



300 Sierra Manor Drive, Suite 1  
 Reno, NV 89511

May 21, 2020  
 File: 1013

Mr. Colton Hiatt  
**A&K EARTHMOVERS, INC.**  
 PO Box 1059  
 Fallon, NV 89407

**RE: Aggregate Base Type 2 Class B – Enterprise Pit**

Dear Mr. Hiatt:

Per your request, we have performed testing on the Type 2, Class B aggregate base delivered to our laboratory on May 8<sup>th</sup>. 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	
	Enterprise Pit	Local Standard Specification*
1 Inch	100	100
¾ Inch	96	90 - 100
½ Inch	78	-
⅜ Inch	66	-
No. 4	45	35 – 65
No. 8	34	-
No. 10	31	-
No. 16	24	15 - 40
No. 30	17	-
No. 40	14	-
No. 50	11	-
No. 100	7	-
No. 200	4.2	2 - 10

Fractured Faces (Nev. T230)	
Enterprise Pit	Specification*
90.1%	35% Minimum

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

R-Value (ASTM D2844)	
Enterprise Pit	Specification*
83	70 Minimum

\*Standard Specifications for Public Works Construction (Washoe County, Sparks, Reno, Carson City and Douglas County), 2012 and NDOT Standard Specifications for Road and Bridge Construction, 2014.

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\*\*Does not meet specification.

Los Angeles Abrasion (ASTM C131)		
	Enterprise Pit	Specification*
Percent Loss After 500 Revolutions (Grading B)	29.3%	45% Maximum

\*Standard Specifications for Public Works Construction (Washoe County, Sparks, Reno, Carson City and Douglas County), 2012 and NDOT Standard Specifications for Road and Bridge Construction, 2014.

Moisture Density (ASTM D1557C)	
Maximum Dry Density	126.5 PCF
Optimum Moisture	13.9%

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.

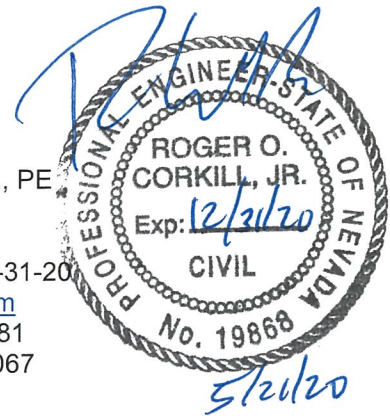
Sincerely,

**CONSTRUCTION MATERIALS ENGINEERS, INC.**



Steven L. Vineis  
Laboratory Manager  
[svineis@cmenv.com](mailto:svineis@cmenv.com)  
Direct: 775-737-7568  
Mobile: 775-772-9921

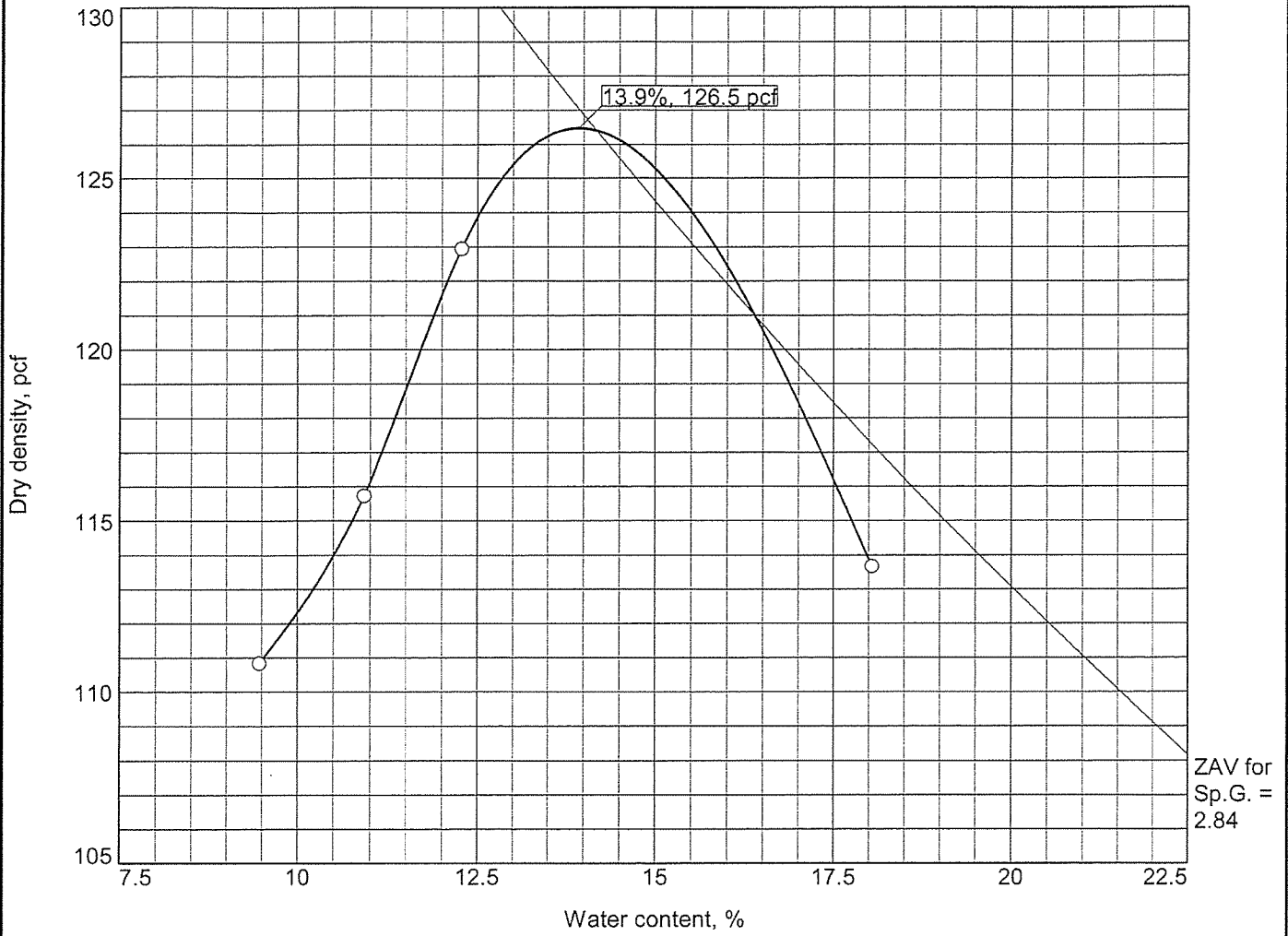
Roger O. Corkill Jr., PE  
Project Manager  
RE Number 19868  
Expiration Date 12-31-20  
[rcorkill@cmenv.com](mailto:rcorkill@cmenv.com)  
Direct: 775-737-7581  
Mobile: 775-722-5067



