Final Report

Condition Assessment: Water Pump Stations and Wastewater Lift Stations

Submitted to City of Albany

February 2007

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1 Introduction

A condition assessment provides a snapshot of the physical state of assets and, in this case, the physical state of the individual assets. Its results offer information to help determine the remaining useful life of the assets and to gauge the effectiveness of the existing maintenance program. Information from the condition assessment also may be used for planning the actions needed to bring equipment back to satisfactory operational status or development of a capital improvement program (CIP), thereby ensuring reliability and prolonged life.

CH2M HILL OMI staff with assistance from City of Albany staff performed an onsite condition assessment of selected water and wastewater facilities from October 16th through November 3rd. In total, 516 assets were assessed to various levels of detail to provide the City of Albany with a snapshot of the current facility condition. A list of these assets, grouped by type, is included as **Appendix A**.

1.1 Condition Rating System

The rating system employed for the condition assessment is shown in **Exhibit 1-1** and is adapted from the rating system from the International Infrastructure Management Manual¹. This system has been shown to be effective in identifying and expressing asset condition and assisting in improving overall asset management practices.

EXHIBIT 1-1 Condition Asset Ratings

Rating	Description of Condition
0 ^a	Asset Nonexistent
1	Very Good Condition Only normal maintenance required.
2	Minor Defects Only Minor maintenance required—5% of the asset needs maintenance.
3	Backlog Maintenance Required to Return to Accepted Level of Service Significant maintenance required—10 to 20% of the asset needs maintenance.
4	Requires Renewal Significant renewal/upgrade—20 to 40% of the asset needs renewal.
5	Asset Unserviceable Over 50% of the asset requires replacement.

^a Rating not included in calculation of asset condition

The rating system uses condition ratings from 1 to 5 to reflect the physical state of the asset, from best to worst, respectively. A condition rating of 0 is assigned to an asset that does not

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¹ Association of Local Government Engineering New Zealand, Inc. and the Institute of Public Works Engineering Australia. 2002. *International Infrastructure Management Manual*. Version 2.0.

exist or has been abandoned. A condition rating of 0 is not included in the calculation of the overall condition rating of the facility. When an asset cannot be assessed completely, it is scored using only the condition questions that were answered. However, these assets are "Flagged" so that a review of that asset can be made before taking the condition score at face value.

1.2 Assessment Factors

CH2M HILL OMI evaluated numerous condition assessment factors to determine those that would best facilitate the condition assessment process and result in data that were most useful. While most factors are specific to the type of asset, the following are general condition assessment factors that are common to several types of assets:

- Corrosion
- Unusual noise, heat, or smell during operation
- Lack of evidence of preventive maintenance
- Lack of evidence of calibration
- Excessive vibration
- Leaking packing glands
- Evidence of wear
- (Inability to perform designed duty)
- Tagged-out
- Safety issues

1.3 Data Collection and Assessment Process

The condition assessment was performed in three phases: preparation, field assessment, and quality review.

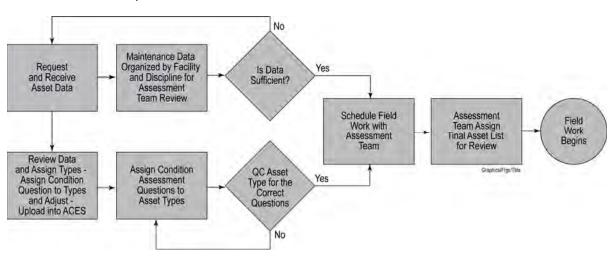
1.3.1 Assessment Preparation

Exhibit 1-2 shows the steps involved in data collection, data review, and software setup prior to the deployment of the CH2M HILL OMI personnel to the field. Basic information about the major assets to be inspected was gathered at an initial site visit that was conducted on July 14th and 15th 2006. This asset information was then loaded into an asset database. The asset database was used as the basis for the field assessment along with additional asset information that was gathered during the assessment process. Each asset was categorized by type and each asset type was assigned a series of questions used to evaluate its current condition.

The condition assessment personnel reviewed operation and maintenance (O&M) data and activities with the City of Albany staff to gain an understanding of the maintenance being performed on the identified assets.

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EXHIBIT 1-2Condition Assessment Preparation Process



1.3.2 Field Assessment

Field condition assessment personnel used XploreTM tablet computers (**Exhibit 1-3**) with the Asset Condition Evaluation System (ACES®) software to perform the field condition assessment. **Exhibit 1-4** provides an example of the computer screen staff used during the field assessment to record their findings.

EXHIBIT 1-3 Xplore Tablet



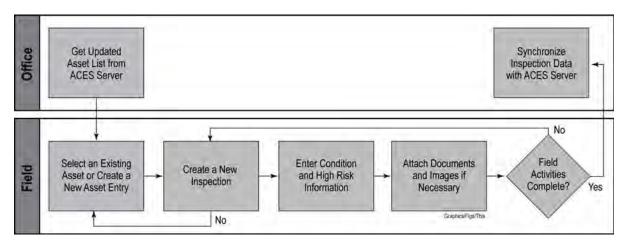
EXHIBIT 1-4
Example Field Assessment Data Input Screen

Condition Risk Photo	s and Docu	ments		
Save Changes	Cancel			
Question	Answer			Comment
Missing Safety Guards	CNA	C No	€ Yes	
Oil Problem at Inspection	ONA	€ No	CYes	
Stopped at Inspection	CNA	€ No	O Yes	
Unusual Smell or Heat	CNA	© No	C Yes	
Excessive Noise	CNA	€ No	C Yes	
Excessive Vibration	CNA	€ No	CYes	
Missing Components	CNA	€ No	C Yes	
Excessive Oil or Grease	CNA	€ No	C Yes	
Corrosion	0 - N/A		•	
Drive Shaft	0-N/A		•	
Bearing	0 - N/A			
Coating	0 - N/A		•	
Belt or Chain	0-N/A		•	
Air Filter	0 - N/A		•	
Structural Integrity	0 - N/A			
Couplings	0-N/A			
Oil Seal	0 - N/A			

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The field condition assessment information and photographs were gathered electronically and uploaded to the main server to provide all condition assessment personnel access to the same information. CH2M HILL OMI personnel were then able to access the condition assessment information for quality assurance/quality control (QA/QC) review. Exhibit 1-5 shows the workflow of the field assessment process.

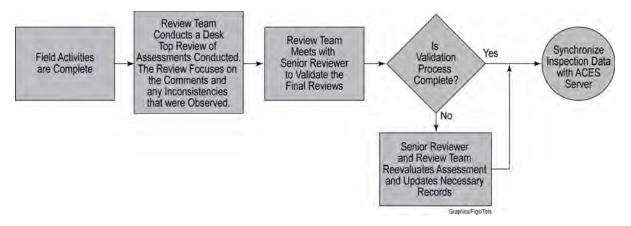
EXHIBIT 1-5 Field Assessment Work Flow



1.3.3 Quality Review

At the end of the field assessment, the field personnel participated in a quality review process to ensure that consistent ratings were assigned to the assets. Upon completion of the review, the condition ratings and comments were updated as necessary. This quality review process is essential to ensuring the reliability of the condition assessment process. **Exhibit 1-6** shows the steps involved in the quality review process.

EXHIBIT 1-6
Condition Assessment Quality Review Process

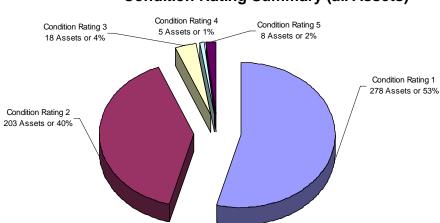


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1.4 Results of Condition Assessment

The assessment personnel were able to assess 516 assets (402 lift station assets and 114 pump station assets) at the designated facilities. Most of the assets assessed showed typical signs of wear and tear for their age. Overall, 93 percent of the assets reviewed fall in either Condition Rating 1 or 2. Generally a condition rating of 2 means an asset or facility is in good condition with some minor asset defects that may require maintenance. **Exhibit 1-7** shows the number of assets and percentage for each condition rating (1 through 5). The condition rating for all assets can be found in Appendix B; backup field data is presented in Appendix C.

EXHIBIT 1-7Condition Assessment Ranking by Number of Assets and Percentage



Condition Rating Summary (all Assets)

The condition assessment team noted the assets that could not be fully assessed due to accessibility issues or operational constraints during the condition assessment period. These assets (shown in **Exhibit 1-8**) have all ended up with incomplete assessment ratings due to the condition questions that were not answered and therefore left out of the condition rating score. These assets were assigned a score based on the condition questions that were answered. CH2M HILL OMI recommends that when The City of Albany shuts down a facility for scheduled maintenance the following assets should be re-assessed. Once these assets are re-assessed the condition ratings can be adjusted to better reflect the current condition of these assets.

EXHIBIT 1-8
Assets Not Assessed Due to Limited Accessibility or Operational Constraints

Asset Name	Asset Type	Description	Question	Comment
PMP-MTR-15m	MOTOR	No 15 Motor	Bearings	
PMP-MTR-15m	MOTOR	No 15 Motor	Drive Shaft Alignment	
PMP-MTR-15m	MOTOR	No 15 Motor	Infrared	
PMP-MTR-15m	MOTOR	No 15 Motor	Vibration Analysis	
PMP-PMP-15a	PUMP	No 15 Pump	Vibration Analysis	Could not run
PMP-PMP-15a	PUMP	No 15 Pump	Infrared	Could not run

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EXHIBIT 1-8Assets Not Assessed Due to Limited Accessibility or Operational Constraints

Asset Name	Asset Type	Description	Question	Comment
PMP-PMP-15a	PUMP	No 15 Pump	Packing Gland	Could not run
PMP-PMP-15a	PUMP	No 15 Pump	Bearings	
PMP-PMP-15a	PUMP	No 15 Pump	Isolation Valve	Could not run
PMP-DIS-001	ELECTRICAL EQUIPMENT	Pump No 15 Main Disconnect	Infrared	Could not run Line fault
PMP-VLV-033	VALVE	Distribution System Isolation Valve	Functional	Did not want to operate
LS03-MTR-001	INSTRUMENT	METERING DEVICE	Indicator	
LS03-MTR-001	INSTRUMENT	METERING DEVICE	Calibration	
LS03-HVC-001	HVAC	HVAC	Air Filter	
LS03-HVC-001	HVAC	HVAC	Corrosion	
LS03-FLW-001	INSTRUMENT	Maple Flow Meter No 1	Transmitter/ Transducer	
LS03-FLW-002	INSTRUMENT	Maple Flow Meter No 2	Transmitter/ Transducer	
LS16-CTP-001	CONTROL PANEL	Pump Control Panel	Main Breaker	Couldn't open panel lock
LS14-FAN-001S	FAN	FAN	Corrosion	
LS15-FAN-001S	FAN	FAN	Corrosion	
LS12-FAN-001S	FAN	FAN	Corrosion	
LS03-RADIO- 001	REMOTE TELEMETRY UNIT	RTU RADIO	Battery/ Charging System	
LS08-FAN-001S	FAN	FAN	Corrosion	

1.5 Pump Performance Testing

In a related effort, CH2M HILL/OMI evaluated the performance of pumps located in the City's sewer lift stations and water pump stations in late 2006. The facilities chosen for evaluation were those identified in the Phase 1 Condition Assessment. The report of the evaluation and the results are presented in Appendix D.

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2 Risk Assessment

To provide the City of Albany with the information necessary to make fact-based and defensible decisions for the maintenance, refurbishment, and replacement of infrastructure assets, the concept of "risk" was used as the basis for the assessment. Risk has become the industry standard to effectively manage infrastructure assets. In this manner, capital and expense-related actions can be prioritized based upon the extent that the actions can reduce the relative risk posed by individual assets, and the cost of actions to reduce the risks can be optimized.

Risk can be defined as: *The potential for realization of unwanted, adverse consequences to organizational and service delivery strategies*. The risk that any individual asset will cause the City to fail to meet its level-of-service objectives can be quantified as a function of the impact or severity of the consequences caused by the failure of that asset and of the probability the asset will fail, as shown in Equation 1.

EQUATION 1

Risk = (*Impact of Failure* * *Likelihood of Failure*)

The impact of failure is determined from an evaluation of how organizational objectives and levels of service will be affected if the asset fails. The likelihood of failure is determined not only from the condition of the asset, but also the effectiveness of operating protocols, history of repairs, and the availability of redundant systems.

In addition to the two classic variables of impact and likelihood, experience in the assessment of infrastructure assets has shown that it is important to include a factor in the risk equation that will account for the capacity and utilization of the asset, the cost of maintaining the asset, and taking into account the potential obsolescence of the asset. This factor is termed the "trigger." Thus, the risk equation can be expressed as follows:

EQUATION 2

Risk Assessment Score = Impact of Failure * Likelihood of Failure * Trigger

The sections that follow describe the methodology used to identify and quantify the impacts, probabilities of failure, and triggers using a series of questions that were developed in an initial workshop with the City of Albany staff. In general, impact questions are a quantification of the strategic goals of the City of Albany, and likelihood questions are an estimation of the physical and operation factors affecting failure.

2.1 Impact of Failure

The impact of the failure of an individual asset is evaluated in a matrix where individual organizational objectives are assessed against defined implications. The objectives reflect the social, financial, and operational implications of asset failure.

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2.1.1 Development of Impact Matrix

The impact objectives relate to the priorities of a utility and must be modified to fit the organization. Based on the *International Infrastructure Management Manual*² and experience with other utilities in North America, a list of example objectives and implication definitions were provided to a City of Albany team representing several functional areas. The CH2M HILL OMI team in consultation with the City of Albany chose the objectives and implication definitions to reflect priorities stated by the City of Albany that are directly supported by asset management practices. To keep the impact evaluation focused and manageable, the number of objectives was limited to six, as follows:

- Service reliability
- Compliance with regulations and permits
- Health and safety of employees and public
- Disruption to the community and public image
- Ability to return asset to level of service
- Financial impact

These objectives are not only applicable to the assessment of the water and wastewater systems but could also be used to evaluate the impact of any asset in the City's system. Using this matrix provides a consistent basis for scoring the impact of failure and subsequently for calculating the relative risk posed by an asset failure. Consequently, while additional objectives could be added if the City of Albany decides an important criterion was omitted, any asset that was scored based on the original six objectives should be re-evaluated with the new objectives to maintain consistency and relevance among assets.

Once the objectives were established, the implications for each were defined by severity, from "negligible" to "catastrophic." A score from 1 to 10 was assigned for each level of severity as follows:

- Negligible = 1
- Low = 4
- Moderate = 7
- Critical = 10

Definitions for the various implications are shown in the matrix, **Exhibit 2-1**.

For example, a score of 1 for service reliability indicates that the failure of a single asset would have a *negligible* impact on service reliability. In contrast, a score of 10 on the same service reliability objective would mean that the failure of a single asset would have a *critical* impact on service reliability.

Because the objectives are of varying importance in achieving the organizational and operational goals of the City of Albany, each objective was assigned a weight, determined by its level of importance as outlined in **Exhibit 2-1**. As such, because health and safety of public and employees was identified as the most essential objective, that objective was assigned a weight of 1.0. All other objectives were weighted with a score lower than 1.0. For example, the ability to return an individual asset to its level of service within 24 hours is

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²Association of Local Government Engineering New Zealand, Inc. and the Institute of Public Works Engineering of Australia. 2002. *International Infrastructure Management Manual.* Version 2.0.

EXHIBIT 2-1 Criticality Matrix for Water and Wastewater Criticality levels by possible impact

	NA / a + a - r							
	Water							
	Impact Category	Weight	Negligible = 1	Low = 4	Moderate = 7	Critical = 10		
-	Health and safety of 1 employees and public	1.0	No injuries or adverse health effects	No lost-time injuries or medical attention necessary	Lost time injury or injury requires medical attention	Long term disability or death.		
	Compliance with 2 regulations and permits	0.9	No violations of permits or regulations. No environmental or public health impact.	Technical violation but no enforcement action taken, No environmental or public health impact	Violation of secondary MCL. Possible short-term environmental impact. Possible public health impact.	Violation of primary MCL. Enforcement action likely. Long- term environmental impact likely; public health impact likely.		
	3 Service reliability	0.8	Pressure >30 psi and <80 psi; <20 services interrupted; no impact on fire protection.	Pressure 25 – 30 psi; >20 <500 services effected. Minimal effect on fire protection.	Service interruption affecting 500-1000 services; pressure 20 – 25 psi; considerable impact on fire protection	Service interruption >1000 services pressure < 20 psi or >80 psi; significant impacting fire protection.		
	Disruption to the 4 community / public image	0.7	No social or economic impact on the businesses or the community. No disruption to the community. No media coverage.	No social or economic impact on the businesses or the community. Minor disruption to the community (e.g., traffic, dust, noise). No media coverage.	Short-term economic impact on residential customers and/or a few business. Minor disruption to the community (e.g., traffic, dust, noise). Local media coverage.	Long-term or area-wide economic impact on numerous businesses or any "high-priority" customer. Major disruption to the community (e.g., traffic, dust, noise). National media coverage.		
	Ability to return asset to service	0.7	Less than 4 hours	Service restored 4 to 12 hours	Service restored 12 to 24 hours	Not able to restore service for >24 hrs		
	Financial impact on utility	0.7	<\$5,000	\$5,000 to \$25,000	\$25,000 to \$150,000	>\$150,000		

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EXHIBIT 2-1 Criticality Matrix for Water and Wastewater Criticality levels by possible impact

	/astewater	,				
	Impact Category	Weight	Negligible = 1	Low = 4	Moderate = 7	Critical = 10
1	Health & Safety of employees and public	1.0	No injuries or adverse health effects	No lost-time injuries or medical attention necessary	Lost time injury or injury requires medical attention	Long-term disability or death.
2	Compliance with regulations and permits	0.9	No violations of permits or regulations. No environmental or public health impact.	Technical violation but no enforcement action taken; no environmental or public health impact	Violation of secondary MCL; possible short-term environmental impact; possible public health impact	Violation of primary MCL; enforcement action likely; long- term environmental impact likely; public health impact likely
3	Service reliability	0.8	<20 services interrupted	<500 services effected	500-1000 services effected	Service interruption >1000 services
4	Disruption to the community/public Image	0.7	No social or economic impact on the businesses or the community. No disruption to the community. No media coverage.	No social or economic impact on the businesses or the community. Minor disruption to the community (e.g., traffic, dust, noise). No media coverage.	Short-term economic impact on residential customers and/or a few business. Minor disruption to the community (e.g., traffic, dust, noise). Local media coverage.	Long-term or area-wide economic impact on numerous businesses or any "high-priority" customer. Major disruption to the community (e.g., traffic, dust, noise). National media coverage.
5	Ability to return asset to service	0.7	Less than 4 hours	Service restored 4 to 12 hours	Service restored 12 to 24 hours	Not able to restore service for >24 hrs
6	Financial impact on utility	0.7	<\$5,000	\$5,000 to \$25,000	\$25,000 to \$150,000	>\$150,000

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considered less important than the City's ability to provide water that has adequate flow and pressure to its customers.

2.1.2 Calculation of Impact Score

For any asset, the impact (or the severity of a failure) is calculated by multiplying the score of each objective by its weight and dividing the product by the maximum possible score. This calculation is shown in Equation 3.

EQUATION 3

$$Normalized\ ImpactScore = \sum_{1}^{N} ObjectiveScore \times \left(\frac{ObjectiveWeight}{\sum_{1}^{N} ObjectiveWeight}\right)$$

Where N is the number of objectives. Generally, the asset's impact score is equal to the sum of each objective score times the percent weight of each impact question. Note that all impact questions are included in the score (unlike condition questions).

2.1.3 Summary of Impact Calculations

The impact matrix (**Exhibit 2-2**) details the highest impact assets in the systems, starting with an impact score of 6. All asset impacts can be found in Appendix B.

2.2 Likelihood of Failure and Triggers

In the risk equation, the likelihood of failure relates to the characteristics that affect the integrity of the asset. Four criteria were used to judge the likelihood of failure, the most significant of which is the condition assessment (see Section 1). The trigger factor, as used in the risk equation, accounts for performance-related aspects such as capacity and utilization of the asset, the cost of maintaining the asset, and the currency or obsolescence of the asset. However, the effect of the trigger factor intentionally is limited so that it cannot affect the risk level by more than 30 percent.

2.2.1 Development of Likelihood and Trigger Matrix

The likelihood criteria relate to the likelihood that an asset will fail to meet its design purpose or will cause a reduction in an established level of service. The likelihood of failure is dominated by the physical condition of the asset and is expected to be the best indicator of a future failure. The details of the field-condition assessment and condition scoring for the individual assets are discussed in Section 1. The criteria associated with evaluating the likelihood of failure of an asset are as follows:

- Physical condition
- Effectiveness of operating protocols
- Repair history
- Availability of redundant entities

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EXHIBIT 2-2 Asset Impact (Score of 6.00 and above)

Asset Name	Description	Location	Total Score	Impact Score
LS07-STR-001	College Green Lift Station	LS No 07 COLLEGE GREEN	2.48	9.33
LS08-STR-001	34th Avenue Lift Station	LS No 08 34TH AVENUE	2.48	9.33
LS19-STR-001	North Albany Lift Station	LS No 19 NORTH ALBANY	2.48	9.33
LS08-CTP-001	Pump Control Panel	LS No 08 34TH AVENUE	3.75	9.17
PUMP013	Centrifugal Pump	LS No 08 34TH AVENUE	2.04	9.17
PUMP014	Centrifugal Pump	LS No 08 34TH AVENUE	2.04	9.17
LS07-BATT-001	UPS Battery Backup	LS No 07 COLLEGE GREEN	1.95	9.17
LS08-CONV-001	12V Power Supply Converter	LS No 08 34TH AVENUE	1.95	9.17
LS19-BATT-001	UPS Battery Backup	LS No 19 NORTH ALBANY	1.95	9.17
LS07-CTP-001	Pump Control Panel	LS No 07 COLLEGE GREEN	1.56	9.17
PUMP002	Centrifugal pump	LS No 19 NORTH ALBANY	1.31	9.17
PUMP011	Pump	LS No 07 COLLEGE GREEN	1.31	9.17
PUMP012	Pump	LS No 07 COLLEGE GREEN	1.31	9.17
MOTOR014	Motor - 3 Phase	LS No 08 34TH AVENUE	2.01	9.00
LS12-BATT-001	UPS Battery Backup	LS No 12 WAH CHANG	1.82	9.00
LS12-ELC-001	Added Transfer Switch	LS No 12 WAH CHANG	1.82	9.00
MOTOR011	Motor - 3 Phase	LS No 07 COLLEGE GREEN	1.97	8.83
MOTOR012	Motor - 3 Phase	LS No 07 COLLEGE GREEN	1.97	8.83
MOTOR013	Motor - 3 Phase	LS No 08 34TH AVENUE	1.97	8.83
MOTOR001	Motor - 3 Phase	LS No 19 NORTH ALBANY	1.97	8.83
MOTOR002	Motor - 3 Phase	LS No 19 NORTH ALBANY	1.97	8.83
LS12-STR-001	Wah Chang Lift Station	LS No 12 WAH CHANG	2.60	8.67
PUMP001	Centrifugal Pump	LS No 19 NORTH ALBANY	1.22	8.50
LS06-STR-001	Oak Creek Structure	LS No 06 OAK CREEK	3.55	8.00
LS20-STR-001	Columbus Street Lift Station	LS No 20 COLUMBUS STREET	2.12	8.00
LS13-STR-001		LS No 13 CENTURY DR	2.12	8.00
LS06-MCC-001	Century Drive Lift Station Motor Control Center	LS No 06 OAK CREEK	1.97	7.83
LS06-CONV-001	12V Power Supply Converter	LS No 06 OAK CREEK	1.97	7.83
LS20-BATT-001		LS No 20 COLUMBUS STREET		7.83
PUMP009	UPS Battery Backup	LS No 20 COLUMBUS STREET	1.21	7.67
PUMP010	Centrifugal Pump	LS No 06 OAK CREEK	1.71 1.71	7.67
LS20-CTP-001	Centrifugal Pump	LS No 20 COLUMBUS STREET	1.71	
LS13-CTP-001	Pump Control Panel	LS No 13 CENTURY DR	1.30	7.67
	Pump Control Panel Millershurg Lift Station		1.99	
LS18-STR-001 PUMP023	Millersburg Lift Station	LS No 18 MILLERSBURG		7.50
	Centrifugal Pump	LS No 12 WAH CHANG	1.83	7.17
PUMP024	Centrifugal Pump	LS No 12 WAH CHANG	1.83	7.17
LS12-GEN-001	Generator	LS No 12 WAH CHANG	1.10	7.17
LS12-CTP-001	Pump Control Panel	LS No 12 WAH CHANG	1.19	7.00
MOTOR023	Motor - 3 Phase	LS No 12 WAH CHANG	1.71	6.83
MOTOR024	Motor - 3 Phase	LS No 12 WAH CHANG	1.71	6.83
LS12-POT-001	Vacuum Pot	LS No 12 WAH CHANG	1.77	6.67
LS12-PMP-002	Vacuum Pump	LS No 12 WAH CHANG	1.24	6.67
LS12-PMP-003	Vacuum Pump	LS No 12 WAH CHANG	1.24	6.67
LS12-POT-002	Vacuum Pot 2	LS No 12 WAH CHANG	1.24	6.67
LS08-PMP-001	Submersible Pump	LS No 08 34TH AVENUE	1.10	6.50
LS07-PMP-001	Submersible Pump	LS No 07 COLLEGE GREEN	1.10	6.50
LS07-PMP-002	Submersible Pump	LS No 07 COLLEGE GREEN	1.10	6.50
LS19-PMP-001	Submersible Pump	LS No 19 NORTH ALBANY	1.10	6.50
LS04-STR-001	Queen Avenue structure	LS No 04 QUEEN AVENUE	1.69	6.33
LS05-CTP-001	Pump Control Panel	LS No 05 UMATILLA	1.58	6.33
LS05-CONV-001	12V Power Supply Converter	LS No 05 UMATILLA	1.54	6.17
LS04-CONV-001	12V Power Supply Converter	LS No 04 QUEEN AVENUE	1.07	6.17
LS05-BATT-001	UPS Battery Backup	LS No 05 UMATILLA	1.05	6.17
LS14-STR-001	Charlotte Lift Station	LS No 14 CHARLOTTE STREET	2.55	6.00
LS04-CTP-001	Pump Control Panel	LS No 04 QUEEN AVENUE	2.50	6.00
LS15-STR-001	Burkhart Lift Station	LS No 15 BURKHART CREEK	1.59	6.00
PUMP005	Centrifugal Pump	LS No 04 QUEEN AVENUE	1.34	6.00
PUMP006	Centrifugal Pump	LS No 04 QUEEN AVENUE	1.34	6.00

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The trigger criteria identify other circumstances that may increase the risk of asset failure as it relates to performance rather than to physical condition. The criteria selected to quantify the trigger factor are as follows:

- Capacity and utilization
- Obsolescence
- Total maintenance cost (based on previous 12 months)

Because each criterion contributes differently to the likelihood of failure or to the trigger, each was assigned weights. The physical condition of an asset has the most effect on the likelihood of failure. Thus, that criterion received the highest weight among the four likelihood criteria. Capacity and utilization received the highest weight among the trigger criteria. The definitions for the various criteria—score combinations are shown in **Exhibit 2-3**.

The condition assessment team used the matrix shown in **Exhibit 2-3** to score the likelihood and trigger criteria for the different types of assets in the City of Albany systems. These scores then were entered into ACES. Similar to the objectives selected for the determination of the impact of asset failure discussed in Section 3, the criteria and scoring system used to evaluate the likelihood of failure and the triggers for the City of Albany also could be used for the assessments of any other assets. This will assure a consistent basis for scoring the likelihood and triggers, and subsequently for calculating the relative risk associated with individual assets.

2.2.2 Calculation of Likelihood and Trigger Score

The likelihood score of the asset is equal to the sum of the score of each likelihood criterion, times the percent weight of each likelihood criterion, divided by the sum of the maximum answer score, times the percent weight of each likelihood criterion. This calculation is shown in Equation 4. Dividing by the maximum possible answer scores normalizes the likelihood score from 0 to 1.

$$Asset \ \text{Pr} \ obabilityScore} = \frac{\displaystyle\sum_{1}^{N} AnswerScore \times \left(\frac{CriteriaWeight}{\displaystyle\sum_{1}^{N} CriteriaWeight}\right)}{\displaystyle\sum_{1}^{N} MaxAnswerScore \times \left(\frac{CriteriaWeight}{\displaystyle\sum_{1}^{N} CriteriaWeight}\right)}$$

Where N is the total number of Likelihood criteria, and MaxAnswerScore is the maximum possible answer score for that Likelihood criterion.

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EXHIBIT 2-3 Likelihood and Triggers Matrix

	Objective	Weight	Negligible = 1	Minor = 2	Moderate = 4	Major = 7	Critical = 10
poo	Condition Assessment Overall	0.75	Only planned maintenance required (Condition Grade 1)	5% needs corrective maintenance or renewal (Condition Grade 2)	10 to 20% needs corrective maintenance or renewal (Condition Grade 3)	20 to 40% needs corrective maintenance or renewal (Condition Grade 4)	>50% requires corrective maintenance or renewal (Condition Grade 5)
	Effective Operating Protocols ¹	0.10	Optimal	Satisfactory	Known improvements needed	No protocols currently exist	
Likelihood	Reliability	0.10	No Corrective work order Events within 12 months	<2 corrective work order events within 12 months	2-5 corrective work order events within 12 months	>6-8 corrective work order events within 12 months	>8 corrective work order events within 12 months
	Planned Redundancy ²	0.05	200% - additional spare parts in stock - action plan in place and practiced	100% - spare parts in stock - action plan developed and implemented	Spare parts are available within 4 hours - action plan developed and implemented	Spare parts are available within 24 hours - action plan developed and implemented	0% - no parts - no plan
	Capacity and Utilization ³	0.5	Sized correctly for meeting conditions	Under utilized (Time)	Over capacity (Volume)	Over utilized (Time)	Unable to meet capacity
Trigger	Obsolescence	0.2	New - optimal technology	Technology change	No manufactured parts available	Parts probably available from other utilities	Parts are not available
	Annual Maintenance Cost ⁴	0.3	<10% of replacement cost	10-20% of replacement cost	20-30% of replacement cost	30-50% of replacement cost	>50% of replacement cost

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The trigger score of the asset is equal to the sum of the scores of each trigger criterion answer, times the percent weight of each trigger question, divided by the sum of the maximum answer score, times the percent weight of each trigger criterion. Dividing by the maximum possible answer scores normalizes the trigger score from 0 to 1. Because the total trigger score is established to raise the total risk level by no more than 30 percent, the quotient is multiplied by 0.3 and increased by 1.0 to normalize the trigger score to be between 1 and 1.3.

 $AssetTriggerScore = 1 + \left(\begin{array}{c} \sum_{1}^{N} AnswerScore \times \left(\frac{CriteriaWeight}{\sum_{1}^{N} QuestionWeight} \right) \\ \\ \sum_{1}^{N} MaxAnswerScore \times \left(\frac{CriteriaWeight}{\sum_{1}^{N} CriteriaWeight} \right) \\ \\ \end{array} \right) \times 0.3$

Where N is the number trigger criteria, and MaxAnswerScore is the maximum possible answer score for that trigger criteria.

2.2.3 Summary of Likelihood Calculations

As discussed in Section 2.2.2, likelihood is scored between 0 and 1, where 0 represents the lowest likelihood that an asset will fail and 1 represents the highest likelihood that an asset will fail. The likelihood scores for each asset are included in **Appendix B. Exhibit 2-4** presents those assets with the highest likelihood scores (from 0.5 and greater).

EXHIBIT 2-4 Likelihood Score Higher Than 0.3

•	ĺ		Total	Probability
Asset Name	Description	Location	Score	Score
LS10-FAN-001	Fan	LS No 10 OAK STREET	0.96	0.8608
LS03-HVC-001	HVAC	LS No 03 MAPLE STREET	0.89	0.8608
LS14-FAN-001S	Fan	LS No 14 CHARLOTTE STREET	0.87	0.8402
LS15-FAN-001S	Fan	LS No 15 BURKHART CREEK	0.87	0.8402
LS03-RADIO-001	RTU Radio	LS No 03 MAPLE STREET	1.00	0.8351
LS12-FAN-001S	Fan	LS No 12 WAH CHANG	0.86	0.8351
LS13-FIL-002	Filter	LS No 13 CENTURY DR	0.86	0.8299
LS08-FAN-001S	Fan	LS No 08 34TH AVENUE	0.86	0.8299
LS16-HTR-001	Heater	LS No 16 TRUAX CREEK	0.63	0.6134
		WTP1-04 HI-PRESSURE PUMP		
PMP-PMP-15a	No 15 Pump	STN	1.95	0.5979
		WTP1-04 HI-PRESSURE PUMP		
PMP-MTR-15m	No 15 Motor	STN	1.85	0.5979
LS04-FAN-001	Fan	LS No 04 QUEEN AVENUE	0.62	0.5979
LS04-FIL-001	Filter	LS No 04 QUEEN AVENUE	0.62	0.5979
LS06-STR-001	Oak Creek Structure	LS No 06 OAK CREEK	3.55	0.4124
LS14-STR-001	Charlotte Lift Station	LS No 14 CHARLOTTE STREET	2.55	0.4124
LS05-STR-001	Umatilla List Station Structure	LS No 05 UMATILLA	2.48	0.4124
LS08-RTU-001	Remote Terminal Unit	LS No 08 34TH AVENUE	0.49	0.4021
LS08-CTP-001	Pump Control Panel	LS No 08 34TH AVENUE	3.75	0.3969

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EXHIBIT 2-4 Likelihood Score Higher Than 0.3

Likelii lood Score I li	grior ritair olo		Total	Probability
Asset Name	Description	Location	Score	Score
LS04-CTP-001	Pump Control Panel	LS No 04 QUEEN AVENUE	2.50	0.3969
LS09-CTP-001	Pump Control Panel	LS No 09 MARION STREET	2.33	0.3969
LS11-CTP-001	Pump Control Panel	LS No 11 LAWNDALE	2.33	0.3969
LS09-FAN-001	Fan	LS No 09 MARION STREET	0.44	0.3969
LS11-FAN-001	Fan	LS No 11 LAWNDALE	0.44	0.3969
WTP1-04 PUMP		WTP1-04 HI-PRESSURE PUMP		
STA	Pump Station Structure	STN	1.03	0.3918
LS03-MTR-001	Metering Device	LS No 03 MAPLE STREET	0.98	0.3814
LS14-RADIO-001	RTU Radio	LS No 14 CHARLOTTE STREET	0.47	0.3814
LS14-RTU-001	Remote Terminal Unit	LS No 14 CHARLOTTE STREET	0.47	0.3814
LS05-DEH-001	Dehumidifier	LS No 05 UMATILLA	0.39	0.3814
LS14-FAN-001	Fan	LS No 14 CHARLOTTE STREET	0.39	0.3763
LS04-FIL-002	Filter	LS No 04 QUEEN AVENUE	0.38	0.366
LS18-FAN-001	Fan	LS No 18 MILLERSBURG	0.38	0.366
	Pump No 21 Motor Control			
CRTL-PMP-021	Center	PSR QUEEN AVE	2.22	0.3505
	Pump No 22 Motor Control			
CRTL-PMP-022	Center	PSR QUEEN AVE	2.22	0.3505
		WTP1-04 HI-PRESSURE PUMP		
PMP-DIS-003	Pump No 13 Main Disconnect	STN	2.22	0.3505
		WTP1-04 HI-PRESSURE PUMP		
PMP-DIS-005	Pump No 11 Main Disconnect	STN	2.22	0.3505
PMP-DIS-010	Pump No 21 Disconnect	PSR QUEEN AVE	2.22	0.3505
PMP-DIS-012	Pump Main Disconnect	PSR QUEEN AVE	2.22	0.3505
PMP-DIS-011	Pump No 22 Disconnect	PSR QUEEN AVE	2.14	0.3505
		WTP1-04 HI-PRESSURE PUMP		
PMP-DIS-002	Pump No 14 Main Disconnect	STN	1.96	0.3505

2.3 Risk Analysis

Previous sections in this report have focused on individual aspects of the asset risk such as the condition or impact of failure. By scoring each of these components, the City of Albany can take a repeatable and methodical approach to analyzing risk. This is done by focusing on an individual aspect of risk rather than attempting to quantify risk in a single step.

Based on the condition assessment of the systems, all scores were entered in ACESTM and risk scores calculated. **Exhibit 2-5** (at the end of this section) provides a list of the one hundred highest risk assets that were assessed with a total risk score greater than 1.0. In general, it should be noted that the highest risk assets were items that had the potential to completely shut down the facility (Impact: Availability) or were in moderate condition.

Major electrical components are commonly identified as some of the highest risk assets. This is again due to the dependence of the facility on electrical components with limited installed redundancy. What brings them to the top of the list is the difficulty in assessing the condition of the electrical equipment and the current availability of replacement parts. To lower the risk of failure of major electrical components in the systems, regular shutdowns and condition assessments (at least annual for most components) would improve the condition score and help to identify maintenance deficiencies in time to take corrective action.

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Structures are also commonly identified as high risk assets due to the following:

- Ability to return to service
- Financial impact
- Redundancy

The items in Exhibit 13 were examined closely to see if some modifications to this equipment would result in lower risk for that asset and the location as a whole. The results of that examination are shown in detailed sheets in Section 3. The items with the highest impact scores (that is, with the greatest potential for risk reduction for the site as a whole) are shown on the first page. The majority of these items were control panels. The City of Albany has replaced several control panels in the field with a "standard" panel. This process should continue using the standard to reduce the amount of spare parts needed. The training associated with troubleshooting could also be reduced if only one control panel had to be learned. Replacing failed parts in control panels is not cost-effective as it requires engineering time.

The City can also perform some tasks to reduce risk in general:

- Operating Protocols This Likelihood score was constant throughout the facilities. If The City of Albany spent some time in generating Pump Station and Lift Station Emergency Guides, this score would be reduced to a 1. These emergency guides or binders would contain this information:
 - Site layout
 - Equipment nameplate data
 - Emergency contact numbers
 - Bypass pumping directions (size of pump needed, connection points, length of suction and discharge hose needed)
 - Emergency generator needed (size and location)
 - Spare parts list and location of part or vendor

Planned Redundancy – another item that received a consistent low score on the Likelihood and Triggers Matrix. This score may be improved by focusing some resources on documenting spare parts availability. One method would be to create a critical spare parts list for each station. This would be in the pump station or lift station emergency guide. These lists for each station could be combined into a single list that could be used to look for redundant parts. This will allow for reduced stocking levels. The list could also be reviewed for parts that are similar. If the parts are similar, making changes in the system to accommodate just one version of the part may be warranted.

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EXHIBIT 2-5Highest Risk Assessed Assets with a Total Score Greater than 1.0

Asset Name	sed Assets with a Total Score Greater Description	Location	Rank	Total Score
LS08-CTP-001	Pump Control Panel	LS No 08 34TH AVENUE	1	3.75
LS06-STR-001	Oak Creek Structure	LS No 06 OAK CREEK	2	3.55
LS12-STR-001	Wah Chan Lift Station	LS No 12 WAH CHANG	3	2.60
LS14-STR-001	Charlotte Lift Station	LS No 14 CHARLOTTE STREET	4	2.55
LS04-CTP-001	Pump Control Panel	LS No 04 QUEEN AVENUE	5	2.50
LS05-STR-001	Umatilla List Station Structure	LS No 05 UMATILLA	6	2.48
LS07-STR-001	College Green Lift Station	LS No 07 COLLEGE GREEN	7	2.48
LS08-STR-001	34th Avenue Lift Station	LS No 08 34TH AVENUE	8	2.48
LS19-STR-001	North Albany Lift Station	LS No 19 NORTH ALBANY	9	2.48
LS09-CTP-001	Pump Control Panel	LS No 09 MARION STREET	10	2.33
LS11-CTP-001	Pump Control Panel	LS No 11 LAWNDALE	11	2.33
CRTL-PMP-021	Pump No 21 Motor Control Center	PSR QUEEN AVE	12	2.22
CRTL-PMP-022	Pump No 22 Motor Control Center	PSR QUEEN AVE	13	2.22
PMP-DIS-003	Pump No 13 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	14	2.22
		WTP1-04 HI-PRESSURE PUMP		
PMP-DIS-005	Pump No 11 Main Disconnect	STN	15	2.22
PMP-DIS-010	Pump No 21 Disconnect	PSR QUEEN AVE	16	2.22
PMP-DIS-012	Pump Main Disconnect	PSR QUEEN AVE	17	2.22
PMP-DIS-011	Pump No 22 Disconnect	PSR QUEEN AVE	18	2.14
LS20-STR-001	Columbus Street Lift Station	LS No 20 COLUMBUS STREET	19	2.12
LS13-STR-001	Century Drive Lift Station	LS No 13 CENTURY DR	20	2.12
PUMP013	Centrifugal Pump	LS No 08 34TH AVENUE	21	2.04
PUMP014	Centrifugal Pump	LS No 08 34TH AVENUE	22	2.04
MOTOR014	Motor - 3 Phase	LS No 08 34TH AVENUE	23	2.01
LS18-STR-001	Millersburg Lift Station	LS No 18 MILLERSBURG	24	1.99
MOTOR011	Motor - 3 Phase	LS No 07 COLLEGE GREEN	25	1.97
MOTOR012	Motor - 3 Phase	LS No 07 COLLEGE GREEN	26	1.97
MOTOR013	Motor - 3 Phase	LS No 08 34TH AVENUE	27	1.97
MOTOR001	Motor - 3 Phase	LS No 19 NORTH ALBANY	28	1.97
MOTOR002	Motor - 3 Phase	LS No 19 NORTH ALBANY	29	1.97
LS06-MCC-001	Motor Control Center	LS No 06 OAK CREEK	30	1.97
PMP-DIS-002	Pump No 14 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	31	1.96
DMD DMD 45-	No. 45 Down	WTP1-04 HI-PRESSURE PUMP	00	4.05
PMP-PMP-15a	No 15 Pump	STN	32	1.95
LS07-BATT-001	UPS Battery Backup	LS No 07 COLLEGE GREEN	33	1.95
LS08-CONV-001	12V Power Supply Converter	LS No 08 34TH AVENUE	34	1.95
LS19-BATT-001	UPS Battery Backup	LS No 19 NORTH ALBANY	35	1.95
DMD MTD 45m	No 45 Motor	WTP1-04 HI-PRESSURE PUMP	26	1.05
PMP-MTR-15m	No 15 Motor	STN STN STN	36	1.85
PUMP023	Centrifugal Pump	LS No 12 WAH CHANG LS No 12 WAH CHANG	37	1.83
PUMP024	Centrifugal Pump UPS Battery Backup		38	1.83
LS12-BATT-001		LS No 12 WAH CHANG	39	1.82
LS12-ELC-001 LS12-POT-001	Added Transfer Switch Vacuum Pot	LS No 12 WAH CHANG LS No 12 WAH CHANG	40	1.82 1.77
LS12-PU1-001	vacuum Pot	WTP1-04 HI-PRESSURE PUMP	41	1.77
PMP-DIS-001	Dump No 15 Main Diagonnest		40	1.70
	Pump No 15 Main Disconnect	LS No 06 OAK CREEK	42	1.73
PUMP009 PUMP010	Centrifugal Pump Centrifugal Pump	LS No 06 OAK CREEK	43	1.71 1.71
	0 1		44	
MOTOR023	Motor - 3 Phase	LS No 12 WAH CHANG		1.71
MOTOR024	Motor - 3 Phase	LS No 12 WAH CHANG	46	1.71
LS04-STR-001	Queen Avenue structure	LS No 04 QUEEN AVENUE	47	1.69
CTRL-PMP-41	Pump No 41 Motor Control Center	PSR 34TH AVE	48	1.62
LS15-STR-001	Burkhart Lift Station	LS No 15 BURKHART CREEK	49	1.59
LS05-CTP-001	Pump Control Panel	LS No 05 UMATILLA LS No 07 COLLEGE GREEN	50	1.58
LS07-CTP-001	Pump Control Panel		51	1.56
LS05-CONV-001	12V Power Supply Converter	LS No 05 UMATILLA	52	1.54
DMD DIS 004	Pump No 12 Main Disconnect	WTP1-04 HI-PRESSURE PUMP	50	4 50
PMP-DIS-004 MCC-MCC-001	Pump No 12 Main Disconnect Motor Control Center	STN PS NORTH ALBANY	53 54	1.53 1.46
IVICO-IVICO-UU I	I WOLOI CONTO CENTEI	FO NOR IT ALBANY	54	1.40

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EXHIBIT 2-5
Highest Risk Assessed Assets with a Total Score Greater than 1.0

Asset Name	Description	Location	Rank	Total Score
LS14-CONV-001	12V Power Supply Converter	LS No 14 CHARLOTTE STREET	55	1.46
LS09-CONV-001	12V Power Supply Converter	LS No 09 MARION STREET	56	1.46
PUMP007	Pump	LS No 05 UMATILLA	57	1.45
PUMP008	Pump	LS No 05 UMATILLA	58	1.45
CTRL-PMP-42	Pump No 42 Motor Control Center	PSR 34TH AVE	59	1.43
CTRL-PMP-43	Pump No 43 Motor Control Center	PSR 34TH AVE	60	1.43
LS14-CTP-001	Pump Control Panel	LS No 14 CHARLOTTE STREET	61	1.43
LS15-CTP-001	Pump Control Panel	LS No 15 BURKHART CREEK	62	1.42
LS10-CTP-001	Pump Control Panel	LS No 13 BORKHART CREEK	63	1.42
PUMP005	Centrifugal Pump	LS No 04 QUEEN AVENUE	65	1.42
PUMP006	Centrifugal Fump	LS No 04 QUEEN AVENUE	66	1.34
LS06-CONV-001	12V Power Supply Converter	LS No 04 QUEEN AVENUE	64	1.34
LS18-CTP-001	Pump Control Panel	LS No 18 MILLERSBURG	67	1.33
	Centrifugal Pump			1.33
PUMP002	<u> </u>	LS No 19 NORTH ALBANY	68	
PUMP011	Pump	LS No 07 COLLEGE GREEN	69	1.31
PUMP012	Pump	LS No 07 COLLEGE GREEN	70	1.31
LS20-CTP-001	Pump Control Panel	LS No 20 COLUMBUS STREET	71	1.30
LS13-CTP-001	Pump Control Panel	LS No 13 CENTURY DR	72	1.30
MOTOR007	Motor - 3 Phase	LS No 05 UMATILLA	73	1.25
MOTOR008	Motor - 3 Phase	LS No 05 UMATILLA	74	1.25
LS10-STR-001	Oak Street Structure	LS No 10 OAK STREET	78	1.24
LS11-STR-001	Lawndale Street Lift Station	LS No 11 LAWNDALE	79	1.24
LS09-STR-001	Marion Street Lift Station	LS No 09 MARION STREET	80	1.24
LS03-STR-001	Maple Lift station Structure	LS No 03 MAPLE STREET	81	1.24
LS12-PMP-002	Vacuum Pump	LS No 12 WAH CHANG	75	1.24
LS12-PMP-003	Vacuum Pump	LS No 12 WAH CHANG	76	1.24
LS12-POT-002	Vacuum Pot 2	LS No 12 WAH CHANG	77	1.24
MOTOR021	Motor - 3 Phase	LS No 13 CENTURY DR	82	1.23
MOTOR022	Motor - 3 Phase	LS No 13 CENTURY DR	83	1.23
PUMP001	Centrifugal Pump	LS No 19 NORTH ALBANY	84	1.22
LS20-BATT-001	UPS Battery Backup	LS No 20 COLUMBUS STREET	85	1.21
MOTOR009	Motor - 3 Phase	LS No 06 OAK CREEK	86	1.19
MOTOR010	Motor - 3 Phase	LS No 06 OAK CREEK	87	1.19
LS12-CTP-001	Pump Control Panel	LS No 12 WAH CHANG	88	1.19
LS12-PMP-001	Submersible Pump	LS No 12 WAH CHANG	89	1.15
LS16-CTP-001	Pump Control Panel	LS No 16 TRUAX CREEK	90	1.13
LS08-PMP-001	Submersible Pump	LS No 08 34TH AVENUE	91	1.10
LS07-PMP-001	Submersible Pump	LS No 07 COLLEGE GREEN	92	1.10
LS07-PMP-002	Submersible Pump	LS No 07 COLLEGE GREEN	93	1.10
LS19-PMP-001	Submersible Pump	LS No 19 NORTH ALBANY	94	1.10
LS12-GEN-001	Generator	LS No 12 WAH CHANG	95	1.10
LS08-MTR-001	Metering Device	LS No 08 34TH AVENUE	96	1.09
LS04-CONV-001	12V Power Supply Converter	LS No 04 QUEEN AVENUE	97	1.07
LS16-STR-001	Truax Creek Lift Station	LS No 16 TRUAX CREEK	98	1.06
LS18-CONV-001	12V Power Supply Converter	LS No 18 MILLERSBURG	99	1.05
LS05-BATT-001	UPS Battery Backup	LS No 05 UMATILLA	100	1.05
WTP1-04 PUMP		WTP1-04 HI-PRESSURE PUMP		
STA	Pump Station Structure	STN	101	1.03
LS03-RADIO-001	RTU Radio	LS No 03 MAPLE STREET	102	1.00

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3 Risk Reduction

Of the 516 assets assessed for condition and risk, 44 assets presented high total risk scores. For this group of high-risk assets, the City requested recommendations outlining initial steps to reduce, or mitigate, the risk of failure of these assets. **Exhibit 3-1**, Risk Reduction Summary, summarizes these recommendations grouped by water pump stations and sewer lift stations.

Exhibits 3-2 and 3-3 provide detailed risk reduction information for the individual water pump stations and sewer lift stations, respectively. The details on these sheets include information about the consequence and likelihood factors that resulted in the listed risk score, the risk reduction options recommended, and the estimated costs.

It should be noted that some pump or lift stations included previously on **Exhibit 2-5** with high risk values are not listed in this risk reduction section. For these assets, either their high risk values are a result of the high risk scores of one or more of the 44 assets listed, or their high risk is of a structural nature already known to the City of Albany. If the latter case, risk reduction can only be achieved through reconstruction or replacement. If the high risk score is based on the risk of the station's individual assets, then mitigating the risk to the assets will also reduce the risk to the station.

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EXHIBIT 3-1Risk Reduction Summary

Detail	RISK Reduction Summary							
Sheet		Asset Number	Asset Description	Action	Existing Risk	Reduced Risk	Change	Estimated Cost
(page)	Water Pump Stations (detail sheets in E	xhibit 3-2)						
		CTRL-PMP-41	Pump No 41 Motor Control Center	Replace	1.62	0.82	0.8	\$ 57,000
3-5	PSR 34th AVE	CTRL-PMP-42	Pump No 42 Motor Control Center	Replace	1.43	0.82		\$ 57,000
		CTRL-PMP-43	Pump No 43 Motor Control Center	Replace	1.43	0.82	0.61	
		•		Total				\$ 171,000
				Location Score	0.54	0.46	0.08	
						<u> </u>		
		PMP-DIS-001	Pump No 15 Main Disconnects	Replace	1.73	0.83	0.9	\$ 34,000
		PMP-DIS-002	Pump Main Disconnects	Replace	1.96	0.77	1.19	\$ 34,000
3-6	WTP1-04 HI-PRESSURE PUMP STN	PMP-DIS-003	Pump No 13 Main Disconnects	Replace	2.22	0.87	1.35	\$ 34,000
		PMP-DIS-004	Pump No 12 Main Disconnects	Replace	1.53	0.77	0.76	\$ 34,000
		PMP-DIS-005	Pump No 11 Main Disconnects	Replace	2.22	0.87	1.35	\$ 34,000
				Total				\$ 170,000
				Location Score	0.72	0.55	0.17	
						'		
3-7	PS NORTH ALBANY	MCC-MCC-001	Motor Control Center	Replace	1.46	0.87	0.59	\$ 40,000
				Total				\$ 124,800
				Location Score	0.41	0.37	0.04	
		CTRL-PMP-021	Pump No 21 MCC		2.22	0.85	1.37	
		CTRL-PMP-022	Pump No 22 MCC		2.22	0.85	1.37	\$ 34,000
3-8	PSR QUEEN AVE	PMP-DIS-010	Pump No 21 Main Disconnect		2.22	0.85	1.37	
		PMP-DIS-011	Pump No 22 Main Disconnect		2.14	0.85	1.29	\$ 34,000
		PMP-DIS-012	Pump Main Disconnect		2.22	0.85	1.37	\$ 34,000
				Total				\$ 170,000
				Location Score	0.77	0.45	0.32	
					SUBTOTAL: WAT	ER PUMP STATION	ONS	\$ 635,800
	Sewer Lift Stations (detail sheets in Exh					<u> </u>		
3-9		PUMP005	CENTRIFUGAL PUMP	Replace	1.34		0.47	
3-9	LS No 04 QUEEN AVENUE	PUMP006	CENTRIFUGAL PUMP	Replace	1.34	0.87	0.47	
3-10		LS04-CTP-001	Pump Control Panel	Replace	2.5	0.68	1.82	
				Total				\$ 47,000
				Location Score	0.81	0.66	0.15	
		T		T = -				
3-11		LS05-CTP-001	Pump Control Panel	Replace	1.58	0.88	0.7	30000
3-12		PUMP007	PUMP	Replace	1.45	0.62	0.83	7000
3-12	LS No 05 UMATILLA	PUMP008	PUMP	Replace	1.45	0.62	0.83	7000
3-13		MOTOR007	MOTOR 3 PHASE	Upgrade Guards	1.25	0.93	0.32	850
3-13		MOTOR008	MOTOR 3 PHASE	Upgrade Guards	1.25	0.93	0.32	850
3-14		LS05-CONV-001	12V POWER SUPPLY CONVERTER	Replace	1.54	0.71	0.83	1700
				Total				\$ 47,400
				Location Score	0.78	0.6	0.18	

EXHIBIT 3-1Risk Reduction Summary

Detail	•							
Sheet		Asset Number	Asset Description	Action	Existing Risk	Reduced Risk	Change	Estimated Cost
(page)	Sewer Lift Stations (detail sheets in Ex							
3-15		LS06-CONV-001	12V POWER SUPPLY CONVERTER	Replace	1.34	1.08	0.26	\$ 1,300
3-16	LS No 06 OAK CREEK	PUMP009	CENTRIFUGAL PUMP	Upgrade Guards	1.71	0.83	0.88	\$ 1,700
3-16	LS NO 06 OAK CREEK	PUMP010	CENTRIFUGAL PUMP	Upgrade Guards	1.71	0.83	0.88	\$ 1,700
3-17	3-17	LS06-MCC-001	Motor Control Center	Replace	1.97	1.18	0.79	
				Total				\$ 4,700
				Location Score	0.71	0.63	0.08	
				<u> </u>				
3-18	1011 07 0011 505 005511	LS07-CTP-001	CONTROL PANEL	Replace	1.56	1.34	0.22	\$ 30,000
3-19	LS No 07 COLLEGE GREEN	LS07-BATT-001	BACKUP CONTROL POWER SUPPLY	Replace	1.95	1.36	0.59	
			1	Total				\$ 31,700
				Location Score	0.78	0.75	0.03	, , , , , , , , , , , , , , , , , , ,
							5155	
3-20		LS08-CTP-001	CONTROL PANEL	Replace	3.75	1.36	2.39	\$ 30,000
3-20		PUMP013	PUMP	Upgrade Guards	2.04	1.12	0.92	
3-21		PUMP014	PUMP	Upgrade Guards	2.04	1.12	0.92	
3-22	LS No 08 34TH AVENUE	MOTOR013	MOTOR 3 PHASE	Upgrade Guards	2.01	1.7	0.31	•
3-22	MOTOR014	MOTOR 3 PHASE	Upgrade Guards	2.01	1.7	0.31	•	
3-23		LS08-CTP-001	BACKUP CONTROL POWER SUPPLY	Replace	1.95	1.36	0.59	
			1	Total				\$ 34,700
				Location Score	1.09	0.83	0.26	<u> </u>
3-24		LS09-CTP-001	Pump Control Panel	Replace	2.33	0.96	1.37	\$ 30,000
3-25	LS No 09 MARION STREET	LS09-CONV-001	12V POWER SUPPLY CONVERTER	Replace	1.46	0.82	0.64	
		1		Total				\$ 33,000
				Location Score	0.64	0.57	0.07	Ψ σο,σσσ
				Location Coole	0.04	0.07	0.07	
3-26	LS No 10 14th and OAK	LS10-CTP-001	Pump Control Panel	Replace	1.42	0.82	0.6	\$ 30,000
3-20	ES NO 10 14th and OAK	L310-011-001	I drip Control Laner	Total	1.42	0.02	0.0	\$ 30,000
				Location Score	0.65	0.63	0.02	\$ 30,000
				Location Score	0.00	0.03	0.02	
						0.00	1	\$ 30,000
0.07	LONE 44 LAWADALE	L 044 OTD 004	David Caratast David					
3-27	LS No 11 LAWNDALE	LS11-CTP-001	Pump Control Panel	Replace	2.33	0.82	1.51	
3-27	LS No 11 LAWNDALE	LS11-CTP-001	Pump Control Panel	Total			•	\$ 30,000
3-27	LS No 11 LAWNDALE	LS11-CTP-001	Pump Control Panel		2.33 0.57	0.82	0.01	
	LS No 11 LAWNDALE			Total Location Score	0.57	0.56	0.01	\$ 30,000
3-28	LS No 11 LAWNDALE LS No 19 NORTH ALBANY	MOTOR001	Motor #1	Total Location Score	0.57	0.56	0.01	\$ 30,000 \$ 1,200
				Total Location Score Rebuild Rebuild	0.57	0.56	0.01 0.71 0.71	\$ 30,000 \$ 1,200 \$ 1,200
3-28		MOTOR001	Motor #1	Total Location Score	0.57	0.56 1.26 1.26	0.01 0.71 0.71	\$ 30,000 \$ 1,200

EXHIBIT 3-1

Risk Reduction Summary

Sheet		Asset Number	Asset Description	Action	Existing Risk	Reduced Risk	Change	Estimated Cost
(page)	Sewer Lift Stations (detail sheets in Exhi	bit 3-3)						
3-29	LS No 14 CHARLOTTE STREET	LS14-CTP-001	Pump Control Panel	Replace	1.42	0.82	0.6	\$ 30,000
3-30	ES NO 14 CHARLOTTE STREET	LS14-CONV-001	12V POWER SUPPLY CONVERTER	Replace	1.46	1	0.46	\$ 1,700
				Total				\$ 31,700
				Location Score	0.68	0.64	0.04	
3-31	LS No 15 BURKHART CREEK	LS15-CTP-001	Pump Control Panel	Replace	1.42	0.77	0.65	\$ 30,000
				Total				\$ 30,000
				Location Score	0.56	0.54	0.02	
					SUBTOTAL: SEW	ER LIFT STATION	S	\$ 258,500

Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score CTRL-PMP-41, CTRL-PMP-42, CTRL-PMP-43 Pump Motor Control Centers 1.62

	Primary Cause of Risk
Туре	Category
☐ Consequence ✓ Likelihood	Condition overall

	Secondary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Availability to return asset to service

Risk Reduction Option #1							
Addresses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk			
	Description	Option	Risk Score	Cost	Reduction:Cost		
✓ Primary ✓ Secondary	Replace disconnect and replace with MCC panel for all pumps	0.85	0.77	N/A	\$170,000		

Risk Reduction Option #2						
Addresses Description	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
	Description	Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

Combined Risk Reduction of Completing Both Option #1 and Option #2							
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost		
Primary Secondary							

Notes/Comments		l
	Replacing disconnects with MCC for all equipment greatly reduces the condition overall. The consequences of ability to return to service, obsolecence, and number of work orders is also greatly reduced.	

WTP1-04 HI-PRESSURE PUMP STN

Asset ID	Asset ID Asset Common Name / Location Ri				
PMP-DIS-001, PMP-DIS-002, PMP-DIS-003, PMP-DIS-004, PMP-DIS-005	Pump Main Disconnects	2.22			

Primary Cause of Risk			
Туре	Category		
☐ Consequence ✓ Likelihood	Condition overall		

Secondary Cause of Risk				
Type Category				
✓ Consequence ☐ Likelihood	Availability to return asset to service			

	Risk Reduction Opt	ion #1			
Addresses	Addresses		Reduction in	Estimated Lifecycle	Risk
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost
✓ Primary ✓ Secondary	Replace disconnect and replace with MCC panel for all pumps		2.22	N/A	\$170,000

	Risk Reduction Option #2					
Addrossos	Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
	Audiesses		Option	Risk Score	Cost	Reduction:Cost
	Primary					
	Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2				
Addresses	sses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

Notes/Comments

Replacing disconnects with MCC for all equipment greatly reduces the condition overall. The consequences of ability to return to service, obsolecence, and number of work orders is also greatly reduced. STRONGLY RECOMMEND REVIEWING RISK FOR PMP-DIS002 AND PMP-DIS-004. These are newer softstart units that were considered the same during risk workshop.

PS NORTH ALBANY

	Accet ID	Asset Posing Unacceptable Risk Asset Common Name / Location	Diek Coore
ı	Asset ID	ASSEC COMMON NAME / LOCATION	Risk Score
	MCC-MCC-001	Motor Control Center	1.46

Primary Cause of Risk			
Туре	Category		
☐ Consequence ✓ Likelihood	Condition Overall		

Secondary Cause of Risk				
Туре	Category			
✓ Consequence ☐ Likelihood	Availability to Return asset to Service			

Risk Reduction Option #1					
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
✓ Primary ✓ Secondary	Replace MCC	0.87	0.59	N/A	\$40,000

	Risk Reduction Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audresses		Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
ſ	Addresses	es Description Ris	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
	Audresses		Option	Risk Score	Cost	Reduction:Cost
	Primary					
	Secondary					

Į	Notes/Comments	
		Replacing MCC will decrease the overall condition score. This will also have an effect on ability to restore to service, and planned redundancy through parts availability.

