Appendix F Sanitary Sewer Overflow (SSOs) Bypass Events

Draft Lake Oologah TMDL Report

Prepared for

Oklahoma Department of Environmental Quality

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DYNAMIC SOLUTIONS, LLC 6421 DEANE HILL DRIVE KNOXVILLE, TENNESSEE 37919





Appendix F - Sanitary Sewer Overflows Bypass Events

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Table 1 South Coffeyville

	Pryor Creek								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
6/12/1995	S21501	6030000	RAIN I/I	NONE	UNKNOWN				
7/13/1992	S21501		Flood water		Cap off old line				
6/28/2003	S21501	>4 MILLN	PUMP FAILURE		REPAIR	LAGOON/BASIN			
12/25/2007	S21501	400	ROOTS		MAINTENANCE				
7/13/1992	S21501		OLD OUTFALL LINE LEAKING		RE PLUG LINE				
3/31/1993	S21501	1700000	I/I PROBLEMS CAUSED PLANT	NONE	CORRECT I/I				
6/12/1995	S21501	6030000	RAIN I/I	NONE	UNKNOWN				

Table 2 Delaware

	Delaware							
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE		
12/9/1992	S21502	100	LINE BLOCKAGE	CLEANED AREA	OPENED LINE			
11/3/1993	S21502	500	ROOT BLOCKAGE	PICKED UP SOLIDS	RODDED AND FLUSHED			
1/9/1994	S21502	1000	LINE BLOCKAGE	NONE	RODDED LINE			
11/2/1995	S21502	200	ROOT STOPPAGE	CLEANED AND	RODDED AND CAWED			
3/3/1996	S21502	600000	LOWERING POUNDS TO REPLACE	NONE	COMPLETE			
3/15/1996	S21502	600000	CONSTRUSTION ON NEW ROCK					
7/17/1996	S21502	600	CONSTRUCTION ON NEW ROCK		NEW FILTER			
1/5/2005	S21502	1,000	1&1	WASHED AWAY	REPAIRS	MANHOLE		
9/10/2007	S21502		STORM WATER	NONE	REHAB MH	PIPE		
3/29/2009	S21502	12,000	STORM WATER		REPAIR	MANHOLE		
3/29/2009	S21502	12,000	STORM WATER	NONE	REPAIR LINES	MANHOLE		



	Delaware								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
3/30/2009	S21502		STORM WATER		RAISING FREEBOARD	LAGOON/BASIN			
5/12/2009	S21502		RAIN	C & D	UPGRADES	MANHOLE			
5/12/2009	S21502		RAIN	C & D	UPGRADES	MANHOLE			
10/8/2009	S21502	7,800	RAIN		LAY LINES	LAGOON/BASIN			
6/14/2010	S21502	18,000	RAIN		REPLACING LINE	MANHOLE			
6/14/2010	S21502	162,000	RAIN		REPLACING LINES	MANHOLE			
3/19/2012	S21502	200,000	RAIN		REPAIRING MAINS	MANHOLE			
4/14/2012	S21502	50,000	RAIN		STOPPING I&I	MANHOLE			
4/30/2012	S21502	200,000	RAIN	NONE	REPLACING MAIN	MANHOLE			
5/30/2013	S21502	39,750	RAINS		UPGRADE SYSTEM	MANHOLE			

Table 3 Nowata

	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
2/28/1990	S21503		EXCESSIVE I & I, 2" RAIN						
3/14/1990	S21503		STORM WATERS-CREEK WAS OUT OF						
4/25/1990	S21503		STORM WATER						
4/26/1990	S21503	0	EXCESSIVE WATER						
5/16/1990	S21503		FLOOD WATERS						
6/5/1990	S21503		GATE VALVE APPAARENTLY FAILED						
6/5/1990	S21503		LINE HAD VALVE THAT WAS OPEN FOR AN						
6/7/1990	S21503		FLOOD WATER/MANHOLE OVERFLOW						
6/26/1992	S21503	50	LINE BROKE	DISINFECTED	FIXED LINE				



