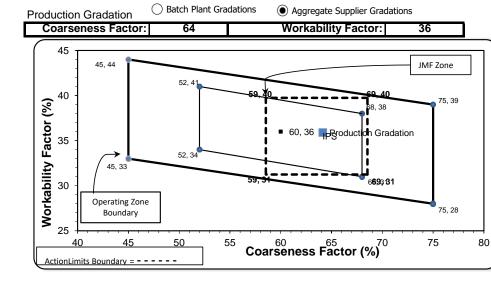
PLANT #	#:	P-101					Contractor:						
Sample Date	:	11/7/22			Concrete Grade:	S2M, 3500HP							
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:						
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution							
6AA	71-47	Presque Isle	1570	9.60	2.62	51.4							
26A	71-47	Presque Isle	255	1.56	2.62	8.3							
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	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"		98.7	100 100	-	-	10	-	0.0	100.0	99.3	0.7	0.7	
3/4"		82.9						0.0	100.0	91.2	8.1	8.8	
1/2"		45.6	94	.7	100.0	71.6	19.6	28.4					
3/8"	:	23.3	79).7	100.0	58.9	12.7	41.1	*				
#4		4.1	22	2.7	98.8	43.8	15.1	56.2	*				
#8		2.1	8.	.6	84.7	35.9	7.9	64.1	no				
#16	1.8		4.	.8	69.2	29.2	6.7	70.8	*				
#30		1.7	3.	.9	50.9	21.7	7.5	78.3	no				
#50		1.7	3.	5	21.0	9.6	12.1	90.4	*				
#100		1.7	3.		4.5	3.0	6.7	97.0	a 2				
LBW		1.5	2.	.8	0.6	1.2	1.7	98.8	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Initial Produc	tion Sample (IPS	5)	_
Coar	seness Factor:	64	
Wor	kability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sleve	% 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

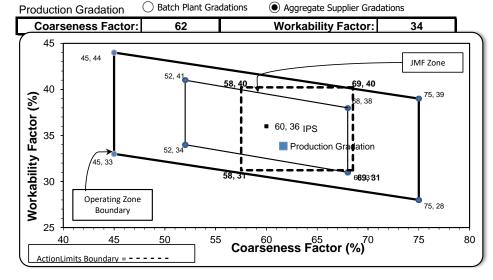
Approved By: Mart P. Ball

PLANT :	#:	P-102					Contractor:				
Sample Date	:	11/7/22			Concrete Grade:	S2M, 3500HP					
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution					
6AA	58-003	Stoneco	1750	10.43	2.69	56.5					
26A	58-003	Stoneco	150	0.89	2.69	4.8					
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			
1.5"		100.0	100	0.0	100.0	100.0	0.0	0.0			
1"		99.7	10	0.0	100.0	99.8	0.2	0.2			
3/4"		83.8	100	10	10	0.0	100.0	90.9	9.0	9.1	
1/2"		50.5	99	.8	100.0	72.0	18.8	28.0			
3/8"		28.7	88	.7	100.0	59.2	12.8	40.8	*N		
#4		4.9	6.	0	98.1	41.0	18.2	59.0	*A		
#8		1.9	1.	3	84.5	33.8	7.2	66.2	nor		
#16		1.4	1.	0	68.0	27.2	6.7	72.8	*9		
#30		1.2	1.	0	49.2	19.8	7.4	80.2	nor		
#50		1.1	0.	8	25.7	10.6	9.2	89.4	*9		
#100		1.0	0.	8	7.2	3.4	7.2	96.6	a 2		
LBW		0.8	0.	6	1.4	1.0	2.4	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Product	tion Sample (IPS	5)	_
Coar	seness Factor:	63	
Wor	kability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sleve	% 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

