

Appendix D: Force Main System Final Condition Assessment Report

This page intentionally left blank.

Table of Contents

List of Figures	D-iv
List of Tables	D-iv
List of Abbreviations	D-v
1. Introduction.....	D-1
2. Force Main Inspection Program.....	D-3
2.1 Level 1 Force Main Inspections	D-3
2.1.1 Flow Augmentation	D-3
2.1.2 Level 1 Data Collection.....	D-3
2.1.3 Level 1 Field Inspections.....	D-4
2.2 Level 2 Force Main Inspections and Interpretation	D-4
2.2.1 UST and BEM Testing	D-4
2.2.2 Other Level 2 Testing.....	D-4
2.3 Level 3 Force Main Inspections	D-5
2.4 Additional Inspections	D-5
2.5 Force Main Condition Documentation.....	D-5
2.6 Data Management	D-6
2.7 Asset Recommendations.....	D-6
2.8 Assessment of Force Main Appurtenances.....	D-7
2.9 External Pipe Inspections	D-7
2.10 Cathodic Protection.....	D-8
2.11 History of Force Main System SSOs.....	D-8
2.12 Assets Presenting a Material Risk of Failure.....	D-8
3. Final Condition Assessment Report Tables	D-9

List of Figures

Figure D-1. General Soil Corrosivity Map for Army Base Treatment Plant Service Area.....	D-571
Figure D-2. General Soil Corrosivity Map for the Atlantic Treatment Plant Service Area	D-573
Figure D-3. General Soil Corrosivity Map for the Boat Harbor Treatment Plant Service Area.....	D-575
Figure D-4. General Soil Corrosivity Map for the Chesapeake Elizabeth Treatment Plant Service Area.....	D-577
Figure D-5. General Soil Corrosivity Map for the James River Treatment Plant Service Area.....	D-579
Figure D-6. General Soil Corrosivity Map for the Nansemond Treatment Plant Service Area	D-581
Figure D-7. General Soil Corrosivity Map for the Virginia Initiative Treatment Plant Service Area	D-583
Figure D-8. General Soil Corrosivity Map for the Williamsburg Treatment Plant Service Area	D-585
Figure D-9. General Soil Corrosivity Map for the York River Treatment Plant Service Area	D-587

List of Tables

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains.....	D-11
Table D-1.2. Level 1 and Level 2 Inspections Removed From CAP.....	D-17
Table D-2. Group Ferrous Summary	D-18
Table D-3.1. Level 1 to Level 2 Inspection Results Summary for Group 1 and Group 2 Force Mains...	D-23
Table D-3.2. Level 1 to Level 2 Inspection Results Summary for Reservoir Group.....	D-27
Table D-4. UST Wall Thickness Testing Results	D-29
Table D-5. BEM Wall Thickness Testing Results	D-69
Table D-6. FM Appurtenances Condition Assessment Summary	D-73
Table D-7. Exposed / Aerial Crossing Condition Assessment Summary	D-541
Table D-8. Cathodic Protection Systems Condition Assessment Summary (Updated 2/12/2014) ...	D-547
Table D-9. FM System SSO Summary (updated February 2014)	D-551
Table D-10. Force Main Assets that Present a Material Risk of Failure.....	D-569

List of Abbreviations

AC	Asbestos Cement
ARV	Air Release Valve or AV
BEM	Broadband Electromagnetic
BO	Blow Off Valve
BP	Bypass Valve
CA	Condition Assessment
CAP	Condition Assessment Plan
CCTV	Closed Circuit Television
CI	Cast Iron
CIP	Capital Improvement Program
CP	Cathodic Protection
DEQ	(Virginia) Department of Environmental Quality
DI	Ductile Iron
EC	Emergency Pump Connection or EPC
EPA	(United States) Environmental Protection Agency
FM	Force Main
GV	Gate Valve
HDPE	High Density Polyethylene
ICCP	Impressed Current cathodic Protection
LD	Leak Detector
LF	Linear Feet
ML	Mainline Valve
MOM	Management, Operations and Maintenance
NACE	National Association of Corrosion Engineers
PCCP	Prestressed Concrete Cylinder Pipe
PCV	Pressure Control Valve
PE	Polyethylene
PM	Preventive Maintenance
PRS	Pressure Reducing Station
PS	Pumping Station
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
RCCP	Reinforced Concrete Cylinder Pipe
RTS	Regional Technical Standards
SCADA	Supervisory Control and Data Acquisition
SOC	Special Order By Consent
SSO	Sanitary Sewer Overflow
SSORS	Sanitary Sewer System Overflow Reporting System
STP	Sewage Treatment Plant
TP	Treatment Plant
TS	CP Test Station or CPTS
UST	Ultrasonic Testing
WO	Work Order

This page intentionally left blank.

Section 1

Introduction

This report is an Appendix to HRSD's Rehabilitation Action (Rehab) Plan to satisfy the requirements of the United State's Environmental Protection Agency (EPA) Consent Decree as well as the Virginia Department of Environmental Quality (DEQ) Special Order by Consent (SOC) for reporting on results of the Condition Assessment Plan (CAP). This document summarizes results related to HRSD's force main (FM) systems. Appendices A, B, C, and E satisfy the remaining reporting requirements of the CAP. Assets found presenting a material risk of failure, as described further in this report, are referenced in the main document, the Rehabilitation Action Plan.

The HRSD sanitary sewer system contains approximately 450 miles of force mains, of varying ages, materials, diameters, and physical conditions. The HRSD force main system is unique in that the force mains are extensively interconnected with numerous in-line valves, junctions and many connections from locality and private pumping stations. The force main system includes associated appurtenances including, but not limited to, main line valves, air release valves, leak detectors, by-pass valves, exposed crossings and cathodic protection systems. HRSD has conducted a condition assessment of the force main system as part of the CAP. The primary purpose of the CAP is to identify HRSD assets that present a "material risk of failure." For the purposes of this document, "failure" means conditions resulting in a sanitary sewer overflow, pipe leakage, or interruption of service to HRSD's customers due to a physical condition defect in the system.

To identify force main segments for evaluation, HRSD submitted a Preliminary Condition Assessment Report (PCAR) which was approved by EPA/DEQ on March 4, 2010. The PCAR reported results of the Condition Assessment Screening process. The Condition Assessment Screening process identified and prioritized force main segments presenting **potential** for material risk of failure into priority groups. Those assets presenting **potential** for material risk of failure were evaluated in the field using a variety of technologies. HRSD has identified whether an **actual** material risk of failure exists for each inspected segment and if repair, rehabilitation or replacement is needed. The results of the field evaluation and recommended actions are contained within this report. Some recommended actions refer the asset to the Rehab Plan, submitted concurrently with this document.

During CAP activities through October 15, 2013 (as updated in February 2014), HRSD inspected approximately 265,000 linear feet (LF) of force main pipeline segments; over 6,500 force main appurtenances, including performing a cathodic protection system evaluation; and external inspection of exposed crossing sections using the inspection methods outlined in the CAP. The 265,000 LF of pipeline segments consisted of Group 1, Group 2, Group Ferrous and Reservoir Group force mains as described in the CAP.

Group 1: Force main segments which have a recorded condition related failure during the previous ten years (1999 through 2008). These segments were presented in the CAP as having the highest potential risk for additional failures.

Group 2: Force main segments that have had a condition related failure in the previous records (from 1989 through 1998).

Group Ferrous: Force mains that were included because they are ferrous material pipes (cast iron or ductile iron) and within 3,000 feet downstream of an HRSD pumping station.

Reservoir Group: Force main sections that are located within 500 feet of a drinking water reservoir.

This page intentionally left blank.

Section 2

Force Main Inspection Program

In the PCAR, HRSD listed force main segments which had been established as having a **potential** material risk of failure. The approved program consisted of varying levels of intrusion into force main segments through different field activities. The field activities conducted as part of the CAP are described in the following sections.

2.1 Level 1 Force Main Inspections

HRSD's Level 1 inspections consisted of utilizing the Sahara® tethered-type acoustic leak detection system and the SmartBall® free-swimming acoustic technology. Segments in Group 1, Group 2 and Reservoir Group were first inspected with Level 1 technology. These technologies rely on the flow of the in-service force main to propel inspection instruments downstream.

2.1.1 Flow Augmentation

Due to passive propulsion (i.e. instruments are reliant on the force main flow to move down the pipeline), these technologies have limitations, including possible fouling when the velocity is below a certain threshold. HRSD used hydraulic modeling to predict the flow velocities within the line segments planned for inspection. In cases where the flow velocity was predicted or measured to be lower than the threshold velocity, HRSD evaluated the feasibility to perform flow augmentation. When used, flow augmentation consisted of creating a new mainline tap for a temporary pump connection or through valve operations to divert flow from other areas of the system. Temporary portable pumps and water storage tanks were brought to the test site to pump more water into the force main, thereby increasing flow velocities. The storage tanks were filled from a local fire hydrant and operated with an air gap to isolate the fresh water system. In some cases, locality pump stations were operated in manual mode to increase flow rates and velocities.

2.1.2 Level 1 Data Collection

Level 1 inspections were used to determine the presence of air pockets and leaks. Air pockets were evaluated to determine if they were significant (>5 ft. in length and not vented) and if they were stationary. Moving air pockets tend to accumulate at existing high points that may already be vented. In the event where a significant air pocket was detected, HRSD initiated a Level 2 inspection for up to three significant air pockets per segment. If more than three significant air pockets were found, HRSD determined which three air pockets were most significant and initiated Level 2 inspection. No leaks were found during Level 1 inspections. In force main segments where no significant air pockets were found, no further action was warranted. Level 1 results that led to Level 2 Inspections are summarized in two places:

-Table D-3.1 – Level 1 to Level 2 Inspection Results Summary for Group 1 and 2 Force Mains

-Table D-3.2 – Level 1 to Level 2 Inspection Results Summary for Reservoir Segments.

Level 1 inspection results served as a preliminary step to determine if Level 2 inspection was necessary. HRSD also gained direct information about the condition of force main segments through the extraction of pipe samples (coupons). To facilitate certain Level 1 inspections, HRSD had to make a new tap into the force main segment to gain access. In these cases, a coupon was extracted that provided direct information about the wall condition of the pipe.

2.1.3 Level 1 Field Inspections

There were a few instances where Level 1 technologies were determined as inappropriate for inspection of HRSD's force mains. The Level 1 tethered technology requires ground level sonde (listening device probe) tracking by a hand held sensor. Multiple sensors must be tracked at various points when utilizing the free swimming technology. HRSD could not track the sonde in all cases, such as when a pipe segment went underneath a body of water. In situations where a Level 1 inspection was not possible or appropriate, a Level 2 inspection was planned and performed. Explanations of segments for which Level 1 was not possible are listed in Table D-1.1-Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains. In total the actual inspected length exceeded the planned length by approximately 10,000 LF.

2.2 Level 2 Force Main Inspections and Interpretation

HRSD Level 2 inspections were performed to determine pipe wall thickness or internal condition. To evaluate the condition of the pipe wall, HRSD used Ultrasonic Wall Thickness (UST) testing, Broadband Electromagnetic (BEM) wall thickness testing and borescope technology. Level 2 inspections were warranted where significant air pockets were found that were not near an air release vent (ARV), at pipe segments that were not suitable for using Level 1 inspection technologies and for Group Ferrous segments. Furthermore, segments in Group Ferrous were first inspected with Level 2 technology. Table D-2. Group Ferrous Summary presents results of Group Ferrous inspections.

2.2.1 UST and BEM Testing

UST and BEM testing provided HRSD with wall thickness readings of ferrous pipes at specific locations. These test results were used to calculate the in-service factor of safety of the pipe wall thickness. The in-service factor of safety was determined in accordance with AWWA C150 Thickness Design of Ductile Iron Pipe. The AWWA standard provides a procedure for designers to determine wall thickness for buried pipe. Both the internal pressure and external trench loading formulas were used to compare design thickness to actual minimum measured wall thickness to determine a factor of safety.

Any factor of safety calculated to be less than 1.2 was referred to the Prompt Repair Program. There were two locations where a value of less than 1.2 were found; one near Deep Creek Pressure Reducing Station and the other near State Street Pump Station. These pipe segments were addressed as part of the Prompt Repairs Program. Details are explained in Appendix E – Rehabilitation Performed During Condition Assessment Program.

Any estimated factor of safety found to be greater than 1.2 and less than 2.0 was referred to the Rehab Plan. Factors of safety greater than 2.0 warrant no further action under the Rehab Plan. The results of UST and BEM testing including minimum and average wall thickness and subsequent factors of safety are displayed in Table D-4 Ultrasonic (UST) Wall Thickness Testing Results and Table D-5 Broadband Electromagnetic (BEM) Wall Thickness Testing Results found in Section 3 of this report.

2.2.2 Other Level 2 Testing

To perform Level 2 inspection on Asbestos Cement Pipe (ACP), Reinforced Concrete Pipe (RCP) and Prestressed Concrete Cylinder Pipe (PCCP), HRSD utilized borescope technology and visual observation of coupon samples. A borescope inspection required a 2" pipe tap of an in-service FM for the insertion of a specialized CCTV camera. The CCTV camera provided a means to visually evaluate the pipe wall interior. While borescope videos present challenges related to camera orientation, wastewater turbidity, etc., HRSD did not find evidence of material risk of failure from evaluation of borescope videos.

In most cases of a borescope inspection, HRSD tapped the in-service force main and collected a pipe coupon. HRSD was able to use the coupons to make a determination of the condition of the pipe wall

interior. HRSD did not observe significant wall deterioration in any of the AC, RCP or PCCP force mains. There were a few cases where HRSD was not able to recover a coupon from the new tap. In such cases HRSD used the other collected coupons extracted from the same segment to make a determination of the condition of the pipe.

During Level 1 and Level 2 inspections, HRSD collected a total of four AC pipe coupons. HRSD utilized laboratory testing services in addition to the inspections required under the Condition Assessment Program on the four collected AC pipe samples. Laboratory tests performed included:

- Phenolphthalein Indicator Tests (CTL REF #'s 29450-1, 29450-2, 29450-3, 29450-4)
- ASTM C500 Uncombined Calcium Hydroxide Tests (CTL REF #29450-5)
- Microscopic examination for microcracking
- SEM/EDS elemental examination
- Physical Examination for softening

As a result of the additional work, one pipe segment along Diamond Springs Road (SF-016) was identified to be at material risk of failure and is referred for action. Details are listed in Table D-10 Force Mains Found to be at Material Risk of Failure.

2.3 Level 3 Force Main Inspections

In the event that a Level 2 inspection warranted further action, HRSD could refer the segment to the Action Plan or evaluate the feasibility of performing a Level 3 inspection. HRSD did not find any Level 3 inspections to be necessary or appropriate as outlined under the CAP process (From Level 1, to Level 2 and then to Level 3). Although no segments listed in the PCAR were found suitable for a Level 3 inspection, HRSD was able to utilize Level 3 technology (CCTV) to evaluate the condition of a portion of line SF-165 (Military Highway IFM) outside of the segment identified in the PCAR. The CCTV showed crown deterioration and HRSD elected to replace approximately 100 feet of 36" RCP forcemain as a maintenance action.

2.4 Additional Inspections

As part of the CAP, if HRSD found a FM segment presenting material risk of failure, upstream and downstream inspections were required in order to determine the full extent of the issue. These inspections are referred to herein as additional inspections. Pipe conditions found to be of a concern but determined to be clearly localized were excluded from the additional inspection process.

Portions of the Deep Creek IFM (Segments NA-SS-0169; SF-143 and NA-SS-0168; SF-142) were found to present a material risk of failure during the CAP. Following the requirements of the CAP, HRSD isolated the segments presenting a material risk of failure near the Deep Creek PRS. Upstream and downstream segments of the Deep Creek IFM were inspected on Military Highway, Shell Road and east of Deep Creek PRS to Steel Street with no additional at risk segments discovered.

2.5 Force Main Condition Documentation

The HRSD force main network includes approximately 450 miles of active force mains and over 6,500 related appurtenances. Each force main asset is associated with a line number that typically begins with "NF" or "SF" which denotes the North or South Shore ("N" or "S") and that the asset is a part of the force main system ("F"). Appurtenances are identified by the associated HRSD line number and by valve guide numbers. Valve guide numbers typically begin with Treatment Plant (TP) service area prefixes such as "AB" for Army Base TP or "BH" for Boat Harbor TP. Following the TP prefix is a number identifying each unique valve guide with a suffix (sequential number) to identify each valve. Force main cathodic protection systems and exposed crossings are identified by line number and geographic location.

During the course of the CAP, HRSD has continuously updated its GIS system and made improvements to sewer infrastructure. In addition, field conditions such as points of entry and equipment challenges resulted in differences in inspected lengths. Therefore, there are differences between the segments and/or segment lengths listed in the Preliminary Condition Assessment Report (PCAR) and the actual inspections performed. HRSD has inspected all force main segments that were assessed to have **potential** material risk of failure as well as those segments not having **potential** material risk of failure, but identified in the PCAR for inspection, such as pipe segments within 500 LF of a drinking water reservoir. Explanations of changes are listed in Table D-1.1 Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains can be found in Section 3 of this report.

During the CAP, HRSD elected to remove force mains from the original PCAR inspection list if the segment was planned for replacement under another program, such as the CIP and/or Interim System Improvements. A list of all inspections that were removed from the program for this reason can be found in Table D-1.2- Level 1 and Level 2 Inspections Removed from CAP. These segments do not appear in subsequent condition summary tables.

2.6 Data Management

The Force Main Systems Condition Assessment Program collected a variety of data, including wall thickness measurements, locations of air pockets, photographs, videos, reports and inspector comments. HRSD used this information to develop the Interceptor Force Main Condition Assessment Database which is compatible with the existing HRSD GIS and other existing data management practices used by HRSD.

2.7 Asset Recommendations

HRSD evaluated condition data from various sources to make recommendations for each force main asset. The various data types and data analysis techniques for pipelines were described in the preceding sections. The remaining data types and analysis techniques are described in following sections.

The recommendation for action is either “Rehabilitation Required” or “No Rehabilitation Required at this time.” Assets receiving a recommendation of “Rehabilitation Required” have an associated addressing activity. The addressing activity gives information on how the asset recommendation will be implemented. The addressing activity field is populated with one of the following four options:

- A Rehab Project Number, which is associated with a Rehab Project.
- “Interim System Improvements”, which are the specific projects identified in the Consent Decree and are not part of the Rehab Plan.
- “Rehab during CAP” is assigned when an asset has already been addressed (or work is currently being performed) through the CIP or Prompt Repairs Program. These assets need some type of corrective action but rehabilitation / replacement is underway or has already been performed.
- “N/A” is assigned to assets which do not present a material risk of failure and no action is required under the Rehab Plan.

Rehab Project Numbers give information on the treatment plant tributary area and identify themselves as part of the Rehab Plan. For example, a Rehab Project numbered “AT-R1” is within the Atlantic TP service area (“AT”), is a Rehab Project (“R”) and is numbered sequentially (“1”) according to when the project was developed with respect to the other Rehab Projects.

Table D-10 Force Mains that Present a Material Risk of Failure summarizes force main projects in the Rehab Plan. The table is sorted by HRSD Line number and includes the Rehab Project Number as appropriate.

2.8 Assessment of Force Main Appurtenances

HRSD assessed the condition of over 6,500 FM appurtenances through functional inspection of line valves, air release valves, and other assets in the force main system. Assets that are critical and not functioning or present a material risk of failure are identified as requiring action in Table D-6. Force Main Appurtenances Condition Assessment Summary presented in Section 3 of this report.

As part of the CAP, HRSD established condition evaluation criteria for FM appurtenances based on the existing routine maintenance program. The existing routine maintenance program utilizes Force Main (FM) Preventative Maintenance (PM) forms for inspection of force main valves, air vents, and other appurtenances. The PM forms were reviewed for completeness with respect to assets identified in the current HRSD inventory and thoroughness of assessment by asset. Following a data gathering process, HRSD utilized these forms to perform a condition assessment of each force main appurtenance. Typical condition issues included but were not limited to:

- Steel riser pipes on air release valves. (HRSD has added a CIP project to the Interim System Improvements to address these appurtenances.)
- Inoperable, frozen or broken valves.
- Stiff valves. It should be noted that valves which are stiff are not always indicative of a defective valve.

Each FM appurtenance Preventive Maintenance (PM) form was reviewed and information about each appurtenance with condition assessment findings are summarized in Table D-6. Force Main Appurtenances Condition Assessment Summary in Section 3 of this report. The table provides a brief description of the location and type of asset. The “Condition Assessment Findings” column explains comments related to the inspection and / or condition of the asset and is the basis for asset recommendations. The recommendation for each appurtenance is either “Rehabilitation Required” or “No Rehabilitation Required at this time.”

The table is sorted by line number, then by addressing activity. The effect of this sorting is such that the assets referred to the Rehab Plan are at the top followed by assets to be addressed under the Interim System Improvements. The remainder of the table contains assets which do NOT present a material risk of failure. Abbreviations used within the table are defined in the List of Abbreviations on Page vi of this report.

2.9 External Pipe Inspections

As part of the CAP, HRSD inspected the exterior of each force main pipe segment at aerial crossings and where pipes were exposed for internal inspections. Aerial crossing inspections were performed through the HRSD Preventive Maintenance (PM) program. The inspections consisted of photographing and visually assessing the segment’s exterior for structural support damage, protective coating condition and evidence of corrosion or deterioration.

When pipes were exposed for internal inspections, HRSD used the onsite inspector to assess the condition of the pipe and fittings. Using this process, HRSD was able to identify two defects which were referred to the prompt repair program. The following bullets summarize the defects and actions:

- One fitting along the Witchduck Road IFM (AT-SS-0238) was found to have significant deterioration of the fitting bolts. The defect was addressed by installing new bolts under the Prompt Repairs Program.
- As part of the Level 1 FM inspection program, HRSD found that a portion of FM segment NA-SS-0173 had been exposed by tidal action on the banks of the Elizabeth River. Subsequent ultrasonic wall thickness testing and visual inspection results indicated internal and external corrosion. HRSD repaired the exposed portion of the pipeline; overlapping the repair on each side into the areas that

are continuously submerged and were still buried. Subsequent lab reports on two physical pipe samples (one exposed to tidal fluctuations and one continuously submerged) presented minimum wall thicknesses for each sample. Safety factor calculations for these minimum wall thicknesses resulted in a limiting safety factor of 6.5, resulting in no further action at this time.

A summary of PM program aerial crossing inspections and recommendations is presented in Table D-7 Exposed/Aerial Crossing Condition Assessment Summary.

2.10 Cathodic Protection

As part of the CAP, HRSD evaluated the existing cathodic protection (CP) systems for condition and adequacy. HRSD also utilized USDA Soil Resistivity Maps to identify areas where CP may be needed. The CAP CP activities are summarized below and data tables can be found in Section 3.

HRSD inspected and tested known impressed current cathodic protection (ICCP) systems designed to protect sewer force mains. The test data indicates that the ICCP systems are operating as designed and the level of protection satisfies the standards established by NACE international (National Association of Corrosion Engineers). HRSD also inspected galvanic anode CP test stations installed on the sewer force main system and did not find evidence of force main failure or leaks along the protected segments. The inspection results for both ICCP and galvanic anode CP systems and asset recommendations are presented in Table D-8 Cathodic Protection Systems Condition Assessment Summary can be found in Section 3. Table D-8 was updated as part of the Rehab Update with new data acquired in 2012-2013.

As part of the external corrosion analysis documented in this section, HRSD developed soil corrosivity maps that show the potential for corrosive conditions to metallic force mains. Corrosivity maps are presented in Figures D-1 through D-9 at the end of this report for each treatment plant service area. The soil maps show potential for corrosive soil by colors indicating high, moderate or low corrosion potential. HRSD used the soil maps to assess the magnitude of the potential issue with corrosive soils. The corrosion industry regards USDA soil maps as general indications only and recommends detailed, site specific soils analysis before action is taken. Therefore, HRSD has conducted corrosive environment analysis in locations where issues have been found.

The soil corrosivity maps give a general indication that there are widespread potentially corrosive soils in the Hampton Roads region. For new ferrous pipelines, site specific corrosion evaluations should be conducted as part of the design process.

2.11 History of Force Main System SSOs

As part of the CAP, HRSD is required to provide information on the history of all sanitary sewer overflows (SSOs) from HRSD's force main system that occurred from 1999 to 2008 (compiled from Sanitary Sewer System Overflow Reporting System (SSORS)). A list of SSOs by HRSD line number is presented in Table D-9 HRSD Force Main System SSO Summary. This list was updated in 2014 and includes SSOs through October 2013.

2.12 Assets Presenting a Material Risk of Failure

As part of the CAP, HRSD is required to submit a list of assets that present a material risk of failure. Force main segments, aerial crossings and cathodic protection system assets that present an actual material risk of failure are summarized and presented with the addressing activity in Table D-10 Force Main Assets that Present a Material Risk of Failure. Force main appurtenances which present actual material risk of failure can be identified specifically by examining the Recommended Action in Table D-6. Assets presenting material risk of failure have a recommended action of "Rehabilitation Required." Table D-6 is sorted so that these assets appear at the beginning.



Section 3

Final Condition Assessment Report Tables

The tables contained in this section present a summary of the results of the HRSD Force Main System Condition Assessment Program. Content of the tables was discussed in the preceding sections.

This page intentionally left blank.

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains

Contract Number	Force Main Segment Number	Status	Work Order (WO) Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	(A) WO Length (ft)	(B) Total LF Level 1 Inspected	(B) - (A) (Total LF Level 1) - (Pipe Length)	Comments on Inspection Variance
NF-153	BH-NS-0005	COMPLETED	6	1	30	RCP	2,930	13,219	10,289	Additional 10,289' due to use of existing insertion and retrieval points. SmartBall used.
NF-172	WMBG-NS-0052	COMPLETED	7	1	36	PCCP	860	3,509	2,649	Additional 2,649' due to update in system mapping from time of PCAR.
NF-005/006	WMBG-NS-0021	COMPLETED	8	1	36	PCCP	5,000	4,934	-66	Work order short 66' due to inspection field conditions.
NF-090	BH-NS-0029	COMPLETED	10	1	8	CI	4,150	5,829	1,679	Additional 1,679' due to change in planned insertion and retrieval points distances.
NF-039	JR-NS-0011	COMPLETED	11	1	36	RCP	5,000	4,827	-173	Work order short 173' because inspection was not needed on portion of HDPE CIP replacement.
SF-007	AB-SS-0039	COMPLETED	2	1	20	RCP	2,701	2,626	-75	Work order short 75' due to insertion point offset.
SF-137	NA-SS-0163	COMPLETED	33	2	30	PCCP	3,035	3,008	-27	Work order short 27' due to measurement difference
SF-070	VIP-SS-0069	COMPLETED	36	2	16	CI	2,688	2,556	-132	Work order short 132' due to insertion point adjustment (Turbulence near PS).
SF-210	AT-SS-0033	COMPLETED	14	1	30	DI	3,188	3,281	93	Additional 93' because of increase in planned insertion point distance.
SF-213	AT-SS-0191	COMPLETED	15	1	30	PCCP	4,273	4,571	298	Additional 298' because of increase in planned insertion point distance.
SF-097	VIP-SS-0128	COMPLETED	4	1	30	DI	5,000	4,717	-283	Work order short 283' due to inspection field conditions (Turbulence).

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains

Contract Number	Force Main Segment Number	Status	Work Order (WO) Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	(A) WO Length (ft)	(B) Total LF Level 1 Inspected	(B) - (A) (Total LF Level 1) - (Pipe Length)	Comments on Inspection Variance
SF-159/165	AT-SS-0063 & 65	COMPLETED	13	1	36	PCCP / DI	4,104	4,466	362	Additional 362' because of increase in planned insertion point distance.
SF-160	AT-SS-0054	COMPLETED	18	2	30	DI	5,000	4,600	-400	Work order short 400' due to inspection field conditions (Turbulence).
SF-213	AT-SS-0190	COMPLETED	30	2	30	PCCP	4,374	3,874	-500	Work order short 500' due to inspection field conditions (Turbulence)
SF-134	AT-SS-0218	COMPLETED	40	2	30	RCP	5,000	2,224	-2,776	Work orders short 2,776' because there was no need for inspection of CIP under construction.
SF-121	AT-SS-0238	COMPLETED	41	2	24	CI	5,000	4,185	-815	Work order short 815' because there was no need for inspection of CIP under construction.
SF-143	NA-SS-0170	COMPLETED	42	2	24	DI	2,621	1,591	-1,030	Work order short 1,030' due to updates in system mapping from time of PCAR.
SF-218	VIP-SS-0023	COMPLETED	44	2	30	PCCP	642	691	49	Additional 49' due to field measurement difference.
SF-143	NA-SS-0173	COMPLETED	43	2	24	CI	1,260	500	-760	Work order short 760' due to inspection field conditions. (could not track through Elizabeth River)
NF-016	JR-NS-0047	COMPLETED	37	2	30	PCCP	5,000	7,536	2,536	Additional 2,536' due to increase in distance from planned insertion and retrieval points.
NF-089	YR-NS-0110	COMPLETED	56	1	20	AC	1,687	1,630	-57	Work order short 57' due to discrepancy from planned insertion point distance.

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains

Contract Number	Force Main Segment Number	Status	Work Order (WO) Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	(A) WO Length (ft)	(B) Total LF Level 1 Inspected	(B) - (A) (Total LF Level 1) - (Pipe Length)	Comments on Inspection Variance
NF-042	JR-NS-0023	COMPLETED	58	1	20	AC	5,000	12,287	7,287	Additional 7,287' due to increase in distance from planned insertion and retrieval points.
NF-179	JR-NS-0062	COMPLETED	60	1	24	DI	3,478	1,892	-1,586	Work order short 1,586' because there was no need for inspection of CIP under construction.
NF-026	YR-NS-0075/76	COMPLETED	59	1	18	RCP	8,530	8,484	-46	Work order short 46' due to measurement difference
NF-157	BH-NS-0020	COMPLETED	61	2	30	RCP	342	275	-67	Work order short 67' due to insertion point measurement distance.
SF-168/169	AT-SS-0014	COMPLETED	31	2	36	PCCP	3,559	3,322	-237	Work order short 237' because of insertion point distance and field conditions (pull back pressure).
SF-120	CE-SS-0073	COMPLETED	34	2	24	RCP	2,788	2,728	-60	Work order short 60' due to inspection field conditions (Turbulence near PS).
SF-189	NA-SS-0059	COMPLETED	48	2	24	PCCP	1,129	1,051	-78	Work order short 78' due to insertion point measurement distance.
SF-167	AT-SS-0021	COMPLETED	39	2	42	PCCP	3,371	3,376	5	Additional 5' due to measurement difference.
SF-017	CE-SS-0026/41	COMPLETED	62	2	42	RC	1,275	1,400	125	Additional 125' due to insertion point measurement difference.
SF-014	CE-SS-0027/28	COMPLETED	50	2	24	DI	2,238	1,410	-828	Work order short 828' because of November 2009 pilot inspection overlap.
SF-164	AT-SS-0044	COMPLETED	17	1	30	DI	4,288	4,296	8	Additional 8' due to measurement difference.
SF-142	NA-SS-0168	COMPLETED	3	1	24	DI	3,291	3,315	24	Additional 24' due to measurement difference.

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains

Contract Number	Force Main Segment Number	Status	Work Order (WO) Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	(A) WO Length (ft)	(B) Total LF Level 1 Inspected	(B) - (A) (Total LF Level 1) - (Pipe Length)	Comments on Inspection Variance
NF-020	JR-NS-0074	COMPLETED	5	1	14	CI	1,585	561	-1,024	Work order short 1,024' because of field conditions (Insufficient flow).
SF-190	NA-SS-0052	COMPLETED	35	2	30	PCCP	4,290	3,276	-1,014	Work order short 1,014' because of field conditions (Insufficient flow)
NF-105	BH-NS-0045	COMPLETED	29	1	10	DI	730	0	-730	Unable to perform Level 1 because of field conditions (Access difficulties under bridge and railroad tracks).
SF-122	AT-SS-0230	COMPLETED	32	2	24	RCP	5,000	4,510	-490	Work order short 490' due to field conditions (Reverse flows and pull back pressure).
SF-015	CE-SS-0024 & 25	COMPLETED	66	2	16	DI	64	0	-64	Unable to perform Level 1 because of field conditions (64' jumper).
SF-013	CE-SS-0030	COMPLETED	51	2	24	DI	4,358	4,138	-220	Work order short 220' due to field conditions (Variable flow rate).
SF-016	CE-SS-0002	COMPLETED	53	2	48	PCCP	835	1,560	725	Additional 725' due to change in planned insertion point.
SF-016	CE-SS-0001	COMPLETED	54	2	48	PCCP	3,419	4,134	715	Additional 715' due to change in planned insertion point.
SF-219	VIP-SS-0024	COMPLETED	55	2	30	RCP	3,805	2,240	-1,565	Work order short 1,565' due to field conditions (Insufficient flow).
SF-258/259	AT-SS-0148	COMPLETED	63	2	16	DI	1,119	433	-686	Work order short 686' due to field conditions (Flow meter registered no flow in the northern section).
NF-008	WMBG-NS-0009/10/11/12	COMPLETED	38	2	24	PCCP	3,885	5,266	1,381	Additional 1,381' due to change in planned insertion point.

Table D-1.1. Level 1 and Level 2 Inspection Variations from PCAR for Group 1 and 2 Force Mains

Contract Number	Force Main Segment Number	Status	Work Order (WO) Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	(A) WO Length (ft)	(B) Total LF Level 1 Inspected	(B) - (A) (Total LF Level 1) - (Pipe Length)	Comments on Inspection Variance
SF-273	AT-SS-0119	COMPLETED	64	2	48	Steel	1,763	0	-1,763	Unable to perform Level 1 because of field conditions (could not track across Gum swamp crossing)
SF-012	CE-SS-0032 & 0103	COMPLETED	65	2	14	CI	633	0	-633	Work order sent to Level 2 because it was confirmed that segment was not adjacent to a drinking water reservoir
								TOTAL	10,040	

This page intentionally left blank.

Table D-1.2. Level 1 and Level 2 Inspections Removed From CAP

Contract Number	Force Main Segment Number	Status	Work Order Number	Prioritization Group	Pipe Diameter (in)	Pipe Material	WO Length (ft)	Comments
NF-031	BH-NS-0035	CIP	N/A	1	14	CI	997	Eliminated from CAP due to CIP No. BH-121.
NF-031	JR-NS-0035	REPLACED	N/A	1	18	CI	670	Eliminated from CAP because it was found segment was slip lined with HDPE in 2006.
NF-055	JR-NS-0109	CIP	N/A	1	6	CI	546	Eliminated because of CIP under construction.
NF-006	WMBG-NS-0018	CIP	8	1	36	PCCP	5,000	Eliminated because of CIP under construction.
SF-040	VIP-SS-0052	CIP	57	1	8	CI	1,510	Eliminated due to CIP No. VIP-106 (500 LF) and 2003 replacement (1,010 LF HDPE).
SF-066	VIP-SS-0068	CIP	N/A	2	18	CI	1,030	Segment inspected in November 2009 Pilot. CIP No. VIP-109 (March 2011).
SF-081	VIP-SS-0089	CIP	N/A	2	36	RCP	630	Eliminated due to CIP No. VIP-132.
SF-082	VIP-SS-0092	CIP	N/A	1	20	CI	205	Eliminated due to CIP No. VIP-120.
SF-099	VIP-SS-0132	REPLACED	N/A	2	20	PVC	1,550	Eliminated from CAP because of 2006 PVC replacement.
SF-046/052	VIP-SS-0040	REPLACED	N/A	1	10	CI	405	Eliminated from CAP because of new 2007 PVC.
SF-045	VIP-SS-0043	REPLACED	N/A	1	12	CI	4,276	Eliminated from CAP because of new 2007 PVC.
SF-039	VIP-SS-0048	CIP	N/A	2	6	CI	55	Eliminated from CAP due to CIP No. VIP-106.
SF-188	NA-SS-0065	CIP	N/A	2	14	AC	871	Eliminated from CAP due to CIP No. NP-118.
SF-188	NA-SS-0066	CIP	N/A	2	14	AC	141	Eliminated from CAP due to CIP No. NP-118.
SF-188	NA-SS-0067	CIP	N/A	2	14	AC	1,449	Eliminated from CAP due to CIP No. NP-118.
							Total	19,335

Table D-2. Group Ferrous Summary

Contract Number	Force Main Segment Number	Diameter (inches)	HRSD PS	HRSD PS Number	Length of Segment for Inspection (Feet)	Pipe Material	Length Inspected (Feet)	Inspection Comments
SF-170	AT-SS-0194	16	SHIPS CORNER PRS	143	2,970	DI	889	This segment includes both AC and DI pipe. 2081 LF Removed because of material discrepancy.
SF-128	AT-SS-0228	24	PINE TREE PRS	120	3,000	DI	0	Pipe material was confirmed as reinforced flat bottom concrete pipe. No inspection required.
NF-031/032	JR-NS-0036	18	NORMANDY LANE	220	2,950	DI	2,950	
NF-171	JR-NS-0050	24	PATRICK HENRY	221	450	DI	2000	
NF-018	JR-NS-0054	18	PATRICK HENRY	221	500	CI	3000	
SF-216	VIP-SS-0031	20	ELMHURST LN	144	900	CI/DI	2,675	Force main length per GIS data is 2,675 LF
SF-065	VIP-SS-0066	18	LUXEMBOURG AVE	113	1,100	CI	0	Force main segment scheduled to be replaced; no inspection needed.
SF-268/270	VIP-SS-0121	30	STATE ST	127	2,608	DI	2,608	
NF-171/019	JR-NS-0051	24	PATRICK HENRY	221	1,334	DI	1,334	
SF-103	VIP-SS-0141	16	STEAMBOAT CREEK	128	199	DI	199	
SF-027	NA-SS-0151	36	ROUTE 337 PRS	154	376	DI	376	
SF-163	AT-SS-0056	10	DOZIER'S CORNER	109	2,136	CI	2,136	
NF-075	BH-NS-0026	14	PINE CHAPEL	222	304	CI	304	Force main segment is 10" CIP where UST testing was performed
SF-143	NA-SS-0169	24	DEEP CREEK PRS	138	3,000	DI	3,000	
SF-008	AB-SS-0030	20	DOVERCOURT RD	117	2,990	CI	2,990	Force main segment was inspected in November 2009 Pilot
SF-031	NA-SS-0012	24	CEDAR LANE	104	949	DI	949	
SF-138	NA-SS-0164	24	BOWERS HILL PRS	137	323	DI	323	
SF-143	NA-SS-0174	24	WASHINGTON DISTRICT	131	2,272	DI	2,272	
SF-090	VIP-SS-0097	16	VIRGINIA BEACH BLVD	130	2,069	CI	2,069	
SF-097	VIP-SS-0129	30	QUAIL AVE PRS	139	2,975	DI	2,975	
SF-143	NA-SS-0176	30	WASHINGTON DISTRICT	131	328	DI	0	Pipe material was confirmed as PCC pipe. No inspection required.

Table D-2. Group Ferrous Summary

Contract Number	Force Main Segment Number	Diameter (inches)	HRSD PS	HRSD PS Number	Length of Segment for Inspection (Feet)	Pipe Material	Length Inspected (Feet)	Inspection Comments
SF-143	NA-SS-0177	14	WASHINGTON DISTRICT	131	366	CI	366	
SF-094	VIP-SS-0109	8	INGELSIDE RD	148	2,642	DI	2,642	
SF-097/270	VIP-SS-0122	30	STATE ST	127	392	DI	392	
SF-064	VIP-SS-0072	6	ASHLAND CIRCLE	102	1,269	CI	600	Visual inspection confirmed pipe material is PVC.
SF-062	VIP-SS-0075	6	GRANBY ST	111	70	CI	0	Removed from CAP due to CIP. CIP Nos. VIP-104, VIP-105, and VIP-161
SF-076	VIP-SS-0076	8	NORVIEW AVE	118	1,800	CI	1,800	
SF-101	VIP-SS-0144	10	STEAMBOAT CREEK	128	206	DI	206	
SF-031	NA-SS-0011	24	CEDAR LANE	104	2,051	DI	2,051	
SF-027	NA-SS-0148	36	ROUTE 337 PRS	154	260	DI	260	
NF-121	BH-NS-0037	12	25TH ST	201	2,510	CI	2,510	
SF-101/103	VIP-SS-0142	10	STEAMBOAT CREEK	128	99	DI	99	
SF-143	NA-SS-0175	24	WASHINGTON DISTRICT	131	2	DI	2	
SF-235	AB-SS-0019	24	TAUSSIG BLVD	129	1,938	DI	1,938	
SF-092	VIP-SS-0106	8	SEAY AVE	125	931	CI	3000	
SF-101	VIP-SS-0145	8	STEAMBOAT CREEK	128	2	CI	2	
SF-101	VIP-SS-0146	8	STEAMBOAT CREEK	128	7	CI	7	
SF-146	VIP-SS-0153	12	QUAIL AVE	123	2,168	CI	2,168	
SF-043	VIP-SS-0047	8	JAMESTOWN CRESCENT	142	200	CI	1,220	The PCAR footage states 200 LF but is 1,220 LF per GIS data.
SF-235	AB-SS-0017	24	TAUSSIG BLVD	129	696	DI	696	Force main segment is 30" DIP per record drawings
SF-235	AB-SS-0020	16	TAUSSIG BLVD	129	364	DI	364	
SF-097	VIP-SS-0130	24	QUAIL AVE PRS	139	5	DI	5	
SF-097	VIP-SS-0131	24	QUAIL AVE PRS	139	20	DI	20	
NF-042	JR-NS-0066	12	MORRISON	218	597	CI	0	Force main is 12" AC. No inspection required
SF-093	VIP-SS-0107	10	INGELSIDE RD	148	1,354	DI	1,354	
SF-146	VIP-SS-0148	12	QUAIL AVE	123	29	CI	29	

Table D-2. Group Ferrous Summary

Contract Number	Force Main Segment Number	Diameter (inches)	HRSD PS	HRSD PS Number	Length of Segment for Inspection (Feet)	Pipe Material	Length Inspected (Feet)	Inspection Comments
SF-146	VIP-SS-0149	12	QUAIL AVE	123	10	CI	10	
SF-146	VIP-SS-0150	12	QUAIL AVE	123	4	CI	4	
SF-146	VIP-SS-0151	12	QUAIL AVE	123	180	CI	180	
SF-097	VIP-SS-0128	30	near STATE ST		0	DI	650	Force main segment added to the Group Ferrous list due to integrity concerns
SF-039	VIP-SS-0048	6	HANOVER AVE	141	0	CI	1,110	Force main segment not previously identified in the PCAR
SF-160	AT-SS-0054	30	WASHINGTON DISTRICT	131	0	DI	110	Force main segment not previously identified in the PCAR
SF-143	NA-SS-0174	24	WASHINGTON DISTRICT	131	0	DI	50	Force main segment not previously identified in the PCAR
Updated February 2014								
NF-204	WMBG-NS-0105	20	GREENSPRINGS	232	3,000	DI	3,000	
NF-018	JR-NS-0056	18	PATRICK HENRY	221	67	CI	67	
NF-027	WMBG-NS-0038	16	FORT EUSTIS	227	2,530	DI	2,530	
NF-105	BH-NS-0044	10	FERGUSON PARK	210	3,000	CI	3,000	
NF-015/17	JR-NS-0042/43	24, 36	LUCAS CREEK	216	529	CI, DI	3,306	Additional footage inspected due to updated GIS.
NF-177	WMBG-NS-0110	24	FORDS COLONY	231	1,390	DI	1,390	
NF-075	BH-NS-0026	14	PINE CHAPEL	222	304	CI	0	Segment removed from inspections due to replacement in 2012.
NF-085	BH-NS-0025	14	PINE CHAPEL	222	760	CI	3,000	Additional footage inspected due to updated GIS.
NF-113	BH-NS-0042	16	COPELAND PARK	209	3,000	CI	3,000	
NF-107	BH-NS-0043	16	NEWMARKET CREEK	219	3,000	CI	3,000	
NF-048	YR-NS-0125	30	BIG BETHEL	205	3,000	DI	3,000	
NF-162	BH-NS-0036	12	HAMPTON INSTITUTE	211	1,155	CI	1,155	
NF-097/096	BH-NS-0023	14	BAY SHORE LANE	203	3,000	CI	3,000	
SF-006	AB-SS-0022	10	NORTH SHORE ROAD	117	99	CI	99	

Table D-2. Group Ferrous Summary

Contract Number	Force Main Segment Number	Diameter (inches)	HRSD PS	HRSD PS Number	Length of Segment for Inspection (Feet)	Pipe Material	Length Inspected (Feet)	Inspection Comments	
NF-090/NPS 204	BH-NS-0028	8	BLOXOMS CORNER	204	1,731	CI	0	Inspection removed as part of CIP BH-151. Partial inspection completed on FM next to meter vault at Bloxoms Corner PS.	
NF-041	JR-NS-0030/31	12	MORRISON	218	3,035	CI	3,035		
NF-163	WMBG-NS-0032	18	COLONIAL WILLIAMSBURG	229	2,900	DI	2,900		
NF-017	JR-NS-0041	36	LUCAS CREEK	216	2,696	CI	2,696		
NF-177	WMBG-NS-0111	24	FORDS COLONY	231	1,560	DI	1,560		
SF-155	VIP-SS-0155	12	FEREBEE AVENUE	110	0	CI	0	Force main segment not previously identified in the PCAR. Part of CIP VIP-140	
N/A	N/A	24, 30, 48	VIP TP	-	0	DI	500	Force main segment not previously identified in the PCAR	
NF-130	N/A	36	BOAT HARBOR TP	-	0	DI	809	Force main segment not previously identified in the PCAR	
SF-146	VIP-SS-0202	12	QUAIL AVENUE	123	0	DI	115	Force main segment not previously identified in the PCAR	
SF-042	VIP-SS-0201	6	JAMESTOWN CRESCENT	142	0	CI	955	Force main segment not previously identified in the PCAR	
SF-040/041	VIP-SS-0052	8	RICHMOND CRESCENT	144	0	CI	1,400	Force main segment not previously identified in the PCAR	
NF-179	JR-NS-0062	24	KILN CREEK	-	0	DI	1,000	Force main segment not previously identified in the PCAR	
NF-055	JR-NS-0109	6	HILTON SCHOOL	212	0	CI	270	Force main segment not previously identified in the PCAR	
							Total Length Inspected	101,681	

This page intentionally left blank.

Table D-3.1. Level 1 to Level 2 Inspection Results Summary for Group 1 and Group 2 Force Mains

Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Prioritization Group	Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
1	SF-142	NA-SS-0168	24	DI	3	3,315	6	L2-03 / L2-03A	4 UST/ 10 BEM	Rehabilitation Required	NP-R3
1	SF-007	AB-SS-0039	20	RCP	2	2,626	0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-026	YR-NS-0075/76	18	RCP	59	8,484	0	N/A	-	No Rehabilitation Required at this time	N/A
1	SF-159	AT-SS-0063	36	PCCP	13	4,466	20	L2-13	3 Borescope / 4 Coupons	No Rehabilitation Required at this time	N/A
1	SF-213	AT-SS-0191	30	PCCP	15	4,571	6	L2-15	3 Borescope / 3 Coupons	No Rehabilitation Required at this time	N/A
1	SF-164	AT-SS-0044	30	DI	17	4,296	0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-153	BH-NS-0005	30	RCP / DI	6	13,219	17	L2-06	3 BEM	No Rehabilitation Required at this time	N/A
1	NF-039	JR-NS-0011	36	RCP	11	4,827	0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-005/006	WMBG-NS-0021	36	PCCP	8	4,934	0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-172	WMBG-NS-0052	36	PCCP	7	3,509	0	N/A	-	No Rehabilitation Required at this time	N/A

Table D-3.1. Level 1 to Level 2 Inspection Results Summary for Group 1 and Group 2 Force Mains

Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Prioritization Group	Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
1	NF-090	BH-NS-0029	8	CI	10	5,829	0	N/A	-	No Rehabilitation Required at this time	N/A
1	SF-210	AT-SS-0033	30	DI	14	3,281	4	L2-14	1 BEM / 2 UST / 3 Borescope / 1 Coupon	No Rehabilitation Required at this time	N/A
1	SF-097	VIP-SS-0128	30	DI	4	4,717	2	L2-04	1 BEM	No Rehabilitation Required at this time	N/A
1	NF-089	YR-NS-0110	20	AC	56	1,630	0	N/A	-	No Rehabilitation Required at this time	N/A
1	SF-165	AT-SS-0065	36	DI	13		0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-042	JR-NS-0023	20	AC	58	12,287	15	L2-58	3 Borescope / 3 Coupons	No Rehabilitation Required at this time	N/A
1	NF-179	JR-NS-0062	24	DI	60	1,892	3	L2-60	3 BEM	No Rehabilitation Required at this time	N/A
1	NF-031	JR-NS-0074	14	CI	5	561	0 / short inspection	L2-05	2 BEM	No Rehabilitation Required at this time	N/A
1	SF-216/217	VIP-SS-0026	24	RCP	46	555	0	N/A	-	No Rehabilitation Required at this time	N/A
1	NF-105	BH-NS-0045	10	DI	29	730	Unable to perform L1	L2-29	5 UST	No Rehabilitation Required at this time	N/A

Table D-3.1. Level 1 to Level 2 Inspection Results Summary for Group 1 and Group 2 Force Mains

Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Prioritization Group	Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
1	SF-168/169	AT-SS-0014	36	PCCP	31	3,322	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-167	AT-SS-0021	42	PCCP	39	3,376	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-134	AT-SS-0218	30	RCP	40	2,224	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-213	AT-SS-0190	30	PCCP	30	3,874	16	L2-30	3 Borescope / 3 Coupons	No Rehabilitation Required at this time	N/A
2	SF-120	CE-SS-0073	24	RCP	34	2,728	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-160	AT-SS-0054	30	DI	18	4,600	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-258/259	AT-SS-0148	16	DI	63	433	0	N/A	-	No Rehabilitation Required at this time	N/A
2	NF-016	JR-NS-0047	30	PCCP	37	7,536	5	L2-37	3 Borescope / 2 Coupons	No Rehabilitation Required at this time	N/A
2	SF-190	NA-SS-0052	30	PCCP	35	3,276	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-143	NA-SS-0173	24	CI	43	500	0	N/A	-	No Rehabilitation Required at this time	N/A

Table D-3.1. Level 1 to Level 2 Inspection Results Summary for Group 1 and Group 2 Force Mains

Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Prioritization Group	Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
2	SF-070	VIP-SS-0069	16	CI	36	2,556	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-189	NA-SS-0059	24	PCCP	48	1,051	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-122	AT-SS-0230	24	RCP	32	4,510	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-137	NA-SS-0163	30	PCCP	33	3,008	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-218	VIP-SS-0023	30	PCCP	44	691	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-219	VIP-SS-0024	30	RCP	55	2,240	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-121	AT-SS-0238	24	CI	41	4,185	0	N/A	-	No Rehabilitation Required at this time	N/A
2	NF-157	BH-NS-0020	30	RCP	61	275	0	N/A	-	No Rehabilitation Required at this time	N/A
2	SF-143	NA-SS-0170	24	DI	42	1,591	0	N/A	-	No Rehabilitation Required at this time	N/A
						TOTAL	145,351				

Table D-3.2. Level 1 to Level 2 Inspection Results Summary for Reservoir Group											
Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Water Body	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
SF-016	CE-SS-0001	48	PCCP	Lake Smith - Lake Whitehurst	54	4,134	0	N/A	-	No Rehabilitation Required at this time	N/A
SF-017	CE-SS-0026/41	42	RC	Lake Smith	62	1,400	0	N/A	-	No Rehabilitation Required at this time	N/A
SF-015	CE-SS-0035	20	AC	Lake Whitehurst	52	1,111	0	N/A	-	No Rehabilitation Required at this time	N/A
NF-008	WMBG-NS-0009/10/11/12	24	PCCP	Skiffes Creek Reservoir	38	5,266	2	L2-38	2 Coupons	No Rehabilitation Required at this time	N/A
SF-016	CE-SS-0002	48	PCCP	Lake Whitehurst	53	1,560	0	N/A	-	No Rehabilitation Required at this time	N/A
SF-013	CE-SS-0030	24	DI	Lake Whitehurst	51	4,138	0	N/A	-	No Rehabilitation Required at this time	N/A
SF-012/013	CE-SS-0103 & 32	14	CI	Little Creek Reservoir	65	0	Unable to perform L1	L2-65	2 BEM	No Rehabilitation Required	N/A
SF-273	AT-SS-0119	48	STEEL	Stumpy Lake	64	0	Unable to perform L1	L2-64	2 BEM	No Rehabilitation Required	N/A

Table D-3.2. Level 1 to Level 2 Inspection Results Summary for Reservoir Group											
Level 1 Results Summary								Level 2 From Level 1 Results Summary		Action	
Contract Number	Force Main Segment Number	Pipe Diameter (in)	Pipe Material	Water Body	Level 1 Work Order Number	Total LF Level 1	Number of Gas Pockets Found	Level 2 Work Order Number	Level 2 Summary	Recommendation	Addressing Activity
SF-014	CE-SS-0027/28	24	DI	Lake Smith	50	2,060	0	N/A	-	No Rehabilitation Required at this time	N/A
SF-016	CE-SS-0024	16	DI	Lake Whitehurst	66	0	Unable to perform L1	L2-66	1 UST	No Rehabilitation Required at this time	N/A
SF-016	CE-SS-0025	16	DI	Lake Whitehurst	66	0	0	N/A	-	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results

Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-143	NA-SS-0174	GF-38	Ferrous	7/30/2012	CI	24	0.279	0.421	1.77	Rehabilitation Required	Rehab during CAP
SF-143	NA-SS-0174	GF-38	Ferrous	7/30/2012	CI	24	0.287	0.551	1.83	Rehabilitation Required	Rehab during CAP
SF-143	NA-SS-0169	GF-03	Ferrous	6/20/2011	DI	24	0.198	0.298	2.23	No Rehabilitation Required at this time*	Rehab during CAP
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	5/29/2012	DI	30	0.056	0.197	0.19	No Rehabilitation Required at this time*	Rehab during CAP
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	5/29/2012	DI	30	0.077	0.252	0.36	No Rehabilitation Required at this time*	Rehab during CAP
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	5/29/2012	DI	30	0.083	0.364	0.42	No Rehabilitation Required at this time*	Rehab during CAP
SF-144	Out of CAP Scope	900	Other	6/23/2010	DI	24	0.359	0.381	4.72	No Rehabilitation Required at this time	N/A
SF-144	Out of CAP Scope	900	Other	6/22/2010	DI	24	0.403	0.443	5.63	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-080/081/227	Out of CAP Scope	904	Other	8/1/2011	DI	48	0.571	0.587	4.01	No Rehabilitation Required at this time	N/A
SF-080/081/227	Out of CAP Scope	904	Other	8/1/2011	DI	48	0.589	0.598	4.17	No Rehabilitation Required at this time	N/A
NF-089	Out of CAP Scope	905	Other	5/11/2011	DI/AC	20	0.438	0.464	3.83	No Rehabilitation Required at this time	N/A
NF-089	Out of CAP Scope	905	Other	5/11/2011	DI/AC	20	0.464	0.478	4.2	No Rehabilitation Required at this time	N/A
SF-163	AT-SS-0056	GF-02	Ferrous	6/14/2011	CI	10	0.393	0.4	7.92	No Rehabilitation Required at this time	N/A
SF-163	AT-SS-0056	GF-02	Ferrous	6/16/2011	CI	10	0.401	0.421	8.23	No Rehabilitation Required at this time	N/A
SF-163	AT-SS-0056	GF-02	Ferrous	6/13/2011	CI	10	0.403	0.41	8.31	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-163	AT-SS-0056	GF-02	Ferrous	6/15/2011	CI	10	0.406	0.412	8.43	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/21/2011	DI	24	0.324	0.363	4.07	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/16/2011	DI	24	0.341	0.368	4.38	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/17/2011	DI	24	0.361	0.374	4.75	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/21/2011	DI	24	0.4	0.417	5.57	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/15/2011	DI	24	0.401	0.406	5.59	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0169	GF-03	Ferrous	6/14/2011	DI	24	0.402	0.409	5.61	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-143	NA-SS-0169	GF-03	Ferrous	7/1/2011	DI	36	0.636	0.654	6.73	No Rehabilitation Required at this time	N/A
SF-138	NA-SS-0164	GF-04	Ferrous	6/17/2011	DI	24	0.382	0.394	6.17	No Rehabilitation Required at this time	N/A
SF-027	NA-SS-0148	GF-05	Ferrous	7/6/2011	DI	36	0.548	0.576	5.32	No Rehabilitation Required at this time	N/A
SF-027	NA-SS-0151	GF-05	Ferrous	7/1/2011	DI	36	0.628	0.649	6.6	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0177	GF-06	Ferrous	8/23/2011	CI	14	0.636	0.653	9.98	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0175	GF-07	Ferrous	8/25/2011	DI	24	0.334	0.336	4.25	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0175	GF-07	Ferrous	8/25/2011	DI	24	0.341	0.365	4.38	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-143	NA-SS-0175	GF-07	Ferrous	8/29/2011	DI	24	0.388	0.397	5.31	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0174	GF-07	Ferrous	8/30/2011	DI	24	0.396	0.417	5.48	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0175	GF-07	Ferrous	8/24/2011	DI	24	0.409	0.424	5.77	No Rehabilitation Required at this time	N/A
SF-216	VIP-SS-0031	GF-08	Ferrous	8/19/2011	CI	20	0.63	0.65	7	No Rehabilitation Required at this time	N/A
SF-216	VIP-SS-0031	GF-08	Ferrous	9/15/2011	DI	20	0.415	0.423	7.59	No Rehabilitation Required at this time	N/A
SF-216	VIP-SS-0031	GF-08	Ferrous	8/18/2011	DI	20	0.42	0.438	7.75	No Rehabilitation Required at this time	N/A
SF-216	VIP-SS-0031	GF-08	Ferrous	9/16/2011	DI	20	0.433	0.441	8.18	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-216	VIP-SS-0031	GF-08	Ferrous	8/17/2011	DI	20	0.605	0.64	15.29	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0011	GF-09	Ferrous	11/3/2011	DI	24	0.431	0.443	6.28	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0012	GF-09	Ferrous	11/2/2011	DI	24	0.439	0.449	6.47	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0012	GF-09	Ferrous	11/15/2011	DI	24	0.44	0.446	6.5	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0011	GF-09	Ferrous	11/3/2011	DI	24	0.444	0.452	6.6	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0011	GF-09	Ferrous	11/3/2011	DI	24	0.446	0.45	6.65	No Rehabilitation Required at this time	N/A
SF-031	NA-SS-0011	GF-09	Ferrous	11/14/2011	DI	24	0.449	0.453	6.72	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-195	AB-SS-0017	GF-11	Ferrous	4/6/2012	DI	30	0.378	0.399	4.89	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/5/2012	DI	24	0.354	0.373	5.61	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/2/2012	DI	24	0.377	0.385	6.07	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/6/2012	DI	30	0.464	0.471	6.25	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/2/2012	DI	24	0.388	0.398	6.3	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/5/2012	DI	24	0.388	0.396	6.3	No Rehabilitation Required at this time	N/A
SF-195	AB-SS-0017	GF-11	Ferrous	4/2/2012	DI	16	0.396	0.413	10.21	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-008	AB-SS-0030	GF-12	Ferrous	11/21/2011	CI	20	0.486	0.513	3.59	No Rehabilitation Required at this time	N/A
SF-008	AB-SS-0030	GF-12	Ferrous	12/1/2011	CI	20	0.515	0.529	3.92	No Rehabilitation Required at this time	N/A
SF-008	AB-SS-0030	GF-12	Ferrous	11/28/2011	CI	20	0.534	0.551	4.15	No Rehabilitation Required at this time	N/A
SF-008	AB-SS-0030	GF-12	Ferrous	12/1/2011	CI	20	0.542	0.562	4.25	No Rehabilitation Required at this time	N/A
SF-008	AB-SS-0030	GF-12	Ferrous	11/28/2011	CI	20	0.559	0.602	4.47	No Rehabilitation Required at this time	N/A
SF-008	AB-SS-0030	GF-12	Ferrous	11/18/2011	CI	20	0.717	0.722	6.67	No Rehabilitation Required at this time	N/A
SF-076	VIP-SS-0076	GF-13	Ferrous	11/21/2011	CI	8	0.378	0.425	10.02	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-076	VIP-SS-0076	GF-13	Ferrous	11/21/2011	CI	8	0.386	0.394	10.24	No Rehabilitation Required at this time	N/A
SF-076	VIP-SS-0076	GF-13	Ferrous	11/21/2011	CI	8	0.434	0.451	11.51	No Rehabilitation Required at this time	N/A
SF-146	VIP-SS-0148/0151/0153	GF-15	Ferrous	5/23/2012	CI	12	0.415	0.463	6.54	No Rehabilitation Required at this time	N/A
SF-146	VIP-SS-0148/0151/0153	GF-15	Ferrous	5/21/2012	CI	12	0.45	0.464	7.62	No Rehabilitation Required at this time	N/A
SF-146	VIP-SS-0148/0151/0153	GF-15	Ferrous	5/22/2012	CI	12	0.473	0.5	8.39	No Rehabilitation Required at this time	N/A
SF-146	VIP-SS-0148/0151/0153	GF-15	Ferrous	5/25/2012	CI	12	0.503	0.516	9.15	No Rehabilitation Required at this time	N/A
SF-146	VIP-SS-0148/0151/0153	GF-15	Ferrous	5/22/2012	CI	12	0.537	0.55	9.76	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/20/2010	DI	18	0.341	0.354	6.23	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/21/2010	DI	18	0.35	0.362	6.51	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/21/2010	DI	18	0.351	0.362	6.54	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/21/2010	DI	18	0.375	0.384	7.34	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/20/2010	DI	18	0.383	0.402	7.62	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	6/29/2010	DI	18	0.4	0.41	8.23	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/19/2010	DI	18	0.422	0.436	9.07	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/20/2010	DI	18	0.424	0.437	9.15	No Rehabilitation Required at this time	N/A
NF-031/032	JR-NS-0036	GF-16	Ferrous	7/20/2010	DI	18	0.474	0.483	11.26	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-17	Ferrous	3/16/2012	DI	30	0.38	0.426	4.92	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-17	Ferrous	3/16/2012	DI	30	0.418	0.435	5.5	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-17	Ferrous	3/16/2012	DI	30	0.423	0.43	5.58	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	12/22/2010	CI	18	0.546	0.57	6.4	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	12/10/2010	CI	18	0.564	0.579	6.79	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-018	JR-NS-0054	GF-19	Ferrous	1/25/2011	CI	18	0.567	0.572	6.86	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	1/25/2011	CI	18	0.656	0.668	8.07	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	12/10/2010	CI	18	0.681	0.706	8.38	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	12/21/2010	CI	18	0.719	0.756	8.85	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0054	GF-19	Ferrous	1/25/2011	CI	18	0.72	0.74	8.86	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0050	GF-20	Ferrous	12/9/2010	DI	24	0.461	0.467	3.32	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0050	GF-20	Ferrous	1/25/2011	DI	24	0.39	0.4	5.35	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-171	JR-NS-0050	GF-20	Ferrous	12/10/2010	DI	24	0.395	0.438	5.46	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0050	GF-20	Ferrous	12/22/2010	DI	24	0.434	0.439	6.35	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0050	GF-20	Ferrous	12/20/2010	DI	24	0.462	0.475	7.06	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0051	GF-21	Ferrous	1/25/2011	DI	24	0.438	0.451	6.45	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0051	GF-21	Ferrous	1/25/2011	DI	24	0.47	0.518	7.27	No Rehabilitation Required at this time	N/A
NF-171	JR-NS-0051	GF-21	Ferrous	1/25/2011	DI	24	0.505	0.511	8.24	No Rehabilitation Required at this time	N/A
NF-017	JR-NS-0041	GF-22	Ferrous	2/4/2011	CI	36	0.427	0.519	3.76	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-017	JR-NS-0041	GF-22	Ferrous	2/4/2011	CI	36	0.456	0.46	4.1	No Rehabilitation Required at this time	N/A
NF-017	JR-NS-0041	GF-22	Ferrous	2/2/2011	CI	36	0.474	0.51	4.32	No Rehabilitation Required at this time	N/A
NF-017	JR-NS-0041	GF-22	Ferrous	2/4/2011	CI	36	0.486	0.532	4.47	No Rehabilitation Required at this time	N/A
NF-017	JR-NS-0041	GF-22	Ferrous	2/2/2011	CI	36	0.489	0.547	4.51	No Rehabilitation Required at this time	N/A
NF-017	JR-NS-0041	GF-22	Ferrous	2/2/2011	CI	36	0.553	0.576	5.4	No Rehabilitation Required at this time	N/A
NF-121	BH-NS-037	GF-23	Ferrous	12/22/2010	CI	12	0.306	0.319	3.79	No Rehabilitation Required at this time	N/A
NF-121	BH-NS-037	GF-23	Ferrous	12/21/2010	CI	12	0.319	0.369	4.06	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-121	BH-NS-037	GF-23	Ferrous	1/25/2011	CI	18	0.47	0.518	4.91	No Rehabilitation Required at this time	N/A
NF-121	BH-NS-037	GF-23	Ferrous	1/5/2011	CI	12	0.393	0.458	5.9	No Rehabilitation Required at this time	N/A
NF-121	BH-NS-037	GF-23	Ferrous	1/5/2011	CI	12	0.413	0.459	6.48	No Rehabilitation Required at this time	N/A
SF-170	AT-SS-0194	GF-24	Ferrous	5/10/2011	DI	16	0.348	0.367	7.51	No Rehabilitation Required at this time	N/A
SF-170	AT-SS-0194	GF-24	Ferrous	5/10/2011	DI	16	0.427	0.435	10.95	No Rehabilitation Required at this time	N/A
SF-092	VIP-SS-0106	GF-25	Ferrous	3/15/2011	CI	8	0.316	0.342	7.39	No Rehabilitation Required at this time	N/A
SF-092	VIP-SS-0106	GF-25	Ferrous	3/15/2011	CI	8	0.317	0.337	7.44	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-092	VIP-SS-0106	GF-25	Ferrous	3/15/2011	CI	8	0.346	0.365	8.81	No Rehabilitation Required at this time	N/A
SF-092	VIP-SS-0106	GF-25	Ferrous	3/15/2011	CI	8	0.347	0.36	8.86	No Rehabilitation Required at this time	N/A
SF-092	VIP-SS-0106	GF-25	Ferrous	3/18/2011	CI	8	0.359	0.372	9.47	No Rehabilitation Required at this time	N/A
SF-092	VIP-SS-0106	GF-25	Ferrous	3/15/2011	CI	8	0.373	0.388	9.89	No Rehabilitation Required at this time	N/A
SF-039/043	VIP-SS-0047/48	GF-26	Ferrous	6/27/2012	CI	8	0.329	0.349	7.99	No Rehabilitation Required at this time	N/A
SF-039/043	VIP-SS-0047/48	GF-26	Ferrous	7/6/2012	CI	6	0.312	0.354	10.85	No Rehabilitation Required at this time	N/A
SF-039/043	VIP-SS-0047/48	GF-26	Ferrous	7/3/2012	CI	6	0.336	0.366	11.69	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-039/043	VIP-SS-0047/48	GF-26	Ferrous	6/28/2012	CI	6	0.343	0.363	11.93	No Rehabilitation Required at this time	N/A
SF-039/043	VIP-SS-0047/48	GF-26	Ferrous	7/2/2012	CI	6	0.4	0.418	13.91	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/15/2012	DI	30	0.294	0.393	2.86	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/16/2012	DI	30	0.342	0.377	3.43	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/18/2012	DI	30	0.344	0.389	3.45	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/11/2012	DI	30	0.352	0.384	3.55	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/17/2012	DI	30	0.352	0.38	3.55	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-097	VIP-SS-0129/130/131	GF-27	Ferrous	5/10/2012	DI	30	0.4	0.443	4.21	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	6/25/2012	DI	30	0.356	0.377	3.6	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	6/22/2012	DI	30	0.368	0.389	3.76	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	6/6/2012	DI	30	0.378	0.428	3.9	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	6/1/2012	DI	30	0.397	0.407	4.16	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	6/6/2012	DI	30	0.404	0.425	4.26	No Rehabilitation Required at this time	N/A
SF-268/270/097	VIP-SS-0121/122	GF-28	Ferrous	5/31/2012	DI	30	0.372	0.378	4.8	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.324	0.406	3.21	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.383	0.414	3.96	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.421	0.459	4.52	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.432	0.45	4.69	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.433	0.465	4.7	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.435	0.456	4.74	No Rehabilitation Required at this time	N/A
SF-160	AT-SS-0054	GF-29	Ferrous	11/2/2011	DI	30	0.545	0.56	6.74	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-094	VIP-SS-109	GF-31	Ferrous	6/11/2012	CI	8	0.352	0.369	9.11	No Rehabilitation Required at this time	N/A
SF-094	VIP-SS-109	GF-31	Ferrous	6/12/2012	CI	8	0.378	0.389	10.02	No Rehabilitation Required at this time	N/A
SF-094	VIP-SS-109	GF-31	Ferrous	6/6/2012	CI	8	0.385	0.4	10.21	No Rehabilitation Required at this time	N/A
SF-094	VIP-SS-109	GF-31	Ferrous	6/14/2012	CI	8	0.415	0.429	11.01	No Rehabilitation Required at this time	N/A
SF-094	VIP-SS-109	GF-31	Ferrous	6/13/2012	CI	8	0.422	0.431	11.19	No Rehabilitation Required at this time	N/A
SF-093	VIP-SS-107	GF-32	Ferrous	6/19/2012	CI	10	0.36	0.388	6.7	No Rehabilitation Required at this time	N/A
SF-093	VIP-SS-107	GF-32	Ferrous	6/18/2012	CI	10	0.362	0.414	6.77	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-101/103	VIP-SS-0141/-0146	GF-34	Ferrous	7/18/2012	CI	10	0.312	0.344	5.13	No Rehabilitation Required at this time	N/A
SF-101/103	VIP-SS-0141/-0146	GF-34	Ferrous	7/19/2012	DI	16	0.388	0.394	9.15	No Rehabilitation Required at this time	N/A
SF-101/103	VIP-SS-0141/-0146	GF-34	Ferrous	7/17/2012	DI	10	0.414	0.439	20.64	No Rehabilitation Required at this time	N/A
SF-143	NA-SS-0174	GF-38	Ferrous	7/30/2012	DI	24	0.436	0.804	3.07	No Rehabilitation Required at this time	N/A
SF-159	AT-SS-0063	PR-13	1	6/29/2011	DI	24	0.314	0.373	3.9	No Rehabilitation Required at this time	N/A
SF-165	AT-SS-0065	PR-13	1	6/29/2011	DI	24	0.413	0.429	5.86	No Rehabilitation Required at this time	N/A
NF-210	AT-SS-0033	L1-14	1	6/29/2011	DI	30	0.34	0.35	3.4	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-210	AT-SS-0033	L1-14	1	6/30/2011	DI	30	0.414	0.424	4.41	No Rehabilitation Required at this time	N/A
SF-121	AT-SS-0238	L1-41	2	12/9/2010	CI	24	0.44	0.458	3.11	No Rehabilitation Required at this time	N/A
SF-121	AT-SS-0238	L1-41	2	12/9/2010	CI	24	0.389	0.407	2.63	No Rehabilitation Required at this time	N/A
SF-121	AT-SS-0238	L1-41	2	12/9/2010	CI	24	0.401	0.409	2.74	No Rehabilitation Required at this time	N/A
SF-121	AT-SS-0238	L1-41	2	12/9/2010	CI	24	0.407	0.416	2.79	No Rehabilitation Required at this time	N/A
SF-142	NA-SS-0168	L2-03A	1	10/13/2011	DI	24	0.389	0.4	5.33	No Rehabilitation Required at this time	N/A
SF-142	NA-SS-0168	L2-03A	1	10/12/2011	DI	24	0.396	0.407	5.48	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-142	NA-SS-0168	L2-03A	1	10/14/2011	DI	24	0.4	0.409	5.57	No Rehabilitation Required at this time	N/A
SF-142	NA-SS-0168	L2-03A	1	10/17/2011	DI	24	0.43	0.444	6.26	No Rehabilitation Required at this time	N/A
NF-210	AT-SS-0033	L2-14	1	6/29/2011	DI	30	0.34	0.35	3.4	No Rehabilitation Required at this time	N/A
NF-210	AT-SS-0033	L2-14	1	6/30/2011	DI	30	0.414	0.434	4.41	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0045	L2-29	1	4/22/2011	DI	10	0.292	0.301	10.41	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0045	L2-29	1	4/22/2011	DI	10	0.311	0.322	11.75	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0045	L2-29	1	4/22/2011	DI	10	0.321	0.328	12.49	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-105	BH-NS-0045	L2-29	1	4/22/2011	DI	10	0.327	0.336	12.95	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0045	L2-29	1	4/22/2011	DI	10	0.342	0.346	14.14	No Rehabilitation Required at this time	N/A
SF-016	CE-SS-0024/25	L2-66	2	12/15/2011	DI	20	0.434	0.45	8.22	No Rehabilitation Required at this time	N/A
Updated February 2014											
SF-146	VIP-SS-0202	GF-30	Ferrous	11/1/2012	DI	12	0.301	0.309	8.23	No Rehabilitation Required at this time	N/A
SF-042	VIP-SS-0201	GF-35	Ferrous	10/4/2012	CI	6	0.255	0.287	7.78	No Rehabilitation Required at this time	N/A
SF-042	VIP-SS-0201	GF-35	Ferrous	10/9/2012	CI	6	0.267	0.299	8.51	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-041/042	VIP-SS-0052	GF-36	Ferrous	10/10/2012	CI	8	0.349	0.367	8.96	No Rehabilitation Required at this time	N/A
SF-041/042	VIP-SS-0052	GF-36	Ferrous	10/11/2012	CI	12	0.305	0.35	3.76	No Rehabilitation Required at this time	N/A
SF-006	AB-SS-0022	GF-37	Ferrous	11/2/2012	CI	12	0.438	0.459	7.24	No Rehabilitation Required at this time	N/A
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/7/2012	DI	20	0.39	0.4	6.82	No Rehabilitation Required at this time	N/A
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/8/2012	DI	20	0.403	0.42	7.21	No Rehabilitation Required at this time	N/A
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/8/2012	DI	20	0.386	0.4	6.70	No Rehabilitation Required at this time	N/A
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/7/2012	DI	20	0.391	0.398	6.85	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/6/2012	DI	20	0.409	0.414	7.40	No Rehabilitation Required at this time	N/A
NF-204	WMBG-NS-0105	GF-39	Ferrous	11/6/2012	DI	20	0.59	0.367	5.93	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/14/2012	DI	24	N/A (see BEM Table)	0.45	N/A (see BEM Table)	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/12/2012	DI	24	0.401	0.414	5.59	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/15/2012	DI	24	0.545	0.561	9.44	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/20/2012	DI	24	0.404	0.416	5.65	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/26/2012	DI	24	0.436	0.469	6.40	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/27/2012	DI	24	0.464	0.484	7.11	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/11/2013	DI	30	0.409	0.441	4.34	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/11/2013	DI	30	0.402	0.455	4.23	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/11/2013	DI	30	0.476	0.498	5.42	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/10/2013	DI	30	0.443	0.451	4.86	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/10/2013	DI	30	0.4	0.414	4.21	No Rehabilitation Required at this time	N/A
NF-048	YR-NS-0125	GF-41	Ferrous	1/10/2013	DI	30	0.4	0.409	4.21	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/18/2013	DI	16	0.306	0.326	6.01	No Rehabilitation Required at this time	N/A
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/18/2013	DI	16	0.321	0.34	6.52	No Rehabilitation Required at this time	N/A
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/16/2013	DI	16	0.288	0.314	5.43	No Rehabilitation Required at this time	N/A
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/16/2013	DI	16	0.333	0.347	6.95	No Rehabilitation Required at this time	N/A
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/14/2013	DI	16	0.355	0.374	7.79	No Rehabilitation Required at this time	N/A
NF-027	WMBG-NS-0038	GF-42	Ferrous	1/14/2013	DI	16	0.311	0.324	6.18	No Rehabilitation Required at this time	N/A
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/15/2013	DI	18	0.397	0.405	8.12	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/12/2013	DI	18	0.335	0.344	6.05	No Rehabilitation Required at this time	N/A
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/12/2013	DI	18	0.403	0.407	8.34	No Rehabilitation Required at this time	N/A
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/13/2013	DI	18	0.294	0.317	4.90	No Rehabilitation Required at this time	N/A
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/14/2013	DI	18	0.344	0.355	6.32	No Rehabilitation Required at this time	N/A
NF-163	WMBG-NS-0032	GF-43	Ferrous	2/14/2013	DI	18	0.355	0.365	6.67	No Rehabilitation Required at this time	N/A
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/29/2013	CI	14	0.442	0.482	6.12	No Rehabilitation Required at this time	N/A
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/21/2013	CI	14	0.373	0.417	4.52	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/22/2013	CI	14	0.437	0.468	5.99	No Rehabilitation Required at this time	N/A
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/23/2013	CI	14	0.372	0.403	4.50	No Rehabilitation Required at this time	N/A
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/24/2013	CI	14	0.438	0.481	6.02	No Rehabilitation Required at this time	N/A
NF-097/096	BH-NS-0023	GF-44	Ferrous	1/28/2013	CI	14	0.412	0.46	5.39	No Rehabilitation Required at this time	N/A
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/4/2013	CI	12	0.562	0.59	10.22	No Rehabilitation Required at this time	N/A
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/2/2013	CI	12	0.569	0.582	10.35	No Rehabilitation Required at this time	N/A
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/2/2013	CI	12	0.431	0.44	7.02	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/2/2013	CI	12	0.6	0.617	10.91	No Rehabilitation Required at this time	N/A
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/3/2013	CI	12	0.494	0.501	8.98	No Rehabilitation Required at this time	N/A
NF-041	JR-NS-0030 and JR-NS-0031	GF-45	Ferrous	4/3/2013	CI	12	0.461	0.478	7.98	No Rehabilitation Required at this time	N/A
NF-113	BH-NS-0042	GF-46	Ferrous	2/7/2013	CI	16	0.433	0.477	4.96	No Rehabilitation Required at this time	N/A
NF-113	BH-NS-0042	GF-46	Ferrous	2/6/2013	CI	16	0.474	0.511	5.82	No Rehabilitation Required at this time	N/A
NF-113	BH-NS-0042	GF-46	Ferrous	2/6/2013	CI	16	0.443	0.488	5.16	No Rehabilitation Required at this time	N/A
NF-113	BH-NS-0042	GF-46	Ferrous	2/5/2013	CI	16	0.372	0.472	3.84	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-113	BH-NS-0042	GF-46	Ferrous	2/4/2013	CI	16	0.412	0.46	4.55	No Rehabilitation Required at this time	N/A
NF-113	BH-NS-0042	GF-46	Ferrous	2/1/2013	CI	16	0.465	0.482	5.62	No Rehabilitation Required at this time	N/A
NF-107	BH-NS-0043	GF-47	Ferrous	3/1/2013	CI	16	0.459	0.487	5.49	No Rehabilitation Required at this time	N/A
NF-107	BH-NS-0043	GF-47	Ferrous	2/28/2013	CI	16	0.519	0.545	6.87	No Rehabilitation Required at this time	N/A
NF-107	BH-NS-0043	GF-47	Ferrous	2/27/2013	CI	16	0.546	0.55	7.53	No Rehabilitation Required at this time	N/A
NF-107	BH-NS-0043	GF-47	Ferrous	2/25/2013	CI	16	0.593	0.607	8.18	No Rehabilitation Required at this time	N/A
NF-107	BH-NS-0043	GF-47	Ferrous	2/22/2013	CI	16	0.611	0.661	8.43	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-107	BH-NS-0043	GF-47	Ferrous	2/21/2013	CI	16	0.437	0.459	5.04	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/21/2013	CI	10	0.451	0.456	9.75	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/20/2013	CI	10	0.532	0.536	11.50	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/20/2013	CI	10	0.445	0.45	9.62	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/19/2013	CI	10	0.426	0.442	9.21	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/19/2013	CI	10	0.359	0.415	6.66	No Rehabilitation Required at this time	N/A
NF-105	BH-NS-0044	GF-48	Ferrous	8/19/2013	CI	10	0.493	0.499	10.66	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-162	BH-NS-0036	GF-49	Ferrous	8/6/2013	CI	12	0.454	0.482	7.75	No Rehabilitation Required at this time	N/A
NF-162	BH-NS-0036	GF-49	Ferrous	8/8/2013	CI	12	0.403	0.438	6.19	No Rehabilitation Required at this time	N/A
NF-055	JR-NS-0109	GF-50	Ferrous	3/7/2013	CI	6	0.316	0.332	10.99	No Rehabilitation Required at this time	N/A
NPS-204	BH-NS-0028	GF-51	Ferrous	8/7/2013	DI	8	0.43	0.43	26.61	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	4/15/2013	CI	14	0.55	0.571	8.63	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	4/18/2013	CI	14	0.559	0.599	8.77	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	4/16/2013	CI	14	0.582	0.591	9.13	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-085	BH-NS-0025	GF-52	Ferrous	4/17/2013	CI	14	0.596	0.635	9.35	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	4/18/2013	CI	14	0.552	0.593	8.66	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	4/19/2013	CI	14	0.563	0.581	8.83	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	10/11/2013	CI	10	0.416	0.513	8.84	No Rehabilitation Required at this time	N/A
NF-085	BH-NS-0025	GF-52	Ferrous	10/11/2013	CI	10	0.322	0.34	5.44	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/22/2013	CI	24	0.355	0.37	2.35	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/23/2013	DI	24	0.481	0.517	7.56	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/24/2013	DI	24	0.4	0.431	5.57	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	5/1/2013	DI	24	0.366	0.433	4.85	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/26/2013	DI	24	0.492	0.538	7.87	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/30/2013	DI	24	0.376	0.492	5.06	No Rehabilitation Required at this time	N/A
NF-017 and NF-015	JR-NS-0042 and JR-NS-0043	GF-53	Ferrous	4/26/2013	DI	24	0.489	0.497	7.78	No Rehabilitation Required at this time	N/A
NF-018	JR-NS-0056	GF-54	Ferrous	7/25/2013	CI	18	0.305	0.313	2.54	No Rehabilitation Required at this time	N/A
NF-130	N/A	GF-56	Ferrous	7/29/2013	DI	36	0.394	0.406	3.41	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
NF-130	N/A	GF-56	Ferrous	7/31/2013	DI	36	0.409	0.43	3.57	No Rehabilitation Required at this time	N/A
NF-130	N/A	GF-56	Ferrous	8/2/2013	DI	36	0.374	0.415	3.20	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.44	0.452	6.50	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.409	0.421	5.77	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.452	0.471	5.01	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.454	0.467	5.05	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.401	0.414	5.59	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.389	0.413	5.33	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.496	0.513	5.78	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.431	0.441	6.28	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.433	0.454	6.33	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.447	0.464	4.93	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.46	0.466	5.15	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.436	0.442	6.40	No Rehabilitation Required at this time	N/A

Table D-4. UST Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommended Action	Addressing Activity
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	24	0.42	0.465	6.02	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	GF-57	Ferrous	7/24/2013	DI	30	0.646	0.659	9.05	No Rehabilitation Required at this time	N/A
SF-227	N/A	GF-57	Ferrous	7/24/2013	DI	48	0.682	0.763	5.11	No Rehabilitation Required at this time	N/A
SF-227	N/A	GF-57	Ferrous	7/24/2013	DI	48	0.71	0.73	5.42	No Rehabilitation Required at this time	N/A
NF-179	JR-NS-0062	GF-60	Ferrous	3/22/2012	DI	24	0.387	0.43	5.28	No Rehabilitation Required at this time	N/A
NF-179	JR-NS-0062	GF-60	Ferrous	3/22/2012	DI	24	0.388	0.42	5.31	No Rehabilitation Required at this time	N/A

* Work has been completed.

This page intentionally left blank.

Table D-5. BEM Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommendation	Addressing Activity
SF-143	NA-SF-0169	GF-03	Ferrous	6/21/2011	DIP	24	0.28	0.357	4.45	No Rehabilitation Required at this time	N/A
SF-216	VIP-SF-0031	GF-08	Ferrous	8/10/2011	CI	20	0.469	0.593	4.27	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03	Ferrous	6/20/2011	DIP	30	0.335	0.415	4.41	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03	Ferrous	7/18/2011	DIP	24	0.294	0.408	4.71	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03	Ferrous	6/22/2011	DIP	24	0.307	0.367	4.95	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03	2	7/16/2011	DIP	24	0.321	0.41	5.21	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03	2	7/16/2011	DIP	24	0.337	0.429	5.51	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03A	Ferrous	10/5/2011	DIP	24	0.316	0.347	5.11	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03A	2	10/3/2011	DIP	24	0.367	0.408	6.1	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03A	Ferrous	10/5/2011	DIP	24	0.371	0.402	6.18	No Rehabilitation Required at this time	N/A
SF-142	NA-SF-0168	L2-03A	Ferrous	10/4/2011	DIP	24	0.375	0.446	6.26	No Rehabilitation Required at this time	N/A

Table D-5. BEM Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommendation	Addressing Activity
SF-142	NA-SS-0168	L2-03A	2	10/4/2011	DIP	24	0.388	0.405	6.53	No Rehabilitation Required at this time	N/A
SF-097	VIP-SS-0128	L2-04	Ferrous	6/23/2011	DIP	30	0.398	0.421	5.37	No Rehabilitation Required at this time	N/A
NF-020	JR-NS-0074	L2-05	Ferrous	8/10/2011	CI	14	0.533	0.618	8.43	No Rehabilitation Required at this time	N/A
NF-020	JR-NS-0074	L2-05	Ferrous	8/10/2011	CI	14	0.588	0.63	9.3	No Rehabilitation Required at this time	N/A
NF-153	BH-NS-0005	L2-06	Ferrous	10/4/2011	DIP	36	0.457	0.553	5.28	No Rehabilitation Required at this time	N/A
NF-153	BH-NS-0005	L2-06	Ferrous	10/6/2011	DIP	42	0.571	0.686	5.88	No Rehabilitation Required at this time	N/A
NF-153	BH-NS-0005	L2-06	2	10/5/2011	DIP	36	0.543	0.597	6.46	No Rehabilitation Required at this time	N/A
NF-210	AT-SF-0033	L2-14	2	6/24/2011	DIP	30	0.286	0.362	3.65	No Rehabilitation Required at this time	N/A
NF-179	JR-NS-0062	L2-60	2	8/10/2011	DIP	24	0.305	0.346	4.91	No Rehabilitation Required at this time	N/A
NF-179	JR-NS-0062	L2-60	Ferrous	8/10/2011	DIP	24	0.355	0.5	5.86	No Rehabilitation Required at this time	N/A
NF-179	JR-NS-0062	L2-60	2	8/10/2011	DIP	24	0.404	0.47	6.88	No Rehabilitation Required at this time	N/A

Table D-5. BEM Wall Thickness Testing Results											
Contract Number	Force Main Segment Number	Work Order Number	Group	Date of Inspection	Material	Pipe Diameter (inches)	Minimum Wall Thickness Reading (inches)	Average Wall Thickness Reading (inches)	Limiting Factor of Safety	Recommendation	Addressing Activity
Updated February 2014											
SF-273	AT-SS-0119	L2-64	2	3/28/2013	STEEL	48	0.305	0.315	3.51	No Rehabilitation Required at this time*	N/A
SF-273	AT-SS-0119	L2-64	2	3/28/2013	STEEL	48	0.3	0.315	3.46	No Rehabilitation Required at this time*	N/A
NF-008	WMBG-NS-0009/10/11/12	L2-65	2	4/25/2013	CI	14	0.662	0.693	10.37	No Rehabilitation Required at this time	N/A
NF-008	WMBG-NS-0009/10/11/12	L2-65	2	4/25/2013	CI	14	0.646	0.717	10.14	No Rehabilitation Required at this time	N/A
NA-SS-0175	SF-143	GF-07	Ferrous	11/13/2012	DI	24	0.368	0.419	6.12	No Rehabilitation Required at this time	N/A
NA-SS-0175	SF-143	GF-07	Ferrous	11/13/2012	DI	24	0.344	0.387	5.64	No Rehabilitation Required at this time	N/A
NF-177	WMBG-NS-0111	GF-40	Ferrous	11/16/2012	DI	24	0.369	0.443	6.14	No Rehabilitation Required at this time	N/A

* Factor of Safety Calculated with Wheel Load removed due to location of force main.

This page intentionally left blank.

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-001	5/9/2011	2" AV	W5019A	1	w-5019-a #1 Air vent needs to be rebuilt it has a gate valve on it with no handle. #802868	Rehabilitation or Replacement Required	GN-R8
NF-003	11/8/2010	24" ML	W4005A	2	w-4005-a #2 Valve wrench was red lining.; #735754	Rehabilitation or Replacement Required	GN-R8
NF-005	11/29/2010	12" BRANCH	W2016	3	CANNOT SEAT; W-2016 #3 CANNOT GET ON THE NUT BECAUSE THE RISER PIPE IS SLANTED AND INTERFERING WITH THE WRENCH.; #737256	Rehabilitation or Replacement Required	GN-R8
NF-007	10/7/2010	12" BRANCH	W1004	1	Valve is shut. To be Included in miscellaneous valves Rehab Project to address all of valve complex at once.	No further action required under Rehab Plan.	GN-R8
NF-007	10/7/2010	24" ML	W1004	2	Valve is open. To be included in miscellaneous valves Rehab Project to address all of valve complex at once.	No further action required under Rehab Plan.	GN-R8
NF-011	9/9/2010	36" ML	YR1017B	1	YR-1017-B #1 36" ML: Nut is worn out. Could not exercise valve. #782544	Rehabilitation or Replacement Required	GN-R8
NF-015	5/10/2011	6" BRANCH	JR6014	1	JR-6014 #1 Water bubbling in riser pipe #791846;	Rehabilitation or Replacement Required	GN-R8
NF-017	4/8/2012	12" BRANCH	JR4012	1	Valve is frozen.	Rehabilitation or Replacement Required	GN-R8
NF-047	4/25/2011	12" BRANCH	YR2037	1	SEIZED; YR-2037 #1 12" Branch -Frozen open #791834	Rehabilitation or Replacement Required	GN-R8
NF-060	1/5/2011	LD	YR4002	3	New leak detector required.	Rehabilitation or Replacement Required	GN-R8
NF-077	1/5/2011	10" ML	BH2002	3	BH-2002-3 VALVE VERY STIFF NEED TO BE EXERCISED. #745078	Rehabilitation or Replacement Required	GN-R8
NF-105	12/2/2010	10" ML	BH6013	1	BH-6013-1 M.L. Did not operate. Valve is frozen open. #819122; FROZEN	Rehabilitation or Replacement Required	GN-R8
NF-162	5/11/2011	12" BRANCH	BH1008A	1	SEIZED.	Rehabilitation or Replacement Required	GN-R8

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-163	5/23/2011	18" BRANCH	W3003	4	W-3003 #4 SHAFT IS BENT ON THE VALVE MAKES IT HARD TO OPERATE; #802761	Rehabilitation or Replacement Required	GN-R8
NF-172	5/30/2012	20" Branch	W1004J	10	Nut is free spinning, valve broken.	Rehabilitation or Replacement Required	GN-R8
NF-172	4/18/2011	24" ML	W1004	4	CLOSE Include in miscellaneous valves Rehab Project to address all of valve complex at once	No further action required under Rehab Plan.	GN-R8
NF-172	4/18/2011	12" BRANCH	W1004	9	CLOSE Include in miscellaneous valves Rehab Project to address all of valve complex at once	No further action required under Rehab Plan.	GN-R8
NF-172	4/18/2011	8" BRANCH	W1004	10	CLOSE Include in miscellaneous valves Rehab Project to address all of valve complex at once	No further action required under Rehab Plan.	GN-R8
NF-179	12/6/2011	12" BRANCH	JR5033	3	METAL PLATE; JR-5033 #3 Nut is free spinning, valve broken. #272696	Rehabilitation or Replacement Required	GN-R8
NF-183	12/8/2010	4" BRANCH	YR6603A	1	YR-6603-A #1 Nut has broken off and is wedged between riser and bonnet. # 816802 YR-6603-A-1.	Rehabilitation or Replacement Required	GN-R8
NF-192	12/9/2010	36" ML	W1004	6	OPEN; W-1004-6 M.L. Valve is very stiff. #804468 (12/8/11) These valves are an important flow control area. Rebuild entire valve complex area.	Rehabilitation or Replacement Required	GN-R8
SF-002	9/29/2011	20" VALVE	AB1006	9	Only got to 94 turns (extremely tight).	Rehabilitation or Replacement Required	GN-R8
SF-002	9/27/2011	2" AV	AB1003	3	AB-1003 and AB-1009 are frozen.	Rehabilitation or Replacement Required	GN-R8
SF-014	3/23/2011	24" VALVE	CE3005	2	CE-3005 #2 Could only get 90 total turns on valve. (Extremely tight)	Rehabilitation or Replacement Required	GN-R8
SF-023	3/1/2011	2" AV	NA1006	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-024	12/6/2011	2" AV	NA1017	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-024	12/6/2011	2" AV	NA1018	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-028	3/29/2011	2" AV	NA1040	1	NA-1040 is a gate valve with copper raiser.	Rehabilitation or Replacement Required	GN-R8
SF-060	9/1/2011	20" VALVE	LP1009A	1	Frozen Open; 20" Valve LP-1009A # 1 is frozen open.	Rehabilitation or Replacement Required	GN-R8
SF-101	7/11/2011	10" VALVE	AT6042	6	Extremely tight	Rehabilitation or Replacement Required	GN-R8
SF-117	3/7/2011	24" VALVE	CE2042	2	90 OPEN; CE-2042 #2 (tight)	Rehabilitation or Replacement Required	GN-R8
SF-129	5/3/2011	24" VALVE	AT3048	14	AT-3048 #14 Could only achieve 100 total turns on PM (very tight).	Rehabilitation or Replacement Required	GN-R8
SF-136	2/7/2012	2" AV	NA3047E	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-136	2/6/2012	2" AV	NA3047H	3	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-137	2/7/2012	2" AV	NA3059	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-137	2/7/2012	2" AV	NA3059A	2	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-137	2/6/2012	2" AV	NA3049	2	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-146	7/6/2011	2" AV	AT6031A	1	Air vent AT-6031A # 1 has a 1 1/2" gate valve and the riser has a coupling on it.	No further action required under Rehab Plan.	GN-R8
SF-170	5/31/2011	2" AV	AT1019A	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-188	9/20/2011	2" AV	NA1138A	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-208	2/2/2012	2" AV	NA3002	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-208	2/1/2012	2" AV	NA3003	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-208	2/1/2012	2" AV	NA3006	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-209	1/3/2011	2" AV	AT1159Q	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8
SF-218	8/23/2011	2" AV	VIP6004	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-219	8/17/2011	2" AV	VIP7005	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-219	8/18/2011	2" AV	VIP7011	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-219	8/22/2011	2" AV	VIP7012	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-220	8/16/2011	2" AV	VIP7002	1	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-224	9/12/2011	36" VALVE	VIP4003	6	VIP4003 #6 IS INOPERABLE. THE VALVE IS IN THE OPEN POSITION. UNABLE TO WORK THE VALVE IN EITHER DIRECTION.	Rehabilitation or Replacement Required	GN-R8
SF-230	4/12/2011	2" AV	NA3110	6	Gate valve; should be included under general valves project.	Rehabilitation or Replacement Required	GN-R8
SF-232	4/13/2011	2" AV	AT1224	1	Gate valve; should be included under general valves project.	No further action required under Rehab Plan.	GN-R8