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
10/7/1992	S21503	0	UNKNOWN. POSSIBLE A	TRYING TO	SMOKE TESTING TO	
3/20/1994	S21503	0	LINES COLLAPSED		REPLACED LINES	
8/24/1994	S21503	1000	CONTRACTOR HIT LINE	CLEANED UP	CEMENTED LINE	
5/19/1995	S21503	20	LINE STOPPAGE	CLEANED	RODDED AND	
6/8/1995	S21503	100	LINE STOPPAGE	CLEANED	RODDED LINE	
6/8/1995	S21503	100	LINE STOPPAGE	CLEANED	RODDED LINE	
1/3/1997	S21503	100	COLLAPSED LINE	BLEACH		
2/26/1997	S21503	50	RAIN	RAKED &	SMOKE TEST	
2/26/1997	S21503	75	RAIN	RAKE &	SMOKE TEST	
2/26/1997	S21503	100	RAIN	C & D	SMOKE TEST	
2/26/1997	S21503		RAIN		SMOKE TEST	
2/26/1997	S21503	150	RAIN	RAKE &	SMOKE TEST	
3/16/1998	S21503		RAINFALL		HIRE ENGINEER TO	
4/25/1999	S21503		RAIN	BLEACHED		
4/25/1999	S21503		RAIN	CLEANED &	REPAIR AREAS	
5/4/1999	S21503		RAIN	BLEACH		
5/4/1999	S21503		RAIN	BLEACH	REPAIR OF I&I	
5/4/1999	S21503		RAIN	BLEACH	REPAIR	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
5/17/1999	S21503	UNKNOWN	2 3/4 INCHES OF RAINCAUSING	WE BLEACH	REPAIRING ALL	
6/19/1999	S21503		RAIN	C & D		
6/19/1999	S21503		RAIN	C & D	REPAIR	
6/19/1999	S21503		RAIN	C & D	REPAIR	
6/19/1999	S21503		RAIN	C & D	REPAIR	
6/19/1999	S21503		RAIN	C & D		
6/20/1999	S21503		RAIN	C & D	REPAIR	
6/20/1999	S21503		RAIN	C & D	REPAIR	
6/23/1999	S21503		RAIN	C & D	REPAIRING I&I	
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D	REPAIR	
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D		
6/23/1999	S21503		RAIN	C & D		
7/1/1999	S21503		RAIN	C & D	REPAIR	
7/1/1999	S21503		RAIN	C & D	REPAIR	
7/1/1999	S21503		RAIN	C & D	REPAIR	
7/1/1999	S21503		RAIN	C & D	REPAIRING I&I	



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
7/1/1999	S21503		RAIN	C & D	REPAIR	
7/1/1999	S21503		RAIN	C & D	REPAIR	
7/1/1999	S21503		RAIN	C & D	REPAIR	
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503	UNKNOWN	RAIN	C & S	REPAIRING BAD	
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503		RAIN	C & S	REPLACE LINES	
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S		
5/9/2000	S21503		RAIN	C & S		
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C & D	REPAIRED	
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C & D		



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C & D		
6/21/2000	S21503		RAIN	C&D	REPAIRING LINES	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIRING BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
1/28/2001	S21503	UNKNOWN	1" OF RAIN & SNOW MELT	BLEACH AREA	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/8/2001	S21503		2.3 INCHES OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/13/2001	S21503	UNKNOWN	1/2" OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
2/13/2001	S21503	UNKNOWN	1/2" OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/13/2001	S21503	UNKNOWN	1/2" OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/13/2001	S21503	UNKNOWN	1/2" OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/14/2001	S21503	UNKNOWN	1/2" OF RAIN IN 3 HRS	INDUSTRIAL	REPAIR BAD	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIRED BAD	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS.	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR OF BAD	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
2/23/2001	S21503	UNKNOWN	3" OF RAIN IN 24 HRS	INDUSTRIAL	REPAIR BAD LINES	
4/6/2001	S21503		PLUG IN LINE	C & S		
5/14/2001	S21503		PLUG IN LINE	W & D		
5/18/2001	S21503		RAINS	C & S		
5/18/2001	S21503		RAINS	C & S	REPAIR	
5/18/2001	S21503		RAINS	C & S		
5/18/2001	S21503		RAINS	C & S		
5/18/2001	S21503		RAIN	C & S	REPAIR	
5/18/2001	S21503		RAINS	C & S		
5/18/2001	S21503		RAINS	C & S		