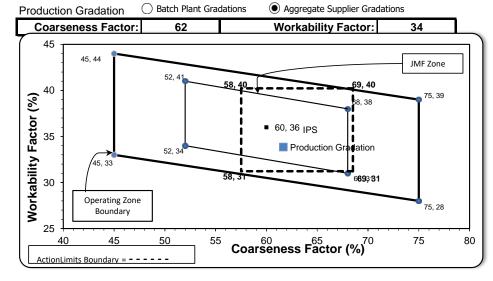
Approved By: Nat 1. Ball

PLANT	#:	P-103					Contractor:		
Sample Date	e:	11/7/22			Concrete Grade	: S2M, 3500HP			
Dates Test F	Represents:	11/8/2022	through	11/14/2022			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1750	10.43	2.69	56.5			
26A	58-003	Stoneco	150	0.89	2.69	4.8			
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	
1.5"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	
1"		99.7	100	0.0	100.0	99.8	0.2	0.2	
3/4"		83.8	100	0.0	100.0	90.9	9.0	9.1	
1/2"		50.5	99	.8	100.0	72.0	18.8	28.0	
3/8"		28.7	88	5.7	100.0	59.2	12.8	40.8	*Ma
#4		4.9	6.	.0	98.1	41.0	18.2	59.0	*Any
#8		1.9	1.	.3	84.5	33.8	7.2	66.2	nom.
#16		1.4	1.	.0	68.0	27.2	6.7	72.8	*% F
#30		1.2	1.	0	49.2	19.8	7.4	80.2	nom.
#50		1.1	0.	.8	25.7	10.6	9.2	89.4	*% F
#100		1.0	0.		7.2	3.4	7.2	96.6	a 2" m
LBW		0.8	0.	6	1.4	1.0	2.4	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



ntial Produc	tion Sample (IPS	5)	
Coar	seness Factor:	63	
Wor	kability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sleve	% 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: Mary P. Ball

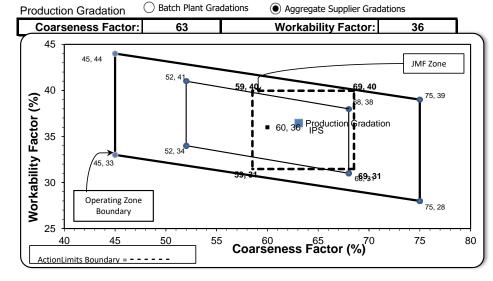
PLANT :	#:	P-14					Contractor:		
Sample Date	e:	11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	Represents:	11/8/2022	through	11/14/2022	2		MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	58-003	Stoneco	1720	10.25	2.69	55.3			
26A	58-003	Stoneco	180	1.07	2.69	5.8			
2NS	19-55	Schlegel	1210	7.26	2.67	38.9			
		Total Wt	3110	18.58		100.0	< Verify this n	umber is 100%	
Sieve	6	6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	
1.5"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	
1"	ç	99.7	10	0.0	100.0	99.8	0.2	0.2	
3/4"	8	83.8	10	0.0	100.0	91.0	8.8	9.0	
1/2"	Ę	50.5	99	.8	100.0	72.6	18.4	27.4	
3/8"	4	28.7	88	3.7	100.0	59.9	12.7	40.1	*Maximum %
#4		4.9	6	.0	100.0	42.0	17.9	58.0	*Any two adja
#8		1.9	1.	.3	90.8	36.5	5.5	63.5	nom. max., #1
#16		1.4	1.	.0	71.2	28.5	7.9	71.5	*% Retained
#30		1.2	1.	.0	48.1	19.4	9.1	80.6	nom. max., #1
#50		1.1	0	.8	16.9	7.2	12.2	92.8	*% Retained
#100		1.0		.8	3.2	1.8	5.4	98.2	a 2" max. size
LBW		0.8	0.	.6	0.3	0.6	1.3	99.4	



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



Intial Production	on Sample (IPS	5)	_
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

