

# Aggregate Optimization Chart

# Production Gradation Report

PLANT #: **P-32**

Sample Date: **12/21/20**

Dates Test Represents: **12/22/2020**

through **12/28/2020**

Concrete Grade: **S2M**

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

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

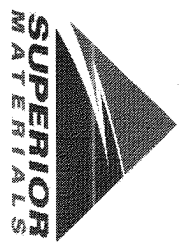
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1620	9.91	2.62	53.1
26A	71-47	Presque Isle	200	1.22	2.62	6.6
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3
Total Wt			<b>3050</b>	<b>18.57</b>		<b>100.0</b>

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"	98.3	100.0	100.0	99.1	0.9	0.9
3/4"	81.4	100.0	100.0	90.1	9.9	9.9
1/2"	45.3	98.9	100.0	70.9	29.1	29.1
3/8"	23.3	92.5	100.0	58.8	41.2	41.2
#4	6.9	20.1	96.1	43.7	56.3	56.3
#8	3.5	4.9	83.3	35.8	64.2	64.2
#16	2.6	2.8	66.9	28.5	71.5	71.5
#30	2.3	2.6	42.9	18.7	81.3	81.3
#50	2.1	2.4	22.1	10.2	89.8	89.8
#100	2.0	2.3	6.4	3.8	96.2	96.2
LBW	1.7	1.6	1.0	1.4	98.6	98.6

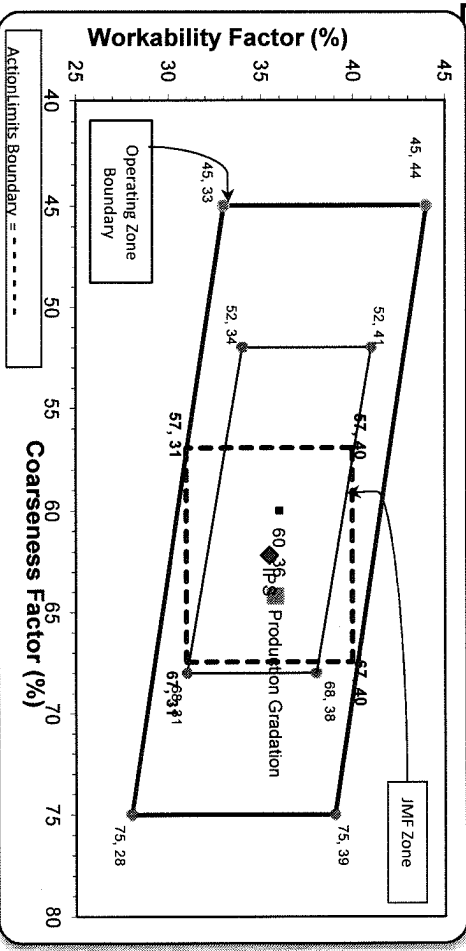
\*Maximum % Retained must be above the 3/8" sieve.  
 \*Any two adjacent sieves must equal 10% except max., nom. max. #100 and #200 sieves.  
 \*% Retained must be at least 4% for each sieve except max., nom. max. #100 and #200 sieves.  
 \*% Retained must be at least 8% for the 1" sieve when a 2" max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

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Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations

Coarseness Factor: **64** Workability Factor: **36**



Initial Production Sample (IPS)

Sieve	Coarseness Factor:	Workability Factor:	% Cumulative Passing	% Retained	Cumulative % Retained
2"	<b>62</b>	<b>35</b>	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: \_\_\_\_\_

# Edw. C. Levy Co.

Plant 958-JMT

Product 1054-6AA LS PI

Period: 12/20/2020 - 12/26/2020

Name/Title Doug Storey / QC Technician

Report Date 12/24/2020

Procedure	Sieve/Test	Result	Unit	6AA LS PI Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	98.3	%	95-100
	3/4" (19mm)	81.4	%	
	1/2" (12.5mm)	45.3	%	30-60
	3/8" (9.5mm)	23.3	%	
	#4 (4.75mm)	6.9	%	0-8
	#8 (2.36mm)	3.5	%	
	#16 (1.18mm)	2.6	%	
	#30 (.6mm)	2.3	%	
	#50 (.3mm)	2.1	%	
	#100 (.15mm)	2.0	%	
	#200 (75µm)	1.9	%	
	Wash Loss (#200/75µm)	1.7	%	0-2
	Total Moisture	3.2	%	

# Edw. C. Levy Co.

Plant 958-JMT

Product 1067-26A Mod LS

Period: 12/20/2020 - 12/26/2020

Name/Title Doug Storey / QC Technician

Report Date 12/24/2020

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)	98.9	%	95-100
	3/8" (9.5mm)	92.5	%	60-95
	#4 (4.75mm)	20.1	%	5-30
	#8 (2.36mm)	4.9	%	0-12
	#16 (1.18mm)	2.8	%	
	#30 (.6mm)	2.6	%	
	#50 (.3mm)	2.4	%	
	#100 (.15mm)	2.3	%	
	#200 (75µm)	1.8	%	
	Wash Loss (#200/75um)	1.6	%	0-3
	Total Moisture	4.0	%	

# Edw. C. Levy Co.

Plant 958-JMT

Product 1022-2NS GR - Smelter Bay

Period: 12/20/2020 - 12/26/2020

Name/Title Doug Storey / QC Technician

Report Date 12/24/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	96.1	%	95-100
	#8 (2.36mm)	83.3	%	65-95
	#16 (1.18mm)	66.9	%	35-75
	#30 (.6mm)	42.9	%	20-55
	#50 (.3mm)	22.1	%	10-30
	#100 (.15mm)	6.4	%	0-10
	#200 (75µm)	1.4	%	
	FM	2.82		2.6-3
	Wash Loss (#200/75um)	1.0	%	0-3
	Total Moisture	4.3	%	