



2010

Product Data Sheet
Plant: Blue Ridge

I. GEOLOGICAL FORMATION: Conococheague Limestone

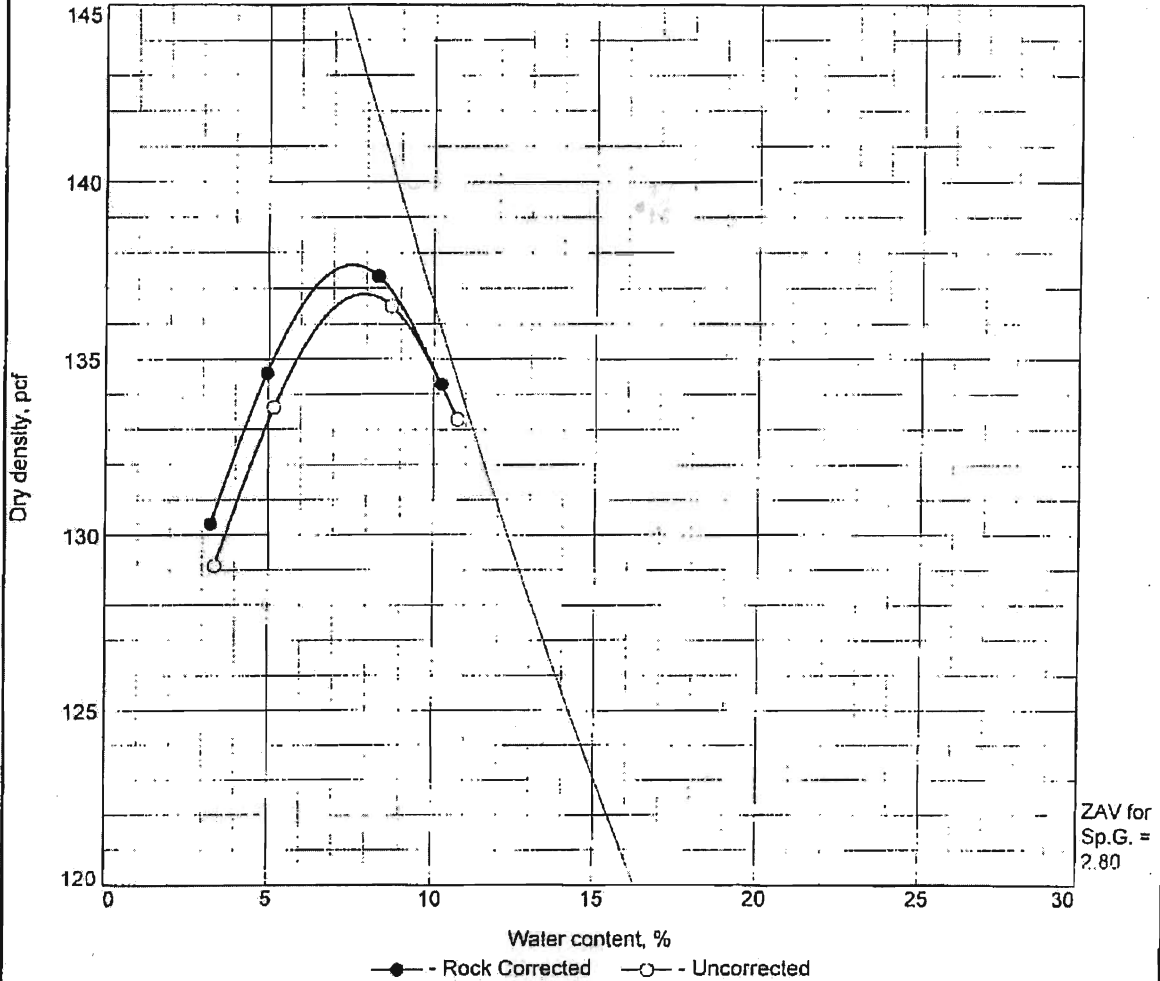
II. CHEMICAL ANALYSIS (March 2010) :

