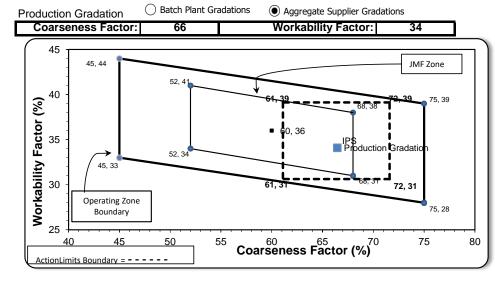
PLANT :	#:	P-101					Contractor:		
Sample Date):	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	st Represents: 5/23/2023		through 5/29/2				MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	1070	6.54	2.62	34.9			
IA	71-47	Presque Isle	800	4.89	2.62	26.1			
2NS	75-051	Mid Michigan	1200	7.23	2.66	39.1			
		Total Wt	3070	18.67		100.0	< Verify this n	umber is 100%	
Sieve		CA	IA	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100).0	100.0	100.0	0.0	0.0	1
1.5"		98.6	100).0	100.0	99.5	0.5	0.5	1
1"		42.5	100).0	100.0	80.0	19.6	20.0	1
3/4"		1.1	98	.5	100.0	68.6	11.3	31.4	1
1/2"		2.1	83	.2	100.0	61.5	7.1	38.5	
3/8"		1.5	63	.7	100.0	56.2	5.3	43.8	*
#4		1.4	17	.3	97.5	43.1	13.1	56.9	*/
#8		1.4	4.	5	83.0	34.1	9.0	65.9	no
#16		1.4	2.	7	68.4	27.9	6.2	72.1	*(
#30		1.4	2.	3	52.0	21.4	6.5	78.6	no
#50		1.3	2.	1	26.4	11.3	10.1	88.7	*0
#100		1.3	1.	9	7.3	3.8	7.5	96.2	a 2
LBW		1.1	1.	7	1.0	1.2	2.6	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 Producti	Initial Production Sample (IPS)									
Coars	eness Factor:	66								
Work	ability Factor:	35								
Sieve	Cumulative	%	Cumulative							
Sieve	% Passing	Retained	% Retained							
2"	100.0	0.0	0.0							
1.5"	99.6	0.4	0.4							
1"	84.3	15.3	15.7							
3/4"	74.8	9.6	25.2							
1/2"	64.3	10.4	35.7							
3/8"	56.8	7.5	43.2							
#4	43.0	13.8	57.0							
#8	34.9	8.1	65.1							
#16	26.4	8.5	73.6							
#30	19.9	6.5	80.1							
#50	10.4	9.5	89.6							
#100	3.4	7.0	96.6							
LBW	1.2	2.2	98.8							
LBW	1.2	2.2	98.8							

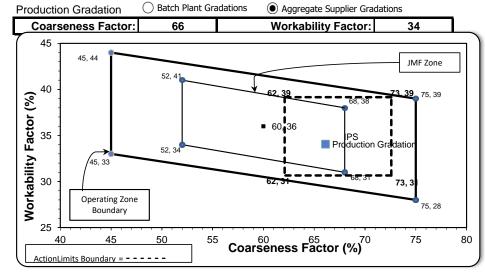
Approved By: Mart 1. Ball

PLANT :	#:	P-102					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	58-003	Stoneco	1370	8.16	2.69	43.9			
IA	58-003	Stoneco	550	3.28	2.69	17.6			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5			
		Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%	
Sieve		CA	LI I	4	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"		62.6	10	0.0	100.0	83.6	16.4	16.4	1
3/4"		31.8	10	0.0	100.0	70.1	13.5	29.9	1
1/2"		14.6	90).6	100.0	60.8	9.2	39.2	1
3/8"		10.0	76	5.9	100.0	56.4	4.4	43.6	*
#4		2.8	19).2	98.9	42.7	13.8	57.3	*
#8		1.8	4	.8	84.3	34.1	8.6	65.9	no
#16		1.6	2	.6	66.0	26.5	7.5	73.5	*
#30		1.6	1.	.7	45.6	18.5	8.0	81.5	no
#50		1.4	1.	.4	20.3	8.7	9.9	91.3	*
#100		1.4	1.	.2	5.0	2.7	5.9	97.3	a 2
LBW		1.3	1.	.2	1.2	1.2	1.5	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., 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 12" max. size (nom. Max. 1.5") aggregate is used.