SLV:ROC:lnh  
Enclosures

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# COMPACTION TEST REPORT



Test specification: ASTM D 1557-12 Method C Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
							4.4	4.2

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 126.5 pcf Optimum moisture = 13.9 %	AGGREGATE BASE TYPE 2 CLASS B ENTERPRISE PIT

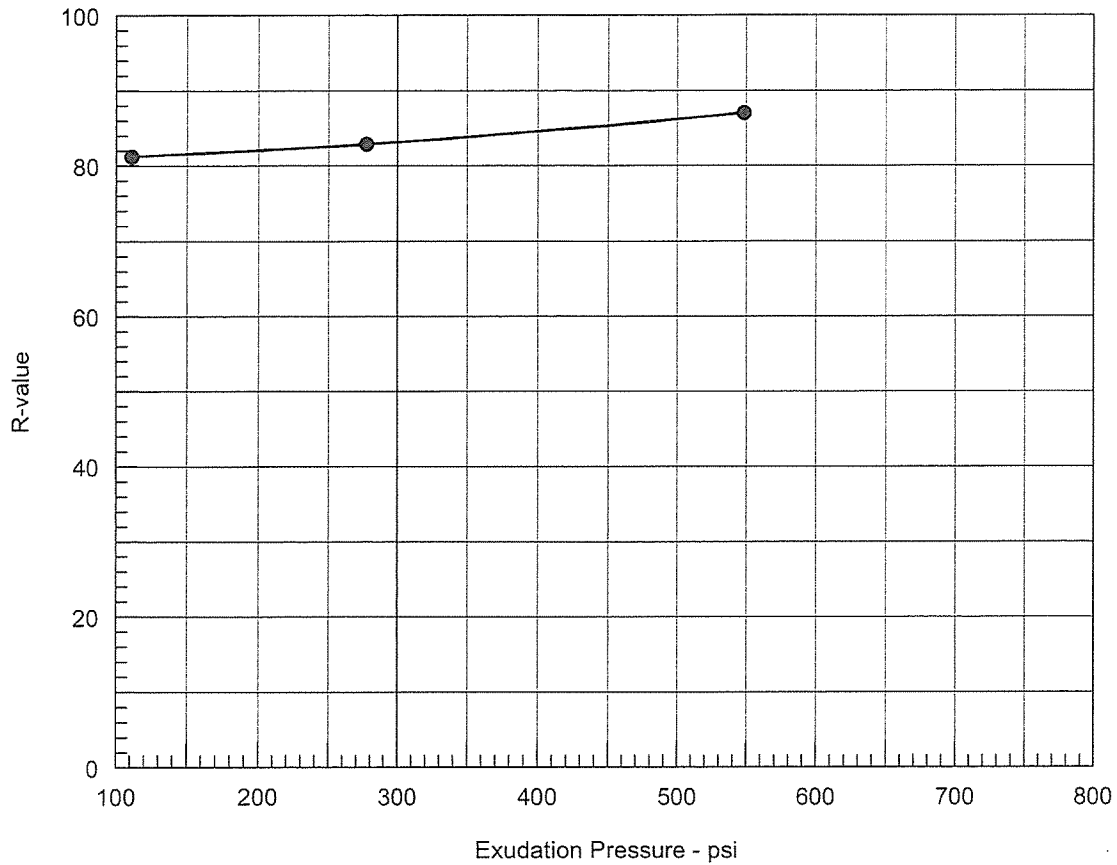
<b>Project No.</b> 1013 <b>Client:</b> A & K EARTHMOVERS, INC. <b>Project:</b> ANNUAL QUALITY TESTING  Location: PLANT STOCKPILE <b>Sample Number:</b> 34292	<b>Remarks:</b> RECEIVED 5/8/2020
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Figure

Tested By: S. VINEIS      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	114.9	11.8	0.00	10	2.48	548	87	87
2	350	113.2	12.7	0.00	12	2.40	277	84	83
3	350	113.6	13.2	0.00	14	2.50	111	81	81

Test Results	Material Description
R-value at 300 psi exudation pressure = 83	AGGREGATE BASE TYPE 2 CLASS B ENTERPRISE PIT

<b>Project No.:</b> 1013 <b>Project:</b> ANNUAL QUALITY TESTING <b>Location:</b> PLANT STOCKPILE <b>Sample Number:</b> 34292 <b>Date:</b> 5/19/2020	<b>Tested by:</b> M. PONTONI <b>Checked by:</b> S. VINEIS <b>Remarks:</b> RECEIVED 5/8/2020
 <b>CONSTRUCTION MATERIALS ENGINEERS, INC.</b>	Figure 1A