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-267	9/29/2011	2" AV	NA7021	2	Could not open valve	Rehabilitation or Replacement Required	GN-R8
SF-094	9/22/2011	10" VALVE	LP1026C	1	Inoperable Include with Rehab Project VIP-147 Ingleside Rd Pump Station	Rehabilitation or Replacement Required	VIP-R8
SF-184	7/6/2011	14" VALVE	AT1162	1	BROKEN-OPEN	Rehabilitation or Replacement Required	AT-R4
SF-220	8/16/2011	36" VALVE	VIP7001	2	Frozen open Same as VIP2004-2	Rehabilitation or Replacement Required	VIP-R9
NF-001	5/9/2011	2" AV	W5015A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5018A	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5020	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5021	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5019	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-001	5/9/2011	2" AV	W5012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-002	5/10/2011	2" AV	W5003	2	STEEL RISER	Rehabilitation or Replacement Required	Interim System Improvements
NF-003	11/8/2010	2" AV	W4002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-005	11/29/2010	2" AV	W2012	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	JR6033	2	JR-6033- Air vent is not made with concrete rings; PVC pipe set inside casting. #782533; STEEL RISER, GATE VALVE	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	JR6033A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1014	2	CORP. NOT COMPLETELY OPEN	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1017A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1022	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1009A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1010	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-008	5/11/2011	2" AV	W1012A	1	RISER UNKNOWN, GATE VALVE	Rehabilitation or Replacement Required	Interim System Improvements
NF-010	9/15/2010	2" AV	YR1008A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1013	1	CORP. NOT COMPLETELY OPEN	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-011	9/9/2010	2" AV	YR1016A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1017A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1017B	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1018	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1018A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1020	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1022A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1024B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1026	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-011	9/9/2010	2" AV	YR1026A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-012	6/2/2011	2" AV	YR1001	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-012	6/2/2011	2" AV	YR1006B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-012 (OUTFALL)	6/2/2011	2" AV	YR03	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-012 (OUTFALL)	6/2/2011	2" AV	YR03	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-012 (OUTFALL)	6/2/2011	2" AV	YR04	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-012 (OUTFALL)	6/2/2011	2" AV	YR05	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-017	4/4/2011	2" AV	JR4001	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-017	4/4/2011	2" AV	JR4002	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-017	4/4/2011	2" AV	JR4003	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-018	5/18/2011	2" AV	JR5010	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-019	5/26/2011	2" AV	JR5016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-019	5/26/2011	2" AV	JR5017	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-023	3/7/2011	2" AV	YR1031	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-024	3/8/2011	2" AV	YR2013	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-024	3/8/2011	2" AV	YR2013	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-024	3/8/2011	2" AV	YR2014	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-024	3/8/2011	2" AV	YR2015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-024	3/8/2011	2" AV	YR2015A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-025	3/10/2011	2" AV	YR3013	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-025	3/10/2011	2" AV	YR3015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-025	3/10/2011	2" AV	YR3016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-026	3/7/2011	2" AV	YR3009	1	UNKNOWN RISER, INTERNAL STRUCTURE FAILING	Rehabilitation or Replacement Required	Interim System Improvements
NF-028	2/28/2011	2" AV	JR1004	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-029	2/28/2011	2" AV	JR1003	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-030	2/28/2011	36" ML	JR1005	5	NF-030 JR-1005-5 36" Main Line valve was very stiff. #782506; Stiff Being Addressed under Interim System Improvements (JR-108)	Rehabilitation or Replacement Required	Interim System Improvements
NF-030	2/28/2011	8" BRANCH	JR1017	1	OPEN Valve operator broken during last PM. Small connection for a few residences. Being Addressed under Interim System Improvements (JR-108)	Rehabilitation or Replacement Required	Interim System Improvements
NF-032	3/7/2011	2" AV	JR1007	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-032	3/7/2011	2" AV	JR1011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-033	3/1/2011	2" AV	JR1020	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-033	3/1/2011	2" AV	JR1022	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-033	3/1/2011	2" AV	JR1024	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-036	3/1/2011	2" AV	JR1014	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-036	3/1/2011	2" AV	JR1016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1028	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1030	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1031	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1032	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1033	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1037	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-037	10/5/2010	2" AV	JR1038	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-038	10/6/2010	2" AV	JR1035	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-039	5/17/2011	2" AV	JR3003	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-039	5/17/2011	2" AV	JR3003A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR1041	7	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2001	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2001	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2001	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2002	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2002	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-041	4/26/2011	2" AV	JR2002	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-042	4/26/2011	2" AV	JR2013	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-042	4/26/2011	2" AV	JR2016	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-042	4/26/2011	2" AV	JR2018	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-042	4/26/2011	2" AV	JR2023	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-042	4/26/2011	2" AV	JR2024	7	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-046	5/3/2011	2" AV	YR2020	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-047	4/25/2011	2" AV	YR2034A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-047	4/25/2011	2" AV	YR2035	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-047	4/25/2011	2" AV	YR2037	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-047	4/25/2011	2" AV	YR2038	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-048	4/11/2011	2" AV	YR2026	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-048	4/11/2011	2" AV	YR2029	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-048	4/11/2011	2" AV	YR2029	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-049	4/12/2011	2" AV	JR3007	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-049	4/12/2011	2" AV	JR3008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-049	4/12/2011	2" AV	JR3012	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-049	4/12/2011	2" AV	YR2032C	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-050	1/7/2011	2" AV	JR3009	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-050	1/7/2011	2" AV	JR3010	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-050	1/7/2011	2" AV	JR3011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-058	4/6/2011	2" AV	YR4017	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-058	4/6/2011	2" AV	YR4020	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-058	4/6/2011	2" AV	YR4021	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-059	1/5/2011	2" AV	YR2039	6	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-059	1/5/2011	2" AV	YR3018	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-059	1/5/2011	2" AV	YR3018A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-060	1/5/2011	2" AV	YR4002	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-060	1/5/2011	2" AV	YR4004	6	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-061	1/7/2011	2" AV	YR4007	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-061	1/7/2011	2" AV	YR4008	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-065	1/10/2011	2" AV	YR5003	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-065	1/10/2011	2" AV	YR5003	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-066	1/11/2011	2" AV	YR5008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-073	1/4/2011	2" AV	YR4029	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-073	1/4/2011	2" AV	YR4030	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-075	1/4/2011	2" AV	BH2002B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-085	1/31/2011	2" AV	BH2001A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-085	1/31/2011	2" AV	BH2001A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-089	1/12/2011	2" AV	YR5019	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-089	1/12/2011	2" AV	YR5022	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-090	5/10/2011	2" AV	BH5003	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-090	5/10/2011	2" AV	BH5003	2	2" A.V. B.H.-5003-2 Riser pipe has two gate valves and the top valve is in the casting. #802764; Gate Valves/ one in casting/IN GRASS	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-091	1/31/2011	2" AV	YR5017	2	cmms # 764781-Air Vent rebuild.	Rehabilitation or Replacement Required	Interim System Improvements
NF-093	5/19/2010	2" AV	BH4001A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-093	5/19/2010	2" AV	BH4001B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-093	5/19/2010	2" AV	BH4002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-105	12/2/2010	2" AV	BH6012A	1	UNKNOWN RISER, CONCRETE UP TO BALL VALVE	Rehabilitation or Replacement Required	Interim System Improvements
NF-130	2/1/2011	2" AV	BH1001A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-130	2/1/2011	2" AV	BH1001B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-153	2/1/2011	2" AV	BH1003B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-157	2/1/2011	2" AV	BH1012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-165	1/11/2011	2" AV	W2012E	7	Gate Valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-170	5/11/2011	2" AV	BH1006	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5009B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5010	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-171	5/18/2011	2" AV	JR5011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5011A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5011B	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5011D	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-171	5/18/2011	2" AV	JR5012	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018B	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018C	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018D	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018G	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018H	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-177	1/11/2011	2" AV	W5018I	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-178	7/14/2011	2" AV	W5022A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-178	7/14/2011	2" AV	W5026	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-178	7/14/2011	2" AV	W5029B	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-178	7/14/2011	2" AV	W5030	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-178	7/14/2011	2" AV	W5032	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5020	5	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5023	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5024	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5025	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5027	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5028	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5029	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5035	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5036	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-179	12/8/2010	2" AV	JR5037	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-182	12/6/2010	2" AV	YR6040	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
NF-183	12/8/2010	2" AV	YR6601A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-183	12/8/2010	2" AV	YR6602	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-183	12/8/2010	2" AV	YR6605	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-183	12/8/2010	2" AV	YR6608	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-183	12/8/2010	2" AV	YR6611	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6614	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6615	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6616	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6618	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6620	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-184	12/13/2010	2" AV	YR6624	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6043A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-185	12/13/2010	2" AV	YR6046	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6049	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6052	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6053	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6054	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6055	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-185	12/13/2010	2" AV	YR6056	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6057	6	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6058	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6059	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6060	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6061	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6062	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-186	12/15/2010	2" AV	YR6064	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6065	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6067	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6068	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-186	12/15/2010	2" AV	YR6069	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6071	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6072	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6074	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6076	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6078	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6079	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6080	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6081	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-187	12/20/2010	2" AV	YR6082	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6083	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6084	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6085	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6086	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6087	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6087	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6088	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6089	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6090	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6092	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6093	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-187	12/20/2010	2" AV	YR6094	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-188	12/13/2010	2" AV	YR6095	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6096	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6097	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6099	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6100	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6101	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-188	12/13/2010	2" AV	YR6102	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-189	12/14/2010	2" AV	YR6804	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-189	12/14/2010	2" AV	YR6805	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-189	12/14/2010	2" AV	YR6806	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-189	12/14/2010	2" AV	YR6808	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
NF-197	1/5/2011	2" AV	W5513	2	UNKNOWN RISER, CONCRETE	Rehabilitation or Replacement Required	Interim System Improvements
SF-004	10/4/2011	2" AV	AB1015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-005	10/3/2011	2" AV	AB1017	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-008	6/2/2011	2" AV	AB1017B	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-008	6/2/2011	2" AV	AB1017B	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-008	6/1/2011	2" AV	AB1019	2	Could not open; Steel Riser Valve cannot be opened due to the casting being shifted. Will correct when the air vent is replaced	Rehabilitation or Replacement Required	Interim System Improvements
SF-008	5/27/2011	2" AV	AB1019A	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-015	3/24/2011	2" AV	CE3014	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-015	3/24/2011	2" AV	CE3017	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-018	1/27/2011	2" AV	CE5002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-018	1/26/2011	2" AV	CE5003	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-018	1/26/2011	2" AV	CE5004	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-018	1/26/2011	2" AV	CE5005	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-018	1/27/2011	2" AV	CE5006	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-019	4/12/2011	2" AV	CE5009	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-019	4/12/2011	2" AV	CE5011	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-020	4/13/2011	2" AV	CE5012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-020	4/13/2011	2" AV	CE5014	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-020	4/12/2011	2" AV	CE5016	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-020	4/12/2011	2" AV	CE5017	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-020	4/12/2011	2" AV	CE5020	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-021	4/14/2011	2" AV	CE5025	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-021	4/13/2011	2" AV	CE5028	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-022	4/22/2011	2" AV	AT5024	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-022	4/19/2011	2" AV	AT5025	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-022	4/22/2011	2" AV	AT5026	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-022	4/22/2011	2" AV	AT5026	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-022	4/22/2011	2" AV	AT5027	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-023	2/28/2011	2" AV	NA1001	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-023	2/28/2011	AV-HP	NA1005	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-023	3/8/2011	2" AV	NA1012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1019	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1020	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1022	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1024	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1026	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1028	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-025	3/24/2011	2" AV	NA1029	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-026	3/28/2011	2" AV	NA1030	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-026	3/23/2011	2" AV	NA1031	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-026	3/28/2011	2" AV	NA1032	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-026	3/28/2011	2" AV	NA1034	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-026	3/28/2011	2" AV	NA1038	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	4/28/2010	2" AV	NA3008	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	4/28/2010	2" AV	NA3009	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	6/23/2010	2" AV	NA3014	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	6/23/2010	2" AV	NA3014	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	6/23/2010	2" AV	NA3014	6	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/13/2010	2" AV	NA3015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/13/2010	2" AV	NA3016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/13/2010	2" AV	NA3017	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/14/2010	2" AV	NA3022	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/15/2010	2" AV	NA3025	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/15/2010	2" AV	NA3026	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-027	7/15/2010	2" AV	NA3028	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/15/2010	2" AV	NA3028	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-027	7/15/2010	2" AV	NA3029	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	4/4/2011	4" VALVE	NA1039	4	NA1039 #4 Missing Retainer Nut Being addressed under Interim System Improvements (NP-122)	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/29/2011	2" AV	NA1042	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/29/2011	2" AV	NA1043	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/29/2011	2" AV	NA1052	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/29/2011	2" AV	NA1056	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/28/2011	2" AV	NA1057	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/29/2011	2" AV	NA1058	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/30/2011	2" AV	NA1060	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-028	3/31/2011	2" AV	NA1062	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/12/2011	2" AV	NA2003	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-029	7/12/2011	2" AV	NA2004	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/12/2011	2" AV	NA2005	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2006	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2007	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2009	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2010	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/11/2011	2" AV	NA2012	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2013	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2015	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2016	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2017	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-029	7/5/2011	2" AV	NA2018	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2019	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-029	7/5/2011	2" AV	NA2020	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-030	7/12/2011	2" AV	NA2014H	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-031	7/20/2011	2" AV	NA2024	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-031	7/20/2011	2" AV	NA2025	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-031	7/21/2011	2" AV	NA2026	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-032	7/19/2011	2" AV	NA2022	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-032	7/20/2011	2" AV	NA2022A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-032	7/21/2011	2" AV	NA2023A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-038	7/27/2011	2" AV	NA2029	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-038	7/27/2011	2" AV	NA2032	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-038	7/27/2011	2" AV	NA2032	6	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-051	8/16/2011	2" AV	LP2010	1	Riser is at an angle and cannot be whammied Being Addressed under Interim System Improvements (VIP-104)	Rehabilitation or Replacement Required	Interim System Improvements
SF-057	8/22/2011	2" AV	LP1006	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-058	9/6/2011	2" AV	LP1008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-058	9/1/2011	30" VALVE	LP1009	2	VALVE INOPERABLE Being Addressed under Interim System Improvements (VIP-131)	Rehabilitation or Replacement Required	Interim System Improvements
SF-059	9/1/2011	2" AV	LP1012	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1016A	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1017	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1018	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1019	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1019A	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	2" AV	LP1019C	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-080	8/18/2011	30" VALVE	LP1016	1	VALVE IN-OPERABLE Being Addressed under Interim System Improvements (VIP-132)	Rehabilitation or Replacement Required	Interim System Improvements
SF-081	8/18/2011	30" VALVE	LP5001	1	FROZEN OPEN Being Addressed under Interim System Improvements (VIP-132)	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-081	8/18/2011	16" VALVE	LP5002	2	FROZEN OPEN Being Addressed under Interim System Improvements (VIP-132)	Rehabilitation or Replacement Required	Interim System Improvements
SF-083	8/19/2011	2" AV	LP5004A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-090	9/19/2011	2" AV	LP1027B	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-097	3/28/2011	2" AV	LP5006	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-097	2/2/2011	2" AV	LP5006U	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-103	7/6/2011	2" AV	AT6034	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-103	7/8/2011	2" AV	AT6035	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-103	7/8/2011	2" AV	AT6036	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-103	7/6/2011	2" AV	AT6038	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-103	7/6/2011	2" AV	AT6039	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-117	2/16/2011	2" AV	CE2042	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-117	3/7/2011	2" AV	CE2045	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-117	2/10/2011	2" AV	CE2048	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	6/2/2011	2" AV	CE1042	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/3/2011	2" AV	CE1046	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1048	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1051	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1052	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1054	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1057	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	6/6/2011	2" AV	CE1061	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-118	2/22/2011	36" VALVE	AT1071	4	Valve should not be operated; valve skips Being Addressed under Interim System Improvements (AT-114-2)	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/11/2011	2" AV	CE2011	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/11/2011	2" AV	CE2012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/31/2011	2" AV	CE2013	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/31/2011	2" AV	CE2014	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	1/31/2011	2" AV	CE2014	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/31/2011	2" AV	CE2016	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	1/31/2011	2" AV	CE2018	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	2/7/2011	2" AV	CE2021	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	3/21/2011	2" AV	CE2024	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	2/8/2011	2" AV	CE2025	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	2/8/2011	2" AV	CE2029	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	2/15/2011	2" AV	CE2032	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-119	2/15/2011	2" AV	CE2033	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-120	3/10/2011	2" AV	CE6011	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-121	1/3/2012	2" AV	AT1077M	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-123	4/26/2011	2" AV	AT5017	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-123	4/25/2011	2" AV	AT5020	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-123	4/25/2011	2" AV	AT5022	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-124	4/27/2011	2" AV	AT5007	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-124	4/26/2011	2" AV	AT5010	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-124	4/26/2011	2" AV	AT5012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-124	4/27/2011	2" AV	AT5014	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-124	4/27/2011	2" AV	AT5014	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-125	4/28/2011	2" AV	AT5002	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-125	4/28/2011	2" AV	AT5004	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-125	4/28/2011	2" AV	AT5005	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-126	1/25/2011	2" AV	AT3035	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-126	1/25/2011	2" AV	AT3038	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-126	1/25/2011	2" AV	AT3039	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-127	4/22/2011	2" AV	AT3054C	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-127	4/22/2011	2" AV	AT3054D	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-127	4/22/2011	2" AV	AT3054E	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-127	4/22/2011	2" AV	AT3054F	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-128	1/4/2012	2" AV	AT3049	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-128	1/4/2012	2" AV	AT3050	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-129	5/2/2011	2" AV	AT3044	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-129	5/3/2011	2" AV	AT3046	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-130	5/2/2011	2" AV	AT3040A	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-130	5/11/2011	2" AV	AT3040D	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-130	5/23/2011	2" AV	AT3040G	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-132	5/31/2011	2" AV	AT4010A	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-132	5/31/2011	2" AV	AT4010A	5	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-134	1/19/2012	2" AV	AT4004	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-134	1/23/2012	2" AV	AT4006	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/24/2012	2" AV	AT3011	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/24/2012	2" AV	AT3011	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/24/2012	2" AV	AT3011A	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/24/2012	2" AV	AT3011A	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/23/2012	2" AV	AT3011B	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/23/2012	2" AV	AT3011C	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/23/2012	2" AV	AT3012A	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/24/2012	2" AV	AT3012A	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/23/2012	2" AV	AT3012A	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/20/2012	2" AV	AT3015A	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/20/2012	2" AV	AT3020A	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/19/2011	2" AV	AT3021	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-135	1/19/2012	2" AV	AT3023	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-135	1/19/2012	2" AV	AT3025	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/1/2012	2" AV	NA3031	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/7/2012	2" AV	NA3037	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/7/2012	2" AV	NA3040	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/7/2012	2" AV	NA3044	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/3/2012	2" AV	NA3047	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-136	2/7/2012	2" AV	NA3047C	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-139	4/19/2011	2" AV	NA4011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-139	4/26/2011	2" AV	NA4013	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-140	4/19/2011	2" AV	NA4006	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-141	4/19/2011	2" AV	NA4002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-142	1/11/2012	2" AV	NA3090	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-142	1/10/2012	2" AV	NA3090	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-143	1/18/2012	2" AV	NA3090F	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-143	1/30/2012	2" AV	NA3090K	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-143	1/30/2012	2" AV	NA3090L	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-143	1/30/2012	2" AV	NA3090M	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-144	4/6/2011	2" AV	NA3091	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-144	4/12/2011	2" AV	NA3107	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/18/2011	2" AV	AT6019	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/19/2011	2" AV	AT6024	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/19/2011	2" AV	AT6025	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/20/2011	2" AV	AT6027	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/20/2011	2" AV	AT6028	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-150	7/20/2011	2" AV	AT6030	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-150	7/20/2011	2" AV	AT6031	15	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-156	7/18/2011	2" AV	AT6009	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-156	7/18/2011	2" AV	AT6011	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-156	7/18/2011	2" AV	AT6012	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-156	7/18/2011	2" AV	AT6013	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/11/2011	2" AV	AT6001	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/12/2011	2" AV	AT6002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/12/2011	2" AV	AT6003A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/12/2011	2" AV	AT6003B	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/12/2011	2" AV	AT6004	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/13/2011	2" AV	AT6005	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/13/2011	2" AV	AT6006	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-158	7/13/2011	2" AV	AT6007	5	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-159	10/13/2011	2" AV	AT1094	1	AT-1094 #1 A.V. Possibly steel riser.	Rehabilitation or Replacement Required	Interim System Improvements
SF-159	10/11/2011	2" AV	AT1098	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-159	9/23/2011	2" AV	AT1106	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/13/2011	2" AV	AT1109	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/17/2011	2" AV	AT1115	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/17/2011	2" AV	AT1115	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/17/2011	2" AV	AT1117	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/17/2011	2" AV	AT1118	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/24/2011	2" AV	AT1120	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/18/2011	2" AV	AT1124	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-160	10/20/2011	2" AV	AT1126	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-164	8/11/2011	2" AV	AT1129A	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-164	8/15/2011	2" AV	AT1130	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	8/18/2011	2" AV	AT1133	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1078	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1079	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1082	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1086	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1087	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-165	10/24/2011	2" AV	AT1089	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-166	10/21/2011	2" AV	AT1074	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-168	1/30/2012	2" AV	AT1040	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-168	1/30/2012	2" AV	AT1041	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-168	1/25/2012	2" AV	AT1042B	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-169	5/31/2011	2" AV	AT1036	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-171	10/13/2011	2" AV	AT1016	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-173	1/20/2012	2" AV	AT3008B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/20/2012	2" AV	AT3008C	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/20/2012	2" AV	AT3008D	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/20/2012	2" AV	AT3008D	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/20/2012	2" AV	AT3008E	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/23/2012	2" AV	AT3008F	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/23/2012	2" AV	AT3008F	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-173	1/23/2012	2" AV	AT3008G	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-174	1/25/2012	2" AV	AT3001A	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-174	1/24/2012	2" AV	AT3002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-174	1/24/2012	2" AV	AT3004	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-174	1/24/2012	2" AV	AT3005	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-174	1/24/2012	2" AV	AT3006	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-174	1/20/2012	2" AV	AT3008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159C	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159D	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159E	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-182	4/4/2011	2" AV	AT1159H	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/21/2011	2" AV	AT1161A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/18/2011	2" AV	AT1161A2 A	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/18/2011	2" AV	AT1161B	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/18/2011	2" AV	AT1161C	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/18/2011	2" AV	AT1161E	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-183	7/18/2011	2" AV	AT1161F	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-183	7/18/2011	2" AV	AT1161G	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-184	7/6/2011	2" AV	AT1162	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-184	7/6/2011	2" AV	AT1162	3	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-184	7/6/2011	2" AV	AT1162	4	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-186	9/13/2011	2" AV	NA1149	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-186	9/13/2011	2" AV	NA1153	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-186	9/9/2011	2" AV	NA1154	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-187	9/15/2011	2" AV	NA1139	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-187	9/14/2011	2" AV	NA1140	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-187	9/14/2011	2" AV	NA1141	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-187	9/14/2011	2" AV	NA1142	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-187	9/14/2011	2" AV	NA1144	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-188	9/20/2011	2" AV	NA1138E	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-189	9/19/2011	2" AV	NA1132	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-190	2/17/2011	2" AV	NA1101	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-190	2/8/2011	2" AV	NA1111	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-190	2/7/2011	2" AV	NA1116	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/9/2011	2" AV	NA1072	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/10/2011	2" AV	NA1074	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/10/2011	2" AV	NA1074	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/10/2011	2" AV	NA1078	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/14/2011	2" AV	NA1079	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/16/2011	2" AV	NA1085	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-194	2/16/2011	2" AV	NA1087	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-203	7/22/2011	2" AV	AT6043H	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-206	7/27/2011	2" AV	NA2026D	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-209	4/1/2011	2" AV	AT1159M	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-210	9/22/2011	2" AV	AT1148W	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-211	9/29/2011	2" AV	AT1148ZD16	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-214	11/1/2011	2" AV	NA5003	2	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-214	11/1/2011	2" AV	NA5003	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-214	10/31/2011	2" AV	NA5004	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-214	11/1/2011	2" AV	NA5004	2	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-214	10/31/2011	2" AV	NA5006	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-215	11/1/2011	2" AV	NA5000	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-215	11/1/2011	2" AV	NA5001	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-215	11/1/2011	2" AV	NA5002	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-216	8/2/2011	2" AV	VIP8004	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-216	8/2/2011	2" AV	VIP8006	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-216	8/1/2011	2" AV	VIP8010	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-218	8/23/2011	2" AV	VIP6005	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-218	9/20/2011	2" AV	VIP6006	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-218	8/23/2011	2" AV	VIP6008	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-218	8/23/2011	2" AV	VIP6010	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-220	8/16/2011	2" AV	VIP7001	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-221	9/20/2011	2" AV	VIP2002	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-224	9/12/2011	2" AV	VIP4001	3	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-224	9/12/2011	2" AV	VIP4002	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-227	6/8/2011	2" AV	VIP1100A	1	Could not bleed; Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-227	6/7/2011	2" AV	VIP1100G	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-227	6/6/2011	2" AV	VIP1100H	7	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-227	6/6/2011	2" AV	VIP1103	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-227	6/6/2011	2" AV	VIP1104	1	Steel Riser	Rehabilitation or Replacement Required	Interim System Improvements
SF-230	4/12/2011	2" AV	NA3108	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-230	4/12/2011	2" AV	NA3109	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-232	4/13/2011	2" AV	AT1221	4	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-232	4/13/2011	2" AV	AT1225	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-233	4/5/2011	2" AV	AT1159Z	1	Steel riser with gate valve	Rehabilitation or Replacement Required	Interim System Improvements
SF-172	8/4/2010	2" AV	AT2014	1	Steel riser Being addressed under AT-107-1	Rehabilitation or Replacement Required	Rehab During CAP
SF-172	8/4/2010	2" AV	AT2017	3	Steel riser Being addressed under AT-107-2B	Rehabilitation or Replacement Required	Rehab During CAP
SF-172	8/23/2010	2" AV	AT2020	1	Steel riser with gate valve and no handle Being addressed under AT-107-2B.	Rehabilitation or Replacement Required	Rehab During CAP
SF-172	8/30/2010	2" AV	AT2020	3	Steel riser with a gate valve Being addressed under AT-107-2B.	Rehabilitation or Replacement Required	Rehab During CAP
SF-172	8/30/2010	2" AV	AT2021	2	Steel riser with a gate valve with no hand wheel Being addressed under AT-107-2B.	Rehabilitation or Replacement Required	Rehab During CAP
SF-172	8/26/2010	2" AV	AT2022	2	Steel riser with gate valve and no handle Being addressed under AT-107-2B.	Rehabilitation or Replacement Required	Rehab During CAP
NF-190	4/6/2011	20" BRANCH	W5060	1	Broken This valve is a future connection for a PRS and is already blind flanged. No action at this time is required.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/2/2011	3" BP	CE1040	9	Frozen Bypass Valve. No Rehab action required.	No further action required under Rehab Plan.	N/A
SF-104	7/11/2011	12" VALVE	AT6043	7	Frozen Open; 12" valve AT-6043 #7 is frozen in the open position; Low Criticality; Valve isolates emergency pump connection in pump station yard. To be repaired/inspected under the MOM program if necessary in the future	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	4" BP	VIP2009	2	VALVE BROKEN Bypass Valve. No Rehab action required.	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5008	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	36" ML	W2016	1	open; STIFF Operate with valve trailer to exercise valve	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	2" AV	W1005	1	BALL VALVE ON FORD CORP.	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1020	2	CORP. NOT COMPLETELY OPEN	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	2" AV	JR6033A	4	Air Vent set in non-concrete rings	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	BRANCH	NO GUIDE	-	open Valve guide should be updated.	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	8" BRANCH	YR1002	1	shut; STIFF No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BRANCH	JR6011	1	JR-6011 #1; Vent covered in mud. Nut could not be located and riser full of water. HRSD operations to address under work order #791844	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	6" BRANCH	JR5007	1	open; JR-5007-1 Valve Box is below grade #802880; Below Grade Valve Box	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-018	5/18/2011	6" BO	JR5014A	1	NO NUT/Do not operate No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	2" AV	JR5020B4	1	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	2" AV	JR5020B5	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2003B	1	BALL VALVE UPSIDE DOWN	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3010	1	DOUBLE BALL VALVE	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	8" BRANCH	JR1008	1	JR-1008-1 8" Branch is stiff, below grade and has a broken riser pipe. #782501; Casting has been raised to grade (10/31/2011). Valve still needs to be exercised. No Rehab action is required.	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	2" AV	JR1012	3	NO RISER	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2017	1	OPEN/STIFF-O-TURN Update documentation	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2019	1	CORP. STOP No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	12" BO	YR2020A	1	Do not operate/NO NUT No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	2" AV	YR2021	1	BURIED	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	24" ML	YR2025	4	shut; Stiff No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4026A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-061	1/7/2011	12" BRANCH	YR4006	2	CLOSED; YR-4006 #2 THE NUT IS ROUNDED UNABLE TO TELL IF THE VALVE IS IN THE CLOSED POSTION. #745118; Rounded Valve Nut WO created on 8/1/11. Branch line closed with no connections. No action necessary.	No further action required under Rehab Plan.	N/A
NF-113	2/1/2011	16" ML	BH6006	1	open; BH-6006 #1- Valve extremely stiff. #762992; WO Completed 12/28/11. Valve was exercised to 75% with valve machine. No action required.	No further action required under Rehab Plan.	N/A
NF-121	2/1/2011	12" ML	BH6001	1	open; BH-6001 #1- Valve very stiff. cmms # 762994-BH-6001-1; WO Completed 12/28/11. Valve was exercised with valve machine. No action required.	No further action required under Rehab Plan.	N/A
NF-128	2/1/2011	8" ML	BH1001	1	open; BH-1001 #1- Exercised valve extensively, valve stiff; Stiff No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-158	2/1/2011	2" AV	BH1009	1	REPLACE HANDLE	No further action required under Rehab Plan.	N/A
NF-158	2/1/2011	2" AV	BH1010	1	CORP. STOP No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	4" BP	JR5015	2	NO NUT No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004A	4	NOT FOUND	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	36" ML	W1004E	3	OPEN; #791813-W1004-E-3; Needs to exercised with valve trailer	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004I	2	CNL	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	4" BP	W5018F	2	NO NUT; No rehab action necessary.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-178	7/14/2011	24" ML	W5035	2	W-5035-2 24" M.L. calls for 116 turns at 75% but, could only get 93. Valve comes to a complete stop at 93 turns. #824408 HRSD will verify number of turns. It is possible that the valve guide is incorrect.	No further action required under Rehab Plan.	N/A
NF-179	12/6/2011	4" BP	JR5033	2	NO NUT; JR-5033 # 2 BYPASS VAVLE HAS A PIECE OF SQUARE STOCK DOWN IN THE RISER; #737071 No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5047	1	COUPLING AND NIPPLE BELOW BALL VALVE	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	6" BP	W1004	7	CLOSE; W-1004-7 B.P. Valve box is below grade. #634615	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	20" ML	W7012I	1	open; W-7012-I # 1 -Line # 204, Greensprings mainline at station, 20 " valve. Update documentation	No further action required under Rehab Plan.	N/A
SF-002	9/28/2011	2" AV	AB1004	2	Cannot locate air vent AB-1004 #2; Valve should be located.	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1030	1	Missing lid; Lids on Order	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1030B	1	Missing lid; Lids on Order	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1030D	1	Missing lid; Lids on Order	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	4" BP	NA1011	10	NA-1011 #8,10,12,and 14 have no retainer nut	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	4" BP	NA1011	12	NA-1011 #8,10,12,and 14 have no retainer nut	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	4" BP	NA1011	8	NA-1011 #8,10,12,and 14 have no retainer nut	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	4" BP	NA1011	14	NA-1011 #8,10,12,and 14 have no retainer nut	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-024	3/15/2011	LD	NA1014	1	UNABLE TO LOCATE; should be located	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	6" BP	NA1018	3	paved over	No further action required under Rehab Plan.	N/A
SF-030	7/12/2011	14" VALVE	NA2014H	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	2" AV	LP2002	1	Cannot Locate; Cannot locate air vent LP-2002 # 1.; CNL	No further action required under Rehab Plan.	N/A
SF-059	8/30/2011	2" AV	LP1012	2	Not on the valve guide Update documentation	No further action required under Rehab Plan.	N/A
SF-060	9/6/2011	24" VALVE	LP1009AA	1	236 Open(Gets tight at the top)	No further action required under Rehab Plan.	N/A
SF-080	8/18/2011	CATHODIC TEST SITE	LP1019A	2	LP-1019A #2.; Could not locate	No further action required under Rehab Plan.	N/A
SF-081	8/18/2011	16" VALVE	LP5002	1	Cannot Locate To be replaced; Line is currently under construction. (VIP-132)	No further action required under Rehab Plan.	N/A
SF-082	5/3/2011	2" AV	LP1024	1	Riser is too high in the box; Air vent LP-1024 #1 is too high inside the valve box.	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	SADDLE	LP5003A3	1	Cannot check	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	TS	LP5004A2	1	Cannot Locate; Test Station, LP-5004A2 # 1 cannot be located. ; CNL	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	24" VALVE	LP5004B	3	Cannot Locate; 24" valve, LP-5004B # 3 cannot be located.; CNL	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	20" GV	LP5008A	1	Can't locate LP 5008A #1 and #2. Are same as LP 5008 1&2. Update documentation	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	5/3/2011	TS	LP5008A	2	Can't locate LP 5008A #1 and #2. Are same as LP 5008 1&2. Update documentation	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	2" AV	AT1059	1	Corp Stop; AT1059 #1 is corp stop not operable.	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	2" AV	NEW	X	NEW Update documentation	No further action required under Rehab Plan.	N/A
SF-128	1/4/2012	2" AV	AT3051	1	A/V AT3050 #2 and 3051 #1 whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-128	1/10/2012	10" VALVE	AT3054	3	AT3054 #3 leaks when operated.	No further action required under Rehab Plan.	N/A
SF-135	9/9/2010	2" AV	STA 59+53	1	NO VALVE GUIDE Update documentation	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	STA 62+09	1	NO VALVE GUIDE Update documentation	No further action required under Rehab Plan.	N/A
SF-135	8/23/2010	2" AV	STA 115+90	1	NO VALVE GUIDE Update documentation	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	LD	NA3047H	1	Condition good; Dirt piled on top	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	LD	NA3047J	1	UNABLE TO LOCATE;	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	LD	NA3047J	2	UNABLE TO LOCATE	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090E	1	NA3090E #1 2" AV-Casting needs raised, ball valve is sitting inside the casting.	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	4" BP	NA3090J	3	NA3090J #3 4" BP-Not engaging when turned. Bypass Valve. No Rehab action required.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-160	10/18/2011	8" VALVE	AT1124	2	Paved Over	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	LD	AT1129	12	Can't Locate	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	12" VALVE	AT1135	2	AT-1135 #2 Could not get on nut.; Shifted riser	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	2" AV	AT1023	1	cannot locate	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	12" VALVE	AT1029	2	leaks; AT1029 #2 12" branch leaks and AT1038 #1 6" BP paved over. Repack valve as part of routine PM activities	No further action required under Rehab Plan.	N/A
SF-172	8/19/2010	2" AV	AT2018	3	Copper; No Handle Being addressed under AT-107-2B.	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1160	1	Ball Valve; Special whammy rod would not go thru corp stop AT1160 #1, 1161A #2 and 1161A2 #2 are ball valves with copper risers.	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1161	4	Could not locate.	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1161A	2	Ball Valve; Special whammy rod would not go thru corp stop AT1160 #1, 1161A #2 and 1161A2 #2 are ball valves with copper risers.	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1161A	3	Ball Valve; AT1161A #3 Casting needs to be raised	No further action required under Rehab Plan.	N/A
SF-190	2/17/2011	2" AV	NA1114	1	Could not locate.	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	LD	LP1022C	3	Leak detector LP-1022C #3 cannot be located.	No further action required under Rehab Plan.	N/A
SF-206	7/26/2011	6" VALVE	NA2026H	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-208	2/1/2012	8" VALVE	NA3005	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-210	9/16/2011	2" AV	NEW	-	- Update documentation	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	2" AV	AT1148ZE7	4	AT-1148ZE 7 #4 Large whammy head does not fit through corp stop. Riser material cannot be confirmed.	No further action required under Rehab Plan.	N/A
SF-221	9/8/2011	2" AV	-	-	LINE 221 ALSO HAS AN AIR VENT AT ADDRESS 504 JAMESTOWN NOT IN THE VALVE GUIDE. ; Update VG Update documentation	No further action required under Rehab Plan.	N/A
SF-225	9/7/2011	2" AV	VIP5001	1	VIP5001 #1 IS AN AIR VENT IN WHICH THE TOP OF THE BALL VALVE IN 3 INCHES BELOW THE CASTING LID.	No further action required under Rehab Plan.	N/A
SF-227	6/8/2011	LD	VIP1100A	2	Could not locate	No further action required under Rehab Plan.	N/A
SF-227	6/8/2011	2" AV	VIP1100B	1	Ball valve should be replaced.	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	LD	VIP1110	1	Covered with asphalt	No further action required under Rehab Plan.	N/A
SF-231	9/20/2011	3" BP	NA1138	4	pm'd 11; NA1138 #3,4 AND 5 were not on the PM sheet	No further action required under Rehab Plan.	N/A
SF-231	9/20/2011	18" VALVE	NA1138	3	pm'd 84; NA1138 #3,4 AND 5 were not on the PM sheet Update documentation	No further action required under Rehab Plan.	N/A
SF-232	4/13/2011	2" AV	AT1221	1	Ball Valve needs to be replaced	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	8" VALVE	AT1159U	1	Closed no nut	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	3" BP	AT1159Z	3	No nut	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-233	4/5/2011	8" VALVE	AT1159Z	4	No nut	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	12" VALVE	AT1159Z	6	No nut	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	4" BP	NA6001	5	CLOSED; NA-6001 #5 B.P. Valve - Needs to be reset in the asphalt. #802757	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	30" ML	NA6028	1	OPEN; NA-6028 #1 30" ML - Valve box needs to be raised. Roughly 3"-4" below grade. #802758	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	8" BRANCH	NA6030	2	OPEN; Needs to be raised/Below grade	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	3" BP	NA6055	4	CLOSED; NA-6055 #4 B.P. Valve - Riser and casting need to be straightened. #802756	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	4" BP	NA6092	1	NA-6092 #1 B.P. Valve- Riser pipe is full of rock and the valve was blocked. #802748	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	8" BRANCH	NA6094	1	OPEN; NA-6094 #1 8" Branch Valve - Valve box is about 4"-5" below grade. #802742	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	3" BP	NA6096	2	CLOSED; Below Grade	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	8" VALVE	NA5019	1	NA 5019 #1 Is paved over, It had been previously white boxed. There is a valve directly in front of Kings Fork Middle School that is not in the valve guide or in the PM sheet.	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/21/2010	48" VALVE	AT9000	8	AT-9001 #8 is very stiff.	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	16" VALVE	AT9001	1	AT-9001 #1 A.V. 3' to handle on ball valve.	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	2" AV	AT9001A	1	C; AT-9001A A.V.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-257	1/3/2011	42" VALVE	AT9011	3	AT-9011 #3 Leaks; To be repaired/inspected under routine PM program	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2070	2	AT2070 #2 CPT does not have a casting.;	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2070	3	Couldn't locate; AT2070 #3 and AT2075 #9 CPT	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	2" AV	AT2072	1	Ball Valve; AT2072 #1, special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2075	9	AT2070 #3 and AT2075 #9 CPT could not locate	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2067	1	Could not locate	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2067	2	Could not locate	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2034	1	TYPE 1; No Lids Lids on Order	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2047	1	TYPE 2; No Lids Lids on Order	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2050	1	Cannot locate	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2026TS	1	TYPE IF; Missing Lid Lids on Order	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2026TS	4	TYPE IF; CNL	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2027	2	TYPE IF; Damaged	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-263	11/2/2011	CPT	AT2027	3	TYPE 2; Damaged	No further action required under Rehab Plan.	N/A
SF-269,270	6/14/2011	2" AV	LP5006A	3	Ball valve missing handle	No further action required under Rehab Plan.	N/A
SF-269,270	6/13/2011	6" CPTS	LP5006A	4, 7	Missing Lid's; CPTS, LP-5006A # 4 and 7. Are both cracked and missing lids.; Lids on Order	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	CPT	AT7054	3	Cannot Locate	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	CPT	AT7056	3	Cannot locate CPT, AT-7053A #1 or CPT, AT-7056 # 3.	No further action required under Rehab Plan.	N/A
SF-273	10/20/2011	CPT	AT7035	4	Cannot locate CPT, AT-7035 # 4.; CNL	No further action required under Rehab Plan.	N/A
SF-275	2/13/2012	2" AV	AT2076	1	Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8127	1	Could not bleed air vent AT-8127#1 due to access to the yard.	No further action required under Rehab Plan.	N/A
SF-278	10/17/2011	CPT	AT7053A	2	Cannot locate CPT, AT-7053A #1 or CPT, AT-7056 # 3.	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5012	2	W-5012 #2 Branch valve bubbling. #802870 Addressed during Virginia Department of Transportation Ironbound Rd Project, 2012	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	24" ML	W5012	3	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	3" BP	W5012	4	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5012A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-001	5/9/2011	2" AV	W5013	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5013	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5014	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5014	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5014	3	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	18" ML	W5015	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	3" BP	W5015	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	24" ML	W5015	3	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	4" BP	W5015	4	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5015	5	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5015	6	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	2" AV	W5015A	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5016	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-001	5/9/2011	8" BRANCH	W5017	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5018	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	2" AV	W5018	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	20" M.L.	W5018-4	1	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	3" BP	W5018A	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	24" ML	W5018A	4	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	3" BP	W5018A	5	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5018A	6	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5018A	7	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5018A	8	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5019	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5019	3	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5019	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-001	5/9/2011	VAULT INSP.	W5019	-	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	8" BRANCH	W5020	2	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	6	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	7	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	8	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	14" BRANCH	W5021	9	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	12" ML	W5021	10	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	11	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	12	-	No further action required under Rehab Plan.	N/A
NF-001	5/9/2011	LD	W5021	13	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	4" BP	W5002B	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	12" BRANCH	W5001	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5001A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-002	5/10/2011	12" BRANCH	W5001A	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5002	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	LD	W5002A	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	24" ML	W5002B	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	10" BRANCH	W5002B	3	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	10" BRANCH	W5002B	4	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	20" BRANCH	W5002B	5	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	20" BRANCH	W5002B	6	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	20" PCV	W5002B	7	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	12" AIR VALVE	W5002B	8	-	No further action required under Rehab Plan.	N/A
NF-002	5/13/2011	VAULT(AIR VALVE) INSP. W-5002-B	W5002B	-	VAULT(AIR VALVE) INSP. W-5002-B Vault inspected	No further action required under Rehab Plan.	N/A
NF-002	5/13/2011	VAULT(P.C.V.) INSP. W-5002-B	W5002B	-	VAULT(P.C.V.) INSP. W-5002-B Vault inspected	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5003	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-002	5/10/2011	2" AV	W5004	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5004	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5004	3	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	24" BRANCH	W5005	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5006	1	OPEN; Paved Over No WO exists, but work has been completed to expose this appurtenance.	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5006A	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5007	1	Paved Over Noted issue addressed on 12/14/2011	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5008A	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5008A	2	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	LD	W5009	4	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	LD	W5009	5	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	2" AV	W5010	1	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5010	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-002	5/10/2011	24" ML	W5010	3	OPEN; Paved Over WO completed 12/14/11. Valve is currently exposed.	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	3" BP	W5010	4	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	8" BRANCH	W5010	5	-	No further action required under Rehab Plan.	N/A
NF-002	5/10/2011	12" BRANCH	W5009	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	30" ML	W2019	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BP	W2019	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	6" BRANCH	W2019	6	open; W-2019 #6; Could not Operate (Rounded Nut) #802875 Checked valve and nut was operational on 07/11/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	6" BRANCH	W2019	8	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4001	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4001	2	w-4001 #2 Air vent has a gate valve with no handle; #737260; Noted issue addressed on 4/19/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	8" BRANCH	W4003	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4004	1	Gate valve with steel riser was addressed on 9/14/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4004A	1	w-4004-A #1 air vent has a gate valve with no handle.; #735754; Noted issue addressed on 8/21/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-003	11/8/2010	2" AV	W4004A	2	STEEL RISER, GATE VALVE Noted issue addressed on 8/16/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4005	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4005A	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BP	W4005A	3	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	24" ML	W4006	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BP	W4006	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4006A	1	STEEL RISER, GATE VALVE Noted issue addressed on 8/23/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4006A	2	STEEL RISER, GATE VALVE Noted issue addressed on 8/22/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4006B	1	STEEL RISER, GATE VALVE Noted issue addressed on 8/28/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4006B	2	STEEL RISER, GATE VALVE Noted issue addressed on 8/27/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4007	1	STEEL RISER, GATE VALVE Noted issue addressed on 8/30/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4007	2	STEEL RISER, GATE VALVE Noted issue addressed on 8/29/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	8" BRANCH	W4008	1	W-4008 #1 THERE IS NO NUT ON THE VALVE CANNOT TELL IF ITS IN THE CLOSED POSITION. ; Noted issue addressed on 07/30/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-003	11/8/2010	2" AV	W4008	2	STEEL RISER, GATE VALVE Noted issue addressed on 9/5/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4008	3	STEEL RISER, GATE VALVE Noted issue addressed on 10/15/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	30" ML	W4009	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BP	W4009	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4009	3	STEEL RISER, GATE VALVE Noted issue addressed on 9/6/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4010	1	STEEL RISER, GATE VALVE Noted issue addressed on 9/11/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	8" BRANCH	W4010	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	12" BRANCH	W4011	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4011	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4012	1	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BRANCH	W4012	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4012	3	STEEL RISER, GATE VALVE Noted issue addressed on 9/12/2012	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	2" AV	W4013	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-003	11/8/2010	30" ML	W4013	2	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	4" BP	W4013	3	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	18" BRANCH	W4013	4	-	No further action required under Rehab Plan.	N/A
NF-003	11/8/2010	8" BRANCH	W4013	5	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	12" BRANCH	W2018B	1	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	LD	W2018B	2	NEEDS REPAIR Noted issue addressed on 1/27/2011	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	24" ML	W2019	3	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	4" BP	W2019	4	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	16" BRANCH	W2019	5	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	2" AV	W3001	1	GATE VALVE Noted issue addressed on 8/8/2012	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	8" BRANCH	W3001	2	-	No further action required under Rehab Plan.	N/A
NF-004	11/2/2010	2" AV	W3002	1	STEEL RISER, GATE VALVE Noted issue addressed on 8/7/2012	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	8" BRANCH	W2014	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-005	11/29/2010	36" ML	W2006	4	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2007	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2008	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	8" BRANCH	W2009	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	10" BRANCH	W2009A	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2009A	2	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2010	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	8" BRANCH	W2011	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2011	2	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	16" ML	W2012	2	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	4" BP	W2012	3	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	36" ML	W2012	4	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	6" BRANCH	W2013	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-005	11/29/2010	2" AV	W2014	1	STEEL RISER, GATE VALVE Noted issue addressed on 8/13/2012	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2015	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	4" BP	W2016	2	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	8" BRANCH	W2016	4	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	6" BRANCH	W2016	5	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2017	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2018	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	8" BRANCH	W2018	2	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	2" AV	W2018A	1	-	No further action required under Rehab Plan.	N/A
NF-005	11/29/2010	*** NEW ***	W2018C	-	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	36" ML	W2006	2	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	36" ML	W1001	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	4" BP	W1001	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-006	11/10/2011	2" AV	W1001	3	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	30" BRANCH	W1001	5	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	6" BRANCH	W2001	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2001	2	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2002	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2002A	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2002B	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	12" BRANCH	W2003	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2004	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	36" ML	W2004	2	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2004A	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2004B	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2004C	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-006	11/10/2011	2" AV	W2004D	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2005	2	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	TS	W2005	3	W-2005 #3 ; Covered in Debris #737302; Busch Properties has cleared off the debris on top of this line	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	TS	W2005	4	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	TS	W2005TS	1	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	TS	W2005TS	2	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	20" BRANCH	W2006	3	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	TS	W2006	6	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	20" BRANCH	W2006	10	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2006	11	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	20" BRANCH	W2006	12	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	2" AV	W2006	13	-	No further action required under Rehab Plan.	N/A
NF-006	11/10/2011	12" EPC	W2006	14	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-006	11/10/2011	20" ML	W2006	15	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1008	2	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	16" BRANCH	W1001	4	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	2" AV	W1002	3	STEEL RISER, GATE VALVE Noted issue addressed on 7/16/2012	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1002	4	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1003	1	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	2" AV	W1003A	2	STEEL RISER, GATE VALVE Noted issue addressed on 8/9/2012	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	4" BP	W1004	3	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1005	2	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	24" ML	W1005	3	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	4" BP	W1005	4	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1006	1	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1007	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-007	10/7/2010	8" BRANCH	W1007A	1	PAVED OVER WO completed on 8/18/11. Valve box raised and to grade.	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	2" AV	W1008	1	STEEL RISER, GATE VALVE Noted issue addressed on 7/11/2012	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	8" BRANCH	W1008A	1	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	24" ML	W1008A	2	-	No further action required under Rehab Plan.	N/A
NF-007	10/7/2010	4" BP	W1008A	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1021	6	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	JR6018	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	JR6018	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	JR6018	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" BRANCH	JR6018A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6018A	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" BRANCH	JR6018A	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	JR6022	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	2" AV	JR6022	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6022	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6022	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6022	6	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	JR6023	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6023	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6023	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6023	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6023	6	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6025	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" BRANCH	JR6025	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" BRANCH	JR6025	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6025	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	LD	JR6026	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6026	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6026	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6026	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6026	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6026	6	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" BRANCH	JR6026	9	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" BRANCH	JR6026	10	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6026A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6026A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6026A	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6026A	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6027	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	2" AV	JR6027	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6027	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6028	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6028	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	6" BRANCH	JR6028	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	6" BRANCH	JR6028	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6028	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" BRANCH	JR6028	6	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" BRANCH	JR6028	7	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6028	8	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6029	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	JR6029	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	16" BRANCH	JR6029	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	14" ML	JR6029	7	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6029	8	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6029	9	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6029	10	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6029	11	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6029	16	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BRANCH	JR6029	17	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6029	18	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	TS	JR6029	19	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6030	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" ML	JR6030	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	JR6030A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	JR6032	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	10" BRANCH	JR6032	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	12" BRANCH	JR6032	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	JR6033	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	12" BRANCH	JR6033A	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	12" BRANCH	JR6033A	5	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	12" BRANCH	JR6034	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" BRANCH	W1008A	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	LD	W1009	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1009	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" BRANCH	W1009	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1009A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1010	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1011	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	2" AV	W1012	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1012A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1013	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1013	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1013A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1013A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	6" BRANCH	W1013B	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1014	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1014	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1015	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1015A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1015A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1017	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	24" ML	W1017A	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1017A	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1018	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1019	1	STEEL RISER, GATE VALVE Noted issue addressed on 7/10/2012	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1019A	1	STEEL RISER, GATE VALVE Rebuilt on 7/09/2012	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1019A	2	STEEL RISER, GATE VALVE Noted issue addressed on 7/5/2012	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	8" BRANCH	W1020	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	10" BRANCH	W1020A	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1021	1	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1021	2	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1021	3	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1021	4	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1021	5	STEEL RISER, GATE VALVE Noted issue addressed on 7/3/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-008	5/11/2011	4" BP	W1021	7	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	24" ML	W1021	8	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	W1021	9	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	20" ML	W1021	10	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	3" BP	W1021	11	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	20" ML	W1021	12	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	3" BP	W1021	13	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	20" ML	W1021	14	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	3" BP	W1021	15	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	20" ML	W1021	16	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	3" BP	W1021	17	-	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	2" AV	W1023	1	STEEL RISER, GATE VALVE Noted issue addressed on 7/2/2012	No further action required under Rehab Plan.	N/A
NF-008	5/11/2011	4" BP	JR6032	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-009	3/15/2011	2" AV	JR6029	12	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	6" BRANCH	JR6029	13	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	6" BRANCH	JR6029	14	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	14" ML	JR6029	15	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6029A	1	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	2" AV	JR6030	3	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	4" BRANCH	JR6030	4	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6030	5	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	2" AV	JR6030A	2	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6030A	3	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	12" BRANCH	JR6032	4	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	2" AV	JR6032	7	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	2" AV	JR6032A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-009	3/15/2011	LD	JR6032B	1	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6032B	2	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6032B	3	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	12" BRANCH	JR6033A	2	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	TEST STATION	JR6033A	6	-	No further action required under Rehab Plan.	N/A
NF-009	3/15/2011	12" BRANCH	JR6034	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1011A	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	30" ML	YR1007	6	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	4" BP	YR1007	7	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	10" BRANCH	YR1007	8	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	16" ML	YR1007	9	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	3" BP	YR1007	10	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1007A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-010	9/15/2010	12" BRANCH	YR1008	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1008B	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1009	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	16" ML	YR1009	3	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1009	4	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1009	5	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1009	6	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1009	7	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	LD	YR1009A	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	LD	YR1009A	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1009A	3	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1010	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1010A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-010	9/15/2010	2" AV	YR1010B	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	8" BRANCH	YR1011	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1011	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1012	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	2" AV	YR1012	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	12" BRANCH	YR1012A	1	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	16" ML	YR1012A	2	-	No further action required under Rehab Plan.	N/A
NF-010	9/15/2010	4" BP	YR1012A	3	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	36" ML	YR1007	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	3" BP	YR1007	3	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	12" BRANCH	YR1013A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1013B	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1014	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-011	9/9/2010	8" BRANCH	YR1014A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1015	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	6" BRANCH	YR1015A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1015B	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1016	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1016	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1017	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1017A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	6" BP	YR1017B	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1018	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	16" ML	YR1019	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	3" BP	YR1019	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1020	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-011	9/9/2010	2" AV	YR1021	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1021A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1022	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1023	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1023	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	36" ML	YR1024	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	6" BP	YR1024	2	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	6" BRANCH	YR1024A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	6" BRANCH	YR1025	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	10" BRANCH	YR1027	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1028	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	8" BRANCH	YR1028A	1	-	No further action required under Rehab Plan.	N/A
NF-011	9/9/2010	2" AV	YR1029	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-012	6/2/2011	24" ML	YR1005	7	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	16" ML	YR1001	2	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	4" BP	YR1001	3	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	LD	YR1002	2	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	8" BRANCH	YR1003	1	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	8" BRANCH	YR1003	2	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	2" AV	YR1004	1	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	42" ML	YR1005	1	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	6" BP	YR1005	2	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	42" ML	YR1005	3	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	6" BP	YR1005	4	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	42" ML	YR1005	5	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	6" BP	YR1005	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-012	6/2/2011	4" BP	YR1005	8	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	24" ML	YR1005	9	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	4" BP	YR1005	10	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	24" ML	YR1005	11	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	4" BP	YR1005	12	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	24" ML	YR1005	13	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	4" BP	YR1005	14	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	LD	YR1005	15	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	2" AV	YR1006	1	YR-1006-1 2" A.V. Riser is badly rusted and casting is broken; #802878; Broken Casting/Rusted Riser Rebuilt on 1/25/2012	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	8" BRANCH	YR1006A	1	-	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	42" ML	YR1007	4	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-012	6/2/2011	6" BP	YR1007	5	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	2" AV	YR01	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-012 (OUTFALL)	6/2/2011	2" AV	YR01	5	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	2" AV	YR02	1	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	2" AV	YR02	2	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	LD	YR04	2	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	10" SAMPLE VALVE	YR06	1	-	No further action required under Rehab Plan.	N/A
NF-012 (OUTFALL)	6/2/2011	LD	YR1002	3	-	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	8" BRANCH	JR6022	2	-	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	6" BO	JR6023	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	6" BRANCH	JR6023	8	-	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	10" BRANCH	JR6025	1	-	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	14" BRANCH	JR6026	7	-	No further action required under Rehab Plan.	N/A
NF-013	3/16/2011	2" AV	JR6026	8	-	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	12" BRANCH	JR6018	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-014	3/16/2011	16" ML	JR6018	2	-	No further action required under Rehab Plan.	N/A
NF-014	5/11/2011	8" BRANCH	JR6018A	5	-	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	2" AV	JR6019A	1	JR-6019-A #1 A.V.: Needs to be rebuilt. Gate valve is spinning on riser pipe. #782542; Needs to be rebuilt Rebuilt on 11/17/2011	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	6" BO	JR6019B	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	2" AV	JR6020	1	JR-6020 #1 A.V.: Could not vent. Gate valve is to close to side of bricks #737269; Could not vent Noted issue addressed on 08/16/2011	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	6" BRANCH	JR6020A	1	-	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	6" BRANCH	JR6020A	2	-	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	2" AV	JR6021	1	Steel Riser Rebuilt on 05/02/12	No further action required under Rehab Plan.	N/A
NF-014	3/16/2011	6" BRANCH	JR6021	2	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	4	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	8" ML	JR6017	1	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	1	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-015	5/10/2011	2" AV	JR4016	5	Steel Riser Rebuilt on 04/02/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	12	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016	12	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	13	OPEN/Do not operate	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016	13	OPEN/Do not operate	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	14	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016	14	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016	15	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016	15	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR4016	16	Steel Riser Rebuilt on 04/03/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR4016	17	Steel Riser Rebuilt on 03/28/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016A	6	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016A	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-015	5/10/2011	6" EC	JR4016A	7	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	6" EC	JR4016A	8	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	30" ML	JR4016A	9	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016A	9	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	24" ML	JR4016A	10	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	4" BP	JR4016A	10	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR4016A	11	Steel Riser Rebuilt on 03/29/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6001	1	Steel Riser	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6002	1	Steel Riser	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6002	2	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	12" BRANCH	JR6003	1	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	12" BO	JR6003	2	Do not operate/MUD No rehab action necessary.	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	12" ML	JR6004	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-015	5/10/2011	24" ML	JR6004	3	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6005	1	Steel Riser Rebuilt on 05/01/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	8" BRANCH	JR6006	1	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6007	1	Steel Riser Rebuilt on 06/01/11	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6008	1	Steel Riser Rebuilt on 06/01/11	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6009	1	Steel Riser Rebuilt on 06/01/11	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6009	2	Steel Riser Rebuilt on 06/01/11	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6010	1	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6010	2	OPEN; Steel riser Rebuilt on 05/18/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6012	1	Steel Riser Rebuilt on 05/17/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6013	1	Steel Riser Rebuilt on 05/09/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	6" BRANCH	JR6013	2	-	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	2" AV	JR6015	1	JR-6015 #1 ; #791842; Needs new casting Noted issue addressed on 05/08/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-015	5/10/2011	2" AV	JR6016	1	Steel Riser Rebuilt on 05/07/12	No further action required under Rehab Plan.	N/A
NF-015	5/10/2011	8" BRANCH	JR6017	2	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	24" ML	JR5001	3	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5001	17	Steel Riser Rebuilt on 3/28/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5002	1	Steel Riser Rebuilt on 4/19/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5002	2	Steel Riser Rebuilt on 4/4/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5003	1	Steel Riser Rebuilt on 4/11/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5003	2	Steel Riser Rebuilt on 3/26/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	8" BRANCH	JR5004	3	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5004	4	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5005	1	Steel Riser Rebuilt on 4/10/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5006	1	Steel Riser Rebuilt on 3/27/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5008	1	Steel Riser Rebuilt on 3/22/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-016	5/31/2011	2" AV	JR5008	2	Steel Riser Rebuilt on 3/21/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5008	3	Steel Riser Rebuilt on 3/20/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	2" AV	JR5009	3	Stiff Rebuilt on 3/19/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	18" ML	JR5009	6	JR-5009-6 18" M.L. is stiff. Called for 228 turns and only got 115. #802882 Replaced on 5/1/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	3" BP	JR5009	7	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	6" BRANCH	JR5009	8	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	6" BRANCH	JR5009	9	-	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	18" ML	JR5009	10	JR-5009-10 18" M.L. broken #802885; Rebuilt on 5/1/2012	No further action required under Rehab Plan.	N/A
NF-016	5/31/2011	3" BP	JR5009	11	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4014	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BO	JR4002	1	Do not operate/ND-CLEAN	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BO	JR4003	1	Do not operate/ND-CLEAN	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4004	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-017	4/4/2011	12" BRANCH	JR4004	2	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4005	1	STEEL RISER, GATE VALVE Rebuilt on 4/16/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	8" BRANCH	JR4006	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4006	2	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4007	2	STEEL RISER, GATE VALVE Rebuilt on 4/17/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4007A	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4008	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4008	2	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4008	3	STEEL RISER, GATE VALVE Rebuilt on 4/18/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4009	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4010	1	STEEL RISER, GATE VALVE Rebuilt on 4/23/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4011	1	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4011	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-017	4/4/2011	2" AV	JR4011	3	STEEL RISER, GATE VALVE Rebuilt on 4/24/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	2" AV	JR4013	1	STEEL RISER, GATE VALVE Rebuilt on 4/25/2012	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BRANCH	JR4014	2	-	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	12" BO	JR4015	1	Do not operate/CLOSE	No further action required under Rehab Plan.	N/A
NF-017	4/4/2011	MMP vault JRTP			-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	6" BO	JR5011A	1	shut/Do not operate	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	2" AV	JR5011B	1	-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	6" BO	JR5011C	1	shut/Do not operate	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	6" BRANCH	JR5012	2	shut/Do not operate	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	8" BRANCH	JR5013	1	-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	2" AV	JR5013A	2	-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	LD	JR5013A	4	MANHOLE/good	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	2" AV	JR5014B	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-018	5/18/2011	2" AV	JR5015	3	-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	18" ML	JR5015	4	-	No further action required under Rehab Plan.	N/A
NF-018	5/18/2011	24" BRANCH	JR5015	5	-	No further action required under Rehab Plan.	N/A
NF-019	5/26/2011	30" ML	JR5015	8	-	No further action required under Rehab Plan.	N/A
NF-019	5/26/2011	4" BP	JR5015	9	-	No further action required under Rehab Plan.	N/A
NF-019	5/26/2011	24" ML	JR5017	1	-	No further action required under Rehab Plan.	N/A
NF-019	5/26/2011	3" BP	JR5017	2	-	No further action required under Rehab Plan.	N/A
NF-019	5/26/2011	12" EPC	JR5017	4	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	16" ML	JR5020	3	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	8" BRANCH	JR5020A	1	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	4" BP	JR5020	4	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	2" AV	JR5020	6	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	LD	JR5020B	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-020	4/5/2011	LD	JR5020B1	1	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	LD	JR5020B2	1	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	LD	JR5020B3	1	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	LD	JR5020B4	2	-	No further action required under Rehab Plan.	N/A
NF-020	4/5/2011	2" AV	JR5020C	1	-	No further action required under Rehab Plan.	N/A
NF-021	4/5/2011	2" AV	JR5020C 1	1	-	No further action required under Rehab Plan.	N/A
NF-021	4/5/2011	10" BRANCH	JR5020D	1	-	No further action required under Rehab Plan.	N/A
NF-021	4/5/2011	6" BRANCH	JR5020E	1	-	No further action required under Rehab Plan.	N/A
NF-023	3/7/2011	8" BRANCH	YR1030	1	-	No further action required under Rehab Plan.	N/A
NF-023	3/7/2011	12" BRANCH	YR1029	4	-	No further action required under Rehab Plan.	N/A
NF-023	3/7/2011	8" BRANCH	YR1031A	1	-	No further action required under Rehab Plan.	N/A
NF-023	3/7/2011	16" ML	YR1032	1	-	No further action required under Rehab Plan.	N/A
NF-023	3/7/2011	3" BP	YR1032	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-023	3/7/2011	12" BRANCH	YR1032	3	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	42" ML	YR1029	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	12" BRANCH	YR1029	3	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	LD	YR1029	5	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR1029	6	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	30" ML	YR2003A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2003B	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	30" BRANCH	YR2003C	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	30" BRANCH	YR2003C	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	30" BRANCH	YR2003C	6	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2003C	8	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2004	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2005	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-024	3/8/2011	2" AV	YR2005A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2006	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2006A	1	YR-2006-A #1 A.V.: Needs to be rebuilt. Ball valve spins on riser pipe and is to close to brick work. #781843; Needs to be rebuilt Rebuilt on 10/3/2011	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2007	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2008	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2008A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2009	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2009	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	12" BRANCH	YR2010	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	12" BRANCH	YR2010	2	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2010	3	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2011	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2012	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-024	3/8/2011	6" BRANCH	YR2013	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2013A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2014A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	8" BRANCH	YR2015A	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	2" AV	YR2016	1	-	No further action required under Rehab Plan.	N/A
NF-024	3/8/2011	12" BRANCH	YR2017	3	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	18" ML	YR3015A	1	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	12" BRANCH	YR3012	1	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	18" BRANCH	YR3012	2	SEIZED; YR-3012 #2 BRANCH VALVE IS VERY STIFF NEEDS TO BE OPERATED WITH THE VALVE TRAILER. #782529; Stiff Valve is operable. No action required	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	10" BRANCH	YR3012	3	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	6" BRANCH	YR3012A	1	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	10" BRANCH	YR3014	1	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	2" AV	YR3014	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-025	3/10/2011	2" AV	YR3015A	2	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	2" AV	YR3017	1	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	10" BRANCH	YR3017	2	-	No further action required under Rehab Plan.	N/A
NF-025	3/10/2011	14" BRANCH	YR3017	3	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	24" ML	YR2039	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	4" BP	YR2039	2	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3001	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	LD	YR3001A	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	6" BRANCH	YR3002	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3002	3	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	8" BRANCH	YR3003	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3003	5	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3003A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-026	3/7/2011	8" BRANCH	YR3004	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	4" BRANCH	YR3005	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" CORP STOP	YR3006	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	12" BRANCH	YR3006	2	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	20" VALVE	YR3006	3	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	18" PLUG	YR3006	4	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	12" BRANCH	YR3006	5	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	6" BRANCH	YR3007	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	12" BO	YR3007	3	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	20" VALVE	YR3007	4	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	18" PLUG	YR3007	5	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	12" BRANCH	YR3007	6	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3008	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-026	3/7/2011	6" BRANCH	YR3010	2	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3010	3	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3011	1	-	No further action required under Rehab Plan.	N/A
NF-026	3/7/2011	2" AV	YR3011A	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	16" ML	W1031	6	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031A	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	LD	W1031B	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031C	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031D	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	16" ML	W1031D	2	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	LD	W1031D1	2	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031E	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031F	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-027	12/1/2010	2" AV	W1031G	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031H	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	16" ML	W1031I	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031J	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	LD	W1031K	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031L	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	2" AV	W1031M	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	16" ML	W1031N	1	-	No further action required under Rehab Plan.	N/A
NF-027	12/1/2010	12" EPC	W1031N	2	-	No further action required under Rehab Plan.	N/A
NF-028	2/28/2011	12" BO	JR1004	2	Do not operate; Right Handed	No further action required under Rehab Plan.	N/A
NF-028	2/28/2011	12" BO	JR1005	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-028	2/28/2011	2" AV	JR1005	2	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	8" BRANCH	JR1001	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-029	2/28/2011	36" ML	JR1001	2	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	6" BP	JR1001	3	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	8" BRANCH	JR1002	1	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	8" BRANCH	JR1002	2	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	8" BRANCH	JR1002A	1	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	12" BRANCH	JR1003	2	-	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	36" ML	JR4001	2	JR-4001-2 Valve box needs to be raised to grade. #782510; JR-4001-2 Valve is very stiff and could not get 75% turns. #782511 Valve has been exercised with the valve machine and the casting has been raised.	No further action required under Rehab Plan.	N/A
NF-029	2/28/2011	6" BP	JR4001	3	-	No further action required under Rehab Plan.	N/A
NF-030	2/28/2011	6" BP	JR1005	6	-	No further action required under Rehab Plan.	N/A
NF-030	2/28/2011	2" AV	JR1017A	1	-	No further action required under Rehab Plan.	N/A
NF-030	2/28/2011	8" BRANCH	JR1018	1	-	No further action required under Rehab Plan.	N/A
NF-030	2/28/2011	2" AV	JR1019	1	-	No further action required under Rehab Plan.	N/A
NF-030	2/28/2011	6" BRANCH	JR1019A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-030	2/28/2011	12" BRANCH	JR1020	2	-	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	18" ML	JR1005	3	-	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	2" AV	JR1005	4	-	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	12" ML	JR1005	7	-	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	8" BRANCH	JR1006	1	-	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	6" BO	JR1006	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-031	2/28/2011	12" ML	JR1006A	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	8" BRANCH	JR1009	2	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	2" AV	JR1009	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	12" BRANCH	JR1010	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	6" BO	JR1011	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	18" ML	JR1011A	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	6" BRANCH	JR1011A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-032	3/7/2011	18" ML	JR1012	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	6" BO	JR1012	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	18" ML	JR1013	1	-	No further action required under Rehab Plan.	N/A
NF-032	3/7/2011	6" EC	JR1013	2	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	8" BRANCH	JR1021	1	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	8" BRANCH	JR1021A	-	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	8" BRANCH	JR1022	2	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	12" BO	JR1022	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	12" BRANCH	JR1023	1	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	2" AV	JR1024	1	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	2" AV	JR1024A	1	-	No further action required under Rehab Plan.	N/A
NF-033	3/1/2011	2" AV	JR1025	1	-	No further action required under Rehab Plan.	N/A
NF-036	3/1/2011	6" BO	JR1014	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-036	3/1/2011	6" BO	JR1014	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-036	3/1/2011	10" BRANCH	JR1015	1	-	No further action required under Rehab Plan.	N/A
NF-037	10/5/2010	2" AV	JR1026	1	-	No further action required under Rehab Plan.	N/A
NF-037	10/5/2010	2" AV	JR1027	1	-	No further action required under Rehab Plan.	N/A
NF-037	10/5/2010	8" BRANCH	JR1029	1	-	No further action required under Rehab Plan.	N/A
NF-037	10/5/2010	10" BRANCH	JR1029A	1	-	No further action required under Rehab Plan.	N/A
NF-037	10/5/2010	12" BRANCH	JR1038	2	-	No further action required under Rehab Plan.	N/A
NF-038	10/6/2010	6" BRANCH	JR1034	1	-	No further action required under Rehab Plan.	N/A
NF-038	10/6/2010	6" BRANCH	JR1036	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-038	10/6/2010	6" BRANCH	JR1036	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-038	10/6/2010	6" BRANCH	JR1036	3	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	30" ML	JR1041	3	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	4" BP	JR1041	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-039	5/17/2011	30" ML	JR1041	5	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	4" BP	JR1041	6	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	LD	JR1041	11	STEEL RISER, GATE VALVE Rebuilt on 2/23/2012	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	2" AV	JR3001	1	2"A.V. JR-3001-1 Casting is loose from rings. #802779; Loose Casting Rebuilt on 12/6/2011	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	12" B0	JR3001	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	2" AV	JR3001	3	STEEL RISER, GATE VALVE Rebuilt on 1/3/2012	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	8" BRANCH	JR3002	1	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	12" B0	JR3002	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	6" BRANCH	JR3002	3	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	LD	JR3003	1	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	2" AV	JR3003B	1	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	8" BRANCH	JR3004	1	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	8" BRANCH	JR3005	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-039	5/17/2011	2" AV	JR3005	2	-	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	12" BRANCH	JR3006	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-039	5/17/2011	3" BP	JR3007	4	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1038	3	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1038A	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1038B	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	6" BRANCH	JR1038B	2	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1038C	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1039	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1039A	2	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1039B	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1040	1	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	16" ML	JR1040A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-040	4/26/2011	3" BP	JR1040A	2	-	No further action required under Rehab Plan.	N/A
NF-040	4/26/2011	2" AV	JR1040A	3	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	12" BRANCH	JR1041	8	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	6" BO	JR2001	4	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	2" AV	JR2003	1	COVERED BY FENCE Rebuilt on 6/20/2012	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	12" ML	JR2004	1	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	6" EC	JR2004	3	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	12" ML	JR2004	4	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	12" ML	JR2004	6	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	6" BO	JR2004A	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	2" AV	JR2004A	2	-	No further action required under Rehab Plan.	N/A
