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Oklahoma Water Resources Board

Robin L. Simmons

Regional Land Manager

June 19, 2020

Oklahoma Water Resources Board
3800 N. Classen Boulevard
Oklahoma City, OK 73118
Attn: Mr. Matt Cogburn

Re: Martin Marietta/TXI Mill Creek Limestone Quarry Monitoring Report Q1 2020

Dear Mr. Cogburn:

Attached please find the Q1 2020 Quarterly Monitoring Report for Martin Marietta/TXI's Mill Creek Limestone quarry. The report is summarized on the table labeled Appendix C. Supporting data is also included.

Please call if you have any questions or comments.

Sincerely,

A handwritten signature in blue ink that reads 'Robin L. Simmons'.

Robin L. Simmons
Regional Land Manager

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ATTACHMENT 1 (Appendix C)
Martin Marietta (TXI) Mill Creek 2020

Oklahoma Water Resources Board

Appendix C . Consumptive use of Pitwater

Q1 2020

PIT GROUNDWATER VOLUME			
1	Total volume pumped from producing mine pit(s) (AC-FT)		612.46
2	Volume of precipitation that falls onto the surface of producing Mine Pits (AC-FT)		30.70
3	Portion of total precipitation that flows over the land surface that drains into the mine pit water (AC-FT)		136.16
4	(WATER HELD IN PIT FROM PREVIOUS MONTHS) other non pit waters pumped from the producing mining pit (AC-FT)		
5	add lines 2 through 4		166.85
6	Pit Groundwater Volume (AC-FT) (line 1 minus Line 5)		445.61
DEFINED ELEMENTS OF CONSUMPTIVE USE			
7	Vol. of pit groundwater that is driven off (by drying) the mined material transp. off of the mine site (AC-FT)		0.00
8	Vol. of pit groundwater that is carried away with the the mined material transp. off of the mine site (AC-FT)		4.43
9	Vol. of pit groundwater that evaporates from producing mine pits, process ponds and lined ponds (excluding structures used for augmentation) (AC-FT)		2.21
10	Volume of pit groundwater that is used for other beneficial uses off of the mine site (AC-FT) (includes on-site dust control)		9.71
11	DEFINED ELEMENTS OF CONSUMPTIVE USE of Pit groundwater (AC-FT) (add lines 7 through 10)		16.35
PIT GROUNDWATER BALANCE			
12	Lines 6 minus 11		429.26
13	Groundwater Augmentation Volume of pit water returned to GW Basin or subbasin. (Troy Recharge AC-FT)	Credits	460.93
14	Stream Augmentation volume of pit water discharged to a definite Stream, during flow conditions that are less than or equal to the accepted exceedance level (AC-FT)		0.00
15	PPT and Runoff Volume of Precipitation and surface runoff into a recharge pit or holding pond (AC-FT)		60.58
16	Recycled Pit Groundwater - Volume of ground water returned to the mine pit or holding basin (AC-FT)		422.97
17	Other Non-Consumptive GW Losses Including pit GW returned to the land surface from which surface runoff flows into a mine pit and other losses (AC-FT)		64.6
18	add lines 13 through 17		1009.03
19	OTHER CONSUMPTIVE USE Line 12 minus Line 18		-579.77
TOTAL REPORTED CONSUMPTIVE USE (AC-FT)			
TOTAL NET CONSUMPTIVE USE (AC-FT) Line 11 plus line 19			-563.42

RESULTS FROM RUNOFF MODELLING

2020		Quarry Monthly Totals				FW Pond Monthly Totals		Re-cycle Recharge (Troy) Monthly Totals		TXI-Mill Creek Totals	
	PPT.	Sump Direct ppt	In-Quarry Runoff	Runoff from beyond Quarry	Quarry Totals	Direct ppt	Runoff	Direct ppt	Runoff	Direct ppt	Runoff
	Inches	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft
January	5.64	13.442	42.798	16.111	72.35	8.79	9.88	18.57	7.09	40.80	75.88
February	2.24	5.339	12.582	3.347	21.27	3.49	1.30	7.37	1.39	16.20	18.62
March	5.00	11.917	40.625	20.693	73.23	7.79	17.87	16.46	9.69	36.17	88.88
Q1 Subtotal	12.88	30.70	96.00	40.15	166.85	20.07	29.05	42.40	18.18	93.17	183.38