Silica	as SiO2	9.7%	Calcium	29.60% as CaCO3	73.8%
Iron	as Fe2O3	0.9%	Magnesium	6.40% as MgCO3	22.2%
Aluminum	as Al2O3	2.2%	Calcium Carbonate Equiv.	CCE	100.2%
Sulfur	as S	0.1%			

III. QUALITY DATA:

TEST	TEST DATE	Product											
		1	3	5	IMP 57	Coarse 57	68	78	8/8P	9	A Sand	10 Block Mix	
* SPECIFIC GRAVITY *													
BULK (ASPHALT)	2/10	2.724	2.803	2.773	2.767	2.757	2.741	2.764	2.737	2.743	2.697	2.728	
BULK - SSD (CONCRETE)	2/10	2.734	2.812	2.781	2.772	2.766	2.749	2.772	2.745	2.759	2.723	2.746	
APPARENT	2/10	2.753	2.829	2.796	2.781	2.781	2.764	2.787	2.760	2.789	2.769	2.777	
% ABSORPTION	2/10	0.40%	0.3%	0.3%	0.2%	0.3%	0.3%	0.3%	0.3%	0.6%	1.0%	0.6%	
* UNIT WEIGHT *													
DRY RODDED (LBS/CUBIC FT)	2/10	96	98.3	98.0	102.8	98.4	101.3	103.8	97.4	97.4	100.1	116.8	
DRY RODDED (LBS/CUBIC YARD)	2/10	2592.0	2654.1	2646.0	2775.6	2656.8	2735.1	2802.6	2629.8	2629.8	2702.7	3153.6	
DRY RODDED (% VOIDS)	2/10	43.5	42.3%	43.2%	40.5%	42.8%	40.8%	39.8%	43.1%	43.1%	40.5%	31.4%	
DRY RODDED (Kg/Cubic Meter)	2/10	1538	1575	1570	1647	1576	1623	1663	1560	1560	1603	1871	
VTM-5 % VOIDS IN STONE SAND	2/10										50.2%	50.5%	
ASTM C1252 % VOIDS (METH B)	2/10										49.3%	50.1%	
ASTM C1252 % VOIDS (METH C)	2/10										44.2%	40.2%	
ASTM D4791 % F & E (3:1)	2/10	24.9%	16.8%	7.7%	10.3%	9.3%	14.0%	11.1%	11.8%	NA			
* LOS ANGELES DEGRADATION *													
GRADING A % LOSS	2/10	16.2%											
GRADING B % LOSS	2/10	16.7%											
GRADING C % LOSS	2/10	16.5%											
SOUNDNESS % LOSS (Magnesium Sulfate)	2/10	0.6%	0.6%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	9.3%	8.9%	8.5%	
SOUNDNESS % LOSS (Sodium Sulfate)													
Surface Treatment Rate of Application													
Stone (lb/sq yd)													
Emulsion (gal/sq yd)													
* SUPERPAVE *													
ASTM C1252 % VOIDS (METH A)	2/10										45.8%	45.6%	
AASHTO T 176 SAND EQUIVALENT	2/10										88	77	
ASTM D4791 % F & E (5:1)	2/10	0.00%	2.7%	0.3%	1.2%	2.1%	3.0%	2.4%	2.5%				

COMPACTION TEST



Test specification: AASHTO T 99 Method D Standard
 ASTM D 4718-87/AASHTO T 224-86 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
--	--	--	--	--	--	--	5.1	--

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 137.7 pcf	136.8 pcf	21B aggregate
Optimum moisture = 7.6 %	7.9 %	