NF-041	4/26/2011	MMP VAULT			-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2008	3	STEEL RISER, GATE VALVE Rebuilt on 6/18/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-042	4/26/2011	2" AV	JR2015B	1	STEEL RISER, GATE VALVE Rebuilt on 6/28/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	20" ML	JR2024	3	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2024	6	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	20" ML	JR1041	9	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	4" BP	JR1041	10	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	12" ML	JR2004	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2007	1	STEEL RISER, GATE VALVE Rebuilt on 6/14/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2008	1	STEEL RISER, GATE VALVE Rebuilt on 6/12/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2008	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2009	1	STEEL RISER, GATE VALVE Rebuilt on 6/7/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2009	2	STEEL RISER, GATE VALVE Rebuilt on 06/13/12	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2010	1	STEEL RISER, GATE VALVE Rebuilt on 6/6/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2010A	1	STEEL RISER, GATE VALVE Rebuilt on 6/11/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-042	4/26/2011	2" AV	JR2011	1	STEEL RISER, GATE VALVE Rebuilt on 6/25/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	LD	JR2011	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2012	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2013	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	12" BRANCH	JR2013	3	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2013	4	CORP. STOP Rebuilt on 6/21/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	LD	JR2013	5	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	LD	JR2013	6	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	20" ML	JR2014	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	3" BP	JR2014	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2015	1	STEEL RISER, GATE VALVE Rebuilt on 6/19/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2015A	1	STEEL RISER, GATE VALVE Rebuilt on 6/27/2012	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	12" BRANCH	JR2016	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-042	4/26/2011	20" ML	JR2018	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	3" BP	JR2018	2	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2018	4	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2018	5	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2018A	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2018A	4	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	12" BRANCH	JR2020	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2021	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	2" AV	JR2022	1	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	3" BP	JR2024	4	-	No further action required under Rehab Plan.	N/A
NF-042	4/26/2011	8" BRANCH	JR2024	5	-	No further action required under Rehab Plan.	N/A
NF-043	3/31/2011	12" ML	JR2004	5	-	No further action required under Rehab Plan.	N/A
NF-043	3/31/2011	2" AV	JR2005	1	STEEL RISER, GATE VALVE Rebuilt on 6/26/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-043	3/31/2011	MMP VAULT	-	-	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	8" BRANCH	YR2022	2	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	30" ML	YR2017	1	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	4" BP	YR2017	2	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	10" BRANCH	YR2017	5	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	10" BRANCH	YR2017	6	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	2" AV	YR2018	1	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	8" BRANCH	YR2018	2	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	10" BRANCH	YR2019	2	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	8" BRANCH	YR2019	3	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	2" AV	YR2022	1	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	12" BRANCH	YR2023	1	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	8" BRANCH	YR2024	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-046	5/3/2011	2" AV	YR2024	2	-	No further action required under Rehab Plan.	N/A
NF-046	5/3/2011	4" BP	YR2025	3	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	12" BRANCH	YR2025	6	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	8" BRANCH	YR2026	1	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	12" BRANCH	YR2029	1	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	12" BRANCH	YR2029	2	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	2" AV	YR2029	3	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" EC	YR2030	1	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	30" ML	YR2030	2	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" EC	YR2030	3	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	30" ML	YR2030	4	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" ML	YR2030	5	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" ML	YR2030	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-047	4/25/2011	2" AV	YR2030	7	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" ML	YR2030	8	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	2" AV	YR2030	9	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	2" AV	YR2030	10	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	30" ML	YR2030	11	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	24" EC	YR2030	12	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	2" AV	YR2034	1	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	12" BRANCH	YR2035	1	-	No further action required under Rehab Plan.	N/A
NF-047	4/25/2011	12" BO	YR2036	1	-	No further action required under Rehab Plan.	N/A
NF-048	4/11/2011	24" ML	YR2025	1	-	No further action required under Rehab Plan.	N/A
NF-048	4/11/2011	4" BP	YR2025	2	-	No further action required under Rehab Plan.	N/A
NF-048	4/11/2011	2" AV	YR2025	5	-	No further action required under Rehab Plan.	N/A
NF-048	4/11/2011	8" BRANCH	YR2027	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-049	5/17/2011	20" ML	JR3007	3	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	8" BRANCH	JR3008A	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	12" BRANCH	JR3009	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	10" BO	JR3012A	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	12" BRANCH	JR3013	2	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	12" BRANCH	JR3013	3	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	30" ML	JR3013	4	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	4" BP	JR3013	5	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	LD	JR3013	6	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	TS	YR2031	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	TS	YR2031	2	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	2" AV	YR2031A	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	30" ML	YR2031B	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-049	4/12/2011	6" BRANCH	YR2031B	2	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	2" AV	YR2031C	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	TS	YR2032	1	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	TS	YR2032	2	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	6" BRANCH	YR2032A	2	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	6" BRANCH (MMP)	YR2032A	3	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	2" AV	YR2032A	4	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	30" ML	YR2032A	5	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	2" AV	YR2032A	6	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	6" BRANCH	YR2032A	7	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	Vault INSPECTION	YR2032A	-	-	No further action required under Rehab Plan.	N/A
NF-049	4/12/2011	8" BRANCH	YR2032B	1	-	No further action required under Rehab Plan.	N/A
NF-050	1/7/2011	12" ML	JR3011	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-050	1/7/2011	6" EC	JR3011	3	-	No further action required under Rehab Plan.	N/A
NF-050	1/7/2011	10" ML	JR3011	4	-	No further action required under Rehab Plan.	N/A
NF-055	1/24/2011	6" EC	JR2006	1	-	No further action required under Rehab Plan.	N/A
NF-055	1/24/2011	6" ML	JR2006	2	-	No further action required under Rehab Plan.	N/A
NF-055	1/24/2011	6" OUTFALL	JR2006	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010	6	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4009	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4009	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" CORP STOP	YR4009	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" CORP STOP	YR4009	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4009	5	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4009	6	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4009A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-058	4/6/2011	CP	YR4009A	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4009A	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4009A	5	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4009A	6	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	CP	YR4009B	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	CP	YR4009B	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	CP	YR4009B	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4009B	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4010	5	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4010	7	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	CP	YR4010	8	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	CP	YR4010	9	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-058	4/6/2011	2" AV	YR4010	10	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010A	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010A	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010B	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010B	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010C	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010D	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4010D	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	12" BRANCH	YR4013	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4013	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" BRANCH	YR4013	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4013	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4013	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-058	4/6/2011	30" ML	YR4013A	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4013A	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4014	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4014	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4015	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4015	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4016	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4017	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	12" BRANCH	YR4017	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	10" BO	YR4017	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4019	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	10" BRANCH	YR4022	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	16" ML	YR4023	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-058	4/6/2011	10" BRANCH	YR4026A	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4027	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	10" BRANCH	YR4027	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	10" BRANCH	YR4027	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4027	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4027	5	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	10" BRANCH	YR4027	6	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4027	8	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	12" BRANCH	YR4027	11	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	12" BRANCH	YR4027	12	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" CORP STOP	YR4033	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" CORP STOP	YR4033	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	30" ML	YR4034	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-058	4/6/2011	8" BRANCH	YR4034	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4034	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4034	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4036	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4036	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BRANCH	YR4037	1	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	8" BO	YR4038	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	24" ML	YR4038	2	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4038	3	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	24" ML	YR4038	4	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	4" BP	YR4038	5	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	2" AV	YR4038	8	-	No further action required under Rehab Plan.	N/A
NF-058	4/6/2011	EC	YR4038	9	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-059	1/5/2011	12" ML	YR2039	5	-	No further action required under Rehab Plan.	N/A
NF-059	1/5/2011	4" BRANCH	YR3019	1	-	No further action required under Rehab Plan.	N/A
NF-059	1/5/2011	8" BRANCH	YR3020	1	-	No further action required under Rehab Plan.	N/A
NF-059	1/5/2011	12" ML	YR3020	2	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	18" ML	YR4002	1	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4003	1	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4003	2	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4004	3	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4004	4	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	18" ML	YR4004	5	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4004	1	-	No further action required under Rehab Plan.	N/A
NF-060	1/5/2011	8" BRANCH	YR4004	2	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	2" AV	YR4001	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-061	1/7/2011	30" ML	YR2039	3	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	4" BP	YR2039	4	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4001A	1	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4001A	2	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	2" AV	YR4001A	3	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	30" ML	YR4005	1	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	4" BP	YR4005	2	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	2" AV	YR4005	3	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	2" AV	YR4005A	4	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	2" AV	YR4006	1	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4006	3	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4008	1	OPEN; YR-4008 #1 THE NUT ON THE VALVE IS ROUNDED. WO issue 8/1/11. Valve is operable, no action required.	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4008	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-061	1/7/2011	30" ML	YR4008	3	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	4" BP	YR4008	4	-	No further action required under Rehab Plan.	N/A
NF-061	1/7/2011	12" BRANCH	YR4008A	1	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	24" ML	YR4038	6	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	4" BP	YR4038	7	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	12" EPC	YR4038	10	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	2" AV	YR5001	1	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	8" Branch	YR5001	2	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	2" AV	YR5002	1	STEEL RISER, GATE VALVE Rebuilt on 10/26/2012	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	8" BRANCH	YR5002	2	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	2" AV	YR5004	1	STEEL RISER, GATE VALVE Rebuilt on 9/25/2012	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	8" BRANCH	YR5005	1	-	No further action required under Rehab Plan.	N/A
NF-065	1/10/2011	24" ML	YR5005	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-065	1/10/2011	4" BP	YR5005	3	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5006	1	STEEL RISER, GATE VALVE Rebuilt on 10/25/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5006A	1	STEEL RISER, GATE VALVE Rebuilt on 10/24/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5007	1	STEEL RISER, GATE VALVE Rebuilt on 10/23/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5007A	1	STEEL RISER, GATE VALVE Rebuilt on 10/17/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	8" BRANCH	YR5007A	2	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	6" BRANCH	YR5007B	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	10" BRANCH	YR5009	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	24" ML	YR5009	2	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	4" BP	YR5009	3	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5009A	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5010	1	YR-5010 #1- Air vent with highly corroded riser. #742969; Corroded AV Rebuilt on 9/15/2011	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5010A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-066	1/11/2011	12" BRANCH	YR5011	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5011	2	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5012	1	YR-5012 #1- Air vent with highly corroded riser, also corp. stop not completely open. #742917; Corroded AV Rebuilt on 1/26/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5013	1	YR-5013 #1- Air vent with highly corroded riser. #742918; Corroded AV Rebuilt on 1/24/2012	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5014	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	10" BRANCH	YR5015	1	-	No further action required under Rehab Plan.	N/A
NF-066	1/11/2011	2" AV	YR5015	2	-	No further action required under Rehab Plan.	N/A
NF-072	4/6/2011	10" ML	YR4027	2	-	No further action required under Rehab Plan.	N/A
NF-072	4/6/2011	10" ML	YR4027	6	-	No further action required under Rehab Plan.	N/A
NF-072	1/4/2011	6" BO	YR4028	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-072	1/4/2011	12" ML	YR4029	3	-	No further action required under Rehab Plan.	N/A
NF-073	1/4/2011	12" ML	YR4029	2	-	No further action required under Rehab Plan.	N/A
NF-073	1/4/2011	2" AV	YR4031	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-075	1/4/2011	6" BO	BH2002	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-075	1/4/2011	10" ML	BH2002	2	-	No further action required under Rehab Plan.	N/A
NF-075	1/4/2011	8" BRANCH	BH2002A	1	-	No further action required under Rehab Plan.	N/A
NF-076	1/5/2011	12" ML	BH2003	1	-	No further action required under Rehab Plan.	N/A
NF-076	1/5/2011	12" ML	BH2003	2	-	No further action required under Rehab Plan.	N/A
NF-076	1/5/2011	10" BRANCH	BH2003	3	-	No further action required under Rehab Plan.	N/A
NF-085	1/31/2011	1"A.V.	BH2001	1	cmms # 764758 -rebuild a.v. BH-2001-1; Rebuilt on 10/25/2011	No further action required under Rehab Plan.	N/A
NF-085	1/31/2011	8" BRANCH	BH2001	2	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	20" ML	YR5015	3	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	3" BP	YR5015	4	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	2" AV	YR5018	1	STEEL RISER, GATE VALVE Rebuilt on 9/26/2012	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	2" AV	YR5018A	1	STEEL RISER, GATE VALVE Rebuilt on 9/20/2012	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	10" BRANCH	YR5020	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-089	1/12/2011	2" AV	YR5020	2	STEEL RISER, GATE VALVE Rebuilt on 10/18/2012	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	2" AV	YR5021	1	STEEL RISER, GATE VALVE Rebuilt on 10/19/2012	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	20" ML	YR5022A	1	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	3" BP	YR5022A	2	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	2" AV	YR5023	1	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	8" BRANCH	YR5024	1	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	20" ML	YR5024	2	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	4" BP	YR5024	3	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	8" ML	YR5025	1	-	No further action required under Rehab Plan.	N/A
NF-089	1/12/2011	6" ML	YR5025	2	-	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	8" BO	BH5001	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	8" BRANCH	BH5002	1	-	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	8" BRANCH	BH5002	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-090	5/10/2011	8" ML	BH5004	1	-	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	8" BRANCH	BH5004	2	-	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	2" AV	BH5004	3	-	No further action required under Rehab Plan.	N/A
NF-090	5/10/2011	4" BRANCH (NEW)	YR5024	5	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	10" BO	BH4005	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	2" AV	BH4006	1	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	2" AV	BH4007	1	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	8" BRANCH	YR5017	1	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	16" ML	YR5017	5	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	16" ML	YR5017	6	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	3" BP	YR5017	7	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	8" BRANCH	YR5017	8	-	No further action required under Rehab Plan.	N/A
NF-091	1/31/2011	8" EC	YR5017	9	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-093	5/19/2010	16" ML	BH4001	1	-	No further action required under Rehab Plan.	N/A
NF-093	5/19/2010	10" ML	BH4003	2	-	No further action required under Rehab Plan.	N/A
NF-093	5/19/2010	8" BRANCH	BH4003	3	-	No further action required under Rehab Plan.	N/A
NF-093	5/19/2010	16" ML	BH4004	1	-	No further action required under Rehab Plan.	N/A
NF-093	5/19/2010	12" BP	BH4004	2	Do not operate/CLOSE	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	2" AV	BH1018	1	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	2" AV	BH1019	1	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	14" ML	BH1020	1	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	8" EC	BH1020	2	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	14" ML	BH1020	3	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	12" EPC	BH1020	4	-	No further action required under Rehab Plan.	N/A
NF-096	5/9/2011	vault inspection	GOOD	-	-	No further action required under Rehab Plan.	N/A
NF-097	12/9/2010	8" BRANCH	BH1015A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-097	12/9/2010	2" AV	BH1017	1	-	No further action required under Rehab Plan.	N/A
NF-097	12/9/2010	10" BRANCH	BH1017A	1	-	No further action required under Rehab Plan.	N/A
NF-100	4/26/2011	18" ML	JR2024	1	-	No further action required under Rehab Plan.	N/A
NF-100	4/26/2011	3" BP	JR2024	2	-	No further action required under Rehab Plan.	N/A
NF-100	4/26/2011	8" EC	JR2025	1	-	No further action required under Rehab Plan.	N/A
NF-105	12/2/2010	10" ML	BH6011	1	-	No further action required under Rehab Plan.	N/A
NF-105	12/2/2010	10" BRANCH	BH6011	2	-	No further action required under Rehab Plan.	N/A
NF-105	12/2/2010	4" BRANCH	BH6012	1	-	No further action required under Rehab Plan.	N/A
NF-105	12/2/2010	6" BRANCH	BH6012B	1	-	No further action required under Rehab Plan.	N/A
NF-105	12/2/2010	6" BRANCH	BH6013	2	shut; EM. CON	No further action required under Rehab Plan.	N/A
NF-113	8/1/2011	Valve	BH6005	3	BH-6005 #2, BH-6005 #3- Both new valves. New facility. No Action Necessary.	No further action required under Rehab Plan.	N/A
NF-113	2/1/2011	2" AV	BH6005	1	-	No further action required under Rehab Plan.	N/A
NF-113	8/1/2011	Valve	BH6005	2	BH-6005 #2, BH-6005 #3- Both new valves. New facility. No Action Necessary.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-113	2/1/2011	2" AV	BH6005A	1	-	No further action required under Rehab Plan.	N/A
NF-113	2/1/2011	2" AV	BH6007	1	-	No further action required under Rehab Plan.	N/A
NF-113	2/1/2011	14" BRANCH	BH6008	1	-	No further action required under Rehab Plan.	N/A
NF-113	2/1/2011	8" EPC	BH6008	2	-	No further action required under Rehab Plan.	N/A
NF-119	12/10/2010	4" BO	BH6003	1	shut/Do not operate	No further action required under Rehab Plan.	N/A
NF-119	12/10/2010	2" AV	BH6003	2	-	No further action required under Rehab Plan.	N/A
NF-120	2/1/2011	2" AV	YR5017	10	-	No further action required under Rehab Plan.	N/A
NF-120	2/1/2011	2" AV	YR5016	1	-	No further action required under Rehab Plan.	N/A
NF-120	2/1/2011	2" AV	YR5016	2	STEEL RISER, GATE VALVE Rebuilt on 10/1/2012	No further action required under Rehab Plan.	N/A
NF-120	2/1/2011	16" ML	YR5017	3	-	No further action required under Rehab Plan.	N/A
NF-121	2/1/2011	2" AV	BH6002	1	-	No further action required under Rehab Plan.	N/A
NF-121	2/1/2011	8" EC	BH6001	2	-	No further action required under Rehab Plan.	N/A
NF-121	2/1/2011	14" ML	BH6001	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-121	2/1/2011	12" ML	BH6003	3	-	No further action required under Rehab Plan.	N/A
NF-122	2/1/2011	18" ML	BH6004	1	BH-6004 #1 has been replaced, new valve has 238 turns, exercised at 180 turns. BH-6004 #1, #2, both have to have valve boxes added, but will be done soon, work was performed in area. ; Needs new valve box Work Completed. No action necessary.	No further action required under Rehab Plan.	N/A
NF-122	2/1/2011	8" EC	BH6004	2	BH-6004 #1, #2, both have to have valve boxes added, but will be done soon, work was performed in area.; Needs new valve box Work Completed. No action necessary.	No further action required under Rehab Plan.	N/A
NF-128	2/1/2011	EPC	BH1001	2	-	No further action required under Rehab Plan.	N/A
NF-128	2/1/2011	2" AV	BH1001	3	-	No further action required under Rehab Plan.	N/A
NF-128	2/1/2011	12" ML	BH1001	4	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001C	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001D	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001E	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001F	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001G	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	8" BRANCH	BH1001H	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-130	2/1/2011	2" AV	BH1001H	2	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	2" AV	BH1001I	1	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	36" ML	BH1001I	2	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	6" BP	BH1001I	3	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	18" ML	BH1001I	4	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	3" BP	BH1001I	5	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	3" BP	BH1001I	6	-	No further action required under Rehab Plan.	N/A
NF-130	2/1/2011	18" ML	BH1001I	7	-	No further action required under Rehab Plan.	N/A
NF-131	2/2/2011	20" BRANCH	BH1002	1	-	No further action required under Rehab Plan.	N/A
NF-131	2/2/2011	8" BRANCH	BH1002A	1	-	No further action required under Rehab Plan.	N/A
NF-132	2/2/2011	14" ML	BH3001	1	-	No further action required under Rehab Plan.	N/A
NF-132	2/2/2011	12" BRANCH	BH3001	2	-	No further action required under Rehab Plan.	N/A
NF-132	2/2/2011	8" EC	BH3002	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-133	2/1/2011	6" BO	BH1006	2	-	No further action required under Rehab Plan.	N/A
NF-133	2/1/2011	12" BO	BH1006	1	-	No further action required under Rehab Plan.	N/A
NF-133	2/1/2011	8" BRANCH	BH1006A	1	-	No further action required under Rehab Plan.	N/A
NF-133	2/1/2011	10" BRANCH	BH1006B	1	-	No further action required under Rehab Plan.	N/A
NF-133	2/1/2011	2" AV	BH1007	1	-	No further action required under Rehab Plan.	N/A
NF-133	2/1/2011	12" ML	BH1008	2	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	24" ML	BH1004	6	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	2" AV	BH1003	1	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	4" BRANCH	BH1003A	1	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	24" ML	BH1004	1	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	2" AV	BH1004	2	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	24" ML	BH1004	3	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	24" ML	BH1004	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-153	2/1/2011	24" EPC	BH1004	5	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	24" ML	BH1004	9	-	No further action required under Rehab Plan.	N/A
NF-153	2/1/2011	4" BP	BH1004	10	-	No further action required under Rehab Plan.	N/A
NF-157	2/1/2011	BRANCH	BH1012	2	-	No further action required under Rehab Plan.	N/A
NF-157	2/1/2011	LD	BH1012	3	-	No further action required under Rehab Plan.	N/A
NF-157	2/1/2011	8" EC	BH1012	4	-	No further action required under Rehab Plan.	N/A
NF-158	2/1/2011	2" AV	BH1011	1	BH-1011 No. 1 2" A.V. Ball Valve will not open CMMS #751599 VENTED AIR VENT AFTER REBUILD CMMS # 751051 REBUILT AIR VENT; Corrected Rebuilt on 8/9/2012	No further action required under Rehab Plan.	N/A
NF-161	2/1/2011	16" ML	BH1013	1	-	No further action required under Rehab Plan.	N/A
NF-161	2/1/2011	3" BP	BH1013	2	-	No further action required under Rehab Plan.	N/A
NF-161	2/1/2011	2" AV	BH1014	1	-	No further action required under Rehab Plan.	N/A
NF-161	2/1/2011	12" ML	BH1015	1	-	No further action required under Rehab Plan.	N/A
NF-162	5/11/2011	8" BRANCH	BH1008	1	-	No further action required under Rehab Plan.	N/A
NF-162	5/11/2011	8" BRANCH	BH1008A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-162	5/11/2011	8" BRANCH	BH1008A	3	-	No further action required under Rehab Plan.	N/A
NF-162	5/11/2011	8" BRANCH	BH1008A	4	-	No further action required under Rehab Plan.	N/A
NF-162	5/11/2011	2" AV	BH1008A	5	-	No further action required under Rehab Plan.	N/A
NF-162	5/11/2011	8" ML	BH1008A	6	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	24" ML	W3003	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	12" EPC	W3003	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3003	3	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" BRANCH	W3003	5	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" BRANCH	W3003	6	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3003	7	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3004	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" ML	W3004	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	3" BP	W3004	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-163	5/23/2011	LD	W3004	4	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3005	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" ML	W3006	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	3" BP	W3006	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3007	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3008	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3009	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3010	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" ML	W3011	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	3" BP	W3011	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	LD	W3011	3	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3012	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3012	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-163	5/23/2011	LD	W3012	3	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	LD	W3013	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3014	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	LD	W3014	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3015	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3016	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	14" ML	W3017	1	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	10" EC	W3017	2	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	2" AV	W3017	3	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	3" BP	W3017	4	-	No further action required under Rehab Plan.	N/A
NF-163	5/23/2011	18" ML	W3017	5	-	No further action required under Rehab Plan.	N/A
NF-165	11/29/2010	16" BRANCH	W2012	2	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012A	1	GATE VALVE Rebuilt on 8/6/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-165	1/11/2011	16" ML	W2012B	1	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012B	2	GATE VALVE Rebuilt on 9/10/2012	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012D	1	GATE VALVE Rebuilt on 8/2/2012	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012D	2	GATE VALVE Rebuilt on 8/1/2012	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012E	1	GATE VALVE Rebuilt on 7/30/2012	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	10" BRANCH	W2012E	2	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	16" ML	W2012E	3	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	12" BRANCH	W2012E	4	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	10" ML	W2012E	5	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	10" EC	W2012E	6	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012F	1	STEEL RISER, GATE VALVE Rebuilt on 7/31/2012	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	16" ML	W2012G	1	-	No further action required under Rehab Plan.	N/A
NF-165	1/11/2011	2" AV	W2012G	2	STEEL RISER, GATE VALVE Rebuilt on 8/15/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-165	1/11/2011	8" EC	W2012G	3	-	No further action required under Rehab Plan.	N/A
NF-170	5/11/2011	14" ML	BH1005	1	-	No further action required under Rehab Plan.	N/A
NF-170	5/11/2011	12" BRANCH	BH1005	2	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	4" BP	JR5015	7	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	30" ML	JR5009	4	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	4" BP	JR5009	5	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5011D	2	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	12" BRANCH	JR5012	3	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5012	6	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5013	2	Steel Riser Rebuilt on 4/12/2012	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	LD	JR5013	3	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5013A	1	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	LD	JR5013A	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-171	5/18/2011	8" BRANCH	JR5013B	1	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5014	1	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	2" AV	JR5014B	2	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	24" ML	JR5015	1	-	No further action required under Rehab Plan.	N/A
NF-171	5/18/2011	30" ML	JR5015	6	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004E	7	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004E	8	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	4" BP	W1004	5	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004	8	STEEL RISER, GATE VALVE Rebuilt on 7/17/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004A	1	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004A	2	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004A	3	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004B	1	STEEL RISER, GATE VALVE Rebuilt on 7/18/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-172	4/18/2011	2" AV	W1004C	1	STEEL RISER, GATE VALVE Rebuilt on 7/25/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004D	1	STEEL RISER, GATE VALVE Rebuilt on 7/19/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004E	1	STEEL RISER, GATE VALVE Rebuilt on 7/26/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004E	2	STEEL RISER, GATE VALVE Rebuilt on 7/23/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	6" BP	W1004E	4	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004E	5	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004E	6	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004F	1	STEEL RISER, GATE VALVE Rebuilt on 7/24/2012	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004G	1	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004H	1	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004I	1	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004I	3	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	CATHODE	W1004I	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-172	4/18/2011	CATHODE	W1004I	5	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	2" AV	W1004J	1	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	30" ML	W1004J	7	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	4" BP	W1004J	8	-	No further action required under Rehab Plan.	N/A
NF-172	4/18/2011	12" EPC	W1004J	9	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	6" BRANCH	YR6016	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6002	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6002	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6003	1	Steel Riser Rebuilt on 2/1/2012	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6004	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6005	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6005	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6006	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-173	12/2/2010	8" BRANCH	YR6007	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	10" BRANCH	YR6008	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6009	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6010	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	16" ML	YR6011	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	3" BP	YR6011	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6011	3	Steel Riser Rebuilt on 2/7/2012	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6011	4	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6012	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6012	2	Steel Riser Rebuilt on 2/8/2012	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6013	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6013	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	16" ML	YR6013	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-173	12/2/2010	3" BP	YR6013	4	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6014	1	Steel Riser Rebuilt on 2/9/2012	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6014A	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	16" ML	YR6015	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	3" BP	YR6015	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	2" AV	YR6017	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6018	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	10" BRANCH	YR6018A	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	8" BRANCH	YR6018B	1	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	16" ML	YR6018B	2	-	No further action required under Rehab Plan.	N/A
NF-173	12/2/2010	3" BP	YR6018B	3	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	20" ML	W5018A	1	-	No further action required under Rehab Plan.	N/A
NF-177	5/9/2011	3" BP	W5018A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-177	1/11/2011	LD	W5018B	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	LD	W5018D	2	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	8" BRANCH	W5018D1	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	2" AV	W5018D2	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	2" AV	W5018D3	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	LD	W5018D4	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	LD	W5018D5	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	2" AV	W5018D5	2	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	8" BRANCH	W5018D5	3	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	8" BRANCH	W5018E	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	24" ML	W5018F	1	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	24" ML	W5018J	2	-	No further action required under Rehab Plan.	N/A
NF-177	1/11/2011	3" BP	W5018J	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-177	1/11/2011	8" BRANCH	W5018J	4	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	4" BP	W5039-A	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	LD	W5039-A	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	18" ML	W5021	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	3" BP	W5021	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	8" BRANCH	W5021	4	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5021	5	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	12" BRANCH	W5022	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5022	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5022	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5022	4	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	12" BRANCH	W5022A	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" AV	W5023	1	STEEL RISER, GATE VALVE Rebuilt on 9/17/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-178	7/14/2011	2" LD	W5024	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5025	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5027	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5028	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	24" ML	W5029	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	4" BP	W5029	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	12" BRANCH	W5029	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5029	4	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5029	5	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5029	6	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	8" BRANCH	W5029	7	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5029B	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	12" ML	W5029B	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-178	7/14/2011	2" LD	W5031	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	6" BRANCH	W5031	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5032	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	8" BRANCH	W5033	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5034	1	NEEDS REPAIR Noted issue resolved on 07/28/2011	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5035	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	4" BP	W5035	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" AV	W5036	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5036	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" AV	W5037	1	W-5037-1 2" A.V. has broken handle on gate valve, when operated with wrench packing leaks badly. Could not safely vent A.V. #741445 Noted issue addressed on 09/27/2012	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	CP	W5037	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5038	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5039	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-178	7/14/2011	24" ML	W5039-A	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	8" BRANCH	W5040	1	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5040	2	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" AV	W5040	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	24" ML	W5041	3	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	4" BP	W5041	4	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5041	5	-	No further action required under Rehab Plan.	N/A
NF-178	7/14/2011	2" LD	W5041	6	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	2" AV	JR5018	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	2" AV	JR5019	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	24" ML	JR5020	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	4" BP	JR5020	2	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	10" BRANCH	JR5021	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-179	12/8/2010	2" AV	JR5022	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	6" BRANCH	JR5024A	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	2" AV	JR5026	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	24" ML	JR5030	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	4" BP	JR5030	2	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	8" BRANCH	JR5030	3	-	No further action required under Rehab Plan.	N/A
NF-179	12/6/2011	2" AV	JR5031	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/6/2011	2" AV	JR5032	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	24" ML	JR5033	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	2" AV	JR5034	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	24" ML	JR5038	1	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	12" BRANCH	JR5038	2	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	16" ML	JR5039	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-179	12/8/2010	3" BP	JR5039	2	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	24" ML	JR5039	3	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	4" BP	JR5039	4	-	No further action required under Rehab Plan.	N/A
NF-179	12/8/2010	6" BRANCH	JR5039	5	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	30" ML	YR6018B	4	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	4" BP	YR6018B	5	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" AV	YR6018B	6	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	6" BRANCH	YR6019	2	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	6" BRANCH	YR6019	3	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	8" BRANCH	YR6019	4	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" LD	YR6020	2	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" AV	YR6021	3	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" LD	YR6022	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-180	12/2/2010	2" LD	YR6022	2	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" AV	YR6023	3	STEEL RISER Rebuilt on 2/10/2012	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" AV	YR6024	1	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" LD	YR6024	2	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	8" BRANCH	YR6025	1	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	30" ML	YR6025	2	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	4" BP	YR6025	3	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	8" BRANCH	YR6025	4	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	8" BRANCH	YR6025	5	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	2" AV	YR6025	6	-	No further action required under Rehab Plan.	N/A
NF-180	12/2/2010	CP	YR6025	7	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	30" ML	YR6026	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6026	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-182	12/6/2010	8" BRANCH	YR6026	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	8" BRANCH	YR6026	4	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6026	5	STEEL RISER Rebuilt on 1/23/2012	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6027	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6028	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	30" ML	YR6029	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6029	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	TELOGER	YR6029	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	VAULT	YR6029	4	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	24" ML	YR6029	5	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6029	6	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	24" ML	YR6029	7	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6029	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-182	12/6/2010	8" BRANCH	YR6029	9	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6030	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" BRANCH	YR6030A	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6031	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	30" ML	YR6032	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6032	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	8" BRANCH	YR6032	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6033	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	LD	YR6034	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" BRANCH	YR6034	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" BRANCH	YR6034	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6035	1	STEEL RISER Rebuilt on 1/18/2012	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6035	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-182	12/6/2010	2" BRANCH	YR6035	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BRANCH	YR6035	4	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	30" ML	YR6036	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BP	YR6036	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6037	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	LD	YR6037	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BRANCH	YR6037	3	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" BRANCH	YR6037A	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6038	1	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	4" BRANCH	YR6038	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	2" AV	YR6039	1	STEEL RISER Rebuilt on 2/28/2012	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	8" BRANCH	YR6040	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	LD	YR6041	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-182	12/6/2010	20" ML	YR6041	2	-	No further action required under Rehab Plan.	N/A
NF-182	12/6/2010	3" BP	YR6041	3	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	16" ML	YR6600	4	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	3" BP	YR6600	5	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" AV	YR6600	6	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	8" BRANCH	YR6601	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	4" BRANCH	YR6601B	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	16" ML	YR6603	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	3" BP	YR6603	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	LD	YR6604	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" BRANCH	YR6604	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	4" BRANCH	YR6605	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	4" BRANCH	YR6605A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-183	12/8/2010	2" AV	YR6606	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" BRANCH	YR6606	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" AV	YR6607	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	16" ML	YR6609	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	3" BP	YR6609	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	8" BRANCH	YR6609A	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	4" BRANCH	YR6609B	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" BRANCH	YR6609C	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" AV	YR6610	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	8" BRANCH	YR6610	2	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" BRANCH	YR6610A	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	2" AV	YR6612	1	-	No further action required under Rehab Plan.	N/A
NF-183	12/8/2010	16" ML	YR6613	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-183	12/8/2010	3" BP	YR6613	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	4" BRANCH	YR6613A	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" BRANCH	YR6613B	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	8" BRANCH	YR6613B	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	4" BRANCH	YR6614	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	8" BRANCH	YR6616A	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	LD	YR6617	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	16" ML	YR6617	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	3" BP	YR6617	3	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" AV	YR6617	4	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" BRANCH	YR6617	5	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	6" BRANCH	YR6618A	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" AV	YR6619	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-184	12/13/2010	4" BRANCH	YR6619	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	4" BRANCH	YR6620	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" AV	YR6621	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	16" ML	YR6622	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	3" BP	YR6622	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	4" BRANCH	YR6622A	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" AV	YR6623	1	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	2" BRANCH	YR6623	2	-	No further action required under Rehab Plan.	N/A
NF-184	12/13/2010	16" ML	YR6624	3	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6041A	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6041A	4	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6042	1	Steel Riser Rebuilt on 1/24/2012	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6042	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-185	12/13/2010	4" BRANCH	YR6043	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	6" BRANCH	YR6043A	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6044	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" BRANCH	YR6044	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6044A	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6045	1	Steel Riser Rebuilt on 1/23/2012	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" BRANCH	YR6045	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" BRANCH	YR6046	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6047	1	Steel Riser Rebuilt on 1/19/2012	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	8" BRANCH	YR6047	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	20" ML	YR6048	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	3" BP	YR6048	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6048	3	Steel Riser Rebuilt on 2/22/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-185	12/13/2010	2" BRANCH	YR6048	4	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" BRANCH	YR6049	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	8" BRANCH	YR6049A	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6050	1	Steel Riser Rebuilt on 1/25/2012	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" AV	YR6051	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6051	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6051A	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	20" ML	YR6053	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	3" BP	YR6053	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	4" BRANCH	YR6056	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	8" BRANCH	YR6057	1	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	8" RED VALVE	YR6057	2	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	20" ML	YR6057	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-185	12/13/2010	3" BP	YR6057	4	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	8" BRANCH	YR6057	5	-	No further action required under Rehab Plan.	N/A
NF-185	12/13/2010	2" BRANCH	YR6057	1-A	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	LD	YR6060	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6060	3	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6061	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	6" BRANCH	YR6061	3	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	20" ML	YR6062	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	3" BP	YR6062	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	4" BRANCH	YR6062A	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6062B	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6062C	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" AV	YR6063	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-186	12/15/2010	4" BRANCH	YR6064	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6065	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	20" ML	YR6066	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	3" BP	YR6066	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	4" BRANCH	YR6067	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	4" BRANCH	YR6067A	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	LD	YR6068	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	2" BRANCH	YR6069	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	18" ML	YR6070	1	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	3" BP	YR6070	2	-	No further action required under Rehab Plan.	N/A
NF-186	12/15/2010	4" BRANCH	YR6070	3	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6070A	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	8" BRANCH	YR6070A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-187	12/20/2010	2" BRANCH	YR6071	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" AV	YR6073	1	Steel Riser Rebuilt on 2/27/2012	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	8" BRANCH	YR6074A	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	18" ML	YR6075	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	3" BP	YR6075	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	LD	YR6077	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	10" BRANCH	YR6080	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6081	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	18" ML	YR6082	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	3" BP	YR6082	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	4" BRANCH	YR6084A	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6084B	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	4" BRANCH	YR6086	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-187	12/20/2010	4" BRANCH	YR6088	3	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	18" ML	YR6089	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	3" BP	YR6089	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	8" BRANCH	YR6089	4	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6090	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	LD	YR6091	3	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	4" BRANCH	YR6091A	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	8" BRANCH	YR6093	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6093A	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	4" BRANCH	YR6093B	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	2" BRANCH	YR6094	2	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	12" BRANCH	YR6095	1	-	No further action required under Rehab Plan.	N/A
NF-187	12/20/2010	16" ML	YR6095	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-187	12/20/2010	3" BP	YR6095	3	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	12" BRANCH	YR6095	4	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	2" BRANCH	YR6096A	1	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	8" BRANCH	YR6096A	3	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	2" BRANCH	YR6096B	1	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	LD	YR6098	1	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	4" BRANCH	YR6098	2	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	2" BRANCH	YR6100A	1	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	4" BRANCH	YR6100B	1	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	4" BRANCH	YR6101	2	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	16" ML	YR6102	2	-	No further action required under Rehab Plan.	N/A
NF-188	12/13/2010	3" BP	YR6102	3	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6804A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-189	12/14/2010	16" ML	YR6800	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	3" BP	YR6800	2	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	2" BRANCH	YR6800A	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	2" AV	YR6801	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6801A	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	6" BRANCH	YR6801A	2	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6801B	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	2" AV	YR6802	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6802	2	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	8" BRANCH	YR6803	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6805	2	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	4" BRANCH	YR6805A	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	LD	YR6807	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-189	12/14/2010	2" AV	YR6807	2	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	8" BRANCH	YR6808	1	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	16" ML	YR6808	3	-	No further action required under Rehab Plan.	N/A
NF-189	12/14/2010	3" BP	YR6808	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5049	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5042	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5043	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5044	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5045	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5045	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5046	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	4" BP	W5046	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	24" ML	W5046	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-190	4/6/2011	LD	W5046	5	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5048	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	18" BRANCH	W5048	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	10" BRANCH	W5049	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	4" BP	W5049	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	24" ML	W5049	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5050	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5051	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5052	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5053	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	4" BP	W5054	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	24" ML	W5054	2	-	No further action required under Rehab Plan.	N/A
NF-190	10/5/2011	2" AV	W5055	1	W-5055-1 2" A.V. Threads are worn on ball valve and needs to be replaced. #790068; Threads need to be replaced on Ball valve Rebuilt on 12/13/2011	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-190	4/6/2011	8" BRANCH	W5056	1	-	No further action required under Rehab Plan.	N/A
NF-190	10/5/2011	2" AV	W5057	1	W-5057-1 2" A.V. Threads are worn on ball valve and needs to be replaced. #790067; Threads need to be replaced on Ball valve Rebuilt on 3/26/2011	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5058	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5059	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5060	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	24" ML	W5060	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	4" BP	W5060	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" BRANCH	W5060	5	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5060	6	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5061	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5062	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5062	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5063	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-190	4/6/2011	LD	W5063	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5064	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	12" BRANCH	W5064	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	24" ML	W5064	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	4" BP	W5064	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5064	5	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5065	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5066	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" ML	W5067	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5067	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	18" BRANCH	W5067	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5067	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5068	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-190	4/6/2011	2" AV	W5069	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" ML	W5070	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5070	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	BRANCH	W5070A	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5071	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5072	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5072	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5072	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" ML	W5072	5	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5072	6	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5073	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" ML	W5074	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5074	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-190	4/6/2011	2" AV	W5075	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5075	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5076	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	8" BRANCH	W5077	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	LD	W5077	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5078	1	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" BRANCH	W5078	2	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5078	3	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	3" BP	W5078	4	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	20" ML	W5078	5	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	2" AV	W5078	-	-	No further action required under Rehab Plan.	N/A
NF-190	4/6/2011	MMP Vault	-	-	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	12" BRANCH	W5510	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-191	9/10/2010	24" ML	W5041	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	4" BP	W5041	2	-	No further action required under Rehab Plan.	N/A
NF-191	7/14/2011	LO	W5041	6	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	LD	W5501	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	LD	W5502	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	2" AV	W5503	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	4" BRANCH	W5503	2	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	18" ML	W5504	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	3" BP	W5504	2	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	18" ML	W5504	3	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	3" BP	W5504	4	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	2" AV	W5505	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	LD	W5506	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-191	9/10/2010	2" AV	W5507	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	LD	W5508	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	18" ML	W5508	2	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	3" BP	W5508	3	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	18" ML	W5508	4	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	3" BP	W5508	5	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	8" BRANCH	W5508	6	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	8" BRANCH	W5508A	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	2" AV	W5509	1	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	3" BP	W5510	3	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	LD	W5510	4	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	18" ML	W5510	2	-	No further action required under Rehab Plan.	N/A
NF-191	9/10/2010	2" AV	W5511	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-192	12/9/2010	24" ML	W1001A	1	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	4" BP	W1001A	2	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	36" ML	W1001A	3	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	6" BP	W1001A	4	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	24" ML	W1001A	5	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	4" BP	W1001A	6	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	18" PCV	W1001A	7	AUTO	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	12" PCV	W1001A	8	AUTO	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	2" AV	W1001A	9	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	2" AV	W1002	1	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	2" AV	W1002	2	Steel Riser Rebuilt on 7/12/12	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	2" AV	W1002A	1	-	No further action required under Rehab Plan.	N/A
NF-192	12/9/2010	2" AV	W1003A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-193	12/7/2010	4" BP	BH1004	7	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	30" ML	BH1004	8	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004	11	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	30" ML	BH1004A	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	4" BP	BH1004A	2	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004B	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004B	2	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004C	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004D	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004E	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004F	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004G	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004H	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-193	12/7/2010	30" ML	BH1004H	2	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	6" BP	BH1004H	3	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004I	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004J	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004K	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004L	1	-	No further action required under Rehab Plan.	N/A
NF-193	12/7/2010	2" AV	BH1004M	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH10040	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	30" ML	BH1004N	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	6" BP	BH1004N	2	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004P	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004Q	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004R	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-194	12/2/2010	2" AV	BH1004S	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004T	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	8" BRANCH	BH1004U	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004V	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004W	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004X	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004Y	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	2" AV	BH1004Y	2	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	16" EPC	BH1004Z	1	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	3" BP	BH1004Z	2	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	30" ML	BH1004Z	3	-	No further action required under Rehab Plan.	N/A
NF-194	12/2/2010	4" BP	BH1004Z	4	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	2" AV	W7001	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-195	12/3/2010	LD	W7002	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	8" BRANCH	W7003	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	30" ML	W7004	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	2" AV	W7005	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	2" AV	W7006	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	LD	W7007	1	-	No further action required under Rehab Plan.	N/A
NF-195	12/3/2010	LD	W7007	2	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	30" ML	W7008	1	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	2" AV	W7009	1	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	2" AV	W7010	1	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	30" ML	W7011	1	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	24" ML	W7011	2	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	24" ML	W7011	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-196	12/3/2011	2" AV	W7011	4	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	30" ML	W7012	1	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	20" ML	W7012	2	-	No further action required under Rehab Plan.	N/A
NF-196	12/3/2011	2" AV	W7012	3	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	2" AV	W5511	2	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5511	3	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5511	4	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5512	1	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	6" BRANCH	W5513	1	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	TS	W5513	3	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	TS	W5513	4	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	2" AV	W5514	1	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5514	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-197	1/5/2011	18" BRANCH	W5514	3	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5514	4	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5514	5	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	18" ML	W5515	2	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	LD	W5515	3	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5515	4	-	No further action required under Rehab Plan.	N/A
NF-197	1/5/2011	CP	W5515	5	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	2" AV	W7012F	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012	4	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012	5	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	2" AV	W7012A	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012A	2	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012B	1	CNL HRSD has located appurtenance. No action needed.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-204	1/10/2011	CP	W7012C	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012D	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012D	2	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012D	3	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012E	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012F	2	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	2" AV	W7012G	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012G	2	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012H	1	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	2" AV	W7012H	2	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012H	3	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	CP	W7012H	4	-	No further action required under Rehab Plan.	N/A
NF-204	1/10/2011	8" EC	W7012I	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-205	3/2/2011	16" ML	W1021	19	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	30" BRANCH	W1021	20	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W1021	21	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	30" BRANCH	W1021	22	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	LD	W1021	23	good	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6001	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	30" ML	W6001	2	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6001A	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6002	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6003	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6004	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6005	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6005	2	Steel riser Rebuilt on 2/17/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-205	3/2/2011	36" ML	W6005	3	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6006	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6006	2	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6007	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	CP. TEST STATION	W6007	2	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6008	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6008	2	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	CP TEST STATION	W6008	3	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6009	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6010	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	LD	W6010	2	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6010	3	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6010	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-205	3/2/2011	2" AV	W6011	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6011	2	shut; Broken Ballard	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6012	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	8" BRANCH	W6013	1	-	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	2" AV	W6013	2	REMARKS: W-6013 #2 AIR VENT NEEDS A NEW BALLARD THE OLD ONE HAS BEEN HIT AND BROKE. #782530 Bollard replaced on 10/27/2011	No further action required under Rehab Plan.	N/A
NF-205	3/2/2011	36" ML	W6013	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2213	2	NOT FOUND HRSD has located appurtenance. No action needed.	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2003	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	16" BRANCH.	YR2003	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2003	6	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2003	7	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	24" ML	YR2003A	2	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	16" BRANCH.	YR2003A	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-206	3/14/2011	24" BRANCH	YR2003A	6	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	2" AV	YR2003A	7	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	30" ML	YR2003C	3	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	2" AV	YR2003C	4	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	30" ML	YR2003C	5	-	No further action required under Rehab Plan.	N/A
NF-206	3/14/2011	30" ML	YR2003C	7	-	No further action required under Rehab Plan.	N/A
NF-206	3/8/2011	2" AV	YR2004	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2201	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2201	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2202	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2202	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2202	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	L.D.	YR2203	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-206	9/16/2011	L.D.	YR2203	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2203	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2203	4	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2204	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2205	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	12" BRANCH	YR2206	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2206	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	L.D.	YR2206	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2206	4	YR-2206-4 2" A.V. is below grade.#782483Casting replaced on 11/18/2011	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	6" BRANCH (SENSOR)	YR2207	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	VAULT INSPECT.	YR2207		-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2208	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2208	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-206	9/16/2011	C.P.	YR2209	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2209	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	12" BRANCH	YR2209	3	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2209	4	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2210	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2210	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2211	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2212	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2212	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	C.P.	YR2213	1	NOT FOUND HRSD has located appurtenance. No action needed.	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2214	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	L.D.	YR2214	2	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	24" ML	YR2214	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
NF-206	9/16/2011	12" BRANCH	YR2214	4	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR2215	1	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	20" M.L.	YR3011A	4	-	No further action required under Rehab Plan.	N/A
NF-206	9/16/2011	2" AV	YR3011A	5	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" AV	AB1001	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" AV	AB1002	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" LD	AB1002	2	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" AV	AB1003	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" LD	AB1003	2	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" LD	AB1004	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/27/2011	2" AV	AB1005	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/29/2011	2" AV	AB1006	1	-	No further action required under Rehab Plan.	N/A
SF-002	9/29/2011	24" VALVE	AB1006	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-002	9/29/2011	4" BP	AB1006	3	-	No further action required under Rehab Plan.	N/A
SF-002	9/29/2011	24" VALVE	AB1006	4	-	No further action required under Rehab Plan.	N/A
SF-002	9/29/2011	4" BP	AB1006	5	-	No further action required under Rehab Plan.	N/A
SF-002	9/22/2011	2" AV	AB1006	10	-	No further action required under Rehab Plan.	N/A
SF-002	9/22/2011	20" VALVE	AB1006	6	-	No further action required under Rehab Plan.	N/A
SF-002	9/22/2011	3" BP	AB1006	7	-	No further action required under Rehab Plan.	N/A
SF-002	9/22/2011	3" BP	AB1006	8	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	2" AV	AB1007	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	2" AV	AB1007	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	8" VALVE	AB1008	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	12" VALVE	AB1008	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	20" VALVE	AB1008	5	-	No further action required under Rehab Plan.	N/A
SF-004	10/7/2011	2" AV	AB1008	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-004	10/7/2010	2" AV	AB1009	1	AB-1003 and AB-1009 are frozen. Replaced ball valve on 05-27-2011	No further action required under Rehab Plan.	N/A
SF-004	10/6/2011	8" VALVE	AB1010	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/6/2011	2" AV	AB1010	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/6/2011	2" AV	AB1011	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	8" VALVE	AB1011	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	12" VALVE	AB1012	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	2" AV	AB1012	3	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	6" VALVE	AB1013	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	2" AV	AB1014	1	Corp Stop(Nut is stripped) Noted issue addressed on 01-31-2012	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	LD	AB1015A	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	LD	AB1015A	2	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	4" BP	AB1015A	5	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	24" VALVE	AB1015A	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-004	10/4/2011	2" AV	AB1015A	7	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	4" BP	AB1015A	10	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	24" VALVE	AB1015A	11	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	2" AV	AB1015A	12	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	2" AV	AB1015A	13	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	4" BP	AB1015A	14	-	No further action required under Rehab Plan.	N/A
SF-004	10/4/2011	20" VALVE	AB1015B	1	-	No further action required under Rehab Plan.	N/A
SF-004	10/7/2011	20" VALVE	AB1016	6	PM 41 turns(replaced the operator nut); The brass nut on the corp stop AB-1016 # 6 is rounded off(needs replaced); We replaced the operator nuts on 8" valve AB-1008A #1, and 20" valve AB-1016 # 6. Within extents of Interim System Improvements (AB-100)	No further action required under Rehab Plan.	N/A
SF-004	10/3/2011	16" VALVE	AB1016	7	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	12" VALVE	AB1008	3	-	No further action required under Rehab Plan.	N/A
SF-004	10/11/2011	24" VALVE	AB1015A	15	-	No further action required under Rehab Plan.	N/A
SF-005	10/7/2011	2" AV	AB1008	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-005	10/4/2011	6" VALVE	AB1011	3	-	No further action required under Rehab Plan.	N/A
SF-005	10/6/2011	2" AV	AB1011	4	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	12" VALVE	AB1012	1	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	20" VALVE	AB1015A	3	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	3"BP	AB1015A	4	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	20" VALVE	AB1015A	8	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	3"BP	AB1015A	9	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	3"BP	AB1015A	16	-	No further action required under Rehab Plan.	N/A
SF-005	10/11/2011	20" VALVE	AB1015A	17	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	20" VALVE	AB1016	1	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	20" VALVE	AB1016	2	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	20" VALVE	AB1016	3	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	20" VALVE	AB1016	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-005	10/3/2011	20" VALVE	AB1016	5	Replaced operating nut and retainer nut on AB1016 #5.	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	20" VALVE	AB1017	2	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	LD	AB1017	3	-	No further action required under Rehab Plan.	N/A
SF-005	10/4/2011	4" VALVE	AB1017A	1	-	No further action required under Rehab Plan.	N/A
SF-005	10/3/2011	2" AV	AB1018	1	-	No further action required under Rehab Plan.	N/A
SF-005	9/29/2011	20" VALVE	AB1018	2	-	No further action required under Rehab Plan.	N/A
SF-006	9/29/2011	8" VALVE	AB1008A	1	Operator nuts on 8" valve AB-1008A #1, and 20" valve AB-1016 # 6 were replaced.	No further action required under Rehab Plan.	N/A
SF-006	9/29/2011	6" VALVE	AB1008A	2	-	No further action required under Rehab Plan.	N/A
SF-007	5/19/2011	6" VALVE	AB2006	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/19/2011	2" AV	AB2007	1	Corp stop	No further action required under Rehab Plan.	N/A
SF-007	5/19/2011	2" AV	AB2007A	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/19/2011	16" VALVE	AB2008	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/19/2011	16" VALVE	AB2008	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-007	11/16/2010	12" VALVE	AB2008	3	-	No further action required under Rehab Plan.	N/A
SF-007	7/22/2010	10" VALVE	AB2009	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	16" VALVE	AB2010	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	16" VALVE	AB2010	2	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	8" VALVE	AB2011	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	2" AV	AB2011A	1	Corp stop	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	12" VALVE	AB2012	6	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	2" AV	No valve guide	-	194 Bay Ave. Documentation updated 07/2011	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	12" VALVE	No valve guide	-	194 Bay Ave. Documentation updated 11/2010	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	16" VALVE	AB2012	3	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	2" AV	AB2012	8	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	2" AV	AB2011B	1	-	No further action required under Rehab Plan.	N/A
SF-007	5/18/2011	2" AV	AB2012	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-007	5/18/2011	2" AV	AB2012	2	-	No further action required under Rehab Plan.	N/A
SF-008	5/25/2011	2" AV	AB1023	3	-	No further action required under Rehab Plan.	N/A
SF-008	6/1/2011	10" VALVE	AB1019	1	-	No further action required under Rehab Plan.	N/A
SF-008	6/1/2011	2" AV	AB1019	3	Same as AB1019A	No further action required under Rehab Plan.	N/A
SF-008	5/27/2011	20" VALVE	AB1020	1	-	No further action required under Rehab Plan.	N/A
SF-008	5/27/2011	2" AV	AB1021	1	-	No further action required under Rehab Plan.	N/A
SF-008	5/27/2011	20" VALVE	AB1022	1	-	No further action required under Rehab Plan.	N/A
SF-008	5/27/2011	2" AV	AB1022	5	-	No further action required under Rehab Plan.	N/A
SF-008	6/2/2011	20" VALVE	AB1022	6	-	No further action required under Rehab Plan.	N/A
SF-008	5/26/2011	2" AV	AB1022	7	-	No further action required under Rehab Plan.	N/A
SF-008	5/26/2011	20" VALVE	AB1022	8	-	No further action required under Rehab Plan.	N/A
SF-008	5/26/2011	12" VALVE	AB1022	9	-	No further action required under Rehab Plan.	N/A
SF-008	5/25/2011	Test/Locate	AB1022	10	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-008	5/25/2011	12" VALVE	AB1023	1	-	No further action required under Rehab Plan.	N/A
SF-008	5/25/2011	12" VALVE	AB1023	2	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	20" VALVE	AB1024	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1025	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1026	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1027	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1028	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1029	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1030A	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1030C	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1030E	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1030F	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	Test/Locate	AB1030G	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-009	5/25/2011	Test/Locate	AB1030H	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/25/2011	2" AV	AB1030H	2	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	2" AV	AB1031	2	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	2" AV	AB1031 I	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	2" AV	AB1032	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	8" VALVE-R	AB1033	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	10" VALVE	AB1034	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	8" VALVE	AB1034	2	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	8" VALVE	AB1035	1	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	14" VALVE	AB1035	2	-	No further action required under Rehab Plan.	N/A
SF-009	5/24/2011	8" VALVE-R	AB1031	1	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	2" AV	AB1036	1	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	2" AV	AB1036	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-011	5/24/2011	8" VALVE	AB1037	1	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	2" AV	AB1038	1	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	2" AV	AB1039	1	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	14" VALVE	AB1039	2	-	No further action required under Rehab Plan.	N/A
SF-011	5/24/2011	10" VALVE	AB1039	3	-	No further action required under Rehab Plan.	N/A
SF-012	6/1/2011	2" AV	CA4010	1	-	No further action required under Rehab Plan.	N/A
SF-012	5/27/2011	10" VALVE	CE4010A	3	-	No further action required under Rehab Plan.	N/A
SF-012	6/1/2011	2" AV	CE4011	1	-	No further action required under Rehab Plan.	N/A
SF-012	6/1/2011	2" AV	CE4012	1	-	No further action required under Rehab Plan.	N/A
SF-012	5/24/2011	2" AV	CE4013	1	-	No further action required under Rehab Plan.	N/A
SF-012	5/24/2011	14" VALVE	CE4013	2	-	No further action required under Rehab Plan.	N/A
SF-012	5/24/2011	10" VALVE	CE4013	3	-	No further action required under Rehab Plan.	N/A
SF-012	6/1/2011	14" VALVE	CE4010A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-012	5/27/2011	6" VALVE	CE4010A	2	-	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	24" VALVE	CE4001	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	4" VALVE	CE4001	2	-	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	10" VALVE	CE4002	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/26/2011	2" AV	CE4002	2	Steel Riser Replaced during CAP Level 1 Inspection Work Order 51	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	4" VALVE	CE4002A	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	2" AV	CE4003	1	Steel Riser Replaced during CAP Level 1 Inspection Work Order 51	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	2" AV	CE4004	1	Corp stop	No further action required under Rehab Plan.	N/A
SF-013	5/26/2011	18" VALVE	CE4004	2	-	No further action required under Rehab Plan.	N/A
SF-013	5/26/2011	3" VALVE	CE4004	3	-	No further action required under Rehab Plan.	N/A
SF-013	5/23/2011	2" AV	CE4005	1	Steel Riser Replaced during CAP Level 1 Inspection Work Order 51	No further action required under Rehab Plan.	N/A
SF-013	5/26/2011	8" VALVE	CE4006	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/26/2011	2" AV	CE4006	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-013	5/25/2011	10" VALVE	CE4007	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/25/2011	2" AV	CE4008	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/25/2011	14" VALVE	CE4009	1	-	No further action required under Rehab Plan.	N/A
SF-013	5/25/2011	24" VALVE	CE4009	2	-	No further action required under Rehab Plan.	N/A
SF-013	5/25/2011	4" VALVE	CE4009	3	-	No further action required under Rehab Plan.	N/A
SF-013	5/25/2011	LD	CE4009	-	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	42" VALVE	CE3001	1	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	6" BP	CE3001	2	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	24" VALVE	CE3001	3	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	4" BP	CE3001	4	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	2" AV	CE3001	5	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	2" AV	CE3002	1	Steel Riser Replaced during CAP Level 1 Inspection Work Order 54	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	8" VALVE	CE3003	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-014	3/23/2011	2" AV	CE3003	2	-	No further action required under Rehab Plan.	N/A
SF-014	3/23/2011	2" AV	CE3003	3	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	4" VALVE	CE3004	1	-	No further action required under Rehab Plan.	N/A
SF-014	3/23/2011	4" BP	CE3005	1	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	16" VALVE	CE3005	3	-	No further action required under Rehab Plan.	N/A
SF-014	3/22/2011	LD	CE3005	4	-	No further action required under Rehab Plan.	N/A
SF-014	3/23/2011	4" VALVE	CE3006	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	4" VALVE	CE3009	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	4" VALVE	CE3009	2	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	20" VALVE	CE3009	5	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	CORP STOP	CE3010	1	CE-3010 #1 Corp Stop is on an exposed crossing.	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	20" VALVE	CE3010	2	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	20" VALVE	CE3010	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-015	3/23/2011	16" VALVE	CE3011	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	3" BP	CE3011	2	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	8" VALVE	CE3012	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	2" AV	CE3013	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	12" VALVE	CE3016	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	20" VALVE	CE3016	2	-	No further action required under Rehab Plan.	N/A
SF-015	3/23/2011	12" VALVE	CE3008	1	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	8" VALVE	CE3013	2	-	No further action required under Rehab Plan.	N/A
SF-015	3/24/2011	LD	CE3015	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	2" AV	CE1010	1	-	No further action required under Rehab Plan.	N/A
SF-016	10/18/2011	6" BP	CE1001	5	-	No further action required under Rehab Plan.	N/A
SF-016	10/18/2011	42" VALVE	CE1001	6	-	No further action required under Rehab Plan.	N/A
SF-016	10/18/2011	6" BP	CE1002	1	Same as 1001	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	10/18/2011	42" VALVE	CE1002	2	Same as 1002	No further action required under Rehab Plan.	N/A
SF-016	10/18/2011	2" AV	CE1002	3	-	No further action required under Rehab Plan.	N/A
SF-016	4/5/2011	2" AV	CE1003	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/5/2011	2" AV	CE1003	2	-	No further action required under Rehab Plan.	N/A
SF-016	4/5/2011	LD	CE1003	3	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1004	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1004	2	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1004	3	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	LD	CE1004	4	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	8" VALVE	CE1005	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1005	2	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1006	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	6" VALVE	CE1007	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	4/4/2011	6" VALVE	CE1007	2	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" AV	CE1007	3	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" Corp Stop	CE1008	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/4/2011	2" Corp Stop	CE1008	2	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	16" VALVE	CE1009	1	See line 15	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	3" BP	CE1009	2	See line 16	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	6" BO	CE1010	2	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	2" AV	CE1011	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	2" AV	CE1011	2	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	12" VALVE	CE1012	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	2" AV	CE1012	2	-	No further action required under Rehab Plan.	N/A
SF-016	4/7/2011	6" BP	CE1012	3	-	No further action required under Rehab Plan.	N/A
SF-016	4/7/2011	42" VALVE	CE1012	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	3/31/2011	2" AV	CE1013	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	6" BO	CE1014	1	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	12" VALVE	CE1014	2	-	No further action required under Rehab Plan.	N/A
SF-016	3/31/2011	12" VALVE	CE1014	3	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	2" AV	CE1014	4	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	LD	CE1014	5	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	LD	CE1014	6	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	2" AV	CE1015	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	8" VALVE	CE1016	1	-	No further action required under Rehab Plan.	N/A
SF-016	3/30/2011	2" AV	CE1016A	1	-	No further action required under Rehab Plan.	N/A
SF-016	4/5/2011	8" VALVE	CE1016A	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/7/2011	2" AV	CE1016B	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1017	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/9/2011	8" VALVE	CE1017	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1017	3	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	2" AV	CE1017A	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1018	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1018A	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1019	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1020	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1020A	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1021	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1021	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1021A	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1022	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1022A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/3/2011	14" VALVE	CE1023	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	42" VALVE	CE1024	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	6" BP	CE1024	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	8" VALVE	CE1025	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1026	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1027	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/9/2011	12" VALVE	CE1027	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/7/2011	2" AV	CE1027	3	-	No further action required under Rehab Plan.	N/A
SF-016	11/7/2011	8" VALVE	CE1028	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/7/2011	10" VALVE	CE1028	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/8/2011	2" AV	CE1029	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	8" VALVE	CE1030	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	LD	CE1030	2	can't locate	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/3/2011	2" AV	CE1031	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	2" AV	CE1032	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	8" VALVE	CE1032	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	2" AV	CE1033	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	2" AV	CE1034	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	12" B0	CE1035	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	2" AV	CE1035	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/3/2011	2" AV	CE1036	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	2" AV	CE1036	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	2" AV	CE1037	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	2" AV	CE1038	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	2" AV	CE1039	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	2" AV	CE1039	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/2/2011	24" VALVE	CE1040	1	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	36" VALVE	CE1040	2	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	6" BP	CE1040	3	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	36" VALVE	CE1040	4	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	6" BP	CE1040	5	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	42" VALVE	CE1040	6	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	6" BP	CE1040	7	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	20" VALVE	CE1040	8	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	4" BP	CE1040	10	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	24" VALVE	CE1040	11	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	4" BP	CE1040	12	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	24" VALVE	CE1040	13	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	4" BP	CE1040	14	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-016	11/2/2011	12" VALVE	CE1040	15	-	No further action required under Rehab Plan.	N/A
SF-016	11/2/2011	12" VALVE	CE1040	16	-	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	2" AV	CE2002	1	All A.V.'s have steel risers and gate valves.; Steel Riser Replaced during CAP Level 1 Inspection Work Order 62	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	4" BP	CE2003	1	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	24" VALVE	CE2003	2	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	2" AV	CE2003	3	All A.V.'s have steel risers and gate valves.; Steel Riser Noted issue addressed on 05-31-2012	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	10" VALVE	CE2004	1	-	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	10" VALVE	CE2005	1	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	2" AV	CE2006	1	All A.V.'s have steel risers and gate valves.; Steel Riser Noted issue addressed on 05-23-2012	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	2" AV	CE2007	1	All A.V.'s have steel risers and gate valves.; Steel Riser Noted issue addressed on 05-23-2012	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	4" BP	CE2007	2	-	No further action required under Rehab Plan.	N/A
SF-017	4/11/2011	24" VALVE	CE2007	3	-	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	4" BP	CE5001	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-017	4/12/2011	2" AV	CE5001	1	Same as CE; All A.V. 's have steel risers and gate valves.; Steel Riser Noted issue addressed on 05-23-2012; Same As CE2007-1	No further action required under Rehab Plan.	N/A
SF-017	4/12/2011	24" VALVE	CE5001	3	-	No further action required under Rehab Plan.	N/A
SF-018	1/27/2011	24" VALVE	CE5006	1	-	No further action required under Rehab Plan.	N/A
SF-018	1/27/2011	4" BP	CE5006	2	-	No further action required under Rehab Plan.	N/A
SF-018	1/26/2011	12" VALVE	CE5004	2	-	No further action required under Rehab Plan.	N/A
SF-018	1/27/2011	24" VALVE	CE5004	3	-	No further action required under Rehab Plan.	N/A
SF-018	1/27/2011	4" BP	CE5004	4	-	No further action required under Rehab Plan.	N/A
SF-018	1/26/2011	8" Valve	CE5005A	1	-	No further action required under Rehab Plan.	N/A
SF-019	4/12/2011	8" Valve	CE5007	1	-	No further action required under Rehab Plan.	N/A
SF-019	4/12/2011	8" Valve	CE5007	2	-	No further action required under Rehab Plan.	N/A
SF-019	4/12/2011	8" Valve R	CE5009	3	-	No further action required under Rehab Plan.	N/A
SF-019	4/12/2011	6" Valve	CE5010	1	-	No further action required under Rehab Plan.	N/A
SF-019	4/12/2011	8" Valve	CE5011	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-019	4/12/2011	4" Valve	CE5008	1	-	No further action required under Rehab Plan.	N/A
SF-020	4/13/2011	2" AV	CE5013	1	-	No further action required under Rehab Plan.	N/A
SF-020	4/13/2011	8" VALVE	CE5013	2	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	6" VALVE	CE5014	2	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	6" VALVE	CE5014	3	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	10" VALVE	CE5015	1	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	12" VALVE	CE5017	2	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	2" AV	CE5018	1	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	2" AV	CE5019	1	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	6" VALVE	CE5020	2	-	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	2" AV	CE5022	1	CE-5022 # 1 is over the side of the Lesner Bridge. ; over the side of the Lesner Bridge	No further action required under Rehab Plan.	N/A
SF-020	4/12/2011	18" VALVE	CE5020	3	-	No further action required under Rehab Plan.	N/A
SF-021	4/14/2011	16" VALVE	CE5024	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-021	4/14/2011	8" Valve	CE5027	1	-	No further action required under Rehab Plan.	N/A
SF-021	4/14/2011	14" VALVE	CE5027	2	-	No further action required under Rehab Plan.	N/A
SF-021	4/13/2011	16" VALVE	CE5029	1	-	No further action required under Rehab Plan.	N/A
SF-021	4/13/2011	16" VALVE	CE5029	2	-	No further action required under Rehab Plan.	N/A
SF-021	4/14/2011	8" Valve	CE5026	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	8" VALVE	AT5023	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	16" VALVE	AT5023	4	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	8" VALVE	AT5026	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	6" VALVE	AT5026	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	8" VALVE	AT5027	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	2" AV	AT5027A	1	AT-5024,#1, 5025 #4,5026 #3,& #4, 5027 #1, 5027A #1 all have steel risers.; Steel Riser Noted issue addressed on 06/21/2011	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	2" AV	AT5027A	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	8" VALVE	AT5027A	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-022	4/14/2011	12" VALVE	CE5030	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/14/2011	2" AV	CE5030	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/14/2011	2" AV	CE5031	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/14/2011	8" VALVE	CE5032	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/14/2011	8" VALVE	CE5032	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	3" BP	CE5033	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	16" VALVE	CE5033	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	8" VALVE	CE5034	1	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	2" CC	CE5034	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	2" AV	CE5035	1	CE-5038 #5, CE-5038 #1, CE-5037 #2, CE-5036 #1, CE-5035 #1, All have steel risers. ; Steel Riser Noted issue addressed on 06/27/2011	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	3" BP	CE5035	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	16" VALVE	CE5035	3	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	2" CC	CE5035	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-022	4/18/2011	2" AV	CE5036	1	CE-5038 #5,CE-5038 #1, CE-5037 #2, CE-5036 #1, CE-5035 #1,All have steel risers. ; Steel Riser Noted issue addressed on 06/22/2011	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	8" VALVE	CE5036	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	3" BP	CE5038	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	16" VALVE	CE5038	3	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	2" AV	CE5038	6	CE-5038 #6 Corp Stop is not all the way open also has a steel riser.; Steel Riser Noted issue addressed on 05/16/2011	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	3" VALVE	AT5025	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	16" VALVE	AT5025	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/22/2011	8" VALVE	AT5025	3	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	2" AV	AT5025A	1	-	No further action required under Rehab Plan.	N/A
SF-022	4/19/2011	2" AV	AT5025A	2	-	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	2" AV	CE5037	2	CE-5038 #5,CE-5038 #1, CE-5037 #2, CE-5036 #1, CE-5035 #1,All have steel risers. ; Steel Riser Noted issue addressed on 06/24/2011	No further action required under Rehab Plan.	N/A
SF-022	4/18/2011	2" AV	CE5038	1	CE-5038 #5,CE-5038 #1, CE-5037 #2, CE-5036 #1, CE-5035 #1,All have steel risers. ; Steel Riser Noted issue addressed on 06/21/2011	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-022	4/18/2011	2" AV	CE5038	5	CE-5038 #5 ,CE-5038 #1, CE-5037 #2, CE-5036 #1, CE-5035 #1,All have steel risers. ; Steel Riser Noted issue addressed on 06/20/2011	No further action required under Rehab Plan.	N/A
SF-023	3/8/2011	42" VALVE	NA1011	5	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	6" BP	NA1011	6	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	10" VALVE	NA1001	2	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	8" VALVE	NA1002	1	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	8" VALVE	NA1003	1	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	2" AV	NA1004	1	ball/copper	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	12" VALVE	NA1005	2	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	LD	NA1007	1	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	4" BP	NA1008	1	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	24" VALVE	NA1008	2	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	2" AV	NA1008	3	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	8" VALVE	NA1009	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-023	2/28/2011	8" VALVE	NA1009	2	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	8" VALVE	NA1010	1	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	8" VALVE	NA1010	2	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	42" VALVE	NA1011	1	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	6" BP	NA1011	2	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	42" VALVE	NA1011	3	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	6" BP	NA1011	4	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	24" VALVE	NA1011	7	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	24" VALVE	NA1011	9	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	24" VALVE	NA1011	11	-	No further action required under Rehab Plan.	N/A
SF-023	2/28/2011	24" VALVE	NA1011	13	-	No further action required under Rehab Plan.	N/A
SF-023	3/1/2011	2" AV	NA1011	15	-	No further action required under Rehab Plan.	N/A
SF-023	3/9/2011	30" VALVE	NA1013	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-023	3/9/2011	4" BP	NA1013	2	-	No further action required under Rehab Plan.	N/A
SF-023	3/9/2011	42" VALVE	NA1013	3	-	No further action required under Rehab Plan.	N/A
SF-023	3/9/2011	6" BP	NA1013	4	-	No further action required under Rehab Plan.	N/A
SF-023	3/9/2011	16" VALVE	NA1013	5	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-023	3/9/2011	3" BP	NA1013	6	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	12" VALVE	NA1015	3	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	2" AV	NA1015A	1	-	No further action required under Rehab Plan.	N/A
SF-024	12/5/2011	LD	NA1014	2	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	2" AV	NA1014	3	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	42" VALVE	NA1015	1	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	2"BP	NA1015	2	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	LD	NA1015A	2	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	36" VALVE	NA1018	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-024	12/6/2011	2" AV	NA1016	1	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	2" AV	NA1016A	1	-	No further action required under Rehab Plan.	N/A
SF-024	12/6/2011	LD	NA1016B	1	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	6" VALVE	NA1019	1	15 turns; Both NA-1019 1&2 had jack-up rings. No rehab action necessary. Verified that no jack-up rings installed	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	8" VALVE	NA1023	1	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	8" VALVE	NA1025	1	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	8" VALVE	NA1027	1	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	10" VALVE	NA1029	2	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	8" VALVE	NA1029A	1	-	No further action required under Rehab Plan.	N/A
SF-025	3/24/2011	8" VALVE	NA1021	1	-	No further action required under Rehab Plan.	N/A
SF-026	3/23/2011	36" VALVE	NA1030	2	-	No further action required under Rehab Plan.	N/A
SF-026	3/23/2011	6" VALVE	NA1030	3	-	No further action required under Rehab Plan.	N/A
SF-026	3/23/2011	30" VALVE	NA1030	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-026	3/23/2011	4" VALVE	NA1030	5	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	8" VALVE	NA1031	2	CLOSED; Steel Riser	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	8" VALVE	NA1033	1	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	8" VALVE	NA1035	1	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	3" VALVE	NA1036	1	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	12" VALVE	NA1037	1	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	LD	NA1038	2	-	No further action required under Rehab Plan.	N/A
SF-026	3/28/2011	10" VALVE	NA1038	3	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	LD	NA3012	1	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	8" VALVE	NA3013	1	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	2" AV	NA3013	2	-	No further action required under Rehab Plan.	N/A
SF-027	6/23/2010	8" VALVE	NA3014	3	-	No further action required under Rehab Plan.	N/A
SF-027	6/23/2010	2" AV	NA3014	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-027	6/23/2011	LD	NA3014	5	-	No further action required under Rehab Plan.	N/A
SF-027	7/13/2010	8" VALVE	NA3016	2	-	No further action required under Rehab Plan.	N/A
SF-027	7/13/2010	2" AV	NA3019	1	ball/copper; Copper Riser	No further action required under Rehab Plan.	N/A
SF-027	7/14/2010	2" AV	NA3019	2	ball/copper; Copper Riser	No further action required under Rehab Plan.	N/A
SF-027	7/14/2010	8" VALVE	NA3020	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/14/2010	36" VALVE	NA3021	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/14/2010	6" BP	NA3021	2	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	8" VALVE	NA3023	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	36" VALVE	NA3024	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	6" BP	NA3024	2	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	LD	NA3024	3	-	No further action required under Rehab Plan.	N/A
SF-027	6/13/2011	30" VALVE	NA3024	6	-	No further action required under Rehab Plan.	N/A
SF-027	6/13/2011	4" BP	NA3024	7	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-027	6/13/2011	36" VALVE	NA3024	8	-	No further action required under Rehab Plan.	N/A
SF-027	6/13/2011	6" BP	NA3024	9	-	No further action required under Rehab Plan.	N/A
SF-027	6/13/2011	30" VALVE	NA3024	10	-	No further action required under Rehab Plan.	N/A
SF-027	6/13/2011	4" BP	NA3024	11	-	No further action required under Rehab Plan.	N/A
SF-027	2/2/2012	2" Auto AV	NA3024	12	-	No further action required under Rehab Plan.	N/A
SF-027	2/2/2012	2" AV	NA3024	13	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	8" VALVE	NA3025	2	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	8" VALVE	NA3027	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	LD	NA3028	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	4" BP	NA3029	1	-	No further action required under Rehab Plan.	N/A
SF-027	7/15/2010	30" VALVE	NA3029	2	-	No further action required under Rehab Plan.	N/A
SF-027	7/21/2010	6" BP	NA3029	3	-	No further action required under Rehab Plan.	N/A
SF-027	7/21/2010	36" VALVE	NA3029	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-027	4/28/2010	8" VALVE	NA3008	1	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	8" VALVE	NA3010	1	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	LD	NA3011	1	-	No further action required under Rehab Plan.	N/A
