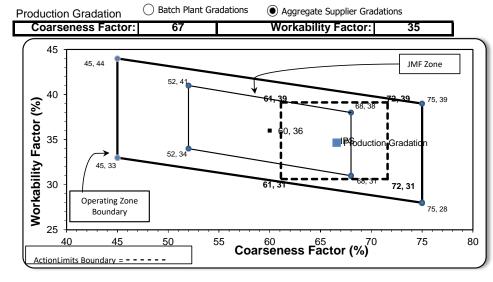
PLANT #	#:	P-101					Contractor:						
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP							
Dates Test R	epresents:	6/20/2023	through	6/26/2023			MDOT No.:						
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution							
CA	71-47	Presque Isle	1070	6.54	2.62	34.9							
IA	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 number 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"		95.2	100).0	100.0	98.3	1.7	1.7					
1"	:	37.2	100	0.0	100.0	78.1	20.2	21.9					
3/4"		9.2	98	98	98	98	98	.5	100.0	68.0	10.1	32.0	1
1/2"		2.7	83	.2	100.0	61.7	6.3	38.3					
3/8"		2.3	63	.7	100.0	56.5	5.2	43.5	*				
#4		2.2	17	17.3 97.0	97.0	43.2	13.3	56.8	*				
#8		2.2	4.	5	83.7	34.7	8.5	65.3	no				
#16		2.1	2.	7	69.4	28.6	6.1	71.4	*				
#30		2.0	2.	3	52.4	21.8	6.8	78.2	no				
#50		1.9	2.	1	24.0	10.6	11.2	89.4	*				
#100		1.8	1.		5.3	3.2	7.4	96.8	a 2				
LBW		1.5	1.	7	0.9	1.3	1.9	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.



initial i fouuctio	on Sample (IPS	5)	
Coarse	eness Factor:	66	
Worka	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sleve	% 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	#100 3.4		96.6
LBW	1.2	2.2	98.8

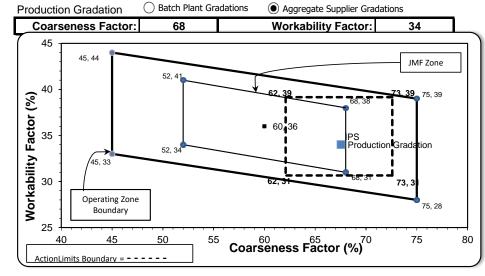


PLANT #	#:	P-102					Contractor:										
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP											
Dates Test R		6/20/2023	through	6/26/2023			MDOT No.:										
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution											
CA	58-003	Stoneco	1370	8.16	2.69	43.9											
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	0.0	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"		60.2	100	0.0	100.0	82.5	17.5	17.5	1								
3/4"		41.8	100.0 91.6					0.0	100.0	74.4	8.1	25.6	1				
1/2"		18.2						91	91	91	91	91	91	91	-	91	.6
3/8"		9.9	71	.6	100.0	55.4	7.2	44.6									
#4		4.4 16.8 98.8	98.8	42.9	12.5	57.1											
#8		1.8	5.	4	83.9	34.0	8.9	66.0	n								
#16		1.4	3.	0	65.6	26.4	7.6	73.6									
#30		1.2	2.	4	45.9	18.6	7.8	81.4	n								
#50		1.2	2.	3	22.3	9.5	9.1	90.5									
#100		1.2	2.		5.9	3.2	6.3	96.8	а								
LBW		1.1	2.	0	1.3	1.3	1.8	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 Sample (IPS)									
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	#100 2.2		97.8						
LBW	1.4	0.8	98.6						

