

6980 Sierra Center Parkway, Suite 90  
Reno, NV 89511

February 19, 2013

File: 1009

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

**RE: Rilite Pit Type 2, Class B Aggregate Base**

Dear Mr. Benna:

Per your request, we have performed testing on the Type 2, Class B aggregate base received by our laboratory on February 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	
	Rilite Pit	Local Standard Specification*
1 Inch	100	100
¾ Inch	94	90 - 100
½ Inch	84	-
¾ Inch	78	-
No. 4	50	35 - 65
No. 8	28	-
No. 10	25	25 - 53
No. 16	19	15 - 40
No. 30	14	-
No. 40	12	12 - 28
No. 50	10	-
No. 100	8	-
No. 200	5.8	2 - 10

Fractured Faces (ASTM D5821)	
Rilite Pit	Specification*
81.6%	35% Minimum

Atterberg Limits (ASTM D4318)		
	Rilite Pit	Specification*
Liquid Limit	No Value	35 Maximum
Plasticity Index	Nonplastic	6 Maximum

R-Value (ASTM D2844)	
Rilite Pit	Specification*
75	70 Minimum

Los Angeles Abrasion (ASTM C131)		
	Rilite Pit	Specification*
Percent Loss After 500 Revolutions (Grading B)	36.0%	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, 2001.

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Moisture Density (ASTM D1557C)	
Maximum Dry Density	117.0 PCF
Optimum Moisture	12.0%

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.**

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Laboratory Manager  
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Roger O. Corkill Jr., PE  
Project Coordinator  
RE Number 19868  
Expiration Date 12-31-14  
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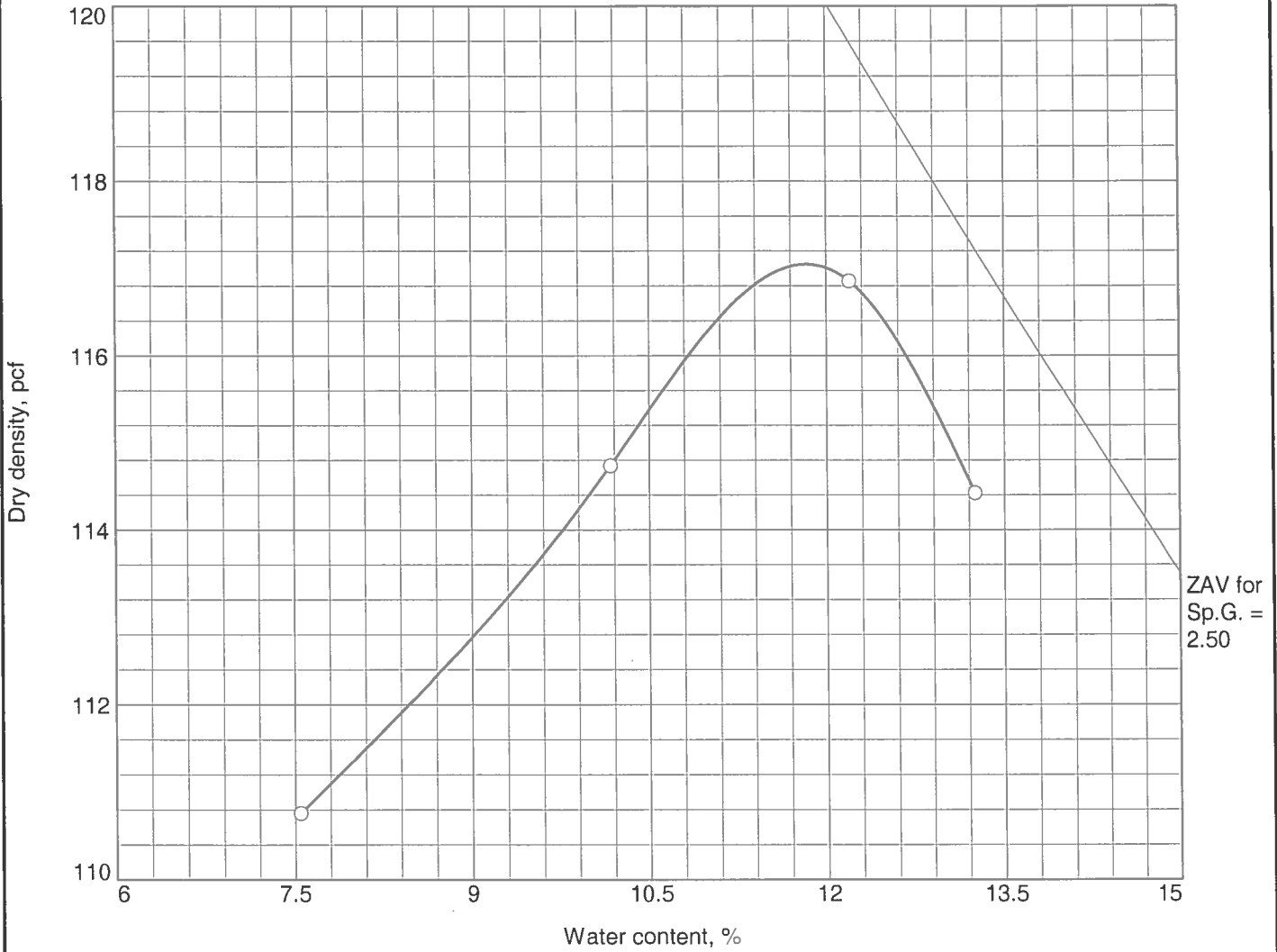


