

6980 Sierra Center Parkway, Suite 90
Reno, NV 89511

March 12, 2015
File: 1009

Mr. Chris Benna
RILITE AGGREGATES
3025 Mill Street
Reno, NV 89502

RE: Rilite Pit - Fill Sand

Dear Mr. Benna:

Per your request, we have performed testing on the fill sand sampled by our laboratory on March 6th. Test results are as follows:

Sieve Size Analysis (ASTM C136/C117)	
U.S. Standard Sieve Size	Percent By Weight Passing Rilite Pit Fill Sand
½ Inch	100
¾ Inch	99
No. 4	92
No. 8	72
No. 16	53
No. 30	40
No. 50	29
No. 100	19
No. 200	11.9

Atterberg Limits (ASTM D4318)	
Liquid Limit	No Value
Plasticity Index	Nonplastic

Moisture Density (ASTM D1557C)	
Maximum Dry Density	120.5 PCF
Optimum Moisture	15.5%

R-Value (ASTM D2844)	
Rilite Pit Fill Sand	81

Mr. Chris Benna
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March 12, 2015
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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.

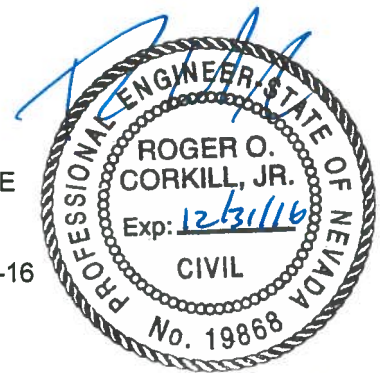
Sincerely,

CONSTRUCTION MATERIALS ENGINEERS, INC.



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

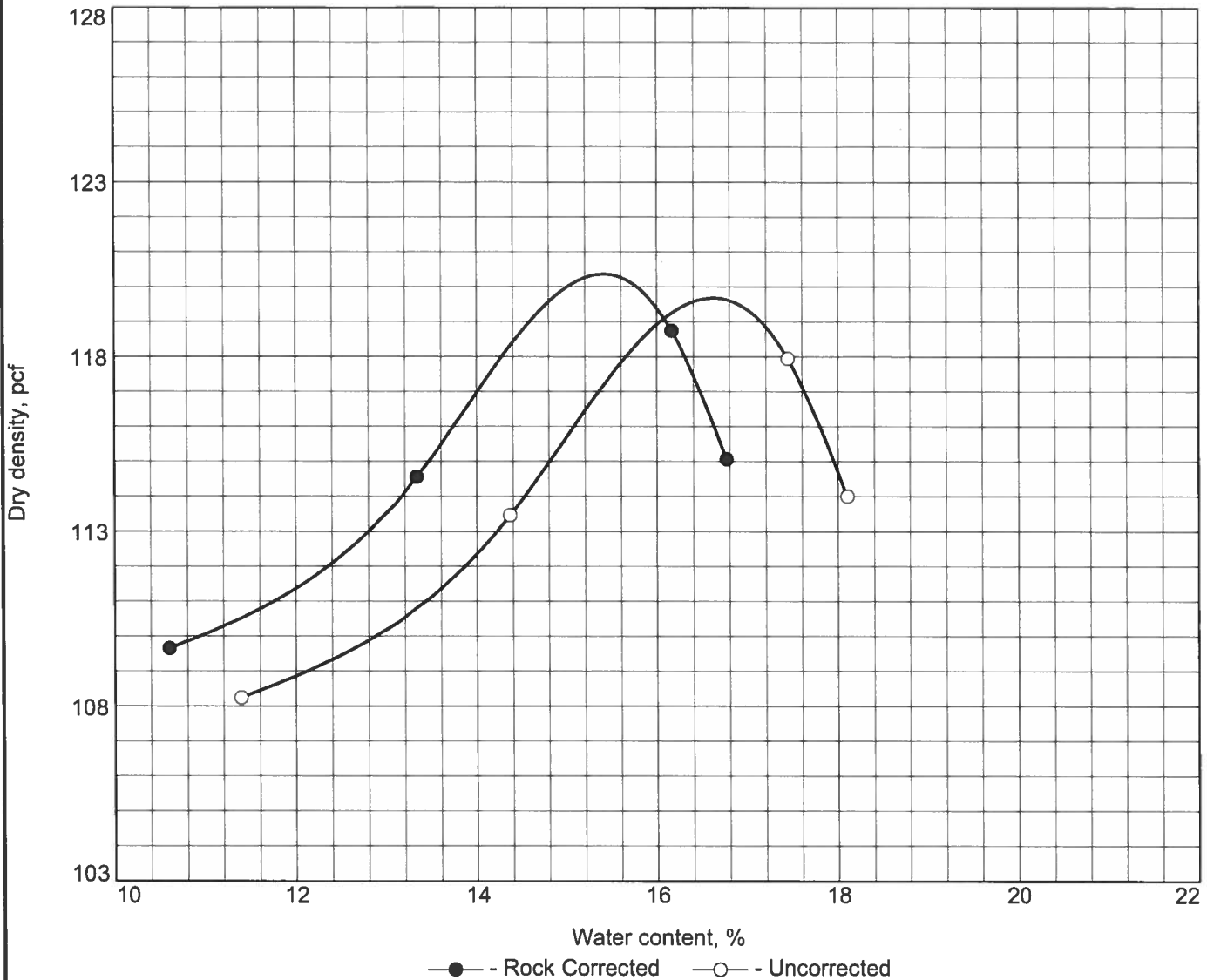
Roger O. Corkill Jr., PE
Project Manager
RE Number 19868
Expiration Date 12-31-16
rcorkill@cmenv.com
Direct: 775-737-7581
Mobile: 775-722-5067