SF-027	4/28/2010	LD	NA3011	2	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	24" VALVE	NA1039	1	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	4" VALVE	NA1039	2	LEAVE CLOSED	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	24" VALVE	NA1039	3	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	24" VALVE	NA1039	5	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	4" VALVE	NA1039	6	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	24" VALVE	NA1039	7	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	4" VALVE	NA1039	8	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	24" VALVE	NA1039	9	-	No further action required under Rehab Plan.	N/A
SF-028	4/4/2011	4" VALVE	NA1039	10	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-028	3/29/2011	8" VALVE	NA1041	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1044	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	2" AV	NA1045	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1046	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	2" AV	NA1047	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	LD	NA1047	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	2" AV	NA1048	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1049	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/23/2011	30" VALVE	NA1050	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	4" VALVE	NA1050	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1051	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	16" VALVE	NA1051	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1053	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-028	3/29/2011	2" AV	NA1053	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	2" AV	NA1054	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1054	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	2" AV	NA1055	1	CORP COCK; H2o	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	8" VALVE	NA1057	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/29/2011	6" VALVE	NA1058A	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/30/2011	8" VALVE	NA1059	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/30/2011	8" VALVE	NA1061	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	8" VALVE	NA1063	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	2" AV	NA1064	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	8" VALVE	NA1065	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	2" AV	NA1066	1	CORP COCK; H2o	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	LD	NA1067	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-028	3/31/2011	2" AV	NA1068	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	24" VALVE	NA1069	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	4" VALVE	NA1069	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	30" VALVE	NA1069	3	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	4" BP	NA1069	4	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	4" BP	NA1069	6	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	24" VALVE	NA1069	7	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	4" BP	NA1069	8	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	8" VALVE	NA1070	1	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	LD	NA1070	2	-	No further action required under Rehab Plan.	N/A
SF-028	3/31/2011	24" VALVE	NA1069	5	-	No further action required under Rehab Plan.	N/A
SF-029	7/5/2011	14" VALVE	NA2014	1	-	No further action required under Rehab Plan.	N/A
SF-029	7/12/2011	2" AV	NA2002	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-029	7/12/2011	8" VALVE	NA2003	2	-	No further action required under Rehab Plan.	N/A
SF-029	7/12/2011	6" VALVE	NA2003	3	-	No further action required under Rehab Plan.	N/A
SF-029	7/12/2011	8" VALVE	NA2005	2	-	No further action required under Rehab Plan.	N/A
SF-029	7/5/2011	30" VALVE	NA2017	1	-	No further action required under Rehab Plan.	N/A
SF-029	7/5/2011	3" BP	NA2017	2	-	No further action required under Rehab Plan.	N/A
SF-029	7/5/2011	LD	NA2018	2	-	No further action required under Rehab Plan.	N/A
SF-029	7/5/2011	10" VALVE	NA2020	2	-	No further action required under Rehab Plan.	N/A
SF-029	7/12/2011	8" VALVE	NA2006	1	-	No further action required under Rehab Plan.	N/A
SF-029	7/11/2011	8" VALVE	NA2007	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	2" AV	NA2014A	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	2" AV	NA2014B	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	8" VALVE	NA2014C	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	2" AV	NA2014D	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-030	7/13/2011	8" VALVE	NA2014E	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	2" AV	NA2014F	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/13/2011	2" AV	NA2014F	2	-	No further action required under Rehab Plan.	N/A
SF-030	7/12/2011	8" VALVE	NA2014G	1	-	No further action required under Rehab Plan.	N/A
SF-030	7/12/2011	8" VALVE	NA2014H	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-031	7/19/2011	LD	NA2021	1	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	12" VALVE	NA2027	1	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	8" VALVE	NA2028	1	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	30" VALVE	NA2028	2	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	20" VALVE	NA2028	3	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	3" BP	NA2028	4	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	20" VALVE	NA2028	5	-	No further action required under Rehab Plan.	N/A
SF-031	7/21/2011	12" VALVE	NA2028	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-032	7/20/2011	8" VALVE	NA2023	2	-	No further action required under Rehab Plan.	N/A
SF-033	7/20/2011	8" VALVE	NA2023	1	-	No further action required under Rehab Plan.	N/A
SF-036	7/21/2011	2" AV	NA2026A1	1	-	No further action required under Rehab Plan.	N/A
SF-036	7/21/2011	8" VALVE	NA2026A1	2	-	No further action required under Rehab Plan.	N/A
SF-036	7/21/2011	2" AV	NA2026A3	1	-	No further action required under Rehab Plan.	N/A
SF-036	7/21/2011	2" AV	NA2026A4	1	-	No further action required under Rehab Plan.	N/A
SF-037	7/25/2011	2" LD	NA2026A	1	-	No further action required under Rehab Plan.	N/A
SF-037	7/25/2011	2" LD	NA2026A	2	-	No further action required under Rehab Plan.	N/A
SF-037	7/25/2011	2" LD	NA2026A	3	-	No further action required under Rehab Plan.	N/A
SF-037	7/25/2011	2" LD	NA2026A	4	-	No further action required under Rehab Plan.	N/A
SF-038	7/27/2011	6" VALVE	NA2030	1	-	No further action required under Rehab Plan.	N/A
SF-038	7/27/2011	10" VALVE	NA2031	1	-	No further action required under Rehab Plan.	N/A
SF-038	7/27/2011	2" AV	NA2031	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-038	7/27/2011	20" VALVE	NA2032	1	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	10" VALVE	NA2032	2	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	10" VALVE	NA2032	3	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	20" VALVE	NA2032	5	-	No further action required under Rehab Plan.	N/A
SF-038	7/27/2011	20" VALVE	NA2032	8	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	TS	NA2032A	1	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	6" VALVE	NA2033	1	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	2" AV	NA2033	4	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	TS	NA2033	5	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	TS	NA2034	4	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	12" VALVE	NA2032	7	-	No further action required under Rehab Plan.	N/A
SF-038	8/1/2011	12" VALVE	NA2034	1	-	No further action required under Rehab Plan.	N/A
SF-039	7/25/2011	6" VALVE-R	LP3003A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-039	7/25/2011	8" VALVE	LP3003B	1	-	No further action required under Rehab Plan.	N/A
SF-039	7/25/2011	6" VALVE	LP3003B	3	-	No further action required under Rehab Plan.	N/A
SF-039	7/25/2011	6" VALVE	LP3003B	4	-	No further action required under Rehab Plan.	N/A
SF-039	7/25/2011	8" VALVE	LP3003C	1	BLOW OFF-DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-040	7/25/2011	6" VALVE	LP3002	2	-	No further action required under Rehab Plan.	N/A
SF-040	7/25/2011	2" AV	LP3002	3	-	No further action required under Rehab Plan.	N/A
SF-040	7/25/2011	2" AV	LP3002A	1	-	No further action required under Rehab Plan.	N/A
SF-040	7/26/2011	2" AV	LP3002B	1	-	No further action required under Rehab Plan.	N/A
SF-042	7/25/2011	6" VALVE-R	LP3003A	1	-	No further action required under Rehab Plan.	N/A
SF-042	7/25/2011	EPC	LP3003A1	1	-	No further action required under Rehab Plan.	N/A
SF-042	7/25/2011	6" VALVE	LP3003A1	2	-	No further action required under Rehab Plan.	N/A
SF-042	7/25/2011	6" VALVE	LP3003A1	3	-	No further action required under Rehab Plan.	N/A
SF-042	7/25/2011	6" VALVE	LP3003A1	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-042	7/25/2011	6" VALVE	LP3003A1	5	-	No further action required under Rehab Plan.	N/A
SF-043	7/27/2011	T.S	LP3004	9	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3004	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3004	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	8" VALVE	LP3004	3	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	8" VALVE	LP3004	4	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	EPC	LP3004	5	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	6" VALVE	LP3004	6	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	12" VALVE	LP3004	7	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3004	8	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3005	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3005	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3006	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-045	7/27/2011	TS	LP3006	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3007	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3007	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3008	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3009	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	LD	LP3009	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3010	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	2" AV	LP3010	2	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3011	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3012	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3013	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/27/2011	TS	LP3014	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/26/2011	2" AV	LP3015	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-045	7/26/2011	TS	LP3016	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/26/2011	2" AV	LP3017	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/26/2011	2" AV	LP3018	1	-	No further action required under Rehab Plan.	N/A
SF-045	7/26/2011	TS	LP3018	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	16" VALVE	LP3033	4	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3019	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3019	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	16" VALVE	LP3019	3	-	No further action required under Rehab Plan.	N/A
SF-046	7/26/2011	12" VALVE	LP3019	4	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3019	5	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	10" VALVE	LP3019	6	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	6" Valve	LP3019	7	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	E.P.C.	LP3019	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-046	8/2/2011	2" AV	LP3020	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3020	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3021	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3021	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3022	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3023	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3024	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3025	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3026	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3026	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3026	3	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3027	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3027	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-046	8/2/2011	2" AV	LP3028	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3029	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3030	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3032	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	16" VALVE	LP3033	1	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	16" VALVE	LP3033	3	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	E.P.C.	LP3033	5	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	T.S	LP3033	6	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3033	2	-	No further action required under Rehab Plan.	N/A
SF-046	8/2/2011	2" AV	LP3031	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	4" BP	LP2001	3	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	24" VALVE	LP2001	4	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	4" BP	LP2001	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-051	8/15/2011	24" VALVE	LP2001	6	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	2" AV	LP2001	7	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	10" VALVE	LP2001	8	TAGGED CLOSED	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	4" BP	LP2001	9	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	24" VALVE	LP2001	10	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	2" AV	LP2003	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/15/2011	2" AV	LP2003	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	24" VALVE	LP2003A	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	12" VALVE	LP2003B	1	Open (valve nut has an extension)	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	2" AV	LP2003B	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	2" AV	LP2004	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	8" VALVE	LP2005	1	BLOW OFF- DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	10" VALVE	LP2006	1	BRANCH-CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-051	8/16/2011	24" VALVE	LP2006	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	2" AV	LP2007	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	2" AV	LP2008	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	24" VALVE	LP2009	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	6" VALVE	LP2009	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	2" AV	LP2011	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/16/2011	18" VALVE	LP2011A	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/12/2011	6" VALVE	LP2012	1	-	No further action required under Rehab Plan.	N/A
SF-051	8/12/2011	6" VALVE	LP2012	4	-	No further action required under Rehab Plan.	N/A
SF-051	8/12/2011	6" VALVE	LP2012	5	-	No further action required under Rehab Plan.	N/A
SF-051	8/12/2011	6" VALVE	LP2012	6	-	No further action required under Rehab Plan.	N/A
SF-051	8/17/2011	24" VALVE	LP2013	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/17/2011	18" VALVE	LP2013	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-051	8/17/2011	2" AV	LP2013	4	Exposed (Temp line).	No further action required under Rehab Plan.	N/A
SF-051	8/12/2011	6" VALVE	LP2012	2	-	No further action required under Rehab Plan.	N/A
SF-051	8/17/2011	2" AV	LP2013A	1	Exposed (Temp Line)	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	10" VALVE	LP3034	3	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	2" AV	LP3035	1	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	10" VALVE	LP3034	1	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	10" VALVE	LP3034	2	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	T.S	LP3035	2	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	8" Valve	LP3036	1	-	No further action required under Rehab Plan.	N/A
SF-052	8/3/2011	2" AV	LP3036	2	-	No further action required under Rehab Plan.	N/A
SF-057	8/22/2011	12" VALVE	LP1005	1	-	No further action required under Rehab Plan.	N/A
SF-057	8/22/2011	2" AV	LP1004	1	-	No further action required under Rehab Plan.	N/A
SF-058	9/6/2011	6" VALVE	LP1007	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-058	9/7/2011	24" VALVE	LP1009	1	-	No further action required under Rehab Plan.	N/A
SF-058	9/7/2011	2" AV	LP1009	4	-	No further action required under Rehab Plan.	N/A
SF-059	8/30/2011	12" VALVE	LP1013	1	-	No further action required under Rehab Plan.	N/A
SF-059	8/23/2011	36" VALVE	LP1013A	1	-	No further action required under Rehab Plan.	N/A
SF-059	8/23/2011	16" VALVE	LP1014	1	-	No further action required under Rehab Plan.	N/A
SF-059	8/23/2011	2" AV	LP1015	1	-	No further action required under Rehab Plan.	N/A
SF-059	9/1/2011	12" VALVE	LP1011	1	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	20" VALVE	LP1009A	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	20" VALVE	LP1009A	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-060	9/6/2011	4" BP	LP1009AA	2	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	TS	LP1009AA	3	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	2" AV	LP1009AA	4	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	TS	LP1009AB	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-060	9/1/2011	LD	LP1009AB	2	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	TS	LP1009AC	1	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	2" AV	LP1009AC	2	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	24" VALVE	LP1009B	1	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	6" VALVE	LP1009B	3	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	6" VALVE	LP1009B	2	-	No further action required under Rehab Plan.	N/A
SF-060	9/1/2011	10" VALVE	LP1009B	4	-	No further action required under Rehab Plan.	N/A
SF-062	8/17/2011	2" AV	LP2012A	1	-	No further action required under Rehab Plan.	N/A
SF-062	8/17/2011	6" VALVE	LP2012B	1	-	No further action required under Rehab Plan.	N/A
SF-062	8/17/2011	6" VALVE	LP2012B	2	-	No further action required under Rehab Plan.	N/A
SF-062	8/17/2011	2" AV	LP2012B	3	-	No further action required under Rehab Plan.	N/A
SF-062	8/17/2011	4" VALVE	LP2012B	4	-	No further action required under Rehab Plan.	N/A
SF-064	8/8/2011	2" AV	LP2014A	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-064	8/8/2011	6" VALVE	LP2014A	5	-	No further action required under Rehab Plan.	N/A
SF-064	8/8/2011	6" VALVE	LP2014B	1	-	No further action required under Rehab Plan.	N/A
SF-064	8/8/2011	6" VALVE	LP2014B	2	-	No further action required under Rehab Plan.	N/A
SF-064	8/8/2011	CPT	LP2014B	3	-	No further action required under Rehab Plan.	N/A
SF-064	8/8/2011	6" Valve	LP2014B	4	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	18" VALVE	LP2014	3	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	12" VALVE	LP2014	5	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	16" VALVE	LP2014	7	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	18" VALVE	LP2014	8	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	2" AV	LP2014	9	-	No further action required under Rehab Plan.	N/A
SF-065	8/17/2011	18" VALVE	LP2014	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	2" AV	LP2014AA	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/4/2011	18" VALVE	LP2015	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-066	8/4/2011	16" VALVE	LP2015	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/4/2011	2" AV	LP2016	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	18" VALVE	LP20161	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	18" VALVE	LP20161	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	T.S	LP20161	3	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP20161	4	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP20162	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	2" AV	LP20163	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	T.S	LP20163	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	T.S	LP20164	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	T.S	LP2016A	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	18" VALVE	LP2016A	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	18" VALVE	LP2016A	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-066	8/10/2011	2" AV	LP2016A	5	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP2016C	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP2017	2	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	LD	No #		-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP2017	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	18" VALVE	LP2016A	3	-	No further action required under Rehab Plan.	N/A
SF-066	8/8/2011	T.S	LP2016A	6	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP2016B	1	-	No further action required under Rehab Plan.	N/A
SF-066	8/10/2011	2" AV	LP2016C	1	-	No further action required under Rehab Plan.	N/A
SF-069	8/11/2011	12" VALVE	LP2018	2	-	No further action required under Rehab Plan.	N/A
SF-069	8/11/2011	2" AV	LP2018A	1	-	No further action required under Rehab Plan.	N/A
SF-069	8/11/2011	2" AV	LP2018A1	1	-	No further action required under Rehab Plan.	N/A
SF-069	8/11/2011	2" AV	LP2018B	1	Broken handle on the Ball valve; Air vent LP-2018B # 1 had a broken handle on the ball valve, crew 5 has replaced this air vent. Noted issue addressed on 08/12/2011	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-069	8/11/2011	12" VALVE	LP2018C	1	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	8" VALVE	LP2019	3	-	No further action required under Rehab Plan.	N/A
SF-070	8/11/2011	16" VALVE	LP2018	1	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	2" AV	LP2018	3	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	2" AV	LP2018E	1	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	12" VALVE	LP2019	1	-	No further action required under Rehab Plan.	N/A
SF-070	8/11/2011	12" VALVE	LP2019	2	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	12" VALVE	LP2019	4	-	No further action required under Rehab Plan.	N/A
SF-070	8/10/2011	12" VALVE	LP2019	5	-	No further action required under Rehab Plan.	N/A
SF-070	8/11/2011	2" AV	NEW	-	Located in front of Chesapeake PS - documentation needs update.	No further action required under Rehab Plan.	N/A
SF-076	8/11/2011	8" VALVE	LP2019A	1	-	No further action required under Rehab Plan.	N/A
SF-080	8/18/2011	24" VALVE	LP1016A	1	-	No further action required under Rehab Plan.	N/A
SF-080	8/18/2011	4" BP	LP1016A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-081	8/19/2011	24" VALVE	LP5004	2	-	No further action required under Rehab Plan.	N/A
SF-081	8/19/2011	2" AV	LP5003	1	-	No further action required under Rehab Plan.	N/A
SF-081	8/18/2011	2" AV	LP5003B	1	-	No further action required under Rehab Plan.	N/A
SF-081	8/19/2011	24" VALVE	LP5004	1	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	2" AV	LP1020	1	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	12" VALVE	LP1020A	1	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	12" VALVE	LP1020A	2	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	2" AV	LP1021	1	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	20" VALVE	LP1022	1	-	No further action required under Rehab Plan.	N/A
SF-082	4/29/2011	12" VALVE	LP1022	2	-	No further action required under Rehab Plan.	N/A
SF-082	5/3/2011	2" AV	LP1023	1	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	24" VALVE	LP5003A	1	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	2" AV	LP5003A	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-083	8/19/2011	2" AV	LP5003A1	2	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	2" TS	LP5003A1	3	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	12" VALVE	LP5003A	3	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	12" VALVE	LP5003A	5	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	LD	LP5003A1	1	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	2" AV	LP5003A2	1	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	2" TS	LP5003A2	2	-	No further action required under Rehab Plan.	N/A
SF-083	8/19/2011	24" VALVE	LP5003A	2	-	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	LD	LP5004A3	2	-	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	2" AV	LP5004A3	1	-	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	8" VALVE	LP5004B	1	Covered by asphalt; 8" valve LP-5004B # 1 is covered with asphalt.; Paved over Noted issue addressed on 06/04/2012	No further action required under Rehab Plan.	N/A
SF-084	8/19/2011	2" AV	LP5004A1	1	-	No further action required under Rehab Plan.	N/A
SF-085	5/9/2011	12" VALVE	LP1022E	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-085	5/9/2011	6" VALVE	LP1022E	1	-	No further action required under Rehab Plan.	N/A
SF-086	5/16/2011	14" VALVE	LP1025	2	-	No further action required under Rehab Plan.	N/A
SF-086	5/16/2011	12" VALVE	LP1025	5	-	No further action required under Rehab Plan.	N/A
SF-086	5/9/2011	2" AV	LP1025A	1	-	No further action required under Rehab Plan.	N/A
SF-086	5/12/2011	2" AV	LP1025D	1	-	No further action required under Rehab Plan.	N/A
SF-086	5/16/2011	8" VALVE	LP1025	1	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	6" VALVE	LP1025E	2	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	4" VALVE	LP1025E	3	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	10" VALVE	LP1025E	4	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	12" VALVE	LP1025E	5	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	6" VALVE	LP1025E	6	-	No further action required under Rehab Plan.	N/A
SF-087	5/12/2011	6" VALVE	LP1025E	7	-	No further action required under Rehab Plan.	N/A
SF-088	5/12/2011	LD	LP1025D1	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-088	5/12/2011	LD	LP1025D2	1	-	No further action required under Rehab Plan.	N/A
SF-090	9/19/2011	2" AV	LP1027A	1	-	No further action required under Rehab Plan.	N/A
SF-090	9/19/2011	16" VALVE	VIP9001	1	-	No further action required under Rehab Plan.	N/A
SF-090	9/19/2011	2" AV	VIP9001	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027C	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027C	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027D	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027E	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027F	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027G	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027H	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	12" VALVE	LP1027H	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	2" AV	LP1027I	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-091	9/20/2011	8" VALVE	LP1027I	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1027I	3	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	12" VALVE	LP1027I	4	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" CORP STOP	LP1028	3	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" CORP STOP	LP1028	4	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	2" AV	LP1028A	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/20/2011	12" VALVE	LP1028A	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	TS	LP1028B	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	2" AV	LP1028C	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	TS	LP1028D	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	2" AV	LP1028E	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	TS	LP1028F	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	2" AV	LP1028G	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-091	9/19/2011	TS	LP1028G	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/19/2011	2" AV	LP1029	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	TS	LP1029A	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	TS	LP1029A	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	TS	LP1029A	3	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	8" VALVE	LP1030	1	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	2" AV	LP1030	2	-	No further action required under Rehab Plan.	N/A
SF-091	9/9/2011	2" AV	LP1031	1	-	No further action required under Rehab Plan.	N/A
SF-092	9/22/2011	2" AV	LP1026	1	-	No further action required under Rehab Plan.	N/A
SF-092	9/26/2011	8" GV	VIP9001	3	-	No further action required under Rehab Plan.	N/A
SF-092	9/26/2011	4" GV	VIP9001	4	Line 92X (10 Open)	No further action required under Rehab Plan.	N/A
SF-092	9/26/2011	8" GV	VIP9001	5	-	No further action required under Rehab Plan.	N/A
SF-093	9/22/2011	8" VALVE	LP1026A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-093	9/22/2011	10" VALVE	LP1026A	2	-	No further action required under Rehab Plan.	N/A
SF-093	9/22/2011	8" VALVE	LP1026A	3	-	No further action required under Rehab Plan.	N/A
SF-093	9/22/2011	8" VALVE	LP1026A	4	-	No further action required under Rehab Plan.	N/A
SF-093	9/22/2011	6" VALVE	LP1026A	5	-	No further action required under Rehab Plan.	N/A
SF-093	9/22/2011	8" VALVE	LP1026B	1	-	No further action required under Rehab Plan.	N/A
SF-093	9/20/2011	16" VALVE	LP1027	1	-	No further action required under Rehab Plan.	N/A
SF-093	9/20/2011	12" VALVE	LP1027	2	-	No further action required under Rehab Plan.	N/A
SF-093	9/20/2011	12" VALVE	LP1027	3	-	No further action required under Rehab Plan.	N/A
SF-093	9/20/2011	6" VALVE	LP1027	4	-	No further action required under Rehab Plan.	N/A
SF-094	9/22/2011	8" VALVE	LP1026C	2	-	No further action required under Rehab Plan.	N/A
SF-094	9/22/2011	4" VALVE	LP1026C	3	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" LD	LP5006T	2	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006U	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-097	3/28/2011	2" AV	LP5006B	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	4" BP	LP5006B	4	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	24" VALVE	LP5006B	5	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	12" VALVE	LP5006B	6	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	24" VALVE	LP5006B	7	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	20" VALVE	LP5006B	8	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	12" VALVE	LP5006B	9	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	12" VALVE	LP5006B	10	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006B	11	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006B-1	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006C	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006D	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006DA	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-097	3/28/2011	2" AV	LP5006E	1	Corp stop	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006E	2	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006F	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006G	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" LD	LP5006G	2	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006H	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006J	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006K	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	2" AV	LP5006L	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/25/2011	2" AV	LP5006N	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/25/2011	2" AV	LP5006P	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/25/2011	2" LD	LP5006P	2	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006Q	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-097	2/2/2011	2'' LD	LP5006Q	2	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006R	1	no nut on valve handle; Air vent LP5006R #1 has no valve handle nut on the ball valve. Contractor replaced the nut on the ball valve handle	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006U	2	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006V	1	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006W	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/25/2011	20" VALVE	LP5006-X5	1	-	No further action required under Rehab Plan.	N/A
SF-097	3/28/2011	20" VALVE	LP5006-X5	2	-	No further action required under Rehab Plan.	N/A
SF-097	3/25/2011	2" AV	LP5006-X5	3	-	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006S	1	2" coupling; Air vent LP5006S #1 had a 2'' coupling on the riser pipe. AV installation contractor addressed.	No further action required under Rehab Plan.	N/A
SF-097	2/2/2011	2" AV	LP5006T	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	12" VALVE	LP5006X1A	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	TS	LP5006X1A	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	TS	LP5006X1BTS	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	5/9/2011	2" AV	LP5006X1BTS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	TS	LP5006X1CTS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	10" VALVE	LP5006X1D	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	8" VALVE	LP5006X1D	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/5/2011	TS	LP5006X1ETS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/5/2011	8" VALVE	LP5006X1F	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/9/2011	TS	LP5006X1TS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	20" VALVE	LP5006X5	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	20" VALVE	LP5006X5	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	2" AV	LP5006X5	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	TS	LP5006X5	4	NOT ON VG Documentation Updated	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	TS	LP5007	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	2" AV	LP5007	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	4/27/2011	2" AV	LP5007A	1	no pressure	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	TS	LP5007ATS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	TS	LP5007BTS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	TS	LP5007TS	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/2/2011	20" VALVE	LP5008	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	8" VALVE	LP5008	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	2" AV	LP5008	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	10" VALVE	LP5008	4	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008B	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008B	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008C	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008C	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008D	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	5/3/2011	20" VALVE	LP5008E	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	LD	LP5008E	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008F	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008F	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008F	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008G	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008G	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008H	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008H	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008I	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008I	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	2" AV	LP5008J	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/3/2011	TS	LP5008J	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	5/3/2011	TS	LP5008J	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	LD	LP5008L	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	TS	LP5008M	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	2" AV	LP5008M	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	TS	LP5008M	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	2" AV	LP5008N	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	TS	LP5008N	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	TS	LP5008N	3	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	2" AV	LP5008O	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	10" VALVE	LP5008P	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	12" VALVE	LP5008P	4	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	12" VALVE	LP5008P	5	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	2" AV	LP5008P	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-099, 100, 147, 155	4/27/2011	12" VALVE	LP5014	1	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	4/27/2011	6" VALVE	LP5014	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	2" AV	LP50080	2	-	No further action required under Rehab Plan.	N/A
SF-099, 100, 147, 155	5/4/2011	10" VALVE	LP5008P	2	-	No further action required under Rehab Plan.	N/A
SF-101	7/11/2011	2" AV	AT6042	3	-	No further action required under Rehab Plan.	N/A
SF-101	7/11/2011	CLEANOUT	AT6042	5	-	No further action required under Rehab Plan.	N/A
SF-101	7/11/2011	8" VALVE	AT6043	6	-	No further action required under Rehab Plan.	N/A
SF-101	7/11/2011	10" VALVE	AT6042	2	CLOSED - DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-103	7/6/2011	2" AV	AT6033	1	Steel riser with gate valve Noted issue addressed on 03/29/2012	No further action required under Rehab Plan.	N/A
SF-103	7/6/2011	2" AV	AT6037	1	-	No further action required under Rehab Plan.	N/A
SF-103	7/6/2011	2" AV	AT6038	2	-	No further action required under Rehab Plan.	N/A
SF-103	7/8/2011	2" AV	AT6039A	1	-	No further action required under Rehab Plan.	N/A
SF-103	7/11/2011	10" VALVE	AT6042	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-103	7/6/2011	2" AV	AT6040	1	-	No further action required under Rehab Plan.	N/A
SF-104	7/6/2011	2" AV	AT6041	1	-	No further action required under Rehab Plan.	N/A
SF-105	7/11/2011	12" VALVE	AT6043	8	-	No further action required under Rehab Plan.	N/A
SF-105	7/11/2011	12" VALVE	AT6043	9	-	No further action required under Rehab Plan.	N/A
SF-105	7/11/2011	6" Valve	AT6043	11	Closed (EPC)	No further action required under Rehab Plan.	N/A
SF-106	7/22/2011	2" AV	AT6045A	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/22/2011	2" AV	AT6045B	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/22/2011	2" AV	AT6047	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	8" VALVE	AT6048	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	6" VALVE	AT6048	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	8" VALVE	AT6050	1	Branch Closed	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	12" VALVE	AT6050	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	8" VALVE	AT6050	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-106	7/21/2011	12" VALVE	AT6050	4	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	2" AV	AT6051	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/22/2011	6" VALVE	AT6052	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/22/2011	12" VALVE	AT6052	3	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	2" AV	AT6052	4	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	12" VALVE	AT6053	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	12" VALVE	AT6054	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	2" AV	AT6055	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	12" VALVE	AT6055	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	8" VALVE	AT6056	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	12" VALVE	AT6056	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	8" VALVE	AT6056	3	-	No further action required under Rehab Plan.	N/A
SF-106	7/21/2011	8" VALVE	AT6057	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-106	7/20/2011	10" VALVE	AT6058	1	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	6" VALVE	AT6058	2	-	No further action required under Rehab Plan.	N/A
SF-106	7/20/2011	4" VALVE	AT6054	2	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	2" AV	CE3018	1	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	8" VALVE	CE3018	2	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	2" AV	CE3019	2	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	8" VALVE	CE3020	1	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	14" VALVE	CE3020	2	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	10" VALVE	CE3019	1	-	No further action required under Rehab Plan.	N/A
SF-109	3/24/2011	2" AV	CE3020	4	-	No further action required under Rehab Plan.	N/A
SF-110	3/24/2011	12" VALVE	SF-110	3	-	No further action required under Rehab Plan.	N/A
SF-110	3/24/2011	12" VALVE	SF-110	4	-	No further action required under Rehab Plan.	N/A
SF-110	3/24/2011	12" VALVE	SF-110	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-111	9/19/2011	4" VALVE	LP1033	1	VALVE IN-OPERABLE Abandoned Connection	No further action required under Rehab Plan.	N/A
SF-111	9/19/2011	2" AV	LP1034	1	-	No further action required under Rehab Plan.	N/A
SF-111	9/19/2011	2" AV	LP1034	2	-	No further action required under Rehab Plan.	N/A
SF-111	9/19/2011	10" VALVE	LP1034	3	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	14" VALVE	CE2060	3	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	10" VALVE	CE2060	4	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	L.D.	CE2060	8	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	T.S.	CE2060	9	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	2" AV	CE2060	10	CE-2060 #10 ball valve is upside down.; Upside Down Ball Valve	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	12" VALVE	CE2061	1	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	2" AV	CE2061	3	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	2" AV	CE2060	1	-	No further action required under Rehab Plan.	N/A
SF-115	4/5/2011	2" AV	CE2060	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-116	4/11/2011	24" VALVE	CE2053	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	2" AV	CE2053	2	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	2" AV	CE2053	3	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	16" VALVE	CE2053	4	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	16" VALVE	CE2053	5	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2053	6	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	L.D.	CE2053	7	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	2" AV	CE2053	8	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2053A	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2053B	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2053C	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2055	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	2" AV	CE2055	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-116	4/11/2011	2" CORP STOP	CE2056	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	L.D.	CE2056	2	-	No further action required under Rehab Plan.	N/A
SF-116	4/11/2011	T.S.	CE2056	3	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	2" AV	CE2057	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	WYE	CE2058	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	8" Valve	CE2059	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	16" VALVE	SF-116	1	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	16" VALVE	SF-116	2	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	16" VALVE	SF-116	3	-	No further action required under Rehab Plan.	N/A
SF-116	4/7/2011	4" Valve	SF-116	4	-	No further action required under Rehab Plan.	N/A
SF-116	4/5/2011	2" AV	SF-116	5	-	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	4" BP	CE2042	3	-	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	2" AV	CE2043	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-117	3/7/2011	24" VALVE	CE2043	2	-	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	4" BP	CE2043	3	-	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	10" VALVE	CE2044	1	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	LD	CE2045	2	-	No further action required under Rehab Plan.	N/A
SF-117	3/7/2011	8" VALVE	CE2046	1	-	No further action required under Rehab Plan.	N/A
SF-117	2/16/2011	LD	CE2047	1	-	No further action required under Rehab Plan.	N/A
SF-117	3/21/2011	8" VALVE	CE2051	1	-	No further action required under Rehab Plan.	N/A
SF-117	3/29/2011	24" VALVE	CE2051	2	-	No further action required under Rehab Plan.	N/A
SF-117	3/29/2011	4" BP	CE2051	3	-	No further action required under Rehab Plan.	N/A
SF-117	2/16/2011	2" AV	CE2049	1	-	No further action required under Rehab Plan.	N/A
SF-117	2/10/2011	4" VALVE	CE2049	2	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-117	3/29/2011	2" AV	CE2050	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	8" VALVE	AT1066	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	6/8/2011	8" VALVE	AT1057	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	2" AV	AT1057	4	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1058	1	-	No further action required under Rehab Plan.	N/A
SF-118	5/19/2011	8" VALVE	AT1060	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1061	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1062	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	2" AV	AT1063	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1063	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	2" AV	AT1064	1	AT1064 #1 and 1069 #1 have steel risers and gate valves. AT1064 #1 A/V frozen shut.; Steel Riser/Frozen Shut Noted issue addressed on 05/08/2012	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1065	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/8/2011	8" VALVE	AT1065	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	2" AV	AT1066	2	Broken stem; AT1066 #2 A/V broken stem on ball valve. Noted issue addressed on 06/10/2011	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	2" AV	AT1067	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	6/7/2011	8" VALVE	AT1068	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	2" AV	AT1069	1	Gate Valve; AT1064 #1 and 1069 #1 have steel risers and gate valves.; Steel Riser Noted issue addressed on 11/21/2011	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	8" VALVE	AT1070	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	2" AV	AT1070	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	LD	AT1070	3	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	LD	AT1070	4	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	36" VALVE	AT1071	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/7/2011	36" VALVE	AT1071	2	-	No further action required under Rehab Plan.	N/A
SF-118	2/22/2011	42" VALVE	AT1071	3	-	No further action required under Rehab Plan.	N/A
SF-118	2/22/2011	36" VALVE	AT1071	5	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	42" VALVE	AT1071	6	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	36" VALVE	AT1071	7	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	AT1071	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	2/24/2011	6" BP	AT1071	9	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	AT1071	10	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	AT1071	11	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	AT1071	12	-	No further action required under Rehab Plan.	N/A
SF-118	2/22/2011	6" BP	AT1071	13	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	AT1071	14	-	No further action required under Rehab Plan.	N/A
SF-118	2/22/2011	36" VALVE	AT1071	15	-	No further action required under Rehab Plan.	N/A
SF-118	2/22/2011	6" BP	AT1071	16	-	No further action required under Rehab Plan.	N/A
SF-118	6/2/2011	24" VALVE	CE1041	1	See line 116 ; Unit 42 PM'd CE1041 1 and 2 with line 116	No further action required under Rehab Plan.	N/A
SF-118	6/2/2011	2" AV	CE1041	2	See line 116 ; Unit 42 PM'd CE1041 1 and 2 with line 116	No further action required under Rehab Plan.	N/A
SF-118	6/2/2011	8" VALVE	CE1043	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/2/2011	8" VALVE	CE1044	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/3/2011	8" VALVE	CE1045	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	6/3/2011	8" VALVE	CE1046	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1047	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	2" CORP STOP	CE1049	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	10" VALVE	CE1049	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	42" VALVE	CE1049	3	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	6" BP	CE1049	4	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	42" VALVE	CE1050	1	-	No further action required under Rehab Plan.	N/A
SF-118	2/24/2011	6" BP	CE1050	2	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1051	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1053	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1055	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1056	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1057	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-118	6/6/2011	8" VALVE	CE1058	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1059	1	-	No further action required under Rehab Plan.	N/A
SF-118	6/6/2011	8" VALVE	CE1060	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	2" AV	CE2008	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	2" AV	CE2008	2	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	36" VALVE	CE2009	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	6" BP	CE2009	2	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	36" VALVE	CE2009	3	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	6" BP	CE2009	4	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	36" VALVE	CE2009	5	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	6" BP	CE2009	6	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	8" VALVE	CE2009	7	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	12" VALVE	CE2009	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	1/31/2011	24" VALVE	CE2009	9	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	4" BP	CE2009	10	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	8" VALVE	CE2009	11	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	6" VALVE	CE2010	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/11/2011	LD	CE2013	2	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	LD	CE2013	3	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	LD	CE2013	4	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	8" VALVE	CE2014	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	8" VALVE	CE2014	2	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	6" VALVE	CE2014	5	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	10" VALVE	CE2015	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	8" VALVE	CE2019	1	-	No further action required under Rehab Plan.	N/A
SF-119	1/31/2011	10" VALVE	CE2019	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	1/31/2011	8" VALVE	CE2020	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	2" AV	CE2022	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	8" VALVE	CE2022	2	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	18" VALVE	CE2023	1	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	12" VALVE	CE2023	2	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	2" AV	CE2023	3	-	No further action required under Rehab Plan.	N/A
SF-119	2/7/2011	12" VALVE	CE2024	2	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	10" VALVE	CE2025	2	CE-2025#2 Leaks when operated and must be jammed open to stop leak at packing.; Leaks Noted issue addressed on 6/27/2012	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	6" VALVE	CE2025	3	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	12" BO	CE2026	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	12" VALVE	CE2027	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	2" AV	CE2028	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	2" AV	CE2030	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	2/15/2011	10" VALVE	CE2031	1	-	No further action required under Rehab Plan.	N/A
SF-119	2/15/2011	10" VALVE	CE2031	2	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	16" VALVE	CE2031	3	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	BYPASS	CE2031	4	-	No further action required under Rehab Plan.	N/A
SF-119	2/15/2011	2" AV	CE2033	2	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	6" VALVE	CE2034	1	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	30" VALVE	CE2035	1	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	4" BP	CE2035	2	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	30" VALVE	CE2035	3	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	4" BP	CE2035	4	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	36" VALVE	CE2035	5	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	6" BP	CE2035	6	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	24" VALVE	CE2035	7	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	3/21/2011	4" BP	CE2035	8	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	24" VALVE	CE2035	9	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	4" BP	CE2035	10	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	24" VALVE	CE2035	11	-	No further action required under Rehab Plan.	N/A
SF-119	3/21/2011	4" BP	CE2035	12	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	24" VALVE	CE2035	13	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	4" BP	CE2035	14	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	24" VALVE	CE2035	15	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	4" BP	CE2035	16	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	2" AV	CE2035	17	-	No further action required under Rehab Plan.	N/A
SF-119	2/8/2011	36" VALVE	CE2035	18	-	No further action required under Rehab Plan.	N/A
SF-119	3/17/2011	2" AV	CE2035	19	-	No further action required under Rehab Plan.	N/A
SF-119	3/17/2011	36" VALVE	CE2035	20	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-119	2/8/2011	24" VALVE	CE2035	21	-	No further action required under Rehab Plan.	N/A
SF-120	3/21/2011	12" VALVE	CE6002	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/30/2011	24" VALVE	CE6002	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	12" VALVE	CE6002A	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	12" VALVE	CE6002A	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	6" VALVE	CE6003	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6003	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	8" VALVE	CE6003A	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	8" VALVE	CE6004	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	6" VALVE	CE6004	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	24" VALVE	CE6005	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6005	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6006	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-120	3/10/2011	4" BP	CE6006	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	24" VALVE	CE6006	3	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	16" VALVE	CE6007	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	3" BP	CE6007	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	16" VALVE	CE6007	3	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	3" BP	CE6007	4	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	12" VALVE	CE6007	5	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6007	6	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	8" VALVE	CE6008	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6009	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	10" VALVE	CE6010	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	4" BP	CE6011	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	24" VALVE	CE6011	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-120	3/10/2011	4" BP	CE6012	1	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	24" VALVE	CE6012	2	-	No further action required under Rehab Plan.	N/A
SF-120	3/10/2011	2" AV	CE6012	3	-	No further action required under Rehab Plan.	N/A
SF-121	12/29/2011	2" AV	AT1077K	2	(New) Ball Valve; A/V's AT1077J #2, J1 #1, K #2 and K1 #3 are new not on valve guides. A/V AT1077K #2 and 1077L #1 Addressed with City of Virginia Beach roadway project	No further action required under Rehab Plan.	N/A
SF-121	12/27/2011	10" VALVE	AT1077J	1	30 turns open; A/V's AT1077J #2, J1 #1, K #2 and K1 #3 are new not on valve guides. Update documentation	No further action required under Rehab Plan.	N/A
SF-121	12/27/2011	2" AV	AT1077J	2	(New) Ball Valve; A/V's AT1077J #2, J1 #1, K #2 and K1 #3 are new not on valve guides. A/V AT1077J #2 and 1077K1 #3 too deep for whammy. ; Too deep for whammy Addressed with City of Virginia Beach roadway project	No further action required under Rehab Plan.	N/A
SF-121	12/27/2011	8" VALVE	AT1077J	3	(New) Closed; Valve AT1077J #3 is new not on valve guide.	No further action required under Rehab Plan.	N/A
SF-121	12/29/2011	2" AV	AT1077J1	1	(New) Ball Valve; A/V's AT1077J #2, J1 #1, K #2 and K1 #3 are new not on valve guides.; Add to VG Addressed with City of Virginia Beach roadway project	No further action required under Rehab Plan.	N/A
SF-121	12/29/2011	2" AV	AT1077K	1	-	No further action required under Rehab Plan.	N/A
SF-121	1/3/2012	8" VALVE	AT1077K1	1	-	No further action required under Rehab Plan.	N/A
SF-121	1/3/2012	2" AV	AT1077K1	3	(New) Ball Valve; A/V's AT1077J #2, J1 #1, K #2 and K1 #3 are new not on valve guides. A/V AT1077J #2 and 1077K1 #3 too deep for whammy. ; Addressed with City of Virginia Beach roadway project	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-121	1/4/2012	2" AV	AT1077L	1	Ball Valve; A/V AT1077K #2 and 1077L #1 whammy would not go thru corp stop.; Addressed with City of Virginia Beach roadway project	No further action required under Rehab Plan.	N/A
SF-121	1/3/2012	2" AV	AT1077M	2	-	No further action required under Rehab Plan.	N/A
SF-122	4/26/2011	2" AV	AT3056	1	-	No further action required under Rehab Plan.	N/A
SF-122	4/26/2011	18" VALVE	AT3057	1	-	No further action required under Rehab Plan.	N/A
SF-122	4/26/2011	16" VALVE	AT3057	2	-	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	10" VALVE	AT3058	2	-	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	2" AV	AT3058	3	-	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	4" BP	AT3059	1	-	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	24" VALVE	AT3059	2	-	No further action required under Rehab Plan.	N/A
SF-122	4/27/2011	2" AV	AT3059	3	-	No further action required under Rehab Plan.	N/A
SF-122	4/26/2011	2" AV	AT3058	1	-	No further action required under Rehab Plan.	N/A
SF-123	4/26/2011	6" VALVE	AT5016	1	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	8" VALVE	AT5017	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-123	4/25/2011	16" VALVE	AT5017	3	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	8" VALVE	AT5018	1	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	2" AV	AT5018	2	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	8" VALVE	AT5019	1	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	2" AV	AT5020	1	-	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	12" VALVE	AT5020	2	AT-5020 #2 operator nut was secured by drilling and tapping the end of the stem and inserting a retainer bolt.	No further action required under Rehab Plan.	N/A
SF-123	4/25/2011	8" VALVE	AT5021	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	16" VALVE	AT5008	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	2" AV	AT5008A	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	6" VALVE	AT5009	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	6" VALVE	AT5010	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	6" VALVE	AT5011	1	-	No further action required under Rehab Plan.	N/A
SF-124	4/26/2011	6" VALVE	AT5013	1	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-124	4/26/2011	10" VALVE	AT5013	2	-	No further action required under Rehab Plan.	N/A
SF-124	4/27/2011	10" VALVE	AT5015	1	-	No further action required under Rehab Plan.	N/A
SF-125	4/21/2011	24" VALVE	AT5001	1	See Line	No further action required under Rehab Plan.	N/A
SF-125	4/21/2011	4" BP	AT5001	2	-	No further action required under Rehab Plan.	N/A
SF-125	4/21/2011	16" VALVE	AT5001	3	-	No further action required under Rehab Plan.	N/A
SF-125	4/21/2011	3" BP	AT5001	4	-	No further action required under Rehab Plan.	N/A
SF-125	4/28/2011	6" VALVE	AT5003	1	-	No further action required under Rehab Plan.	N/A
SF-125	4/28/2011	6" VALVE	AT5003	2	-	No further action required under Rehab Plan.	N/A
SF-125	4/28/2011	6" VALVE	AT5003	3	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-125	4/28/2011	12" VALVE	AT5003	4	-	No further action required under Rehab Plan.	N/A
SF-125	4/27/2011	8" VALVE	AT5006	1	-	No further action required under Rehab Plan.	N/A
SF-125	4/13/2011	16" VALVE	AT5006	2	-	No further action required under Rehab Plan.	N/A
SF-125	4/13/2011	3" BP	AT5006	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-125	4/27/2011	2" AV	AT5006	4	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	2" AV	AT3032	1	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	4" BP	AT3032	2	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	24" VALVE	AT3032	3	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	12" VALVE	AT3032	4	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	8" VALVE	AT3033	1	-	No further action required under Rehab Plan.	N/A
SF-126	1/26/2011	8" VALVE-R	AT3034	1	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	8" VALVE	AT3035A	1	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	4" VALVE	AT3035A	2	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	2" AV	AT3035A	3	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	4" VALVE	AT3035A	4	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	6" VALVE	AT3036	1	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	2" AV	AT3036	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-126	1/25/2011	2" AV	AT3037	2	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	6" VALVE	AT3037	3	-	No further action required under Rehab Plan.	N/A
SF-126	1/25/2011	6" VALVE	AT3037	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	8" VALVE	AT3054P	3	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	8" VALVE	AT3054Q	1	-	No further action required under Rehab Plan.	N/A
SF-127	1/22/2011	6" VALVE	AT3054A	1	-	No further action required under Rehab Plan.	N/A
SF-127	1/22/2011	3" BP	AT3054A	2	-	No further action required under Rehab Plan.	N/A
SF-127	1/22/2011	18" VALVE	AT3054A	3	-	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	6" VALVE	AT3054B	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	2" AV	AT3054B	2	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	12" VALVE	AT3054E	2	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	10" VALVE	AT3054G	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	2" AV	AT3054H	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-127	4/26/2011	2" AV	AT3054J	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	8" VALVE	AT3054K	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	2" AV	AT3054K	2	-	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	18" VALVE	AT3054K	3	-	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	3" BP	AT3054K	4	-	No further action required under Rehab Plan.	N/A
SF-127	4/26/2011	2" AV	AT3054L	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	2" AV	AT3054M	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	8" VALVE	AT3054M	2	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	4" VALVE	AT3054N	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	2" AV	AT3054P	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	8" VALVE	AT3054P	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	18" VALVE	AT3054S	2	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	3" BP	AT3054S	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-127	4/22/2011	10" VALVE	AT3054S	4	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	2" AV	AT3054R	1	-	No further action required under Rehab Plan.	N/A
SF-127	4/22/2011	10" VALVE	AT3054S	5	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-128	1/4/2012	6" VALVE	AT3050	1	-	No further action required under Rehab Plan.	N/A
SF-128	1/4/2012	10" VALVE	AT3052	1	-	No further action required under Rehab Plan.	N/A
SF-128	1/4/2012	2" AV	AT3053	1	-	No further action required under Rehab Plan.	N/A
SF-128	9/13/2011	4" BP	AT3054	1	-	No further action required under Rehab Plan.	N/A
SF-128	9/13/2011	24" VALVE	AT3054	2	-	No further action required under Rehab Plan.	N/A
SF-128	1/10/2012	16" VALVE	AT3054	7	-	No further action required under Rehab Plan.	N/A
SF-128	1/10/2012	3" BP	AT3054	8	-	No further action required under Rehab Plan.	N/A
SF-128	1/10/2012	6" VALVE	AT3054	9	-	No further action required under Rehab Plan.	N/A
SF-128	1/10/2012	2" AV	AT3054	10	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3040	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-129	5/2/2011	4" BP	AT3040	2	-	No further action required under Rehab Plan.	N/A
SF-129	4/21/2011	16" VALVE	AT3040	3	-	No further action required under Rehab Plan.	N/A
SF-129	4/21/2011	3" BP	AT3040	4	-	No further action required under Rehab Plan.	N/A
SF-129	4/21/2011	2" AV	AT3040	5	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	10" VALVE	AT3041	1	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	8" VALVE	AT3042	1	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	24" VALVE	AT3042	2	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	4" BP	AT3042	3	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	2" AV	AT3042	4	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	4" BP	AT3042A	1	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	24" VALVE	AT3042A	2	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	8" VALVE	AT3043	1	-	No further action required under Rehab Plan.	N/A
SF-129	4/28/2011	2" AV	AT3043	2	Steel Riser Noted issue addressed on 4/30/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-129	5/2/2011	16" VALVE	AT3045	1	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	LD	AT3045	2	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	10" VALVE	AT3046	1	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	10" VALVE	AT3047	1	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	18" VALVE	AT3048	1	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	18" VALVE	AT3048	2	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3048	3	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	4" BP	AT3048	6	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3048	7	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	4" BP	AT3048	8	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3048	9	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	4" BP	AT3048	10	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3048	11	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-129	5/2/2011	4" BP	AT3048	12	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	8" VALVE	AT3048	13	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	4" BP	AT3048	15	-	No further action required under Rehab Plan.	N/A
SF-129	5/3/2011	2" AV	AT3048	16	Steel Riser Noted issue addressed on 10/3/2011	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	4" BP	AT3048	4	-	No further action required under Rehab Plan.	N/A
SF-129	5/2/2011	24" VALVE	AT3048	5	-	No further action required under Rehab Plan.	N/A
SF-130	5/2/2011	16" VALVE	AT3040A	1	AT-3040 A #1 was replaced 5-6-11,	No further action required under Rehab Plan.	N/A
SF-130	5/4/2011	LD	AT3040A	3	-	No further action required under Rehab Plan.	N/A
SF-130	5/4/2011	2" AV	AT3040B	1	-	No further action required under Rehab Plan.	N/A
SF-130	5/11/2011	8" VALVE	AT3040C	1	-	No further action required under Rehab Plan.	N/A
SF-130	5/11/2011	2" AV	AT3040C	2	-	No further action required under Rehab Plan.	N/A
SF-130	5/4/2011	12" VALVE	AT3040D	2	-	No further action required under Rehab Plan.	N/A
SF-130	5/3/2011	16" VALVE	AT3040E	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-130	5/23/2011	6" VALVE	AT3040F	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-130	5/23/2011	16" VALVE	AT3040H	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-130	5/23/2011	16" VALVE	AT3040H	2	-	No further action required under Rehab Plan.	N/A
SF-130	5/11/2011	2" AV	AT3040C1	1	-	No further action required under Rehab Plan.	N/A
SF-130	5/4/2011	12" VALVE	AT3040E	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	2" AV	AT4011	2	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	8" VALVE	AT4011	3	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	2" AV	AT4012	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	8" VALVE	AT4013	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	2" AV	AT4014	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	8" VALVE	AT4015	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	2" AV	AT4016	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	3" BP	AT4016	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-131	5/26/2011	16" VALVE	AT4016	3	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	8" VALVE	AT4017	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	4" VALVE	AT4017A	1	METER SITE	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	16" VALVE	AT4020	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	12" VALVE	AT4020	4	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	12" VALVE	AT4020	5	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	3" BP	AT4020	2	-	No further action required under Rehab Plan.	N/A
SF-131	5/31/2011	2" AV	AT4011	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	2" AV	AT4018	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	2" AV	AT4019	1	-	No further action required under Rehab Plan.	N/A
SF-131	5/26/2011	12" VALVE	AT4020	3	-	No further action required under Rehab Plan.	N/A
SF-132	5/31/2011	3" BP	AT4010A	1	-	No further action required under Rehab Plan.	N/A
SF-132	5/31/2011	16" VALVE	AT4010A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-132	5/31/2011	20" VALVE	AT4010A	3	-	No further action required under Rehab Plan.	N/A
SF-132	5/11/2011	2" AV	AT4010B	6	-	No further action required under Rehab Plan.	N/A
SF-132	5/11/2011	2" AV	AT4010B	7	-	No further action required under Rehab Plan.	N/A
SF-132	5/11/2011	20" VALVE	AT4010B	8	-	No further action required under Rehab Plan.	N/A
SF-132	5/11/2011	2" AV	AT4010B	9	-	No further action required under Rehab Plan.	N/A
SF-133	1/4/2012	6" Valve	NA4004	1	-	No further action required under Rehab Plan.	N/A
SF-133	1/4/2012	12" VALVE	NA4005	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/19/2012	2" AV	AT4002	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/19/2012	8" VALVE	AT4003	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/23/2012	10" VALVE	AT4008	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/23/2012	2" AV	AT4009	1	Corp Stop	No further action required under Rehab Plan.	N/A
SF-134	1/19/2012	30" VALVE	AT4004	2	-	No further action required under Rehab Plan.	N/A
SF-134	1/19/2012	4" BP	AT4004	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-134	1/19/2012	8" VALVE	AT4004	4	-	No further action required under Rehab Plan.	N/A
SF-134	1/23/2012	16" VALVE	AT4005	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/23/2012	2" AV	AT4007	1	-	No further action required under Rehab Plan.	N/A
SF-134	1/23/2012	8" VALVE	AT4007	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3013	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3013	3	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	42" VALVE	AT3013	7	-	No further action required under Rehab Plan.	N/A
SF-135	1/24/2012	12" VALVE	AT3010	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/24/2012	2" AV	AT3010A	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/24/2012	10" VALVE	AT3011	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/24/2012	10" VALVE	AT3011	3	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3011C	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3011C	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-135	1/23/2012	10" VALVE	AT3012	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3012	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3013	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	36" VALVE	AT3013	4	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	6" BP	AT3013	5	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	6" BP	AT3013	6	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	36" VALVE	AT3013	8	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	6" BP	AT3013	9	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3013A	1	Steel Riser Noted issue addressed on 3/13/2012	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3013B	1	Steel Riser Noted issue addressed on 3/15/2012	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3014	1	Steel Riser Noted issue addressed on 3/15/2012	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3014	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	10" VALVE	AT3014	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-135	1/20/2012	8" VALVE	AT3015	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/23/2012	2" AV	AT3015	2	Steel Riser Noted issue addressed on 2/27/2012	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3015B	1	Steel Riser Noted issue addressed on 3/23/2012	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3015B	2	Steel Riser Noted issue addressed on 3/23/2012	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	10" VALVE	AT3016	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3016	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	10" VALVE	AT3017	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3017	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	10" VALVE	AT3017	3	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	LD	AT3017	4	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	8" VALVE	AT3018	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3018	2	Steel Riser	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3019	1	Steel Riser	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-135	1/20/2012	10" VALVE	AT3020	2	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3020	3	Steel Riser	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	4" BP	AT3020	4	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	20" VALVE	AT3020	5	-	No further action required under Rehab Plan.	N/A
SF-135	1/19/2012	2" AV	AT3020A	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/19/2012	2" AV	AT3020B	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/19/2012	10" VALVE	AT3022	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	36" VALVE	AT3024	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	6" BP	AT3024	2	Closed (Replaced the 2" valve Nut and the retainer nut)	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	42" VALVE	AT3024	3	-	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	6" BP	AT3024	4	-	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	6" BP	AT3024	6	-	No further action required under Rehab Plan.	N/A
SF-135	1/25/2012	36" VALVE	AT3024	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-135	1/19/2012	12" VALVE	AT3025	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/19/2012	2" AV	AT3026	1	-	No further action required under Rehab Plan.	N/A
SF-135	1/20/2012	2" AV	AT3020	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3038	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	8" VALVE	NA3047F	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	2" AV	NA3047F	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	8" VALVE	NA3030	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	2" AV	NA3032	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	8" VALVE	NA3032	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	8" VALVE	NA3033	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	2" AV	NA3034	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	8" VALVE	NA3035	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/1/2012	8" VALVE	NA3035A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-136	2/1/2012	8" VALVE	NA3036	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	2" AV	NA3039	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3039	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3041	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	2" AV	NA3041	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3042	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	2" AV	NA3042	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3042	3	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	30" VALVE	NA3043	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	4" BP	NA3043	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	8" VALVE	NA3044	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	2" AV	NA3045	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	8" VALVE	NA3045	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-136	2/3/2012	2" AV	NA3046	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	8" VALVE	NA3046	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	8" VALVE	NA3047A	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	LD	NA3047B	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/7/2012	8" VALVE	NA3047D	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/3/2012	6" VALVE	NA3047F	3	-	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	8" VALVE	NA3047G	1	-	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	LD	NA3047G	2	-	No further action required under Rehab Plan.	N/A
SF-136	2/6/2012	LD	NA3047H	2	buried	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	8" VALVE	NA3051	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	2" AV	NA3052	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	8" VALVE	NA3052	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	2" AV	NA3052	3	gate valve Noted issue addressed on 4/25/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-137	2/6/2012	2" AV	NA3053	1	gate valve Noted issue addressed on 5/14/2012	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	2" AV	NA3054	1	gate valve Noted issue addressed on 4/24/2012	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	LD	NA3054	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	8" VALVE	NA3054	3	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	2" AV	NA3055	1	gate valve Noted issue addressed on 4/30/2012	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	8" VALVE	NA3056	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/7/2012	2" AV	NA3057	1	gate valve Noted issue addressed on 5/1/2012	No further action required under Rehab Plan.	N/A
SF-137	2/7/2012	8" VALVE	NA3058	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/7/2012	8" VALVE	NA3059A	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/7/2012	8" VALVE	NA3061	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3062	1	gate valve Noted issue addressed on 5/1/2012	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	8" VALVE	NA3063	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3063	2	gate valve Noted issue addressed on 5/3/2012	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-137	2/15/2012	4" VALVE	NA3064	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	30" VALVE	NA3064	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3065	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	8" VALVE	NA3065	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3066	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3067	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	8" VALVE	NA3068	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3068	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3069	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	8" VALVE	NA3070	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	2" AV	NA3072	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	8" VALVE	NA3073	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	2" AV	NA3073	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-137	2/16/2012	2" AV	NA3074	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	8" VALVE	NA3075	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	12" VALVE	NA3076	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	30" VALVE	NA3048	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	4" VALVE	NA3048	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	LD	NA3048	3	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	8" VALVE	NA3049	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/6/2012	2" AV	NA3050	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/15/2012	2" AV	NA3071	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	8" VALVE	NA3071	2	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	2" AV	NA3072	1	-	No further action required under Rehab Plan.	N/A
SF-137	2/16/2012	2" AV	NA3076	3	-	No further action required under Rehab Plan.	N/A
SF-138	2/16/2012	2" AV	NA3076	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-138	6/13/2011	24" VALVE	NA3077	1	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	4" BP	NA3077	2	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	20" VALVE	NA3077	3	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	3" BP	NA3077	4	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	20" VALVE	NA3077	5	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	3" BP	NA3077	6	-	No further action required under Rehab Plan.	N/A
SF-138	6/13/2011	24" VALVE	NA3077	7	-	No further action required under Rehab Plan.	N/A
SF-138	7/28/2010	8" VALVE	NA3078	1	-	No further action required under Rehab Plan.	N/A
SF-138	7/28/2010	2" AV	NA3078	2	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	7/28/2010	8" VALVE	NA3078	3	-	No further action required under Rehab Plan.	N/A
SF-138	7/29/2010	2" AV	NA3079	1	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	7/29/2010	8" VALVE	NA3079	2	-	No further action required under Rehab Plan.	N/A
SF-138	7/29/2010	2" AV	NA3080	1	ball valve/copper	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-138	7/29/2010	12" VALVE	NA3080	2	-	No further action required under Rehab Plan.	N/A
SF-138	7/29/2010	LD	NA3080	3	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	2" AV	NA3081	1	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	10" VALVE	NA3081	2	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	24" VALVE	NA3081	3	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	4" BP	NA3081	4	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	2" AV	NA3082	1	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	8" VALVE	NA3082	2	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	8" VALVE	NA3083	1	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	8" VALVE	NA3083A	2	-	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	2" AV	NA3084	1	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	2" AV	NA3084	2	ball valve/copper	No further action required under Rehab Plan.	N/A
SF-138	8/2/2010	8" VALVE	NA3084	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-139	4/25/2011	6" VALVE	NA4010	2	-	No further action required under Rehab Plan.	N/A
SF-139	4/19/2011	6" VALVE	NA4012	1	-	No further action required under Rehab Plan.	N/A
SF-139	4/25/2011	12" VALVE	NA4010	1	-	No further action required under Rehab Plan.	N/A
SF-140	4/19/2011	10" VALVE	NA4007	1	-	No further action required under Rehab Plan.	N/A
SF-140	4/25/2011	8" VALVE	NA4008	1	-	No further action required under Rehab Plan.	N/A
SF-140	4/25/2011	2" AV	NA4009	1	-	No further action required under Rehab Plan.	N/A
SF-140	4/25/2011	6" VALVE	NA4009	2	-	No further action required under Rehab Plan.	N/A
SF-140	4/25/2011	16" VALVE	NA4009A	1	-	No further action required under Rehab Plan.	N/A
SF-141	4/19/2011	8" Valve	NA4001	1	-	No further action required under Rehab Plan.	N/A
SF-141	4/19/2011	8" Valve	NA4001A	1	-	No further action required under Rehab Plan.	N/A
SF-141	4/25/2011	16" VALVE	NA4001B	1	70 turns; NA-40001B #1 AND NA-4001#2 VALVE BOXES WERE RASIED TO GRADE.	No further action required under Rehab Plan.	N/A
SF-141	4/25/2011	6" Valve	NA4001B	2	-	No further action required under Rehab Plan.	N/A
SF-141	4/19/2011	14" VALVE	NA4003	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-141	4/19/2011	10" VALVE	NA4003	2	-	No further action required under Rehab Plan.	N/A
SF-141	4/19/2011	16" VALVE	NA4001	2	CLOSED; NA-40001B #1 AND NA-4001#2 VALVE BOXES WERE RASIED TO GRADE.	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	2" AV	NA3087	2	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	6" VALVE	NA3090	4	-	No further action required under Rehab Plan.	N/A
SF-142	1/10/2012	24" VALVE	NA3085	1	-	No further action required under Rehab Plan.	N/A
SF-142	1/10/2012	4" BP	NA3085	2	-	No further action required under Rehab Plan.	N/A
SF-142	1/10/2012	16" VALVE	NA3085	3	-	No further action required under Rehab Plan.	N/A
SF-142	1/10/2012	2" AV	NA3085	4	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	2" AV	NA3086	1	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	2" AV	NA3087	1	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	2" AV	NA3088	1	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	8" VALVE	NA3088	2	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	2" AV	NA3089	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-142	1/11/2012	24" VALVE	NA3090	2	-	No further action required under Rehab Plan.	N/A
SF-142	1/11/2012	4" BP	NA3090	3	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	24" VALVE	NA30901	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	4" VALVE	NA30901	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	24" VALVE	NA30901	3	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	4" VALVE	NA30901	4	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	24" VALVE	NA30901	5	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	4" VALVE	NA30901	6	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	8" VALVE	NA30901	7	-	No further action required under Rehab Plan.	N/A
SF-143	1/27/2012	2" AV	NA30901	8	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	16" VALVE	NA30901	9	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	16" VALVE	NA30901	10	-	No further action required under Rehab Plan.	N/A
SF-143	1/24/2012	20" VALVE	NA30901	11	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-143	1/27/2012	2" AV	NA30901	12	-	No further action required under Rehab Plan.	N/A
SF-143	1/27/2012	2" AV	NA30901	13	-	No further action required under Rehab Plan.	N/A
SF-143	1/25/2012	2" AV	NA3090A	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/25/2012	6" VALVE	NA3090C	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/25/2012	2" AV	NA3090C	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/19/2012	2" AV	NA3090D	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/19/2012	2" AV	NA3090D	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	8" VALVE	NA3090E	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	24" VALVE	NA3090E	4	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090E	5	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	6" VALVE	NA3090E	6	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090E	7	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	8" VALVE	NA3090E	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-143	1/18/2012	2" AV	NA3090G	3	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090H	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090J	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	24" VALVE	NA3090J	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/30/2012	24" VALVE	NA3090K	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/30/2012	4" BP	NA3090K	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/30/2012	12" VALVE	NA3090M	2	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090G	1	-	No further action required under Rehab Plan.	N/A
SF-143	1/18/2012	2" AV	NA3090G	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/12/2011	3" BP	NA3107	3	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	20" VALVE	NA3090	6	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3090	7	ball/copper	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	24" VALVE	NA3091	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-144	4/6/2011	4" BP	NA3091	3	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	8" VALVE	NA3092	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3093	1	ball/copper; Valves NA3193#1,NA3195 32 and 3196 #4. Could remove broken handle as they were rusted. If you tried turning it started opening the valve. Noted issue addressed on 5/3/2012	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3094	2	ball/copper	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3095	2	ball/copper; Valves NA3193#1,NA3195 32 and 3196 #4. Could remove broken handle as they were rusted. If you tried turning it started opening the valve. Noted issue addressed on 5/3/2012	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3096	1	ball/copper	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	8" VALVE	NA3096	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	8" VALVE	NA3096	3	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	2" AV	NA3096	4	ball/copper; Valves NA3193#1,NA3195 32 and 3196 #4. Could remove broken handle as they were rusted. If you tried turning it started opening the valve. Noted issue addressed on 5/3/2012	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	8" VALVE	NA3097	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3097	2	ball/copper	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-144	4/7/2011	8" VALVE	NA3097	3	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3098	1	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3098	2	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3098	3	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	8" VALVE	NA3098	4	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3099	1	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	8" VALVE	NA3100	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3100	2	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	2" AV	NA3101	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	18" VALVE	NA3101A	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	24" VALVE	NA3101A	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	8" VALVE	NA3101A	4	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	24" LS	NA3101A	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-144	4/11/2011	2" AV	NA3101A	7	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	24" VALVE	NA3101B	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	18" VALVE	NA3101B	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/7/2011	2" AV	NA3101B	3	ball copper	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	8" VALVE	NA3102	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	2" AV	NA3103	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	10" VALVE	NA3103	2	nut missing; NA-3103 #2 there is no valve nut installed. There is a retainer nut install on stim. The valve nut was installed over the retaining nut it was removed during PM. Noted issue addressed on 12/27/2011	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	2" AV	NA3104A	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	8" VALVE	NA3104A	3	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	2" AV	NA3105	1	corp stop	No further action required under Rehab Plan.	N/A
SF-144	4/12/2011	8" VALVE	NA3105	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/12/2011	2" AV	NA3106	1	gate/steel Noted issue addressed on 9/9/2011	No further action required under Rehab Plan.	N/A
SF-144	4/12/2011	8" VALVE	NA3106	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-144	4/12/2011	20" VALVE	NA3107	2	-	No further action required under Rehab Plan.	N/A
SF-144	4/12/2011	10" VALVE	NA3107	4	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	8" VALVE	NA3094	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/6/2011	8" VALVE	NA3095	1	-	No further action required under Rehab Plan.	N/A
SF-144	4/11/2011	10" VALVE	NA3104	1	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	24" VALVE	AT6031	7	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	4" BP	AT6031	8	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	12" VALVE	AT6031A	2	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	12" VALVE	AT6031A	3	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	12" VALVE	AT6031A	4	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	12" VALVE	AT6032	1	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	12" VALVE	AT6032	2	-	No further action required under Rehab Plan.	N/A
SF-146	7/6/2011	2" AV	AT6032	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-150	7/18/2011	18" VALVE	AT6008	1	Branch closed	No further action required under Rehab Plan.	N/A
SF-150	7/14/2011	2" AV	AT6018	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/18/2011	6" VALVE	AT6020	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/14/2011	2" AV	AT6021	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	2" AV	AT6022	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/14/2011	LD	AT6022	2	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	2" AV	AT6023	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	6" VALVE	AT6024	2	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	6" E.P.C.	AT6024	3	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	6" E.P.C	AT6024	4	-	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	8" VALVE	AT6026	1	Branch Closed	No further action required under Rehab Plan.	N/A
SF-150	7/19/2011	LD	AT6027	2	-	No further action required under Rehab Plan.	N/A
SF-150	7/20/2011	6" VALVE	AT6029	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-150	7/20/2011	LD	AT6029	2	-	No further action required under Rehab Plan.	N/A
SF-150	7/20/2011	24" VALVE	AT6031	1	-	No further action required under Rehab Plan.	N/A
SF-150	7/20/2011	4"BP	AT6031	2	-	No further action required under Rehab Plan.	N/A
SF-150	7/20/2011	24" VALVE	AT6031	3	-	No further action required under Rehab Plan.	N/A
SF-150	7/20/2011	4"BP	AT6031	4	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	24" VALVE	AT6031	5	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	4"BP	AT6031	6	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	24" VALVE	AT6031	9	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	4"BP	AT6031	10	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	24" VALVE	AT6031	11	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	4"BP	AT6031	12	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	24" VALVE	AT6031	13	-	No further action required under Rehab Plan.	N/A
SF-150	12/1/2011	4"BP	AT6031	14	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-156	7/13/2011	2" AV	AT6008	2	-	No further action required under Rehab Plan.	N/A
SF-156	7/18/2011	8" VALVE	AT6010	1	Branch closed	No further action required under Rehab Plan.	N/A
SF-156	7/18/2011	8" VALVE	AT6013	1	Branch closed	No further action required under Rehab Plan.	N/A
SF-156	7/18/2011	2" AV	AT6014	1	-	No further action required under Rehab Plan.	N/A
SF-156	7/14/2011	8" VALVE	AT6015	1	Branch closed	No further action required under Rehab Plan.	N/A
SF-156	7/14/2011	8" VALVE	AT6015	2	Branch closed	No further action required under Rehab Plan.	N/A
SF-156	7/14/2011	2" AV	AT6016	1	Put a new handle on the ball valve	No further action required under Rehab Plan.	N/A
SF-156	7/14/2011	30" VALVE	AT6017	1	-	No further action required under Rehab Plan.	N/A
SF-156	7/14/2011	4" BP	AT6017	2	-	No further action required under Rehab Plan.	N/A
SF-158	7/11/2011	16" VALVE	AT6001	2	-	No further action required under Rehab Plan.	N/A
SF-158	7/11/2011	2" AV	AT6001	3	-	No further action required under Rehab Plan.	N/A
SF-158	7/11/2011	24" VALVE	AT6001	4	-	No further action required under Rehab Plan.	N/A
SF-158	7/11/2011	4" VALVE	AT6001	5	AT-6001 #5 Needs to be updated on the valve guide.	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-158	7/12/2011	8" VALVE	AT6004	1	-	No further action required under Rehab Plan.	N/A
SF-158	7/12/2011	2" AV	AT6004A	1	-	No further action required under Rehab Plan.	N/A
SF-158	7/13/2011	24" VALVE	AT6007	1	(no retainer nut); 24" valve AT-6007 #1 has no retainer nut. Noted issue addressed on 4/5/2012	No further action required under Rehab Plan.	N/A
SF-158	7/13/2011	4" VALVE	AT6007	2	-	No further action required under Rehab Plan.	N/A
SF-158	7/13/2011	10" VALVE	AT6007	3	-	No further action required under Rehab Plan.	N/A
SF-158	7/13/2011	2" AV	AT6007	4	-	No further action required under Rehab Plan.	N/A
SF-158	7/12/2011	8" VALVE	AT6003	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	8" VALVE	AT1092	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	2" AV	AT1093	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	8" VALVE	AT1095	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	2" AV	AT1096	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	2" AV	AT1097	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/13/2011	8" VALVE	AT1097	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-159	10/11/2011	2" AV	AT1098	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	8" VALVE	AT1099	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	2" AV	AT1099	2	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	18" VALVE	AT1100	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	2" AV	AT1100	2	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	8" VALVE	AT1101	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	8" VALVE	AT1102	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/6/2011	2" AV	AT1102	2	Steel Riser	No further action required under Rehab Plan.	N/A
SF-159	10/6/2011	10" VALVE	AT1103	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/6/2011	2" AV	AT1104	1	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	4" BP	AT1105	1	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	36" VALVE	AT1105	3	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	6" BP	AT1105	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-159	9/23/2011	4" BP	AT1105	5	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	2" AV	AT1105	8	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	8" VALVE	AT1106	2	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	LD	AT1107	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/6/2011	2" AV	AT1108	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	2" AV	AT1108A	1	-	No further action required under Rehab Plan.	N/A
SF-159	10/11/2011	8" VALVE	AT1108B	1	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	30" VALVE	AT1105	2	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	30" VALVE	AT1105	6	-	No further action required under Rehab Plan.	N/A
SF-159	9/23/2011	2" AV	AT1105	7	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	2" AV	AT1123	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	16" VALVE	AT1109	2	-	No further action required under Rehab Plan.	N/A
SF-160	10/13/2011	2" AV	AT1109	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-160	10/17/2011	24" VALVE	AT1109	4	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	4" BP	AT1109	5	-	No further action required under Rehab Plan.	N/A
SF-160	10/24/2011	2" AV	AT1110	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/24/2011	8" VALVE	AT1110	2	-	No further action required under Rehab Plan.	N/A
SF-160	10/13/2011	8" VALVE	AT1111	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/13/2011	2" AV	AT1112	1	Steel Riser Noted issue addressed on 6/5/2012	No further action required under Rehab Plan.	N/A
SF-160	10/13/2011	8" VALVE	AT1112	2	-	No further action required under Rehab Plan.	N/A
SF-160	10/14/2011	2" AV	AT1113	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/14/2011	8" VALVE	AT1113	2	-	No further action required under Rehab Plan.	N/A
SF-160	10/14/2011	8" VALVE	AT1113	3	-	No further action required under Rehab Plan.	N/A
SF-160	10/14/2011	2" AV	AT1114	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	8" VALVE	AT1116	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	8" VALVE	AT1118	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-160	10/17/2011	2" AV	AT1119	1	Steel Riser Noted issue addressed on 6/6/2012	No further action required under Rehab Plan.	N/A
SF-160	10/24/2011	8" VALVE	AT1120	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	18" VALVE	AT1121	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	8" VALVE	AT1121	2	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	LD	AT1121	3	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	8" VALVE	AT1121	4	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	2" AV	AT1121	7	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	2" AV	AT1121A	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/17/2011	8" VALVE	AT1122	1	-	No further action required under Rehab Plan.	N/A
SF-160	10/18/2011	2" AV	AT1125	1	-	No further action required under Rehab Plan.	N/A
SF-163	8/16/2011	10" VALVE	AT1130A	1	-	No further action required under Rehab Plan.	N/A
SF-163	8/16/2011	10" VALVE	AT1130A	2	-	No further action required under Rehab Plan.	N/A
SF-163	8/18/2011	2" AV	AT1130B	1	Vacuum	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	8/15/2011	30" VALVE	AT1128	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	30" VALVE	AT1128	3	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	12" VALVE	AT1128	5	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	14" Valve	AT1129	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	4" BP	AT1129	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	30" VALVE	AT1129	3	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	4" BP	AT1129	4	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	24" VALVE	AT1129	5	-	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	18" VALVE	AT1129	6	-	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	14" Valve	AT1129	7	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	30" VALVE	AT1129	8	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	4" BP	AT1129	9	-	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	14" Valve	AT1129	10	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	8/11/2011	LD	AT1129	11	-	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	2" AV	AT1129A	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	16" VALVE	AT1129A	2	DO NO OPERATE-GET ON NUT ONLY	No further action required under Rehab Plan.	N/A
SF-164	8/11/2011	12" VALVE	AT1129A	4	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	2" AV	AT1130	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	2" AV	AT1131	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	2" AV	AT1131	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	8" Valve	AT1132	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	2" AV	AT1132	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	LD	AT1132	3	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	LD	AT1132	4	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	8" Valve	AT1133	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	30" VALVE	AT1133	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	8/23/2011	4" BP	AT1133	4	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	LD	AT1133	5	-	No further action required under Rehab Plan.	N/A
SF-164	8/18/2011	LD	AT1133	6	-	No further action required under Rehab Plan.	N/A
SF-164	9/19/2011	Valve	AT1133	7	AT-1133 has 2 city valves that are not on the valve guide. They have been GPS as #'s 7 & 8. Add Valves to Valve Guide	No further action required under Rehab Plan.	N/A
SF-164	9/19/2011	Valve	AT1133	8	AT-1133 has 2 city valves that are not on the valve guide. They have been GPS as #'s 7 & 8. Add Valves to Valve Guide	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	2" AV	AT1134	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	30" VALVE	AT1134A	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	8" Valve	AT1134A	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	TS	AT1134A	5	-	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	LD	AT1134A	6	-	No further action required under Rehab Plan.	N/A
SF-164	8/22/2011	TS	AT1134ATS	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	2" AV	AT1135	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	TS	AT1135A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	8/23/2011	30" VALVE	AT1136	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	10" VALVE	AT1136	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	TS	AT1136	5	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	8" Valve	AT1136A	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	2" AV	AT1137	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	8" Valve	AT1137	2	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	2" AV	AT1138	1	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	8" Valve	AT1138	2	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	8" Valve	AT1139	1	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	8" Valve	AT1141	1	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	4" BP	AT1128	2	-	No further action required under Rehab Plan.	N/A
SF-164	8/15/2011	4" BP	AT1128	4	-	No further action required under Rehab Plan.	N/A
SF-164	8/23/2011	12" VALVE	AT1139	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-164	9/8/2011	24" VALVE	AT1139	3	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	4" BP	AT1139	4	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	2" AV	AT1139	5	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	2" AV	AT1140	1	-	No further action required under Rehab Plan.	N/A
SF-164	9/8/2011	8" Valve	AT1140	2	-	No further action required under Rehab Plan.	N/A
SF-164	9/19/2011	2" AV	AT1141	2	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	36" VALVE	AT1077	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	6" BP	AT1077	2	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	16" VALVE	AT1077	3	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	14" VALVE	AT1081	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	2" AV	AT1081	2	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	8" VALVE	AT1083	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	2" AV	AT1084	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-165	10/24/2011	8" VALVE	AT1085	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	8" VALVE	AT1087	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	6" VALVE	AT1087A	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	2" AV	AT1088	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	36" VALVE	AT1089A	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	6" BP	AT1089A	2	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	2" AV	AT1090	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	12" VALVE	AT1091	1	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	36" VALVE	AT1091	2	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	6" BP	AT1091	3	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	8" VALVE	AT1091	4	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	2" AV	AT1091	5	-	No further action required under Rehab Plan.	N/A
SF-165	10/24/2011	12" VALVE	AT1091	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-166	10/21/2011	2" AV	AT1072	1	Reset casting on AT-1072 #1,	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	8" VALVE	AT1073	1	Closed; Replaced and raised casting on AT-1073 #1.	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	LD	AT1073	2	-	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	LD	AT1074	2	-	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	2" AV	AT1075	1	-	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	2" AV	AT1076	1	-	No further action required under Rehab Plan.	N/A
SF-166	10/21/2011	12" VALVE	AT1076	2	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1048	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1048	2	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1049	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1050	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	12" VALVE	AT1051	4	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1051	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-167	1/30/2012	2" AV	AT1051	7	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1052	1	-	No further action required under Rehab Plan.	N/A
SF-167	5/24/2010	2" AV	AT1053	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/25/2012	42" VALVE	AT1053	2	-	No further action required under Rehab Plan.	N/A
SF-167	5/24/2010	8" VALVE	AT1054	1	-	No further action required under Rehab Plan.	N/A
SF-167	5/24/2010	2" AV	AT1055	1	-	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	42" VALVE	AT1056	3	-	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	16" VALVE	AT1056	4	Branch closed	No further action required under Rehab Plan.	N/A
SF-167	5/24/2010	4" VALVE	AT1056	6	See Line 212	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	24" VALVE	AT1056	9	Branch closed	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	4" BP	AT1056	10	Branch closed	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	24" VALVE	AT1056	12	-	No further action required under Rehab Plan.	N/A
SF-167	5/24/2010	2" AV	AT1056	13	See Line 212	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-167	1/30/2012	2" AV	AT1046	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	10" VALVE	AT1047	1	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	10" VALVE	AT1047	2	-	No further action required under Rehab Plan.	N/A
SF-167	1/30/2012	2" AV	AT1047	3	-	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	6" BP	AT1056	2	-	No further action required under Rehab Plan.	N/A
SF-167	6/22/2010	4" BP	AT1056	11	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	30" VALVE	AT1045	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	8" VALVE	AT1039	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	2" AV	AT1040A	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	8" VALVE	AT1040A	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	16" VALVE	AT1041	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	3" BP	AT1041	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	3" BP	AT1041A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-168	2/2/2012	2" AV	AT1042	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	42" VALVE	AT1042	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	6" BP	AT1042	3	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	30" VALVE	AT1042	4	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	4" BP	AT1042	5	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	30" VALVE	AT1042	6	ON Line 213 PM	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	4" BP	AT1042	7	-	No further action required under Rehab Plan.	N/A
SF-168	2/2/2012	2" AV	AT1042	8	-	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	2" AV	AT1042A	1	Same as 1042B #1	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	42" VALVE	AT1042A	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	6" BP	AT1042A	3	-	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	30" VALVE	AT1042A	4	-	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	4" BP	AT1042A	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-168	1/25/2012	8" VALVE	AT1042B	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/26/2012	8" VALVE	AT1043	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/26/2012	2" AV	AT1043	2	-	No further action required under Rehab Plan.	N/A
SF-168	1/25/2012	8" VALVE	AT1044	1	-	No further action required under Rehab Plan.	N/A
SF-168	1/26/2012	2" AV	AT1044	2	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	4" BP	AT1045	1	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	6" BP	AT1045	3	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	36" VALVE	AT1045	4	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	4" BP	AT1045	5	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	30" VALVE	AT1045	6	-	No further action required under Rehab Plan.	N/A
SF-168	2/6/2012	8" VALVE	AT1045	7	-	No further action required under Rehab Plan.	N/A
SF-168	1/30/2012	16" VALVE	AT1041A	2	-	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	8" VALVE	AT1024	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-169	5/31/2011	8" VALVE	AT1021	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	12" VALVE	AT1021	2	-	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	2" AV	AT1022	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/17/2011	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	8" VALVE	AT1022	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-169	5/27/2011	2" AV	AT1022	3	-	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	8" VALVE	AT1023	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	2" AV	AT1023	3	-	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	2" AV	AT1023	4	-	No further action required under Rehab Plan.	N/A
SF-169	5/27/2011	2" AV	AT1024	2	3737 Purebreed dr. 573-5027 John Brown	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	2" AV	AT1025	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/16/2011	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	6" BP	AT1026	1	leaks; AT1026 #1 6" BP leaks.; BP Leaks Noted issue addressed on 2/23/2012	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	36" VALVE	AT1026	2	-	No further action required under Rehab Plan.	N/A
SF-169	5/26/2011	8" VALVE	AT1026	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-169	5/26/2011	2" AV	AT1026	4	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/16/2011	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	2" AV	AT1027	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/18/2011	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	18" VALVE	AT1027	2	-	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	2" AV	AT1028	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/18/2011	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	2" AV	AT1029	1	-	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	2" AV	AT1030	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/17/2011	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	2" AV	AT1031	1	-	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	2" AV	AT1032	1	-	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	8" VALVE	AT1032	2	-	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	8" VALVE	AT1032	3	-	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	20" VALVE	AT1032	4	-	No further action required under Rehab Plan.	N/A
SF-169	6/2/2011	3" BP	AT1032	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-169	5/31/2011	8" VALVE	AT1033	1	-	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	2" AV	AT1034	1	-	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	2" AV	AT1035	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/11/2011	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	2" AV	AT1037	1	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 8/22/2012	No further action required under Rehab Plan.	N/A
SF-169	5/31/2011	8" VALVE	AT1037	2	-	No further action required under Rehab Plan.	N/A
SF-169	6/1/2011	6" BP	AT1038	1	Paved Over; AT1029 #2 12" branch leaks and AT1038 #1 6" BP paved over.; Paved Over Casting raised to grade on 5/10/2012	No further action required under Rehab Plan.	N/A
SF-169	6/1/2011	36" VALVE	AT1038	2	-	No further action required under Rehab Plan.	N/A
SF-169	6/1/2011	2" AV	AT1038	3	Gate Valve; AT1022 #1, 25 #1, 26 #4, 27 #1, 28 #1, 30 #1, 35 #1, 36 #1, 37 #2 and 38 #3 Gate Valves and steel risers.; Steel Riser Noted issue addressed on 5/11/2012	No further action required under Rehab Plan.	N/A
SF-170	5/31/2011	8" VALVE	AT1019A	2	-	No further action required under Rehab Plan.	N/A
SF-170	5/31/2011	8" VALVE	AT1019A	3	-	No further action required under Rehab Plan.	N/A
SF-170	5/31/2011	2" AV	AT1019B	1	-	No further action required under Rehab Plan.	N/A
SF-170	5/31/2011	2" AV	AT1019C	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-170	5/31/2011	2" AV	AT1019C-2		(One) new A/V between AT1019C and 1019D VG Updated AT 1019C-2	No further action required under Rehab Plan.	N/A
SF-170	5/31/2011	16" VALVE	AT1019D	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1011C	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	2" AV	AT1011C	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1012	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	2" AV	AT1012	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	2" AV	AT1012	3	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1012	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1013	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1013	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1013	3	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1014	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1014	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-171	10/13/2011	12" VALVE	AT1014	3	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1015	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1015	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1015	3	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	42" VALVE	AT1015	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	6" BP	AT1015	5	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	2" AV	AT1016	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1016	3	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	2" AV	AT1016	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1016	5	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1017	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1017	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/12/2011	2" AV	AT1017	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-171	10/26/2011	12" VALVE	AT1017	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/12/2011	2" AV	AT1017	5	-	No further action required under Rehab Plan.	N/A