PSR QUEEN AVE

I		Asset Posing Unacceptable Risk		
	Asset ID Asset Common Name / Location R			
	CRTL-PMP-021 CRTL-PMP-022 PMP-DIS-010 PMP-DIS-010 PMP-DIS-011	Pump Disconnects	2.22	

Primary Cause of Risk			
Type Category			
☐ Consequence ✓ Likelihood	Condition overall		

Secondary Cause of Risk			
Туре	Category		
✓ Consequence ☐ Likelihood	Availability to return asset to service		

	Risk Reduction Opt	ion #1			
Addresses	Addresses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses		Option	Risk Score	Cost	Reduction:Cost
✓ Primary ✓ Secondary	Replace disconnect and replace with MCC panel for all pumps	0.85	1.37	N/A	\$170,000

Risk Reduction Option #2					
Addresses	Addresses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2						
Addresses	ses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
Audresses		Option	Risk Score	Cost	Reduction:Cost		
Primary							
Secondary							

Notes/Comments	
	Replacing disconnects with MCC for all equipment greatly reduces the condition overall. The consequences of ability to return to service, obsolecence, and number of work orders is also greatly reduced.

LS NO 04 QUEEN AVENUE

	Asset Posing Unacceptable Risk		
Asset ID	Asset Common Name / Location	Risk Score	
PUMP005, PUMP006	CENTRIFUGAL PUMP	1.34	

	Primary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Health and safety of employees and public

Secondary Cause of Risk				
Туре	Category			
Consequence Likelihood	Condition assessment overall			

	Risk Reduction Option #	1			
Addresses	Addresses Description			Estimated Lifecycle Cost	Risk Reduction:Cost
✓ Primary ✓ Secondary	Replace existing pumps and add safety guards	Option 0.87	Risk Score 0.47	N/A	\$17,000

	Risk Reduction Option #	2			
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary					
		I			

	Combined Risk Reduction of Completing Both	Option #1 and Op	tion #2		
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addicases	Description	Option	Risk Score	Cost	Reduction:Cost
☐ Primary ☐ Secondary					

Notes/Comments	
	Replacing the pumps would include new plumbing and safety guards.

LS NO 04 QUEEN AVENUE

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS04-CTP-001	Pump Control Panel	2.496

I		Primary Cause of Risk
	Туре	Category
Ī	✓ Consequence Likelihood	Multiple

	Secondary Cause of Risk
Туре	Category
Consequence Likelihood	

	Risk Reduction Option #	1			
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary Secondary	Replace existing control panel with new control panel standard already in place.	0.68	1.82	N/A	\$30,000

	Risk Reduction Option #	2			
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audiesses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both	Option #1 and Op	tion #2		
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

Notes/Comments	
	Replacing the older controls will reduce many of the consequence and liklelihood scores. (planned redundancy, ability to restore to service, condition, spare parts availability).

4 115	Asset Posing Unaccept				D: 1 0
Asset ID	Asset Common Name	Location			Risk Score
LS05-CTP-001	Pump Control P	anel			1.58
	Primary Cause of Risk		Secondar	ry Cause of Risk	
Туре	Category	Туре		Category	
✓ Consequence Likelihood	Multiple	Consequence Likelihood		Multiple	
	Risk Reduction Opti	on #1			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
Primary I Secondary	Replace existing control panel with new control panel standard already in place.	0.88	0.70	N/A	\$30,000
	Risk Reduction Opti				
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
Primary Secondary					
	Combined Risk Reduction of Completing B				
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
_					
Primary Secondary					
_ ′					

LS NO 05 UMATILLA

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	
PUMP007, PUMP008	PUMP #1 AND #2	1.45

Primary Cause of Risk				
Type Category				
✓ Consequence Likelihood	Health and safety of employees and public			

	Secondary Cause of Risk
Туре	Category
☐ Consequence ✓ Likelihood	Capacity and utilization

Risk Reduction Option #1					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
	Description	Option	Risk Score	Cost	Reduction:Cost
Primary Secondary	Install safety guards on all rotating equipment	0.73	0.72	N/A	\$1,700

Risk Reduction Option #2					
Addresses	Description	Risk Score w/ Reduction in Estimated Lifecycle	Risk		
	Description	Option	Risk Score	Cost	Reduction:Cost
Primary Secondary	Replace existing pumps with correctly sized pumps, safety guards included.	0.62	0.83	N/A	\$14,000

Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

Notes/Comments	
	Note that by installing replacement guards, only the health and safety consequence was affected. With replacing pumps, several other consequences and likelihood items changed.

	LS NO 05 UN	//ATILLA			
A+ID	Asset Posing Unaco				D: 1. C
Asset ID	Asset Common Na	ame / Location			Risk Score
MOTOR007, MOTOR008	MOTOR - 3 PHASE FOR	R PUMPS #1 AND #2	2		1.25
	Primary Cause of Risk		Secondai	ry Cause of Risk	
Туре	Category	Туре		Category	
Consequence Likelihood	Health and Safety of Employees and Public	☐ Consequence ✓ Likelihood			
	Risk Reduction	Option #1			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
Primary Secondary	Install safety guards on all rotating equipment	0.93	0.32	N/A	1700*
	Risk Reduction	Option #2			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
Primary Secondary					
	Combined Risk Reduction of Completing	ng Both Option #1 an	d Option #2		
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
Primary Secondary					
Notes/Comments					
	* - No cost if done with pump safety guard upgrades				

Sewer rump Statio	III NISK Neduction Detail Sheets				
	LS NO 05 UMA	TILLA			
	Asset Posing Unaccept				
Asset ID	Asset Common Name	/ Location			Risk Score
LS05-CONV-001	12V POWER SUPPLY (CONVERTER			1.59
	Primary Cause of Risk		Seconda	ry Cause of Risk	
Туре	Category	Туре	- Scoonaa	Category	
Consequence Likelihood	Health and Safety of Employees and Public	Consequence Likelihood		Condition Overal	I
Addresses	Risk Reduction Opt Description	ion #1 Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
✓ Primary ✓ Secondary	Replace power supply and mount correctly in dafe manner.	0.71	0.88	N/A	1700*
	Risk Reduction Opt	:an #2		•	
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
Primary Secondary					
	Combined Risk Reduction of Completing E	Both Option #1 and	d Option #2		
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
Primary Secondary					
Notes/Comments					
	Replacement effects safety and also overall conditon.				

LS NO 06 OAK CREEK

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS06-CONV-001	12V POWER SUPPLY CONVERTER	1.34

	Primary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Availability to return asset to service

	Secondary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Planned redundancy

	Risk Reduction Option #1					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost	
✓ Primary ✓ Secondary	Replace power supply with up-to-date technology	1.08	0.26	N/A	\$1,300	

Risk Reduction Option #2					
Addresses	Addresses Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description		Reduction in	Estimated Lifecycle	Risk	
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

Notes/Comn	nents	
		Replacement affects safety, ability to return to service, and redundancy associated with spare parts availability.

Sewer Pump Stati	on Risk Reduction Detail Sheets				
	LS NO 06 OAK	CREEK			
	Asset Posing Unaccept	able Risk			
Asset ID	Asset Common Name /				Risk Score
PUMP009, PUMP010	PUMP #1 AND	#2			1.71
	Primary Cause of Risk		Seconda	ry Cause of Risk	
Туре	Category	Туре		Category	
Consequence	Health and safety of employees and public	Consequence Likelihood			
Addresses	Risk Reduction Opti	on #1 Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
Primary Secondary	Install safety guards on ALL rotating equipment. <u>Drive shafts</u> <u>and couplings ???</u>	0.83	0.88	N/A	\$1,700
	Risk Reduction Opti	on #2			
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Primary Secondary	·	Option	Risk Score	Cost	Reduction:Cost
	Combined Risk Reduction of Completing B	Soth Option #1 an	d Option #2		
Addresses	Description Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Primary Secondary	2000.p.io.	Option	Risk Score	Cost	Reduction:Cost
Notes/Comments					
	The upgrading of safety guards also lowered the condition score	re based on the o	question "All Sa	afety Guards Presen	nt."

LS NO 06 OAK CREEK Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score LS06-MCC-001 Motor Control Center 1.97 Primary Cause of Risk Secondary Cause of Risk Category Туре Category Туре ✓ Consequence Consequence Health and safety of employees and public Condition overall Likelihood Likelihood Risk Reduction Option #1 Risk Score w/ Reduction in Estimated Lifecycle Risk Description Addresses Risk Score Reduction:Cost Option Cost ✓ Primary Replace existing MCC with new MCC standard already in 1.18 0.79 \$130,000 N/A Secondary place. Risk Reduction Option #2 Estimated Lifecycle Risk Score w/ Reduction in Risk Addresses Description Option Risk Score Cost Reduction:Cost Primary Secondary Combined Risk Reduction of Completing Both Option #1 and Option #2 Estimated Lifecycle Addresses Description Option Risk Score Cost Reduction:Cost Primary Secondary Notes/Comments <u>Previous version:</u> With replacing MCC, several other Consequences and Liklihood items risk dropped mostly associated with condition.

By replacing the MCC, the risk of several other consequences and likelihood items mostly associated with condition will drop.

Suggested version:

LS NO 07 COLLEGE GREEN

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS07-CTP-001	CONTROL PANEL	1.56

	Primary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Availability to return asset to service

	Secondary Cause of Risk					
Type Category						
☐ Consequence ✓ Likelihood	Planned redundancy					

	Risk Reduction Option #1						
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
Addresses		Option	Risk Score	Cost	Reduction:Cost		
✓ Primary ✓ Secondary	Replace controls with new standard	1.34	0.22	N/A	\$30,000		

Risk Reduction Option #2							
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
Addresses		Option	Risk Score	Cost	Reduction:Cost		
Primary							
Secondary							

	Combined Risk Reduction of Completing Both Option #1 and Option #2							
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk			
Audiesses	Description	Option	Risk Score	Cost	Reduction:Cost			
Primary								
Secondary								

Notes/Comments	
	New controls will decrease risk in ability to return to service and also planned redundancy based on ability to obtain or stock spare parts.

LS NO 07 COLLEGE GREEN Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score LS07-BATT-001 BACKUP CONTROL POWER SUPPLY 1.95 Primary Cause of Risk Secondary Cause of Risk Category Туре Category Туре ✓ Consequence ☐ Consequence Availability to return asset to service Obsolesence Likelihood ✓ Likelihood Risk Reduction Option #1 Risk Score w/ Reduction in Estimated Lifecycle Risk Description Addresses Risk Score Reduction:Cost Option Cost ✓ Primary ✓ Secondary Replace existing power supply with newer model. 1.36 0.59 N/A \$1,700 Risk Reduction Option #2 Reduction in Estimated Lifecycle Risk Score w/ Risk Addresses Description Option Risk Score Cost Reduction:Cost Primary Secondary Combined Risk Reduction of Completing Both Option #1 and Option #2 Estimated Lifecycle Description Addresses Option Risk Score Cost Reduction:Cost Primary Secondary

Replacement control power affects the return to service, obsolesence, work orders, and planned redundancy.

Notes/Comments

LS NO 08 34TH AVENUE

	Asset Posing Unacceptable Risk					
Asset ID	Asset Common Name / Location	Risk Score				
LS08-CTP-001	CONTROL PANEL	3.74				

Primary Cause of Risk				
Type Category				
☐ Consequence ✓ Likelihood	Condition assesment overall			

	Secondary Cause of Risk				
I	Type Category				
	Consequence Likelihood	Availability to return asset to service			

	Risk Reduction Option #1						
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost		
✓ Primary ✓ Secondary	Replace controls with new standard	1.36	2.38	N/A	\$30,000		

Risk Reduction Option #2							
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
		Option	Risk Score	Cost	Reduction:Cost		
Primary							
Secondary							

	Combined Risk Reduction of Completing Both Option #1 and Option #2						
Addresses	Addresses Description Risk Score w/ Reduction in Estimated Lifecycle Risk Option Risk Score Cost Reduction:Co						
Primary Secondary							

Notes/Comments	
	New controls will decrease condition overall the most. Ability to return to service and planned redundancy were also slightly lowered.

LS NO 08 34TH AVENUE Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score PUMP013, Pumps #1 and #2 2.04 PUMP014 Primary Cause of Risk Secondary Cause of Risk Category Туре Category Туре ✓ Consequence Consequence Health and safety of employees and public Condition overall Likelihood Likelihood Risk Reduction Option #1 Risk Score w/ Reduction in Estimated Lifecycle Risk Description Addresses Risk Score Reduction:Cost Option Cost ✓ Primary ✓ Secondary Install safety guards on ALL rotating equipment 1.12 0.92 \$3,000 N/A Risk Reduction Option #2 Estimated Lifecycle Risk Score w/ Reduction in Risk Addresses Description Option Risk Score Cost Reduction:Cost Primary Secondary Combined Risk Reduction of Completing Both Option #1 and Option #2 Estimated Lifecycle Description Addresses Option Risk Score Cost Reduction:Cost Primary Secondary Notes/Comments

Safety guards reduce the health and safety risk as well as the overall condition question "All Safety Guards Present."

Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score MOTOR013, MOTOR014 Motors #1 and #2 2.01

Primary Cause of Risk				
Type	Category			
Consequence Likelihood	Health and safety of employees and public			

Secondary Cause of Risk				
Туре	Category			
☐ Consequence ✓ Likelihood	Condition overall			

Risk Reduction Option #1						
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost	
✓ Primary ✓ Secondary	Install safety guards on ALL rotating equipment	1.70	0.31	N/A	3000*	

Risk Reduction Option #2						
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
		Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

	Combined Risk Reduction of Completing Both Option #1 and Option #2						
Addresses	resses Description		Reduction in	Estimated Lifecycle	Risk		
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost		
Primary							
Secondary							

Notes/Comments	
	Safety guards reduce the risk to health and safety as well as the overall condition question "all safety guards present."

^{*} No cost if done with pump safety guard installation

Sewer Pump Station	n Risk Reduction Detail Sheets				
	LS NO 08 34TH	AVENUE			
	Asset Posing Unacce	•			
Asset ID	Asset Common Nam	ne / Location			Risk Score
LS08-CONV-001	BACKUP CONTROL POWER SUPPLY			1.95	
Type	Primary Cause of Risk Category	Type	Seconda	ry Cause of Risk Category	
✓ Consequence	<u> </u>	Consequence			
Likelihood	Availability to return asset to service	Likelihood		Obsolesence	
	Risk Reduction O	ption #1			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
✓ Primary ✓ Secondary	Replace existing power supply with newer model.	1.36	0.59	N/A	\$1,700
	Risk Reduction O	ntion #2			
		Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary Secondary					
	Combined Risk Reduction of Completing	Roth Option #1 an	d Ontion #2		
		Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary Secondary					
Notes/Comments					

Replacement control power affects the return to service, obsolesence, work orders, and planned redundancy.

LS NO 09 MARION STREET

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS09-CTP-001	Pump Control Panel	2.33

Primary Cause of Risk			
Туре	Category		
☐ Consequence ✓ Likelihood	Condition assesment overall		

Secondary Cause of Risk				
Туре	Category			
✓ Consequence ☐ Likelihood	Availability to return asset to service			

Risk Reduction Option #1						
Addresses	ddresses Description		Reduction in	Estimated Lifecycle	Risk	
Audresses	Description	Option	Risk Score	Cost	Reduction:Cost	
✓ Primary ✓ Secondary	Replace controls with new standard	0.96	1.37	N/A	\$30,000	

Risk Reduction Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description Risk Score w/ Reduction in Estimated Lifecy Option Risk Score Cost			Estimated Lifecycle Cost	Risk Reduction:Cost	
Primary Secondary						

Notes/Comments	
	New controls will decrease condition overall the most. Ability to return to service and planned redundancy were also slightly lowered.

Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score LS09-CONV-001 12V POWER SUPPLY CONVERTER 1.46

Primary Cause of Risk			
Туре	Category		
✓ Consequence ☐ Likelihood	Availability to return asset to service		

Secondary Cause of Risk				
Туре	Category			
☐ Consequence ✓ Likelihood	Planned redundancy			

	Risk Reduction Option #1				
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
✓ Primary ✓ Secondary	Replace existing power supply coverter with newer model.	0.82	0.64	N/A	\$3,000

Risk Reduction Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audiesses		Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

Notes/0	Comments	
		Replacement control power affects the ability to return to service, and planned redundancy.

LS NO 10 14th AND OAK

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS10-CTP-001	Pump Control Panel	1.42

	Primary Cause of Risk			
Туре		Category		
☐ Consequence ✓ Likelihood		Condition assesment overall		

Secondary Cause of Risk					
Туре	Category				
✓ Consequence ☐ Likelihood	Availability to return asset to service				

	Risk Reduction Option #1					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audiesses	Description	Option Ris	Risk Score	Cost	Reduction:Cost	
✓ Primary ✓ Secondary	Replace controls with new standard	0.82	0.60	N/A	\$30,000	

	Risk Reduction Option #2					
Address	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses Description Risk Score W/Option Risk Score Cost Reduction:Cos					
Primary Secondary					

Notes/Comments	
	New controls will decrease condition overall the most. Ability to return to service and planned redundancy were also slightly lowered.

	LS NO 11 LAWNDALE	
Asset ID	Asset Posing Unacceptable Risk Asset Common Name / Location	Risk Score
LS11-CTP-001	Pump Control Panel	2.33

	Primary Cause of Risk
Type	Category
☐ Consequence ✓ Likelihood	Condition assesment overall

	Secondary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Availability to return asset to service

	Risk Reduction Option #1					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audiesses	Description	Option Risk Score	Cost	Reduction:Cost		
✓ Primary ✓ Secondary	Replace controls with new standard	0.82	1.51	N/A	\$30,000	

	Risk Reduction Option #2					
Address	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audiesses	Description	Option	Risk Score		Reduction:Cost	
Primary						
Secondary						

Notes/Comments	
	New controls will decrease condition overall the most. Ability to return to service and also planned redundancy were also slightly lowered.

	Asset Posing I	Unacceptable Risk			
Asset ID	Asset Comm	on Name / Location			Risk Score
MOTOR001 MOTOR002	MOTOR #1 and #2 - 3 PHASE				
Type	Primary Cause of Risk Category	Туре	Secondar	ry Cause of Risk Category	
Consequence Likelihood	Condition assesment overall	Consequence Likelihood		outegory	
	Risk Reduc	ction Option #1			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Co
Primary Secondary	Rebuild motor	1.26	0.71	N/A	\$2,400
	Risk Reduc	ction Option #2			
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Co
Primary Secondary					
	Combined Risk Reduction of Com				
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Co
Primary Secondary					

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	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS14-CTP-001	Pump Control Panel	1.42

Primary Cause of Risk				
Type Category				
☐ Consequence ✓ Likelihood	Condition assesment overall			

	Secondary Cause of Risk
Туре	Category
✓ Consequence ☐ Likelihood	Availability to return asset to service

	Risk Reduction Option #1					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Audiesses	Description	Option	Risk Score	Cost	Reduction:Cost	
✓ Primary ✓ Secondary	Replace controls with new standard	0.82	0.60	N/A	\$30,000	

Risk Reduction Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audiesses		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					

	Combined Risk Reduction of Completing Both Option #1 and Option #2					
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk	
Addresses		Option	Risk Score	Cost	Reduction:Cost	
Primary						
Secondary						

Notes/Comments		
	New controls will decrease condition overall the most. Ability to return to service and planned redundancy were also slightly lowered due to parts availability.	,

LS NO 14 CHARLOTTE STREET Asset Posing Unacceptable Risk Asset ID Asset Common Name / Location Risk Score LS14-CONV-001 12V POWER SUPPLY 1.46 Primary Cause of Risk Secondary Cause of Risk Category Туре Category Туре Consequence Consequence Condition assesment overall ✓ Likelihood Likelihood Risk Reduction Option #1 Risk Score w/ Reduction in Estimated Lifecycle Risk Description Addresses Risk Score Reduction:Cost Option Cost ✓ Primary Replace controls with new standard 1.00 0.46 N/A \$1,700 Secondary Risk Reduction Option #2 Estimated Lifecycle Reduction in Risk Score w/ Risk Addresses Description Option Risk Score Cost Reduction:Cost Primary Secondary Combined Risk Reduction of Completing Both Option #1 and Option #2 Estimated Lifecycle Description Addresses Option Risk Score Cost Reduction:Cost Primary Secondary Notes/Comments

New power supply reduced the overall condition score.

LS NO 15 BURKHART CREEK

	Asset Posing Unacceptable Risk	
Asset ID	Asset Common Name / Location	Risk Score
LS15-CTP-001	Pump Control Panel	1.42

Primary Cause of Risk			
Type Category			
Consequence Likelihood	Condition assesment overall		

Secondary Cause of Risk				
Type Category				
✓ Consequence ☐ Likelihood	Availability to return asset to service			

Risk Reduction Option #1					
Addresses	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost	
✓ Primary ✓ Secondary	Replace controls with new standard	0.77	0.65	N/A	\$30,000

I	Risk Reduction Option #2							
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk			
	Addresses Description		Option	Risk Score	Cost	Reduction:Cost		
ſ	Primary							
	Secondary							

	Combined Risk Reduction of Completing Both Option #1 and Option #2							
ſ	Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk		
L	Audiesses	Description	Option	Risk Score	Cost	Reduction:Cost		
	Primary							
	Secondary							

Notes/Comments	
	New controls will decrease condition overall the most. Ability to return to service and also planned redundancy were also slightly lowered based on parts availability.

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Pump No 21 Motor Control Center	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	2.22
Pump No 22 Motor Control Center	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	2.22
ALARM SYSTEM	PS GIBSON HILL	10/12/2006	1	Normal maintenance	1	0.16
Pump No 41 Motor Control Center	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	1.62
Pump No 42 Motor Control Center	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	1.43
Pump No 43 Motor Control Center	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	1.43
Main Disconnect	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.99
Transfer Switch	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.93
Motor Control Center	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.93
CONTROL PANEL	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.65
SCADA PANEL	PS GIBSON HILL	10/19/2006	2	5% needs maintenance	1	0.85
Building Fan	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.17
MCC Colling Fan	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.26
Unit Heater	PS NORTH ALBANY	10/24/2006	1	Normal maintenance	1	0.14
Flow Meter	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.12
Pressure Transducer	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.29
ACTUATOR	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.23
FLOOR CRANE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.20
Maple Flow Meter No 1	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.39
Maple Flow Meter No 2	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.39
GENERATOR	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.65
HOIST	LS No 03 MAPLE STREET	10/31/2006	1	Normal maintenance	1	0.17
HVAC	LS No 03 MAPLE STREET	10/24/2006	5	>50% requires replacement	1	0.89
SENSOR UNIT	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.39
SENSOR UNIT	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.39
SENSOR UNIT	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.39
METERING DEVICE	LS No 03 MAPLE STREET	10/24/2006	3	10 to 20% needs maintenance	1	0.98
METERING DEVICE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.33
METERING DEVICE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.49
RTU RADIO	LS No 03 MAPLE STREET	10/31/2006	5	>50% requires replacement	1	1.00
REMOTE TERMINAL UNIT	LS No 03 MAPLE STREET	10/24/2006	2	5% needs maintenance	1	0.26
Maple Lift station Structure	LS No 03 MAPLE STREET	10/25/2006	2	5% needs maintenance	1	1.24
FUEL TANK	LS No 03 MAPLE STREET	10/31/2006	2	5% needs maintenance	1	0.79
VARIABLE FREQUENCY DRIVE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.99
VARIABLE FREQUENCY DRIVE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.99
VARIABLE FREQUENCY DRIVE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.87
VARIABLE FREQUENCY DRIVE	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.99

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Pump No 1 Check Valve	LS No 03 MAPLE STREET	10/18/2006	1	Normal maintenance	1	0.23
Pump No 1 Discharge Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 1 Air Release Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Air Release Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 3 Check Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 3 Discharge Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 3 Air Release Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 4 Check Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 4 Discharge Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 4 Air Release Valve	LS No 03 MAPLE STREET	10/26/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 04 QUEEN AVENUE	10/18/2006	1	Normal maintenance	1	1.07
Pump Control Panel	LS No 04 QUEEN AVENUE	10/19/2006	3	10 to 20% needs maintenance	1	2.50
FAN	LS No 04 QUEEN AVENUE	10/18/2006	4	20 to 40% needs renewal	1	0.62
FILTER	LS No 04 QUEEN AVENUE	10/18/2006	4	20 to 40% needs renewal	1	0.62
FILTER	LS No 04 QUEEN AVENUE	10/18/2006	3	10 to 20% needs maintenance	1	0.38
SENSOR UNIT	LS No 04 QUEEN AVENUE	10/18/2006	1	Normal maintenance	1	0.44
METERING DEVICE	LS No 04 QUEEN AVENUE	10/18/2006	1	Normal maintenance	1	0.44
SUBMERSIBLE PUMP	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.92
RTU RADIO	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.29
REMOTE TERMINAL UNIT	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.29
Queen Avenue structure	LS No 04 QUEEN AVENUE	10/25/2006	2	5% needs maintenance	1	1.69
Pump No 1 Suction Valve	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.33
Pump No 1 Check Valve	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.33
Pump No 2 Suction	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.33
Pump No 2 Check Valve	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.33
UPS BATTERY BACKUP	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	1.05
12V POWER SUPPLY CONVERTER	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	1.54
Pump Control Panel	LS No 05 UMATILLA	10/19/2006	2	5% needs maintenance	1	1.58
DEHUMIDIFIER	LS No 05 UMATILLA	10/18/2006	3	10 to 20% needs maintenance	1	0.39
FAN	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.14
SENSOR UNIT	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.61
METERING DEVICE	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.61
SUBMERSIBLE PUMP	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	0.92
RTU RADIO	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	0.29
REMOTE TERMINAL UNIT	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	0.29

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Umatilla List Station Structure	LS No 05 UMATILLA	10/25/2006	3	10 to 20% needs maintenance	1	2.48
Pump No 1 Discharge Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
Pump No 1 Check Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
Pump No 1 Suction Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
Pump No 2 Discharge Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
Pump No 2 Check Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
Pump No 2 Suction Valve	LS No 05 UMATILLA	10/18/2006	1	Normal maintenance	1	0.20
12V POWER SUPPLY CONVERTER	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	1.34
FAN	LS No 06 OAK CREEK	10/23/2006	1	Normal maintenance	1	0.19
MOTOR - 1 PHASE	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	0.27
FAN	LS No 06 OAK CREEK	10/23/2006	1	Normal maintenance	1	0.19
MOTOR	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	0.27
FILTER	LS No 06 OAK CREEK	10/24/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 06 OAK CREEK	10/24/2006	2	5% needs maintenance	1	0.22
HEATER	LS No 06 OAK CREEK	10/23/2006	1	Incomplete		
Motor Control Center	LS No 06 OAK CREEK	10/24/2006	2	5% needs maintenance	1	1.97
SENSOR UNIT	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.56
Metering Device	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.56
SUBMERSIBLE PUMP	LS No 06 OAK CREEK	10/23/2006	1	Normal maintenance	1	0.51
RTU RADIO	LS No 06 OAK CREEK	10/24/2006	2	5% needs maintenance	1	0.28
REMOTE TERMINAL UNIT	LS No 06 OAK CREEK	10/24/2006	2	5% needs maintenance	1	0.28
Oak Creek Structure	LS No 06 OAK CREEK	10/25/2006	3	10 to 20% needs maintenance	1	3.55
Pump 009 Suction Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
Pump 009 Check Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
Pump 009 Discharge Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
Pump 10 Suction Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
Pump 10 Check Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
Pump 10 Discharge Valve	LS No 06 OAK CREEK	10/24/2006	1	Normal maintenance	1	0.27
UPS BATTERY BACKUP	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	1.95
Pump Control Panel	LS No 07 COLLEGE GREEN	10/19/2006	1	Normal maintenance	1	1.56
DEHUMIDIFIER	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.14
FAN	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.14
FAN	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.14
FILTER	LS No 07 COLLEGE GREEN	10/18/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 07 COLLEGE GREEN	10/18/2006	2	5% needs maintenance	1	0.22
SENSOR UNIT	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.69
METERING DEVICE	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.69

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
SUBMERSIBLE PUMP	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	1.10
SUBMERSIBLE PUMP	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	1.10
RTU RADIO	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.21
REMOTE TERMINAL UNIT	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.21
College Green Lift Station	LS No 07 COLLEGE GREEN	10/25/2006	2	5% needs maintenance	1	2.48
Pump No 1 Discharge Valve	LS No 07 COLLEGE GREEN	10/31/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.23
Pump No 1 Suction Valve	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.23
Pump N0 2 Check Valve	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.23
Pump No 2 Suction Valve	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	1.95
Pump Control Panel	LS No 08 34TH AVENUE	10/26/2006	3	10 to 20% needs maintenance	1	3.75
DEHUMIDIFIER	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	0.22
FAN	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	0.22
FAN	LS No 08 34TH AVENUE	10/31/2006	5	>50% requires replacement	1	0.85
SENSOR UNIT	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	0.69
Metering Device	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	1.09
SUBMERSIBLE PUMP	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	1.10
RTU RADIO	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	0.30
REMOTE TERMINAL UNIT	LS No 08 34TH AVENUE	10/24/2006	3	10 to 20% needs maintenance	1	0.49
34th Avenue Lift Station	LS No 08 34TH AVENUE	10/25/2006	2	5% needs maintenance	1	2.48
Pump No 1 Discharge Valve	LS No 08 34TH AVENUE	10/31/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	0.33
Pump No 1 Suction Valve	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	0.23
Pump No 2 Suction Valve	LS No 08 34TH AVENUE	10/24/2006	1	Normal maintenance	1	0.23
UPS BATTERY BACKUP	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.99
12V POWER SUPPLY CONVERTER	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	1.46
Pump Control Panel	LS No 09 MARION STREET	10/26/2006	3	10 to 20% needs maintenance	1	2.33
DEHUMIDIFIER	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.14
FAN	LS No 09 MARION STREET	10/25/2006	3	10 to 20% needs maintenance	1	0.44
FILTER	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.22
SENSOR UNIT	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.37
METERING DEVICE	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.37

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
SUBMERSIBLE PUMP	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.54
VACUUM PUMP	LS No 09 MARION STREET	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PUMP	LS No 09 MARION STREET	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PRIMER POT	LS No 09 MARION STREET	10/25/2006	1	Normal maintenance	1	0.59
RTU RADIO	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.28
REMOTE TERMINAL UNIT	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.28
Marion Street Lift Station	LS No 09 MARION STREET	10/26/2006	2	5% needs maintenance	1	1.24
Pump No 1 Check Valve	LS No 09 MARION STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 1 Discharge Valve	LS No 09 MARION STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 09 MARION STREET	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 09 MARION STREET	10/26/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.99
Pump Control Panel	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	1.42
FAN	LS No 10 OAK STREET	10/17/2006	5	>50% requires replacement	1	0.96
SENSOR UNIT	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	0.55
METERING DEVICE	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.37
SUBMERSIBLE PUMP	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	0.79
VACUUM PUMP	LS No 10 OAK STREET	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PUMP	LS No 10 OAK STREET	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PRIMER POT	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.59
RTU RADIO	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	0.28
REMOTE TERMINAL UNIT	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	0.28
Oak Street Structure	LS No 10 OAK STREET	10/25/2006	2	5% needs maintenance	1	1.24
Pump No 1 Discharge valve	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 10 OAK STREET	10/17/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.99
Pump Control Panel	LS No 11 LAWNDALE	10/26/2006	3	10 to 20% needs maintenance	1	2.33
DEHUMIDIFIER	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.22
FAN	LS No 11 LAWNDALE	10/25/2006	3	10 to 20% needs maintenance	1	0.44
FILTER	LS No 11 LAWNDALE	10/25/2006		Incomplete		
FILTER	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.22
HEATER	LS No 11 LAWNDALE	10/25/2006		Incomplete		
SENSOR UNIT	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.37
METERING DEVICE	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.55
SUBMERSIBLE PUMP	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.54

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
VACUUM PUMP	LS No 11 LAWNDALE	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PUMP	LS No 11 LAWNDALE	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PRIMER POT	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.59
VACUUM PRIMER POT	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.59
RTU RADIO	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.28
REMOTE TERMINAL UNIT	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.28
Lawndale Street Lift Station	LS No 11 LAWNDALE	10/26/2006	2	5% needs maintenance	1	1.24
Pump No 1 Check Valve	LS No 11 LAWNDALE	10/26/2006	1	Normal maintenance	1	0.23
Pump No 1 Discharge Valve	LS No 11 LAWNDALE	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 11 LAWNDALE	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 11 LAWNDALE	10/26/2006	1	Normal maintenance	1	0.23
UPS BATTERY BACKUP	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	1.82
Pump Control Panel	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	1.19
DEHUMIDIFIER	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	0.23
Added Transfer Switch	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	1.82
FAN	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.14
FAN	LS No 12 WAH CHANG	10/31/2006	5	>50% requires replacement	1	0.86
GENERATOR	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	1.10
HEATER	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	0.23
SENSOR UNIT	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.15
METERING DEVICE	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.15
SUBMERSIBLE PUMP	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.15
VACUUM PUMP	LS No 12 WAH CHANG	10/31/2006	1	Normal maintenance	1	1.24
VACUUM PUMP	LS No 12 WAH CHANG	10/31/2006	1	Normal maintenance	1	1.24
Vacuum Pot	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.77
Vacuum Pot 2	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	1.24
RTU RADIO	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	0.27
REMOTE TERMINAL UNIT	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	0.27
SENSOR UNIT	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.15
SENSOR UNIT	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.15
Wah Chan Lift Station	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	2.60
Pump No 1 Discharge Valve	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 12 WAH CHANG	10/26/2006	1	Normal maintenance	1	0.23
Pump Control Panel	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	1.30
DEHUMIDIFIER	LS No 13 CENTURY DR	10/17/2006	2	5% needs maintenance	1	0.22

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
FAN	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.14
FAN	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.14
FILTER	LS No 13 CENTURY DR	10/18/2006		Incomplete		
FILTER	LS No 13 CENTURY DR	10/18/2006	5	>50% requires replacement	1	0.85
HEATER	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.15
SENSOR UNIT	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.51
METERING DEVICE	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.51
SUBMERSIBLE PUMP	LS No 13 CENTURY DR	10/17/2006	2	5% needs maintenance	1	0.83
VACUUM PUMP	LS No 13 CENTURY DR	10/31/2006	1	Normal maintenance	1	0.45
VACUUM PUMP	LS No 13 CENTURY DR	10/31/2006	1	Normal maintenance	1	0.43
VACUUM PRIMER POT	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.43
VACUUM PRIMER POT	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.43
RTU RADIO	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.16
REMOTE TERMINAL UNIT	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.16
Century Drive Lift Station	LS No 13 CENTURY DR	10/25/2006	2	5% needs maintenance	1	2.12
Pump No 1 Discharge Valve	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.23
Pump No1 Check Valve	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 13 CENTURY DR	10/17/2006	2	5% needs maintenance	1	0.33
Pump No 2 Check Valve	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	1.46
Pump Control Panel	LS No 14 CHARLOTTE STREET	10/19/2006	2	5% needs maintenance	1	1.42
DEHUMIDIFIER	LS No 14 CHARLOTTE STREET	10/17/2006	1	Normal maintenance	1	0.14
FAN	LS No 14 CHARLOTTE STREET	10/17/2006	3	10 to 20% needs maintenance	1	0.39
FAN	LS No 14 CHARLOTTE STREET	10/30/2006	5	>50% requires replacement	1	0.87
FILTER	LS No 14 CHARLOTTE STREET	10/18/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 14 CHARLOTTE STREET	10/18/2006	2	5% needs maintenance	1	0.22
HEATER	LS No 14 CHARLOTTE STREET	10/17/2006	1	Normal maintenance	1	0.14
SENSOR UNIT	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.62
METERING DEVICE	LS No 14 CHARLOTTE STREET	10/17/2006	1	Normal maintenance	1	0.43
SUBMERSIBLE PUMP	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.79
VACUUM PUMP	LS No 14 CHARLOTTE STREET	10/31/2006	2	5% needs maintenance	1	0.84
VACUUM PUMP	LS No 14 CHARLOTTE STREET	10/31/2006	1	Normal maintenance	1	0.59
VACUUM PRIMER POT	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.84
VACUUM PRIMER POT	LS No 14 CHARLOTTE STREET	10/30/2006	1	Normal maintenance	1	0.87
RTU RADIO	LS No 14 CHARLOTTE STREET	10/17/2006	3	10 to 20% needs maintenance	1	0.47
REMOTE TERMINAL UNIT	LS No 14 CHARLOTTE STREET	10/17/2006	3	10 to 20% needs maintenance	1	0.47
Charlotte Lift Station	LS No 14 CHARLOTTE STREET	10/25/2006	3	10 to 20% needs maintenance	1	2.55

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Pump No 1 Discharge Valve	LS No 14 CHARLOTTE STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 14 CHARLOTTE STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 14 CHARLOTTE STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 14 CHARLOTTE STREET	10/30/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 15 BURKHART CREEK	10/31/2006	1	Normal maintenance	1	0.88
Pump Control Panel	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	1.42
DEHUMIDIFIER	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.22
FAN	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.15
FAN	LS No 15 BURKHART CREEK	10/30/2006	5	>50% requires replacement	1	0.87
FILTER	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.22
SENSOR UNIT	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.43
METERING DEVICE	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.43
VACUUM PUMP	LS No 15 BURKHART CREEK	10/31/2006	1	Normal maintenance	1	0.59
VACUUM PUMP	LS No 15 BURKHART CREEK	10/31/2006	1	Normal maintenance	1	0.59
SUBMERSIBLE PUMP	LS No 15 BURKHART CREEK	10/31/2006	1	Normal maintenance	1	0.54
VACUUM PRIMER POT	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.59
VACUUM PRIMER POT	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.59
RTU RADIO	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.28
REMOTE TERMINAL UNIT	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.28
Burkhart Lift Station	LS No 15 BURKHART CREEK	10/25/2006	2	5% needs maintenance	1	1.59
Pump No 1 Discharge Valve	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.23
12V POWER SUPPLY CONVERTER	LS No 16 TRUAX CREEK	10/26/2006	1	Normal maintenance	1	0.85
Pump Control Panel	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	1.13
FILTER	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.22
Heater	LS No 16 TRUAX CREEK	10/31/2006	4	20 to 40% needs renewal	1	0.63
SENSOR UNIT	LS No 16 TRUAX CREEK	10/26/2006	1	Normal maintenance	1	0.16
METERING DEVICE	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.24
SUBMERSIBLE PUMP	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.62
VACUUM PUMP	LS No 16 TRUAX CREEK	10/31/2006	2	5% needs maintenance	1	0.64
VACUUM PUMP	LS No 16 TRUAX CREEK	10/31/2006	2	5% needs maintenance	1	0.64
VACUUM PRIMER POT	LS No 16 TRUAX CREEK	10/26/2006	1	Normal maintenance	1	0.43
RTU RADIO	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.26
REMOTE TERMINAL UNIT	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.26

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Truax Creek Lift Station	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	1.06
12V POWER SUPPLY CONVERTER	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	1.05
Pump Control Panel	LS No 18 MILLERSBURG	10/26/2006	2	5% needs maintenance	1	1.33
FAN	LS No 18 MILLERSBURG	10/26/2006	3	10 to 20% needs maintenance	1	0.38
HEATER	LS No 18 MILLERSBURG	10/26/2006	2	5% needs maintenance	1	0.23
SENSOR UNIT	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.46
METERING DEVICE	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.46
RTU RADIO	LS No 18 MILLERSBURG	10/26/2006	2	5% needs maintenance	1	0.25
REMOTE TERMINAL UNIT	LS No 18 MILLERSBURG	10/26/2006	2	5% needs maintenance	1	0.25
Millersburg Lift Station	LS No 18 MILLERSBURG	10/26/2006	2	5% needs maintenance	1	1.99
Added Pump No 1 Check Valve	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.23
Added Pump no 1 Discharge Valve	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.23
Added Pump No 2 Check Valve	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.23
Added Pump No 2 Discharge Valve	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.23
UPS BATTERY BACKUP	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	1.95
DEHUMIDIFIER	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.22
DEHUMIDIFIER	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.22
FAN	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.14
FILTER	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.22
FILTER	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.22
SENSOR UNIT	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.69
METERING DEVICE	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.69
SUBMERSIBLE PUMP	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	1.10
RTU RADIO	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.30
REMOTE TERMINAL UNIT	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.30
North Albany Lift Station	LS No 19 NORTH ALBANY	10/25/2006	2	5% needs maintenance	1	2.48
Pump No 1 Discharge Valve	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.23
Pump No 1 Check Valve	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.31
Pump No 2 Check Valve	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.23
UPS BATTERY BACKUP	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	1.21
Pump Control Panel	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	1.30
DEHUMIDIFIER	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.14
FAN	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.14
FAN	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.14
FAN	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	0.22
HEATER	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.15

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
SENSOR UNIT	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.51
METERING DEVICE	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.51
SUBMERSIBLE PUMP	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.54
SUBMERSIBLE PUMP	LS No 20 COLUMBUS STREET	10/31/2006	1	Normal maintenance	1	0.54
RTU RADIO	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	0.25
REMOTE TERMINAL UNIT	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	0.22
Columbus Street Lift Station	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	2.12
Pump No 1 Suction Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.25
Pump No 1 Check Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 1 Discharge Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 2 Suction Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 2 Check Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.23
Pump No 2 Discharge Valve	LS No 20 COLUMBUS STREET	10/30/2006	1	Normal maintenance	1	0.23
Motor control Center	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	1.46
METERING DEVICE	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.30
MOTOR - 3 PHASE	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	1.97
MOTOR - 3 PHASE	LS No 19 NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	1.97
MOTOR - 3 PHASE	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.85
MOTOR - 3 PHASE	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	0.85
MOTOR - 3 PHASE	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	1.25
MOTOR - 3 PHASE	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	1.25
MOTOR - 3 PHASE	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	1.19
MOTOR - 3 PHASE	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	1.19
MOTOR - 3 PHASE	LS No 07 COLLEGE GREEN	10/18/2006	2	5% needs maintenance	1	1.97
MOTOR - 3 PHASE	LS No 07 COLLEGE GREEN	10/18/2006	2	5% needs maintenance	1	1.97
MOTOR - 3 PHASE	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	1.97
MOTOR - 3 PHASE	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	2.01
MOTOR - 3 PHASE	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.74
MOTOR - 3 PHASE	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.74
MOTOR - 1 PHASE	LS No 10 OAK STREET	10/30/2006	2	5% needs maintenance	1	0.74
MOTOR - 1 PHASE	LS No 10 OAK STREET	10/17/2006	2	5% needs maintenance	1	0.74
MOTOR - 3 PHASE	LS No 11 LAWNDALE	10/25/2006	1	Normal maintenance	1	0.48
MOTOR - 3 PHASE	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.74
MOTOR - 3 PHASE	LS No 13 CENTURY DR	10/17/2006	2	5% needs maintenance	1	1.23
MOTOR - 3 PHASE	LS No 13 CENTURY DR	10/17/2006	2	5% needs maintenance	1	1.23
MOTOR - 3 PHASE	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.71
MOTOR - 3 PHASE	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.71

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
MOTOR - 1 PHASE	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.85
MOTOR - 1 PHASE	LS No 14 CHARLOTTE STREET	10/30/2006	2	5% needs maintenance	1	0.85
MOTOR - 3 PHASE	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.85
MOTOR - 3 PHASE	LS No 15 BURKHART CREEK	10/24/2006	2	5% needs maintenance	1	0.85
MOTOR - 3 PHASE	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.60
MOTOR - 3 PHASE	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.60
MOTOR - 3 PHASE	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.60
MOTOR - 3 PHASE	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.60
MOTOR - 3 PHASE	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.79
MOTOR - 3 PHASE	LS No 20 COLUMBUS STREET	10/25/2006	1	Normal maintenance	1	0.79
MOTOR - 3 PHASE	LS No 03 MAPLE STREET	10/24/2006	2	5% needs maintenance	1	0.76
MOTOR - 3 PHASE	LS No 03 MAPLE STREET	10/24/2006	2	5% needs maintenance	1	0.76
MOTOR - 3 PHASE	LS No 03 MAPLE STREET	10/24/2006	2	5% needs maintenance	1	0.69
MOTOR - 3 PHASE	LS No 03 MAPLE STREET	10/24/2006	2	5% needs maintenance	1	0.76
Pump No 13 Suction Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
No 12 Pump	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.69
No 11 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.69
No 13 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.69
No 14 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.69
PUMP No 21	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.69
PUMP No 22	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.44
PUMP No 41	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.69
PUMP No 42	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.69
PUMP No 43	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.69
N.ALB PUMP No 51 SPLIT CASE CENTRIFUGAL	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.69
N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.69
W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.48
W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.48
Pump No 15 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	1	Normal maintenance	1	1.73
Pump No 14 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	1.96
Pump No 13 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	2.22
Pump No 12 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	1	Normal maintenance	1	1.53
Pump No 11 Main Disconnect	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	2.22
Pump no 41 Disconnect	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.97
Pump No 42 Disconnect	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.97
Pump No 43 Disconnect	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.97
Transformer Disconnect	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.44

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Pump No 21 Disconnect	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	2.22
Pump No 22 Disconnect	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	2.14
Pump Main Disconnect	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	2.22
No 11 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	1	Normal maintenance	1	0.41
No 12 Motor	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	2	5% needs maintenance	1	0.65
No 13 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.65
No 14 HP PUMP	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.65
No 15 Motor	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	4	20 to 40% needs renewal	1	1.85
PUMP No 21	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.65
PUMP No 22	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.65
PUMP No 41	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.41
PUMP No 42	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.41
PUMP No 43	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.44
N.ALB PUMP No 51 SPLIT CASE CENTRIFUGAL	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.65
N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.65
W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.48
W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.48
No 15 Pump	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	4	20 to 40% needs renewal	1	1.95
Pump No 11 Suction Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
Pump No 11 Clay Valve	WTP1-04 HI-PRESSURE PUMP STN	10/19/2006	2	5% needs maintenance	1	0.26
Pump No 11 Discharge Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
Pump No 12 Suction Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
Pump No 12 Discharge Valve Actuated	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
Pump No 13 Clay Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 13 Discharge Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.16
Pump No 14 Suction Valave	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 14 Clay Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 14 Discharge Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 15 Suction Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 15 Discharge Valve Actuated	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 15 Check Valve	WTP1-04 HI-PRESSURE PUMP STN	10/31/2006	1	Normal maintenance	1	0.18
Pump No 41 Suction Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 41 Clay Valve	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.26
Pump No 41 Discharge Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 42 Suction Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 42 Clay Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.14
Pump No 42 Discharge Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
Pump No 43 Suction Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 43 Clay valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 43 Discharge Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
PSR 34th Ave Altitude Valve	PSR 34TH AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 21 Suction Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 21 Clay Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 21 Discharge Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 22 Suction Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Pump No 22 Clay Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.18
Pump No 22 Discharge Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Reservior Isolation Valve	PSR QUEEN AVE	10/20/2006	1	Normal maintenance	1	0.16
Distribution System Isolation Valve	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.26
PS GIBSON HILL STRUCTURE	PS GIBSON HILL	10/26/2006	2	5% needs maintenance	1	0.74
PS NORTH ALBANY STRUCTURE	PS NORTH ALBANY	10/26/2006	2	5% needs maintenance	1	0.61
PSR 34 Structure	PSR 34TH AVE	10/26/2006	2	5% needs maintenance	1	0.62
Queen Avenue Structure	PSR QUEEN AVE	10/31/2006	2	5% needs maintenance	1	0.62
CENTRIFUGAL PUMP	LS No 19 NORTH ALBANY	10/31/2006	1	Normal maintenance	1	1.22
CENTRIFUGAL PUMP	LS No 19 NORTH ALBANY	10/19/2006	1	Normal maintenance	1	1.31
CENTRIFUGAL PUMP	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	1.34
CENTRIFUGAL PUMP	LS No 04 QUEEN AVENUE	10/18/2006	2	5% needs maintenance	1	1.34
PUMP	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	1.45
PUMP	LS No 05 UMATILLA	10/18/2006	2	5% needs maintenance	1	1.45
CENTRIFUGAL PUMP	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	1.71
CENTRIFUGAL PUMP	LS No 06 OAK CREEK	10/23/2006	2	5% needs maintenance	1	1.71
PUMP	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	1.31
PUMP	LS No 07 COLLEGE GREEN	10/18/2006	1	Normal maintenance	1	1.31
CENTRIFUGAL PUMP	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	2.04
CENTRIFUGAL PUMP	LS No 08 34TH AVENUE	10/24/2006	2	5% needs maintenance	1	2.04
CENTRIFUGAL PUMP	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.92
CENTRIFUGAL PUMP	LS No 09 MARION STREET	10/25/2006	2	5% needs maintenance	1	0.92
CENTRIFUGAL PUMP	LS No 10 OAK STREET	10/30/2006	1	Normal maintenance	1	0.59
CENTRIFUGAL PUMP	LS No 10 OAK STREET	10/30/2006	1	Normal maintenance	1	0.59
CENTRIFUGAL PUMP	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.92
CENTRIFUGAL PUMP	LS No 11 LAWNDALE	10/25/2006	2	5% needs maintenance	1	0.92
CENTRIFUGAL PUMP	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.65
CENTRIFUGAL PUMP	LS No 13 CENTURY DR	10/17/2006	1	Normal maintenance	1	0.65
CENTRIFUGAL PUMP	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.83

		Last	Condition		Risk Score	Total
Description	Location	Inspection	Score	Condition Category	Category	Score
CENTRIFUGAL PUMP	LS No 12 WAH CHANG	10/26/2006	2	5% needs maintenance	1	1.83
CENTRIFUGAL PUMP	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.93
CENTRIFUGAL PUMP	LS No 14 CHARLOTTE STREET	10/17/2006	2	5% needs maintenance	1	0.93
CENTRIFUGAL PUMP	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.61
CENTRIFUGAL PUMP	LS No 15 BURKHART CREEK	10/24/2006	1	Normal maintenance	1	0.61
CENTRIFUGAL PUMP	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.68
CENTRIFUGAL PUMP	LS No 16 TRUAX CREEK	10/26/2006	2	5% needs maintenance	1	0.68
PUMP	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.60
PUMP	LS No 18 MILLERSBURG	10/26/2006	1	Normal maintenance	1	0.60
CENTRIFUGAL PUMP	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	0.93
CENTRIFUGAL PUMP	LS No 20 COLUMBUS STREET	10/25/2006	2	5% needs maintenance	1	0.93
SUBMERSIBLE PUMP	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.51
SUBMERSIBLE PUMP	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.51
SUBMERSIBLE PUMP	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.51
SUBMERSIBLE PUMP	LS No 03 MAPLE STREET	10/24/2006	1	Normal maintenance	1	0.51
RTU Data Radio	PS NORTH ALBANY	10/19/2006	2	5% needs maintenance	1	0.27
RTU SCADA Pack	PS NORTH ALBANY	10/24/2006	2	5% needs maintenance	1	0.27
RTU	WTP1-04 HI-PRESSURE PUMP STN	10/30/2006	2	5% needs maintenance	1	0.40
PSR 34TH AVE RTU Data Radio	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.27
PSR 34TH AVE RTU ScadaPack	PSR 34TH AVE	10/20/2006	2	5% needs maintenance	1	0.27
PSR QUEEN AVE RTU Data Radio	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.27
PSR QUEEN AVE RTU Scada Pack	PSR QUEEN AVE	10/20/2006	2	5% needs maintenance	1	0.27
VALVE	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.16
VALVE	PS GIBSON HILL	10/19/2006	1	Normal maintenance	1	0.14
Pressure Relief Valve (Clay Valve)	PS NORTH ALBANY	10/19/2006	1	Normal maintenance	1	0.16
Pump Station Structure	WTP1-04 HI-PRESSURE PUMP STN	10/25/2006	3	10 to 20% needs maintenance	1	1.03

