



2010

Product Data Sheet
Plant: Lawyers Road

I. GEOLOGICAL FORMATION: ARCH MARBLE

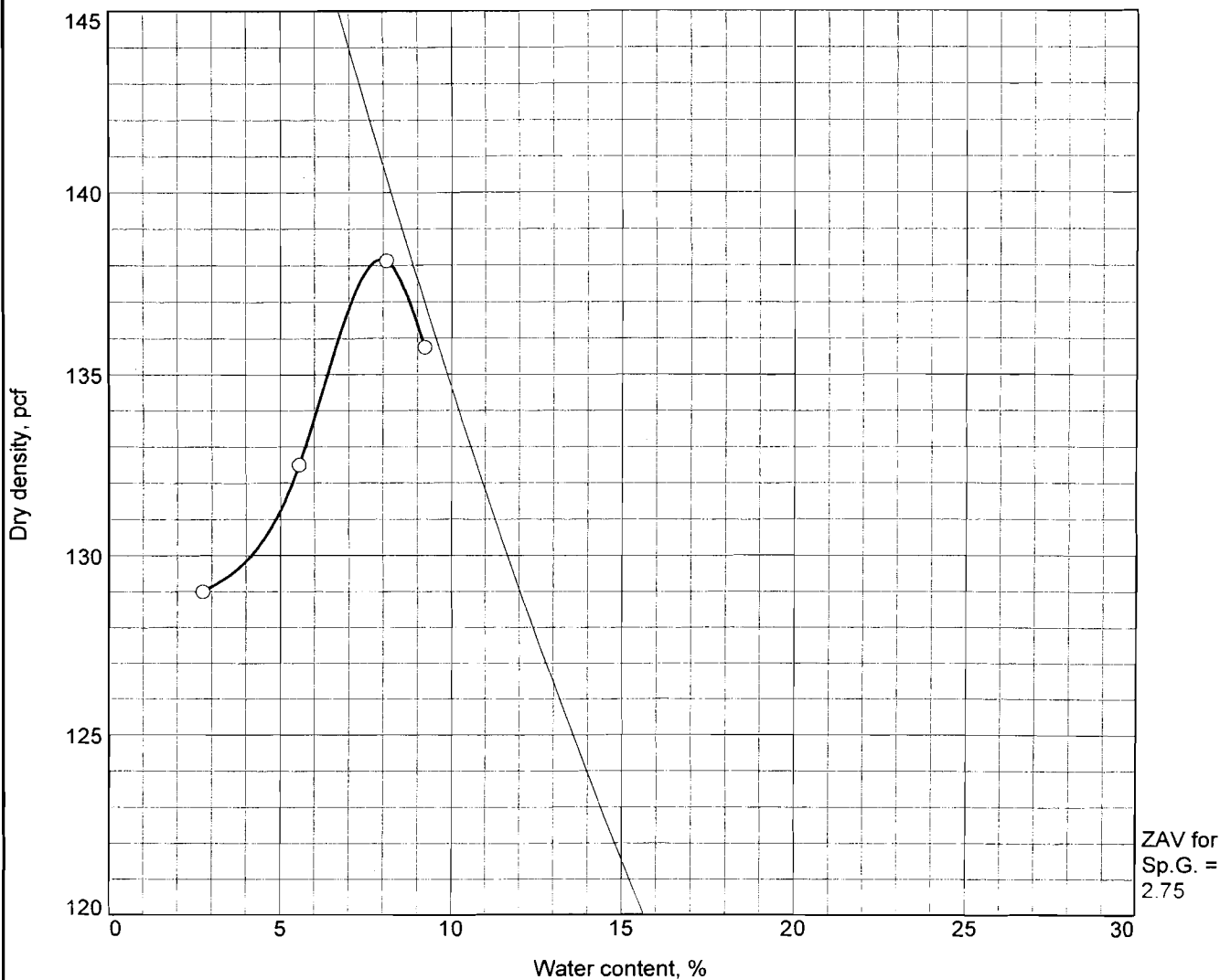
II. CHEMICAL ANALYSIS (March 2010) :

