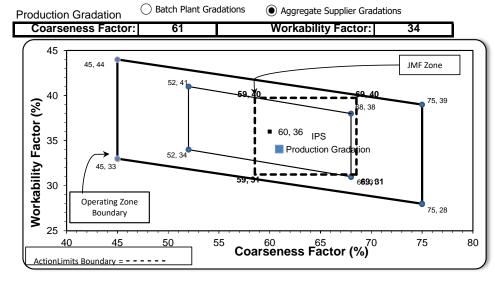
PLANT #	#:	P-101					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1625	9.94	2.62	53.2			
26A	71-47	Presque Isle	200	1.22	2.62	6.5			
2NS	75-051	Mid Michigan	1230	7.41	2.66	40.3			
		Total Wt	3055	18.57		100.0	< Verify this n	umber is 100%	
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"	_	00.0	100	0.0	100.0	100.0	0.0	0.0	
1"	1	97.3	100	0.0	100.0	98.6	1.4	1.4	1
3/4"		82.7	100	0.0	100.0	90.8	7.8	9.2	1
1/2"		41.3	98	.7	100.0	68.7	22.1	31.3	
3/8"	:	25.7	90	.0	100.0	59.8	8.9	40.2	*
#4		4.6	18	.4	96.0	42.3	17.5	57.7	*
#8		2.3	4.	7	80.8	34.1	8.2	65.9	no
#16		2.1	2.	5	66.8	28.2	5.9	71.8	*
#30		2.0	2.	2	51.9	22.1	6.1	77.9	nc
#50		2.0	2.	0	27.4	12.2	9.9	87.8	*
#100		1.9	1.		7.9	4.3	7.9	95.7	а ′
LBW		1.6	1.	7	1.2	1.4	2.9	98.6	



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Initial Produc	tion Sample (IPS	5)	
Coar	seness Factor:	64	
Wor	kability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% 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"	93.9	6.1	6.1
1/2"	71.4	22.5	28.6
3/8"	59.0	12.4	41.0
#4	45.1	13.9	54.9
#8	35.5	9.6	64.5
#16	28.3	7.2	71.7
#30	21.3	6.9	78.7
#50	11.0	10.3	89.0
#100	3.4	7.6	96.6
LBW	1.1	2.3	98.9
	-	-	

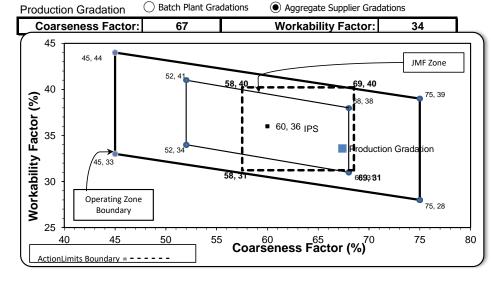
Approved By: Mart 1. Ball

PLANT :	#:	P-102					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1625	9.68	2.69	52.4			
26A	58-003	Stoneco	275	1.64	2.69	8.9			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7			
		Total Wt	3100	18.58		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
1.5"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	
1"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	1
3/4"		81.5	100	0.0	100.0	90.3	9.7	9.7	1
1/2"		40.4	99	.2	100.0	68.7	21.6	31.3	
3/8"		16.6	88	.4	100.0	55.3	13.4	44.7	*
#4		4.2	16	5.0	97.9	41.5	13.7	58.5	*,
#8		2.2	3.	5	83.0	33.6	7.9	66.4	no
#16		1.6	2.	0	66.4	26.7	6.9	73.3	*(
#30		1.5	1.	7	47.2	19.2	7.5	80.8	no
#50		1.5	1.	6	23.2	9.9	9.3	90.1	*(
#100		1.4	1.		4.4	2.6	7.3	97.4	a 1
LBW		1.1	1.	2	0.4	0.8	1.7	99.2	1



