Aggregate Optimization Chart

Production Gradation Report

PLANT #: P-101 Contractor:

Sample Date: 7/19/21 DM Concrete Grade: Dates Test Represents: 7/20/2021 7/26/2021 through

Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1460	8.93	2.62	50.2
26A	71-47	Presque Isle	300	1.83	2.62	10.3
2NS	75-051	Mid-Michigan	1150	6.93	2.66	39.5
		Total Wt	2910	17.69		100.0

MDOT No.:

--- Verify this number is 100%

SUPERIOR MATERIALS

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

% Retained	
0.0	
0.0	
0.3	
7.7	
28.3	
39.1	*Maxim
56.2	*Any tw
65.6	nom ma

num % Retained must be above the 3/8" sieve.

wo adjacent sieves must equal 10% except max.,

m. max., #100 and #200 sieves.

*% Retained must be at least 4% for each sieve except max.,

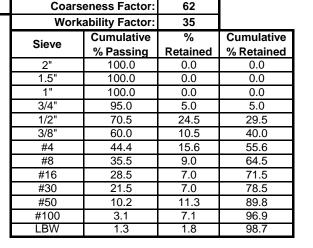
nom. max., #100 and #200 sieves.

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0	100.0	100.0	100.0	0.0	0.0	1
1.5"	100.0	100.0	100.0	100.0	0.0	0.0	1
1"	99.5	100.0	100.0	99.7	0.3	0.3	1
3/4"	84.7	100.0	100.0	92.3	7.4	7.7	1
1/2"	44.3	96.9	100.0	71.7	20.6	28.3	1
3/8"	24.8	86.7	100.0	60.9	10.8	39.1	*
#4	4.8	20.6	99.3	43.8	17.1	56.2	*
#8	1.9	4.5	83.5	34.4	9.4	65.6	no
#16	1.7	2.5	68.3	28.1	6.3	71.9	*
#30	1.6	1.9	52.3	21.7	6.4	78.3	no
#50	1.5	1.6	26.1	11.2	10.4	88.8	*
#100	1.5	1.5	5.6	3.1	8.1	96.9	a 2
LBW	1.4	1.4	0.6	1.1	2.0	98.9	1
Production Grad	dation O Batch Plant Grad	dations Aggregate Supplier	Gradations	Adjusted WF	Initial Producti	on Sample (IP	S)

		111		
Production Gradation	Batch Plant Gra	dations Aggregate Supplier Grad	dations	Adjusted V
Coarseness Factor	60	Workability Factor:	34	36.9
45 45, 44	52, 41	57, 39 68, 38	JMF Zone 75, 39	



Workability Factor Operating Zone 75, 28 Boundary 50 Coarseness Factor (%) 70 75 80 ActionLimits Boundary = - - - - -

PLANT #: P-102

Sample Date:

Production Gradation

7/19/21 Concrete Grade: **DM**

MDOT

Dates Test F	Represents:	7/20/2021	through	7/26/2021		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1500	8.94	2.69	50.8
26A	58-003	Stoneco	305	1.82	2.69	10.3
2NS	63-114	Highland	1150	6.95	2.65	38.9
		Total Wt	2055	17 71		100.0

MDOT No.:

<---- Verify this number is 100%

Contractor:

Adjusted WF Intial Production Sample (IPS)

Coarseness Factor:

36.0

SUP	ER	10	R

Superior Materials, LLC 30701 W. 10 Mile Rd. Suite 500

Farmington Hills, MI 48336

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"	99.8	100.0	100.0	99.9	0.1	0.1
3/4"	87.4	100.0	100.0	93.6	6.3	6.4
1/2"	46.0	99.1	100.0	72.5	21.1	27.5
3/8"	24.4	81.6	100.0	59.7	12.8	40.3
#4	3.8	11.2	98.8	41.5	18.2	58.5
#8	1.7	2.9	83.1	33.5	8.0	66.5
#16	1.2	2.0	64.2	25.8	7.7	74.2
#30	1.0	1.7	45.7	18.5	7.3	81.5
#50	0.8	1.6	24.4	10.1	8.4	89.9
#100	0.8	1.5	5.9	2.9	7.2	97.1
LBW	0.8	1.2	0.9	0.9	2.0	99.1

Aggregate Supplier Gradations

*Maximum % Retained must be above the 3/8" sieve.

*Any two adjacent sieves must equal 10% except max.,

nom. max., #100 and #200 sieves.

 $^{\star}\%$ 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.