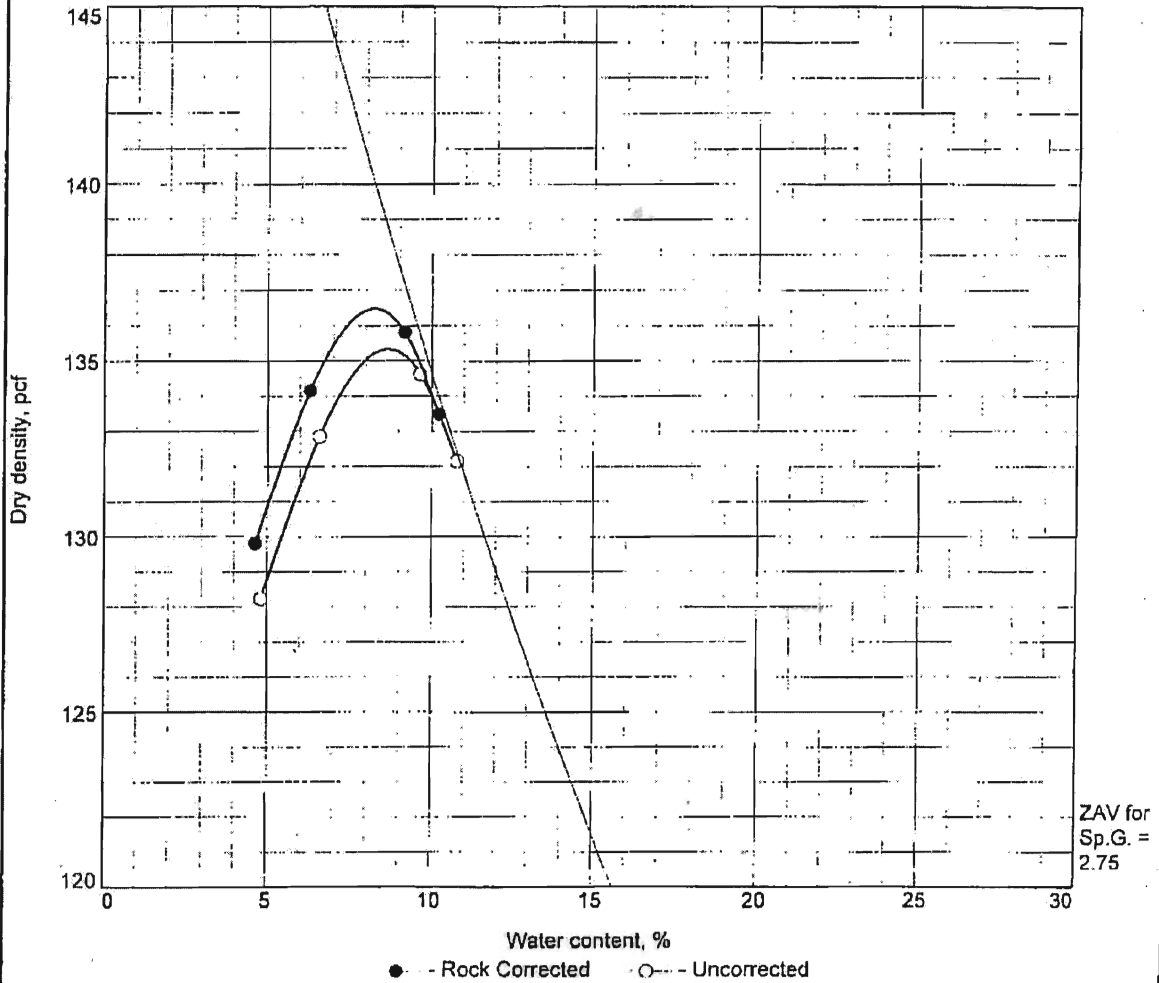
Project No. K62-063T Client: Boxley Materials Company Project: Laboratory testing Sample Source: Blue Ridge Depth: -- Sample No.: 107262	Remarks: June 15, 2009 Assumed sp. gr. of +3/4": 2.72
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Figure

Assumed sp. gr. for ZAV: 2.80

COMPACTION TEST



Test specification: AASHTO T 99 Method D Standard
 ASTM D 4718-87/AASHTO T 224-86 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
--	--	--	--	--	--	--	6.3	--

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 136.5 pcf	135.3 pcf	21A aggregate
Optimum moisture = 8.2 %	8.7 %	

Project No. K62-063T Client: Boxley Materials Company Project: Laboratory testing Sample Source: Blue Ridge Depth: -- Sample No.: 107261	Remarks: June 9, 2009 Assumed sp. gr. of +3/4": 2.72
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Figure

