

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-02**

Contractor: _____

Sample Date: 12/13/21

Concrete Grade: **S2M**

Dates Test Represents: 12/14/2021 through 12/20/2021

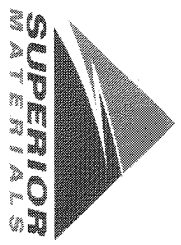
MDOT No.: _____

Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1450	8.87	2.62	47.5
26A	71-47	Presque Isle	350	2.14	2.62	11.5
2NS	63-115	Ray Rd	1250	7.56	2.65	41.0
Total Wt:			3050	18.57		100.0

<--- Verify this number is 100%

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"	96.0	100.0	100.0	98.1	1.9	1.9
3/4"	80.8	100.0	100.0	90.9	7.2	9.1
1/2"	34.8	97.1	100.0	68.7	22.2	31.3
3/8"	17.4	87.5	100.0	59.3	9.4	40.7
#4	4.2	22.2	96.7	44.2	15.1	55.8
#8	3.0	6.6	79.4	34.7	9.5	65.3
#16	2.6	3.4	63.0	27.4	7.3	72.6
#30	2.4	2.6	46.2	20.4	7.1	79.6
#50	2.4	2.4	22.4	10.6	9.8	89.4
#100	2.2	2.2	5.1	3.4	7.2	96.6
LBW	1.1	2.0	0.5	1.0	2.4	99.0

*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. 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.



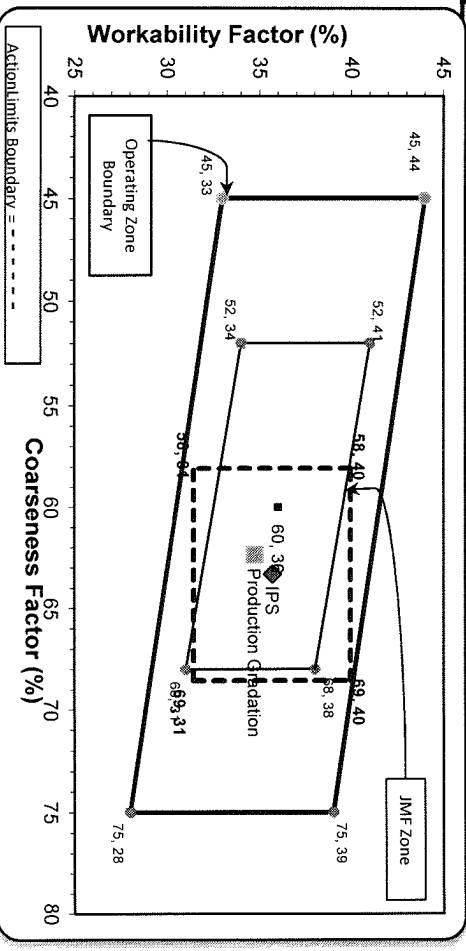
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Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Initial Production Sample (IPS)

Coarseness Factor: **62** Workability Factor: **35**

Coarseness Factor: **63** Workability Factor: **36**



Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.6	4.4	4.4
1/2"	73.1	22.6	26.9
3/8"	59.3	13.8	40.7
#4	42.8	16.5	57.2
#8	35.7	7.1	64.3
#16	28.9	6.8	71.1
#30	20.7	8.2	79.3
#50	9.9	10.8	90.1
#100	2.1	7.8	97.9
LBW	0.9	1.2	99.1

PREPARED BY:
 SM, LLC Technical Service

Approved By:



Basic Quality Statistical Summary Report

Plant S02-Superior Hoover
Product 1022-2NS
Specification 2NS GR Spec
Period 12/12/2021 - 12/18/2021

Sieve/Test	Tests	Average	St Dev	Target	Specification
3/8" (9.5mm)	1	100.0			100-100
#4 (4.75mm)	1	96.7			95-100
#8 (2.36mm)	1	79.4			65-95
#16 (1.18mm)	1	63.0			35-75
#30 (.6mm)	1	46.2		40-50	20-55
#50 (.3mm)	1	22.4			10-30
#100 (.15mm)	1	5.1			0-10
#200 (75µm)	1	0.7			
Pan	1	0.0			
FM	1	2.87		2.7-2.9	2.6-3
Wash Loss (#200/75µm)	1	0.5			0-3
Total Moisture	1	3.82			



Basic Quality Statistical Summary Report

Plant S02-Superior Hoover
Product 1067-26A Mod LS
Specification 26A Mod LS Spec
Period 12/12/2021 - 12/18/2021

Sieve/Test	Tests	Average	St Dev	Target	Specification
2" (50mm)	1	100.0			
1 1/2" (37.5mm)	1	100.0			
1" (25mm)	1	100.0			
3/4" (19mm)	1	100.0			100-100
1/2" (12.5mm)	1	97.1			95-100
3/8" (9.5mm)	1	87.5			60-95
#4 (4.75mm)	1	22.2			5-30
#8 (2.36mm)	1	6.6			0-12
#16 (1.18mm)	1	3.4			
#30 (.6mm)	1	2.6			
#50 (.3mm)	1	2.4			
#100 (.15mm)	1	2.2			
#200 (75µm)	1	2.1			
Pan	1	0.0			
Wash Loss (#200/75um)	1	2.0			0-3
Total Moisture	1	3.62			



Basic Quality Statistical Summary Report

Plant S02-Superior Hoover
Product 1051-6AA LS
Specification 6AA LS
Period 12/12/2021 - 12/18/2021

Sieve/Test	Tests	Average	St Dev	Target	Specification
2" (50mm)	1	100.0			
1 1/2" (37.5mm)	1	100.0			100-100
1" (25mm)	1	96.9			95-100
3/4" (19mm)	1	81.3			
1/2" (12.5mm)	1	35.9			30-60
3/8" (9.5mm)	1	18.1			
#4 (4.75mm)	1	4.1			0-8
#8 (2.36mm)	1	2.6			
#16 (1.18mm)	1	2.3			
#30 (.6mm)	1	2.1			
#50 (.3mm)	1	2.0			
#100 (.15mm)	1	1.8			
#200 (75µm)	1	1.45			
Pan	1	0.00			
Wash Loss (#200/75µm)	1	1.1			0-2
Total Moisture	1	2.05			