Intial Production	-		
Coars	eness Factor:	67	
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"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

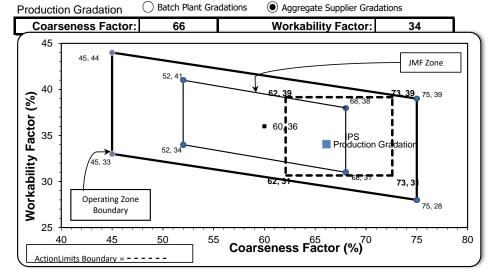
Approved By: Mart 1. Ball

PLANT #	#:	P-103					Contractor:						
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP							
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:						
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution							
CA	58-003	Stoneco	1370	8.16	2.69	43.9							
IA	58-003	Stoneco	550	3.28	2.69	17.6							
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5							
		Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%	_				
Sieve		CA	I/	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	10	0.0	100.0	100.0	0.0	0.0	1				
1"		62.6	10	0.0	100.0	83.6	16.4	16.4	1				
3/4"		31.8	100	10	100	100	100.0	100.0	100.0	70.1	13.5	29.9	
1/2"		14.6	90).6	100.0	60.8	9.2	39.2					
3/8"		10.0	76	5.9	100.0	56.4	4.4	43.6	*				
#4		2.8	19).2	98.9	42.7	13.8	57.3	*				
#8		1.8	4.	.8	84.3	34.1	8.6	65.9	nc				
#16		1.6	2.	.6	66.0	26.5	7.5	73.5	*				
#30		1.6	1.	.7	45.6	18.5	8.0	81.5	no				
#50		1.4	1.	.4	20.3	8.7	9.9	91.3	*				
#100		1.4	1.	.2	5.0	2.7	5.9	97.3	a				
LBW		1.3	1.	.2	1.2	1.2	1.5	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., 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 12" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)									
		67	Coarseness Factor:						
		35	Workability Factor:						
ulative	Cumula	%	Cumulative	Sieve					
tained	% Retai	Retained	% Passing	Sieve					
.0	0.0	0.0	100.0	2"					
.0	0.0	0.0	100.0	1.5"					
4.5	14.5	14.5	85.5	1"					
6.6	26.6	12.1	73.4	3/4"					
9.0	39.0	12.4	61.0	1/2"					
3.8	43.8	4.8	56.2	3/8"					
5.9	56.9	13.1	43.1	#4					
5.1	65.1	8.2	34.9	#8					
0.6	70.6	5.5	29.4	#16					
3.4	78.4	7.8	21.6	#30					
1.9	91.9	13.4	8.1	#50					
7.8	97.8	5.9	2.2	#100					
3.6	98.6	0.8	1.4	LBW					
1	91 97	13.4 5.9	8.1 2.2	#50 #100					

Approved BY: May 1. Ball

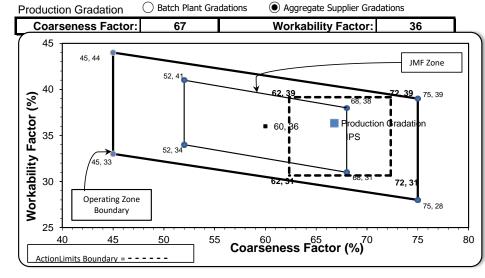
PLANT #	#:	14					Contractor:		
Sample Date		5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R		5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	58-003	Stoneco	1320	7.86	2.69	42.3			
IA	58-003	Stoneco	600	3.57	2.69	19.2			<u> </u>
2NS	19-04	Schlegel	1200	7.20	2.67	38.5			Build
		Total Wt	3120	18.64		100.0	< Verify this n	umber is 100%	REDI-
Sieve		CA	I/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	Finish First W Builders Rec 30701 W. 10
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	Suite 500
1.5"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	Farmington H
1"	6	62.6	100	0.0	100.0	84.2	15.8	15.8	
3/4"		31.8	100	0.0	100.0	71.1	13.0	28.9	
1/2"		14.6	90	.6	100.0	62.1	9.1	37.9	
3/8"		10.0	76	.9	100.0	57.5	4.6	42.5	*Maximum % Retained must be abo
#4		2.8	19	.2	99.9	43.3	14.2	56.7	*Any two adjacent sieves must equa
#8		1.8	4.8		90.1	36.3	7.0	63.7	nom. max., #100 and #200 sieves.
#16		1.6	2.	6	69.4	27.9	8.5	72.1	*% Retained must be at least 4% for
#30		1.6	1.	7	44.5	18.1	9.8	81.9	nom. max., #100 and #200 sieves.
#50		1.4	1.	4	14.3	6.4	11.8	93.6	*% Retained must be at least 8% for
#100		1.4	1.		2.7	1.9	4.5	98.1	a 2" max. size (nom. Max. 1.5") aggre
LBW		1.3	1.	2	0.2	0.9	1.0	99.1	J



edi-Mix

Mile Rd. Hills, MI 48336

pove the 3/8" sieve. ual 10% except max., or each sieve except max., or the 1" sieve when regate is used.



