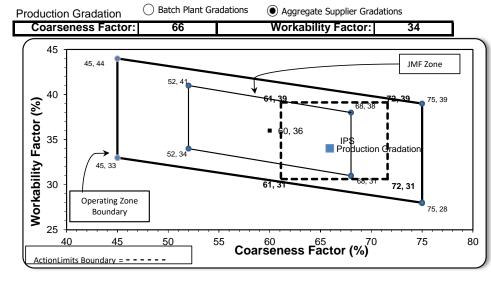
PLANT #: Sample Date: Dates Test Represents:		P-101					Contractor:		
		5/15/23			Concrete Grade:	P1M, 3500HP			
		5/16/2023	- through 5/22/202				MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	71-47	Presque Isle	1070	6.54	2.62	34.9			
IA	71-47	Presque Isle	800	4.89	2.62	26.1			
2NS	75-051	Mid Michigan	1200	7.23	2.66	39.1			
		Total Wt		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"		97.7	100	0.0	100.0	99.2	0.8	0.8	
1"		48.9	100	0.0	100.0	82.2	17.0	17.8	1
3/4"		14.2	98	.5	100.0	69.7	12.5	30.3	1
1/2"		3.2	83	.2	100.0	61.9	7.8	38.1	
3/8"		2.4	63	.7	100.0	56.5	5.4	43.5	,
#4		2.2	17	.3	97.3	43.3	13.2	56.7	,
#8		2.2	4.	5	82.1	34.0	9.3	66.0	nc
#16		2.1	2.	7	66.8	27.5	6.5	72.5	*
#30		2.0	2.	3	50.7	21.1	6.4	78.9	no
#50		2.0	2.	1	23.2	10.3	10.8	89.7	*
#100		1.8	1.8 1.9		6.7	3.7	6.6	96.3	a
LBW		1.6	1.	7	1.3	1.5	2.2	98.5	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 Product	ion Sample (IPS	5)	_
Coars	eness Factor:	66	
Work	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	3.4	7.0	96.6
LBW	1.2	2.2	98.8

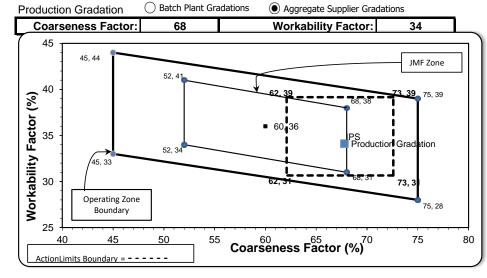


PLANT #: Sample Date: Dates Test Represents:		P-102					Contractor:							
		5/15/23			Concrete Grade:	P1M, 3500HP								
		5/16/2023	through	5/22/2023			MDOT No.:							
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution								
CA	58-003	Stoneco	1370	8.16	2.69	43.9								
IA	58-003	Stoneco	550	3.28	2.69	17.6								
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5								
		Total Wt					< Verify this n	umber is 100%	_					
Sieve		CA	14	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"		57.6	100	0.0	100.0	81.4	18.6	18.6	1					
3/4"		32.5	100	100	100	100	100	100	0.0	100.0	70.4	11.0	29.6	1
1/2"		14.9	91	.8	100.0	61.2	9.2	38.8						
3/8"		9.4	72	.4	100.0	55.4	5.8	44.6	*1					
#4		2.9	18	.9	98.8	42.6	12.7	57.4	*/					
#8		1.7	3.	2	85.3	34.1	8.5	65.9	no					
#16		1.4	1.	8	67.4	26.9	7.3	73.1	*0					
#30		1.4	1.	4	46.5	18.7	8.1	81.3	no					
#50		1.4	1.	3	21.7	9.2	9.6	90.8	*0					
#100		1.2	1.		5.8	3.0	6.2	97.0	a 2					
LBW		1.1	1.	0	1.1	1.1	1.9	98.9						



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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	2.2	5.9	97.8					
LBW	1.4	0.8	98.6					

