



## Premium Northern White Sands

PROPERTIES		UNITS/METHOD		16/30		20/40		30/50		40/70		50/140	
<b>TYPICAL SIEVE ANALYSIS</b>		SIEVE NO.	% RETAINED	SIEVE NO.	% RETAINED	SIEVE NO.	% RETAINED	SIEVE NO.	% RETAINED	SIEVE NO.	% RETAINED	SIEVE NO.	% RETAINED
		16	0.0	20	1.4	30	0.5	40	1.9	50	2.7		
		18	98.5	25	97.2	35	98.1	45	98.0				
		20		30		40		50					
		25		35		45		60					
		30		40		50		70					
		40	1.5	50	1.4	60	1.3	100	0.0	200	0.0		
		Pan	<1	Pan	<1	Pan	<1	Pan	<1	Pan	<1	Pan	<1
<b>SPHERICITY</b>	Krumbein	0.9		0.8		0.7		0.7		0.8			
<b>ROUNDNESS</b>	Krumbein	0.9		0.8		0.7		0.7		0.7			
<b>TURBIDITY</b>	NTU	35		31		223		30		36			
<b>MEAN PARTICLE DIAMETER</b>	mm	0.803		0.619		0.439		0.328		0.221			
<b>BULK DENSITY</b>	g/cc	1.57		1.54		1.55		1.51		1.50			
<b>BULK DENSITY</b>	lb/ft <sup>3</sup>	97.70		96.32		96.70		93.91		93.50			
<b>SPECIFIC GRAVITY</b>	g/cc	2.63		2.59		2.64		2.64		2.64			
<b>CRUSH</b>		5K		7K		8K		11K		13K			
<b>CLOSURE STRESS</b>	<b>PSI</b>	<b>Conductivity (md-ft)</b>	<b>Permeability (Darcy)</b>	<b>Conductivity (md-ft)</b>	<b>Permeability (Darcy)</b>	<b>Conductivity (md-ft)</b>	<b>Permeability (Darcy)</b>	<b>Conductivity (md-ft)</b>	<b>Permeability (Darcy)</b>	<b>Conductivity (md-ft)</b>	<b>Permeability (Darcy)</b>		
	1000	10802	576	4714	261	2163	121	1246	68	-	-		
	2000	8832	480	4252	238	1956	111	1092	60	-	-		
	4000	4767	271	2961	169	1550	89	878	49	-	-		
	6000	1615	98	1568	92	1053	62	502	29	-	-		
	8000	622	40	838	51	646	39	241	15	-	-		

TESTING DATA REFERENCES: STIMLAB: 11103-2040-NW, 11103-3050-NW, 11103-4070-NW, 11223, 9686; PROPTESTER: 101-15-04-46-18-A, 101-15-04-46-18-B, 101-15-04-46-18-C, 101-15-10-65-09