



Maximum Allowable Operating Pressure
Determination & Validation Plan

in accordance with

Docket No. PG-150120

December 2017

INTRODUCTION

Cascade Natural Gas Corporation (Cascade) has prepared a Maximum Allowable Operating Pressure (MAOP) Determination & Validation Plan (Plan) for all transmission and high pressure (HP) distribution pipelines operating in the state of Washington. Transmission pipelines are defined as having a MAOP which produces a hoop stress greater than or equal to 20% Specified Minimum Yield Strength (SMYS). HP distribution pipelines are defined as having a MAOP greater than 60 psig and producing a hoop stress less than 20% SMYS.

The purpose of this plan is to determine and validate the MAOP of all transmission and HP distribution pipelines and to determine where there are insufficient records to confirm the current MAOP per the requirements of 49 CFR 192.619. This plan consists of the following elements:

1. Determination of MAOP
2. Missing Critical Information
3. Summary of all transmission and HP distribution pipelines and facilities with insufficient data to demonstrate and confirm current MAOP
4. Action plan to validate MAOP and gather missing critical information
5. Rationale describing prioritization of each action plan
6. Schedule for completion of action plan for each pipeline segment
7. Process for corrective actions and updates to Plan
8. Findings

1. DETERMINATION OF MAOP

Cascade's validation of MAOP for pipeline segments and facilities having a MAOP greater than 60 psig began in 2013 and completed in 2016. A subsequent review of records for the purpose of validating MAOP was completed by TRC Pipeline Services, LLC (TRC) from October 2016 to March 2017.

Validation of MAOP included the compilation of critical information for Cascade's pipelines and facilities from existing records that included the following information: Year installed, pipeline diameter, wall thickness, seam type, length, pipe grade, test pressure, percent SMYS, and pressure rating of components. Critical information was gathered from Cascade's available records located at the General Office, District Offices, off-site record storage locations, and GIS. When data was missing, assumptions were made in order to perform appropriate calculations. A summary of the assumptions used are described in Section 2 - Missing Critical Information.

Records reviewed included construction project books, NDT test records, pressure test records, as-built records, work orders, material test reports, test certificates, purchase orders and specifications, and data sheets. To identify all components in a pipeline segment, repairs, replacements, relocations, upgrades, and retirement records were also reviewed.

The MAOP for each segment was determined to be either valid (VALID) or unvalidated (UNVALID) by comparing the current MAOP to the lowest pressure determined in accordance with 49 CFR 192.619. Refer to Attachment 1 for the final MAOP designation (VALID/UNVALID) for each pipeline segment and an overview of missing critical information.

2. MISSING CRITICAL INFORMATION

Critical information is information and/or records that are necessary to establish and validate MAOP for a pipeline segment or facility. Missing critical information for pipeline segments (e.g. wall thickness, pipe grade, or pressure test) are shown as yellow cells in the spreadsheets in Attachment 1.

TABLE 1: MISSING CRITICAL INFORMATION

Missing Critical Information	
Pipe, Fitting, and Component Properties	Outside Diameter Yield Strength Wall Thickness Longitudinal Seam Type Pressure Ratings Facilities
Operational	Class Locations Branch/Service Line Connections Uprates Pressure Testing Information Facilities Stubs/Retirements

Pipe and Component Properties

Outside Diameter

Pipe, fitting, and component outside diameter was obtained from material descriptions on as-built drawings, material test reports, or Cascade-specific part numbers. When outside diameter could not be determined, an outside diameter was assumed based on segment classification, adjacent main, or size of connecting facilities.

Yield Strength

Pipe, fitting, and component yield strength was obtained from material descriptions on as-built drawings, material test reports, or Cascade-specific part numbers. When yield strength could not be determined, a yield strength of 24,000 psig was used per 49 CFR 192.107 (b) (2).

Wall Thickness

Pipe, fitting, and component wall thickness was obtained from material descriptions on as-built drawings, material test reports, or Cascade-specific part numbers. When wall thickness could not be determined, the following values were used for wall thickness based on typical wall thickness found in Cascade’s system for the given pipe diameter:

TABLE 2: WALL THICKNESS VALUES

Pipe Diameter (inch)	Wall Thickness (inch)	Pipe Diameter (inch)	Wall Thickness (inch)
1/4	0.119	4	0.156
3/4	0.113	6	0.188
1	0.109	8	0.188
1-1/2	0.145	10	0.188
1-1/4	0.140	12	0.250
2	0.154	16	0.250
3	0.156	20	0.250

Longitudinal Seam Type

Pipe and component longitudinal seam type was obtained from material descriptions on as-built drawings, material test reports, or Cascade-specific part numbers. If longitudinal seam type was known, the longitudinal joint factor in 49 CFR 192.113 was used for the design pressure formula. When longitudinal seam type was unknown, the following values were used:

TABLE 3: UNKNOWN LONGITUDINAL SEAM TYPE VALUES

Longitudinal Seam Type	Longitudinal Joint Factor (E)
Unknown, for pipe diameters 4" and smaller	0.6
Unknown, for pipe diameters over 4"	0.8

Records of longitudinal seam type are consistently a piece of missing critical information. Data from material sampling, material specifications of known materials, and vintage of transmission and HP distribution pipeline segments would indicate longitudinal seam types would typically be electric resistance welded (ERW) or seamless (SMLS). Without having records to fully support this, Cascade will continue to use unknown longitudinal joint factors when seam type is unknown.

Class Location Design Factor

Currently, class location survey data only exists for Cascade’s transmission and HP distribution mainline segments and isn’t available for branch and service line segments. For MAOP validation, a Class 3 design factor was primarily used for all pipeline segments. In locations where branch or service lines connected to transmission or HP distribution segment in a Class 4 location, a Class 4 design factor was applied to the branch or service line. Cascade’s transmission and HP distribution mainlines are primarily located within Class 1, 2, and 3 locations with only a few Class 4 locations.

TABLE 4: CLASS LOCATION DESIGN FACTOR VALUES

Class Location	Design Factor from 49 CFR 192.111(a), (F)
Class 3	0.50
Class 4	0.40

Pressure Ratings

Component and valve pressure ratings were obtained from material descriptions on as-built drawings or Cascade-specific part numbers. When pressure ratings could not be determined, the lowest ASME Class 150, pressure rating of 275 psig, was used for flanges and valves, and a pressure rating of 250 psig was used for unknown Mueller fittings.

Branch and Service Line Connections

Branch and Service Line Connections were obtained from as-built drawings and Cascade-specific part numbers. When connection could not be determined, the pressure rating of the component was marked as “Unknown” and treated as a piece of missing critical information to validate MAOP.

Records, materials commonly used, and past practices would lead to believe the following connections may have been used for branch and service lines:

TABLE 5: BRANCH/SERVICE LINE CONNECTIONS

Diameter	Connection Type	Pressure Rating
Less than 2-Inch	Mueller No-Blo Service Stop Tee, Mueller Autoperf Tee	250 – 1,440 psig
2-Inch	Mueller Curb Valve Tee, Service Tee	1,440 psig
Greater than 2-Inch	Mueller Flanged Tee	275 – 1200 psig

Missing information on the type of component used for service line connections is a systematic issue. Lack of records for high pressure service lines makes it difficult to determine the type of component used.

Pressure Test Information

Pressure test information was obtained from as-built drawings, pressure charts, test reports, progress reports, or pressure test stamps. Pressure testing information is a piece of critical information required to validate MAOP.

49 CFR 192.517 Records

Validation of MAOP via pressure test is per 49 CFR 192.619(a)(2). For pipeline segments operated at a pressure of 100 psig or more, the rule requires that the test pressure must be reduced in accordance with the table provided within the rule. Within the context of 49 CFR 192.619, the rule requires the operator to have record of the test pressure alone to apply the rule. Washington Utilities and Transportation Commission (WUTC or Commission) Staff have performed spot inspections on Cascade records and has accepted this methodology.

Cascade recognizes that 49 CFR 192.517 defines the recordkeeping requirements for pressure tests of 100 psig or more and has identified that prior form revisions omitted some of the required criteria. As a result, Cascade has complete forms that systematically omit 49 CFR 192.517 requirements and has identified this as critical missing information. Cascade maintains that it is possible to validate the pressure under 49 CFR 192.619(a)(2) but have a record deficiency to the requirements of 49 CFR 192.517.

Uprates

Uprates impact validation of MAOP when the pipeline characteristics defined in 49 CFR 192.105 are unknown. Cascade has evidence of uprates in the form up uprate records, as well as pressure history. Cascade has made considerations for uprates in the validation process and coordinated a search for uprate records with WUTC; however, Cascade cannot be assured that all uprates are known and considers uprates missing critical information.

Facilities

Facilities include regulator stations, odorizer stations, valve settings, meter stations, and High Pressure Service Sets (HPSS). Review of facility records showed gaps in information and missing critical information required to validate MAOP. Missing information included missing facility drawings to determine facility pipe, fittings, and components, missing pressure test records, missing material information, and records of facility modifications/rebuilds.

Stubs/Retirements

A systematic issue may exist with missing critical information pertaining to the retirement of branch and service lines. A typical retirement consists of retiring a small stub of pipe and installation of a cap. Past practices indicate retirements may have included a steel plate instead of a cap. Missing critical information includes missing records pertaining to retirements and pressure testing of caps used for retirement. Known stubs have been identified during MAOP validation, but new stubs may be discovered during routine field activities and GIS mapping efforts that will be addressed as they are discovered.

3. SUMMARY OF TRANSMISSION AND HP DISTRIBUTION PIPELINE SEGMENTS AND FACILITIES

Through the review of the information of all pipeline segments operating over 60 psig Cascade determined 2,651 of the 3,176 segments in the state of Washington to have some piece of insufficient records to confirm the current MAOP (See Table 6).

TABLE 6: PIPELINE SEGMENT MAOP DESIGNATION SUMMARY

MAOP Designation	Count	Pipe Length (Miles)
VALID	525	329.7
UNVALID	2,651	269.6
TOTAL	3,176	599.3

Pipeline MAOP summary for all transmission and HP distribution pipeline segments for each operating district in Washington are listed in Attachment 1 - Pipeline MAOP Summary. Attachments include the pipeline segment work order number, pipeline segment name, existing MAOP, class location, calculated MAOPs per 49 CFR 192.619, test pressure, minimum pressure rating of any pressure rated components, MAOP designation, maximum segment pipe diameter, minimum segment pipe wall thickness, minimum segment pipe grade, installation year, percent SMYS of pipe and fittings, critical missing information, total risk score, action plan, and action year.

UNVALID Pipeline Segments

Pipeline segments that have been classified with a MAOP designation of UNVALID can be further categorized into the following subgroups to identify the specific missing critical information needed to validate MAOP:

- 116 Segments (PG-150120 Settlement Agreement)
- Missing Pressure Test Records
- Current MAOP not consistent with 49 CFR 192.619
- Missing 49 CFR 192.517 Records
- Missing Component Information with Pressure Test

TABLE 7: UNVALID PIPELINE SEGMENT BY SUBGROUP

UNVALID Designation	Count	Pipe Length (Miles)
116 Segments*	98	158.6
Missing Pressure Test Records	317	4.2
Current MAOP not consistent with 49 CFR 192.619	824	13.6
Missing 49 CFR 192.517 Records	227	13.5
Missing Component Information with Pressure Test	1,185	79.7
TOTAL	2,651	269.6

* Remaining 116 Segment (PG-150120 Settlement Agreement) count and mileage.

116 Segments (PG-150120 Settlement Agreement)

Pipeline segments identified by Cascade as part of the Settlement Agreement PG-150120 as having insufficient records to confirm the current MAOP. Work began in 2015 to validate MAOP of these 116 pipeline segments. An update was provided to the WUTC in the Six-Month Status Report submitted on September 29, 2017.

Missing Pressure Test Records

Pipeline segments where no records of a pressure test were found during MAOP validation.

Current MAOP not consistent with 49 CFR 192.619

- Pressure Rated Fittings: 7 Segments – 0.3 Miles

Pipeline segments including a pipe, fitting, or component(s) where the pressure rating indicated a lower pressure rating than the current MAOP.

- Design Pressure: 4 Segments – 0.1 Miles

Pipeline segments including a pipe, fitting, or component(s) where the design pressure, calculated per 49 CFR 192.105, was calculated to have a lower design pressure than the current MAOP. The design pressure was calculated using the pipe, fitting, or component’s yield strength, outside diameter, wall thickness, design factor, longitudinal joint factor, and temperature derating factor. Where parameters were unknown, most stringent values were used. Values used are described in Section 2 - Missing Critical Information.

- Insufficient Test Pressure: 813 Segments – 13.2 Miles

Pipeline segments where records of the pressure test indicated a test pressure, divided by the factors determined in accordance with 49 CFR 192.619 (a) (2) (ii), is insufficient for the current MAOP.

Missing 49 CFR 192.517 Records

Pipeline segments where the determined MAOP meets the terms of 49 CFR 192.619, but pressure test record does not include all of the information listed in 49 CFR 192.517 (a). Pressure test records for segments were found to be missing names of employee responsible for the pressure test, test medium, and test duration. If a pipeline segment included test by, test medium, test pressure, and test duration, it was included as meeting the requirements of 49 CFR 192.517.

Requirements of 49 CFR 192.517 were effective beginning on November 11, 1970. The requirements of 49 CFR 192.517 do not apply for segments installed prior to this date.

Missing Component Information with Pressure Test

Pipeline segments where the segment design pressure and pressure test information were sufficient to validate the current MAOP, but segment has a component that could not be verified from the records review. These segments are primarily inlet lines to HPSS and regulator stations where the connection to the main could not be determined.

Transmission Pipeline Segments

Pipeline segments with percent SMYS greater than or equal to 20% are highlighted in orange on Attachment 1. New pipeline segments reclassified as transmission will be incorporated into Cascade’s Transmission Integrity Management Program (TIMP) and will be maintained as transmission lines per Cascade Company Procedures. Baseline assessments for all pipelines reclassified as transmission status shall be completed by the end of 2020. All unvalidated pipeline segments with SMYS of 20% or greater will be leak surveyed four times annually. Once information is available to substantiate SMYS below 20%, or to validate the MAOP of a pipeline segment, that pipeline segment will return to leak survey intervals prescribed by Cascade Company Procedures. Cascade will notify Commission Staff when a pipeline segment returns to normal survey intervals and will make available records of the basis for the action.

Pressure Reductions over 30% SMYS

Currently, there are five pipelines with unvalidated pipeline segments that have been identified with low frequency ERW or an unknown seam type and a calculated percent SMYS greater than 30%. The following five pipelines are currently operating at a 20% pressure reduction:

- 8” Central Whatcom Transmission Line
- 8” Bellingham Transmission Line
- 8” Anacortes Transmission Line
- 8” March Point Transmission Line
- 8” Lake Terrell Rd Transmission Line

Through this review, additional pipeline segments were identified meeting the criteria above. The segments that are currently operating over 30% SMYS are associated with the following pipelines:

- 8” and 12” Kitsap HP and Transmission Lines
- 16” March Point Transmission Line
- 16” North Whatcom Transmission Line
- East Stanwood Odorizer Station (017-O-003)

Each of these systems were modeled to determine if a 20% pressure reduction could be performed.

8" and 12" Kitsap HP and Transmission Lines

Pressure reduction of the 8" and 12" Kitsap system would put Cascade in a position of not being able to meet current demands on the system. Segments currently operating over 30% SMYS are post-code and were all installed in 1996 or later. Cascade material specifications post-1991 would indicate pipe used would have been API 5L with a minimum yield strength of 35,000 psig and ERW or SMLS seam type. Fittings would have a minimum yield strength of 35,000 psig and standard wall thickness. Cascade is currently coordinating with a third party to have in-situ testing completed early 2018. Testing will allow Cascade to determine yield strength and wall thickness to be able to accurately calculate percent SMYS.

16" March Point Transmission Line

The 8" Anacortes and 8" March Point Lines are currently under a 20% pressure reduction and further pressure reduction would put Cascade in a position of not being able to meet the current demands on the system. Segments currently operating over 30% SMYS are post-code and were all installed in 1993 or later. Cascade material specifications post-1991 would indicate pipe used would have been API 5L with a minimum yield strength of 35,000 psig and ERW or SMLS seam type. Fittings would have a minimum yield strength of 35,000 psig and standard wall thickness. Cascade is currently coordinating with a third party to have in-situ testing completed early 2018. Testing will allow Cascade to determine yield strength and wall thickness to be able to accurately calculate percent SMYS.

16" North Whatcom Transmission Line

This pipeline is currently operating at 535 psig (MAOP = 600 psig) based on 49 CFR 192.917 (3) requirements for considering manufacturing and construction defects to be stable. In addition, the 8" Central Whatcom Line is currently operating under a 20% pressure reduction and further pressure reductions would put Cascade in a position of not being able to meet the current demands on the system. The segment is currently operating over 30% SMYS, and is post-code installation with a post-installation pressure test of 900 psig. Cascade is currently coordinating with a third party to have in-situ testing completed early 2018. Testing will allow Cascade to determine yield strength and wall thickness to be able to accurately calculate percent SMYS.

East Stanwood Odorizer Station (017-O-003)

This pipeline segment is at the odorizer station east of Stanwood which is where Cascade currently odorizes the gas directly from William's Pipeline at the take-off of William's pipeline to Stanwood. This site currently has no way to directly regulate pressure to perform a pressure reduction without having Williams lower the pressure on their system. Fittings are the only piece of this pipeline segment that are currently over 30% SMYS. Fittings are standard wall, Grade B, and the seam type is unknown. This odorizer station is scheduled for replacement in 2018.

4. ACTION PLAN

Cascade has reviewed each transmission and HP distribution pipeline segment and identified segments with missing critical information. Attachment 1 contains the pipelines by district and the overall action plans for each segment. Time frames for completion of each action plan are outlined in the Section 6 and plans of action described in the Processes to Address Missing Critical Information section below.

Processes to Address Missing Critical Information

Methods that will be employed by Cascade may include:

- Excavation and Field Testing to Determine Pipe and Fitting Properties
- Pressure Testing
- Replacement
- Exposing and Verify Components
- Downrate
- Integrity Management (DIMP/TIMP)
- Accept Most Stringent Criteria
- Uprate Records

Any process considered to validate data not listed above will be submitted to the WUTC for review prior to execution. Any new or innovative processes for validating pipe characteristics shall be submitted to the Commission for review.

Excavation and Field Testing to Determine Missing Pipe and Fitting Properties

To obtain missing pipe and fitting properties, excavation and field testing will be performed through scheduled and routine excavations to confirm known properties and obtain missing critical information. The following properties will be obtained:

- Pipe diameter of pipe and fittings will be measured.
- Wall thickness of pipe and fittings will be measured with an Ultrasonic Thickness (UT) gauge.
- Yield strength and/or longitudinal seam type will be determined through mechanical testing when samples are available at an accredited material testing laboratory in accordance with 49 CFR 192.107. Yield strength may also be determined by non-destructive in-situ testing as described in a letter to the WUTC on June 2, 2015. Cascade has contracted with a third-party to perform a statistical analysis of pipeline segments with missing pipe grade to determine the number of sampling points that will be required to validate pipe grade. Analysis is conducted in accordance with 49 CFR 192 Appendix B – Qualification of Pipe. Cascade has also contracted with a third-party to perform in-situ testing at the determined locations.

Pressure Testing

In instances where pressure testing is required, Cascade's primary consideration is to isolate the pipeline and perform the pressure test. Test medium, pressure, and duration will be based on current Cascade procedures. After completion of a successful pressure test, the pipeline will be placed back into service.

Pressure testing an existing pipeline segment presents many different challenges, one of which is maintaining service to customers during the test. To maintain service to customers, Cascade plans to utilize liquefied natural gas or compressed natural gas. In some cases, Cascade may need to interrupt service to be able to perform the test.

An additional challenge to pressure testing existing pipelines with missing critical information is ensuring the pressure test is performed safely. Pressure testing requires proper preparation and precautions to be in place to protect public, environment, and employees during the test. Test medium is also a critical factor in performing a test safely. When nitrogen cannot be used as a test medium, additional steps and timing are required to allow for a pipeline segment to be hydrotested.

All proposed pressure testing options will meet 49 CFR 192 Subpart J requirements.

Replacement

To address missing critical information, replacement of a pipeline segment or facility may be required due to various factors including, but not limited to integrity management concerns, operational history, or when other actions aren't feasible.

Expose and Verify Components

To obtain missing component information, field verification can be performed by exposing and performing a visual inspection to verify that the components installed match validation records and to verify the pressure ratings of pressure rated components.

Missing facility information will be field verified during routine maintenance activities to confirm components match installation drawings and determine unknown facility components.

Downrate

In some cases where Cascade has insufficient information to validate current MAOP, Cascade will lower the existing MAOP to a level where records are available to establish a lower MAOP.

Integrity Management (DIMP/TIMP)

To address critical missing information, Cascade will utilize its Distribution Integrity Management Program (DIMP) and TIMP to address risks associated with missing critical information. Two specific areas where DIMP and TIMP will be utilized, is to address UNVALID segments with missing 49 CFR 192.517 records and pipeline segments with missing component information with a valid pressure test. Upon completion of MAOP validation, Cascade's TIMP and DIMP will be updated as required to account for missing critical information.

Missing 49 CFR 192.517 Records

Cascade plans to utilize DIMP to address missing critical information associated with missing records required by 49 CFR 192.517. Missing 49 CFR 192.517 records will be incorporated into DIMP and mitigated by incorporating the associated risk into Cascade's DIMP risk analysis model. Cascade plans to differentiate between the risk associated with a pipe that has all the required records per 49 CFR 192.517 and the same type of pipe that does not have these records. The intent is to incorporate the risk so that a pipe segment that is missing records will have a higher priority for risk mitigation than the same type of pipe that has required records, but not to increase the risk so significantly that the lack of records would raise the priority of the pipe

segment above other DIMP risks with a higher likelihood and consequence of leaks (e.g. external corrosion, material failure, weld, or joint failure).

Missing Component Information with Pressure Test

Cascade plans to utilize DIMP to address pipeline segments which have pressure test records but are missing component information. An action plan will be developed in DIMP to address missing component information by exposing and verifying an appropriate sample size of pipeline segments with similar parameters (e.g. type of missing critical information, year installed, district, and MAOP). From the results of the sampling Cascade will establish a confidence level from the information gathered and will evaluate if additional excavation and verification is required to verify remaining missing information. Subject Matter Expert's (SME) information will also be gathered and utilized. A large portion of this information will be obtained from other actions required in this plan.

Accept Most Stringent Criteria

Cascade will accept and operate a pipeline segment using the most stringent criteria as allowed by 49 CFR 192.107 and 192.111 when values are unknown. Cascade will use the most conservative values for wall thickness, pipe grade, and seam factor as allowed to calculate the design pressure and percent SMYS.

