

Coarse Concrete Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
14698 Galaxie Avenue

Project : AVR
15305 Johnny Cake Ridge
Apple Valley MN

Apple Valley MN 55124


Lab ID : 17492 **Background Information**

Sample Number : 11	Specification : C33
Date Sampled : 5/23/2007	Classification : Size 89
Date Submitted : 5/23/2007	Test Method : ASTM
Date Tested : 6/25/2007	Class Designation : 4S
Sample Location : Fisher Pit stockpile	Sampled by : Client
	Source : Fischer Pit

Properties	Test Results	Spec's	Sieve Analysis	
Clay Lumps & Friable Part's ASTM C142	0.3	3.0 max	ASTM C136/C117	
Chert ASTM C123	0.3	5.0 max	% Passing	Spec's
Lightweight Particles ASTM C123	0.1	0.5 max	3" (75mm)	
Passing # 200 ASTM C117	0.4	1.0 max	2" (50mm)	
Los Angeles Abrasion C ASTM C131/C535	19.4	50 max	1.5"(37.5mm)	
Magnesium Soundness Loss ASTM C88	8.0	18 max	1" (25mm)	
Specific Gravity ASTM C127			3/4"(19mm)	
Bulk Oven Dry	2.647		5/8"(16mm)	
Bulk Saturated Surface Dry	2.683		1/2"(12.5mm)	100
Apparent Oven Dry	2.745		3/8"(9.5mm)	100 90-100
Absorption	1.34		#4 (4.75mm)	36 20-55
			#8 (2.36mm)	3 5-30
			#16 (1.18mm)	1 0-10
			#30 (.60mm)	1
			#50 (.30mm)	1 0-5
Unit Weight ASTM C29	102.8	Rodded Loose		
Voids ASTM C29	37.7			

Remarks :

CC:

Sincerely,
Braun Intertec Corporation

Dallas D. Miner
Aggregate Laboratory Supervisor

Coarse Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
14698 Galaxie Avenue


Project : AVR
15305 Johnny Cake Ridge
Apple Valley MN

Apple Valley MN 55124

		Background Information	
Lab ID :	17492	Specification :	C33
Sample Number :	11	Classification :	Size 89
Date Sampled :	5/23/2007	Test Method :	ASTM
Date Submitted :	5/23/2007	Sampled by :	Client
Date Tested :	6/25/2007	Source :	Fischer Pit
Sample Location :	Fisher Pit stockpile		

Properties	Test Results	Spec's
Shale ASTM		
+1/2"	0.0	
+#4 Total	0.0	
Soft Iron Oxide ASTM	0.0	
Total Spall Excluding Soft Part's & Clay Balls		
+1/2" ASTM C295	0.0	
+#4 Total	0.3	
Soft Particles ASTM	0.5	
Carbonate Content ASTM	21.7	
Sum of Spall, Soft particles ,Clay balls	0.8	5.0 max

Remarks:

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Aggregate Laboratory Supervisor

Coarse Concrete Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
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Project : AVR
15305 Johnny Cake Ridge
Apple Valley MN

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Lab ID : 17491

Background Information


Sample Number : 10
Date Sampled : 5/23/2007
Date Submitted : 5/23/2007
Date Tested : 6/22/2007
Sample Location : Fisher Pit stockpile

Specification : C33
Classification : Size 67
Test Method : ASTM
Class Designation : 4S
Sampled by : Client
Source : Fischer Pit