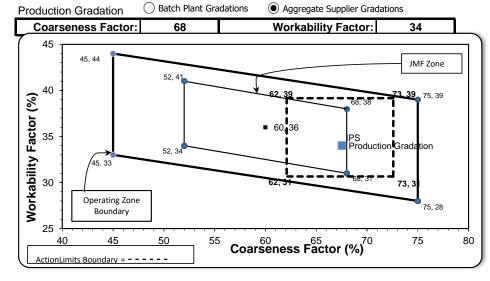
Approved By: Mart 1. Ball

PLANT #	#:	P-103					Contractor:								
Sample Date):	6/19/23			Concrete Grade:	P1M, 3500HP									
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	number is 100%							
Sieve		CA	IA	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained							
2"	,	100.0	100	0.0	100.0	100.0	0.0	0.0	1						
1.5"		100.0	100	0.0	100.0	100.0	0.0	0.0							
1"		60.2	100	0.0	100.0	82.5	17.5	17.5	1						
3/4"		41.8	100 91					0.0	100.0	74.4	8.1	25.6			
1/2"		18.2						91	91	91	91	91	91	91	.6
3/8"		9.9	71	.6	100.0	55.4	7.2	44.6	4						
#4		4.4	16	16.8	98.8	42.9	12.5	57.1	*						
#8		1.8	5.	4	83.9	34.0	8.9	66.0	nc						
#16		1.4	3.	0	65.6	26.4	7.6	73.6	4						
#30		1.2	2.	4	45.9	18.6	7.8	81.4	no						
#50		1.2	2.	3	22.3	9.5	9.1	90.5	*						
#100		1.2	2.	2	5.9	3.2	6.3	96.8	a						
LBW		1.1	2.	0	1.3	1.3	1.8	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	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"	3/4" 73.4		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: May 1. Ball

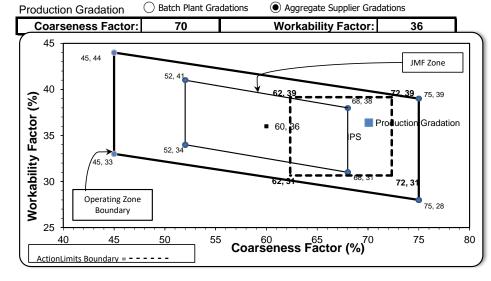
PLANT	#:	14					Contractor:		
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	58-003	Stoneco	1370	8.16	2.69	43.9	1		5
IA	58-003	Stoneco	550	3.28	2.69	17.6			S
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- Finish First W
Sieve		CA	1/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	Builders Rec 30701 W. 10
2"	1	00.0	100).0	100.0	100.0	0.0	0.0	Suite 500
1.5"	1	00.0	100).0	100.0	100.0	0.0	0.0	Farmington H
1"	6	60.2	100).0	100.0	82.5	17.5	17.5	
3/4"	4	41.8	100).0	100.0	74.4	8.1	25.6	
1/2"		18.2	91	.6	100.0	62.6	11.8	37.4	
3/8"		9.9	71	.6	100.0	55.4	7.2	44.6	*Maximum % Retained must be abo
#4		4.4	16	.8	99.9	43.3	12.1	56.7	*Any two adjacent sieves must equa
#8		1.8	5.	4	90.1	36.4	6.9	63.6	nom. max., #100 and #200 sieves.
#16		1.4	3.	0	69.4	27.8	8.6	72.2	*% Retained must be at least 4% for
#30		1.2	2.	4	44.5	18.1	9.8	81.9	nom. max., #100 and #200 sieves.
#50		1.2	2.	3	14.3	6.4	11.6	93.6	*% Retained must be at least 8% for
#100		1.2	2.		2.7	2.0	4.5	98.0	a 2" max. size (nom. Max. 1.5") aggre
LBW		1.1	2.	0	0.2	0.9	1.0	99.1]



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.



Intial Producti	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"	85.5	14.5	14.5
3/4"	3/4" 73.4		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	#100 2.2		97.8
LBW	1.4	0.8	98.6

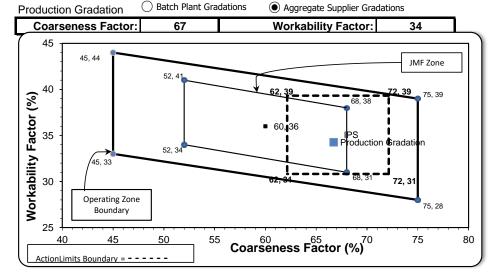
Approved By: Mary 1. Ball

PLANT #	#:	12					Contractor:		
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific	%			
-yy. Class	1 IC #	Source	Weight (33D)	п	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		CA	IA	۱.	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	100.0	100.0	0.0	0.0	
1"	4	48.0	100).0	100.0	81.9	18.1	18.1	1
3/4"		16.5	100).0	100.0	70.9	11.0	29.1	
1/2"		4.9	80	.9	100.0	62.2	8.7	37.8	
3/8"		3.4	58.3		100.0	56.1	6.0	43.9	*N
#4		2.5	9.	9	96.4	42.5	13.6	57.5	*A
#8		2.3	2.	8	80.5	34.3	8.3	65.7	nor
#16		2.2	2.	2	65.0	27.8	6.5	72.2	*%
#30		2.2	2.	0	48.9	21.2	6.6	78.8	nor
#50		2.1	1.	9	25.2	11.5	9.7	88.5	*%
#100		2.0	1.	8	4.7	3.1	8.4	96.9	a 2'
LBW		1.5	1.	4	0.6	1.1	1.9	98.9	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., 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.