Uprate Records

Uprate records will be incorporated into the plan as records are discovered that indicate an uprate occurred. Pipeline segments which were part of the uprate will be reviewed and evaluated to determine if pipeline characteristics defined in 49 CFR 192.105 are unknown. If unknown pipe characteristics exist, 49 CFR 192.619 (a) (1) (i) and (ii) will be applied for the design pressure. If the MAOP designation of a segment changes to unvalidated, the segment will be incorporated into the plan and the segment will be validated per the plan.

5. PRIORITIZATION

To determine the prioritization of MAOP validation efforts, Cascade prepared a risk matrix to individually evaluate each transmission and HP distribution pipeline segment with missing critical information. Components of the priority matrix include:

- Percent SMYS of pipe and fittings based on most stringent criteria for missing pipe characteristics
- Available pressure test records
- Number of High Consequence Areas (HCAs) on pipeline segment
- Segment class location
- Low frequency ERW and unknown seam types when percent SMYS > 25%
- Pipe vintage with special consideration for pre-code pipe with unknown characteristics
- Pipe material, installation characteristics, or maintenance records that indicate increased risk
- Length of segment

The risk matrix produced a total risk score for each pipeline segment. The risk score was used as a basis for determining prioritization of validation of each of the pipeline segments identified as missing critical

information to validate MAOP. Factors outside of the risk score will also be considered and evaluated to determine the most effective and timely way to address pipeline segments with a higher risk.

In general, pre-code pipeline segments operating at greater than 30% SMYS without pressure test records are the highest priorities, with subsequent priorities influenced by overall percent SMYS and the availability of pressure test records.

6. SCHEDULE

The time frame for completion of action required for MAOP validation for each transmission and HP distribution pipeline segment with missing critical information is outlined below. The priority matrix and total risk score was the basis for the scheduling of action plans.

From the priority matrix, the total risk score for all pipeline segments ranged from 10.13 to 199.91, with an average risk score of 43.54. In comparison, the total risk score for the previously identified 116 segments ranged from 44.87 to 199.91. Through this review, segments were identified with a higher total risk score than the lowest risk score of the 116 segments. For the basis of developing the schedule for the additional segments, Cascade used 49.01 as the risk score level for determining when MAOP validation action would be completed. Only one of the 116 segments had a risk score lower than 49.01, this segment’s risk score was not used due to the relative risk compared to the risk scores of the other 116 segments.

TABLE 10: UNVALID SEGMENT COUNT BY TOTAL RISK SCORE

	Segment Count	Mileage (miles)
116 Segments*	98	158.6
New Segments Addressed w/ 116 Segment**	344	3.3
New Segments Not Addressed w/ 116 Segment, Total Risk Score greater than 49.01**	256	6.7
New Segments Not Addressed w/ 116 Segment, Total Risk Score less than 49.01**	541	7.8
New Segments w/ Missing 192.517 Records	227	13.5
New Segments w/ Missing Component Information with Pressure Test	1,185	79.7
Total	2,651	269.6

* Remaining 116 Segment (PG-150120 Settlement Agreement) count and mileage.

** Segments with Missing Pressure Test Records and Current MAOP not consistent with 49 CFR 192.619.

116 Segments (PG-150120 Settlement Agreement)

For the 116 pipeline segments identified as missing critical information necessary for documenting the basis for validation of MAOP:

- Cascade will document the basis for validation of the MAOP on at least 50% of the mileage by December 31, 2018.
- Cascade will document the basis for validation of the MAOP on 100% of the mileage by December 31, 2023.
- Cascade has completed and documented MAOP validation on five of the 116 segments currently operating at 30% SMYS or above that were missing critical information necessary to document the basis for validation of MAOP.

New Segments with Missing Pressure Test Records and Current MAOP not consistent with 192.619

For newly identified pipeline segments as missing critical information necessary for documenting the basis for validation of:

- Cascade has identified new additional segments currently operating at 30% SMYS or above that are missing critical information to document the basis for validation of MAOP. Cascade will complete validation of new additional segments by December 31, 2019.
- Cascade will complete and document MAOP validation on segments with a total risk score greater than 49.01, by December 31, 2023.
- Cascade will complete and document MAOP validation on segments with a total risk score less than 49.01, by December 31, 2028.

Missing 49 CFR 192.517 Records

Cascade will develop its plan to address pipeline segments missing 49 CFR 192.517 records by December 31, 2018. Missing 192.517 records will be incorporated into DIMP and included in the 2019 DIMP model run.

Missing Component Information with Pressure Test

Cascade will develop its plan to address pipeline segments that have pressure test records but are missing component information by December 31, 2018. Initiation of field verification plan will begin in 2019 and be completed by December 31, 2028.

Facilities

Cascade will perform field verification of facilities during routine maintenance beginning in 2018 with completion by the end of 2020. MAOP validation on all facilities that are missing critical information will be completed by December 31, 2028. Priority of field verification and action will be based on percent SMYS.

7. PROCESS FOR CORRECTIVE ACTIONS AND UPDATE TO PLAN

Cascade will continue to evaluate all current and future transmission and HP distribution pipelines on an ongoing basis to verify that critical information used to validate MAOP is known and to identify when immediate corrective actions are required. Existing pipelines will be evaluated annually by Cascade's System Integrity group through the DIMP plan and model. The plan and model will be reviewed annually to ensure that information obtained as part of this MAOP Validation & Determination Plan is incorporated. Continuous review of existing pipeline segments will be ongoing, and if any critical information necessary to validate MAOP is discovered to be insufficient, corrective actions will be taken and the pipeline segment will be incorporated into the plan.

Cascade will continue to submit to Commission Staff a written status report every six months, providing updates on progress of this plan.

8. FINDINGS

Results of the MAOP review are presented in the attached spreadsheets.

- Attachment 1: Pipeline MAOP Summary

TABLE 11: PIPELINE SEGMENT MAOP DESIGNATION SUMMARY

MAOP Designation	Count	Pipe Length (Miles)
VALID	525	329.7
UNVALID	2,651	269.6
TOTAL	3,176	599.3

- Attachment 2: Facility MAOP Summary

TABLE 12: FACILITY MAOP DESIGNATION SUMMARY

MAOP Designation	Count
VALID	476
UNVALID	336
TOTAL	812

Column descriptions for each spreadsheet can be found below.

Attachment 1: Pipeline MAOP Summary

Critical missing information for pipeline segments are shown as yellow cells, percent SMYS values greater than or equal to 20% SMYS are shown as orange cells.

Work Order #	Work order number associated with the feature.
Segment Name	Name of the pipeline segment.
Existing MAOP	Existing MAOP of the pipeline segment.
Class Location (1,2,3,4)	Class location of segment.
Uprate (YES/NO)	Segment part of an uprate.
Design Pressure 192.619 (a) (1) (psig)	Minimum calculated design pressure of the pipeline segment using "Class Location Design Factor," "Outside Diameter," "Wall Thickness," "SMYS," and "Longitudinal Joint Factor."
Test Pressure (psig)	Minimum test pressure from pressure test in psig.
Test Pressure 192.619 (a) (2) (psig)	Minimum MAOP established by pressure test, test pressure divided by the appropriate class location factor from 49 CFR 192.619 (a) (2).
Pressure Class Rating (psig)	Minimum pressure rating of pressure rated components.
Hi-5 Pressure (psig) 192.619 (a) (3)	Highest actual operating pressure of pipeline segment between July 1, 1965 and June 30, 1970.
MAOP per 192.619 (psig)	Minimum MAOP for pipeline segment from "Design Pressure 192.619 (a) (1) (psig)," "Test Pressure 192.619 (a) (2) (psig)," "Pressure Class Rating (psig)," and "Hi-5 Pressure (psig) 192.619 (a) (3)."
Meets 192.619	Segment meets criteria of 49 CFR 192.619 and MAOP is greater than or equal to existing MAOP.

Meets 192.517	Segment pressure test includes items necessary to meet the criteria of 49 CFR 192.517.
MAOP Designation	MAOP designation of segment, "VALID" or "INVALID."
Max Outside Diameter, OD1 (inches)	Maximum outside diameter of pipe installed under work order # in inches.
Min Wall Thickness, WT1 (inches)	Minimum wall thickness of maximum outside diameter of pipe installed under work order # in inches.
Min SMYS, SMYS1 (psig)	Minimum yield strength of maximum outside diameter of pipe installed under work order # in inches.
Min Longitudinal Joint Factor, E1 (E)	Minimum longitudinal joint factor of maximum outside diameter of pipe installed under work order # in inches.
Unknown Pressure Rated Fitting (YES/NO)	Segment contains components with unknown pressure rating.
Fittings w/ Assumed SMYS (YES/NO)	Segment contains fittings with unknown yield strength (24,000 psig).
Fittings w/ Assumed Joint Factor (YES/NO)	Segment contains fittings with unknown longitudinal joint factor.
Max Pipe % SMYS	Maximum pipe percent SMYS of segment.
Max Fitting % SMYS	Maximum fitting percent SMYS of segment.
Install Date (Year)	Year segment installed.
Pipe Length (Feet)	Length of segment in feet.
Total Risk Score	Total risk score from decision matrix.
Action Plan	Action plan for MAOP validation.
Action Year	Action year for MAOP validation.

Attachment 2: Facility MAOP Summary

Work Order #	Work order number associated with the feature.
Facility ID	Cascade facility ID of facility.
Facility Type	Type of facility that is related to the feature. (Odorizer, Regulator, Valve Setting, Meter Station)
Existing Inlet MAOP (psig)	Existing Inlet MAOP of Facility.
Existing Outlet MAOP (psig)	Existing Outlet MAOP of Facility.
Class Location (1,2,3,4)	Class location of facility.
Design Pressure 192.619 (a) (1) (psig)	Minimum calculated design pressure of the facility using "Class Location Design Factor," "Outside Diameter," "Wall Thickness," "SMYS," and "Longitudinal Joint Factor."
Test Pressure (psig)	Minimum test pressure from pressure test in psig.
Test Pressure 192.619 (a) (2) (psig)	Minimum MAOP established by pressure test, test pressure divided by the appropriate class location factor from 49 CFR 192.619 (a) (2).
Pressure Class Rating (psig)	Minimum pressure rating of pressure rated components.
MAOP per 192.619 (psig)	Minimum MAOP for pipeline segment from "Design Pressure 192.619 (a) (1) (psig)," "Test Pressure 192.619 (a) (2) (psig)," "Pressure Class Rating (psig)," and "Hi-5 Pressure (psig) 192.619 (a) (3)".

Cascade Natural Gas Corporation
MAOP Determination & Validation Plan

MAOP Designation	MAOP designation of segment, "VAILD" or "UNVALID."
Max % SMYS	Maximum percent SMYS of facility.

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-5 Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
50202-T	009-V-045, 046, 051, 053	499	3		418	0	0	720		0			UNVALID	8.625	0.188	24000	0.8	NO	YES	YES	47.69%	47.69%	1996	193.0	143.19	Pressure Test/Replace	2018-2019
20C6308	8" Kitsap Line	366	3		802	750	535	250		250		NA	UNVALID	8.625	0.188	46000	0.8	NO	NO	YES	18.25%	18.25%	1963	18,760.2	86.25	116 Segment, Expose/Verify	2016
50202	009-V-043, 044, 047, 048, 049, 050	499	3		376	750	500	UNKV		376			UNVALID	12.75	0.25	24000	0.8	YES	YES	YES	53.02%	53.02%	1996	62.9	117.52	In-Situ Test	2018-2019
44000-T	8" Kitsap Line (Shomocker Creek, 009-V-045)	499	3		418	1080	720	UNKV		418		X	UNVALID	8.625	0.188	24000	0.8	YES	YES	YES	47.69%	16.03%	1995	15.2	112.69	116 Segment, Expose/Verify	2017
20C6308 (R-11)	009-R-011	809	3		1373	0	0	1440		0			UNVALID	8.625	0.322	46000	0.8	NO	NA	NA	23.55%	NA	1964	24.2	108.05	Pressure Test/Replace	2018-2023
77C6321	4" Montesano H.P. Distribution System	135	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	8.11%	NA	1964	1,763.7	85.11	116 Segment, Replace	2023
75C6817	009-R-001	305	3		1183	0	0	NA		0			UNVALID	6.625	0.28	35000	0.8	NO	NO	YES	10.31%	10.31%	1964	25.0	82.31	Pressure Test/Replace	2018-2023
75C6312	009-V-009, 015, 037, 038	150	3		499	0	0	720		0			UNVALID	8.625	0.322	35000	0.8	NO	YES	YES	9.01%	9.01%	1965	62.5	77.51	Pressure Test/Replace	2018-2023
20C6308 (R-12)	Inlet 009-R-012	366	3		1106	0	0	NA		0			UNVALID	4.5	0.237	35000	0.6	NO	NA	NA	9.93%	NA	1964	27.5	75.43	Pressure Test/Replace	2018-2023
41639	Inlet 009-R-035	250	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	15.02%	NA	1992	31.1	71.52	Pressure Test/Replace	2018-2023
44000	12" Kitsap H.P. Line	499	3		1017	1080	720	250		250		X	UNVALID	12.75	0.312	52000	0.8	NO	NO	YES	19.61%	16.31%	1995	35,827.6	70.61	116 Segment, Expose/Verify	2017
22551	Inlet 009-R-022	155	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	9.31%	NA	1973	2.8	70.31	Pressure Test/Replace	2018-2023
78C7902	2" Elma Rendering Plant H.P. Line	150	3		933	0	0	UNKV		0			UNVALID	2.375	0.154	35000	0.6	YES	YES	YES	3.30%	4.82%	1964	5,906.0	69.32	116 Segment, Replace	2022
1265	Inlet M&R CC000112	250	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	15.02%	NA	2001	82.7	67.02	Pressure Test/Replace	2018-2023
50200 (V-54)	009-V-054	499	3		1223	0	0	NA		0			UNVALID	12.75	0.375	52000	0.8	NO	NA	NA	16.31%	NA	1997	30.6	66.31	Pressure Test/Replace	2018-2023
18828	Inlet 009-R-032	499	3		1193	300	200	1440		200			UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	12.54%	NA	1971	187.3	65.54	Pressure Test/Replace	2018-2023
1863500	HPSS 1863500	499	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1966	22.4	62.16	Pressure Test/Replace	2018-2023
1863530	HPSS 1863530	499	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1993	24.3	60.66	Pressure Test/Replace	2018-2023
4320771326	HPSS 2522359	150	3		933	0	0	UNKV		0			UNVALID	2.375	0.154	24000	0.6	YES	YES	YES	4.82%	4.82%	1964	409.0	60.32	Addressed w/ 116 Segment	2022
1811600	HPSS 1811600	499	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1994	15.1	60.16	Pressure Test/Replace	2018-2023
14845	Inlet 009-R-015	366	3		1193	100	66	1440		66			UNVALID	1.315	0.109	24000	0.6	NO	NA	NA	9.20%	NA	1968	7.3	59.70	Pressure Test/Replace	2018-2023
1811611	HPSS 1811611	499	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1996	60.2	59.16	Pressure Test/Replace	2018-2023
1655	Inlet M&R 25776	100	3		499	0	0	UNKV		0			UNVALID	4.5	0.156	24000	0.6	YES	YES	YES	6.01%	6.01%	1989	28.0	59.01	Pressure Test/Replace	2018-2023
9867583287	Service Stub	155	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	3.00%	NA	1963	0.0	58.50	Pressure Test/Replace	2018-2023
2522359	HPSS 2522359	150	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1964	5.0	57.40	Addressed w/ 116 Segment	2022
2522364	HPSS 2522364	150	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1964	40.6	57.40	Pressure Test/Replace	2018-2023
25775	2" Elma (RHD) H.P. Line	100	3		499	100	66	1440		66			UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	2.20%	6.01%	1978	1,572.7	57.01	116 Segment, Downrate	2018
C0067138	Inlet 009-R-042	305	3		933	0	0	1440		0			UNVALID	2.375	0.154	24000	0.6	NO	YES	YES	9.80%	9.80%	2001	29.0	56.80	Pressure Test/Replace	2018-2023
19313	Inlet 009-R-018	499	3		1549	100	66	1200		66			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	9.66%	NA	1971	9.1	56.66	Pressure Test/Replace	2018-2023
1864030	HPSS 1864030	499	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1971	3.0	56.66	Pressure Test/Replace	2018-2023
10442	Inlet 009-R-013	155	3		1193	0	0	UNKV		0			UNVALID	1.315	0.109	24000	0.6	YES	NA	NA	3.90%	NA	1966	28.5	56.40	Pressure Test/Replace	2018-2023
186015	Inlet 009-R-055	499	3		1569	0	0	720		0			UNVALID	6.625	0.25	52000	0.8	NO	NO	YES	12.71%	11.35%	2011	32.2	55.71	Pressure Test/Replace	2018-2023
1864029	HPSS 1864029	499	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1980	5.2	52.16	Pressure Test/Replace	2018-2023
C0068316	8" Kitsap Line	366	3		811	950	633	NA		633		X	UNVALID	8.625	0.25	35000	0.8	NO	YES	YES	18.04%	9.20%	2002	176.2	50.54	DIMP/TIMP, Missing 192.517	2018-2019
C0074544	4" Satsop H.P. Line	305	3		499	1000	666	NA		499		X	UNVALID	4.5	0.156	24000	0.6	NO	YES	YES	18.33%	18.33%	2005	151.8	49.33	DIMP/TIMP, Missing 192.517	2018-2019
2440103	HPSS 2440103	305	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	1979	19.0	48.90	Pressure Test/Replace	2024-2028
C0070660	Inlet 009-R-043	250	3		1361	0	0	1440		0			UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	5.51%	5.51%	2003	144.4	48.51	Pressure Test/Replace	2024-2028
2083832	Service Stub	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.90%	2.90%	1964	42.1	48.40	Pressure Test/Replace	2024-2028
2083850	HPSS 2083850	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1964	69.1	48.40	Pressure Test/Replace	2024-2028
2522365	HPSS 2522365	150	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1964	37.1	48.40	Pressure Test/Replace	2024-2028
1864070	HPSS 1864070	499	3		1549	600	400	UNKV		400			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1989	15.0	47.66	Pressure Test/Replace	2024-2028
186016	Outlet 009-R-055	366	3		1553	0	0	720		0			UNVALID	6.625	0.25	52000	0.8	NO	NO	YES	9.33%	9.43%	2011	31.5	47.43	Pressure Test/Replace	2024-2028
2084002	Inlet 009-R-048	150	3		1549	100	66	275		66			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	2.90%	NA	1965	18.0	47.40	Pressure Test/Replace	2024-2028
2083826	Service Stub	150	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.90%	2.90%	1965	42.1	47.40	Pressure Test/Replace	2024-2028
2083836	Service Stub	150	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.90%	2.90%	1965	42.1	47.40	Pressure Test/Replace	2024-2028
186014	Outlet 009-R-055	366	3		1569	0	0	NA		0			UNVALID	6.625	0.25	52000											

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-5 Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year	
1863487	HPSS 1863487	499	3		1549	910	1	UNKV		1			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	2005	32.9	39.66	Pressure Test/Replace	2024-2028	
2083843	HPSS 2083843	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1974	18.0	39.40	Pressure Test/Replace	2024-2028	
2083846	HPSS 2083846	150	3		1549	300	200	UNKV		200	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1972	18.0	39.40	Expose/Verify, DIMP/TIMP	2018-2028
C0080941	8" Grays Harbor H.P. Line	305	3		973	830	553	720		553	X		UNVALID	8.625	0.25	42000	0.8	NO	NO	YES	12.53%	11.67%	2006	225.6	39.03	DIMP/TIMP, Missing 192.517	2018-2019	
203116	Inlet 009-R-050	150	3		2260	100	71	NA		71			UNVALID	1.05	0.113	35000	0.6	NO	NA	NA	1.99%	NA	1969	19.0	38.49	Pressure Test/Replace	2024-2028	
2440025	HPSS 2440025	305	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	1991	39.8	37.90	Expose/Verify, DIMP/TIMP	2018-2028
26452	Main Stub	100	3		933	100	66	250		66			UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	2.20%	3.21%	1978	18.0	37.71	Addressed w/ 116 Segment	2018	
223505 - OUT	Outlet 009-R-061	305	3		1205	2	1	720		1			UNVALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2015	181.8	37.12	Pressure Test/Replace	2024-2028	
2490046	HPSS 2490046	305	3		1549	90	1	UNKV		1			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2003	17.0	36.90	Pressure Test/Replace	2024-2028	
2440036	HPSS 2440036	135	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.61%	2.61%	1979	10.0	36.61	Addressed w/ 116 Segment	2023	
45256	Inlet 009-R-036	366	3		1361	750	500	NA		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	8.06%	8.06%	1993	23.5	35.06	DIMP/TIMP, Missing 192.517	2018-2019	
2440035	HPSS 2440035	135	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.61%	NA	1983	20.0	34.61	Addressed w/ 116 Segment	2023	
46522	Inlet 009-R-037	366	3		1361	750	500	1440		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	8.06%	NA	1994	27.2	34.56	DIMP/TIMP, Missing 192.517	2018-2019	
C0080671	Inlet 009-R-054	250	3		1549	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	2006	21.7	34.34	Pressure Test/Replace	2024-2028	
C0079627	Inlet 009-R-046	305	3		933	905	603	1440		603	X		UNVALID	2.375	0.154	24000	0.6	NO	YES	YES	9.80%	9.80%	2006	9.2	34.30	DIMP/TIMP, Missing 192.517	2018-2019	
2083831	HPSS 2083831	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1985	18.0	33.90	Pressure Test/Replace	2024-2028	
1853460	HPSS 1853460	125	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.42%	NA	1985	58.1	33.42	Pressure Test/Replace	2024-2028	
1853450	HPSS 1853450	125	3		1549	600	400	UNKV		400	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.42%	NA	1984	47.0	32.92	Expose/Verify, DIMP/TIMP	2018-2028
2520004	HPSS 2520004	305	3		1549	750	500	UNKV		500	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2001	13.0	32.90	Expose/Verify, DIMP/TIMP	2018-2028
2520005	HPSS 2520005	305	3		1549	750	500	UNKV		500	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2001	15.0	32.90	Expose/Verify, DIMP/TIMP	2018-2028
2490020	HPSS 2490020	100	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	1.94%	NA	1986	51.2	32.44	Addressed w/ 116 Segment	2018	
2520001	HPSS 2520001	305	3		1549	750	500	UNKV		500	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2002	23.0	32.40	Expose/Verify, DIMP/TIMP	2018-2028
2522347	HPSS 2522347	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.90%	2.90%	1988	39.9	32.40	Addressed w/ 116 Segment	2022	
2083960	HPSS 2083960	150	3		1549	450	300	UNKV		300	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1989	166.0	31.90	Expose/Verify, DIMP/TIMP	2018-2028
1854415	HPSS 1854415	250	3		1549	120	80	UNKV		80			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1993	15.0	31.84	Pressure Test/Replace	2024-2028	
1854416	HPSS 1854416	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1995	157.0	31.84	Pressure Test/Replace	2024-2028	
2520006	HPSS 2520006	305	3		1549	755	503	UNKV		503	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2004	20.3	31.40	Expose/Verify, DIMP/TIMP	2018-2028
2522360	HPSS 2522360	150	3		1549	600	400	UNKV		400	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1990	118.6	31.40	Expose/Verify, DIMP/TIMP	2018-2028
2522366	HPSS 2522366	150	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1991	201.0	30.90	Expose/Verify, DIMP/TIMP	2018-2028
1854425	HPSS 1854425	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1995	20.0	30.84	Pressure Test/Replace	2024-2028	
29119	Inlet 009-R-024	150	3		2260	100	66	1440		66			UNVALID	1.05	0.113	35000	0.6	NO	NA	NA	1.99%	NA	1982	10.4	30.49	Addressed w/ 116 Segment	2022	
32090	Inlet 009-R-051	155	3		1361	100	66	250		66			UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	3.41%	NA	1985	21.3	30.41	Pressure Test/Replace	2024-2028	
2522416	HPSS 2522416	305	3		1549	905	603	UNKV		603	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	5.90%	NA	2006	23.4	30.40	Expose/Verify, DIMP/TIMP	2018-2028
2083827	HPSS 2083827	150	3		1549	600	400	UNKV		400	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1990	18.0	30.40	Expose/Verify, DIMP/TIMP	2018-2028
2083828	HPSS 2083828	150	3		1549	600	400	UNKV		400	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1990	59.0	30.40	Expose/Verify, DIMP/TIMP	2018-2028
1854417	HPSS 1854417	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1996	19.0	30.34	Pressure Test/Replace	2024-2028	
1854600	HPSS 1854600	250	3		1549	450	300	UNKV		300	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1994	80.0	30.34	Expose/Verify, DIMP/TIMP	2018-2028
1811700	HPSS 1811700	155	3		1549	600	400	UNKV		400	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	3.00%	NA	1991	19.1	30.00	Expose/Verify, DIMP/TIMP	2018-2028
2490041	HPSS 2490041	100	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	1.94%	NA	1989	48.6	29.94	Expose/Verify, DIMP/TIMP	2018-2028
2083854	HPSS 2083854	150	3		1549	450	300	UNKV		300	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1991	30.0	29.90	Expose/Verify, DIMP/TIMP	2018-2028
1854601	HPSS 1854601	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1997	73.0	29.84	Pressure Test/Replace	2024-2028	
172883	Inlet 009-R-053	366	3		2123	100	66	720		66			UNVALID	1.315	0.133	35000	0.6	NO	NO	YES	5.17%	5.17%	2010	39.5	28.67	Pressure Test/Replace	2024-2028	
2083915	HPSS 2083915	150	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1996	20.0	28.40	Pressure Test/Replace	2024-2028	
2083916	HPSS 2083916	150	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1994	14.0	28.40	Expose/Verify, DIMP/TIMP	2018-2028
2522361	HPSS 23189	150	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1994	8.0	28.40	Expose/Verify, DIMP/TIMP	2018-2028
2440037	HPSS 2440037	135	3		1549	650	433	UNKV		433	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.61%	NA	1994	22.1	28.11	Expose/Verify, DIMP/TIMP	2018-2028
1853376	HPSS 1853376	125	3		1549	750	500	UNKV		500	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.42%	NA	1994	11.7	27.92	Expose/Verify, DIMP/TIMP	2018-2028
2083823	HPSS 2083823	150	3		1549	900	600	UNKV		600	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1995	60.1	27.90	Expose/Verify, DIMP/TIMP	2018-2028
2083824	HPSS 2083824	150	3		1549	750	500	UNKV		500	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1995	40.1	27.90	Expose/Verify, DIMP/TIMP	2018-2028
2522362	HPSS 2522362	150	3		1549	500	333	UNKV		333	X		Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	2.90%	NA	1995	15.0	27.90	Expose/Verify, DIMP/TIMP	2018-2028
2490010	HPSS 2490010	100																										