SF-171	10/12/2011	12" VALVE	AT1018	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/12/2011	12" VALVE	AT1018	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1018A	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/12/2011	2" AV	AT1018A	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1018B	1	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	6"BP	AT1019	1	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	36" VALVE	AT1019	2	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	6"BP	AT1019	3	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	42" Valve	AT1019	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/27/2011	6"BP	AT1019	5	-	No further action required under Rehab Plan.	N/A
SF-171	10/27/2011	36" VALVE	AT1019	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-171	5/31/2011	16" VALVE	AT1019	7	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	2" AV	AT1019	8	Steel Riser Noted issue addressed on 11/16/2011	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1019	9	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	36" VALVE	AT1019	10	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	36" VALVE	AT1019	11	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1020	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	12" VALVE	AT1020	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/13/2011	2" AV	AT1020	3	Steel Riser	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1020	4	-	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1020	5	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	12" VALVE	AT1011A	1	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	42" VALVE	AT1011A	2	-	No further action required under Rehab Plan.	N/A
SF-171	10/14/2011	6" BP	AT1011A	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-171	10/14/2011	2" AV	AT1011A	4	Steel Riser	No further action required under Rehab Plan.	N/A
SF-171	10/26/2011	12" VALVE	AT1011B	1	-	No further action required under Rehab Plan.	N/A
SF-171	11/29/2011	36" VALVE	AT1019	12	-	No further action required under Rehab Plan.	N/A
SF-172	8/19/2010	10" VALVE	AT2019	2	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2023	3	-	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2023	4	-	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	2" AV	AT2024	1	Copper	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2024	2	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/26/2010	4" BP	AT2025	1	-	No further action required under Rehab Plan.	N/A
SF-172	8/26/2010	24" VALVE	AT2025	2	-	No further action required under Rehab Plan.	N/A
SF-172	8/4/2010	10" VALVE	AT2014	2	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/4/2010	2" AV	AT2015	1	copper	No further action required under Rehab Plan.	N/A
SF-172	8/4/2010	2" AV	AT2015A	1	copper	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-172	8/4/2010	10" VALVE	AT2016	1	-	No further action required under Rehab Plan.	N/A
SF-172	8/9/2010	2" AV	AT2016	2	copper	No further action required under Rehab Plan.	N/A
SF-172	8/9/2010	10" VALVE	AT2017	1	-	No further action required under Rehab Plan.	N/A
SF-172	8/4/2010	10" VALVE	AT2017	2	-	No further action required under Rehab Plan.	N/A
SF-172	8/9/2010	2" AV	AT2018	1	No handle on ball valve ,cannot open. The ball valve needs replaced Noted issue addressed on 7/6/2011	No further action required under Rehab Plan.	N/A
SF-172	8/9/2010	10" VALVE	AT2018	2	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/19/2010	10" VALVE	AT2019	1	-	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	2" AV	AT2019	3	Copper	No further action required under Rehab Plan.	N/A
SF-172	8/19/2010	10" VALVE	AT2020	2	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/30/2010	10" VALVE	AT2021	1	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2022	1	branch-closed; broken valve box was replaced.	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2022	3	branch-closed	No further action required under Rehab Plan.	N/A
SF-172	8/26/2010	2" AV	AT2022	4	Copper	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-172	8/23/2010	2" AV	AT2023	1	Copper	No further action required under Rehab Plan.	N/A
SF-172	8/23/2010	10" VALVE	AT2023	2	Meter Site, open	No further action required under Rehab Plan.	N/A
SF-172	8/26/2010	30" VALVE	AT2025	3	-	No further action required under Rehab Plan.	N/A
SF-172	8/26/2010	4" BP	AT2025	4	-	No further action required under Rehab Plan.	N/A
SF-173	1/23/2012	6" Valve	AT3008F	3	-	No further action required under Rehab Plan.	N/A
SF-173	1/23/2012	10" VALVE	AT3008G	2	Branch Closed	No further action required under Rehab Plan.	N/A
SF-173	1/23/2012	10" VALVE	AT3008G	3	-	No further action required under Rehab Plan.	N/A
SF-173	1/20/2012	42" Valve	AT3008A	1	-	No further action required under Rehab Plan.	N/A
SF-173	1/20/2012	6" BP	AT3008A	2	-	No further action required under Rehab Plan.	N/A
SF-173	1/20/2012	12" VALVE	AT3008A	3	-	No further action required under Rehab Plan.	N/A
SF-173	1/20/2012	6" AV	AT3008A	4	-	No further action required under Rehab Plan.	N/A
SF-173	1/20/2012	2" AV	AT3008A	5	AT3008B #1, 3008A #5 whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-173	1/23/2012	10" VALVE	AT3008G	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-174	1/25/2012	12" VALVE	AT3001A	1	-	No further action required under Rehab Plan.	N/A
SF-174	1/25/2012	42" VALVE	AT3001A	3	-	No further action required under Rehab Plan.	N/A
SF-174	1/25/2012	6" BP	AT3001A	4	-	No further action required under Rehab Plan.	N/A
SF-174	1/24/2012	10" VALVE	AT3003	1	-	No further action required under Rehab Plan.	N/A
SF-174	1/24/2012	10" VALVE	AT3003	2	-	No further action required under Rehab Plan.	N/A
SF-174	1/24/2012	12" VALVE	AT3004	2	-	No further action required under Rehab Plan.	N/A
SF-174	1/23/2012	10" VALVE	AT3006	2	-	No further action required under Rehab Plan.	N/A
SF-174	1/23/2012	10" VALVE	AT3006	3	-	No further action required under Rehab Plan.	N/A
SF-174	1/23/2012	10" VALVE	AT3007	1	-	No further action required under Rehab Plan.	N/A
SF-174	1/20/2012	42" VALVE	AT3008	3	-	No further action required under Rehab Plan.	N/A
SF-174	1/20/2012	12" VALVE	AT3008	4	-	No further action required under Rehab Plan.	N/A
SF-174	1/20/2012	6" BP	AT3008	2	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	2" AV	AT 1001A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-175 & 176	7/28/2010	12" VALVE	AT1001	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	2" AV	AT1001	2	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/29/2010	2" AV	AT1001B	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1002	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1003	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1003B	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1004	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1005	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	2" AV	AT1005	2	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1006	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1007	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	8" VALVE	AT1008	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/28/2010	2" AV	AT1009	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-175 & 176	2/28/2011	42" VALVE	AT1010	1	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	2/28/2011	6" BP	AT1010	2	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	2/28/2011	42" VALVE	AT1010	3	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	2/28/2011	6" BP	AT1010	4	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	2/28/2011	42" VALVE	AT1010	5	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	2/28/2011	6" BP	AT1010	6	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	6/8/2011	42" VALVE	AT1010	7	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	6/8/2011	6" BP	AT1010	8	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	6/8/2011	42" VALVE	AT1010	9	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	6/8/2011	6" BP	AT1010	10	-	No further action required under Rehab Plan.	N/A
SF-175 & 176	7/29/2010	2" AV	AT1003A	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	30" VALVE	AT2001A	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	4" BP	AT2001A	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-177	6/8/2011	10" VALVE	AT2002	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	2" AV	AT2002	2	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	2" AV	AT2003	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	8" VALVE	AT2004	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	2" AV	AT2005	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	8" VALVE	AT2005	2	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	2" AV	AT2006	1	AT-2006 #1 Changed Ball valve due to old one being cracked.	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	2" AV	AT2007	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	8" VALVE	AT2007	2	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	4" VALVE	AT2007A	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	2" AV	AT2008	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	10" VALVE	AT2008	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	8" VALVE	AT2009	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-177	6/9/2011	8" VALVE	AT2009	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	2" AV	AT2009	3	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	2" AV	AT2010	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	10" VALVE	AT2010	2	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	10" VALVE	AT2011	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/8/2011	2" AV	AT2012	1	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	12" VALVE	AT2012	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	24" VALVE	AT2013	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	4" VALVE	AT2013	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	30" VALVE	AT2013	3	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	4" VALVE	AT2013	4	-	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	24" VALVE	AT2013	5	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-177	6/9/2011	4" VALVE	AT2013	6	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-178	9/19/2011	8" Valve	AT1142	2	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	2" AV	AT1143	1	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	2" AV	AT1144	1	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	8" Valve	AT1144	2	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	2" AV	AT1144	3	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	8" Valve	AT1145	1	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	4" BP	AT1146	2	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	20" VALVE	AT1146	3	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	20" VALVE	AT1146	4	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	2" AV	AT1147	1	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	8" Valve	AT1147	2	-	No further action required under Rehab Plan.	N/A
SF-178	9/19/2011	2" AV	AT1142	1	-	No further action required under Rehab Plan.	N/A
SF-178	9/20/2011	24" VALVE	AT1146	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-179	9/20/2011	3" Bypass	AT1148	1	-	No further action required under Rehab Plan.	N/A
SF-179	9/20/2011	4" BP	AT1148	3	-	No further action required under Rehab Plan.	N/A
SF-179	9/20/2011	24" VALVE	AT1148	4	-	No further action required under Rehab Plan.	N/A
SF-179	9/20/2011	2" AV	AT1148	5	-	No further action required under Rehab Plan.	N/A
SF-179	9/20/2011	20" VALVE	AT1148	2	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1149	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/11/2011	2" AV	AT1149	2	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1150	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	6" Valve	AT1151	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1151	2	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1152	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	2" AV	AT1153	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	4" Valve	AT1154	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-180	8/10/2011	20" VALVE	AT1154A	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	3" Bypass	AT1154A	2	-	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	2" AV	AT1154A	3	Corp Stop; AT-1154A #3&4 are on an exposed crossing.	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	2" AV	AT1154A	4	Corp Stop; AT-1154A #3&4 are on an exposed crossing.	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	20" VALVE	AT1154A	5	-	No further action required under Rehab Plan.	N/A
SF-180	8/10/2011	3" Bypass	AT1154A	6	-	No further action required under Rehab Plan.	N/A
SF-180	8/1/2010	20" VALVE	AT1156	1	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1156	2	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	2" AV	AT1156	3	-	No further action required under Rehab Plan.	N/A
SF-180	8/8/2011	4" Valve	AT1156	4	-	No further action required under Rehab Plan.	N/A
SF-180	8/11/2010	3" Bypass	AT1156	5	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	10" VALVE	AT1157	1	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	2" AV	AT1157	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-181	8/4/2011	2" AV	AT1158	1	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	8" Valve	AT1158	2	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	3" Bypass	AT1159	1	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	16" VALVE	AT1159	2	-	No further action required under Rehab Plan.	N/A
SF-181	8/4/2011	2" AV	AT1159	3	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	12" VALVE	AT1159L	2	-	No further action required under Rehab Plan.	N/A
SF-182	4/4/2011	8" VALVE	AT1159C	1	-	No further action required under Rehab Plan.	N/A
SF-182	4/4/2011	8" VALVE	AT1159E	2	-	No further action required under Rehab Plan.	N/A
SF-182	4/4/2011	2" AV	AT1159F	1	-	No further action required under Rehab Plan.	N/A
SF-182	4/4/2011	8" VALVE	AT1159G	1	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	8" VALVE	AT1159J	1	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	8" VALVE	AT1159J	2	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	2" PLUG VAL	AT1159J	3	Corp stop	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-182	4/1/2011	2" AV	AT1159K	1	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	8" VALVE	AT1159K	2	-	No further action required under Rehab Plan.	N/A
SF-182	4/1/2011	16" VALVE	AT1159L	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1160	2	-	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	12" VALVE	AT1161	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	16" VALVE	AT1161	2	-	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	2" AV	AT1161A1	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	2" AV	AT1161A2	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	2" AV	AT1161A2	2	Ball Valve (Changed); Special whammy rod would not go thru corp stop AT1160 #1, 1161A #2 and 1161A2 #2 are ball valves with copper risers. Changed out ball valve on AT1161A2 #2.	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	2" AV	AT1161A3	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	12" VALVE	AT1161A3	2	-	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	6" VALVE	AT1161A3	3	-	No further action required under Rehab Plan.	N/A
SF-183	7/18/2011	6" VALVE	AT1161C	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-183	7/18/2011	6" VALVE	AT1161D	1	-	No further action required under Rehab Plan.	N/A
SF-183	7/21/2011	3" BP	AT1161	3	-	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	2" AV	AT1164	1	A.V.'s AT-1162 #'s 2,3,4, AT-1163 #1,1164#1 all have steel riser's. ; Steel Riser Noted issue addressed on 5/8/2012	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	8" VALVE	AT1164A	1	-	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	8" VALVE	AT1165	2	-	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	3" BP	AT1165	4	-	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	2" AV	AT1163	1	A.V.'s AT-1162 #'s 2,3,4, AT-1163 #1,1164#1 all have steel riser's. ; Steel Riser Noted issue addressed on 5/2/2012	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	2" AV	AT1165	1	Replaced ball valve on 5/2/2012 as part of Condition Assessment Program	No further action required under Rehab Plan.	N/A
SF-184	7/6/2011	16" VALVE	AT1165	3	-	No further action required under Rehab Plan.	N/A
SF-185	9/20/2011	24" VALVE	AT1148H	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	6" Valve	AT1148H	3	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	LD	AT1148H	4	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	LD	AT1148H	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-185	9/19/2011	2" AV	AT1148J	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	8' VALVE	AT1148J	2	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	2" AV	AT1148K	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/20/2011	10" VALVE	AT1148L	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/20/2011	2" AV	AT1148L	3	-	No further action required under Rehab Plan.	N/A
SF-185	9/15/2011	2" AV	AT1148L1	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/13/2011	24" VALVE	AT1148M	1	-	No further action required under Rehab Plan.	N/A
SF-185	9/13/2011	4" BP	AT1148M	2	-	No further action required under Rehab Plan.	N/A
SF-185	9/12/2011	2" Valve	AT1148M	4	-	No further action required under Rehab Plan.	N/A
SF-185	9/12/2011	6" Valve	AT1148M	5	-	No further action required under Rehab Plan.	N/A
SF-185	9/12/2011	2" AV	AT1148M	6	-	No further action required under Rehab Plan.	N/A
SF-185	9/16/2011	4" BP	AT1148H	2	-	No further action required under Rehab Plan.	N/A
SF-185	9/12/2011	6" Valve	AT1148M	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-186	9/9/2011	2" AV	NA1148	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" AV	NA1149	1	gate valve; Steel Riser Noted issue addressed on 4/23/2012	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	14" VALVE	NA1150	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	14" VALVE	NA1150	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" CC	NA1150	3	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" AV	NA1151	1	gate valve; Steel Riser Noted issue addressed on 4/19/2012	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	LD	NA1151	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	8" VALVE	NA1151	3	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" AV	NA1152	1	gate valve; Steel Riser Noted issue addressed on 4/18/2012	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	8" VALVE	NA1152	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	8" VALVE	NA1152A	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/9/2011	2" AV	NA1155	1	Steel Riser Noted issue addressed on 8/16/2011	No further action required under Rehab Plan.	N/A
SF-186	9/9/2011	2" AV	NA1155	2	Auto AV	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-186	9/13/2011	12" VALVE	NA1156	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" AV	NA1146	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	LD	NA1146	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	2" AV	NA1147	1	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	LD	NA1147	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	8" VALVE	NA1156	2	-	No further action required under Rehab Plan.	N/A
SF-186	9/13/2011	LD	NA1156	3	-	No further action required under Rehab Plan.	N/A
SF-187	9/14/2011	2" AV	NA1143	1	gate valve; Steel Riser Noted issue addressed on 2/8/12	No further action required under Rehab Plan.	N/A
SF-187	9/14/2011	LD	NA1145	1	-	No further action required under Rehab Plan.	N/A
SF-187	9/19/2011	14" VALVE	NA1145	2	-	No further action required under Rehab Plan.	N/A
SF-187	9/19/2011	10" VALVE	NA1145	3	-	No further action required under Rehab Plan.	N/A
SF-188	9/20/2011	14" VALVE	NA1138B	1	-	No further action required under Rehab Plan.	N/A
SF-188	9/20/2011	6" VALVE	NA1138B	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-188	9/20/2011	6" VALVE	NA1138B	3	-	No further action required under Rehab Plan.	N/A
SF-188	9/20/2011	LD	NA1138B	4	-	No further action required under Rehab Plan.	N/A
SF-188	9/20/2011	2" AV	NA1138C	1	-	No further action required under Rehab Plan.	N/A
SF-188	9/20/2011	2" AV	NA1138D	1	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	2" AV	NA1138F	1	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	2" AV	NA1138G	1	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	8" VALVE	NA1138H	2	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	14" VALVE	NA1138H	3	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	LD	NA1138H	4	-	No further action required under Rehab Plan.	N/A
SF-188	9/22/2011	8" VALVE	NA1138H	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	LD	NA1127	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	2" AV	NA1128	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	8" VALVE	NA1128A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-189	9/19/2011	2" AV	NA1129	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	2" AV	NA1130	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	6" VALVE	NA1131	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	2" AV	NA1133	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	LD	NA1134	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	20" VALVE	NA1135	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	3" BP	NA1135	2	-	No further action required under Rehab Plan.	N/A
SF-189	9/19/2011	2" AV	NA1135	3	-	No further action required under Rehab Plan.	N/A
SF-189	9/20/2011	2" AV	NA1137	1	-	No further action required under Rehab Plan.	N/A
SF-189	9/20/2011	18" VALVE	NA1137	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1106A	1	-	No further action required under Rehab Plan.	N/A
SF-190	1/12/2011	8" VALVE	NA1102	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	LD	NA1102	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-190	2/28/2011	LD	NA1102	4	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" CORP STOP	NA1103	1	Corp Stop	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1104	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	8" VALVE	NA1105	1	Branch/Closed	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1106	1	-	No further action required under Rehab Plan.	N/A
SF-190	11/2/2011	12" VALVE	NA1106A	2	Refer to Line SF215 PM Same as NA5000	No further action required under Rehab Plan.	N/A
SF-190	11/2/2011	24" VALVE	NA1106A	3	Refer to Line SF215 PM Same as NA5000	No further action required under Rehab Plan.	N/A
SF-190	11/2/2011	4" BP	NA1106A	4	Refer to Line SF215 PM Same as NA5000	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1107	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1108	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	2" AV	NA1109	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	8" VALVE	NA1109	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	30" VALVE	NA1109	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-190	2/8/2011	4" BP	NA1109	4	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	LD	NA1110	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	2" AV	NA1110	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	LD	NA1111	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	8" VALVE	NA1111	3	-	No further action required under Rehab Plan.	N/A
SF-190	2/8/2011	2" AV	NA1112	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/17/2011	2" AV	NA1113	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/17/2011	8" VALVE	NA1113	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" AV	NA1115	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	8" VALVE	NA1116	2	Branch/Closed	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" AV	NA1117	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" AV	NA1118	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	LD	NA1118	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-190	2/7/2011	8" VALVE	NA1118	3	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	8" VALVE	NA1119	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" AV	NA1120	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	8" VALVE	NA1121	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" CC	NA1122	1	Corp stop	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	LD	NA1122	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/7/2011	2" AV	NA1124	1	-	No further action required under Rehab Plan.	N/A
SF-190	1/8/2011	20" VALVE	NA1124	2	-	No further action required under Rehab Plan.	N/A
SF-190	1/8/2011	3" BP	NA1124	3	-	No further action required under Rehab Plan.	N/A
SF-190	2/3/2011	24" VALVE	NA1124	4	-	No further action required under Rehab Plan.	N/A
SF-190	2/3/2011	4" BP	NA1124	5	-	No further action required under Rehab Plan.	N/A
SF-190	2/3/2011	2" AV	NA1125	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/3/2011	LD	NA1125	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-190	2/3/2011	LD	NA1125	3	-	No further action required under Rehab Plan.	N/A
SF-190	2/3/2011	10" VALVE	NA1126	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/22/2011	24" VALVE	NA1126	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/22/2011	4" BP	NA1126	3	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NEW	x	New A/V between NA-1102 and NA-1103Update documentation	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1098	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	8" VALVE	NA1098	2	-	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1099	1	-	No further action required under Rehab Plan.	N/A
SF-190	2/17/2011	8" VALVE	NA1100	1	Branch/Closed	No further action required under Rehab Plan.	N/A
SF-190	2/28/2011	2" AV	NA1102	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/9/2011	8" VALVE	NA1071	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/9/2011	2" AV	NA1071	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/9/2011	8" VALVE	NA1073	1	Branch - closed	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-194	2/10/2011	8" VALVE	NA1074	3	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/10/2011	8" VALVE	NA1075	1	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/10/2011	2" AV	NA1076	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/10/2011	8" VALVE	NA1077	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/15/2011	LD	NA1080	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/15/2011	8" VALVE	NA1081	1	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/15/2011	LD	NA1081	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/17/2011	8" VALVE	NA1082	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	2" AV	NA1082	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	2" AV	NA1083	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	4" VALVE	NA1084	3	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	8" VALVE	NA1086	1	Valve guide should be updated with 18 turns.	No further action required under Rehab Plan.	N/A
SF-194	2/22/2011	8" VALVE	NA1088	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-194	2/22/2011	2" AV	NA1089	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/22/2011	4" VALVE	NA1089	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/15/2011	8" VALVE	NA1090	1	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/15/2011	2" AV	NA1091	1	gate valve steel; NA-1085,NA1087,and NA-1091 are all gate valves with steel raisers.; Steel Riser Noted issue addressed on 4/30/2012	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	LD	NA1092	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	8" VALVE	NA1092	2	-	No further action required under Rehab Plan.	N/A
SF-194	2/17/2011	8" VALVE	NA1093	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/17/2011	2" AV	NA1094	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/17/2011	2" AV	NA1095	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/17/2011	8" VALVE	NA1096	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	2" AV	NA1097	1	-	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	24" VALVE	NA1097	2	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	4" VALVE	NA1097	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-194	2/24/2011	30" VALVE	NA1097	4	-	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	4" VALVE	NA1097	5	-	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	24" VALVE	NA1097	6	Branch - closed	No further action required under Rehab Plan.	N/A
SF-194	2/24/2011	4" VALVE	NA1097	7	-	No further action required under Rehab Plan.	N/A
SF-194	2/16/2011	30" VALVE	NA1084	2	-	No further action required under Rehab Plan.	N/A
SF-195	5/16/2011	TS	AB-1	1	AB-1 #1&3 are not installed in castings, cable is there but no castings. Casting installed following completion of line replacement	No further action required under Rehab Plan.	N/A
SF-195	5/16/2011	2" AV	AB-1	2	vacuum; Copper Riser	No further action required under Rehab Plan.	N/A
SF-195	5/16/2011	TS	AB-1	3	AB-1 #1&3 are not installed in castings, cable is there but no castings. Casting installed following completion of line replacement	No further action required under Rehab Plan.	N/A
SF-195	5/16/2011	2" AV	AB-2	1	no pressure; Copper Riser	No further action required under Rehab Plan.	N/A
SF-195	5/16/2011	2" AV	AB-3	1	vacuum; Copper Riser	No further action required under Rehab Plan.	N/A
SF-197	4/27/2011	10" VALVE	CE2036	1	Blow off Do Not Operate	No further action required under Rehab Plan.	N/A
SF-197	4/27/2011	2" AV	CE2037	1	-	No further action required under Rehab Plan.	N/A
SF-197	4/27/2011	8" VALVE	CE2037	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-197	4/27/2011	2" AV	CE2038	1	-	No further action required under Rehab Plan.	N/A
SF-197	4/28/2011	8" VALVE	CE2039	1	-	No further action required under Rehab Plan.	N/A
SF-197	4/28/2011	2" AV	CE2040	1	No Handle Ball Valve; A/V CE2040 #1 has no handle; No handle Noted issue addressed on 6/14/2011	No further action required under Rehab Plan.	N/A
SF-197	5/2/2011	4" BP	CE2041	2	-	No further action required under Rehab Plan.	N/A
SF-197	5/2/2011	24" VALVE	CE2041	3	-	No further action required under Rehab Plan.	N/A
SF-197	4/28/2011	8" VALVE	CE2041	4	-	No further action required under Rehab Plan.	N/A
SF-198	1/3/2012	14" VALVE	AT1077F	1	CLOSED - PLUGGED	No further action required under Rehab Plan.	N/A
SF-198	11/17/2011	16" VALVE	AT1077F	3	-	No further action required under Rehab Plan.	N/A
SF-198	12/27/2011	2" AV	AT1077F1	1	-	No further action required under Rehab Plan.	N/A
SF-198	12/27/2011	16" VALVE	AT1077F	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161J	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	8" VALVE	AT1161J	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	12" VALVE	AT1161J	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-199 & 229	7/11/2011	12" VALVE	AT1161J	5	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161J	6	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161K	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161K	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161KTS	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161L	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161L	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161M	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161M	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	16" VALVE	AT1161M	3	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161M	4	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	10" VALVE	AT1161M	5	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161N	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-199 & 229	7/11/2011	2" AV	AT1161N	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161NTS	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	TS	AT1161NTS1	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	2" AV	AT1161O	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	TS	AT1161O	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	8" VALVE	AT1161P	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	2" AV	AT1161P	4	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	TS	AT1161P	5	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	2" AV	AT1161Q	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161Q	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	2" AV	AT1161R	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161RTS	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	16" VALVE	AT1161S	1	Open Valve operates OK	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-199 & 229	7/11/2011	8" VALVE	AT1161S	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	2" AV	AT1161S	5	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161STS	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161STS1	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161T	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	2" AV	AT1161T	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161U	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	2" AV	AT1161U	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	TS	AT1161UTS	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	TS	AT1161V	1	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	2" AV	AT1161V	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	16" VALVE	AT1161V	3	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	8" VALVE	AT1161V	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-199 & 229	7/13/2011	12" VALVE	AT1161H	2	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/13/2011	Corp Stop	AT1161H	4	Corp stop	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/11/2011	10" VALVE	AT1161J	3	-	No further action required under Rehab Plan.	N/A
SF-199 & 229	7/12/2011	2" AV	AT1161V	4	-	No further action required under Rehab Plan.	N/A
SF-200	7/20/2011	2" AV	AT6058	3	-	No further action required under Rehab Plan.	N/A
SF-200	7/20/2011	8" VALVE	AT6059	2	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	8" valve	AT6043H	2	Branch closed	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043A	4	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043B	1	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043C	1	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043D	1	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	2" AV	AT6043D	2	-	No further action required under Rehab Plan.	N/A
SF-203	7/18/2012	2" AV	AT6043E	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-203	7/22/2011	Cleanout	AT6043G	1	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043H	1	-	No further action required under Rehab Plan.	N/A
SF-203	7/11/2011	CLEANOUT	AT6043	10	-	No further action required under Rehab Plan.	N/A
SF-203	7/22/2011	Cleanout	AT6043A	3	-	No further action required under Rehab Plan.	N/A
SF-204	5/9/2011	12" VALVE	LP1022D	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	2" AV	LP1022A	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	2" AV	LP1022B	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	14" VALVE	LP1022C	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	2" AV	LP1022C	2	-	No further action required under Rehab Plan.	N/A
SF-204	5/3/2011	2" AV	LP1022C1	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/9/2011	2" AV	LP1022C2	1	-	No further action required under Rehab Plan.	N/A
SF-204	5/9/2011	LD	LP1022C2	2	-	No further action required under Rehab Plan.	N/A
SF-204	5/9/2011	2" AV	LP1022D	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-204	5/9/2011	TS	LP1022D	5	-	No further action required under Rehab Plan.	N/A
SF-204	5/9/2011	8" VALVE	LP1022D	2	-	No further action required under Rehab Plan.	N/A
SF-206	7/26/2011	8" VALVE	NA2026D1	1	-	No further action required under Rehab Plan.	N/A
SF-206	7/26/2011	2" AV	NA2026E	1	-	No further action required under Rehab Plan.	N/A
SF-206	7/26/2011	2" AV	NA2026F	1	-	No further action required under Rehab Plan.	N/A
SF-206	7/27/2011	16" VALVE	NA2026K	1	-	No further action required under Rehab Plan.	N/A
SF-206	7/25/2011	12" VALVE	NA2026D	2	-	No further action required under Rehab Plan.	N/A
SF-206	7/25/2011	16" VALVE	NA2026D	3	-	No further action required under Rehab Plan.	N/A
SF-206	7/25/2011	8" VALVE-R	NA2026D	4	-	No further action required under Rehab Plan.	N/A
SF-208	2/1/2012	2" AV	NA3004	1	-	No further action required under Rehab Plan.	N/A
SF-208	2/1/2012	8" VALVE	NA3004	2	-	No further action required under Rehab Plan.	N/A
SF-208	2/1/2012	8" VALVE	NA3004	4	-	No further action required under Rehab Plan.	N/A
SF-208	8/9/2010	16" VALVE	NA3024	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-208	8/9/2010	3" BP	NA3024	5	-	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	2" AV	AT1159N	1	-	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	6" VALVE	AT11590	1	-	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	6" VALVE	AT11590	2	-	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	2" AV	AT1159P	1	-	No further action required under Rehab Plan.	N/A
SF-209	1/3/2011	8" VALVE	AT1159P1	1	-	No further action required under Rehab Plan.	N/A
SF-209	1/3/2011	16" VALVE	AT1159R	1	-	No further action required under Rehab Plan.	N/A
SF-209	1/3/2011	4" BP	AT1159R	2	-	No further action required under Rehab Plan.	N/A
SF-209	1/3/2011	6" VALVE	AT1159R	4	-	No further action required under Rehab Plan.	N/A
SF-209	1/3/2011	6" VALVE	AT1159R	5	-	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	2" AV	-	1	Ball Valve Update documentation	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	2" AV	-	2	Ball Valve Update documentation	No further action required under Rehab Plan.	N/A
SF-209	4/1/2011	8" VALVE	AT1159M1	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-210	9/29/2011	2" AV	AT1148Z	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	2" AV	AT1148A	3	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	8" Valve	AT1148B	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	LD	AT1148B1	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	8" Valve	AT1148C	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/16/2011	2" AV	AT1148N1	1	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	2" AV	AT1148N1	2	-	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	2" AV	AT11480	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	2" AV	AT114801	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	2" AV	AT114801	2	-	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	30" VALVE	AT1148P	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	4" BP	AT1148P	2	-	No further action required under Rehab Plan.	N/A
SF-210	8/9/2011	2" AV	AT1148Q	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-210	8/9/2011	30" VALVE	AT1148Q	2	-	No further action required under Rehab Plan.	N/A
SF-210	8/9/2011	4" BP	AT1148Q	3	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	8" Valve	AT1148Q	4	-	No further action required under Rehab Plan.	N/A
SF-210	9/27/2011	2" AV	AT1148R	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	2" AV	AT1148S	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	12" VALVE	AT1148S1	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	2" AV	AT1148T	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	8" Valve	AT1148U	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	2" AV	AT1148U1	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	2" AV	AT1148U2	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	8" Valve	AT1148V	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/22/2011	8" Valve	AT1148X	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	2" AV	AT1148X1	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-210	9/28/2011	2" AV	AT1148X1	2	-	No further action required under Rehab Plan.	N/A
SF-210	9/28/2011	16" VALVE	AT1148X1	3	Jumper-closed	No further action required under Rehab Plan.	N/A
SF-210	9/28/2011	30" VALVE	AT1148X1	4	-	No further action required under Rehab Plan.	N/A
SF-210	9/28/2011	12" VALVE	AT1148Y	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/28/2011	2" AV	AT1148Y	2	AT1148Y #2 changed out bad ball valve. AT1148G #2 and 1148Y #2 too deep for whammy rod.; Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-210	9/28/2011	2" AV	AT1148Y	3	-	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	2" AV	AT1148ZA	1	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	8" Valve	AT1148ZA1	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	2" AV	AT1148ZB	1	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	8" Valve	AT1148ZC	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	2" AV	AT1148ZC	2	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/29/2011	8" Valve	AT1148ZC	3	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	8" Valve	AT1148D	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-210	9/7/2011	2" AV	AT1148E	1	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/15/2011	8" Valve	AT1148F	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/19/2011	12" VALVE	AT1148G	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/19/2011	2" AV	AT1148G	2	AT1148G #2 and 1148Y #2 too deep for whammy rod.; Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-210	9/16/2011	2" AV	AT1148N	1	AT1148E #1, 1148M #6, 1148N #1, 1148N1 #1, 1148ZA #1, 1148ZB #1 and 1148ZC #2 special whammy would not go thru corp stop.	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	24" VALVE	AT1148A	1	-	No further action required under Rehab Plan.	N/A
SF-210	9/7/2011	4" BP	AT1148A	2	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	8" VALVE	AT1148ZD17	1	-	No further action required under Rehab Plan.	N/A
SF-211	10/3/2011	4" BP	AT1148ZD18	1	-	No further action required under Rehab Plan.	N/A
SF-211	10/3/2011	24" VALVE	AT1148ZD18	2	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	2" AV	AT1148ZD2	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	8" VALVE	AT1148ZD2	2	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	2" AV	AT1148ZD2	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-211	9/29/2011	2" AV	AT1148ZD3	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	2" AV	AT1148ZD4	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/27/2011	8" VALVE	AT1148ZD5	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/27/2011	2" AV	AT1148ZD5	2	AT-1148ZD 5 #2 Large whammy head does not fit through corp stop. ; Whammy head does not fit corp stop	No further action required under Rehab Plan.	N/A
SF-211	9/27/2011	2" AV	AT1148ZD6	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/27/2011	8" VALVE	AT1148ZD7	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/27/2011	12" VALVE	AT1148ZD8	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	2" AV	AT1148ZD1	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/26/2011	2" AV	AT1148ZD9	1	-	No further action required under Rehab Plan.	N/A
SF-211	9/29/2011	2" AV	AT1148ZD9	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	2" AV	AT1148ZE2	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	8" VALVE	AT1148ZE2	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	2" VALVE	AT1148ZE3	1	HANDWHEEL	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-212	10/3/2011	6" Valve	AT1148ZE3	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	2" AV	AT1148ZE4	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	2" AV	AT1148ZE5	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/3/2011	2" AV	AT1148ZE6	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	24" VALVE	AT1148ZE7	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	8" VALVE	AT1148ZE7	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	24" VALVE	AT1148ZE7	3	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	4" BP	AT1148ZE7	5	-	No further action required under Rehab Plan.	N/A
SF-212	10/4/2011	2" AV	AT1148ZE8	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/4/2011	10" VALVE	AT1148ZE9	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/4/2011	10" VALVE	AT1148ZE9	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/4/2011	10" VALVE	AT1148ZE10	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	2" AV	AT1148ZE11	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-212	10/5/2011	8" VALVE	AT1148ZE11	2	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	2" AV	AT1148ZE11A	1	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	2" AV	AT1148ZE11B	7	-	No further action required under Rehab Plan.	N/A
SF-212	10/5/2011	8" Valve	AT1148ZE11B	8	-	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	4" BP	AT7001	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	30" VALVE	AT7001	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7001-A	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7002	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	8" VALVE	AT7003	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7003	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7004	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	AT7004	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7005	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-213	5/24/2011	2" AV	AT7006	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7007	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	12" VALVE	AT7007	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7007	3	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7008	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7008	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	4" BP	AT7008	3	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	30" VALVE	AT7008	4	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7009	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	8" VALVE	AT7010	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-213	5/24/2011	2" AV	AT7011	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7012	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7013	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-213	5/17/2011	2" AV	AT7014	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	8" VALVE	AT7015	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7016	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7017	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7018	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7019	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7020	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	8" VALVE	AT7021	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-213	5/17/2011	2" AV	AT7021	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	30" VALVE	AT7022	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	4" BP	AT7022	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	2" AV	AT7023	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	2" AV	AT7024	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-213	5/12/2011	8" VALVE	AT7025	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	8" VALVE	AT7025	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	2" AV	AT7026	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	2" AV	AT7027	1	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	8" VALVE	AT7027	2	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	12" VALVE	AT7028	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	12" VALVE	AT7028	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	30" VALVE	AT7028	3	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	4" BP	AT7028	4	-	No further action required under Rehab Plan.	N/A
SF-213	5/12/2011	2" AV	AT7029	3	-	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A
SF-213	5/26/2011	2" AV	NEW	x	6 new A/V's not on valve guide. Update documentation	No further action required under Rehab Plan.	N/A
SF-214	11/1/2011	CP TEST	NA5003	1	-	No further action required under Rehab Plan.	N/A
SF-214	11/2/2011	24" VALVE	NA5003	4	-	No further action required under Rehab Plan.	N/A
SF-214	11/2/2011	4" BP	NA5003	5	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	12" VALVE	NA5005	1	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	2" AV	NA5007	1	-	No further action required under Rehab Plan.	N/A
SF-214	11/1/2011	2" AV	NA5008	1	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	8" VALVE	NA5009	1	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	24" VALVE	NA5010	1	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	4" BP	NA5010	2	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	12" VALVE	NA5010	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-214	10/31/2011	2" AV	NA5011	1	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	2" AV	NA5012	3	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	12" VALVE	NA5012	4	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	12" VALVE	NA5012	5	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	2" AV	NA5012	6	-	No further action required under Rehab Plan.	N/A
SF-214	10/31/2011	LD	NA5012	7	-	No further action required under Rehab Plan.	N/A
SF-215	11/1/2011	12" VALVE	NA5000	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-215	11/2/2011	4" BP	NA5000	3	-	No further action required under Rehab Plan.	N/A
SF-215	11/2/2011	24" VALVE	NA5000	4	-	No further action required under Rehab Plan.	N/A
SF-215	11/1/2011	24" VALVE	NA5002	2	-	No further action required under Rehab Plan.	N/A
SF-215	11/1/2011	4" BP	NA5002	3	-	No further action required under Rehab Plan.	N/A
SF-215	11/1/2011	CP TEST	NA5002	4	-	No further action required under Rehab Plan.	N/A
SF-216	8/15/2011	2" AV	VIP8007	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-216	8/15/2011	2" AV	VIP8007A	1	-	No further action required under Rehab Plan.	N/A
SF-216	8/15/2011	20" VALVE	VIP8007A	2	-	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	10" VALVE	VIP8007B	1	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	20" VALVE	VIP8007B	2	-	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	2" AV	VIP8007B	3	-	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	2" AV	VIP8008	1	-	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	6" VALVE	VIP8008A	1	-	No further action required under Rehab Plan.	N/A
SF-216	8/12/2011	2" AV	VIP8008B	1	-	No further action required under Rehab Plan.	N/A
SF-216	8/2/2011	2" AV	VIP8008C	1	-	No further action required under Rehab Plan.	N/A
SF-216	8/2/2011	2" AV	VIP8008D	1	not In guide; VIP8008D is not in valve guide. ; Update VG	No further action required under Rehab Plan.	N/A
SF-216	8/1/2011	20" VALVE	VIP8011	2	-	No further action required under Rehab Plan.	N/A
SF-216	8/1/2011	6" PLUG VALVE	VIP8011	3	-	No further action required under Rehab Plan.	N/A
SF-216	8/2/2011	10" VALVE	VIP8005	1	BLOW OFF - DO NOT OPERATE	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-216	8/1/2011	20" VALVE	VIP8011	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/15/2011	24" VALVE	VIP8001	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/15/2011	2" AV	VIP8001A	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/3/2011	2" AV	VIP8001B	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/3/2011	2" AV	VIP8001C	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/3/2011	2" AV	VIP8002	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/2/2011	18" VALVE	VIP8003	1	-	No further action required under Rehab Plan.	N/A
SF-217	8/2/2011	2" AV	VIP8003	2	no pressure	No further action required under Rehab Plan.	N/A
SF-218	8/18/2011	30" VALVE	VIP6001	1	-	No further action required under Rehab Plan.	N/A
SF-218	8/18/2011	4" VALVE	VIP6001	2	-	No further action required under Rehab Plan.	N/A
SF-218	8/18/2011	30" VALVE	VIP6001	3	-	No further action required under Rehab Plan.	N/A
SF-218	8/22/2011	2" AV	VIP6002	1	-	No further action required under Rehab Plan.	N/A
SF-218	8/23/2011	2" AV	VIP6009	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-218	8/22/2011	2" AV	VIP6003	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	30" VALVE	VIP7003	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	24" VALVE	VIP7004	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	4" BP	VIP7004	2	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	24" VALVE	VIP7004	3	Blow off do not operate	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	12" VALVE	VIP7007	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	TS	VIP7008	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	2" AV	VIP7008	2	Ball valve; Copper Riser	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	TS	VIP7008A	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	TS	VIP7008B	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/17/2011	2" AV	VIP7008B	2	Ball valve; Copper Riser	No further action required under Rehab Plan.	N/A
SF-219	8/18/2011	30" VALVE	VIP7010	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/18/2011	4" BP	VIP7010	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-219	8/18/2011	30" VALVE	VIP7010	3	-	No further action required under Rehab Plan.	N/A
SF-219	8/18/2011	16" VALVE	VIP7013	1	-	No further action required under Rehab Plan.	N/A
SF-219	8/18/2011	14" VALVE	VIP7013	2	-	No further action required under Rehab Plan.	N/A
SF-219	8/22/2011	2" AV	VIP7013	3	Ball valve; Copper Riser	No further action required under Rehab Plan.	N/A
SF-219	8/18/2011	30" VALVE	VIP7008A	2	-	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	2" AV	VIP2013	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/20/2011	36" VALVE	VIP2001	4	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-221	9/20/2011	6" BP	VIP2001	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-221	9/20/2011	36" VALVE	VIP2001	2	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-221	9/20/2011	6" BP	VIP2001	3	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-221	9/22/2011	2" AV	VIP2003	1	-	No further action required under Rehab Plan.	N/A
SF-221	8/16/2012	2" AV	VIP2003A	1	-	No further action required under Rehab Plan.	N/A
SF-221	8/16/2012	2" AV	VIP2003B	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-221	9/7/2011	2" AV	VIP2005	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	2" AV	VIP2006	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	2" AV	VIP2007	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	2" AV	VIP2008	1	-	No further action required under Rehab Plan.	N/A
SF-221	8/16/2012	LD	VIP2008	2	-	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	2" AV	VIP2008	3	not on pm sheet; VALVE GUIDE VIP2008 # 3,4AND 5 ARE ON THE VALVE GUIDE BUT NOT ON THE PM SHEET. Update documentation	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	48" Valve	VIP2008	4	pm'd 469; VALVE GUIDE VIP2008 # 3,4AND 5 ARE ON THE VALVE GUIDE BUT NOT ON THE PM SHEET. Update documentation	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	8" Valve	VIP2008	5	pm'd 24 3/4; VALVE GUIDE VIP2008 # 3,4AND 5 ARE ON THE VALVE GUIDE BUT NOT ON THE PM SHEET. Update documentation	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	30" VALVE	VIP2009	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/7/2011	2" AV	VIP2009	3	-	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	2" AV	VIP2010	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	2" AV	VIP2011	1	-	No further action required under Rehab Plan.	N/A
SF-221	9/6/2011	2" AV	VIP2012	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-221	9/6/2011	30" VALVE	VIP2013	2	-	No further action required under Rehab Plan.	N/A
SF-222	9/7/2011	2" AV	VIP2014	1	-	No further action required under Rehab Plan.	N/A
SF-223	9/12/2011	2" AV	VIP3002	1	-	No further action required under Rehab Plan.	N/A
SF-223	9/12/2011	10" VALVE	VIP3002	2	-	No further action required under Rehab Plan.	N/A
SF-224	9/12/2011	36" VALVE	VIP4003	4	OPERATOR NUT REMOVED Operator Nut Removed to prevent operation of the valve	No further action required under Rehab Plan.	N/A
SF-224	9/12/2011	2" AV	VIP4001	1	-	No further action required under Rehab Plan.	N/A
SF-224	9/12/2011	24" VALVE	VIP4001	2	-	No further action required under Rehab Plan.	N/A
SF-224	9/12/2011	36" VALVE	VIP4003	1	-	No further action required under Rehab Plan.	N/A
SF-224	9/12/2011	8"	VIP4003	5	-	No further action required under Rehab Plan.	N/A
SF-225	9/7/2011	30" ML	VIP5001	2	-	No further action required under Rehab Plan.	N/A
SF-226	9/8/2011	24" VALVE	VIP5003	3	-	No further action required under Rehab Plan.	N/A
SF-226	9/8/2011	2" AV	VIP5002	4	-	No further action required under Rehab Plan.	N/A
SF-226	9/8/2011	2" AV	VIP5002A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-226	9/8/2011	10" VALVE	VIP5003	4	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	2" AV	VIP1100E	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	2" AV	VIP1100C	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/8/2011	2" AV	VIP1100D	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	2" AV	VIP1100F	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	4" BP	VIP1100H	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	24" VALVE	VIP1100H	2	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	2" AV	VIP1100H	3	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	48" VALVE	VIP1100H	4	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	6" BP	VIP1100H	5	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	LD	VIP1100H	6	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	42" VALVE	VIP1100H	8	-	No further action required under Rehab Plan.	N/A
SF-227	6/7/2011	6" BP	VIP1100H	9	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-227	6/7/2011	12" VALVE	VIP1100H	10	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	2" AV	VIP1101	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	CORP STOP	VIP1102	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	LD	VIP1105	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	2" AV	VIP1106	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	42" VALVE	VIP1107	1	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	6" BP	VIP1107	2	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	C.P.	VIP1107	3	-	No further action required under Rehab Plan.	N/A
SF-227	6/6/2011	2" AV	VIP1107	4	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	2" AV	VIP1108	1	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	C.P.	VIP1108	2	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	2" AV	VIP1109	1	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	LD	VIP1111	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-228	6/6/2011	LD	VIP1112	1	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	2" AV	VIP1113	1	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	8" VALVE	VIP1113	2	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	48" VALVE	VIP1114	1	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	2" AV	VIP1114	3	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	8" BP	VIP1114	2	-	No further action required under Rehab Plan.	N/A
SF-228	6/6/2011	2" AV	VIP1115	7	-	No further action required under Rehab Plan.	N/A
SF-230	4/13/2011	24" VALVE	NA3110	1	Replaced nuts on NA-3110 #1.	No further action required under Rehab Plan.	N/A
SF-230	4/13/2011	4" BP	NA3110	2	-	No further action required under Rehab Plan.	N/A
SF-230	4/13/2011	12" VALVE	NA3110	3	-	No further action required under Rehab Plan.	N/A
SF-230	4/13/2011	12" VALVE	NA3110	4	-	No further action required under Rehab Plan.	N/A
SF-231	9/20/2011	2" AV	NA1138	1	-	No further action required under Rehab Plan.	N/A
SF-231	9/20/2011	14" VALVE	NA1138	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-231	9/20/2011	2" AV	NA1138	5	no air; NA1138 #3,4 AND 5 were not on the PM sheet No rehab action necessary.	No further action required under Rehab Plan.	N/A
SF-232	4/13/2011	24" VALVE	AT1221	2	-	No further action required under Rehab Plan.	N/A
SF-232	4/13/2011	4" BP	AT1221	3	-	No further action required under Rehab Plan.	N/A
SF-232	4/13/2011	12" VALVE	AT1222	1	-	No further action required under Rehab Plan.	N/A
SF-232	4/13/2011	12" VALVE	AT1223	1	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	12" VALVE	AT1159T	1	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	8" VALVE	AT1159T	2	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	2" AV	AT1159V	1	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	10" VALVE	AT1159V	2	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	2" AV	AT1159W	1	-	No further action required under Rehab Plan.	N/A
SF-233	12/14/2010	8" VALVE	AT1159X	1	-	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	2" AV	AT1159Y	1	-	No further action required under Rehab Plan.	N/A
SF-233	12/15/2010	2" AV	AT1159R	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-233	12/15/2010	2" AV	AT1159S	1	-	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	18" VALVE	AT1159Z	2	-	No further action required under Rehab Plan.	N/A
SF-233	4/5/2011	LD	AT1159Z	5	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1203	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1204	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	24" VALVE	AT1205	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	4" BP	AT1205	2	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	24" VALVE	AT1205	3	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	4" BP	AT1205	4	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	2" AV	AT1206	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1207	1	-	No further action required under Rehab Plan.	N/A
SF-234	8/22/2012	2" AV	AT1207A	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1208	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-234	4/21/2011	6" VALVE	AT1208A	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1209	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	2" AV	AT1210	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/21/2011	8" VALVE	AT1210	2	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	2" AV	AT1211	1	corp stop; water	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	2" AV	AT1211	2	corp stop	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	2" AV	AT1212	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	8" VALVE	AT1212	2	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	24" VALVE	AT1213	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	4" BP	AT1213	2	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	2" AV	AT1214	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	2" AV	AT1215	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	8" VALVE	AT1215	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-234	4/14/2011	2" AV	AT1216	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	8" VALVE	AT1217	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	24" VALVE	AT1218	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/14/2011	2" AV	AT1218	2	-	No further action required under Rehab Plan.	N/A
SF-234	4/25/2011	2" AV	AT1200	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	2" AV	AT1201	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/18/2011	8" VALVE	AT1202	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/13/2011	4" BP	AT1219	1	-	No further action required under Rehab Plan.	N/A
SF-234	4/13/2011	2" AV	AT1220	1	-	No further action required under Rehab Plan.	N/A
SF-235	5/17/2011	2" AV	AB3003	1	vacuum; Copper Riser	No further action required under Rehab Plan.	N/A
SF-235	5/17/2011	2" AV	AB3004	1	no pressure; Copper Riser	No further action required under Rehab Plan.	N/A
SF-235	5/17/2011	2" AV	AB3005	1	vacuum; Copper Riser	No further action required under Rehab Plan.	N/A
SF-235	5/16/2011	2" AV	AB3009	2	vacuum; Copper Riser	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-235	5/10/2011	24" VALVE	AB3010	1	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	4" BP	AB3010	2	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	12" VALVE	AB3010	3	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	CPT	AB3011	1	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	LD	AB3011	2	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	2" AV	AB3012	1	Copper Riser	No further action required under Rehab Plan.	N/A
SF-235	5/16/2011	2" AV	AB3013	1	frozen; AB-3001 #2, AB-3013#1, and AB-30015#3 are frozen shut; Copper Riser Ball valve opened on 11/3/2011	No further action required under Rehab Plan.	N/A
SF-235	5/16/2011	CPT	AB3013	2	-	No further action required under Rehab Plan.	N/A
SF-235	5/10/2011	CPT	AB3014	1	-	No further action required under Rehab Plan.	N/A
SF-235	5/9/2011	CPT	AB3015	1	-	No further action required under Rehab Plan.	N/A
SF-235	5/9/2011	CPT	AB3015	2	-	No further action required under Rehab Plan.	N/A
SF-235	5/9/2011	2" AV	AB3015	3	frozen; AB-3001 #2, AB-3013#1, and AB-30015#3 are frozen shut; Copper Riser Ball valve opened on 11/3/2011	No further action required under Rehab Plan.	N/A
SF-235	5/9/2011	CPT	AB3016	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-235	5/16/2011	2" AV	AB3001	1	vacuum; AB-3001 #2, AB-3013#1, and AB-30015#3 are frozen shut.; Copper Noted issue addressed on 1/5/2012	No further action required under Rehab Plan.	N/A
SF-235	5/17/2011	2" AV	AB3002	1	frozen; Copper Riser Ball valve opened on 11/3/2011	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	2" AV	AT8008	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	4" VALVE	AT8008	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	8" VALVE	AT8008A	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	36" VALVE	AT8009	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	6"BP	AT8009	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	8"VALVE	AT8009	3	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	36" VALVE	AT8010	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	6"BP	AT8010	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	8" VALVE	AT8010	3	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	2" AV	AT8010	6	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	CPT	AT8010	7	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-236	8/2/2011	2" AV	AT8011	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	2" AV	AT8012	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	36" VALVE	AT8013	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	6" BP	AT8013	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/1/2011	8" VALVE	AT8013	3	-	No further action required under Rehab Plan.	N/A
SF-236	8/1/2011	8" VALVE	AT8013A	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/29/2011	36" VALVE	AT8014	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/29/2011	6" BP	AT8014	2	-	No further action required under Rehab Plan.	N/A
SF-236	7/29/2011	2" AV	AT8015	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/29/2011	10" VALVE	AT8016	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/28/2011	2" AV	AT8017	1	Broken stem white boxed Noted issue addressed on 12/5/2011	No further action required under Rehab Plan.	N/A
SF-236	7/28/2011	2" AV	AT8018	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/28/2011	2" AV	AT8019	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-236	7/26/2011	6'BP	AT8020	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/9/2011	30" VALVE	AT8001	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/9/2011	4" BP	AT8001	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/9/2011	8" VALVE	AT8001	3	-	No further action required under Rehab Plan.	N/A
SF-236	8/3/2011	2" AV	AT8001	4	-	No further action required under Rehab Plan.	N/A
SF-236	8/5/2011	2" AV	AT8002	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/5/2011	2" AV	AT8003	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	8" VALVE	AT8004	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/2/2011	2" AV	AT8005	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	36" VALVE	AT8005	2	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	6" BP	AT8005	3	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	8" VALVE	AT8006	1	-	No further action required under Rehab Plan.	N/A
SF-236	8/8/2011	8" VALVE	AT8007	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-236	7/29/2011	36" VALVE	AT8020	1	-	No further action required under Rehab Plan.	N/A
SF-236	7/26/2011	20" VALVE	AT8020	3	-	No further action required under Rehab Plan.	N/A
SF-236	7/26/2011	8" VALVE	AT8020	4	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	30" ML	NA6001	4	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6001	6	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6002	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6003	1	Needs to be reset Rebuilt on 12/21/2011	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	18" ML	NA6004	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	3" BP	NA6004	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6005	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	36" ML	NA6006	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	6" BP	NA6006	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6006	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-237	11/17/2010	10" BRANCH	NA6006	4	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6007	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6007	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6008	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	6" BRANCH	NA6008	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6009	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6010	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	36" ML	NA6011	1	DO NOT OPERATE	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	6" BP	NA6011	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	8" BRANCH	NA6011	3	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6011	4	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6012	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6013	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-237	11/17/2010	6" BRANCH	NA6013	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	2" AV	NA6014	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	12" BRANCH	NA6014	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	LD	NA6015	1	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	36" ML	NA6015	2	-	No further action required under Rehab Plan.	N/A
SF-237	11/17/2010	6" BP	NA6015	3	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	36" ML	NA6016	1	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	6" BP	NA6016	2	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	2" AV	NA6016	3	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	LD	NA6016	4	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	2" AV	NA6016	5	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	TEST STATION	NA6016	6	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	8" BRANCH	NA6016	7	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-239	5/26/2011	8" BRANCH	NA6017	1	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	2" AV	NA6017	2	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	2" AV	NA6018	1	-	No further action required under Rehab Plan.	N/A
SF-239	5/26/2011	2" AV	NA6019	1	-	No further action required under Rehab Plan.	N/A
SF-239A	5/26/2011	LD	NA6020	3	-	No further action required under Rehab Plan.	N/A
SF-239A	5/26/2011	24" ML	NA6020	4	-	No further action required under Rehab Plan.	N/A
SF-239A	5/26/2011	4" BP	NA6020	5	-	No further action required under Rehab Plan.	N/A
SF-239A	5/26/2011	12" BRANCH	NA6020	7	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	LD	NA6020	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	12" BRANCH	NA6020	2	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	2" AV	NA6021	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	8" BRANCH	NA6022	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	LD	NA6022	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-240	5/25/2011	2" AV	NA6023	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	LD	NA6024	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	36" ML	NA6025	1	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	6" BP	NA6025	2	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	2" AV	NA6025	3	-	No further action required under Rehab Plan.	N/A
SF-240	5/25/2011	TEST STATION	NA6025	4	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	8" BRANCH	NA6036	3	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6037	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	4" BP	NA6028	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6029	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6030	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	8" BRANCH	NA6030A	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6031	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-242	5/24/2011	8" BRANCH	NA6031	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	LD	NA6032	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	12" BRANCH	NA6032	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6033	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	LD	NA6034	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	30" ML	NA6034	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	4" BP	NA6034	3	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6035	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	LD	NA6035	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	LD	NA6036	1	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	LD	NA6036	2	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	2" AV	NA6036	4	-	No further action required under Rehab Plan.	N/A
SF-242	5/24/2011	30" ML	NA6038	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-242	5/24/2011	4" BP	NA6038	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6041	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	30" ML	NA6041	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	4" BP	NA6041	3	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6041	4	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	TEST STATION	NA6041	5	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6042	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6043	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6044	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6045	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6045A	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6046	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6046	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-244	5/23/2011	2" AV	NA6047	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	30" ML	NA6048	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	4" BP	NA6048	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6049	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6050	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6050	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6051	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6051	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6051A	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6052	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	LD	NA6053	1	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	8" BRANCH	NA6053	2	-	No further action required under Rehab Plan.	N/A
SF-244	5/23/2011	2" AV	NA6054	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-244	5/23/2011	18" ML	NA6055	3	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6055	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6055	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	LD	NA6056	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6056	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6056	3	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6057	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	TEST STATION	NA6057	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	TEST STATION	NA6057	3	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6058	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6059	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6059	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6060	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-245	5/19/2011	8" BRANCH	NA6061	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	LD	NA6061	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6061A	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6061A	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6062	1	NA-6062 #1 A.V.- Needs new handle but is still operable. #802749 Rebuilt on 12/20/2011	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6063	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	TEST STATION	NA6063	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6063A	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6064	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6064	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	LD	NA6064	3	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6065	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	6" BRANCH	NA6065	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-245	5/19/2011	2" AV	NA6067	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6067A	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6068	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6068A	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6069	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6069	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6069	3	Steel Riser Rebuilt on 12/19/2011	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6069	4	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6069	5	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	LD	NA6069	6	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6070	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6071	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6071	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-245	5/19/2011	2" AV	NA6072	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	2" AV	NA6073	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	30" ML	NA6074	1	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	4" BP	NA6074	2	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	8" BRANCH	NA6074	3	-	No further action required under Rehab Plan.	N/A
SF-245	5/19/2011	LD	NA6074	4	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	2" AV	NA6075	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	LD	NA6076	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	8" BRANCH	NA6077	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	2" AV	NA6077	2	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	12" BRANCH	NA6078	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	LD	NA6078	2	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	2" AV	NA6079	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-246	5/19/2011	12" BRANCH	NA6079A	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	30" ML	NA6080	1	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	4" BP	NA6080	2	-	No further action required under Rehab Plan.	N/A
SF-246	5/19/2011	12" BRANCH	NA6080	3	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	CP	NA6081	3	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	30" ML	NA6081	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	4" BP	NA6081	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	10" BRANCH	NA6082	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6082	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6083	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	LD	NA6083	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6084	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	10" BRANCH	NA6085	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-248	5/16/2011	2" AV	NA6085	5	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6086	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	4" BP	NA6088	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	30" ML	NA6088	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	LD	NA6089	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6090	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	2" AV	NA6090	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	LD	NA6091	1	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	24" ML	NA6092	2	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	10" BRANCH	NA6092	3	-	No further action required under Rehab Plan.	N/A
SF-248	5/16/2011	CP	NA6092	4	-	No further action required under Rehab Plan.	N/A
SF-249	5/19/2011	8" BRANCH	NA6087	1	-	No further action required under Rehab Plan.	N/A
SF-249	5/19/2011	30" ML	NA6088	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-249	5/19/2011	4" BP	NA6088	4	-	No further action required under Rehab Plan.	N/A
SF-249	5/19/2011	LD	NA6088	5	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	24" ML	NA6093	1	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	24" ML	NA6097	2	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	4" BP	NA6093	2	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	LD	NA-6095	1	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	16" ML	NA6096	1	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	2" AV	NA6096	3	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	4" BP	NA6097	1	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	LD	NA6097	4	-	No further action required under Rehab Plan.	N/A
SF-251	5/16/2011	2" AV	NA6097	3	NA-6097 #3 Air Vent - Needs to have handle replaced. #603846 Rebuilt on 10/02/12	No further action required under Rehab Plan.	N/A
SF-252	7/25/2011	2" AV	AT8021	1	-	No further action required under Rehab Plan.	N/A
SF-252	7/25/2011	LD	AT8021	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-252	7/25/2011	18" VALVE	AT8022	1	-	No further action required under Rehab Plan.	N/A
SF-252	7/25/2011	3"BP	AT8022	2	-	No further action required under Rehab Plan.	N/A
SF-252	7/25/2011	12" VALVE	AT8022	3	-	No further action required under Rehab Plan.	N/A
SF-252	7/25/2011	2" AV	AT8022	4	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	24" VALVE	NA5018A	3	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	24" VALVE	NA5012	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	4" BP	NA5012	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	2" AV	NA5015	4	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	2" AV	NA5016	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5017	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	24" VALVE	NA5018	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	4" BP	NA5018	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5018	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-253	10/18/2011	18" VALVE	NA5018A	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	18" VALVE	NA5018A	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5018A	6	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	2" AV	NA5020	1	not an autobleed	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5021	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	LD	NA5021	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	24" VALVE	NA5022	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	4" BP	NA5022	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5023	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5024	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	2" AV	NA5025	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	20" VALVE	NA5026	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	3" BP	NA5026	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-253	10/18/2011	20" VALVE	NA5026	3	-	No further action required under Rehab Plan.	N/A
SF-253	10/18/2011	3" BP	NA5026	4	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	2" AV	NA5027	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	2" AV	NA5028	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	LD	NA5029	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	12" VALVE	NA5029	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	12" VALVE	NA5029	3	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	2" AV	NA5030	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	20" VALVE	NA5031	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	3" BP	NA5031	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	8" VALVE	NA5032	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	8" VALVE	NA5033	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	8" VALVE	NA5034	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-253	10/19/2011	2" AV	NA5035	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	20" VALVE	NA5036	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/20/2011	3" BP	NA5036	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	2" AV	NA5013	1	Vacuum	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	8" VALVE	NA5014	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	24" VALVE	NA5015	1	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	4" BP	NA5015	2	-	No further action required under Rehab Plan.	N/A
SF-253	10/17/2011	LD	NA5015	3	-	No further action required under Rehab Plan.	N/A
SF-253	10/19/2011	2" AV	NA5034	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/20/2011	12" VALVE	NA5038	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-254	10/20/2011	2" AV	NA5039	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/24/2011	2" AV	NA5040	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/20/2011	20" VALVE	NA5040	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-254	10/20/2011	3" BP	NA5040	3	-	No further action required under Rehab Plan.	N/A
SF-254	10/24/2011	2" AV	NA5041	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/24/2011	2" AV	NA5042	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/24/2011	8" VALVE	NA5043	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-254	10/24/2011	LD	NA5043	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	20" VALVE	NA5043	3	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	3" BP	NA5043	4	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	2" AV	NA5045	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	LD	NA5046	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	8" VALVE	NA5046	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	4" VALVE	NA5046	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	20" VALVE	NA5047	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	3" BP	NA5047	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-254	10/25/2011	2" AV	NA5047	3	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	2" AV	NA5048	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	2" AV	NA5049	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	2" AV	NA5050	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	LD	NA5050	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	8" VALVE	NA5050	3	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	8" VALVE	NA5050	4	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	20" VALVE	NA5051	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	3" BP	NA5051	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	20" VALVE	NA5052	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	3" BP	NA5052	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	8" Valve	NA5052A	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/25/2011	8" VALVE	NA5053	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-254	10/25/2011	8" VALVE	NA5053	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/26/2011	2" AV	NA5053	3	-	No further action required under Rehab Plan.	N/A
SF-254	10/26/2011	20" VALVE	NA5054	1	-	No further action required under Rehab Plan.	N/A
SF-254	10/26/2011	3" BP	NA5054	2	-	No further action required under Rehab Plan.	N/A
SF-254	10/19/2011	2" AV	NA5037	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/28/2011	20" VALVE	NA5063	2	-	No further action required under Rehab Plan.	N/A
SF-255	10/28/2011	20" VALVE	NA5063	3	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	8" VALVE	NA5054	3	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	8" VALVE	NA5055	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	2" AV	NA5055	2	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	LD	NA5056	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	8" VALVE	NA5056	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-255	10/27/2011	2" AV	NA5057	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-255	10/26/2011	LD	NA5058	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	LD	NA5059	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	20" VALVE	NA5059	2	-	No further action required under Rehab Plan.	N/A
SF-255	10/27/2011	2" AV	NA5060	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/27/2011	2" AV	NA5060	2	-	No further action required under Rehab Plan.	N/A
SF-255	10/27/2011	8" VALVE	NA5061	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/27/2011	2" AV	NA5062	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/28/2011	20" VALVE	NA5063	1	-	No further action required under Rehab Plan.	N/A
SF-255	10/26/2011	LD	NA5054	4	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	20" VALVE	AT9007	3	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	2" AV	AT9000	1	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	8" BP	AT9000	2	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	48" VALVE	AT9000	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-256 & 279	12/15/2010	36" VALVE	AT9000	4	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	6" BP	AT9000	5	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	6" BP	AT9000	6	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	36" VALVE	AT9000	7	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	CATH. TEST	AT9001	2	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/9/2010	2" AV	AT9001B	1	Copper riser	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/9/2010	16" VALVE	AT9001C	1	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	8" BP	AT9002	1	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	48" VALVE	AT9002	2	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/15/2010	CATH. TEST	AT9002	3	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/8/2010	2" AV	AT9003	1	Copper riser	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	2" CC	AT9004	1	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/6/2010	48" VALVE	AT9005	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-256 & 279	12/6/2010	8" BP	AT9005	2	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	CATH. TEST	AT9005	3	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	2" AV	AT9006	1	Copper riser	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	6" BP	AT9007	1	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/20/2010	42" VALVE	AT9007	2	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	48" VALVE	AT9007	4	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	8" BP	AT9007	5	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	CATH. TEST	AT9007	5	-	No further action required under Rehab Plan.	N/A
SF-256 & 279	12/1/2010	2" AV	AT9007	6	Copper riser	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	6" BP	AT9008	1	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	42" VALVE	AT9008	2	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	2" AV	AT9009	1	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	2" AV	AT9010	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-257	12/21/2010	12" VALVE	AT9011	1	-	No further action required under Rehab Plan.	N/A
SF-257	1/3/2011	6" BP	AT9011	2	-	No further action required under Rehab Plan.	N/A
SF-257	1/3/2011	36" VALVE	AT9011	4	-	No further action required under Rehab Plan.	N/A
SF-257	1/3/2011	6" BP	AT9011	5	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	2" AV	AT9012	1	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	30" VALVE	AT9013	1	-	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	8" VALVE	AT9013	3	Casting Removed	No further action required under Rehab Plan.	N/A
SF-257	12/21/2010	2" AV	AT9013	2	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	2" AV	AT1172	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1173	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1174	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1175	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	20" VALVE	AT1176	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-258	7/12/2011	8" VALVE	AT1176	2	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1177	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1178	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1179	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	LD	AT1180	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/12/2011	2" AV	AT1181	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	8" VALVE	AT1181A	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	20" VALVE	AT1182	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	24" VALVE	AT1182	2	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	LD	AT1182	3	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	36" VALVE	AT1182	4	-	No further action required under Rehab Plan.	N/A
SF-258	7/14/2011	2" AV	AT1182	5	-	No further action required under Rehab Plan.	N/A
SF-258	7/14/2011	36" VALVE	AT1182	6	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-258	7/14/2011	8" VALVE	AT1183	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/14/2011	2" AV	AT1184	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/14/2011	8" VALVE	AT1185	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1186	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1187	1	Auto Bleed	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	8" VALVE	AT1188	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	8" VALVE	AT1189	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	24" VALVE	AT1189	2	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1189	3	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1190	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1191	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1192	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	4" VALVE	AT1193	1	METER SITE	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-258	7/18/2011	2" AV	AT1194	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	24" VALVE	AT1195	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	2" AV	AT1196	1	No Pressure	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	2" AV	AT1169	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	2" AV	AT1170	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/13/2011	2" AV	AT1171	1	-	No further action required under Rehab Plan.	N/A
SF-258	7/18/2011	12" VALVE	AT1195	2	-	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	2" AV	AT1168	1	-	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	2" AV	AT1166	1	-	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	2" AV	AT1167	1	Corp Stop	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	3" Bypass	AT1168	4	-	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	16" VALVE	AT1168	5	-	No further action required under Rehab Plan.	N/A
SF-259	7/6/2011	6" Valve	AT1168	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-260	10/24/2011	12" VALVE	AT2070	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2071	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	12" VALVE	AT2068	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2068	2	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	12" VALVE	AT2068	3	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2068	4	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	2" AV	AT2068	5	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2069	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2072	2	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2073	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2074	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	42" valve	AT2075	1	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	4" valve	AT2075	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-260	10/17/2011	16" VALVE	AT2075	3	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2075	7	-	No further action required under Rehab Plan.	N/A
SF-260	10/17/2011	TS	AT2075	8	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2054	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2054	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	2" AV	AT2054	3	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2055	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2056	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2056	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2057	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	2" AV	AT2058	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2058	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2059	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-261	10/18/2011	CPT	AT2059	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2060	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	2" AV	AT2060	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2061	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2061	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	2" AV	AT2062	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2063	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	CPT	AT2063	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	42" VALVE	AT2064	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/18/2011	4" BP	AT2064	2	-	No further action required under Rehab Plan.	N/A
SF-261	10/17/2011	CPT	AT2064	3	-	No further action required under Rehab Plan.	N/A
SF-261	10/17/2011	CPT	AT2065	1	-	No further action required under Rehab Plan.	N/A
SF-261	10/17/2011	CPT	AT2066	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-261	10/17/2011	CPT	AT2066	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	12" VALVE	AT2043	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	12" VALVE	AT2049	3	-	No further action required under Rehab Plan.	N/A
SF-262	11/2/2011	CPT	AT2031	1	-	No further action required under Rehab Plan.	N/A
SF-262	11/2/2011	2" AV	AT2031	2	Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2032	1	-	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2033	1	-	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	12" VALVE	AT2034	2	BRANCH-CLOSED	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2035	1	-	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2036	1	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	12" VALVE	AT2036	2	BRANCH-CLOSED	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2036	3	-	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	2" AV	AT2036	4	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-262	10/31/2011	4" BP	AT2037	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	42" VALVE	AT2037	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2037	3	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2037	4	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2038	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2039	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	16" VALVE	AT2039	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2040	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/31/2011	CPT	AT2041	1	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2042	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	2" AV	AT2042	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2043	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2044	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-262	10/28/2011	CPT	AT2045	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2046	1	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2046	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	12" VALVE	AT2046	3	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2048	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2049	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2049	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2050	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	42" VALVE	AT2050	3	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	4" BP	AT2050	4	-	No further action required under Rehab Plan.	N/A
SF-262	10/28/2011	CPT	AT2050	5	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	12" VALVE	AT2051	1	BRANCH CLOSED	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	12" VALVE	AT2051	2	BRANCH CLOSED	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-262	10/24/2011	CPT	AT2051TS	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	CPT	AT2051TS	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	CPT	AT2051TS	3	-	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	2" AV	AT2052	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/24/2011	CPT	AT2052	2	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/19/2011	42" VALVE	AT2053	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/19/2011	6" BP	AT2053	1	-	No further action required under Rehab Plan.	N/A
SF-262	10/19/2011	16" VALVE	AT2053	2	-	No further action required under Rehab Plan.	N/A
SF-262	10/19/2011	CPT	AT2053TS	1	TYPE IR (A)	No further action required under Rehab Plan.	N/A
SF-262	10/19/2011	CPT	AT2053TS	2	-	No further action required under Rehab Plan.	N/A
SF-262	11/1/2011	CPT	AT2034	3	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	36" VALVE	AT2030	2	-	No further action required under Rehab Plan.	N/A
SF-263	9/2/2011	36" VALVE	AT2030	8	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-263	11/2/2011	CPT	AT2030TS	1	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2030TS	2	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	12" VALVE	AT2026	1	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	12" VALVE	AT2026	2	-	No further action required under Rehab Plan.	N/A
SF-263	9/6/2011	30" VALVE	AT2026	3	-	No further action required under Rehab Plan.	N/A
SF-263	9/6/2011	4" BP	AT2026	4	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	2" AV	AT2026	5	Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-263	9/7/2011	42" VALVE	AT2026	6	-	No further action required under Rehab Plan.	N/A
SF-263	9/7/2011	4" BP	AT2026	7	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2026TS	2	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2026TS	3	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	16" VALVE	AT2027	1	-	No further action required under Rehab Plan.	N/A
SF-263	11/9/2011	2" AV	AT2028	1	Too deep for whammy rod	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-263	11/9/2011	CPT	AT2029TS	1	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	4" BP	AT2030	1	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	4" BP	AT2030	3	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	36" VALVE	AT2030	4	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	4" BP	AT2030	5	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	36" VALVE	AT2030	6	-	No further action required under Rehab Plan.	N/A
SF-263	9/2/2011	4" BP	AT2030	7	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	4" BP	AT2030	9	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	36" VALVE	AT2030	10	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	16" VALVE	AT2030	11	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2030TS	3	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2030TS	4	-	No further action required under Rehab Plan.	N/A
SF-263	11/2/2011	CPT	AT2030TS	5	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-264	10/11/2011	18" VALVE	NA7000	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/11/2011	30" VALVE	NA7000	2	-	No further action required under Rehab Plan.	N/A
SF-264	10/11/2011	2" AV	NA7000	3	-	No further action required under Rehab Plan.	N/A
SF-264	10/11/2011	LD	NA7000	4	-	No further action required under Rehab Plan.	N/A
SF-264	10/11/2011	30" VALVE	NA7001	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	18" VALVE	NA7001	2	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	18" VALVE	NA7001	3	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	2" VALVE	NA7002	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	LD	NA7002	2	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	2" AV	NA7003	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	8" VALVE	NA7003A	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	LD	NA7004	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	2" AV	NA7004	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-264	10/6/2011	2" AV	NA7005	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/6/2011	2" AV	NA7006	1	-	No further action required under Rehab Plan.	N/A
SF-264	10/5/2011	2" AV	NA7007	1	-	No further action required under Rehab Plan.	N/A
SF-265	10/5/2011	30" VALVE	NA7008	1	pm'd 187 ***; Line #265- NA7008 #1 30" valve, PVC riser pipe was sliding up out of the casing as the valve was pm'd. Moved approx. 8". We trimmed the pipe so the lid would fit correctly.	No further action required under Rehab Plan.	N/A
SF-265	10/4/2011	2" AV	NA7009	1	-	No further action required under Rehab Plan.	N/A
SF-265	10/3/2011	8" VALVE	NA7009	2	-	No further action required under Rehab Plan.	N/A
SF-265	10/3/2011	2" AV	NA7009	3	-	No further action required under Rehab Plan.	N/A
SF-265	10/3/2011	2" AV	NA7010	1	-	No further action required under Rehab Plan.	N/A
SF-265	10/5/2011	TS	NA7011	1	-	No further action required under Rehab Plan.	N/A
SF-265	10/5/2011	2" AV	NA7012	1	-	No further action required under Rehab Plan.	N/A
SF-265	10/5/2011	8" VALVE	NA7012	2	-	No further action required under Rehab Plan.	N/A
SF-265	10/5/2011	2" AV	NA7013	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/4/2011	30" VALVE	NA7014	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-266	10/4/2011	LD	NA7015	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/3/2011	12" VALVE	NA7016	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/3/2011	2" AV	NA7016	2	-	No further action required under Rehab Plan.	N/A
SF-266	10/3/2011	2" AV	NA7017	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/3/2011	2" AV	NA7018	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/4/2011	30" VALVE	NA7020	1	-	No further action required under Rehab Plan.	N/A
SF-266	10/3/2011	12" VALVE	NA7019	1	-	No further action required under Rehab Plan.	N/A
SF-267	9/27/2011	8" VALVE	NA7020A	1	-	No further action required under Rehab Plan.	N/A
SF-267	9/27/2011	12" VALVE	NA7021	1	-	No further action required under Rehab Plan.	N/A
SF-267	9/27/2011	2" AV	NA7022	1	-	No further action required under Rehab Plan.	N/A
SF-267	9/27/2011	8" VALVE	NA7022	2	-	No further action required under Rehab Plan.	N/A
SF-267	9/29/2011	2" AV	NA7023	1	-	No further action required under Rehab Plan.	N/A
SF-267	9/22/2011	12" VALVE	NA7024	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-267	9/22/2011	LD	NA7024	3	-	No further action required under Rehab Plan.	N/A
SF-267	9/22/2011	30" VALVE	NA7024	4	END OF LINE-CLOSED	No further action required under Rehab Plan.	N/A
SF-267	9/27/2011	6" VALVE	NA7024	1	-	No further action required under Rehab Plan.	N/A
SF-268	6/13/2011	6" CPTS	LP5005A	3	-	No further action required under Rehab Plan.	N/A
SF-268	6/13/2011	2" AV	LP5005A	4	-	No further action required under Rehab Plan.	N/A
SF-268	8/22/2011	2" AV	LP5005	1	-	No further action required under Rehab Plan.	N/A
SF-268	8/22/2011	30" VALVE	LP5005	2	-	No further action required under Rehab Plan.	N/A
SF-268	8/22/2011	6" CPTS	LP5005	3	-	No further action required under Rehab Plan.	N/A
SF-268	6/13/2011	2" AV	LP5005A	1	-	No further action required under Rehab Plan.	N/A
SF-268	6/13/2011	2" AV	LP5005A	2	-	No further action required under Rehab Plan.	N/A
SF-269,270	6/15/2011	30" VALVE	LP5006A	5	-	No further action required under Rehab Plan.	N/A
SF-269,270	6/13/2011	2" AV	LP5006A	6	-	No further action required under Rehab Plan.	N/A
SF-269,270	6/14/2011	2" AV	LP5006A	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-269,270	6/14/2011	6" CPTS	LP5006A	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	CPT	AT7044	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	2" AV	AT7044	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	48" Valve	AT7044	5	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	4" BP	AT7044	6	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	2" AV	AT7044	7	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	42" Valve	AT7044	8	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	4" BP	AT7044	9	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	CPT	AT7045	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	2" AV	AT7045	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	CPT	AT7046	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	2" AV	AT7047	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	2" AV	AT7047	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-271	10/19/2011	12" VALVE	AT7047	3	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	CPT	AT7048	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	2" AV	AT7049	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	CPT	AT7050	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	2" AV	AT7051	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	CPT	AT7051	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	2" AB	AT7052	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	48" Valve	AT7053	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/19/2011	4" BP	AT7053	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	2" AB	AT7054	1	-	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	CPT	AT7054	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	CPT	AT7055	4	-	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	2" AV	AT7056	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-271	10/17/2011	CPT	AT7056	2	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	42" Valve	AT7044	3	-	No further action required under Rehab Plan.	N/A
SF-271	10/20/2011	4" BP	AT7044	4	-	No further action required under Rehab Plan.	N/A
SF-271	10/17/2011	12" VALVE	AT7055	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	2" AV	AT7043	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	12" VALVE	AT7036	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	2" AV	AT7036	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	CPT	AT7036	3	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	CPT	AT7036	4	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	2" AV	AT7037	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	CPT	AT7037	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	2" AV	AT7038	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	CPT	AT7038	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-272	10/24/2011	2" AV	AT7039	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	12" VALVE	AT7039	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	48" VALVE	AT7039	3	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	4" BP	AT7039	4	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	2" AV	AT7039	5	-	No further action required under Rehab Plan.	N/A
SF-272	10/20/2011	CPT	AT7039	6	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	2" AV	AT7040	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	CPT	AT7040	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	2" AV	AT7040	3	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	2" AV	AT7041	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	CPT	AT7041	2	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	12" VALVE	AT7042	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	2" AV	AT7042	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-272	10/24/2011	CPT	AT7042	3	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	CPT	AT7043	1	-	No further action required under Rehab Plan.	N/A
SF-272	10/24/2011	CPT	AT7043	3	-	No further action required under Rehab Plan.	N/A
SF-273	10/20/2011	48" Valve	AT7035	1	-	No further action required under Rehab Plan.	N/A
SF-273	10/20/2011	8" B.P.	AT7035	2	-	No further action required under Rehab Plan.	N/A
SF-273	10/20/2011	2" AV	AT7035	3	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	42" VALVE	AT7030	1	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	4" BP	AT7030	2	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	6" CPT	AT7030	3	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	10" VALVE	AT7031	1	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	6" CPT	AT7031	2	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	2" AV	AT7032	1	-	No further action required under Rehab Plan.	N/A
SF-274	8/9/2010	42" VALVE	AT7033	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-274	8/9/2010	4" BP	AT7033	2	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	30" VALVE	AT7033	3	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	4" BP	AT7033	4	BP CLOSED	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	2" AV	AT7033	5	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	2" AV	AT7033	6	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	CPT	AT7033	7	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	CPT	AT7033	8	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	2" AV	AT7034	1	-	No further action required under Rehab Plan.	N/A
SF-274	9/13/2010	6" CPT	AT7034	2	-	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	4" Valve	AT2080	1	-	No further action required under Rehab Plan.	N/A
SF-275	2/13/2012	6" CPT	AT2076	2	-	No further action required under Rehab Plan.	N/A
SF-275	2/13/2012	2" AV	AT2077	1	-	No further action required under Rehab Plan.	N/A
SF-275	2/13/2012	6" CPT	AT2077	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-275	2/6/2012	12" VALVE	AT2078	1	-	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	2" AV	AT2081	1	Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	6" CPT	AT2081	2	-	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	2" AV	AT2079	1	Too deep for whammy rod	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	6" CPT	AT2079	2	-	No further action required under Rehab Plan.	N/A
SF-275	2/6/2012	6" CPT	AT2082	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8104	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	8" VALVE	AT8104	2	-	No further action required under Rehab Plan.	N/A
SF-276	7/20/2011	2" AV	AT8105	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/20/2011	2" AV	AT8106	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/20/2011	2" AV	AT8107	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/20/2011	2" AV	AT8107	2	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8108	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-276	7/21/2011	36" VALVE	AT8109	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8110	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	LD	AT8110	2	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8110	3	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8111	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8112	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8113	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8114	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8115	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	8" VALVE	AT8116	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/18/2011	2" AV	AT8100	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/18/2011	36" VALVE	AT8101	1	-	No further action required under Rehab Plan.	N/A
SF-276	7/21/2011	2" AV	AT8102	1	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-276	7/21/2011	2" AV	AT8103	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/4/2011	2" AV	AT8131	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	36" VALVE	AT8117	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8121	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8121	2	Auto Bleed; AT-8117 #1 A.V. AT-8118 #1 A.V. AT-8121 #2 y Large whammy rod head does not fit through corp stop but smaller one does. No Issue	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	8" VALVE	AT8121	3	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8122	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8122	2	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	LD	AT8123	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8124	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8124	2	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	LD	AT8125	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/3/2011	12" VALVE	AT8125	2	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results							
Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-277	8/4/2011	36" VALVE	AT8125	3	-	No further action required under Rehab Plan.	N/A
SF-277	8/3/2011	2" AV	AT8126	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/3/2011	2" AV	AT8128	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/4/2011	8" Valve	AT8128A	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/4/2011	2" AV	AT8129	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/4/2011	2" AV	AT8130	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/4/2011	2" AV	AT8132	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8117	2	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8118	1	AT-8117 #1 A.V. AT-8118 #1 A.V. AT-8121 #2 Large whammy rod head does not fit through corp stop but smaller one does. No Issue	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8119	1	-	No further action required under Rehab Plan.	N/A
SF-277	8/1/2011	2" AV	AT8120	1	-	No further action required under Rehab Plan.	N/A
SF-278	10/17/2011	16" VALVE	AT7053A	1	-	No further action required under Rehab Plan.	N/A
SF-278	10/17/2011	16" VALVE	AT7053	3	-	No further action required under Rehab Plan.	N/A

