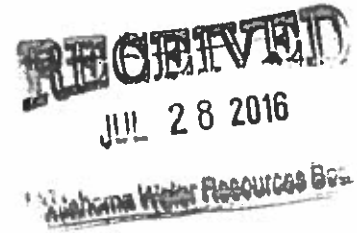




Robin Simmons
Regional Land Manager

July 28, 2016



Kent Wilkins
Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, OK 73118

Re: Martin Marietta/Material Producers Davis Quarry Q2 2016 Monitoring Report

Dear Mr. Wilkins:

Attached please find the Q2 2016 monitoring report and associated data and calculations for Martin Marietta/Material Producers' Davis Quarry.

Sincerely,

A handwritten signature in cursive script that reads 'Robin L. Simmons'.

Robin L. Simmons, EIT
Land Manager


North Texas/Oklahoma District
1503 LBJ Parkway Suite 400, Dallas, Texas 75234
t. (972) 350-8228 f. (972) 647-3363 m. (214) 213-6024 e. Robin.Simmons@martinmarietta.com
www.martinmarietta.com

MMM Davis Quarry 2016 Monitoring Report

All volumes are in acre-feet.

	Total Groundwater Entering Pit	Total Stormwater Entering Pit	Total Stormwater Diverted from Pit	Total Water Diverted	Water Sent To Holding Basin	Groundwater Augmentation	Streamwater Augmentation	Consumptive Use of Stormwater	Consumptive Use of Groundwater	Groundwater Pumped From Well
January-16	-2.71	2.26	2.26	-0.44	N/A	-2.71	0.00	2.76	0.00	0.00
February-16	-5.50	6.43	6.43	0.93	N/A	-5.50	0.00	3.77	0.00	0.00
March-16	-7.84	11.82	11.82	3.98	N/A	-7.84	0.00	3.44	0.00	0.00
1st QTR Totals	-16.05	20.52	20.52	4.47	0.00	-16.05	0.00	9.96	0.00	0.00
April-16	-20.74	28.24	28.24	7.49	N/A	-20.74	0.00	3.66	0.00	0.00
May-16	-13.77	12.28	12.28	-1.49	N/A	-13.77	0.00	2.96	0.00	0.00
June-16	-4.41	9.88	9.88	5.46	N/A	-4.41	0.00	5.84	0.00	0.00
2nd QTR Totals	-38.93	50.39	50.39	11.46	0.00	-38.93	0.00	12.46	0.00	0.00

Note: Negative entries for Total Groundwater Entering Pit indicate that stormwater is entering the rock formation via the pit.

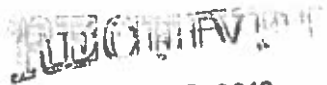


 JUL 28 2016

Consumptive Use

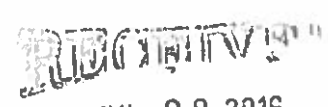
	January	February	March	April	May	June
Water Truck Usage	0.46	0.52	0.71	0.64	-	1.50
Moisture Content of Product Shipped	2.30	3.25	2.74	3.02	2.96	4.33
Misc on site use	-	-	-	-	-	-
Misc off site	-	-	-	-	-	-
Total	2.76	3.77	3.44	3.66	2.96	5.84

	January	February	March	April	May	June
Shipped Tons	35,366	27,088	29,170	28,008	34,258	49,070
Base	57,982	74,390	65,711	56,491	68,262	61,094
Coarse Aggregate	16,218	43,194	30,304	43,155	32,076	63,860
Fine Aggregate	109,566	144,673	125,185	127,655	134,596	174,024
Total	2.30	3.25	2.74	3.02	2.96	4.33


 JUL 28 2016
 Alabama Water Resources Co.