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Water Volume Movements	January	February	March
Pumped from Pit	202.2	190.5	219.7
Groundwater Component of Pitwater	152.2	178.4	270.3
Quarry dust suppression	3.5	3.7	5.1
Q- freshwater pond	198.7	186.8	214.6
To Secondary FM7	600.8	492.8	603.3
To sand Plant FM8	132.9	108.9	143.6
to loadout FM6	321.6	272.8	331.7
to dust control FM9	0.004	0.000	0.000
to Plant FM7+FM8+FM6	1055.2	874.5	1078.6
to stream Augmentation	0.00	0.00	0.00
bypass discharge	0.47	0.47	0.47
To Troy FM3	1062.4	765.1	1116.7
To Booster FM2			
From Troy to Freshwater Pond FM4	854.6	803.3	689.2

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Quarter Summary	1st Qtr
Total Tons Shipped	1,150,000
Total Acre Feet	24.22
Average Moisture %	2.87%

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may not have received Director's approval. Any such data values are qualified
as provisional and are subject to revision. Provisional data are released on the
condition that neither the USGS nor the United States Government may be held liable
for any damages resulting from its use.

Additional info: <https://help.waterdata.usgs.gov/policies/provisional-data-statement>

File-format description: <https://help.waterdata.usgs.gov/faq/about-tab-delimited-output>
Automated-retrieval info: <https://help.waterdata.usgs.gov/faq/automated-retrievals>

Contact: gs-w_support_nwisweb@usgs.gov
retrieved: 2020-06-19 17:45:54 EDT (caww01)

Data for the following 1 site(s) are contained in this file
USGS 07331200 Mill Creek near Mill Creek, OK

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Data provided for site 07331200
TS parameter statistic Description
111780 00060 00003 Discharge, cubic feet per second (Mean)
#

Data-value qualification codes included in this output:
A Approved for publication -- Processing and review completed.
#

agency_cd	site_no	datetime	111780_00060_00003	111780_00060_00003_cd
5s	15s	20d	14n	10s
USGS	07331200	2020-01-01	13.3	A
USGS	07331200	2020-01-02	12.1	A
USGS	07331200	2020-01-03	11.2	A
USGS	07331200	2020-01-04	11.6	A
USGS	07331200	2020-01-05	12.7	A
USGS	07331200	2020-01-06	13.6	A
USGS	07331200	2020-01-07	14.5	A
USGS	07331200	2020-01-08	15.1	A
USGS	07331200	2020-01-09	16.2	A
USGS	07331200	2020-01-10	111	A
USGS	07331200	2020-01-11	142	A
USGS	07331200	2020-01-12	71.1	A
USGS	07331200	2020-01-13	51.7	A
USGS	07331200	2020-01-14	46.6	A
USGS	07331200	2020-01-15	43.0	A
USGS	07331200	2020-01-16	38.8	A
USGS	07331200	2020-01-17	145	A
USGS	07331200	2020-01-18	129	A
USGS	07331200	2020-01-19	76.0	A
USGS	07331200	2020-01-20	60.9	A
USGS	07331200	2020-01-21	50.8	A
USGS	07331200	2020-01-22	69.7	A
USGS	07331200	2020-01-23	91.4	A
USGS	07331200	2020-01-24	64.5	A
USGS	07331200	2020-01-25	52.5	A
USGS	07331200	2020-01-26	51.3	A
USGS	07331200	2020-01-27	47.1	A
USGS	07331200	2020-01-28	85.1	A
USGS	07331200	2020-01-29	105	A
USGS	07331200	2020-01-30	70.1	A
USGS	07331200	2020-01-31	55.9	A

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 #
 # Contact: gs-w_support_nwisweb@usgs.gov
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Data for the following 1 site(s) are contained in this file
 # USGS 07331200 Mill Creek near Mill Creek, OK

Data provided for site 07331200

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#	TS	parameter	statistic	Description
#	111780	00060	00003	Discharge, cubic feet per second (Mean)