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	>	Planned Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
LS08-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 08 34TH AVENUE	1	1	NA		9.1667	0.3969	1.03		7	10	7	10	10) 4	4	1	7 ′	1 1	1
LS06-STR-001	Oak Creek Structure	10/25/2006	Albany LS	LS No 06 OAK CREEK	1	2	NA	_	8	0.4124	1.075		7	7	10	7	10	+ -	4	1	10 4	4 1	1
LS12-STR-001	Wah Chang Lift Station	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	3	NA		8.6667	0.2577	1.165		7	10	10	10	10	+ -	4	1	10 10	J 1	1
LS14-STR-001	Charlotte Lift Station	10/25/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	4	NA		6	0.4124	1.03			4	10	4	10) 4	4	1	10 ′	1 1	1
LS04-CTP-001	Pump Control Panel	10/19/2006	Albany LS	LS No 04 QUEEN AVENUE	1	5	NA		6	0.3969	1.048		4	4	4	7	7	4	4	1	7 ′	1 4	1
LS05-STR-001	Umatilla List Station Structure	10/25/2006	Albany LS	LS No 05 UMATILLA	1	6	NA		5.8333	0.4124	1.03		7	4	10	4	7	4	4	1	10 ′	1 1	1
LS07-STR-001	College Green Lift Station	10/25/2006	Albany LS	LS No 07 COLLEGE GREEN	1	7	NA		9.3333	0.2577	1.03		7	10	10	10	10) 2	4	1	10 ′	1 1	1
LS08-STR-001	34th Avenue Lift Station	10/25/2006	Albany LS	LS No 08 34TH AVENUE	1	8	NA		9.3333	0.2577	1.03		7	10	10	10	10) 2	4	1	10 ′	1 1	1
LS19-STR-001	North Albany Lift Station	10/25/2006	Albany LS	LS No 19 NORTH ALBANY	1	9	NA	_	9.3333	0.2577	1.03		7	10	10	10	10) 2	4	1	10 ′	1 1	1
LS09-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 09 MARION STREET	1	10	NA	_	5.6667	0.3969	1.036			4	4	4	10) 4	4	1	7 ′	1 2	1
LS11-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 11 LAWNDALE	1	11	NA		5.6667	0.3969	1.036			4	4	4	10	+ -	4	1	7 ′	1 2	1
CRTL-PMP-021	Pump No 21 Motor Control Center	10/20/2006	Albany WTS	PSR QUEEN AVE	1	12	-		5.8333	0.3505	1.084		4	4	7	4	10) 2	4	10	10 ′	1 10	1
CRTL-PMP-022	Pump No 22 Motor Control Center	10/20/2006	Albany WTS	PSR QUEEN AVE	1	13	NA		5.8333	0.3505	1.084			4	7	4	10) 2	4	10	10 ′	1 10	1
PMP-DIS-003	Pump No 13 Main Disconnect	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	14	NA		5.8333	0.3505	1.084			4	7	4	10	_	4	10	10 ′	1 10	1
PMP-DIS-005	Pump No 11 Main Disconnect	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	15	NA		5.8333	0.3505	1.084			4	7	4	10	+	4	10	10 ′	1 10	1
PMP-DIS-010	Pump No 21 Disconnect	10/20/2006	Albany WTS	PSR QUEEN AVE	1	16	NA		5.8333	0.3505	1.084			4	7	4	10	+	4	10	10 ′	1 10	1
PMP-DIS-012	Pump Main Disconnect	10/20/2006	Albany WTS	PSR QUEEN AVE	1	17	NA		5.8333	0.3505	1.084			4	7	4	10	_	4	10	10 ′	1 10	1
PMP-DIS-011	Pump No 22 Disconnect	10/20/2006	Albany WTS	PSR QUEEN AVE	1	18	NA		5.8333	0.3505	1.048			4	7	4	10	+	4	10	10 ′	1 4	1
LS20-STR-001	Columbus Street Lift Station	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	19	NA		8	0.2577	1.03			7	10	7	10	+	4	1	10 ′	1 1	1
LS13-STR-001	Century Drive Lift Station	10/25/2006	Albany LS	LS No 13 CENTURY DR	1	20				0.2577	1.03			7	10	7	10	_	4	1	10 ′	1 1	1
PUMP013	CENTRIFUGAL PUMP	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	21	NA		9.1667	0.2165	1.03		7	10	7	10	10	+ -	4	1	2	1 1	1
PUMP014	CENTRIFUGAL PUMP	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	22		_	9.1667	0.2165	1.03		7	10	7	10	10) 2	4	1	2	1 1	1
MOTOR014	MOTOR - 3 PHASE	10/24/2006	Albany LS	LS No 08 34TH AVENUE		23			9	0.2165	1.03		7	10	7	10	7	2	4	1	2	1 1	1
LS18-STR-001	Millersburg Lift Station	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	24			7.5		1.03		7	7	10	4	10) 2	4	1	10 ′	1 1	1
MOTOR011	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	25			8.8333	0.2165	1.03		7	10	4	10	7	2	4	1	$\frac{2}{2}$	1 1	1
MOTOR012	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	26			8.8333	0.2165	1.03		7	10	4	10	7	2	4	1	$\frac{2}{2}$	1 1	1
MOTOR013	MOTOR - 3 PHASE	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	27	NA	-	8.8333	0.2165	1.03		_ / _	10	4	10	7	2	4	1	2 2	1 1	1
MOTOR001	MOTOR - 3 PHASE	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	28	NA		8.8333	0.2165	1.03		7	10	4	10	7	2	4	1	2 2	1 1	1
MOTOR002	MOTOR - 3 PHASE	10/19/2006	Albany LS	LS No 19 NORTH ALBANY		29			8.8333	0.2165	1.03		7	10	4	10	7	2	4	1	2 2	1 1	1
LS06-MCC-001	Motor Control Center	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	30	NA NA		7.8333	0.2423	1.036		/	/	-	/	10	+ -	4	10	10	1 2	1
PMP-DIS-002	Pump No 14 Main Disconnect	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	31	NA NA		5.1667	0.3505	1.084		4	4	/	4	10	+ -	4	10	10 1	1 10	1
PMP-PMP-15a LS07-BATT-001	No 15 Pump	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	32	NA NA		3.1667	0.5979	1.03		1	1	/	1	10	1	4	1	-	1 1	1
	UPS BATTERY BACKUP	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	33	NA NA		9.1667	0.1959	1.084		7	10	/	10	10	1	4	4	-/ -	1 10	1
LS08-CONV-001	12V POWER SUPPLY CONVERTER	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	34 35	NA NA		9.1667	0.1959	1.084		7	10	/	10	10	+ -	4	4	-/ -	1 10 1 10	1
LS19-BATT-001 PMP-MTR-15m	UPS BATTERY BACKUP No 15 Motor	10/19/2006 10/19/2006	Albany LS Albany WTS	LS No 19 NORTH ALBANY WTP1-04 HI-PRESSURE PUMP STN	1	35	NA NA	-	9.1667	0.1959 0.5979	1.084		/	10	1	10	10	_	4	4		1 10	1
PUMP023	CENTRIFUGAL PUMP	10/19/2006	Albany LS	LS No 12 WAH CHANG		36			7.1667	0.5979	1.03		7	10	4	10	10	+	4	1	2	1 1	1
PUMP023 PUMP024	CENTRIFUGAL PUMP	10/26/2006	Albany LS	LS No 12 WAH CHANG		38				0.2474	1.03		7	10	7	10	10	_	4	4	2	1 1	1
	UPS BATTERY BACKUP		•			39				.	1.03		7	10	1	10	10	_	4	4	7	1 1	1
LS12-BATT-001	UF S DATTERT DAUNUP	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	39	INA	1.816	9	0.1959	1.03	10	/	10	4	10	10	η Τ	4	4		1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	>	Planned Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
LS12-ELC-001	Added Transfer Switch	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	40	NA	1.816	9	0.1959	1.03		7	10	4	10	10	1	4	4	7 ′	1 1	1
LS12-POT-001	Vacuum Pot	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	41	NA		6.6667	0.2577	1.03	-	7	10	7	10	1	2	4	4	4 ′	1 1	1
PMP-DIS-001	Pump No 15 Main Disconnect	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	42	NA		5.8333	0.2732	1.084			4	7	4	10	-	4	10	10 ′	1 10	1
PUMP009	CENTRIFUGAL PUMP	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	43	NA	1.71	7.6667	0.2165	1.03		7	7	4	7	10	h	4	1		1 1	1
PUMP010	CENTRIFUGAL PUMP	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	44	NA		7.6667	0.2165	1.03		7	7	4	7	10	h	4	1		1 1	1
MOTOR023	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	45	NA		6.8333	0.2423	1.03		7	10	1	10	10	2	4	1	7 ′	1 1	1
MOTOR024	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	46	NA		6.8333	0.2423	1.03		7	10	1	10	10	2	4	1	7 ′	1 1	1
LS04-STR-001	Queen Avenue structure	10/25/2006	Albany LS	LS No 04 QUEEN AVENUE	1	47	NA	1.691	6.3333	0.2577	1.036		4	4	10	7	7	2	4	1	10 ′	1 2	1
CTRL-PMP-41	Pump No 41 Motor Control Center	10/20/2006	Albany WTS	PSR 34TH AVE	1	48	NA	1.62	5.8333	0.268	1.036	10	4	4	7	4	10	2	4	2	10 ′	1 2	1
LS15-STR-001	Burkhart Lift Station	10/25/2006	Albany LS	LS No 15 BURKHART CREEK	1	49	NA	1.593	6	0.2577	1.03		4	4	10	4	10	2	4	1	10 ′	1 1	1
LS05-CTP-001	Pump Control Panel	10/19/2006	Albany LS	LS No 05 UMATILLA	1	50	NA	1.581	6.3333	0.2423	1.03	10	7	4	7	4	7	2	4	1	7 ′	1 1	1
LS07-CTP-001	Pump Control Panel	10/19/2006	Albany LS	LS No 07 COLLEGE GREEN	1	51	NA	1.557	9.1667	0.1649	1.03	10	7	10	7	10	10	1	4	1	7 ′	1 1	1
LS05-CONV-001	12V POWER SUPPLY CONVERTER	10/18/2006	Albany LS	LS No 05 UMATILLA	1	52	NA		6.1667	0.2423	1.03		7	4	4	4	7	2	4	1	7 ′	1 1	1
PMP-DIS-004	Pump No 12 Main Disconnect	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	53	NA	1.53	5.1667	0.2732	1.084	-	4	4	7	4	10	1	4	10	10 ′	1 10	1
MCC-MCC-001	Motor control Center	10/19/2006	Albany WTS	PS NORTH ALBANY	1	54	NA	1.464	5.8333	0.2423	1.036		4	4	7	4	10	2	4	1	7 ′	1 2	1
LS14-CONV-001	12V POWER SUPPLY CONVERTER	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	55	NA	1.464	5.8333	0.2423	1.036		4	4	7	4	10	2	4	1	7 ′	1 2	1
LS09-CONV-001	12V POWER SUPPLY CONVERTER	10/25/2006	Albany LS	LS No 09 MARION STREET	1	56	NA		5.8333	0.2423	1.03		4	4	7	4	10	2	4	1	7 ′	1 1	1
PUMP007	PUMP	10/18/2006	Albany LS	LS No 05 UMATILLA	1	57	NA	1.453	5.5	0.2268	1.165		7	4	4	4	7	2	4	1	4 10) 1	1
PUMP008	PUMP	10/18/2006	Albany LS	LS No 05 UMATILLA	1	58	NA				1.165	7	7	4	4	4	7	2	4	1	4 10) 1	1
CTRL-PMP-42	Pump No 42 Motor Control Center	10/20/2006	Albany WTS	PSR 34TH AVE	1	59	NA	1.433	5.8333	0.2371	1.036	10	4	4	7	4	10	2	4	2	4 ′	1 2	1
CTRL-PMP-43	Pump No 43 Motor Control Center	10/20/2006	Albany WTS	PSR 34TH AVE	1	60	NA	1.433	5.8333	0.2371	1.036	10	4	4	7	4	10	2	4	2	4 ′	1 2	1
LS14-CTP-001	Pump Control Panel	10/19/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	61	NA	1.422	5.6667	0.2423	1.036	10	4	4	4	4	10	2	4	1	7 ′	1 2	1
LS15-CTP-001	Pump Control Panel	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	62	NA		5.6667	0.2423	1.036	10	4	4	4	4	10	2	4	1	7 ′	1 2	1
	Pump Control Panel	10/17/2006	Albany LS	LS No 10 OAK STREET	1	63	NA			0.2423	1.036		4	4	4	4	10	2	4	1	7 ′	1 2	1
LS06-CONV-001	12V POWER SUPPLY CONVERTER	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	64	NA			0.1649	1.036		7	7	7	7	10	1	4	1	7 ′	1 2	1
PUMP005	CENTRIFUGAL PUMP	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	65	NA			0.2165	1.03		4	4	4	7	7	2	4	1	2 ′	1 1	1
PUMP006	CENTRIFUGAL PUMP	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	66	NA			0.2165	1.03		4	4	4	7	7	2	4	1		1 1	1
LS18-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 18 MILLERSBURG		67			5.3333		1.03		4	4	4	4	4	2	4	1	7 ′	1 1	1
PUMP002	CENTRIFUGAL PUMP	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	68	NA		9.1667	0.1392	1.03		7	10	7	10	10		4	1		1 1	1
	PUMP	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	69	NA		9.1667	0.1392	1.03		7	10	7	10	10	h	4	1		1 1	1
PUMP012	PUMP	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	70	NA		9.1667	0.1392	1.03	-	7	10	7	10	10	1	4	1		1 1	1
LS20-CTP-001	Pump Control Panel	10/30/2006	Albany LS	LS No 20 COLUMBUS STREET	1	71	NA		7.6667	0.1649	1.03		7	7	7	7	7	1	4	1	7 ′	1 1	1
	Pump Control Panel	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	72	NA		7.6667	0.1649	1.03		7	7	7	7	7	1	4	1	7	1 1	1
MOTOR007	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 05 UMATILLA	1	73	NA		5.3333	0.2268	1.03		7	4	1	4	7	2	4	1	4 1	1 1	1
MOTOR008	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 05 UMATILLA	1	74	NA		5.3333	0.2268	1.03		7	4	1	4	7	2	4	1	4 ′	1 1	1
LS12-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 12 WAH CHANG		75	NA		6.6667	0.1804	1.03		7	10	7	10	1	1	4	4	4	1 1	1
LS12-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 12 WAH CHANG		76			6.6667	0.1804	1.03		7	10	7	10	1	1	4	4	4 1	1 1	1
LS12-POT-002	Vacuum Pot 2	10/26/2006	Albany LS	LS No 12 WAH CHANG		77	NA		6.6667	0.1804	1.03		7	10	7	10	1	1	4	4	4 1	1 1	1
LS10-STR-001	Oak Street Structure	10/25/2006	Albany LS	LS No 10 OAK STREET	1	78	NA	1.239	4.6667	0.2577	1.03	4	4	4	10	4	10	2	4	1	10 ′	1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	>	Planned Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
LS11-STR-001	Lawndale Street Lift Station	10/26/2006	Albany LS	LS No 11 LAWNDALE	1	79	NA		4.6667	0.2577	1.03		4	4	10	4	10	+ -	4	1	10 1	1 1	1
LS09-STR-001	Marion Street Lift Station	10/26/2006	Albany LS	LS No 09 MARION STREET	1	80	NA		4.6667	0.2577	1.03		4	4	10	4	10	+ -	4	1	10 1	1 1	1
LS03-STR-001	Maple Lift station Structure	10/25/2006	Albany LS	LS No 03 MAPLE STREET	1	81	NA		4.6667	0.2577	1.03		4	4	10	4	10) 2	4	1	10 1	1 1	1
MOTOR021	MOTOR - 3 PHASE	10/17/2006	Albany LS	LS No 13 CENTURY DR		82	NA		5.5		1.03		7	7	4	7	7	2	4	1	2 1	1 1	1
MOTOR022	MOTOR - 3 PHASE	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	83	NA		5.5		1.03		7	7	4	7	7	2	4	1	2 1	1 1	1
PUMP001	CENTRIFUGAL PUMP	10/31/2006	Albany LS	LS No 19 NORTH ALBANY	1	84	NA		8.5	0.1392	1.03		7	10	7	10	10	1	4	1	2 1	1 1	1
LS20-BATT-001	UPS BATTERY BACKUP	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	85	NA		7.8333	0.1495	1.03		7	7	7	7	10) 1	4	1	4 1	1 1	1
MOTOR009	MOTOR - 3 PHASE	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	86	NA		5.3333	0.2165	1.03		7	7	1	7	7	2	4	1	2 1	1 1	1
MOTOR010	MOTOR - 3 PHASE	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	87	NA	1.189	5.3333	0.2165	1.03	1	7	7	1	7	7	2	4	1	2 1	1 1	1
LS12-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	88	NA	1.189	7	0.1649	1.03		7	10	4	10	10	1	4	1	7 1	1 1	1
LS12-PMP-001	SUBMERSIBLE PUMP	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	89	NA	1.152	5.1667	0.2165	1.03	1	7	7	4	7	1	2	4	1	2 1	1 1	1
LS16-CTP-001	Pump Control Panel	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	90	NA	1.131	5	0.2165	1.045	10	7	1	4	1	10) 2	4	1	2 2	2 1	1
LS08-PMP-001	SUBMERSIBLE PUMP	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	91	NA	1.104	6.5	0.1649	1.03	1	7	10	1	10	4	1	4	1	7 1	1 1	1
LS07-PMP-001	SUBMERSIBLE PUMP	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	92	NA	1.104	6.5	0.1649	1.03		7	10	1	10	4	1	4	1	7 1	1 1	1
LS07-PMP-002	SUBMERSIBLE PUMP	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	93	NA	1.104	6.5	0.1649	1.03		7	10	1	10	4	1	4	1	7 1	1 1	1
LS19-PMP-001	SUBMERSIBLE PUMP	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	94	NA	1.104	6.5	0.1649	1.03	1	7	10	1	10	4	1	4	1	7 1	1 1	1
LS12-GEN-001	GENERATOR	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	95	NA	1.104	7.1667	0.1495	1.03	4	7	10	4	10	1	1	4	1	4 1	1 1	1
LS08-MTR-001	Metering Device	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	96	NA	1.088	5	0.2113	1.03	1	1	10	1	10	1	2	4	1	1 1	1 1	1
LS04-CONV-001	12V POWER SUPPLY CONVERTER	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	97	NA	1.066	6.1667	0.1649	1.048	10	4	4	7	7	7	1	4	1	7 1	1 4	1
LS16-STR-001	Truax Creek Lift Station	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	98	NA	1.062	4	0.2577	1.03	4	7	1	10	1	10	2	4	1	10 1	1 1	1
LS18-CONV-001	12V POWER SUPPLY CONVERTER	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	99	NA	1.053	5.6667	0.1804	1.03	10	4	4	7	4	7	1	4	1	10 1	1 1	1
LS05-BATT-001	UPS BATTERY BACKUP	10/18/2006	Albany LS	LS No 05 UMATILLA	1	100	NA	1.047	6.1667	0.1649	1.03	10	7	4	4	4	7	1	4	1	7 1	1 1	1
WTP1-04 PUMP STA	Pump Station Structure	10/25/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	101	NA	1.03	2.5	0.3918	1.051	1	1	1	10	4	10	4	2	1	10 2	2 2	1
LS03-RADIO-001	RTU RADIO	10/31/2006	Albany LS	LS No 03 MAPLE STREET	1	102	NA	1.004	1.1667	0.8351	1.03	1	1	1	4	1	1	10	4	1	2 1	1 1	1
LS03-VFD-001	VARIABLE FREQUENCY DRIVE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	103	NA	0.991	5.8333	0.1649	1.03	10	4	4	7	4	10	1	4	1	7 1	1 1	1
LS03-VFD-002	VARIABLE FREQUENCY DRIVE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	104	NA	0.991	5.8333	0.1649	1.03	10	4	4	7	4	10	1	4	1	7 1	1 1	1
CTRL-PMP-61a	Main Disconnect	10/19/2006	Albany WTS	PS GIBSON HILL	1	105	NA	0.991	5.8333	0.1649	1.03	10	4	4	7	4	10	1	4	1	7 1	1 1	1
LS03-VFD-004	VARIABLE FREQUENCY DRIVE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	106	NA		5.8333	0.1649	1.03		4	4	7	4	10	1	4	1	7 1	1 1	1
LS09-BATT-001	UPS BATTERY BACKUP	10/25/2006	Albany LS	LS No 09 MARION STREET	1	107	NA	0.991	5.8333	0.1649	1.03	10	4	4	7	4	10	1	4	1	7 1	1 1	1
LS11-CONV-001	12V POWER SUPPLY CONVERTER	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	108	NA		5.8333	0.1649	1.03		4	4	7	4	10	1	4	1	7 1	1 1	1
LS10-CONV-001	12V POWER SUPPLY CONVERTER	10/17/2006	Albany LS	LS No 10 OAK STREET	1	109	NA		5.8333	0.1649	1.03		4	4	7	4	10	1	4	1	7 1	1 1	1
LS03-MTR-001	METERING DEVICE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	110	NA		2.5	0.3814	1.03		1	4	4	4	1	4	4	1	4 1	1 1	1
	Pump no 41 Disconnect	10/20/2006	Albany WTS	PSR 34TH AVE	1	111	NA		5.8333	0.1598	1.036		4	4	7	4	10	1	4	2	4 1	1 2	1
	Pump No 42 Disconnect	10/20/2006	Albany WTS	PSR 34TH AVE	1	112	NA		5.8333	0.1598	1.036	10	4	4	7	4	10	1	4	2	4 1	1 2	1
PMP-DIS-008	Pump No 43 Disconnect	10/20/2006	Albany WTS	PSR 34TH AVE	1	113	NA		5.8333	0.1598	1.036	10	4	4	7	4	10	1	4	2	4 1	1 2	1
LS10-FAN-001	FAN	10/17/2006	Albany LS	LS No 10 OAK STREET	1	114	NA		1	0.8608	1.111	1	1	1	1	1	1	10	4	4	1 1	1 1	10
CTRL-PMP-61b	Transfer Switch	10/19/2006	Albany WTS	PS GIBSON HILL	1	115			5.5	0.1649	1.03	10	4	4	7	4	4	1	4	1	7 1	1 1	1
CTRL-PMP-61c	Motor Control Center	10/19/2006	Albany WTS	PS GIBSON HILL	1	116	NA	0.934	5.5		1.03		4	4	7	4	4	1	4	1	7 1	1 1	1
PUMP025	CENTRIFUGAL PUMP	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	117	NA	0.931	3.6667	0.2268	1.12	1	4	4	4	4	10	2	4	1	4 7	7 1	1

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PUMP026	CENTRIFUGAL PUMP	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	118	NA	0.931	3.6667	0.2268	1.12	1	4	4	4	4	10) 2	4	1	4	7 1	1
PUMP035	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	119	NA	0.929	4.1667	0.2165	1.03	4	4	4	4	4	7	2	4	1	2	1 1	1
PUMP036	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	120	NA		4.1667	0.2165	1.03	4	4	4	4	4	7	7 2	4	1	2	1 1	1
PUMP015	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 09 MARION STREET	1	121	NA		3.6667	0.2165	1.165	1	4	4	4	4	10) 2	4	1	2 1	0 1	1
PUMP016	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 09 MARION STREET	1	122	NA	0.925	3.6667	0.2165	1.165	1	4	4	4	4	10) 2	4	1	2 1	0 1	1
PUMP019	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	123	NA	0.925	3.6667	0.2165	1.165	1	4	4	4	4	10) 2	4	1	2 1	0 1	1
PUMP020	CENTRIFUGAL PUMP	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	124	NA	0.925	3.6667	0.2165	1.165	1	4	4	4	4	10) 2	4	1	2 1	0 1	1
LS04-PMP-001	SUBMERSIBLE PUMP	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	125	NA	0.915	3.6667	0.2423	1.03	1	4	4	1	7	4	1 2	4	1	7	1 1	1
LS05-PMP-001	SUBMERSIBLE PUMP	10/18/2006	Albany LS	LS No 05 UMATILLA	1	126	NA	0.915	3.6667	0.2423	1.03	1	7	4	1	4	1	2	4	1	7	1 1	1
LS03-HVC-001	HVAC	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	127	NA	0.887	1	0.8608	1.03	1	1	1	1	1	1	10	4	1	7	1 1	1
LS15-CONV-001	12V POWER SUPPLY CONVERTER	10/31/2006	Albany LS	LS No 15 BURKHART CREEK	1	128	NA	0.883	5.1667	0.1649	1.036	7	4	4	7	4	10) 1	4	1	7	1 2	. 1
LS14-POT-002	VACUUM PRIMER POT	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	129	NA	0.867	4.6667	0.1804	1.03	1	7	7	1	4	4	1	4	4	4	1 1	1
LS03-VFD-003	VARIABLE FREQUENCY DRIVE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	130	NA	0.867	5.8333	0.1443	1.03	10	4	4	7	4	10) 1	2	1	7	1 1	1
LS14-FAN-001S	FAN	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	131	NA	0.865	1	0.8402	1.03	1	1	1	1	1	1	10	4	2	1	1 1	1
LS15-FAN-001S	FAN	10/30/2006	Albany LS	LS No 15 BURKHART CREEK	1	132	NA	0.865	1	0.8402	1.03	1	1	1	1	1	1	10	4	2	1	1 1	1
LS12-FAN-001S	FAN	10/31/2006	Albany LS	LS No 12 WAH CHANG	1	133	NA	0.86	1	0.8351	1.03	1	1	1	1	1	1	10	4	1	2	1 1	1
LS13-FIL-002	FILTER	10/18/2006	Albany LS	LS No 13 CENTURY DR	1	134	NA	0.855	1	0.8299	1.03	1	1	1	1	1	1	10	4	1	1	1 1	1
LS08-FAN-001S	FAN	10/31/2006	Albany LS	LS No 08 34TH AVENUE	1	135	NA	0.855	1	0.8299	1.03	1	1	1	1	1	1	10	4	1	1	1 1	1
MOTOR005	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	136	NA	0.855	3.8333	0.2165	1.03	1	4	4	1	7	7	7 2	4	1	2	1 1	1
MOTOR006	MOTOR - 3 PHASE	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	137	NA	0.855	3.8333	0.2165	1.03	1	4	4	1	7	7	7 2	4	1	2	1 1	1
LS16-CONV-001	12V POWER SUPPLY CONVERTER	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	138	NA	0.849	5	0.1649	1.03	10	7	1	4	1	10) 1	4	1	7	1 1	1
MOTOR025	MOTOR - 1 PHASE	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	139	NA	0.847	3.3333	0.2268	1.12	1	4	4	1	4	7	7 2	4	1	4	7 1	1
MOTOR026	MOTOR - 1 PHASE	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	140	NA	0.847	3.3333	0.2268	1.12	1	4	4	1	4	7	7 2	4	1	4	7 1	1
MOTOR027	MOTOR - 3 PHASE	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	141	NA	0.847	3.3333	0.2268	1.12	1	4	4	1	4	7	7 2	4	1	4	7 1	1
MOTOR028	MOTOR - 3 PHASE	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	142	NA	0.847	3.3333	0.2268	1.12	1	4	4	1	4	7	7 2	4	1	4	7 1	1
CTRL-SCADA-GH	SCADA PANEL	10/19/2006	Albany WTS	PS GIBSON HILL	1	143	NA	0.846	3.1667	0.2577	1.036	4	4	1	4	4		2	4	1	10	1 2	1
LS09-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 09 MARION STREET	1	144	NA		3.1667	0.2577	1.03		4	4	1	4	4	1 2	4	4	4	1 1	1
LS09-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 09 MARION STREET	1	145	NA		3.1667	0.2577	1.03		4	4	1	4	4	1 2	4	4	4	1 1	1
LS14-POT-001	VACUUM PRIMER POT	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	146	NA		3.1667	0.2577	1.03		4	4	1	4	4	1 2	4	4	4	1 1	1
LS14-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	147	NA		3.1667	0.2577	1.03		4	4	1	4	4	1 2	4	4	4	1 1	1
LS10-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 10 OAK STREET	1	148	NA	0.841	3.1667	0.2577	1.03	1	4	4	1	4		2	4	4	4	1 1	1
LS10-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 10 OAK STREET	1	149	NA		3.1667	0.2577	1.03		4	4	1	4		2	4	4	4	1 1	1
LS11-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 11 LAWNDALE	1	150	NA		3.1667	0.2577	1.03		4	4	1	4		2	4	4	4	1 1	1
LS11-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 11 LAWNDALE	1	151	NA		3.1667	0.2577	1.03		4	4	1	4		2	4	4	4	1 1	1
LS13-PMP-001	SUBMERSIBLE PUMP	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	152	NA		3.3333	0.2423	1.03		4	4	1	4	7	7 2	4	1	7	1 1	1
LS10-PMP-001	SUBMERSIBLE PUMP	10/17/2006	Albany LS	LS No 10 OAK STREET	1	153	NA		3.1667	0.2423	1.03		4	4	1	4		1 2	4	1	7	1 1	1
	SUBMERSIBLE PUMP	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	154	NA		3.1667	0.2423	1.03		4	4	1	4	4	1 2	4	1	7	1 1	1
	FUEL TANK	10/31/2006	Albany LS	LS No 03 MAPLE STREET	1	155	NA		3.1667	0.2423	1.03		4	4	4	4	1	2	4	1	7	1 1	1
	MOTOR - 3 PHASE	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	156	NA		5.5		1.03		4	4	4	4	7	7 1	4	1	2	1 1	1
		. 5, 25, 2550	arry 20		<u>. </u>	.00	, .	5.7 00	5.0	3002	1.00						<u>'</u>	<u> </u>				نــــــــــــــــــــــــــــــــــــــ	

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

MOTORS: MOTOR: 3 PHASE																								
MOTORIAN MOTOR SHARES 1000-2000 Abbuy LS LS NOS MARIE ESTREET 1 190 AM 070 3.5 0.2115 1.0 1 4 4 4 4 7 2 4 1 1 1 1 1 1 1 1 1	Asset Name	Description	Date	System	Location	Category	Rank	Ĕ	တ	nsednence Sc	Scor	Trigger S	Health and Safety of E and Public	with	(I)	Impac rivate	ıtion to Community/P	to Return Asset	Assessment Ov	Operating Proto	>	Redt and	nce	
MOTORNOON MOTOR: 3 PHASE	MOTOR036	MOTOR - 3 PHASE	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	157	NA	0.789	5.5	0.1392	1.03	10	4	4	4	4	7	7 1	4	1	2 ′	1 1	1
MOTORNOIS MOTOR: 3 PHASE 10942000 Above 15 IS NO 03 MARIE STREET 1 150 NA 0.726 3.0 0.718 1.05 1 4 4 4 7 7 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MOTOR037	MOTOR - 3 PHASE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	158	NA	0.762	3.5	0.2113	1.03	1	4	4	4	4	7	7 2	4	1	1 '	1 1	1
MOTORNOTE MOTORS - SPHARE 10550000 Above SE LS No 00 MARION STREET 1 161 NA 0.743 3.3333 0.2166 103 1 4 4 1 4 7 2 4 4 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 10550000 Above SE LS No 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 4 7 2 4 4 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 10550000 Above SE LS No 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 1 4 7 2 4 4 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 10550000 Above SE LS No 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 1 4 7 2 2 4 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 1 10550000 Above SE LS No 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 1 4 7 2 2 4 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 1 10550000 Above SE LS NO 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 1 4 7 2 2 4 1 1 2 1 1 1 MOTORNOTE MOTORS - SPHARE 1 10550000 Above SE LS NO 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 4 4 1 1 4 7 2 2 4 1 1 2 1 1 1 MOTORNOTE SE MOTORS - SPHARE 1 10550000 Above SE LS NO 00 MARION STREET 1 160 NA 0.748 3.3333 0.2166 103 1 1 0 1 1 0 0 7 1 0 2 2 1 1 1 1 1 1 MOTORNOTE SE M	MOTOR038		10/24/2006	Albany LS		1	159					1.03	1	4	4	4	4	7	7 2	4	1		1 1	1
MOTORIS MOTOR: 3 PHASE 1092000 About US LS No 90 AMRIOR STREET 1 150 N. 0.748 3.3333 0.2186 1.00 1 4 4 4 1 4 7 2 4 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MOTOR040			Albany LS		1								4	4	4	4	7	7 2	4	1		1 1	1
MOTORI 1 MOTOR 1 PINASE 1017000 Abany US LS No 10 AK STREET 1 160 NO 7.48 5.3333 0.2168 1.00 1 4 4 6 7 7 2 4 1 2 1 1 1 MOTORIO (MOTOR) MOTOR 1	MOTOR015					1								4	4	1	4	7	7 2	4	1	2 .	1 1	1
MOTORNIA MOTOR - PHARE						1	162	NA						4	4	1	4	7	7 2	4	1	2 ′	1 1	1
MOTORSOO MOTOR 3 PHASE 1002-2006 Abarry LS PS GISSTRUCTURE 1002-2006 Abarry LS PS GISSTRUCTURE 1002-2006 Abarry LS PS GISSTRUCTURE 1002-2006 Abarry LS LS NO B SH			10/30/2006	Albany LS	LS No 10 OAK STREET	1	163	NA	0.743					4	4	1	4	7	7 2	4	1	2 ′	1 1	1
RSGISSON HILL STRUCTURE 10042000 Albary MTS RSGISSON HILL 100 100 1 1 1 1 1 1 7 10 2 2 1 10 1 2	MOTOR018	MOTOR - 1 PHASE	10/17/2006	Albany LS	LS No 10 OAK STREET	1	164	NA	0.743	3.3333				4	4	1	4	7	7 2	4	1	2 ′	1 1	1
SPRINGED SPRINGE NATE 10044000 Albany LS LS No GOLDEG PREN 189 160 1 1 0 1 1 0 1 1 0 1 1	MOTOR020	MOTOR - 3 PHASE	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	165	NA	0.743	3.3333	0.2165	1.03	1	4	4	1	4	7	7 2	4	1	2 '	1 1	1
SEPAME S	PS GIB STRUCTURE	PS GIBSON HILL STRUCTURE	10/26/2006	Albany WTS	PS GIBSON HILL	. 1	166	NA	0.737	3	0.2371	1.036	1	1	1	10	7	10) 2	2	1	10 ′	1 2	1
SOF-METROD METERING DEVICE 1918/2006 Albary U.S S. NO.7 COLLEGE GREEN 1.99 1.90 1.91 1.90 1.91	LS08-MIL-001	SENSOR UNIT	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	167	NA	0.69	5	0.134	1.03	1	1	10	1	10	1	1	4	1	1 '	1 1	1
SEISOR UNIT	LS07-MIL-001	SENSOR UNIT	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	168	NA	0.69	5	0.134	1.03	1	1	10	1	10	1	1	4	1	1 '	1 1	1
ISI9-MFR.001 METERING DEVICE 1019/2008 Albany WTS LS No.19 NORTH ALBANY 1 71 NA 0.68 5 0.33 1.03 1 1 1 1 1 1 4 1 1 1	LS07-MTR-001	METERING DEVICE	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	169	NA	0.69	5	0.134	1.03	1	1	10	1	10	1	1	4	1	1 '	1 1	1
PMP=PMP - 12a No. 12 Pump	LS19-MIL-001	SENSOR UNIT	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	170	NA	0.69	5	0.134	1.03	1	1	10	1	10	1	1	4	1	1 '	1 1	1
PRIPCHP-11 No.11 HP PUMP 10192006 Albary WTS WTP-04 HI-PRESSURE PUMP STN 1 173 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS19-MTR-001	METERING DEVICE	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	171	NA	0.69	5	0.134	1.03	1	1	10	1	10	1	1	4	1	1 '	1 1	1
PRIPCHP-13 No 13 HP PUMP 10/19/2006 Albary WTS WTP-104 HI-PRESSURE PUMP STN 1 174 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-21 No 14 HP PUMP No 21 10/20/2006 Albary WTS WTP-104 HI-PRESSURE PUMP STN 1 175 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-21 PUMP No 21 10/20/2006 Albary WTS PSR OULEN AVE 1 176 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-21 PUMP No 21 10/20/2006 Albary WTS PSR OULEN AVE 1 177 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 21 10/20/2006 Albary WTS PSR 34TH AVE 1 177 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 42 10/20/2006 Albary WTS PSR 34TH AVE 1 178 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 42 10/20/2006 Albary WTS PSR 34TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 43 10/20/2006 Albary WTS PSR 34TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 43 10/20/2006 Albary WTS PSR 34TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 0 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP No 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 34TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 0 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP NO 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 04TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 0 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP NO 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 04TH AVE 1 180 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 0 2 4 1 1 1 1 1 1 PMP-CHP-24 PUMP NO 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 04TH AVE 1 180 NA 0.689 3.1667 0.2113 1.03 7 1 1 1 7 7 1 10 0 2 4 1 1 1 1 1 1 PMP-MTR-21 PUMP NO 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 04TH AVE 1 180 NA 0.689 3.1667 0.2113 1.03 7 1 1 1 4 1 1 1 0 2 4 1 1 1 1 1 1 PMP-MTR-21 PUMP NO 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albary WTS PSR 04TH AVE 1 1 180 NA 0.689 3.1667 0.2113 1.03 7 1 1 1 4 1 1 1 0 2 4 1 1 1 1 1 1 1 PMP-MTR-13		No 12 Pump	10/19/2006	Albany WTS		1	172	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PRIPCHP-14 No.14 HP PUMP No.11 10/19/2006 Albany WTS PSR QUEEN AVE 1 176 NA 0.689 3.1667 0.2113 1.03 7 1 1 1 7 1 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-11	No 11 HP PUMP	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	173	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PRIPC-CIP-21 PUMP No 21 10/20/2006 Albany WTS PSR QUEEN AVE 1 176 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 1 1 PMP-CHP-42 PUMP No 41 10/20/2006 Albany WTS PSR 34TH AVE 1 177 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 1 1 PMP-CHP-42 PUMP No 42 10/20/2006 Albany WTS PSR 34TH AVE 1 178 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-13	No 13 HP PUMP	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	174	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PMP-CHP-41 PUMP No 41 10/20/2006 Albany WTS PSR 34TH AVE 1 177 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-14	No 14 HP PUMP	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	175	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PMP-CHP-42 PUMP No 42 10/20/2006 Albany WTS PSR 34TH AVE 1 178 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-21	PUMP No 21	10/20/2006	Albany WTS	PSR QUEEN AVE	1	176	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10	2	4	1	1 '	1 1	1
PMP-CHP-43 PUMP No 43 10/20/2006 Albany WTS PSR 34TH AVE 1 179 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-41	PUMP No 41	10/20/2006	Albany WTS	PSR 34TH AVE	1	177	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PMP-CVT-51 N.ALB PUMP No 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany WTS PS NORTH ALBANY 1 180 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 1 1 0 2 4 1 1 1 1 1 1 PMP-CVT-52 N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany WTS PS NORTH ALBANY 1 181 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 1 1 10 2 4 1 1 1 1 1 1 1 PMP-MTR-52 PUMP No 52 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany LS LS NO 3 MAPLE STREET 1 182 NA 0.688 3.5 0.1907 1.03 1 4 4 4 4 4 7 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-42	PUMP No 42	10/20/2006	Albany WTS	PSR 34TH AVE	1	178	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
PMP-CVT-52 N.A.B. PUMP No 52 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany WTS PS NORTH ALBANY 1 181 NA 0.689 3.1667 0.2113 1.03 7 1 1 7 7 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-43	PUMP No 43	10/20/2006	Albany WTS	PSR 34TH AVE	1	179	NA	0.689	3.1667	0.2113	1.03	7	1	1	7	1	10) 2	4	1	1 '	1 1	1
MOTOR-3 PHASE			10/19/2006	Albany WTS	PS NORTH ALBANY	1	180	NA	0.689	3.1667				1	1	7	1	10) 2	4	1	1 '	1 1	1
PUMP029 CENTRIFUGAL PUMP 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 183 NA 0.679 3 0.2165 1.045 1 7 1 4 1 10 2 4 1 2 2 1 PUMP030 CENTRIFUGAL PUMP 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 184 NA 0.679 3 0.2165 1.045 1 7 1 4 1 10 2 4 1 2 2 1 1 CTRL-POWER-NA CONTROL PANEL 10/19/2006 Albany WTS PS NORTH ALBANY 1 185 NA 0.659 3 0.2165 1.045 1 7 1 4 1 1 10 2 4 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL		Albany WTS	PS NORTH ALBANY	1	181	NA		3.1667				1	1	7	1	10) 2	4	1	1 '	1 1	1
PUMP030 CENTRIFUGAL PUMP 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 184 NA 0.679 3 0.2165 1.045 1 7 1 4 1 1 0 2 4 1 2 2 1 1 CTRL-POWER-NA CONTROL PANEL 10/19/2006 Albany WTS PS NORTH ALBANY 1 185 NA 0.655 3.8333 0.1649 1.036 4 4 4 4 1 1 4 4 1 1 0 2 4 1 7 1 2 2 1 1 PMP-MTR-21 PUMP No 21 10/20/2006 Albany WTS PS QUEEN AVE 1 186 NA 0.653 3 0.2113 1.03 7 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MOTOR039	MOTOR - 3 PHASE	10/24/2006	Albany LS		1	182	NA	0.688	3.5		1.03	1	4	4	4	4	7	7 2	2	1	1 '	1 1	1
CRIL-POWER-NA CONTROL PANEL 10/19/2006 Albany WTS PS NORTH ALBANY 1 185 NA 0.655 3.833 0.1649 1.036 4 4 4 1 1 4 4 1 4 1 7 1 2 PMP-MTR-21 PUMP No 21 10/20/2006 Albany WTS PSR QUEEN AVE 1 186 NA 0.653 3 0.2113 1.03 7 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PUMP029			,						3				7	1	4	1	10) 2	4	1	2 :	2 1	1
PMP-MTR-21 PUMP No 21 10/20/2006 Albany WTS PSR QUEEN AVE 1 186 NA 0.653 3 0.2113 1.03 7 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 PMP-MTR-22 PUMP No 22 10/20/2006 Albany WTS PSR QUEEN AVE 1 187 NA 0.653 3 0.2113 1.03 7 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 PMP-MTR-12 No 12 Motor 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 188 NA 0.653 3 0.2113 1.03 7 1 1 4 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PUMP030					1				3				7	1	4	1	10) 2	4	1	2 7	2 1	1
PMP-MTR-22 PUMP No 22 10/20/2006 Albany WTS PSR QUEEN AVE 1 187 NA 0.653 3 0.2113 1.03 7 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CTRL-POWER-NA			,		_				3.8333				4	4	1	4	4	1 1	4	1	7 ′	1 2	1
PMP-MTR-12 No 12 Motor 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 188 NA 0.653 3 0.2113 1.03 7 1 1 1 4 1 1 0 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-MTR-21					1				3				1	1	4	1	10) 2	4	1	1 '	1 1	1
PMP-MTR-13 No 13 HP PUMP 10/19/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 189 NA 0.653 3 0.2113 1.03 7 1 1 4 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-MTR-22			,		1				3				1	1	4	1	10) 2	4	1	1 '	1 1	1
PMP-MTR-14 No 14 HP PUMP 10/19/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 190 NA 0.653 3 0.2113 1.03 7 1 1 4 1 10 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-MTR-12					1				3				1	1	4	1	10) 2	4	1		1 1	1
PMP-MTR-51 N.ALB PUMP No 51 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany WTS PS NORTH ALBANY 1 191 NA 0.653 3 0.2113 1.03 7 1 1 4 1 10 2 4 1						1				3				1	1	4	1		1	4	1		1 1	1
PMP-MTR-52 N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL 10/19/2006 Albany WTS PS NORTH ALBANY 1 192 NA 0.653 3 0.2113 1.03 7 1 1 4 1 10 2 4 1						1				3				1	1	4	1			4	1		1 1	1
LS03-GEN-001 GENERATOR 10/24/2006 Albany LS LS No 03 MAPLE STREET 1 193 NA 0.651 3.833 0.1649 1.03 10 4 1 4 1 1 1 1 4 1 7 1 1 4 1 7 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-MTR-51					1				3				1	1	4	1			4	1		1 1	1
PUMP021 CENTRIFUGAL PUMP 10/17/2006 Albany LS LS No 13 CENTURY DR 1 194 NA 0.645 4.5 0.1392 1.03 4 4 4 7 4 10 1 4 1 2 1 1				•		1				3				1	1	4	1	10) 2	4	1		1 1	1
		-				1				3.8333				4	1	4	1	1	1	4	1	7 ′	1 1	1
PUMP022 CENTRIFUGAL PUMP 10/17/2006 Albany LS LS No 13 CENTURY DR 1 195 NA 0.645 4.5 0.1392 1.03 4 4 4 7 4 10 1 4 1 2 1 1 7	PUMP021					_								4	4	7	4		-	4	1	2 ′	1 1	1
	PUMP022	CENTRIFUGAL PUMP	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	195	NA	0.645	4.5	0.1392	1.03	4	4	4	7	4	10) 1	4	1	2 ′	1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	Reliability	Planned Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
LS16-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 16 TRUAX CREEK	1	196	NA	0.641	2.5	0.2371	1.081	1	7	1	1	1	4	1 2	4	2	4	2 7	1
LS16-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 16 TRUAX CREEK	1	197	NA		2.5	0.2371	1.081	1	7	1	1	1	4	1 2	4	2	4	2 7	1
	Heater	10/31/2006	Albany LS	LS No 16 TRUAX CREEK	1	198	NA		1	0.6134	1.03		1	1	1	1	,	1 7	4	1	4	1 1	1
	SUBMERSIBLE PUMP	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	199	NA		2.5		1.03	1	7	1	1	1	4	1 2	4	1	7	1 1	1
	PSR 34 Structure	10/26/2006	Albany WTS	PSR 34TH AVE	1	200	NA		2.5		1.051	1	1	1	10	4	10	_	2	1	10	2 2	1
	Queen Avenue Structure	10/31/2006	Albany WTS	PSR QUEEN AVE	1	201	NA		2.5	0.2371	1.051	1	1	1	10	4	10) 2	2	1	10	2 2	1
	SENSOR UNIT	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	202	NA		2.3333	0.2577	1.03		1	4	1	4	,	1 2	4	4	4	1 1	1
	FAN	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	203	NA	0.616	1	0.5979	1.03		1	1	1	1	,	1 7	4	1	1	1 1	1
LS04-FIL-001	FILTER	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	204	NA	0.616	1	0.5979	1.03	1	1	1	1	1	,	1 7	4	1	1	1 1	1
LS05-MIL-001	SENSOR UNIT	10/18/2006	Albany LS	LS No 05 UMATILLA	1	205	NA		3.6667	0.1598	1.048		7	4	1	4	,	1 1	4	2	4	1 4	1
LS05-MTR-001	METERING DEVICE	10/18/2006	Albany LS	LS No 05 UMATILLA	1	206	NA	0.614	3.6667	0.1598	1.048	1	7	4	1	4	•	1 1	4	2	4	1 4	1
PUMP027	CENTRIFUGAL PUMP	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	207	NA	0.614	3.6667	0.1495	1.12		4	4	4	4	10) 1	4	1	4	7 1	1
PUMP028	CENTRIFUGAL PUMP	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	208	NA	0.614	3.6667	0.1495	1.12		4	4	4	4	10) 1	4	1	4	7 1	1
	PS NORTH ALBANY STRUCTURE	10/26/2006	Albany WTS	PS NORTH ALBANY	1	209	NA	0.611	2.5	0.2371	1.03		1	1	10	4	10) 2	2	1	10	1 1	1
	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	210	NA		2.6667	0.2165	1.045		7	1	1	1	-	7 2	4	1	2	2 1	1
	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	211	NA	0.603	2.6667	0.2165	1.045		7	1	1	1		7 2	4	1	2	2 1	1
	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	212	NA		4.1667	0.1392	1.03		4	4	4	4		7 1	4	1	2	1 1	1
	MOTOR - 3 PHASE	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	213	NA	0.597	4.1667	0.1392	1.03		4	4	4	4	-	7 1	4	1	2	1 1	1
	PUMP	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	214	NA		4.1667	0.1392	1.03	4	4	4	4	4	-	7 1	4	1	2	1 1	1
PUMP034	PUMP	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	215		0.597	4.1667	0.1392	1.03	4	4	4	4	4	-	7 1	4	1	2	1 1	1
PUMP017	CENTRIFUGAL PUMP	10/30/2006	Albany LS	LS No 10 OAK STREET	1	216	NA	0.595	3.6667	0.1392	1.165	1	4	4	4	4	10) 1	4	1	2 1	10 1	1
PUMP018	CENTRIFUGAL PUMP	10/30/2006	Albany LS	LS No 10 OAK STREET	1	217	NA	0.595	3.6667	0.1392	1.165	1	4	4	4	4	10) 1	4	1	2 1	0 1	1
LS09-POT-001	VACUUM PRIMER POT	10/25/2006	Albany LS	LS No 09 MARION STREET	1	218	NA	0.588	3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
	VACUUM PUMP	10/31/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	219	NA			0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
LS15-POT-001	VACUUM PRIMER POT	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	220	NA			0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
LS15-POT-002	VACUUM PRIMER POT	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	221	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
LS15-PMP-001	VACUUM PUMP	10/31/2006	Albany LS	LS No 15 BURKHART CREEK	1	222	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
LS15-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 15 BURKHART CREEK	1	223	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
	VACUUM PRIMER POT	10/17/2006	Albany LS	LS No 10 OAK STREET	1	224	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
	VACUUM PRIMER POT	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	225	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
LS11-POT-002	VACUUM PRIMER POT	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	226	NA		3.1667	0.1804	1.03		4	4	1	4	4	1 1	4	4	4	1 1	1
	SENSOR UNIT	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	227	NA		3.6667	0.1495	1.03		1	7	1	7	,	1 1	4	1	4	1 1	1
	Metering Device	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	228	NA		3.6667	0.1495	1.03		1	7	1	7	,	1 1	4	1	4	1 1	1
	SENSOR UNIT	10/17/2006	Albany LS	LS No 10 OAK STREET	1	229	NA		2.3333	0.2268	1.048		1	4	1	4	,	1 2	4	1	4	1 4	1
	METERING DEVICE	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	230	NA		2.3333	0.2268	1.048		1	4	1	4		1 2	4	1	4	1 4	1
	SUBMERSIBLE PUMP	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	231	NA		3.1667	0.1649	1.03		4	4	1	4	4	1 1	4	1	7	1 1	1
	SUBMERSIBLE PUMP	10/31/2006	Albany LS	LS No 15 BURKHART CREEK	1	232			3.1667	0.1649	1.03		4	4	1	4	4	1 1	4	1	7	1 1	1
	SUBMERSIBLE PUMP	10/25/2006	Albany LS	LS No 09 MARION STREET	1	233			3.1667	0.1649	1.03		4	4	1	4	4	1 1	4	1	7	1 1	1
LS20-PMP-001	SUBMERSIBLE PUMP	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	234	NA	0.538	3.1667	0.1649	1.03	1	4	4	1	4	4	1 1	4	1	7	1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

ASSET NAME Description Date System Location Date System Location Date Date																								
SEMPLY OF SUMBLESSIE FIMEP 1023000 Abbry US 1.8 No 19 ACCRESSED 2 No 19 3 C 3540 1.10 5 1 7 4 1 7 4 1 7 4 1 7 1 1 1 1 1 1 1 1	Asset Name	Description	Date	System	Location	Category		Ĕ	S	Consequence Score	od Scor	S	Safety of E	with	(I)	Impac rivate	tion to Community/P	to Return Asset	Assessment Ov	Operating Proto	Reliability	Redt and	nce	Annual Maintenance Cost
SENDALIGO SENDAL BUT	LS20-PMP-002	SUBMERSIBLE PUMP	10/31/2006	Albany LS	LS No 20 COLUMBUS STREET	1	235	NA	0.538	3.1667	0.1649	1.03	1	4	4	1	4	4	1	4	1	7	1 1	. 1
SEPAME OF INCEC 1917/2009 Allowy LE E. No 3 CENTLEW NO 1.20 NA 0.500 3.0007 0.134 1.05 1 7 7 7 1 7 7	LS06-PMP-001	SUBMERSIBLE PUMP	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	236	NA	0.51	3	0.1649	1.03	1	1	4	1	7	4	1	4	1	7	1 1	. 1
SESSMET SESS	LS13-MIL-001	SENSOR UNIT	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	237	NA	0.506	3.6667	0.134	1.03	1	1	7	1	7	1	1	4	1	1	1 1	1
ESPANTINO METERING DEVICE 10262008 Abbury LS LS No 20 ACLUMBURS STREET 1 240 NA 0.506 3.6887 0.134 1.05 1 4 7 4 7 1 7 1 4 1 1 1 1 1 1 1 1	LS13-MTR-001	METERING DEVICE	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	238	NA	0.506	3.6667	0.134	1.03	1	1	7	1	7	1	1	4	1	1	1 1	1
Pumproy Summersiale Pump 10242000 Aboury LS LS No 03 MARE STREET 24 NA 0.500 3.6807 0.13 1.03 1 4 4 7 7 4 7 1 4 7 1 1 4 1 1 1 1 1 1 1	LS20-MIL-001	SENSOR UNIT	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	239	NA	0.506	3.6667	0.134	1.03	1	1	7	1	7	1	1	4	1	1	1 1	1
Pumprish Submarrishie Pump 1004/2006 Albamy LS LS No SMAPE STREET 240 NA 0.506 3.6867 0.134 1.00 1 4 4 7 7 4 7 7 8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS20-MTR-001	METERING DEVICE	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	240	NA	0.506	3.6667	0.134	1.03	1	1	7	1	7	1	1	4	1	1	1 1	1
Pumpora Submersime Plum	PUMP037	SUBMERSIBLE PUMP	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	241	NA	0.506	3.6667	0.134	1.03	1	4	4	7	4	7	1	4	1	1	1 1	1
PUMPPMO SUBBERSINE PLMP 10242000 Albary LS LS No 89 37H AVENUE 1 246 NA 0.000 3.6607 0.422 1.03 1 4 4 7 7 4 7 1 4 1 1 1 4 4 2 1 1 1 1 1 1 1 1 1 1 1 1	PUMP038	SUBMERSIBLE PUMP	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	242	NA	0.506	3.6667	0.134	1.03	1	4	4	7	4	7	1	4	1	1	1 1	1
SUB-RETUON REMOTE TERMINAL UNIT 1024/2008 Albany LS LS No 3 MAPLE STREET 1 26 MA 0.402 1.1667 0.4021 1.048 1 1 4 4 4 4 2 1 4 5 1 5 5 5 5 5 5 5 5	PUMP039	SUBMERSIBLE PUMP	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	243	NA	0.506	3.6667	0.134	1.03	1	4	4	7	4	7	1	4	1	1	1 1	1
METERNO DEVICE 10/24/2006 Albany LIS LISNO BAPILE STREET 1 248 NA 0.488 3.1867 0.1488 1.03 1 4 4 4 4 4 4 1 1 1 4 4 1 1 7 7 1 1 1 1	PUMP040	SUBMERSIBLE PUMP	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	244	NA	0.506	3.6667	0.134	1.03	1	4	4	7	4	7	1	4	1	1	1 1	1
PRIME-CYT-8: 0 WW, PLMP Not 3 PILT CASE CENTRIFUGAL 1019/32006 Abony WTS PS GISSON HILL 1 247 NA 0.481 2.3333 0.1648 1.03 7 1 1 4 4 1 7 7 1 4 4 1 7 7 1 1 4 1 7 7 1 1 4 1 7 7 1 1 4 1 7 7 1 1 1 1	LS08-RTU-001	REMOTE TERMINAL UNIT	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	245	NA	0.492	1.1667	0.4021	1.048	1	1	1	4	1	1	4	4	4	2	1 4	1
PRIMPOYT-62 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry WTS PS GIBSON HILL 1 249 NA 0.481 2.8333 0.1484 1.035 7 1 1 4 1 7 1 4 1 7 7 1 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry WTS PS GIBSON HILL 1 269 NA 0.481 2.8333 0.1484 1.035 7 1 1 4 1 7 7 1 4 1 7 7 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US PS GIBSON HILL 1 269 NA 0.481 2.8333 0.1484 1.035 7 1 1 4 1 4 7 7 1 4 1 7 7 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US SP GIBSON HILL 1 269 NA 0.481 2.8333 0.1484 1.035 7 1 1 4 1 4 7 7 1 4 1 7 7 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US SP GIBSON HILL 1 269 NA 0.481 2.8333 0.1484 1.035 7 1 1 4 1 4 7 7 1 4 1 7 7 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US SP GIBSON HILL 1 269 NA 0.481 2.8333 0.1342 1.035 7 1 1 4 4 7 7 1 4 4 7 7 7 1 1 PRIPATE-82 W.W. PLMP No 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US SP SIBSON HILL 1 269 NA 0.486 1.1667 0.3814 1.048 1 1 1 4 7 1 4 4 1 4 7 7 1 1 4 PRIPATE-82 W.W. PLMP NO 62 SPLIT CASE CENTRIFUGAL 10/19/2006 Albarry US SP SIBSON HILL 1 261 NA 0.468 1.1667 0.3814 1.048 1 1 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 4	LS03-MTR-003	METERING DEVICE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	246	NA	0.488	3.1667	0.1495	1.03	1	4	4	4	4	1	1	4	1	4	1 1	1
PMP-MTRR1 W.W. PLMP No 61 SPLIT CASE CENTRIFUGAL 10192006 Albamy WTS PS GIBSON HILL 1 20 NA 0.481 2.8333 0.1649 1.03 7 1 1 4 1 7 1 4 1 7 1 4 1 7 1 1 4 1 7 1 1 1 1 1 1 1 1	PMP-CVT-61	W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL	10/19/2006	Albany WTS	PS GIBSON HILL	1	247	NA	0.481	2.8333	0.1649	1.03	7	1	1	4	1	7	1	4	1	7	1 1	1
PMP-MTR-R2 WW. PLMP No 62 SPLIT CASE CENTRIFUGAL 1019/2006 Albary MTS PS GIBSON HILL 1 250 NA 0.481 2.833 0.1649 1.00 7 1 1 4 1 7 7 1 4 1 1 7 7 1 1 1 1 1 1 1	PMP-CVT-62	W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL	10/19/2006	Albany WTS	PS GIBSON HILL	1	248	NA	0.481	2.8333	0.1649	1.03	7	1	1	4	1	7	1	4	1	7	1 1	1
MOTOR: 9 PHASE 10/25/2006 Motor: 1	PMP-MTR-61	W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL	10/19/2006	Albany WTS	PS GIBSON HILL	1	249	NA	0.481	2.8333	0.1649	1.03	7	1	1	4	1	7	1	4	1	7	1 1	1
LSI-HARDIO-061 RTU RADIO 101/17/2006 Albany LS LS No 14 CHARLOTTE STREET 1 262 NA 0.466 1.1667 0.3814 1.048 1 1 1 1 4 1 1 1 4 4 1 1 4 1 4 1 4 1 4	PMP-MTR-62	W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL	10/19/2006	Albany WTS	PS GIBSON HILL	1	250	NA	0.481	2.8333	0.1649	1.03	7	1	1	4	1	7	1	4	1	7	1 1	1
ESHAFTLUOI REMOTE TERMINAL UNIT 10/17/2006 Albany LS LS No 14 CHARLOTTE STREET 1 254 NA 0.466 3.3333 0.134 1.03 1 4 4 4 4 4 4 4 4 1 4 1 1 4 1 1 1 1 1	MOTOR019	MOTOR - 3 PHASE	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	251	NA	0.478	3.3333	0.1392	1.03	1	4	4	1	4	7	1	4	1	2	1 1	1
LS18-MIT-001 SENSOR UNIT 10/26/2006 Albany LS LS No 18 MILLERSBURG 1 25 NA 0.46 3.333 0.134 1.03 1 4 4 4 4 4 4 4 1 4 1 1 1 1 1 1 1 1 1	LS14-RADIO-001	RTU RADIO	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	252	NA	0.466	1.1667	0.3814	1.048	1	1	1	4	1	1	4	4	1	4	1 4	1
LS18-MTR-001 METERING DEVICE 10/26/2006 Albary LS LS No 18 MILLERSBURG 1 256 NA 0.46 3.3333 0.134 1.03 1 4 4 4 4 4 4 1 4 1 4 1 1 1 1 1 1 1 1	LS14-RTU-001	REMOTE TERMINAL UNIT	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	253	NA	0.466	1.1667	0.3814	1.048	1	1	1	4	1	1	4	4	1	4	1 4	1
LS13-PMP-002 VACUUM PUMP 10/31/2006 Albany LS LS No 13 CENTURY DR 1 256 NA 0.454 3.1667 0.1392 1.03 1 4 4 1 1 4 1 4 1 4 1 2 1 1 4 1 4 1 4 1	LS18-MIL-001	SENSOR UNIT	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	254	NA	0.46	3.3333	0.134	1.03	1	4	4	4	4	4	1	4	1	1	1 1	1
LSO4-MIL-001 SENSOR UNIT 10/18/2006 Albany LS LS No 04 QUEEN AVENUE 1 257 NA 0.444 2.8333 0.1495 1.048 1 1 4 1 7 1 1 4 1 7 1 1 4 1 4 1 4 1 4 1	LS18-MTR-001	METERING DEVICE	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	255	NA	0.46	3.3333	0.134	1.03	1	4	4	4	4	4	1	4	1	1	1 1	1
LSO4-MTR-001 METERING DEVICE 10/18/2006 Albany LS LS No 04 QUEEN AVENUE 1 258 NA 0.444 2.8333 0.1495 1.048 1 1 4 1 7 1 1 4 1 1 4 4 4 4 1 1 1 1 1 1	LS13-PMP-002	VACUUM PUMP	10/31/2006	Albany LS	LS No 13 CENTURY DR	1	256	NA	0.454	3.1667	0.1392	1.03	1	4	4	1	4	4	1	4	1	2	1 1	1
LSO9-FAN-001 FAN 10/25/2006 Albany LS LS No 09 MARION STREET 1 259 NA 0.441 1 0.3969 1.111 1 1 1 1 1 1 1 1 1 1 4 4 4 4 1 1 1 1	LS04-MIL-001	SENSOR UNIT	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	257	NA	0.444	2.8333	0.1495	1.048	1	1	4	1	7	1	1	4	1	4	1 4	1
LS11-FAN-001 FAN 10/25/2006 Albany LS LS No 11 LAWNDALE 1 260 NA 0.441 1 0.3969 1.111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS04-MTR-001	METERING DEVICE	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	258	NA	0.444	2.8333	0.1495	1.048	1	1	4	1	7	1	1	4	1	4	1 4	1
PMP-CHP-22 PUMP No 22 10/20/2006 Albany WTS PSR QUEEN AVE 1 261 NA 0.437 3.1667 0.134 1.03 7 1 1 7 1 1 0 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS09-FAN-001	FAN	10/25/2006	Albany LS	LS No 09 MARION STREET	1	259	NA	0.441	1	0.3969	1.111	1	1	1	1	1	1	4	4	4	1	1 1	10
PMP-MTR-43 PUMP No 43 10/20/2006 Albany WTS PSR 34TH AVE 1 262 NA 0.437 3.1667 0.134 1.03 7 1 1 7 1 10 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS11-FAN-001	FAN	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	260	NA	0.441	1	0.3969	1.111	1	1	1	1	1	1	4	4	4	1	1 1	10
PMP-DIS-009 Transformer Disconnect 10/20/2006 Albany WTS PSR 34TH AVE 1 263 NA 0.437 3.1667 0.134 1.03 7 1 1 7 1 1 0 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-CHP-22	PUMP No 22	10/20/2006	Albany WTS	PSR QUEEN AVE	1	261	NA	0.437	3.1667	0.134	1.03	7	1	1	7	1	10) 1	4	1	1	1 1	1
LS14-MTR-001 METERING DEVICE 10/17/2006 Albany LS LS No 14 CHARLOTTE STREET 1 264 NA 0.434 2.333 0.1804 1.03 1 1 4 1 1 4 1 4 1 4 1 1 4 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 4 4 1 1 1 1 4 4 4 1 1 1 1 4 4 4 1 1 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 4 4 1 1 1 1 1 4 4 1 1 1 1 1 4 4 1 1 1 1 1 1 4 4 1	PMP-MTR-43	PUMP No 43	10/20/2006	Albany WTS	PSR 34TH AVE	1	262	NA	0.437	3.1667	0.134	1.03	7	1	1	7	1	10) 1	4	1	1	1 1	1
LS15-MIL-001 SENSOR UNIT 10/24/2006 Albany LS LS No 15 BURKHART CREEK 1 265 NA 0.434 2.333 0.1804 1.03 1 1 4 1 4 1 4 1 1 4 4 1 1 4 4 1 1 1 4 4 1 1 1 4 1 1 1 4 1	PMP-DIS-009	Transformer Disconnect	10/20/2006	Albany WTS	PSR 34TH AVE	1	263	NA	0.437	3.1667	0.134	1.03	7	1	1	7	1	10) 1	4	1	1	1 1	1
LS15-MTR-001 METERING DEVICE 10/24/2006 Albany LS LS No 15 BURKHART CREEK 1 266 NA 0.434 2.333 0.1804 1.03 1 1 4 1 4 1 4 1 4 1 1 4 4 4 4 1 1 1 LS16-POT-001 VACUUM PRIMER POT 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 267 NA 0.432 2.5 0.1598 1.081 1 7 1 1 1 1 1 4 1 4 1 4 1 4 1 4 1 4 1	LS14-MTR-001	METERING DEVICE	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	264	NA	0.434	2.3333	0.1804	1.03	1	1	4	1	4	1	1	4	4	4	1 1	1
LS16-POT-001 VACUUM PRIMER POT 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 267 NA 0.432 2.5 0.1598 1.081 1 7 1 1 1 1 4 1 4 2 4 2 7 LS13-PMP-003 VACUUM PUMP 10/31/2006 Albany LS LS No 13 CENTURY DR 1 268 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 4 1 4 1 2 1 1 1 4 1 2 1 1 1 1	LS15-MIL-001	SENSOR UNIT	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	265	NA	0.434	2.3333	0.1804	1.03	1	1	4	1	4	1	1	4	4	4	1 1	1
LS13-PMP-003 VACUUM PUMP 10/31/2006 Albany LS LS No 13 CENTURY DR 1 268 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 2 1 1 1 LS13-POT-001 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 269 NA 0.43 3 0.1392 1.03 1 4 4 1 4 1 4 1 1 4 1 2 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 2 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany WTS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 1 4 1 2 1 1 1 LS13-POT-002 PMP-MTR-41 PUMP No 41 10/20/2006 Albany WTS PSR 34TH AVE 1 271 NA 0.414 3 0.134 1.03 7 1 1 4 1 1 0 1 4 1 1 0 1 4 1 1 1 1 1 1 1	LS15-MTR-001	METERING DEVICE	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	266	NA	0.434	2.3333	0.1804	1.03	1	1	4	1	4	1	1	4	4	4	1 1	1
LS13-POT-001 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 269 NA 0.43 3 0.1392 1.03 1 4 4 1 4 1 4 1 1 4 1 2 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 2 1 1 1 4 1 2 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 1 4 1 2 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 1 4 1 1 4 1 1 4 1 1 1 1 1 1 LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 4 1 1 4 1 1 1 4 1 1 1 4 1 1 1 1	LS16-POT-001	VACUUM PRIMER POT	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	267	NA	0.432	2.5	0.1598	1.081	1	7	1	1	1		1	4	2	4	2 7	1
LS13-POT-002 VACUUM PRIMER POT 10/17/2006 Albany LS LS No 13 CENTURY DR 1 270 NA 0.43 3 0.1392 1.03 1 4 4 1 4 1 4 1 1 4 1 2 1 1 4 PMP-MTR-41 PUMP No 41 10/20/2006 Albany WTS PSR 34TH AVE 1 271 NA 0.414 3 0.134 1.03 7 1 1 4 1 10 1 4 1 1 0 1 4 1 1 1 1 1 1 1	LS13-PMP-003	VACUUM PUMP	10/31/2006	Albany LS	LS No 13 CENTURY DR	1	268	NA	0.43	3	0.1392	1.03	1	4	4	1	4	1	1	4	1	2	1 1	1
PMP-MTR-41 PUMP No 41 10/20/2006 Albany WTS PSR 34TH AVE 1 271 NA 0.414 3 0.134 1.03 7 1 1 4 1 10 1 4 1 1 1 1 1 1 1 1 1 1 1 1	LS13-POT-001	VACUUM PRIMER POT	10/17/2006	Albany LS	LS No 13 CENTURY DR	1		NA	0.43	3	0.1392	1.03	1	4	4	1	4	1	1	4	1	2	1 1	1
PMP-MTR-42 PUMP No 42 10/20/2006 Albany WTS PSR 34TH AVE 1 272 NA 0.414 3 0.134 1.03 7 1 1 4 1 10 1 4 1 1 1 1	LS13-POT-002	VACUUM PRIMER POT	10/17/2006	Albany LS	LS No 13 CENTURY DR	1		NA	0.43	3	0.1392	1.03	1	4	4	1	4	1	1	4	1	2	1 1	. 1
	PMP-MTR-41	PUMP No 41	10/20/2006	Albany WTS	PSR 34TH AVE	1	271	NA	0.414	3	0.134	1.03	7	1	1	4	1	10	1	4	1	1	1 1	1
PMP-MTR-11 No 11 HP PUMP 10/19/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 273 NA 0.414 3 0.134 1.03 7 1 1 4 1 1 1 1 1 1 1	PMP-MTR-42	PUMP No 42	10/20/2006	Albany WTS	PSR 34TH AVE	1	272	NA	0.414	3	0.134	1.03	7	1	1	4	1	10	1	4	1	1	1 1	1
	PMP-MTR-11	No 11 HP PUMP	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	273	NA	0.414	3	0.134	1.03	7	1	1	4	1	10) 1	4	1	1	1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	Reliability	Planned Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
RTU-RTU-003	RTU	10/30/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	274	NA	0.404	2	0.1959	1.03	1	1	4	1	1	4	2	2	1	2	1 1	1
LS05-DEH-001	DEHUMIDIFIER	10/18/2006	Albany LS	LS No 05 UMATILLA	1	275	NA	0.393	1	0.3814	1.03	1	1	1	1	1	1	4	4	1	4	1 1	1
LS14-FAN-001 F	FAN	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	276	NA	0.388	1	0.3763	1.03	1	1	1	1	1	1	4	4	2	1	1 1	1
	Maple Flow Meter No 1	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	277	NA		2.5		1.03		1	4	4	4	1	1	4	1	4	1 1	1
LS03-FLW-002 N	Maple Flow Meter No 2	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	278	NA	0.385	2.5	0.1495	1.03	1	1	4	4	4	1	1	4	1	4	1 1	1
LS03-MIL-001	SENSOR UNIT	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	279	NA	0.385	2.5	0.1495	1.03	1	1	4	4	4	1	1	4	1	4	1 1	1
LS03-MIL-002	SENSOR UNIT	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	280	NA	0.385	2.5	0.1495	1.03	1	1	4	4	4	1	1	4	1	4	1 1	1
LS03-MIL-003	SENSOR UNIT	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	281	NA	0.385	2.5	0.1495	1.03	1	1	4	4	4	1	1	4	1	4	1 1	1
LS04-FIL-002 F	FILTER	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	282	NA	0.377	1	0.366	1.03	1	1	1	1	1	1	4	4	1	1	1 1	1
LS18-FAN-001 F	FAN	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	283	NA	0.377	1	0.366	1.03	1	1	1	1	1	1	4	4	1	1	1 1	1
LS11-MIL-001	SENSOR UNIT	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	284	NA	0.366	2.3333	0.1495	1.048	1	1	4	1	4	1	1	4	1	4	1 4	1
LS10-MTR-001 N	METERING DEVICE	10/17/2006	Albany LS	LS No 10 OAK STREET	1	285	NA	0.366	2.3333	0.1495	1.048	1	1	4	1	4	1	1	4	1	4	1 4	1
LS09-MIL-001	SENSOR UNIT	10/25/2006	Albany LS	LS No 09 MARION STREET	1	286	NA	0.366	2.3333	0.1495	1.048	1	1	4	1	4	1	1	4	1	4	1 4	1
LS09-MTR-001 N	METERING DEVICE	10/25/2006	Albany LS	LS No 09 MARION STREET	1	287	NA	0.366	2.3333	0.1495	1.048	1	1	4	1	4	1	1	4	1	4	1 4	1
LS08-VLV-004 P	Pump No 2 Check Valve	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	288	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	2	4	1	7	1 1	1
LS04-VLV-001 P	Pump No 1 Suction Valve	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	289	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	2	4	1	7	1 1	1
LS04-VLV-002 F	Pump No 1 Check Valve	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	290	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	2	4	1	7	1 1	1
LS04-VLV-003 F	Pump No 2 Suction	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	291	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	2	4	1	7	1 1	1
LS04-VLV-004 F	Pump No 2 Check Valve	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	292	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	2	4	1	7	1 1	1
LS13-VLV-003 P	Pump No 2 Discharge Valve	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	293	NA	0.333	1.3333	0.2423	1.03	1	1	1	1	1	7	7 2	4	1	7	1 1	1
LS03-MTR-002	METERING DEVICE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	294	NA	0.332	2.5	0.1289	1.03	1	1	4	4	4	1	1	2	1	4	1 1	1
LS19-VLV-003 P	Pump No 2 Discharge Valve	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	295	NA	0.311	1.8333	0.1649	1.03	1	1	1	1	4	7	1	4	1	7	1 1	1
MET-FLO-04	METERING DEVICE	10/20/2006	Albany WTS	PSR QUEEN AVE	1	296	NA	0.304	1.8333	0.1598	1.036	1	4	1	1	1	4	1	4	2	4	1 2	. 1
LS19-RADIO-001	RTU RADIO	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	297	NA	0.303	1.1667	0.2474	1.048	1	1	1	4	1	1	2	4	4	2	1 4	1
LS19-RTU-001	REMOTE TERMINAL UNIT	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	298	NA	0.303	1.1667	0.2474	1.048	1	1	1	4	1	1	2	4	4	2	1 4	. 1
LS08-RADIO-001	RTU RADIO	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	299	NA	0.303	1.1667	0.2474	1.048	1	1	1	4	1	1	2	4	4	2	1 4	1
LS05-RADIO-001	RTU RADIO	10/18/2006	Albany LS	LS No 05 UMATILLA	1	300	NA	0.29	1.1667	0.2371	1.048	1	1	1	4	1	1	2	4	2	4	1 4	1
LS05-RTU-001 R	REMOTE TERMINAL UNIT	10/18/2006	Albany LS	LS No 05 UMATILLA	1	301	NA	0.29	1.1667	0.2371	1.048	1	1	1	4	1	1	2	4	2	4	1 4	1
	RTU RADIO	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	302	NA		1.1667	0.2371	1.048	1	1	1	4	1	1	2	4	2	4	1 4	1
	REMOTE TERMINAL UNIT	10/18/2006	Albany LS	LS No 04 QUEEN AVENUE	1	303	NA		1.1667	0.2371	1.048	1	1	1	4	1	1	2	4	2	4	1 4	1
	Pressure Transducer	10/19/2006	Albany WTS	PS NORTH ALBANY	1	304	NA		2.3333	0.1186	1.03		4	1	1	1	1	1	2	1	2	1 1	1
	RTU RADIO	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	305	NA		1.1667	0.2371	1.03		1	1	4	1	1	2	4	2	4	1 1	1
	REMOTE TERMINAL UNIT	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	306	NA		1.1667	0.2371	1.03	1	1	1	4	1	1	2	4	2	4	1 1	1
LS09-RADIO-001	RTU RADIO	10/25/2006	Albany LS	LS No 09 MARION STREET	1	307	NA		1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
LS09-RTU-001	REMOTE TERMINAL UNIT	10/25/2006	Albany LS	LS No 09 MARION STREET	1	308	NA		1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
	RTU RADIO	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	309	NA		1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
	REMOTE TERMINAL UNIT	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	310	NA		1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
	RTU RADIO	10/17/2006	Albany LS	LS No 10 OAK STREET		311	NA	0.277	1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
LS10-RTU-001 R	REMOTE TERMINAL UNIT	10/17/2006	Albany LS	LS No 10 OAK STREET	1	312	NA	0.277	1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