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Maximum % Retained must be above the 3/8" sieve.
Any two adjacent sieves must equal 10% except max.,
bm. max., #100 and #200 sieves.
% Retained must be at least 4% for each sieve except max.,
bm. max., #100 and #200 sieves.
% Retained must be at least 4% for the 3/4" sieve when
1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)									
Coars	eness Factor:	63							
Work	ability Factor:	36							
Sieve	Cumulative	%	Cumulative						
Sieve	% Passing	Retained	% Retained						
2"	100.0	0.0	0.0						
1.5"	100.0	0.0	0.0						
1"	99.2	0.8	0.8						
3/4"	90.9	8.3	9.1						
1/2"	71.3	19.6	28.7						
3/8"	59.5	11.8	40.5						
#4	43.8	15.7	56.2						
#8	35.7	8.1	64.3						
#16	27.0	8.7	73.0						
#30	18.6	8.4	81.4						
#50	6.8	11.8	93.2						
#100	1.4	5.4	98.6						
LBW	0.6	0.8	99.4						

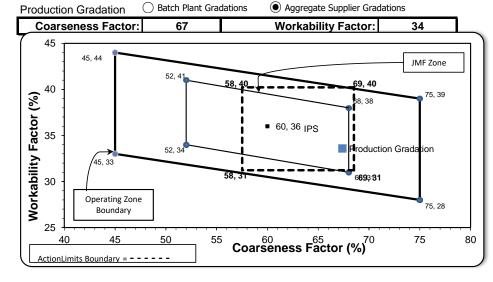
Approved By: Mart 1. Ball

PLANT #:		P-103					Contractor:		
Sample Date	e:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test F	Represents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1625	9.68	2.69	52.4			
26A	58-003	Stoneco	275	1.64	2.69	8.9			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7			
		Total Wt	3100	18.58		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"	1	00.0	100).0	100.0	100.0	0.0	0.0	
1"	1	00.0	100).0	100.0	100.0	0.0	0.0	
3/4"		81.5	100).0	100.0	90.3	9.7	9.7	
1/2"		40.4	99	.2	100.0	68.7	21.6	31.3	
3/8"		16.6	88	.4	100.0	55.3	13.4	44.7	*Ma
#4		4.2	16	.0	97.9	41.5	13.7	58.5	*An
#8		2.2	3.	5	83.0	33.6	7.9	66.4	nom.
#16		1.6	2.0		66.4	26.7	6.9	73.3	*%
#30		1.5	1.7		47.2	19.2	7.5	80.8	nom
#50		1.5	1.	6	23.2	9.9	9.3	90.1	*%
#100		1.4	1.		4.4	2.6	7.3	97.4	a 1.5
LBW		1.1	1.:	2	0.4	0.8	1.7	99.2	1



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



	Intial Production Sample (IPS)									
Coars	eness Factor:	63								
Work	ability Factor:	36								
Sieve	Cumulative	%	Cumulative							
Sieve	% Passing	Retained	% Retained							
2"	100.0	0.0	0.0							
1.5"	100.0	0.0	0.0							
1"	99.2	0.8	0.8							
3/4"	90.9	8.3	9.1							
1/2"	71.3	19.6	28.7							
3/8"	59.5	11.8	40.5							
#4	43.8	15.7	56.2							
#8	35.7	8.1	64.3							
#16	27.0	8.7	73.0							
#30	18.6	8.4	81.4							
#50	6.8	11.8	93.2							
#100	1.4	5.4	98.6							
LBW	0.6	0.8	99.4							