Data-value qualification codes included in this output:
 # A Approved for publication -- Processing and review completed.

agency_cd	site_no	datetime	111780_00060_00003	111780_00060_00003_cd
5s	15s	20d	14n	10s
USGS	07331200	2020-02-01	48.9	A
USGS	07331200	2020-02-02	45.5	A
USGS	07331200	2020-02-03	43.5	A
USGS	07331200	2020-02-04	116	A
USGS	07331200	2020-02-05	105	A
USGS	07331200	2020-02-06	102	A
USGS	07331200	2020-02-07	84.7	A
USGS	07331200	2020-02-08	71.2	A
USGS	07331200	2020-02-09	64.9	A
USGS	07331200	2020-02-10	67.9	A
USGS	07331200	2020-02-11	89.8	A
USGS	07331200	2020-02-12	255	A
USGS	07331200	2020-02-13	129	A
USGS	07331200	2020-02-14	90.7	A
USGS	07331200	2020-02-15	81.8	A
USGS	07331200	2020-02-16	73.2	A
USGS	07331200	2020-02-17	67.2	A
USGS	07331200	2020-02-18	61.3	A
USGS	07331200	2020-02-19	55.7	A
USGS	07331200	2020-02-20	52.4	A
USGS	07331200	2020-02-21	48.9	A
USGS	07331200	2020-02-22	48.0	A
USGS	07331200	2020-02-23	47.4	A
USGS	07331200	2020-02-24	48.1	A
USGS	07331200	2020-02-25	46.2	A
USGS	07331200	2020-02-26	44.2	A
USGS	07331200	2020-02-27	43.4	A
USGS	07331200	2020-02-28	42.1	A
USGS	07331200	2020-02-29	41.2	A

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Data provided for site 07331200
 # TS parameter statistic Description
 # 111780 00060 00003 Discharge, cubic feet per second (Mean)

Data-value qualification codes included in this output:
 # A Approved for publication -- Processing and review completed.

agency_cd	site_no	datetime	111780_00060_00003	111780_00060_00003_cd
5s	15s	20d	14n	10s
USGS	07331200	2020-03-01	41.0	A
USGS	07331200	2020-03-02	41.1	A
USGS	07331200	2020-03-03	40.7	A
USGS	07331200	2020-03-04	41.3	A
USGS	07331200	2020-03-05	40.2	A
USGS	07331200	2020-03-06	39.8	A
USGS	07331200	2020-03-07	38.5	A
USGS	07331200	2020-03-08	36.7	A
USGS	07331200	2020-03-09	37.3	A
USGS	07331200	2020-03-10	36.6	A
USGS	07331200	2020-03-11	36.7	A
USGS	07331200	2020-03-12	36.4	A
USGS	07331200	2020-03-13	71.5	A
USGS	07331200	2020-03-14	138	A
USGS	07331200	2020-03-15	89.3	A
USGS	07331200	2020-03-16	84.2	A
USGS	07331200	2020-03-17	68.9	A
USGS	07331200	2020-03-18	371	A
USGS	07331200	2020-03-19	642	A
USGS	07331200	2020-03-20	206	A
USGS	07331200	2020-03-21	146	A
USGS	07331200	2020-03-22	137	A
USGS	07331200	2020-03-23	121	A
USGS	07331200	2020-03-24	109	A
USGS	07331200	2020-03-25	95.4	A
USGS	07331200	2020-03-26	90.4	A
USGS	07331200	2020-03-27	87.7	A
USGS	07331200	2020-03-28	85.8	A
USGS	07331200	2020-03-29	77.1	A
USGS	07331200	2020-03-30	79.1	A
USGS	07331200	2020-03-31	85.4	A