Silica	as SiO ₂	21.5%	Calcium	24.9% as CaCO ₃	62.1%
Iron	as Fe ₂ O ₃	2.5%	Magnesium	1.5% as MgCO ₃	5.2%
Aluminum	as Al ₂ O ₃	7.2%	Calcium Carbonate Equiv.	CCE	68.4%
Sulfur	as S	0.2%			

III. QUALITY DATA:

TEST	TEST DATE	Product											
		40	357	57	W 57	68	78	8/8P	9	Concrete Sand	Asphalt Sand	10	
* SPECIFIC GRAVITY *													
BULK (ASPHALT)	3/10	2.714	2.716	2.714	2.717	2.714	2.701	2.702	2.675	2.710	2.676	2.715	
BULK - SSD (CONCRETE)	3/10	2.725	2.726	2.724	2.724	2.724	2.716	2.717	2.700	2.722	2.701	2.736	
APPARENT	3/10	2.743	2.744	2.740	2.738	2.741	2.744	2.744	2.743	2.743	2.744	2.773	
% ABSORPTION	3/10	0.4%	0.4%	0.4%	0.3%	0.4%	0.6%	0.6%	0.9%	0.4%	0.9%	0.8%	
3													
DRY RODDED (LBS/CUBIC FT)	3/10	94.5	93.9	98.6	98.5	101.6	96.1	94.5	92.1	102.1	102.8	112.4	
DRY RODDED (LBS/CUBIC YARD)	3/10	2552	2535	2662	2660	2743	2595	2552	2487	2757	2776	3035	
DRY RODDED (% VOIDS)	3/10	44.2%	44.6%	41.8%	41.9%	40.0%	43.0%	44.0%	44.8%	39.6%	38.5%	33.6%	
DRY RODDED (Kg/Cubic Meter)	3/10	1514	1504	1579	1578	1627	1539	1514	1475	1635	1647	1800	
VTM-5 % VOIDS IN STONE SAND	3/10									55.2%	54.1%	56.4%	
ASTM C1252 % VOIDS (METH B)	3/10									54.4%	53.4%	55.5%	
ASTM C1252 % VOIDS (METH C)	3/10									44.2%	42.8%	43.2%	
ASTM D4791 % F & E (3:1)	3/10		37.0%	25.9%	20.7%	28.3%	41.6%	44.8%					
0													
GRADING A % LOSS	3/10	21.8%											
GRADING B % LOSS	3/10	20.6%											
GRADING C % LOSS	3/10	21.8%											
SOUNDNESS % LOSS (Magnesium Sulfate)	3/10	1.7%	44.1%	0.7%	0.3%	0.3%	0.2%	0.1%	3.2%	2.3%	2.4%	1.8%	
SOUNDNESS % LOSS (Sodium Sulfate)													
2.1													
Stone (lb/sq yd)													
Emulsion (gal/sq yd)													
* SUPERPAVE *													
ASTM C1252 % VOIDS (METH A)	3/10									49.8%	48.4%	51.1%	
AASHTO T 176 SAND EQUIVALENT	3/10									92	94	62	
ASTM D4791 % F & E (5:1)	3/10		11.0%	3.1%	2.2%	4.8%	7.6%	9.5%					

COMPACTION TEST REPORT



Test specification: AASHTO T 99 Method D Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
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Assumed sample sp. gr. for ZAV: 2.75

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 138.2 pcf Optimum moisture = 7.9 %	21A aggregate
Project No. K62-063T Client: Boxley Materials Company Project: Laboratory testing ○ Sample Source: Lawyer's Road Depth: -- Sample No.: 107236	Remarks: April 17, 2009
FROEHLING & ROBERTSON, INC.	
Figure	