Table D-6. Force Main Appurtenances Condition Assessment Results

Line No.	PM Date	Description	Valve Guide No.	Valve No.	Condition Assessment Comments / Findings	Recommendation	Addressing Activity
SF-278	10/17/2011	8" Valve	AT7053	4	-	No further action required under Rehab Plan.	N/A
SF-278	10/17/2011	2" AV	AT7053	5	-	No further action required under Rehab Plan.	N/A
SF-278	10/19/2011	CPT	AT7053	6	-	No further action required under Rehab Plan.	N/A

This page intentionally left blank.

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
North	NF-158	2/8/2011	Joint diapers cracking and spalling and support system has potential evidence of deterioration. Repair joint diapers and repair and/or remove and replace support system as required. Crossing is scheduled to be addressed in CIP.	Rehabilitation Required	GN-R9
South	CE-2043	3/22/2011	One pipe support is damaged; minimal surface corrosion.	Rehabilitation Required	GN-R9
South	Loc. AB-2010 & AB-2011	3/31/2011	Portions of concrete pipe cracking at joints and repairs. Repair cracks and spalling concrete as required.	Rehabilitation Required	GN-R9
South	NA; SG-191 MH#15	3/21/2011	Pipe supports and piles have potential evidence of deterioration. Further evaluate pipe supports and piles.	Rehabilitation Required	GN-R9
South	NA-1103	3/28/2011	Joint diapers showing some signs of deterioration; minimal corrosion. Address joint diaper.	Rehabilitation Required	GN-R9
South	NA-3105	3/8/2011	One cross member support is in poor condition and will be addressed. Inspect and evaluate rest of support system. Repair and/or remove and replace support system as required.	Rehabilitation Required	GN-R9
South	VIP-1102	4/1/2011	Pipe supports, coating and hardware showing signs of weathering. Repair or replace support system as required and properly coat or otherwise protect pipe for exposed service.	Rehabilitation Required	GN-R9
South	CE-5033 CE-5034 CE-5035	3/23/2011	Pipe supports showing signs of deterioration. Repair or replace support system as required. Minimal corrosion.	Rehabilitation Required	GN-R9
South	CE-1049 & CE-1050	3/15/2011	Pipe supports showing signs of weathering. Minimal corrosion. Further evaluation of pipe supports required. Repair or replace support system as necessary.	Rehabilitation Required	GN-R9
South	NA; SG -191 MH#24	3/21/2011	Pipe supports and piles showing signs of weathering. Further evaluation of pipe supports and piles is required. Repair or replace support system as necessary.	Rehabilitation Required	GN-R9
North	NF-006	6/14/2011	Pipe and supports showing some signs of deterioration. Abutments need repair. Repair and/or remove and replace pipe supports and abutments as required.	Rehabilitation Required	Interim System Improvements
North	NF-005-10932	6/7/2011	Joint diapers and pipe have slight cracking and/or spalling. Monitor for further signs of deterioration as part of normal maintenance program.	No Rehabilitation Required at this time	N/A

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
North	NF-003-40450	5/25/2011	Pipe and supports showing some signs of corrosion. Protective coating or other protection system for exposed condition should be applied during normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-005-1956	6/7/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-005-40465	6/7/2011	Joint diaphragms have slight cracking and/or spalling. Abutments beginning to crack. Monitor for further signs of deterioration as part of normal maintenance program	No Rehabilitation Required at this time	N/A
North	NF-005-40466	6/7/2011	Joint diaphragms and pipe have slight cracking and/or spalling. Monitor for further signs of deterioration as part of normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-018	5/25/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-026	1/18/2011	Out of service pipe supports are broken and joint hardware showing signs of corrosion. A bypass line has been put into place beside the original pipe.	No Rehabilitation Required at this time	N/A
North	NF-028	3/30/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-028	3/30/2011	Pipe is buried and should be removed from Exposed Crossing inspection list.	No Rehabilitation Required at this time	N/A
North	NF-042	5/4/2011	Structural supports showing signs of corrosion. Proper coating or other protection system should be applied as part of normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-058	1/18/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-058	5/4/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
North	NF-058	5/3/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-075	1/5/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-104	2/8/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NF-105	2/8/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-1126	3/15/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-4009	3/25/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-6053 & AT-6054	4/1/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	CE-4004	3/11/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program	No Rehabilitation Required at this time	N/A
South	NA 4009A	6/14/2011	Pipe supports and hardware have some evidence of corrosion for action in the normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA-1114	3/28/2011	Joint diapers showing some signs of deterioration for action under the normal maintenance program; minimal corrosion	No Rehabilitation Required at this time	N/A
South	NA-1122	3/28/2011	Joint diapers showing some signs of deterioration for action under the normal maintenance program; minimal corrosion	No Rehabilitation Required at this time	N/A
South	NA-5052A	3/28/2011	Casing pipe and supports showing signs of weathering. Unable to evaluate force main; encased with steel pipe	No Rehabilitation Required at this time	N/A

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
South	AT-1161H	4/13/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AB-2007	3/31/2011	Findings indicate exposed crossing is in good condition; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AB-2011B	3/31/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-1001B	5/18/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-1154A	4/13/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-1167	4/13/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-1211	3/8/2011	Findings indicate exposed crossing has minimal corrosion; evaluate corp stop under normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-6043 & AT-6043A	3/15/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-6043 & AT-6043A	3/15/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT-9004	4/7/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	CE-1008	3/10/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	CE-3003	3/11/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
South	CE-3010	3/10/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	CE-5022	3/23/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program. Line abandonment pending	No Rehabilitation Required at this time	N/A
South	LP-1028	4/1/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA; SG - 191 MH#19	3/21/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA; 10th Street Culvert	3/21/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA-1001	3/24/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA-1055	3/24/2011	Joint diapers and hardware showing some signs of deterioration for action under the normal maintenance program; minimal corrosion	No Rehabilitation Required at this time	N/A
South	NA-1066	3/24/2011	Joint diapers and hardware showing some signs of deterioration for action under the normal maintenance program; minimal corrosion	No Rehabilitation Required at this time	N/A
South	NA-1138A	4/18/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA-1150	3/21/2011	Evaluate condition of pipe and wrap under normal maintenance program. Pending replacement (in progress CIP).	No Rehabilitation Required at this time	N/A
South	SG-153	4/15/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A
South	SG-153	4/15/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A

Table D-7. Exposed / Aerial Crossing Condition Assessment Summary

Shore	Location Identifier	Date of Inspection	Condition Assessment Findings	Recommended Action	Addressing Activity
South	SG-192	4/18/2011	Findings indicate exposed crossing has minimal corrosion; replace pipe straps are part of normal maintenance program.	No Rehabilitation Required at this time	N/A
South	VIP-8007-A & VIP-8007-B	3/8/2011	Findings indicate exposed crossing has minimal corrosion; continue normal maintenance program.	No Rehabilitation Required at this time	N/A

Table D-8. Cathodic Protection Systems Condition Assessment Summary (Updated 2/12/2014)

Shore	Valve Guide Number	HRSD Line Number	Line Name / Location	Date Tested	Condition Assessment Findings	Recommended Action	Addressing Activity
South	AT2031 through AT2053TS	SF-262	Lake Ridge Section E, 42-inch DI Year 2002	05/2013	Anodes at AT2045-1, AT2046-1, AT2047-1, AT2048-1, AT2049-1, AT2050-5 appear to be depleted.. Install new anodes.	Rehabilitation Required	GN-R10
South	AT7036	SF-273	Gum Swamp Crossing	4/17/2013	The negative cable between rectifier and target structure is faulty and the system is no longer providing protective current to the force main and needs repair.	Rehabilitation Required	GN-R10
South	VIP1107, VIP1108	SF-228	Elizabeth River Crossing - VIP	05/2013	Testing indicates selenium in rectifier is nearing the end of its useful life. Rectifier should be repaired or replaced.	Rehabilitation Required	GN-R10
North	W1004	NF-172, NF-173, NF-174	KINGSMILL IFM	10/2012	Anodes at W1004A-1, 2, 3, W1004E-5, 6, 7, 8, W1004I-3 appear to be depleted. Install new anodes. W1004I-3: CPTS requires repair as a maintenance action.	Rehabilitation Required	GN-R10
North	W5037	NF-178	NORTH TRUNK IFM PART C	10/2012	W5037-2 anode is depleted. Install new anodes.	Rehabilitation Required	GN-R10
North	W6007, W6008	NF-205	LACKEY IFM SEC A	10/2012	W6008A-1 anode is depleted. Install new anodes.	Rehabilitation Required	GN-R10
North	W7012 A-H	NF-204	POWHATAN CREEK IFM	10/2012	W7012F-2 anode is depleted. Install new anodes.	Rehabilitation Required	GN-R10
North	JR-5048, 53, 60, 61, 62, 64,65	NF-171	KILN CREEK IFM CONTRACT B	6/10/2011	Many CPTS are new but require a concrete pad around the test box. Concrete pad should be installed under normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NA-6015	NF-237	Smithfield	6/3/2011	Four-wire CPTS should be installed at end of each casing. System should be evaluated for need of cathodic protection.	No Rehabilitation Required at this time	N/A
North	NA-6015	NF-239 / SF-238	Smithfield Bennett's Creek River Crossing	6/3/2012	Tests indicate that one of the three anodes is no longer operating. The two remaining anodes have the capacity to deliver the required protection. No action is recommended.	No Rehabilitation Required at this time	N/A

Table D-8. Cathodic Protection Systems Condition Assessment Summary (Updated 2/12/2014)

Shore	Valve Guide Number	HRSD Line Number	Line Name / Location	Date Tested	Condition Assessment Findings	Recommended Action	Addressing Activity
North	NA-6025	NF-240/242 / SF-241	SMITHFIELD RIVER CROSSINGS / NANSEMOND RIVER CROSSING	6/3/2011	Test data shows that one of the five anodes is no longer operating. The four remaining anodes have the capacity to deliver the required protection. No action is needed at this time.	No Rehabilitation Required at this time	N/A
North	NA-6038	NF-243/244 / SF-243	SMITHFIELD RIVER CROSSINGS / CHUCKATUCK CREEK CROSSING	6/3/2011	Tests indicate that all four anodes are operating as designed.	No Rehabilitation Required at this time	N/A
North	NA-6057, NA-6063	NF-245	SMITHFIELD IFM SECT 2 / 22126 BREWERS NECK BLVD	Not tested.	Should be tested under normal maintenance program.	No Rehabilitation Required at this time	N/A
North	NA-6080	NF-247 / NF-248	SMITHFIELD RIVER CROSSINGS / CYPRESS CREEK CROSSING	6/3/2011	Tests indicate that all three anodes are operating as designed.	No Rehabilitation Required at this time	N/A
North	NA-6092	NF-250/251 (SF-250)	SMITHFIELD RIVER CROSSINGS / PAGAN RIVER CROSSING	6/3/2011	Tests indicate that all three anodes are operating as designed.	No Rehabilitation Required at this time	N/A
North	W-1031-A	NF-027	FORT EUSTIS IFM	6/10/2011	Additional testing needed as well as record drawing review under normal maintenance program.	No Rehabilitation Required at this time	N/A
North	W-2005	NF-006	WB IFM CONT. A REPAIR	6/8/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
North	WB-1004-I, WB-1031, JR-6027, JR-6026	NF-008	WB-JR CONNECTOR PHASE I	6/8/2011	Testing indicates the one magnesium anode is operating as designed. Pipe material unknown during time of inspection.	No Rehabilitation Required at this time	N/A
North	W-5511, W-5512, W-5513, W-5514, W-5515	NF-197	LIGHTFOOT IFM EXT	10/2012	Pipe appears to be protected by cathodic protection. Additional testing recommended as a maintenance action.	No Rehabilitation Required at this time	N/A
North	YR-2031, YR-2032	NF-049	BIG BETHEL IFM	6/10/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A

Table D-8. Cathodic Protection Systems Condition Assessment Summary (Updated 2/12/2014)

Shore	Valve Guide Number	HRSD Line Number	Line Name / Location	Date Tested	Condition Assessment Findings	Recommended Action	Addressing Activity
North	YR-4009-A, YR-4009-B, YR-4010	NF-058	MAGRUDER MERCURY IFM REPLACEMENT	Under replacement	Further evaluation needed to ensure CP is in conformance with project design.	No Rehabilitation Required at this time	N/A
North	YR-6025, YR-6026	NF-181	GLOUCESTER IFM YORK RIVER CROSSING	6/1/2011	Three of the five anodes are operating as designed; reference electrodes are faulty when compared with calibrated reference but does not warrant repairs at this time.	No Rehabilitation Required at this time	N/A
South	AB3011, AB-3014, AB3015, AB3016	SF-235	Hampton Blvd.	6/8/2011 - 6/10/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT 7029 through AT7035	SF-274	LakeRidge Section A	6/9/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT 7036 through AT7043	SF-272	Elbow Road Section B, Year 2009 48-inch	6/3/2011 - 6/6/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT2026TS, AT2027, AT2029TS, AT2030TS	SF-263	LakeRidge Section F	6/7/2011	Additional testing needed of flange insulation under normal maintenance program.	No Rehabilitation Required at this time	N/A
South	AT2054 through AT2066	SF-261	LakeRidge Section D 42- inch Steel Tape Wrapped Pipe, Year 2004	6/7/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT2068 through AT2075	SF-260	LakeRidge Section C 42- inch Steel Tape Wrapped Pipe	6/7/2011 - 6/9/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT2077, AT2079, AT2081, AT2082	SF-275	LakeRidge Section B 42- inch Steel Tape Wrapped Pipe	6/9/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT7044 - AT7056, AT- 8010	SF-271	Elbow Road Section A, Year 2003 48 inch	6/3/2011 - 6/10/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A

Table D-8. Cathodic Protection Systems Condition Assessment Summary (Updated 2/12/2014)

Shore	Valve Guide Number	HRSD Line Number	Line Name / Location	Date Tested	Condition Assessment Findings	Recommended Action	Addressing Activity
South	AT7053A	SF-278	Elbow Road Section A, Year 2003 48 inch	6/3/2011	Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A
South	AT-9002, AT-9005, AT-9007	SF-256	Lagomar IFM Section B	05/2013	Updated from 2013 testing program: No cathodic protection was designed or installed for this force main. Test stations are for monitoring only.	No Rehabilitation Required.	N/A
South	LP-1019A	SF-080	South Trunk Sewer Section F	Not tested.	Should be tested under normal maintenance program.	No Rehabilitation Required at this time	N/A
South	LP5005, LP5005A	SF-268	South Trunk Section Q	05/2013	LP5005-3, LP5005A-5, and LP5005A-3: Magnesium / Zinc ground mats should be replaced under normal maintenance program. This system is designed for monitoring only and is not designed to provide protection.	No Rehabilitation Required at this time	N/A
South	LP5006A	SF-270	Elizabeth River Crossing Section 1	05/2013	LP5006A-7, LP5006A-4, and LP5006A-2: Magnesium / Zinc ground mats should be replaced under normal maintenance program. This system is designed for monitoring only and is not designed to provide protection.	No Rehabilitation Required at this time	N/A
South	NA-1016A, NA-1016B, NA-1015, NA-1015A, NA-1014	SF-024	Suffolk Section II Relocation	6/3/2011 - 6/8/2011	Although testing indicates magnesium anodes are operating as designed, casing has potential of short. Additional casing testing should be performed under normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA5002, NA-5003	SF-215	Hillpoint	6/8/2011	Continue periodic tests under normal maintenance program.	No Rehabilitation Required at this time	N/A
South	NA-7010, NA-7011, NA-7012, NA-7014	SF-265	Carolina Road	6/7/2011 - 6/8/2011	Zinc groundmat open circuit potential indicates it is in good operating condition. Testing indicates the magnesium anodes are operating as designed.	No Rehabilitation Required at this time	N/A

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
NF-001	1	10/31/2012	2013-T-103592	2013-T-103592	Right of Way between Longhill Connector Road & Carlton Court	Williamsburg	Hole in the crown of a 24-inch prestressed concrete cylinder pipe immediately upstream of an air vent. The air vent is approximately 88 feet upstream of a city pump station.	139,500
NF-003	1	9/13/2012	2013-T-103523	2013-T-103523	Woods approximately 90' north of Route 199 & 840' west of S. Henry Street	Williamsburg	Failure of air vent. Contractor was replacing air vent as part of vent replacement project. During the removal of the coupling, the corporation stop began to wobble and then blew out of the pipe.	95,400
NF-006	1	9/2/2005	2006-T-100325	2006-T-100325	1 Busch Gardens Blvd at Admin Building	James City	HRSD was notified by Busch Garden's staff that sewage was seeping through asphalt in front of administrative building due to failure in Line #6 underground.	50
NF-008	2	4/29/2004	2004-T-1948	2004-T-1948	Route 60 near Picketts Line	Newport News	Contractor was installing guard rail and damaged FM.	12,000
		1/14/2007	2007-T-101099	2007-T-101099	15482 Warwick Blvd & Stafford St	Newport News	Internal corrosion caused failure of 24" force main.	750
NF-009	4	10/18/1999	SR99-78	2000-T-0826	Route 60 Near Enterprise Drive	Newport News	External corrosion on 12" C.I. force main.	13,700
		1/24/2003	2003-T-1313	2003-T-1313	Route 60 @ Enterprise Drive	Newport News	Graphitization. Hole in pipe repaired w/ full-circle clamp.	4,500
		3/8/2003	2003-T-1661	2003-T-1661	Route 60 @ Enterprise Drive	Newport News	Graphitization. 8-ft section replaced. 2,000 gal. recovered.	18,000

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		4/9/2003	2003-T-1961	2003-T-1961	Route 60 between Enterprise Dr and Picketts Lane	Newport News	Excessive I/I and graphitization	18,000
NF-010	1	1/19/2012	2012-T-103343	2012-T-103343	701 Hornsbyville Road	York	Bolts on old repair clamp broke. Estimated flow rate of 100 gpm.	4,600
NF-011	1	9/12/2007	2008-T-101269	2008-T-101269	204 Hollywood Boulevard	York	Contractor hit a 42" force main. Estimated flow rate is 500 gpm.	420,000
NF-020	2	9/19/2005	2006-T-100331	2006-T-100331	12280 Jefferson Avenue	Newport News	Failed air vent riser pipe. Conservative leak rate estimate of 25 gpm from 11pm 9/19 to 2am 9/20 to storm drain at intersection of Jefferson Avenue and Clair Lane.	4,500
		9/20/2005	2006-T-100332	2006-T-100332	12280 Jefferson Avenue	Newport News	Leak had previously been discovered at 11:00 pm on 9/19 and flow was diverted until repairs could be made. When repair crew arrived on site, it was discovered that line pressure had increased and leak had restarted.	1,500
NF-025	1	3/4/2000	SR00-8	2000-T-1506	Little Florida Rd and Far St	Poquoson	External corrosion on air vent riser.	9,000
NF-026	3	4/9/2000	SR00-11	2000-T-1710	Semple Farm Rd near Magruder Blvd	Hampton	Internal corrosion near PS tie-in. Replaced 2 sticks 4/13/00.	4,500
		2/19/2007	2007-T-101134	2007-T-101134	Wythe Creek Road	Hampton	A 2" ball valve on the air vent froze. The ball valve body expanded and came apart causing spill at approximate flow rate of 100 gpm.	5,000

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		5/25/2011	FY11-43	2011-T-103068	Wythe Creek Road	Hampton	Temporary HDPE line installed aboveground in swampy area near Wythe Creek. HRSD crew was working in the area and noticed the corporation stop was seeping at the threads.	25
NF-032	1	1/16/2006	2006-T-100492	2006-T-100492	Normandy Lane Pump Station	Newport News	Failure of 18" force main located under marsh beside Deep Creek. Citizen reported the problem to HRSD.	-1
NF-037	1	9/11/2007	2008-T-101267	2008-T-101267	Alpine Street & Marrow Drive	Newport News	Contractor hit 36 inch force main causing it to leak intermittently. Discharge flow rate estimated at 50 gpm for about 5 minutes at a time.	800
NF-039	1	10/10/2005	2006-T-100399	2006-T-100399	694-696 J. Clyde Morris Blvd.	Newport News	Force main (36 in) failed about 5 miles west of previous reported problem on same system. Sewage/storm water was spilled for at rate of 100 gpm until this system could be shut down. 750 gallons was storm water and 2250 gallons was wastewater.	3,000
NF-042	1	10/25/2006	2007-T-100947	2007-T-100947	225 Tyler Avenue	Newport News	Force main leaking at joint. Wastewater leaked into large drainage ditch intermittently when the pump station pumps operated.	-1
NF-048	1	10/30/2002	2003-T-0797	2003-T-0797	Big Bethel Road FM	Hampton	Corrosion of air vent riser pipe.	12,000
NF-049	1	8/19/2008	2009-T-101642	2009-T-101642	100 North Park Lane	Hampton	Landfill employee was mowing the right-of-way with a bush hog when he hit the 12" HDPE temporary by-pass line located near the back of the property.	1,000

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 – Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
NF-055	1	3/15/2004	2004-T-1722	2004-T-1722	Hilton School PS	Newport News	Stress crack in 55-year-old cast iron force main.	100
NF-058	3	7/12/2001	SR01-08	2002-T-0076	Executive Dr between Marcella & Hardy Cash	Hampton	Suspected internal corrosion. Repair will be made after Chesapeake Ave	1,250
		5/10/2003	2003-T-2229	2003-T-2229	N. King Street & Thomrose Ave	Hampton	Internal corrosion of PCCP FM. 2 sticks replaced. AV added.	3,150
		12/2/2008	2009-T-101736	2009-T-101736	Hardy Cash Drive & Executive Drive	Hampton	Force main leaking at an estimated rate of 50 gpm. Upon further review, the flow rate was estimated at 100 gpm. The 30-inch PCCP failed due to sulfide corrosion on the crown of the pipe.	4,000
NF-073	1	6/25/2008	2008-T-101599	2008-T-101599	1798 Armistead Avenue & Westminister Dr	Hampton	Line had been dewatered so that contractor could conduct a tie-in. The air vent was opened to help the line drain. Technician did not close air vent prior to re-opening the main valve to line after contractor completed work.	25
NF-089	1	11/28/2000	SR00-37	2001-T-1086	Foxhill Rd Interceptor FM (Bloxoms Corner PS)	Hampton	Piece of asphalt wore through pipe wall, 12" AC FM	1,500
		5/8/2013	2013-T-103718	2013-T-103718	Foxhill Rd Interceptor FM (Bloxoms Corner PS)	Hampton	Crack in top of 12-inch force main on discharge side of pump station. Pipe leaks when pump station operates.	7,750
NF-090	1	12/8/2008	2009-T-101741	2009-T-101741	Old Buckroe Road & Ranalet Drive	Hampton	Force main leaking. 8-inch cast iron pipe had stress fracture.	100

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
NF-105	2	3/17/2004	2004-T-1744	2004-T-1744	Ferguson Park FM @ Railroad Overpass	Newport News	Internal corrosion.	50
		4/26/2004	2004-T-1922	2004-T-1922	Ferguson Park FM @ Railroad Overpass	Newport News	Internal corrosion. Replaced expansion joint.	60
NF-121	3	3/6/2008	2008-T-101444	2008-T-101444	2901 West Avenue	Newport News	Force main leaking intermittently 5 gpm when pump station operates. 12-inch cast iron pipe had a stress fracture which broke the bell joint. Fracture was most likely caused by ground settling.	900
		11/4/2010	2011-T-102846	2011-T-102846	2800 West Avenue	Newport News	12" cast iron force main failure. Release was intermittent following pump cycles at the upstream pump station. Pipe was cracked.	1,000
		12/21/2010	2011-T-102908	2011-T-102908	West Avenue at 31st Street	Newport News	A crack in the 12" cast iron force main, NF-121-1049, caused an intermittent leak when the nearby pump station would cycle on. Leak is approximately 1 gpm. Crack is in the circumference of the pipe.	50
NF-132	1	3/13/2006	2006-T-100546	2006-T-100546	217 Washington Street	Hampton	Crew discovered a failure of 14" force main near the Washington Street Pump Station. Pipe failed due to external corrosion.	200
NF-153	1	7/2/2001	SR01-07	2002-T-0005	Chesapeake Ave & Buxton Ave	Newport News	Suspected failure in 57-year old FM	500
NF-163	1	2/21/2013	2013-T-103672	2013-T-103672	W. Francis Street & S. Nassau Street	Williamsburg	Air vent was leaking at ball valve at an estimated rate of 10 gpm.	200

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
NF-172	1	9/23/2005	2006-T-100335	2006-T-100335	Construction Road into brewery	Williamsburg	Automatic air vent on force main had a small leak. The sealing mechanism was not fully closing and spill went to storm drain.	50
NF-177	1	6/13/1999	SR99-5	99-5305	Longhill Rd at Proposed Route 199	Williamsburg	Push-on joint failed after contractor completed relocation of 24" line	376,000
NF-179	2	2/14/2003	2003-T-1475	2003-T-1475	949 Backspin Court (Kiln Creek)	Newport News	External corrosion of air vent riser pipe	90
		1/14/2011	2011-T-102930	2011-T-102930	Kiln Creek Parkway & Drivers Lane	York	Contractor was exposing force main to install line stop and hit a corporation stop on the pipe that was not in the drawings.	100
NF-185	1	1/16/2013	2013-T-103640	2013-T-103640	2513 George Washington Memorial Highway Hayes, VA	Gloucester	Corroded bonnet bolts on a 4-inch branch valve caused wastewater to leak from pipe. Most of spill was contained in ditch and recovered.	281
NF-190	1	12/26/2000	SR00-39	2001-T-1226	Croaker Rd. (near the library)	James City	Auto air vent on air vent #2, VG-W-5062 froze in open position.	0
NF-194	1	6/27/2006	2006-T-100678	2006-T-100678	Ivy Home Road & 3721 Victoria Boulevard	Hampton	Failure of 30" force main due to interior corrosion. Estimated discharge of 300 gpm going into storm drain. Area receiving heavy rains at the time.	73,500
NF-204	2	10/17/2007	2008-T-101298	2008-T-101298	Fort Eustis Blvd & Warwick Blvd	Newport News	Leaking 24" force main. Estimated initial flow rate of 50 gpm which decreased to 25 gpm and stopped at 4:30 pm. Originally reported as entering reservoir but NN waterworks staff informed HRSD that catch basin drained to river.	4,500