Assumed sp. gr. for ZAV: 2.75



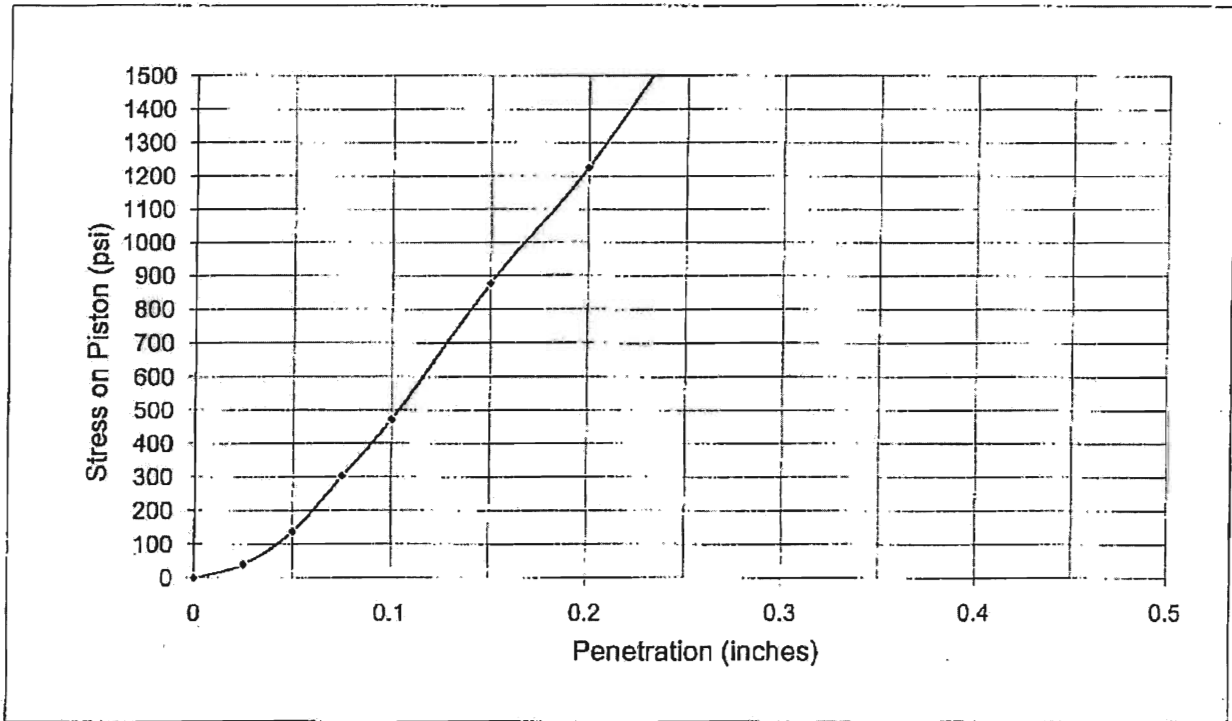
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 1734 Seibel Drive, N.E., Roanoke, Virginia 24012
 Telephone: (540) 344-7939 Fax: (540) 344-3657

California Bearing Ratio (AASHTO T-193)

Record No.: K62-063T

Client: Boxley Materials Company
 Project: Laboratory testing
 Source: Blue Ridge

Test Date: 22-Jun-09
 Tested By: M R Henry
 Compaction method: AASHTO T-99
 Soaked CBR
 Unsoaked CBR



CBR: penetration @ 0.2 in. (corrected)

96.1

Maximum Dry Density (pcf):

135.1

Optimum Moisture Content (%):

9.0

Swell (%):

0.0

Dry Density Before Soaking (pcf):

134.7

Visual Description:

Dry Density After Soaking (pcf):

135.6

Select Material Type 1

Retained on 3/4 inch sieve (%):

7.0

Surcharge Weight (pounds):

15.0

F&R Lab No.: 107271

Moisture Content Before Soaking (%):

8.7

Moisture Content After Soak, Top in. (%):

