

300 Sierra Manor Drive, Suite 1
 Reno, NV 89511

March 23, 2021
 File: 2762

Mr. Dillon Rasmussen
A&K EARTHMOVERS, INC.
 PO Box 1059
 Fallon, NV 89407

RE: Aggregate Base Type 2 Class B – Farm District Pit

Dear Mr. Rasmussen:

Per your request, we have performed testing on the Type 2, Class B aggregate base sampled from the pit on March 18th. Test results in comparison with local standard specifications are as follows:

Sieve Size Analysis (ASTM C136/C117)		
U.S. Standard Sieve Size	Percent By Weight Passing	
	Farm District Pit	Local Standard Specification*
1 Inch	100	100
¾ Inch	90	90 - 100
½ Inch	67	-
⅜ Inch	52	-
No. 4	37	35 – 65
No. 8	33	-
No. 10	32	-
No. 16	29	15 - 40
No. 30	24	-
No. 40	21	-
No. 50	17	-
No. 100	10	-
No. 200	6.5	2 - 10

Fractured Faces (Nev. T230)	
Farm District Pit	Specification*
89.6%	35% Minimum

Atterberg Limits (ASTM D4318)		
	Farm District Pit	Specification*
Liquid Limit	No Value	35 Maximum
Plasticity Index	Nonplastic	8 Maximum

R-Value (ASTM D2844)	
Farm District Pit	Specification*
87	70 Minimum

*Standard Specifications for Public Works Construction (Washoe County, Sparks, Reno, Carson City and Douglas County), 2016 and NDOT Standard Specifications for Road and Bridge Construction, 2014.

**Does not meet specification.

Mr. Dillon Rasmussen
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Los Angeles Abrasion (ASTM C131)		
	Farm District Pit	Specification*
Percent Loss After 500 Revolutions (Grading B)	18.9%	45% Maximum

*Standard Specifications for Public Works Construction (Washoe County, Sparks, Reno, Carson City and Douglas County), 2016 and NDOT Standard Specifications for Road and Bridge Construction, 2014.

Moisture Density (ASTM D1557C)	
Maximum Dry Density	122.7 PCF
Optimum Moisture	12.8%

We appreciate this opportunity to provide our laboratory testing services. If you have any questions or require further information, please do not hesitate to contact us.

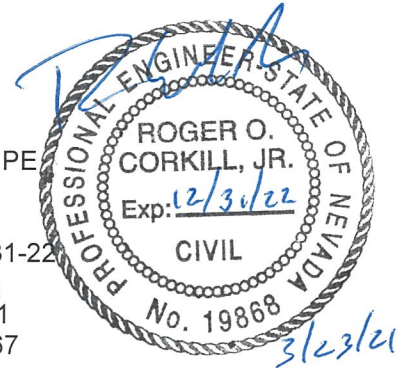
Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.



Steven L. Vineis
Laboratory Manager
svineis@cmenv.com
Direct: 775-737-7568
Mobile: 775-772-9921