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
14338	2" North Shelton H.P. Line	125	3		933	600	400	1440		400	X	NA	VALID	2.375	0.154	24000	0.6	NO	YES	YES	4.02%	4.02%	1968	1,248.6	52.02	Accept Most Stringent Criteria	--
14781	2" North Shelton H.P. Line	125	3		933	180	128	NA		128	X	NA	VALID	2.375	0.154	35000	0.6	NO	YES	YES	2.75%	4.02%	1968	1,327.6	52.02	Accept Most Stringent Criteria	--
40981	4" North Shelton H.P. Line	250	3		877	600	400	NA		400	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	8.55%	8.55%	1992	28,678.8	51.05	Accept Most Stringent Criteria	--
183044	8" Kitsap Line	499	3		973	850	566	720		566	X	X	VALID	8.625	0.25	42000	0.8	NO	NO	YES	20.49%	12.85%	2011	129.5	49.49	Accept Most Stringent Criteria	--
180758	12" Kitsap H.P. Line	499	3		1223	1080	720	720		720	X	X	VALID	12.75	0.375	52000	0.8	NO	NO	YES	16.31%	16.31%	2011	5,930.6	49.31	Accept Most Stringent Criteria	--
58317, 57697	009-V-060, 061, 062, 063	499	3		1017	1080	720	720		720	X	X	VALID	12.75	0.312	52000	0.8	NO	NO	YES	19.61%	19.61%	2000	161.0	49.11	Accept Most Stringent Criteria	--
13523	2" North Shelton H.P. Line	125	3		1361	600	400	NA		400	X	NA	VALID	2.375	0.154	35000	0.6	NO	NA	NA	2.75%	NA	1968	2,997.2	46.75	Accept Most Stringent Criteria	--
SS000329	8" Kitsap Line (009-V-068, 069, 070)	499	3		1045	1080	720	720		720	X	X	VALID	8.625	0.322	46000	0.8	NO	NO	YES	14.53%	19.09%	2002	40.9	46.59	Accept Most Stringent Criteria	--
182291	8" Kitsap Line	499	3		1045	852	568	720		568	X	X	VALID	8.625	0.25	52000	0.8	NO	YES	YES	16.55%	19.09%	2012	108.4	46.59	Accept Most Stringent Criteria	--
46558	8" Kitsap Line	366	3		1045	750	500	720		500	X	X	VALID	8.625	0.277	46000	0.8	NO	NO	YES	12.39%	14.01%	1994	472.2	46.51	Accept Most Stringent Criteria	--
24986	4" Shelton H.P. Line	155	3		877	500	333	720		333	X	X	VALID	4.5	0.188	35000	0.6	NO	YES	YES	5.30%	4.20%	1977	112.8	45.30	Accept Most Stringent Criteria	--
40981-366	Inlet 009-R-034	366	3		877	600	400	720		400	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	12.52%	9.93%	1992	25.3	45.02	Accept Most Stringent Criteria	--
36730	6" Aberdeen H.P. Line	150	3		794	525	350	720		350	X	X	VALID	6.625	0.188	35000	0.8	NO	NO	YES	7.55%	5.07%	1989	1,432.3	44.05	Accept Most Stringent Criteria	--
41470	Inlet 009-R-033	499	3		1361	750	500	1440		500	X	X	VALID	2.375	0.154	35000	0.6	NO	NA	NA	10.99%	NA	1992	35.0	43.49	Accept Most Stringent Criteria	--
41120	Inlet 009-R-019	499	3		1361	750	500	1440		500	X	X	VALID	2.375	0.154	35000	0.6	NO	NA	NA	10.99%	NA	1994	31.6	42.49	Accept Most Stringent Criteria	--
SS000329	8" Kitsap Line (009-V-068, 069, 070)	499	3		1373	1080	720	NA		720	X	X	VALID	8.625	0.322	46000	0.8	NO	NA	NA	14.53%	NA	2002	17.7	42.03	Accept Most Stringent Criteria	--
SS000328	12" Kitsap Line (009-V-068, 069, 070)	499	3		1411	1080	720	1440		720	X	X	VALID	12.75	0.375	60000	0.8	NO	NO	YES	14.14%	14.14%	2002	16.0	41.64	Accept Most Stringent Criteria	--
23792	2" North Shelton H.P. Line	125	3		1361	600	400	250		250	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	2.75%	2.75%	1975	1,788.3	41.25	Accept Most Stringent Criteria	--
181677	8" Grays Harbor H.P. Line	305	3		1205	637	424	720		424	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	1,132.7	40.62	Accept Most Stringent Criteria	--
34477	4" Elma (R.H.D.) H.P. Loop Line	100	3		877	150	100	1440		100	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	3.42%	2.71%	1989	1,444.1	38.92	Accept Most Stringent Criteria	--
176437	8" Grays Harbor H.P. Line	305	3		1205	840	560	720		560	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	847.2	38.12	Accept Most Stringent Criteria	--
181678	8" Grays Harbor H.P. Line	305	3		1205	640	426	720		426	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	656.4	38.12	Accept Most Stringent Criteria	--
181679	8" Grays Harbor H.P. Line	305	3		1205	645	430	720		430	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	582.7	38.12	Accept Most Stringent Criteria	--
183985	8" Grays Harbor H.P. Line	305	3		1205	640	426	720		426	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	581.3	38.12	Accept Most Stringent Criteria	--
185510	8" Grays Harbor H.P. Line	305	3		1205	641	427	720		427	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	591.0	38.12	Accept Most Stringent Criteria	--
30702	4" Elma H.P. Line	150	3		877	600	400	400		400	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	5.13%	4.07%	1983	29.3	37.13	Accept Most Stringent Criteria	--
188090	8" Grays Harbor H.P. Line	305	3		1205	630	420	720		420	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2013	925.4	37.12	Accept Most Stringent Criteria	--
210746	009-V101, 102, 103	809	3		2426	1275	850	1440		850	X	X	VALID	8.625	0.322	65000	1	NO	NO	NO	16.67%	16.67%	2014	51.7	36.17	No Action Needed	--
186540	Outlet 009-R-057	499	3		1553	1100	733	720		720	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	12.71%	12.85%	2012	22.7	35.35	Accept Most Stringent Criteria	--
186535	Inlet 009-R-056	499	3		1569	1092	728	720		720	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	12.71%	11.35%	2012	50.4	35.21	Accept Most Stringent Criteria	--
186538	Outlet 009-R-057	499	3		1569	1100	733	NA		733	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	12.71%	11.35%	2012	50.9	35.21	Accept Most Stringent Criteria	--
186539	Inlet 009-R-057	499	3		1569	1100	733	720		720	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	12.71%	11.35%	2012	39.2	35.21	Accept Most Stringent Criteria	--
178875	8" Grays Harbor H.P. Line	305	3		1205	859	572	720		572	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2010	439.9	34.62	Accept Most Stringent Criteria	--
181676	8" Grays Harbor H.P. Line	305	3		1205	640	426	720		426	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	10.12%	7.86%	2011	455.3	34.12	Accept Most Stringent Criteria	--
52659	Inlet 009-R-040	366	3		1361	750	500	1440		500	X	X	VALID	2.375	0.154	35000	0.6	NO	NA	NA	8.06%	NA	1997	46.4	33.06	Accept Most Stringent Criteria	--
186757	009-R-058	305	3		1045	769	512	720		512	X	X	VALID	8.625	0.25	52000	0.8	NO	NO	YES	11.67%	7.86%	2016	86.7	32.17	Accept Most Stringent Criteria	--
1853445	Inlet 009-R-029	125	3		933	600	400	1440		400	X	Service	VALID	2.375	0.154	24000	0.6	NO	NA	NA	4.02%	NA	1990	54.9	31.52	Accept Most Stringent Criteria	--
51987	Inlet 009-R-039	250	3		1361	600	400	1440		400	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	5.51%	5.51%	1997	132.1	31.51	Accept Most Stringent Criteria	--
35967	Inlet 009-R-028	125	3		1361	600	400	1440		400	X	X	VALID	2.375	0.154	35000	0.6	NO	NA	NA	2.75%	NA	1988	29.8	27.25	Accept Most Stringent Criteria	--
186534	Outlet 009-R-056	366	3		1553	1092	728	NA		728	X	X	VALID	6.625	0.322	52000	0.8	NO	NO	YES	9.43%	9.43%	2012	24.7	26.93	Accept Most Stringent Criteria	--
186536	Outlet 009-R-056	366	3		1553	1092	728	720		720	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	9.33%	9.43%	2012	55.4	26.93	Accept Most Stringent Criteria	--
40412	Inlet 009-R-031	150	3		1361	900	600	1440		600	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	3.30%	3.30%	1991	58.0	26.30	Accept Most Stringent Criteria	--
189325	Inlet 009-R-059	305	3		1361	800	533	720		533	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	6.72%	6.72%	2012	29.1	24.22	Accept Most Stringent Criteria	--
189011 - IN	Inlet 009-R-059	305	3		1361	750	500	NA		500	X	X	VALID	2.375	0.154	35000	0.6	NO	NA	NA	6.72%	NA	2012	1.5	24.22	Accept Most Stringent Criteria	--
38437	009-V-018 (Inlet 009-R-029)	125	3		NA	NA	NA	1440		1440	X	Service	VALID	NA	NA	NA	NA	NO	NA	NA	NA	NA	1990	0.0	23.50	No Action Needed	--
41636	009-V-024 (Inlet 009-R-035)	250	3		NA	NA	NA	720		720	X	Service	VALID	NA	NA	NA	NA	NO	NA	NA	NA	NA	1993	0.0	22.00	No Action Needed	--
189380	Inlet 009-R-060	150	3		1052	400	266	720		266	X	X	VALID	4.5	0.188	42000	0.6	NO	NO	YES	4.27%	4.07%	2013	22.9	16.27	Accept Most Stringent Criteria	--
189326	Outlet 009-R-059	100	3		1052	280	186	275		186	X	X	VALID	4.5	0.188	42000	0.6	NO	NO	YES	2.85%	2.71%	2012	48.0	15.35	Accept Most Stringent Criteria	--
189011 - OUT	Outlet 009-R-059	100	3		1327	225	150	NA		150	X	X	VALID	4.5	0.237	42000	0.6	NO	NA	NA	2.26%	NA	2012	3.5	14.76	Accept Most Stringent Criteria	--
230683	4" Shelton H.P. Line	155	3		1106	615	410	720		410	X	X	VALID	4.5	0.237	52000	0.6	NO	NO	YES	2.83%	4.20%	2016	46.1	14.70	Accept Most Stringent Criteria	--

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-5 Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
1281900	HPSS 454800372	380	3		NA	NA	NA	720		720	X	Service	VALID	NA	NA	NA	NA	NO	NA	NA	NA	NA	2015	0.0	11.00	No Action Needed	--
28563-600	Inlet 005-R-133	600	3		NA	NA	NA	1440		1440	X	X	VALID	NA	NA	NA	NA	NO	NA	NA	NA	NA	1980	0.0	28.50	No Action Needed	--
484900321	HPSS 484900321	250	3		NA	NA	NA	UNKV		UNKV	X	Service	UNVALID	1.05	NA	NA	NA	YES	NA	NA	NA	NA	1990	0.0	23.50	Expose/Verify, DIMP/TIMP	2018-2028
WR45525	HPSS 1144089	150	3		1494	0	0	NA		0			UNVALID	1.05	NA	NA	NA	NO	YES	YES	NA	3.01%	2003	104.5	35.01	Pressure Test/Replace	2024-2028
18736	005-V-145, 005-O-002	600	3		446	900	600	720		446			UNVALID	16	0.25	52000	0.8	NO	YES	YES	53.75%	53.33%	1971	38.8	130.75	In-Situ Test	2018-2019
17930	Inlet 005-R-008	150	4		635	0	0	UNKV		0			UNVALID	6.625	0.188	35000	0.8	YES	NA	NA	7.55%	NA	1970	2.0	69.05	Addressed w/ 116 Segment	2019
860124	HPSS 860124	150	4		1239	0	0	UNKV		0			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	2.90%	2.90%	1965	29.0	58.40	Addressed w/ 116 Segment	2019
42512	20" Sumas Transmission Line	780	3		780	1170	780	1440		780	X	X	VALID	20	0.375	52000	0.8	NO	NO	YES	40.00%	40.00%	1993	17,523.3	117.00	Accept Most Stringent Criteria	--
18794	16" N. Whatcom Transmission Line	600	3		812	930	620	720		620	X	X	VALID	16	0.25	52000	1	NO	YES	YES	36.92%	25.81%	1971	143,669.0	143.92	No Action Needed	--
26956	12" Grandview Rd Transmission Line	600	3		658	900	600	720		600	X	X	VALID	12.75	0.25	42000	0.8	NO	NO	YES	36.43%	29.14%	1980	7,644.9	104.93	Accept Most Stringent Criteria	--
1284820	Inlet M&R 26955	600	3		658	900	600	NA		600	X	Service	VALID	12.75	0.25	42000	0.8	NO	NO	YES	36.43%	29.14%	1980	21.0	94.93	Accept Most Stringent Criteria	--
40855	8" Central Whatcom H.P. Line	380	3		418	680	453	UNKV		418	X	X	UNVALID	8.625	0.188	24000	0.8	YES	NA	NA	36.32%	NA	1993	10,573.7	122.32	116 Segment, In-Situ	2017
14C1344	8" Central Whatcom H.P. Line	380	3		418	0	0	UNKV		0			UNVALID	8.625	0.188	24000	0.8	YES	YES	YES	36.32%	36.32%	1957	53,839.4	191.82	116 Segment, Pressure Test	2018
18734-1	8" Lake Terrell Rd Transmission Line	380	3		418	569	379	720		379		NA	UNVALID	8.625	0.188	24000	0.8	NO	YES	YES	36.32%	36.32%	1965	10,414.9	138.82	116 Segment, In-Situ	2017
Line 1-1	8" Bellingham Transmission Line	380	3		418	0	0	720		0			UNVALID	8.625	0.188	24000	0.8	NO	NA	NA	36.32%	NA	1956	15,434.1	187.82	116 Segment, Replace	2018
Line 1-1	8" Bellingham Transmission Line (005-V-149)	380	3		418	0	0	NA		0			UNVALID	8.625	0.188	24000	0.8	NO	NA	NA	36.32%	NA	1956	13.2	172.82	116 Segment, Replace	2018
42491	20" Ferndale Transmission Line	600	3		780	900	600	1440		600	X	X	VALID	20	0.375	52000	0.8	NO	NO	YES	30.77%	30.77%	1993	28,254.9	97.77	Accept Most Stringent Criteria	--
41508	16" Squalicum Transmission Line	250	4		269	600	400	NA		269	X	X	VALID	16	0.281	24000	0.8	NO	NA	NA	29.66%	NA	1993	2,596.5	100.16	Accept Most Stringent Criteria	--
31567	005-V-043	600	3		811	900	600	720		600	X	X	VALID	8.625	0.25	35000	0.8	NO	NO	YES	29.57%	22.96%	1984	0.0	81.07	Accept Most Stringent Criteria	--
18734-2	8" Kickerville Transmission Line	600	3		906	900	600	720		600	X	X	VALID	8.625	0.188	52000	0.8	NO	NA	NA	26.47%	NA	1971	17,358.8	99.47	Accept Most Stringent Criteria	--
34405 - 600	Inlet 005-R-087	600	3		877	900	600	720		600	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	20.52%	16.27%	1987	1,300.3	68.02	Accept Most Stringent Criteria	--
25797	Inlet 005-R-065	600	3		877	900	600	1440		600	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	20.52%	16.27%	1978	5.3	65.02	Accept Most Stringent Criteria	--
29520	Inlet 005-R-073	600	3		877	900	600	1440		600	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	20.52%	16.27%	1982	226.3	64.02	Accept Most Stringent Criteria	--
33880	4" West Lynden Transmission Line	600	3		877	900	600	720		600	X	X	VALID	4.5	0.188	35000	0.6	NO	NO	YES	20.52%	16.27%	1988	1,340.4	67.52	Accept Most Stringent Criteria	--
163891	Inlet 005-R-163	600	3		933	0	0	720		0			UNVALID	2.375	0.154	24000	0.6	NO	YES	YES	19.28%	19.28%	2009	25.1	67.28	Pressure Test/Replace	2018-2023
52482	Inlet 005-R-155	600	3		933	900	600	1440		600	X	X	VALID	2.375	0.154	24000	0.6	NO	NO	YES	19.28%	13.22%	1997	21.0	53.28	Accept Most Stringent Criteria	--
45634	8" Lake Terrell Rd Transmission Line	380	3		802	740	493	720		493	X	X	VALID	8.625	0.188	46000	0.8	NO	NO	YES	18.95%	14.54%	1993	394.6	51.95	Accept Most Stringent Criteria	--
41506	005-V-093	380	3		784	600	400	720		400	X	X	VALID	8.625	0.25	35000	0.8	NO	NO	YES	18.73%	15.99%	1992	33.2	51.23	Accept Most Stringent Criteria	--
41501	10" Squalicum H.P. Line	380	3		855	600	400	UNKV		400	X	X	UNVALID	10.75	0.25	46000	0.8	YES	NO	YES	17.76%	15.99%	1992	14,960.3	65.26	Expose/Verify, DIMP/TIMP	2018-2028
42176	Inlet 005-R-109	780	3		1361	1170	780	1440		780	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	17.18%	17.18%	1995	117.0	49.18	Accept Most Stringent Criteria	--
42177	Inlet 005-R-110	780	3		1361	1200	800	1440		800	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	17.18%	17.18%	1995	54.2	48.18	DIMP/TIMP, Missing 192.517	2018-2019
18734-3	8" South Kickerville Transmission Line	380	3		906	900	600	720		600	X	X	VALID	8.625	0.188	52000	0.8	NO	NA	NA	16.76%	NA	1971	7,141.9	69.76	Accept Most Stringent Criteria	--
41502	M&R 41502	250	4		451	600	400	275		275	X	X	VALID	12.75	0.25	46000	0.8	NO	YES	YES	16.38%	17.71%	1992	315.6	57.21	Accept Most Stringent Criteria	--
174995	10" Squalicum H.P. Line	380	3		950	750	500	720		500	X	X	VALID	10.75	0.25	52000	1	NO	NO	YES	15.71%	15.99%	2010	1,510.7	46.99	No Action Needed	--
210697	10" Squalicum H.P. Line	380	3		967	800	533	720		533	X	X	VALID	10.75	0.25	52000	0.8	NO	YES	YES	15.71%	10.76%	2014	923.2	46.21	Accept Most Stringent Criteria	--
27163	005-V-039	380	3		728	600	400	500		400	X	X	VALID	4.5	0.156	35000	0.6	NO	NO	YES	15.66%	10.31%	1979	35.1	58.66	Accept Most Stringent Criteria	--
Line 4-1	4" South Lynden H.P. Line	250	3		499	0	0	UNKV		0			UNVALID	4.5	0.156	24000	0.6	YES	NA	NA	15.02%	NA	1961	35,395.5	114.02	116 Segment, Pressure Test	2020
1391000	Inlet 005-R-069	250	3		499	100	66	UNKV		66			UNVALID	4.5	0.156	24000	0.6	YES	NA	NA	15.02%	NA	1982	47.0	61.52	Pressure Test/Replace	2018-2023
4059	Inlet 005-R-028	250	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	15.02%	NA	1961	12.4	94.02	Pressure Test/Replace	2018-2023
218481	4" Blaine H.P. Line	250	3		499	684	456	720		456	X	X	VALID	4.5	0.156	24000	0.6	NO	NO	YES	15.02%	4.56%	2015	1,604.5	47.52	Accept Most Stringent Criteria	--
AA00894	005-V-168	250	3		499	600	400	720		400	X		UNVALID	4.5	0.156	24000	0.6	NO	YES	YES	15.02%	8.03%	2002	21.1	46.52	DIMP/TIMP, Missing 192.517	2018-2019
UNKV (005-O-010)	005-O-010	250	3		499	0	0	NA		0			UNVALID	4.5	0.156	24000	0.6	NO	NA	NA	15.02%	NA	1961	91.6	94.02	Addressed w/ 116 Segment	2020
59131	8" Bellingham Transmission Line	380	3		1045	750	500	720		500	X	X	VALID	8.625	0.322	35000	0.8	NO	NO	YES	14.54%	14.54%	2000	225.1	44.04	Accept Most Stringent Criteria	--
FISH	Bellingham HP Distribution System	150	4		268	0	0	UNKV		0			UNVALID	10.75	0.25	24000	0.8	YES	YES	YES	14.34%	17.87%	1954	28,793.6	120.87	116 Segment, Replace	2019
11406	Outlet 005-R-018	150	3		335	0	0	UNKV		0			UNVALID	10.75	0.25	24000	0.8	YES	YES	YES	14.34%	17.87%	1966	80.7	91.87	Addressed w/ 116 Segment	2019
11406-T	Inlet 005-R-018	150	3		418	0	0	UNKV		0			UNVALID	8.625	0.188	24000	0.8	YES	YES	YES	14.34%	9.01%	1956	72.4	98.34	Addressed w/ 116 Segment	2018
55653	Inlet 005-R-134	780	3		1361	900	600	1440		600			UNVALID	2.375	0.154	42000	0.6	NO	NO	YES	14.32%	17.18%	1999	17.0	51.18	Pressure Test/Replace	2018-2023
25773	4" North Lynden H.P. Line	400	3		877	600	400	250		250		X	UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	13.68%	10.85%	1978	7,689.3	63.18	116 Segment, Expose/Verify	2016
21602	Main Stub	600	3		1361	900	600	250		250			UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	13.22%	NA	1973	1.5	65.22	Expose/Verify/Replace	2018-2023
21252	Inlet 005-R-040	600	3		1361	100	66	1440		66			UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	13.22%	NA	1973	3.7	60.22	Pressure Test/Replace	2018-2023
22140	Inlet 005-R-047	600	3		1193	600	400	1440		400			UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	13.22%	15.08%	1973	15.5	66.08	Pressure Test/Replace	2018-2023
22158	Inlet 005-R-044	600	3		1193	100	66	1440		66			UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	13.22%	15.08%	1973	9.7	66.08	Pressure Test/Replace	2018-2023
22213	Inlet 005																										