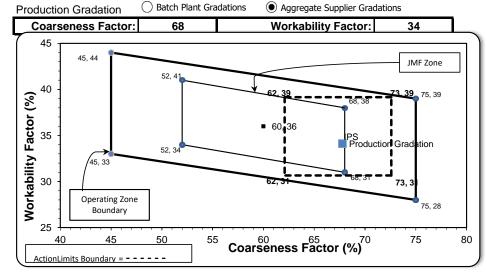
Approved By: Mart 1. Ball

PLANT #: Sample Date: Dates Test Represents:		P-103					Contractor:		
		5/15/23	5/15/23 Concrete Grac		Concrete Grade:	P1M, 3500HP			
		5/16/2023	through	5/22/2023			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 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"	1	100.0	100	0.0	100.0	100.0	0.0	0.0	
1"		57.6	100	0.0	100.0	81.4	18.6	18.6	1
3/4"		32.5	100	0.0	100.0	70.4	11.0	29.6	1
1/2"		14.9	91	.8	100.0	61.2	9.2	38.8	
3/8"		9.4	72	2.4	100.0	55.4	5.8	44.6	*1
#4		2.9	18	3.9	98.8	42.6	12.7	57.4	*/
#8		1.7	3.	.2	85.3	34.1	8.5	65.9	noi
#16		1.4	1.		67.4	26.9	7.3	73.1	*0
#30		1.4	1.	.4	46.5	18.7	8.1	81.3	noi
#50		1.4	1.	.3	21.7	9.2	9.6	90.8	*0
#100		1.2	1.2		5.8	3.0	6.2	97.0	a 2
LBW		1.1	1.	.0	1.1	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., 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	2.2	5.9	97.8						
LBW	1.4	0.8	98.6						

Approved BY: May 1. Ball

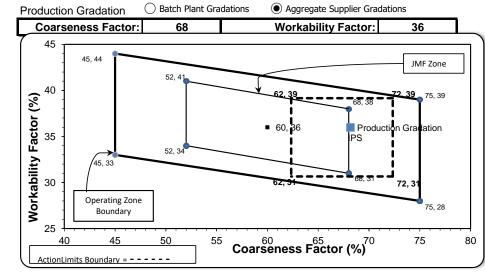
PLANT :	#:	14					Contractor:		
Sample Date	•:	5/15/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/16/2023	through	5/22/2023			MDOT No.:		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution			
CA	58-003	Stoneco	1320	7.86	2.69	42.3			
IA	58-003	Stoneco	600	3.57	2.69	19.2			185
2NS	19-04	Schlegel	1200	7.20	2.67	38.5			Byild
		Total Wt	3120	18.64		100.0	< Verify this n	umber is 100%	REDI-N Finish First With
Sieve		CA	I/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	Builders Redi- 30701 W. 10 M
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 Hill
1"	Ę	57.6	100	0.0	100.0	82.1	17.9	17.9	
3/4"	3	32.5	100	0.0	100.0	71.4	10.6	28.6	
1/2"		14.9	91	.8	100.0	62.4	9.0	37.6	
3/8"		9.4	72	.4	100.0	56.4	6.1	43.6	*Maximum % Retained must be above
#4		2.9	18	.9	99.9	43.3	13.1	56.7	*Any two adjacent sieves must equal 1
#8		1.7	3.	2	90.1	36.0	7.3	64.0	nom. max., #100 and #200 sieves.
#16		1.4	1.	8	69.4	27.6	8.4	72.4	*% Retained must be at least 4% for ea
#30		1.4	1.	4	44.5	18.0	9.7	82.0	nom. max., #100 and #200 sieves.
#50		1.4	1.	3	14.3	6.3	11.6	93.7	*% Retained must be at least 8% for th
#100		1.2	1.		2.7	1.8	4.6	98.2	a 2" max. size (nom. Max. 1.5") aggrega
LBW		1.1	1.	0	0.2	0.7	1.0	99.3	



li-Mix

Mile Rd. ills, MI 48336

ve the 3/8" sieve. 10% except max., each sieve except max., the 1" sieve when egate is used.



