date: 2/5/21

Turf & Soil Diagnostics

Trumansburg, NY

Client: Bulldog Field Equipment
Project: Product Development

Project No:

Tested By: hat, cm **Checked By:** cm

Turf & Soil Diagnostics

February 5, 2021

Bulldog Field Equipment
TSD File #46574

The Clay Brick Sample was tested as received and evaluated for baseball/softball infield use. The ASTM F2107 skinned area guidelines for pitcher's mound clay are included for comparison purposes.

The sample is classified as clay loam per the U.S. Department of Agriculture soil classification system.

This sample is similar to the ASTM F2107 guidelines.

ASTM F2107, *Standard Guide for Construction and Maintenance of Skinned Areas on Baseball and Softball Fields*, states: "If the performance of a skinned infield mix is not totally satisfactory after installation, its physical composition can be altered by incorporating sand or amendments to loosen it or by adding clayey soil to create a firmer mix. Such alterations may be related to player preference or to ease of maintenance."

Please contact us if you have any questions or need further assistance. Samples are generally kept on the premises for 45 days after report date. Thank you for using Turf & Soil Diagnostics, Inc.

Duane Otto
Digitally signed by Duane Otto
Date: 2021.02.05 11:24:20 -05'00'

Duane K. Otto
Vice President

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