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-5 Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
883566	HPSS 883566	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	7.36%	7.36%	1997	79.0	36.36	Expose/Verify, DIMP/TIMP	2018-2028
883569	HPSS 883569	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1985	39.2	42.36	Expose/Verify, DIMP/TIMP	2018-2028
883571	HPSS 883571	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1974	43.8	47.86	Expose/Verify, DIMP/TIMP	2018-2028
884006	HPSS 884006	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1989	48.0	40.36	Expose/Verify, DIMP/TIMP	2018-2028
884008	HPSS 884008	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1985	43.0	42.36	Expose/Verify, DIMP/TIMP	2018-2028
884300	HPSS 884300	380	3		1549	700	466	UNKV	466	466	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1985	10.0	42.36	Expose/Verify, DIMP/TIMP	2018-2028
884700	HPSS 884700	380	3		1549	800	533	UNKV	533	533	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1986	8.2	41.86	Expose/Verify, DIMP/TIMP	2018-2028
886358	HPSS 886358	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1992	27.0	38.86	Expose/Verify, DIMP/TIMP	2018-2028
886407	HPSS 886407	380	3		1549	875	583	UNKV	583	583	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	144.3	39.36	Expose/Verify, DIMP/TIMP	2018-2028
886614	HPSS 886614	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1996	112.3	37.86	Expose/Verify, DIMP/TIMP	2018-2028
1110384	HPSS 1110384	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1973	24.0	48.36	Expose/Verify, DIMP/TIMP	2018-2028
1110388	HPSS 1110388	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1973	10.0	48.36	Expose/Verify, DIMP/TIMP	2018-2028
1111243	HPSS 1111243	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1983	26.0	43.36	Expose/Verify, DIMP/TIMP	2018-2028
1117305	HPSS 1117305	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	7.36%	7.36%	1992	174.6	39.86	Expose/Verify, DIMP/TIMP	2018-2028
1152100	HPSS 1152100	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1994	55.5	37.86	Expose/Verify, DIMP/TIMP	2018-2028
1158541	HPSS 1158541	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1990	20.0	39.86	Expose/Verify, DIMP/TIMP	2018-2028
1158692	HPSS 1158692	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	197.7	39.36	Expose/Verify, DIMP/TIMP	2018-2028
1158694	HPSS 1158694	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	83.6	38.36	Expose/Verify, DIMP/TIMP	2018-2028
1158696	HPSS 1158696	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1994	121.4	38.86	Expose/Verify, DIMP/TIMP	2018-2028
1158699	HPSS 1158699	380	3		1549	950	433	UNKV	433	433	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1994	177.8	38.86	Expose/Verify, DIMP/TIMP	2018-2028
1158706	HPSS 1158706	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1994	58.0	37.86	Expose/Verify, DIMP/TIMP	2018-2028
1158708	HPSS 1158708	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1994	62.7	37.86	Expose/Verify, DIMP/TIMP	2018-2028
1158715	HPSS 1158715	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	7.36%	7.36%	1994	197.9	38.86	Expose/Verify, DIMP/TIMP	2018-2028
1158739	HPSS 1158739	380	3		1549	750	500	UNKV	500	500	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1995	99.0	37.36	Expose/Verify, DIMP/TIMP	2018-2028
1158750	HPSS 1158750	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1995	112.6	38.36	Expose/Verify, DIMP/TIMP	2018-2028
1158752	HPSS 1158752	380	3		1549	700	466	UNKV	466	466	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1996	136.8	37.86	Expose/Verify, DIMP/TIMP	2018-2028
1158770	HPSS 1158770	380	3		1549	790	526	UNKV	526	526	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1996	15.5	36.86	Expose/Verify, DIMP/TIMP	2018-2028
1158786	HPSS 1158786	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1997	46.9	36.36	Expose/Verify, DIMP/TIMP	2018-2028
1158791	HPSS 1158791	380	3		1549	950	633	UNKV	633	633	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1997	47.1	36.36	Expose/Verify, DIMP/TIMP	2018-2028
1158834	HPSS 1158834	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1999	40.0	35.36	Expose/Verify, DIMP/TIMP	2018-2028
1275390	HPSS 1275390	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1992	201.0	39.86	Expose/Verify, DIMP/TIMP	2018-2028
1275395	HPSS 1275395	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1984	32.4	42.86	Expose/Verify, DIMP/TIMP	2018-2028
1280032	HPSS 1280032	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	16.6	38.36	Expose/Verify, DIMP/TIMP	2018-2028
1280533	HPSS 1280533	380	3		1549	650	433	UNKV	433	433	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1998	179.0	36.86	Expose/Verify, DIMP/TIMP	2018-2028
1280651	HPSS 1280651	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1998	21.0	35.86	Expose/Verify, DIMP/TIMP	2018-2028
1280912	HPSS 1280912	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	2000	13.0	34.86	Expose/Verify, DIMP/TIMP	2018-2028
1281732	HPSS 1281732	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1988	7.0	40.86	Expose/Verify, DIMP/TIMP	2018-2028
1281738	HPSS 1281738	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1989	115.0	41.36	Expose/Verify, DIMP/TIMP	2018-2028
1281760	HPSS 1281760	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	72.7	38.36	Expose/Verify, DIMP/TIMP	2018-2028
2454800374	HPSS 2454800374	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1992	86.0	38.86	Expose/Verify, DIMP/TIMP	2018-2028
5531700569	HPSS 5531700569	380	3		1549	600	400	UNKV	400	400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1999	22.0	35.36	Expose/Verify, DIMP/TIMP	2018-2028
7683800794	HPSS 7683800794	380	3		1549	750	500	UNKV	500	500	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	2001	27.0	34.36	Expose/Verify, DIMP/TIMP	2018-2028
9349400969	HPSS 9349400969	380	3		1549	900	600	UNKV	600	600	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	7.36%	NA	1993	141.0	39.36	Expose/Verify, DIMP/TIMP	2018-2028
172727	4" West Ferndale H.P. Line	250	3		1052	840	560	1440	560	560	X	X	VALID	4.5	0.188	42000	0.6	NO	NO	YES	7.12%	6.78%	2012	7,815.7	34.62	Accept Most Stringent Criteria	--
196032	005-R-169	250	3		1052	840	560	720	560	560	X	X	VALID	6.625	0.28	52000	0.8	NO	NO	YES	7.12%	6.78%	2012	51.5	24.62	Accept Most Stringent Criteria	--
196033	Inlet 005-R-170	250	3		1052	840	560	720	560	560	X	X	VALID	4.5	0.188	42000	0.6	NO	NO	YES	7.12%	4.56%	2012	42.4	24.62	Accept Most Stringent Criteria	--
53163	Inlet 005-R-131	250	3		1106	600	400	NA	400	400	X	X	VALID	4.5	0.237	35000	0.6	NO	NA	NA	6.78%	NA	1997	5.0	31.78	Accept Most Stringent Criteria	--
AA000801	005-V-165	250	3		1106	600	400	720	400	400	X	X	VALID	4.5	0.237	35000	0.6	NO	NO	YES	6.78%	6.78%	2002	0.0	29.28	Accept Most Stringent Criteria	--
192833	Inlet 005-R-064	250	3		1193	750	1	740	1	1			UNVALID	1.315	0.109	24000	0.6	NO	YES	YES	6.28%	6.28%	2012	1.0	32.78	Addressed w/ 116 Segment	2020
1471600263	HPSS 1471600263	250	4</																								

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
1437704	HPSS 1437704	170	3		933	900	600	UNKV		600	X	Service	UNVALID	2.375	0.154	24000	0.6	YES	NA	NA	5.46%	NA	2008	17.7	28.96	Expose/Verify, DIMP/TIMP	2018-2028
54421	Inlet 005-R-135	155	3		877	305	203	720		203	X		VALID	4.5	0.188	35000	0.6	NO	NA	NA	5.30%	NA	1998	38.6	29.80	Accept Most Stringent Criteria	--
211165	Bellingham H.P. Distribution System	155	3		641	0	0	UNKV		0			UNVALID	3.5	0.216	24000	0.6	YES	YES	YES	5.23%	7.24%	1955	87.4	85.74	Addressed w/ 116 Segment	2019
20752	Bellingham H.P. Distribution System	150	4		701	100	66	NA		66			UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	5.13%	4.07%	1972	48.8	49.63	116 Segment, Replace	2019
21298	Bellingham H.P. Distribution System	150	4		701	0	0	NA		0			UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	5.13%	4.07%	1973	123.0	65.13	116 Segment, Replace	2019
39957	Bellingham H.P. Distribution System	150	3		499	300	200	200		200	X	X	VALID	4.5	0.188	35000	0.6	NO	YES	YES	5.13%	9.01%	1991	281.6	42.01	Accept Most Stringent Criteria	--
22344	Bellingham H.P. Distribution System	150	3		499	600	400	UNKV		400	X		UNVALID	4.5	0.188	35000	0.6	YES	YES	YES	5.13%	9.01%	1973	164.8	51.01	Expose/Verify, DIMP/TIMP	2018-2028
59026	Bellingham H.P. Distribution System	150	4		399	310	206	275		206	X		UNVALID	4.5	0.188	35000	0.6	NO	YES	YES	5.13%	9.01%	2000	1,269.2	46.01	DIMP/TIMP, Missing 192.517	2018-2019
19466 - 150	4" & 6" Bay Road H.P. Line	150	3		877	750	500	275		275	X		UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	5.13%	4.07%	1973	9,326.0	52.13	DIMP/TIMP, Missing 192.517	2018-2019
1117741	HPSS 1117741	380	3		3766	90	60	UNKV		60			UNVALID	1.05	0.113	35000	1	YES	NA	NA	5.04%	NA	2001	20.8	31.04	Pressure Test/Replace	2024-2028
211166	Inlet 005-R-006	155	3		933	0	0	NA		0			UNVALID	2.375	0.154	24000	0.6	NO	YES	YES	4.98%	4.98%	1957	6.7	66.48	Addressed w/ 116 Segment	2019
14483	005-O-004, 005-R-032	155	3		933	0	0	NA		0			UNVALID	2.375	0.154	24000	0.6	NO	NA	NA	4.98%	NA	1968	14.3	55.48	Pressure Test/Replace	2018-2023
1117530	Service Stub	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1996	79.0	30.34	Pressure Test/Replace	2024-2028
1370945	HPSS 1370945	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1964	13.0	50.34	Pressure Test/Replace	2018-2023
1371760	HPSS 1371761	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1973	78.0	41.84	Pressure Test/Replace	2024-2028
1371761	HPSS 1371761	250	3		1549	90	1	NA		1			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	4.84%	NA	2006	42.9	25.34	Pressure Test/Replace	2024-2028
1371900	HPSS 1371900	250	3		1549	90	64	UNKV		64			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1969	47.0	45.34	Pressure Test/Replace	2024-2028
1371910	HPSS 1371910	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	3.0	53.34	Pressure Test/Replace	2018-2023
1371920	HPSS 1371920	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	3.0	53.34	Pressure Test/Replace	2018-2023
1371930	HPSS 1371930	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	3.0	53.34	Pressure Test/Replace	2018-2023
1371940	HPSS 1371940	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	3.0	53.34	Pressure Test/Replace	2018-2023
1371960	HPSS 1371960	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1962	37.4	52.34	Pressure Test/Replace	2018-2023
1371970	HPSS 1371970	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	4.0	53.34	Pressure Test/Replace	2018-2023
1371980	HPSS 1371980	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1961	40.0	53.34	Pressure Test/Replace	2018-2023
1371990	HPSS 1371990	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1969	11.0	45.34	Pressure Test/Replace	2024-2028
1372000	HPSS 1372000	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1968	10.3	46.34	Pressure Test/Replace	2024-2028
1375800	HPSS 1377644	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1985	201.2	36.84	Pressure Test/Replace	2024-2028
1376210	HPSS 1376210	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1990	49.3	33.34	Pressure Test/Replace	2024-2028
1377764	HPSS 1377764	250	3		1549	300	200	UNKV		200			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1994	97.1	31.34	Pressure Test/Replace	2024-2028
1377823	HPSS 1377823	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1996	36.0	30.34	Pressure Test/Replace	2024-2028
1377828	HPSS 1377828	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1996	58.6	30.34	Pressure Test/Replace	2024-2028
1377844	HPSS 1377844	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1997	8.0	29.84	Pressure Test/Replace	2024-2028
1377896	HPSS 1377896	250	3		1549	350	233	UNKV		233			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1997	29.0	29.84	Pressure Test/Replace	2024-2028
1377913	HPSS 1377913	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1999	20.1	28.84	Pressure Test/Replace	2024-2028
1377929	HPSS 1377929	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	2000	40.2	28.34	Pressure Test/Replace	2024-2028
1371500	HPSS 1371500	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1969	8.3	45.34	Addressed w/ 116 Segment	2020
1402930	HPSS 1403949	250	3		1549	300	200	UNKV		200			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1972	73.3	42.34	Addressed w/ 116 Segment	2022
1402935	HPSS 1402935	250	3		1549	350	233	UNKV		233			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1978	42.0	39.34	Addressed w/ 116 Segment	2022
1371510	HPSS 1371510	250	3		1549	90	1	UNKV		1			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	2003	84.9	26.84	Addressed w/ 116 Segment	2020
1371530	HPSS 1371530	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1966	49.2	48.34	Addressed w/ 116 Segment	2020
1498731	HPSS 1498731	250	3		1549	90	60	UNKV		60			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1991	40.0	32.84	Pressure Test/Replace	2024-2028
1371550	HPSS 1371550	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1969	3.0	45.34	Addressed w/ 116 Segment	2020
1371570	HPSS 1371570	250	3		1549	30	21	UNKV		21			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1968	46.7	46.34	Addressed w/ 116 Segment	2020
1371595	HPSS 1371595	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1963	16.1	51.34	Addressed w/ 116 Segment	2020
1371610	HPSS 1371610	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1962	14.9	52.34	Addressed w/ 116 Segment	2020
1371620	HPSS 1371620	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1971	7.0	42.84	Addressed w/ 116 Segment	2020
1371630	HPSS 1371630	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1962	14.7	52.34	Addressed w/ 116 Segment	2020
1371640	HPSS 1371640	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1973	41.8	41.84	Addressed w/ 116 Segment	2020
1371650	HPSS 1371650	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1964	51.7	50.34	Addressed w/ 116 Segment	2020
1371660	HPSS 1371660	250	3		1549	95	1	UNKV		1			UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1964	30.9	50.34	Addressed w/ 116 Segment	2020
1371700	HPSS 1371700	250	3		1549	100	71	UNKV		71			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1968	2.0	46.34	Addressed w/ 116 Segment	2020
1374252	HPSS 1374252	250	3		1549	100	66	UNKV		66			UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1979	8			

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
6856710936	HPSS 6856710936	300	3		1549	0	0	NA		0			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	5.81%	NA	2014	2.0	46.31	Pressure Test/Replace	2024-2028
189413	Inlet 023-R-113	150	3		2738	0	0	720		0			UNVALID	4.5	0.237	52000	1	NO	NO	NO	2.74%	2.74%	2015	21.0	21.74	Pressure Test/Replace	2024-2028
214539 (R-117 IN)	Inlet 023-R-117	811	3		2426	0	0	NA		0			UNVALID	8.625	0.322	65000	1	NO	NA	NA	16.71%	NA	2016	0.0	55.21	Pressure Test/Replace	2018-2023
214539 (R-117 OUT)	Outlet 023-R-117	500	3		1507	0	0	NA		0			UNVALID	8.625	0.25	52000	1	NO	NA	NA	16.59%	NA	2016	0.0	55.09	Pressure Test/Replace	2018-2023
214539 (R-120)	Inlet 023-R-120	500	3		1754	750	500	740		500	X		UNVALID	4.5	0.188	42000	1	NO	NO	NO	14.25%	9.13%	2016	43.6	32.75	DIMP/TIMP, Missing 192.517	2018-2019
9978315734	HPSS 9978315734	300	3		3539	800	533	740		533	X	Service	VALID	1.315	0.133	35000	1	NO	NA	NA	4.24%	NA	2017	8.0	12.24	No Action Needed	--
155676464	HPSS 0155676464	200	3		3539	800	533	1440		533	X	Service	VALID	1.315	0.133	35000	1	NO	NA	NA	2.82%	NA	2017	14.0	10.82	No Action Needed	--