Approved BY: Mart P. Ball

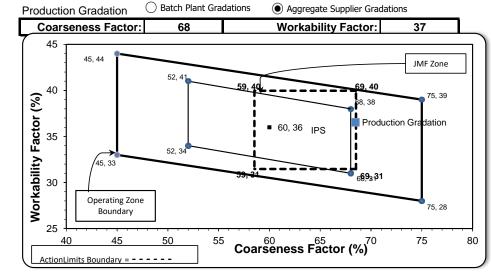
PLANT :	#:	14					Contractor:		
Sample Date):	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	Represents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1575	9.38	2.69	50.6			
26A	58-003	Stoneco	325	1.94	2.69	10.5			
2NS	19-04	Schlegel	1210	7.26	2.67	38.9			
		Total Wt	3110	18.58		100.0	< Verify this n	umber is 100%	_
Sieve	(6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	1
1.5"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	
1"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	
3/4"	8	31.5	100	0.0	100.0	90.6	9.4	9.4	
1/2"	4	40.4	99	.2	100.0	69.7	20.9	30.3	
3/8"		16.6	88	.4	100.0	56.6	13.2	43.4	*Maximum %
#4		4.2	16	5.0	99.9	42.7	13.9	57.3	*Any two adja
#8		2.2	3.	5	90.1	36.5	6.1	63.5	nom. max., #10
#16		1.6	2.	0	69.4	28.0	8.5	72.0	*% Retained r
#30		1.5	1.	7	44.5	18.3	9.8	81.7	nom. max., #10
#50		1.5	1.	6	14.3	6.5	11.8	93.5	*% Retained r
#100		1.4		5	2.7	1.9	4.6	98.1	a 1.5" max. size
LBW		1.1	1.	2	0.2	0.8	1.2	99.2	



Builders Redi-Mix

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*Maximum % Retained must be above the 3/8" sieve. *Any two adjacent sieves must equal 10% except max., bom. max., #100 and #200 sieves. *% Retained must be at least 4% for each sieve except max., bom. max., #100 and #200 sieves. *% Retained must be at least 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)									
Coars	eness Factor:	64							
Work	ability Factor:	36							
Sieve	Cumulative	%	Cumulative						
Sieve	% Passing	Retained	% Retained						
2"	100.0	0.0	0.0						
1.5"	100.0	0.0	0.0						
1"	99.2	0.8	0.8						
3/4"	90.9	8.3	9.1						
1/2"	71.3	19.6	28.7						
3/8"	59.2	12.1	40.8						
#4	41.5	17.7	58.5						
#8	35.7	5.8	64.3						
#16	27.9	7.9	72.1						
#30	18.3	9.5	81.7						
#50	7.3	11.0	92.7						
#100	2.0	5.3	98.0						
LBW	0.9	1.1	99.1						

Approved By: Mart P. Ball

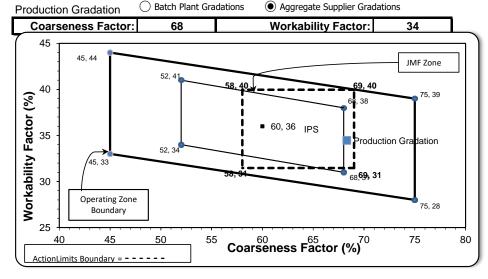
PLANT #	#:	12					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1550	9.48	2.62	50.8			
26A	71-47	Presque Isle	270	1.65	2.62	8.9			
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3			
		Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	1
1.5"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	1
1"	1	96.6	100).0	100.0	98.3	1.7	1.7	1
3/4"		75.0	100	0.0	100.0	87.3	11.0	12.7	
1/2"		30.8	94	.8	100.0	64.4	22.9	35.6	
3/8"		14.8	83	.4	100.0	55.2	9.1	44.8	*N
#4		3.8	19	.9	96.4	42.6	12.7	57.4	*A
#8		2.2	3.	1	82.0	34.5	8.1	65.5	nor
#16		1.8	1.	6	67.0	28.1	6.4	71.9	*%
#30		1.6	1.5		50.1	21.2	6.9	78.8	nor
#50		1.6	1.	5	24.6	10.9	10.3	89.1	*%
#100		1.4	1.		4.7	2.7	8.1	97.3	a 1.
LBW		1.2	1.	2	0.8	1.0	1.7	99.0	1



