



Testing Laboratory
Certificate #1552-01



ISTRC NEW MIX LAB, L.L.C.

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Report of Test Results

Report To: Mr. Paul Hagy & Mr. Dennis Klene, Jr.

TEXAS SPORTS SANDS

Address: 1919 S. Shiloh, Suite 312-LB2
Garland, TX 75042

Report Date: April 8, 2016

Date Received: March 17, 2016

Test Dates: March 22 to 31

Condition of Sample(s): intact

Re: Quality Control

Lab ID & Job Sequence: 16020002 C – 3/8” D-Rock

Gravel Analysis*

Sample # & Type	Sample Description	Gravel Distribution by Size								Coefficients		
		Size reported as Sieve & mm Size [Value Reported is % Retained]								D ₁₅ (gravel)	Cu	
		1/2 in. 12.5 mm	3/8 in. 9.5 mm	1/4 in. 6.3 mm	#5 4.0 mm	#7 2.8 mm	#10 2.0 mm	#18 1.0 mm	< #18			
	USGA Recommended Specifications for Gravel without the Intermediate Layer	0.00%								≤ 5%		≤ 3.0
9 G	North Texas 3/8” D-Rock	0.18	12.86	36.03	34.21	12.37	3.07	0.82	0.46	3.83	2.66	

*ASTM C136

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USGA Gravel Recommendations When Intermediate Layer Is Not Used

	Sample # & Type	Sample Description	Proposed Root Zone Sand/Mix
	9 G	North Texas 3/8" D-Rock	None Specified
Bridging Factor	D ₁₅ (gravel) less than or equal to 8 x D ₈₅ (root zone)		Sand D₈₅ must be at least 0.48
Permeability Factor	D ₁₅ (gravel) greater than or equal to 5 x D ₁₅ (root zone)		Sand D₁₅ must be less than 0.77
Uniformity Factors	D ₉₀ (gravel) / D ₁₅ (gravel) less than or equal to 3.0		Complies [Cu of 2.15 is less than 3.0]
	No particles greater than 12.0 mm		Fails [0.18% retained on the 1/2" sieve - the amount is so small that it does not affect the ability of the gravel to perform]]
	Not more than 10% less than 2.0 mm		Complies [only 1.28% of the particles were smaller than 2.0 mm]
	Not more than 5% less than 1.0 mm		Complies [only 0.46% of the particles were smaller than 1.0 mm]

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Comments:

None

[Note: The opinions expressed in this report are outside the scope of the A2LA certification in accordance with ISO/IEC 17025, as amended from time to time.]

Sincerely;

New Mix Lab

A handwritten signature in blue ink, appearing to read 'R. Oppold', written over a large, loopy flourish.

by:

Robert S. Oppold, COO
Quality Manager