6.7

Source: Blue Ridge

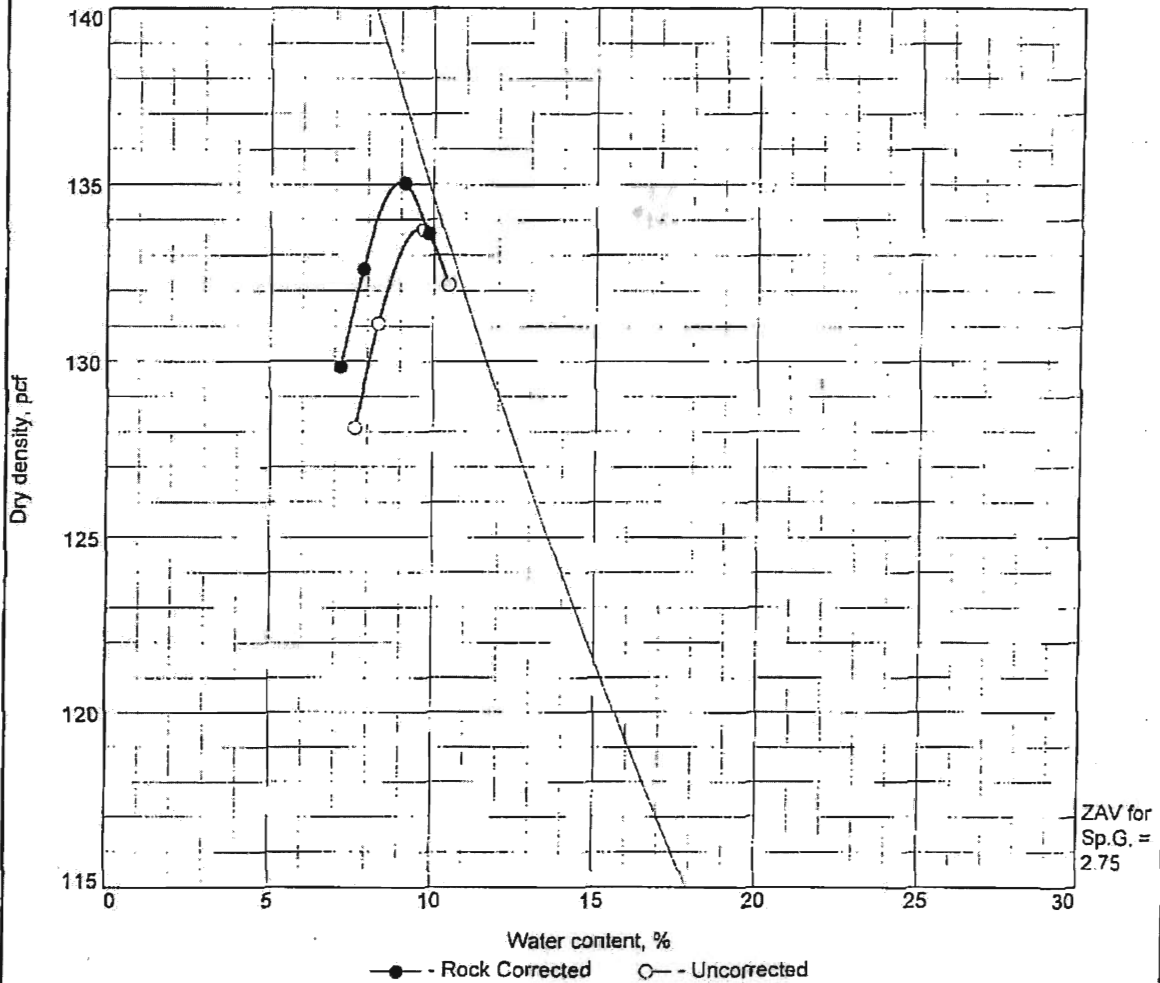
Moisture Content After Soak, Avg. (%):

6.8

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By: Frank Jan

COMPACTION TEST



Test specification: AASHTO T 99 Method D Standard
 ASTM D 4718-87/AASHTO T 224-86 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
--	--	--	--	--	--	--	7.0	--

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 135.1 pcf	133.8 pcf	Select Material Type I
Optimum moisture = 9.0 %	9.5 %	

Project No. K62-063T Client: Boxley Materials Company Project: Laboratory testing Sample Source: Blue Ridge Depth: -- Sample No.: 107271	Remarks: June 15, 2009 Assumed sp. gr. of +3/4": 2.72
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Figure

Assumed sp. gr. for ZAV: 2.75