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., bm. max., #100 and #200 sieves. % Retained must be at least 4% for each sieve except max., bm. max., #100 and #200 sieves. % Retained must be at least 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)									
Coars	seness Factor:	64							
Work	ability Factor:	36							
Sieve	Cumulative	%	Cumulative						
Sieve	% Passing	Retained	% Retained						
2"	100.0	0.0	0.0						
1.5"	100.0	0.0	0.0						
1"	99.2	0.8	0.8						
3/4"	90.9	8.3	9.1						
1/2"	71.3	19.6	28.7						
3/8"	59.2	12.1	40.8						
#4	41.5	17.7	58.5						
#8	35.7	5.8	64.3						
#16	27.9	7.9	72.1						
#30	18.3	9.5	81.7						
#50	7.3	11.0	92.7						
#100	2.0	5.3	98.0						
LBW	0.9	1.1	99.1						

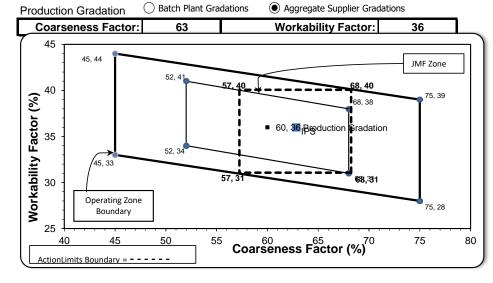
Approved By: Mart P. Ball

PLANT #:		20					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1700	10.40	2.62	55.7			
26A	71-47	Presque Isle	100	0.61	2.62	3.3			
2NS	63-92	Grange Hall	1250	7.56	2.65	41.0			
		Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"	1	00.0	100).0	100.0	100.0	0.0	0.0	1
1"	1	98.2	100).0	100.0	99.0	1.0	1.0	
3/4"		85.4	100).0	100.0	91.9	7.1	8.1	1
1/2"		45.9	97	.2	100.0	69.8	22.1	30.2	1
3/8"	:	28.4	90	.1	100.0	59.8	10.0	40.2	*M
#4		4.0	28	.6	97.6	43.2	16.6	56.8	*Ar
#8		2.1	6.	6	84.4	36.0	7.2	64.0	nom
#16		1.9	2.	2.6		29.9	6.1	70.1	*%
#30		1.8	1.	9	51.6	22.2	7.7	77.8	nom
#50		1.8	1.	7	21.4	9.8	12.4	90.2	*%
#100		1.7	1.		3.3	2.4	7.5	97.6	a 1.5
LBW		1.4	1.	5	0.6	1.1	1.3	98.9	1



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Coarseness Factor: 63 Workability Factor: 36 Sieve Cumulative % Passing % Cumulative % Retained 2" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1.4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	Intial Production Sample (IPS)									
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 1" 100.0 0.0 0.0 3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	Coars	eness Factor:	63							
Sieve % Passing Retained % Retained 2" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1" 100.0 0.0 0.0 3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	Work	ability Factor:	36							
% 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 1" 100.0 0.0 0.0 3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	Siovo	Cumulative	%	Cumulative						
1.5" 100.0 0.0 0.0 1" 100.0 0.0 0.0 3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	Sieve	% Passing	Retained	% Retained						
1" 100.0 0.0 0.0 3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	2"	100.0	0.0	0.0						
3/4" 93.3 6.7 6.7 1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	1.5"	100.0	0.0	0.0						
1/2" 70.6 22.6 29.4 3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	1"	100.0	0.0	0.0						
3/8" 59.6 11.0 40.4 #4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	3/4"	93.3	6.7	6.7						
#4 43.9 15.7 56.1 #8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	1/2"	70.6	22.6	29.4						
#8 35.6 8.4 64.4 #16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	3/8"	59.6	11.0	40.4						
#16 28.4 7.2 71.6 #30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	#4	43.9	15.7	56.1						
#30 19.4 9.0 80.6 #50 7.5 11.9 92.5 #100 0.9 6.6 99.1	#8	35.6	8.4	64.4						
#50 7.5 11.9 92.5 #100 0.9 6.6 99.1	#16	28.4	7.2	71.6						
#100 0.9 6.6 99.1	#30	19.4	9.0	80.6						
	#50	7.5	11.9	92.5						
	#100	0.9	6.6	99.1						
LBW 0.9 0.1 99.1	LBW	0.9	0.1	99.1						