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
2742054	HPSS 2742054	250	3		1549	0	0	NA		0			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	4.84%	NA	1995	4.0	39.84	Addressed w/ 116 Segment	2018
2742100	HPSS 2742100	250	3		1549	750	500	UNKV		500	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1978	113.6	39.34	Expose/Verify, DIMP/TIMP	2018-2028
166621	4" Woodland H.P. Line	150	3		499	375	250	NA		250	X	X	VALID	4.5	0.188	24000	0.6	NO	YES	YES	7.48%	9.01%	2010	1,691.1	39.01	Accept Most Stringent Criteria	--
E0073431	6" South Kalama H.P. Line	300	3		1044	750	500	UNKV		500	X	X	UNVALID	6.625	0.188	46000	0.8	YES	NO	YES	11.49%	10.14%	2004	439.8	38.99	Expose/Verify, DIMP/TIMP	2018-2028
2910525	HPSS 2910525	499	3		1549	1100	733	UNKV		733	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	9.66%	NA	1997	34.0	38.66	Expose/Verify, DIMP/TIMP	2018-2028
2910535	HPSS 2910535	499	3		1549	1200	800	UNKV		800	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	9.66%	9.66%	1998	30.8	38.16	Expose/Verify, DIMP/TIMP	2018-2028
2980314	HPSS 2980314	250	3		1549	850	566	UNKV		566	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1981	7.0	36.84	Expose/Verify, DIMP/TIMP	2018-2028
177226	Longview-Kelso H.P. Distribution Line	250	3		1082	840	560	NA		560	X	X	VALID	12.75	0.375	46000	0.8	NO	NO	YES	9.24%	8.17%	2012	7,654.0	36.74	Accept Most Stringent Criteria	--
EE000176	Inlet 011-R-017	250	3		1549	0	0	1440		0			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	4.84%	NA	2002	4.7	36.34	Addressed w/ 116 Segment	2017-2021
2980200	HPSS 2980200	250	3		1193	375	250	UNKV		250	X	Service	UNVALID	1.315	0.109	24000	0.6	YES	NA	NA	6.28%	NA	1995	36.0	36.28	Expose/Verify, DIMP/TIMP	2018-2028
32982	Inlet 011-R-011	250	3		1361	750	500	1440		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	5.51%	5.51%	1986	14.7	36.01	DIMP/TIMP, Missing 192.517	2018-2019
53094	Longview-Kelso H.P. Distribution Line	250	3		1017	600	400	400		400	X		UNVALID	12.75	0.312	52000	0.8	NO	NO	YES	9.82%	8.17%	1997	108.3	35.82	DIMP/TIMP, Missing 192.517	2018-2019
2742051	HPSS 2742051	250	3		1549	750	500	UNKV		500	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1985	29.0	34.84	Expose/Verify, DIMP/TIMP	2018-2028
2980290	HPSS 2980290	250	3		1549	400	266	UNKV		266	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1988	97.1	33.34	Expose/Verify, DIMP/TIMP	2018-2028
2980292	HPSS 2980292	250	3		1549	500	333	UNKV		333	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1988	78.3	33.34	Expose/Verify, DIMP/TIMP	2018-2028
1317	M&R E0082073	250	3		933	750	500	NA		500	X	Service	VALID	12.75	0.375	52000	0.8	NO	YES	YES	8.17%	8.03%	2007	230.1	33.17	Accept Most Stringent Criteria	--
1495	HPSS 1495	250	3		933	600	400	UNKV		400	X	Service	UNVALID	2.375	0.154	24000	0.6	YES	NA	NA	8.03%	NA	2005	29.6	33.03	Expose/Verify, DIMP/TIMP	2018-2028
192408	6" South Kalama H.P. Line	300	3		1569	845	563	NA		563	X	X	VALID	6.625	0.25	52000	0.8	NO	NO	YES	7.64%	6.83%	2012	1,860.2	32.64	Accept Most Stringent Criteria	--
E0065803	Inlet 011-R-038	250	3		877	700	466	720		466	X		UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	8.55%	6.78%	2001	15.0	31.55	DIMP/TIMP, Missing 192.517	2018-2019
2930570	HPSS 2930570	250	3		1549	100	66	NA		66			UNVALID	1.05	0.113	24000	0.6	NO	YES	YES	4.84%	4.84%	1994	11.0	31.34	Addressed w/ 116 Segment	2017-2021
124	HPSS 124	80	3		499	250	166	UNKV		166	X	Service	UNVALID	4.5	0.156	24000	0.6	YES	NA	NA	4.81%	NA	1994	203.4	31.31	Expose/Verify, DIMP/TIMP	2018-2028
190874	Inlet 011-R-008	250	3		1066	850	566	720		566	X	X	VALID	8.625	0.25	46000	0.8	NO	YES	YES	9.38%	8.17%	2012	46.0	30.88	Accept Most Stringent Criteria	--
2742052	HPSS 2742052	250	3		1549	600	400	UNKV		400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	1994	65.0	30.34	Expose/Verify, DIMP/TIMP	2018-2028
2980316	HPSS 2980316	250	3		1549	750	500	UNKV		500	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1995	30.0	29.84	Expose/Verify, DIMP/TIMP	2018-2028
2930817	HPSS 2930817	250	3		1549	600	400	UNKV		400	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	NA	NA	4.84%	NA	1996	2.6	29.34	Expose/Verify, DIMP/TIMP	2018-2028
199748	Inlet 011-R-050	300	3		1361	101.2	67	1440		67			UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	6.61%	6.61%	2013	4.5	28.61	Pressure Test/Replace	2024-2028
2742281	HPSS 2742281	250	3		1549	650	1	NA		1			UNVALID	1.05	0.113	24000	0.6	NO	NA	NA	4.84%	NA	2005	33.0	25.84	Pressure Test/Replace	2024-2028
189505	Longview-Kelso H.P. Distribution Line	250	3		1223	600	400	720		400	X	X	VALID	12.75	0.375	52000	0.8	NO	NA	NA	8.17%	NA	2012	25.0	25.67	Accept Most Stringent Criteria	--
197085	Inlet 011-R-049	300	3		1361	845	563	720		563	X	X	VALID	2.375	0.154	35000	0.6	NO	NO	YES	6.61%	6.83%	2012	55.5	24.33	Accept Most Stringent Criteria	--
2980318	HPSS 2980318	250	3		2260	950	633	UNKV		633	X	Service	UNVALID	1.05	0.113	35000	0.6	YES	NA	NA	3.32%	NA	1999	54.0	22.32	Expose/Verify, DIMP/TIMP	2018-2028
2980275	HPSS 2980275	250	3		2260	400	266	UNKV		266	X	Service	UNVALID	1.05	0.113	35000	0.6	YES	NA	NA	3.32%	NA	2000	45.0	21.82	Expose/Verify, DIMP/TIMP	2018-2028
2660271	HPSS 2660271	250	3		1549	800	533	UNKV		533	X	Service	UNVALID	1.05	0.113	24000	0.6	YES	YES	YES	4.84%	4.84%	2012	77.0	21.34	Expose/Verify, DIMP/TIMP	2018-2028
2770482	HPSS 2770482	250	4		1808	400	266	UNKV		266	X	Service	UNVALID	1.05	0.113	35000	0.6	YES	NA	NA	3.32%	NA	2001	17.0	23.32	Expose/Verify, DIMP/TIMP	2018-2028
9301367742	HPSS 9301367742	250	3		1740	650	433	UNKV		433	X	Service	UNVALID	1.315	0.109	35000	0.6	YES	NA	NA	4.31%	NA	2013	75.0	16.31	Expose/Verify, DIMP/TIMP	2018-2028
6521322387	HPSS 6521322387	250	3		3766	750	500	UNKV		500	X	Service	UNVALID	1.05	0.113	35000	1	YES	NA	NA	3.32%	NA	2016	56.0	11.82	Expose/Verify, DIMP/TIMP	2018-2028

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
32375	Inlet 017-R-023	105	3		1361	750	500	1440		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	2.31%	2.31%	1985	41.6	28.31	DIMP/TIMP, Missing 192.517	2018-2019
33004	Inlet 017-R-026	105	3		1361	675	450	1440		450	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	2.31%	2.31%	1986	20.4	27.81	DIMP/TIMP, Missing 192.517	2018-2019
34257	Inlet 017-R-079	105	3		1193	250	166	1440		166	X		UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	2.31%	2.64%	1987	78.2	31.64	DIMP/TIMP, Missing 192.517	2018-2019
41293	Inlet 017-R-093	105	3		1361	750	500	1440		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	2.31%	NA	1991	17.8	25.31	DIMP/TIMP, Missing 192.517	2018-2019
45845	Inlet 017-R-104	105	3		1361	265	176	1440		176	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	2.31%	2.31%	1994	7.0	23.81	DIMP/TIMP, Missing 192.517	2018-2019
51883	Inlet 017-R-043	105	3		1361	275	183	1440		183	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	2.31%	2.31%	1997	21.1	22.31	DIMP/TIMP, Missing 192.517	2018-2019
60209	Fredonia Compressor Station	500	3		375	800	533	UNKV		375		X	UNVALID	16	0.25	35000	1	YES	YES	NO	59.56%	66.67%	2001	483.1	117.67	In-Situ Test	2018-2019
4086545446	Inlet M&R 191484	500	3		758	780	520	UNKV		520	X	Service	UNVALID	4.5	0.188	42000	0.6	YES	YES	YES	14.25%	19.78%	2012	62.0	46.28	Expose/Verify, DIMP/TIMP	2018-2028
45730	16" March Point Transmission Line	500	3		437	0	0	NA		0			UNVALID	16	0.25	35000	0.8	NO	NA	NA	45.71%	NA	1993	3.0	137.71	Pressure Test/Replace	2018-2019
16049	017-O-003	960	3		1183	0	0	UNKV		0			UNVALID	6.625	0.28	52000	0.8	YES	NO	YES	21.84%	32.45%	1970	120.7	126.95	Pressure Test/Replace	2018-2019

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
WWL1-1	8" Walla Walla H.P. Line	150	3		418	0	0	NA		0			UNVALID	8.625	0.188	24000	0.8	NO	NA	NA	14.34%	NA	1956	5,345.0	108.34	116 Segment, Pressure Test	2020
WWL2-1	3" College Place H.P. Line	150	3		641	0	0	NA		0			UNVALID	3.5	0.156	24000	0.6	NO	YES	YES	7.01%	7.01%	1956	2,660.6	92.05	116 Segment, Retire	2022
3503801004	Service Stub	150	3		1193	90	1	UNKV		1			UNVALID	1.315	0.109	24000	0.6	YES	YES	YES	3.77%	3.77%	2010	25.0	22.27	Addressed w/ 116 Segment	2020
UNKV	O26-O-001 to Williams	150	3		418	0	0	NA		0			UNVALID	8.625	0.188	24000	0.8	NO	NA	NA	14.34%	NA	1956	0.0	98.34	Addressed w/ 116 Segment	2020
MM000188	O26-V-030	150	3		908	600	400	720		400	X	X	VALID	4.5	0.237	35000	0.6	NO	NO	YES	4.07%	6.60%	2002	17.0	29.10	Accept Most Stringent Criteria	--
MM000189	O26-V-031	150	3		908	600	400	720		400	X	X	VALID	8.625	0.322	46000	0.8	NO	NO	YES	4.37%	6.60%	2002	20.7	29.10	Accept Most Stringent Criteria	--
MM000190	O26-O-001	150	3		418	600	400	720		400	X	X	VALID	8.625	0.188	24000	0.8	NO	YES	YES	14.34%	8.37%	2002	62.2	45.84	Accept Most Stringent Criteria	--
212245	6" College Place H.P. Line	150	3		418	630	420	720		418	X	X	VALID	6.625	0.188	52000	0.8	NO	YES	YES	5.08%	14.34%	2015	3,966.9	46.84	Accept Most Stringent Criteria	--

Work Order #	Segment Name	Existing MAOP (psig)	Class Location (1,2,3,4)	Uprate (YES/NO)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	Hi-S Pressure (psig) 192.619 (a) (3)	MAOP per 192.619 (psig)	Meets 192.619	Meets 192.517	MAOP Designation	Max Outside Diameter, OD1 (inches)	Min Wall Thickness, WT1 (inches)	Min SMYS, SMYS1 (psig)	Min Longitudinal Joint Factor, E1 (E)	Unknown Pressure Rated Fitting (YES/NO)	Fittings w/ Assumed SMYS (YES/NO)	Fittings w/ Assumed Joint Factor (YES/NO)	Max Pipe % SMYS	Max Fitting % SMYS	Install Date (Year)	Pipe Length (Feet)	Total Score	Action Plan	Action Year
00082714	8" REC Silicon Reinforcement	250	3		418	615	410	UNKV		410	X		UNVALID	8.625	0.25	52000	0.8	YES	YES	YES	8.29%	23.89%	2007	927.8	62.89	Expose/Verify, DIMP/TIMP	2018-2028
3400130	1329 E Wheeler Rd	250	3		933	600	400	UNKV		400	X	Service	UNVALID	2.375	0.154	24000	0.6	YES	YES	YES	8.03%	8.03%	1960	372.8	62.53	Expose/Verify, DIMP/TIMP	2018-2028
3400124	Inlet 029-R-030	250	3		933	660	440	UNKV		440	X	Service	UNVALID	2.375	0.154	24000	0.6	YES	NA	NA	8.03%	NA	1995	12.0	38.03	Expose/Verify, DIMP/TIMP	2018-2028
00067106	Inlet 029-R-067	250	3		1214	750	500	UNKV		500	X		UNVALID	1.66	0.14	35000	0.6	YES	YES	YES	4.23%	6.18%	1998	95.4	34.68	Expose/Verify, DIMP/TIMP	2018-2028
1145	Inlet M&R 50342	250	3		544	600	400	UNKV		400	X	Service	UNVALID	6.625	0.188	24000	0.8	YES	YES	YES	18.35%	18.35%	1996	488.7	53.85	Expose/Verify, DIMP/TIMP	2018-2028
58601	HPSS 3764572	250	3		2260	500	333	1200		333	X		UNVALID	1.05	0.113	35000	0.6	NO	NA	NA	3.32%	NA	1999	5.0	22.32	DIMP/TIMP, Missing 192.517	2018-2019
180809	6" North Moses Lake H.P. Line	250	3		499	750	500	720		499	X		UNVALID	4.5	0.188	42000	0.6	NO	YES	YES	7.12%	15.02%	2011	4,875.0	49.52	DIMP/TIMP, Missing 192.517	2018-2019
44879	4" Othello Transmission Line	400	3		877	750	500	720		500	X		UNVALID	4.5	0.188	35000	0.6	NO	YES	YES	13.68%	10.05%	1993	60.0	49.68	DIMP/TIMP, Missing 192.517	2018-2019
00083214	2" Wheeler H.P. Line	250	3		1361	640	426	1440		426	X		UNVALID	2.375	0.154	42000	0.6	NO	NO	YES	4.59%	5.51%	2008	57.2	25.01	DIMP/TIMP, Missing 192.517	2018-2019
42827	029-V-024	250	3		NA	NA	NA	720		720	X		UNVALID	NA	NA	NA	NA	NO	NA	NA	NA	NA	1992	0.0	22.50	DIMP/TIMP, Missing 192.517	2018-2019
20757	4" Wheeler H.P. Loop Line	250	3		877	600	400	720		400	X		UNVALID	4.5	0.188	35000	0.6	NO	NO	YES	8.55%	6.78%	1972	99.8	46.05	DIMP/TIMP, Missing 192.517	2018-2019
237006	6" Quincy H.P. Line	250	3		499	600	400	720		400	X		UNVALID	6.625	0.28	52000	0.8	NO	YES	YES	5.69%	15.02%	2016	760.0	44.52	DIMP/TIMP, Missing 192.517	2018-2019
50648	Inlet 029-R-057	250	3		794	800	533	720		533	X		UNVALID	6.625	0.188	35000	0.8	NO	YES	YES	12.59%	8.45%	1996	263.0	48.09	DIMP/TIMP, Missing 192.517	2018-2019
21940	Inlet 029-R-018	400	3		1321	750	500	1440		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	9.08%	8.81%	1973	1,347.9	57.58	DIMP/TIMP, Missing 192.517	2018-2019
60612	Inlet 029-R-008	400	3		1361	750	500	NA		500	X		UNVALID	2.375	0.154	35000	0.6	NO	NO	YES	8.81%	8.81%	2001	13.4	31.81	DIMP/TIMP, Missing 192.517	2018-2019
20799	Inlet 029-R-014	250	3		877	750	500	720		500	X		UNVALID	4.5	0.188	35000	0.6	NO	NA	NA	8.55%	NA	1972	227.1	47.05	DIMP/TIMP, Missing 192.517	2018-2019
32315	4" Wheeler H.P. Loop Line	250	3		877	400	266	720		266	X		UNVALID	4.5	0.188	35000	0.6	NO	NA	NA	8.55%	NA	1985	28.0	39.55	DIMP/TIMP, Missing 192.517	2018-2019
21209	Main Stub	225	3		933	720	480	1440		480	X		UNVALID	2.375	0.154	35000	0.6	NO	YES	YES	4.96%	7.23%	1973	1.0	48.23	DIMP/TIMP, Missing 192.517	2018-2019
00085074	Inlet 029-R-056	250	3		1361	650	433	1440		433	X		UNVALID	2.375	0.154	35000	0.6	NO	NA	NA	5.51%	NA	2008	41.0	25.01	DIMP/TIMP, Missing 192.517	2018-2019

Table with columns: Work Order #, Segment Name, Existing MAOP (psig), Class Location (1,2,3,4), Uprate (YES/NO), Design Pressure 192.619 (a) (1) (psig), Test Pressure (psig), Test Pressure 192.619 (a) (2) (psig), Pressure Class Rating (psig), Hi-5 Pressure (psig) 192.619 (a) (3), MAOP per 192.619 (psig), Meets 192.619, Meets 192.517, MAOP Designation, Max Outside Diameter, OD1 (inches), Min Wall Thickness, WT1 (inches), Min SMYS, SMYS1 (psig), Min Longitudinal Joint Factor, E1 (E), Unknown Pressure Rated Fitting (YES/NO), Fittings w/ Assumed SMYS (YES/NO), Fittings w/ Assumed Joint Factor (YES/NO), Max Pipe % SMYS, Max Fitting % SMYS, Install Date (Year), Pipe Length (Feet), Total Score, Action Plan, Action Year.