2/16/2020	0
2/17/2020	0
2/18/2020	0
2/19/2020	0
2/20/2020	0
2/21/2020	0
2/22/2020	0
2/23/2020	0.01
2/24/2020	0
2/25/2020	0
2/26/2020	0.02
2/27/2020	0
2/28/2020	0
2/29/2020	0
3/1/2020	0
3/2/2020	0
3/3/2020	0.09
3/4/2020	0.02
3/5/2020	0
3/6/2020	0
3/7/2020	0
3/8/2020	0
3/9/2020	0.18
3/10/2020	0
3/11/2020	0
3/12/2020	0
3/13/2020	1.26
3/14/2020	0.34
3/15/2020	0
3/16/2020	0.13
3/17/2020	0.19
3/18/2020	0.81
3/19/2020	1.19
3/20/2020	0
3/21/2020	0
3/22/2020	0.28
3/23/2020	0.02
3/24/2020	0.01
3/25/2020	0
3/26/2020	0
3/27/2020	0
3/28/2020	0
3/29/2020	0
3/30/2020	0.48
3/31/2020	0

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MESONET CLIMATOLOGICAL DATA SUMMARY (TISH) Tishomingo Latitude: 34-19-57										January 2020 Nearest City: 6.0 N Tishomingo Longitude: 96-40-44				Time Zone: Midnight-Midnight CST County: Johnston Elevation: 879 feet Oklahoma Water Resources Board							
DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN	PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES				
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN	
1	53	29	44.0	32.0	24	0	86	42	64	0.00	28.90	29.83	S	10.8	29.8	4.30	44.0	40.7	44	37	
2	58	39	49.7	44.8	17	0	100	67	84	0.00	28.65	29.58	SSE	7.0	21.3	5.62	47.0	46.2	51	43	
3	58	36	46.4	36.7	18	0	100	39	72	0.00	29.00	29.93	NNW	9.5	24.3	10.88	47.1	45.7	51	42	
4	55	30	41.9	25.0	22	0	92	26	55	0.00	29.32	30.27	SSE	4.9	14.7	13.01	45.5	43.4	51	37	
5	62	33	45.9	31.6	18	0	89	35	60	0.00	29.25	30.19	N	6.8	20.4	13.06	45.4	43.7	52	37	
6	61	34	46.0	29.6	17	0	84	32	55	0.00	29.21	30.16	NW	7.4	20.1	12.69	45.6	44.0	52	38	
7	62	33	45.5	22.8	18	0	70	17	44	0.00	29.37	30.31	NW	6.4	16.9	13.57	45.2	43.0	51	37	
8	62	30	48.9	27.0	19	0	76	23	45	0.00	29.21	30.16	SSE	12.7	33.5	12.54	44.6	42.3	48	36	
9	65	55	59.0	55.6	5	0	96	68	89	0.00	29.00	29.93	SSE	12.1	31.4	1.67	49.3	50.7	55	45	
10	67	36	58.5	56.8	13	0	100	87	94	3.98	28.86	29.79	S	13.5	35.6	1.54	53.8	56.4	59	51	
11	38	26	31.2	27.6	33	0	99	66	87	0.11	29.12	30.06	NNW	10.4	29.8	7.60	46.5	45.2	51	42	
12	52	28	36.6	33.3	25	0	99	61	89	0.01	29.18	30.13	ESE	8.5	24.3	11.77	43.6	43.0	49	39	