Sieve	Intial Product	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" 85.5 14.5 14.5 3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	Coars	seness Factor:	67								
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" 85.5 14.5 14.5 3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	Worl	ability Factor:	35								
% Passing Retained % Retained 2" 100.0 0.0 0.0 1.5" 100.0 0.0 0.0 1" 85.5 14.5 14.5 3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	Siovo	Cumulative	%	Cumulative							
1.5" 100.0 0.0 0.0 1" 85.5 14.5 14.5 3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	Sleve	% Passing	Retained	% Retained							
1" 85.5 14.5 14.5 3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	2"	100.0	0.0	0.0							
3/4" 73.4 12.1 26.6 1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	1.5"	100.0	0.0	0.0							
1/2" 61.0 12.4 39.0 3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	1"	85.5	14.5	14.5							
3/8" 56.2 4.8 43.8 #4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	3/4"	73.4	12.1	26.6							
#4 43.1 13.1 56.9 #8 34.9 8.2 65.1 #16 29.4 5.5 70.6	1/2"	61.0	12.4	39.0							
#8 34.9 8.2 65.1 #16 29.4 5.5 70.6	3/8"	56.2	4.8	43.8							
#16 29.4 5.5 70.6	#4	43.1	13.1	56.9							
	#8	34.9	8.2	65.1							
#30 21.6 7.8 78.4	#16	29.4	5.5	70.6							
	#30	21.6	7.8	78.4							
#50 8.1 13.4 91.9	#50	8.1	13.4	91.9							
#100 2.2 5.9 97.8	#100	2.2	5.9	97.8							
LBW 1.4 0.8 98.6	LBW	1.4	0.8	98.6							

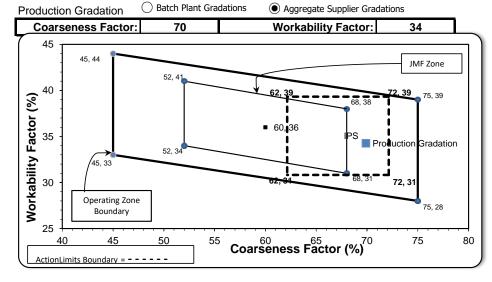
Approved By: Marthe Ball

PLANT #	ANT #: 12						Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific	%			
ngg. Class	1 IL #	Source	Weight (33D)	-	Gravity	Contribution			
CA	71-47	Presque Isle	1070	6.54	2.62	34.9			
IA	71-47	Presque Isle	750	4.59	2.62	24.4			
2NS	63-115	Ray Rd	1250	7.56	2.65	40.7			
		Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	
Sieve		СА		N	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100).0	100.0	100.0	0.0	0.0	1
1.5"	1	98.8	100).0	100.0	99.6	0.4	0.4	1
1"	:	37.4	100).0	100.0	78.2	21.4	21.8	1
3/4"		8.6	99	.1	100.0	67.9	10.3	32.1	1
1/2"		2.4	75	.9	100.0	60.1	7.8	39.9	1
3/8"		2.1	51	.6	100.0	54.1	6.0	45.9	1
#4		1.9	10	.0	96.5	42.4	11.7	57.6	
#8	1.8		3.5		80.5	34.3	8.1	65.7	1
#16		1.8	2.	6	65.7	28.0	6.2	72.0	
#30		1.8	2.4	4	49.9	21.5	6.5	78.5	1
#50		1.7	2.3	3	24.9	11.3	10.2	88.7	1
#100		1.6	2.	1	3.9	2.7	8.6	97.3	
LBW		1.3	1.	8	0.5	1.1	1.6	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production	-		
Coars	eness Factor:	67	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.0	9.8	26.0
1/2"	63.7	10.3	36.3
3/8"	56.4	7.3	43.6
#4	43.0	13.4	57.0
#8	35.1	7.9	64.9
#16	29.0	6.1	71.0
#30	20.9	8.0	79.1
#50	8.1	12.8	91.9
#100	1.6	6.5	98.4
LBW	0.9	0.8	99.1