Workab	ess Factor: ality Factor: Cumulative	67 35	
		35	
a: (Cumulative		1
	Jumalative	%	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"	1/2" 63.7		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

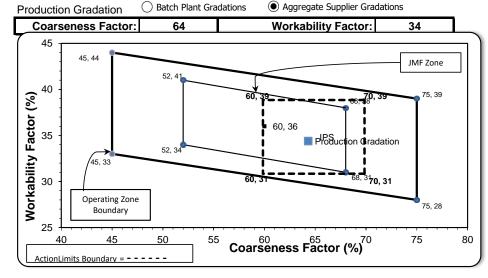
Approved By: Nat 1. Ball

PLANT #	#:	20					Contractor:							
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP								
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	900	5.50	2.62	29.3								
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	14	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained						
2"	1	100.0	100	0.0	100.0	100.0	0.0	0.0						
1.5"		97.2	100	0.0	100.0	99.1	0.9	0.9						
1"	:	23.8	100	0.0	100.0	75.9	23.2	24.1						
3/4"		1.2	99	.4	100.0	68.6	7.3	31.4						
1/2"		0.9	84	.5	100.0	64.1	4.5	35.9						
3/8"		0.9	62	.9	100.0	57.8	6.3	42.2	*Ma					
#4		0.9	12	12	12		-	-	12.5	97.7	42.1	15.7	57.9	*Ar
#8		0.9	3.	7	84.5	34.4	7.7	65.6	nom					
#16		0.9	2.	5	69.2	28.1	6.3	71.9	*%					
#30		0.9	2.	3	48.6	20.0	8.1	80.0	nom					
#50		0.8	2.	2	18.4	8.1	11.9	91.9	*%					
#100		0.8	2.		3.4	2.2	5.9	97.8	a 2"					
LBW		0.7	1.	8	0.6	1.0	1.2	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 Production	on Sample (IPS	5)	_
Coars	eness Factor:	65	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.1	0.9	0.9
1"	80.8	18.2	19.2
3/4"	71.3	9.6	28.7
1/2"	64.0	7.3	36.0
3/8"	57.7	6.2	42.3
#4	42.8	15.0	57.2
#8	34.8	7.9	65.2
#16	28.4	6.4	71.6
#30	20.2	8.2	79.8
#50	7.6	12.6	92.4
#100	1.6	6.0	98.4
LBW	1.0	0.6	99.0

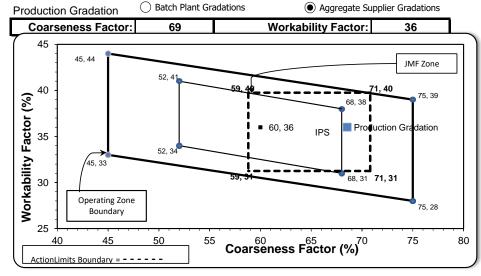


PLANT #	#:	P11					Contractor:		
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	1070	6.54	2.62	34.9			
IA	71-47	Presque Isle	750	4.59	2.62	24.4			
2NS	95-013	Smelter Bay	1250	7.56	2.65	40.7	1		
		Total Wt	3070	18.69		100.0	< Verify this number is 100%		
Sieve		CA	IA	A .	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	100.0	100).0	100.0	100.0	0.0	0.0	
1.5"	1	100.0	100).0	100.0	100.0	0.0	0.0	
1"		48.0	100).0	100.0	81.9	18.1	18.1	
3/4"		16.5	100).0	100.0	70.9	11.0	29.1	
1/2"		4.9	80	.9	100.0	62.2	8.7	37.8	
3/8"		3.4	58	.3	100.0	56.1	6.0	43.9	
#4		2.5	9.	9	96.6	42.6	13.5	57.4	
#8		2.3	2.	8	84.8	36.0	6.6	64.0	
#16	2.2		2.	2	69.4	29.6	6.5	70.4	
#30	2.2		2.	0	49.5	21.4	8.2	78.6	
#50		2.1	1.	9	23.7	10.8	10.6	89.2	
#100		2.0	1.	8	7.0	4.0	6.9	96.0	
LBW		1.5	1.	4	1.7	1.6	2.4	98.4	



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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							
1										

