

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-32**

Sample Date: **2/14/22**

Dates Test Represents: **2/15/2022** through **2/21/2022**

Concrete Grade: **DM, 4500HP**

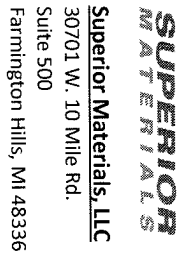
Contractor: _____

MDOT No.: _____

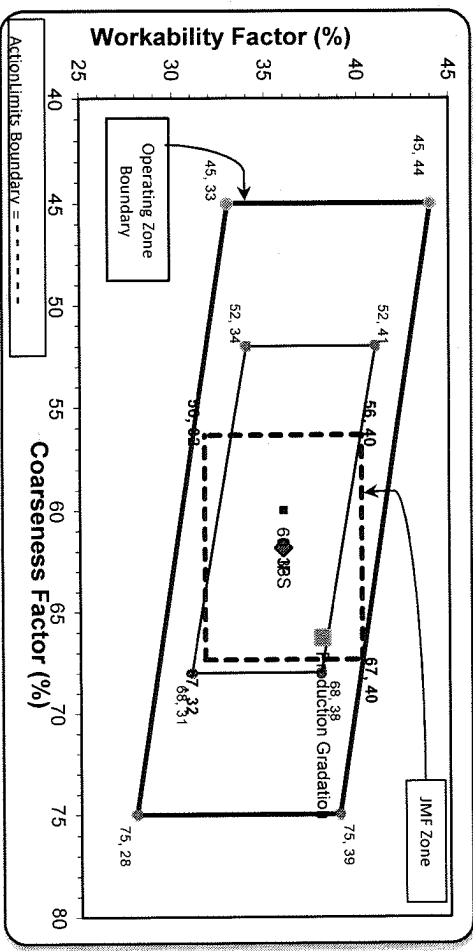
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1455	8.90	2.62	50.1
26A	71-47	Presque Isle	300	1.83	2.62	10.3
2NS	95-013	Smelter Bay	1150	6.95	2.65	39.6
Total Wt			2905	17.69		100.0

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"	95.8	100.0	100.0	97.9	2.1	2.1
3/4"	79.7	100.0	100.0	89.8	8.1	10.2
1/2"	34.1	98.0	100.0	66.8	23.0	33.2
3/8"	16.9	89.5	100.0	57.3	9.5	42.7
#4	4.0	27.2	96.3	42.9	14.4	57.1
#8	3.0	11.4	83.1	35.6	7.4	64.4
#16	2.5	4.8	67.4	28.4	7.1	71.6
#30	2.1	3.3	48.7	20.7	7.8	79.3
#50	1.7	2.6	24.5	10.8	9.9	89.2
#100	1.3	2.3	7.4	3.8	7.0	96.2
LBW	0.9	1.6	1.4	1.2	2.6	98.8

*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. 1.5") aggregate is used.



Production Gradation	<input checked="" type="radio"/> Batch Plant Gradations	<input type="radio"/> Aggregate Supplier Gradations
Coarseness Factor:	66	Workability Factor: 36
Adjusted WF		38.1



Initial Production Sample (IPS)	Coarseness Factor:	62
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"	95.0	5.0	5.0
1/2"	72.3	22.8	27.7
3/8"	60.4	11.8	39.6
#4	42.6	17.8	57.4
#8	36.0	6.6	64.0
#16	29.5	6.5	70.5
#30	20.3	9.2	79.7
#50	9.5	10.8	90.5
#100	3.4	6.1	96.6
LBW	1.3	2.1	98.7

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____

Edw. C. Levy Co.

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Plant 958-JMT

Product 1054-6AA LS PI

Name/Title Doug Storey / QC Technician

Period: 02/13/2022 - 02/19/2022

Report Date 02/18/2022

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	95.8	%	95-100
	3/4" (19mm)	79.7	%	
	1/2" (12.5mm)	34.1	%	30-60
	3/8" (9.5mm)	16.9	%	
	#4 (4.75mm)	4.0	%	0-8
	#8 (2.36mm)	3.0	%	
	#16 (1.18mm)	2.5	%	
	#30 (.6mm)	2.1	%	
	#50 (.3mm)	1.7	%	
	#100 (.15mm)	1.3	%	
	#200 (75µm)	1.1	%	
	Wash Loss (#200/75um)	0.9	%	0-2
	Total Moisture	4.3	%	

Plant 958-JMT

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 02/13/2022 - 02/19/2022

Report Date 02/18/2022

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)	98.0	%	95-100
	3/8" (9.5mm)	89.5	%	60-95
	#4 (4.75mm)	27.2	%	5-30
	#8 (2.36mm)	11.4	%	0-12
	#16 (1.18mm)	4.8	%	
	#30 (.6mm)	3.3	%	
	#50 (.3mm)	2.6	%	
	#100 (.15mm)	2.3	%	
	#200 (75µm)	1.9	%	
	Wash Loss (#200/75um)	1.6	%	0-3
	Total Moisture	5.0	%	

Plant 958-JMT

Product 1022-2NS GR - Smelter Bay

Name/Title Doug Storey / QC Technician

Period: 02/13/2022 - 02/19/2022

Report Date 02/18/2022

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	96.3	%	95-100
	#8 (2.36mm)	83.1	%	65-95
	#16 (1.18mm)	67.4	%	35-75
	#30 (.6mm)	48.7	%	20-55
	#50 (.3mm)	24.5	%	10-30
	#100 (.15mm)	7.4	%	0-10
	#200 (75µm)	2.0	%	
	FM	2.73		2.6-3
	Wash Loss (#200/75um)	1.4	%	0-3
	Total Moisture	4.8	%	