

Metropolitan Water Reclamation District of Greater Chicago

## RESEARCH AND DEVELOPMENT DEPARTMENT

REPORT NO. 07-21

MONTHLY REPORT OF THE FULTON COUNTY

ENVIRONMENTAL PROTECTION SYSTEM

JANUARY 2007

**APRIL 2007** 

## Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

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312.751.5190

April 30, 2007

Mr. S. Alan Keller, P.E. Manager, Permit Section Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

Dear Mr. Keller:

Subject: Metropolitan Water Reclamation District of Greater Chicago -

January 2007 Monthly Report of the Fulton County Environ-

mental Protection System

This letter transmits information and data for the January 2007 monthly report of the Fulton County Environmental Protection System. No biosolids data are reported because supernatant and biosolids application was terminated in 1995 and 2004, respectively. Termination of monitoring of soil, crops, and surface water and groundwater sites was approved by the IEPA in September 2006.

During this month, only discharge from the runoff retention basin (3-1) was monitored. A total of 2.53 million gallons was released from the basin. Analytical data of water sample is presented in Table 1. A log of discharge information is presented in Table 2.

Lysimeters and drainage tiles at the reclaimed St. David coal refuse pile site, and lysimeters at Morgan Mine (Big Ten) and the United Electric coal refuse pile sites were not sampled during the month.

Subject: Metropolitan Water Reclamation District of Greater Chicago – January

2007 Monthly Report of the Fulton County Environmental Protection Sys-

tem

The daily climatological observations for January 2007 are summarized in <u>Table 3</u>. Total precipitation for the month was 2.25 inches.

Very truly yours,

Louis Kollias Director

Research and Development

LK:GT:spy Attachment

cc w/enc.: Mr. Valdis Aistars, USEPA Region V

Mr. Ash Sajjad, USEPA Region V

Mr. Matthew Williams, USEPA Region V

IEPA Permit Section, Springfield IEPA Surveillance Section, Peoria Chairman of the Fulton County Board

Fulton County Board of Health Fulton County Zoning Office

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Quintanilla

Ryzak

TABLE 1: FULTON COUNTY LAND RECLAMATION PROJECT FIELD RUNOFF BASIN DISCHARGE DATA JANUARY 2007

Basin No.	Sample Date	рН	TSS (mg/L)	BOD <sub>5</sub> (mg/L)	F. coli. per 100 ml	Discharge Date	Discharge Amount (MG)
3-1	1/8	8.0	11.0	< 2	10	1/10	2.53

TABLE 2: FIELD RUNOFF BASIN DISCHARGE LOG AT FULTON COUNTY LAND RECLAMATION SITE JANUARY 2007

Basin No.	Date Opened	Time Opened	Date Closed	Time Closed	Opening Stage (feet)	Closing Stage (feet)	Time Open (hours)	Volume Released (MG)	Release Type	Reason Closed	R&D Dept. OK	R&D Dept. Sample
3-1	1/10/2007	09:50	1/12/2007	14:30	3.80	0.75	52.67	2.53	Normal	Low flow	YES	YES