Intial Producti	on Sample (IPS	5)	_
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"	85.5	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

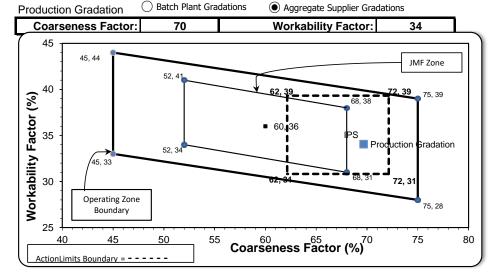
Approved By: Mary 1. Ball

PLANT #: Sample Date: Dates Test Represents:		12					Contractor:		
		c 5/15/23 Concrete Grade: P1M, 3500HP							
		5/16/2023	through	5/22/2023			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 number 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"	9	98.8	100).0	100.0	99.6	0.4	0.4	
1"	:	37.4	100).0	100.0	78.2	21.4	21.8	
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	
3/8"		2.1	51	.6	100.0	54.1	6.0	45.9	*N
#4		1.9	10	.0	96.6	42.4	11.6	57.6	*A
#8		1.8	3.	5	80.0	34.1	8.4	65.9	non
#16		1.8	2.	6	64.0	27.3	6.7	72.7	*%
#30		1.8	2.	4	48.2	20.8	6.5	79.2	non
#50		1.7	2.	3	25.1	11.4	9.5	88.6	*%
#100		1.6	2.		3.9	2.7	8.7	97.3	a 2"
LBW		1.3	1.	8	0.5	1.1	1.6	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.



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"	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	#100 1.6		98.4					
LBW	0.9	0.8	99.1					

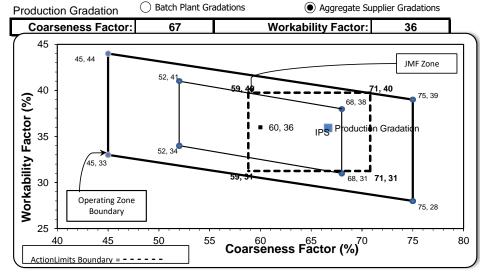
Approved By: Mart 1. Ball

PLANT #: Sample Date: Dates Test Represents:		P11					Contractor:		
		5/15/23			Concrete Grade:	P1M, 3500HP			
		5/16/2023	through	5/22/2023			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	100.0	< Verify this number is 100%					
Sieve		CA	IA	N .	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	1	00.0	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"	:	37.4	100).0	100.0	82.3	17.4	17.7	
3/4"		8.6	99	.1	100.0	73.8	8.4	26.2	
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	*M
#4		1.9	10	.0	96.9	43.1	14.2	56.9	*Ar
#8		1.8	3.	5	84.3	35.9	7.2	64.1	nom
#16		1.8	2.	6	68.7	29.3	6.6	70.7	*%
#30		1.8	2.4	4	48.6	21.0	8.2	79.0	nom
#50		1.7	2.	3	23.1	10.6	10.4	89.4	*%
#100		1.6	2.		6.7	3.8	6.8	96.2	a 2"
LBW		1.3	1.	8	1.1	1.4	2.5	98.6	



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.