Properties		Test Results	Spec's	Sieve Analysis	
Clay Lumps & Friable Part's	ASTM C142	0.2	3.0 max	ASTM C136/C117	
Chert	ASTM C123	0.4	5.0 max	% Passing	Spec's
Lightweight Particles	ASTM C123	0.0	0.5 max	3" (75mm)	
Passing # 200	ASTM C117	0.8	1.0 max	2" (50mm)	
Los Angeles Abrasion B	ASTM C131/C535	20.5	50 max	1.5"(37.5mm)	
Magnesium Soundness Loss	ASTM C88	5.6	18 max	1" (25mm)	100 100
Specific Gravity	ASTM C127			3/4"(19mm)	95 90-100
Bulk Oven Dry		2.651		5/8"(16mm)	
Bulk Saturated Surface Dry		2.687		1/2"(12.5mm)	61
Apparent Oven Dry		2.749		3/8"(9.5mm)	35 20-55
Absorption		1.33		#4 (4.75mm)	3 0-10
				#8 (2.36mm)	0-5
				#16 (1.18mm)	
				#30 (.60mm)	
				#50 (.30mm)	
Unit Weight	ASTM C29	104.1	Rodded Loose		
Voids	ASTM C29	36.9			

Remarks :

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Coarse Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
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14698 Galaxie Avenue


Project : AVR
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Apple Valley MN

Apple Valley MN 55124

		Background Information	
Lab ID :	17491	Specification :	C33
Sample Number :	10	Classification :	Size 67
Date Sampled :	5/23/2007	Test Method :	ASTM
Date Submitted :	5/23/2007	Sampled by :	Client
Date Tested :	6/22/2007	Source :	Fischer Pit
Sample Location :	Fisher Pit stockpile		

Properties	Test Results	Spec's
Shale ASTM		
+1/2"	0.0	
+#4 Total	0.1	
Soft Iron Oxide ASTM	0.0	
Total Spall Excluding Soft Part's & Clay Balls		
+1/2" ASTM C295	0.0	
+#4 Total	0.5	
Soft Particles ASTM	0.1	
Carbonate Content ASTM	23.8	
Sum of Spall, Soft particles ,Clay balls	0.6	5.0 max

Remarks:

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Aggregate Laboratory Supervisor

Coarse Concrete Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
14698 Galaxie Avenue

Project : AVR
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Apple Valley MN

Apple Valley MN 55124

Lab ID : 17490

Background Information


Sample Number : 9
Date Sampled : 5/23/2007
Date Submitted : 5/23/2007
Date Tested : 6/22/2007
Sample Location : Fisher Pit stockpile

Specification : C33
Classification : Size 4
Test Method : ASTM
Class Designation : 4S
Sampled by : Client
Source : Fischer Pit

Properties	Test Results	Spec's	Sieve Analysis	
Clay Lumps & Friable Part's ASTM C142	0.4	3.0 max	ASTM C136/C117	
Chert ASTM C123	0.0	5.0 max	% Passing	Spec's
Lightweight Particles ASTM C123	0.0	0.5 max	3" (75mm)	
Passing # 200 ASTM C117	0.4	1.0 max	2" (50mm)	100 100
Los Angeles Abrasion 3 ASTM C131/C535	21.1	50 max	1.5"(37.5mm)	96 90-100
Magnesium Soundness Loss ASTM C88	1.6	18 max	1" (25mm)	33 20-55
Specific Gravity ASTM C127			3/4"(19mm)	5 0-15
Bulk Oven Dry	2.722		5/8"(16mm)	
Bulk Saturated Surface Dry	2.739		1/2"(12.5mm)	1
Apparent Oven Dry	2.769		3/8"(9.5mm)	1 0-5
Absorption	0.63		#4 (4.75mm)	1
			#8 (2.36mm)	
			#16 (1.18mm)	
			#30 (.60mm)	
			#50 (.30mm)	
Unit Weight ASTM C29	102.2	Rodded Loose		
Voids ASTM C29	39.7			

Remarks :

CC:

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Dallas D. Miner
Aggregate Laboratory Supervisor

Coarse Concrete Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
14698 Galaxie Avenue

Project : AVR
15305 Johnny Cake Ridge
Apple Valley MN

Apple Valley MN 55124

Lab ID : 17493

Background Information


Sample Number : 12
Date Sampled : 5/23/2007
Date Submitted : 5/23/2007
Date Tested : 6/25/2007
Sample Location : Fisher Pit stockpile

