

Aggregate Optimization Chart

PLANT #: **P-32**

Sample Date: **1/18/21**

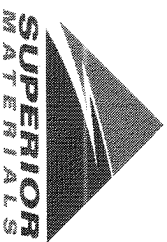
Dates Test Represents: **1/19/2021** through **1/25/2021**

Concrete Grade: **DM**

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.						17.69
						100.0



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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"	98.1	100.0	100.0	99.0	1.0	1.0
3/4"	71.8	100.0	100.0	85.9	13.2	14.1
1/2"	30.9	98.0	100.0	65.2	20.7	34.8
3/8"	15.2	72.4	100.0	54.7	10.5	45.3
#4	2.6	11.5	96.6	40.7	13.9	59.3
#8	1.5	3.1	82.8	33.8	6.9	66.2
#16	1.3	1.9	66.7	27.3	6.6	72.7
#30	1.2	1.7	43.3	17.9	9.3	82.1
#50	1.0	1.5	18.0	7.8	10.1	92.2
#100	0.9	1.3	4.4	2.3	5.5	97.7
LBW	0.6	1.0	1.1	0.8	1.5	99.2

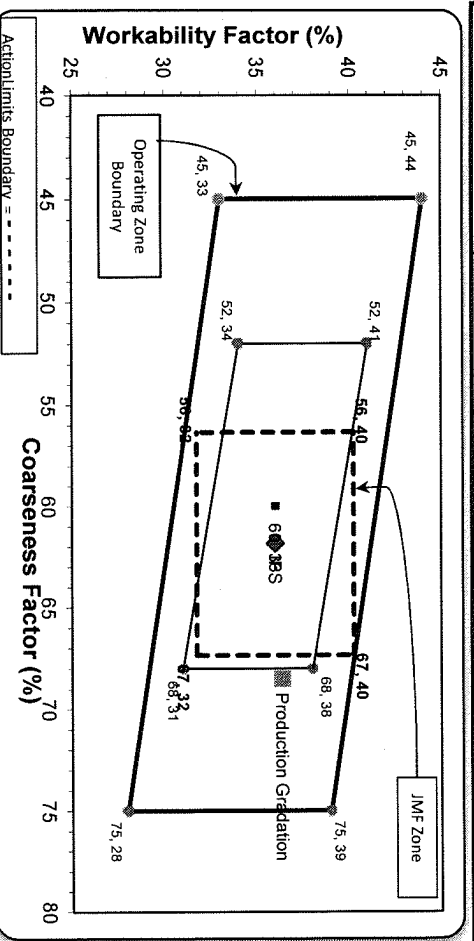
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 **% Retained must be at least 8% for the 1" sieve when
 a 2" max. size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

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **69** Workability Factor: **34** Adjusted WF: **36.3**

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.

Basic Quality Statistical Summary Report

Plant 958-JMT
Product 1054-6AA LS PI
Specification 6AA LS PI Spec
Period 01/17/2021 - 01/23/2021

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	98.1			95-100
3/4" (19mm)	1	71.8			
1/2" (12.5mm)	1	30.9			30-60
3/8" (9.5mm)	1	15.2			
#4 (4.75mm)	1	2.6			0-8
#8 (2.36mm)	1	1.5			
#16 (1.18mm)	1	1.3			
#30 (.6mm)	1	1.2			
#50 (.3mm)	1	1.0			
#100 (.15mm)	1	0.9			
#200 (75µm)	1	0.7			
Pan	1	0.0			
Wash Loss (#200/75um)	1	0.6			0-2
Total Moisture	1	2.9			

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Basic Quality Statistical Summary Report

Plant 958-JMT
Product 1067-26A Mod LS
Specification 26A Mod LS Spec
Period 01/17/2021 - 01/23/2021

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	98.0			95-100
3/8" (9.5mm)	1	72.4			60-95
#4 (4.75mm)	1	11.5			5-30
#8 (2.36mm)	1	3.1			0-12
#16 (1.18mm)	1	1.9			
#30 (.6mm)	1	1.7			
#50 (.3mm)	1	1.5			
#100 (.15mm)	1	1.3			
#200 (75µm)	1	1.1			
Pan	1	0.0			
Wash Loss (#200/75µm)	1	1.0			0-3
Total Moisture	1	3.4			

Edw. C. Levy Co.

Basic Quality Statistical Summary Report

Plant 958-JMT
Product 1022-2NS GR - Smelter Bay
Specification 2NS GR Spec
Period 01/17/2021 - 01/23/2021

Sieve/Test	Tests	Average	St Dev	Target	Specification
3/8" (9.5mm)	1	100.0			100-100
#4 (4.75mm)	1	96.6			95-100
#8 (2.36mm)	1	82.8			65-95
#16 (1.18mm)	1	66.7			35-75
#30 (.6mm)	1	43.3			20-55
#50 (.3mm)	1	18.0		18-28	10-30
#100 (.15mm)	1	4.4			0-10
#200 (75µm)	1	1.1			
Pan	1	0.0			
FM	1	2.88		2.7-2.9	2.6-3
Wash Loss (#200/75um)	1	1.1			0-3
Total Moisture	1	4.8			