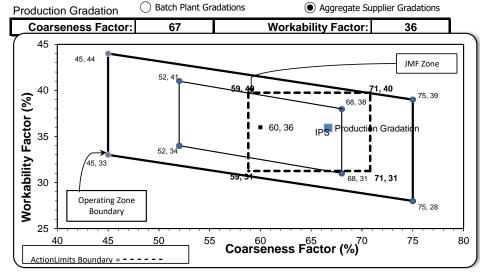
Approved By: Mart P. Ball

PLANT #	_ANT #: P11						Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	870	5.32	2.62	28.3			
IA	71-47	Presque Isle	950	5.81	2.62	30.9			
2NS	95-013	Smelter Bay	1250	7.56	2.65	40.7			
		Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	_
Sieve		CA	IA	N .	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	100.0	100).0	100.0	100.0	0.0	0.0	
1.5"		98.8	100).0	100.0	99.7	0.3	0.3	1
1"	:	37.4	100).0	100.0	82.3	17.4	17.7	1
3/4"		8.6	99	.1	100.0	73.8	8.4	26.2	1
1/2"		2.4	75	.9	100.0	64.9	8.9	35.1	
3/8"		2.1	51	.6	100.0	57.3	7.6	42.7	*N
#4		1.9	10	.0	95.9	42.7	14.6	57.3	*/
#8		1.8	3.	5	84.3	35.9	6.8	64.1	nor
#16		1.8	2.	6	68.8	29.3	6.6	70.7	*9
#30		1.8	2.	4	48.4	21.0	8.4	79.0	nor
#50		1.7	2.	3	22.7	10.4	10.5	89.6	*%
#100		1.6	2.		6.5	3.7	6.7	96.3	a 2
LBW		1.3	1.	8	1.0	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 Producti	Intial Production Sample (IPS)									
Coars	eness Factor:	65								
Work	ability Factor:	36								
Sieve	Cumulative	%	Cumulative							
Sieve	% Passing	Retained	% Retained							
2"	100.0	0.0	0.0							
1.5"	99.0	0.6	0.6							
1"	84.0	15.3	16.0							
3/4"	73.5	10.5	26.5							
1/2"	65.2	8.2	34.8							
3/8"	58.2	7.1	41.8							
#4	44.1	14.1	55.9							
#8	35.5	8.6	64.5							
#16	29.1	6.4	70.9							
#30	21.9	7.3	78.1							
#50	9.6	12.2	90.4							
#100	2.6	7.1	97.4							
LBW	1.0	1.6	99.0							

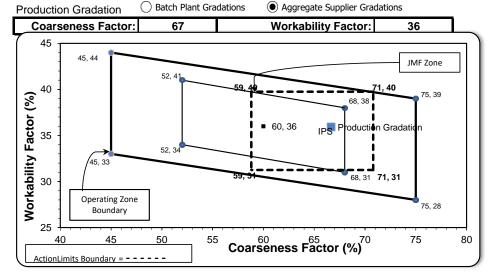
Approved By: Mary P. Ball

PLANT #	#:	P-32					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	870	5.32	2.62	28.3			
IA	71-47	Presque Isle	950	5.81	2.62	30.9			
2NS	95-013	Smelter Bay	1250	7.56	2.65	40.7			
		Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	
Sieve		CA	IA	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"		98.8	100	0.0	100.0	99.7	0.3	0.3	
1"	:	37.4	100	0.0	100.0	82.3	17.4	17.7	1
3/4"		8.6	99	.1	100.0	73.8	8.4	26.2	1
1/2"		2.4	75	.9	100.0	64.9	8.9	35.1	
3/8"		2.1	51	.6	100.0	57.3	7.6	42.7	
#4		1.9	10	.0	95.9	42.7	14.6	57.3	1
#8		1.8	3.	5	84.3	35.9	6.8	64.1	no
#16		1.8	2.	6	68.8	29.3	6.6	70.7	
#30		1.8	2.	4	48.4	21.0	8.4	79.0	n
#50		1.7	2.	3	22.7	10.4	10.5	89.6	1
#100		1.6	2.		6.5	3.7	6.7	96.3	а
LBW		1.3	1.	8	1.0	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 Production	on Sample (IPS	5)	_
Coars	eness Factor:	65	
Work	ability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.0	0.6	0.6
1"	84.0	15.3	16.0
3/4"	73.5	10.5	26.5
1/2"	65.2	8.2	34.8
3/8"	58.2	7.1	41.8
#4	44.1	14.1	55.9
#8	35.5	8.6	64.5
#16	29.1	6.4	70.9
#30	21.9	7.3	78.1
#50	9.6	12.2	90.4
#100	2.6	7.1	97.4
LBW	1.0	1.6	99.0

