

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-32**

Contractor: _____

Sample Date: 10/3/22

MDOT No.: _____

Dates Test Represents: 10/4/2022 through 10/10/2022

Concrete Grade: **S2M, 3500HP**

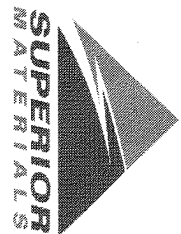
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1420	8.69	2.62	46.6
26A	71-47	Presque Isle	400	2.45	2.62	13.1
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
Total Wt.			3050	18.57		100.0

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"	98.4	100.0	100.0	99.3	0.7	0.7
3/4"	83.3	100.0	100.0	92.2	7.0	7.8
1/2"	47.7	100.0	100.0	95.6	17.2	24.9
3/8"	27.8	85.8	100.0	85.8	10.6	35.5
#4	6.1	23.5	95.6	95.6	20.0	55.5
#8	2.5	7.7	83.2	83.2	8.7	64.3
#16	2.2	3.8	68.8	68.8	6.5	70.7
#30	2.1	2.9	50.7	50.7	7.5	78.2
#50	2.0	2.7	24.9	24.9	10.5	88.7
#100	1.9	2.5	7.2	7.2	7.2	95.9
LBW	1.5	2.2	1.1	1.1	2.7	98.6

*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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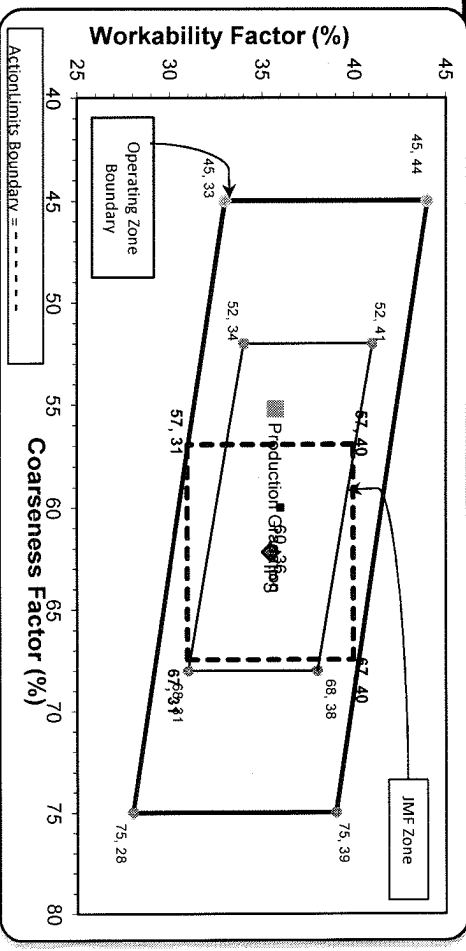


Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **55** Workability Factor: **36**

Initial Production Sample (IPS)

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



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"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____

Plant 958-JMT
 Product 1022-2NS GR - Smelter Bay
 Period: 10/02/2022 - 10/08/2022

Name/Title Doug Storey / QC Technician
 Report Date 10/07/2022

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	95.6	%	95-100
	#8 (2.36mm)	83.2	%	65-95
	#16 (1.18mm)	68.8	%	35-75
	#30 (.6mm)	50.7	%	20-55
	#50 (.3mm)	24.9	%	10-30
	#100 (.15mm)	7.2	%	0-10
	#200 (75µm)	1.7	%	
	FM	2.70		2.6-3
	Wash Loss (#200/75µm)	1.1	%	0-3
	Total Moisture	5.0	%	

Plant 958-JMT

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 10/02/2022 - 10/08/2022

Report Date 10/07/2022

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)	95.6	%	95-100
	3/8" (9.5mm)	85.8	%	60-95
	#4 (4.75mm)	23.5	%	5-30
	#8 (2.36mm)	7.7	%	0-12
	#16 (1.18mm)	3.8	%	
	#30 (.6mm)	2.9	%	
	#50 (.3mm)	2.7	%	
	#100 (.15mm)	2.5	%	
	#200 (75µm)	2.2	%	
	Wash Loss (#200/75um)	2.2	%	0-3
	Total Moisture	2.6	%	

Plant 958-JMT

Product 1054-6AA LS PI

Period: 10/02/2022 - 10/08/2022

Name/Title Doug Storey / QC Technician

Report Date 10/07/2022

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	98.4	%	95-100
	3/4" (19mm)	83.3	%	
	1/2" (12.5mm)	47.7	%	30-60
	3/8" (9.5mm)	27.8	%	
	#4 (4.75mm)	6.1	%	0-8
	#8 (2.36mm)	2.5	%	
	#16 (1.18mm)	2.2	%	
	#30 (.6mm)	2.1	%	
	#50 (.3mm)	2.0	%	
	#100 (.15mm)	1.9	%	
	#200 (75µm)	1.7	%	
	Wash Loss (#200/75um)	1.5	%	0-2
	Total Moisture	3.1	%	