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		11/2/2007	2008-T-101317	2008-T-101317	Fort Eustis Blvd & Warwick Blvd	Newport News	Leaking 24" force main at an estimated flow rate of 10 gpm.	300
SF-005	1	10/14/1999	SR99-56	2000-0793	Granby St @ I-564 off ramp	Williamsburg	Contractor hit with excavator.	27,000
SF-006	2	2/12/2011	2011-T-102961	2011-T-102961	1515 Runnymede Road near Shirland Avenue	Norfolk	10-inch cast iron force main had a crack in the circumference. Tree root was lying across top of the pipe.	200
		10/31/2012	2013-T-103591	2013-T-103591	1510 1/2 North Shore Road	Norfolk	Force main leaking when pump station operates. Tree located on top of pipe caused crack in circumference of cast iron pipe.	75
SF-007	2	9/23/2000	SR00-34	2001-T-0660	Near 9232 Marlow Ave on 20" Granby St Force Main	Norfolk	Internal corrosion of 20" PCCP force main.	30
		11/24/2010	2011-T-102875	2011-T-102875	9115 Mace Avenue	Norfolk	WE Kurling was boring across Mace Avenue and penetrated the HRSD 20" force main causing a release. The line had been marked properly. The contractor did not dig down to confirm the location of the pipe ("spot the line") prior to boring across the road.	2,400
SF-009	1	9/20/2006	2007-T-100893	2007-T-100893	Bi-County and Eagle Roads	Norfolk	Force main failure. This force main was scheduled to be taken out of service within two weeks. New replacement force main is in ground awaiting tie-in to system by contractor.	53,000
SF-013	1	4/19/2012	2012-T-103391	2012-T-103391	Amphibious Drive & Ferry Road	Virginia Beach	Contractor was replacing air vent CE4002-2 and damaged the riser pipe during excavation. Most of spill was recovered using vacuum truck.	300

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
SF-016	1	5/2/2008	2008-T-101517	2008-T-101517	649 Newtown Road	Virginia Beach	Air vent had a hole in it which caused it to leak at an estimated rate of 15 gpm. Air vent had corroded around threads which caused it to leak at the corporation stop.	225
SF-031	1	6/6/2012	2012-T-103409	2012-T-103409	5000 West Norfolk Road	Portsmouth	Small hole in 24-inch ductile iron force main resulted in spill in ditch leading to a storm drain. Hole was the size of a nickel and the estimated flow rate was 15 gpm.	1,185
SF-040	3	9/2/2003	2004-T-0411	2004-T-0411	Myrtle Pkwy & Surrey Cresc (near Richmond Cresc PS)	Norfolk	External corrosion of 55-yr old CI pipe.	300
		3/18/2005	2005-T-100231	2005-T-100231	Surry Crescent and Hampton Boulevard	Norfolk	Contractor hit an 8" force main which had been marked.	-1
		4/25/2005	2005-T-100251	2005-T-100251	Surrey Crescent and Hampton Boulevard	Norfolk	Portable generator and pumping system that was containing leak on force main failed.	0
SF-042	1	6/6/2006	2006-T-100633	2006-T-100633	900 Jamestown Crescent & Magnolia Avenue	Norfolk	Failure of 6" force main. Crew found 3 foot long crack in pipe	50
SF-045	2	2/18/2003	2003-T-1491	2003-T-1491	Bluestone Ave & Monterey Ave (Norfolk)	Norfolk	Stress crack in this 56-year-old cast iron force main.	525
		1/31/2005	2005-T-100163	2005-T-100163	Brunswick Avenue & Hampton Boulevard	Norfolk	Cracked bell on 12" force main caused line to leak. Approximately 50 gallons were contained in the gutter when crew arrived at site. Additional 150 gallons spilled into storm drain before leak could be stopped.	150

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
SF-046	1	1/15/2006	2006-T-100494	2006-T-100494	Powhatan and Bolling Avenues	Norfolk	Circumference crack in force main.	250
SF-051	2	11/15/2000	SR00-36	2001-T-0987	41st Street between Hampton Blvd & Killam Ave	Norfolk	Contractor left air vent open when activating a relocated line.	6,000
		11/13/2012	2013-T-103602	2013-T-103602	41st Street and Killam Avenue	Norfolk	Contractor blew compressed air into abandoned force main causing wastewater to escape from open air vent. This was part of project to fill abandoned pipe with flowable fill.	400
SF-052	1	2/8/2000	SR00-5	SR00-5*	Powhatan Ave and 39th St	Norfolk	Stress crack in 52-year-old cast iron force main.	40
SF-059	1	11/15/2002	2003-T-0907	2003-T-0907	1110 Llewellyn Ave (S. Trunk Section "C" FM)	Norfolk	Leaking coupling on HDPE pipe.	50
SF-066	1	10/9/2003	2004-T-0827	2004-T-0827	Chesapeake Blvd & Robin Hood Rd	Norfolk	Corrosion failure of air vent not shown on HRSD Valve Guides.	2,250
SF-069	5	10/9/1999	SR99-55	2000-T-0761	Robin Hood Rd & Oklahoma Ave	Norfolk	Exterior corrosion on air vent riser.	400
		5/18/2006	2006-T-100605	2006-T-100605	Intersection of Robin Hood Rd. & Hurley Ave	Norfolk	Corroded fittings on air vent in force main Line # 69 caused leak estimated at 25 gpm. Leak was stopped at 6:50 PM on May 18, 2006. Air vent was not on drawings.	750
		11/28/2010	2011-T-102876	2011-T-102876	3714 Robin Hood Road	Norfolk	Air Vent LP-2018 A #1 ball valve came apart and caused a release.	7,725

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		12/3/2010	2011-T-102882	2011-T-102882	3644 Robin Hood Road	Norfolk	Corporation stop broke on air vent. Air Vent LP-2018A #1 HRSD employee observed a small puddle beside the air vent casting when he was driving in to work. A crew was sent to investigate and determined the air vent was slowly leaking below the ball valve	464
		12/30/2012	2013-T-103630	2013-T-103630	Robin Hood Road & E. Bonner Drive	Norfolk	Leak caused by circumference crack on bottom half of 12-inch cast iron pipe.	4,500
SF-082	4	3/22/2004	2004-T-1761	2004-T-1761	Olney Road west of Roswell Avenue	Norfolk	Lead joint failure in 20" cast iron FM.	2,400
		3/24/2006	2006-T-100556	2006-T-100556	2539 Corprew Avenue & Oaklawn Street	Norfolk	Failure of 20" cast iron force main	12,000
		7/30/2010	2011-T-102649	2011-T-102649	2401 Corprew Avenue and Madison Avenue	Norfolk	Failure of 20" cast iron force main. The pipe had a linear crack approximately 8' along the side of the spring line level. Estimated flow rate of 100 gpm.	33,400
		4/4/2011	FY11-41	2011-T-103016	Tidewater Drive & East Olney Road	Norfolk	Force main leaking intermittently at an estimated rate of 25 gpm. 20-inch cast iron force main had 3-foot crack on top of bell joint of the pipe. Pipe leaked approximately every three for three minutes.	1,450
SF-085	1	2/16/2000	SR00-6	2000-T-1432	Brambleton Ave and I-264	Norfolk	Stress crack in 52-year-old cast iron force main.	400
SF-086	2	1/19/2007	2007-T-101106	2007-T-101106	Between Middletown Arch & Colchester Crescent	Norfolk	Circular crack in 8-inch force main.	150

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		2/16/2011	FY11-40	2011-T-102965	Colechester Crescent & Norchester Avenue	Norfolk	8-inch cast iron force main leaking. Pipe had a crack in the circumference.	100
SF-087	1	5/11/1999	SR99-4	99-8528	Norchester Ave between Kimball Terrace & Stanhope Av	Norfolk	Stress crack in 12-inch cast iron force main	2,500
SF-095	3	11/16/1999	SR99-81	2000-T-1042	Elizabeth River Crossing	Norfolk	Pipe struck by object? Investigation to be conducted on failed pipe.	730,000
		8/28/2002	2003-T-0423	2003-T-0423	Waterside Dr & St. Paul's Blvd	Norfolk	Suspected corrosion of 24" CIFM. Line abandoned.	33,750
		9/11/2002	2003-T-0504	2003-T-0504	Waterside Dr & St. Paul's Blvd	Norfolk	Leaking isolation valve. Pinched down on valve & dewatered FM.	50
SF-100	1	11/22/2002	2003-T-0963	2003-T-0963	Selden Ave & Cypress St	Norfolk	Stress crack in 54-year old CI pipe.	600
SF-125		10/21/2003	2004-T-0890	2004-T-0890	Great Neck Rd & Virginia Beach Blvd	Virginia Beach	Packing on 16" valve leaked.	75
SF-126	2	6/29/1999	SR99-6	99-5379	Laskin Rd & Victor Rd	Virginia Beach	Internal corrosion due to air entrainment	800
		10/20/2003	2004-T-0878	2004-T-0878	2020 Laskin Road	Virginia Beach	Human error. Incorrect valve status provided to contractor.	60,000
SF-127	1	10/26/2010	SR10-53	2011-T-102836	Little Neck Rd & Virginia Beach Blvd	Atlantic	Crew was excavating a 2" air vent to replace the old cast iron riser pipe when the saddle failed and the vent blew out. The tapping saddle bolts had deteriorated.	1,700
SF-131	2	7/30/2011	FY12-09	2012-T-103132	35th Street	Newport News	Contractor set up bypass pumps for rehab of 35th Street gravity main. The pumps were not operating properly. They pumped down the manhole too low and would lose suction. Then the pumps did not regain prime fast enough for the wastewater	0

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		9/27/2013	2014-T-103818	2014-T-103818	3601 Holly Road	Virginia Beach	A contractor was bore drilling in the area and hit an HRSD 16" force main. The line was marked by Miss Utility. Flow rate was approximately 75 gallons per minute and flow entered a nearby storm drain.	3,825
SF-130	1	9/3/2004	2005-T-0532	2005-T-0532	Great Neck Road	Virginia Beach	Contractor hit coupling. Line had been marked.	15,000
SF-138	1	3/14/2004	2004-T-1717	2004-T-1717	3900 South Military Highway	Chesapeake	External corrosion of air vent riser pipe.	27,000
SF-140	1	9/15/2011	FY12-26	2012-T-103284	1064 George Washington Highway	Chesapeake	Cast iron force main failure. Water service serving 1064 George Washington highway (wells Fargo Bank) developed a leak that jetted the HRSD cast iron force main and caused a small hole in it. Chesapeake public utilities was called out on possible water	225
SF-142	1	4/14/2005	2005-T-100245	2005-T-100245	804 Canal Drive	Chesapeake	24" ductile iron force main leaking from hole caused by external corrosion.	32,250
SF-147	4	2/28/2000	SR00-7	2000-T-1473	Park Ave and Porter St	Chesapeake	Joint leak in 52-year-old cast iron force main.	100
		6/13/2005	2005-T-100284	2005-T-100284	1127 Perry Street	Chesapeake	Discovered force main leaking intermittently with approximately 100 gallons on ground.	70
		11/1/2007	2008-T-101313	2008-T-101313	Bainbridge Boulevard & Buchanan Street	Chesapeake	Contractor bore through 20" force main causing spill of 75 gpm.	2,625
		12/17/2007	2008-T-101370	2008-T-101370	Perry Street and Park Avenue	Chesapeake	Failure of bell joint on new 20" force main caused minor leak to storm drain. Further investigation after pipe was excavated indicated that pipe had not seated tightly in joint.	500

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
SF-160	1	12/14/2000	SR00-38	2001-T-1191	4545 Bainbridge Blvd at MMP Site	Chesapeake	Vehicle hit 2" corporation stop at MMP pressure site	5,500
SF-164	1	1/8/2007	2007-T-101085	2007-T-101085	865 Great Bridge Boulevard	Chesapeake	Internal corrosion caused 30" force main failure. Estimate leak rate averaged 1000 gpm until 1:45 pm. Staff was forced to dewater pipe (est. 20,000 gallons) into storm drain to make repairs because gravity system was too small to accept flow.	339,000
SF-165	1	10/11/2002	2003-T-0694	2003-T-0694	Military Highway and Rokeyby Ave	Chesapeake	Internal corrosion of RC pipe.	1,800,000
SF-167	1	2/10/2005	2005-T-100191	2005-T-100191	5000 block of Ferrell Parkway	Virginia Beach	Flow overwhelmed a crew that was attempting to install a valve in a 42" force main. Flow had been diverted into a city gravity line but it increased to the point of endangering the people in the excavation. Flow was pumped to the ditch.	9,000
SF-169	5	4/3/2000	SR00-10	2000-T-1685	In Field between Lynnhaven Pkwy and Holland Rd	Virginia Beach	Mechanical. PM handle on valve broke with valve in open position.	150
		2/1/2001	SR00-39	SR00-39*	Lynnhaven Pkwy between Windmill Point Cres & Ski	Virginia Beach	Whammy rod got stuck in air vent. Spill upon removal.	150

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		8/22/2011	FY12-10	2012-T-103140	Lynnhaven Pkway	Virginia Beach	Crew was replacing air vents on line 169. The corporation stop on one of the vents was covered in a cement pad. The corporation stop was crossthreaded into the line was when it was installed and began leaking when the concrete was removed.	150
		7/26/2011	FY12-07	2012-T-103126	S. Lynnhaven Pkway & Dahlia Drive	Virginia Beach	Failure of 2" air vent structure on 36" RCCP force main due to corrosion.	7,200
		8/23/2011	2012-T-103140	2012-T-103140	S. Lynnhaven Pkway & Dahlia Drive	Virginia Beach	Crew was replacing air vents on force main. One of the air vents was covered by concrete and began leaking when excavated. The corporation stop was cross-threaded.	150
SF-177	1	1/28/2008	2008-T-101413	2008-T-101413	Line # 177Map page #22Grid E-9	Virginia Beach	Galvanized air vent riser pipe had deteriorated around threads causing it to separate from the corp stop. Material sprayed out which prevented a recovery of material from the ground.	0
SF-178	1	8/22/2002	2003-T-0382	2003-T-0382	Great Bridge Blvd & Willow Point Arch	Chesapeake	Corrosion of air vent riser pipe	900
SF-182	2	5/5/1999	SR99-3	99-8510	Cedar Road & Bartell Drive	Chesapeake	Contractor bored into 16-inch AC force main	18,000
		1/27/2004	2004-T-1440	2004-T-1440	113 Cedar Road (air vent)	Chesapeake	Contractor mistook air vent for cleanout.	2,400
SF-183	1	9/20/2005	2006-T-100334	2006-T-100334	Intersection of Mt. Pleasant and S. Battlefield Blvd	Chesapeake	Valve leaking past o-ring on 16" force main. HRSD was notified by City of Chesapeake. Found 150 gallons on ground when arrived on site.	-1
SF-184	2	10/12/2002	2003-T-0696	2003-T-0696	S. Battlefield Blvd & Luray Terrace	Chesapeake	Corrosion of bolts in repair clamp.	37,500

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
		1/11/2007	2007-T-101091	2007-T-101091	601 S Battlefield Blvd & Ashley Road	Chesapeake	16" force main failure. Spill flow rate is estimated at 300 gpm. A full circle clamp which had previously been installed on the force main failed.	1,000
SF-185	1	6/22/2006	2006-T-100672	2006-T-100672	Kempsville Road & Sharon Drive	Virginia Beach	24" force main failure	50
SF-188	1	1/26/2001	SR01-01	2001-T-1484	714 Main Street (Suffolk)	Suffolk	Soil boring contractor bored through 14" AC force main.	4,400
SF-190	1	10/29/2012	2013-T-103551	2013-T-103551	875 Wilroy Road	Suffolk	Failure of 30-inch force main. Hole in the crown of pipe at the elbow where it rises out of the ground to cross the creek.	18,352,500
SF-197	1	5/13/2005	2005-T-100263	2005-T-100263	101 Aragona Boulevard	Virginia Beach	Contractor hit air vent on force main.	0
SF-199	3	2/21/2001	SR01-03	2001-T-1659	Fentress Road & Erik Paul Drive	Chesapeake	Leak @ coupling on 12" AC force main. Internal corrosion.	12,200
		6/15/2003	2003-T-2395	2003-T-2395	1008 Fentress Road	Chesapeake	Internal corrosion of AC force main.	42,000
		11/1/2008	2009-T-101702	2009-T-101702	Fentress Avenue & Etheridge Road	Chesapeake	16-inch force main failure. Spill flow rate initially 200 gpm. Decreased to 150 gpm @ 3:00 pm. Flow rate then reduced to 50 gpm. Cause of problem was 2-year old PVC force main split on the bottom for 12 feet.	5,200
SF-210	2	7/10/2000	SR00-17	2001-T-0038	Kempsville Road and Volvo Parkway	Chesapeake	Contractor inadvertently pumped wastewater from excavation	1,500
		5/23/2001	SR01-05	2001-T-2316	Kempsville Road & Shenandoah Parkway	Chesapeake	Contractor dropped trench box on 30" DI FM	36,050
SF-211	1	10/4/2000	SR00-35	2001-T-0724	Kempsville Rd & Dunn Loring Drive	Virginia Beach	Contractor inadvertently pumped wastewater from excavation.	2,400

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
SF-213	2	11/16/2005	2006-T-100421	2006-T-100421	Intersection of Roundhill Road and Pirandello Road	Virginia Beach	Contractor bore through 30" Force Main. Pipe had been marked properly. Initial flow rate was estimated at 125 gallons per minute and then decreased to 50 gpm.	14,700
		10/24/2007	2008-T-101303	2008-T-101303	Round Hill Drive	Virginia Beach	An 8" branch valve broke off during maintenance causing water to spill into storm drain. The bolts that fasten the bonnet to the valve body deteriorated which caused the flanges to separate and leak.	1,365
SF-228	1	7/28/2004	2005-T-0175	2005-T-0175	Seaboard Ave (Portsmouth Marine Terminal)	Portsmouth	External corrosion of air vent riser pipe.	6,000
SF-197	1	5/13/2005	2005-T-100263	2005-T-100263	101 Aragona Boulevard	Virginia Beach	Contractor hit air vent on force main.	0
SF-199	3	2/21/2001	SR01-03	2001-T-1659	Fentress Road & Erik Paul Drive	Chesapeake	Leak @ coupling on 12" AC force main. Internal corrosion.	12,200
		6/15/2003	2003-T-2395	2003-T-2395	1008 Fentress Road	Chesapeake	Internal corrosion of AC force main.	42,000
		11/1/2008	2009-T-101702	2009-T-101702	Fentress Avenue & Etheridge Road	Chesapeake	16-inch force main failure. Spill flow rate initially 200 gpm. Decreased to 150 gpm @ 3:00 pm. Flow rate then reduced to 50 gpm. Cause of problem was 2-year old PVC force main split on the bottom for 12 feet.	5,200
SF-210	2	7/10/2000	SR00-17	2001-T-0038	Kempsville Road and Volvo Parkway	Chesapeake	Contractor inadvertently pumped wastewater from excavation	1,500
		5/23/2001	SR01-05	2001-T-2316	Kempsville Road & Shenandoah Parkway	Chesapeake	Contractor dropped trench box on 30" DI FM	36,050

Table D-9. FM System SSO Summary (updated February 2014)								
Line No.	Total SSO Occurrences (1999 - Oct 2013)	Date	ID No.	DEQ ID No.	Location	Jurisdiction	Reported Cause	Volume (gal.)
SF-211	1	10/4/2000	SR00-35	2001-T-0724	Kempsville Rd & Dunn Loring Drive	Virginia Beach	Contractor inadvertently pumped wastewater from excavation.	2,400
SF-213	2	11/16/2005	2006-T-100421	2006-T-100421	Intersection of Roundhill Road and Pirandello Road	Virginia Beach	Contractor bore through 30" Force Main. Pipe had been marked properly. Initial flow rate was estimated at 125 gallons per minute and then decreased to 50 gpm.	14,700
		10/24/2007	2008-T-101303	2008-T-101303	Round Hill Drive	Virginia Beach	An 8" branch valve broke off during maintenance causing water to spill into storm drain. The bolts that fasten the bonnet to the valve body deteriorated which caused the flanges to separate and leak.	1,365
SF-228	1	7/28/2004	2005-T-0175	2005-T-0175	Seaboard Ave (Portsmouth Marine Terminal)	Portsmouth	External corrosion of air vent riser pipe.	6,000

* DEQ ID Number Unavailable

This page intentionally left blank.

Table D-10. Force Main Assets that Present a Material Risk of Failure

HRSD Line No / Location Identifier	Asset Type	Condition Assessment Findings that Present a Material Risk of Failure	Addressing Activity
NF-001	Pipeline	After a break on this line, HRSD conducted condition assessment of the force main using CCTV and discovered crown corrosion in the pipe.	WB-R1
NF-029	Pipeline	Condition assessment activities showed that this pipe segment has wall loss due to corrosion that requires action.	JR-R1
NF-033, NF-037	Pipeline	An evaluation of the existing record drawings indicated the presence of 6 potential air pockets where there is potential for corrosion in the section to be abandoned.	JR-R2
NF-090	Pipeline	Disproportionate force main failure history indicates material risk of failure.	BH-R5
NF-105	Pipeline	The force main has experienced past failures due to internal corrosion of the unlined ductile iron pipe. Condition assessment of the existing manhole showed severe corrosion.	BH-R9
NF-119, NF-121, NF-122	Pipeline	This force main has evidence of fractures along the crown and a circumferential cracks in some locations	BH-R11
NF-132	Pipeline	An exposed portion of line NF-132 was observed to have external pitting and visible cracking.	BH-R6
NF-153	Pipeline	During the rehabilitation of Claremont PS, a visual inspection of the existing 34" concrete was performed and found that significant corrosion had occurred to the crown of the pipe. The manhole rehabilitation will minimize turbulent flow conditions on the influent side of Claremont PS wet well and thus minimize odors and sulfide creation.	BH-R8
SF-016	Pipeline	Lab analysis of pipe core sample taken near Aragon Dr and Diamond Springs Rd showed immediate area around sample is at material risk of failure. Extents of project to be determined under this project in the design phase which could include sampling of more pipe cores.	CE-R2
SF-057	Pipeline	Pipe to be addressed so that South Trunk Sewer improvements are contiguous. Adjoining sections of South Trunk Sewer force main of similar material and age are showing deterioration and are being replaced.	VIP-R7
SF-060	Pipeline	HRSD conducted condition assessment of the force main using CCTV and discovered crown corrosion in the pipe.	VIP-R5
SF-066	Pipeline	HRSD will replace this line along with the upstream segment identified for inclusion in the Action Plan during the Condition Assessment Program.	VIP-R15
SF-066	Pipeline	HRSD performed a pilot force main inspection on this line during the Condition Assessment Program. Because of the age of the pipe and the cost of further inspections, it was decided to include this pipe in the Rehabilitation Action Plan.	VIP-R2
SF-069	Pipeline	HRSD will replace this line along with the downstream segment identified for inclusion in the Action Plan during the Condition Assessment Program.	VIP-R14
SF-084	Pipeline	This project will replace the remaining portion of the South Trunk Sewer force main. CCTV inspection was conducted and circumferential and longitudinal cracks were found in some locations.	VIP-R13
SF-120, SF-197	Pipeline	This project is due to a previous failure and the potential to disrupt a critical transportation corridor in Virginia Beach if a future failure were to occur.	CE-R6
SF-142	Pipeline	Wall thickness testing and corrosive soils analysis during the Condition Assessment Program led to recommendation of Level 3 inspection. Level 3 is cost prohibitive in this case.	NP-R3
SF-184	Pipeline	This force main has shown evidence of stress cracks and coupling failures. During the condition assessment program, this line showed bidirectional flow indicating potential air entrainment issues. The main line valve, AT1161-2, needs to be replaced due to inability to get spare parts.	AT-R4

Table D-10. Force Main Assets that Present a Material Risk of Failure			
HRSD Line No / Location Identifier	Asset Type	Condition Assessment Findings that Present a Material Risk of Failure	Addressing Activity
SF-143	Pipeline	A portion of line SF-143 on the East side of the Elizabeth River Crossing has evidence of pipe wall thinning.	Rehab during CAP
NF-158	Aerial Crossing	Joint diaphragms cracking and spalling and support system has potential evidence of deterioration. Repair joint diaphragms and repair and/or remove and replace support system as required. Crossing is scheduled to be addressed in CIP.	GN-R9
CE-2043	Aerial Crossing	One pipe support is damaged; minimal surface corrosion.	GN-R9
AB-2010 & AB-2011	Aerial Crossing	Portions of concrete pipe cracking at joints and repairs. Repair cracks and spalling concrete as required.	GN-R9
SG-191 MH#15	Aerial Crossing	Pipe supports and piles have potential evidence of deterioration. Further evaluate pipe supports and piles.	GN-R9
NA-1103	Aerial Crossing	Joint diaphragms showing some signs of deterioration; minimal corrosion. Address joint diaphragm.	GN-R9
NA-3105	Aerial Crossing	One cross member support is in poor condition and will be addressed. Inspect and evaluate rest of support system. Repair and/or remove and replace support system as required.	GN-R9
VIP-1102	Aerial Crossing	Pipe supports, coating and hardware showing signs of weathering. Repair or replace support system as required and properly coat or otherwise protect pipe for exposed service.	GN-R9
CE-5033 CE-5034 CE-5035	Aerial Crossing	Pipe supports showing signs of deterioration. Repair or replace support system as required. Minimal corrosion.	GN-R9
CE-1049 & CE-1050	Aerial Crossing	Pipe supports showing signs of weathering. Minimal corrosion. Further evaluation of pipe supports required. Repair or replace support system as necessary.	GN-R9
SG -191 MH#24	Aerial Crossing	Pipe supports and piles showing signs of weathering. Further evaluation of pipe supports and piles is required. Repair or replace support system as necessary.	GN-R9
NF-006	Aerial Crossing	Pipe and supports showing some signs of deterioration. Abutments need repair. Repair and/or remove and replace pipe supports and abutments as required.	Interim System Improvements
W-1004-I	Cathodic Protection Asset	CPTS is faulty; repair as required.	GN-R10
AT2031 through AT2053TS	Cathodic Protection Asset	Several anode groundbeds appear to be consumed and should be addressed. Additional testing is needed of flange insulation.	GN-R10
AT7036	Cathodic Protection Asset	The negative cable between rectifier and target structure is faulty and the system is no longer providing protective current to the force main and needs repair.	GN-R10
AT-9002, AT-9005, AT-9007	Cathodic Protection Asset	Three CPTS do not appear to be connected to anodes and should be addressed.	GN-R10
LP5005, LP5005A	Cathodic Protection Asset	Zinc ground mats should be replaced.	GN-R10
LP5006A	Cathodic Protection Asset	Zinc ground mats should be replaced.	GN-R10
VIP-1107, VIP-1108	Cathodic Protection Asset	Testing indicates selenium in rectifier is nearing the end of its useful life. Rectifier should be replaced within the next two years to avoid a lapse of CP.	GN-R10

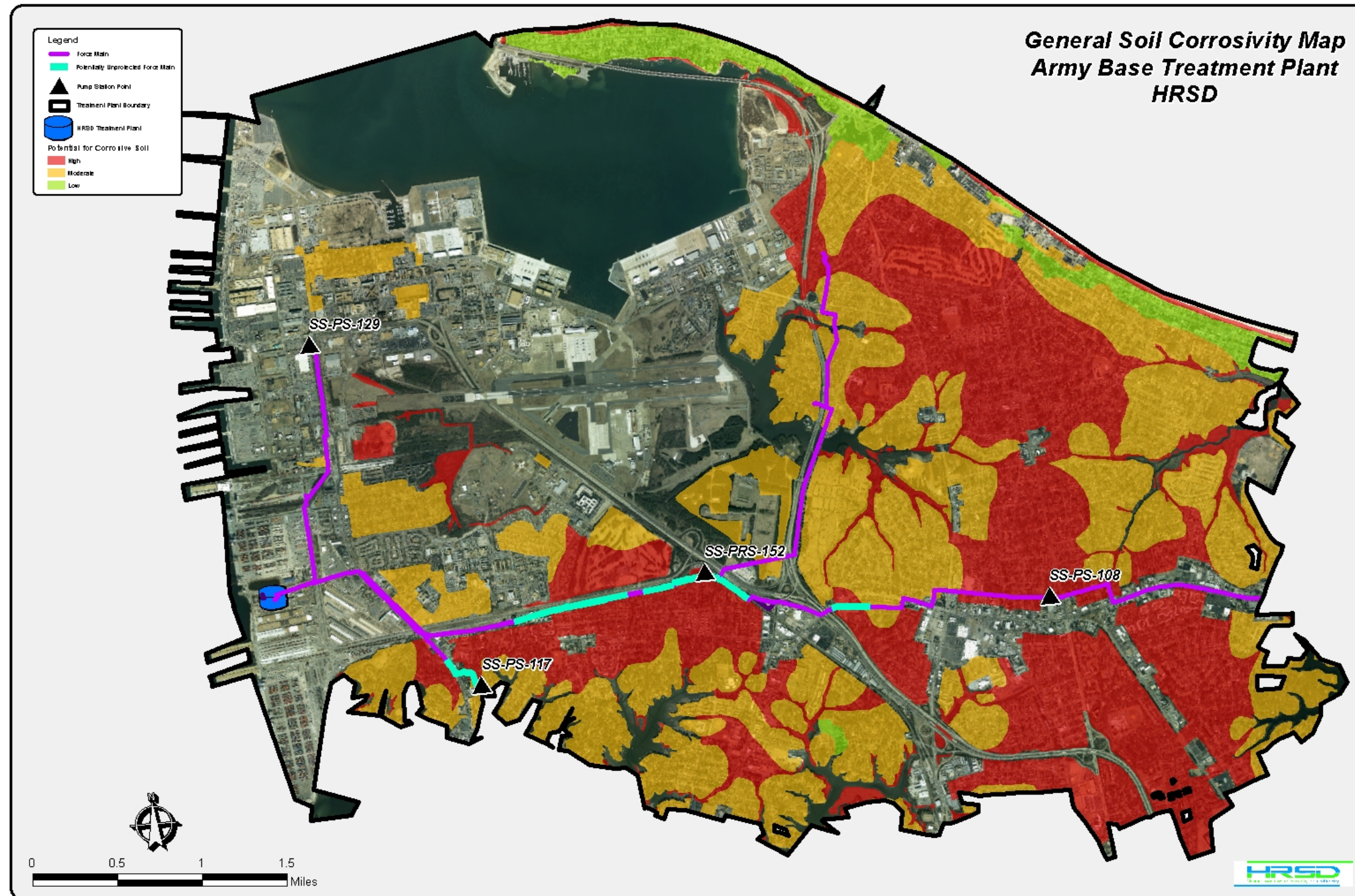


Figure D-1. General Soil Corrosivity Map for Army Base Treatment Plant Service Area

This page intentionally left blank.

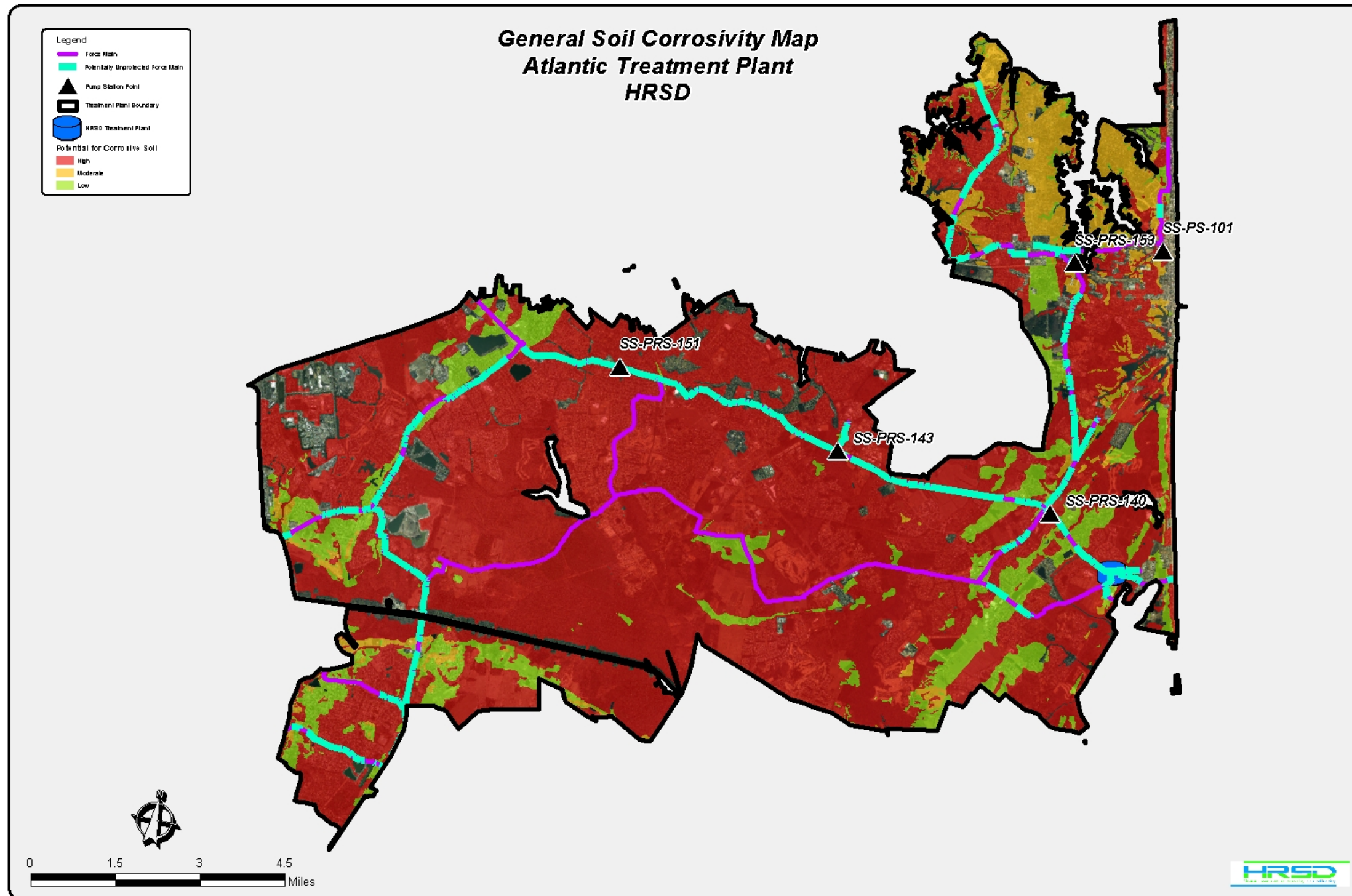


Figure D-2. General Soil Corrosivity Map for the Atlantic Treatment Plant Service Area

This page intentionally left blank.

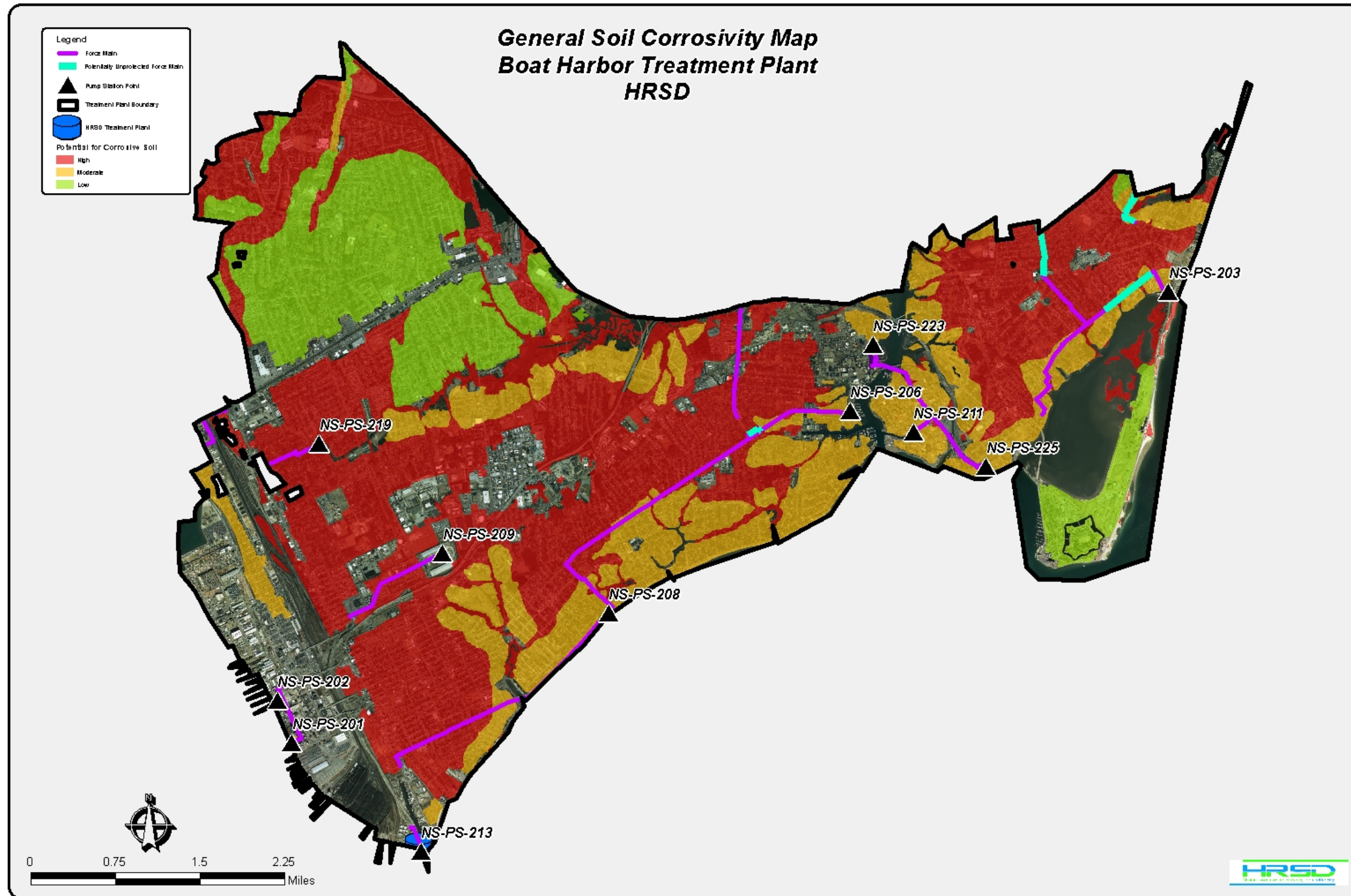


Figure D-3. General Soil Corrosivity Map for the Boat Harbor Treatment Plant Service Area

This page intentionally left blank.

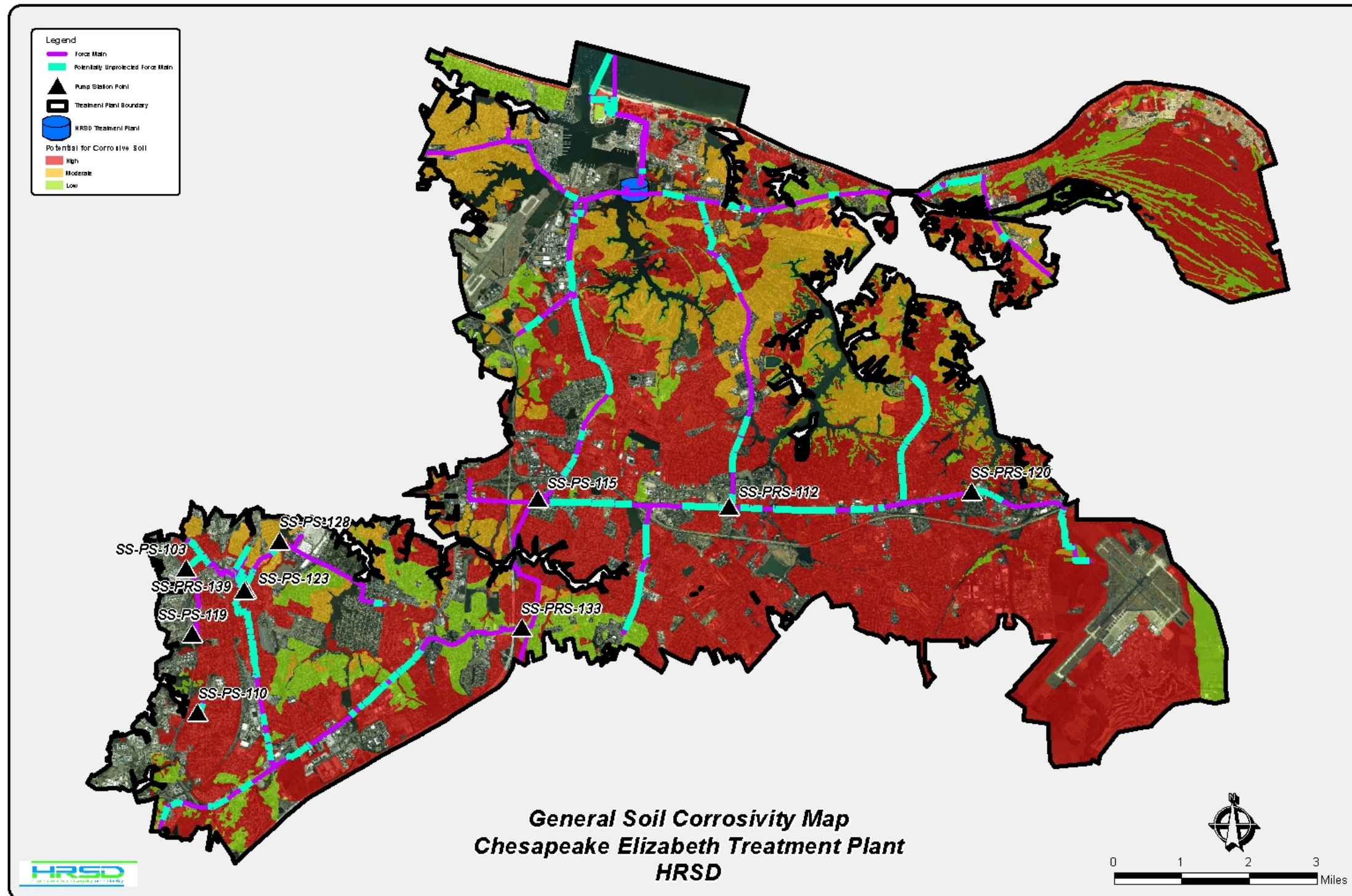


Figure D-4. General Soil Corrosivity Map for the Chesapeake Elizabeth Treatment Plant Service Area

This page intentionally left blank.

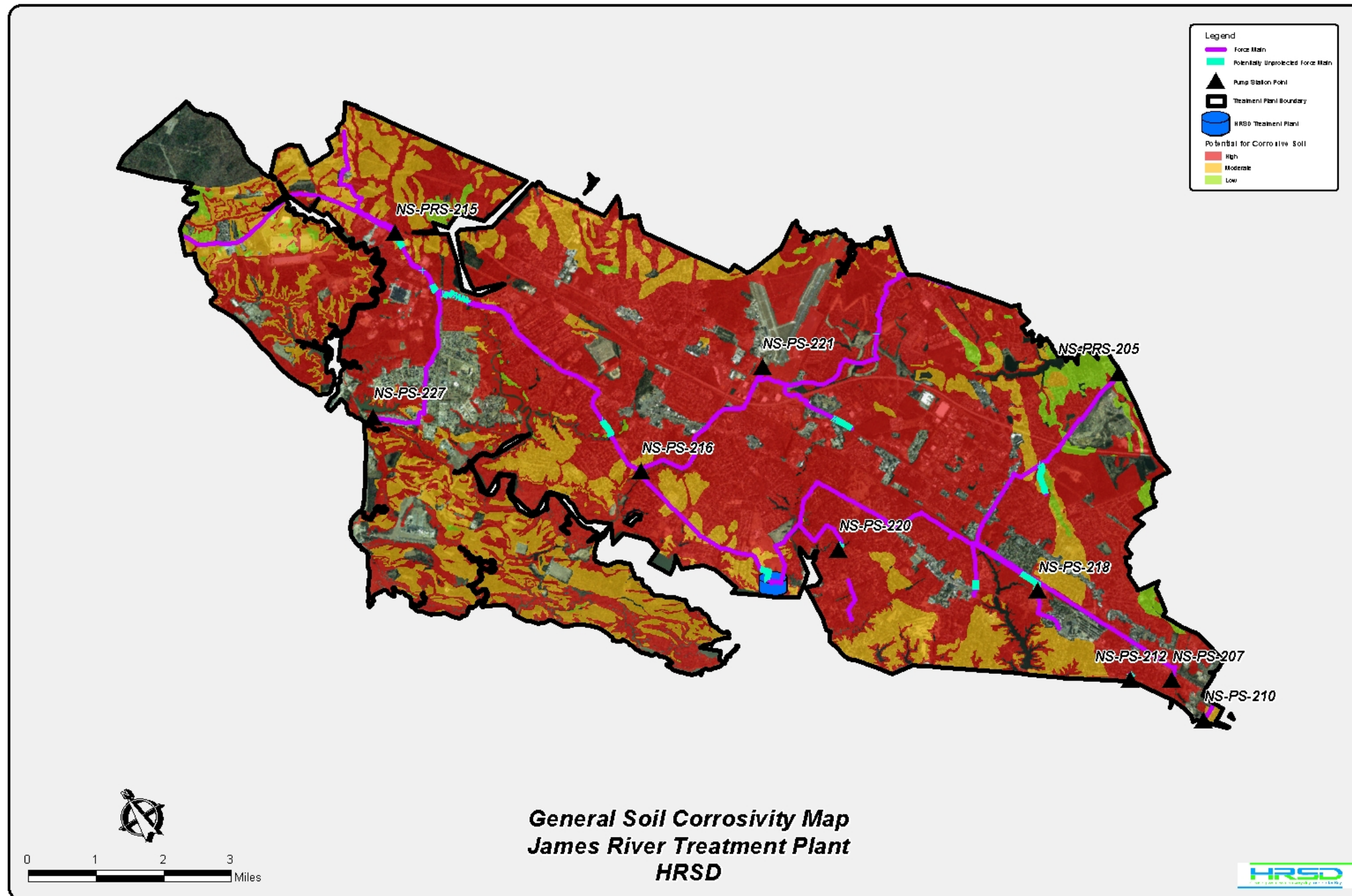


Figure D-5. General Soil Corrosivity Map for the James River Treatment Plant Service Area

This page intentionally left blank.

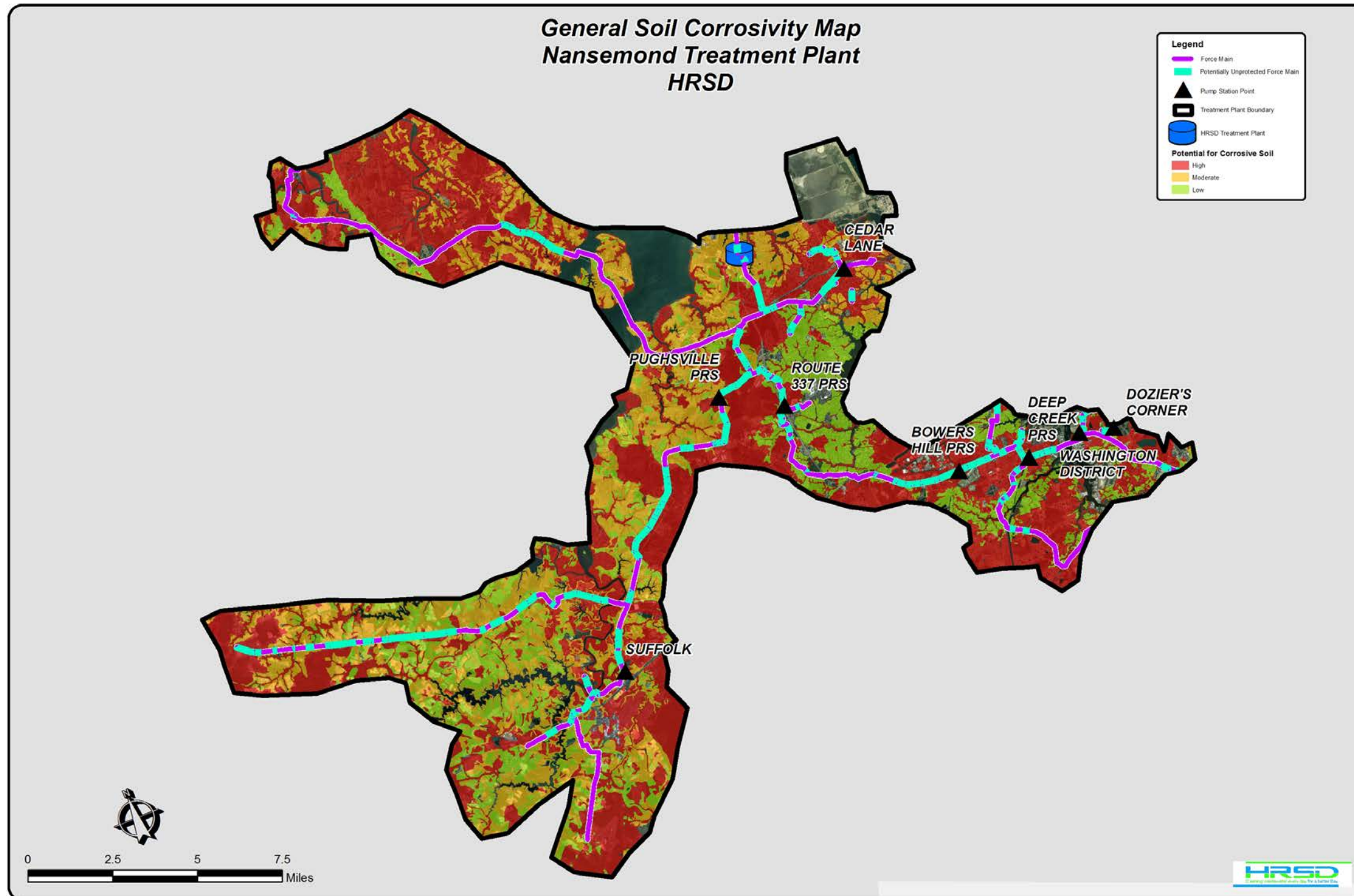


Figure D-6. General Soil Corrosivity Map for the Nansemond Treatment Plant Service Area

This page intentionally left blank.

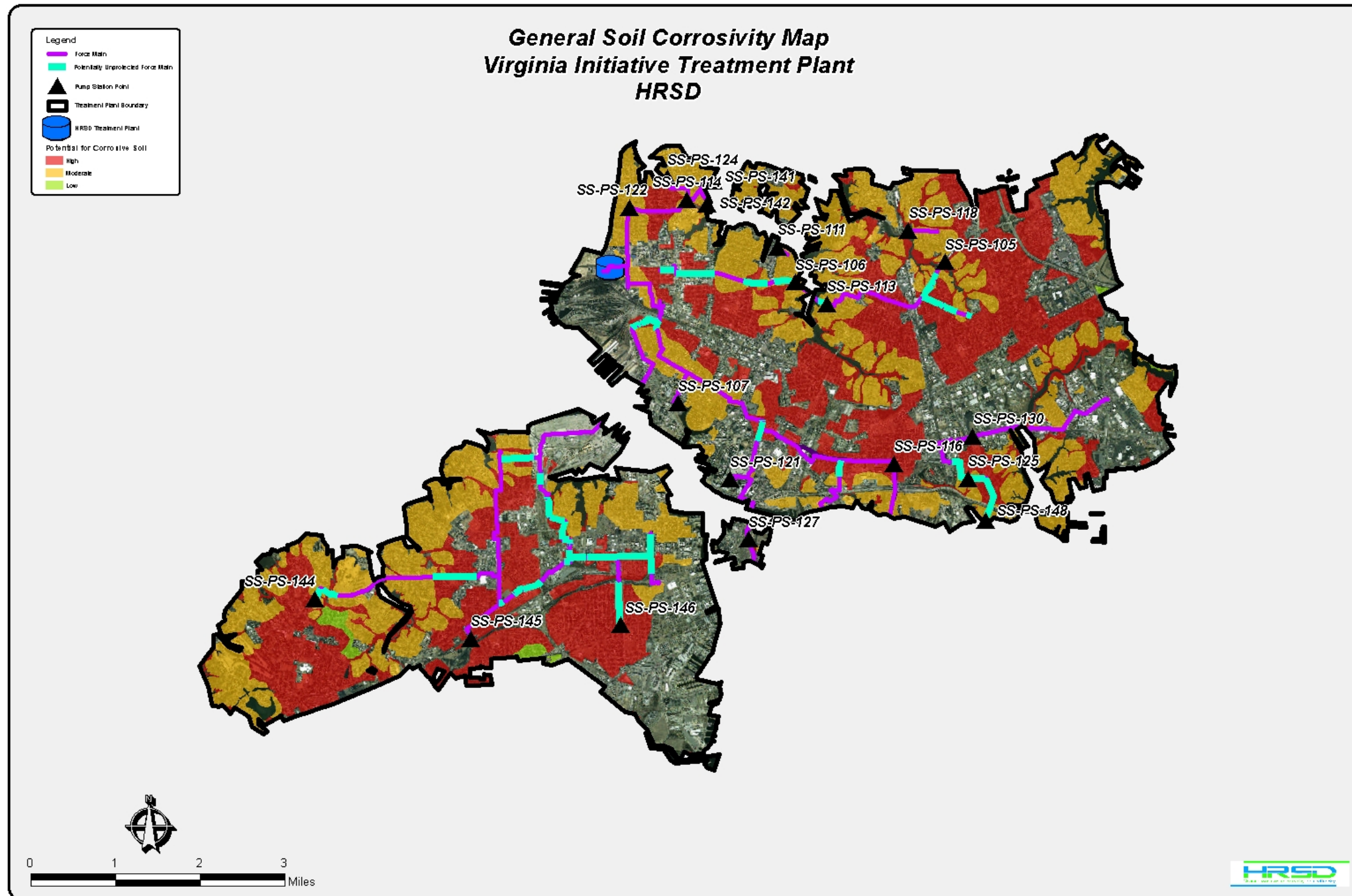


Figure D-7. General Soil Corrosivity Map for the Virginia Initiative Treatment Plant Service Area

This page intentionally left blank.

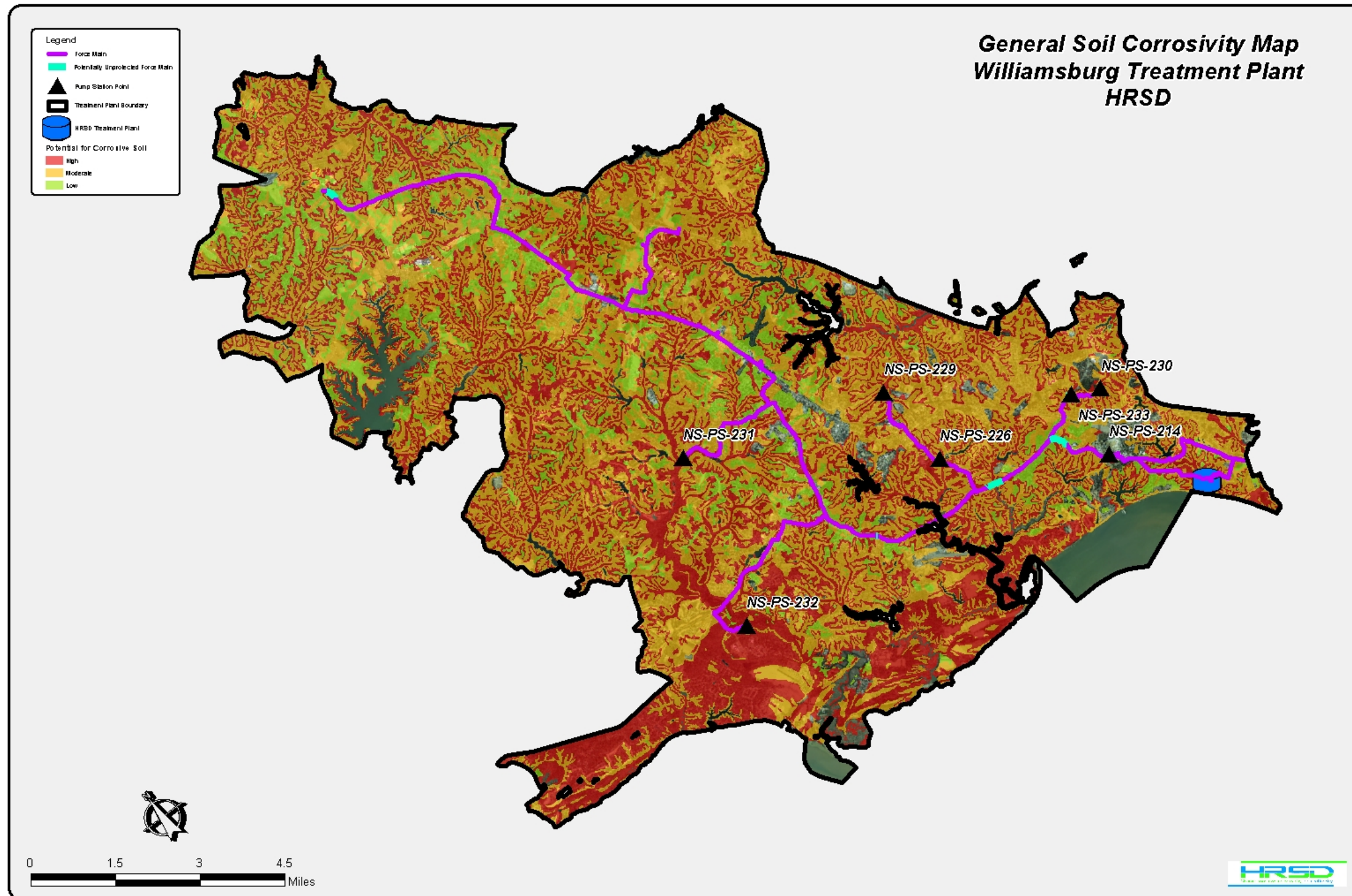


Figure D-8. General Soil Corrosivity Map for the Williamsburg Treatment Plant Service Area

This page intentionally left blank.

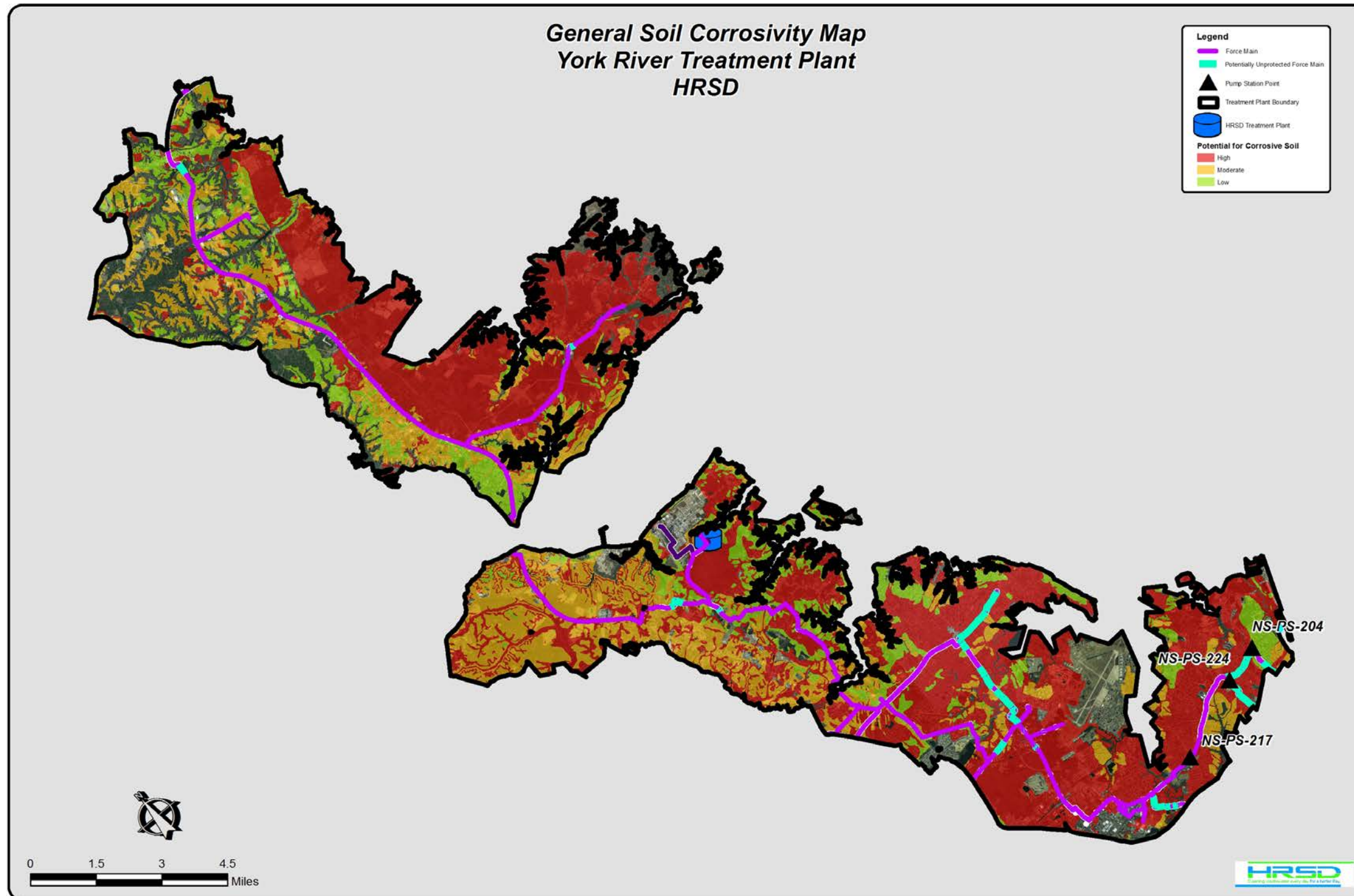


Figure D-9. General Soil Corrosivity Map for the York River Treatment Plant Service Area

This page intentionally left blank