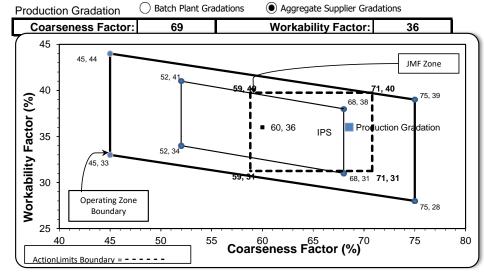
Approved By: Mart P. Ball

PLANT #: P-32						Contractor:				
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP				
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	750	4.59	2.62	24.4				
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	1/	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"		48.0	100.0	0.0	100.0	81.9	18.1	18.1	1	
3/4"		16.5	100	100.0	100.0 100.0	100.0	70.9	11.0	29.1	1
1/2"		4.9	80	0.9	100.0	62.2	8.7	37.8		
3/8"		3.4	58	.3	100.0	56.1	6.0	43.9	*	
#4		2.5	9.9		96.6	42.6	13.5	57.4	*	
#8		2.3	2.	.8	84.8	36.0	6.6	64.0	no	
#16		2.2	2.	.2	69.4	29.6	6.5	70.4	*	
#30		2.2	2.	.0	49.5	21.4	8.2	78.6	no	
#50		2.1	1.	9	23.7	10.8	10.6	89.2	*	
#100		2.0	1.	.8	7.0	4.0	6.9	96.0	a 2	
LBW		1.5	1.	4	1.7	1.6	2.4	98.4		



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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 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" 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	Intial Producti	on Sample (IPS	5)	_
Sieve Cumulative % Passing % Retained Cumulative % 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	Coars	eness Factor:	65	
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	Work	ability Factor:	36	
% 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	Siovo	Cumulative	%	Cumulative
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	Sieve	% Passing	Retained	% Retained
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	2"	100.0	0.0	0.0
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	1.5"	99.0	0.6	0.6
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	1"	84.0	15.3	16.0
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	3/4"	73.5	10.5	26.5
#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	1/2"	65.2	8.2	34.8
#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	3/8"	58.2	7.1	41.8
#16 29.1 6.4 70.9 #30 21.9 7.3 78.1 #50 9.6 12.2 90.4	#4	44.1	14.1	55.9
#30 21.9 7.3 78.1 #50 9.6 12.2 90.4	#8	35.5	8.6	64.5
#50 9.6 12.2 90.4	#16	29.1	6.4	70.9
	#30	21.9	7.3	78.1
#100 26 71 974	#50	9.6	12.2	90.4
#100 2.0 7.1 37.4	#100	2.6	7.1	97.4
LBW 1.0 1.6 99.0	LBW	1.0	1.6	99.0

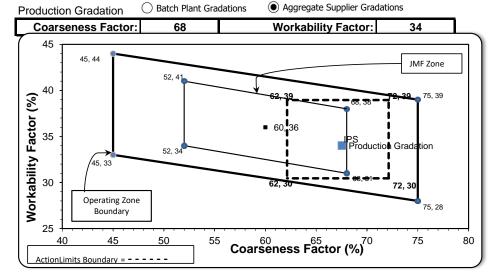
Approved By: Mart 1. Ball

PLANT #	#:	P-35					Contractor:			
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP				
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	0.0	100.0	100.0	0.0	0.0	1	
1.5"		100.0	100. 100.		0.0	100.0	100.0	0.0	0.0	
1"		60.2			100	10	0.0	100.0	82.5	17.5
3/4"		41.8	100	0.0	100.0	74.4	8.1	25.6	1	
1/2"		18.2	91	.6	100.0	62.6	11.8	37.4		
3/8"		9.9	71	.6	100.0	55.4	7.2	44.6	*	
#4		4.4	16	.8	98.8	42.9	12.5	57.1	*	
#8		1.8	5.4		83.9	34.0	8.9	66.0	no	
#16		1.4	3.	0	65.6	26.4	7.6	73.6	*	
#30		1.2	2.	4	45.9	18.6	7.8	81.4	no	
#50		1.2	2.	3	22.3	9.5	9.1	90.5	*	
#100		1.2	2.	2	5.9	3.2	6.3	96.8	a 2	
LBW		1.1	2.	0	1.3	1.3	1.8	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:	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

