

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0670-NO. 67  
**Specification** NO. 67

Sample Id	Date	1" (25mm) (%)	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)	SPGR (SSD)
1855873523	04/23/2013 05:55	100.0	91.5	51.6	29.1	9.9	4.3	1.8	0.00	0.70	0.6	2.629	2.644
1855873546	04/23/2013 07:35	100.0	91.6	47.8	26.2	8.7	4.0	1.9	0.00	0.66			
1855873617	04/23/2013 09:00	100.0	90.1	54.3	34.0	14.5	6.5	2.1	0.00	0.84			

	1" (25mm) (%)	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)	SPGR (SSD)
Count	3	3	3	3	3	3	3	3	3	1	1	1
Min	100.0	90.1	47.8	26.2	8.7	4.0	1.8	0.00	0.66	0.6	2.629	2.644
Max	100.0	91.6	54.3	34.0	14.5	6.5	2.1	0.00	0.84	0.6	2.629	2.644
Range	0.0	1.5	6.6	7.8	5.8	2.4	0.4	0.00	0.18	0.0	0.000	0.000
Mean	100.0	91.1	51.2	29.8	11.0	4.9	1.9	0.00	0.73	0.6	2.629	2.644
Median	100.0	91.5	51.6	29.1	9.9	4.3	1.9	0.00	0.70	0.6	2.629	2.644
St Dev	0.00	0.85	3.30	3.96	3.05	1.34	0.18	0.000	0.095			
CV	0.0	0.0	0.1	0.1	0.3	0.3	0.1		0.1			
Skewness	0.0	-0.4	-0.1	0.2	0.3	0.4	0.2	0.0	0.3			
Kurtosis	0.0	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	0.0	-2.3			
Pay Factor												
Lower Target	100	94	56	35		4	1					
Upper Target												
Target												
Lower Spec (LSL)	100	90		20		0	0		0			
Upper Spec (USL)	100	100		55		10	5		1.5			
PWS	100.0	90.2		99.3		100.0	100.0		100.0			
Lower Limit (LCL)	100.0	89.4	44.6	21.9	4.9	2.2	1.5	0.00	0.54			
Upper Limit (UCL)	100.0	92.8	57.8	37.7	17.1	7.6	2.3	0.00	0.92			
PWL	100.0	95.4	95.4	95.4	95.4	95.4	95.4	100.0	95.4			

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0700-NO. 7  
**Specification** NO. 7

Sample Id	Date	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)	SPGR (SSD)
1855873472	04/23/2013 02:40	100.0	93.3	63.9	11.2	4.6	0.00	1.26	0.6	2.629	2.646
1855873482	04/23/2013 03:30	100.0	92.9	60.5	8.3	2.7	0.00	1.03			
1855873516	04/23/2013 04:15	100.0	92.5	52.6	5.8	2.4	0.00	0.70			

	3/4" (19mm) (%)	1/2" (12.5mm) (%)	3/8" (9.5mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)	SPGR (SSD)
Count	3	3	3	3	3	3	3	1	1	1
Min	100.0	92.5	52.6	5.8	2.4	0.00	0.70	0.6	2.629	2.646
Max	100.0	93.3	63.9	11.2	4.6	0.00	1.26	0.6	2.629	2.646
Range	0.0	0.8	11.3	5.4	2.3	0.00	0.56	0.0	0.000	0.000
Mean	100.0	92.9	59.0	8.4	3.2	0.00	1.00	0.6	2.629	2.646
Median	100.0	92.9	60.5	8.3	2.7	0.00	1.03	0.6	2.629	2.646
St Dev	0.00	0.40	5.82	2.70	1.23	0.000	0.281			
CV	0.0	0.0	0.1	0.3	0.4		0.3			
Skewness	0.0	0.1	-0.2	0.1	0.3	0.0	-0.1			
Kurtosis	0.0	-2.3	-2.3	-2.3	-2.3	0.0	-2.3			
Pay Factor										
Lower Target	100	93	59	7	1					
Upper Target										
Target										
Lower Spec (LSL)	100	90	40	0	0					
Upper Spec (USL)	100	100	70	15	5					
PWS	100.0	100.0	97.0	99.3	92.8					
Lower Limit (LCL)	100.0	92.1	47.4	3.0	0.7	0.00	0.44			
Upper Limit (UCL)	100.0	93.7	70.6	13.8	5.7	0.00	1.56			
PWL	100.0	95.4	95.4	95.4	95.4	100.0	95.4			

## Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0955-Concrete Sand  
**Specification** Concrete Sand

Sample Id	Date	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	#12 (1.7mm) (%)	#16 (1.18mm) (%)	#30 (0.6mm) (%)	#50 (0.3mm) (%)	#100 (0.15mm) (%)	#200 (75um) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)
1855873435	04/22/2013 20:30	100.0	99.7	99.6	89.3	72.7	55.8	33.5	16.8	6.4	3.00	0.00	2.80	1.1	2.602
1855873439	04/22/2013 21:30	100.0	100.0	100.0	90.1	73.5	56.8	34.4	17.1	6.7	3.38	0.00	3.28		
1855873443	04/22/2013 22:30	100.0	100.0	99.9	87.5	70.4	53.8	32.3	16.0	6.1	2.88	0.00	2.83		
1855873456	04/22/2013 23:10	100.0	100.0	100.0	87.8	70.5	53.6	32.0	16.0	6.2	2.91	0.00	2.81		

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0955-Concrete Sand  
**Specification** Concrete Sand

	3/8" (9.5mm) (%)	1/4" (6.3mm) (%)	#4 (4.75mm) (%)	#8 (2.36mm) (%)	#12 (1.7mm) (%)	#16 (1.18mm) (%)	#30 (0.6mm) (%)	#50 (0.3mm) (%)	#100 (0.15mm) (%)	#200 (75um) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)
Count	4	4	4	4	4	4	4	4	4	4	4	4	1	1
Min	100.0	99.7	99.6	87.5	70.4	53.6	32.0	16.0	6.1	2.88	0.00	2.80	1.1	2.602
Max	100.0	100.0	100.0	90.1	73.5	56.8	34.4	17.1	6.7	3.38	0.00	3.28	1.1	2.602
Range	0.0	0.3	0.4	2.6	3.1	3.2	2.3	1.1	0.6	0.50	0.00	0.48	0.0	0.000
Mean	100.0	99.9	99.9	88.7	71.8	55.0	33.0	16.5	6.4	3.04	0.00	2.93	1.1	2.602
Median	100.0	100.0	100.0	88.5	71.6	54.8	32.9	16.4	6.3	2.95	0.00	2.82	1.1	2.602
St Dev	0.00	0.15	0.18	1.22	1.54	1.55	1.09	0.54	0.25	0.231	0.000	0.234		
CV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1		0.1		
Skewness	0.0	-0.8	-0.7	0.1	0.1	0.1	0.2	0.1	0.3	0.6	0.0	0.7		
Kurtosis	0.0	-1.7	-1.7	-2.3	-2.3	-2.3	-2.2	-2.3	-2.0	-1.8	0.0	-1.7		
Pay Factor														
Lower Target	100		99	87		54	32	16	7					
Upper Target														
Target														
Lower Spec (LSL)	100		95	80		50	25	5	0					
Upper Spec (USL)	100		100	100		85	60	30	10					
PWS	100.0		100.0	100.0		99.9	100.0	100.0	100.0					
Lower Limit (LCL)	100.0	99.6	99.5	86.3	68.7	51.9	30.8	15.4	5.9	2.58	0.00	2.46		
Upper Limit (UCL)	100.0	100.0	100.0	91.1	74.9	58.1	35.2	17.6	6.9	3.50	0.00	3.40		
PWL	100.0	97.7	97.7	95.4	95.4	95.4	95.4	95.4	95.4	95.4	100.0	95.4		

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0955-Concrete Sand  
**Specification** Concrete Sand

Sample Id	Date	SPGR (SSD)
1855873435	04/22/2013 20:30	2.632
1855873439	04/22/2013 21:30	
1855873443	04/22/2013 22:30	
1855873456	04/22/2013 23:10	

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 0955-Concrete Sand  
**Specification** Concrete Sand

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	SPGR (SSD)
Count	1
Min	2.632
Max	2.632
Range	0.000
Mean	2.632
Median	2.632
St Dev	
CV	
Skewness	
Kurtosis	
Pay Factor	
Lower Target	
Upper Target	
Target	
Lower Spec (LSL)	
Upper Spec (USL)	
PWS	
Lower Limit (LCL)	
Upper Limit (UCL)	
PWL	