Davis Water Balance

	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
Monitoring Period, Days		31	29	31	30	31	30
Monthly Production, tons		113,229	107,164	120,892	104,186	63,864	114,429
Product Moisture Content		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Water Truck Loads		15	17	23	21	0	49
Month End Water Elevs.							
1) Freshwater pond, depth to water	2.619	7.269	9.277	9.937	6.082	10.517	8.442
2) Pit Sump, depth to water	10.409	9.321	11.648	10.347	10.12	8.193	12.872
Pond Surface Acres							
1) Freshwater pond	0.937	0.937	0.937	0.937	0.937	0.937	0.937
2) Pit Sump	0.322	0.322	0.322	0.322	0.322	0.322	0.322
Total surface acres	1.259	1.259	1.259	1.259	1.259	1.259	1.259
Pond Water Volume Change							
1) Freshwater pond	-4.357	-1.881	-0.618	3.612	1.944	-4.156	1.944
2) Pit Sump	0.350	-0.749	0.419	0.073	-1.507	0.620	-1.507
3) Change in settling pond storage	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Volume Change	-4.007	-2.631	-0.199	3.685	-3.535	0.000	0.438
Water Inputs, ac-ft							
Rural Water	0.018	0.033	0.043	0.033	0.033	0.028	0.000
Lake Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Water	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Precipitation	2.265	6.432	11.823	28.238	12.276	12.276	9.875
Total Water Input	2.283	6.466	11.866	28.271	12.304	12.304	9.875
Water Usage, ac-ft							
Product moisture content	2.916	2.760	3.113	2.683	1.645	2.947	2.947
Haul road dust control	0.460	0.522	0.706	0.644	0.000	1.504	1.504
Evaporation losses	0.207	0.316	0.407	0.515	0.424	0.424	0.574
Misc usage	-	-	-	-	-	-	-
Total Water Usage, Ac-ft	3.583	3.597	4.226	3.842	2.068	5.024	5.024
Net Water Input	-1.300	2.868	7.640	24.429	10.236	4.851	4.851
emergency storage of precipitation and runoff, ac-ft							
Groundwater Inflow	-2.707	-5.499	-7.840	-20.744	-13.771	-4.413	-4.413
Groundwater Inflow, Avg Ac-ft/Day	-0.087	-0.190	-0.253	-0.691	-0.444	-0.147	-0.147
Groundwater Inflow, Avg Gallons/Day	-28,450	-61,791	-82,407	-225,313	-144,751	-47,937	-47,937


 JUL 28 2016
 Water Resources

April Precipitation Data

PIT RUNOFF ASSUMPTIONS		
Hydrologic Soil Group	D	
Land Use	gravel road	
AMC Condition	II (ave)	
CN (pit fringe)	88	area draining into pit
CN (pit)	100	area with direct interception
S (pit fringe)	1.364	area draining into pit
S (pit)	0.000	area with direct interception
Pit - Direct Interception (>95 ft deep)	54.36	subject to refinement
Pit fringe (area drains to pit)	68.34	subject to refinement
Drainage to Pit (total area)	122.70	subject to refinement

RECEIVED

JUL 28 2016

Water Resources Board

Quarry area Fringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-Apr	0.00	0.00	0.00	0.13
2-Apr	0.00	0.00	0.00	0.18
3-Apr	0.00	0.00	0.00	0.27
4-Apr	0.00	0.00	0.00	0.24
5-Apr	0.00	0.00	0.00	0.21
6-Apr	0.00	0.00	0.00	0.24
7-Apr	0.00	0.00	0.00	0.23
8-Apr	0.00	0.00	0.00	0.19
9-Apr	0.03	0.03	0.00	0.89
10-Apr	0.00	0.00	0.00	0.16
11-Apr	0.85	0.85	0.00	0.07
12-Apr	0.03	0.03	0.00	0.07
13-Apr	0.24	0.24	0.00	0.06
14-Apr	0.01	0.01	0.00	0.09
15-Apr	0.00	0.00	0.00	0.15
16-Apr	0.00	0.00	0.00	0.12
17-Apr	0.76	0.76	0.00	0.03
18-Apr	1.84	1.84	0.84	0.06
19-Apr	0.64	0.64	0.00	0.09
20-Apr	0.17	0.17	0.00	0.00
21-Apr	0.08	0.08	0.00	0.17
22-Apr	0.00	0.00	0.00	0.19
23-Apr	0.00	0.00	0.00	0.21
24-Apr	0.00	0.00	0.00	0.19
25-Apr	0.00	0.00	0.00	0.19
26-Apr	0.10	0.10	0.00	0.15
27-Apr	0.18	0.18	0.00	0.00
28-Apr	0.00	0.00	0.00	0.18
29-Apr	0.08	0.08	0.00	0.00
30-Apr	0.17	0.17	0.00	0.16
		0.00	0.00	
		5.18	0.84	
Volume, ac-ft		23.46	4.77	4.906
Total Vol, ac-ft		28.24		

May Precipitation Data

PIT RUNOFF ASSUMPTIONS		
Hydrologic Soil Group	D	
Land Use	gravel road	
AMC Condition	II (ave)	
CN (pit fringe)	88	area draining into pit
CN (pit)	100	area with direct interception
S (pit fringe)	1.364	area draining into pit
S (pit)	0.000	area with direct interception
Pit - Direct Interception (>95 ft deep)	54.36	subject to refinement
Pit fringe (area drains to pit)	68.34	subject to refinement
Drainage to Pit (total area)	122.70	subject to refinement