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
24993	M&R 24993	Meter	366	NA	3	877	0	0	720	0	UNVALID	12.52%
25776	M&R 25776	Meter	100	NA	3	758	90	60	200	60	UNVALID	4.93%
44771	M&R 44771	Meter	150	NA	3	933	0	0	100	0	UNVALID	4.82%
CC000112	M&R CC000112	Meter	250	NA	3	933	0	0	200	0	UNVALID	8.03%
UNKV (009-O-001)	009-O-001	Odorizer	499	499	3	0	0	0	0	0	UNVALID	0.00%
17084	009-R-002	Regulator	150	60	3	499	0	0	200	0	UNVALID	11.01%
77C6818	009-R-004	Regulator	305	135	3	499	0	0	400	0	UNVALID	18.33%
77C6329	009-R-005	Regulator	135	25	3	499	0	0	200	0	UNVALID	8.11%
UNKV (009-R-006)	009-R-006	Regulator	305	150	3	499	0	0	720	0	UNVALID	18.33%
220070	009-R-012	Regulator	366	155	3	1106	600	400	720	400	VALID	9.93%
50205	009-R-011	Regulator	809	499	3	1045	750	500	720	500	UNVALID	19.09%
23798	009-R-016	Regulator	125	60	3	877	0	0	200	0	UNVALID	4.27%
UNKV (009-R-017)	009-R-017	Regulator	155	27	3	499	0	0	200	0	UNVALID	9.31%
UNKV (009-R-050)	009-R-050	Regulator	150	25	3	0	0	0	0	0	UNVALID	0.00%
189383	009-R-060	Regulator	150	25	3	499	375	250	275	250	VALID	9.01%
186538	009-R-057	Regulator	499	366	3	1205	750	500	720	500	VALID	16.55%
186534	009-R-056	Regulator	499	366	3	1205	1080	720	720	720	VALID	16.55%
186014	009-R-055	Regulator	499	366	3	933	1080	720	720	720	VALID	16.03%
411139	009-R-027	Regulator	499	60	3	1193	750	500	500	500	VALID	12.54%
29120	009-R-024	Regulator	150	60	3	3080	0	0	500	0	UNVALID	1.46%
13618	009-R-003	Regulator	150	60	3	933	0	0	200	0	UNVALID	4.82%
10C10441	009-R-013	Regulator	155	60	3	933	0	0	200	0	UNVALID	4.98%
14845	009-R-015	Regulator	366	125	3	877	0	0	200	0	UNVALID	12.52%
19560	009-R-018	Regulator	499	60	3	933	0	0	200	0	UNVALID	16.03%
41111	009-R-019	Regulator	499	60	3	1193	750	500	500	500	VALID	12.54%
22551	009-R-022	Regulator	155	60	3	933	0	0	200	0	UNVALID	4.98%
35969	009-R-028	Regulator	125	60	3	933	600	400	200	200	VALID	4.02%
38472	009-R-029	Regulator	125	60	3	933	300	200	200	200	VALID	4.02%
39578	009-R-030	Regulator	499	60	3	933	750	500	500	500	VALID	16.03%
40413	009-R-031	Regulator	150	60	3	1361	900	600	500	500	VALID	3.30%
40434	009-R-032	Regulator	499	60	3	933	750	500	500	500	VALID	16.03%
41471	009-R-033	Regulator	499	60	3	1193	750	500	500	500	VALID	12.54%
41638	009-R-034	Regulator	366	250	3	933	750	500	275	275	UNVALID	11.76%
41639	009-R-035	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
45257	009-R-036	Regulator	366	60	3	1193	750	500	500	500	VALID	9.20%
46523	009-R-037	Regulator	366	60	3	1193	750	500	500	500	VALID	9.20%
47605	009-R-038	Regulator	366	25	3	1106	750	500	500	500	VALID	9.93%
51988	009-R-039	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
52603	009-R-040	Regulator	366	60	3	1361	750	500	500	500	VALID	8.06%
C0070593	009-R-043	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
C0073721	009-R-044	Regulator	125	25	3	933	0	0	275	0	UNVALID	4.02%
C0074247	009-R-045	Regulator	500	500	3	1361	750	500	500	500	VALID	11.02%
C0079649	009-R-046	Regulator	305	60	3	1361	900	600	800	600	VALID	6.72%
172887	009-R-053	Regulator	366	60	3	1820	750	500	500	500	VALID	6.03%
C0080671	009-R-054	Regulator	250	60	3	0	405	270	500	0	UNVALID	0.00%
189011-IN	009-R-059	Regulator	305	100	3	499	750	500	720	499	VALID	18.33%
189011-OUT	009-R-059	Regulator	100	100	3	499	750	500	275	275	VALID	6.01%
39870	009-R-021	Regulator	125	<= 60 psig	3	1361	600	400	400	400	VALID	2.75%
C0067138 (009-R-041)	009-R-041	Regulator	305	<= 60 psig	3	1106	750	500	740	500	VALID	8.27%
C0067138 (009-R-042)	009-R-042	Regulator	305	<= 60 psig	3	1106	750	500	740	500	VALID	8.27%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
UNKNOWN (009-R-048)	009-R-048	Regulator	150	<= 60 psig	3	3080	0	0	500	0	UNVALID	1.46%
UNKNOWN (009-R-051)	009-R-051	Regulator	155	<= 60 psig	3	0	0	0	1000	0	UNVALID	0.00%
186757	009-R-058	Regulator	305	150	3	1164	750	500	740	500	VALID	7.86%
223505	009-R-061	Regulator	809	305	3	1106	525	350	740	350	UNVALID	21.94%
T0022504	009-V-060, 061, 062, 063	Valve Setting	499	499	3	0	0	0	0	0	UNVALID	0.00%
58317, 57697	009-V-060, 061, 062, 063	Valve Setting	499	499	3	856	1080	720	720	720	VALID	29.13%
50200 (V-54)	009-V-054	Valve Setting	499	499	3	1223	1080	720	720	720	VALID	16.31%
186016	009-V-089	Valve Setting	366	366	3	1553	750	500	720	500	VALID	9.43%
186015	009-V-088	Valve Setting	499	499	3	1569	1115	743	720	720	VALID	12.71%
50201	009-V-152, 153, 154, 155, 157, 158, 159, 160	Valve Setting	499	499	3	1045	1080	720	720	720	VALID	19.09%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
190281	Conoco Phillips MSA	Meter	90	NA	3	376	275	183	100	100	VALID	9.56%
42515 (Meter)	Sumas Check Meter Station No. II	Meter	780	NA	3	780	850	566	800	566	UNVALID	40.00%
26955	Whitehorn	Meter	600	NA	3	656	900	600	270	270	UNVALID	36.57%
42492	Tenaska Cogen M&R	Meter	600	NA	3	787	900	600	720	600	VALID	30.48%
41502 (Meter)	Encogen M&R	Meter	250	NA	4	488	600	400	500	400	VALID	16.38%
28244	Depot Road	Meter	400	NA	3	877	600	400	400	400	VALID	13.68%
9021	Bellingham II Gate	Meter	600	NA	3	1549	900	600	800	600	VALID	11.62%
18136	WWU	Meter	150	NA	4	488	0	0	200	0	UNVALID	9.83%
A0084424	601 Front ST #A	Meter	170	NA	3	933	900	600	175	175	VALID	5.46%
15668 (Meter)	Seawest Industries M&R	Meter	150	NA	3	877	0	0	125	0	UNVALID	5.13%
28028	WWU	Meter	150	NA	4	884	235	156	275	156	VALID	4.07%
34751	Sumas Check Meter Station	Meter	150	NA	3	1106	0	0	275	0	UNVALID	4.07%
34941	Lynden Check Meter #1	Meter	150	NA	3	1106	375	250	275	250	VALID	4.07%
42515	005-O-009	Odorizer	780	780	3	1193	850	566	275	275	UNVALID	19.60%
188196	005-O-008	Odorizer	380	380	3	610	600	400	500	400	VALID	24.91%
UNKV (05-O-03)	005-O-003	Odorizer	250	250	3	499	0	0	720	0	UNVALID	15.02%
187460	005-O-007	Odorizer	145	145	3	1193	750	500	275	275	VALID	3.64%
12838	005-O-006	Odorizer	150	150	3	1361	0	0	400	0	UNVALID	3.30%
14483	005-O-004	Odorizer	155	155	3	1361	0	0	400	0	UNVALID	3.41%
12841	005-O-005	Odorizer	150	150	3	1361	0	0	400	0	UNVALID	3.30%
42109	005-R-109	Regulator	780	60	3	1361	1200	800	1440	800	VALID	17.18%
34456	005-R-087	Regulator	600	170	3	1106	900	600	400	400	UNVALID	16.27%
10C8244	005-R-005	Regulator	150	60	3	877	0	0	200	0	UNVALID	5.13%
20943	005-R-001	Regulator	150	34	3	499	0	0	200	0	UNVALID	9.01%
18049	005-R-007	Regulator	150	60	3	794	0	0	200	0	UNVALID	7.55%
17931	005-R-008	Regulator	150	34	4	635	0	0	200	0	UNVALID	7.55%
16252	005-R-004	Regulator	150	34	3	877	0	0	200	0	UNVALID	5.13%
162322	005-R-006	Regulator	150	34	3	933	600	400	200	200	VALID	4.82%
23886	005-R-013	Regulator	150	58	3	499	0	0	200	0	UNVALID	9.01%
A0080167	005-R-015	Regulator	150	27	3	1193	350	233	250	233	VALID	3.77%
59034	005-R-009	Regulator	150	60	4	0	0	0	0	0	UNVALID	0.00%
11406	005-R-018	Regulator	380	150	3	610	0	0	275	0	UNVALID	24.91%
58366	005-R-019	Regulator	380	60	3	933	600	400	500	400	VALID	12.21%
11246	005-R-020	Regulator	380	60	3	794	0	0	275	0	UNVALID	19.13%
22858	005-R-021	Regulator	600	60	3	933	0	0	200	0	UNVALID	19.28%
AA013576	005-R-022	Regulator	380	58	3	877	0	0	275	0	UNVALID	12.99%
14774	005-R-023	Regulator	380	58	3	794	0	0	275	0	UNVALID	19.13%
18737	005-R-026	Regulator	600	380	3	877	0	0	275	0	UNVALID	26.47%
12208	005-R-024	Regulator	380	60	3	933	0	0	400	0	UNVALID	12.21%
A0084829	005-R-025	Regulator	380	58	3	877	600	400	500	400	VALID	12.99%
UNKV(005-R-028)	005-R-028	Regulator	250	44	3	499	0	0	275	0	UNVALID	15.02%
14482	005-R-032	Regulator	155	60	3	877	0	0	200	0	UNVALID	5.30%
12842	005-R-033	Regulator	150	60	3	1361	0	0	200	0	UNVALID	3.30%
12839	005-R-037	Regulator	150	60	3	1361	0	0	200	0	UNVALID	3.30%
14090	005-R-038	Regulator	380	60	3	1361	0	0	200	0	UNVALID	8.37%
16695	005-R-030	Regulator	250	50	3	933	0	0	200	0	UNVALID	8.03%
31235	005-R-036	Regulator	250	60	3	933	600	400	500	400	VALID	8.03%
44278	005-R-042	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
21253	005-R-040	Regulator	600	60	3	1193	0	0	200	0	UNVALID	15.08%
58717	005-R-041	Regulator	600	150	3	877	0	0	200	0	UNVALID	20.52%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
21799	005-R-043	Regulator	600	60	3	1193	0	0	200	0	UNVALID	15.08%
22159	005-R-044	Regulator	600	60	3	1361	0	0	200	0	UNVALID	13.22%
22244	005-R-048	Regulator	150	60	3	1361	0	0	200	0	UNVALID	3.30%
22214	005-R-046	Regulator	600	60	3	1361	0	0	200	0	UNVALID	13.22%
22141	005-R-047	Regulator	600	60	3	933	0	0	200	0	UNVALID	19.28%
58890	005-R-051	Regulator	150	32	3	1193	0	0	200	0	UNVALID	3.77%
15668	005-R-052	Regulator	150	150	3	933	0	0	200	0	UNVALID	4.82%
22594	005-R-049	Regulator	380	60	3	1361	0	0	275	0	UNVALID	8.37%
UNKV (005-R-057)	005-R-057	Regulator	250	60	3	1456	0	0	720	0	UNVALID	5.15%
480	005-R-050	Regulator	150	60	3	1193	0	0	200	0	UNVALID	3.77%
16497	005-R-058	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
46665	005-R-061	Regulator	380	60	3	1361	60	40	275	40	UNVALID	8.37%
25325	005-R-062	Regulator	380	60	3	1361	600	400	500	400	VALID	8.37%
25894	005-R-063	Regulator	600	60	3	1549	0	0	800	0	UNVALID	11.62%
54445	005-R-066	Regulator	400	60	3	877	1000	666	400	400	VALID	13.68%
165210	005-R-068	Regulator	380	60	3	794	600	400	400	400	VALID	19.13%
27341	005-R-070	Regulator	250	60	3	1193	450	300	275	275	VALID	6.28%
25568	005-R-064	Regulator	250	60	3	1549	0	0	500	0	UNVALID	4.84%
25797	005-R-065	Regulator	600	400	3	877	900	600	400	400	UNVALID	20.52%
29535	005-R-072	Regulator	250	60	3	933	375	250	275	250	VALID	8.03%
18403	005-R-075	Regulator	380	90	3	877	0	0	720	0	UNVALID	12.99%
25692	005-R-076	Regulator	150	60	3	3080	0	0	500	0	UNVALID	1.46%
1402955	005-R-072	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
29595	005-R-073	Regulator	600	60	3	877	900	600	720	600	VALID	20.52%
AA004819	005-R-078	Regulator	250	60	3	641	375	250	275	250	VALID	11.69%
33212	005-R-077	Regulator	145	60	3	1193	600	400	200	200	VALID	3.64%
56948	005-R-082	Regulator	600	60	3	1106	900	600	720	600	VALID	16.27%
33762	005-R-079	Regulator	600	250	3	877	900	600	400	400	UNVALID	20.52%
50002	005-R-081	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
34140	005-R-084	Regulator	380	60	3	933	600	400	500	400	VALID	12.21%
34597	005-R-089	Regulator	600	60	3	1361	900	600	720	600	VALID	13.22%
35231	005-R-092	Regulator	150	60	3	933	300	200	200	200	VALID	4.82%
59764	005-R-091	Regulator	250	60	3	641	600	400	275	275	VALID	11.69%
36387	005-R-093	Regulator	600	60	3	1193	900	600	800	600	VALID	15.08%
36793	005-R-094	Regulator	600	60	3	1106	900	600	200	200	UNVALID	16.27%
37614	005-R-097	Regulator	250	60	3	1193	750	500	275	275	VALID	6.28%
37836	005-R-098	Regulator	250	60	3	1361	600	400	275	275	VALID	5.51%
1490125	005-R-098	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
38944	005-R-099	Regulator	600	60	3	1193	900	600	800	600	VALID	15.08%
40741	005-R-101	Regulator	380	60	3	933	600	400	500	400	VALID	12.21%
41011	005-R-103	Regulator	600	60	3	1193	900	600	800	600	VALID	15.08%
41395	005-R-104	Regulator	250	60	3	1193	600	400	275	275	VALID	6.28%
1291800	005-R-104	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
41676	005-R-105	Regulator	250	60	3	933	600	400	500	400	VALID	8.03%
41622	005-R-106	Regulator	600	60	3	1193	900	600	200	200	UNVALID	15.08%
43625	005-R-107	Regulator	600	60	3	1193	900	600	800	600	VALID	15.08%
41940	005-R-108	Regulator	170	60	3	1193	600	400	200	200	VALID	4.27%
42052	005-R-110	Regulator	780	60	3	1361	1200	800	1440	800	VALID	17.18%
41167	005-R-111	Regulator	250	60	3	877	600	400	275	275	VALID	8.55%
41504	005-R-113	Regulator	380	250	3	811	600	400	720	400	VALID	18.73%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
44841	005-R-115	Regulator	380	34	3	1106	600	400	720	400	VALID	10.31%
42514	005-R-116	Regulator	780	600	3	780	1170	780	720	720	UNVALID	40.00%
44543	005-R-119	Regulator	380	60	3	1193	600	400	400	400	VALID	9.55%
45949	005-R-121	Regulator	380	58	3	758	600	400	400	400	VALID	15.03%
45979	005-R-122	Regulator	380	60	3	1106	600	400	400	400	VALID	10.31%
47669	005-R-125	Regulator	600	60	3	933	900	600	720	600	VALID	19.28%
47811	005-R-126	Regulator	400	60	3	933	600	400	720	400	VALID	12.85%
48257	005-R-127	Regulator	150	60	3	933	600	400	200	200	VALID	4.82%
50222	005-R-128	Regulator	150	60	3	877	600	400	200	200	VALID	5.13%
1380	005-R-128	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
51217	005-R-130	Regulator	600	60	3	1361	900	600	800	600	VALID	13.22%
34457	005-R-088	Regulator	170	40	3	877	375	250	200	200	VALID	5.81%
53164	005-R-131	Regulator	250	60	3	499	600	400	200	200	UNVALID	18.35%
53447	005-R-133	Regulator	600	58	3	1106	750	500	720	500	UNVALID	16.27%
55654	005-R-134	Regulator	780	60	3	1361	900	600	800	600	UNVALID	17.18%
47593	005-R-135	Regulator	150	34	3	499	305	203	275	203	VALID	11.01%
55462	005-R-137	Regulator	600	60	3	499	900	600	720	499	UNVALID	36.06%
41502	005-R-114	Regulator	250	250	3	564	600	400	150	150	UNVALID	17.71%
56120	005-R-138	Regulator	380	60	3	933	600	400	500	400	VALID	12.21%
59466	005-R-140	Regulator	250	34	4	399	600	400	275	275	VALID	15.02%
AA003824	005-R-141	Regulator	150	60	3	499	375	250	275	250	VALID	9.01%
AA003825	005-R-142	Regulator	150	60	3	499	750	500	275	275	VALID	9.01%
AA000668	005-R-144	Regulator	250	60	4	399	600	400	275	275	VALID	15.02%
A0066250	005-R-145	Regulator	380	60	3	933	750	500	500	500	VALID	12.21%
209767	005-R-171	Regulator	960	380	3	1106	750	500	720	500	UNVALID	31.38%
27230	005-R-069	Regulator	250	<= 60 psig	3	877	100	66	400	66	UNVALID	8.55%
233264	005-R-173	Regulator	250	<= 60 psig	3	1106	600	400	740	400	VALID	6.78%
A0066711	005-R-146	Regulator	250	60	3	933	600	400	500	400	VALID	8.03%
UNKV (005-R-147)	005-R-147	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
A0066752	005-R-148	Regulator	250	60	4	746	600	400	500	400	VALID	8.03%
AA00172	005-R-149	Regulator	600	60	3	933	750	500	500	500	UNVALID	19.28%
A0071659	005-R-151	Regulator	600	60	3	933	900	600	800	600	VALID	19.28%
AA004862	005-R-152	Regulator	600	60	3	933	900	600	800	600	VALID	19.28%
AA005324	005-R-153	Regulator	250	60	4	746	600	400	500	400	VALID	8.03%
A0078424	005-R-154	Regulator	380	60	3	1361	600	400	400	400	VALID	8.37%
A0078097	005-R-155	Regulator	600	60	3	1361	900	600	800	600	VALID	13.22%
AA009292	005-R-156	Regulator	250	60	3	933	700	466	500	466	VALID	8.03%
A0081220	005-R-157	Regulator	150	60	3	1106	375	250	500	250	VALID	4.07%
1402832	005-R-159	Regulator	250	60	3	0	450	300	0	0	UNVALID	0.00%
AA013271	005-R-161	Regulator	380	58	3	641	750	500	720	500	VALID	17.76%
163890	005-R-163	Regulator	600	60	3	1106	90	60	300	60	UNVALID	16.27%
171155	005-R-164	Regulator	380	60	3	1960	0	0	500	0	UNVALID	5.82%
180093	005-R-166	Regulator	380	150	3	1106	750	500	275	275	UNVALID	10.31%
194878	005-R-167	Regulator	150	60	4	0	0	0	0	0	UNVALID	0.00%
196032	005-R-169	Regulator	380	250	3	758	750	500	720	500	VALID	15.03%
196033	005-R-170	Regulator	250	58	3	1106	750	500	275	275	VALID	8.45%
18794	005-V-010	Valve Setting	600	600	3	877	930	620	720	620	VALID	20.52%
41501	005-V-092	Valve Setting	380	380	3	811	600	400	720	400	VALID	18.73%
41506	005-V-093	Valve Setting	380	380	3	811	600	400	720	400	VALID	18.73%
224325	005-V-258	Valve Setting	600	600	3	1193	900	600	720	600	VALID	15.08%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
41505	005-V-094	Valve Setting	250	250	4	652	600	400	720	400	VALID	12.26%
27163	005-V-039	Valve Setting	380	380	3	933	600	400	500	400	VALID	12.21%
33194	005-V-050	Valve Setting	250	250	3	1052	375	250	400	250	VALID	7.12%
AA000801 (005-V-050)	005-V-050	Valve Setting	250	250	3	1106	600	400	0	0	UNVALID	6.78%
27205	005-V-044	Valve Setting	250	250	3	2269	450	300	400	300	VALID	5.51%
29722	005-V-045	Valve Setting	150	150	3	933	250	166	400	166	VALID	4.82%
11406 (Valve)	005-V-001	Valve Setting	380	150	3	418	0	0	1440	0	UNVALID	36.32%
AA000894	005-V-168	Valve Setting	250	250	3	499	600	400	720	400	VALID	15.02%
27342	005-V-042	Valve Setting	250	250	3	0	450	300	400	0	UNVALID	0.00%
39957	005-V-075	Valve Setting	150	150	3	0	300	200	0	0	UNVALID	0.00%
54421	005-V-139	Valve Setting	150	150	3	0	305	203	720	0	UNVALID	0.00%
59026	005-V-178	Valve Setting	150	150	4	0	300	200	720	0	UNVALID	0.00%
21515	005-V-123	Valve Setting	600	600	3	1361	900	600	1440	600	VALID	13.22%
215129	005-V-253	Valve Setting	380	380	3	1052	634	422	720	422	VALID	10.83%
AA000801 (005-V-165)	005-V-165	Valve Setting	250	250	4	884	600	400	720	400	VALID	6.78%
163891 (005-V-204)	005-V-204	Valve Setting	600	600	3	0	900	600	720	0	UNVALID	0.00%
34405 (005-V-055)	005-V-055	Valve Setting	600	600	3	0	900	600	720	0	UNVALID	0.00%
34405 (005-V-056)	005-V-056	Valve Setting	170	170	3	0	375	250	400	0	UNVALID	0.00%
PRE-CNG	005-V-002	Valve Setting	150	150	3	0	0	0	720	0	UNVALID	0.00%
44414 (005-V-107)	005-V-107	Valve Setting	250	250	3	0	760	506	720	0	UNVALID	0.00%
44414 (005-V-112)	005-V-112	Valve Setting	250	250	3	0	760	506	720	0	UNVALID	0.00%
AA004166	005-V-162	Valve Setting	150	150	3	0	750	500	720	0	UNVALID	0.00%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
47761	PUGET SOUND NAVAL SHIPYARD	Meter	400	NA	3	823	850	566	720	566	VALID	19.43%
45014	SUBBASE BLDG NO. 2800	Meter	400	NA	3	641	600	400	400	400	VALID	18.70%
45012	BANGOR NAVAL SUBMARINE BASE	Meter	250	NA	3	499	600	400	400	400	VALID	15.02%
B0071949	CHICO CHECK METER	Meter	325	NA	3	1056	0	0	720	0	UNVALID	12.30%
16160	008-R-007	Regulator	499	60	3	877	0	0	200	0	UNVALID	17.06%
13350	008-R-008	Regulator	170	60	3	933	0	0	200	0	UNVALID	5.46%
45211	008-R-009	Regulator	499	170	3	933	750	500	720	500	VALID	16.03%
41114	008-R-006	Regulator	499	60	3	1361	750	500	500	500	VALID	10.99%
51772	008-R-017	Regulator	499	250	3	888	750	500	720	500	VALID	19.09%
16443	008-R-019	Regulator	250	60	3	933	0	0	200	0	UNVALID	8.03%
20C10484	008-R-021	Regulator	250	35	3	1361	0	0	200	0	UNVALID	5.51%
20387 (008-R-023)	008-R-023	Regulator	499	60	3	877	750	500	500	500	VALID	17.06%
51773	008-R-022	Regulator	250	144	3	499	600	400	275	275	VALID	16.38%
23416	008-R-024	Regulator	250	60	3	877	114	76	200	76	UNVALID	8.55%
55656	008-R-026	Regulator	144	60	3	499	90	60	200	60	UNVALID	10.57%
23419	008-R-025	Regulator	144	60	3	933	100	66	200	66	UNVALID	4.63%
24685	008-R-027	Regulator	499	60	3	933	0	0	200	0	UNVALID	16.03%
41117	008-R-028	Regulator	499	250	3	794	750	500	720	500	VALID	25.12%
25874	008-R-032	Regulator	170	60	3	877	375	250	200	200	VALID	5.81%
33943	008-R-035	Regulator	170	60	3	933	400	266	275	266	VALID	5.46%
35209	008-R-036	Regulator	170	60	3	933	600	400	200	200	VALID	5.46%
35853	008-R-038	Regulator	250	60	3	933	275	183	200	183	UNVALID	8.03%
40247	008-R-040	Regulator	499	60	3	1361	750	500	500	500	VALID	10.99%
40491	008-R-041	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
40559	008-R-042	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
41027	008-R-044	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41029	008-R-045	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41031	008-R-046	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41033	008-R-047	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41035	008-R-048	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41037	008-R-049	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41039	008-R-050	Regulator	250	60	3	0	600	400	0	0	UNVALID	0.00%
41041	008-R-051	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
41043	008-R-052	Regulator	250	60	3	2260	600	400	500	400	VALID	3.32%
41045	008-R-053	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41047	008-R-054	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41049	008-R-055	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41051	008-R-056	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41053	008-R-057	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41055	008-R-058	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41057	008-R-059	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41059	008-R-060	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41061	008-R-061	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41063	008-R-062	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41065	008-R-063	Regulator	250	60	3	2112	600	400	500	400	VALID	3.55%
41067	008-R-064	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
UNKV (008-R-064)	008-R-064	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
41070	008-R-065	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41072	008-R-066	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
41074	008-R-067	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41076	008-R-068	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
41078	008-R-069	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41080	008-R-070	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41082	008-R-071	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41084	008-R-072	Regulator	250	60	3	1361	0	0	200	0	UNVALID	5.51%
41086	008-R-073	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41088	008-R-074	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41093	008-R-076	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41099	008-R-079	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41101	008-R-080	Regulator	250	60	3	2260	600	400	500	400	VALID	3.32%
41103	008-R-081	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
41105	008-R-082	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41155	008-R-084	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41314	008-R-085	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
41348	008-R-086	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41972	008-R-087	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
42142	008-R-089	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
42393	008-R-091	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
43558	008-R-096	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
44742	008-R-098	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
45089	008-R-099	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
45246	008-R-101	Regulator	170	60	3	1361	600	400	500	400	VALID	3.75%
46427	008-R-102	Regulator	499	60	3	1361	750	500	500	500	VALID	10.99%
46594	008-R-103	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
47828	008-R-104	Regulator	170	60	3	1361	600	400	200	200	VALID	3.75%
48281	008-R-105	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
49478	008-R-108	Regulator	250	60	3	1361	750	500	500	500	VALID	5.51%
49714	008-R-109	Regulator	170	60	3	499	750	500	200	200	VALID	10.22%
49795	008-R-110	Regulator	170	60	3	1361	750	500	200	200	VALID	3.75%
51685	008-R-111	Regulator	170	60	3	933	600	400	200	200	VALID	5.46%
53132	008-R-113	Regulator	170	60	3	499	750	500	200	200	VALID	10.22%
53884	008-R-115	Regulator	170	60	3	1361	750	500	200	200	VALID	3.75%
54836	008-R-116	Regulator	250	60	3	1361	0	0	500	0	UNVALID	5.51%
60124	008-R-119	Regulator	250	60	3	2260	750	500	500	500	VALID	3.32%
60112	008-R-120	Regulator	499	60	3	1361	750	500	500	500	VALID	10.99%
B0073116 (008-R-122)	008-R-122	Regulator	250	60	3	499	740	493	275	275	VALID	15.02%
B0074271	008-R-123	Regulator	499	60	3	1361	750	500	500	500	VALID	10.99%
45222	008-R-124	Regulator	150	NA	3	499	750	500	275	275	VALID	11.01%
B0080216	008-R-124	Regulator	170	60	3	933	750	500	275	275	VALID	5.46%
B0074126	008-R-125	Regulator	499	60	3	2260	750	500	500	500	VALID	6.62%
B0072657	008-R-126	Regulator	499	60	3	2260	750	500	500	500	VALID	6.62%
B0078444	008-R-127	Regulator	499	60	3	877	750	500	720	500	VALID	17.06%
UNKV (008-R-128)	008-R-128	Regulator	499	60	3	0	0	0	0	0	UNVALID	0.00%
1700307	008-R-129	Regulator	170	60	3	0	100	66	0	0	UNVALID	0.00%
UNKV (008-R-129)	008-R-129	Regulator	170	60	3	0	0	0	0	0	UNVALID	0.00%
2000104	008-R-130	Regulator	250	60	3	0	600	400	0	0	UNVALID	0.00%
2000134	008-R-131	Regulator	250	60	3	0	600	400	0	0	UNVALID	0.00%
2001251	008-R-132	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
UNKV (008-R-133)	008-R-133	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
1951003	008-R-134	Regulator	170	60	3	0	120	80	0	0	UNVALID	0.00%
1577136	008-R-135	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
UNKV (008-R-135)	008-R-135	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
2001765	008-R-138	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
1703539	008-R-139	Regulator	250	60	3	0	100	66	0	0	UNVALID	0.00%
178845	008-R-145	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
1510070	008-R-146	Regulator	170	60	3	0	120	80	0	0	UNVALID	0.00%
201253	008-R-151	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
218194	008-R-153	Regulator	250	60	3	0	745	496	0	0	UNVALID	0.00%
228923	008-R-156	Regulator	250	30	3	0	750	500	0	0	UNVALID	0.00%
UNKV (008-R-136)	008-R-136	Regulator	499	60	3	0	0	0	0	0	UNVALID	0.00%
BB005015	008-R-137	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
163399	008-R-141	Regulator	144	60	3	499	600	400	275	275	VALID	8.65%
UNKV (008-R-142)	008-R-142	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (008-R-143)	008-R-143	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
174704	008-R-144	Regulator	499	60	3	1820	750	500	500	500	VALID	8.22%
198153	008-R-147	Regulator	170	60	3	1361	750	500	250	250	VALID	3.75%
UNKV (008-R-148)	008-R-148	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
186076	008-R-149	Regulator	250	60	3	1820	750	500	500	500	VALID	4.12%
186766	008-R-150	Regulator	175	60	3	1361	375	250	200	200	VALID	3.86%
226327	008-R-155	Regulator	250	60	3	1052	640	426	720	426	VALID	7.12%
UNKV (008-R-082)	08-R-082	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
41077	008-V-081	Valve Setting	250	60	3	794	600	400	275	275	VALID	12.59%
50201	008-V-158,159,160	Valve Setting	499	499	3	1045	1080	720	720	720	VALID	19.09%
20387 (008-V-031)	008-V-031	Valve Setting	499	60	3	877	750	500	500	500	VALID	17.06%
53128	008-V-170	Valve Setting	170	170	3	544	750	500	720	500	VALID	12.48%
B0073116 (008-V-184)	008-V-184	Valve Setting	250	60	3	1056	740	493	720	493	VALID	9.46%
B0073116 (008-V-185)	008-V-185	Valve Setting	250	60	3	933	740	493	720	493	VALID	9.46%
44274	008-V-129	Valve Setting	170	170	3	933	750	500	720	500	VALID	6.44%
210812	008-V-250	Valve Setting	170	170	3	933	660	440	720	440	VALID	5.75%
49319	008-V-147,148,149	Valve Setting	170	170	3	933	600	400	720	400	VALID	5.46%
53133	008-V-168	Valve Setting	170	NA	3	933	750	500	720	500	VALID	5.46%
45440	008-V-130	Valve Setting	170	170	3	1106	750	500	720	500	VALID	4.61%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
38509	M&R 38509	Meter	150	NA	3	1045	225	150	100	100	UNVALID	5.74%
15281	M&R 15281	Meter	200	NA	3	877	0	0	200	0	UNVALID	6.84%
51880	M&R 51880	Meter	300	NA	3	908	600	400	275	275	UNVALID	13.20%
53237	M&R 53237	Meter	250	NA	3	758	750	500	275	275	VALID	9.89%
39727	M&R 39727	Meter	250	NA	3	1106	750	500	720	500	VALID	8.45%
D0085404	M&R D0085404	Meter	200	NA	3	0	225	150	200	0	UNVALID	0.00%
28788	023-O-007	Odorizer	400	400	3	1106	600	400	400	400	VALID	10.85%
39726	023-O-003	Odorizer	250	250	3	1183	750	500	275	275	VALID	8.45%
15604	023-O-001	Odorizer	200	200	3	758	0	0	275	0	UNVALID	7.91%
227280	023-O-001	Odorizer	200	200	3	0	750	500	1440	0	UNVALID	0.00%
214539	023-R-120	Regulator	250	60	3	1106	750	500	720	500	VALID	6.78%
31050	023-R-029	Regulator	300	60	3	685	600	400	300	300	VALID	13.14%
DD000273	023-R-079	Regulator	250	55	3	0	600	400	0	0	UNVALID	0.00%
52153	023-R-056	Regulator	500	60	3	1106	750	500	500	500	VALID	13.56%
48813	023-R-048	Regulator	300	60	3	1106	600	400	720	400	VALID	10.14%
51504	023-R-053	Regulator	250	55	3	758	600	400	275	275	VALID	9.89%
194550	023-R-114	Regulator	300	60	3	758	750	500	720	500	VALID	11.87%
58506	023-R-073	Regulator	250	60	3	758	750	500	275	275	VALID	9.89%
198521	023-R-026	Regulator	300	60	3	758	600	400	400	400	VALID	11.87%
200521	023-R-116	Regulator	500	100	3	1296	750	500	720	500	VALID	11.57%