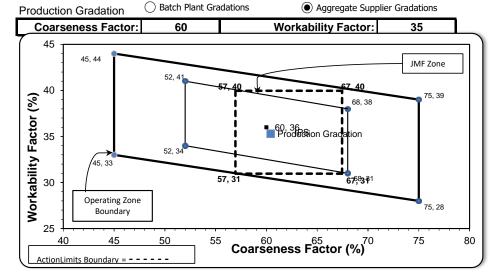
Approved By: Mart P. Ball

PLANT :	#:	11					Contractor:		
Sample Date	:	11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1470	8.99	2.62	48.2			
26A	71-47	Presque Isle	350	2.14	2.62	11.5			
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	6A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	-
1.5"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	
1"	9	96.9	10	0.0	100.0	98.5	1.5	1.5	
3/4"	i	81.8	10	0.0	100.0	91.2	7.3	8.8	
1/2"		44.0	96	5.2	100.0	72.6	18.7	27.4	
3/8"	:	22.1	86	6.5	100.0	60.9	11.7	39.1	*Max
#4		4.3	21	.4	96.1	43.3	17.6	56.7	*Any
#8		2.2	5	.6	83.3	35.3	8.0	64.7	nom. n
#16		1.8	2.6		68.4	28.8	6.5	71.2	*% R
#30		1.7	2	.1	49.6	21.1	7.7	78.9	nom. n
#50		1.6	1.	.9	24.2	10.7	10.3	89.3	*% Re
#100		1.5		.8	6.9	3.7	7.0	96.3	a 2" ma
LBW		1.3	1.	.7	1.3	1.3	2.4	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Product	ion Sample (IPS	5)	-
Coars	seness Factor:	62	
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"	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

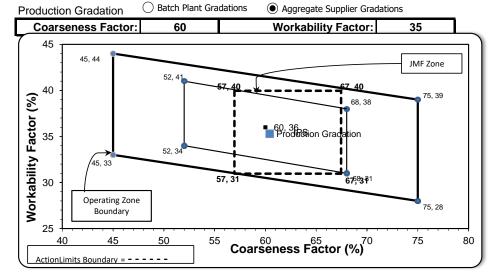
Approved By: Mart 1. Ball

PLANT #	#:	P-32					Contractor:		
Sample Date	:	11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
6AA	71-47	Presque Isle	1470	8.99	2.62	48.2			
26A	71-47	Presque Isle	350	2.14	2.62	11.5			
2NS	95-013	Smelter Bay	1230	7.44	2.65	40.3			
		Total Wt	3050	18.57		100.0	< Verify this no	umber is 100%	
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	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	96.9	100	0.0	100.0	98.5	1.5	1.5	
3/4"		81.8	100	0.0	100.0	91.2	7.3	8.8	1
1/2"		44.0	96	96.2 100.0	100.0	72.6	18.7	27.4	
3/8"	:	22.1	86	6.5	100.0	60.9	11.7	39.1	*
#4		4.3	21	.4	96.1	43.3	17.6	56.7	*,
#8		2.2	5.	.6	83.3	35.3	8.0	64.7	noi
#16		1.8	2.	.6	68.4	28.8	6.5	71.2	*(
#30		1.7	2.	.1	49.6	21.1	7.7	78.9	no
#50		1.6	1.	.9	24.2	10.7	10.3	89.3	*(
#100		1.5	1.	.8	6.9	3.7	7.0	96.3	a 2
LBW		1.3	1.	.7	1.3	1.3	2.4	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Producti	on Sample (IPS	5)	_
Coars	seness 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