3-12-15

SLV:ROC:jy
Enclosures
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MOISTURE DENSITY CURVE

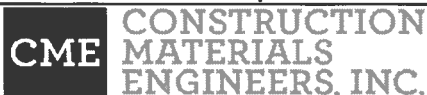


Test specification: ASTM D 1557-07 Method A Modified
 ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
							8.2	11.9

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 120.5 pcf	119.5 pcf	FILL SAND RILITE PIT
Optimum moisture = 15.5 %	16.5 %	

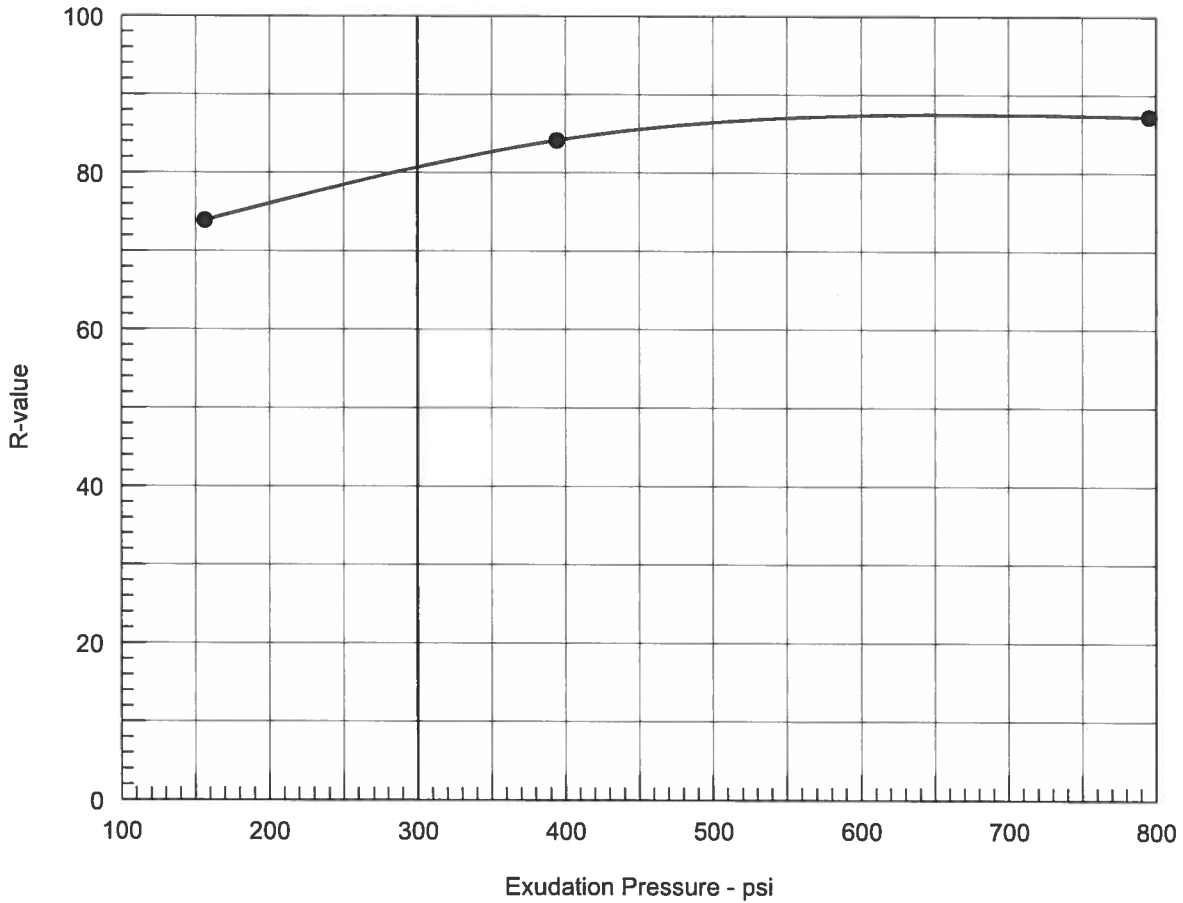
Project No. 1009 Client: RILITE AGGREGATES Project: RILITE AGGREGATES-QUALITY TESTING ○ Location: PLANT STOCKPILE Sample Number: 29335	Remarks: RECEIVED 3/6/2015
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Figure

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

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - ASTM D 2844

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	109.3	13.5	0.00	13	2.70	795	85	87
2	350	109.9	14.5	0.00	15	2.60	394	83	84
3	350	111.2	15.6	0.00	24	2.50	156	74	74

Test Results	Material Description
R-value at 300 psi exudation pressure = 81	FILL SAND RILITE PIT
Project No.: 1009 Project: RILITE AGGREGATES-QUALITY TESTING Location: PLANT STOCKPILE Sample Number: 29335 Date: 3/12/2015	Tested by: G. MORALES Checked by: S. VINEIS Remarks: RECEIVED 3/6/2015
R-VALUE TEST REPORT Construction Materials Engineers, Inc.	Figure 1A