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
5/29/2001	S21503		RAIN	BLEACH	REPAIR	
5/29/2001	S21503		RAINS	BLEACHED	REPAIR BAD	
5/29/2001	S21503		RAINS	BLEACH	REPAIR	
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S	REPAIRED LINES	
6/14/2001	S21503		RAIN	C & S	REPAIR	
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S		
6/14/2001	S21503		RAIN	C & S		
11/25/2001	S21503		GREASE	BLEACHED	TREATED	
11/26/2001	S21503		LINE PLUGGED	BLEACHED	TREATED	
1/4/2002	S21503		PLUGGED MAIN	FLUSHED	RODDED	
1/30/2002	S21503		RAIN	C & D	PROJECT IN PLACE	
1/30/2002	S21503		RAIN	C & D		
2/12/2002	S21503		PLUGGED MAIN	C & S	RODDED	
2/12/2002	S21503		PLUGGED MAIN	BLEACHED	RODDED	
2/14/2002	S21503		GREASE & ROOTS	W & S	RODDED	
4/18/2002	S21503		PLUGGED LINE	W & D	RODDED	MANHOLE
4/23/2002	S21503		RAIN	BLEACH	RODDED	
5/3/2002	S21503		GREASE	C & D	RODDED	MANHOLE
5/6/2002	S21503		RAIN	C & S	RODDED	



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
5/6/2002	S21503		RAIN	C & S		MANHOLE
5/6/2002	S21503		RAIN	C & S		LIFT STATION
5/6/2002	S21503		RAIN	C & S		LIFT STATION
5/6/2002	S21503		RAIN	C & D		LIFT STATION
5/6/2002	S21503		RAIN		RODDED	
5/9/2002	S21503		RAIN	BLEACHED &		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/9/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & D		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & D		
5/17/2002	S21503		RAIN	C & S		MANHOLE
5/17/2002	S21503		RAIN	C & S		MANHOLE



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
5/17/2002	S21503		RAIN	C & D		MANHOLE			
5/17/2002	S21503		RAIN	C & D		MANHOLE			
5/28/2002	S21503		RAIN	C & D					
5/28/2002	S21503		RAIN	C & S	SEWER PROJECT TO	MANHOLE			
5/28/2002	S21503		RAIN	C & S		MANHOLE			
5/28/2002	S21503		RAIN	C & S		MANHOLE			
5/28/2002	S21503		RAIN	C & D		MANHOLE			
6/4/2002	S21503		RAIN	C & S					
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & D		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/12/2002	S21503		RAIN	C & S		MANHOLE			
6/15/2002	S21503		ROOTS	C & S	RODDED				
7/29/2002	S21503		RAIN	C & S		MANHOLE			
7/29/2002	S21503		RAIN	C & S		MANHOLE			
7/29/2002	S21503		RAIN	C & S		MANHOLE			
8/2/2002	S21503	UNKNOWN	BLOCKAGE	C & S	RODDED	MANHOLE			
9/19/2002	S21503		RAIN	C & S		MANHOLE			
11/6/2002	S21503		GREASE	C & D		MANHOLE			
11/27/2002	S21503		GREASE	C & D	RODDED	MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED	SEWER PROJECT	MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/18/2003	S21503		RAIN	BLEACHED		MANHOLE			
3/28/2003	S21503		RAIN	C & S		MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/13/2003	S21503		RAIN			MANHOLE			
5/16/2003	S21503		RAIN	C & S		MANHOLE			
5/16/2003	S21503		RAIN	C & S		MANHOLE			