12613	023-R-016	Regulator	250	60	3	685	0	0	100	0	UNVALID	10.95%
177457	023-R-111	Regulator	250	60	3	758	750	500	275	275	VALID	9.89%
172439	023-R-104	Regulator	250	60	3	1106	750	500	275	275	VALID	8.45%
184453	023-R-015	Regulator	250	60	3	1106	750	500	275	275	VALID	8.45%
11140	023-R-010	Regulator	300	150	3	1106	450	300	200	200	UNVALID	8.14%
15799	023-R-001	Regulator	300	60	3	1106	722	515	500	500	VALID	8.14%
56258	023-R-068	Regulator	300	60	3	933	600	400	720	400	VALID	9.64%
161237	023-R-101	Regulator	300	60	3	933	600	400	300	300	VALID	9.64%
208908	023-R-118	Regulator	300	175	3	933	750	500	400	400	VALID	9.64%
29278	023-R-026	Regulator	300	60	3	1106	450	300	400	300	VALID	8.14%
42449	023-R-037	Regulator	300	60	3	1106	600	400	300	300	VALID	8.14%
49792	023-R-040	Regulator	300	60	3	1106	600	400	720	400	VALID	8.14%
54158	023-R-060	Regulator	300	60	3	1106	600	400	720	400	VALID	8.14%
16257	023-R-017	Regulator	250	60	3	933	0	0	100	0	UNVALID	8.03%
35682	023-R-031	Regulator	250	60	3	933	750	500	300	300	VALID	8.03%
47893	023-R-044	Regulator	250	60	3	1106	600	400	275	275	VALID	6.78%
4740096	023-R-103	Regulator	300	60	3	1193	1110	740	720	720	VALID	7.54%
36421	023-R-014	Regulator	250	60	3	1106	600	400	250	250	VALID	6.78%
59844	023-R-077	Regulator	250	60	3	1106	750	500	275	275	VALID	6.78%
163646	023-R-095	Regulator	250	59	3	1106	750	500	250	250	VALID	6.78%
28041	023-R-025	Regulator	300	60	3	1361	100	66	200	66	UNVALID	6.61%
30370	023-R-028	Regulator	300	60	3	1361	600	400	400	400	VALID	6.61%
35527	023-R-030	Regulator	300	60	3	1361	600	400	300	300	VALID	6.61%
55912	023-R-067	Regulator	300	60	3	1361	600	400	500	400	VALID	6.61%
56872	023-R-069	Regulator	300	60	3	1361	600	400	500	400	VALID	6.61%
59739	023-R-078	Regulator	300	60	3	1361	0	0	500	0	UNVALID	6.61%
194008	023-R-115	Regulator	300	158	3	1361	600	400	720	400	VALID	6.61%
25473	023-R-019	Regulator	250	60	3	1361	0	0	200	0	UNVALID	5.51%
48291	023-R-045	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
49724	023-R-049	Regulator	250	55	3	1361	600	400	300	300	VALID	5.51%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
28321	023-R-023	Regulator	250	60	3	1361	750	500	275	275	VALID	5.51%
42764	023-R-038	Regulator	250	60	3	1361	750	500	300	300	VALID	5.51%
49758	023-R-050	Regulator	250	60	3	1361	750	500	500	500	VALID	5.51%
53588	023-R-061	Regulator	250	60	3	1361	750	500	500	500	VALID	5.51%
53690	023-R-059	Regulator	250	60	3	1361	750	500	300	300	VALID	5.51%
55747	023-R-066	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
58823	023-R-075	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
54540	023-R-064	Regulator	250	60	3	1361	750	500	300	300	VALID	5.51%
54792	023-R-065	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
59253	023-R-076	Regulator	250	60	3	1361	750	500	300	300	VALID	5.51%
166068	023-R-102	Regulator	250	60	3	1361	750	500	250	250	VALID	5.51%
163136	023-R-108	Regulator	250	60	3	1456	500	333	500	333	VALID	5.15%
180655	023-R-112	Regulator	250	60	3	1456	800	533	500	500	VALID	5.15%
45596	023-R-039	Regulator	250	60	3	1549	750	500	500	500	VALID	4.84%
30947	023-R-024	Regulator	200	60	3	1361	375	250	200	200	VALID	4.41%
52223	023-R-055	Regulator	200	60	3	1361	375	250	200	200	VALID	4.41%
189413	023-R-113	Regulator	150	55	3	0	0	0	0	0	UNVALID	0.00%
238750	023-R-007	Regulator	300	55	3	0	0	0	275	0	UNVALID	0.00%
239665	023-R-007	Regulator	300	55	3	0	750	500	400	0	UNVALID	0.00%
5C2565	023-R-006	Regulator	300	33	3	0	0	0	300	0	UNVALID	0.00%
D0067264	023-R-083	Regulator	250	60	3	0	600	400	500	0	UNVALID	0.00%
D0070621	023-R-084	Regulator	250	60	3	0	600	400	500	0	UNVALID	0.00%
D0070753	023-R-085	Regulator	250	60	3	0	750	500	275	0	UNVALID	0.00%
D0075204	023-R-086	Regulator	250	60	3	0	750	500	275	0	UNVALID	0.00%
D0077899	023-R-087	Regulator	250	60	3	0	750	500	720	0	UNVALID	0.00%
D0078199	023-R-088	Regulator	200	60	3	0	750	500	500	0	UNVALID	0.00%
D0078546	023-R-089	Regulator	158	60	3	0	600	400	275	0	UNVALID	0.00%
D0080105	023-R-091	Regulator	300	60	3	0	600	400	720	0	UNVALID	0.00%
D0080029	023-R-092	Regulator	300	45	3	0	600	400	300	0	UNVALID	0.00%
D0080697	023-R-093	Regulator	300	60	3	0	750	500	500	0	UNVALID	0.00%
D0082224	023-R-109	Regulator	250	60	3	0	750	500	1440	0	UNVALID	0.00%
D0083934	023-R-096	Regulator	250	59	3	0	750	500	275	0	UNVALID	0.00%
D0084203	023-R-097	Regulator	250	60	3	0	750	500	275	0	UNVALID	0.00%
D0084213	023-R-036	Regulator	300	60	3	0	600	400	300	0	UNVALID	0.00%
D0084759	023-R-099	Regulator	250	60	3	0	750	500	275	0	UNVALID	0.00%
D0085196	023-R-098	Regulator	300	60	3	0	600	400	720	0	UNVALID	0.00%
DD002177	023-R-080	Regulator	250	60	3	0	0	0	500	0	UNVALID	0.00%
DD002860	023-R-082	Regulator	250	60	3	0	600	400	275	0	UNVALID	0.00%
DD011684	023-R-109	Regulator	250	60	3	0	0	0	500	0	UNVALID	0.00%
39724	023-V-014	Valve Setting	250	60	3	1183	750	500	275	275	VALID	8.45%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
192344	LONGVIEW FIBRE MILL	Meter	499	NA	3	823	600	400	250	250	UNVALID	12.14%
48328	B.F. GOODRICH (KALAMA CHEMICAL)	Meter	300	NA	3	564	750	500	275	275	UNVALID	21.25%
43607	LONGVIEW FIBRE MILL	Meter	250	NA	3	727	1080	720	720	720	VALID	13.75%
51822	BHP	Meter	300	NA	3	811	750	500	275	275	UNVALID	14.79%
13913	CHINOOK VENTURES (REYNOLDS METALS)	Meter	250	NA	3	641	0	0	300	0	UNVALID	12.59%
E0082073	MINT FARM ENERGY	Meter	250	NA	3	823	750	500	720	500	VALID	12.14%
45514	CHINOOK VENTURES (REYNOLDS METALS)	Meter	250	NA	3	1056	600	400	720	400	VALID	9.46%
E0083149	CHINOOK VENTURES (REYNOLDS METALS)	Meter	250	NA	3	1106	250	166	90	90	UNVALID	6.78%
52802	LAKESIDE IND.	Meter	80	NA	3	641	140	93	200	93	VALID	3.74%
192288	LAKESIDE IND.	Meter	80	NA	3	1106	140	93	275	93	VALID	2.17%
43604	011-O-006	Odorizer	499	499	3	1193	1080	720	275	275	UNVALID	12.54%
213993	011-O-007	Odorizer	300	300	3	1056	0	0	300	0	UNVALID	11.36%
29516	011-O-002	Odorizer	250	250	3	1193	0	0	275	0	UNVALID	6.28%
13163	011-O-001	Odorizer	152	152	3	933	225	150	400	150	UNVALID	4.88%
173404	011-O-005	Odorizer	150	150	3	1106	375	250	275	250	VALID	4.07%
43606	011-R-030	Regulator	499	250	3	1045	1080	720	720	720	VALID	19.09%
73582	011-R-008	Regulator	250	36	3	418	90	60	275	60	UNVALID	23.89%
206644	011-R-002	Regulator	250	36	3	418	90	60	275	60	UNVALID	23.89%
E0084526	011-R-044	Regulator	300	60	3	499	750	500	720	499	VALID	18.03%
165132	011-R-046	Regulator	499	46	3	1106	1080	720	720	720	VALID	16.91%
23640	011-R-020	Regulator	250	46	3	499	600	400	200	200	UNVALID	15.02%
52429	011-R-038	Regulator	250	60	3	499	0	0	200	0	UNVALID	15.02%
E0072301	011-R-040	Regulator	250	60	3	499	750	500	275	275	VALID	15.02%
UNKV (011-R-001)	011-R-001	Regulator	250	36	3	641	100	66	275	66	UNVALID	13.95%
21728	011-R-014	Regulator	250	60	3	794	0	0	200	0	UNVALID	12.59%
47137	011-R-031	Regulator	250	60	3	758	600	400	250	250	VALID	9.89%
24888	011-R-027	Regulator	150	52	3	0	0	0	0	0	UNVALID	0.00%
82C8590	011-R-004	Regulator	250	80	3	877	0	0	200	0	UNVALID	8.55%
52070	011-R-037	Regulator	300	60	3	1106	750	500	720	500	VALID	8.14%
E0078128	011-R-042	Regulator	300	22	3	1106	600	400	720	400	VALID	8.14%
173406	011-R-047	Regulator	150	58	3	641	0	0	275	0	UNVALID	7.01%
32981	011-R-011	Regulator	250	60	3	1106	600	400	275	275	VALID	6.78%
24820	011-R-024	Regulator	300	60	3	1361	0	0	200	0	UNVALID	6.61%
49631	011-R-032	Regulator	300	60	3	1361	750	500	500	500	VALID	6.61%
49632	011-R-033	Regulator	300	60	3	1361	750	500	500	500	VALID	6.61%
192409	011-R-049	Regulator	300	60	3	1361	750	500	300	300	VALID	6.61%
199748	011-R-050	Regulator	300	60	3	1361	750	500	300	300	VALID	6.61%
UNKV (011-R-021)	011-R-021	Regulator	152	40	3	758	0	0	200	0	UNVALID	6.01%
17004	011-R-003	Regulator	250	60	3	1321	375	250	275	250	VALID	5.67%
179775	011-R-003	Regulator	250	60	3	1321	375	250	275	250	VALID	5.67%
16088	011-R-018	Regulator	250	60	3	1361	0	0	200	0	UNVALID	5.51%
50827	011-R-036	Regulator	250	60	3	1361	750	500	500	500	VALID	5.51%
EE00176	011-R-017	Regulator	250	60	3	1361	750	500	500	500	VALID	5.51%
173407	011-R-048	Regulator	150	52	3	0	0	0	0	0	UNVALID	0.00%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
9020	GENERAL CHEMICAL	Meter	250	NA	3	877	225	150	300	150	UNVALID	8.55%
30637	PSE FERDONIA	Meter	500	NA	3	335	750	500	275	275	UNVALID	59.56%
37429	GENERAL CHEMICAL	Meter	250	NA	3	1056	225	150	100	100	UNVALID	9.46%
40022	SHELL (TEXACO)	Meter	400	NA	3	335	600	400	275	275	UNVALID	47.65%
40023	SHELL PUGET SOUND (MARCH PT COGEN)	Meter	500	NA	3	489	750	500	275	275	UNVALID	44.44%
52583	ANACORTES CHECK METER	Meter	366	NA	3	1106	750	500	720	500	VALID	12.37%
191484	LINDE HYDROGEN	Meter	500	NA	3	1052	750	500	720	500	VALID	16.90%
169736 Tesoro	TESORO	Meter	225	NA	3	564	600	400	720	400	VALID	15.94%
19330 (Meter)	AULT FIELD	Meter	250	NA	3	610	0	0	100	0	UNVALID	16.38%
G0073443	ANACORTES CHECK METER	Meter	366	NA	3	1106	750	500	720	500	VALID	12.37%
G0080813	API PROPERTIES - SIERRA PACIFIC	Meter	200	NA	3	811	225	150	125	125	UNVALID	9.86%
GG002455	AIR LIQUIDE	Meter	500	NA	3	1056	750	500	720	500	VALID	18.93%
GG002457	AIR LIQUIDE	Meter	500	NA	3	877	750	500	720	500	VALID	20.98%
26235	017-O-004	Odorizer	249	249	3	877	275	183	400	183	UNVALID	8.51%
177232 (017-O-006)	017-O-006	Odorizer	250	250	3	1456	900	600	300	300	VALID	5.15%
G0067527 (017-O-001)	017-O-001	Odorizer	500	500	3	1361	750	500	250	250	UNVALID	11.02%
UNKV (017-O-003)	017-O-003	Odorizer	960	960	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-O-005)	017-O-005	Odorizer	25	25	3	0	0	0	0	0	UNVALID	0.00%
14851	017-R-012	Regulator	360	100	3	877	0	0	400	0	UNVALID	12.31%
15491	017-R-001	Regulator	360	60	3	794	0	0	200	0	UNVALID	18.12%
15973	017-R-036	Regulator	105	45	3	877	100	66	200	66	UNVALID	3.59%
16050	017-R-063	Regulator	400	60	3	794	0	0	275	0	UNVALID	20.14%
17275	017-R-051	Regulator	400	60	3	1361	0	0	200	0	UNVALID	8.81%
18439	017-R-006	Regulator	250	60	4	746	0	0	200	0	UNVALID	8.03%
19956	017-R-052	Regulator	400	60	3	1361	0	0	200	0	UNVALID	8.81%
20491	017-R-007	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
21000	017-R-017	Regulator	360	60	3	1361	0	0	200	0	UNVALID	7.93%
21175	017-R-019	Regulator	249	41	3	758	110	73	200	73	UNVALID	12.54%
21304	017-R-018	Regulator	360	249	3	1106	0	0	400	0	UNVALID	9.76%
21366	017-R-003	Regulator	250	60	4	399	0	0	200	0	UNVALID	15.02%
23477	017-R-060	Regulator	400	60	3	1361	0	0	200	0	UNVALID	8.81%
25372	017-R-062	Regulator	400	60	3	1361	0	0	200	0	UNVALID	8.81%
25452	017-R-008	Regulator	250	60	4	954	0	0	200	0	UNVALID	6.28%
26117	017-R-042	Regulator	105	60	3	933	600	400	200	200	VALID	3.37%
26783	017-R-068	Regulator	400	60	3	933	0	0	200	0	UNVALID	12.85%
28377	017-R-067	Regulator	400	60	3	3080	0	0	500	0	UNVALID	3.90%
169736	017-R-047	Regulator	360	225	3	418	600	400	720	400	VALID	34.41%
28931	017-R-070	Regulator	105	60	3	933	750	500	200	200	VALID	3.37%
53023	017-R-031	Regulator	360	105	3	641	750	500	720	500	VALID	18.12%
60133 (017-R-134)	017-R-134	Regulator	360	275	3	811	600	400	720	400	VALID	17.74%
54487	017-R-013	Regulator	360	41	3	641	600	400	500	400	VALID	16.83%
32376	017-R-023	Regulator	105	60	3	1361	300	200	200	200	VALID	2.31%
33020	017-R-026	Regulator	105	60	3	1549	265	176	300	176	VALID	2.03%
54636	017-R-123	Regulator	250	60	3	499	750	500	275	275	VALID	15.02%
34160	017-R-077	Regulator	175	60	3	933	600	400	200	200	VALID	5.62%
34198	017-R-078	Regulator	175	60	3	1193	600	400	200	200	VALID	4.40%
34199	017-R-072	Regulator	360	175	3	1193	600	400	400	400	VALID	9.05%
209739	017-R-173	Regulator	500	52	3	1106	750	500	720	500	VALID	14.25%
GG010642	017-R-025	Regulator	360	41	3	758	750	500	720	500	VALID	14.24%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
34628	017-R-041	Regulator	360	250	3	641	750	500	200	200	UNVALID	16.83%
35043	017-R-083	Regulator	500	60	3	1085	750	500	500	500	VALID	13.82%
31980	017-R-021	Regulator	400	60	3	877	675	450	500	450	VALID	13.68%
33846	017-R-076	Regulator	400	60	3	877	675	450	500	450	VALID	13.68%
34371	017-R-081	Regulator	500	250	3	1106	750	500	500	500	VALID	13.56%
40024	017-R-089	Regulator	500	360	3	811	750	500	720	500	VALID	24.64%
40026	017-R-091	Regulator	500	400	3	562	750	500	720	500	VALID	44.44%
41747	017-R-093	Regulator	105	60	3	933	0	0	500	0	UNVALID	3.37%
162514	017-R-156	Regulator	500	52	3	1106	750	500	720	500	VALID	13.56%
42739	017-R-096	Regulator	360	60	3	933	600	400	500	400	VALID	11.57%
43837	017-R-094	Regulator	400	60	3	933	750	500	500	500	VALID	12.85%
42928	017-R-098	Regulator	250	60	3	1106	600	400	275	275	VALID	6.78%
43053	017-R-100	Regulator	500	60	3	1193	0	0	200	0	UNVALID	12.57%
57477	017-R-128	Regulator	400	60	3	933	750	500	720	500	VALID	12.85%
58210	017-R-130	Regulator	400	60	3	933	750	500	500	500	VALID	12.85%
191622	017-R-165	Regulator	400	60	3	933	750	500	500	500	VALID	12.85%
45846	017-R-104	Regulator	105	10	3	1106	600	400	200	200	VALID	2.85%
48869	017-R-110	Regulator	360	60	3	933	750	500	500	500	VALID	11.57%
53024	017-R-045	Regulator	360	60	3	933	750	500	500	500	VALID	11.57%
47212	017-R-108	Regulator	250	60	3	544	600	400	250	250	VALID	18.35%
55633	017-R-121	Regulator	360	250	3	933	750	500	500	500	VALID	11.57%
49703	017-R-113	Regulator	250	60	3	933	0	0	500	0	UNVALID	8.03%
49816	017-R-114	Regulator	400	60	3	933	0	0	500	0	UNVALID	12.85%
49968	017-R-115	Regulator	250	60	3	933	0	0	500	0	UNVALID	8.03%
220939	017-R-175	Regulator	400	60	3	1106	750	500	500	500	VALID	10.85%
50253	017-R-117	Regulator	400	60	3	933	0	0	500	0	UNVALID	12.85%
51884	017-R-043	Regulator	105	60	3	2260	0	0	500	0	UNVALID	1.39%
52562	017-R-118	Regulator	151	60	3	933	0	0	500	0	UNVALID	4.85%
52993	017-R-119	Regulator	500	60	3	499	600	400	720	400	UNVALID	30.05%
28768	017-R-066	Regulator	249	52	3	758	600	400	275	275	VALID	9.85%
47086	017-R-107	Regulator	360	60	3	1106	750	500	720	500	VALID	9.76%
G0080815	017-R-148	Regulator	360	200	3	1106	600	400	720	400	VALID	9.76%
34279	017-R-080	Regulator	250	60	3	1056	600	400	275	275	VALID	9.46%
36582	017-R-084	Regulator	360	60	3	1193	750	500	500	500	VALID	9.05%
45639	017-R-106	Regulator	360	60	3	1193	750	500	500	500	VALID	9.05%
56132	017-R-124	Regulator	400	60	3	933	0	0	500	0	UNVALID	12.85%
56610	017-R-126	Regulator	151	45	3	933	600	400	200	200	VALID	4.85%
57391	017-R-132	Regulator	360	60	3	2260	750	500	500	500	VALID	4.78%
30969	017-R-020	Regulator	400	60	3	1361	750	500	500	500	VALID	8.81%
58167	017-R-129	Regulator	400	60	3	933	750	500	275	275	UNVALID	12.85%
31324	017-R-004	Regulator	250	60	3	877	600	400	275	275	VALID	8.55%
58345	017-R-131	Regulator	400	60	3	933	750	500	500	500	VALID	12.85%
42767	017-R-097	Regulator	360	60	3	1361	750	500	500	500	VALID	7.93%
45941	017-R-105	Regulator	360	60	3	1361	750	500	500	500	VALID	7.93%
170356	017-R-157	Regulator	500	60	3	544	750	500	720	500	VALID	36.71%
173441	017-R-158	Regulator	400	60	3	1960	750	500	500	500	VALID	6.59%
179240	017-R-160	Regulator	400	60	3	1820	750	500	500	500	VALID	6.59%
184808	017-R-161	Regulator	151	60	3	1960	750	500	500	500	VALID	2.49%
186760	017-R-162	Regulator	500	360	3	1106	750	500	720	500	VALID	16.90%
189436	017-R-163	Regulator	400	60	3	1960	750	500	500	500	VALID	6.59%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
213277	017-R-082	Regulator	250	60	3	1106	375	250	275	250	VALID	6.78%
191798	017-R-079	Regulator	105	60	3	877	375	250	200	200	VALID	3.59%
193978	017-R-170	Regulator	105	45	3	953	300	200	275	200	VALID	4.40%
200583	017-R-171	Regulator	100	52	3	1106	600	400	275	275	VALID	2.85%
205109	017-R-172	Regulator	105	60	3	1960	275	183	500	183	VALID	1.73%
37799	017-R-086	Regulator	249	60	3	1106	600	400	275	275	VALID	6.75%
50121	017-R-116	Regulator	249	41	3	1106	600	400	275	275	VALID	6.75%
220008	017-R-029	Regulator	151	60	3	499	0	0	200	0	UNVALID	9.07%
55558	017-R-122	Regulator	250	60	3	1167	375	250	300	250	VALID	6.43%
227564	017-R-178	Regulator	400	60	3	1960	750	500	500	500	VALID	6.59%
230009	017-R-075	Regulator	500	360	3	758	750	500	500	500	VALID	24.65%
11C6725	017-R-038	Regulator	360	30	3	2858	0	0	300	0	UNVALID	3.78%
13C7972	017-R-005	Regulator	250	32	3	0	0	0	0	0	UNVALID	0.00%
13C8489	017-R-024	Regulator	360	60	3	499	0	0	200	0	UNVALID	21.63%
13C9115	017-R-002	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
177232 (017-R-166)	017-R-166	Regulator	960	395	3	0	900	600	1440	0	UNVALID	0.00%
18C6103	017-R-065	Regulator	150	25	3	1193	0	0	200	0	UNVALID	3.77%
19330 (017-R-059)	017-R-059	Regulator	400	60	3	794	0	0	200	0	UNVALID	20.14%
24C9677	017-R-028	Regulator	360	151	3	601	0	0	720	0	UNVALID	17.95%
60133 (017-R-090)	017-R-090	Regulator	360	360	3	450	600	400	720	400	VALID	32.00%
42330	017-R-095	Regulator	249	60	3	1193	600	400	300	300	VALID	6.26%
G0067527 (017-R-138)	017-R-138	Regulator	500	500	3	794	750	500	200	200	UNVALID	25.17%
G0068269	017-R-137	Regulator	249	60	3	641	750	500	275	275	VALID	11.64%
G0072371 (017-R-141)	017-R-141	Regulator	360	250	3	758	600	400	720	400	VALID	14.24%
G0072371 (017-R-143)	017-R-143	Regulator	250	45	3	933	600	400	275	275	VALID	8.03%
G0072371 (017-R-144)	017-R-144	Regulator	250	45	3	1106	600	400	275	275	VALID	6.78%
G0073542	017-R-145	Regulator	400	60	3	499	600	400	720	400	VALID	24.04%
G0078891	017-R-146	Regulator	175	60	3	1106	750	500	275	275	VALID	4.75%
G0079688	017-R-147	Regulator	400	60	3	933	750	500	500	500	VALID	12.85%
G0080171	017-R-150	Regulator	400	60	3	1321	750	500	500	500	VALID	9.08%
44845	017-R-102	Regulator	249	60	3	1193	600	400	300	300	VALID	6.26%
G0082379	017-R-151	Regulator	105	45	3	544	375	250	275	250	VALID	7.71%
G0082548	017-R-154	Regulator	960	60	3	1453	1520	1013	1440	1013	VALID	19.81%
G0084755	017-R-053	Regulator	400	60	3	1456	750	500	500	500	VALID	8.24%
G0084854	017-R-050	Regulator	400	60	3	489	0	0	200	0	UNVALID	32.67%
36694	017-R-085	Regulator	250	60	3	1361	375	250	275	250	VALID	5.51%
UNK V (017-R-169)	017-R-169	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
UNK V(017-R-177)	017-R-177	Regulator	500	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-016)	017-R-016	Regulator	360	37	3	1456	0	0	300	0	UNVALID	7.42%
UNKV (017-R-125)	017-R-125	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-135)	017-R-135	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-140)	017-R-140	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-153)	017-R-153	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-159)	017-R-159	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-167)	017-R-167	Regulator	400	250	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-168)	017-R-168	Regulator	250	250	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-174)	017-R-174	Regulator	400	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV (017-R-176)	017-R-176	Regulator	500	60	3	0	0	0	0	0	UNVALID	0.00%
9650	017-R-044	Regulator	105	60	3	3080	0	0	500	0	UNVALID	1.02%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
651010	026-R-002	Regulator	150	60	3	499	0	0	200	0	UNVALID	9.01%
MM000041	026-O-001	Odorizer	150	150	3	933	600	400	400	400	VALID	4.82%
MM000188	026-V-030	Valve Setting	150	150	3	908	600	400	720	400	VALID	6.60%
MM000189	026-V-031	Valve Setting	150	150	3	908	600	400	720	400	VALID	6.60%
UNKV (026-R-001)	026-R-001	Regulator	150	60	3	499	0	0	200	0	UNVALID	11.01%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
UNKV (029-O-06)	029-O-06	Odorizer	250	250	3	794	0	0	720	0	UNVALID	12.59%
UNKV (029-O-05)	029-O-05	Odorizer	500	500	3	794	750	500	1440	500	VALID	25.17%
181660	029-R-058	Regulator	500	400	3	1106	1440	960	720	720	VALID	16.90%
28257	029-O-08	Odorizer	225	225	3	544	450	300	300	300	VALID	16.52%
188977	029-O-10	Odorizer	250	250	3	1081	750	500	300	300	VALID	6.93%
18997	029-R-015	Regulator	250	60	3	877	0	0	200	0	UNVALID	8.55%
222162	029-O-12	Odorizer	500	500	3	794	750	500	300	300	UNVALID	25.17%
188978	029-O-11	Odorizer	90	90	3	1361	750	500	720	500	VALID	1.98%
181146	SGL Automotive M&R	Meter	100	NA	3	499	225	150	200	150	VALID	6.01%
31551	Chef Reddy M&R	Meter	100	NA	3	794	100	66	100	66	UNVALID	5.03%
37072	Nestle Brand M&R	Meter	100	100	3	1056	150	100	100	100	VALID	3.79%
28668	Jim Frank M&R	Meter	125	NA	3	794	200	133	100	100	UNVALID	6.29%
18997 (Meter)	Nestle Brand M&R	Meter	125	NA	3	794	0	0	200	0	UNVALID	6.29%
32660	Nestle Brand M&R	Meter	125	NA	3	794	100	66	100	66	UNVALID	6.29%
189179 (Meter)	Nestle Brand M&R	Regulator	125	NA	3	0	0	0	0	0	UNVALID	0.00%
O0083324 (Meter)	Roloff-Schutte M&R	Meter	150	NA	3	1106	225	150	200	150	VALID	5.07%
O0085224	Guardian Industries M&R	Meter	150	NA	3	1106	225	150	200	150	VALID	5.07%
12448	029-O-07	Odorizer	150	150	3	1361	0	0	400	0	UNVALID	3.30%
21907	029-R-040	Regulator	150	60	3	610	0	0	200	0	UNVALID	9.83%
207109	029-R-065	Regulator	150	90	3	1296	750	500	275	275	VALID	3.47%
192354	029-R-061	Regulator	225	60	3	1045	600	400	275	275	VALID	8.61%
12443	029-R-039	Regulator	225	60	3	933	0	0	200	0	UNVALID	7.23%
20154	029-R-037	Regulator	225	60	3	1361	0	0	200	0	UNVALID	4.96%
223306	029-R-066	Regulator	225	60	3	0	650	433	0	0	UNVALID	0.00%
50342	Lamb-Weston M&R	Meter	250	NA	3	811	750	500	720	500	VALID	12.32%
55929	029-R-043	Regulator	250	60	3	499	750	500	275	275	VALID	15.02%
59320	029-R-047	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
O0085210	029-R-052	Regulator	250	150	3	499	600	400	275	275	VALID	15.02%
33C9624	029-R-002	Regulator	250	60	3	794	0	0	200	0	UNVALID	12.59%
14458	029-R-016	Regulator	250	60	3	877	0	0	200	0	UNVALID	8.55%
48787	029-R-029	Regulator	250	60	3	877	600	400	275	275	VALID	8.55%
55924	029-R-044	Regulator	250	60	3	877	750	500	275	275	VALID	8.55%
165149	029-R-057	Regulator	250	60	3	877	600	400	275	275	VALID	8.55%
O0082716	029-R-055	Regulator	250	60	3	1106	600	400	720	400	VALID	8.45%
208243	029-R-025	Regulator	250	60	3	728	600	400	275	275	VALID	10.30%
181145	029-R-059	Regulator	250	100	3	1106	750	500	275	275	VALID	6.78%
207499	029-R-014	Regulator	250	125	3	1106	200	133	200	133	UNVALID	6.78%
232225	029-R-070	Regulator	250	60	3	1106	600	400	720	400	VALID	6.78%
48689	029-R-030	Regulator	250	60	3	1193	660	440	400	400	VALID	6.28%
166358	029-R-003	Regulator	250	47	3	1327	100	66	275	66	UNVALID	5.65%
25426	029-R-020	Regulator	250	60	3	1361	0	0	200	0	UNVALID	5.51%
45415	029-R-028	Regulator	250	60	3	1361	600	400	275	275	VALID	5.51%
55804	029-R-005	Regulator	250	60	3	1361	750	500	275	275	VALID	5.51%
200620	029-R-063	Regulator	250	60	3	1361	600	400	275	275	VALID	5.51%
51346	029-R-035	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
53922	029-R-045	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
55541	029-R-041	Regulator	250	60	3	1361	600	400	500	400	VALID	5.51%
58C5746	029-R-007	Regulator	250	50	3	1361	0	0	200	0	UNVALID	5.51%
O0084171	029-R-053	Regulator	250	60	3	1361	750	500	100	100	UNVALID	5.51%
O0085085	029-R-056	Regulator	250	60	3	1361	650	433	500	433	VALID	5.51%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
189179	029-R-015	Regulator	250	60	3	0	90	60	720	0	UNVALID	0.00%
230251	029-R-068	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
230649	029-R-067	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
UNKV 029-R-054	029-R-054	Regulator	250	100	3	0	0	0	285	0	UNVALID	0.00%
60390	029-V-061	Valve	250	250	3	877	375	250	275	250	VALID	8.55%
20159	029-R-011	Regulator	400	60	3	877	750	500	200	200	UNVALID	13.68%
37341	029-R-018	Regulator	400	100	3	877	750	500	400	400	VALID	13.68%
208242	029-R-009	Regulator	400	60	3	877	90	60	200	60	UNVALID	13.68%
DO001649	029-R-012	Regulator	400	100	3	877	150	100	200	100	UNVALID	13.68%
29100	029-R-022	Regulator	400	125	3	877	750	500	400	400	VALID	13.68%
199470	029-R-062	Regulator	400	60	3	877	750	500	720	500	VALID	13.68%
200528	029-R-064	Regulator	400	60	3	1106	600	400	720	400	VALID	10.85%
188983	029-R-060	Regulator	400	60	3	1106	750	500	800	500	VALID	10.85%
22274	029-R-008	Regulator	400	60	3	1361	0	0	200	0	UNVALID	8.81%
O0077809	029-R-049	Regulator	400	60	3	1361	750	500	720	500	VALID	8.81%
O0083324	029-R-051	Regulator	400	150	3	1361	225	150	275	150	UNVALID	8.81%
49470	029-R-033	Regulator	400	60	3	1361	750	500	500	500	VALID	8.81%
234314	29-R-071	Regulator	400	<=60 psig	3	1106	750	500	740	500	VALID	10.85%
183047	029-V-070	Valve	400	400	3	1106	750	500	720	500	VALID	10.85%
183048	029-V-071	Valve	400	400	3	1183	750	500	720	500	VALID	13.52%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
15737	Y(15737)	Meter	400	NA	3	610	0	0	200	0	UNVALID	26.22%
46844	Y(46844)	Meter	175	NA	3	933	600	400	175	175	VALID	5.62%
25856	020-O-008	Odorizer	400	400	3	641	750	500	275	275	UNVALID	20.14%
29252	032-O-001	Odorizer	250	250	3	499	450	300	300	300	VALID	15.02%
31950	032-O-004	Odorizer	250	250	3	499	450	300	300	300	VALID	15.02%
55590	020-O-003	Odorizer	250	250	3	499	400	266	275	266	VALID	15.02%
55442	020-O-006	Odorizer	200	200	3	499	400	266	275	266	VALID	12.02%
P0070018 (31063)	032-O-002	Odorizer	200	200	3	794	0	0	275	0	UNVALID	10.07%
30484	020-O-009	Odorizer	300	300	3	933	450	300	500	300	VALID	9.64%
18687	020-O-001	Odorizer	250	250	3	933	750	500	275	275	VALID	8.03%
UNKV (020-O-002)	020-O-002	Odorizer	130	130	3	0	0	0	0	0	UNVALID	0.00%
UNKV (020-O-005)	020-O-005	Odorizer	160	160	3	0	0	0	0	0	UNVALID	0.00%
UNKV (032-O-003)	032-O-003	Odorizer	275	275	3	0	0	0	0	0	UNVALID	0.00%
K0085502	020-R-022	Regulator	400	56	3	641	750	500	275	275	UNVALID	18.70%
185704	020-R-029	Regulator	400	152	3	641	600	400	400	400	VALID	18.70%
47C8259	020-R-001	Regulator	250	60	3	610	0	0	200	0	UNVALID	16.38%
20375	032-R-003	Regulator	200	60	3	376	0	0	200	0	UNVALID	21.25%
13033	032-R-007	Regulator	200	60	3	418	0	0	200	0	UNVALID	19.12%
51801	032-R-005	Regulator	200	60	3	418	600	400	275	275	VALID	19.12%
51681	032-R-017	Regulator	250	60	3	499	600	400	275	275	VALID	18.35%
30541	032-R-002	Regulator	275	60	3	499	600	400	275	275	VALID	16.53%
50048	020-R-041	Regulator	400	60	3	758	900	600	720	600	VALID	15.82%
181048	020-R-060	Regulator	400	41	3	758	750	500	720	500	VALID	15.82%
177231	020-R-062	Regulator	250	250	3	499	750	500	720	499	VALID	15.02%
29779	032-R-012	Regulator	250	60	3	499	1000	666	275	275	VALID	15.02%
163885	032-R-025	Regulator	250	60	3	499	450	300	275	275	VALID	15.02%
47011	032-R-038	Regulator	250	60	3	499	600	400	250	250	VALID	15.02%
164909	032-R-047	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
K0067487	020-R-055	Regulator	250	60	3	499	600	400	275	275	VALID	15.02%
51198	032-R-043	Regulator	200	60	3	499	750	500	200	200	VALID	14.68%
47974	020-R-046	Regulator	400	60	3	933	600	400	720	400	VALID	12.85%
52717	020-R-049	Regulator	400	60	3	933	900	600	720	600	VALID	12.85%
K0072188	020-R-019	Regulator	400	60	3	933	90	60	200	60	UNVALID	12.85%
47211	020-R-045	Regulator	200	51	3	499	600	400	250	250	VALID	12.02%
171750	020-R-008	Regulator	200	51	3	499	600	400	200	200	VALID	12.02%
163158	020-R-056	Regulator	175	60	3	499	600	400	200	200	VALID	10.52%
37426	020-R-039	Regulator	400	60	3	1193	900	600	700	600	VALID	10.05%
30753	020-R-034	Regulator	300	60	3	933	270	180	200	180	UNVALID	9.64%
29310	032-R-013	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
29819	032-R-024	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
29820	032-R-016	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
29830	032-R-019	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
32399	032-R-026	Regulator	250	60	3	933	450	300	300	300	VALID	8.03%
32774	032-R-020	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
36007	032-R-027	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
46360	020-R-038	Regulator	250	60	3	933	600	400	275	275	VALID	8.03%
56153	032-R-021	Regulator	250	60	3	933	450	300	275	275	VALID	8.03%
P0084559	032-R-022	Regulator	250	60	3	933	600	400	275	275	VALID	8.03%
44366	032-R-034	Regulator	250	60	3	933	650	433	500	433	VALID	8.03%
44923	032-R-035	Regulator	250	60	3	933	600	400	500	400	VALID	8.03%

