



2011

Product Data Sheet
Plant: Rich Patch

I. GEOLOGICAL FORMATION: Egglestone, Edinburg, Lincolnshire, and New Market Limestone

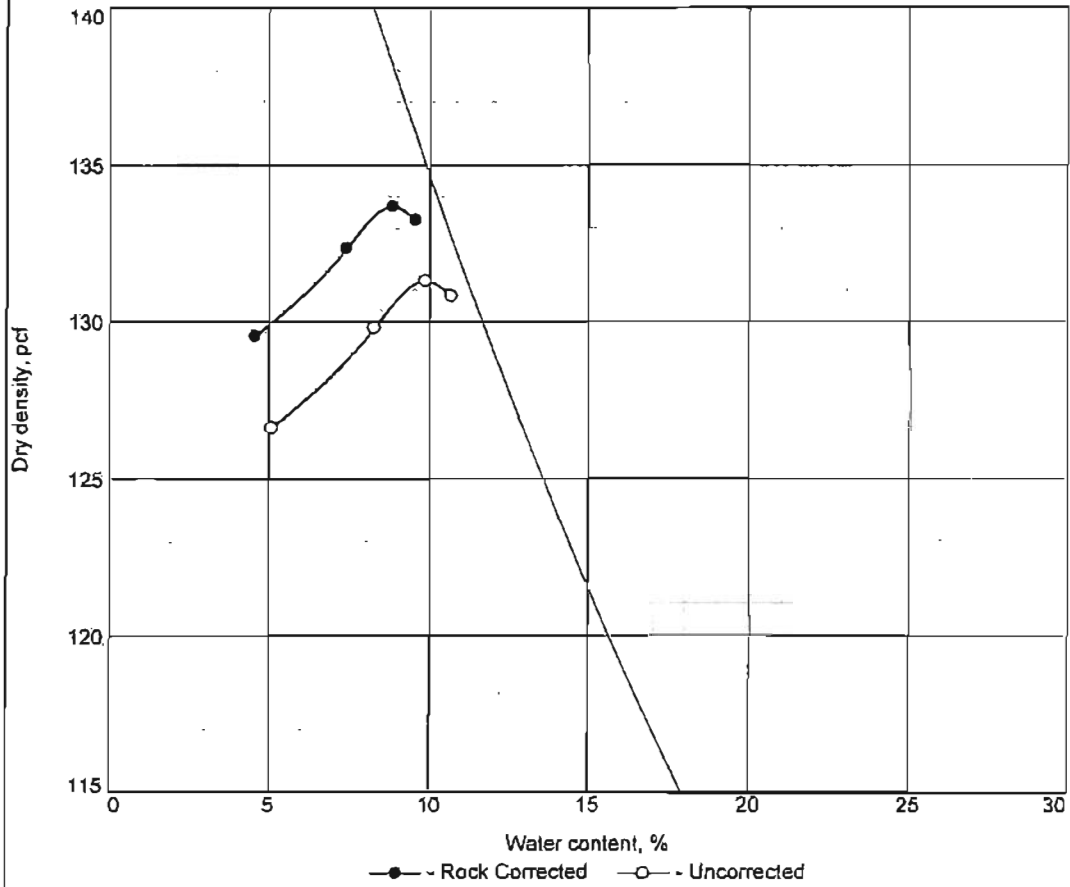
II. CHEMICAL ANALYSIS (March 2011) :

Silica	as SiO2	8.0%	Calcium	34.9% as CaCO3	87.3%
Iron	as Fe2O3	0.7%	Magnesium	3.10% as MgCO3	10.5%
Aluminum	as Al2O3	1.7%	Calcium Carbonate Equiv.	CCE	99.8%
Sulfur	as S	0.1%			