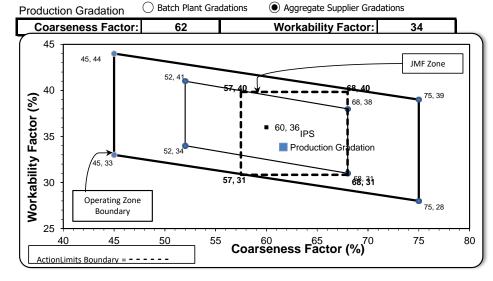
Approved By: Mart 1. Ball

PLANT #:		P-35					Contractor:		
Sample Date:		11/7/22			Concrete Grade	: S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific	%			
ngg. Class	110 #	Source	Weight (33D)		Gravity	Contribution			
6AA	58-003	Stoneco	1750	10.43	2.69	56.5			
26A	58-003	Stoneco	150	0.89	2.69	4.8			
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	
1.5"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	1
1"		99.7	100	0.0	100.0	99.8	0.2	0.2	
3/4"		83.8	100	0.0	100.0	90.9	9.0	9.1	
1/2"		50.5	99	.8	100.0	72.0	18.8	28.0	1
3/8"		28.7	88	5.7	100.0	59.2	12.8	40.8	*N
#4		4.9	6.	0	98.1	41.0	18.2	59.0	*/
#8		1.9	1.	3	84.5	33.8	7.2	66.2	nor
#16		1.4	1.	0	68.0	27.2	6.7	72.8	*9
#30		1.2	1.	0	49.2	19.8	7.4	80.2	nor
#50		1.1	0.	8	25.7	10.6	9.2	89.4	*9
#100		1.0	0.	8	7.2	3.4	7.2	96.6	a 2
LBW		0.8	0.	6	1.4	1.0	2.4	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Coarseness Factor: Workability Factor: Sieve Cumulative % Passing 2" 100.0 1.5" 100.0 1" 99.2 3/4" 90.9 1/2" 71.3		Cumulative % Retained 0.0
Sieve Cumulative % Passing 2" 100.0 1.5" 100.0 1" 99.2 3/4" 90.9 1/2" 71.3	% Retained 0.0	% Retained
Sieve % Passing 2" 100.0 1.5" 100.0 1" 99.2 3/4" 90.9 1/2" 71.3	Retained 0.0	% Retained
% Passing 2" 100.0 1.5" 100.0 1" 99.2 3/4" 90.9 1/2" 71.3	0.0	
1.5" 100.0 1" 99.2 3/4" 90.9 1/2" 71.3		0.0
1" 99.2 3/4" 90.9 1/2" 71.3	0.0	
3/4" 90.9 1/2" 71.3		0.0
1/2" 71.3	0.8	0.8
· · · · · · · · · · · · · · · · · · ·	8.3	9.1
	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

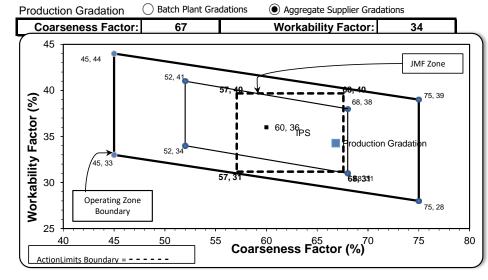
Approved By: Mart P. Ball

PLANT #:		P-36					Contractor:		
Sample Date:		11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			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	300	1.83	2.62	9.8			
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	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"	9	97.6	100	0.0	100.0	98.8	1.2	1.2	
3/4"	i	83.3	100	0.0	100.0	91.5	7.3	8.5	
1/2"		36.9	96	.2	100.0	67.6	24.0	32.4	
3/8"		16.2	86	.5	100.0	56.1	11.5	43.9	*
#4		2.7	21	.4	97.5	41.8	14.2	58.2	*/
#8		1.8	5.	6	83.4	34.3	7.6	65.7	no
#16		1.6	2.	6	69.4	28.4	5.9	71.6	*0
#30		1.6	2.	1	51.5	21.3	7.1	78.7	no
#50		1.5	1.	9	22.1	9.6	11.6	90.4	*0
#100		1.5	1.		4.1	2.6	7.1	97.4	a 2
LBW		1.2	1.	7	1.0	1.2	1.4	98.8	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)								
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					