13	54	34	43.5	43.0	21	0	100	92	98	0.02	29.18	30.12	SE	6.7	22.4	2.25	44.6	43.4	48	40	
14	61	52	55.8	53.7	8	0	100	76	93	0.00	29.11	30.05	SE	7.1	16.9	7.73	50.2	52.1	57	48	
15	71	52	60.5	55.2	4	0	100	53	84	0.02	29.12	30.06	N	9.8	23.1	5.85	53.9	56.1	61	52	
16	52	37	41.1	37.1	21	0	99	71	86	0.49	29.45	30.40	NNE	14.1	32.3	2.65	50.0	47.4	53	45	
17	52	39	43.7	43.5	20	0	100	94	99	0.62	29.22	30.16	SE	7.8	19.2	1.19	47.4	45.8	47	45	
18	56	28	45.5	34.8	23	0	100	32	70	0.01	29.32	30.27	NNW	12.6	35.8	14.32	48.8	49.0	53	44	
19	53	24	37.6	22.3	26	0	88	27	58	0.00	29.56	30.51	NNW	5.7	15.9	11.17	44.7	43.1	49	39	
20	54	25	37.5	23.5	26	0	86	33	60	0.00	29.57	30.52	NNE	4.9	16.0	14.58	43.8	41.8	50	36	
21	41	28	35.0	26.1	31	0	85	59	70	0.04	29.46	30.41	ESE	8.0	17.2	7.08	42.6	39.1	42	36	
22	37	35	36.2	35.9	29	0	100	86	99	0.58	29.09	30.03	SE	10.3	26.7	0.87	42.1	39.6	41	39	
23	54	37	43.1	37.1	20	0	100	45	82	0.05	29.04	29.98	NW	6.9	23.5	8.98	44.1	43.9	50	40	
24	53	34	41.3	31.4	21	0	88	41	70	0.00	29.14	30.08	NW	8.4	25.7	14.97	43.8	44.4	52	39	
25	62	31	45.9	36.0	19	0	94	42	71	0.15	29.09	30.03	SSE	7.7	24.9	11.53	44.2	43.9	50	37	
26	61	37	49.7	46.6	16	0	100	63	90	0.00	29.04	29.98	NE	4.2	10.9	6.51	48.3	49.4	55	47	
27	59	35	44.8	43.6	18	0	100	72	96	0.01	29.03	29.97	ESE	5.5	15.9	9.13	47.9	47.8	54	43	
28	49	37	46.7	46.3	22	0	100	91	99	0.84	28.91	29.84	ESE	9.3	24.6	1.28	48.7	48.5	50	47	
29	42	35	38.3	35.1	26	0	98	78	88	0.01	29.13	30.07	NNW	11.0	24.9	5.33	46.2	45.4	48	43	
30	41	36	38.6	34.4	26	0	90	78	85	0.00	29.17	30.12	NE	4.4	15.9	3.41	45.4	44.0	46	42	
31	53	31	42.7	33.9	23	0	93	51	72	0.00	29.18	30.13	WNW	4.7	17.5	14.21	46.8	46.4	54	42	
	55	35	44.5	36.8	<- Monthly Averages ->							29.16	30.10	NNW	8.4	35.8	8.11	46.5	45.7	51	42
Temperature - Highest: 71 Lowest: 24							Degree Days - Total HDD: 627 Total CDD: 0					Number of Days With: Tmax ≥ 90: 0 Rainfall ≥ 0.01 inch: 15 Tmax ≤ 32: 0 Rainfall ≥ 0.10 inch: 7 Tmin ≤ 32: 11 Avg Wind Speed ≥ 10 mph: 9 Tmin ≤ 0: 0 Max Wind Speed ≥ 30 mph: 5									
Rainfall: Monthly Total: 6.94 in. Greatest 24 Hr: 3.98 in.							Humidity - Highest: 100 Lowest: 17														