Coarseness Factor:	61	Workability Factor:	34	
45 45, 44 45, 44 45, 33 Operating Zone Boundary	52, 34	68, 38 68, 38 67, 38, 31	75, 39 75, 28	
25 40 45 ActionLimits Boundary =	50 55	Coarseness Factor (%)	75	80

Batch Plant Gradations

Work	ability Factor:	36	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

61

PREPARED BY: SM, LLC Technical Service Approved By

PLANT #: P-20 Contractor:

Sample Date: 7/19/21 DM Concrete Grade: Dates Test Represents: 7/20/2021 7/26/2021 MDOT No.: through

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1705	10.43	2.62	58.7
26A	71-47	Presque Isle	100	0.61	2.62	3.4
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
		Total Wt	2905	17.69		100.0



Adjusted WF Intial Production Sample (IPS)

Coarseness Factor:

36.3

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30701 W. 10 Mile Rd.
Suite 500
Farmington Hills MI 48336

	Total Wt	2905	17.69		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	100	0.0	100.0	100.0	0.0	0.0
1"	97.9	100	0.0	100.0	98.8	1.2	1.2
3/4"	84.2	100	0.0	100.0	90.7	8.0	9.3
1/2"	47.8	96	.6	100.0	69.2	21.5	30.8
3/8"	26.0	90	.8	100.0	56.3	13.0	43.7
#4	4.2	28	.8	98.4	40.7	15.5	59.3
#8	1.8	7.	4	85.8	33.8	6.9	66.2
#16	1.4	2.	8	70.3	27.5	6.3	72.5
#30	1.3	2.	2	49.8	19.7	7.8	80.3
#50	1.2	2.	0	20.0	8.3	11.3	91.7
#100	1.1	1.	8	3.0	1.8	6.5	98.2
LBW	1.0	1.	6	0.5	0.8	1.0	99.2

Aggregate Supplier Gradations

*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.

63

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.

Coarseness Factor:	66	Workability Factor:	34	
45 45, 44 45, 44 45, 33 Operating Zone Boundary	52, 41	68, 40 68, 38 60, 36 PS Preduction	JMF Zone 75, 39 Gradatior 75, 28	
25 40 45 ActionLimits Boundary =	50 55	Coarseness Factor (%) ⁷⁰	75	80

Batch Plant Gradations

Production Gradation

Work	ability 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"	89.2	10.8	10.8
1/2"	68.4	20.8	31.6
3/8"	59.9	8.6	40.1
#4	43.0	16.9	57.0
#8	35.9	7.1	64.1
#16	29.0	6.8	71.0
#30	21.3	7.7	78.7
#50	9.9	11.4	90.1
#100	2.4	7.5	97.6
LBW	1.2	1.2	98.8

PLANT #: P-32 Contractor:

Sample Date: 7/19/21 DM Concrete Grade: Dates Test Represents: 7/20/2021 7/26/2021 through

2NS

21.0

5.2

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1450	8.87	2.62	49.9
26A	71-47	Presque Isle	305	1.87	2.62	10.5
2NS	95-013	Smelter Bay	1150	6.95	2.65	39.6
		Total Wt	2905	17.69		100.0

26A

3.7

3.1

2.2

MDOT No.:

Cumulative

90.3

96.7

98.3

Coarseness Factor:

---- Verify this number is 100%

% Retained

10.8

6.4

1.6

Adjusted WF Intial Production Sample (IPS)

Cumulative

9.7

3.3

1.7

SUPERIOR MATERIALS

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				% Passing		% 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"	98.2	100.0	100.0	99.1	0.9	0.9
3/4"	78.4	100.0	100.0	89.2	9.9	10.8
1/2"	38.0	97.7	100.0	68.8	20.4	31.2
3/8"	17.1	89.8	100.0	57.6	11.3	42.4
#4	3.8	29.6	96.2	43.1	14.5	56.9
#8	2.6	7.9	83.9	35.3	7.7	64.7
#16	2.2	5.5	71.2	29.9	5.5	70.1
#30	2.0	4.4	47.9	20.4	9.4	79.6

Aggregate Supplier Gradations

*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.

62

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.

Coarseness Factor:	66	Workability Factor:	35	37.8
45 45, 44 45, 44 45, 33 Operating Zone Boundary	52, 34	67, 40 Production Grad 68, 38 60, 38S	75, 39 dation 75, 28	
25 40 45 ActionLimits Boundary =	50 55	Coarseness Factor (%) ⁷⁰	75	80

Work	ability Factor:	36	
Sieve	Cumulative	%	Cumulative
0.010	% Passing	Retained	% 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

6AA

1.9

1.8

Batch Plant Gradations

Sieve

#50

#100

LBW

Production Gradation

PLANT #: P-35 Contractor:

Sample Date: 7/19/21 Concrete Grade: DM

Dates Test Represents: 7/20/2021 through 7/26/2021

MDOT No.:

Adjusted WF Intial Production Sample (IPS)

Coarseness Factor:

35.0

24100 10011	100.0000.	.,,	un o a g	.,_0,_0		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1555	9.26	2.69	52.6
26A	58-003	Stoneco	300	1.79	2.69	10.2
2NS	81-093	Burmeister	1100	6.65	2.65	37.2
		Total Wt	2955	17.70		100.0



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Farmington Hills, MI 48336

	Total Wt	2955	17.70		100.0	< Verify this n	umber 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
1.5"	100.0	100.0		100.0	100.0	0.0	0.0	1
1"	99.8	100.0		100.0	99.9	0.1	0.1	1
3/4"	87.4	100.0		100.0	93.4	6.5	6.6	1
1/2"	46.0	99.1		100.0	71.5	21.9	28.5	1
3/8"	24.4	81.6		100.0	58.3	13.1	41.7	*
#4	3.8	11.2		98.8	39.9	18.4	60.1	*
#8	1.7	2.9		84.1	32.5	7.4	67.5	no
#16	1.2	2.0		65.1	25.1	7.4	74.9	*
#30	1.0	1.7		43.9	17.0	8.0	83.0	no
#50	0.8	1.6		15.7	6.4	10.6	93.6	*
#100	0.8	1.5		2.6	1.5	4.9	98.5	a 2
LBW	0.8	1.2		0.8	0.8	0.7	99.2	1

Aggregate Supplier Gradations

*Maximum % Retained must be above the 3/8" sieve.

*Any two adjacent sieves must equal 10% except max.,

om. max., #100 and #200 sieves.

 $^{*}\%$ Retained must be at least 4% for each sieve except max.,

om. 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.

Coarseness Factor:	62	Workability Factor:	32	
45 45, 44 45, 44 45, 33 Operating Zone Boundary	52, 41 56, 52, 34	68, 38 60, 36 Production Gradation	JMF Zone 75, 39	
25 40 45 ActionLimits Boundary =	50 58	Coarseness Factor (%)	75	80

Batch Plant Gradations

Production Gradation

Work	ability Factor:	36	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.1	10.2	10.9
1/2"	70.5	18.6	29.5
3/8"	60.5	10.0	39.5
#4	44.1	16.4	55.9
#8	35.6	8.5	64.4
#16	27.7	7.9	72.3
#30	20.6	7.1	79.4
#50	8.7	11.8	91.3
#100	1.6	7.1	98.4
LBW	1.1	0.6	98.9

PREPARED BY: SM, LLC Technical Service Approved By

Aggregate Optimization Chart

7/19/21

PLANT #: P-36 Sample Date:

Production Gradation

DM Concrete Grade:

Contractor:

Dates Test F	Represents:	7/20/2021	through	7/26/2021		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1405	8.59	2.62	48.4
26A	71-47	Presque Isle	400	2.45	2.62	13.8
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
		Total Wt	2005	17 60		100.0

MDOT No.:

Adjusted WF Intial Production Sample (IPS)

Coarseness Factor:

37.5

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

	i otai vyt	2905 17.69		100.0	< Verity this n	umber 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"	97.9	100.0	100.0	99.0	1.0	1.0
3/4"	86.2	100.0	100.0	93.3	5.7	6.7
1/2"	48.5	97.7	100.0	74.8	18.6	25.2
3/8"	24.5	89.8	100.0	62.1	12.7	37.9
#4	4.6	29.6	98.4	43.6	18.5	56.4
#8	2.9	7.9	85.8	35.0	8.6	65.0 r
#16	2.4	5.5	70.3	28.5	6.4	71.5
#30	2.3	4.4	49.8	20.6	8.0	79.4 r
#50	2.2	3.7	20.0	9.1	11.4	90.9
#100	2.1	3.1	3.0	2.6	6.6	97.4 a
LBW	1.7	2.2	0.5	1.3	1.3	98.7

Aggregate Supplier Gradations

*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.

Coarseness Factor:	58	Workability Factor:	35	
45 45, 44 45, 44 45, 44 45, 33 45, 33 Operating Zone Boundary	52, 41	58, 39 Production Gradation 60, 36 IPS 68, 31	75, 39 75, 28	
25 + 40 45 ActionLimits Boundary =	50 5	5 Coarseness Factor (%)	75	80

Batch Plant Gradations

Work	ability Factor:	35	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.1	0.9	0.9
3/4"	90.3	8.8	9.7
1/2"	69.2	21.1	30.8
3/8"	59.1	10.1	40.9
#4	41.8	17.3	58.2
#8	35.1	6.6	64.9
#16	28.5	6.6	71.5
#30	21.2	7.3	78.8
#50	8.7	12.5	91.3
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3

PLANT #: P-39 Contractor:

Sample Date: 7/19/21 DM Concrete Grade: Dates Test Represents: 7/20/2021 7/26/2021 through

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1505	9.21	2.62	51.8
26A	71-47	Presque Isle	300	1.83	2.62	10.3
2NS	44-051	Krake Willis Rd	1100	6.65	2.65	37.9
	_	Total Wt	2905	17.69		100.0

MDOT No.:

---- Verify this number is 100%

Adjusted WF Intial Production Sample (IPS)

Coarseness Factor:

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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"	99.5	100.0	100.0	99.7	0.3	0.3
3/4"	84.7	100.0	100.0	92.1	7.7	7.9
1/2"	44.3	96.9	100.0	70.8	21.3	29.2
3/8"	24.8	86.7	100.0	59.7	11.2	40.3
#4	4.8	20.6	97.3	41.5	18.2	58.5
#8	1.9	4.5	80.8	32.0	9.4	68.0
#16	1.7	2.5	66.3	26.2	5.8	73.8
#30	1.6	1.9	50.6	20.2	6.1	79.8
#50	1.5	1.6	25.8	10.7	9.5	89.3
#100	1.5	1.5	7.8	3.9	6.8	96.1
LBW	1.4	1.4	1.5	1.4	2.4	98.6

Aggregate Supplier Gradations

*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.

Coarseness Factor:	59	Workability Factor:	32	34.5
45 45, 44 45, 44 45, 33 Operating Zone Boundary	52, 41	58, 40 68, 36 60, 36 IPS Production Gradation 58, 32	75, 39 75, 28	
40 45 ActionLimits Boundary =	50 5	Coarseness Factor (%) ⁷⁰	75	80

Batch Plant Gradations

Production Gradation

Work	ability 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"	89.7	10.3	10.3
1/2"	70.3	19.4	29.7
3/8"	59.1	11.2	40.9
#4	42.8	16.3	57.2
#8	35.5	7.3	64.5
#16	29.0	6.5	71.0
#30	21.2	7.7	78.8
#50	9.8	11.5	90.2
#100	3.7	6.1	96.3
LBW	1.2	2.5	98.8

63

Production Gradation Report

PLANT #: P-02 Sample Date:

ActionLimits Boundary = - - -

7/19/21 DM Concrete Grade: 7/20/2021 7/26/2021 through

MDOT No.:

Contractor:

Dates Test F	Represents:	7/20/2021	through	7/26/2021		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1450	8.87	2.62	49.9
26A	71-47	Presque Isle	355	2.17	2.62	12.2
2NS	63-115	Ray Rd	1100	6.65	2.65	37.9
		Total Wt	2905	17 69		100.0

Coarseness Factor:

SUPERIOR MATERIALS

Superior Materials, LLC 30701 W. 10 Mile Rd. Suite 500

Farmington Hills, MI 48336

*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.

63

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.

	i otai wt	2905	17.69		100.0	< Verify this n	umber is 100%
Sieve	6AA	26	6 A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	10	0.0	100.0	100.0	0.0	0.0
1"	97.9	10	0.0	100.0	99.0	1.0	1.0
3/4"	86.2	10	0.0	100.0	93.1	5.8	6.9
1/2"	48.5	97	7.7	100.0	74.0	19.1	26.0
3/8"	24.5	89	9.8	100.0	61.1	12.9	38.9
#4	4.6	29	9.6	96.5	42.5	18.6	57.5
#8	2.9	7	.9	80.4	32.9	9.6	67.1
#16	2.4	5	.5	65.1	26.5	6.3	73.5
#30	2.3	4	.4	48.7	20.1	6.4	79.9
#50	2.2	3	.7	24.9	11.0	9.1	89.0
#100	2.1	3	.1	5.8	3.6	7.4	96.4
LBW	1.7	2	.2	0.8	1.4	2.2	98.6
Production Gra	adation O Batch Plant Grada	tions	regate SupplierGra	adations	Adjusted WF	Intial Production	on Sample (IPS)

Adjusted WF Intial Production Sample (IPS) **Coarseness Factor:** 58 **Workability Factor:** 33 35.4 45 JMF Zone 45, 44 52, 41 Workability Factor (%) ■ 60,36 Production ∰adation 52, 34 Operating Zone Boundary 75, 28 25 Coarseness Factor (%)⁷⁰ 45 50 55 75 80

Work	ability 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"	95.1	4.9	4.9	
1/2"	74.6	20.5	25.4	
3/8"	59.3	15.3	40.7	
#4	42.1	17.2	57.9	
#8	35.1	7.1	64.9	
#16	29.2	5.9	70.8	
#30	21.9	7.3	78.1	
#50	9.6	12.4	90.4	
#100	2.4	7.2	97.6	
LBW	0.9	1.5	99.1	