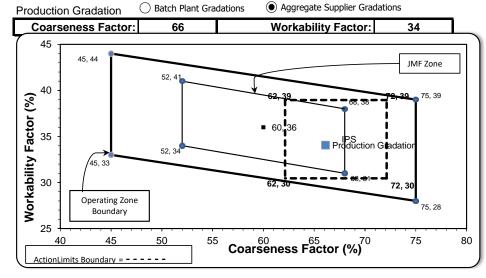
Approved By: Mart P. Ball

PLANT :	#:	P-35					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	58-003	Stoneco	1370	8.16	2.69	43.9			
IA	58-003	Stoneco	550	3.28	2.69	17.6			
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5			
-		Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%	
Sieve		CA	IA	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
1"		62.6	100).0	100.0	83.6	16.4	16.4	1
3/4"		31.8	100	0.0	100.0	70.1	13.5	29.9	1
1/2"		14.6	90	.6	100.0	60.8	9.2	39.2	
3/8"		10.0	76	.9	100.0	56.4	4.4	43.6	1
#4		2.8	19	.2	98.9	42.7	13.8	57.3	
#8		1.8	4.	8	84.3	34.1	8.6	65.9	n
#16		1.6	2.	6	66.0	26.5	7.5	73.5	1
#30		1.6	1.	7	45.6	18.5	8.0	81.5	n
#50		1.4	1.	4	20.3	8.7	9.9	91.3	1
#100		1.4	1.	2	5.0	2.7	5.9	97.3	а
LBW		1.3	1.	2	1.2	1.2	1.5	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	on Sample (IPS	5)	_
Coars	eness Factor:	67	
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"	86.9	13.1	13.1
3/4"	76.1	10.8	23.9
1/2"	63.7	12.4	36.3
3/8"	56.2	7.5	43.8
#4	43.2	13.0	56.8
#8	34.7	8.5	65.3
#16	27.5	7.2	72.5
#30	20.6	7.0	79.4
#50	9.0	11.6	91.0
#100	2.1	6.9	97.9
LBW	1.0	1.1	99.0

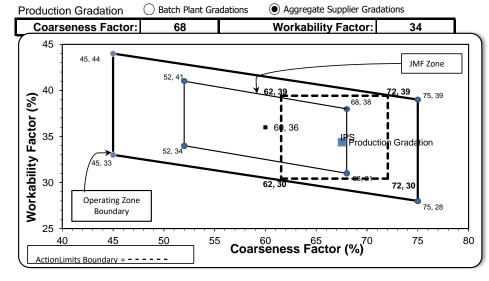
Approved By: Mart 1. Ball

PLANT #	#:	P-36					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	920	5.63	2.62	30.0			
IA	71-47	Presque Isle	950	5.81	2.62	30.9			
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1			
		Total Wt	3070	18.70		100.0	< Verify this n	umber is 100%	_
Sieve		CA	IA	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	
1.5"		98.8	100	0.0	100.0	99.6	0.4	0.4	1
1"	:	37.4	100	0.0	100.0	81.2	18.4	18.8	
3/4"		8.6	99	.1	100.0	72.3	8.9	27.7	
1/2"		2.4	75	.9	100.0	63.3	9.0	36.7	
3/8"		2.1	51	.6	100.0	55.7	7.6	44.3	*1
#4		1.9	10	.0	97.3	41.7	14.0	58.3	*/
#8		1.8	3.	5	83.8	34.4	7.3	65.6	nor
#16		1.8	2.	6	69.2	28.4	6.0	71.6	*0
#30		1.8	2.	4	50.8	21.1	7.3	78.9	no
#50		1.7	2.	3	21.6	9.7	11.5	90.3	*9
#100		1.6	2.		3.8	2.6	7.0	97.4	a 2
LBW		1.3	1.	8	0.4	1.1	1.5	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production	on Sample (IPS)	-
Coars	eness Factor:	67	
Work	ability 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"	85.0	15.0	15.0
3/4"	72.1	12.9	27.9
1/2"	64.5	7.6	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