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MESONET CLIMATOLOGICAL DATA SUMMARY
(TISH) Tishomingo
Latitude: 34-19-57

February 2020
Nearest City: 6.0 N Tishomingo
Longitude: 96-40-44

Time Zone: Midnight-Midnight CST
County: Johnston Oklahoma Water Resources Board
Elevation: 879 feet

DAY	TEMPERATURE (F)				DEG DAYS		HUMIDITY (%)			RAIN	PRESSURE (in)		WIND SPEED (mph)			SOLAR	4" SOIL TEMPERATURES			
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG	(in)	STN	MSL	DIR	AVG	MAX	(MJ/m2)	SOD	BARE	MAX	MIN
1	64	26	45.0	27.6	20	0	97	21	58	0.01	29.19	30.13	SW	5.1	16.9	16.14	45.8	44.6	54	37
2	79	35	57.4	33.1	8	0	85	20	44	0.00	28.99	29.93	S	9.0	27.9	15.87	47.6	47.5	56	40
3	72*	52*	60.9*	48.0*	3*	0*	100*	38*	65*	0.18*	28.78*	29.72*	S	13.8*	29.9*	11.85*	51.4*	52.1*	57*	46*
4	61	34	39.1	36.9	18	0	100	84	92	0.51	28.93	29.87	N	13.4	28.4	3.15	49.9	49.1	56	44
5	34	29	32.0	29.9	34	0	99	85	92	0.52	28.94	29.88	NNW	11.5	24.5	4.50	43.9	41.7	44	39
6	40	23	30.7	23.9	34	0	91	51	77	0.02	28.82	29.75	NW	7.2	19.4	16.54	42.1	41.8	49	38
7	54	23	37.6	28.6	26	0	97	38	73	0.00	28.94	29.88	NW	4.9	18.5	13.83	42.2	42.6	51	37
8	60	29	47.5	32.3	20	0	96	34	60	0.00	29.17	30.11	SE	7.5	24.2	16.42	45.2	45.2	53	38
9	65	47	56.6	53.1	9	0	100	49	89	0.50	29.02	29.95	SSE	11.5	25.4	2.33	49.7	51.3	56	47
10	47	35	38.6	34.4	24	0	96	75	85	0.26	29.11	30.05	N	12.1	23.8	3.63	47.6	46.9	52	44
11	43	37	39.4	34.6	25	0	95	64	83	0.10	29.21	30.15	NNE	12.1	26.0	3.89	44.9	43.7	46	42
12	44	38	40.3	39.1	24	0	100	84	95	0.99	28.95	29.89	WNW	7.5	19.7	3.54	44.7	43.9	47	42
13	40	27	34.4	23.9	31	0	88	42	67	0.00	29.33	30.28	NNE	11.6	25.1	16.52	44.7	44.7	52	41
14	47	23	34.4	22.4	30	0	76	47	62	0.00	29.44	30.39	SSE	8.1	19.4	17.83	42.7	42.0	51	37
15	60	33	45.7	36.9	19	0	96	51	72	0.00	29.18	30.12	SSE	10.5	27.5	13.99	44.6	43.2	50	37
16	70	40	53.2	47.3	10	0	100	48	84	0.00	28.99	29.93	E	5.5	19.3	15.61	48.4	49.2	59	41
17	73	54	61.2	50.4	1	0	100	33	73	0.00	28.84	29.78	SSE	9.7	25.9	16.88	53.1	55.4	63	51
18	58	39	49.4	35.2	17	0	88	42	59	0.00	29.18	30.12	NNE	16.4	34.6	9.78	51.4	49.8	53	45
19	55	34	45.4	29.6	20	0	78	38	56	0.00	29.36	30.30	NE	8.3	19.1	13.81	48.5	45.8	52	39
20	47	30	40.6	30.0	27	0	80	52	66	0.04	29.57	30.52	NNE	12.1	29.3	13.83	48.7	45.6	50	39
21	49	20	34.2	19.3	31	0	88	26	58	0.00	29.64	30.60	N	5.2	13.6	19.97	45.6	42.0	52	36
22	59	33	45.7	32.1	19	0	82	42	60	0.00	29.33	30.27	SSE	9.6	23.2	15.68	47.2	44.9	52	38
23	57	45	50.5	45.1	14	0	100	61	83	0.02	29.02	29.96	SSE	10.2	24.1	3.80	48.7	47.3	51	44
24	58	42	50.8	43.7	15	0	100	68	77	0.00	28.79	29.72	NW	13.7	33.3	5.05	49.9	49.4	51	47
25	57	38	46.1	34.6	18	0	96	36	67	0.00	29.03	29.97	NW	9.6	25.6	15.70	48.9	47.4	55	43
26	44	24	36.6	24.9	31	0	95	37	65	0.05	29.39	30.34	NNW	13.0	32.7	17.85	46.6	43.3	49	39
27	60	19	39.5	22.7	25	0	94	23	57	0.00	29.32	30.27	SSW	7.0	23.8	20.37	44.9	42.3	52	36
28	65	32	48.4	29.5	17	0	93	22	54	0.00	29.34	30.28	WNW	6.3	20.8	20.62	47.3	46.1	57	37
29	74	30	53.6	32.8	13	0	92	20	52	0.00	29.17	30.11	SSE	8.7	30.9	17.06	49.0	47.7	56	39
	56*	33*	44.6*	33.8*	<- Monthly Averages ->						29.14*	30.08*	SSE*	9.7*	34.6*	12.62*	47.1*	46.1*	53*	41*
Temperature - Highest: 79*							Degree Days - Total HDD: 581*					Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 12* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 7* Tmin ≤ 32: 13* Avg Wind Speed ≥ 10 mph: 13* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 4*								
Lowest: 19*							Total CDD: 0*													
Rainfall: Monthly Total: 3.20* in.							Humidity - Highest: 100*													
Greatest 24 Hr: 0.99* in.							Lowest: 20*													

