

LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT



Report Number: 02191565.0001A
Service Date: 01/09/20
Report Date: 01/14/20
Task: 02 - Laboratory Soil/Aggregate Testing

15620 W 113th St
Lenexa, KS 66219-5102
913-492-7777

Client

Axiom Northwest Construction, Inc.
Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Laboratory Classification: Fat Clay (CH), brown & grayish brown
Material Source: Off-site borrow
Sample Location: Stockpile from off-site borrow at 1905 Shamrock Ave.
Proposed Use: Engineered fill
Testing Performed: Standard Proctor & Atterberg Limits

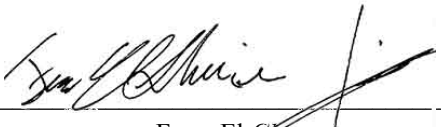
Summary:

Terracon's laboratory completed the requested scope of testing for the above-referenced sample. A report of these test results is attached.

Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:
(1) Axiom Northwest Construction, Inc.,
norm@axiomnw.com

Reviewed By:


Feras El-Ghoussein
Project Manager

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT

Terracon

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Service Date: 01/09/20
Report Date: 01/14/20
Task: 02 - Laboratory Soil/Aggregate Testing

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Client

Axiom Northwest Construction, Inc.
Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Material Information

Source of Material: Off-Site Borrow
Proposed Use: Subgrade Fill

Sample Information

Sample Date: 01/09/20
Sampled By: Caleb Brewer
Sample Location: Off-Site Borrow Pile at 1905 Shamrock Ave.

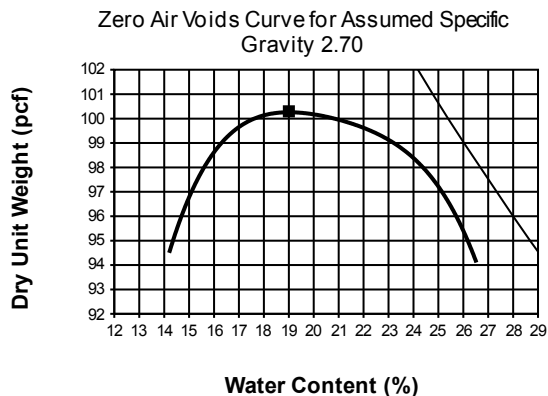
Sample Description: Fat Clay (CH), brown & grayish brown

Laboratory Test Data

Test Procedure: ASTM D698
Test Method: Method A
Sample Preparation: Dry
Rammer Type: Mechanical
Maximum Dry Unit Weight (pcf): 100.3
Optimum Water Content (%): 19.0

	Result	Specifications
Liquid Limit:	53	
Plastic Limit:	21	
Plasticity Index:	32	
In-Place Moisture (%):		

USCS:



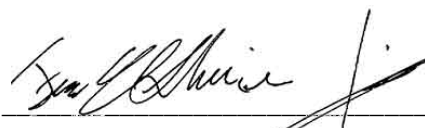
Comments:

Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:

(1) Axiom Northwest Construction, Inc.,
norm@axiomnw.com

Reviewed By:


Feras El-Ghoussein
Project Manager

Test Methods: ASTM D698, ASTM D4318

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT



Report Number: 02191565.0002A
Service Date: 02/27/20
Report Date: 03/11/20
Task: 02 - Laboratory Soil/Aggregate Testing

15620 W 113th St
Lenexa, KS 66219-5102
913-492-7777

Client

Axiom Northwest Construction, Inc.
Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Laboratory Classification: Weathered Shale trace Gravel, gray
Material Source: Off-site borrow
Sample Location: 95th and Loiret, Lenexa, KS
Proposed Use: Structural Fill
Testing Performed: Standard Proctor

Summary:

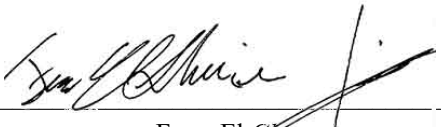
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Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
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Report Number: 02191565.0002A
Service Date: 02/27/20
Report Date: 03/11/20
Task: 02 - Laboratory Soil/Aggregate Testing

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Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Material Information

Source of Material: Off-Site Borrow
Proposed Use: Structural Fill

Sample Information

Sample Date: 02/27/20
Sampled By: Kevin Hollis
Sample Location: 95th and Loiret, Lenexa, KS

Sample Description: Weathered Shale trace Gravel, gray

Laboratory Test Data

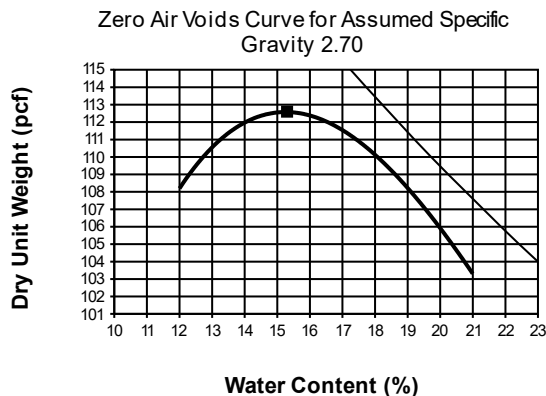
Test Procedure: ASTM D698
Test Method: Method A
Sample Preparation: Dry
Rammer Type: Mechanical
Maximum Dry Unit Weight (pcf): 112.6
Optimum Water Content (%): 15.3

Liquid Limit:
Plastic Limit:
Plasticity Index:
In-Place Moisture (%):

Result

Specifications

USCS:



Comments:

Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:

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Reviewed By:

Feras El-Ghoussein
Feras El-Ghoussein
Project Manager

Test Methods: ASTM D698

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT



Report Number: 02191565.0002B
Service Date: 02/27/20
Report Date: 03/11/20
Task: 02 - Laboratory Soil/Aggregate Testing

15620 W 113th St
Lenexa, KS 66219-5102
913-492-7777

Client

Axiom Northwest Construction, Inc.
Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Laboratory Classification: Weathered Shale trace Gravel, yellowish brown
Material Source: Off-site borrow
Sample Location: 81st and Flint, Lenexa, KS
Proposed Use: Structural Fill
Testing Performed: Standard Proctor

Summary:

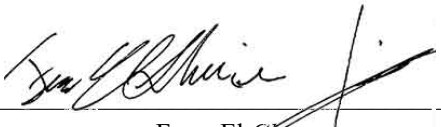
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Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:

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Reviewed By:


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Project Manager

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT

Terracon

Report Number: 02191565.0002B
Service Date: 02/27/20
Report Date: 03/11/20
Task: 02 - Laboratory Soil/Aggregate Testing

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Attn: Norm Hellings
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Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Material Information

Source of Material: Off-Site Borrow
Proposed Use: Structural Fill

Sample Information

Sample Date: 02/27/20
Sampled By: Kevin Hollis
Sample Location: 81st and Flint, Lenexa, KS

Sample Description: Weathered Shale trace Gravel, yellowish brown

Laboratory Test Data

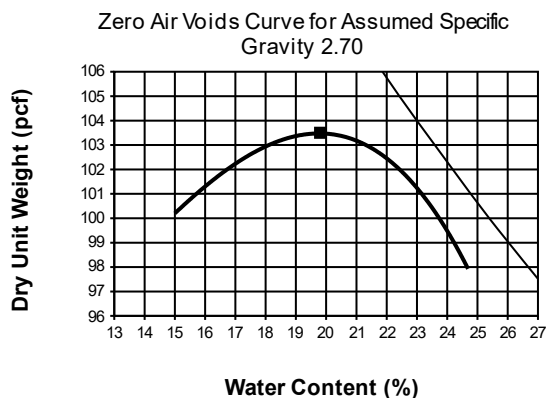
Test Procedure: ASTM D698
Test Method: Method A
Sample Preparation: Dry
Rammer Type: Mechanical
Maximum Dry Unit Weight (pcf): 103.5
Optimum Water Content (%): 19.8

Liquid Limit:
Plastic Limit:
Plasticity Index:
In-Place Moisture (%):

Result

Specifications

USCS:



Comments:

Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:

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norm@axiomnw.com

Reviewed By:

Feras El-Ghoussein
Feras El-Ghoussein
Project Manager

Test Methods: ASTM D698

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT



Report Number: 02191565.0025A
Service Date: 05/04/20
Report Date: 05/10/20
Task: 02 - Laboratory Soil/Aggregate Testing

15620 W 113th St
Lenexa, KS 66219-5102
913-492-7777

Client

Axiom Northwest Construction, Inc.
Attn: Norm Hellings
2232 Broadway
Suite 101
Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Laboratory Classification: Limestone Screenings, dark gray
Material Source: Quarry
Sample Location: On-site stockpile
Proposed Use: Low Volume Change Fill
Testing Performed: Standard Proctor

Summary:

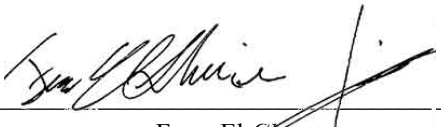
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Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
Report Distribution:

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Reviewed By:



Feras El-Ghoussein
Project Manager

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL REPORT

Terracon

Report Number: 02191565.0025A
Service Date: 05/04/20
Report Date: 05/10/20
Task: 02 - Laboratory Soil/Aggregate Testing

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Client

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Everett, WA 98201

Project

DCI - Lee's Summit
2001 Shamrock Rd
Lee's Summit, MO

Project Number: 02191565

Material Information

Source of Material: Quarry
Proposed Use: LVC Fill

Sample Information

Sample Date: 05/05/20
Sampled By: John D. Martin
Sample Location: On-site Stockpile

Sample Description: Limestone Screenings, dark gray

Laboratory Test Data

Test Procedure: ASTM D698
Test Method: Method B
Sample Preparation: Dry
Rammer Type: Mechanical
Maximum Dry Unit Weight (pcf): 129.2
Optimum Water Content (%): 10.3

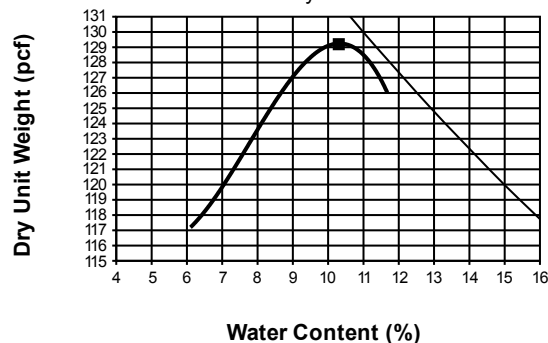
Liquid Limit:
Plastic Limit:
Plasticity Index:
In-Place Moisture (%):

Result

Specifications

USCS:

Zero Air Voids Curve for Assumed Specific Gravity 2.70



Comments:

Services:

Terracon Rep.: John D. Martin
Reported To: N/A
Contractor: Axiom Northwest Construction
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Reviewed By:

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Project Manager

Test Methods: ASTM D698

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