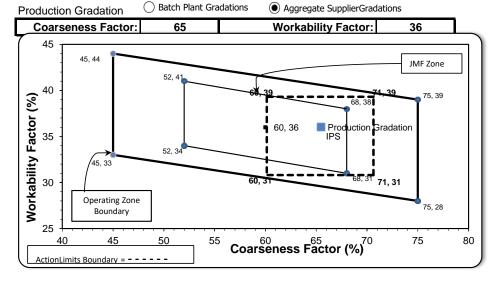
Approved By: Mart 1. Ball

PLANT #	#:	P-39					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	1020	6.24	2.62	33.2			
IA	71-47	Presque Isle	800	4.89	2.62	26.1			
2NS	44-051	Krake Willis Rd	1250	7.56	2.65	40.7			
		Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	
Sieve		CA	IA	N .	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"		100.0	100).0	100.0	100.0	0.0	0.0	
1.5"		97.7	100).0	100.0	99.2	0.8	0.8	
1"		48.9	100).0	100.0	83.0	16.2	17.0	
3/4"		14.2	98	.5	100.0	71.1	11.9	28.9	1
1/2"		3.2	83	.2	100.0	63.5	7.6	36.5	
3/8"		2.4	63	.7	100.0	58.1	5.3	41.9	1
#4		2.2	17	.3	97.0	44.7	13.4	55.3	1
#8		2.2	4.	5	83.8	36.0	8.7	64.0	no
#16		2.1	2.	7	68.6	29.3	6.7	70.7	
#30		2.0	2.	3	50.2	21.7	7.6	78.3	n
#50		2.0	2.	1	22.4	10.3	11.4	89.7	,
#100		1.8	1.	9	5.4	3.3	7.0	96.7	а
LBW		1.6	1.	7	1.0	1.4	1.9	98.6	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	ion Sample (IPS	5)	-
Coars	seness Factor:	65	
Worl	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.1	9.8	25.9
1/2"	64.3	9.7	35.7
3/8"	57.5	6.8	42.5
#4	44.5	13.1	55.5
#8	35.1	9.4	64.9
#16	27.9	7.2	72.1
#30	21.7	6.2	78.3
#50	12.6	9.1	87.4
#100	3.5	9.1	96.5
LBW	1.2	2.4	98.8

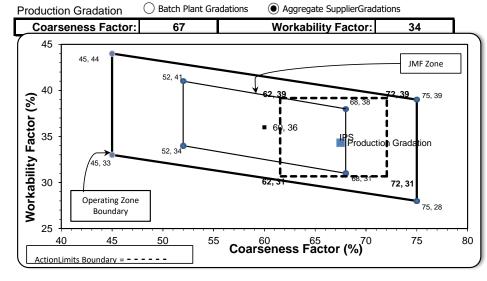
Approved By: Mart P. Ball

PLANT #	#:	P-O2					Contractor:		
Sample Date	:	5/22/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/23/2023	through	5/29/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	970	5.93	2.62	31.6			
IA	71-47	Presque Isle	850	5.20	2.62	27.7			
2NS	63-115	Ray Rd	1250	7.56	2.65	40.7			
		Total Wt	3070	18.69		100.0	< Verify this n	umber is 100%	
Sieve		CA	14	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"		98.8	100	0.0	100.0	99.6	0.4	0.4	
1"	:	37.4	100	0.0	100.0	80.2	19.4	19.8	1
3/4"		8.6	99	.1	100.0	70.9	9.3	29.1	1
1/2"		2.4	75	.9	100.0	62.5	8.4	37.5	
3/8"		2.1	51	.6	100.0	55.7	6.8	44.3	
#4		1.9	10	.0	96.5	42.7	13.0	57.3	
#8		1.8	3.	5	80.5	34.3	8.3	65.7	n
#16		1.8	2.	6	65.7	28.0	6.3	72.0	
#30		1.8	2.	4	49.9	21.6	6.5	78.4	n
#50		1.7	2.	3	24.9	11.3	10.2	88.7	
#100		1.6	2.	1	3.9	2.7	8.6	97.3	а
LBW		1.3	1.	8	0.5	1.1	1.6	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 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:	67	
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"	85.0	15.0	15.0
3/4"	72.3	12.7	27.7
1/2"	64.5	7.8	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

Approved By: Mart P. Ball