ISST-REPUIGN (INTERNALLUMT) 10950000 ABory IS IS NOT LAWNDALF (1) 1 31 A 0 77 1-1967 (2) 228 1-10 1 1 4 1 1 2 2 1 1 4 1 1 2 2 4 1 4 1 1 2 2 2 1 1 4 1 1 1 2 2 2 1 1 4 1 1 1 2 2 2 1 1 4 1 1 1 1																								
STATE STAT		'	-			Category		Life	Total S	Consednence Sc	Likelihood Scor	Trigger	Health and Safety of E and Public	with	4	Impaci rivate	tion to Community/P	to Return Asset	Assessment Ov	Operating Proto	Reliability	Redt and	nce	Annual Maintenance Cost
1928-PADIGNO-01 TU PADIGNO-01 TU PADIGNO-02 TU PADIGNO-02 TU PADIGNO-03 TU PADIGNO-04 TU PADIGNO	LS11-RADIO-001	RTU RADIO	10/25/2006	Albany LS	LS No 11 LAWNDALE	1		NA	0.277	1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
ESPANDON PROPRIED FERRINAL LINET 10002000 Alburry LE LE NOS D'ALCOMER 1970 Albury LE Albury LE Albury LE LE NOS D'ALCOMER 1970 Albury LE A	LS11-RTU-001	REMOTE TERMINAL UNIT	10/25/2006	Albany LS	LS No 11 LAWNDALE	1		NA	0.277	1.1667	0.2268	1.048	1	1	1	4	1	1	2	4	1	4	1 4	1
SIGN-FLY-007 Pump 000 Sutron Valve 1094/2000 Abary LS ISN 00 GAAC CREEK 1 317 NA 289 1,333 0.199 1.03 1 1 1 7 1 4 6 7 1 1 1 1 1 7 1 4 6 7 1 1 1 1 1 1 1 1 7 1 4 6 7 1 1 1 1 1 1 1 1 1			10/26/2006	Albany LS	LS No 12 WAH CHANG	1				1.1667		1.03	1	1	1	4	1	1	2	4	1	4	1 1	1
1924-2006 Alberty US LS No GOAC PREEK 1 376 N. 0.288 1.333 0.1589 1.00 1 1 1 1 7 1 4 4 7 1 1 1 1 1 1 1 1 1		REMOTE TERMINAL UNIT				1								1	1	4	1	1	2	4	1	4	1 1	1
LISSH-LY-0006 Pump 10 Diameting White 10242006 Albamy US LIS Not GOAK CREEK 1 370 No. 0.288 1.333 0.1698 1.00 1 1 1 1 7 7 4 4 7 1 1 1 1 1 1 7 7 4 4 7 1 1 1 1 1 1 1 1 1		i				1								1	1	1	1	7	1	4	4	7	1 1	1
ISSAM-YA-064 Pump 10 Discheron Valve 102-20006 Albamy LS LS Not GOAK CREEK 1 20 NA 0.286 1.3333 0.1956 1.03 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 1 1 1 7 1 4 4 7 7 1 1 5 1 1 1 1 1 1 1 1 1 7 1 4 4 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Pump 009 Check Valve	10/24/2006			1		NA						1	1	1	1	7	1	4	4	7	1 1	1
ISBN-147-056 Pump to Dicheck Value 1024/2009 Albamy LS LS No GOAK CREEK 1 327 NA 0.268 1.333 0.1959 1.03 1 1 1 1 1 7 1 4 4 7 7 1 1 1 1 1 1 1 7 1 4 4 7 7 1 1 1 1 1 1 1 1	LS06-VLV-003	Pump 009 Discharge Valve	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	319	NA	0.269					1	1	1	1	7	1	4	4	7	1 1	1
ISSPERINGENEERS 1922-1909 1924-2009 Abbury LS L.S. NOS OAK CREEK 1 322 N.A. 0.269 1.333 0.1969 1.03 1 1 1 1 7 1 4 4 7 1 1 1 1 1 1 1 1 1	LS06-VLV-004	Pump 10 Suction Valve	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	320	NA	0.269					1	1	1	1	7	1	4	4	7	1 1	1
RTLAFTLOOM PR SATH AVE RTU Data Radio 10/20/2006 Abany WTS PSR SHTH AVE 1 328 NA 0.280 1.333 0.1969 1.03 1 1 1 4 4 1 4 2 2 1 1 2 1 1 RTLAFTLOOF PSR SHTH AVE 1 328 NA 0.280 1.333 0.1969 1.03 1 1 1 1 4 1 1 4 2 2 2 1 1 2 1 1 RTLAFTLOOF PSR SHTH AVE RTU Scada Process of the Control of the Contr	LS06-VLV-005	Pump 10 Check Valve	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	321	NA	0.269	1.3333	0.1959	1.03	1	1	1	1	1	7	1	4	4	7	1 1	1
RTL-BTL-006 PS SATH-AVE RTU ScadaPack 102020006 Albary WTS PSR 34TH-AVE RTU ScadaPack 10202006 Albary WTS PSR 044TH-AVE 1 324 NA 0.269 1.3333 0.1950 1.03 1 1 1 4 4 1 4 2 2 1 1 2 1 1 2 NT 1 1 1 1 1 4 1 4 2 2 2 1 1 2 1 1 1 NT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS06-VLV-006	Pump 10 Discharge Valve	10/24/2006	Albany LS	LS No 06 OAK CREEK	1		NA	0.269	1.3333	0.1959	1.03	1	1	1	1	1	7	1	4	4	7	1 1	1
RTLAFTLOGO PSR QUEEN AVE FITU Data Radio 1902/0006 Albany WTS PSR QUEEN AVE 1 325 NA 0.286 1.333 0.1986 1.03 1 1 1 4 1 4 2 2 1 2 1 1 1 1 1 4 1 4 2 2 1 2 1 1 1 1 1 1	RTU-RTU-004	PSR 34TH AVE RTU Data Radio	10/20/2006	Albany WTS	PSR 34TH AVE	1	323	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
RTU-STU-007 PSR QUEEN AVE RTU Scade Pack 10020006 Abany WTS PSR QUEEN AVE 1 326 NA 0.289 1.3333 0.1959 1.03 1 1 1 4 4 1 4 2 2 2 1 2 1 2 1 1 7 1 1 1 1 1 1 1 1 1 1	RTU-RTU-005	PSR 34TH AVE RTU ScadaPack	10/20/2006	Albany WTS	PSR 34TH AVE	1	324	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
RTU-STU-001 RTU Dana Radio 1019/2008 Albarny WTS PS NORTH ALBANY 1 327 NA 0.269 1.3333 0.1699 1.03 1 1 1 1 4 4 1 4 2 2 1 1 2 1 1 1 . RTU-STU-002 RTU SCADA Pack 102/22/2008 Albarny WTS PS NORTH ALBANY 1 328 NA 0.269 1.3333 0.1699 1.03 1 1 1 1 1 4 1 1 4 2 2 2 1 1 2 1 1 1 . RTU-STU-002 RTU SCADA Pack 102/22/2008 Albarny WTS PS NORTH ALBANY 1 328 NA 0.269 1.3333 0.1699 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RTU-RTU-006	PSR QUEEN AVE RTU Data Radio	10/20/2006	Albany WTS	PSR QUEEN AVE	1	325	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
RTU-SCADA Fack 10/24/2006 Albarry WTS PS NORTH ALBANY 1 328 NA 0.269 1.333 0.1959 1.03 1 1 4 1 4 2 2 1 2 1 1 1 1 1 2 4 1 1 1 1 2 2 1 1 1 1	RTU-RTU-007	PSR QUEEN AVE RTU Scada Pack	10/20/2006	Albany WTS	PSR QUEEN AVE	1	326	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
1.506-FAN-002M MOTOR - 1 PHASE 10/23/2006 Albarry LS L.S No 60 GAK CREEK 1 329 NA 0.265 1 0.2577 1.03 1 1 1 1 1 1 1 2 4 1 1 1 0 5 1 1 1 1 1 1 1 1 2 4 1 1 1 0 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RTU-RTU-001	RTU Data Radio	10/19/2006	Albany WTS	PS NORTH ALBANY	1	327	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
LS06-RAN-002M MOTOR 10/23/2006 Albany LS LS No 80 OAK CREEK 1 330 NA 0.265 1 0.2577 1.03 1 1 1 1 1 1 1 1 2 4 1 10 5 1 1 1 1 1 1 1 1 1	RTU-RTU-002	RTU SCADA Pack	10/24/2006	Albany WTS	PS NORTH ALBANY	1	328	NA	0.269	1.3333	0.1959	1.03	1	1	1	4	1	4	1 2	2	1	2	1 1	1
LS16-RADIO-001 RTU RADIO 10/28/2006 Albany LS LS No 16 TRUAX CREEK 1 331 NA 0.286 1.1667 0.2165 1.048 1 1 1 4 1 1 2 4 1 1 2 1 4 1 2 1 4 4 1 1 2 1 4 1 1 2 1 4 4 1 1 2 1 1 4 1 1 1 2 4 1 1 2 1 1 4 1 1 1 2 4 1 1 2 1 1 4 1 1 1 2 4 1 1 2 1 1 4 1 1 1 2 4 1 1 2 1 1 4 1 1 1 2 1 1 1 1	LS06-FAN-001M	MOTOR - 1 PHASE	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	329	NA	0.265	1	0.2577	1.03	1	1	1	1	1	1	2	4	1	10	1 1	1
LS16-RTI-001 REMOTE TERMINAL UNIT 10/26/2006 Albany WTS WTP1-04 H-PRESSURE PUMP STN 1 332 NA 0.265 1.1667 0.2165 1.048 1 1 1 1 4 1 1 1 2 4 1 1 2 1 4 1 1 1 2 1 4 1 1 1 2 4 1 1 1 2 1 4 1 1 1 1	LS06-FAN-002M	MOTOR	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	330	NA	0.265	1	0.2577	1.03	1	1	1	1	1	1	2	4	1	10	1 1	1
PMP-VLV-002 Pump No 11 City Valve 10/19/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 333 NA 0.262 1.3333 0.1907 1.03 1 1 1 1 1 1 1 7 2 2 2 1 1 1 1 1 1 1 1 1	LS16-RADIO-001	RTU RADIO	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1		NA	0.265	1.1667	0.2165	1.048	1	1	1	4	1	1	2	4	1	2	1 4	1
PMP-VLV-073 Distribution System Isolation Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 334 NA 0.262 1.3333 0.1907 1.03 1 1 1 1 1 7 2 2 1 1 1 1 1 1 1 1	LS16-RTU-001	REMOTE TERMINAL UNIT	10/26/2006	Albany LS	LS No 16 TRUAX CREEK	1	332	NA	0.265	1.1667	0.2165	1.048	1	1	1	4	1	1	2	4	1	2	1 4	1
PMP-VLV-017 Pump No 41 Clay Valve 10/20/2006 Albary WTS PSR 34TH AVE 1 335 NA 0.262 1.3333 0.1907 1.03 1 1 1 1 1 1 7 2 2 2 1 1 1 1 1 1 5 2 4 1 1 2 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	PMP-VLV-002	Pump No 11 Clay Valve	10/19/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	333	NA	0.262	1.3333	0.1907	1.03	1	1	1	1	1	7	2	2	1	1	1 1	1
FAN-FAN-002 MCC Colling Fan	PMP-VLV-033	Distribution System Isolation Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	334	NA	0.262	1.3333	0.1907	1.03	1	1	1	1	1	7	2	2	1	1 '	1 1	1
LS03-RTU-001 REMOTE TERMINAL UNIT 10/24/2006 Albany LS LS No 03 MAPLE STREET 1 337 NA 0.26 1.1667 0.2165 1.03 1 1 1 4 1 1 2 4 1 2 1 1 1 1 1 1 1 1 1 1	PMP-VLV-017	Pump No 41 Clay Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	335	NA	0.262	1.3333	0.1907	1.03	1	1	1	1	1	7	2	2	1	1 '	1 1	1
LS20-VLV-001 Pump No 1 Suction Valve 10/30/2006 Albany LS LS No 20 COLUMBUS STREET 1 338 NA 0.255 1.5 0.1649 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FAN-FAN-002	MCC Colling Fan	10/19/2006	Albany WTS	PS NORTH ALBANY	1	336	NA	0.26	1.1667	0.2165	1.03	1	1	1	1	1	4	1 2	4	1	2	1 1	1
LS20-RADIO-001 RTU RADIO 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 339 NA 0.254 1.1667 0.2113 1.03 1 1 1 4 1 1 1 2 4 1 1 1 1 1 1 1 1 1 1 1	LS03-RTU-001	REMOTE TERMINAL UNIT	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	337	NA	0.26	1.1667	0.2165	1.03	1	1	1	4	1	1	2	4	1	2	1 1	1
LS18-RADIO-001 RTU RADIO 10/26/2006 Albany LS LS No 18 MILLERSBURG 1 340 NA 0.254 1.1667 0.2113 1.03 1 1 1 4 4 1 1 2 4 1 1 1 1 1 1 1 1 1 1 1	LS20-VLV-001	Pump No 1 Suction Valve	10/30/2006	Albany LS	LS No 20 COLUMBUS STREET	1	338	NA	0.255	1.5	0.1649	1.03	1	1	1	1	1	10) 1	4	1	7	1 1	1
LS18-RTU-001 REMOTE TERMINAL UNIT 10/26/2006 Albany LS LS No 18 MILLERSBURG 1 341 NA 0.254 1.1667 0.2113 1.03 1 1 1 4 1 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1	LS20-RADIO-001	RTU RADIO	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1		NA		1.1667				1	1	4	1	1	2	4	1	1	1 1	1
LS16-MTR-001 METERING DEVICE 10/26/2006 Albany LS LS No 16 TRUAX CREEK 1 342 NA 0.244 1 0.2371 1.03 1 1 1 1 1 1 1 1 1 2 4 2 4 1 1 1 1 LS18-HTR-001 HEATER 10/26/2006 Albany LS LS No 18 MILLERSBURG 1 343 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 1 2 4 1 1 1 1 1 1 1 1			10/26/2006	Albany LS	LS No 18 MILLERSBURG	1		NA		1.1667				1	1	4	1	1	2	4	1	1	1 1	1
LS18-HTR-001 HEATER 10/26/2006 Albany LS LS No 18 MILLERSBURG 1 343 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 2 4 1 4 1 1 1 LS12-HTR-001 HEATER 10/26/2006 Albany LS LS No 12 WAH CHANG 1 344 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 1 2 4 1 4 1 1 1 LS12-HTR-001 DEHUMIDIFIER 10/26/2006 Albany LS LS No 12 WAH CHANG 1 345 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	341	NA	0.254	1.1667				1	1	4	1	1	2	4	1	1	1 1	1
LS 10/26/2006 Albany LS LS No 12 WAH CHANG 1 344 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 2 4 1 4 1 1 1 LS 12 4 1 1 4 1 1 LS 12 4 1 1 LS 12 LS		METERING DEVICE		Albany LS		1		NA		1				1	1	1	1	1	2	4	2	4	1 1	1
LS12-DEH-001 DEHUMIDIFIER 10/26/2006 Albany LS LS No 12 WAH CHANG 1 345 NA 0.234 1 0.2268 1.03 1 1 1 1 1 1 1 1 1 1 2 4 1 4 1 1 1 LS11-VLV-001 Pump No 1 Check Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 346 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 1 1 1 1 1 1 7 1 4 1 7 1 1 1 1			10/26/2006	Albany LS		1		NA		1				1	1	1	1	1	2	4	1	4	1 1	1
LS11-VLV-001 Pump No 1 Check Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 346 NA 0.227 1.333 0.1649 1.03 1 1 1 1 1 1 7 1 4 1 7 1 1 1 1 1 1 1 1 7 1 4 1 7 1 1 1 1	LS12-HTR-001			Albany LS		1				1				1	1	1	1	1	2	4	1	4	1 1	1
LS11-VLV-002 Pump No 1 Discharge Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 347 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 1 1 7 1 4 1 7 1 1 1 1 1 1 1 1	LS12-DEH-001	DEHUMIDIFIER	10/26/2006	Albany LS	LS No 12 WAH CHANG	1				1	0.2268			1	1	1	1	1	2	4	1	4	1 1	1
LS11-VLV-003 Pump No 2 Check Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 348 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 7 1 4 1 7 1 1 1 LS11-VLV-004 Pump No 2 Discharge Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 349 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 7 1 4 1 7 1 1 1 LS10-VLV-001 Pump No 1 Discharge valve 10/17/2006 Albany LS LS No 10 OAK STREET 1 350 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 1 7 1 4 1 7 1 1 1 7 1 4 1 7 1 1 7 1 4 1 7 1 1<	LS11-VLV-001	Pump No 1 Check Valve	10/26/2006	Albany LS	LS No 11 LAWNDALE	1		NA			0.1649			1	1	1	1	7	1	4	1	7	1 1	1
LS11-VLV-004 Pump No 2 Discharge Valve 10/26/2006 Albany LS LS No 11 LAWNDALE 1 349 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 1 7 1 4 1 7 1 1 1 1 1 7 1 4 1 7 1 1 1 1	LS11-VLV-002	Pump No 1 Discharge Valve	10/26/2006	Albany LS	LS No 11 LAWNDALE	1		NA						1	1	1	1	7	1	4	1	7	1 1	1
LS10-VLV-001 Pump No 1 Discharge valve 10/17/2006 Albany LS LS No 10 OAK STREET 1 350 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 1 7 1 4 1 7 1 1 1	LS11-VLV-003	Pump No 2 Check Valve	10/26/2006	Albany LS	LS No 11 LAWNDALE	1								1	1	1	1	7	1	4	1	7	1 1	1
		·	10/26/2006	Albany LS							0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1 1	1
LS10-VLV-002 Pump No 1 Check Valve 10/17/2006 Albany LS LS No 10 OAK STREET 1 351 NA 0.227 1.3333 0.1649 1.03 1 1 1 1 7 1 4 1 7 1 1 7 1 1 7 1 1	LS10-VLV-001	Pump No 1 Discharge valve	10/17/2006	Albany LS				NA						1	1	1	1	7	1	4	1	7	1 1	1
	LS10-VLV-002	Pump No 1 Check Valve	10/17/2006	Albany LS	LS No 10 OAK STREET	1	351	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1 1	1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	Reliability	Sedt	Capacity and Utilization Obsolesence	Annual Maintenance Cost
LS10-VLV-003	Pump No 2 Discharge Valve	10/17/2006	Albany LS	LS No 10 OAK STREET	1	352	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS10-VLV-004	Pump No 2 Check Valve	10/17/2006	Albany LS	LS No 10 OAK STREET	1	353	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS12-VLV-001	Pump No 1 Discharge Valve	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	354	NA	0.227	1.3333	0.1649	1.03	1	1	1	4	1	4	1	4	1	7	1	1 1
LS12-VLV-002	Pump No 1 Check Valve	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	355	NA	0.227	1.3333	0.1649	1.03	1	1	1	4	1	4	1	4	1	7	1	1 1
LS12-VLV-003	Pump No 2 Discharge Valve	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	356	NA	0.227	1.3333	0.1649	1.03	1	1	1	4	1	4	1	4	1	7	1	1 1
LS12-VLV-004	Pump No 2 Check Valve	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	357	NA	0.227	1.3333	0.1649	1.03	1	1	1	4	1	4	1	4	1	7	1	1 1
LS13-VLV-001	Pump No 1 Discharge Valve	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	358	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS13-VLV-002	Pump No1 Check Valve	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	359	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS15-VLV-001	Pump No 1 Discharge Valve	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	360	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS15-VLV-002	Pump No 1 Check Valve	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	361	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS15-VLV-003	Pump No 2 Discharge Valve	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	362	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS15-VLV-004	Pump No 2 Check Valve	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	363	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS14-VLV-001	Pump No 1 Discharge Valve	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	364	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS14-VLV-002	Pump No 1 Check Valve	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	365	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS14-VLV-003	Pump No 2 Discharge Valve	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	366	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS14-VLV-004	Pump No 2 Check Valve	10/30/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	367	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS13-VLV-004	Pump No 2 Check Valve	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	368	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-ACT-001	ACTUATOR	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	369	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS18-VLV-001	Added Pump No 1 Check Valve	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	370	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS18-VLV-002	Added Pump no 1 Discharge Valve	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	371	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS18-VLV-003	Added Pump No 2 Check Valve	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	372	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS18-VLV-004	Added Pump No 2 Discharge Valve	10/26/2006	Albany LS	LS No 18 MILLERSBURG	1	373	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-001	Pump No 1 Check Valve	10/18/2006	Albany LS	LS No 03 MAPLE STREET	1	374	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-002	Pump No 1 Discharge Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	375	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-003	Pump No 1 Air Release Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	376	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-004	Pump No 2 Check Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	377	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-005	Pump No 2 Discharge Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	378	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-006	Pump No 2 Air Release Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	379	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-007	Pump No 3 Check Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	380	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-008	Pump No 3 Discharge Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	381	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-009	Pump No 3 Air Release Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	382	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-010	Pump No 4 Check Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	383	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-011	Pump No 4 Discharge Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	384	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS03-VLV-012	Pump No 4 Air Release Valve	10/26/2006	Albany LS	LS No 03 MAPLE STREET	1	385	NA	0.227	1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7	1	1 1
LS07-VLV-001	Pump No 1 Discharge Valve	10/31/2006	Albany LS	LS No 07 COLLEGE GREEN	1	386	NA	0.227	1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7	1	1 1
LS07-VLV-002	Pump No 1 Check Valve	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	387	NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7	1	1 1
LS07-VLV-003	Pump No 1 Suction Valve	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	388	NA		1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1
LS07-VLV-004	Pump No 2 Discharge Valve	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	389	NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7	1	1 1
LS07-VLV-005	Pump N0 2 Check Valve	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	390	NA	0.227	1.3333	0.1649	1.03	1	1	1	1	1	7	1	4	1	7	1	1 1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	onsequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	o Community/P	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	> 1 C	Figure 4 Redundancy Capacity and Utilization	nce	Annual Maintenance Cost
	'	10/18/2006			0				4 2222	0.1649			0	S)	ш 2		₹ Ø	0	Ш	1 0		101	◀ 1
	Pump No 1 Chock Volvo	10/16/2006	Albany LS	LS No 07 COLLEGE GREEN	1	391 392	NA	0.227	1.3333 1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS09-VLV-001 LS09-VLV-002	Pump No 1 Check Valve Pump No 1 Discharge Valve	10/26/2006	Albany LS	LS No 09 MARION STREET LS No 09 MARION STREET	1	393	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 /	1 1	
	Pump No 2 Check Valve	10/26/2006	Albany LS Albany LS	LS No 09 MARION STREET	1	394	NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
			· · · · · · · · · · · · · · · · · · ·	LS No 09 MARION STREET	1	395			1.3333		1.03		1	1	1	1	7	1	4	1	7 /	1 1	
	Pump No 2 Discharge Valve	10/26/2006	Albany LS		1		NA			0.1649			1	1	1	1	7	1	4	1	7	+++	
LS08-VLV-005	Pump No 1 Suction Valve	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	396	NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 7	+++	
	Pump No 1 Disphares Valve	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	397 398	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
	Pump No 1 Discharge Valve	10/31/2006 10/24/2006	Albany LS	LS No 08 34TH AVENUE		398	NA NA		1.3333	0.1649 0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
	Pump No 1 Check Valve	10/24/2006	Albany LS	LS No 08 34TH AVENUE	1	400			1.3333 1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
	Pump No 2 Discharge Valve		Albany LS	LS No 08 34TH AVENUE LS No 20 COLUMBUS STREET	1		NA		1.3333				1	1	1	1	7	1	4	1	7 1	1 1	
LS20-VLV-002	Pump No 1 Check Valve	10/30/2006	Albany LS	LS No 20 COLUMBUS STREET	1	401 402	NA NA		1.3333	0.1649	1.03 1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS20-VLV-003	Pump No 1 Discharge Valve	10/30/2006	Albany LS		1	402	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS20-VLV-004	Pump No 2 Suction Valve	10/30/2006	Albany LS	LS No 20 COLUMBUS STREET	1	_				0.1649			1	1	1	1	7	1	4	1	7 1	1 1	
LS20-VLV-005	Pump No 2 Check Valve	10/30/2006 10/30/2006	Albany LS	LS No 20 COLUMBUS STREET	1	404 405	NA NA		1.3333 1.3333	0.1649 0.1649	1.03 1.03		1	1	1	1	7	1	4	1	7 1	+++	
LS20-VLV-006 LS19-VLV-001	Pump No 1 Discharge Valve	10/30/2006	Albany LS Albany LS	LS No 20 COLUMBUS STREET LS No 19 NORTH ALBANY	1	406	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS19-VLV-001	Pump No 1 Discharge Valve Pump No 1 Check Valve	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	407	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS19-VLV-002	Pump No 2 Check Valve	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	407	NA NA		1.3333	0.1649	1.03		1	1	1	1	7	1	4	1	7 1	1 1	
LS20-FAN-003	FAN	10/19/2006	Albany LS	LS No 20 COLUMBUS STREET	1	409	NA NA		1.3333	0.1649	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS20-PAN-003 LS20-RTU-001	REMOTE TERMINAL UNIT	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	410	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS08-DEH-001	DEHUMIDIFIER	10/23/2006	Albany LS	LS No 08 34TH AVENUE	1	411	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS08-FAN-001	FAN	10/24/2006	-	LS No 08 34TH AVENUE	1	412	NA NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	_
LS09-FIL-001	FILTER	10/24/2006	Albany LS	LS No 09 MARION STREET	1	413			1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	_
	FILTER	10/25/2006	Albany LS Albany LS	LS No 09 MARION STREET	1	414		0.218	1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	+++	
LS07-FIL-001	FILTER	10/23/2006	Albany LS	LS No 07 COLLEGE GREEN	1	415		0.218	1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS07-FIL-001	FILTER	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	416		0.218	1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	╁┼	
LS06-FIL-002	FILTER	10/16/2006	Albany LS	LS No 07 COLLEGE GREEN	1	417	NA NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	╁┼	
LS06-FIL-001	FILTER	10/24/2006	Albany LS	LS No 06 OAK CREEK	1	418	NA NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	╁┼┼	
LS14-FIL-001	FILTER	10/24/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	419	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	╁┼┼	-
LS14-FIL-002	FILTER	10/18/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	420	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS15-DEH-001	DEHUMIDIFIER	10/16/2006	Albany LS	LS No 15 BURKHART CREEK	1	421	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	-
LS15-FIL-001	FILTER	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	422	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	
LS15-FIL-002	FILTER	10/24/2006	Albany LS	LS No 15 BURKHART CREEK		423	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	-
LS16-FIL-001	FILTER	10/24/2006	Albany LS	LS No 16 TRUAX CREEK		424	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	-
LS19-FIL-001	FILTER	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	425	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	-
LS19-FIL-002	FILTER	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	426	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	╅	1
LS19-DEH-001	DEHUMIDIFIER	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	427	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	-
LS19-DEH-002	DEHUMIDIFIER	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	428	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	1
LS13-DEH-001	DEHUMIDIFIER	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	429	NA		1	0.2113	1.03		1	1	1	1	1	2	4	1	1 1	1 1	1
LO 10 DE11 001	DELIGNIDII IER	10/11/2000	Albany Lo	LO NO 13 OLIVIORI DR	<u>'</u>	723	11/7	0.210	ı,	0.2110	1.03	1	_ '	_ '	<u>'</u>	ı ı	ı,	۷	7	'	']	لنـــــــــــــــــــــــــــــــــــــ	

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	Reliability	Sedu	Capacity and Utilization Obsolesence	Annual Maintenance Cost
LS11-DEH-001	DEHUMIDIFIER	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	430	NA	0.218	1	0.2113	1.03		1	1	1	1	1	2	4	1	1	1	1 1
LS11-FIL-002	FILTER	10/25/2006	Albany LS	LS No 11 LAWNDALE	1	431	NA	0.218	1	0.2113	1.03	1	1	1	1	1	1	2	4	1	1	1	1 1
LS07-RADIO-001	RTU RADIO	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	432	NA	0.208	1.1667	0.1701	1.048	1	1	1	4	1	1	1	4	4	2	1	4 1
LS07-RTU-001	REMOTE TERMINAL UNIT	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	433	NA	0.208	1.1667	0.1701	1.048	1	1	1	4	1	1	1	4	4	2	1	4 1
LS05-VLV-001	Pump No 1 Discharge Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	434	NA	0.198	1.1667	0.1649	1.03	1	1	1	1	1	4	1	4	1	7	1	1 1
LS05-VLV-002	Pump No 1 Check Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	435	NA	0.198	1.1667	0.1649	1.03	1	1	1	1	1	4	1	4	1	7	1	1 1
LS05-VLV-003	Pump No 1 Suction Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	436	NA	0.198	1.1667	0.1649	1.03	1	1	1	1	1	4	1	4	1	7	1	1 1
LS05-VLV-004	Pump No 2 Discharge Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	437	NA	0.198	1.1667	0.1649	1.03		1	1	1	1	4	1	4	1	7	1	1 1
LS05-VLV-005	Pump No 2 Check Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	438	NA	0.198	1.1667	0.1649	1.03		1	1	1	1	4	1	4	1	7	1	1 1
LS05-VLV-006	Pump No 2 Suction Valve	10/18/2006	Albany LS	LS No 05 UMATILLA	1	439	NA	0.198	1.1667	0.1649	1.03		1	1	1	1	4	1	4	1	7	1	1 1
LS03-CRANE-001	FLOOR CRANE	10/24/2006	Albany LS	LS No 03 MAPLE STREET	1	440	NA	0.198	1.1667	0.1649	1.03		1	1	4	1	1	1	4	1	7	1	1 1
LS06-FAN-002	FAN	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	441	NA	0.186	1.1007	0.1804	1.03		1	1	1	1	1	1	4	1	10	1	1 1
LS06-FAN-001	FAN	10/23/2006	Albany LS	LS No 06 OAK CREEK	1	442	NA	0.186	1	0.1804	1.03		1	1	1	1	1	1	4	1	10	1	1 1
PMP-VLV-010	Pump No 14 Suction Valave	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	443	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1	1	1	1 1
PMP-VLV-011	Pump No 14 Clay Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	444	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1	1	1	1 1
PMP-VLV-012	Pump No 14 Discharge Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	445	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1	1	1	1 1
PMP-VLV-013	Pump No 15 Suction Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	446	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1	1	1	1 1
PMP-VLV-014	Pump No 15 Discharge Valve Actuated	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	447	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1			1 1
PMP-VLV-015	Pump No 15 Check Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	448	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1			1 1
PMP-VLV-030	Pump No 22 Clay Valve	10/31/2006	Albany WTS	PSR QUEEN AVE	1	449	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1	-+		1 1
PMP-VLV-008	Pump No 13 Clay Valve	10/20/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	450	NA	0.175	1.5	0.1134	1.03		1	1	1	1	10	1	2	1			1 1
LS03-HOIST-001	HOIST	10/31/2006	Albany LS	LS No 03 MAPLE STREET	1	451	NA	0.173	1.0	0.1649	1.03		1	- '	1	1	10	1	1	- '	-		1 1
FAN-FAN-001	Building Fan	10/19/2006	Albany WTS	PS NORTH ALBANY	1	452	NA	0.17	1.1667	0.1392	1.03		1	1	1	1	1	1	4	1	-		1 1
LS16-MIL-001	SENSOR UNIT	10/19/2006	Albany LS	LS No 16 TRUAX CREEK	1	453	NA	0.165	1.1007	0.1592	1.03		1	1	1	1	1	1	4	2	-		1 1
CTRL-ALARM-GH	ALARM SYSTEM	10/20/2006	Albany WTS	PS GIBSON HILL	1	454	NA	0.163	1.3333	0.1396	1.03		1	1	1	1	1	1	2	1	-7		1 1
VAL-PMP-52B	VALVE	10/12/2006	Albany WTS	PS NORTH ALBANY	1	455	NA	0.163	1.3333	0.1186	1.03		1	1	1	1	7	1	2	1	2		1 1
LS13-RADIO-001	RTU RADIO	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	456	NA	0.161	1.1667	0.1186	1.03		1	1	1	1	1	1	4	1	- 4		+ +
LS13-RADIO-001	REMOTE TERMINAL UNIT				1	456	NA NA				1.03		1	1	4	1	1	1	4	- 1	-+		1 1
		10/17/2006	Albany LS	LS No 13 CENTURY DR	1	 	NA NA	0.161	1.1667	0.134	1.03		1	- '	4	1	7	- '	4	- 1			+ +
VAL-PMP-61	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	458		0.156	1.3333	0.1134			1	1	1	1	7	1	2	1	-1		1 1
VAL-PMP-61A	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	459	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1	-1 	$\frac{1}{4}$	1 1
VAL-PMP-61B	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	460	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	/	1	2	1	1	1	1 1
VAL-PMP-62	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	461	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1	1	1	1 1
VAL-PMP-62A	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	462	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1		1	1 1
VAL-PMP-62B	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	463	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1		1	1 1
VAL-VAL-001	Pressure Relief Valve (Clay Valve)	10/19/2006	Albany WTS	PS NORTH ALBANY	1	464	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1	1	1	1 1
VAL-PMP-51A	VALVE	10/19/2006	Albany WTS	PS NORTH ALBANY	1	465	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1		_1 _	1 1
VAL-PMP-51B	VALVE	10/19/2006	Albany WTS	PS NORTH ALBANY	1	466	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1		1	1 1
VAL-PMP-52A	VALVE	10/19/2006	Albany WTS	PS NORTH ALBANY	1	467	NA	0.156	1.3333	0.1134	1.03		1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-009	Pump No 13 Discharge Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	468	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name Description Date System Location Date System Sy																								
PMP-VLV-010 Pump No.1 Suction Value 10012000 Albamy VTS VMP-10H-PMESSURE PUMP STN 1 49 N. 0.156 1.3333 0.1134 1.00 1 1 1 1 1 1 1 7 1 1 2 1 1 1 1 1 7 1 1 2 1 1 1 1 1 7 1 1 2 1 1 1 1 1 7 1 1 2 1 1 1 1 1 7 1 1 2 1 1 1 1 1 1 1 1 7 1 1 2 1 1 1 1 1 1 7 1 1 2 1 1 1 1 1 1 7 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Asset Name	Description	Date	System	Location	Category	Rank	ш	Total Score	sednence Scor	Ø	S	and Safety of blic	e with		Impact rivate	ıtion to Community/P	to Return Asset	Assessment	Operating Proto	Reliability	Sedt.	and	Annual Maintenance Cost
PMP-VLV-004 Pump Not 2 Suction Valve	PMP-VLV-001	Pump No 11 Suction Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	469	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-015	PMP-VLV-003	Pump No 11 Discharge Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	470	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-031	PMP-VLV-004	Pump No 12 Suction Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	471	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-032 Reservior Isolation Valve	PMP-VLV-005	Pump No 12 Discharge Valve Actuated	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	472	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-016 Pump No 41 Suction Valve	PMP-VLV-031	Pump No 22 Discharge Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	473	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-018 Pump No 41 Discharge Valve	PMP-VLV-032	Reservior Isolation Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	474	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-019 Pump No 42 Suction Valve	PMP-VLV-016	Pump No 41 Suction Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	475	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-021 Pump No 42 Discharge Valve 10/20/2006 Albarry WTS PSR 34TH AVE 1 478 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1	PMP-VLV-018	Pump No 41 Discharge Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	476	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-022 Pump No 43 Suction Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 479 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-024 Pump No 43 Discharge Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 480 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-024 Pump No 43 Discharge Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 481 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-025 PSR 34th Ave Altitude Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 482 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-026 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 483 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-027 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-027 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-027 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 PMP-VLV-027 Pump No 13 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 PMP-VLV-029 Pump No 13 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 PMP-VLV-029 Pump No 13 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 1	PMP-VLV-019	Pump No 42 Suction Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	477	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-023	PMP-VLV-021	Pump No 42 Discharge Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	478	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-024 Pump No 43 Discharge Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 481 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-025 PSR 34TH AVE 10/20/2006 Albany WTS PSR 34TH AVE 1 482 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-026 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 483 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-027 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-027 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/20/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/20/2006 Albany US WTP1-04 HI-PRESSURE PUMP STN 1 488 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-022	Pump No 43 Suction Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	479	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-025 PSR 34th Ave Altitude Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 482 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-026 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 483 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-027 Pump No 21 Cloy Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-028 Pump No 21 Discharge Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 23 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 13 Suction Valve 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 1 7 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 488 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-023	Pump No 43 Clay valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	480	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-026 Pump No 21 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 483 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 1	PMP-VLV-024	Pump No 43 Discharge Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	481	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-027 Pump No 21 Clay Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 484 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-028 Pump No 21 Discharge Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 7 1 1 2 1 1 1 PMP-VLV-029 Pump No 21 Discharge Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/21/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/25/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 1 7 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 488 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-HTR-001 HEATER 10/25/2006 Albany LS LS No 12 WAH CHANG 1 490 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 490 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 490 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 490 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 491 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 492 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-025	PSR 34th Ave Altitude Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	482	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-028 Pump No 21 Discharge Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 485 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 7 1 2 1 1 1 PMP-VLV-007 Pump No 13 Suction Valve 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 1 7 7 1 2 1 1 1 1 1 1 1 1 1	PMP-VLV-026	Pump No 21 Suction Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	483	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP-VLV-029 Pump No 22 Suction Valve 10/20/2006 Albany WTS PSR QUEEN AVE 1 486 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 PMP VLV-007 Pump No 13 Suction Valve 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 LS20-HTR-001 HEATER 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 488 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-027	Pump No 21 Clay Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	484	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
PMP VLV-007 Pump No 13 Suction Valve 10/31/2006 Albany WTS WTP1-04 HI-PRESSURE PUMP STN 1 487 NA 0.156 1.3333 0.1134 1.03 1 1 1 1 1 1 7 1 2 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-028	Pump No 21 Discharge Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	485	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
LS20-HTR-001 HEATER 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 488 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PMP-VLV-029	Pump No 22 Suction Valve	10/20/2006	Albany WTS	PSR QUEEN AVE	1	486	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
LS13-HTR-001 HEATER 10/17/2006 Albany LS LS No 13 CENTURY DR 1 489 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 4 1	PMP VLV-007	Pump No 13 Suction Valve	10/31/2006	Albany WTS	WTP1-04 HI-PRESSURE PUMP STN	1	487	NA	0.156	1.3333	0.1134	1.03	1	1	1	1	1	7	1	2	1	1	1	1 1
LS12-SENSOR-001 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 490 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 4 1	LS20-HTR-001	HEATER	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	488	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
LS12-SENSOR-002 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 491 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 LS12-MIL-001 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 492 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 4	LS13-HTR-001	HEATER	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	489	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
LS12-MIL-001 SENSOR UNIT 10/26/2006 Albany LS LS No 12 WAH CHANG 1 492 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 LS12-MTR-001 METERING DEVICE 10/26/2006 Albany LS LS No 12 WAH CHANG 1 493 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 4 LS15-FAN-001 FAN 10/24/2006 Albany LS LS No 15 BURKHART CREEK 1 494 NA 0.149 1 0.1443 1.03 1 1 1 1 1 1 1 1 1 1 1 1 4 1 4 2 1 LS12-FAN-001 FAN 10/26/2006 Albany LS LS No 12 WAH CHANG 1 495 NA 0.143 1 0.1392 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS12-SENSOR-001	SENSOR UNIT	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	490	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
LS12-MTR-001 METERING DEVICE 10/26/2006 Albany LS LS No 12 WAH CHANG 1 493 NA 0.154 1 0.1495 1.03 1 1 1 1 1 1 1 1 1 1 4 1 4 1 4 1 4 1	LS12-SENSOR-002	SENSOR UNIT	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	491	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
LS15-FAN-001 FAN 10/24/2006 Albany LS LS No 15 BURKHART CREEK 1 494 NA 0.149 1 0.1443 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS12-MIL-001	SENSOR UNIT	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	492	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
LS12-FAN-001 FAN 10/26/2006 Albany LS LS No 12 WAH CHANG 1 495 NA 0.143 1 0.1392 1.03 1 <td>LS12-MTR-001</td> <td>METERING DEVICE</td> <td>10/26/2006</td> <td>Albany LS</td> <td>LS No 12 WAH CHANG</td> <td>1</td> <td>493</td> <td>NA</td> <td>0.154</td> <td>1</td> <td>0.1495</td> <td>1.03</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>4</td> <td>1</td> <td>4</td> <td>1</td> <td>1 1</td>	LS12-MTR-001	METERING DEVICE	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	493	NA	0.154	1	0.1495	1.03	1	1	1	1	1	1	1	4	1	4	1	1 1
HTR-HTR-001 Unit Heater 10/24/2006 Albany WTS PS NORTH ALBANY 1 496 NA 0.143 1 0.1392 1.03 1 <th< td=""><td>LS15-FAN-001</td><td>FAN</td><td>10/24/2006</td><td>Albany LS</td><td>LS No 15 BURKHART CREEK</td><td>1</td><td>494</td><td>NA</td><td>0.149</td><td>1</td><td>0.1443</td><td>1.03</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>4</td><td>2</td><td>1</td><td>1</td><td>1 1</td></th<>	LS15-FAN-001	FAN	10/24/2006	Albany LS	LS No 15 BURKHART CREEK	1	494	NA	0.149	1	0.1443	1.03	1	1	1	1	1	1	1	4	2	1	1	1 1
VAL-PRES-63 VALVE 10/19/2006 Albany WTS PS GIBSON HILL 1 497 NA 0.143 1.1667 0.1186 1.03 1 1 1 1 4 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	LS12-FAN-001	FAN	10/26/2006	Albany LS	LS No 12 WAH CHANG	1	495	NA	0.143	1	0.1392	1.03	1	1	1	1	1	1	1	4	1	2	1	1 1
PMP-VLV-020 Pump No 42 Clay Valve 10/20/2006 Albany WTS PSR 34TH AVE 1 498 NA 0.142 1.3333 0.1031 1.03 1 1 1 1 1 7 1 1 1 1 1	HTR-HTR-001	Unit Heater	10/24/2006	Albany WTS	PS NORTH ALBANY	1	496	NA	0.143	1	0.1392	1.03	1	1	1	1	1	1	1	4	1	2	1	1 1
	VAL-PRES-63	VALVE	10/19/2006	Albany WTS	PS GIBSON HILL	1	497	NA	0.143	1.1667	0.1186	1.03	1	1	1	1	1	4	1	2	1	2	1	1 1
LOOD DELLOOK DELLOWED AND LOOK DO LOOK	PMP-VLV-020	Pump No 42 Clay Valve	10/20/2006	Albany WTS	PSR 34TH AVE	1	498	NA	0.142	1.3333	0.1031	1.03	1	1	1	1	1	7	1	1	1	1	1	1 1
10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 499 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1	LS20-DEH-001	DEHUMIDIFIER	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	499	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS20-FAN-001 FAN 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 500 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 4 1 1	LS20-FAN-001	FAN	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	500	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS20-FAN-002 FAN 10/25/2006 Albany LS LS No 20 COLUMBUS STREET 1 501 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 4 1 1	LS20-FAN-002	FAN	10/25/2006	Albany LS	LS No 20 COLUMBUS STREET	1	501	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS05-FAN-001 FAN 10/18/2006 Albany LS LS No 05 UMATILLA 1 502 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 4 1 1	LS05-FAN-001	FAN	10/18/2006	Albany LS	LS No 05 UMATILLA	1	502	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS07-DEH-001 DEHUMIDIFIER 10/18/2006 Albany LS LS No 07 COLLEGE GREEN 1 503 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS07-DEH-001	DEHUMIDIFIER	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	503	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS07-FAN-001 FAN 10/18/2006 Albany LS LS No 07 COLLEGE GREEN 1 504 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 4 1 1	LS07-FAN-001	FAN	10/18/2006	Albany LS	LS No 07 COLLEGE GREEN	1	504	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS07-FAN-001S FAN 10/18/2006 Albany LS LS No 07 COLLEGE GREEN 1 505 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1	LS07-FAN-001S	FAN	10/18/2006	Albany LS			505	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS09-DEH-001 DEHUMIDIFIER 10/25/2006 Albany LS LS No 09 MARION STREET 1 506 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	LS09-DEH-001	DEHUMIDIFIER	10/25/2006	Albany LS	LS No 09 MARION STREET	1	506	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS13-FAN-001 FAN 10/17/2006 Albany LS LS No 13 CENTURY DR 1 507 NA 0.138 1 0.134 1.03 1 1 1 1 1 1 1 1 1 1 1 1	LS13-FAN-001	FAN	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	507	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1

Appendix B

Condition, Impact, Likelihood, Trigger Assessment Results

Asset Name	Description	Date	System	Location	Category	Rank	Life Expectancy	Total Score	Consequence Score	Likelihood Score	Trigger Score	Health and Safety of Employees and Public	Compliance with Regulations	Service Reliability	Financial Impact (repair / replace, private property)	Disruption to Community/Public Image	Availability to Return Asset to Service	Condition Assessment Overall	Effective Operating Protocols	Reliability	Planned Redundancy	Capacity and Utilization Obsolesence	Maj
LS13-FAN-001S	FAN	10/17/2006	Albany LS	LS No 13 CENTURY DR	1	508	NA	0.138	1	0.134	1.03		1	1	1	1	1	1	4	1	1	1	1 1
LS14-HTR-001	HEATER	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	509	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS14-DEH-001	DEHUMIDIFIER	10/17/2006	Albany LS	LS No 14 CHARLOTTE STREET	1	510	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
LS19-FAN-001	FAN	10/19/2006	Albany LS	LS No 19 NORTH ALBANY	1	511	NA	0.138	1	0.134	1.03	1	1	1	1	1	1	1	4	1	1	1	1 1
INT-FLW-001	Flow Meter	10/19/2006	Albany WTS	PS NORTH ALBANY	1	512	NA	0.122	1	0.1186	1.03	1	1	1	1	1	1	1	2	1	2	1	1 1

APPENDIX C

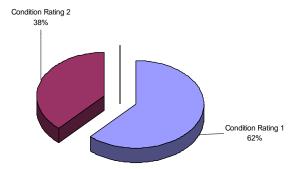
Field Data

This appendix presents the field data compiled on the City of Albany's water pump stations and sewer lift stations (listed below in order of appearance).

- PS 34th Avenue
- PS Gibson Hill
- PS High Pressure
- PS North Albany
- PS Queen Avenue
- LS 3 Maple Street
- LS 4 Queen Avenue
- LS 5 Umatilla
- LS 6 Oak Street
- LS 7 College Green
- LS 8 34th Avenue
- LS 9 Marion Street
- LS 10 14th and Oak
- LS 11 Lawndale
- LS 12 Wah Chang
- LS 13 Century Drive
- LS 14 Charlotte
- LS 15 Burkhart Creek
- LS 16 Truax Creek
- LS 18 Millersburg
- LS 19 North Albany
- LS 20 Columbia Street

Station Name:	Water P	ump Statio	on - 34 A	ve									
			IMPAG	CTS				PROB	ABILIT	Υ	TRIGGER		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CONTROL PANEL	4	4	4	4	4	1		7	1	10	1	1	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		7	10	10	1	10	1
MOTOR	7	1	1	1	10	2		7	1	1	1	1	1
PUMP	7	1	1	1	10	7		7	1	1	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	4	2		2	1	2	1	1	1
STRUCTURE	1	1	1	4	10	10		2	1	10	2	1	1
VALVE	1	1	1	1	7	1		2	1	1	1	1	1

34th Avenue P.S. Summary



Location Roll-U	p Report					
PSR 34TH AVE			Condition	Weighted	Total	Weighted
Asset Name			Score	Condition	Score	Total
	Туре	Weight (%)		Score		Score
CTRL-PMP-41	ELECTRICAL EQUIPMENT	3.8	2	0.08	1.62	0.0623
CTRL-PMP-42	ELECTRICAL EQUIPMENT	3.8	2	0.07	1.433	0.0551
CTRL-PMP-43	ELECTRICAL EQUIPMENT	3.8	2	0.07	1.433	0.0551
PMP-CHP-41	PUMP	3.8	2	0.06	0.689	0.0265
PMP-CHP-42	PUMP	3.8	2	0.06	0.689	0.0265
PMP-CHP-43	PUMP	3.8	2	0.06	0.689	0.0265
PMP-DIS-006	ELECTRICAL EQUIPMENT	3.8	1	0.06	0.966	0.0371
PMP-DIS-007	ELECTRICAL EQUIPMENT	3.8	1	0.06	0.966	0.0371
PMP-DIS-008	ELECTRICAL EQUIPMENT	3.8	1	0.06	0.966	0.0371
PMP-DIS-009	ELECTRICAL EQUIPMENT	3.8	1	0.06	0.437	0.0168
PMP-MTR-41	MOTOR	3.8	1	0.05	0.414	0.0159
PMP-MTR-42	MOTOR	3.8	1	0.05	0.414	0.0159
PMP-MTR-43	MOTOR	3.8	1	0.05	0.437	0.0168
PMP-VLV-016	VALVE	3.8	1	0.04	0.156	0.006
PMP-VLV-017	VALVE	3.8	2	0.08	0.262	0.0101
PMP-VLV-018	VALVE	3.8	1	0.05	0.156	0.006
PMP-VLV-019	VALVE	3.8	1	0.04	0.156	0.006
PMP-VLV-020	VALVE	3.8	1	0.05	0.142	0.0054
PMP-VLV-021	VALVE	3.8	1	0.05	0.156	0.006
PMP-VLV-022	VALVE	3.8	1	0.04	0.156	0.006
PMP-VLV-023	VALVE	3.8	1	0.05	0.156	0.006
PMP-VLV-024	VALVE	3.8	1	0.04	0.156	0.006
PMP-VLV-025	VALVE	3.8	1	0.05	0.156	0.006
PSR 34 Structure	STRUCTURE	3.8	2	0.09	0.623	0.024
RTU-RTU-004	REMOTE TELEMETRY UNIT	3.8	2	0.06	0.269	0.0103
RTU-RTU-005	REMOTE TELEMETRY UNIT	3.8	2	0.06	0.269	0.0103
			Location's		Location's	
			Condition Score	2	Total Score	0.54

Asset ID Asset Description Asset Location

CTRL-PMP-41 Pump No 41 Motor Control Center PSR 34TH AVE

Comments (if applicable)

Older Allis Chalmers starter.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	3	Hour meter only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	3		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

CTRL-PMP-42 Pump No 42 Motor Control Center PSR 34TH AVE

Comments (if applicable)

Allis Chalmers

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	2	Hour meter only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

CTRL-PMP-43 Pump No 43 Motor Control Center PSR 34TH AVE

Comments (if applicable)

Allis Chalmers

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	2	Hour meter only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Grounding	1		
Infrared	3	Some heat on A phase	
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationPMP-CHP-41PUMP No 41PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	3	Pump base has light pitting	
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-CHP-42PUMP No 42PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	3	Pump base has light pitting	
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-CHP-43PUMP No 43PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	3	Outboard bearing loud	
Corrosion	3	Pump base has light pitting	
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-DIS-006 Pump no 41 Disconnect PSR 34TH AVE

Comments (if applicable)

Federal Pacific overhead buss disconnect. Some heat identified on center leg with IR.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	1		
Grounding	1		
Infrared	3	B phase heat on fuse	
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

PMP-DIS-007 Pump No 42 Disconnect PSR 34TH AVE

Comments (if applicable)

Federal Pacific overhead buss disconnect.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

PMP-DIS-008 Pump No 43 Disconnect PSR 34TH AVE

Comments (if applicable)

Federal Pacific overhead buss disconnect

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

PMP-DIS-009 Transformer Disconnect PSR 34TH AVE

Comments (if applicable)

Federal Pacific overhead buss disconnect

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationPMP-MTR-41PUMP No 41PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-MTR-42PUMP No 42PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-MTR-43PUMP No 43PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-VLV-016 Pump No 41 Suction Valve PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	M	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-017 Pump No 41 Clay Valve PSR 34TH AVE

Comments (if applicable)

Caly Valve did not seat after running pump

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	5	Did not seat after test run	
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	4	Did not seat	
All Components	1		
Corrosion	1		
Functional	5	Did not seat after test run of pump	
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	5		

Asset ID Asset Description Asset Location

PMP-VLV-018 Pump No 41 Discharge Valve PSR 34TH AVE

Comments (if applicable)

Not enough support on the discharge pipe assembly of pump. From flange to pipe penitration in floor is approximately 6 feet

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	3	No pipe supports	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-019 Pump No 42 Suction Valve PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	d anual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-020Pump No 42 Clay ValvePSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-021 Pump No 42 Discharge Valve PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-022 Pump No 43 Suction Valve PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	fanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-023Pump No 43 Clay valvePSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	3		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-024 Pump No 43 Discharge Valve PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	ı	Manual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-025 PSR 34th Ave Altitude Valve PSR 34TH AVE

Comments (if applicable)

Main Clay valve on header

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	3		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PSR 34 Structure PSR 34 Structure PSR 34TH AVE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1	Not protected based on soil to structure potential	
Corrosion - Mechanical/Piping Metal Condition?	3		
Corrosion - Soil Resistivity			Not Found
Corrosion - Structural Metal Condition?	4		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	2		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	4	Wood-cement fiber roof not attached to roof joists	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	2		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

RTU-RTU-004 PSR 34TH AVE RTU Data Radio PSR 34TH AVE

Comments (if applicable)

Integra

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	1		
Transmitter	2		

Asset ID Asset Description Asset Location

RTU-RTU-005 PSR 34TH AVE RTU ScadaPack PSR 34TH AVE

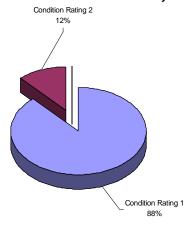
Comments (if applicable)

SCADA PACK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Station Name:	Water P	ump Statio	on - Gibs	on Hill									
	IMPACTS					PROBABILITY			Υ	TRIGGER			
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair/ replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CONTROL PANEL	4	4	4	4	4	1		7	1	10	1	1	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		7	10	10	1	1	1
MOTOR	7	1	1	1	10	2		7	1	1	1	1	1
PUMP	7	1	1	1	10	7		7	1	1	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	4	2		2	1	2	1	1	1
STRUCTURE	1	1	1	4	10	10		2	1	10	2	1	1
VALVE	1	1	1	1	7	1		2	1	1	1	1	1

Gibson Hill P.S. Summary



Location Roll-Up Re	eport					
PS GIBSON HILL			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
CTRL-ALARM-GH	REMOTE TELEMETRY UNIT	5.9	1	0.06	0.163	0.0096
CTRL-PMP-61a	ELECTRICAL EQUIPMENT	5.9	1	0.06	0.991	0.0583
CTRL-PMP-61b	ELECTRICAL EQUIPMENT	5.9	1	0.06	0.934	0.055
CTRL-PMP-61c	ELECTRICAL EQUIPMENT	5.9	1	0.08	0.934	0.055
CTRL-SCADA-GH	CONTROL PANEL	5.9	2	0.09	0.846	0.0497
PMP-CVT-61	PUMP	5.9	1	0.09	0.481	0.0283
PMP-CVT-62	PUMP	5.9	1	0.09	0.481	0.0283
PMP-MTR-61	MOTOR	5.9	1	0.08	0.481	0.0283
PMP-MTR-62	MOTOR	5.9	1	0.08	0.481	0.0283
PS GIB STRUCTURE	STRUCTURE	5.9	2	0.12	0.737	0.0433
VAL-PMP-61	VALVE	5.9	1	0.06	0.156	0.0092
VAL-PMP-61A	VALVE	5.9	1	0.07	0.156	0.0092
VAL-PMP-61B	VALVE	5.9	1	0.07	0.156	0.0092
VAL-PMP-62	VALVE	5.9	1	0.06	0.156	0.0092
VAL-PMP-62A	VALVE	5.9	1	0.07	0.156	0.0092
VAL-PMP-62B	VALVE	5.9	1	0.07	0.156	0.0092
VAL-PRES-63	VALVE	5.9	1	0.06	0.143	0.0084
			Location's		Location's	
			Condition Score	1	Total Score	0.45

Asset IDAsset DescriptionAsset LocationCTRL-ALARM-GHALARM SYSTEMPS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	1		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	1		
Power Supply Ok	1		
Receiver	1		
Receiver Ok	1		
Redundancy	1		
Running at Inspection	1		
Signal	1		
Transmitter	1		
Transmitter Ok	1		

Asset IDAsset DescriptionAsset LocationCTRL-PMP-61aMain DisconnectPS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	1		
Grounding	1		
Infrared	1		
Installation/ Accessibility	1		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset IDAsset DescriptionAsset LocationCTRL-PMP-61bTransfer SwitchPS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2	Some dust but not carbon dust	
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	1		
Grounding	1		
Infrared	1		
Installation/ Accessibility	1		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

CTRL-PMP-61c Motor Control Center PS GIBSON HILL

Comments (if applicable)

Generally good condition

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2	General dust but not carbon dust	
Contactor Block	1		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	3		
Control Switches	2		
Corrosion	1		
Grounding	1		
Infrared	2		
Installation/ Accessibility	1		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset IDAsset DescriptionAsset LocationCTRL-SCADA-GHSCADA PANELPS GIBSON HILL