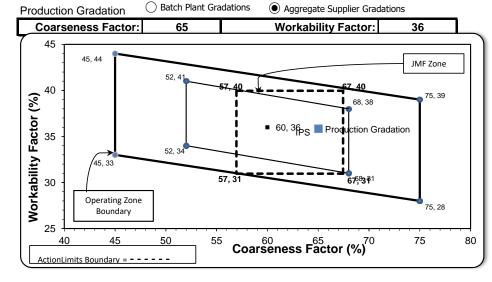
Approved By: Mart 1. Ball

PLANT #	#:	p11					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1500	9.17	2.62	49.2			
26A	71-47	Presque Isle	320	1.96	2.62	10.5			
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3			
		Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100).0	100.0	100.0	0.0	0.0	1
1.5"	1	00.0	100).0	100.0	100.0	0.0	0.0	
1"	1	97.4	100).0	100.0	98.7	1.3	1.3	1
3/4"		76.2	100).0	100.0	88.3	10.4	11.7	
1/2"		31.0	94	.8	100.0	65.5	22.8	34.5	
3/8"		18.7	83	.4	100.0	58.3	7.2	41.7	*N
#4		3.6	19	.9	96.5	42.8	15.5	57.2	*A
#8		2.0	3.	1	85.6	35.8	6.9	64.2	non
#16		1.8	1.	1.6		29.5	6.3	70.5	*%
#30		1.7	1.	1.5		21.4	8.1	78.6	non
#50		1.6	1.	5	24.1	10.7	10.7	89.3	*%
#100		1.5	1.		7.4	3.9	6.8	96.1	a 1.
LBW		1.2	1.	2	1.5	1.3	2.5	98.7	1



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production	on Sample (IPS	5)	
Coars	eness Factor:	62	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% 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"	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

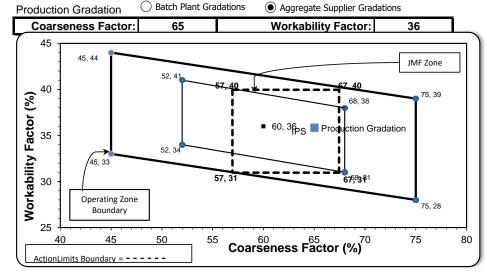
Approved By: Mary P. Ball

PLANT #	#:	P-32					Contractor:				
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP					
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution					
6AA	71-47	Presque Isle	1500	9.17	2.62	49.2					
26A	71-47	Presque Isle	320	1.96	2.62	10.5					
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3					
		Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%	_		
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained			
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0			
1.5"	1	00.0	100	0.0	100.0	100.0	0.0	0.0			
1"	9	97.4	100	0.0	100.0	98.7	1.3	1.3			
3/4"	-	76.2	100	0.0	100.0	88.3	10.4	11.7	1		
1/2"		31.0	94	94	94	94.8	100.0	65.5	22.8	34.5	
3/8"		18.7	83	.4	100.0	58.3	7.2	41.7	*		
#4		3.6	19	.9	96.5	42.8	15.5	57.2	*		
#8		2.0	3.	1	85.6	35.8	6.9	64.2	no		
#16		1.8	1.	6	70.5	29.5	6.3	70.5	*		
#30		1.7	1.	5	50.5	21.4	8.1	78.6	no		
#50		1.6	1.	5	24.1	10.7	10.7	89.3	*(
#100		1.5	1.		7.4	3.9	6.8	96.1	a '		
LBW		1.2	1.	2	1.5	1.3	2.5	98.7]		



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production	on Sample (IPS	5)	_
Coars	eness Factor:	62	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% 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"	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