III. QUALITY DATA:

			Product										
TEST	TEST DATE		1	2	357	57	68	78	8	9	10		
* SPECIFIC GRAVITY *													
BULK (ASPHALT)	3/11		2.726	2.729	2.700	2.718	2.721	2.723	2.704	2.713	2.632		
BULK - SSD (CONCRETE)	3/11		2.732	2.738	2.710	2.727	2.732	2.736	2.716	2.721	2.683		
APPARENT	3/11		2.741	2.753	2.727	2.743	2.751	2.757	2.738	2.736	2.775		
% ABSORPTION	3/11		0.2	0.3%	0.4%	0.3%	0.5%	0.5%	0.5%	0.3%	2.0%		
* UNIT WEIGHT *													
DRY RODDED (LBS/CUBIC FT)	3/11		89.0	98.0	96.5	95.8	97.5	97.6	95.5	98.2	95.1		
DRY RODDED (LBS/CUBIC YARD)	3/11		2403	2646	2606	2587	2633	2635	2579	2651	2568		
DRY RODDED (% VOIDS)	3/11		47.7%	42.5%	42.7%	43.5%	42.6%	42.6%	43.4%	42.0%	42.1%		
DRY RODDED (Kg/Cubic Meter)	3/11		1426	1570	1546	1535	1562	1563	1530	1573	1523		
VTM-5 % VOIDS IN STONE SAND	3/11										52.2%		
ASTM C1252 % VOIDS (METH B)	3/11										51.6%		
ASTM C1252 % VOIDS (METH C)	3/11										42.4%		
ASTM D4791 % F & E (3:1)	3/11		NA	2.6%	9.1%	7.0%	13.5%	14.1%	14.7%				
* LOS ANGELES DEGRADATION *													
GRADING A % LOSS	3/11	19.3%											
GRADING B % LOSS	3/11	17.3%											
GRADING C % LOSS	3/11	18.9%											
SOUNDNESS % LOSS (Magnesium Sulfate)			0.3%	0.3%	0.4%	0.7%	0.7%	0.7%	0.7%	5.5%	12.3%		
SOUNDNESS % LOSS (Sodium Sulfate)													
Surface Treatment Rate of Application													
Stone (lb/sq yd)													
Emulsion (gal/sq yd)													
* SUPERPAVE *													
ASTM C1252 % VOIDS (METH A)	3/11										47.2%		
AASHTO T 176 SAND EQUIVALENT	3/11										56		
ASTM D4791 % F & E (5:1)	3/11		NA	0.0%	0.1%	0.0%	0.7%	0.0%	2.2%				

COMPACTION TEST



ZAV for Sp.G. = 2.75

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						
-	-	-	-	-	-	-	11.1	-

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 133.7 pcf	131.3 pcf	21B aggregate
Optimum moisture = 8.8 %	9.8 %	

Project No. K62-063T **Client:** Boxley Materials Company
Project: Laboratory testing
Sample Source: Rich Patch **Depth:** - **Sample No.:** 107275
FROEHLING & ROBERTSON, INC.

Remarks:
 July 15, 2009
 Assumed sp. gr. of +3/4": 2.72

 Figure

Assumed sp. gr. for ZAV: 2.75



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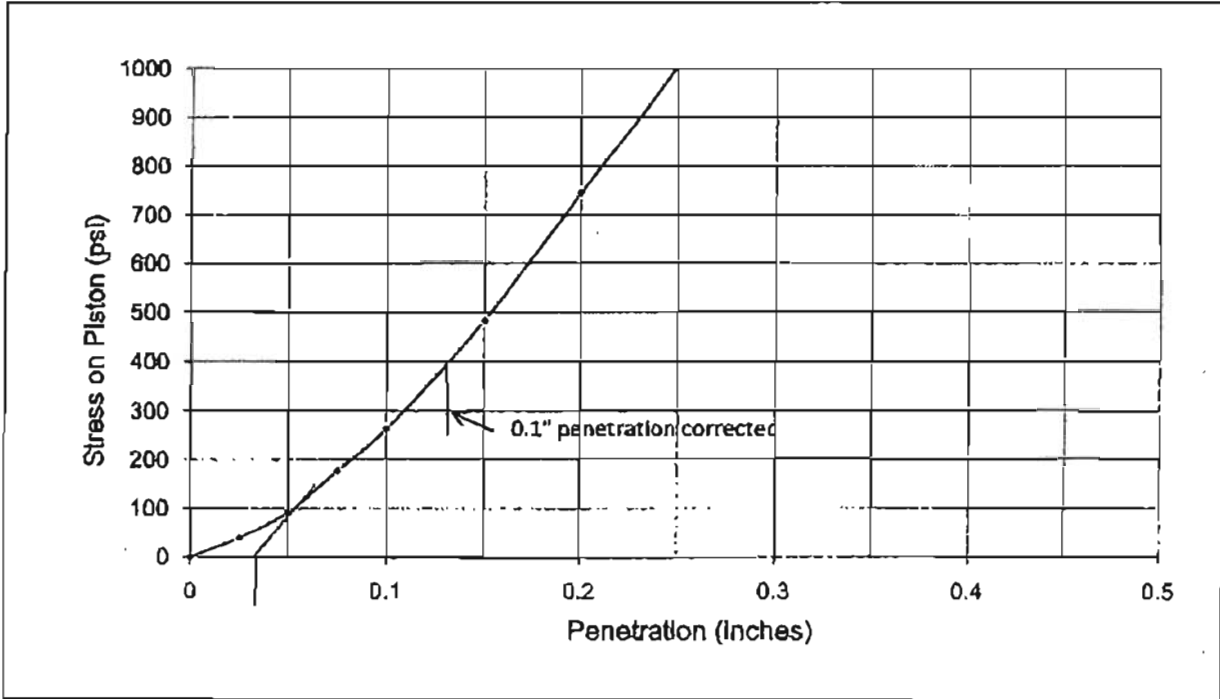
California Bearing Ratio (AASHTO T-193)