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

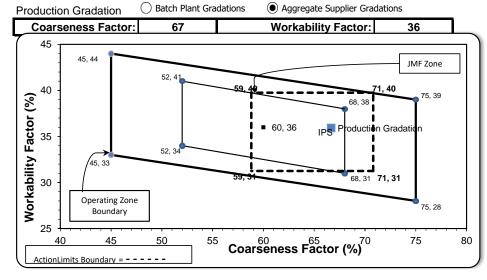
Approved By: North Ball

PLANT #:		P-32					Contractor:		
Sample Date	:	5/15/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/16/2023	through	5/22/2023			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	IJ	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	100.0		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	10	0.0	100.0	82.3	17.4	17.7	
3/4"		8.6	99).1	100.0	73.8	8.4	26.2	
1/2"		2.4	75	5.9	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	96.9	43.1	14.2	56.9	*4
#8	1.8		3.5		84.3	35.9	7.2	64.1	nor
#16		1.8	2.6		68.7	29.3	6.6	70.7	*9
#30		1.8	2.	.4	48.6	21.0	8.2	79.0	nor
#50		1.7	2.	.3	23.1	10.6	10.4	89.4	*9
#100		1.6	2.	.1	6.7	3.8	6.8	96.2	a 2
LBW		1.3	1.	.8	1.1	1.4	2.5	98.6	



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.



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						

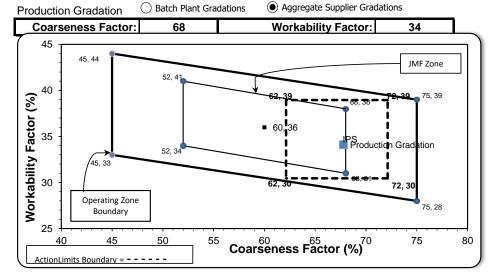
Approved By: Mart 1. Ball

PLANT #:		P-35					Contractor:																	
Sample Date):	5/15/23			Concrete Grade:	P1M, 3500HP																		
Dates Test R	epresents:	5/16/2023	through	5/22/2023			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	14	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"		57.6	100	0.0	100.0	81.4	18.6	18.6																
3/4"		32.5	100	0.0	100.0	70.4	11.0	29.6	1															
1/2"		14.9	91.	91	91.	91.	91	91	91	91	91.8	91.8	91	91	91	91	91	91.	91.8	100.0	61.2	9.2	38.8	_
3/8"		9.4	72	.4	100.0	55.4	5.8	44.6	*															
#4		2.9	18	.9	98.8	42.6	12.7	57.4	*															
#8		1.7	3.2		85.3	34.1	8.5	65.9	no															
#16		1.4	1.	8	67.4	26.9	7.3	73.1	*															
#30		1.4	1.	4	46.5	18.7	8.1	81.3	no															
#50		1.4	1.	3	21.7	9.2	9.6	90.8	*(
#100		1.2	1.		5.8	3.0	6.2	97.0	a 2															
LBW		1.1	1.	0	1.1	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., 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	on Sample (IPS	5)	-
Coars	seness Factor:	67	
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"	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

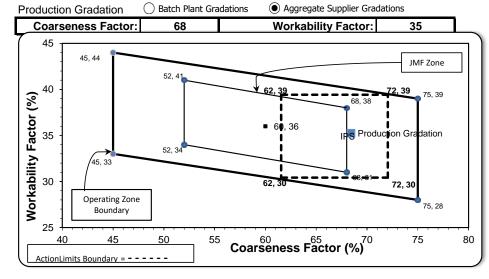
Approved By: Mary P. Ball

PLANT #:		P-36					Contractor:		
Sample Date	:	5/15/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/16/2023	through	5/22/2023			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	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"		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
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	*
#4		1.9	.9 10.0		97.7	41.9	13.8	58.1	*
#8		1.8	3.5		86.0	35.2	6.6	64.8	no
#16		1.8 2.6 71.7	2.6	29.4	5.9	70.6	*		
#30		1.8	2.	4	50.7	21.1	8.3	78.9	no
#50		1.7	2.	3	22.2	9.9	11.2	90.1	*0
#100		1.6	2.		3.8	2.6	7.3	97.4	a 2
LBW		1.3	1.	8	0.7	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.