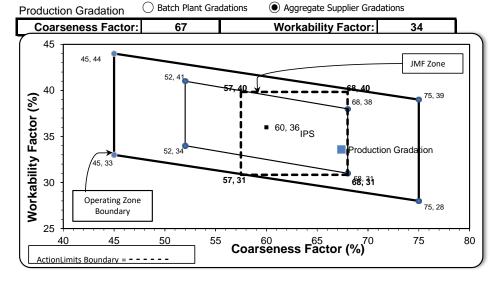
Approved By: Mary P. Ball

PLANT #	#:	P-35					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1625	9.68	2.69	52.4			
26A	58-003	Stoneco	275	1.64	2.69	8.9			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7			
		Total Wt	3100	18.58		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	Α	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"		100.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	1
1"	1	100.0	100).0	100.0	100.0	0.0	0.0	1
3/4"		81.5	100).0	100.0	90.3	9.7	9.7	
1/2"		40.4	96	99.2	100.0	68.7	21.6	31.3	
3/8"		16.6	88	.4	100.0	55.3	13.4	44.7	*N
#4		4.2	16	.0	97.9	41.5	13.7	58.5	*/
#8		2.2	3.	5	83.0	33.6	7.9	66.4	nor
#16		1.6	2.	0	66.4	26.7	6.9	73.3	*9
#30		1.5	1.	7	47.2	19.2	7.5	80.8	nor
#50		1.5	1.	6	23.2	9.9	9.3	90.1	*9
#100		1.4	1.		4.4	2.6	7.3	97.4	a 1
LBW		1.1	1.	2	0.4	0.8	1.7	99.2	1



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Product	ion Sample (IPS	5)	_
Coars	seness Factor:	63	
Worl	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.4	11.9	40.6
#4	43.0	16.5	57.0
#8	35.3	7.6	64.7
#16	28.2	7.1	71.8
#30	21.6	6.6	78.4
#50	9.1	12.5	90.9
#100	1.7	7.4	98.3
LBW	1.1	0.6	98.9
LBW	1.1	0.6	98.9

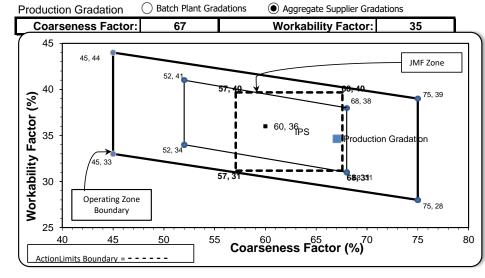
Approved By: Mart P. Ball

PLANT #	#:	P-36					Contractor:									
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP										
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:									
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution										
6AA	71-47	Presque Isle	1500	9.17	2.62	49.2										
26A	71-47	Presque Isle	350	2.14	2.62	11.5										
2NS	63-92	Grange Hall	1200	7.26	2.65	39.3										
		Total Wt	3050	18.57		100.0	< Verify this n	umber is 100%	_							
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained								
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	1							
1.5"	1	00.0	100	0.0	100.0	100.0	0.0	0.0								
1"	1	96.6	100	0.0	100.0	98.3	1.7	1.7								
3/4"		75.0	100	10	100	10	10	10	10	100	0.0	100.0	87.7	10.6	12.3	
1/2"		30.8	94	.8	100.0	65.4	22.3	34.6								
3/8"		14.8	83	.4	100.0	56.2	9.2	43.8	*							
#4		3.8	19	.9	97.6	42.6	13.6	57.4	*/							
#8		2.2	3.	1	84.4	34.6	7.9	65.4	noi							
#16	1.8		1.	6	70.1	28.6	6.0	71.4	*0							
#30		1.6 1.5 5	51.6	21.3	7.4	78.7	noi									
#50		1.6	1.	5	21.4	9.4	11.9	90.6	*0							
#100		1.4	1.		3.3	2.1	7.2	97.9	a 1							
LBW		1.2	1.	2	0.6	1.0	1.2	99.0								



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production	on Sample (IPS	5)	_
Coars	eness Factor:	62	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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"	90.5	8.6	9.5
1/2"	69.8	20.7	30.2
3/8"	59.8	10.0	40.2
#4	42.2	17.6	57.8
#8	35.4	6.7	64.6
#16	28.8	6.7	71.2
#30	21.4	7.4	78.6
#50	8.8	12.6	91.2
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3