Work Order #	Facility ID	Facility Type	Existing Inlet MAOP (psig)	Existing Outlet MAOP (psig)	Class Location (1,2,3,4)	Design Pressure 192.619 (a) (1) (psig)	Test Pressure (psig)	Test Pressure 192.619 (a) (2) (psig)	Pressure Class Rating (psig)	MAOP per 192.619 (psig)	MAOP Designation	Max % SMYS
46584	032-R-037	Regulator	250	60	3	933	0	0	500	0	UNVALID	8.03%
49568	032-R-039	Regulator	250	60	3	933	600	400	500	400	VALID	8.03%
52930	032-R-042	Regulator	250	60	3	933	450	300	500	300	VALID	8.03%
6300678542	032-R-048	Regulator	250	60	3	933	780	520	275	275	VALID	8.03%
40429	020-R-042	Regulator	200	60	3	758	600	400	200	200	VALID	7.91%
18925	020-R-025	Regulator	175	56	3	728	0	0	200	0	UNVALID	7.21%
28023	020-R-032	Regulator	200	60	3	877	1000	666	200	200	VALID	6.84%
28138	020-R-031	Regulator	200	60	3	877	1000	666	200	200	VALID	6.84%
28140	020-R-033	Regulator	200	60	3	877	1000	666	200	200	VALID	6.84%
32810	032-R-001	Regulator	200	60	3	933	600	400	200	200	VALID	6.43%
44379	020-R-044	Regulator	200	60	3	933	600	400	200	200	VALID	6.43%
51600	020-R-048	Regulator	200	60	3	933	600	400	200	200	VALID	6.43%
56274	020-R-012	Regulator	200	60	3	933	450	300	200	200	VALID	6.43%
41661	032-R-029	Regulator	250	60	3	1193	450	300	400	300	VALID	6.28%
38695	020-R-040	Regulator	175	60	3	877	400	266	200	200	VALID	5.98%
22008	020-R-026	Regulator	175	12	3	933	100	71	200	71	UNVALID	5.62%
50750	020-R-047	Regulator	175	60	3	933	600	400	500	400	VALID	5.62%
41809	032-R-030	Regulator	250	60	3	1361	600	400	400	400	VALID	5.51%
45401	032-R-036	Regulator	250	60	3	1361	600	400	300	300	VALID	5.51%
41769	032-R-031	Regulator	250	60	3	1361	450	300	300	300	VALID	5.51%
165211	020-R-057	Regulator	250	16	3	1361	600	400	275	275	VALID	5.51%
24118	020-R-027	Regulator	152	60	3	877	0	0	200	0	UNVALID	5.20%
53549	020-R-010	Regulator	160	13	3	933	150	100	200	100	UNVALID	5.14%
34675	020-R-037	Regulator	200	60	3	1361	750	500	300	300	VALID	4.41%
42C7053	020-R-009	Regulator	200	20	3	1361	0	0	200	0	UNVALID	4.41%
46C6883	020-R-006	Regulator	130	60	3	933	0	0	400	0	UNVALID	4.18%
2025	020-R-044	Regulator	200	60	3	0	740	493	0	0	UNVALID	0.00%
180110	020-R-028	Regulator	152	60	3	0	0	0	0	0	UNVALID	0.00%
4240140	020-R-021	Regulator	400	400	3	0	90	64	0	0	UNVALID	0.00%
6490020	032-R-013	Regulator	250	60	3	0	450	300	0	0	UNVALID	0.00%
6490025	032-R-041	Regulator	250	60	3	0	375	250	0	0	UNVALID	0.00%
6490120	032-R-016	Regulator	250	<250	3	0	750	500	0	0	UNVALID	0.00%
6490130	032-R-047	Regulator	250	<250	3	0	120	80	0	0	UNVALID	0.00%
6490150	032-R-049	Regulator	250	60	3	0	750	500	0	0	UNVALID	0.00%
6490170	032-R-024	Regulator	250	<250	3	0	450	300	0	0	UNVALID	0.00%
6491974	032-R-045	Regulator	250	<250	3	0	375	250	0	0	UNVALID	0.00%
UNKV (032-R-040)	032-R-040	Regulator	250	60	3	0	600	400	0	0	UNVALID	0.00%
UNKV (032-R-046)	032-R-046	Regulator	250	60	3	0	0	0	0	0	UNVALID	0.00%
213913	020-R-061	Regulator	400	175	3	1106	600	400	720	400	VALID	11.40%
59549	020-R-054	Regulator	250	<= 60 psig	3	0	750	500	740	0	UNVALID	6.78%
42C6202	020-R-014	Regulator	150	<= 60 psig	3	2123	0	0	700	0	UNVALID	2.12%