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* Denotes incomplete record

Monthly data generated on Thursday, April 09, 2020 at 18:50 UTC

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Time Zone: Midnight-Midnight CST
County: Johnston
Elevation: 879 feet

Temperature - Highest: 90*	Degree Days - Total HDD: 252*	Number of Days With:
Lowest: 34*	Total CDD: 33*	Tmax \geq 90: 1* Rainfall \geq 0.01 inch: 15*
		Tmax \geq 32: 0* Rainfall \geq 0.10 inch: 9*
Rainfall: Monthly Total: 5.74* in.	Humidity - Highest: 100*	Tmin \geq 32: 0* Avg Wind Speed \geq 10 mph: 11*
Greatest 24 Hr: 1.16* in.	Lowest: 17*	Tmin \geq 0: 0* Max Wind Speed \geq 30 mph: 5*

Date	Reference ET, Short [in]	Reference ET, Tall [in]	Cool Season Grass ET [in]	Warm Season Grass ET [in]	Pan Evaporation [in]
2020-04-07	0.18	0.24	0.17	0.11	0.23
2020-04-06	0.10	0.12	0.09	0.06	0.12
2020-04-05	0.11	0.13	0.10	0.07	0.05
2020-04-04	0.04	0.05	0.03	0.02	0.11
2020-04-03	0.08	0.12	0.07	0.05	0.11
2020-04-02	0.08	0.12	0.08	0.05	0.11
2020-04-01	0.13	0.18	0.12	0.08	0.17
2020-03-31	0.12	0.15	0.11	0.07	0.15
2020-03-30	0.05	0.07	0.05	0.03	0.06
2020-03-29	0.15	0.18	0.14	0.09	0.19
2020-03-28	0.19	0.27	0.18	0.12	0.27
2020-03-27	0.07	0.10	0.07	0.05	0.09
2020-03-26	0.22	0.30	0.21	0.14	0.30
2020-03-25	0.20	0.26	0.18	0.12	0.26
2020-03-24	0.17	0.21	0.15	0.10	0.21
2020-03-23	0.07	0.08	0.06	0.04	0.08
2020-03-22	0.04	0.04	0.03	0.02	0.04
2020-03-21	0.11	0.14	0.10	0.07	0.14
2020-03-20	0.09	0.13	0.08	0.06	0.12
2020-03-19	0.09	0.12	0.09	0.06	0.12
2020-03-18	0.10	0.13	0.09	0.06	0.13
2020-03-17	0.03	0.03	0.03	0.02	0.04
2020-03-16	0.03	0.04	0.03	0.02	0.04
2020-03-15	0.04	0.04	0.03	0.02	0.05
2020-03-14	0.03	0.04	0.03	0.02	0.04
2020-03-13	0.10	0.15	0.09	0.06	0.13
2020-03-12	0.18	0.25	0.17	0.11	0.23
2020-03-11	0.13	0.16	0.12	0.08	0.16
2020-03-10	0.14	0.18	0.13	0.09	0.17
2020-03-09	0.16	0.23	0.15	0.10	0.22
2020-03-08	0.08	0.11	0.07	0.05	0.11
2020-03-07	0.16	0.23	0.14	0.10	0.22
2020-03-06	0.14	0.20	0.13	0.09	0.20
2020-03-05	0.17	0.25	0.16	0.10	0.23
2020-03-04	0.08	0.11	0.07	0.05	0.10
2020-03-03	0.09	0.12	0.08	0.05	0.11
2020-03-02	0.08	0.09	0.07	0.05	0.09
2020-03-01	0.18	0.27	0.17	0.11	0.26
2020-02-29	0.16	0.24	0.15	0.10	0.22
2020-02-28	0.12	0.17	0.11	0.08	0.16
2020-02-27	0.11	0.15	0.10	0.07	0.14
2020-02-26	0.08	0.11	0.07	0.05	0.11
2020-02-25	0.10	0.15	0.10	0.06	0.14
2020-02-24	0.07	0.10	0.06	0.04	0.09
2020-02-23	0.05	0.07	0.05	0.03	0.07
2020-02-22	0.11	0.16	0.10	0.07	0.14
2020-02-21	0.07	0.10	0.07	0.05	0.10
2020-02-20	0.07	0.10	0.07	0.04	0.10
2020-02-19	0.09	0.14	0.09	0.06	0.13
2020-02-18	0.12	0.18	0.11	0.07	0.17
2020-02-17	0.14	0.20	0.13	0.09	0.18