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 2924-Sand (A)  
**Specification** Sand (A)

Sample Id	Date	3/8" (9.5mm) (%)	#4 (4.75mm) (%)	1/8" (3.17mm) (%)	#8 (2.36mm) (%)	#10 (2mm) (%)	#16 (1.18mm) (%)	#30 (0.6mm) (%)	#50 (0.3mm) (%)	#100 (0.15mm) (%)	#200 (75um) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)
1855873458	04/22/2013 23:50	100.0	97.3	80.5	66.3	59.0	40.6	26.7	17.8	12.3	8.89	0.00	8.70	2.0	2.561
1855873460	04/23/2013 00:40	100.0	97.2	81.6	67.9	59.8	41.3	26.9	17.6	12.0	8.60	0.00	8.53		
1855873467	04/23/2013 01:10	100.0	96.8	79.5	66.2	58.6	40.5	26.2	17.1	11.8	8.44	0.00	8.35		
		3/8" (9.5mm) (%)	#4 (4.75mm) (%)	1/8" (3.17mm) (%)	#8 (2.36mm) (%)	#10 (2mm) (%)	#16 (1.18mm) (%)	#30 (0.6mm) (%)	#50 (0.3mm) (%)	#100 (0.15mm) (%)	#200 (75um) (%)	Pan (%)	-#200 (75um) (%)	Absorption (%)	SPGR (Dry,Gsb)
Count		3	3	3	3	3	3	3	3	3	3	3	3	1	1
Min		100.0	96.8	79.5	66.2	58.6	40.5	26.2	17.1	11.8	8.44	0.00	8.35	2.0	2.561
Max		100.0	97.3	81.6	67.9	59.8	41.3	26.9	17.8	12.3	8.89	0.00	8.70	2.0	2.561
Range		0.0	0.6	2.1	1.7	1.1	0.9	0.7	0.7	0.5	0.45	0.00	0.35	0.0	0.000
Mean		100.0	97.1	80.5	66.8	59.1	40.8	26.6	17.5	12.0	8.64	0.00	8.53	2.0	2.561
Median		100.0	97.2	80.5	66.3	59.0	40.6	26.7	17.6	12.0	8.60	0.00	8.53	2.0	2.561
St Dev		0.00	0.29	1.04	0.97	0.58	0.46	0.37	0.35	0.26	0.229	0.000	0.175		
CV		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		
Skewness		0.0	-0.2	0.0	0.4	0.2	0.3	-0.3	-0.3	0.0	0.2	0.0	0.0		
Kurtosis		0.0	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	0.0	-2.3		
Pay Factor															
Lower Target		100	94		60		38	25	16	11					
Upper Target															
Target															
Lower Spec (LSL)		100	80		50		30		10		5				
Upper Spec (USL)		100	100		80		55		25		10				
PWS		100.0	100.0		100.0		100.0		100.0		100.0				
Lower Limit (LCL)		100.0	96.5	78.4	64.9	57.9	39.9	25.9	16.8	11.5	8.18	0.00	8.18		
Upper Limit (UCL)		100.0	97.7	82.6	68.7	60.3	41.7	27.3	18.2	12.5	9.10	0.00	8.88		
PWL		100.0	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	100.0	95.4		

# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Product** 2924-Sand (A)  
**Specification** Sand (A)

Sample Id	Date	SPGR (SSD)
1855873458	04/22/2013 23:50	2.614
1855873460	04/23/2013 00:40	
1855873467	04/23/2013 01:10	

	SPGR (SSD)
Count	1
Min	2.614
Max	2.614
Range	0.000
Mean	2.614
Median	2.614
St Dev	
CV	
Skewness	
Kurtosis	
Pay Factor	
Lower Target	
Upper Target	
Target	
Lower Spec (LSL)	
Upper Spec (USL)	
PWS	
Lower Limit (LCL)	
Upper Limit (UCL)	
PWL	





# Statistical Analysis Report

**Period** 04/01/2013 - 04/24/2013  
**Plant** 80101-Porcupine Mountain Quarry  
**Comments**  
Query Selections  
Date Created 04/24/2013  
Date Range 04/01/2013 - 04/24/2013  
Plant Porcupine Mountain Quarry  
Sample Type Shipping  
Sample Location Bermuda  
Other 2013-S16