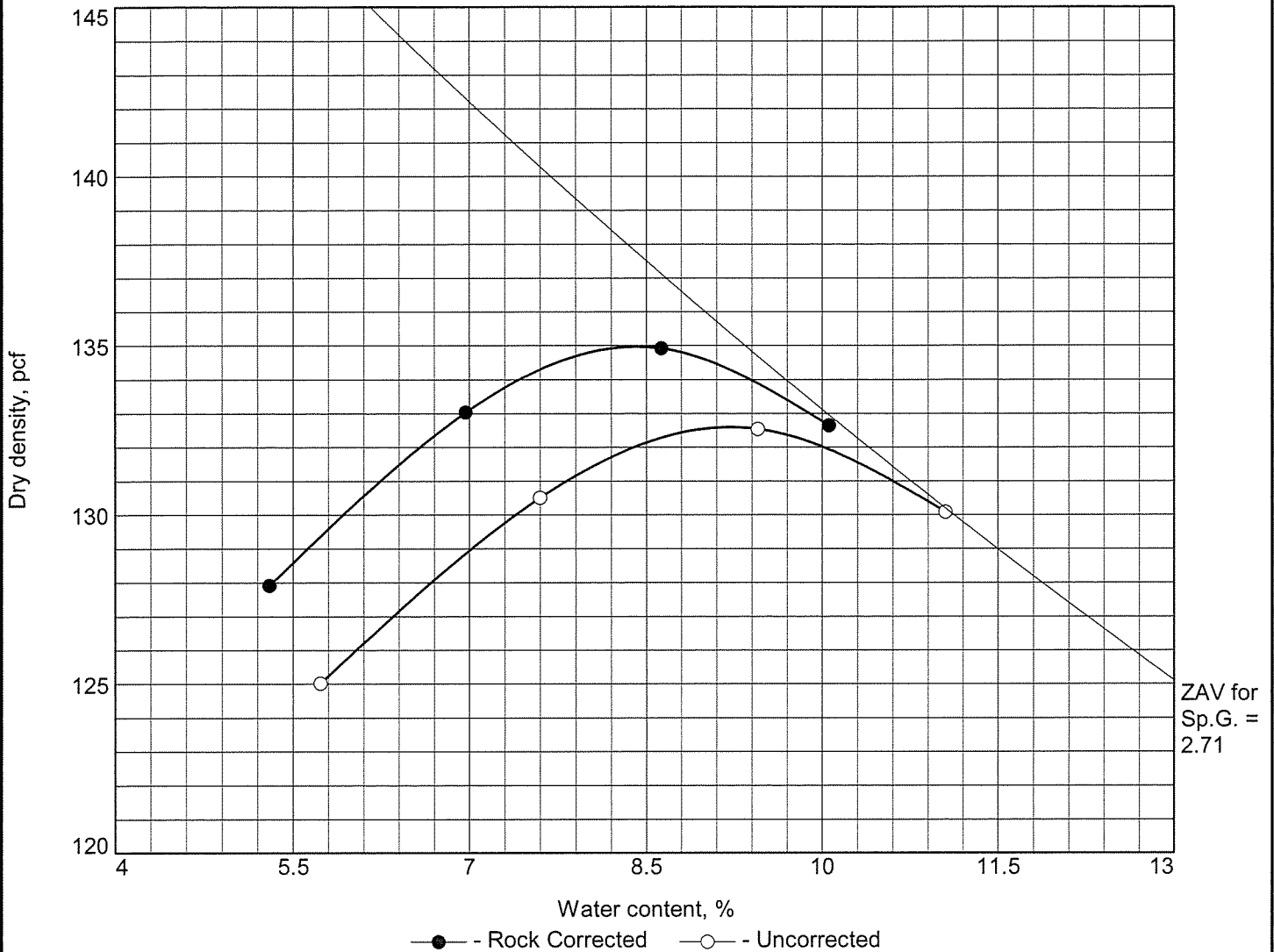
Roger O. Corkill Jr., PE
Project Manager
RE Number 19868
Expiration Date 12-31-22
rcorkill@cmenv.com
Direct: 775-737-7581
Mobile: 775-722-5067



SLV:ROC:Inh
Enclosures

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MOISTURE DENSITY CURVE



Test specification: ASTM D 1557-91 Procedure C Modified
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