SLV:ROC:jy

Enclosures


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# MOISTURE DENSITY CURVE



Test specification: ASTM D 1557-07 Method C Modified

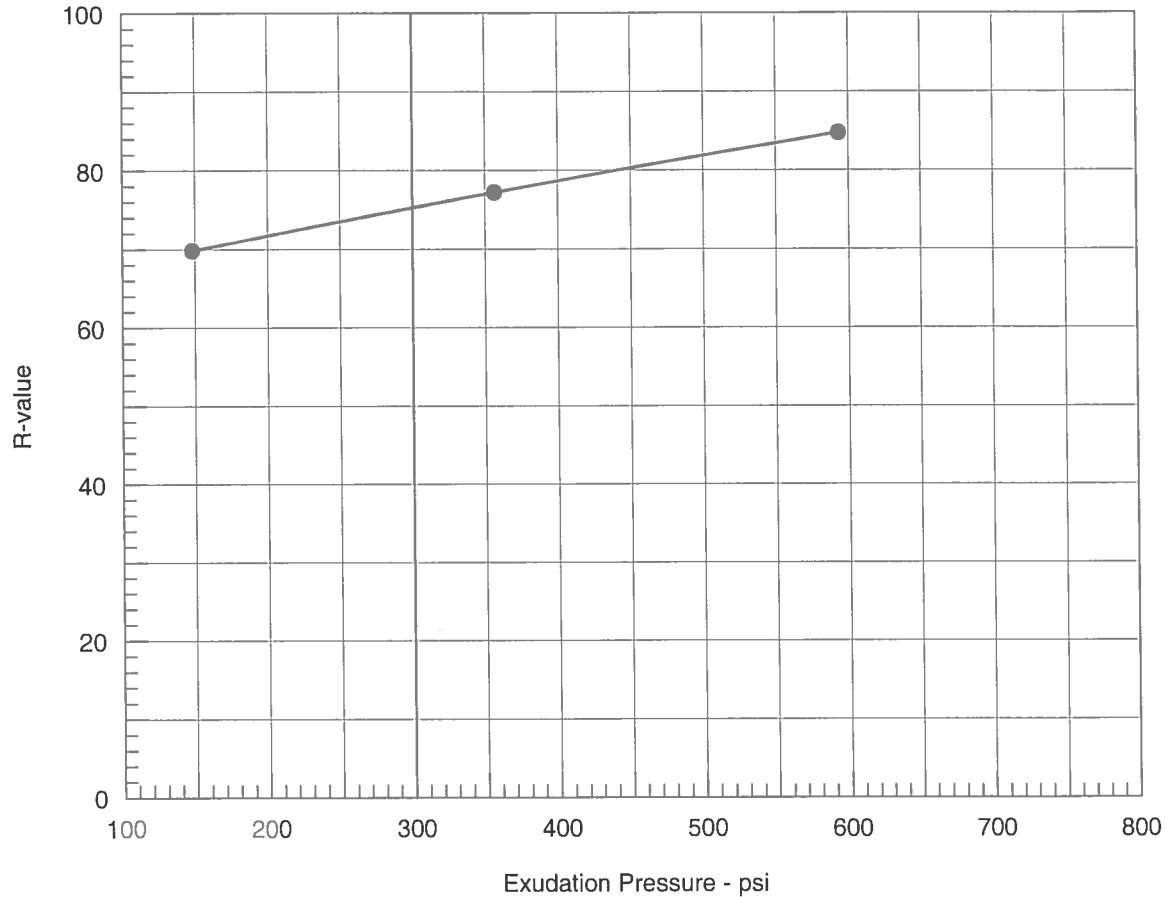
Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% >	% <
	USCS	AASHTO					3/4 in.	No.200
							1.6	

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 117.0 pcf Optimum moisture = 12.0 %	AGGREGATE BASE TYPE 2 CLASS B RILITE PIT
<b>Project No.</b> 1009 <b>Client:</b> RILITE AGGREGATES <b>Project:</b> RILITE AGGREGATES-AGGREGATE QUALITY TESTING  ○ <b>Location:</b> PLANT STOCKPILE <b>Sample Number:</b> 27844	<b>Remarks:</b> RECEIVED 2/8/2013
	<b>Figure</b>

Tested By: D. NASH

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	115.9	11.3	0.00	16	2.45	593	85	85
2	350	115.0	12.0	0.00	21	2.40	356	79	77
3	350	107.9	13.0	0.00	29	2.50	148	70	70

Test Results	Material Description
R-value at 300 psi exudation pressure = 75	AGGREGATE BASE TYPE 2 CLASS B RILITE PIT
<b>Project No.:</b> 1009 <b>Project:</b> RILITE AGGREGATES-AGGREGATE QUALITY TESTING <b>Location:</b> PLANT STOCKPILE <b>Sample Number:</b> 27844 <b>Date:</b> 2/15/2013	<b>Tested by:</b> S. VINEIS <b>Checked by:</b> R. CORKILL, JR. <b>Remarks:</b> RECEIVED 2/8/2013
R-VALUE TEST REPORT Construction Materials Engineers, Inc.	<b>Figure 1A</b>