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
5/16/2003	S21503		RAIN	C & S		MANHOLE
6/11/2003	S21503		FLOODED	C & D	RODDED	MANHOLE
7/1/2003	S21503			BLEACHED		
7/2/2003	S21503		PLUGGED LINED	BLEACHED	RODDED	PIPE
8/29/2003	S21503		RAIN	C & D		MANHOLE
8/29/2003	S21503		RAIN	C & D		MANHOLE
8/29/2003	S21503		RAIN	C & D		MANHOLE
8/29/2003	S21503		RAIN	C & D		MANHOLE
10/9/2003	S21503		RAIN	C & S		MANHOLE
10/9/2003	S21503		RAIN	C & S		MANHOLE
10/9/2003	S21503		RAINFALL	C & D		MANHOLE
10/9/2003	S21503		RAIN		C & S	MANHOLE
10/9/2003	S21503		RAIN	C & S		MANHOLE
10/9/2003	S21503		RAIN	C & D		MANHOLE
10/13/2003	S21503		BLOCKAGE	C & D	RODDED	MANHOLE
11/18/2003	S21503		RAIN			MANHOLE
11/18/2003	S21503		RAIN			MANHOLE



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
11/18/2003	S21503		RAIN			MANHOLE
11/18/2003	S21503		RAIN			MANHOLE
11/18/2003	S21503		RAIN			MANHOLE
11/18/2003	S21503		RAIN			MANHOLE
11/18/2003	S21503		RAIN			MANHOLE
1/13/2004	S21503		BLOCKAGE	C & D	RODDED	MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/17/2004	S21503		RAIN	BLEACH		MANHOLE
1/28/2004	S21503		BLOCKAGE	BLEACHED	RODDED	MANHOLE
1/28/2004	S21503		BLOCKAGE	BLEACHED	RODDED	MANHOLE
3/3/2004	S21503		RAIN	C & S		MANHOLE
3/3/2004	S21503		RAIN	C & S		MANHOLE



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
3/3/2004	S21503		RAIN	C & S		MANHOLE			
3/3/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & D		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
3/4/2004	S21503		RAIN	C & S		MANHOLE			
5/12/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
5/13/2004	S21503		RAIN	C & S		MANHOLE			
7/2/2004	S21503		RAIN	C & S					
7/2/2004	S21503		RAIN	C & S					
7/2/2004	S21503		RAIN	C & S		MANHOLE			
7/2/2004	S21503		RAIN	C & S					
7/2/2004	S21503		RAIN	C & S					
7/2/2004	S21503		RAIN	C & S					
7/2/2004	S21503		RAIN	C & S					
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/9/2004	S21503		RAIN	C & S		MANHOLE			
7/12/2004	S21503		BLOCKAGE	C & D	RODDED	MANHOLE			
11/3/2004	S21503		1&1			MANHOLE			
11/24/2004	S21503		1&1			MANHOLE			
11/30/2004	S21503	1,000	PLUGGED LINE	C & D	RODDED	MANHOLE			
12/6/2004	S21503		1&1			MANHOLE			
12/6/2004	S21503		1&1			MANHOLE			
12/6/2004	S21503		1&1			MANHOLE			
12/6/2004	S21503		1&1			MANHOLE			
12/25/2004	S21503		OBSTRUCTION	C & S	REPLACE LINE	MANHOLE			
1/4/2005	S21503		1&1			MANHOLE			
1/4/2005	S21503		1&1			MANHOLE			
1/4/2005	S21503		1&1			MANHOLE			
1/4/2005	S21503		1&1			MANHOLE			
1/5/2005	S21503		1&1		RODDED	MANHOLE			
1/5/2005	S21503		1&1			MANHOLE			
1/5/2005	S21503		1&1			MANHOLE			
1/5/2005	S21503		GREASE		RODDED	MANHOLE			
1/5/2005	S21503		1&1		RODDED	MANHOLE			
1/5/2005	S21503					MANHOLE			
1/5/2005	S21503		OBSTRUCTION		RODDED	PIPE			
1/5/2005	S21503		1&1			MANHOLE			
1/5/2005	S21503		1&1			MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
1/7/2005	S21503		OBSTRUCTION		RODDED	MANHOLE			
1/12/2005	S21503		1&1			MANHOLE			
1/12/2005	S21503		1&1			MANHOLE			
1/12/2005	S21503		1&1			MANHOLE			
1/13/2005	S21503		OBSTRUCTION IN LINE			PIPE			
2/23/2005	S21503		1&1			MANHOLE			
2/24/2005	S21503		PLUG IN SEWER MAIN	BLEACHED	RODDED	MANHOLE			
2/24/2005	S21503		BLOCKAGE	BLEACHED	RODDED	MANHOLE			
3/28/2005	S21503		ROOTS	C & S	RODDED	PIPE			
5/23/2005	S21503		1&1			MANHOLE			
5/23/2005	S21503		1&1			MANHOLE			
5/23/2005	S21503		1&1			MANHOLE			
6/1/2005	S21503		1&1			MANHOLE			
6/1/2005	S21503		1&1			MANHOLE			
6/1/2005	S21503		1&1			MANHOLE			
6/1/2005	S21503		1&1			MANHOLE			
6/1/2005	S21503		1&1			MANHOLE			
6/9/2005	S21503		1&1			MANHOLE			
6/9/2005	S21503		1&1			MANHOLE			
6/9/2005	S21503		1&1			MANHOLE			
6/13/2005	S21503	2,000	ROOTS	TREATED	RODDED	MANHOLE			
1/1/2006	S21503		PLUGGED MAIN	BLEACHED	RODDED	MANHOLE			
1/5/2006	S21503		PLUGGED MAIN	BLEACHED	RODDED	MANHOLE			
1/6/2006	S21503		PLUG IN MAIN	C & D	RODDED				



