



Jesse Martindale
Sr. Environmental Engineer

June 27, 2025

RECEIVED

JUN 27 2025

Jason Tutkowski
Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, OK 73118

Oklahoma Water Resources Board

Re: Martin Marietta Davis Quarry 2025 Q1 Report

Dear Mr. Tutkowski:

Attached please find the Q1 monitoring report and associated data and calculations for the Martin Marietta Davis Quarry with the requested updated information.

As is typical at the Davis Quarry, we see more precipitation and runoff entering the pit than the total water we use from the pit. Also typically, we do not see a rise in water levels in the pit that correspond to the additional precipitation and runoff that we know is entering the pit and not being used. Thus we still see a net decrease of water within the pit indicating that we continue to augment groundwater through the pit.

Regards,

A handwritten signature in blue ink that reads 'Jesse Martindale'.

Jesse Martindale
Sr. Environmental Engineer

MM Davis Quarry 2025 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-25	-4.79	3.56	3.56	-1.23	N/A	-4.79	0.00	9.26	0.00	0.00
February-25	-0.25	1.50	1.50	1.25	N/A	-0.25	0.00	3.05	0.00	0.00
March-25	0.67	13.73	13.73	14.41	N/A	0.67	0.00	6.47	0.00	0.00
1st QTR Totals	-4.36	18.79	18.79	14.43	0.00	-4.36	0.00	18.78	0.00	0.00

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

Total groundwater entering the pit = total stormwater entering the pit - total water diverted

Groundwater Right Value (MEPS): 68 acre-feet

Davis Water Balance

	Dec-24	Jan-25	Feb-25	Mar-25
Monitoring Period, Days		31	28	31
Monthly Production, tons	133,509	100,201	91,974	154,591
Product Moisture Content		3.5%	3.5%	3.5%
Water Truck Loads		15	38	116
Month End Water Elevs.				
1) Freshwater pond, depth to water	19.37432	20.74881	17.84724	14.8811245
2) Pit Sump, depth to water	60.67374	58.43507	58.42458	59.433167
Pond Surface Acres				
1) Freshwater pond		1.0	1.0	1.0
2) Pit Sump		5.79	5.79	5.79
Total surface acres		6.794314	6.794314	6.794313535
Pond Water Volume Change				
1) Freshwater pond		1.374	-2.902	-2.966
2) Pit Sump		-12.972	-0.061	5.844
3) Change in settling pond storage		0.000	0.000	0.000
Net Volume Change		-11.597	-2.962	2.878
Water Inputs, ac-ft				
Rural Water		0.000	0.037	0.028
Lake Water		0.000	0.000	0.000
Well Water		0.000	0.000	0.000
Precipitation		3.558	1.498	13.734
Total Water Input		3.558	1.535	13.762
Water Usage, ac-ft				
Product moisture content		2.580	2.369	3.981
Haul road dust control		0.414	1.050	3.204
Evaporation losses		0.866	0.834	4.371
Misc usage		6.51	-	-
Total Water Usage, Ac-ft		10.368	4.252	11.556
Net Water Input		-6.810	-2.717	2.206
emergency storage of precipitation and runoff, ac-ft				
Groundwater Inflow		-4.787	-0.245	0.672
Groundwater Inflow, Avg Ac-ft/Day		-0.154	-0.009	0.022
Groundwater Inflow, Avg Gallons/Day		-50,321	-2,854	7,067

Consumptive Use

	January	February	March
Water Truck Usage	0.41	1.05	3.20
Moisture Content of Product Shipped	2.34	2.00	3.27
Misc on site use	-	-	-
Misc off site	6.51	-	-
Total	9.26	3.05	6.47

Shipped Tons	January	February	March
Base	25,341	15,622	25,348
Coarse Aggregate	73,068	72,679	107,260
Fine Aggregate	18,396	15,983	31,086
Total	116,805	104,283	163,693
Moisture Shipped	2.34	2.00	3.27

January 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)	74.91	subject to refinement
Pit fringe (area drains to pit)	90.41	subject to refinement
Drainage to Pit (total area)	165.32	subject to refinement