TABLE 3: RECORD OF CLIMATOLOGICAL OBSERVATIONS FOR JANUARY 2007, FULTON COUNTY, ILLINOIS, STATION SEQ, SEC.10, R3E, T6N

Date   Max   Min   Avg   Goods & Bunderfold surve   Goods & Bunderfold surve   Goods & Bunderfold surve   Avg   Max   Dir					Precip	oitation	Wind				
1   6.9   -2.3   1.3   0.00   4.7   17.0   W					rain, melted snow	snow, sleet, hail	m/S	m/S			
2         7.9         -6.1         0.2         0.00         1.1         6.3         W           3         10.0         -2.3         3.1         0.00         3.1         10.7         SE           4         8.7         2.3         5.4         0.87         4.3         12.1         SE           5         9.9         4.7         8.3         0.00         1.7         8.0         S           6         10.0         -1.3         3.5         0.00         2.7         9.8         W           7         8.6         -1.7         2.3         0.01         3.1         14.8         SE           8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5	Date	Max	Min	Avg	(inches & hundredths)	(inches & tenths)	Avg	Max	Dir		
3	1	6.9	-2.3	1.3	0.00		4.7	17.0	W		
4         8.7         2.3         5.4         0.87         4.3         12.1         SE           5         9.9         4.7         8.3         0.00         1.7         8.0         S           6         10.0         -1.3         3.5         0.00         2.7         9.8         W           7         8.6         -1.7         2.3         0.01         3.1         14.8         SE           8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         0.3         1.6         4.9         N           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2 <td>2</td> <td>7.9</td> <td>-6.1</td> <td>0.2</td> <td>0.00</td> <td></td> <td>1.1</td> <td>6.3</td> <td>W</td>	2	7.9	-6.1	0.2	0.00		1.1	6.3	W		
5         9.9         4.7         8.3         0.00         1.7         8.0         S           6         10.0         -1.3         3.5         0.00         2.7         9.8         W           7         8.6         -1.7         2.3         0.01         3.1         14.8         SE           8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A<	3	10.0	-2.3	3.1	0.00		3.1	10.7	SE		
6         10.0         -1.3         3.5         0.00         2.7         9.8         W           7         8.6         -1.7         2.3         0.01         3.1         14.8         SE           8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A		8.7	2.3	5.4	0.87		4.3	12.1	SE		
7         8.6         -1.7         2.3         0.01         3.1         14.8         SE           8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A	5	9.9	4.7	8.3	0.00		1.7	8.0	S		
8         7.6         -3.6         1.7         0.00         4.7         15.2         SW           9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6	6	10.0	-1.3	3.5	0.00		2.7	9.8	W		
9         4.1         -3.9         0.9         0.00         5.3         15.6         W           10         4.7         -7.8         -1.3         0.00         4.2         14.3         SE           11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1	7	8.6	-1.7	2.3	0.01		3.1	14.8	SE		
10	8	7.6	-3.6	1.7	0.00		4.7	15.2	SW		
11         10.4         1.5         5.6         0.00         0.5         5.8         12.5         SE           12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6 <td>9</td> <td>4.1</td> <td>-3.9</td> <td>0.9</td> <td>0.00</td> <td></td> <td>5.3</td> <td>15.6</td> <td>W</td>	9	4.1	-3.9	0.9	0.00		5.3	15.6	W		
12         10.8         -4.1         1.5         0.10         3.4         8.5         W           13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2 </td <td>10</td> <td>4.7</td> <td>-7.8</td> <td>-1.3</td> <td>0.00</td> <td></td> <td>4.2</td> <td>14.3</td> <td>SE</td>	10	4.7	-7.8	-1.3	0.00		4.2	14.3	SE		
13         -0.1         -3.9         -1.6         0.03         1.6         4.9         N           14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0 <td>11</td> <td>10.4</td> <td>1.5</td> <td>5.6</td> <td>0.00</td> <td>0.5</td> <td>5.8</td> <td>12.5</td> <td>SE</td>	11	10.4	1.5	5.6	0.00	0.5	5.8	12.5	SE		
14         0.3         -0.8         -0.2         0.73         0.2         3.6         N           15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8	12	10.8	-4.1	1.5	0.10		3.4	8.5	W		
15         0.1         -10.5         -3.6         0.04         N/A         N/A         N/A           16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.	13	-0.1	-3.9	-1.6	0.03		1.6	4.9	N		