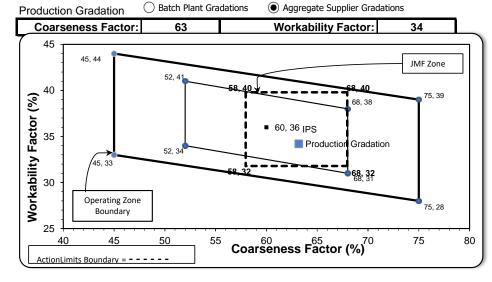
Approved By: Mart P. Ball

PLANT #:		P-39					Contractor:		
Sample Date	:	11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			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	100.0	100.0	0.0	0.0	1
1.5"	1	100.0	100).0	100.0	100.0	0.0	0.0	
1"		98.7	100	0.0	100.0	99.3	0.7	0.7	1
3/4"		82.9	100).0	100.0	91.0	8.3	9.0	
1/2"		45.6	94	.7	100.0	71.1	19.9	28.9	
3/8"		23.3	79	.7	100.0	58.4	12.7	41.6	*N
#4		4.1	22	.7	96.3	43.1	15.3	56.9	*A
#8		2.1	8.	6	79.4	34.2	8.9	65.8	non
#16		1.8	4.	8	63.5	27.3	6.9	72.7	*%
#30		1.7	3.	9	45.6	19.8	7.4	80.2	non
#50		1.7	3.	5	21.0	9.7	10.1	90.3	*%
#100		1.7	3.	2	5.5	3.4	6.4	96.6	a 2'
LBW		1.5	2.	8	0.6	1.2	2.1	98.8	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



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" 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	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 1.5" 100.0 0.0 0.0 1" 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	Coars	eness Factor:	63						
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 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	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" 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	Siovo	Cumulative	%	Cumulative					
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	Sieve	% Passing	Retained	% Retained					
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	2"	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	1.5"	100.0	0.0	0.0					
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	1"	100.0	0.0	0.0					
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	3/4"	89.8	10.2	10.2					
#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	1/2"	70.7	19.1	29.3					
#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	3/8"	59.6	11.1	40.4					
#16 29.2 6.6 70.8 #30 21.4 7.8 78.6 #50 9.8 11.6 90.2	#4	43.2	16.4	56.8					
#30 21.4 7.8 78.6 #50 9.8 11.6 90.2	#8	35.8	7.4	64.2					
#50 9.8 11.6 90.2	#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	#100	3.7	6.1	96.3					
LBW 1.2 2.5 98.8	LBW	1.2	2.5	98.8					

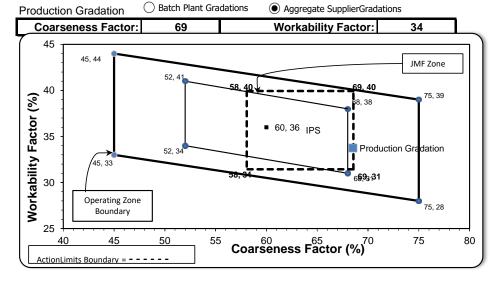
Approved By: Mary 1. Ball

PLANT #:		P-O2					Contractor:		
Sample Date:		11/7/22			Concrete Grade:	S2M, 3500HP			
Dates Test R	epresents:	11/8/2022	through	11/14/2022			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	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	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	Α	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	97.6	100	0.0	100.0	98.7	1.3	1.3	
3/4"	i	83.3	100	0.0	100.0	91.1	7.6	8.9	
1/2"		36.9	96	.2	100.0	66.2	24.9	33.8	
3/8"		16.2	86	.5	100.0	54.6	11.6	45.4	
#4		2.7	21	.4	96.9	41.9	12.7	58.1	
#8		1.8	5.	6	80.4	33.7	8.2	66.3	n
#16		1.6	2.	6	65.3	27.4	6.4	72.6	
#30		1.6	2.	1	50.6	21.4	6.0	78.6	n
#50		1.5	1.	9	28.1	12.3	9.1	87.7	
#100		1.5	1.	8	6.1	3.4	8.9	96.6	а
LBW		1.2	1.	7	0.7	1.0	2.3	99.0	Τ



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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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production	on Sample (IPS	5)	_
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"	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