Comments (if applicable)

Older Direct Logic 405 PLC. Phone line connectivity

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Good House Keeping	1		
Good Wire Labeling	5		
Infrared	1		
Installation	3	Phone termination hanging.	
Main Breaker			Not Found
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	1		
Starter Block			Not Found
Structural (Panel)	1		

Asset ID

Asset Description

Asset Location

PMP-CVT-61

W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL

PS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	1		
Corrosion	3	Light pitting at base	
Infrared			Not Found
Isolation Valve	1		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	1	Mechanical Seals	
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	1		

Asset ID

Asset Description

Asset Location

PMP-CVT-62

W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL

PS GIBSON HILL

Comments (if applicable)

Split case Horizantal

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
1		
5	Does not meet OSHA Standard	
1		
2	Light pitting on base	
		Not Found
2		
1		
		Not Found
1	Mechanical seals	
1		
1		
2		
1		
	1 1 1 1 5 1 2 2 1 1 1 1 2	1 1 1 1 1 5 Does not meet OSHA Standard 1 2 Light pitting on base 2 1 1 Mechanical seals 1 1

Asset ID

Asset Description

Asset Location

PMP-MTR-61

W.W. PUMP No 61 SPLIT CASE CENTRIFUGAL

PS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID

Asset Description

Asset Location

PMP-MTR-62

W.W. PUMP No 62 SPLIT CASE CENTRIFUGAL

PS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PS GIB STRUCTURE PS GIBSON HILL STRUCTURE PS GIBSON HILL

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	3	Severe at pump base	
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	1	Assumed - not visible	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	2		
structure - Piping Connections to Above Ground F			Not Found

Asset IDAsset DescriptionAsset LocationVAL-PMP-61VALVEPS GIBSON HILL

Comments (if applicable)

Suction Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-61AVALVEPS GIBSON HILL

Comments (if applicable)

Clay Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	1		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-61BVALVEPS GIBSON HILL

Comments (if applicable)

Discharge Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1	Manual	Not Found
All Components	1		
Corrosion	1		
Functional	3		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-62VALVEPS GIBSON HILL

Comments (if applicable)

Suction Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-62AVALVEPS GIBSON HILL

Comments (if applicable)

Clay Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	1		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-62BVALVEPS GIBSON HILL

Comments (if applicable)

Discharge Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1	Manual	Not Found
All Components	1		
Corrosion	1		
Functional	3		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

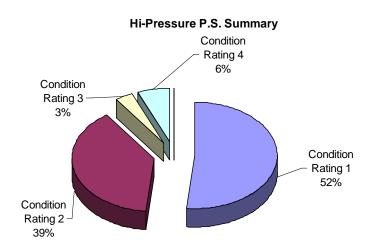
Asset IDAsset DescriptionAsset LocationVAL-PRES-63VALVEPS GIBSON HILL

Comments (if applicable)

Pressure Relief Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise			
Acceptable Vibration			
Actuator	1		
All Components	1		
Corrosion	1		
Functional			Not Found
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Station Name:	Water P	ump Statio	on - High	Service									
			IMPAG	CTS			PROBABILITY			Υ	TRIGGER		
	Health & Safety of employees and public	Compliance with regulations	Service Reliability	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CONTROL PANEL	4	4	4	4	4	1		7	1	10	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7	3	7	10	10	1	10	1
MOTOR	7	1	1	1	10	2		7	1	1	1	2	1
PUMP	7	1	1	1	10	7		7	1	1	1	2	1
REMOTE TELEMETRY UNIT	1	1	1	1	4	2		2	1	2	1	1	1
STRUCTURE	1	1	1	4	10	10		2	1	10	2	1	1
VALVE	1	1	1	1	7	1	2	2	1	1	1	1	1



Location Roll-Up Report

WTP1-04 HI-PRESSURE PUMP STN			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
7 took Hamb	Туре	(%)	000.0	Score	000.0	Score
PMP VLV-007	VALVE	3.2	1	0.04	0.156	0.005
PMP=PMP-12a	PUMP	3.2	2	0.05	0.689	0.0222
PMP-CHP-11	PUMP	3.2	2	0.05	0.689	0.0222
PMP-CHP-13	PUMP	3.2	2	0.05	0.689	0.0222
PMP-CHP-14	PUMP	3.2	2	0.05	0.689	0.0222
PMP-DIS-001	ELECTRICAL EQUIPMENT	3.2	1	0.04	1.728	0.0557
PMP-DIS-002	ELECTRICAL EQUIPMENT	3.2	2	0.07	1.963	0.0633
PMP-DIS-003	ELECTRICAL EQUIPMENT	3.2	2	0.06	2.216	0.0715
PMP-DIS-004	ELECTRICAL EQUIPMENT	3.2	1	0.03	1.53	0.0494
PMP-DIS-005	ELECTRICAL EQUIPMENT	3.2	2	0.06	2.216	0.0715
PMP-MTR-11	MOTOR	3.2	1	0.04	0.414	0.0134
PMP-MTR-12	MOTOR	3.2	2	0.05	0.653	0.0211
PMP-MTR-13	MOTOR	3.2	2	0.06	0.653	0.0211
PMP-MTR-14	MOTOR	3.2	2	0.05	0.653	0.0211
PMP-MTR-15m	MOTOR	3.2	4	0.12	1.848	0.0596
PMP-PMP-15a	PUMP	3.2	4	0.13	1.95	0.0629
PMP-VLV-001	VALVE	3.2	1	0.04	0.156	0.005
PMP-VLV-002	VALVE	3.2	2	0.05	0.262	0.0084
PMP-VLV-003	VALVE	3.2	1	0.04	0.156	0.005
PMP-VLV-004	VALVE	3.2	1	0.04	0.156	0.005
PMP-VLV-005	VALVE	3.2	1	0.04	0.156	0.005
PMP-VLV-008	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-009	VALVE	3.2	1	0.04	0.156	0.005
PMP-VLV-010	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-011	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-012	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-013	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-014	VALVE	3.2	1	0.04	0.175	0.0057
PMP-VLV-015	VALVE	3.2	1	0.04	0.175	0.0057
RTU-RTU-003	REMOTE TELEMETRY UNIT	3.2	2	0.05	0.404	0.013
WTP1-04 PUMP STA	STRUCTURE	3.2	3	0.08	1.03	0.0332
			Location's		Location's	
			0 11/1 0	0	Total	0.70
			Condition Score	2	Score	0.72

Asset ID

Asset Description

Asset Location

PMP VLV-007

Pump No 13 Suction Valve

WTP1-04 HI-PRESSURE PUMP STN

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
		Not Found
1		
2		
1		
		Not Found
1		
2		
1		
2		
2		
1		
	1 1 1 1 1 1 2 1 2 1 2 2	1 1 1 1 2 1 1 2 1 2 1 2 2 2 2

Asset ID Asset Description Asset Location

PMP=PMP-12a No 12 Pump WTP1-04 HI-PRESSURE PUMP

STN

Comments (if applicable)

Spit Case

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	1		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PMP-CHP-11 No 11 HP PUMP WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	1		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-CHP-13 No 13 HP PUMP WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2	Added grease to silence one bearing inboard	
Corrosion	1		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PMP-CHP-14 No 14 HP PUMP WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Split case old motor

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	1		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	3	Leaks a little too much	
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	2		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-DIS-001 Pump No 15 Main Disconnect WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Has Allen Bradley soft start. Soft start faulted on energizing.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block		Solid state soft start	Not Found
Control Gauges (Hour Meters Volts & Amps)	1	Digital display	
Control Lamps			Not Found
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared		Could not run Line fault	Can not Access
Installation/ Accessibility	1		
Main Breaker	1	Disconnect with fuses	
Operating at Inspection	1	Line Fault on start up	
Structural Integrity	1		_

Asset ID

Asset Description

Asset Location

PMP-DIS-002

Pump No 14 Main Disconnect

WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Old Allis-Chalmers installation

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	3		
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	3		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	3		

Asset ID

Asset Description

Asset Location

PMP-DIS-003

Pump No 13 Main Disconnect

WTP1-04 HI-PRESSURE PUMP

STN

Comments (if applicable)

Old Allis-Chalmers

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
5	Older cabinets without current safety devices	
2		
3		
		Not Found
		Not Found
3		
2		
1		
2		
2		
2		
1		
3		
	1 1 1 1 5 2 3 3 2 1 2 2 2 1	1 1 1 5 Older cabinets without current safety devices 2 3 3 2 1 2 2 2 1

Asset ID

Asset Description

Asset Location

PMP-DIS-004

Pump No 12 Main Disconnect

WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Has Allen Bradley soft start

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block		Solid state soft start	Not Found
Control Gauges (Hour Meters Volts & Amps)	1	Digital display	
Control Lamps			Not Found
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared	2		
Installation/ Accessibility	1		
Main Breaker	1	Disconnect with fuses	
Operating at Inspection	1		
Structural Integrity	1		

Asset ID

Asset Description

Asset Location

PMP-DIS-005

Pump No 11 Main Disconnect

WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Old Allis Chalmers

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
5	Older cabinets without current safety devices	
2		
3		
		Not Found
		Not Found
3		
2		
1		
2		
2		
2		
1		
2		
	1 1 1 1 5 2 3 3 2 1 2 2 2 1	1 1 1 5 Older cabinets without current safety devices 2 3 3 4 1 2 2 2 1

Asset ID Asset Description Asset Location

PMP-MTR-11 No 11 HP PUMP WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-MTR-12 No 12 Motor WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PMP-MTR-13 No 13 HP PUMP WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Pump

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	4	.35 inchs/sec max point on axial	

Asset ID Asset Description Asset Location

PMP-MTR-14 No 14 HP PUMP WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Older motor

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	3	Outboard bearing needs lubrication	
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PMP-MTR-15m No 15 Motor WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Could not Access. Tripped on Line fault

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
All Components	5		
All Safety Guards Present	1		
Bearings			Can not Access
Corrosion	1		
Drive Shaft Alignment			Can not Access
Infrared			Can not Access
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis			Can not Access

Asset ID Asset Description Asset Location

PMP-PMP-15a No 15 Pump WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Could not assess. Tripped on line fault

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	5	Could not run	
Absence of Pump Cavitations	5	Could not run	
Acceptable Noise	5	Could not run	
Acceptable Smell or Heat	5	Could not run	
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings			Can not Access
Corrosion	1		
Infrared		Could not run	Can not Access
Isolation Valve		Could not run	Can not Access
Lubrication OK at Inspection	5	Could not run	
Oil Seal			Not Found
Packing Gland		Could not run	Can not Access
Pipe Alignment	1		
Running at Inspection	5		
Structural Integrity	1		
Vibration Analysis		Could not run	Can not Access

Asset ID

Asset Description

Asset Location

PMP-VLV-001

Pump No 11 Suction Valve

WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-002 Pump No 11 Clay Valve WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Clay valve leaking at pin

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	5		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	4		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-003

Pump No 11 Discharge Valve

WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-004

Pump No 12 Suction Valve

WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-005

Pump No 12 Discharge Valve Actuated

WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-008 Pump No 13 Clay Valve WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-009

Pump No 13 Discharge Valve

WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-010

Pump No 14 Suction Valave

WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-011 Pump No 14 Clay Valve WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-012

Pump No 14 Discharge Valve

WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-013

Pump No 15 Suction Valve

WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

PMP-VLV-014

Pump No 15 Discharge Valve Actuated

WTP1-04 HI-PRESSURE PUMP

STN

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
2		
1		
2		
1		
		Not Found
1	Pump not operational	
2		
1		
2		
2		
1		
	1 1 2 1 2 1 2 1 2 2 2	1 1 2 1 2 1 1 Pump not operational 2 1 2 2

Asset ID

Asset Description

Asset Location

PMP-VLV-015

Pump No 15 Check Valve

WTP1-04 HI-PRESSURE PUMP

STN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

RTU-RTU-003 RTU WTP1-04 HI-PRESSURE PUMP STN

Comments (if applicable)

Terminal unit only. Fiber to operations

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	Not in cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

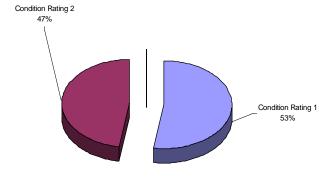
Asset ID Asset Description Asset Location

WTP1-04 PUMP STA Pump Station Structure WTP1-04 HI-PRESSURE PUMP STN

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	3	In small areas around floor penetration	
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	1		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	2		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	3		
Structure - Connections in Lateral Force Resisting	4	Roof decking not visibly fastened to roof joists.	
Structure - Equipment Anchorage – Epoxy, Cast-i	3	Most appear to be OK	
Structure - Load Path/Redundancy	2		
structure - Piping Connections to Above Ground F			Not Found

Station Name:	Water P	ump Statio	on - Nort	h Albany									
			IMPA	CTS				PROB	ABILIT	Υ	,	TRIGGE	R
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CONTROL PANEL	4	4	4	4	4	1		7	1	10	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		7	10	10	1	10	1
MOTOR	7	1	1	1	10	2		7	1	1	1	1	1
PUMP	7	1	1	1	10	7		7	1	1	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	4	2		2	1	2	1	1	1
STRUCTURE	1	1	1	4	10	10		2	1	10	2	1	1
VALVE	1	1	1	1	7	1		2	1	1	1	1	1

North Albany P.S. Summary



Location Roll-Up Re	eport					
PS NORTH ALBANY			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
CTRL-POWER-NA	CONTROL PANEL	5.3	1	0.06	0.655	0.0345
FAN-FAN-001	FAN	5.3	1	0.06	0.167	0.0088
FAN-FAN-002	FAN	5.3	2	0.09	0.26	0.0137
HTR-HTR-001	HVAC	5.3	1	0.07	0.143	0.0075
INT-FLW-001	INSTRUMENT	5.3	1	0.06	0.122	0.0064
INT-INT-002	INSTRUMENT	5.3	1	0.07	0.285	0.015
MCC-MCC-001	ELECTRICAL EQUIPMENT	5.3	2	0.11	1.464	0.0771
PMP-CVT-51	PUMP	5.3	2	0.08	0.689	0.0363
PMP-CVT-52	PUMP	5.3	2	0.08	0.689	0.0363
PMP-MTR-51	MOTOR	5.3	2	0.08	0.653	0.0344
PMP-MTR-52	MOTOR	5.3	2	0.08	0.653	0.0344
PS NO ALBANY STR	STRUCTURE	5.3	2	0.11	0.611	0.0321
RTU-RTU-001	REMOTE TELEMETRY UNIT	5.3	2	0.08	0.269	0.0142
RTU-RTU-002	REMOTE TELEMETRY UNIT	5.3	2	0.08	0.269	0.0142
VAL-PMP-51A	VALVE	5.3	1	0.06	0.156	0.0082
VAL-PMP-51B	VALVE	5.3	1	0.07	0.156	0.0082
VAL-PMP-52A	VALVE	5.3	1	0.06	0.156	0.0082
VAL-PMP-52B	VALVE	5.3	1	0.07	0.163	0.0086
VAL-VAL-001	VALVE	5.3	1	0.06	0.156	0.0082
			Location's		Location's	
			Condition Score	1	Total Score	0.41

Asset IDAsset DescriptionAsset LocationCTRL-POWER-NACONTROL PANELPS NORTH ALBANY

Comments (if applicable)

New SCADA panel that replaced old control and alarm panels

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	1		
Installation	2		
Main Breaker			Not Found
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block			Not Found
Structural (Panel)	1		

Asset IDAsset DescriptionAsset LocationFAN-FAN-001Building FanPS NORTH ALBANY

Comments (if applicable)

Small Building fan on wall

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	1		
Installation/ Accessibility	2		
Vents Clean	1		

Asset IDAsset DescriptionAsset LocationFAN-FAN-002MCC Colling FanPS NORTH ALBANY

Comments (if applicable)

Small MCC cooling fan. No guard on fan inlet

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	1		
Installation/ Accessibility	5	No guard/filter on fan inlet	
Vents Clean	1		

Asset ID Asset Description Asset Location

HTR-HTR-001 Unit Heater PS NORTH ALBANY

Comments (if applicable)

Small wall mounted unit heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Air Filter			Not Found
All Components	1		
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

INT-FLW-001 Flow Meter PS NORTH ALBANY

Comments (if applicable)

Flow meter transmitter and display

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1 1	No calibration sticker	
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

INT-INT-002 Pressure Transducer PS NORTH ALBANY

Comments (if applicable)

Small Taylor pressure transducer

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration			Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

MCC-MCC-001 Motor control Center PS NORTH ALBANY

Comments (if applicable)

Older Furnas

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Exposed buss bars	
Appearance (Carbon Dust)	3	Dirty but not carbon dust	
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	3	Only hour gauges	
Control Lamps	3	Only on pump inserts	
Control Switches	3		
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location
PMP-CVT-51 N.ALB PUMP No 51 SPLIT CASE PS NORTH ALBANY

N.ALB PUMP No 51 SPLIT CASE PS NORTH ALBANY CENTRIFUGAL

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	3	Pump base has light pitting	
Infrared			Not Found
Isolation Valve	1		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	1	Mechanical seals	
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	3	Appears to be stress on pump from clay valve	
Vibration Analysis	1		

Asset Description Asset ID Asset Location

N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL PMP-CVT-52 PS NORTH ALBANY

Comments (if applicable)

Split case horizantal with mech seals

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2	Outboard pump bearing sounds like it needs lubrica	
Corrosion	3	Corrosion on base and light corrosion on pump	
Infrared			Not Found
Isolation Valve	1		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	1	Mechanical seals	
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	3	Appears to be stress on discharge flange from clay	
Vibration Analysis	1		

Asset ID

Asset Description

Asset Location

PMP-MTR-51

N.ALB PUMP No 51 SPLIT CASE CENTRIFUGAL

PS NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	3	Appears to be stress on pump from clay valve	
Vibration Analysis	1		

Asset ID

Asset Description

Asset Location

PMP-MTR-52

N.ALB PUMP No 52 SPLIT CASE CENTRIFUGAL

PS NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2	Outboard needs lubrication	
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PS NO ALBANY STR PS NORTH ALBANY STRUCTURE PS NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity			Not Found
Corrosion - Structural Metal Condition?	3	Severe at pump base	
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	1	Assumed - connection not visible	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	2		
structure - Piping Connections to Above Ground F	5	Header pipe through brick wall with no flex joint	

Asset IDAsset DescriptionAsset LocationRTU-RTU-001RTU Data RadioPS NORTH ALBANY

Comments (if applicable)

Integra data radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1	In cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	1		
Transmitter	2		

Asset IDAsset DescriptionAsset LocationRTU-RTU-002RTU SCADA PackPS NORTH ALBANY

Comments (if applicable)

Scada Pack

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LED's	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset IDAsset DescriptionAsset LocationVAL-PMP-51AVALVEPS NORTH ALBANY

Comments (if applicable)

Suction Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	M	lanual	Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

 Asset ID
 Asset Description
 Asset Location

 VAL-PMP-51B
 VALVE
 PS NORTH ALBANY

Comments (if applicable)

Discharge Clay valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2	light corrosion	
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	3	No support under valve. closest support two feet	
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-52AVALVEPS NORTH ALBANY

Comments (if applicable)

Suction Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1	Manual	Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationVAL-PMP-52BVALVEPS NORTH ALBANY

Comments (if applicable)

Clay valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	1		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	3	No support under valve	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

VAL-VAL-001 Pressure Relief Valve (Clay Valve) PS NORTH ALBANY

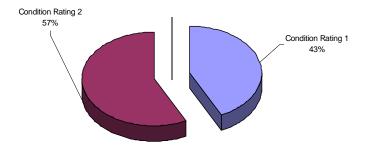
Comments (if applicable)

Pressure relief valve on discharge header

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	1		
Functional			Not Found
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1	Holding	
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Station Name:	Water P	ump Statio	on - Que	en Ave									
	IMPACTS					PROBABILITY			Υ	TRIGGER			
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CONTROL PANEL	4	4	4	4	4	1		7	1	10	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		7	10	10	1	10	1
MOTOR	7	1	1	1	10	2		7	1	1	1	1	1
PUMP	7	1	1	1	10	7		7	1	1	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	4	2		2	1	2	1	1	1
STRUCTURE	1	1	1	4	10	10		2	1	10	2	1	1
VALVE	1	1	1	1	7	1		2	1	1	1	1	1

Queen Avenue P.S. Summary



Location Roll-Up Report Weighted Weighted **PSR QUEEN AVE** Condition Total **Asset Name** Score Condition Score Total Weight (%) Type Score Score **ELECTRICAL EQUIPMENT** 4.8 2 0.1055 CRTL-PMP-021 0.11 2.216 CRTL-PMP-022 **ELECTRICAL EQUIPMENT** 4.8 2 0.1 2.216 0.1055 MET-FLO-04 **INSTRUMENT** 4.8 1 0.06 0.304 0.0145 2 0.0328 PMP-CHP-21 PUMP 4.8 0.07 0.689 PMP-CHP-22 **PUMP** 0.0208 4.8 1 0.07 0.437 ELECTRICAL EQUIPMENT 4.8 PMP-DIS-010 2 0.08 2.216 0.1055 PMP-DIS-011 4.8 2 **ELECTRICAL EQUIPMENT** 0.09 2.143 0.102 PMP-DIS-012 **ELECTRICAL EQUIPMENT** 2 0.1055 4.8 0.1 2.216 PMP-MTR-21 **MOTOR** 4.8 2 0.08 0.653 0.0311 **MOTOR** PMP-MTR-22 4.8 2 0.07 0.653 0.0311 VALVE 4.8 1 0.0074 PMP-VLV-026 0.05 0.156 **VALVE** PMP-VLV-027 4.8 1 0.06 0.156 0.0074 PMP-VLV-028 **VALVE** 4.8 0.156 1 0.05 0.0074 VALVE 4.8 PMP-VLV-029 1 0.05 0.156 0.0074 PMP-VLV-030 **VALVE** 4.8 0.06 0.175 0.0083 PMP-VLV-031 **VALVE** 4.8 1 0.05 0.156 0.0074 PMP-VLV-032 VALVE 4.8 0.0074 1 0.05 0.156 PMP-VLV-033 **VALVE** 4.8 2 0.07 0.262 0.0125 **PSR QUEEN AVE** STRUCTURE 4.8 2 0.11 0.623 0.0297 REMOTE TELEMETRY UNIT 2 RTU-RTU-006 4.8 0.07 0.269 0.0128 RTU-RTU-007 REMOTE TELEMETRY UNIT 0.269 4.8 2 0.07 0.0128 Location's Location's

Condition Score

Total Score

0.77

Asset ID Asset Description Asset Location

CRTL-PMP-021 Pump No 21 Motor Control Center PSR QUEEN AVE

Comments (if applicable)

Older Square D

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	5	Addiitional heat on C phase load wire	
All Components	1		
All Safety Features Present	5		
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	3	Hour meter only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Grounding	1		
Infrared	3	Additional heat on C phase load wire	
Installation/ Accessibility	3		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

CRTL-PMP-022 Pump No 22 Motor Control Center PSR QUEEN AVE

Comments (if applicable)

Older Westinghouse starter in newer box.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	5	No wire coordination	
All Safety Features Present	5	No disconnect for cabinet. transformer loose in	
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2		
Corrosion	1		
Grounding	1		
Infrared	2		
Installation/ Accessibility	4	Poor wiring/transformer loose in bottom	
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationMET-FLO-04METERING DEVICEPSR QUEEN AVE

Comments (if applicable)

Panametrics DF 868 Polysonic

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration		No sticker	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	3	Could use strain relief on trans cables	

Asset IDAsset DescriptionAsset LocationPMP-CHP-21PUMP No 21PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	2		
Corrosion	2		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-CHP-22PUMP No 22PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Does not meet OSHA Standard	
Bearings	1		
Corrosion	2		
Infrared			Not Found
Isolation Valve	2		
Lubrication OK at Inspection	1		
Oil Seal			Not Found
Packing Gland	2		
Pipe Alignment	1		
Running at Inspection	1		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PMP-DIS-010 Pump No 21 Disconnect PSR QUEEN AVE

Comments (if applicable)

Older Square D

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

PMP-DIS-011 Pump No 22 Disconnect PSR QUEEN AVE

Comments (if applicable)

Older Square D

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	3	C phase knife contact shows extra heat	
Installation/ Accessibility	2		
Main Breaker	2		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationPMP-DIS-012Pump Main DisconnectPSR QUEEN AVE

Comments (if applicable)

Older Square D. Increased heat on A phase fuse identified with IR

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older cabinets without current safety devices	
Appearance (Carbon Dust)	2		
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches			Not Found
Corrosion	2		
Grounding	1		
Infrared	3		
Installation/ Accessibility	3		
Main Breaker	3		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationPMP-MTR-21PUMP No 21PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	3	Inboard bearing loud	
Corrosion	2		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-MTR-22PUMP No 22PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	3	Inboard is loud needs grease	
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-026Pump No 21 Suction ValvePSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	Maunal	Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-027Pump No 21 Clay ValvePSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-028 Pump No 21 Discharge Valve PSR QUEEN AVE

Comments (if applicable)

Butterfly Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	M	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

 Asset ID
 Asset Description
 Asset Location

 PMP-VLV-029
 Pump No 22 Suction Valve
 PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	fanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-030Pump No 22 Clay ValvePSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-031 Pump No 22 Discharge Valve PSR QUEEN AVE

Comments (if applicable)

Butterfly Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationPMP-VLV-032Reservior Isolation ValvePSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	fanual	Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

PMP-VLV-033 Distribution System Isolation Valve PSR QUEEN AVE

Comments (if applicable)

Rotork Actuating Betterfly valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	2	Located in tough spot to work on	
All Components	1		
Corrosion	1		
Functional		Did not want to operate	Can not Access
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection		Open	
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)		Open	

Asset ID Asset Description Asset Location

PSR QUEEN AVE Queen Avenue Structure PSR QUEEN AVE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1	Not protected based on structure to soil potential	
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity			Not Found
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	2		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	3	Cracking visible in concrete walls	
Structure - Connections in Lateral Force Resisting	1		
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1	Cracking visible in concrete walls	
structure - Piping Connections to Above Ground F	5		

Asset ID Asset Description Asset Location

RTU-RTU-006 PSR QUEEN AVE RTU Data Radio PSR QUEEN AVE

Comments (if applicable)

Integra

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1 1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	1		
Transmitter	2		

Asset ID Asset Description Asset Location

RTU-RTU-007 PSR QUEEN AVE RTU Scada Pack PSR QUEEN AVE

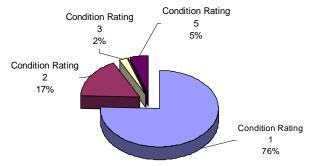
Comments (if applicable)

SCADA Pack

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Station Name:	Lift Stati	on 3 - Map	ole Street	t									
			IMPAG	CTS				PROBABILITY			TRIGGER		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	return asset to	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CRANE	1	1	1	1	1	4		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		4	1	7	1	1	1
FUEL TANK	1	4	4	4	1	1		4	1	7	1	1	1
GENERATOR	10	4	1	1	1	4		4	1	7	1	1	1
HOIST	1	1	1	1	1	1		4	1	7	1	1	1
HVAC	1	1	1	1	1	1		4	1	7	1	1	1
INSTRUMENT	1	1	4	4	1	4		4	1	4	1	1	1
MOTOR	1	4	4	4	7	4		4	1	1	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	2	1	1	1
STRUCTURE	4	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	7	7		4	1	1	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 3 Maple Street Summary



Location Roll-Up Report

LS No 03 MAPLE STREET			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS03-ACT-001	VALVE	2.4	1	0.03	0.227	0.0055
LS03-CRANE-001	CRANE	2.4	1	0.03	0.198	0.0048
LS03-FLW-001	INSTRUMENT	2.4	1	0.03	0.385	0.0094
LS03-FLW-002	INSTRUMENT	2.4	1	0.03	0.385	0.0094
LS03-GEN-001	GENERATOR	2.4	1	0.02	0.651	0.0159
LS03-HOIST-001	HOIST	2.4	1	0.02	0.17	0.0041
LS03-HVC-001	HVAC	2.4	5	0.12	0.887	0.0216
LS03-MIL-001	INSTRUMENT	2.4	1	0.03	0.385	0.0094
LS03-MIL-002	INSTRUMENT	2.4	1	0.03	0.385	0.0094
LS03-MIL-003	INSTRUMENT	2.4	1	0.03	0.385	0.0094
LS03-MTR-001	INSTRUMENT	2.4	3	0.07	0.982	0.024
LS03-MTR-002	INSTRUMENT	2.4	1	0.03	0.332	0.0081
LS03-MTR-003	INSTRUMENT	2.4	1	0.03	0.488	0.0119
LS03-RADIO-001	REMOTE TELEMETRY UNIT	2.4	5	0.12	1.004	0.0245
LS03-RTU-001	REMOTE TELEMETRY UNIT	2.4	2	0.04	0.26	0.0063
LS03-STR-001	STRUCTURE	2.4	2	0.05	1.239	0.0302
LS03-TANK-001	FUEL TANK	2.4	2	0.04	0.79	0.0193
LS03-VFD-001	ELECTRICAL EQUIPMENT	2.4	1	0.02	0.991	0.0242
LS03-VFD-002	ELECTRICAL EQUIPMENT	2.4	1	0.02	0.991	0.0242
LS03-VFD-003	ELECTRICAL EQUIPMENT	2.4	1	0.03	0.867	0.0211
LS03-VFD-004	ELECTRICAL EQUIPMENT	2.4	1	0.04	0.991	0.0242
LS03-VLV-001	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-002	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-003	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-004	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-005	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-006	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-007	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-008	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-009	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-010	VALVE	2.4	1	0.03	0.227	0.0055
LS03-VLV-011	VALVE	2.4	1	0.03	0.227	0.0055

			Condition Score	2	Score	0.5
			Location's		Location's Total	
PUMP040	SUB PUMP	2.4	1	0.03	0.506	0.0123
PUMP039	SUB PUMP	2.4	1	0.03	0.506	0.0123
PUMP038	SUB PUMP	2.4	1	0.03	0.506	0.0123
PUMP037	SUB PUMP	2.4	1	0.03	0.506	0.0123
MOTOR040	MOTOR	2.4	2	0.04	0.762	0.0186
MOTOR039	MOTOR	2.4	2	0.04	0.688	0.0168
MOTOR038	MOTOR	2.4	2	0.04	0.762	0.0186
MOTOR037	MOTOR	2.4	2	0.04	0.762	0.0186
LS03-VLV-012	VALVE	2.4	1	0.03	0.227	0.0055

Asset ID Asset Description Asset Location

LS03-ACT-001 ACTUATOR LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation			
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment			Not Found
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)			

Asset ID Asset Description Asset Location

LS03-CRANE-001 FLOOR CRANE LS No 03 MAPLE STREET

Comments (if applicable)

Thern, Inc. - Rated at 4200 pounds in current position

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Oil/Grease	1		
Acceptable Smell or Heat			
Acceptable Vibration			
All Components	1		
All Safety Guards Present	1		
Certification Current	5	Did not see	
Chain/ Cable/ Hooks	1		
Control Pendent			Not Found
Corrosion	1		
Couplings			Not Found
Drive Motor			Not Found
Gearbox			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Rollers/Tracks	1		
Safety Signs posted			
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS03-FLW-001 Maple Flow Meter No 1 LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer			Can not Access
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-FLW-002 Maple Flow Meter No 2 LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer			Can not Access
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-GEN-001 GENERATOR LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	1		
All Components	1		
All Safety Guards Present	1		
Automatic Transfer Switch	1		
Battery/ Charging System	1		
Coating	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Cooling System	1		
Corrosion	1		
Exercise Program	1		
Exhaust System	1		
Fuel Separator	1		
Heater Jacket			Not Found
Hoses and Belts	1		
Infrared	1		
Monitoring Panel	1		
Oil Analysis			Not Found
Oil OK at Inspection	1		
Oil Pressure	1		
Running at Inspection	1		
Starting System	1		
Structural Integrity	1		
Water Temperature	1		

Asset ID Asset Description Asset Location

LS03-GEN-001 GENERATOR LS No 03 MAPLE STREET

Comments (if applicable)

Condition Question Rating Condition Question Comments Flag

Asset ID Asset Description Asset Location

LS03-HOIST-001 HOIST LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag	
All Components	1			
Chain/ Cable/ Hooks	1			
Corrosion - Visible Coating Condition	1			

Asset ID Asset Description Asset Location

LS03-HVC-001 HVAC LS No 03 MAPLE STREET

Comments (if applicable)

Could not access roof

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Air Filter			Can not Access
All Components			
Corrosion			Can not Access
Operating at Inspection			

Asset ID Asset Description Asset Location

LS03-MIL-001 SENSOR UNIT LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS03-MIL-002 SENSOR UNIT LS No 03 MAPLE STREET

Comments (if applicable)

Milltronics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-MIL-003 SENSOR UNIT LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS03-MTR-001 METERING DEVICE LS No 03 MAPLE STREET

Comments (if applicable)

Meter removed

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	5		
Calibration			Can not Access
Connections Ok	5		
Display Ok	5		
Grounding	1		
Indicator			Can not Access
Installation/ Accessibility			Not Functional
Operating at Inspection	1		
Transmitter/ Transducer	1		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-MTR-002 METERING DEVICE LS No 03 MAPLE STREET

Comments (if applicable)

Milltronics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-MTR-003 METERING DEVICE LS No 03 MAPLE STREET

Comments (if applicable)

Milltronics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS03-RADIO-001 RTU RADIO LS No 03 MAPLE STREET

Comments (if applicable)

No radio at Maple Station

Acceptable Smell or Heat Acceptable Wire Labeling All Components Battery Backup OK Battery/ Charging System Can not Acceptable Wire Labeling Connections Ok Display/Indicator Ok Grounding Not Found Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Not Found Receiver Not Found Redundancy	
All Components Battery Backup OK Battery/ Charging System Can not Acconnections Ok Display/Indicator Ok Grounding Not Found Installation/ Accessibility/ Enclosure Not Found P&IDs are Accessible Power Supply Not Found Receiver Not Found	
Battery Backup OK Battery/ Charging System Can not Ac Connections Ok Display/Indicator Ok Grounding Not Found Installation/ Accessibility/ Enclosure Not Found P&IDs are Accessible Power Supply Not Found Receiver Not Found	
Battery/ Charging System Connections Ok Display/Indicator Ok Grounding Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Not Found Receiver Can not Accessible	
Connections Ok Display/Indicator Ok Grounding Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Not Found Receiver Not Found	
Display/Indicator Ok Grounding Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Not Found Receiver Not Found	ess
Grounding Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Receiver Not Found Not Found	
Installation/ Accessibility/ Enclosure P&IDs are Accessible Power Supply Not Found Receiver Not Found	
P&IDs are Accessible Power Supply Not Found Receiver Not Found	
Power Supply Receiver Not Found	
Receiver Not Found	
Redundancy	
Running at Inspection	
Signal Not Found	
Transmitter Not Found	

Asset ID Asset Description

Asset Location

LS03-RTU-001

REMOTE TERMINAL UNIT

LS No 03 MAPLE STREET

Not Found

Asset ID Asset Description Asset Location

LS03-STR-001 Maple Lift station Structure LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	4	In wet well	
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?			Not Found
Corrosion - Visible Coating Condition	1		
Corrosion - Visible Concrete Condition	3	In wet well and sump	
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping			Not Found
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i			Not Found
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS03-TANK-001 FUEL TANK LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Corrosion	2		
Doublewall - Containment			
Fire and HazCom Signage	5		
Good House Keeping	1		
Isolation Valve			Not Found
Leak Detection	1		
Level Indication	1		
Vent	1		

Asset ID

Asset Description

Asset Location

LS03-VFD-001

VARIABLE FREQUENCY DRIVE

LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared	1		
Installation/ Accessibility	1		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset ID

Asset Description

Asset Location

LS03-VFD-002

VARIABLE FREQUENCY DRIVE

LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared	1		
Installation/ Accessibility	1		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset ID

Asset Description

Asset Location

LS03-VFD-003

VARIABLE FREQUENCY DRIVE

LS No 03 MAPLE STREET

Comments (if applicable)

Some heat on M2 - T2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	5	Terminal heat identified	
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared	3	M2 - T2	
Installation/ Accessibility	1		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS03-VFD-004 VARIABLE FREQUENCY DRIVE LS No 03 MAPLE STREET

Comments (if applicable)

Some heat identified on line breaker A phase, load side of fuses C phase and ${\rm M2}$ - ${\rm T3}$

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	5	Terminal heat identified	
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Contactor Block	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared	4	Refer tp IR images	
Installation/ Accessibility	2		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS03-VLV-001 Pump No 1 Check Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS03-VLV-002

Pump No 1 Discharge Valve

LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-003 Pump No 1 Air Release Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation			
Absence of Leaks	1		
Acceptable Noise			
Acceptable Vibration			
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment			Not Found
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-004 Pump No 2 Check Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS03-VLV-005

Pump No 2 Discharge Valve

LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-006 Pump No 2 Air Release Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation			
Absence of Leaks	1		
Acceptable Noise			
Acceptable Vibration			
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment			Not Found
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-007 Pump No 3 Check Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS03-VLV-008

Pump No 3 Discharge Valve

LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-009 Pump No 3 Air Release Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation			
Absence of Leaks	1		
Acceptable Noise			
Acceptable Vibration			
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment			Not Found
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS03-VLV-010 Pump No 4 Check Valve LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS03-VLV-011

Pump No 4 Discharge Valve

LS No 03 MAPLE STREET

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
1		
1		
2		
1		
		Not Found
1		
1		
2		
1		
2		
2		
1		
	1 1 1 1 1 1 1 1 1 1 2 1 1 2 1 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 2 1 1 2 1

Asset ID Asset Description Asset Location

LS03-VLV-012 Pump No 4 Air Release Valve LS No 03 MAPLE STREET

Comments (if applicable)

Pressure gauge leaking beside air relief valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation			
Absence of Leaks	1		
Acceptable Noise			
Acceptable Vibration			
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland			Not Found
Pipe Alignment			Not Found
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR037 MOTOR - 3 PHASE LS No 03 MAPLE STREET

Comments (if applicable)

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices	1		
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis			Not Found

Asset ID Asset Description Asset Location

MOTOR038 MOTOR - 3 PHASE LS No 03 MAPLE STREET

Comments (if applicable)

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices	1		
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis			Not Found

Asset ID Asset Description Asset Location

MOTOR039 MOTOR - 3 PHASE LS No 03 MAPLE STREET

Comments (if applicable)

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices	1		
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis			Not Found

Asset ID Asset Description Asset Location

MOTOR040 MOTOR - 3 PHASE LS No 03 MAPLE STREET

Comments (if applicable)

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices	1		
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis			Not Found

Asset ID Asset Description Asset Location

PUMP037 SUBMERSIBLE PUMP LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks	1		
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

PUMP038 SUBMERSIBLE PUMP LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks	1		
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

PUMP039 SUBMERSIBLE PUMP LS No 03 MAPLE STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks	1		
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

PUMP040 SUBMERSIBLE PUMP LS No 03 MAPLE STREET

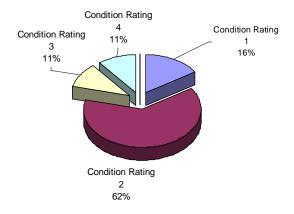
Comments (if applicable)

Leak at pressure gauge in valve box

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks	1		
Corrosion	2		
Operating at Inspection	1		

Station Name:	Lift Stati	on 4 - Que	en Ave										
			IMPAG	CTS				PROBABILITY TRIGGER			₹		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	4	4	7	7	4		4	1	2	1	1	1
CONTROL PANEL	10	4	4	7	7	4		4	1	7	1	4	1
ELECTRICAL EQUIPMENT	10	4	4	7	7	7		4	1	7	1	4	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	4	7	1	1		4	1	4	1	4	1
MOTOR	1	4	4	7	7	1		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	2	4	1	4	1
STRUCTURE	10	4	4	7	7	10		4	1	10	1	2	1
SUB PUMP	1	4	4	7	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 4 Queen Avenue Summary



Location Roll-Up Report

LS No 04 QUEEN AVENUE			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS04-CONV-001	ELECTRICAL EQUIPMENT	5.3	1	0.08	1.066	0.0561
LS04-CTP-001	CONTROL PANEL	5.3	3	0.16	2.496	0.1314
LS04-FAN-001	FAN	5.3	4	0.23	0.616	0.0324
LS04-FIL-001	FILTER	5.3	4	0.19	0.616	0.0324
LS04-FIL-002	FILTER	5.3	3	0.14	0.377	0.0198
LS04-MIL-001	INSTRUMENT	5.3	1	0.07	0.444	0.0234
LS04-MTR-001	INSTRUMENT	5.3	1	0.07	0.444	0.0234
LS04-PMP-001	SUB PUMP	5.3	2	0.09	0.915	0.0482
LS04-RADIO-001	REMOTE TELEMETRY UNIT	5.3	2	0.12	0.29	0.0153
LS04-RTU-001	REMOTE TELEMETRY UNIT	5.3	2	0.12	0.29	0.0153
LS04-STR-001	STRUCTURE	5.3	2	0.13	1.691	0.089
LS04-VLV-001	VALVE	5.3	2	0.1	0.333	0.0175
LS04-VLV-002	VALVE	5.3	2	0.1	0.333	0.0175
LS04-VLV-003	VALVE	5.3	2	0.11	0.333	0.0175
LS04-VLV-004	VALVE	5.3	2	0.1	0.333	0.0175
MOTOR005	MOTOR	5.3	2	0.08	0.855	0.045
MOTOR006	MOTOR	5.3	2	0.08	0.855	0.045
PUMP005	CENT PUMP	5.3	2	0.13	1.338	0.0704
PUMP006	CENT PUMP	5.3	2	0.13	1.338	0.0704
			Location's		Location's	
					Total	
			Condition Score	2	Score	0.79

Asset ID

Asset Description

Asset Location

LS04-CONV-001

12V POWER SUPPLY CONVERTER

LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	2		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

LS04-CTP-001 Pump Control Panel LS No 04 QUEEN AVENUE

Comments (if applicable)

Numerous changes have been made/added in a limited area, resulting in a less than desirable installation

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	5	Not mounted in proper enclosures	
All Safety Features Present	5	See photos	
Appearance (Carbon Dust)	3		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	3		
Control Switches	3		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	2		
Installation	5	Falling apart	
Main Breaker	3	Not proper disconnect	
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	4	Unsafe station electrically	
Starter Block	3		
Structural (Panel)	3	Older panels	

Asset ID Asset Description Asset Location

LS04-FAN-001 FAN LS No 04 QUEEN AVENUE

Comments (if applicable)

Pump evacuation fan not working. Locked Rotor

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion	2		
Installation/ Accessibility	5		
Vents Clean	5		

Asset ID Asset Description Asset Location

LS04-FIL-001 FILTER LS No 04 QUEEN AVENUE

Comments (if applicable)

Pump 1 Seal Water filter

on Rating	Condition Question Comments	s Flag
1		
5		
5		
•	1 5	1 5

Asset ID Asset Description Asset Location

LS04-FIL-002 FILTER LS No 04 QUEEN AVENUE

Comments (if applicable)

Pump 2 seal water filter

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	3		
Tubing / Connections	4		

Asset ID Asset Description Asset Location

LS04-MIL-001 SENSOR UNIT LS No 04 QUEEN AVENUE

Comments (if applicable)

newer narrow beam

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS04-MTR-001 METERING DEVICE LS No 04 QUEEN AVENUE

Comments (if applicable)

Milltronics mutiranger

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration		Tracking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS04-PMP-001 SUBMERSIBLE PUMP LS No 04 QUEEN AVENUE

Comments (if applicable)

Sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	3		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS04-RADIO-001 RTU RADIO LS No 04 QUEEN AVENUE

Comments (if applicable)

Integra

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	5	Not mounted. gets wet	
P&IDs are Accessible	1	Not in station	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS04-RTU-001 REMOTE TERMINAL UNIT LS No 04 QUEEN AVENUE

Comments (if applicable)

telesafe unit. Custom program installed in order to communicate with Integra data radio.

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	4		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS04-STR-001 Queen Avenue structure LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	4		
Corrosion - Structural Metal Condition?	3		
Corrosion - Visible Coating Condition	4		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS04-VLV-001 Pump No 1 Suction Valve LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	5		
Functional	4	Closes with cheater bar	
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	3	Pipe corrosion	
Support	3	No piers	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS04-VLV-002 Pump No 1 Check Valve LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	5	No tension spring	
Corrosion	5		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	3	Pipe corrosion	
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS04-VLV-003 Pump No 2 Suction LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	5		
Functional	4		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	3		
Pipe Alignment	1		
Structural Integrity	3	Pipe corrosion	
Support	3	No piers	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS04-VLV-004 Pump No 2 Check Valve LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	5	No tension spring	
Corrosion	5		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	3	Pipe corrosion	
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR005 MOTOR - 3 PHASE LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

MOTOR006 MOTOR - 3 PHASE LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP005 CENTRIFUGAL PUMP LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	5	extremely tight quaters in pump station	
All Safety Guards Present	5	Missing drive shaft guards	
Corrosion	3	Pitting	
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	2		

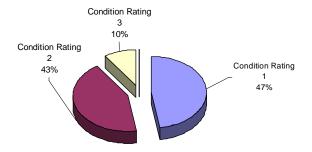
Asset ID Asset Description Asset Location

PUMP006 CENTRIFUGAL PUMP LS No 04 QUEEN AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	5	extremely tight quarters in pump station	
All Safety Guards Present	5	Drive shaft guard missing	
Corrosion	3	Pitting	
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 5 - Uma	atilla										
		IMPACTS					PROBABILITY			Υ	TRIGGER		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	4	1	1	1
CENT PUMP	7	7	4	4	7	4		4	1	4	10	1	1
CONTROL PANEL	10	7	4	4	7	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	4	4	7	4		4	1	7	1	1	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	7	4	4	1	1		4	4	4	1	4	1
MOTOR	7	7	4	4	7	1		4	1	4	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	2		4	2	4	1	4	1
STRUCTURE	7	7	4	4	7	10		4	1	10	1	1	1
SUB PUMP	1	7	4	4	1	1		4	1	7	1	1	1
VALVE	1	1	1	1	4	1		4	1	7	1	1	1

L.S. No 5 Umatilla Summary



Location Roll-Up Report

Location Non-op Nepor						
LS No 05 UMATILLA			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Type	(%)		Score		Score
LS05-BATT-001	ELECTRICAL EQUIPMENT	4.8	1	0.07	1.047	0.0499
LS05-CONV-001	ELECTRICAL EQUIPMENT	4.8	2	0.07	1.539	0.0733
LS05-CTP-001	CONTROL PANEL	4.8	2	0.08	1.581	0.0753
LS05-DEH-001	AIR COMPRESSOR	4.8	3	0.13	0.393	0.0187
LS05-FAN-001	FAN	4.8	1	0.07	0.138	0.0066
LS05-MIL-001	INSTRUMENT	4.8	1	0.06	0.614	0.0292
LS05-MTR-001	INSTRUMENT	4.8	1	0.06	0.614	0.0292
LS05-PMP-001	SUB PUMP	4.8	2	0.11	0.915	0.0436
LS05-RADIO-001	REMOTE TELEMETRY UNIT	4.8	2	0.08	0.29	0.0138
LS05-RTU-001	REMOTE TELEMETRY UNIT	4.8	2	0.1	0.29	0.0138
LS05-STR-001	STRUCTURE	4.8	3	0.13	2.478	0.118
LS05-VLV-001	VALVE	4.8	1	0.07	0.198	0.0094
LS05-VLV-002	VALVE	4.8	1	0.06	0.198	0.0094
LS05-VLV-003	VALVE	4.8	1	0.07	0.198	0.0094
LS05-VLV-004	VALVE	4.8	1	0.06	0.198	0.0094
LS05-VLV-005	VALVE	4.8	1	0.06	0.198	0.0094
LS05-VLV-006	VALVE	4.8	1	0.07	0.198	0.0094
MOTOR007	MOTOR	4.8	2	0.1	1.246	0.0593
MOTOR008	MOTOR	4.8	2	0.09	1.246	0.0593
PUMP007	CENT PUMP	4.8	2	0.08	1.453	0.0692
PUMP008	CENT PUMP	4.8	2	0.12	1.453	0.0692
			Location's		Location's	
			Condition Score	2	Total Score	0.78

Asset ID Asset Description Asset Location

LS05-BATT-001 UPS BATTERY BACKUP LS No 05 UMATILLA

Comments (if applicable)

Small portable unit in bottom of cabinet

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	2		
Control Switches	2		
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3	In bottom of cabinet. Not mounted	
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	2		

Asset ID

Asset Description

Asset Location

LS05-CONV-001

12V POWER SUPPLY CONVERTER

LS No 05 UMATILLA

Comments (if applicable)

Small portable unit in bottom of cabinet

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	2		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	4	In bottom of cabinet. Not mounted	
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

LS05-CTP-001 Pump Control Panel LS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	3	Hour meters only	
Control Lamps	2		
Control Switches	2		
Corrosion	1		
Good House Keeping	5		
Good Wire Labeling	1		
Infrared	2		
Installation	2		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block	2		
Structural (Panel)	1		

Asset IDAsset DescriptionAsset LocationLS05-DEH-001DEHUMIDIFIERLS No 05 UMATILLA

Comments (if applicable)

Small portable unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	5	Condensor vibrating	
Acceptable Smell or Heat	1		
Acceptable Vibration	5	Vibration in condensor	
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor	3		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	3	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	3		
Tubing / Connections			Not Found

Asset IDAsset DescriptionAsset LocationLS05-FAN-001FANLS No 05 UMATILLA

Comments (if applicable)

Pump station evacuation fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	2		
Vents Clean	1		

Asset IDAsset DescriptionAsset LocationLS05-MIL-001SENSOR UNITLS No 05 UMATILLA

Comments (if applicable)

Newer narrow beam

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration		Tracking	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset IDAsset DescriptionAsset LocationLS05-MTR-001METERING DEVICELS No 05 UMATILLA

Comments (if applicable)

Milltronics Multiranger plus

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	tı	racking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset IDAsset DescriptionAsset LocationLS05-PMP-001SUBMERSIBLE PUMPLS No 05 UMATILLA

Comments (if applicable)

Sump Pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks	3		
Corrosion	4		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS05-RADIO-001RTU RADIOLS No 05 UMATILLA

Comments (if applicable)

Integral Radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDS	
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	Not in cabinet	
Power Supply	3	Potable unit sitting in bottom of cabinet	
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS05-RTU-001 REMOTE TERMINAL UNIT LS No 05 UMATILLA

Comments (if applicable)

Older telesafe

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	2		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	Not in cabinet	
Power Supply	3	Small unit sitting in bottom of cabinet	
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description A

Asset Location

LS05-STR-001 Umatilla List Station Structure

LS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	4		
Corrosion - Structural Metal Condition?	3		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition	5	Layer of concrete missing	
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage - Epoxy, Cast-i	3	Significant corrosion of anchor plates/bolts	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description

Asset Location

LS05-VLV-001 Pump No

Pump No 1 Discharge Valve

LS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	3		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS05-VLV-002Pump No 1 Check ValveLS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS05-VLV-003Pump No 1 Suction ValveLS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	3		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS05-VLV-004

Pump No 2 Discharge Valve

LS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS05-VLV-005Pump No 2 Check ValveLS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS05-VLV-006Pump No 2 Suction ValveLS No 05 UMATILLA

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	fanual	Not Found
All Components	1		
Corrosion	1		
Functional	3		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationMOTOR007MOTOR - 3 PHASELS No 05 UMATILLA

Comments (if applicable)

Pump/motor number 1

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Missing guard on coupling area	
Bearings	2		
Corrosion	1		
Drive Shaft Alignment	2		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	4		

Asset IDAsset DescriptionAsset LocationMOTOR008MOTOR - 3 PHASELS No 05 UMATILLA

Comments (if applicable)

Pump/Motor number 2

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Missing coupling guard	
Bearings	3	Top bearing showing wear	
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPUMP007PUMPLS No 05 UMATILLA

Comments (if applicable)

Pump number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5	Missing guard at coupling	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Asset IDAsset DescriptionAsset LocationPUMP008PUMPLS No 05 UMATILLA

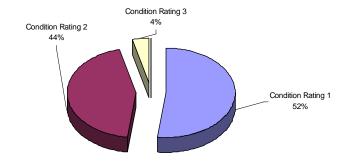
Comments (if applicable)

Pump number 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	5	Excessive leaking at packing gland	
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5	Missing coupling guard	
Corrosion	4	Major corossion at packing gland area	
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 6 - Oak	Creek										
			IMPAG	CTS				PROB	ABILIT	Υ		TRIGGE	۸
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CENT PUMP	10	7	7	7	10	4		4	1	2	1	1	1
CONTROL PANEL	10	7	7	7	10	4		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	7	7	10	7		4	1	7	1	2	1
FAN	1	1	1	1	1	1		4	1	10	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	7	7	1	1		4	1	4	1	1	1
MOTOR	1	7	7	7	7	1		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	2	4	1	1	1
STRUCTURE	10	7	7	7	10	10		4	1	10	4	1	1
SUB PUMP	1	1	4	7	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	4	7	1	1	1

L.S. No 6 Oak Creek Summary



Location Roll-Up Report

LS No 06 OAK CREEK			Condition	Weighted	Total	Weighted
Asset Name		Maight	Score	Condition	Score	Total
Asset Name	Type	Weight (%)	Score	Score	Score	Score
LS06-CONV-001	ELECTRICAL EQUIPMENT	` '	1		1.338	0.0535
		4	1	0.04	<u> </u>	
LS06-FAN-001	FAN	4	1	0.05	0.186	0.0074
LS06-FAN-001M	MOTOR	4	2	0.06	0.265	0.0106
LS06-FAN-002	FAN	4	1_	0.05	0.186	0.0074
LS06-FAN-002M	MOTOR	4	2	0.06	0.265	0.0106
LS06-FIL-001	FILTER	4	2	0.07	0.218	0.0087
LS06-FIL-002	FILTER	4	2	0.07	0.218	0.0087
LS06-HTR-001	FURNACE	4	1	0.05		0
LS06-MCC-001	ELECTRICAL EQUIPMENT	4	2	0.07	1.966	0.0787
LS06-MIL-001	INSTRUMENT	4	1	0.05	0.565	0.0226
LS06-MTR-001	INSTRUMENT	4	1	0.05	0.565	0.0226
LS06-PMP-001	SUB PUMP	4	1	0.05	0.51	0.0204
LS06-RADIO-001	REMOTE TELEMETRY UNIT	4	2	0.09	0.285	0.0114
LS06-RTU-001	REMOTE TELEMETRY UNIT	4	2	0.08	0.285	0.0114
LS06-STR-001	STRUCTURE	4	3	0.1	3.547	0.1419
LS06-VLV-001	VALVE	4	1	0.05	0.269	0.0108
LS06-VLV-002	VALVE	4	1	0.05	0.269	0.0108
LS06-VLV-003	VALVE	4	1	0.05	0.269	0.0108
LS06-VLV-004	VALVE	4	1	0.05	0.269	0.0108
LS06-VLV-005	VALVE	4	1	0.05	0.269	0.0108
LS06-VLV-006	VALVE	4	1	0.05	0.269	0.0108
MOTOR009	MOTOR	4	2	0.06	1.189	0.0476
MOTOR010	MOTOR	4	2	0.06	1.189	0.0476
PUMP009	CENT PUMP	4	2	0.06	1.71	0.0684
PUMP010	CENT PUMP	4	2	0.07	1.71	0.0684
			Location's		Location's	
			Condition Score	1	Total Score	0.71

Asset ID

Asset Description

Asset Location

LS06-CONV-001

12V POWER SUPPLY CONVERTER

LS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	1		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset IDAsset DescriptionAsset LocationLS06-FAN-001FANLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	1		

Asset IDAsset DescriptionAsset LocationLS06-FAN-001MMOTOR - 1 PHASELS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationLS06-FAN-002FANLS No 06 OAK CREEK

Comments (if applicable)

Drive belt loose

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	1		

Asset IDAsset DescriptionAsset LocationLS06-FAN-002MMOTORLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationLS06-FIL-001FILTERLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	2			

Asset IDAsset DescriptionAsset LocationLS06-FIL-002FILTERLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	2			

Asset ID Asset Description Asset Location
LS06-HTR-001 HEATER LS No 06 OAK CREEK

Comments (if applicable)

Building unit heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	2		
Fan and Fan Motor	1		
Operating at Inspection	1		

Asset ID

Asset Description

Asset Location

LS06-MCC-001

Motor Control Center

LS No 06 OAK CREEK

Comments (if applicable)

Older ITE swithchgear - 1970

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Contactor Block	3		
Control Gauges (Hour Meters Volts & Amps)	3	hour meters only	
Control Lamps	3		
Control Switches	2		
Corrosion	2		
Grounding	1		
Infrared	2		
Installation/ Accessibility	2		
Main Breaker	1		
Operating at Inspection	1		
Structural Integrity	2		

Asset IDAsset DescriptionAsset LocationLS06-MIL-001SENSOR UNITLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset IDAsset DescriptionAsset LocationLS06-MTR-001Metering DeviceLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset IDAsset DescriptionAsset LocationLS06-PMP-001SUBMERSIBLE PUMPLS No 06 OAK CREEK

Comments (if applicable)

Union leaks when pump shuts off

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS06-RADIO-001RTU RADIOLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	2		
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	4		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS06-RTU-001

REMOTE TERMINAL UNIT

LS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	2		
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS06-STR-001 Oak Creek Structure LS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition	3		
Structual - Above Grade-Structure Irregularities/C	2		
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations	3		
Structure - Connections in Lateral Force Resisting	1	Assumed - not visible	
Structure - Equipment Anchorage – Epoxy, Cast-i	5		
Structure - Load Path/Redundancy	2		
structure - Piping Connections to Above Ground F			Not Found

Asset IDAsset DescriptionAsset LocationLS06-VLV-001Pump 009 Suction ValveLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS06-VLV-002Pump 009 Check ValveLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS06-VLV-003

Pump 009 Discharge Valve

LS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS06-VLV-004Pump 10 Suction ValveLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS06-VLV-005Pump 10 Check ValveLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationLS06-VLV-006Pump 10 Discharge ValveLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset IDAsset DescriptionAsset LocationMOTOR009MOTOR - 3 PHASELS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment	2		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationMOTOR010MOTOR - 3 PHASELS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	2		
Drive Shaft Alignment	2		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPUMP009CENTRIFUGAL PUMPLS No 06 OAK CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	1		
All Safety Guards Present	5	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPUMP010CENTRIFUGAL PUMPLS No 06 OAK CREEK

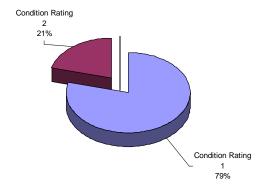
Comments (if applicable)

Some lower bearing noise

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	1		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 7 - Coll	ege Gre	en									
	IMPACTS					PROBABILITY			Υ	TRIGGER			
Same as North Albany	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	return asset to	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE						,							
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	7	10	10	10	7		4	1	2	1	1	1
CONTROL PANEL	10	7	10	10	10	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	10	10	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	10	10	1	1		4	1	1	1	1	1
MOTOR	10	7	10	10	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	10	10	10	10		4	1	10	1	1	1
SUB PUMP	1	7	10	10	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 7 College Green Summary



Location Roll-Up Report

Location Non op Report						
LS No 07 COLLEGE GREEN			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS07-BATT-001	ELECTRICAL EQUIPMENT	4.2	1	0.04	1.947	0.0811
LS07-CTP-001	CONTROL PANEL	4.2	1	0.04	1.557	0.0649
LS07-DEH-001	AIR COMPRESSOR	4.2	1	0.06	0.138	0.0058
LS07-FAN-001	FAN	4.2	1	0.04	0.138	0.0058
LS07-FAN-001S	FAN	4.2	1	0.04	0.138	0.0058
LS07-FIL-001	FILTER	4.2	2	0.08	0.218	0.0091
LS07-FIL-002	FILTER	4.2	2	0.07	0.218	0.0091
LS07-MIL-001	INSTRUMENT	4.2	1	0.05	0.69	0.0288
LS07-MTR-001	INSTRUMENT	4.2	1	0.05	0.69	0.0288
LS07-PMP-001	SUB PUMP	4.2	1	0.06	1.104	0.046
LS07-PMP-002	SUB PUMP	4.2	1	0.06	1.104	0.046
LS07-RADIO-001	REMOTE TELEMETRY UNIT	4.2	1	0.06	0.208	0.0087
LS07-RTU-001	REMOTE TELEMETRY UNIT	4.2	1	0.06	0.208	0.0087
LS07-STR-001	STRUCTURE	4.2	2	0.08	2.477	0.1032
LS07-VLV-001	VALVE	4.2	1	0.05	0.227	0.0094
LS07-VLV-002	VALVE	4.2	1	0.05	0.227	0.0094
LS07-VLV-003	VALVE	4.2	1	0.05	0.227	0.0094
LS07-VLV-004	VALVE	4.2	1	0.05	0.227	0.0094
LS07-VLV-005	VALVE	4.2	1	0.05	0.227	0.0094
LS07-VLV-006	VALVE	4.2	1	0.05	0.227	0.0094
MOTOR011	MOTOR	4.2	2	0.06	1.97	0.0821
MOTOR012	MOTOR	4.2	2	0.09	1.97	0.0821
PUMP011	CENT PUMP	4.2	1	0.06	1.314	0.0548
PUMP012	CENT PUMP	4.2	1	0.06	1.314	0.0548
			Location's		Location's	
					Total	
			Condition Score	1	Score	0.78