Record No.: K62-063T

Client: Boxley Materials Company
 Project: Laboratory testing
 Source: Rich Patch

Test Date: 30-Jun-09
 Tested By: M R Henry
 Compaction method: AASHTO T-99

Soaked CBR
 Unsoaked CBR



CBR: penetration @ 0.2 in. (corrected)	<u>61.3</u>
Swell (%)	<u>0.0</u>
Dry Density Before Soaking (pcf)	<u>135.7</u>
Dry Density After Soaking (pcf)	<u>136.4</u>
Retained on 3/4 inch sieve (%)	<u>8.1</u>
Surcharge Weight (pounds)	<u>15.0</u>
Moisture Content Before Soaking (%)	<u>6.1</u>
Moisture Content After Soak, Top in. (%)	<u>6.5</u>
Moisture Content After Soak, Avg. (%)	<u>7.0</u>

Maximum Dry Density (pcf):	<u>139.6</u>
Optimum Moisture Content (%):	<u>6.6</u>

Visual Description:
 Select Material Type I

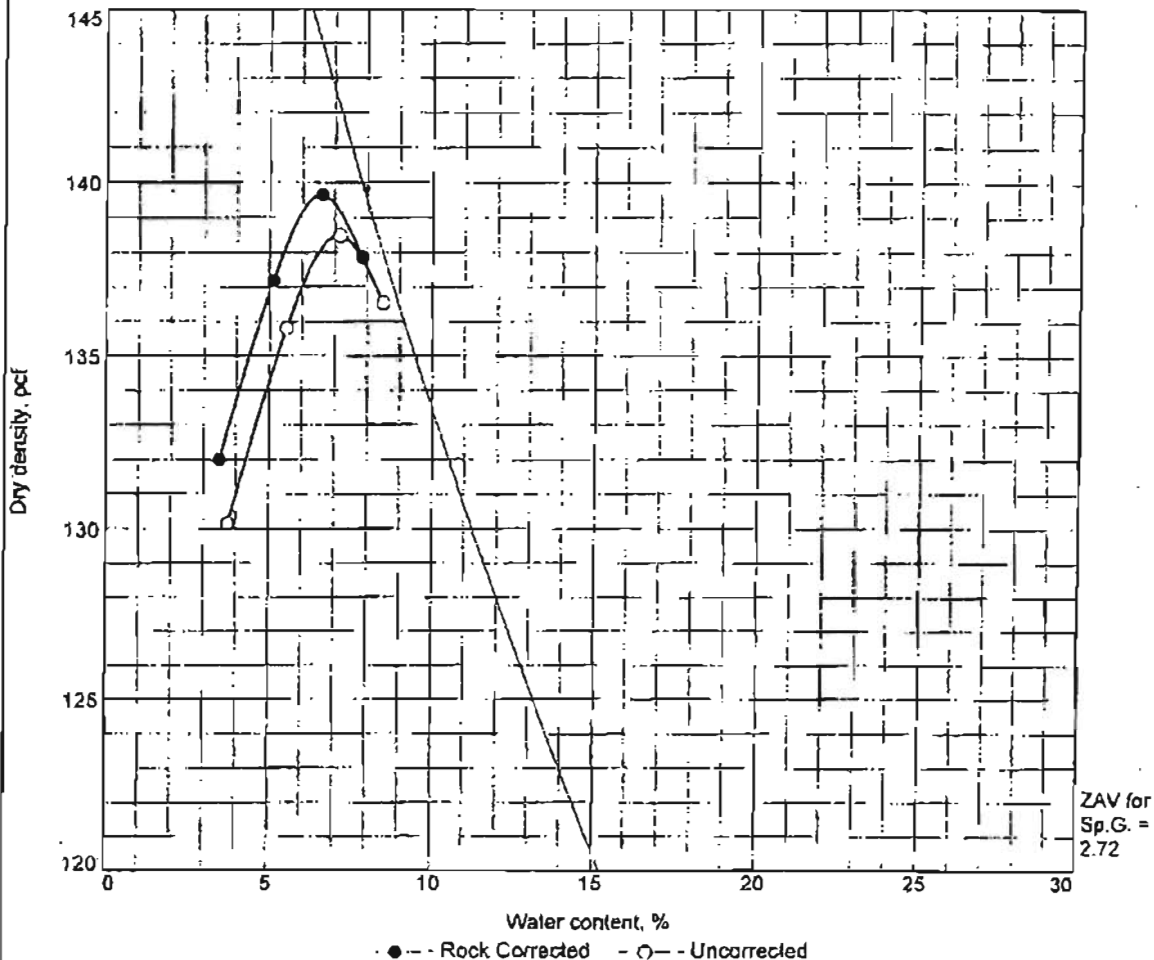
F&R Lab No.: 107274

Source: Rich Patch

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By: *Frank Jan*

COMPACTION TEST



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	USCS	AASHTO						
--	--	--	--	--	--	--	8.1	--

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 139.6 pcf	138.5 pcf	Select Material Type I
Optimum moisture = 6.6 %	7.1 %	

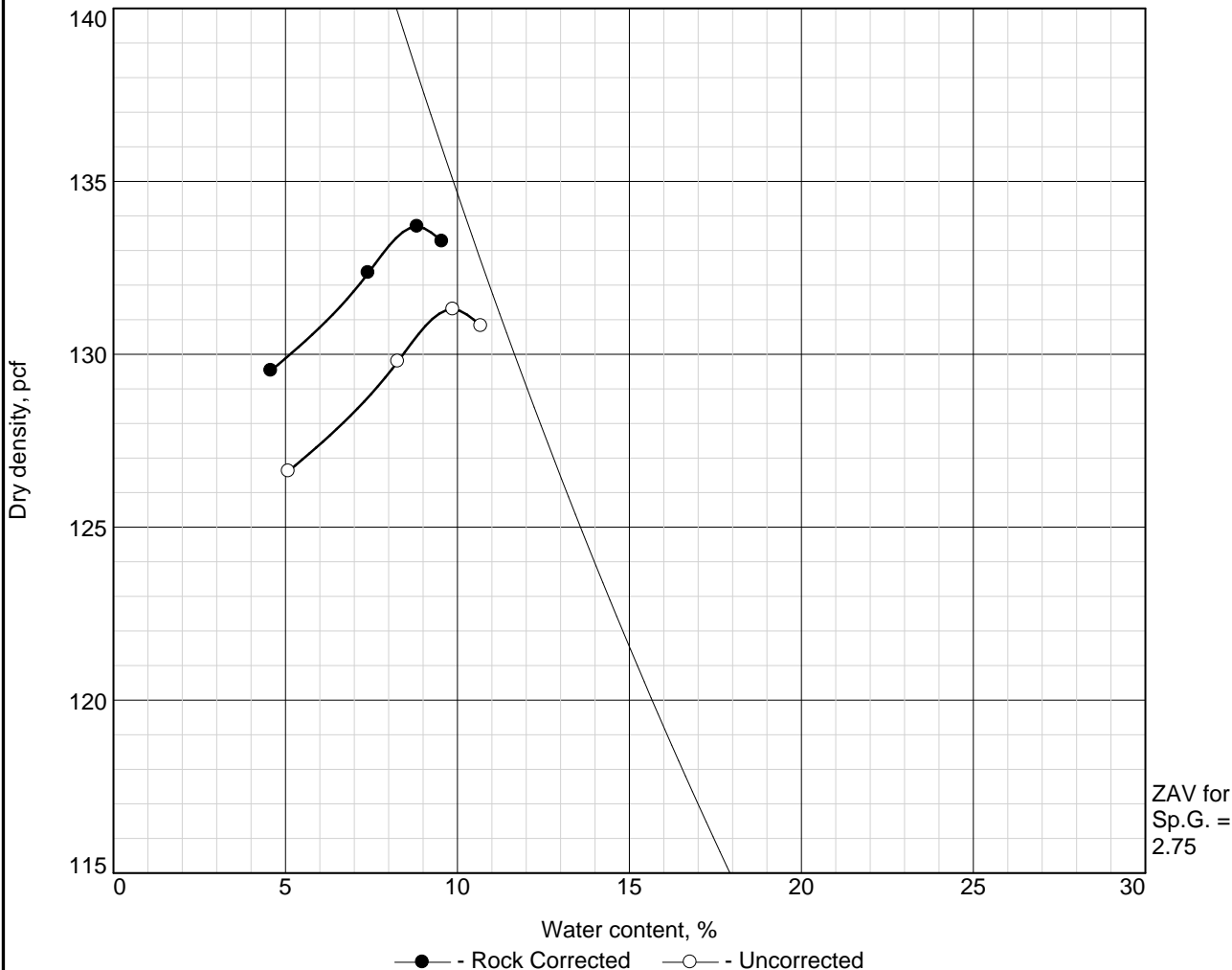
Project No. K62-063T Client: Boxley Materials Company Project: Laboratory testing Sample Source: Rich Patch Depth: -- Sample No.: 107274	Remarks: June 29, 2009 Assumed sp. gr. of +3/4": 2.72
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Figure