16         -5.9         -14.3         -10.9         0.00         N/A         N/A         N/A           17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1 </td <td>14</td> <td>0.3</td> <td>-0.8</td> <td>-0.2</td> <td>0.73</td> <td></td> <td>0.2</td> <td>3.6</td> <td>N</td>	14	0.3	-0.8	-0.2	0.73		0.2	3.6	N		
17         -4.2         -14.6         -8.6         0.00         N/A         N/A         N/A           18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         5.3	15	0.1	-10.5	-3.6	0.04		N/A	N/A	N/A		
18         0.2         -4.3         -2.3         0.00         3.6         16.1         S           19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3	16	-5.9	-14.3	-10.9	0.00		N/A	N/A	N/A		
19         3.2         -8.8         -3.3         0.08         3.1         14.3         SW           20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         6.0 <td>17</td> <td>-4.2</td> <td>-14.6</td> <td>-8.6</td> <td>0.00</td> <td></td> <td>N/A</td> <td>N/A</td> <td></td>	17	-4.2	-14.6	-8.6	0.00		N/A	N/A			
20         -0.8         -10.7         -5.2         0.00         5.0         0.7         4.9         NW           21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         3.1<	18	0.2	-4.3	-2.3	0.00		3.6	16.1	S		
21         1.7         -3.6         -1.3         0.07         2.4         8.5         E           22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8	19	3.2	-8.8	-3.3	0.08		3.1	14.3	SW		
22         -0.4         -3.7         -2.2         0.00         3.2         8.5         W           23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         3.1         9.8         SW           Sum         2.9         -6.8         -2.0         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	20	-0.8	-10.7	-5.2	0.00	5.0	0.7	4.9	NW		
23         0.9         -6.6         -3.0         0.03         4.2         12.5         SW           24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.9         -6.8         -2.0         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	21	1.7	-3.6	-1.3	0.07		2.4	8.5	E		
24         -0.4         -7.0         -3.5         0.00         1.8         9.8         W           25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	22	-0.4	-3.7	-2.2	0.00		3.2	8.5	W		
25         1.6         -12.7         -6.9         0.06         1.8         9.4         W           26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.9         -6.8         -2.0         Station: R&D Lab         Station: R&D Lab	23	0.9	-6.6	-3.0	0.03		4.2	12.5	SW		
26         9.7         -10.2         0.5         0.23         5.1         17.0         S           27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	24	-0.4	-7.0	-3.5	0.00		1.8	9.8	W		
27         3.3         -12.2         -2.8         0.00         6.2         16.1         W           28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	25	1.6	-12.7	-6.9	0.06		1.8	9.4	W		
28         -7.2         -16.8         -12.4         0.00         5.3         14.8         W           29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	26	9.7	-10.2	0.5	0.23		5.1	17.0	S		
29         2.9         -12.6         -4.9         0.00         4.6         16.1         SW           30         -8.2         -14.9         -12.1         0.00         6.0         15.2         W           31         -5.2         -17.0         -10.4         0.00         3.1         9.8         SW           Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	27	3.3	-12.2	-2.8	0.00		6.2	16.1	W		
30     -8.2     -14.9     -12.1     0.00     6.0     15.2     W       31     -5.2     -17.0     -10.4     0.00     3.1     9.8     SW       Sum     2.25     5.5     Observer: Josh DeWees       Avg     2.9     -6.8     -2.0     Station: R&D Lab	28	-7.2	-16.8	-12.4	0.00		5.3	14.8	W		
30       -8.2       -14.9       -12.1       0.00       6.0       15.2       W         31       -5.2       -17.0       -10.4       0.00       3.1       9.8       SW         Sum       2.25       5.5       Observer: Josh DeWees         Avg       2.9       -6.8       -2.0       Station: R&D Lab	29	2.9	-12.6	-4.9	0.00		4.6	16.1	SW		
Sum         2.25         5.5         Observer: Josh DeWees           Avg         2.9         -6.8         -2.0         Station: R&D Lab	30		-14.9	-12.1	0.00		6.0	15.2			
Avg         2.9         -6.8         -2.0         Station: R&D Lab	31	-5.2	-17.0	-10.4	0.00		3.1	9.8	SW		
Avg         2.9         -6.8         -2.0         Station: R&D Lab		_									
<u> </u>	Sum				2.25	5.5	Observer: Josh DeWees				
	Avg	2.9	-6.8	-2.0			Station: R&D Lab				
		10.8	-17.0		0.87	5.0					

<sup>\*</sup>N/A=Not available.