Asset ID Asset Description Asset Location

LS07-BATT-001 UPS BATTERY BACKUP LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	1		
Control Switches			Not Found
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	1		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS07-CTP-001 Pump Control Panel LS No 07 COLLEGE GREEN

Comments (if applicable)

New control panel

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Control Gauges (Hour Meters Volts & Amps)	1	Hour meter only	
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	1		
Installation	1		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block		Soft starts	Not Found
Structural (Panel)	1		

Asset ID Asset Description Asset Location

LS07-DEH-001 DEHUMIDIFIER LS No 07 COLLEGE GREEN

Comments (if applicable)

Small portable unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	2		
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	2		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS07-FAN-001 FAN LS No 07 COLLEGE GREEN

Comments (if applicable)

Pump station evacuation fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	1		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS07-FAN-001S FAN LS No 07 COLLEGE GREEN

Comments (if applicable)

Control Panel vent fan

Condition Question	Rating	Condition Question Comments	Flag	
Acceptable Noise	1			
Acceptable Noise	1			
Acceptable Smell or Heat	1			
Corrosion	1			
Installation/ Accessibility	1			
Vents Clean	1			

Asset ID Asset Description Asset Location

LS07-FIL-001 FILTER LS No 07 COLLEGE GREEN

Comments (if applicable)

Seal water filter for pump 1

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	3			

Asset ID Asset Description Asset Location

LS07-FIL-002 FILTER LS No 07 COLLEGE GREEN

Comments (if applicable)

Seal water filter for pump 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS07-MIL-001 SENSOR UNIT LS No 07 COLLEGE GREEN

Comments (if applicable)

New unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat			
Acceptable Wire Labeling	1		
All Components	1		
Calibration		Tracking level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	3	Located deep in wet well. Not much option	
Operating at Inspection	1		
Transmitter/ Transducer	1		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS07-MTR-001 METERING DEVICE LS No 07 COLLEGE GREEN

Comments (if applicable)

Milltronics Multirangers

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	٦	Fracks wet well	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS07-PMP-001 SUBMERSIBLE PUMP LS No 07 COLLEGE GREEN

Comments (if applicable)

1st stage

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS07-PMP-002 SUBMERSIBLE PUMP LS No 07 COLLEGE GREEN

Comments (if applicable)

2nd stage

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1	Could not remove cover	

Asset ID Asset Description Asset Location

LS07-RADIO-001 RTU RADIO LS No 07 COLLEGE GREEN

Comments (if applicable)

Integra unit. No lightening supression

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDS	
Grounding	1		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	1		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS07-RTU-001 REMOTE TERMINAL UNIT LS No 07 COLLEGE GREEN

Comments (if applicable)

SCADA Pack

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDS	
Grounding	1		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1	In cabinet	
Power Supply	1		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS07-STR-001 College Green Lift Station LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	4		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3	Conduit behind ladder present OSHA climbing hazard	
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	2	No blocking between joists.	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS07-VLV-001 Pump No 1 Discharge Valve LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS07-VLV-002 Pump No 1 Check Valve LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS07-VLV-003 Pump No 1 Suction Valve LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID A

Asset Description

Asset Location

LS07-VLV-004

Pump No 2 Discharge Valve

LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS07-VLV-005 Pump N0 2 Check Valve LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS07-VLV-006 Pump No 2 Suction Valve LS No 07 COLLEGE GREEN

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR011 MOTOR - 3 PHASE LS No 07 COLLEGE GREEN

Comments (if applicable)

Pump/motor Number 1

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

MOTOR012 MOTOR - 3 PHASE LS No 07 COLLEGE GREEN

Comments (if applicable)

Pump/Motor number 2. Fan was not turning. Repaied (tightened) with Mike Bryan. Working

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5	Bearing noise upper	
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	4	Upper bearing noise	
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP011 PUMP LS No 07 COLLEGE GREEN

Comments (if applicable)

Pump number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	4		
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP012 PUMP LS No 07 COLLEGE GREEN

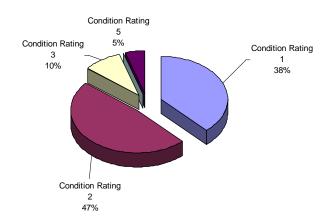
Comments (if applicable)

Pump number 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	4		
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Station Name:	Lift Stati	on 8 - 34 A	Avenue										
			IMPAG	CTS				PROB	ABILIT	Υ	TRIGGER		₹
Same as North Albany	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE	1	4	10	10	10	10	2	7	7	7	10	4	1
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	7	10	10	10	7		4	1	2	1	1	1
CONTROL PANEL	10	7	10	10	10	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	10	10	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	10	10	1	1		4	1	1	1	1	1
MOTOR	10	7	10	10	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	10	10	10	10		4	1	10	1	1	1
SUB PUMP	1	7	10	10	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 8 34th Avenue Summary



Location Roll-Up Report Condition Weighted Total Weighted

LS No 08 34TH AVENUE			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS08-CONV-001	ELECTRICAL EQUIPMENT	4.8	1	0.06	1.947	0.0927
LS08-CTP-001	CONTROL PANEL	4.8	3	0.12	3.747	0.1784
LS08-DEH-001	AIR COMPRESSOR	4.8	2	0.08	0.218	0.0104
LS08-FAN-001	FAN	4.8	2	0.08	0.218	0.0104
LS08-FAN-001S	FAN	4.8	5	0.24	0.855	0.0407
LS08-MIL-001	INSTRUMENT	4.8	1	0.06	0.69	0.0329
LS08-MTR-001	INSTRUMENT	4.8	2	0.07	1.088	0.0518
LS08-PMP-001	SUB PUMP	4.8	1	0.06	1.104	0.0526
LS08-RADIO-001	REMOTE TELEMETRY UNIT	4.8	2	0.11	0.303	0.0144
LS08-RTU-001	REMOTE TELEMETRY UNIT	4.8	3	0.12	0.492	0.0234
LS08-STR-001	STRUCTURE	4.8	2	0.1	2.477	0.118
LS08-VLV-001	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-002	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-003	VALVE	4.8	1	0.07	0.227	0.0108
LS08-VLV-004	VALVE	4.8	2	0.08	0.333	0.0158
LS08-VLV-005	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-006	VALVE	4.8	1	0.06	0.227	0.0108
MOTOR013	MOTOR	4.8	2	0.1	1.97	0.0938
MOTOR014	MOTOR	4.8	2	0.09	2.007	0.0956
PUMP013	CENT PUMP	4.8	2	0.08	2.044	0.0973
PUMP014	CENT PUMP	4.8	2	0.08	2.044	0.0973
			Location's		Location's	
			Condition Score	2	Total Score	1.08

Asset ID

Asset Description

Asset Location

LS08-CONV-001

12V POWER SUPPLY CONVERTER

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS08-CTP-001 Pump Control Panel LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older style panel without modern safety features	
Appearance (Carbon Dust)	3		
Control Gauges (Hour Meters Volts & Amps)	3	Hour meters only	
Control Lamps			Not Found
Control Switches	3		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	2		
Installation	3		
Main Breaker	3	Old breaker	
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	3	Older panel without modern safety devices	
Starter Block	3	Older stlye starters	
Structural (Panel)	3	Older panels	

Asset ID Asset Description Asset Location

LS08-DEH-001 DEHUMIDIFIER LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	2		
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	3	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	3		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location
LS08-FAN-001 FAN LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	3		
Installation/ Accessibility	2		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS08-FAN-001S FAN LS No 08 34TH AVENUE

Comments (if applicable)

Not found

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise			
Acceptable Smell or Heat			
Corrosion			Can not Access
Installation/ Accessibility			Not Functional
Vents Clean			

Asset ID Asset Description Asset Location

LS08-MIL-001 SENSOR UNIT LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS08-MTR-001 Metering Device LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS08-PMP-001 SUBMERSIBLE PUMP LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS08-RADIO-001RTU RADIOLS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS08-RTU-001 REMOTE TERMINAL UNIT LS No 08 34TH AVENUE

Comments (if applicable)

Telesafe. Unique program for interface with Data radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5		
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS08-STR-001 34th Avenue Lift Station LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	4		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition	3	In wet well	
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3	Duct and plate near ladder present OSHA hazards	
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID

Asset Description

Asset Location

LS08-VLV-001

Pump No 1 Discharge Valve

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-002 Pump No 1 Check Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS08-VLV-003

Pump No 2 Discharge Valve

LS No 08 34TH AVENUE

Comments (if applicable)

operates hard

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-004 Pump No 2 Check Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	5 9	slight leak	
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	3		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-005 Pump No 1 Suction Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description

Asset Location

LS08-VLV-006

Pump No 2 Suction Valve

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR - 3 PHASE LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Old motor with inadequate guards	
Bearings	2		
Corrosion	2		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	3		

Asset ID Asset Description Asset Location

MOTOR014 MOTOR - 3 PHASE LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Old motor with inadequate guards	
Bearings	2		
Corrosion	2		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP013 CENTRIFUGAL PUMP LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 N	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP014 CENTRIFUGAL PUMP LS No 08 34TH AVENUE

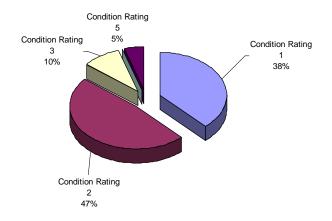
Comments (if applicable)

rattling noise when operating - ultrasonic and vibration good

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Station Name:	Lift Stati	on 8 - 34 A	venue										
			IMPAG	CTS			PROBABILITY			Υ	TRIGGER		
Same as North Albany	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE	1	4	10	10	10	10	2	7	7	7	10	4	1
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	7	10	10	10	7		4	1	2	1	1	1
CONTROL PANEL	10	7	10	10	10	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	10	10	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	10	10	1	1		4	1	1	1	1	1
MOTOR	10	7	10	10	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	10	10	10	10		4	1	10	1	1	1
SUB PUMP	1	7	10	10	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 8 34th Avenue Summary



Location Roll-Up Report Condition Weighted Total Weighted

LS No 08 34TH AVENUE			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS08-CONV-001	ELECTRICAL EQUIPMENT	4.8	1	0.06	1.947	0.0927
LS08-CTP-001	CONTROL PANEL	4.8	3	0.12	3.747	0.1784
LS08-DEH-001	AIR COMPRESSOR	4.8	2	0.08	0.218	0.0104
LS08-FAN-001	FAN	4.8	2	0.08	0.218	0.0104
LS08-FAN-001S	FAN	4.8	5	0.24	0.855	0.0407
LS08-MIL-001	INSTRUMENT	4.8	1	0.06	0.69	0.0329
LS08-MTR-001	INSTRUMENT	4.8	2	0.07	1.088	0.0518
LS08-PMP-001	SUB PUMP	4.8	1	0.06	1.104	0.0526
LS08-RADIO-001	REMOTE TELEMETRY UNIT	4.8	2	0.11	0.303	0.0144
LS08-RTU-001	REMOTE TELEMETRY UNIT	4.8	3	0.12	0.492	0.0234
LS08-STR-001	STRUCTURE	4.8	2	0.1	2.477	0.118
LS08-VLV-001	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-002	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-003	VALVE	4.8	1	0.07	0.227	0.0108
LS08-VLV-004	VALVE	4.8	2	0.08	0.333	0.0158
LS08-VLV-005	VALVE	4.8	1	0.06	0.227	0.0108
LS08-VLV-006	VALVE	4.8	1	0.06	0.227	0.0108
MOTOR013	MOTOR	4.8	2	0.1	1.97	0.0938
MOTOR014	MOTOR	4.8	2	0.09	2.007	0.0956
PUMP013	CENT PUMP	4.8	2	0.08	2.044	0.0973
PUMP014	CENT PUMP	4.8	2	0.08	2.044	0.0973
			Location's		Location's	
			Condition Score	2	Total Score	1.08

Asset ID

Asset Description

Asset Location

LS08-CONV-001

12V POWER SUPPLY CONVERTER

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS08-CTP-001 Pump Control Panel LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older style panel without modern safety features	
Appearance (Carbon Dust)	3		
Control Gauges (Hour Meters Volts & Amps)	3	Hour meters only	
Control Lamps			Not Found
Control Switches	3		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	2		
Installation	3		
Main Breaker	3	Old breaker	
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	3	Older panel without modern safety devices	
Starter Block	3	Older stlye starters	
Structural (Panel)	3	Older panels	

Asset ID Asset Description Asset Location

LS08-DEH-001 DEHUMIDIFIER LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	2		
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	3	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	3		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location
LS08-FAN-001 FAN LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	3		
Installation/ Accessibility	2		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS08-FAN-001S FAN LS No 08 34TH AVENUE

Comments (if applicable)

Not found

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise			
Acceptable Smell or Heat			
Corrosion			Can not Access
Installation/ Accessibility			Not Functional
Vents Clean			

Asset ID Asset Description Asset Location

LS08-MIL-001 SENSOR UNIT LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS08-MTR-001 Metering Device LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS08-PMP-001 SUBMERSIBLE PUMP LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS08-RADIO-001 RTU RADIO LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS08-RTU-001 REMOTE TERMINAL UNIT LS No 08 34TH AVENUE

Comments (if applicable)

Telesafe. Unique program for interface with Data radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5		
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS08-STR-001 34th Avenue Lift Station LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	4		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition	3	In wet well	
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3	Duct and plate near ladder present OSHA hazards	
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID

Asset Description

Asset Location

LS08-VLV-001

Pump No 1 Discharge Valve

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-002 Pump No 1 Check Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS08-VLV-003

Pump No 2 Discharge Valve

LS No 08 34TH AVENUE

Comments (if applicable)

operates hard

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-004 Pump No 2 Check Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	5 9	slight leak	
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	3		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS08-VLV-005 Pump No 1 Suction Valve LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description

Asset Location

LS08-VLV-006

Pump No 2 Suction Valve

LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR - 3 PHASE LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Old motor with inadequate guards	
Bearings	2		
Corrosion	2		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	3		

Asset ID Asset Description Asset Location

MOTOR014 MOTOR - 3 PHASE LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	5	Old motor with inadequate guards	
Bearings	2		
Corrosion	2		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP013 CENTRIFUGAL PUMP LS No 08 34TH AVENUE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 N	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP014 CENTRIFUGAL PUMP LS No 08 34TH AVENUE

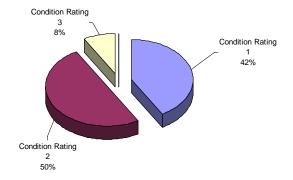
Comments (if applicable)

rattling noise when operating - ultrasonic and vibration good

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Station Name:	Lift Stati	on 9 - Mar	ion Stree	et									
			IMPAG	CTS			PROBABILITY			Υ		TRIGGE	R
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	1	4	4	4	10	4		4	1	2	10	1	1
CONTROL PANEL	10	4	4	4	10	4		4	1	7	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		4	1	7	1	1	1
FAN	1	1	1	1	1	1		4	4	1	1	1	10
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	4	4	1	1		4	1	4	1	4	1
MOTOR	1	4	4	4	7	1		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	4	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 10 14th and Oak Summary



Location Roll-Up Report

LS No 09 MARION STREET			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Type	(%)		Score		Score
LS09-BATT-001	ELECTRICAL EQUIPMENT	4.2	1	0.05	0.991	0.0413
LS09-CONV-001	ELECTRICAL EQUIPMENT	4.2	2	0.06	1.456	0.0607
LS09-CTP-001	CONTROL PANEL	4.2	3	0.11	2.33	0.0971
LS09-DEH-001	AIR COMPRESSOR	4.2	1	0.06	0.138	0.0058
LS09-FAN-001	FAN	4.2	3	0.14	0.441	0.0184
LS09-FIL-001	FILTER	4.2	2	0.07	0.218	0.0091
LS09-FIL-002	FILTER	4.2	2	0.07	0.218	0.0091
LS09-MIL-001	INSTRUMENT	4.2	1	0.05	0.366	0.0152
LS09-MTR-001	INSTRUMENT	4.2	1	0.05	0.366	0.0152
LS09-PMP-001	SUB PUMP	4.2	1	0.06	0.538	0.0224
LS09-PMP-002	VACUUM SYSTEM	4.2	2	0.08	0.841	0.035
LS09-PMP-003	VACUUM SYSTEM	4.2	2	0.08	0.841	0.035
LS09-POT-001	VACUUM SYSTEM	4.2	1	0.05	0.588	0.0245
LS09-RADIO-001	REMOTE TELEMETRY UNIT	4.2	2	0.06	0.277	0.0116
LS09-RTU-001	REMOTE TELEMETRY UNIT	4.2	2	0.08	0.277	0.0116
LS09-STR-001	STRUCTURE	4.2	2	0.1	1.239	0.0516
LS09-VLV-001	VALVE	4.2	1	0.05	0.227	0.0094
LS09-VLV-002	VALVE	4.2	1	0.05	0.227	0.0094
LS09-VLV-003	VALVE	4.2	1	0.05	0.227	0.0094
LS09-VLV-004	VALVE	4.2	1	0.05	0.227	0.0094
MOTOR015	MOTOR	4.2	2	0.07	0.743	0.031
MOTOR016	MOTOR	4.2	2	0.07	0.743	0.031
PUMP015	CENT PUMP	4.2	2	0.08	0.925	0.0385
PUMP016	CENT PUMP	4.2	2	0.08	0.925	0.0385
			Location's		Location's	
			Condition Score	2	Total Score	0.64
			Condition 3core		Score	0.04

Asset ID Asset Description

Asset Location

LS09-BATT-001

UPS BATTERY BACKUP

LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	2		
Control Switches	2		
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	2		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID

Asset Description

Asset Location

LS09-CONV-001

12V POWER SUPPLY CONVERTER

LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	No mounted well	
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	2		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS09-CTP-001 Pump Control Panel LS No 09 MARION STREET

Absence of Burn Marks 1 Acceptable Noise 1 Acceptable Smell or Heat 1 All Components 1 All Safety Features Present 5 Older style panel without modern safety features Appearance (Carbon Dust) 3 Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Control Lamps Not Found Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters Structural (Panel) 2	Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat All Components 1 All Safety Features Present 5 Older style panel without modern safety features Appearance (Carbon Dust) 3 Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Control Lamps Not Found Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 15 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 1 Older style panel without modern safety features 1 Installation 1 Not Found Older style panel without modern safety features Not Found Older style panel without modern safety features	Absence of Burn Marks	1		
All Components 1 All Safety Features Present 5 Older style panel without modern safety features Appearance (Carbon Dust) 3 Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Control Lamps Not Found Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older style starters	Acceptable Noise	1		
All Safety Features Present 5 Older style panel without modern safety features Appearance (Carbon Dust) 3 Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Control Lamps Not Found Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older style panel without modern safety features 1 Not in cabinet	Acceptable Smell or Heat	1		
Appearance (Carbon Dust) 3 Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Control Lamps Not Found Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	All Components	1		
Control Gauges (Hour Meters Volts & Amps) 3 Hour meters only Not Found Control Lamps Corrosion 2 Good House Keeping 5 Good Wire Labeling Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Hour meters only Not Found Not Found	All Safety Features Present	5	Older style panel without modern safety features	
Control Lamps Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Not Found Older stlye starters	Appearance (Carbon Dust)	3		
Control Switches 3 Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Control Gauges (Hour Meters Volts & Amps)	3	Hour meters only	
Corrosion 2 Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Control Lamps			Not Found
Good House Keeping 5 Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Control Switches	3		
Good Wire Labeling 5 Infrared 3 Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Corrosion	2		
Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Good House Keeping	5		
Installation 4 Tight quarters. Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Good Wire Labeling	5		
Main Breaker 2 Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Infrared	3		
Operating at Inspection 1 Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Installation	4	Tight quarters.	
Proper Drawings Accessible 1 Not in cabinet Protective Devices 2 Starter Block 3 Older stlye starters	Main Breaker	2		
Protective Devices 2 Starter Block 3 Older stlye starters	Operating at Inspection	1		
Starter Block 3 Older stlye starters	Proper Drawings Accessible	1	Not in cabinet	
	Protective Devices	2		
Structural (Panel) 2	Starter Block	3	Older stlye starters	
	Structural (Panel)	2		

Asset ID Asset Description Asset Location

LS09-DEH-001 DEHUMIDIFIER LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	2		
Compressor			Non Existent
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	2		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS09-FAN-001 FAN LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion	1		
Installation/ Accessibility	5		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS09-FIL-001 FILTER LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS09-FIL-002 FILTER LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	2			

Asset ID Asset Description Asset Location

LS09-MIL-001 SENSOR UNIT LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS09-MTR-001 METERING DEVICE LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	2		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS09-PMP-001 SUBMERSIBLE PUMP LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS09-PMP-002 VACUUM PUMP LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	5 (Conductors not in conduit	
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS09-PMP-003 VACUUM PUMP LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	5 (Conductors not in conduit	
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS09-POT-001 VACUUM PRIMER POT LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	3	No support on tanks	
Valves			Not Found

Asset ID Asset Description Asset Location

LS09-RADIO-001 RTU RADIO LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy			
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS09-RTU-001

REMOTE TERMINAL UNIT

LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS09-STR-001 Marion Street Lift Station LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	5	No bolts in pipe support base.	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS09-VLV-001 Pump No 1 Check Valve LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description

Asset Location

LS09-VLV-002

Pump No 1 Discharge Valve

LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS09-VLV-003 Pump No 2 Check Valve LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS09-VLV-004

Pump No 2 Discharge Valve

LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR015 MOTOR - 3 PHASE LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

MOTOR016 MOTOR - 3 PHASE LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP015 CENTRIFUGAL PUMP LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

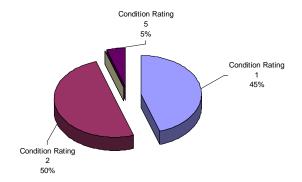
Asset ID Asset Description Asset Location

PUMP016 CENTRIFUGAL PUMP LS No 09 MARION STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 10 - 14	th and O	ak Street									
			IMPAG	CTS				PROBABILITY		Υ	TRIGGER		
Same as Marion	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE	4	4	4	4	4	1	2	7	2	4	1	4	1
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	1	4	4	4	10	4		4	1	2	10	1	1
CONTROL PANEL	10	4	4	4	10	4		4	1	7	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		4	1	7	1	1	1
FAN	1	1	1	1	1	1		4	4	1	1	1	10
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	4	4	1	1		4	1	4	1	4	1
MOTOR	1	4	4	4	7	1		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	4	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 10 14th and Oak Summary



Location Roll-Up Report

LS No 10 OAK STREET			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS10-CONV-001	ELECTRICAL EQUIPMENT	5	1	0.07	0.991	0.0495
LS10-CTP-001	CONTROL PANEL	5	2	0.12	1.422	0.0711
LS10-FAN-001	FAN	5	5	0.23	0.956	0.0478
LS10-MIL-001	INSTRUMENT	5	2	0.08	0.555	0.0277
LS10-MTR-001	INSTRUMENT	5	1	0.06	0.366	0.0183
LS10-PMP-001	SUB PUMP	5	2	0.08	0.79	0.0395
LS10-PMP-002	VACUUM SYSTEM	5	2	0.09	0.841	0.042
LS10-PMP-003	VACUUM SYSTEM	5	2	0.09	0.841	0.042
LS10-POT-001	VACUUM SYSTEM	5	1	0.06	0.588	0.0294
LS10-RADIO-001	REMOTE TELEMETRY UNIT	5	2	0.12	0.277	0.0139
LS10-RTU-001	REMOTE TELEMETRY UNIT	5	2	0.12	0.277	0.0139
LS10-STR-001	STRUCTURE	5	2	0.11	1.239	0.0619
LS10-VLV-001	VALVE	5	1	0.06	0.227	0.0113
LS10-VLV-002	VALVE	5	1	0.06	0.227	0.0113
LS10-VLV-003	VALVE	5	1	0.06	0.227	0.0113
LS10-VLV-004	VALVE	5	1	0.06	0.227	0.0113
MOTOR017	MOTOR	5	2	0.08	0.743	0.0372
MOTOR018	MOTOR	5	2	0.08	0.743	0.0372
PUMP017	CENT PUMP	5	1	0.07	0.595	0.0297
PUMP018	CENT PUMP	5	1	0.07	0.595	0.0297
			Location's		Location's	
			Condition Score	2	Total Score	0.64

Asset ID

Asset Description

Asset Location

LS10-CONV-001

12V POWER SUPPLY CONVERTER

LS No 10 OAK STREET

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
1		
		Not Found
2	On light/switch	
1		
1		
		Not Found
3		
		Not Found
1		
2		
	1 1 1 1 1 1 1 3	1 1 1 1 1 1 1 1 1 1 1 1 3

Asset ID Asset Description Asset Location

LS10-CTP-001 Pump Control Panel LS No 10 OAK STREET

Comments (if applicable)

Older GE starters

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	3	Hour gauges only	
Control Lamps	3		
Control Switches	3		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	1		
Installation	3		
Main Breaker	2	Fused	
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	4	Exposed fuses, etc.	
Starter Block	3	Older stlye starters	
Structural (Panel)	3	Older panels	

Asset ID Asset Description Asset Location
LS10-FAN-001 FAN LS No 10 OAK STREET

Comments (if applicable)

Pump station evacuation fan. Undersized

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion	3		
Installation/ Accessibility	5		
Vents Clean	5		

Asset ID Asset Description Asset Location

LS10-MIL-001 SENSOR UNIT LS No 10 OAK STREET

Comments (if applicable)

older wide beam unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration	1	Tracking level	
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2	Below floor, hard to access for cleaning	
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS10-MTR-001 METERING DEVICE LS No 10 OAK STREET

Comments (if applicable)

Milltronics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	raking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS10-PMP-001 SUBMERSIBLE PUMP LS No 10 OAK STREET

Comments (if applicable)

Sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	3		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS10-PMP-002VACUUM PUMPLS No 10 OAK STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	3		
Valves	3		

Asset ID Asset Description Asset Location

LS10-PMP-003 VACUUM PUMP LS No 10 OAK STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	3		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	3		
Valves	3		

Asset ID Asset Description Asset Location

LS10-POT-001 VACUUM PRIMER POT LS No 10 OAK STREET

Comments (if applicable)

Single pot with two chambers and two float switches

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves			Not Found

Asset ID Asset Description Asset Location

LS10-RADIO-001 RTU RADIO LS No 10 OAK STREET

Comments (if applicable)

Integra data radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5	No backup	
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	not on site	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	1		
Transmitter	2		

Asset ID Asset Description Asset Location

LS10-RTU-001 REMOTE TERMINAL UNIT LS No 10 OAK STREET

Comments (if applicable)

Telesafe unit. Custom program created to talk to data radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5	No backup power supply	
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	Not on site	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS10-STR-001 Oak Street Structure LS No 10 OAK STREET

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	3	Pump bases welded to floor plate. No visible defor	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Ass

Asset Description

Asset Location

LS10-VLV-001

Pump No 1 Discharge valve

LS No 10 OAK STREET

Comments (if applicable)

New Valve. No coating on valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS10-VLV-002 Pump No 1 Check Valve LS No 10 OAK STREET

Comments (if applicable)

New Check Valve. No coating

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS10-VLV-003

Pump No 2 Discharge Valve

LS No 10 OAK STREET

Comments (if applicable)

New Valve. No coating on valve.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS10-VLV-004 Pump No 2 Check Valve LS No 10 OAK STREET

Comments (if applicable)

New Check Valve. No coating on valve yet

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR017 MOTOR - 1 PHASE LS No 10 OAK STREET

WOTOTO TITUDE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

MOTOR018 MOTOR - 1 PHASE LS No 10 OAK STREET

Comments (if applicable)

pump/motor #2

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP017 CENTRIFUGAL PUMP LS No 10 OAK STREET

Comments (if applicable)

Suction Lift Pump

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	1		
Corrosion	1		
Mounting	3	Pump supported by suction pipe	
Operation at Inspection	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP018 CENTRIFUGAL PUMP LS No 10 OAK STREET

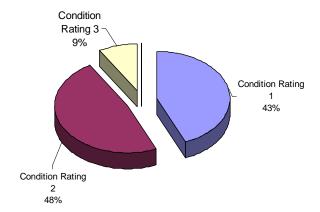
Comments (if applicable)

suction Lift Station

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	1		
Corrosion	1		
Mounting	3	Pump supported by suction pipe	
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 11 - La	wndale										
			IMPAG	CTS				PROB	ABILIT	Υ		TRIGGE	₹
Same as Marion	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE	4	4	4	4	4	1	2	7	7	4	1	4	1
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	1	4	4	4	10	4		4	1	2	10	1	1
CONTROL PANEL	10	4	4	4	10	4		4	1	7	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		4	1	7	1	1	1
FAN	1	1	1	1	1	1		4	4	1	1	1	10
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	4	4	1	1		4	1	4	1	4	1
MOTOR	1	4	4	4	7	1		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	4	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 11 Lawndale Summary



Location Roll-Up Report

Location Non-op Repo				144 1 1 1 1		107 1 1 7
LS No 11 LAWNDALE			Condition	Weighted	Total	Weighted
Asset Name	_	Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS11-CONV-001	ELECTRICAL EQUIPMENT	4	1	0.05	0.991	0.0396
LS11-CTP-001	CONTROL PANEL	4	3	0.11	2.33	0.0932
LS11-DEH-001	AIR COMPRESSOR	4	2	0.1	0.218	0.0087
LS11-FAN-001	FAN	4	3	0.13	0.441	0.0176
LS11-FIL-001	FILTER	4		0		0
LS11-FIL-002	FILTER	4	2	0.08	0.218	0.0087
LS11-HTR-001	FURNACE	4		0		0
LS11-MIL-001	INSTRUMENT	4	1	0.05	0.366	0.0146
LS11-MTR-001	INSTRUMENT	4	2	0.07	0.555	0.0222
LS11-PMP-001	SUB PUMP	4	1	0.05	0.538	0.0215
LS11-PMP-002	VACUUM SYSTEM	4	2	0.09	0.841	0.0336
LS11-PMP-003	VACUUM SYSTEM	4	2	0.09	0.841	0.0336
LS11-POT-001	VACUUM SYSTEM	4	1	0.06	0.588	0.0235
LS11-POT-002	VACUUM SYSTEM	4	1	0.05	0.588	0.0235
LS11-RADIO-001	REMOTE TELEMETRY UNIT	4	2	0.08	0.277	0.0111
LS11-RTU-001	REMOTE TELEMETRY UNIT	4	2	0.08	0.277	0.0111
LS11-STR-001	STRUCTURE	4	2	0.1	1.239	0.0495
LS11-VLV-001	VALVE	4	1	0.05	0.227	0.0091
LS11-VLV-002	VALVE	4	1	0.05	0.227	0.0091
LS11-VLV-003	VALVE	4	1	0.05	0.227	0.0091
LS11-VLV-004	VALVE	4	1	0.05	0.227	0.0091
MOTOR019	MOTOR	4	1	0.06	0.478	0.0191
MOTOR020	MOTOR	4	2	0.07	0.743	0.0297
PUMP019	CENT PUMP	4	2	0.06	0.925	0.037
PUMP020	CENT PUMP	4	2	0.07	0.925	0.037
			Location's		Location's	
			Condition Score	2	Total Score	0.57

Asset ID

Asset Description

Asset Location

LS11-CONV-001

12V POWER SUPPLY CONVERTER

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset IDAsset DescriptionAsset LocationLS11-CTP-001Pump Control PanelLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older style panel without modern safety features	
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	3	Hour gauges only	
Control Lamps			Not Found
Control Switches	3		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	3		
Installation	4	Can't open panel completely	
Main Breaker			Not Found
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	4	600V fuses in 240V panel	
Starter Block	3	one unit newer	
Structural (Panel)	3	Older panels	

Asset ID Asset Description Asset Location

LS11-DEH-001 DEHUMIDIFIER LS No 11 LAWNDALE

Comments (if applicable)

couldn't get to operate

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	5	Front/back panels missing	
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor			Not Assessed
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	4	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	4		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location
LS11-FAN-001 FAN LS No 11 LAWNDALE

Comments (if applicable)

didn't operate

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion	3		
Installation/ Accessibility	2		
Vents Clean	1		

Asset ID Asset Description Asset Location
LS11-FIL-001 FILTER LS No 11 LAWNDALE

Comments (if applicable)

no filter

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Couplings			Not Found
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location
LS11-FIL-002 FILTER LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	3		

Asset ID Asset Description Asset Location
LS11-HTR-001 HEATER LS No 11 LAWNDALE

Comments (if applicable)

no heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks			
Acceptable Noise			
Acceptable Smell or Heat			
All Components			
Corrosion			Not Found
Fan and Fan Motor			Not Found
Operating at Inspection			

Asset IDAsset DescriptionAsset LocationLS11-MIL-001SENSOR UNITLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset IDAsset DescriptionAsset LocationLS11-MTR-001METERING DEVICELS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	2		
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset IDAsset DescriptionAsset LocationLS11-PMP-001SUBMERSIBLE PUMPLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS11-PMP-002VACUUM PUMPLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	5	Poor mounting of compressor	
Air Filter	3		
All Components	1		
Connections Ok	5	Conductors not in conduit	
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	3		
Valves	1		

Asset IDAsset DescriptionAsset LocationLS11-PMP-003VACUUM PUMPLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	5	Missing air filter	
Connections Ok	5	Conductors not in conduit	
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	3		
Valves	1		

Asset ID

Asset Description

Asset Location

LS11-POT-001

VACUUM PRIMER POT

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	3		
Valves			Not Found

Asset ID

Asset Description

Asset Location

LS11-POT-002

VACUUM PRIMER POT

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves			Not Found

Asset IDAsset DescriptionAsset LocationLS11-RADIO-001RTU RADIOLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS11-RTU-001

REMOTE TERMINAL UNIT

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS11-STR-001

Lawndale Street Lift Station

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	5	Primer compressor not well attached-vibrates a lot	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset IDAsset DescriptionAsset LocationLS11-VLV-001Pump No 1 Check ValveLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS11-VLV-002

Pump No 1 Discharge Valve

LS No 11 LAWNDALE

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
		Not Found
1		
2		
1		
		Not Found
1		
2		
1		
2		
2		
1		
	1 1 1 1 1 1 2 1 2 1 2 2	1 1 1 1 2 1 1 2 1 2 1 2 2 2 2

Asset ID

Asset Description

Asset Location

LS11-VLV-003

Pump No 2 Check Valve

LS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS11-VLV-004

Pump No 2 Discharge Valve

LS No 11 LAWNDALE

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
		Not Found
1		
2		
1		
		Not Found
1		
2		
1		
2		
2		
1		
	1 1 1 1 1 1 2 1 2 1 2 2	1 1 1 1 2 1 1 2 1 2 1 2 2 2 2

Asset ID Asset Description Asset Location

MOTOR019 MOTOR - 3 PHASE LS No 11 LAWNDALE

Comments (if applicable)

appears new

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationMOTOR020MOTOR - 3 PHASELS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

 Asset ID
 Asset Description
 Asset Location

 PUMP019
 CENTRIFUGAL PUMP
 LS No 11 LAWNDALE

Comments (if applicable)

appears new

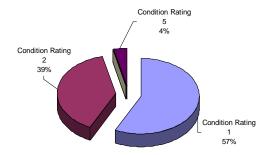
Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	5	Not OSHA Compliant	
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset IDAsset DescriptionAsset LocationPUMP020CENTRIFUGAL PUMPLS No 11 LAWNDALE

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	5	Not OSHA Compliant	
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 12 - M	Wah Cha	ang									
	IMPACTS					PROBABILITY TRIGGER				R			
	Health & Safety of employees and public	Compliance with regulations	Service Reliability	Disruption to the community / Public Image	return asset to	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
DEHUMIDIFIER	1	1	1	1	1	1	2	4	1	4	1	1	1
CENT PUMP	1	7	10	10	10	7	4	4	4	2	1	1	1
CONTROL PANEL	1	7	10	10	10	4	1	4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	10	10	10	4	1	4	4	7	1	1	1
FAN	1	1	1	1	1	1	2	4	1	2	1	1	1
FURNACE	1	1	1	1	1	1	4	4	1	4	1	1	1
GENERATOR	4	7	10	10	1	4	1	4	1	4	1	1	1
INSTRUMENT	1	1	1	1	1	1	2	4	1	4	1	1	1
MOTOR	1	7	10	10	10	1	4	4	1	7	1	1	1
REMOTE TELEMETRY UNIT	1	7	1	1	1	4	2	4	1	4	1	1	1
STRUCTURE	7	7	10	10	10	10	2	4	1	10	10	1	1
SUB PUMP	1			7	1	4	- /	4	1	2	1	1	1
VALVE	1	1 7	1	1	4	4	1	4	1	ı	1	1	1
VACUUM	1	<i>(</i>	10	10	1	<i>(</i>	2	4	4	4	1	1	1

L.S. No 12 Wah- Chang Summary



Location Roll-Up Report

Location Roll-up Report					_	
LS No 12 WAH CHANG			Condition	Weighted	Total	
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS12-BATT-001	ELECTRICAL EQUIPMENT	3.6	1	0.04	1.816	0.0649
LS12-CTP-001	CONTROL PANEL	3.6	1	0.04	1.189	0.0425
LS12-DEH-001	AIR COMPRESSOR	3.6	2	0.06	0.234	0.0083
LS12-ELC-001	ELECTRICAL EQUIPMENT	3.6	1	0.04	1.816	0.0649
LS12-FAN-001	FAN	3.6	1	0.05	0.143	0.0051
LS12-FAN-001S	FAN	3.6	5	0.18	0.86	0.0307
LS12-GEN-001	GENERATOR	3.6	1	0.04	1.104	0.0394
LS12-HTR-001	FURNACE	3.6	2	0.06	0.234	0.0083
LS12-MIL-001	INSTRUMENT	3.6	1	0.05	0.154	0.0055
LS12-MTR-001	INSTRUMENT	3.6	1	0.04	0.154	0.0055
LS12-PMP-001	SUB PUMP	3.6	2	0.07	1.152	0.0412
LS12-PMP-002	VACUUM SYSTEM	3.6	1	0.04	1.239	0.0442
LS12-PMP-003	VACUUM SYSTEM	3.6	1	0.04	1.239	0.0442
LS12-POT-001	VACUUM SYSTEM	3.6	2	0.06	1.77	0.0632
LS12-POT-002	VACUUM SYSTEM	3.6	1	0.04	1.239	0.0442
LS12-RADIO-001	REMOTE TELEMETRY UNIT	3.6	2	0.06	0.273	0.0097
LS12-RTU-001	REMOTE TELEMETRY UNIT	3.6	2	0.05	0.273	0.0097
LS12-SENSOR-001	INSTRUMENT	3.6	1	0.04	0.154	0.0055
LS12-SENSOR-002	INSTRUMENT	3.6	1	0.05	0.154	0.0055
LS12-STR-001	STRUCTURE	3.6	2	0.07	2.602	0.0929
LS12-VLV-001	VALVE	3.6	1	0.04	0.227	0.0081
LS12-VLV-002	VALVE	3.6	1	0.04	0.227	0.0081
LS12-VLV-003	VALVE	3.6	1	0.04	0.227	0.0081
LS12-VLV-004	VALVE	3.6	1	0.04	0.227	0.0081
MOTOR023	MOTOR	3.6	2	0.07	1.705	0.0609
MOTOR024	MOTOR	3.6	2	0.07	1.705	0.0609
PUMP023	CENT PUMP	3.6	2	0.06	1.826	0.0652
PUMP024	CENT PUMP	3.6	2	0.06	1.826	0.0652
			Location's	,	Location's	
			Condition Score	2	Total Score	0.92

Asset ID Asset Description Asset Location

LS12-BATT-001 UPS BATTERY BACKUP LS No 12 WAH CHANG

Comments (if applicable)

Portable UPS

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	2	Cant see condition LED's easily	
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS12-CTP-001 Pump Control Panel LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Control Gauges (Hour Meters Volts & Amps)	2	Hour gauges only	
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	2		
Installation	1		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block	1		
Structural (Panel)	1		

Asset ID Asset Description Asset Location

LS12-DEH-001 DEHUMIDIFIER LS No 12 WAH CHANG

Comments (if applicable)

Small unit heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	2		
Tubing / Connections			Not Found

Asset ID Asset Description

Asset Location

LS12-ELC-001

Added Transfer Switch LS No 12 WAH CHANG

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
1		
1		
		Not Found
		Not Found
1		
1		
1		
1		
2		
1		
1		
1		
1		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Asset IDAsset DescriptionAsset LocationLS12-FAN-001FANLS No 12 WAH CHANG

Comments (if applicable)

station evacuation fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	2		
Vents Clean	1		

Asset IDAsset DescriptionAsset LocationLS12-FAN-001SFANLS No 12 WAH CHANG

Comments (if applicable)

Not found

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion			Can not Access
Installation/ Accessibility			Not Functional
Vents Clean	5		

Asset ID Asset Description Asset Location
LS12-GEN-001 GENERATOR LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	1		
All Components	1		
All Safety Guards Present	1		
Automatic Transfer Switch	1		
Battery/ Charging System	1		
Coating	1		
Control Gauges (Hour Meters Volts & Amps)	1		
Control Lamps	1		
Control Switches	1		
Cooling System	1		
Corrosion	2		
Exercise Program	1		
Exhaust System	1		
Fuel Separator			Not Found
Heater Jacket			Not Found
Hoses and Belts	1		
Infrared	2		
Monitoring Panel	1		
Oil Analysis			Not Found
Oil OK at Inspection	1		
Oil Pressure	1		
Running at Inspection	1		
Starting System	1		
Structural Integrity	1		
Water Temperature	1		

Asset ID Asset Description Asset Location
LS12-GEN-001 GENERATOR LS No 12 WAH CHANG

Comments (if applicable)

Condition Question Rating Condition Question Comments Flag

Asset ID Asset Description Asset Location

LS12-HTR-001 HEATER LS No 12 WAH CHANG

Comments (if applicable)

small portble unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	3		
Fan and Fan Motor	3		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS12-MIL-001SENSOR UNITLS No 12 WAH CHANG

Comments (if applicable)

Level transducer Milltrionics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration		Tracking	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS12-MTR-001 METERING DEVICE LS No 12 WAH CHANG

Comments (if applicable)

Milltronics Multiranger

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS12-PMP-001 SUBMERSIBLE PUMP LS No 12 WAH CHANG

Comments (if applicable)

Sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	4		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS12-PMP-002VACUUM PUMPLS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts	1		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset IDAsset DescriptionAsset LocationLS12-PMP-003VACUUM PUMPLS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts	1		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS12-POT-001 Vacuum Pot LS No 12 WAH CHANG

Comments (if applicable)

Small leak in system. Most likley in suction pipe in wet well

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	5	Small undetecable leack. May be in wet well	
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	1		
Valves			Not Found

Asset ID Asset Description Asset Location

LS12-POT-002 Vacuum Pot 2 LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	1		
Valves			Not Found

Asset ID Asset Description Asset Location

LS12-RADIO-001 RTU RADIO LS No 12 WAH CHANG

Comments (if applicable)

Integral data Radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LED's	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1	n cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	3		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS12-RTU-001

REMOTE TERMINAL UNIT

LS No 12 WAH CHANG

Comments (if applicable)

Scada pack

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	1		
Transmitter	2		

Asset ID Asset Description Asset Location

LS12-SENSOR-001 SENSOR UNIT LS No 12 WAH CHANG

Comments (if applicable)

Station flood float

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration			Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS12-SENSOR-002 SENSOR UNIT LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking Level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS12-STR-001 Wah Chan Lift Station LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	3		
Corrosion - Soil Resistivity	4		
Corrosion - Structural Metal Condition?	3		
Corrosion - Visible Coating Condition	3		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	2	No blocking between joists.	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS12-VLV-001 Pump No 1 Discharge Valve LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS12-VLV-002 Pump No 1 Check Valve LS No 12 WAH CHANG

Comments (if applicable)

New not painted. primer only

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS12-VLV-003

Pump No 2 Discharge Valve

LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS12-VLV-004 Pump No 2 Check Valve LS No 12 WAH CHANG

Comments (if applicable)

New check valve primer only

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR023 MOTOR - 3 PHASE LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	3	Top bearing needs grease	
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	3		

Asset ID Asset Description Asset Location

MOTOR024 MOTOR - 3 PHASE LS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2	Based on vibration/sound	
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	3	Might be unbalanced impeller or debris	

Asset IDAsset DescriptionAsset LocationPUMP023CENTRIFUGAL PUMPLS No 12 WAH CHANG

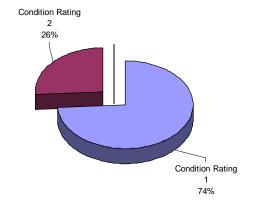
Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3	Typical of can station	
All Safety Guards Present	1		
Corrosion	2		
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	3		

Asset IDAsset DescriptionAsset LocationPUMP024CENTRIFUGAL PUMPLS No 12 WAH CHANG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3	Typical for can station	
All Safety Guards Present	1		
Corrosion	1		
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 13 - Ce	ntury Dr	ive									
	IMPACTS				PROBABILITY			Υ	TRIGGER				
Same as North Albany	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols	-	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE						,							
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	7	7	7	7	7		4	1	2	1	1	1
CONTROL PANEL	10	7	7	7	7	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	7	7	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	7	7	1	1		4	1	1	1	1	1
MOTOR	10	7	7	7	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	7	7	10	10		4	1	10	1	1	1
SUB PUMP	1	7	7	7	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S. No 13 Century Drive Summary



Location Roll-Up Rep	ort					
LS No 13 CENTURY DR			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS13-CTP-001	CONTROL PANEL	4	1	0.04	1.302	0.0521
LS13-DEH-001	AIR COMPRESSOR	4	2	0.06	0.218	0.0087
LS13-FAN-001	FAN	4	1	0.04	0.138	0.0055
LS13-FAN-001S	FAN	4	1	0.04	0.138	0.0055
LS13-FIL-001	FILTER	4		0		0
LS13-FIL-002	FILTER	4	5	0.2	0.855	0.0342
LS13-HTR-001	FURNACE	4	1	0.04	0.154	0.0062
LS13-MIL-001	INSTRUMENT	4	1	0.05	0.506	0.0202
LS13-MTR-001	INSTRUMENT	4	1	0.04	0.506	0.0202
LS13-PMP-001	SUB PUMP	4	2	0.08	0.832	0.0333
LS13-PMP-002	VACUUM SYSTEM	4	1	0.06	0.454	0.0182
LS13-PMP-003	VACUUM SYSTEM	4	1	0.06	0.43	0.0172
LS13-POT-001	VACUUM SYSTEM	4	1	0.04	0.43	0.0172
LS13-POT-002	VACUUM SYSTEM	4	1	0.04	0.43	0.0172
LS13-RADIO-001	REMOTE TELEMETRY UNIT	4	1	0.06	0.161	0.0064
LS13-RTU-001	REMOTE TELEMETRY UNIT	4	1	0.06	0.161	0.0064
LS13-STR-001	STRUCTURE	4	2	0.07	2.123	0.0849
LS13-VLV-001	VALVE	4	1	0.05	0.227	0.0091
LS13-VLV-002	VALVE	4	1	0.05	0.227	0.0091
LS13-VLV-003	VALVE	4	2	0.07	0.333	0.0133
LS13-VLV-004	VALVE	4	1	0.05	0.227	0.0091
MOTOR021	MOTOR	4	2	0.06	1.227	0.0491
MOTOR022	MOTOR	4	2	0.06	1.227	0.0491
PUMP021	CENT PUMP	4	1	0.05	0.645	0.0258
PUMP022	CENT PUMP	4	1	0.05	0.645	0.0258
			Location's		Location's	
			Condition Score	1	Total Score	0.54

Asset ID Asset Description Asset Location

LS13-CTP-001 Pump Control Panel LS No 13 CENTURY DR

Comments (if applicable)

New above ground electrical panel and ATS

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Control Gauges (Hour Meters Volts & Amps)	1	Hour meters only - amps SCADA monitored	
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	1		
Installation	2		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block		Soft start	Not Found
Structural (Panel)	1		

Asset ID Asset Description Asset Location

LS13-DEH-001 DEHUMIDIFIER LS No 13 CENTURY DR

Comments (if applicable)

Small wall mounted unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	2		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS13-FAN-001 FAN LS No 13 CENTURY DR

Comments (if applicable)

Pump Station Evacuation fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	1		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location
LS13-FAN-001S FAN LS No 13 CENTURY DR

Comments (if applicable)

Control cabinet fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	1		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS13-FIL-001 FILTER LS No 13 CENTURY DR

Comments (if applicable)

Removed from pumps with mechanical seal change

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks				
Couplings			Not Found	
Tubing / Connections			Not Found	

Asset ID Asset Description Asset Location

LS13-FIL-002 FILTER LS No 13 CENTURY DR

Comments (if applicable)

Removed with mechanical seal change

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	5		
Couplings			Not Found
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS13-HTR-001 HEATER LS No 13 CENTURY DR

Comments (if applicable)

Small portable unit heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	1		
Fan and Fan Motor	1		
Operating at Inspection	1	Plugged in and turned on	

Asset ID Asset Description Asset Location

LS13-MIL-001 SENSOR UNIT LS No 13 CENTURY DR

Comments (if applicable)

Transducer in wet well

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat			
Acceptable Wire Labeling	1		
All Components	1		
Calibration			Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	3	Mounted below floor plate	
Operating at Inspection	1		
Transmitter/ Transducer	1		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS13-MTR-001 METERING DEVICE LS No 13 CENTURY DR

Comments (if applicable)

Milltronics

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	٦	Fracks with tape measure	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	1		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS13-PMP-001 SUBMERSIBLE PUMP LS No 13 CENTURY DR

Comments (if applicable)

Submersible sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	4		
Operating at Inspection	1		

Asset IDAsset DescriptionAsset LocationLS13-PMP-002VACUUM PUMPLS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset IDAsset DescriptionAsset LocationLS13-PMP-003VACUUM PUMPLS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS13-POT-001 VACUUM PRIMER POT LS No 13 CENTURY DR

Comments (if applicable)

POump/motor number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1	Fabricated vacuum chamber	
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	1		
Valves			Not Found

Asset ID Asset Description Asset Location

LS13-POT-002 VACUUM PRIMER POT LS No 13 CENTURY DR

Comments (if applicable)

pump/motor number 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	1		
Valves			Not Found

Asset IDAsset DescriptionAsset LocationLS13-RADIO-001RTU RADIOLS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	1		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1	ladder logic and schematics	
Power Supply	1		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS13-RTU-001 REMOTE TERMINAL UNIT LS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LED's	
Grounding	1		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	1		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS13-STR-001 Century Drive Lift Station LS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1	potential at -0.607V, not cathodically	
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	2		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	1		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	2	No blocking between roof joists.	
Structure - Equipment Anchorage – Epoxy, Cast-i	3	Pump bases welded to floor plate. No flange?	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS13-VLV-001 Pump No 1 Discharge Valve LS No 13 CENTURY DR

Comments (if applicable)

Valve turns

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2	One support for assembly	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS13-VLV-002 Pump No1 Check Valve LS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	d anual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	3		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS13-VLV-003 Pump No 2 Discharge Valve LS No 13 CENTURY DR

Comments (if applicable)

Frozen open. Could not close by hand

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	1		
Functional	5	Would not close by hand	
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	3	One support for assembly	
Valve Isolates (Holds)	5	Siezed	

Asset ID Asset Description Asset Location

LS13-VLV-004 Pump No 2 Check Valve LS No 13 CENTURY DR

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	3	One support for assembly	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR021 MOTOR - 3 PHASE LS No 13 CENTURY DR

Comments (if applicable)

Motor bearings sound like new. Motor/pump number 1

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	3	Horizantal upper bearing area	

Asset ID Asset Description Asset Location

MOTOR022 MOTOR - 3 PHASE LS No 13 CENTURY DR

Comments (if applicable)

Pump/motor #2

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	3	Upper bearing needs light lubrication	
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP021 CENTRIFUGAL PUMP LS No 13 CENTURY DR

Comments (if applicable)

Motor/Pump Number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3	Typical for can station	
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP022 CENTRIFUGAL PUMP LS No 13 CENTURY DR

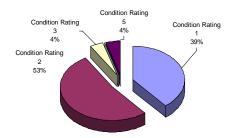
Comments (if applicable)

Pump/Motor number 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	3	Typical for can station	
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 14 - Ch	arlotte										
			IMPAG	CTS				PROB	ABILIT	Υ		TRIGGE	R
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	1	4	4	4	10	4		4	1	4	7	1	1
CONTROL PANEL	10	4	4	4	10	4		4	1	7	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	7		4	1	7	1	2	1
FAN	1	1	1	1	1	1		4	2	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
FURNACE	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	4	4	1	1		4	4	4	1	1	1
MOTOR	1	4	4	4	7	1		4	1	4	7	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	10	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	4	1	1	1 1	7	4		1 1	1 1	7	1 1	1 1	1 1

L.S. No 14 Charlotte Summary



Location Roll-Up Report						
LS No 14 CHARLOTTE STREET			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS14-CONV-001	ELECTRICAL EQUIPMENT	3.8	2	0.07	1.464	0.0563
LS14-CTP-001	CONTROL PANEL	3.8	2	0.08	1.422	0.0547
LS14-DEH-001	AIR COMPRESSOR	3.8	1	0.06	0.138	0.0053
LS14-FAN-001	FAN	3.8	3	0.11	0.388	0.0149
LS14-FAN-001S	FAN	3.8	5	0.19	0.865	0.0333
LS14-FIL-001	FILTER	3.8	2	0.08	0.218	0.0084
LS14-FIL-002	FILTER	3.8	2	0.06	0.218	0.0084
LS14-HTR-001	FURNACE	3.8	1	0.04	0.138	0.0053
LS14-MIL-001	INSTRUMENT	3.8	2	0.07	0.619	0.0238
LS14-MTR-001	INSTRUMENT	3.8	1	0.04	0.434	0.0167
LS14-PMP-001	SUB PUMP	3.8	2	0.08	0.79	0.0304
LS14-PMP-002	VACUUM SYSTEM	3.8	2	0.08	0.841	0.0323
LS14-PMP-003	VACUUM SYSTEM	3.8	1	0.05	0.588	0.0226
LS14-POT-001	VACUUM SYSTEM	3.8	2	0.06	0.841	0.0323
LS14-POT-002	VACUUM SYSTEM	3.8	1	0.04	0.867	0.0334
LS14-RADIO-001	REMOTE TELEMETRY UNIT	3.8	3	0.1	0.466	0.0179
LS14-RTU-001	REMOTE TELEMETRY UNIT	3.8	3	0.1	0.466	0.0179
LS14-STR-001	STRUCTURE	3.8	3	0.1	2.549	0.098
LS14-VLV-001	VALVE	3.8	1	0.05	0.227	0.0087
LS14-VLV-002	VALVE	3.8	1	0.05	0.227	0.0087
LS14-VLV-003	VALVE	3.8	1	0.05	0.227	0.0087
LS14-VLV-004	VALVE	3.8	1	0.05	0.227	0.0087
MOTOR025	MOTOR	3.8	2	0.08	0.847	0.0326
MOTOR026	MOTOR	3.8	2	0.06	0.847	0.0326
PUMP025	CENT PUMP	3.8	2	0.08	0.931	0.0358
PUMP026	CENT PUMP	3.8	2	0.08	0.931	0.0358
			Location's		Location's	
			Camalitian Carre	•	Total	0.00
			Condition Score	2	Score	0.68

Asset ID

Asset Description

Asset Location

LS14-CONV-001

12V POWER SUPPLY CONVERTER

LS No 14 CHARLOTTE STREET

Comments (if applicable)

old unit not mounted

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	5	Not mounted to wall or cabinet	
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	4	Not mounted on wall or cabinet	
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

LS14-CTP-001 Pump Control Panel LS No 14 CHARLOTTE STREET

Comments (if applicable)

Older Allen Bradley installation

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older style panel without modern safety features	
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	2	Hour meters only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	1		
Installation	3		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	2		
Starter Block	2		
Structural (Panel)	2		

Asset ID Asset Description Asset Location

LS14-DEH-001 DEHUMIDIFIER LS No 14 CHARLOTTE STREET

Comments (if applicable)

Small wall mount unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	2		
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	2		
Day Tank			Not Found
Operating at Inspection	1	Turned on	
Structural Integrity	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS14-FAN-001 FAN LS No 14 CHARLOTTE STREET

Comments (if applicable)

Pump Station Evacuation fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5	Locked rotor "Hot"	
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS14-FAN-001S FAN LS No 14 CHARLOTTE STREET

Comments (if applicable)

Not Found. One fan in station

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion			Can not Access
Installation/ Accessibility			Not Functional
Vents Clean	5		

Asset ID Asset Description Asset Location

LS14-FIL-001 FILTER LS No 14 CHARLOTTE STREET

Comments (if applicable)

Pump 1 seal water filter

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	3			

Asset ID Asset Description Asset Location

LS14-FIL-002 FILTER LS No 14 CHARLOTTE STREET

Comments (if applicable)

Pump 2 seal water filter

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS14-HTR-001 HEATER LS No 14 CHARLOTTE STREET

Comments (if applicable)

Small unit heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	2		
Fan and Fan Motor	1		
Operating at Inspection	1 7	urned on	

Asset ID Asset Description Asset Location

LS14-MIL-001 SENSOR UNIT LS No 14 CHARLOTTE STREET

Comments (if applicable)

older wide beam unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration	1	Tracking wet well level	
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	3	Mounted below floor. hard to acess for cleaning	
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS14-MTR-001 METERING DEVICE LS No 14 CHARLOTTE STREET

Comments (if applicable)

Milltronics unit

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	٦	Fracking with tape measure	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	1		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS14-PMP-001 SUBMERSIBLE PUMP LS No 14 CHARLOTTE STREET

Comments (if applicable)

Submersible sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	4		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS14-PMP-002 VACUUM PUMP LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	5	Small leak at compressor	
Corrosion	2		
Hoses and Belts	1		
Running at Inspection	1		
Structural Integrity	2		
Valves	5	Small leak at compressor	

Asset ID Asset Description Asset Location

LS14-PMP-003 VACUUM PUMP LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts	1		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS14-POT-001 VACUUM PRIMER POT LS No 14 CHARLOTTE STREET

Comments (if applicable)

pump/Motor number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	5	Small leak in check valve at compressor	
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	1		
Valves			Not Found

Asset ID Asset Description Asset Location

LS14-POT-002 VACUUM PRIMER POT LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS14-RADIO-001 RTU RADIO LS No 14 CHARLOTTE STREET

Comments (if applicable)

Old truck mount unit

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5	No labeling	
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5	No battery bacup	
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	4	Unit not mounted	
P&IDs are Accessible	1	Not in station	
Power Supply	3		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS14-RTU-001 REMOTE TERMINAL UNIT LS No 14 CHARLOTTE STREET

Comments (if applicable)

older Telesafe unit. Need to upgrade to SCADA Pack

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5	Very little labeling	
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5	No battery backup	
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible		Not on site	
Power Supply	3	Older unit. Not mounted	
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS14-STR-001 Charlotte Lift Station LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	4	Variations in UT measurements	
Corrosion - Visible Coating Condition	4		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	3	Pump bases welded to floor plate. No flange?	
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS14-VLV-001 Pump No 1 Discharge Valve LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	3	Supported by pipe penitration and floor plate	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS14-VLV-002 Pump No 1 Check Valve LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	3	support on pipe penitration and floor plate	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS14-VLV-003 Pump No 2 Discharge Valve LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		Manual	Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	3	Supported at pier to floor plate	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS14-VLV-004 Pump No 2 Check Valve LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	2		
Support	3	supported on pier to floor plate	
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR025 MOTOR - 1 PHASE LS No 14 CHARLOTTE STREET

Comments (if applicable)

pump/motor number 1

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5	Top bearing going bad or needs grease	
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	4	Top bearing failing or needs grease	
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

MOTOR026 MOTOR - 1 PHASE LS No 14 CHARLOTTE STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP025 CENTRIFUGAL PUMP LS No 14 CHARLOTTE STREET

Comments (if applicable)

pump/motor number 1

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	5	Appears to be debris on impeller	
Accessibility	3	Typical for can station	
All Safety Guards Present	1		
Corrosion	2		
Mounting	3	Suction line penatration not reinforced	
Operation at Inspection	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP026 CENTRIFUGAL PUMP LS No 14 CHARLOTTE STREET

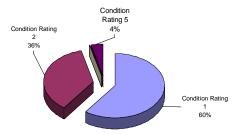
Comments (if applicable)

Pump/motor number 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	5	Appears to be debris on impeller	
Accessibility	3	Typical for can station	
All Safety Guards Present	1		
Corrosion	2		
Mounting	3	Suction line penatration not reinforced	
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 15 - M	Burkhart	Creek									
			IMPAG	CTS				PROB	ABILIT	Υ		TRIGGE	ک
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of	Asset Condition (Auto calculated)	Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
Same as Charlotte						revenue)							
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1 7	1	1
CENT PUMP	1	4	4	4	10	4		4	1	7	1	1	1
CONTROL PANEL	10	4	4	4	10	4		4	1	7	1	2	1
ELECTRICAL EQUIPMENT	10	4	4	4	10	1		4	1	1	1	2	1
FAN FILTER	1	1	1	1	1	1		4	2	1	1	1	1
FURNACE	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	1	4	1	1		4	4	4	1	1	1
MOTOR	1	1	4	4	7	1		4	1	4	7	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	10	4	4	4	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	4	4	4	4	1		4	4	4	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S.No 15 Burkhart Creek Summary



LS No 15 BURKHART CREEK			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS15-CONV-001	ELECTRICAL EQUIPMENT	4	1	0.05	0.883	0.0353
LS15-CTP-001	CONTROL PANEL	4	2	0.1	1.422	0.0569
LS15-DEH-001	AIR COMPRESSOR	4	2	0.09	0.218	0.0087
LS15-FAN-001	FAN	4	1	0.05	0.149	0.0059
LS15-FAN-001S	FAN	4	5	0.2	0.865	0.0346
LS15-FIL-001	FILTER	4	2	0.07	0.218	0.0087
LS15-FIL-002	FILTER	4	2	0.07	0.218	0.0087
LS15-MIL-001	INSTRUMENT	4	1	0.05	0.434	0.0173
LS15-MTR-001	INSTRUMENT	4	1	0.05	0.434	0.0173
LS15-PMP-001	VACUUM SYSTEM	4	1	0.05	0.588	0.0235
LS15-PMP-002	VACUUM SYSTEM	4	1	0.06	0.588	0.0235
LS15-PMP-003	SUB PUMP	4	1	0.05	0.538	0.0215
LS15-POT-001	VACUUM SYSTEM	4	1	0.05	0.588	0.0235
LS15-POT-002	VACUUM SYSTEM	4	1	0.05	0.588	0.0235
LS15-RADIO-001	REMOTE TELEMETRY UNIT	4	2	0.09	0.277	0.0111
LS15-RTU-001	REMOTE TELEMETRY UNIT	4	2	0.09	0.277	0.0111
LS15-STR-001	STRUCTURE	4	2	0.07	1.593	0.0637
LS15-VLV-001	VALVE	4	1	0.05	0.227	0.0091
LS15-VLV-002	VALVE	4	1	0.05	0.227	0.0091
LS15-VLV-003	VALVE	4	1	0.05	0.227	0.0091
LS15-VLV-004	VALVE	4	1	0.05	0.227	0.0091
MOTOR027	MOTOR	4	2	0.06	0.847	0.0339
MOTOR028	MOTOR	4	2	0.06	0.847	0.0339
PUMP027	CENT PUMP	4	1	0.05	0.614	0.0246
PUMP028	CENT PUMP	4	1	0.05	0.614	0.0246
			Location's		Location's	
					Total	
	'		Condition Score	2	Score	0.55

Asset ID

Asset Description

Asset Location

LS15-CONV-001

12V POWER SUPPLY CONVERTER

LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	2		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS15-CTP-001 Pump Control Panel LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	5	Evidence of past burn mark	
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	5	Older style panel without modern safety features	
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	3	Hour gauges only	
Control Lamps	3		
Control Switches	2		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	3		
Installation	3		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	1		
Starter Block	2		
Structural (Panel)	2		

Asset ID Asset Description Asset Location

LS15-DEH-001 DEHUMIDIFIER LS No 15 BURKHART CREEK

Comments (if applicable)

unoperable

Rating	Condition Question Comments	Flag
1		
5		
1		
1		
1		
		Not Found
		Not Found
2		
5		
		Not Found
3	On/off switch	
3		
		Not Found
1		
3		
		Not Found
	1 5 1 1 1 1 2 5	1

Asset ID Asset Description Asset Location

LS15-FAN-001 FAN LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS15-FAN-001S FAN LS No 15 BURKHART CREEK

Comments (if applicable)

Not found. One fan

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	5		
Acceptable Smell or Heat	5		
Corrosion			Can not Access
Installation/ Accessibility			Not Functional
Vents Clean	5		

Asset ID Asset Description Asset Location

LS15-FIL-001 FILTER LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag	
Absence of Leaks	1			
Couplings	2			
Tubing / Connections	2			

Asset ID Asset Description Asset Location

LS15-FIL-002 FILTER LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS15-MIL-001 SENSOR UNIT LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS15-MTR-001 METERING DEVICE LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	2		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS15-PMP-001 VACUUM PUMP LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	1		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	1		
Valves	1		

Asset ID Asset Description Asset Location

LS15-PMP-002 VACUUM PUMP LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	1		
Valves	1		

Asset ID Asset Description Asset Location

LS15-PMP-003 SUBMERSIBLE PUMP LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS15-POT-001 VACUUM PRIMER POT LS No 15 BURKHART CREEK

Comments (if applicable)

no fixture support

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves			Not Found

Asset ID Asset Description Asset Location

LS15-POT-002 VACUUM PRIMER POT LS No 15 BURKHART CREEK

Comments (if applicable)

no fixture support

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves			Not Found

Asset ID Asset Description Asset Location

LS15-RADIO-001 RTU RADIO LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS15-RTU-001 REMOTE TERMINAL UNIT LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System			Not Found
Connections Ok	1		
Display/Indicator Ok			
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS15-STR-001 Burkhart Lift Station LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	2		
Corrosion - Structural Metal Condition?	2		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS15-VLV-001 Pump No 1 Discharge Valve LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS15-VLV-002 Pump No 1 Check Valve LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS15-VLV-003

Pump No 2 Discharge Valve

LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS15-VLV-004 Pump No 2 Check Valve LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	2		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR027 MOTOR - 3 PHASE LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

MOTOR028 MOTOR - 3 PHASE LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	2		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP027 CENTRIFUGAL PUMP LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	1		
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

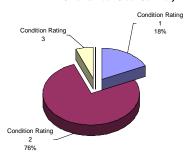
Asset ID Asset Description Asset Location

PUMP028 CENTRIFUGAL PUMP LS No 15 BURKHART CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2	Typical for can station	
All Safety Guards Present	1		
Corrosion	2		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Station Name:	Lift Stati	on 16 - Tr	uax Cree	k									
			IMPAG	CTS				PROBABILITY			TRIGGER		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	Reliability	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	1	7	1	1	10	4		4	1	2	2	1	1
CONTROL PANEL	10	7	1	1	10	4		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	1	1	10	4		4	1	7	1	1	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1	1	1	1	1		4	2	4	1	4	1
MOTOR	1	7	1	1	7	1		4	1	2	2	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	1	4	1	4	1
STRUCTURE	4	7	1	1	10	10		4	1	10	1	1	1
SUB PUMP	1	7	1	1	4	1		4	1	7	1	1	1
VACUUM SYSTEM	1	7	1	1	4	1		4	2	4	2	7	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S.No 16 Truax Creek Summary



Location Roll-Up Repo	ort					
LS No 16 TRUAX CREEK			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS16-CONV-001	ELECTRICAL EQUIPMENT	5.9	1	0.08	0.849	0.05
LS16-CTP-001	CONTROL PANEL	5.9	2	0.13	1.131	0.0665
LS16-FIL-001	FILTER	5.9	2	0.12	0.218	0.0128
LS16-HTR-001	FURNACE	5.9	4	0.22	0.632	0.0372
LS16-MIL-001	INSTRUMENT	5.9	1	0.08	0.165	0.0097
LS16-MTR-001	INSTRUMENT	5.9	2	0.1	0.244	0.0144
LS16-PMP-001	SUB PUMP	5.9	2	0.12	0.624	0.0367
LS16-PMP-002	VACUUM SYSTEM	5.9	2	0.09	0.641	0.0377
LS16-PMP-003	VACUUM SYSTEM	5.9	2	0.11	0.641	0.0377
LS16-POT-001	VACUUM SYSTEM	5.9	1	0.08	0.432	0.0254
LS16-RADIO-001	REMOTE TELEMETRY UNIT	5.9	2	0.14	0.265	0.0156
LS16-RTU-001	REMOTE TELEMETRY UNIT	5.9	2	0.14	0.265	0.0156
LS16-STR-001	STRUCTURE	5.9	2	0.12	1.062	0.0625
MOTOR029	MOTOR	5.9	2	0.09	0.603	0.0355
MOTOR030	MOTOR	5.9	2	0.09	0.603	0.0355
PUMP029	CENT PUMP	5.9	2	0.09	0.679	0.0399
PUMP030	CENT PUMP	5.9	2	0.09	0.679	0.0399
			Location's		Location's	
					Total	
			Condition Score	2	Score	0.57

Asset ID

Asset Description

Asset Location

LS16-CONV-001

12V POWER SUPPLY CONVERTER

LS No 16 TRUAX CREEK

Comments (if applicable)

small type plug in

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
1		
		Not Found
2	On light/switch	
1		
1		
		Not Found
3	installed in small panel.	
		Not Found
1		
2		
	1 1 1 1 1 1 1 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 installed in small panel.