			Nowata			
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE
1/16/2006	S21503		PLUGGED SEWER	BLEACHED	RODDED	
1/24/2006	S21503		PLUG IN LINE	W & S	JET RODDED	MANHOLE
4/24/2006	S21503		RAIN WATER	BLEACHED		MANHOLE
5/4/2006	S21503		1&1			MANHOLE
5/4/2006	S21503		1&1			MANHOLE
5/4/2006	S21503		1&1			MANHOLE
5/4/2006	S21503		1&1			MANHOLE
5/9/2006	S21503		RAIN			MANHOLE
5/9/2006	S21503		RAIN			MANHOLE
5/9/2006	S21503		RAIN			MANHOLE
5/9/2006	S21503		RAIN			MANHOLE
5/10/2006	S21503		RAIN			MANHOLE
5/10/2006	S21503		RAIN			MANHOLE
5/10/2006	S21503		RAIN			MANHOLE
5/10/2006	S21503		RAIN			MANHOLE
5/10/2006	S21503		RAIN			MANHOLE
12/20/2006	S21503		RAIN	BLEACHED		MANHOLE
12/20/2006	S21503		RAIN	BLEACHED		
12/20/2006	S21503		RAIN	BLEACHED		MANHOLE
12/20/2006	S21503		RAIN	BLEACHED		MANHOLE
12/20/2006	S21503		RAIN	BLEACHED		MANHOLE
3/23/2007	S21503		RAIN	BLEACHED		MANHOLE
3/23/2007	S21503		RAIN	BLEACHED		MANHOLE
3/23/2007	S21503		RAIN	BLEACHED		MANHOLE



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/3/2007	S21503		RAIN			MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
5/7/2007	S21503		RAIN	BLEACHED		MANHOLE			
11/17/2007	S21503	100	OBSTRUCTION	C & S	JETTED	MANHOLE			
11/19/2007	S21503	400	OBSTRUCTION	C & S	RODDED				
3/18/2008	S21503		RAIN			MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
3/18/2008	S21503		RAIN						
3/18/2008	S21503		RAIN			MANHOLE			
3/18/2008	S21503		RAIN			MANHOLE			
3/18/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN						
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
3/31/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/8/2008	S21503		RAIN			MANHOLE			
4/24/2008	S21503		RAIN			MANHOLE			
4/24/2008	S21503		RAIN			MANHOLE			
4/24/2008	S21503		RAIN			MANHOLE			