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" 85.0 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	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" 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	Coars	eness 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" 85.0 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	Work	ability Factor:	35							
% 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	Siovo	Cumulative	%	Cumulative						
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	Sieve	% Passing	Retained	% Retained						
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	2"	100.0	0.0	0.0						
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	1.5"	100.0	0.0	0.0						
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	1"	85.0	15.0	15.0						
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	3/4"	72.1	12.9	27.9						
#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	1/2"	64.5	7.6	35.5						
#8 34.9 7.8 65.1 #16 29.0 5.9 71.0 #30 21.0 8.0 79.0	3/8"	56.5	8.0	43.5						
#16 29.0 5.9 71.0 #30 21.0 8.0 79.0	#4	42.7	13.8	57.3						
#30 21.0 8.0 79.0	#8	34.9	7.8	65.1						
	#16	29.0	5.9	71.0						
#50 8.2 12.8 91.8	#30	21.0	8.0	79.0						
	#50	8.2	12.8	91.8						
#100 1.6 6.5 98.4	#100	1.6	6.5	98.4						
LBW 0.7 0.9 99.3	LBW	0.7	0.9	99.3						

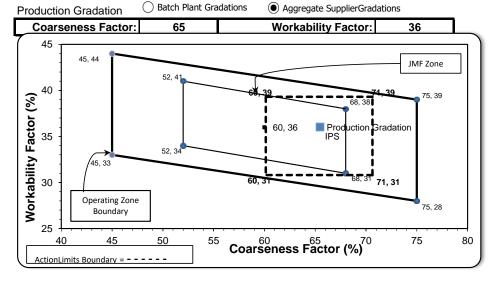
Approved By: Mart P. Ball

PLANT #:		P-39					Contractor:		
Sample Date	:	5/15/23			Concrete Grade:	P1M, 3500HP			
Dates Test R		5/16/2023	through	5/22/2023			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	I/	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained	
2"	·	100.0	10	0.0	100.0	100.0	0.0	0.0	1
1.5"		97.7	100	0.0	100.0	99.2	0.8	0.8	
1"		48.9	10	0.0	100.0	83.0	16.2	17.0	
3/4"		14.2	98	8.5	100.0	71.1	11.9	28.9	1
1/2"		3.2	83	3.2	100.0	63.5	7.6	36.5	
3/8"		2.4 63.7		8.7	100.0	58.1	5.3	41.9	
#4		2.2	17	' .3	97.0	44.7	13.4	55.3	
#8	2.2		4.	.5	83.8	36.0	8.7	64.0	n
#16		2.1	2.		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		.9	5.4	3.3	7.0	96.7	а
LBW		1.6	1.	.7	1.0	1.4	1.9	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 8% for the 1" sieve when 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)									
Coars	eness Factor:	65							
Work	ability Factor:	35							
Sieve	Cumulative	%	Cumulative						
Sieve	% Passing	Retained	% Retained						
2"	100.0	0.0	0.0						
1.5"	99.6	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						

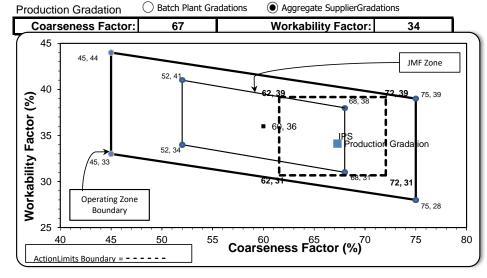
Approved By: Mart 1. Ball

PLANT #: P-O2		P-O2					Contractor:		
Sample Date	:	5/15/23			Concrete Grade:	P1M, 3500HP			
Dates Test R	epresents:	5/16/2023	through	5/22/2023			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	٦
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	
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	10.0		42.7	13.0	57.3	
#8		1.8	3.5		80.0	34.1	8.6	65.9	n
#16		1.8	2.6		64.0	27.3	6.8	72.7	
#30		1.8	2.4		48.2	20.9	6.5	79.1	n
#50		1.7	2.	3	25.1	11.4	9.5	88.6	
#100		1.6	2.		3.9	2.7	8.7	97.3	а
LBW		1.3	1.	8	0.5	1.1	1.6	98.9	



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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"	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 1. Ball