

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Contractor: _____

Sample Date: **7/24/23**

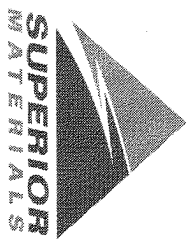
Dates Test Represents: **7/25/2023** through **7/31/2023**

Concrete Grade: **DM, 4500HP**

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stonoco	1575	9.38	2.69	53.4
26A	58-003	Stonoco	225	1.34	2.69	7.6
2NS	81-019	Pleasant Lake	1150	6.95	2.65	39.0
Total Wt			2950	17.68		100.0

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	96.8	100.0	100.0	98.3	1.7	1.7
3/4"	76.3	100.0	100.0	87.3	10.9	12.7
1/2"	40.5	99.8	100.0	68.2	19.1	31.8
3/8"	20.4	86.2	100.0	56.4	11.8	43.6
#4	4.0	11.4	97.6	41.1	15.4	58.9
#8	1.9	3.7	81.9	33.2	7.8	66.8
#16	1.6	2.6	62.7	25.5	7.7	74.5
#30	1.5	2.4	44.6	18.4	7.1	81.6
#50	1.4	2.2	21.9	9.5	8.9	90.5
#100	1.4	2.1	6.2	3.3	6.1	96.7
LBW	1.2	2.0	0.9	1.1	2.2	98.9

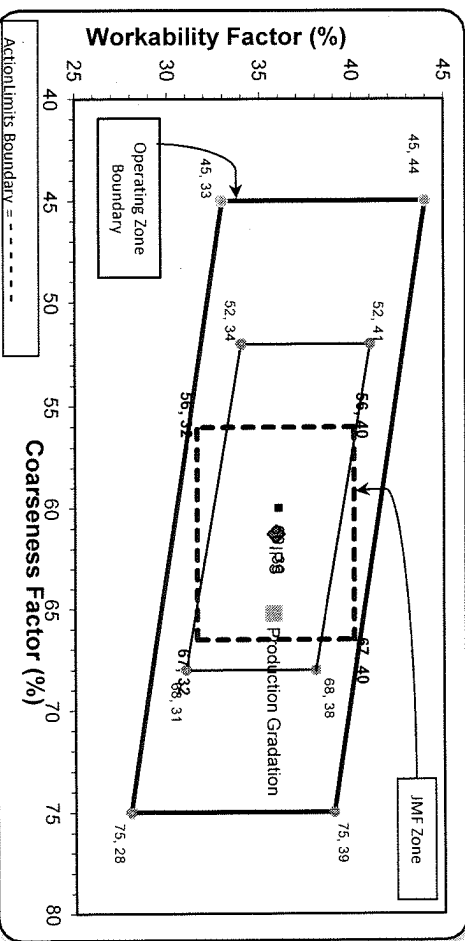


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*Maximum % Retained must be above the 3/8" sieve.
*Any two adjacent sieves must equal 10% except max.
norm. max., #100 and #200 sieves.
*% Retained must be at least 4% for each sieve except max.
norm. max., #100 and #200 sieves.
*% Retained must be at least 8% for the 1" sieve when
a 2" max. size (nom. Max. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **65** Workability Factor: **33** Adjusted WF: **35.7**



Sieve	Coarseness Factor:	Workability Factor:	Adjusted WF
2"	61	36	35.7
1.5"	61	36	35.7
1"	61	36	35.7
3/4"	61	36	35.7
1/2"	61	36	35.7
3/8"	61	36	35.7
#4	61	36	35.7
#8	61	36	35.7
#16	61	36	35.7
#30	61	36	35.7
#50	61	36	35.7
#100	61	36	35.7
LBW	61	36	35.7

PREPARED BY:
SM, LLC Technical Service

Approved By: _____



Plant S102-Superior Novi

Product 1051-6AA LS

Period: 07/23/2023 - 07/29/2023

Name/Title Doug Storey / QC Technician

Report Date 07/30/2023

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	96.8	%	95-100
	3/4" (19mm)	76.3	%	
	1/2" (12.5mm)	40.5	%	30-60
	3/8" (9.5mm)	20.4	%	
	#4 (4.75mm)	4.0	%	0-8
	#8 (2.36mm)	1.9	%	
	#16 (1.18mm)	1.6	%	
	#30 (.6mm)	1.5	%	
	#50 (.3mm)	1.4	%	
	#100 (.15mm)	1.4	%	
	#200 (75µm)	1.26	%	
	Wash Loss (#200/75um)	1.2	%	0-2
	Total Moisture	3.40	%	



Plant S102-Superior Novi

Product 1067-26A Mod LS

Period: 07/23/2023 - 07/29/2023

Name/Title Doug Storey / QC Technician

Report Date 07/30/2023

Procedure	Sieve/Test	Result	Unit	26A Mod LS Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	
	1" (25mm)	100.0	%	
	3/4" (19mm)	100.0	%	100-100
	1/2" (12.5mm)	99.8	%	95-100
	3/8" (9.5mm)	86.2	%	60-95
	#4 (4.75mm)	11.4	%	5-30
	#8 (2.36mm)	3.7	%	0-12
	#16 (1.18mm)	2.6	%	
	#30 (.6mm)	2.4	%	
	#50 (.3mm)	2.2	%	
	#100 (.15mm)	2.1	%	
	#200 (75µm)	2.0	%	
	Wash Loss (#200/75µm)	2.0	%	0-3
	Total Moisture	3.62	%	



Plant S102-Superior Novi

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 07/23/2023 - 07/29/2023

Report Date 07/30/2023

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.6	%	95-100
	#8 (2.36mm)	81.9	%	65-95
	#16 (1.18mm)	62.7	%	35-75
	#30 (.6mm)	44.6	%	20-55
	#50 (.3mm)	21.9	%	10-30
	#100 (.15mm)	6.2	%	0-10
	#200 (75µm)	1.5	%	
	FM	2.85		2.6-3
	Wash Loss (#200/75um)	0.9	%	0-3
	Total Moisture	6.37	%	