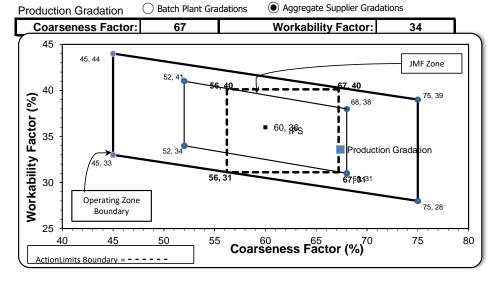
Approved By: Mart 1. Ball

PLANT #	#:	P-38					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1625	9.68	2.69	52.4			
26A	58-003	Stoneco	275	1.64	2.69	8.9			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7			
		Total Wt	3100	18.58		100.0	< Verify this n	umber is 100%	_
Sieve		6AA	26	Α	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"		100.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	1
1"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	1
3/4"		81.5	100	0.0	100.0	90.3	9.7	9.7	1
1/2"		40.4	99.2 100.0	68.7	21.6	31.3	1		
3/8"		16.6	88	.4	100.0	55.3	13.4	44.7	*
#4		4.2	16	.0	97.9	41.5	13.7	58.5	*
#8		2.2	3.	5	83.0	33.6	7.9	66.4	no
#16		1.6	2.	0	66.4	26.7	6.9	73.3	*
#30		1.5	1.	7	47.2	19.2	7.5	80.8	nc
#50		1.5	1.	6	23.2	9.9	9.3	90.1	*
#100		1.4	1.	5	4.4	2.6	7.3	97.4	a ′
LBW		1.1	1.	2	0.4	0.8	1.7	99.2	1



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Maximum % Retained must be above the 3/8" sieve. "Any two adjacent sieves must equal 10% except max., bm. max., #100 and #200 sieves. "% Retained must be at least 4% for each sieve except max., bm. max., #100 and #200 sieves. "% Retained must be at least 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)									
Coars	eness Factor:	62							
Work	ability Factor:	36							
Sieve	Cumulative	%	Cumulative						
Sieve	% Passing	Retained	% Retained						
2"	100.0	0.0	0.0						
1.5"	100.0	0.0	0.0						
1"	99.2	0.8	0.8						
3/4"	91.1	8.1	8.9						
1/2"	72.0	19.1	28.0						
3/8"	60.3	11.7	39.7						
#4	43.4	16.9	56.6						
#8	35.6	7.8	64.4						
#16	28.4	7.2	71.6						
#30	21.8	6.7	78.2						
#50	9.1	12.6	90.9						
#100	1.7	7.4	98.3						
LBW	1.1	0.6	98.9						

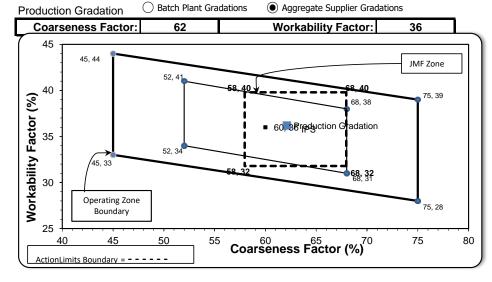
Approved By: Mary P. Ball

PLANT #	#:	P-39					Contractor:		
Sample Date	:	9/11/23			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	9/12/2023	through	9/18/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1600	9.79	2.62	52.5			
26A	71-47	Presque Isle	200	1.22	2.62	6.6			
2NS	44-051	Krake Willis Rd	1250	7.56	2.65	41.0			
		Total Wt	3050	18.57		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	100.0	100.0	0.0	0.0	
1"		97.3	100).0	100.0	98.6	1.4	1.4	
3/4"		82.7	100	0.0	100.0	90.9	7.7	9.1	
1/2"		41.3	98	.7	100.0	69.1	21.8	30.9	
3/8"		25.7	90	.0	100.0	60.4	8.8	39.6	*Ma
#4		4.6	18	.4	98.9	44.2	16.2	55.8	*Any
#8		2.3	4.	7	84.6	36.2	8.0	63.8	nom.
#16		2.1	2.	5	68.9	29.5	6.7	70.5	*% F
#30		2.0	2.	2	49.7	21.6	7.9	78.4	nom.
#50		2.0	2.	0	23.8	10.9	10.6	89.1	*% F
#100		1.9	1.		6.5	3.8	7.1	96.2	a 1.5'
LBW		1.6	1.	7	1.6	1.6	2.2	98.4	1