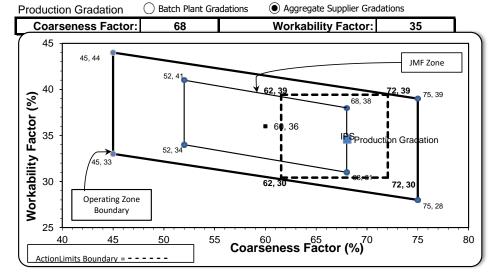
Approved By: Mart 1. Ball

PLANT #	#:	P-36					Contractor:		
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	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	00.0	100).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"		48.0	100).0	100.0	81.9	18.1	18.1	
3/4"		16.5	100).0	100.0	70.9	11.0	29.1	
1/2"		4.9	80	.9	100.0	61.9	9.0	38.1	
3/8"		3.4	58	.3	100.0	55.5	6.4	44.5	*M
#4		2.5 9.		9	97.7	41.6	13.8	58.4	*Ar
#8		2.3 2.8		8	84.5	34.6	7.1	65.4	nom
#16		2.2	2.	2	69.2	28.4	6.2	71.6	*%
#30		2.2	2.	0	48.6	20.3	8.1	79.7	nom
#50		2.1	1.	9	18.4	8.4	11.9	91.6	*%
#100		2.0	1.	8	3.4	2.5	5.9	97.5	a 2"
LBW		1.5	1.	4	0.6	1.1	1.4	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., 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 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"	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

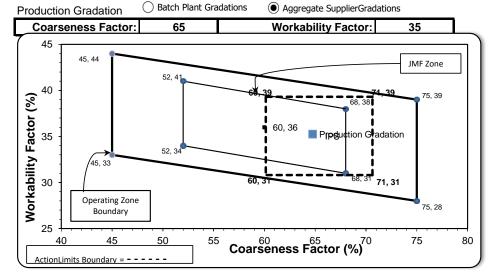
Approved By: Mart 1. Ball

PLANT #	#:	P-39					Contractor:		
Sample Date	:	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"		100.0	100).0	100.0	100.0	0.0	0.0	
1.5"		95.2	100).0	100.0	98.4	1.6	1.6	1
1"		37.2	100).0	100.0	79.1	19.3	20.9	1
3/4"		9.2	98	.5	100.0	69.4	9.7	30.6	
1/2"		2.7	83	.2	100.0	63.3	6.1	36.7	
3/8"		2.3	63	.7	100.0	58.1	5.2	41.9	*1
#4		2.2 17.3		.3	95.7	44.2	13.9	55.8	*/
#8		2.2	.2 4.5		81.9	35.3	9.0	64.7	no
#16		2.1	2.	7	66.9	28.6	6.6	71.4	*0
#30		2.0	2.	3	50.2	21.7	6.9	78.3	no
#50		1.9	2.	1	25.0	11.4	10.3	88.6	*0
#100		1.8	1.		7.5	4.1	7.2	95.9	a 2
LBW		1.5	1.	7	1.3	1.5	2.7	98.5	



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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
Sleve	% 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

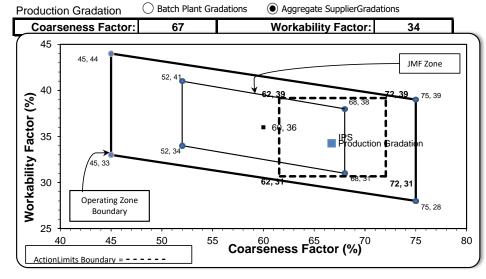
Approved By: Mart P. Ball

PLANT :	#:	P-O2					Contractor:		
Sample Date):	6/19/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	6/20/2023	through	6/26/2023			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	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		CA	I/	4	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"		48.0	10	0.0	100.0	81.9	18.1	18.1	1
3/4"		16.5	10	0.0	100.0	70.9	11.0	29.1	1
1/2"		4.9	80).9	100.0	62.2	8.7	37.8	
3/8"		3.4	58	3.3	100.0	56.1	6.0	43.9	*
#4		2.5	9.	.9	96.4	42.5	13.6	57.5	*,
#8		2.3	2.	.8	80.5	34.3	8.3	65.7	no
#16		2.2	2.	.2	65.0	27.8	6.5	72.2	*
#30		2.2	2.	.0	48.9	21.2	6.6	78.8	no
#50	2.1		1.	.9	25.2	11.5	9.7	88.5	*
#100		2.0	1.	.8	4.7	3.1	8.4	96.9	a 2
LBW		1.5	1.	.4	0.6	1.1	1.9	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., 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	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"	85.0	15.0	15.0
3/4"	3/4" 72.3		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: Mary P. Ball