Specification : C33
Classification : Metroseal
Test Method : ASTM
Class Designation : 4S
Sampled by : Client
Source : Fischer Pit

Properties	Test Results	Spec's	Sieve Analysis	
Clay Lumps & Friable Part's ASTM C142	0.0	3.0 max	ASTM C136/C117	
Chert ASTM C123	0.9	5.0 max	% Passing	Spec's
Lightweight Particles ASTM C123	0.0	0.5 max	3" (75mm)	
Passing # 200 ASTM C117	0.2	1.0 max	2" (50mm)	
Los Angeles Abrasion D ASTM C131/C535	21.4	50 max	1.5"(37.5mm)	
Magnesium Soundness Loss ASTM C88	7.0	18 max	1" (25mm)	
Specific Gravity ASTM C127			3/4"(19mm)	
Bulk Oven Dry	2.658		5/8"(16mm)	
Bulk Saturated Surface Dry	2.681		1/2"(12.5mm)	
Apparent Oven Dry	2.720		3/8"(9.5mm)	100
Absorption	0.86		#4 (4.75mm)	88
			#8 (2.36mm)	31
			#16 (1.18mm)	11
			#30 (.60mm)	4
			#50 (.30mm)	1
Unit Weight ASTM C29	108.5	Rodded Loose		
Voids ASTM C29	34.5			

Remarks :

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Project : AVR
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Apple Valley MN

Apple Valley MN 55124

		Background Information	
Lab ID :	17493	Specification :	C33
Sample Number :	12	Classification :	Metroseal
Date Sampled :	5/23/2007	Test Method :	ASTM
Date Submitted :	5/23/2007	Sampled by :	Client
Date Tested :	6/25/2007	Source :	Fischer Pit
Sample Location :	Fisher Pit stockpile		

Properties	Test Results	Spec's
Shale ASTM		
+1/2"	0.0	
+#4 Total	0.0	
Soft Iron Oxide ASTM	0.0	
Total Spall Excluding Soft Part's & Clay Balls		
+1/2" ASTM C295	0.0	
+#4 Total	0.9	
Soft Particles ASTM	0.0	
Carbonate Content ASTM	21.3	
Sum of Spall, Soft particles ,Clay balls	0.9	5.0 max

Remarks:

Sincerely,
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Dallas D. Miner
Aggregate Laboratory Supervisor

Fine Concrete Aggregate

Date : 6/26/2007

Project Number : LV-05-00244A

Client : Josh Edwards
AVR, Inc.
14698 Galaxie Avenue

Apple Valley MN 55124

Project : AVR
15305 Johnny Cake Ridge
Apple Valley MN

Lab ID : 17494

Background Information

Sample Number : 13
Date Sampled : 5/23/2007
Date Submitted : 5/23/2007
Date Tested : 6/25/2007
Sample Location : Fisher Pit stockpile


Specification : C33
Classification : Fine Aggregate
Test Method : ASTM
Sampled by : Client
Source : Fischer Pit

Properties	Test Results	Spec's	Sieve Analysis	
Fineness Modulus	2.61	2.3-3.1	ASTM C136/C117	
Clay Lumps & Friable Part's ASTM C142	0.4	3.0 max	% Passing	Spec's
Lightweight Pieces ASTM C123	0.0	0.5 max	3/8" (9.5mm)	100 100
Magnesium Soundness Loss ASTM C88	4.8	15 max	#4 (4.75mm)	99 95-100
Specific Gravity ASTM C128			#8 (2.36mm)	91 80-100
Bulk Oven Dry	2.655		#16 (1.18mm)	76 50-85
Bulk Saturated Surface Dry	2.671		#30 (.60mm)	51 25-60
Apparent Oven Dry	2.697		#50 (.30mm)	18 5-30
% Absorption	0.58		#100(.15mm)	4.0 0-10
Maximum Between 2 Sieves	33	45 max	#200(.075mm)	1.8 0-5.0
Organic Impurities ASTM C40	<1	Plate 3 max		

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