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Maximum % Retained must be above the 3/8" sieve.
Any two adjacent sieves must equal 10% except max.,
bm. max., #100 and #200 sieves.
% Retained must be at least 4% for each sieve except max.,
bm. max., #100 and #200 sieves.
% Retained must be at least 4% for the 3/4" sieve when
1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Producti	on Sample (IPS	5)	_
Coars	seness Factor:	63	
Work	ability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sieve	% 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"	89.8	10.2	10.2
1/2"	70.7	19.1	29.3
3/8"	59.6	11.1	40.4
#4	43.2	16.4	56.8
#8	35.8	7.4	64.2
#16	29.2	6.6	70.8
#30	21.4	7.8	78.6
#50	9.8	11.6	90.2
#100	3.7	6.1	96.3
LBW	1.2	2.5	98.8

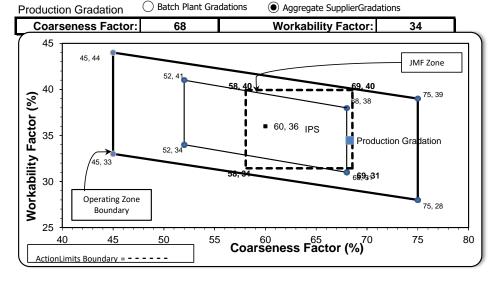
Approved By: Mary P. Ball

PLANT #: Sample Date: Dates Test Represents:		P-O2		9/18/2023	Concrete Grade:		Contractor:		
		9/11/23				S2M, 3500HP			
		9/12/2023	through				MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1550	9.48	2.62	50.8			
26A	71-47	Presque Isle	270	1.65	2.62	8.9			
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3			
• • • • • • • • • • • • • • • • • • •		Total Wt	3050	18.57		100.0	< Verify this nu	mber 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"	96.6		100.0		100.0	98.3	1.7	1.7	1
3/4"	75.0		100.0		100.0	87.3	11.0	12.7	1
1/2"	30.8		94.8		100.0	64.4	22.9	35.6	
3/8"	14.8		83.4		100.0	55.2	9.1	44.8	*
#4	3.8		19.9		96.4	42.6	12.7	57.4	*
#8	2.2		3.1		82.0	34.5	8.1	65.5	no
#16	1.8		1.6		67.0	28.1	6.4	71.9	*
#30	1.6		1.5		50.1	21.2	6.9	78.8	no
#50	1.6		1.5		24.6	10.9	10.3	89.1	*0
#100			1.4		4.7	2.7	8.1	97.3	a 1
LBW	1.2		1.2		0.8	1.0	1.7	99.0	1



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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 4% for the 3/4" sieve when 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)								
Coars	eness Factor:	63						
Work	ability Factor:	36						
Sieve	Cumulative	%	Cumulative					
Sieve	% Passing	Retained	% Retained					
2"	2" 100.0		0.0					
1.5"	100.0	0.0	0.0					
1"	100.0	0.0	0.0					
3/4"	95.6	4.4	4.4					
1/2"	73.1	22.6	26.9					
3/8"	59.3	13.8	40.7					
#4	42.8	16.5	57.2					
#8	35.7	7.1	64.3					
#16	28.9	6.8	71.1					
#30	20.7	8.2	79.3					
#50	9.9	10.8	90.1					
#100	2.1	7.8	97.9					
LBW	0.9	1.2	99.1					

Approved By: Mart 1. Ball