Quarry area Fringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-May	0.03	0.03	0.00	0.16
2-May	0.03	0.03	0.00	0.10
3-May	0.00	0.00	0.00	0.17
4-May	0.00	0.00	0.00	0.21
5-May	0.00	0.00	0.00	0.21
6-May	0.00	0.00	0.00	0.20
7-May	0.00	0.00	0.00	0.18
8-May	0.00	0.00	0.00	0.09
9-May	0.05	0.05	0.00	0.00
10-May	0.01	0.01	0.00	0.23
11-May	0.00	0.00	0.00	0.21
12-May	0.10	0.10	0.00	0.19
13-May	0.00	0.00	0.00	0.21
14-May	0.00	0.00	0.00	0.15
15-May	0.00	0.00	0.00	0.09
16-May	0.00	0.00	0.00	0.10
17-May	0.86	0.86	0.00	0.04
18-May	0.22	0.22	0.00	0.04
19-May	0.00	0.00	0.00	0.00
20-May	0.00	0.00	0.00	0.13
21-May	0.00	0.00	0.00	0.14
22-May	0.00	0.00	0.00	0.16
23-May	0.47	0.47	0.00	0.04
24-May	0.04	0.04	0.00	0.00
25-May	0.00	0.00	0.00	0.15
26-May	0.00	0.00	0.00	0.10
27-May	0.35	0.35	0.00	0.14
28-May	0.36	0.36	0.00	0.18
29-May	0.00	0.00	0.00	0.19
30-May	0.12	0.12	0.00	0.15
31-May	0.07	0.07	0.00	0.07
		2.71	0.00	0.00
Volume, ac-ft		12.28	0.00	4.039
Total Vol, ac-ft		12.28		

RECEIVED

JUL 28 2016

Water Resources Board

June Precipitation Data

PIT RUNOFF ASSUMPTIONS		
Hydrologic Soil Group	D	
Land Use	gravel road	
AMC Condition	II (ave)	
CN (pit fringe)	88	area draining into pit
CN (pit)	100	area with direct interception
S (pit fringe)	1.364	area draining into pit
S (pit)	0.000	area with direct interception
Pit - Direct Interception (>95 ft deep)	54.36	subject to refinement
Pit fringe (area drains to pit)	68.34	subject to refinement
Drainage to Pit (total area)	122.70	subject to refinement

Quarry area Fringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-Jun	0.11	0.11	0.00	0.09
2-Jun	0.04	0.04	0.00	0.00
3-Jun	0.19	0.19	0.00	0.09
4-Jun	0.01	0.01	0.00	0.11
5-Jun	0.00	0.00	0.00	0.22
6-Jun	0.00	0.00	0.00	0.22
7-Jun	0.00	0.00	0.00	0.21
8-Jun	0.00	0.00	0.00	0.23
9-Jun	0.00	0.00	0.00	0.20
10-Jun	0.00	0.00	0.00	0.21
11-Jun	0.00	0.00	0.00	0.19
12-Jun	1.15	1.15	0.00	0.07
13-Jun	0.01	0.01	0.00	0.08
14-Jun	0.66	0.66	0.00	0.17
15-Jun	0.01	0.01	0.00	0.22
16-Jun	0.00	0.00	0.00	0.19
17-Jun	0.00	0.00	0.00	0.23
18-Jun	0.00	0.00	0.00	0.18
19-Jun	0.00	0.00	0.00	0.18
20-Jun	0.00	0.00	0.00	0.18
21-Jun	0.00	0.00	0.00	0.25
22-Jun	0.00	0.00	0.00	0.25
23-Jun	0.00	0.00	0.00	0.22
24-Jun	0.00	0.00	0.00	0.23
25-Jun	0.00	0.00	0.00	0.22
26-Jun	0.00	0.00	0.00	0.19
27-Jun	0.00	0.00	0.00	0.20
28-Jun	0.00	0.00	0.00	0.21
29-Jun	0.00	0.00	0.00	0.22
30-Jun	0.00	0.00	0.00	0.22
		0.00	0.00	
		2.18	0.00	
Volume, ac-ft		9.88	0.00	5.467
Total Vol, ac-ft		9.88		

JUL 28 2016
 Wyoming Water Resources Dept.