Quarry areaFringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-Jan	0.00	0.00	0.00	0.05
2-Jan	0.00	0.00	0.00	0.06
3-Jan	0.00	0.00	0.00	0.06
4-Jan	0.00	0.00	0.00	0.03
5-Jan	0.01	0.01	0.00	0.03
6-Jan	0.00	0.00	0.00	0.04
7-Jan	0.00	0.00	0.00	0.04
8-Jan	0.00	0.00	0.00	0.05
9-Jan	0.00	0.00	0.00	0.01
10-Jan	0.15	0.15	0.00	0.01
11-Jan	0.21	0.21	0.00	0.06
12-Jan	0.00	0.00	0.00	0.06
13-Jan	0.00	0.00	0.00	0.06
14-Jan	0.00	0.00	0.00	0.07
15-Jan	0.00	0.00	0.00	0.06
16-Jan	0.00	0.00	0.00	0.08
17-Jan	0.00	0.00	0.00	0.06
18-Jan	0.00	0.00	0.00	0.05
19-Jan	0.00	0.00	0.00	0.04
20-Jan	0.00	0.00	0.00	0.02
21-Jan	0.00	0.00	0.00	0.04
22-Jan	0.00	0.00	0.00	0.06
23-Jan	0.00	0.00	0.00	0.06
24-Jan	0.00	0.00	0.00	0.09
25-Jan	0.00	0.00	0.00	0.07
26-Jan	0.00	0.00	0.00	0.03
27-Jan	0.00	0.00	0.00	0.07
28-Jan	0.00	0.00	0.00	0.06
29-Jan	0.14	0.14	0.00	0.02
30-Jan	0.06	0.06	0.00	0.04
31-Jan	0.00	0.00	0.00	0.09
		0.57	0.00	
Volume, ac-ft		3.56	0.00	1.53
Total Vol, ac-ft		3.56		

February 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)	74.91	subject to refinement
Pit fringe (area drains to pit)	90.41	subject to refinement
Drainage to Pit (total area)	165.32	subject to refinement

Quarry areaFringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-Feb	0.00	0.00	0.00	0.09
2-Feb	0.00	0.00	0.00	0.11
3-Feb	0.00	0.00	0.00	0.10
4-Feb	0.00	0.00	0.00	0.02
5-Feb	0.02	0.02	0.00	0.02
6-Feb	0.00	0.00	0.00	0.03
7-Feb	0.00	0.00	0.00	0.02
8-Feb	0.00	0.00	0.00	0.04
9-Feb	0.00	0.00	0.00	0.02
10-Feb	0.04	0.04	0.00	0.01
11-Feb	0.04	0.04	0.00	0.01
12-Feb	0.12	0.12	0.00	0.01
13-Feb	0.00	0.00	0.00	0.04
14-Feb	0.00	0.00	0.00	0.04
15-Feb	0.01	0.01	0.00	0.01
16-Feb	0.00	0.00	0.00	0.06
17-Feb	0.00	0.00	0.00	0.06
18-Feb	0.00	0.00	0.00	0.01
19-Feb	0.00	0.00	0.00	0.02
20-Feb	0.01	0.01	0.00	0.04
21-Feb	0.00	0.00	0.00	0.02
22-Feb	0.00	0.00	0.00	0.09
23-Feb	0.00	0.00	0.00	0.10
24-Feb	0.00	0.00	0.00	0.10
25-Feb	0.00	0.00	0.00	0.11
26-Feb	0.00	0.00	0.00	0.07
27-Feb	0.00	0.00	0.00	0.11
28-Feb	0.00	0.00	0.00	0.15
		0.00	0.00	
		0.00	0.00	
		0.00	0.00	
		0.24	0.00	
Volume, ac-ft		1.50	0.00	1.473
Total Vol, ac-ft		1.50		

March 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)	74.91	subject to refinement
Pit fringe (area drains to pit)	90.41	subject to refinement
Drainage to Pit (total area)	165.32	subject to refinement

Quarry areaFringe area

Date	Precip, in.	Runoff, in.	Runoff, in.	Evapor, in/day
1-Mar	0.00	0.00	0.00	0.25
2-Mar	0.12	0.12	0.00	0.28
3-Mar	0.01	0.01	0.00	0.12
4-Mar	0.77	0.77	0.00	0.20
5-Mar	0.00	0.00	0.00	0.17
6-Mar	0.00	0.00	0.00	0.19
7-Mar	0.00	0.00	0.00	0.33
8-Mar	0.67	0.67	0.00	0.08
9-Mar	0.26	0.26	0.00	0.12
10-Mar	0.00	0.00	0.00	0.19
11-Mar	0.00	0.00	0.00	0.31
12-Mar	0.00	0.00	0.00	0.29
13-Mar	0.00	0.00	0.00	0.19
14-Mar	0.00	0.00	0.00	0.57
15-Mar	0.00	0.00	0.00	0.18
16-Mar	0.00	0.00	0.00	0.20
17-Mar	0.00	0.00	0.00	0.46
18-Mar	0.00	0.00	0.00	0.40
19-Mar	0.00	0.00	0.00	0.45
20-Mar	0.00	0.00	0.00	0.21
21-Mar	0.00	0.00	0.00	0.30
22-Mar	0.00	0.00	0.00	0.30
23-Mar	0.00	0.00	0.00	0.31
24-Mar	0.00	0.00	0.00	0.22
25-Mar	0.00	0.00	0.00	0.28
26-Mar	0.25	0.25	0.00	0.20
27-Mar	0.00	0.00	0.00	0.25
28-Mar	0.08	0.08	0.00	0.11
29-Mar	0.04	0.04	0.00	0.21
30-Mar	0.00	0.00	0.00	0.15
31-Mar	0.00	0.00	0.00	0.20
		2.20	0.00	
Volume, ac-ft		13.73	0.00	7.72
Total Vol, ac-ft		13.73		