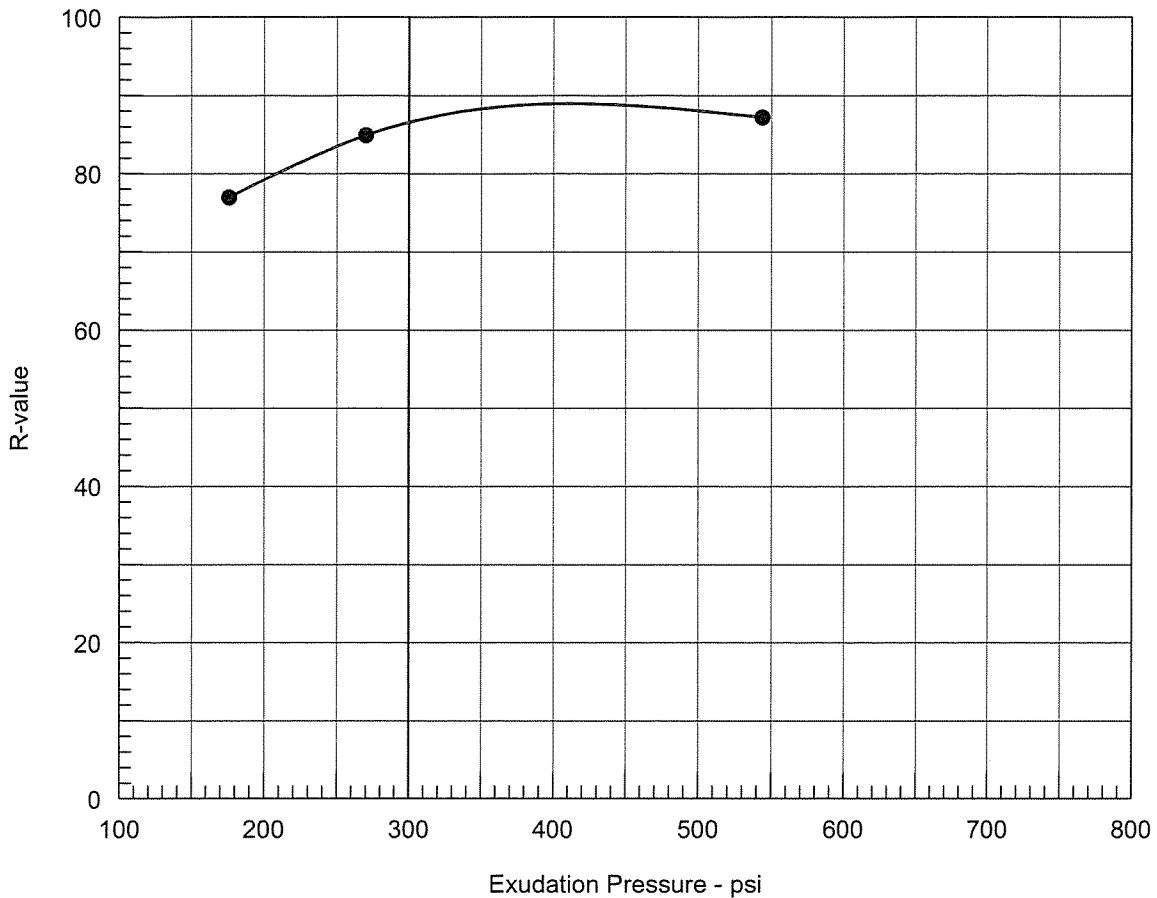
Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
							10.5	6.5

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 135.0 pcf	132.6 pcf	AGGREGATE BASE TYPE 2 CLASS B FARM DISTRICT PIT
Optimum moisture = 8.4 %	9.2 %	

Project No. 2762 Client: A&K EARTHMOVERS Project: FERNLEY RAIL PARK Location: ON SITE STOCKPILE Sample Number: 35180	Remarks: RECEIVED 3/18/2021
	Figure


Tested By: G. MORALES Checked By: S. VINEIS

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D2844

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	132.2	9.5	0.00	11	2.50	544	87	87
2	350	130.8	10.6	0.00	13	2.50	270	85	85
3	350	128.4	11.4	0.00	20	2.50	176	77	77

Test Results	Material Description
R-value at 300 psi exudation pressure = 87	AGGREGATE BASE TYPE 2 CLASS B FARM DISTRICT PIT
Project No.: 2762 Project: FERNLEY RAIL PARK Location: ON SITE STOCKPILE Sample Number: 35180 Date: 3/23/2021	Tested by: M. PONTONI Checked by: S. VINEIS Remarks: RECEIVED 3/18/2021
 CONSTRUCTION MATERIALS ENGINEERS, INC.	Figure 1A