Assumed sp. gr. for ZAV: 2.72

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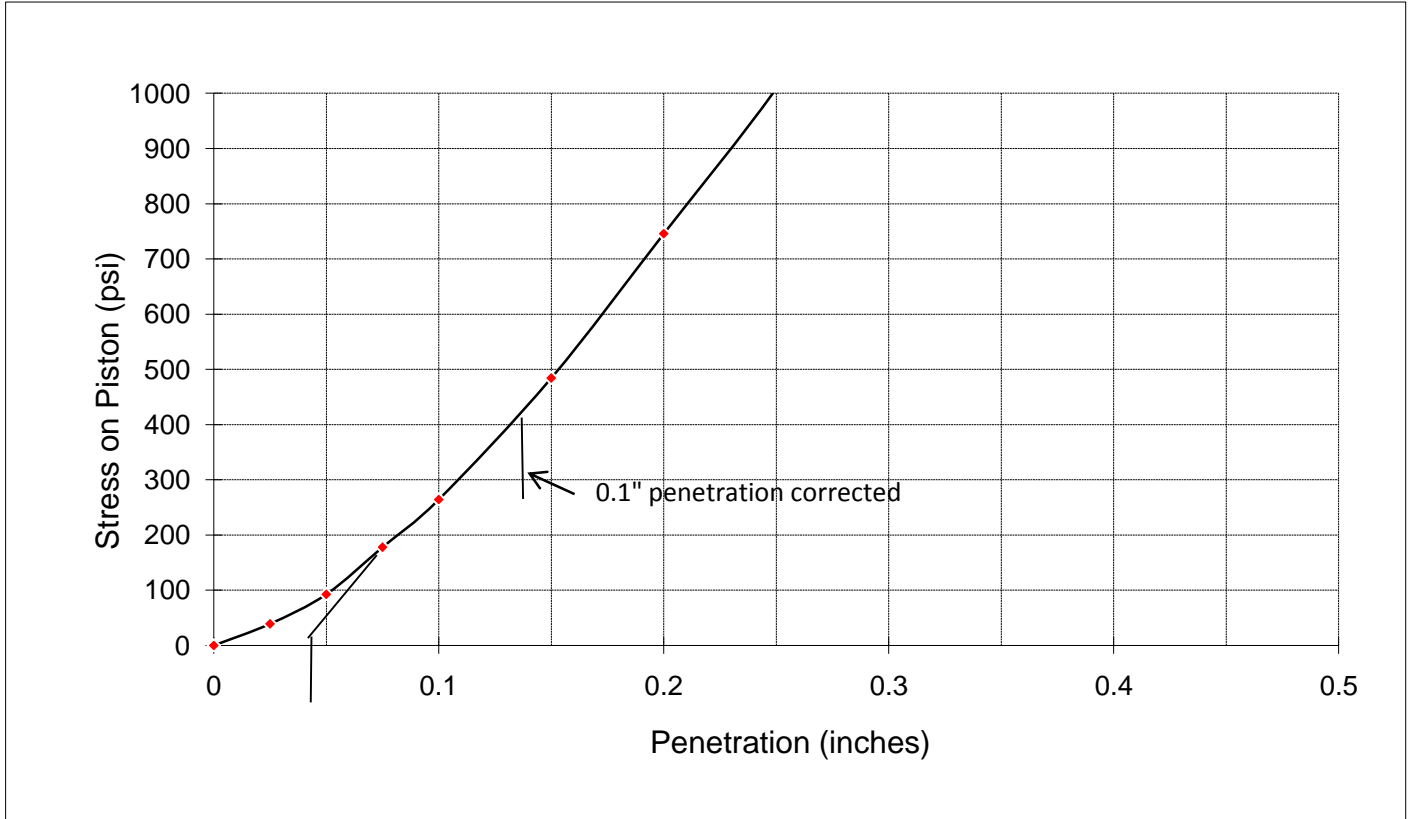
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