Asset ID Asset Description Asset Location

LS16-CTP-001 Pump Control Panel LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	3	Hour gauges only	
Control Lamps			Not Found
Control Switches	2		
Corrosion	2		
Good House Keeping	5		
Good Wire Labeling	5		
Infrared	2		
Installation	3		
Main Breaker		Couldn't open panel lock	Can not Access
Operating at Inspection	1		
Proper Drawings Accessible	1	Not in cabinet	
Protective Devices	3	disconnects questionable	
Starter Block	2		
Structural (Panel)	2		

Asset ID Asset Description Asset Location

LS16-FIL-001 FILTER LS No 16 TRUAX CREEK

Comments (if applicable)

Mech seal water

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	2		
Tubing / Connections	3		

Asset ID Asset Description Asset Location

LS16-HTR-001 Heater LS No 16 TRUAX CREEK

Comments (if applicable)

Old unit mounted on wall. Not wired in.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	5		
Acceptable Smell or Heat	5		
All Components	5		
Corrosion	4		
Fan and Fan Motor	5		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS16-MIL-001 SENSOR UNIT LS No 16 TRUAX CREEK

Comments (if applicable)

Milltronics transducer

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking wet well	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS16-MTR-001 METERING DEVICE LS No 16 TRUAX CREEK

Comments (if applicable)

Transducer

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Calibration		Tracking level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS16-PMP-001 SUBMERSIBLE PUMP LS No 16 TRUAX CREEK

Comments (if applicable)

Sump pump

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	4		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS16-PMP-002 VACUUM PUMP LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	2		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	2		
Valves	1		

Asset ID Asset Description Asset Location

LS16-PMP-003 VACUUM PUMP LS No 16 TRUAX CREEK

Comments (if applicable)

Older vacuum Pump

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
Air Filter	3		
All Components	1		
Connections Ok	1		
Corrosion	3		
Hoses and Belts	3		
Running at Inspection	1		
Structural Integrity	3		
Valves	3		

Asset ID Asset Description Asset Location

LS16-POT-001 VACUUM PRIMER POT LS No 16 TRUAX CREEK

Comments (if applicable)

One compressor old model

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise			
Acceptable Smell or Heat			
Acceptable Vibration	1		
Air Filter			Not Found
All Components	1		
Connections Ok	1	Old dual pot type	
Corrosion	2		
Hoses and Belts			Not Found
Running at Inspection	1		
Structural Integrity	2		
Valves			Not Found

Asset ID Asset Description Asset Location

LS16-RADIO-001 RTU RADIO LS No 16 TRUAX CREEK

Comments (if applicable)

Truck type radio 800 Mhz

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	3		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS16-RTU-001 REMOTE TERMINAL UNIT LS No 16 TRUAX CREEK

Comments (if applicable)

Telesafe

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	5		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1	Not in cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS16-STR-001 Truax Creek Lift Station LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	2		
Corrosion - Soil Resistivity	1		
Corrosion - Structural Metal Condition?	3		
Corrosion - Visible Coating Condition	4		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

MOTOR029 MOTOR - 3 PHASE LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

MOTOR030 MOTOR - 3 PHASE LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP029 CENTRIFUGAL PUMP LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	1		
Corrosion	2		
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	2		

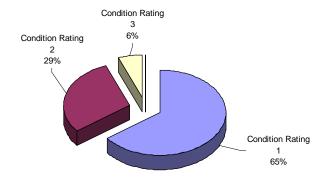
Asset ID Asset Description Asset Location

PUMP030 CENTRIFUGAL PUMP LS No 16 TRUAX CREEK

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	1		
Corrosion	2		
Mounting	3		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 18 - M	- Millesb	urg									
	IMPACTS					PROBABILITY TRIGGER			₹				
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Effective Operating Protocols		Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
CENT PUMP	4	4	4	4	7	7		4	1	2	1	1	1
CONTROL PANEL	10	4	4	4	4	4		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	4	4	4	7	7		4	1	10	1	1	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FURNACE	1	1	1	1	1	1		4	1	7	1	1	1
INSTRUMENT	1	4	4	4	1	4		4	1	1	1	1	1
MOTOR	4	4	4	4	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	4	4	1	1	4		4	1	1	1	1	1
STRUCTURE	10	7	7	4	10	10		4	1	10	1	1	1
VALVE	1	1	1	1	1	1		4	1	7	1	1	1

L.S.No 18 Millersburg Summary



Location Roll-Up Report						
LS No 18 MILLERSBURG			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS18-CONV-001	ELECTRICAL EQUIPMENT	5.9	1	0.07	1.053	0.0619
LS18-CTP-001	CONTROL PANEL	5.9	2	0.09	1.331	0.0783
LS18-FAN-001	FAN	5.9	3	0.16	0.377	0.0222
LS18-HTR-001	FURNACE	5.9	2	0.09	0.234	0.0137
LS18-MIL-001	INSTRUMENT	5.9	1	0.07	0.46	0.0271
LS18-MTR-001	INSTRUMENT	5.9	1	0.07	0.46	0.0271
LS18-RADIO-001	REMOTE TELEMETRY UNIT	5.9	2	0.13	0.254	0.0149
LS18-RTU-001	REMOTE TELEMETRY UNIT	5.9	2	0.15	0.254	0.0149
LS18-STR-001	STRUCTURE	5.9	2	0.11	1.991	0.1171
LS18-VLV-001	VALVE	5.9	1	0.06	0.227	0.0133

5.9

5.9

5.9

5.9

5.9

5.9

5.9

1

1

1

1

1

1

Location's

Condition Score

0.07

0.06

0.07

0.08

0.08

0.06

0.06

0.227

0.227

0.227

0.597

0.597

0.597

0.597

Score

Location's Total

0.0133

0.0133

0.0133

0.0351

0.0351

0.0351

0.0351

0.57

VALVE

VALVE

VALVE

MOTOR

MOTOR

CENT PUMP

CENT PUMP

LS18-VLV-002

LS18-VLV-003

LS18-VLV-004

MOTOR033

MOTOR034

PUMP033

PUMP034

Asset ID

Asset Description

Asset Location

LS18-CONV-001

12V POWER SUPPLY CONVERTER

LS No 18 MILLERSBURG

Comments (if applicable)

Small plug in type

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps			Not Found
Control Switches	1	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	2		

Asset ID Asset Description Asset Location

LS18-CTP-001 Pump Control Panel LS No 18 MILLERSBURG

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	2		
Control Gauges (Hour Meters Volts & Amps)	2	Hour gauges only	
Control Lamps	3		
Control Switches	3		
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	2		
Installation	2		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block	2		
Structural (Panel)	2		_

Asset ID Asset Description Asset Location

LS18-FAN-001 FAN LS No 18 MILLERSBURG

Condition Question	Rating Condition Question Comments	Flag
Acceptable Noise	Could not run	
Acceptable Smell or Heat	Could not run	
Corrosion	2	
Installation/ Accessibility	1	
Vents Clean	5	

Asset ID Asset Description Asset Location

LS18-HTR-001 HEATER LS No 18 MILLERSBURG

Comments (if applicable)

Small portable heater

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	3		
Fan and Fan Motor	3		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS18-MIL-001 SENSOR UNIT LS No 18 MILLERSBURG

Comments (if applicable)

Transducer

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1	racking level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS18-MTR-001 METERING DEVICE LS No 18 MILLERSBURG

Comments (if applicable)

Milltronics multiranger

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS18-RADIO-001 RTU RADIO LS No 18 MILLERSBURG

Comments (if applicable)

Old truck mount 800 Mhz radio

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	5		
Battery/ Charging System	5	No backup	
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	2		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description

Asset Location

LS18-RTU-001

REMOTE TERMINAL UNIT

LS No 18 MILLERSBURG

Comments (if applicable)

telesafe

Condition Question	Rating	Condition Question Comments	Flag		
Acceptable Smell or Heat	1				
Acceptable Wire Labeling	5				
All Components	1				
Battery Backup OK	5				
Battery/ Charging System	5				
Connections Ok	1				
Display/Indicator Ok					
Grounding	2				
Installation/ Accessibility/ Enclosure	2				
P&IDs are Accessible	1				
Power Supply	2				
Receiver	2				
Redundancy	5				
Running at Inspection	1				
Signal	2				
Transmitter	2				

Asset ID Asset Description Asset Location

LS18-STR-001 Millersburg Lift Station LS No 18 MILLERSBURG

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?			Not Found
Corrosion - Visible Coating Condition	1		
Corrosion - Visible Concrete Condition	3		
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe	3		
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID

Asset Description

Asset Location

LS18-VLV-001

Added Pump No 1 Check Valve

LS No 18 MILLERSBURG

Comments (if applicable)

Hydraulically Dampened check

Rating	Condition Question Comments	Flag
1		
1		
1		
1		
		Not Found
1		
1		
1		
		Not Found
1		
1		
2		
1		
1		
1		
1		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Asset ID

Asset Description

Asset Location

LS18-VLV-002

Added Pump no 1 Discharge Valve

LS No 18 MILLERSBURG

Comments (if applicable)

Plug Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	lanual	Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		
	•		

Asset ID

Asset Description

Asset Location

LS18-VLV-003

Added Pump No 2 Check Valve

LS No 18 MILLERSBURG

Comments (if applicable)

Hydraulically dampened check valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection	1		
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS18-VLV-004

Added Pump No 2 Discharge Valve

LS No 18 MILLERSBURG

Comments (if applicable)

Plug Valve

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	<i>f</i> lanual	Not Found
All Components	1		
Corrosion	1		
Functional	2		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR033 MOTOR - 3 PHASE LS No 18 MILLERSBURG

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1	Belt/pulley	
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

MOTOR034 MOTOR - 3 PHASE LS No 18 MILLERSBURG

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1	Belt/pully	
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP033 PUMP LS No 18 MILLERSBURG

Comments (if applicable)

Gormun Rupp. Belt should be tightened

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	1		
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

 Asset ID
 Asset Description
 Asset Location

 PUMP034
 PUMP
 LS No 18 MILLERSBURG

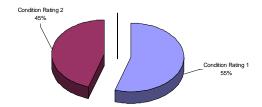
Comments (if applicable)

Gormun Rupp.

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	1		
All Safety Guards Present	1		
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Station Name:	Lift Stati	on 19 - No	rth Alba	ny									
	IMPACTS				PROBABILITY			Υ	TRIGGER				
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	Reliability	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	7	10	10	10	7		4	1	2	1	1	1
CONTROL PANEL	10	7	10	10	10	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	10	10	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	11	1	1	1	1		4	1	1	1	1	1
INSTRUMENT	1	1 7	10	10	1 7	1		4	1	1	1	1	1
MOTOR	10	7	10	10	- 1	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1 7	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	10	10	10	10		4	1	10	1	1	1
SUB PUMP	1		10	10	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S.No 19 North Albany Summary



LS No 19 NORTH ALBANY			Condition	Weighted	Total	Weighted
Asset Name		Weight	Score	Condition	Score	Total
	Туре	(%)		Score		Score
LS19-BATT-001	ELECTRICAL EQUIPMENT	5	1	0.07	1.947	0.0973
LS19-DEH-001	AIR COMPRESSOR	5	2	0.09	0.218	0.0109
LS19-DEH-002	AIR COMPRESSOR	5	2	0.09	0.218	0.0109
LS19-FAN-001	FAN	5	1	0.06	0.138	0.0069
LS19-FIL-001	FILTER	5	2	0.12	0.218	0.0109
LS19-FIL-002	FILTER	5	2	0.12	0.218	0.0109
LS19-MIL-001	INSTRUMENT	5	1	0.06	0.69	0.0345
LS19-MTR-001	INSTRUMENT	5	1	0.05	0.69	0.0345
LS19-PMP-001	SUB PUMP	5	1	0.07	1.104	0.0552
LS19-RADIO-001	REMOTE TELEMETRY UNIT	5	2	0.09	0.303	0.0151
LS19-RTU-001	REMOTE TELEMETRY UNIT	5	2	0.08	0.303	0.0151
LS19-STR-001	STRUCTURE	5	2	0.09	2.477	0.1239
LS19-VLV-001	VALVE	5	1	0.05	0.227	0.0113
LS19-VLV-002	VALVE	5	1	0.05	0.227	0.0113
LS19-VLV-003	VALVE	5	1	0.07	0.311	0.0156
LS19-VLV-004	VALVE	5	1	0.05	0.227	0.0113
MOTOR001	MOTOR	5	2	0.09	1.97	0.0985
MOTOR002	MOTOR	5	2	0.09	1.97	0.0985
PUMP001	CENT PUMP	5	1	0.07	1.219	0.0609
PUMP002	CENT PUMP	5	1	0.07	1.314	0.0657
			Location's		Location's	
					Total	
			Condition Score	2	Score	0.8

г

Asset ID Asset Description Asset Location

LS19-BATT-001 UPS BATTERY BACKUP LS No 19 NORTH ALBANY

Comments (if applicable)

Portable UPS mounted in bottom of cabinet

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	2		
Control Switches	2	On light/switch	
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	3	Tight fit in cabinet	
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS19-DEH-001 DEHUMIDIFIER LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	3		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS19-DEH-002 DEHUMIDIFIER LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	3	minor peeling	
Compressor	2		
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	2	On/off switch	
Corrosion	3		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	3		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS19-FAN-001 FAN LS No 19 NORTH ALBANY

Comments (if applicable)

Pump evacuation fn

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS19-FIL-001 FILTER LS No 19 NORTH ALBANY

Comments (if applicable)

Seal water filter

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	3		
Tubing / Connections	3		

Asset ID Asset Description Asset Location

LS19-FIL-002 FILTER LS No 19 NORTH ALBANY

Comments (if applicable)

Seal water filter

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Couplings	3		
Tubing / Connections	3		

Asset ID Asset Description Asset Location

LS19-MIL-001 SENSOR UNIT LS No 19 NORTH ALBANY

Comments (if applicable)

Newer narrow beam transducer

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking level	Not Found
Connections Ok	1		
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	2		

Asset ID Asset Description Asset Location

LS19-MTR-001 METERING DEVICE LS No 19 NORTH ALBANY

Comments (if applicable)

Milltrnics Multiranger

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	Т	racking level	Not Found
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections	1		

Asset ID Asset Description Asset Location

LS19-PMP-001 SUBMERSIBLE PUMP LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	2		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS19-RADIO-001 RTU RADIO LS No 19 NORTH ALBANY

Comments (if applicable)

Integra Data Radio. Fan on unit not cycling when transmitting

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	4	noted for fan on unit not cycling	
P&IDs are Accessible	1	In cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS19-RTU-001 REMOTE TERMINAL UNIT LS No 19 NORTH ALBANY

Comments (if applicable)

SCADA Pack unit

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1	LEDs	
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1	In Cabinet	
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID Asset Description Asset Location

LS19-STR-001 North Albany Lift Station LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	3	Small areas on pump	
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	1		
Corrosion - Visible Coating Condition	1		
Corrosion - Visible Concrete Condition			Not Found
Structual - Above Grade-Structure Irregularities/C			Not Found
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations			Not Found
Structure - Connections in Lateral Force Resisting			Not Found
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS19-VLV-001 Pump No 1 Discharge Valve LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	N	fanual	Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS19-VLV-002 Pump No 1 Check Valve LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS19-VLV-003 Pump No 2 Discharge Valve LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator		MAnual	Not Found
All Components	1		
Corrosion	1		
Functional	4	Very stiff on closing	
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS19-VLV-004 Pump No 2 Check Valve LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR001 MOTOR - 3 PHASE LS No 19 NORTH ALBANY

Comments (if applicable)

Pump motor No 1

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	3	Top of motor .25 inches/sec	

Asset ID Asset Description Asset Location

MOTOR002 MOTOR - 3 PHASE LS No 19 NORTH ALBANY

Comments (if applicable)

Motor No 2

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	2		
Corrosion	1		
Drive Shaft Alignment			Not Found
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	2		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP001 CENTRIFUGAL PUMP LS No 19 NORTH ALBANY

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	1		
Corrosion	3		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Asset ID Asset Description Asset Location

PUMP002 CENTRIFUGAL PUMP LS No 19 NORTH ALBANY

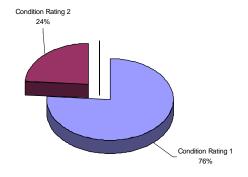
Comments (if applicable)

Pump no 2

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	1		
Corrosion	3 F	Pitting	
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	2		

Station Name:	Lift Stati	on 20 - Co	lumbus	Street									
	IMPACTS					PROB	ABILIT	Υ		TRIGGE	र		
	Health & Safety of employees and public	Compliance with regulations	Sevice Relibility	Disruption to the community / Public Image	Ability to return asset to level of service	Financial Impact (repair / replace, private property damages, loss of revenue)	Asset Condition (Auto calculated)	Operating Protocols	Reliability	Redundancy	Capacity and Utilization	Obsolescence	Maintenance Cost
ASSET TYPE													
AIR COMPRESSOR	1	1	1	1	1	1		4	1	1	1	1	1
CENT PUMP	10	4	4	4	7	7		4	1	2	1	1	1
CONTROL PANEL	10	7	7	7	7	7		4	1	7	1	1	1
ELECTRICAL EQUIPMENT	10	7	7	7	10	7		4	4	7	1	10	1
FAN	1	1	1	1	1	1		4	1	1	1	1	1
FILTER	1	1	1	1	1	1		4	1	1	1	1	1
FURNACE	1	1	1	1	1	1		4	1	4	1	1	1
INSTRUMENT	1	1	7	7	1	1		4	1	1	1	1	1
MOTOR	10	4	4	4	7	4		4	1	2	1	1	1
REMOTE TELEMETRY UNIT	1	1	1	1	1	4		4	4	2	1	4	1
STRUCTURE	10	7	7	7	10	10		4	1	10	1	1	1
SUB PUMP	1	4	4	4	4	1		4	1	7	1	1	1
VALVE	1	1	1	1	7	1		4	1	7	1	1	1

L.S.No 20 Columbia Street Summary



Location Roll-Up Report

Le No 20 COLUMBUS STREET			Condition	Majabtad	Total	Maighted
LS No 20 COLUMBUS STREET		Marialia	Condition	Weighted	Total	Weighted
Asset Name	Time	Weight	Score	Condition	Score	Total
LOOP BATT OOA	Type	(%)		Score	4.000	Score
LS20-BATT-001	ELECTRICAL EQUIPMENT	4.2	1	0.04	1.206	0.0503
LS20-CTP-001	CONTROL PANEL	4.2	1	0.05	1.302	0.0543
LS20-DEH-001	AIR COMPRESSOR	4.2	1	0.04	0.138	0.0058
LS20-FAN-001	FAN	4.2	1	0.06	0.138	0.0058
LS20-FAN-002	FAN	4.2	1	0.06	0.138	0.0058
LS20-FAN-003	FAN	4.2	2	0.08	0.218	0.0091
LS20-HTR-001	FURNACE	4.2	1	0.04	0.154	0.0064
LS20-MIL-001	INSTRUMENT	4.2	1	0.06	0.506	0.0211
LS20-MTR-001	INSTRUMENT	4.2	1	0.05	0.506	0.0211
LS20-PMP-001	SUB PUMP	4.2	1	0.04	0.538	0.0224
LS20-PMP-002	SUB PUMP	4.2	1	0.04	0.538	0.0224
LS20-RADIO-001	REMOTE TELEMETRY UNIT	4.2	2	0.07	0.254	0.0106
LS20-RTU-001	REMOTE TELEMETRY UNIT	4.2	2	0.07	0.218	0.0091
LS20-STR-001	STRUCTURE	4.2	2	0.06	2.123	0.0885
LS20-VLV-001	VALVE	4.2	1	0.05	0.255	0.0106
LS20-VLV-002	VALVE	4.2	1	0.05	0.227	0.0094
LS20-VLV-003	VALVE	4.2	1	0.05	0.227	0.0094
LS20-VLV-004	VALVE	4.2	1	0.05	0.227	0.0094
LS20-VLV-005	VALVE	4.2	1	0.05	0.227	0.0094
LS20-VLV-006	VALVE	4.2	1	0.05	0.227	0.0094
MOTOR035	MOTOR	4.2	1	0.04	0.789	0.0329
MOTOR036	MOTOR	4.2	1	0.06	0.789	0.0329
PUMP035	CENT PUMP	4.2	2	0.06	0.929	0.0387
PUMP036	CENT PUMP	4.2	2	0.06	0.929	0.0387
			Location's		Location's	
					Total	
			Condition Score	1	Score	0.53

Asset ID

Asset Description

Asset Location

LS20-BATT-001

UPS BATTERY BACKUP

LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)			Not Found
Contactor Block			Not Found
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Lamps	1		
Control Switches	1		
Corrosion	1		
Grounding	1		
Infrared			Not Found
Installation/ Accessibility	1		
Main Breaker			Not Found
Operating at Inspection	1		
Structural Integrity	1		

Asset ID Asset Description Asset Location

LS20-CTP-001 Pump Control Panel LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Features Present	1		
Appearance (Carbon Dust)	1		
Control Gauges (Hour Meters Volts & Amps)	2	Hour gauges only	
Control Lamps	2		
Control Switches	1		
Corrosion	1		
Good House Keeping	1		
Good Wire Labeling	1		
Infrared	2		
Installation	2		
Main Breaker	1		
Operating at Inspection	1		
Proper Drawings Accessible	1		
Protective Devices	1		
Starter Block	1		
Structural (Panel)	1		

Asset ID Asset Description Asset Location

LS20-DEH-001 DEHUMIDIFIER LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Acceptable Vibration	1		
All Components	1		
Auto Bleed Valve			Not Found
Belt			Not Found
Coating	1		
Compressor			Non Existent
Control Gauges (Hour Meters Volts & Amps)			Not Found
Control Switches	1	On/off switch	
Corrosion	1		
Day Tank			Not Found
Operating at Inspection	1		
Structural Integrity	1		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS20-FAN-001 FAN LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	2		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS20-FAN-002 FAN LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	2		
Vents Clean	1		

Asset ID Asset Description Asset Location

LS20-FAN-003 FAN LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
Corrosion	2		
Installation/ Accessibility	1		
Vents Clean	5		

Asset ID Asset Description Asset Location

LS20-HTR-001 HEATER LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Burn Marks	1		
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
Corrosion	1		
Fan and Fan Motor	1		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS20-MIL-001 SENSOR UNIT LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Calibration			Not Found
Connections Ok			
Display Ok			
Grounding	1		
Indicator			Not Found
Installation/ Accessibility	2	difficult to access	
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS20-MTR-001 METERING DEVICE LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks			
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Calibration	1		
Connections Ok	1		
Display Ok	1		
Grounding	1		
Indicator	1		
Installation/ Accessibility	1		
Operating at Inspection	1		
Transmitter/ Transducer	2		
Tubing / Connections			Not Found

Asset ID Asset Description Asset Location

LS20-PMP-001 SUBMERSIBLE PUMP LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	1		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS20-PMP-002 SUBMERSIBLE PUMP LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
All Safety Features Present	1		
Chain/ Cable/ Hooks			Not Found
Corrosion	1		
Operating at Inspection	1		

Asset ID Asset Description Asset Location

LS20-RADIO-001 RTU RADIO LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling			
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset Location

Asset ID Asset Description

LS20-RTU-001 REMOTE TERMINAL UNIT LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Smell or Heat	1		
Acceptable Wire Labeling	1		
All Components	1		
Battery Backup OK	1		
Battery/ Charging System	1		
Connections Ok	1		
Display/Indicator Ok	1		
Grounding	2		
Installation/ Accessibility/ Enclosure	1		
P&IDs are Accessible	1		
Power Supply	2		
Receiver	2		
Redundancy	5		
Running at Inspection	1		
Signal	2		
Transmitter	2		

Asset ID

Asset Description

Asset Location

LS20-STR-001

Columbus Street Lift Station

LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Corrosion - Cathodic Protection	1		
Corrosion - Mechanical/Piping Metal Condition?	1		
Corrosion - Soil Resistivity	3		
Corrosion - Structural Metal Condition?	1		
Corrosion - Visible Coating Condition	2		
Corrosion - Visible Concrete Condition	1		
Structual - Above Grade-Structure Irregularities/C	1		
Structure - Aboveground Pipe			Not Found
Structure - Building and System Piping	3		
Structure - Condition of Foundations	1		
Structure - Connections in Lateral Force Resisting	2	No blocking between joists.	
Structure - Equipment Anchorage – Epoxy, Cast-i	1		
Structure - Load Path/Redundancy	1		
structure - Piping Connections to Above Ground F			Not Found

Asset ID Asset Description Asset Location

LS20-VLV-001 Pump No 1 Suction Valve LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS20-VLV-002 Pump No 1 Check Valve LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	1		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS20-VLV-003 Pump No 1 Discharge Valve LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS20-VLV-004 Pump No 2 Suction Valve LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

LS20-VLV-005 Pump No 2 Check Valve LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator			Not Found
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch	2		
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID

Asset Description

Asset Location

LS20-VLV-006

Pump No 2 Discharge Valve

LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Cavitation	1		
Absence of Leaks	1		
Acceptable Noise	1		
Acceptable Vibration	1		
Actuator	1		
All Components	1		
Corrosion	1		
Functional	1		
Limit Switch			Not Found
Lubrication OK at Inspection			
Operating at Inspection	1		
Packing Gland	2		
Pipe Alignment	1		
Structural Integrity	1		
Support	2		
Valve Isolates (Holds)	1		

Asset ID Asset Description Asset Location

MOTOR035 MOTOR - 3 PHASE LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters			
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

MOTOR036 MOTOR - 3 PHASE LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Acceptable Noise	1		
Acceptable Smell or Heat	1		
All Components	1		
All Safety Guards Present	1		
Bearings	1		
Corrosion	1		
Drive Shaft Alignment	1		
Infrared			Not Found
Operating at Inspection	1		
Remote Temperature Devices			Not Found
Space Heaters	5		
Structural Integrity	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP035 CENTRIFUGAL PUMP LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Asset ID Asset Description Asset Location

PUMP036 CENTRIFUGAL PUMP LS No 20 COLUMBUS STREET

Condition Question	Rating	Condition Question Comments	Flag
Absence of Leaks	1		
Absence of Pump Cavitations	1		
Acceptable Noise	1		
Accessibility	2		
All Safety Guards Present	5 1	Not OSHA Compliant	
Corrosion	1		
Mounting	1		
Operation at Inspection	1		
Vibration Analysis	1		

Sewer Lift Station/ Water Pump Station Pump Performance Testing

Prepared for

City of Albany

October-December 2006

CH2MHILL

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CVO\070570019

LS No. 3 Maple Street LS No. 4 Queen Avenue LS No. 5 Umatilla

LS No. 6 Oak Creek

LS No. 7 College Green

LS No. 8 34th Avenue

LS No. 10 14th and Oak

LS No. 12 M-Wah Chang

LS No. 13 Century Drive

LS No. 15 M-Burkhart Creek

LS No. 19 North Albany

LS No. 20 Columbus

IV CVO\070570019

Introduction

During the months of October through December 2006, CH2M HILL/OMI was contracted by the City of Albany, Oregon, to evaluate the performance of pumps located in their numerous sewer lift stations and water pump stations. The sewer lift stations and water pump stations chosen for evaluation were those identified in the Phase 1 Condition Assessment. The following pages present the findings of the performance study. In addition, a summary of the pump performance assessment, water pump station data, and sewer lift station flow calculations are included in tabbed sections following this report.

The following results are divided into two categories: water pump stations and sewer lift stations,

CVO\070570019 1

Sewer Lift Stations

Lift Station: Maple Street LS 3

Date: 10/31/2006

Equipment

- Pump No.1=Flygt Model 3171 Adjustable Speed Submersible Pump
- Pump No.2= Flygt Model 3171 Adjustable Speed Submersible Pump
- Pump No.3= Flygt Model 3151 Adjustable Speed Submersible Pump
- Pump No.4= Flygt Model 3151 Adjustable Speed Submersible Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at Maple Street Lift Station 3 included the following tools:

- Flow element and transmitter
- Pressure gauges

Rated Pumping Capacity

- Pump No.1=54 ft @ 1650 gpm @ 60Hz
- Pump No.2= 54 ft @ 1650 gpm @ 60Hz
- Pump No.3= 48 ft @ 1110 gpm @ 60Hz
- Pump No.4= 48 ft @ 1110 gpm @ 60Hz

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=43 ft @ 1382 gpm @ 60Hz
- Pump No.2=44 ft @ 1388 gpm @ 60Hz
- Pump No.3=43 ft @ 1016 gpm @ 60Hz
- Pump No.4=43 ft @ 1022 gpm @ 60Hz

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that

CVO\070570019 3

the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=59.4 ft to 48.6 ft @ 1815 gpm to 1485 gpm: The calculated flow and TDH of 43 ft @ 1382 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 43 ft @ 1382 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 15 percent has occurred.
 - Pump No.2=59.4 ft to 48.6 ft @ 1815 gpm to 1485 gpm: The calculated flow and TDH of 44 ft @ 1388 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 44 ft @ 1388 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 13 percent has occurred.
 - Pump No.3=52.8 ft to 43.2 ft @ 1210 gpm to 999 gpm: The calculated flow and TDH of 43 ft @ 1016 gpm is inside the 10 percent envelope that has been established for Pump No.3. Since installation, there has been no detectable decrease in pump performance.
 - Pump No.4=52.8 ft to 43.2 ft @ 1210 gpm to 999 gpm: The calculated flow and TDH of 43 ft @ 1022 gpm is inside the 10 percent envelope that has been established for Pump No.4. Since installation, there has been no detectable decrease in pump performance.

Lift Station: Queen Avenue LS 4

Date: 10/30/2006

Equipment

- Pump No.1=Cornell 4NNT Constant Speed Non-Clog Pump
- Pump No.2= Cornell 4NNT Constant Speed Non-Clog Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at Queen Avenue Lift Station 4 included the following tools:

Milltronics gallon display

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- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=18 ft @ 440 gpm
- Pump No.2=18 ft @ 440 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=15 ft @ 275 gpm
- Pump No.2=15 ft @ 282 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=19.8 ft to 16.2 ft @ 484 gpm to 396 gpm: The calculated flow and TDH of 15 ft @ 275 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 15 ft @ 275 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 31 percent has occurred.
 - Pump No.2=19.8 ft to 16.2 ft @ 484 gpm to 396 gpm: The calculated flow and TDH of 15 ft @ 282 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 15 ft @ 282 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 29 percent has occurred.

Lift Station: Umatilla LS 5

Date: 10/31/2006

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Equipment

- Pump No.1=Chicago C-9676 Constant Speed Non-Clog Pump (Impellers were replaced in September 1991 resulting in a capacity change to 24 ft @ 300 gpm).
- Pump No.2= Chicago C-9676 Constant Speed Non-Clog Pump (Impellers were replaced in September 1991 resulting in a capacity change to 24 ft @ 300 gpm).

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at Umatilla Lift Station 5 included the following tools:

- Milltronics gallon display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=24 ft @ 300 gpm
- Pump No.2=24 ft @ 300 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=13 ft @ 135 gpm
- Pump No.2=13 ft @ 125 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=26.4 ft to 21.6 ft @ 330 gpm to 270 gpm: The calculated flow and TDH of 13 ft @ 135 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve,

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- the calculated 13 ft @ 135 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 61 percent has occurred.
- Pump No.2=26.4 ft to 21.6 ft @ 330 gpm to 270 gpm: The calculated flow and TDH of 13 ft @ 125 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 13 ft @ 125 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 63 percent has occurred.

Lift Station: Oak Creek LS 6

Date: 10/26/2006

Equipment

- Pump No.1=Cornell 6NHST Constant Speed Non-Clog Pump (Pump Tech indicated in 1977, the 10.125" impeller was swapped out for a 13.5" impeller. The estimated the revised duty point as 60 ft @ 1100 gpm).
- Pump No.2=Cornell 6NHST Constant Speed Non-Clog Pump (Pump Tech indicated in 1977, the 10.125" impeller was swapped out for a 13.5" impeller. The estimated the revised duty point as 60 ft @ 1100 gpm).

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at Oak Creek Lift Station 6 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=64 ft @ 1100 gpm
- Pump No.2=64 ft @ 1100 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=48 ft @ 651 gpm
- Pump No.2=48 ft @ 731 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access

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whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=70.4 ft to 57.6 ft @ 1210 gpm to 990 gpm: The calculated flow and TDH of 48 ft @ 651 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 48 ft @ 651 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 41 percent has occurred.
 - Pump No.2=70.4 ft to 57.6 ft @ 1210 gpm to 990 gpm: The calculated flow and TDH of 48 ft @ 731 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 48 ft @ 731 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 38 percent has occurred.

Lift Station: College Green LS 7

Date: 10/31/2006

Equipment

- Pump No.1=Crane Demming 4x4x9.5x3 Constant Speed Non-Clog Pump
- Pump No.2= Crane Demming 4x4x9.5x3 Constant Speed Non-Clog Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at College Green Lift Station 7 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

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Rated Pumping Capacity

- Pump No.1=25 ft @ 400 gpm
- Pump No.2=25 ft @ 400 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=19 ft @ 216 gpm
- Pump No.2=19 ft @ 240 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=27.5 ft to 22.5 ft @ 3440 gpm to 360 gpm: The calculated flow and TDH of 19 ft @ 216 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 19 ft @ 216 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 42 percent has occurred.
 - Pump No.2=27.5 ft to 22.5 ft @ 3440 gpm to 360 gpm: The calculated flow and TDH of 19 ft @ 240 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 19 ft @ 240 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 39 percent has been occurred.

Lift Station: 34th Avenue LS 8

Date: 10/30/2006

Equipment

- Pump No.1=Aurora 5054 Constant Speed Pump
- Pump No.2=Aurora 5054 Constant Speed Pump

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Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at 34th Avenue Lift Station 8 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=48 ft @ 1900 gpm
- Pump No.2=48 ft @ 1900 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=48 ft @ 1058 gpm
- Pump No.2=48 ft @ 1053 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=52.8 ft to 43.2 ft @ 2090 gpm to 1710 gpm: The calculated flow and TDH of 48 ft @ 1058 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 48 ft @ 1058 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 25 percent has occurred.
 - Pump No.2=52.8 ft to 43.2 ft @ 2090 gpm to 1710 gpm: The calculated flow and TDH of 48 ft @ 1053 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve,

the calculated 48 ft @ 1053 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 25 percent has occurred.

Lift Station: 14th & Oak LS 10

Date: 10/17/2006

Equipment

• Pump No.1=Cornell 4NNT Constant Speed Pump

Pump No.2= Cornell 4NNT Constant Speed Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at 14th & Oak Lift Station 10 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=32 ft @ 550 gpm
- Pump No.2=32 ft @ 550 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=22 ft @ 378 gpm
- Pump No.2=22 ft @ 317 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

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Results

- Acceptable Pump Range
 - Pump No.1=35.2 ft to 28.8 ft @ 605 gpm to 495 gpm: The calculated flow and TDH of 22 ft @ 378 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 22 ft @ 378 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 38 percent has occurred.
 - Pump No.2=35.2 ft to 28.8 ft @ 605 gpm to 495 gpm: The calculated flow and TDH of 22 ft @ 378 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 22 ft @ 317 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 45 percent has occurred.

Lift Station: M-Wah Chang LS 12

Date: 10/26/2006

Equipment

- Pump No.1=Cornell 6NHT Constant Speed Pump (Pump Tech indicated that in 1977, the 10.125" impeller was replaced with a 13.5" impeller).
- Pump No.2= Cornell 6NHT Constant Speed Pump (Pump Tech indicated that in 1977, the 10.125" impeller was replaced with a 13.5" impeller).

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at M-Wah Chang Lift Station 12 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=65 ft @ 887 gpm
- Pump No.2=65 ft @ 887 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=45 ft @ 873 gpm
- Pump No.2=45 ft @ 944 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=71.5 ft to 58.5 ft @ 975.7 gpm to 798.3 gpm: The calculated flow and TDH of 45 ft @ 873 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 45 ft @ 873 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 37 percent has occurred. The installed 13.5" impeller is too big for the system conditions. A 12.5" impeller would have been a much better choice.
 - Pump No.2=71.5 ft to 58.5 ft @ 975.7 gpm to 798.3 gpm: The calculated flow and TDH of 45 ft @ 944 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 45 ft @ 944 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 33 percent has occurred. The installed 13.5" impeller is too big for the system conditions. A 12.5" impeller would have been a much better choice.

Lift Station: Century Drive LS 13

Date: 10/17/2006

Equipment

- Pump No.1=Cornell 6NHT Constant Speed Pump
- Pump No.2=Cornell 6NHT Constant Speed Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and

transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at Umatilla Lift Station 5 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=50 ft @ 1500 gpm
- Pump No.2=50 ft @ 1500 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=51 ft @ 1239 gpm
- Pump No.2=51 ft @ 1217 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=55 ft to 45 ft @ 1650 gpm to 1350 gpm: The calculated flow and TDH of 51 ft @ 1239 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 51 ft @ 1239 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 6 percent has occurred.
 - Pump No.2=55 ft to 45 ft @ 1650 gpm to 1350 gpm: The calculated flow and TDH of 51 ft @ 1217 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 51 ft @ 1217 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 8 percent has occurred.

Lift Station: M-Burkhart Creek LS 15

Date: 10/26/2006

Equipment

• Pump No.1=Crane Demming Constant Speed Pump (size 4x4x7.25x3)

• Pump No.2= Crane Demming Constant Speed Pump (size 4x4x7.25x3)

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at M-Burkhart Lift Station 15 included the following tools:

- Milltronics gallon display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=25.4 ft @ 250 gpm
- Pump No.2=25.4 ft @ 250 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=51 ft @ 1239 gpm
- Pump No.2=51 ft @ 1217 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=55 ft to 45 ft @ 1650 gpm to 1350 gpm: The calculated flow and TDH of 51 ft @ 1239 gpm is outside the 10 percent envelope that has been established for

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Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 51 ft @ 1239 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.

Pump No.2=55 ft to 45 ft @ 1650 gpm to 1350 gpm: The calculated flow and TDH of 51 ft @ 1217 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 51 ft @ 1217 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.

Lift Station: North Albany LS 19

Date: 10/19/2006

Equipment

• Pump No.1= Cornell 8NHG Constant Speed Non-Clog Pump

Pump No.2= Cornell 8NHG Constant Speed Non-Clog Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the sewer lift stations.

Data collection at North Albany Lift Station 19 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=75 ft @ 1600 gpm
- Pump No.2=75 ft @ 1600 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=71 ft @ 1203 gpm
- Pump No.2=71 ft @ 1209 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that

the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=82.5 ft to 67.5 ft @ 1760 gpm to 1440 gpm: The calculated flow and TDH of 71 ft @ 1203 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 71 ft @ 1203 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 8 percent has occurred.
 - Pump No.2=82.5 ft to 67.5 ft @ 1760 gpm to 1440 gpm: The calculated flow and TDH of 71 ft @ 1209 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 71 ft @ 1209 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 8 percent has occurred.

Lift Station: Columbus LS 20

Date: 10/31/2006

Equipment

- Pump No.1= Cornell 6NHTB Constant Speed Non-Clog Pump
- Pump No.2= Cornell 6NHTB Constant Speed Non-Clog Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted me in data collection for the sewer lift stations.

Data collection at Columbus Lift Station 20 included the following tools:

- Milltronics level display
- Stop Watch
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=22 ft @ 1000 gpm
- Pump No.2=22 ft @ 1000 gpm

Calculated Pumping Capacity from Field Collected Data Points

Pump No.1=17 ft @ 803 gpm

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Pump No.2=17 ft @ 998 gpm

Evaluation Methods

Using the provided pump curves for each sewer lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.1=24.2 ft to 19.8 ft @ 1100 gpm to 900 gpm: The calculated flow and TDH of 17 ft @ 803 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve, the calculated 17 ft @ 803 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 20 percent has occurred.
 - Pump No.2=24.2 ft to 19.8 ft @ 1100 gpm to 900 gpm: The calculated flow and TDH of 17 ft @ 998 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 17 ft @ 998 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 6 percent has occurred.

Water Pump Stations

Pump Station: High Pressure (Vine Street)

Date: 10/26/2006

Equipment

Pump No.11=Paco Double Suction/Split Case Constant Speed Pump

- Pump No.12= Peerless Double Suction/Split Case 10AE16 Constant Speed Pump
- Pump No.13= Allis Chalmers Type SI Constant Speed Pump (size 8x6)
- Pump No.14= Allis Chalmers Type SG Constant Speed Pump (size 12x10)
- Pump No.15= Peerless Double Suction/Split Case 10AE16 Constant Speed Pump

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the water lift stations.

Data collection at High Pressure Water Pump Station included the following tools:

- Flow element and transmitter
- Pressure Gauges

Rated Pumping Capacity

- Pump No.11=145 ft @ 3250 gpm
- Pump No.12=180 ft @ 5600 gpm
- Pump No.13=145 ft @ 2000 gpm
- Pump No.14=180 ft @ 4000 gpm
- Pump No.15= ft @ 6700 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.11=148 ft @ 2220 gpm
- Pump No.12=164 ft @ 6075 gpm
- Pump No.13=155 ft @ 1498 gpm
- Pump No.14=155 ft @ 2968 gpm
- Pump No.15= Pump was not functional at the time of the testing.

Evaluation Methods

Using the provided pump curves for each water lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside

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the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance.

Results

- Acceptable Pump Range
 - Pump No.11=159.5 ft to 130.5 ft @ 3575 gpm to 2925 gpm: The calculated flow and TDH of 148 ft @ 2220 gpm is outside the 10 percent envelope that has been established for Pump No.11. When the calculated flow and TDH was compared to the pump curve, the calculated 148 ft @ 2220 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 15 percent has occurred.
 - Pump No.12=180.4 ft to 147.6 ft @ 6682.5 gpm to 5467.5 gpm: The calculated flow and TDH of 164 ft @ 6075 gpm is inside the 10 percent envelope that has been established for Pump No.12. Since installation, there has been no detectable decrease in pump performance.
 - Pump No.13=159.5 ft to 130.5 ft @ 2220 gpm to 1800 gpm: The calculated flow and TDH of 155 ft @ 1498 gpm is outside the 10 percent envelope that has been established for Pump No.13. When the calculated flow and TDH was compared to the pump curve, the calculated 155 ft @ 1498 gpm did fall on the curve indicating a slight change in system conditions.
 - Pump No.14=198 ft to 162 ft @ 4400 gpm to 3600 gpm: The calculated flow and TDH of 155 ft @ 2968 gpm is outside the 10 percent envelope that has been established for Pump No.14. When the calculated flow and TDH was compared to the pump curve, the calculated 155 ft @ 2968 gpm did not fall on the curve indicating a decrease in pump performance versus a change in system conditions. Since installation, a decrease in pump performance of approximately 16 percent has occurred.
 - Pump No.14=Pump was having electrical problems at the time of the testing and was not functional.

Pump Station: North Albany

Date: 10/19/2006

Equipment

- Pump No.51=Aurora 411BF Constant Speed Pump (size 8x8x11)
- Pump No.52= Aurora 411BF Constant Speed Pump (size 8x8x11)

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the water lift stations.

Data collection at North Albany Water Pump Station included the following tools:

- Flow element and transmitter
- Pressure Gauges

Rated Pumping Capacity

- Pump No.51=82 ft @ 1400 gpm
- Pump No.52=82 ft @ 1400 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.51=83 ft @ 1250 gpm
- Pump No.52=79 ft @ 1187 gpm

Evaluation Methods

Using the provided pump curves for each water lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance

Results

- Acceptable Pump Range
 - Pump No.51=90.2 ft to 73.8 ft @ 1540 gpm to 1260 gpm: The calculated flow and TDH of 83 ft @ 1250 gpm is outside the 10 percent envelope that has been established for Pump No.51. When the calculated flow and TDH was compared to the pump curve, the calculated 83 ft @ 1250 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.
 - Pump No.52=90.2 ft to 73.8 ft @ 1540 gpm to 1260 gpm: The calculated flow and TDH of 79 ft @ 1187 gpm is outside the 10 percent envelope that has been established for Pump No.52. When the calculated flow and TDH was compared to the pump curve, the calculated 79 ft @ 1187 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.

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Pump Station: Gibson Hill

Date: 10/19/2006

Equipment

• Pump No.1=Aurora 411BF Constant Speed Pump (size 6x5x15)

• Pump No.2= Aurora 411BF Constant Speed Pump (size 6x5x15)

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the water lift stations.

Data collection at Gibson Hill Water Pump Station included the following tools:

- Flow element and transmitter
- Pressure Gauges

Rated Pumping Capacity

- Pump No.1=135 ft @ 900 gpm
- Pump No.2=135 ft @ 900 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.1=136 ft @ 655 gpm
- Pump No.2=134 ft @ 615 gpm

Evaluation Methods

Using the provided pump curves for each water lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance

Results

- Acceptable Pump Range
 - Pump No.1=148.5 ft to 121.5 ft @ 990 gpm to 810 gpm: The calculated flow and TDH of 136 ft @ 655 gpm is outside the 10 percent envelope that has been established for Pump No.1. When the calculated flow and TDH was compared to the pump curve,

the calculated 136 ft @ 655 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.

- Pump No.2=148.5 ft to 121.5 ft @ 990 gpm to 810 gpm: The calculated flow and TDH of 134 ft @ 615 gpm is outside the 10 percent envelope that has been established for Pump No.2. When the calculated flow and TDH was compared to the pump curve, the calculated 134 ft @ 615 gpm did fall on the curve indicating a slight change in system conditions rather than a decrease in pump performance.

Pump Station: 34th Avenue

Date: 10/26/2006

Equipment

- Pump No.41=Allis Chalmers Custom V Constant Speed Pump (size 6x4x17)
- Pump No.42= Allis Chalmers Custom V11 Constant Speed Pump (size 8x8x17)
- Pump No.43= Allis Chalmers Custom V11 Constant Speed Pump (size 10x8x17)

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the water lift stations.

Data collection at 34th Avenue Water Pump Station included the following tools:

- Flow element and transmitter
- Pressure Gauges

Rated Pumping Capacity

- Pump No.41=150 ft @ 750 gpm
- Pump No.42=150 ft @ 1850 gpm
- Pump No.43=150 ft @ 2750 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.41=147 ft @ 702 gpm
- Pump No.42=143 ft @ 1642 gpm
- Pump No.43=141 ft @ 2566 gpm

Evaluation Methods

Using the provided pump curves for each water lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that

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the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance

Results

- Acceptable Pump Range
 - Pump No.41=165 ft to 135 ft @ 825 gpm to 675 gpm: The calculated flow and TDH of 147 ft @ 702 gpm is inside the 10 percent envelope that has been established for Pump No.41. Since installation, there has been no detectable decrease in pump performance.
 - Pump No.42=165 ft to 135 ft @ 2035 gpm to 1665 gpm: The calculated flow and TDH of 143 ft @ 1642 gpm is just slightly outside the 10 percent envelope that has been established for Pump No.42. Since installation, there has possibly been some very small decrease in pump performance. Since the field collected flow is roughly 23 gpm lower than the minimum flow in our 10 percent envelope, for all practical purposes, this pump is performing as designed.
 - Pump No.43=165 ft to 135 ft @ 3025 gpm to 2475 gpm: The calculated flow and TDH of 141 ft @ 2566 gpm is inside the 10 percent envelope that has been established for Pump No.43. Since installation, there has been no detectable decrease in pump performance.

Pump Station: Queen Avenue

Date: 10/26/2006

Equipment

- Pump No.21=Allis Chalmers KSK Constant Speed Pump (size 4x3)
- Pump No.22= Allis Chalmers KSK Constant Speed Pump (size 6x5)

Collection Methods

Pump Flow and TDH values were collected in the field using: 1) stop watch, 2) tape measure, 3) Milltronics level and gallon display, 4) pressure gauges, 5) flow element and transmitter, and 6) tape measure. Mike Bryan with the City of Albany assisted in data collection for the water lift stations.

Data collection at Queen Avenue Water Pump Station included the following tools:

- Flow element and transmitter
- Pressure Gauges

Rated Pumping Capacity

- Pump No.21=150 ft @ 500 gpm
- Pump No.22=145 ft @ 1500 gpm

Calculated Pumping Capacity from Field Collected Data Points

- Pump No.21=144 ft @ 465 gpm
- Pump No.22=152 ft @ 1386 gpm

Evaluation Methods

Using the provided pump curves for each water lift station, a comparison was made between data collected in the field to the name plate rated flow and TDH of the pump. A 10 percent envelope was calculated around this name plate rated flow and TDH to access whether or not the field collected points indicated that the pump was performing as designed. In instances where a pump showed field collected flow and TDH points outside the calculated envelope, further investigation was done to determine whether this was caused by a change in system conditions or pump performance. If the field collected data points fell somewhere along the pump curve, then a reasonable conclusion was made that the pump could operate as designed but a change in system conditions was causing it to move up or down on its curve. However, if the field collected data points fell well off the pump curve, a conclusion was drawn that the pump was operating at a decrease in performance

Results

- Acceptable Pump Range
 - Pump No.21=165 ft to 135 ft @ 550 gpm to 450 gpm: The calculated flow and TDH of 144 ft @ 465 gpm is inside the 10 percent envelope that has been established for Pump No.21. Since installation, there has been no detectable decrease in pump performance.
 - Pump No.22=159.5 ft to 130.5 ft @ 1650 gpm to 1350 gpm: The calculated flow and TDH of 152 ft @ 1386 gpm is inside the 10 percent envelope that has been established for Pump No.22. Since installation, there has been no detectable decrease in pump performance.

