

# Aggregate Optimization Chart

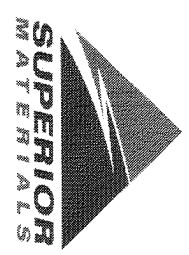
# Production Gradation Report

PLANT #: **P-02**

Sample Date: **12/9/24**  
 Dates Test Represents: **12/10/2024** through **12/16/2024**  
 Concrete Grade: **S2M, 3500HP**

Contractor: \_\_\_\_\_

MDOT No.: \_\_\_\_\_



**Superior Materials, LLC**  
 30701 W. 10 Mile Rd.  
 Suite 500  
 Farmington Hills, MI 48336

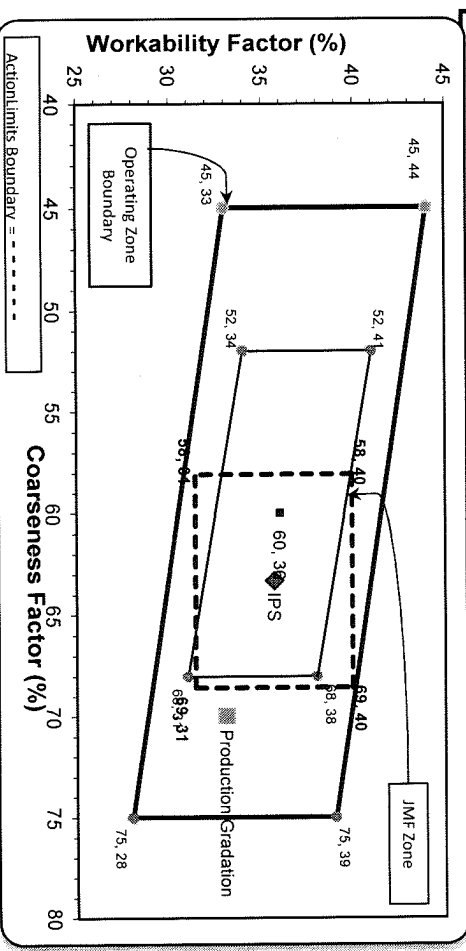
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1620	9.91	2.62	53.1
26A	71-47	Presque Isle	200	1.22	2.62	6.6
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
		<b>Total Wt</b>	<b>3050</b>			<b>100.0</b>

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"	95.8	100.0	100.0	97.8	2.2	2.2
3/4"	70.7	100.0	100.0	84.4	13.3	15.6
1/2"	30.8	96.6	100.0	63.0	21.4	37.0
3/8"	14.2	81.2	100.0	53.2	9.8	46.8
#4	2.1	11.3	96.0	40.6	12.6	59.4
#8	1.6	3.4	79.4	33.1	7.5	66.9
#16	1.4	2.4	63.4	26.5	6.6	73.5
#30	1.3	2.2	48.0	20.2	6.3	79.8
#50	1.2	2.1	25.0	10.9	9.3	89.1
#100	1.2	1.9	6.0	3.2	7.7	96.8
LBW	1.0	1.8	1.0	1.1	2.1	98.9

\*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 4% for the 3/4" sieve when  
 a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations  
 Coarseness Factor: **70** Workability Factor: **33**

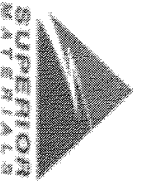


Initial Production Sample (IPS)

Sieve	% 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: \_\_\_\_\_



# Daily Summary Report

Date Monday, December 9, 2024

Sample Id - 674895812

-674952759

-1989656406

Plant

Product Clemens  
6AA LS

1067  
26A Mod LS

1022  
2NS GR

Specification 6AA LS

26A Mod LS Spec

2NS GR Spec

Sample Type QA

QA

QA

QA

Time 15:59

16:02

16:03

2" (50mm)	100.0	100.0	100.0
1 1/2" (37.5mm)	100.0	100.0	96.0
1" (25mm)	95.8	100.0	79.4
3/4" (19mm)	70.7	100.0	63.4
1/2" (12.5mm)	30.8	96.6	48.0
3/8" (9.5mm)	14.2	81.2	25.0
#4 (4.75mm)	2.1	11.3	6.0
#8 (2.36mm)	1.6	3.4	1.2
#16 (1.18mm)	1.4	2.4	0.0
#30 (.6mm)	1.3	2.2	2.82
#50 (.3mm)	1.2	2.1	1.0
#100 (.15mm)	1.2	1.9	1.0
#200 (75µm)	1.09	1.8	1.0
Pan	0.00	0.0	1.0
FM			
Wash Loss (#200/75µm)	1.0	1.8	3.86
Total Moisture	2.42	4.21	