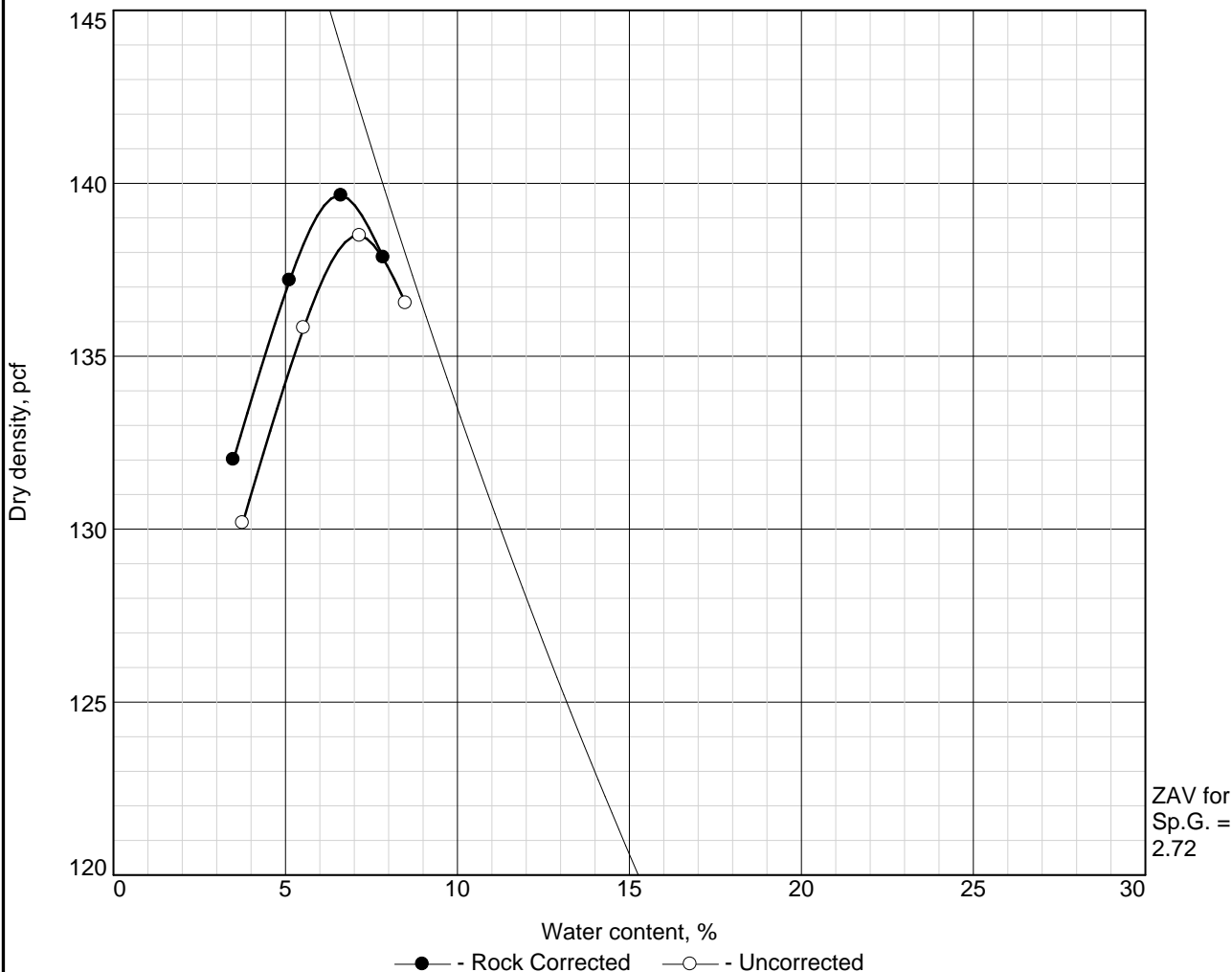
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FROEHLING & ROBERTSON, INC.

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