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2020-02-16	0.09		0.12	0.08	0.06	0.11
2020-02-15	0.09		0.13	0.09	0.06	0.12
2020-02-14	0.08		0.11	0.07	0.05	0.10
2020-02-13	0.06		0.09	0.06	0.04	0.09
2020-02-12	0.02		0.03	0.02	0.01	0.03
2020-02-11	0.04		0.06	0.04	0.03	0.06
2020-02-10	0.05		0.08	0.05	0.03	0.07
2020-02-09	0.05		0.07	0.04	0.03	0.06
2020-02-08	0.09		0.13	0.09	0.06	0.12
2020-02-07	0.06		0.09	0.06	0.04	0.08
2020-02-06	0.05		0.07	0.05	0.03	0.06
2020-02-05	0.02		0.02	0.02	0.01	0.02
2020-02-04	0.09		0.15	0.09	0.06	0.13
2020-02-03	0.14		0.22	0.13	0.09	0.20
2020-02-02	0.17		0.26	0.15	0.10	0.23
2020-02-01	0.09		0.12	0.08	0.05	0.11
2020-01-31	0.06		0.07	0.05	0.04	0.07
2020-01-30	0.03		0.04	0.03	0.02	0.03
2020-01-29	0.03		0.04	0.03	0.02	0.04
2020-01-28	-0.00		-0.01	-0.00	-0.00	-0.00
2020-01-27	0.05		0.06	0.04	0.03	0.06
2020-01-26	0.04		0.05	0.04	0.02	0.05
2020-01-25	0.08		0.12	0.07	0.05	0.10
2020-01-24	0.08		0.11	0.07	0.05	0.10
2020-01-23	0.06		0.08	0.05	0.03	0.07
2020-01-22	0.01		0.01	0.01	0.01	0.01
2020-01-21	0.04		0.06	0.04	0.03	0.06
2020-01-20	0.06		0.09	0.06	0.04	0.08
2020-01-19	0.06		0.10	0.06	0.04	0.08
2020-01-18	0.07		0.11	0.07	0.05	0.10
2020-01-17	0.02		0.03	0.02	0.01	0.03
2020-01-16	0.06		0.09	0.05	0.04	0.08
2020-01-15	0.07		0.10	0.07	0.04	0.09
2020-01-14	0.04		0.05	0.04	0.03	0.05
2020-01-13	0.03		0.03	0.02	0.02	0.03
2020-01-12	0.05		0.08	0.05	0.03	0.07
2020-01-11	0.03		0.05	0.03	0.02	0.04
2020-01-10	0.00		-0.01	0.00	0.00	0.00
2020-01-09	0.05		0.07	0.05	0.03	0.07
2020-01-08	0.12		0.20	0.11	0.08	0.18
2020-01-07	0.09		0.14	0.08	0.05	0.12
2020-01-06	0.09		0.14	0.08	0.05	0.12
2020-01-05	0.08		0.12	0.07	0.05	0.10
2020-01-04	0.06		0.09	0.05	0.04	0.07
2020-01-03	0.07		0.11	0.07	0.04	0.09
2020-01-02	0.04		0.05	0.04	0.02	0.05
2020-01-01	0.06		0.09	0.06	0.04	0.08
2019-12-31	0.06		0.09	0.06	0.04	0.08
2019-12-30	0.07		0.12	0.07	0.05	0.10
2019-12-29	0.04		0.06	0.04	0.03	0.06
2019-12-28	0.00		-0.01	0.00	0.00	0.00

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Mill Creek Water Levels 1st Quarter 2020

Oklahoma Water Resources Board

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Water Level Elevation

Rainfall - Inches