	Nowata								
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
4/24/2008	S21503		RAIN			MANHOLE			
4/24/2008	S21503		RAIN			MANHOLE			
5/27/2008	S21503		RAIN			MANHOLE			
5/27/2008	S21503		RAIN			MANHOLE			
5/27/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN						
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/9/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			
6/13/2008	S21503		RAIN			MANHOLE			



Nowata										
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE				
6/13/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
6/16/2008	S21503		RAIN			MANHOLE				
8/10/2009	S21503		BLOCKAGE	C & D	RODDED	MANHOLE				
10/8/2009	S21503		RAIN	TREATED		MANHOLE				
10/8/2009	S21503		RAIN	TREATED		MANHOLE				
4/25/2011	S21503		RAIN	BLEACHED		MANHOLE				
3/20/2012	S21503		RAIN	BLEACHED		MANHOLE				
3/20/2012	S21503		RAIN	BLEACHED		MANHOLE				
3/20/2012	S21503		RAIN	BLEACHED		MANHOLE				
3/20/2012	S21503	1.5 MGD	RAIN	NONE	BUILDING	CLARIFIER				
3/20/2012	S21503		RAIN	BLEACHED		MANHOLE				
4/14/2012	S21503		RAIN			MANHOLE				
4/14/2012	S21503		RAIN			MANHOLE				
4/14/2012	S21503									
4/14/2012	S21503		RAIN			MANHOLE				
4/14/2012	S21503		RAIN			MANHOLE				
4/14/2012	S21503		RAIN			MANHOLE				



Nowata									
BPDATE	FACID	AMT_GAL	CAUSE	CLEANUP	PREVENTIVE	TYPE_OF_SOURCE			
4/14/2012	S21503		RAIN			MANHOLE			
4/30/2012	S21503		RAIN	C & D	RODDED	MANHOLE			
5/30/2013	S21503		RAIN	PILE UP	BUILD UP DIKE				
5/30/2013	S21503		RAIN	BLEACHED		MANHOLE			
5/30/2013	S21503		RAIN	BLEACHED		MANHOLE			
5/30/2013	S21503		RAIN	BLEACHED		MANHOLE			
5/30/2013	S21503		FLOODING	CLEANED	BUILD UP DIKE ON	MANHOLE			
7/9/2014	S21503		BLOCKAGE	BLEACHED	JET RODDED	MANHOLE			
5/23/2015	S21503		RAIN			MANHOLE			
5/24/2015	S21503		RAIN		CONTAINMENT	MANHOLE			
5/25/2015	S21503	16,438	ALL FEB BASINS WERE FULL. NO MORE	AERATORS	TRY AND KEEP FEB	LIFT STATION			
5/28/2015	S21503		RAIN	BLEACHED		MANHOLE			
5/29/2015	S21503		RAIN			MANHOLE			
6/18/2015	S21503		RAIN			MANHOLE			
7/9/2015	S21503		RAIN			MANHOLE			
7/17/2015	S21503		HAND TOWELS BLOCKAGE	BLEACHED	RODDED	MANHOLE			
7/17/2015	S21503		HANDTOWELS BLOCKED LINE	BLEACHED	RODDED SEWER	MANHOLE			
9/21/2015	S21503	1,000	ROOTS	BLEACHED	JETTED	MANHOLE			
12/26/2015	S21503	1,000	RAIN	DISINFECTED	SEALED MANHOLE	MANHOLE			
12/27/2015	S21503		OVERFLOW FROM RAIN	DISINFECT	TRY TO KEEP	CLARIFIER			
3/22/2016	S21503	100	PLUGGED LINE	BLEACHED	RODDED	MANHOLE			
5/17/2016	S21503		OVERFLOW PONDS	NONE	MONITOR	LIFT STATION			
4/5/2017	S21503	48,000	PUMP FAILURE	NONE	REPAIR	CLARIFIER			
4/21/2017	S21503		OVERFLOW						