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	2006 Pump Performance Assessment for Phase 1 Condition Assessment							
W (Water) or S (Sewer)	Station Name	Station Number	Rated Pump Capacity Rating	Calculated Pump Capacity Rating	Acceptable Capacity Range	Within +/- 10% Margin of Error	Due to change in Pump Performance or System Conditions	Final Conclusion
S	Maple Street LS	LS 3	Pump No.1= 54 ft @ 1650 gpm @ 60 Hz	Pump No.1=43 ft @ 1382 gpm	59.4 ft to 48.6 ft @ 1815 gpm to 1485 gpm	No	Yes	Decrease in Pump Performance by approximately 15%
			Pump No.2= 54 ft @ 1650 gpm @ 60 Hz	Pump No.2=44 ft @ 1388 gpm	59.4 ft to 48.6 ft @ 1815 gpm to 1485 gpm	No	Yes	Decrease in Pump Performance by approximately 13%
			Pump No.3= 48 ft @ 1110 gpm @60 Hz	Pump No.3=43 ft @ 1016 gpm	52.8 ft to 43.2 ft @ 1210 gpm to 999 gpm	Yes		
			Pump No.4= 48 ft @ 1110 gpm @60 Hz	Pump No.4=43 ft @ 1022 gpm	52.8 ft to 43.2 ft @ 1210 gpm to 999 gpm	Yes		
S	Queen Avenue LS	LS 4	Pump No.1= 18 ft @ 440 gpm	Pump No.1=15 ft @ 275 gpm	19.8 ft to 16.2 ft @ 484 gpm to 396 gpm	No	Yes	Decrease in Pump Performance by approximately 31%
			Pump No.2= 18 ft @ 440 gpm	Pump No.2=15 ft @ 282 gpm	19.8 ft to 16.2 ft @ 484 gpm to 396 gpm	No	Yes	Decrease in Pump Performance by approximately 29%
S	Umatilla LS	LS 5	Pump No.1= 24 ft @ 300 gpm	Pump No.1=13 ft @ 135 gpm	26.4 ft to 21.6 ft @ 330 gpm to 270 gpm	No	Yes	Decrease in Pump Performance by approximately 61%
			Pump No.2= 24 ft @ 300 gpm	Pump No.2=13 ft @ 125 gpm	26.4 ft to 21.6 ft @ 330 gpm to 270 gpm	No	Yes	Decrease in Pump Performance by approximately 63%
S	Oak Creek LS	LS 6	Pump No.1= 64 ft @ 1100 gpm	Pump No.1=48 ft @ 651 gpm	70.4 ft to 57.6 ft @ 1210 gpm to 990 gpm	No	Yes	Decrease in Pump Performance by approximately 41%
Ü	Out Orook 20	200	Pump No.2= 64 ft @ 1100 gpm	Pump No.2=48 ft @ 731 gpm	70.4 ft to 57.6 ft @ 1210 gpm to 990 gpm	No	Yes	Decrease in Pump Performance by approximately 38%
S	College Green LS	107	,	3	27.5 ft to 22.5 ft @ 3440 qpm to 360 qpm			Decrease in Pump Performance by approximately 42%
5	College Green LS	LS 7	Pump No.1=25 ft @ 400 gpm	Pump No.1=19 ft @ 216 gpm	<u> </u>	No	Yes	
			Pump No.2=25 ft @ 400 gpm	Pump No.2=19 ft @ 240 gpm	27.5 ft to 22.5 ft @ 3440 gpm to 360 gpm	No	Yes	Decrease in Pump Performance by approximately 39%
S	34th Avenue LS	LS 8	Pump No.1=48 ft @ 1900 gpm	Pump No.1=48 ft @ 1058 gpm	52.8 ft to 43.2 ft @ 2090 gpm to 1710 gpm	No	Yes	Decrease in Pump Performance by approximately 25%
			Pump No.2=48 ft @ 1900 gpm	Pump No.2=48 ft @ 1053 gpm	52.8 ft to 43.2 ft @ 2090 gpm to 1710 gpm	No	Yes	Decrease in Pump Performance by approximately 25%
S	14th & Oak	LS 10	Pump No.1= 32 ft @ 550 gpm	Pump No.1=22 ft @ 378 gpm	35.2 ft to 28.8 ft @ 605 gpm to 495 gpm	No	Yes	Decrease in Pump Performance by approximately 38%
			Pump No.2= 32 ft @ 550 gpm	Pump No.2=22 ft @ 317 gpm	35.2 ft to 28.8 ft @ 605 gpm to 495 gpm	No	Yes	Decrease in Pump Performance by approximately 45%
S	M-Wah Chang LS	LS 12	Pump No.1= 65 ft @ 887 gpm	Pump No.1=45 ft @ 873 gpm	71.5 ft to 58.5 ft @ 975.7 gpm to 798.3 gpm	No	Yes	Decrease in Pump Performance by approximately 37%. In talking with Pump Tech, they indicated that in 1977, the 10.125" impeller was replaced with a 13.5 impeller. This impeller is too big for the system conditions. A 12.5" impeller wou have been a much better choice.
			Pump No.2= 65 ft @ 887 gpm	Pump No.2=45 ft @ 944 gpm	71.5 ft to 58.5 ft @ 975.7 gpm to 798.3 gpm	No	Yes	Decrease in Pump Performance by approximately 33%. In talking with Pump Terthey indicated that in 1977, the 10.125" impeller was replaced with a 13.5" impeller. This impeller is too big for the system conditions. A 12.5" impeller wou have been a much better choice.
S	Century Drive	LS 13	Pump No.1=50 ft @ 1500 gpm	Pump No.1=51 ft @ 1239 gpm	55 ft to 45 ft @ 1650 gpm to 1350 gpm	No	Yes	Decrease in Pump Performance by approximately 6%
Ü	Dilve	20 10	Pump No.2=50 ft @ 1500 gpm	Pump No.2=51 ft @ 1217 gpm	55 ft to 45 ft @ 1650 gpm to 1350 gpm	No	Yes	Decrease in Pump Performance by approximately 8%
	M Duralish and Organical C	2.1.0.45			<u> </u>			
S	M-Burkhart Creek LS	5 LS 15	Pump No.1=25.4 ft @ 250 gpm	Pump No.1=26.5 ft @ 212 gpm	27.94 ft to 22.86 ft @ 275 gpm to 225 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve.
	North Albana I O	10.40	Pump No.2=25.4 ft @ 250 gpm	Pump No.2=26.5 ft @ 196 gpm	27.94 ft to 22.86 ft @ 275 gpm to 225 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve.
S	North Albany LS	LS 19	Pump No.1=75 ft @ 1600 gpm	Pump No.1=71 ft @ 1203 gpm	82.5 ft to 67.5 ft @ 1760 gpm to 1440 gpm	No	Yes	Decrease in Pump Performance by approximately 8%
		1000	Pump No.2=75 ft @ 1600 gpm	Pump No.2=71 ft @ 1209 gpm	82.5 ft to 67.5 ft @ 1760 gpm to 1440 gpm	No	Yes	Decrease in Pump Performance by approximately 8%
S	Columbus LS	LS 20	Pump No.1=22 ft @ 1000 gpm	Pump No.1=17 ft @ 803 gpm	24.2 ft to 19.8 ft @ 1100 gpm to 900 gpm	No	Yes	Decrease in Pump Performance by approximately 20%
			Pump No.1=22 ft @ 1000 gpm	Pump No.2=17 ft @ 998 gpm	24.2 ft to 19.8 ft @ 1100 gpm to 900 gpm	No	Yes	Decrease in Pump Performance by approximately 6%
W	High Pressure PS		Pump No.11=145 ft @ 3250 gpm	Pump No.11=148 ft @ 2220 gpm	159.5 ft to 130.5 ft @ 3575 gpm to 2925 gpm	No Yes	Yes	Decrease in Pump Performance by approximately 15%
			Pump No.12=180 ft @ 5600 gpm	Pump No.12=164 ft @ 6075 gpm	180.4 ft to 147.6 @ 6682.5 gpm to 5467.5 gpm		V	
			Pump No.13=145 ft @ 2000 gpm Pump No.14=180 ft @ 4000 gpm	Pump No.13=155 ft @ 1498 gpm Pump No.14=155 ft @ 2968 gpm	159.5 ft to 130.5 ft @ 2200 gpm to 1800 gpm 198 ft to 162 ft @ 4400 gpm to 3600 gpm	No No	Yes Yes	Change in System Conditions. This pump is running on its pump curve. Decrease in Pump Performance by approximately 16%
			Pump No.15=180 ft @ 5600 gpm	Pump No.15=ft @ gpm	180.4 ft to 147.6 @ 6682.5 gpm to 5467.5 gpm	N/A	N/A	This pump was not operational at the time of the test.
W	North Albany PS		Pump No.51=82 ft @ 1400 gpm	Pump No.51=83 ft @ 1250 gpm	90.2 ft to 73.8 ft @ 1540 to 1260 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve. It is running approximately 1% to 2% off of its design point.
			Pump No.52=82 ft @ 1400 gpm	Pump No.52=79 ft @ 1240 gpm	90.2 ft to 73.8 ft @ 1540 to 1260 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve. It is running approximately 1% to 2% off of its design point.
W	Gibson Hill PS		Pump No.1=135 ft @ 900 gpm	Pump No.1=136 ft @ 655 gpm	148.5 ft to 121.5 ft @ 990 gpm to 810 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve.
			Pump No.2=135 ft @ 900 gpm	Pump No.2=134 ft @ 615 gpm	148.5 ft to 121.5 ft @ 990 gpm to 810 gpm	No	Yes	Change in System Conditions. This pump is running on its pump curve.

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	2006 Pump Performance Assessment for Phase 1 Condition Assessment							
W (Water) or S (Sewer)	Station Name	Station Number	Rated Pump Capacity Rating	Calculated Pump Capacity Rating	Acceptable Capacity Range	Within +/- 10% Margin of Error	Due to change in Pump Performance or System Conditions	Final Conclusion
W	34th Ave PS		Pump No.41=150 ft @ 750 gpm	Pump No.41=147 ft @ 702 gpm	165 ft to 135 ft @ 825 gpm 675 gpm	Yes		
			Pump No.42=150 ft @ 1850 gpm	Pump No.42=143 ft @ 1642 gpm	165 ft to 135 ft @ 2035 gpm 1665 gpm	Yes		This pump is operating just slightly outside the 10% envelope that has been established for Pump No.42. Since installation, there has possibly been some very small decrease in pump performance. Since the field collected flow is roughly 23 gpm lower than the minimum flow in our 10% envelope, for all practical purposes, this pump is performing as designed.
			Pump No.43=150 ft @ 2750 gpm	Pump No.43=141 ft @ 2566 gpm	165 ft to 135 ft @ 3025 gpm 2475 gpm	Yes		
W	Queen Ave PS	_	Pump No.21=150 ft @ 500 gpm	Pump No.21=144 ft @ 465 gpm	165 ft to135 ft @ 550 gpm to 450 gpm	Yes		
			Pump No.22=145 ft @ 1500 gpm	Pump No.22=152 ft @ 1386 gpm	159.5 ft to 130.5 ft @ 1650 gpm to 1350 gpm	Yes		
Note: LS=sewe	r lift station; PS=water r	oump station						

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North Albany Water Pump Station

	Pump No.1	Pump No.2
Suction Pressure (psi)	48	50
Discharge Pressure (psi)	84	84
Flow Rate (gpm)	1229.9 to 1270	1229 to 1250
Suction Pressure No Flow (psi)	48	50
Discharge Pressure No Flow (psi)	50	48
Amps	49.3 to 56.5	50 to 56.5
Voltage	485 to 490	485 to 490
Calculated TDH (ft)	83.16	78.54

Pump Info

Aurora Pump (Double Suction/Split Case)
Size 8"x8x11"
Rated 82 ft @ 1400 gpm
1750 rpm

Motor Info

75 hp 3ph, 60 Hz, 460 V 1775 rpm

Gibson Hill Water Pump Station

	Pump No.1	Pump No.2
Suction Pressure (psi)	64	64
Discharge Pressure (psi)	123	122
Flow Rate (gpm)	655	615
Suction Pressure No Flow (psi)	66	66
Discharge Pressure No Flow (psi)	68	67
Amps	54 to 58	52.5 to 56
Voltage	487 to 492	487 to 492
Calculated TDH (ft)	136.29	133.98

Pump Info

Aurora Pump (Double Suction/Split Case) Size 6"x5"x15" Rated 135 ft @ 900 gpm 1750 rpm

Motor Info

75 hp 3ph, 60 Hz, 460 V 1775 rpm

High Pressure (Vine Street) Water Pump Station

	Pump No.11	Pump No.12	Pump No.13	Pump No.14	Pump No.15
Suction Pressure (psi)	9.2	9.7	9.8	9.91	
Discharge Pressure (psi)	73.4	80.5	77	77	
Flow Rate (gpm)	2220	6075	1498	2967.6	
Suction Pressure No Flow (psi)	9.2	9.7	9.8	9.91	9.923
Discharge Pressure No Flow (psi)	9.2	9.7	9.7	9.87	9.889
Amps	138-139-144	313-326-313	96-99-92	158-165-157	
Voltage	490-491-494	494-493-491	494-490-492	491-489-488	
Calculated TDH (ft)	148.302	163.548	155.232	154.9779	

Pump Info	Pump Info	Pump Info	Pump Info	Pump Info
Paco Pump (Double Suction/Split Case)	Peerless Pump (Double Suction/Split Case)	Allis Chalmers	Allis Chalmers	Peerless Pump (Double Suction/Split Case)
Size	Size	Size 8"x6", Type SI	Size 12"x10", Type SG	Size
Rated 145ft @ 3250 gpm	Rated 180 ft @ 5600 gpm	Rated 145 ft @ 2000 gpm	Rated 180 ft @ 4000 gpm	Rated 180 ft @ 6700 gpm
1750 rpm	1750 rpm	rpm	1760 rpm	1750 rpm

Motor Info	<u>Motor Info</u>	Motor Info	Motor Info	Motor Info
300 hp	300 hp	100 hp	200 hp	300 hp
3ph, 60 Hz, 460 V	3ph, 60 Hz, 460 V	3ph, 60 Hz, 440 V	3ph, 60 Hz, 440 V	3ph, 60 Hz, 460 V
1770 rpm	1780 rpm	1770 rpm	1780 rpm	1775 rpm

34th Avenue Water Pump Station

	Pump No.41	Pump No.42	Pump No.43
Suction Pressure (psi)	10	8	9
Discharge Pressure (psi)	73.5	70	70
Flow Rate (gpm)	690-715	1630-1655	2499-2633
Suction Pressure No Flow (psi)	10	8	9
Discharge Pressure No Flow (psi)	12	10	10
Amps	55-55-52.5	90-95-97	132-140-142
Voltage	466-460-463	463-460-463	463-466-468
Calculated TDH (ft)	146.685	143.22	140.91

Pump Info	Pump Info	Pump Info
Allis-Chalmers (Double Suction/Split Case)	Allis-Chalmers (Double Suction/Split Case)	Allis-Chalmers (Double Suction/Split Case)
Type=Custom V	Type=Custom V11	Type=Custom V11
Size 6"x4"x17"	Size 8"x8"x17"	Size 10"x8"x17"
Rated 150 ft @ 750 gpm	Rated 150 ft @ 1850 gpm	Rated 150 ft @ 2750 gpm
1760 rpm	1750 rpm	1750 rpm

Motor Info	<u>Motor Info</u>	<u>Motor Info</u>
50 hp	100 hp	125 hp
3ph, 60 Hz, 460 V	3ph, 60 Hz, 460 V	3ph, 60 Hz, 460 V
1750 rpm	1770 rpm	1770 rpm

Queen Avenue Water Pump Station

	Pump No.21	Pump No.22
Suction Pressure (psi)	13	13
Discharge Pressure (psi)	75.5	79
Flow Rate (gpm)	445-485	1370-1402
Suction Pressure No Flow (psi)	13	13
Discharge Pressure No Flow (psi)	15	12
Amps	59-57-58	159-160-155
Voltage	243-244-242	240-238-239
Calculated TDH (ft)	144.375	152.46

Pump InfoPump InfoAllis-Chalmers (Double Suction/Split Case)Allis-Chalmers (Double Suction/Split Case)Type=KSKType=KSISize 4"x3"Size 6"x5"Rated 150 ft @ 500 gpmRated 145 ft @ 1500 gpm1750 rpm1750 rpm

Motor InfoMotor Info30 hp75 hp3ph, 60 Hz, 460 V3ph, 60 Hz, 460 V1750 rpm1770 rpm

LS No. 3 Maple Street

Maple Street Lift Station 3

	Pump No.1	Pump No.2	Pump No.3	Pump No.4
Discharge Pressure (psi)	1.3	1.8	1.17	1.01
Flow Rate (gpm)	1382	1388	1016	1022
Suction Pressure No Flow (psi)	0.17	0.16	0.15	0.14
Hz	60	60	60	60
Calculated TDH (ft)	43.1103	44.2884	42.8562	42.5097

LS No. 4 Queen Avenue

Pump Drawdown

 Date:
 11/16/2006

 Site ID
 Queen Avenue LS 4

Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well		Rectangular Well		
Diameter in feet	0 ft	Length		ft
Radius in feet	0 ft	Width		ft
Cubic feet of Water	0 cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	0 gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	0.0 gal/in	Volume of Water/ inch	0.0	gal/in

Head Calculation

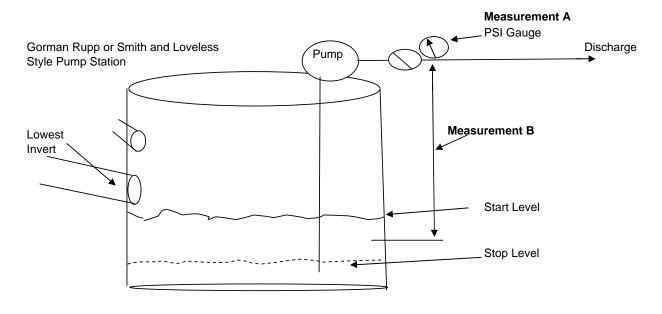
Α	Note:No Pumps Running Static Pressure Static Head	1.8 psi 4.158 ft	With all pumps off, record pressure gauge reading One PSI = 2.31 feet of head
	With one pump running		

B Measure from gauge to water level -5.158 ft
A With one pump running 8.55 psi
A With pumps 1&2 running psi
A With pumps 2&3 running psi
A With pumps 1&3 running psi

Measure in feet at normal water level between start and stop

Total Dynamic Head

1 Pump	14.5925	ft
With pumps 1&2 running	-5.158	ft
With pumps 2&3 running	-5.158	ft
With pumps 1&3 running	-5.158	ft



LS No. 4 Queen Avenue

Data Collection Sheet

Pump Drawdown			
	Areas in Blue		
Site ID Queen Avenue LS 4	will be calculation		
ENTER Volume of Water/ inch	17.6 ENTER CE	ELL C15 OR D15	
ENTER Total Dynamic Head		ELL C13 ON D13 ELL C31 FOR ONE PUMF	D
ENTER Total Dynamio Fload	11.00 2111211 02	LLE COTT OIL CIVE TOWN	
Outflow Calculations			
Note: Water cannot surcharge any inverts or read	ngs will be inaccurate		
T' ' ANNUTEO			
Time is measured in MINUTES Measure distance change in INCHES	DUMD 4	DUMD 2	DUMD 2
Measure distance change in inches	PUMP 1	PUMP 2	PUMP 3
1 Measure the level of water to the top of the	vell INCHES SECONDS	INCHES SECONDS	INCHES SECONDS
when pump starts and start stop watch	0	0	INCITED SECONDS
2 Measure the level of water to the top of the			
when pump shuts off and record time	0 0	0 0	
OUTFLOW TOTAL GPM	210 GPM	217 GPM	GPM
Inflaw Calculations			
Inflow Calculations Note: Water cannot surcharge any inverts or read	ings will be inaccurate		
Trace. Trace carrier cardial go any invente of reac	rigo viii bo iiiaooarato		
Time is measured in MINUTES			
Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
1 Measure the level of water to the top of the			INCHES SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the	(oll	0	
when pump starts and record time	0 0	0 0	
mien pamp stante and reservation	<u> </u>	<u> </u>	
INFLOW TOTAL GPM	65 GPM	65 GPM	GPM
TOTAL GPM	275 GPM	282 GPM	GPM
Outflow Calculations Multiple Pump			
Note: Water cannot surcharge any inverts or read	ngs will be inaccurate		
Time is measured in MINUTES			DUNE 4000
Measure distance change in INCHES	PUMP 1&2	PUMP 2 &3	PUMP 1&2&3
1 Measure the level of water to the top of the	vell INCHES SECONDS	INCHES SECONDS	INCHES SECONDS
when pump starts and start stop watch	<u></u>		
2 Measure the level of water to the top of the	/ell		
when pump shuts off and record time			
011771 0117 707 1077		001	0.514
OUTFLOW TOTAL GPM	GPM	GPM	GPM
TOTAL GPM MULTIPLE PUMP	GPM	GPM	GPM
TOTAL GEM MOLTIFLE FUMP	GF IVI	GF IVI	GF WI
ENTER Total Dynamic Head	ENTER CE	ELL C32 FOR TWO PUMI	Р

LS No. 5 Umatilla

Pump Drawdown

 Date:
 10/31/2006

 Site ID
 Umatilla LS 5

Areas in Blue
will be calculation
NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well			Rectangular Well		
Diameter in feet	6	ft	Length		ft
Radius in feet	3	ft	Width		ft
Cubic feet of Water	28.26	cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	211	gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	17.6	gal/in	Volume of Water/ inch	0.0	gal/in

psi

Head Calculation

	Note:No Pumps Running		
Α	Static Pressure	3.89 psi	With all pumps off, record pressure gauge reading
	Static Head	8.9859 ft	One PSI = 2.31 feet of head
	With one numn running		

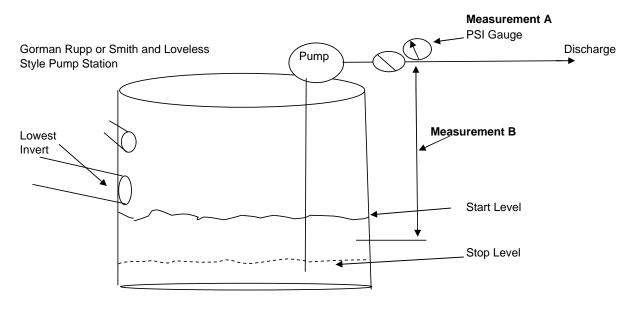
	with one pump running		
В	Measure from gauge to water level	-8.9859	ft
Α	With one pump running	9.4	psi
Α	With pumps 1&2 running		psi
Δ	With pumps 2&3 running		nsi

Measure in feet at normal water level between start and stop

Total Dynamic Head

A With pumps 1&3 running

1 Pump	12.7281	ft
With pumps 1&2 running	-8.9859	ft
With pumps 2&3 running	-8.9859	ft
With pumps 1&3 running	-8.9859	ft



LS No. 5 Umatilla

Data Collection Sheet				
Pump Drawdown	A	DL		
Date: 10/31/2006 Site ID Umatilla LS 5	Areas in will be ca			
Site ID Officialia LS 3	will be ca	liculation		
ENTER Volume of Water/ incl	h	17.6 ENTER CE	LL C15 OR D15	
ENTER Total Dynamic Head		12.7 ENTER CE	LL C31 FOR ONE PUM	P
Outflow Calculations				
Note: Water cannot surcharge a	any inverts or readings will	be inaccurate		
Times in account of in BAINII	ITEO			
Time is measured in MINU Measure distance change		PUMP 1	PUMP 2	PUMP 3
Measure distance change	THI HOULS	POWIF	PUWIP 2	PUIVIP 3
1 Measure the level of water	r to the top of the well	INCHES SECONDS	INCHES SECONDS	INCHES SECONDS
when pump starts and sta		0	0	INCITES SECONDS
2 Measure the level of water				
when pump shuts off and		0 0	0 0	
OUTFLOW TO	OTAL GPM	123 GPM	113 GPM	GPM
Inflow Calculations				
Note: Water cannot surcharge a	any inverts or readings will	be inaccurate		
T' '	ITEO			
Time is measured in MINU		DUMP 4	DUMP 0	DUMP 0
Measure distance change	IN INCHES	PUMP 1	PUMP 2	PUMP 3
1 Measure the level of water	r to the top of the well	INCHES SECONDS	INCHES SECONDS	INCHES SECONDS
when pump shuts off and		0	0	INCITES SECONDS
2 Measure the level of water				
when pump starts and red	•	0 0	0 0	
INFLOW TOTA	AL GPM	12 GPM	12 GPM	GPM
			·	
TOTAL GPM		135 GPM	125 GPM	GPM
Outflow Calculations Multiple				
Note: Water cannot surcharge a	any inverts or readings will	be inaccurate		
Time is measured in MINU	ITEC			
		PUMP 1&2	PUMP 2 &3	PUMP 1&2&3
Measure distance change	III INCHES	PUIVIP 102	PUIVIP 2 &3	PUIVIP 10203
1 Measure the level of water	r to the top of the well	INCHES SECONDS	INCHES SECONDS	INCHES SECONDS
when pump starts and sta				
2 Measure the level of water				
when pump shuts off and				
· ·				
OUTFLOW TO	OTAL GPM	GPM	GPM	GPM
TOTAL GPM I				
	MULTIPLE PUMP	GPM	GPM	GPM
ENTER Total Dynamic Head	MULTIPLE PUMP		GPM LL C32 FOR TWO PLIM	

LS No. 6 Oak Creek

Pump Drawdown

 Date:
 10/26/2006

 Site ID
 Oak Creek LS 6

Areas in Blue
will be calculation
NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well		Rectangular Well	
Diameter in feet	0 ft	Length	ft
Radius in feet	0 ft	Width	ft
Cubic feet of Water	0 cu.ft.	Cubic feet of Water	0 cu.ft.
Gallons /cu.ft	0 gal/ft	Gallons /cu.ft	0 gal/ft
Volume of Water/ inch	0.0 gal/ir	Volume of Water/ inch	0.0 gal/in

Head Calculation

_
psi
ft
į

With all pumps off, record pressure gauge reading One PSI = 2.31 feet of head

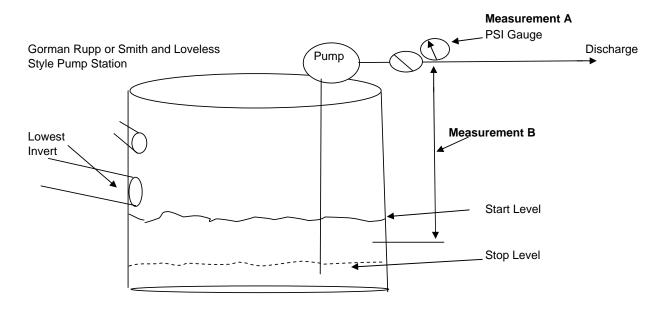
With one pump running

В	Measure from gauge to water level	-5.4	ft
Α	With one pump running	23.05	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

Measure in feet at normal water level between start and stop

Total Dynamic Head

rotar byriainio ricaa	
1 Pump	47.8455 f
With pumps 1&2 running	-5.4 f
With pumps 2&3 running	-5.4 f
With numps 1&3 running	-5.4 f



LS No. 6 Oak Creek

	Areas in Blue will be calculation	l	
Site ID Oak Creek LS 6	will be calculation		
ENTER Volume of Water/ inch ENTER Total Dynamic Head		ELL C15 OR D15	D
ENTER Total Dynamic Head	47.8 ENTER CE	ELL C31 FOR ONE PUMI	٢
Outflow Calculations Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Note. Water carmot surcharge any inverts of re	adings will be maccurate		
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
Measure the level of water to the top of the when pump starts and start stop watch	0	INCHES SECONDS	INCHES SECONDS
2 Measure the level of water to the top of the when pump shuts off and record time	24.36 204	28.8 217	
OUTFLOW TOTAL GPM	558 GPM	620 GPM	GPM
Inflow Calculations			
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
 Measure the level of water to the top of the when pump shuts off and start stop watch Measure the level of water to the top of the when pump starts and record time 	24.36	28.8	INCHES SECONDS
INFLOW TOTAL GPM	93 GPM	110 GPM	GPM
TOTAL GPM	651 GPM	731 GPM	GPM
Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES			
Measure distance change in INCHES	PUMP 1&2	PUMP 2 &3	PUMP 1&2&3
1 Measure the level of water to the top of the when pump starts and start stop watch2 Measure the level of water to the top of the		INCHES SECONDS	INCHES SECONDS
when pump shuts off and record time			
OUTFLOW TOTAL GPM	GPM	GPM	GPM
TOTAL GPM MULTIPLE PUN	IP GPM	GPM	GPM
ENTER Total Dynamic Head	ENTER CE	ELL C32 FOR TWO PUM	Р
		222 : 21	

LS No. 7 College Green

Pump Drawdown

 Date:
 11/16/2006

 Site ID
 College Green LS 7

Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well			Rectangular Well		
Diameter in feet	6	ft	Length		ft
Radius in feet	3	ft	Width		ft
Cubic feet of Water	28.26	cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	211	gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	17.6	gal/in	Volume of Water/ inch	0.0	gal/in

Head Calculation

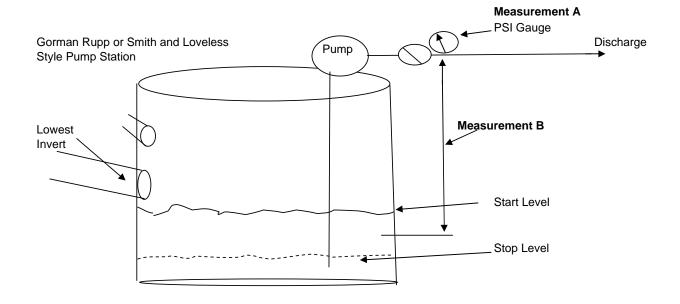
With pumps 2&3 running

With pumps 1&3 running

	Note:No Pumps Running		
Α	Static Pressure	1.585 psi	With all pumps off, record pressure gauge reading
	Static Head	3.66135 ft	One PSI = 2.31 feet of head
	With one pump running		
В	Measure from gauge to water level	-3.661 ft	Measure in feet at normal
Α	With one pump running	9.585 psi	water level between start and stop
Α	With pumps 1&2 running	psi	
Α	With pumps 2&3 running	psi	
Α	With pumps 1&3 running	psi	
	Total Dynamic Head		
	1 Pump	18.48035 ft	
	With pumps 1&2 running	-3.661 ft	

-3.661 ft

-3.661 ft



LS No. 7 College Green

Data Collection Sheet

Pump Drawdown					
Date:11/16/2006	Areas in Blu	ıe			
Site ID College Green LS 7	will be calcu	ulation			
	_				
ENTER Volume of Water/ inch		17.6 ENTER CE			
ENTER Total Dynamic Head		18.48 ENTER CE	L C31 FOR ONE PUMP	•	
Outflow Calculations					
Note: Water cannot surcharge any inverts or re	eadings will b	e inaccurate			
Time is measured in MINUTES					
Measure distance change in INCHES		PUMP 1	PUMP 2	PUMP 3	
1 Measure the level of water to the top of the	he well	INCHES SECONDS	INCHES SECONDS	INCHES	SECONDS
when pump starts and start stop watch		0	0		
2 Measure the level of water to the top of the	he well				
when pump shuts off and record time		12 74	12 65		
	<u>-</u>				
OUTFLOW TOTAL GPM		171 GPM	195 GPM		GPM
	-				
Inflow Calculations					
Note: Water cannot surcharge any inverts or re	eadings will b	e inaccurate			
Time is measured in MINUTES					
Measure distance change in INCHES		PUMP 1	PUMP 2	PUMP 3	
1 Measure the level of water to the top of the state o		INCHES SECONDS	INCHES SECONDS	INCHES	SECONDS
when pump shuts off and start stop watch	h [INCHES SECONDS	INCHES SECONDS	INCHES	SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the start of	h [12	12	INCHES	SECONDS
when pump shuts off and start stop watch	h [INCHES	SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time	h [0 284	0 284		
when pump shuts off and start stop watch 2 Measure the level of water to the top of the start of	h [12	12		SECONDS GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the share pump starts and record time INFLOW TOTAL GPM	h [12 0 284 45 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time	h [0 284	0 284		
when pump shuts off and start stop watch 2 Measure the level of water to the top of the share pump starts and record time INFLOW TOTAL GPM	h [12 0 284 45 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the share pump starts and record time INFLOW TOTAL GPM TOTAL GPM	h [12 0 284 45 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watci 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump	h [he well [12 0 284 45 GPM 216 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the share pump starts and record time INFLOW TOTAL GPM TOTAL GPM	h [he well [12 0 284 45 GPM 216 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time	h [he well [12 0 284 45 GPM 216 GPM	12 0 284 45 GPM		GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time.	h [he well [undersized the second of the s	12 0 284 45 GPM 216 GPM be inaccurate	12 0 284 45 GPM 240 GPM		GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time	h [he well [undersized the second of the s	12 0 284 45 GPM 216 GPM	12 0 284 45 GPM		GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time. Time is measured in MINUTES Measure distance change in INCHES	h [he well [12 0 284 45 GPM 216 GPM re inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1&2	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the surcharge and the top of the surcharge and the top of the surcharge and	h [he well [12 0 284 45 GPM 216 GPM be inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1&2	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time. Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch	he well eadings will be	12 0 284 45 GPM 216 GPM re inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1&2	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the start stop watch	he well eadings will be	12 0 284 45 GPM 216 GPM re inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1&2	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time. Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch	he well eadings will be	12 0 284 45 GPM 216 GPM re inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1&2	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time	he well eadings will be	12 0 284 45 GPM 216 GPM e inaccurate PUMP 1&2 INCHES SECONDS	12 0 284 45 GPM 240 GPM PUMP 2 &3 INCHES SECONDS	PUMP 1820 INCHES	GPM GPM &3 SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the start stop watch	he well eadings will be	12 0 284 45 GPM 216 GPM re inaccurate	12 0 284 45 GPM 240 GPM	PUMP 1820 INCHES	GPM GPM
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time OUTFLOW TOTAL GPM	he well eadings will be ne well ne well	12 0 284 45 GPM 216 GPM Pe inaccurate PUMP 1&2 INCHES SECONDS GPM	12 0 284 45 GPM 240 GPM PUMP 2 &3 INCHES SECONDS	PUMP 1&2	GPM GPM SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time	he well eadings will be ne well ne well	12 0 284 45 GPM 216 GPM e inaccurate PUMP 1&2 INCHES SECONDS	12 0 284 45 GPM 240 GPM PUMP 2 &3 INCHES SECONDS	PUMP 1&2	GPM GPM &3 SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time OUTFLOW TOTAL GPM TOTAL GPM MULTIPLE PU	he well eadings will be ne well ne well	12 0 284 45 GPM 216 GPM Pe inaccurate PUMP 1&2 INCHES SECONDS GPM GPM GPM	12 0 284 45 GPM 240 GPM PUMP 2 &3 INCHES SECONDS GPM GPM	PUMP 1&2	GPM GPM SECONDS
when pump shuts off and start stop watch 2 Measure the level of water to the top of the when pump starts and record time INFLOW TOTAL GPM TOTAL GPM Outflow Calculations Multiple Pump Note: Water cannot surcharge any inverts or record time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of the when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time OUTFLOW TOTAL GPM	he well eadings will be ne well ne well	12 0 284 45 GPM 216 GPM Pe inaccurate PUMP 1&2 INCHES SECONDS GPM GPM GPM	12 0 284 45 GPM 240 GPM PUMP 2 &3 INCHES SECONDS	PUMP 1&2	GPM GPM SECONDS

LS No. 8 34th Avenue

Pump Drawdown

 Date:
 10/30/2006

 Site ID
 34th Avenue LS 8

Areas in Blue
will be calculation
NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well		Rectangular Well		
Diameter in feet	0 ft	Length		ft
Radius in feet	0 ft	Width		ft
Cubic feet of Water	0 cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	0 gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	0.0 <mark>gal/in</mark>	Volume of Water/ inch	0.0	gal/in

12.2 psi

28.182

Head Calculation

A Static Pressure

Static Head

Note:No Pumps Running

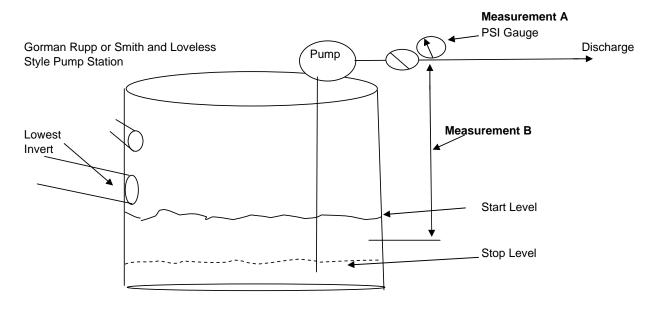
		3	
	With one pump running		
В	Measure from gauge to water level	4.304	ft
Α	With one pump running	18.7	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

With all pumps off, record pressure gauge reading One PSI = 2.31 feet of head

Measure in feet at normal water level between start and stop

Total Dynamic Head

· · · · · · · · · · · · · · · · · · ·		
1 Pump	47.501 ft	
With pumps 1&2 running	4.304 ft	
With pumps 2&3 running	4.304 ft	t
With pumps 1&3 running	4.304 ft	t



LS No. 8 34th Avenue

Data Collection Sheet					
Pump Drawdown	A ' DI				
Date:10/30/2006 Site ID 34th Avenue LS 8	Areas in Blue				
Site ID 34th Avenue LS 8	will be calculation	.1			
ENTER Volume of Water/ inch		86.0 ENTER CF	ELL C15 OR D15		
ENTER Total Dynamic Head	4	7.501 ENTER CE	ELL C31 FOR ONE	PUMP	
- <i>(</i> 1					
Outflow Calculations Note: Water cannot surcharge any inverts or re	oodings will be inacc	ouroto			
Note. Water carried surcharge any inverts of the	eadings will be illacc	urate			
Time is measured in MINUTES					
Measure distance change in INCHES	PUM	P 1	PUMP 2	PUMP 3	
1 Measure the level of water to the top of the	ne well INC	HES SECONDS		NDS INCHES	SECONDS
when pump starts and start stop watch		0	0		
2 Measure the level of water to the top of the		20.04	20.04	007	T
when pump shuts off and record time		36.24 265	36.24	267	
OUTFLOW TOTAL GPM		706 GPM	700 GPM		GPM
			700		J
Inflow Calculations					
Note: Water cannot surcharge any inverts or re	eadings will be inacc	curate			
T' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '					
Time is measured in MINUTES	PUM	D 1	PUMP 2	PUMP 3	
Measure distance change in INCHES	PUW	r i	PUIVIP 2	PUIVIP 3	
1 Measure the level of water to the top of the	he well INC	HES SECONDS	S INCHES SECO	NDS INCHES	SECONDS
when pump shuts off and start stop watch		36.24	36.24		
2 Measure the level of water to the top of the	he well				
when pump starts and record time		0 531	0	531	
INCLOW TOTAL COM		ODM	352 GPM		CDM
INFLOW TOTAL GPM		352 GPM	352 GPW		GPM
TOTAL GPM		1058 GPM	1053 GPM		GРM
TOTAL OF W		TOSO OT W	1033 OI W		OI W
Outflow Calculations Multiple Pump					
Note: Water cannot surcharge any inverts or r	eadings will be inacc	curate			
The sale was a second to MINISTER					
Time is measured in MINUTES Measure distance change in INCHES	DIIM	P 1&2	PUMP 2 &3	PUMP 1&2	28.3
Measure distance change in INCITES	FOW	r IQZ	FUNIF 2 &3	FOWIF 1002	203
1 Measure the level of water to the top of the	he well INC	HES SECONDS	S INCHES SECO	NDS INCHES	SECONDS
when pump starts and start stop watch					
2 Measure the level of water to the top of the	ne well		1		1
when pump shuts off and record time					
OUTFLOW TOTAL GPM		GPM	GPM		GPM
GOTFLOW TOTAL GPM		GPIVI	GPIVI		GEIVI
TOTAL GPM MULTIPLE PU	MP	GPM	GPM		GPM
			J. III		
ENTER Total Dynamic Head		ENTER C	ELL C32 FOR TWO	PUMP	

LS No. 10 14th and Oak

Pump Drawdown

 Date:
 10/17/2006

 Site ID
 14th & Oak LS 10

Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well			Rectangular Well		
Diameter in feet	6	ft	Length		ft
Radius in feet	3	ft	Width		ft
Cubic feet of Water	28.26	cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	211	gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	17.6	gal/in	Volume of Water/ inch	0.0	gal/in

Head Calculation

	Note:No Pumps Running		
Α	Static Pressure	-2.847	psi
	Static Head	-6.57657	ft

With all pumps off, record pressure gauge reading One PSI = 2.31 feet of head

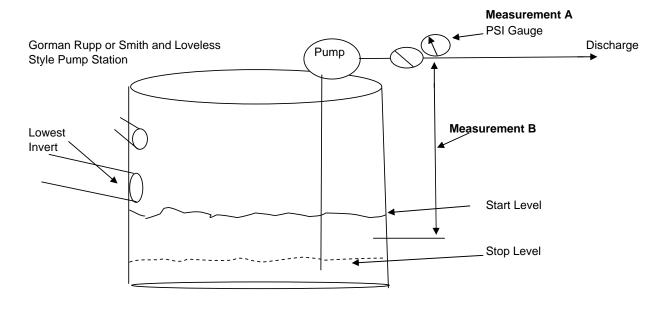
With one pump running

В	Measure from gauge to water level	9.666	ft
Α	With one pump running	5.35	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

Measure in feet at normal water level between start and stop

Total Dynamic Head

1 Pump	22.0245	ft
With pumps 1&2 running	9.666	-
With pumps 2&3 running	9.666	ft
With pumps 1&3 running	9.666	ft



LS No. 10 14th and Oak

Data Collection								
Pump Dra			· ·					
Date:	10/17/2006		Areas in Blue					
Site ID	14th & Oak LS 10	will be cale	culation					
ENTER Volum	e of Water/ inch		17.6	ENTER CE	LL C15 OR D15			
ENTER Total [Dynamic Head				LL C31 FOR ON	E PUMP)	
				-				
Outflow Calcu								
Note: Water ca	nnot surcharge any inverts or	readings will b	e inaccurate)				
Time is m	accured in MINITER							
	easured in MINUTES distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
Measure (distance change in inches		PUNIP 1		PUIVIP 2		PUIVIP 3	
1 Moosuro i	the level of water to the top of	the well	INCHES	SECONDS	INCHES SEC	CONDS	INCHES	SECONDS
	mp starts and start stop watch	trie weii	94		46	CONDS	INCHES	SECONDS
	the level of water to the top of	the well	34	<u> </u>	40			J
	mp shuts off and record time	are wen	120	120	65	120		
Whompul	inp strate on and record time		120	120	001	120		
	OUTFLOW TOTAL GPM		229	GPM	167 GPI	М		GPM
Inflow Calcula	itions							
Note: Water ca	nnot surcharge any inverts or	readings will b	e inaccurate)				
	easured in MINUTES							
Measure of	distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
4 Manageman		tha a II	INCLIES	CECONDO	INCLIES SE	CONDC	INCLIES	SECONDS
	the level of water to the top of np shuts off and start stop wate		111	SECONDS	INCHES SEC	CUNDS	INCHES	SECONDS
	the level of water to the top of			J	111			J
	mp starts and record time	lile well	94	120	94	120		
Whompul	inp starte and record time		01	120	0-1	120		
	INFLOW TOTAL GPM		150	GPM	150 GPI	М		GPM
								•
	TOTAL GPM		378	GPM	317 GPI	М		GPM
				_				
	lations Multiple Pump							
Note: Water ca	nnot surcharge any inverts or	readings will b	e inaccurate	;				
Time is m	easured in MINUTES							
	distance change in INCHES		PUMP 1&2	2	PUMP 2 &3		PUMP 1&2	2.2
Measure	distance change in INCITES		FUNIT 102	2	FUNIF 2 &3		FUNIT 102	.03
1 Measure t	the level of water to the top of	the well	INCHES	SECONDS	INCHES SEC	CONDS	INCHES	SECONDS
	mp starts and start stop watch			7]
	the level of water to the top of	the well	L		<u> </u>			1
when pur	mp shuts off and record time							
				_				
	OUTFLOW TOTAL GPM			GPM	GPI	M		GPM
				_				- •
	TOTAL GPM MULTIPLE PU	JMP		GPM	GPI	М		GPM
				7				
ENTER Total [Dynamic Head			JENTER CE	LL C32 FOR TW	O PUMF)	

LS No. 12 M-Wah Chang

Pump Drawdown

Date: 10/26/2006 Site ID M-Wah Chang LS 12

Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well			Rectangular Well		_
Diameter in feet	8	ft	Length		ft
Radius in feet	4	ft	Width		ft
Cubic feet of Water	50.24	cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	376	gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	31.3	gal/in	Volume of Water/ inch	0.0	gal/in

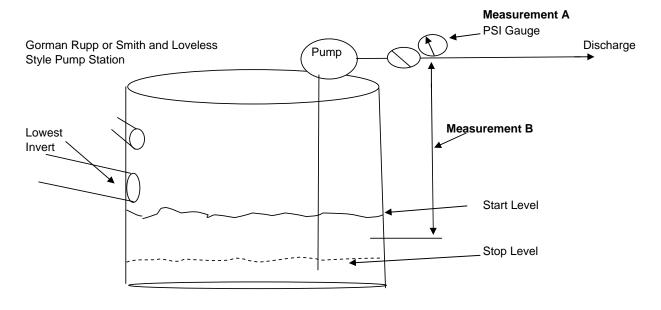
Head Calculation

	Note:No Pumps Running			
Α	Static Pressure	-5.55 p	osi	With all pumps off, record pressure gauge reading
	Static Head	-12.8205 f	t	One PSI = 2.31 feet of head
	With one pump running			
В	Measure from gauge to water level	1.5 f	t	Measure in feet at normal
Α	With one pump running	18.8 p	osi	water level between start and stop
Α	With pumps 1&2 running	p	osi	
Α	With pumps 2&3 running	p	osi	

Total Dynamic Head

With pumps 1&3 running

1 Pump	44.928	ft
With pumps 1&2 running	1.5	
With pumps 2&3 running	1.5	ft
With pumps 1&3 running	1.5	ft



LS No. 12 M-Wah Chang

Data Collection Sheet			
Pump Drawdown			
	Areas in Blue		
Site ID M-Wah Chang LS 12	will be calculation		
ENTER Volume of Water/ inch	31.3 ENTER C	ELL C15 OR D15	
ENTER Total Dynamic Head	44.928 ENTER C	ELL C31 FOR ONE PUM	Р
Outflow Calculations			
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES			
Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
Measure distance change in INCITES	POWF I	PUIVIP 2	PUIVIP 3
1 Measure the level of water to the top of th	e well INCHES SECOND	S INCHES SECONDS	INCHES SECONDS
when pump starts and start stop watch	0	0	INCITES SECONDS
2 Measure the level of water to the top of th		Ŭ	
when pump shuts off and record time	36 86	6 38.4 88	
• •	<u> </u>		· · · · · · · · · · · · · · · · · · ·
OUTFLOW TOTAL GPM	786 GPM	819 GPM	GPM
	<u></u> -		
Inflow Calculations			
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES	DUMD 4	DUMP 0	DUMP 0
Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
1 Measure the level of water to the top of th	e well INCHES SECOND	S INCHES SECONDS	INCHES SECONDS
when pump shuts off and start stop watch		38.4	INGINED GEOGRAPO
2 Measure the level of water to the top of th		00.1	
when pump starts and record time	0 774	4 0 579	
·			
INFLOW TOTAL GPM	87 GPM	125 GPM	GPM
TOTAL GPM	873 GPM	944 GPM	GPM
Outflow Calculations Multiple Pump			
Note: Water cannot surcharge any inverts or re	adinds will be inaccurate		
	9		
	3		
Time is measured in MINUTES		PUMP 2 &3	PUMP 1&2&3
	PUMP 1&2	PUMP 2 &3	PUMP 1&2&3
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1&2		
Time is measured in MINUTES	PUMP 1&2		
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th	PUMP 1&2 e well INCHES SECOND		
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch	PUMP 1&2 e well INCHES SECOND		
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th when pump shuts off and record time	PUMP 1&2 e well INCHES SECOND e well	S INCHES SECONDS	INCHES SECONDS
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th	PUMP 1&2 e well INCHES SECOND		
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th when pump shuts off and record time OUTFLOW TOTAL GPM	PUMP 1&2 e well inches seconds e well GPM	S INCHES SECONDS	INCHES SECONDS
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th when pump shuts off and record time	PUMP 1&2 e well e well GPM	S INCHES SECONDS	INCHES SECONDS
Time is measured in MINUTES Measure distance change in INCHES 1 Measure the level of water to the top of th when pump starts and start stop watch 2 Measure the level of water to the top of th when pump shuts off and record time OUTFLOW TOTAL GPM	PUMP 1&2 e well inches seconds e well GPM GPM	S INCHES SECONDS	INCHES SECONDS GPM GPM

LS No. 13 Century Drive

Pump Drawdown

 Date:
 10/17/2006

 Site ID
 Century Drive LS 13

Areas in Blue
will be calculation
NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well		Rectangular Well	
Diameter in feet	8 ft	Length	ft
Radius in feet	4 ft	Width	ft
Cubic feet of Water	50.24 cu.ft.	Cubic feet of Water	0 cu.ft.
Gallons /cu.ft	376 gal/ft	Gallons /cu.ft	0 gal/ft
Volume of Water/ inch	31.3 gal/in	Volume of Water/ inch	0.0 gal/in

Head Calculation

	Note:No Pumps Running	
Α	Static Pressure	-4.85 psi
	Static Head	-11.2035 ft

With all pumps off, record pressure gauge reading

One PSI = 2.31 feet of head

With one pump running

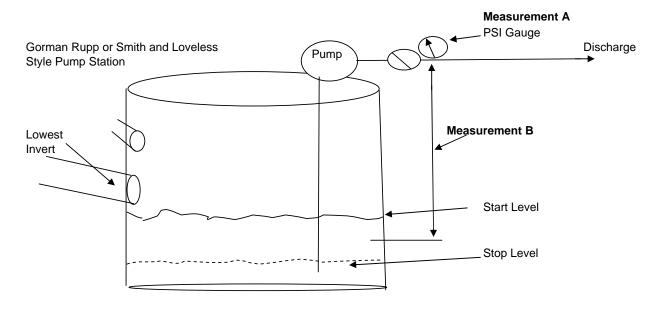
В	Measure from gauge to water level	10.66	ft
Α	With one pump running	17.3	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

Measure in feet at normal

water level between start and stop

Total Dynamic Head

1 Pump	50.623	
With pumps 1&2 running	10.66	
With pumps 2&3 running	10.66	ft
With pumps 1&3 running	10.66	ft



LS No. 13 Century Drive

Data Collection Sheet						
Pump Drawdown	A					
	Areas in Blue will be calculation					
Site ID <u>Century Drive LS 1</u> 3	will be calculation					
ENTER Volume of Water/ inch ENTER Total Dynamic Head		1.3 ENTER CE 623 ENTER CE)	
Outflow Calculations						
Note: Water cannot surcharge any inverts or rea	dings will be inacci	urate				
Time is measured in MINUTES Measure distance change in INCHES	PUMP	1	PUMP 2		PUMP 3	
Modeline distance sharige in Menas	1 01111	•	i Oim 2		1 01111 0	
1 Measure the level of water to the top of the when pump starts and start stop watch	well INCHI	ES SECONDS	INCHES S	ECONDS	INCHES	SECONDS
2 Measure the level of water to the top of the						
when pump shuts off and record time		146 106	146	108		
OUTFLOW TOTAL GPM	10	010 GPM	991 G	iРМ		GPM
Inflow Calculations						
Note: Water cannot surcharge any inverts or rea	dings will be inacci	urate				
Time is measured in MINUTES Measure distance change in INCHES	PUMP	1	PUMP 2		PUMP 3	
1 Measure the level of water to the top of the when pump shuts off and start stop watch2 Measure the level of water to the top of the		S SECONDS	INCHES S		INCHES	SECONDS
when pump starts and record time		89 468	89	473		
INFLOW TOTAL GPM		229 GPM	226 G	PM		GPM
TOTAL GPM	1:	239 GPM	1217 G	PM		GPM
Outflow Calculations Multiple Pump						
Note: Water cannot surcharge any inverts or rea	dings will be inacci	urate				
Time is measured in MINUTES						
Measure distance change in INCHES	PUMP	1&2	PUMP 2 &3		PUMP 1&2	2&3
Measure the level of water to the top of the when pump starts and start stop watch Measure the level of water to the top of the		ES SECONDS	INCHES S	ECONDS	INCHES	SECONDS
when pump starts and start stop watch 2 Measure the level of water to the top of the		SECONDS	INCHES S	ECONDS	INCHES	SECONDS
when pump starts and start stop watch		ES SECONDS	INCHES S	ECONDS	INCHES	
when pump starts and start stop watch 2 Measure the level of water to the top of the		SECONDS GPM		ECONDS PM	INCHES	SECONDS GPM
when pump starts and start stop watch 2 Measure the level of water to the top of the when pump shuts off and record time	well				INCHES	

LS No. 15 M-Burkhart Creek

Pump Drawdown

 Date:
 10/26/2006

 Site ID
 M-Burkhart Creek LS 15

Areas in Blue
will be calculation
NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well		Rectangular Well	
Diameter in feet	8 ft	Length	ft
Radius in feet	4 ft	Width	ft
Cubic feet of Water	50.24 cu.ft.	Cubic feet of Water	0 cu.ft.
Gallons /cu.ft	376 gal/ft	Gallons /cu.ft	0 gal/ft
Volume of Water/ inch	31.3 gal/in	Volume of Water/ inch	0.0 gal/in

Head Calculation

Moto: No Dumna Dunning

	Note:No Pumps Running	
Α	Static Pressure	-2.25 psi
	Static Head	-5.1975 ft

With all pumps off, record pressure gauge reading

One PSI = 2.31 feet of head

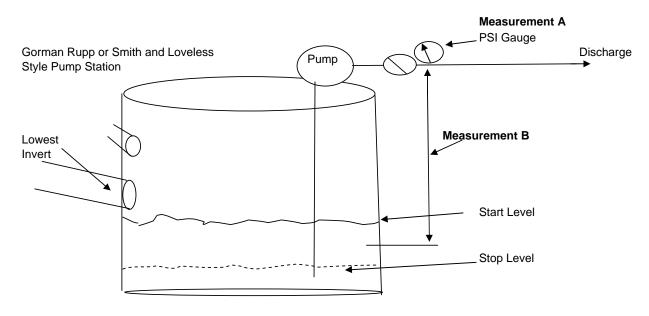
With one pump running

В	Measure from gauge to water level	5.1	ft
Α	With one pump running	9.3	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

Measure in feet at normal water level between start and stop

Total Dynamic Head

1 Pump	26.583	ft
With pumps 1&2 running	5.1	ft
With pumps 2&3 running	5.1	ft
With pumps 1&3 running	5.1	ft



LS No. 15 M-Burkhart Creek

Data Collection Sheet			
Pump Drawdown Date: 10/26/2006	Areas in Blue		
Site ID M-Burkhart Creek LS 15	will be calculation		
ENTER Volume of Water/ inch ENTER Total Dynamic Head		R CELL C15 OR D15 R CELL C31 FOR ONE	DUMD
ENTER Total Dynamic nead	20.36 ENTE	R CELL COT FOR ONE	FUIVIF
Outflow Calculations	P 90.1 1		
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
Measure the level of water to the top of the when pump starts and start stop watch	0	NDS INCHES SECO	NDS INCHES SECONDS
2 Measure the level of water to the top of th when pump shuts off and record time	e well 0	0 38.4	88
OUTFLOW TOTAL GPM	195 GPM	181 GPM	GPM
Inflow Calculations	P 90.1 1		
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1	PUMP 2	PUMP 3
1 Measure the level of water to the top of thwhen pump shuts off and start stop watch2 Measure the level of water to the top of th	36	NDS INCHES SECO	ONDS INCHES SECONDS
when pump starts and record time	0	774 0	579
INFLOW TOTAL GPM	17 GPM	16 GPM	GPM
TOTAL GPM	212 GPM	196 GPM	GPM
Outflow Calculations Multiple Pump			
Note: Water cannot surcharge any inverts or re	adings will be inaccurate		
Time is measured in MINUTES Measure distance change in INCHES	PUMP 1&2	PUMP 2 &3	PUMP 1&2&3
Measure the level of water to the top of the when pump starts and start stop watch	e well INCHES SECO	NDS INCHES SECO	ONDS INCHES SECONDS
Measure the level of water to the top of the when pump shuts off and record time	e well		
OUTFLOW TOTAL GPM	GPM	GPM	GPM
TOTAL GPM MULTIPLE PUM	IP GPM	GPM	GPM
TOTAL GPM MULTIPLE PUN ENTER Total Dynamic Head		GPM R CELL C32 FOR TWO	

LS No. 19 North Albany

Pump Drawdown

 Date:
 10/19/2006

 Site ID
 North Albany LS 19

Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

Round Well			Rectangular Well		
Diameter in feet		ft	Length		ft
Radius in feet	0	ft	Width		ft
Cubic feet of Water	0	cu.ft.	Cubic feet of Water	0	cu.ft.
Gallons /cu.ft	0	gal/ft	Gallons /cu.ft	0	gal/ft
Volume of Water/ inch	0.0	gal/in	Volume of Water/ inch	0.0	gal/in

Head Calculation

	Note:No Pumps Running		
Α	Static Pressure	0.3	psi
	Static Head	0.693	ft
	Static Flead	0.093	ľ

With all pumps off, record pressure gauge reading One PSI = 2.31 feet of head

With one pump running

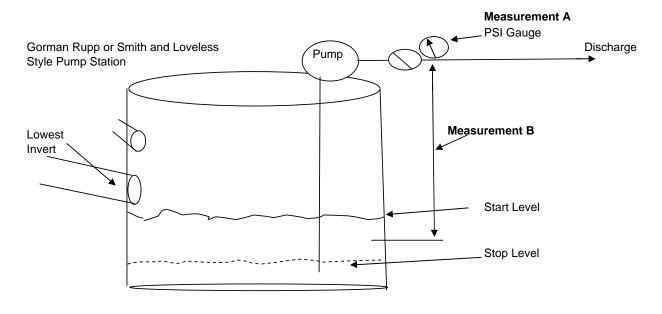
Moto: No Pumpo Puppino

В	Measure from gauge to water level	-0.693	ft
Α	With one pump running	31	psi
Α	With pumps 1&2 running		psi
Α	With pumps 2&3 running		psi
Α	With pumps 1&3 running		psi

Measure in feet at normal water level between start and stop

Total Dynamic Head

1 Pump	70.917	ft
With pumps 1&2 running	-0.693	ft
With pumps 2&3 running	-0.693	ft
With pumps 1&3 running	-0.693	ft



LS No. 19 North Albany

Data Collection								
Pump Dra		A ' DI						
Date: Site ID	10/19/2006 North Albany LS 19	Areas in BI will be calc						
Site ID	NOTH Albany LS 19	Will be calc	ulation					
ENTER Volum	ne of Water/ inch		62.3	ENTER CEI	LL C15 OR E	015		
ENTER Total I	Dynamic Head				LL C31 FOR)	
	•			4				
Outflow Calcu								
Note: Water ca	annot surcharge any inverts or re	eadings will l	be inaccura	te				
<u> </u>								
	neasured in MINUTES		DUMD 4		DUMB 6		DUMB 0	
Measure	distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
1 Magazina	the level of water to the ten of th	الميدمة	INCHES	SECONDS	INCHES	CECONDO	INCHES	SECONDS
	the level of water to the top of the mp starts and start stop watch	ne well	2102.4	SECONDS	2102.4	SECONDS	INCHES	SECONDS
	the level of water to the top of the	ne well	2102.4	1	2102.4			1
	mp shuts off and record time	ic well	2160	251	2160	255		
Wilen pai	mp shale on and record and		2100	201	2.00	200		
	OUTFLOW TOTAL GPM		858	GPM	844	GPM		GPM
								•
Inflow Calcula	ations							
Note: Water ca	annot surcharge any inverts or re	eadings will l	be inaccura	te				
	neasured in MINUTES							
Measure	distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
1 Magaura	the level of water to the ten of th	الميد	INCHES	SECONDS	INCHES	SECONDS	INCHES	SECONDS
	the level of water to the top of the shuts off and start stop watcl		2160	SECONDS	2160	SECONDS	INCHES	SECONDS
	the level of water to the top of the		2100	1	2100			J
	mp starts and record time	ic well	2102.4	624	2102.4	590		
ра	p starte and record time			<u> </u>		000		<u>. </u>
	INFLOW TOTAL GPM		345	GPM	365	GPM		GPM
								•
	TOTAL GPM		1203	GPM	1209	GPM		GPM
								•
	ılations Multiple Pump							
Note: Water ca	annot surcharge any inverts or re	eadings will	be inaccura	te				
T: :	and the MINISTER							
	neasured in MINUTES		PUMP 1&2	•	PUMP 2 &3	•	PUMP 1&2	
ivieasure	distance change in INCHES		PUIVIP 102	1	PUIVIP 2 &3)	PUIVIP 102	20.3
1 Measure	the level of water to the top of the	ne well	INCHES	SECONDS	INCHES	SECONDS	INCHES	SECONDS
	mp starts and start stop watch]				1
	the level of water to the top of the	ne well		1				_
	mp shuts off and record time							
-								
	OUTFLOW TOTAL GPM			GPM		GPM		GPM
			_					•
	TOTAL GPM MULTIPLE PU	MP		GPM		GPM		GPM
				1			_	
ENTER Total I	Dynamic Head			JENTER CEI	LL C32 FOR	TWO PUM	D	

LS No. 20 Columbus

Pump Drawdown

Date: 10/31/2006 Areas in Blue will be calculation NO ENTRY IS REQUIRED

Materials Needed: Tape measure, Pressure Gauge and Stop watch

Well Dimensions & Volumes

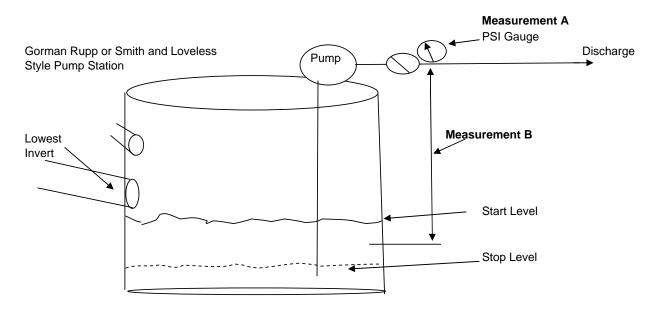
Round Well	<u> </u>	Rectangular Well	
Diameter in feet	12 ft	Length	ft
Radius in feet	6 ft	Width	ft
Cubic feet of Water	113.04 cu.ft.	Cubic feet of Water	0 cu.ft.
Gallons /cu.ft	846 gal/ft	Gallons /cu.ft	0 gal/ft
Volume of Water/ inch	70.5 gal/in	Volume of Water/ inch	0.0 gal/ii

Head Calculation

	neau Calculation		
	Note:No Pumps Running		
Α	Static Pressure	10.45 psi	With all pumps off, record pressure gauge reading
	Static Head	24.1395 ft	One PSI = 2.31 feet of head
	With one pump running		
В	Measure from gauge to water level	-24.1395 ft	Measure in feet at normal
Α	With one pump running	17.6 psi	water level between start and stop
Α	With pumps 1&2 running	psi	
Α	With pumps 2&3 running	psi	
Α	With pumps 1&3 running	psi	

Total Dynamic Head

1 Pump	16.5165	ft
With pumps 1&2 running	-24.1395	ft
With pumps 2&3 running	-24.1395	ft
With pumps 1&3 running	-24.1395	ft



LS No. 20 Columbus

Data Collection Pump Dra								
Date:	10/31/2006	Areas in B	lue					
Site ID	Columbus LS 20	will be cald	culation					
ENTED Volum	e of Water/ inch		70 E EN	TED CEI	L C15 OR D15			
ENTER Volum					L C13 OR D13 L C31 FOR ON)	
	- J				00 0 0.			
Outflow Calcu			ha ta a a a a a a					
Note: water ca	nnot surcharge any inverts or	readings will	be inaccurate					
	easured in MINUTES distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
when pur 2 Measure t	the level of water to the top of mp starts and start stop watch the level of water to the top of		INCHES SEC		INCHES SE		INCHES	SECONDS
when pur	mp shuts off and record time		14.28	76	14.28	61		
	OUTFLOW TOTAL GPM		795 GPI	М	990 GP	PM		GPM
Inflow Calcula	tions							
Note: Water ca	nnot surcharge any inverts or	readings will	be inaccurate					
	easured in MINUTES distance change in INCHES		PUMP 1		PUMP 2		PUMP 3	
when pum 2 Measure t	the level of water to the top of np shuts off and start stop wate the level of water to the top of mp starts and record time	ch	14.28 SEC	7800	14.28 SE	7800	INCHES	SECONDS
	INFLOW TOTAL GPM		8 GPI	М	8 GP	PM		GPM
	TOTAL GPM		803 GPI	М	998 GP	PM		GPM
	lations Multiple Pump nnot surcharge any inverts or	readings will	be inaccurate					
	easured in MINUTES distance change in INCHES		PUMP 1&2		PUMP 2 &3		PUMP 1&2	2&3
when pur 2 Measure t	the level of water to the top of mp starts and start stop watch the level of water to the top of mp shuts off and record time		INCHES SEC	CONDS	INCHES SE	CONDS	INCHES	SECONDS]
, -					0.0)		CDM
	OUTFLOW TOTAL GPM		GPI	IVI	GP	'IVI		GPM
	TOTAL GPM MULTIPLE PU	JMP	GPI	М	GP	PM		GPM
ENTER Total D	Dynamic Head		EN ⁻	TER CEL	L C32 FOR TV	VO PUMI	D	

Final Report

Condition Assessment: Vine Street WTP

Submitted to City of Albany

January 2008

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APPENDIX E

Vine Street WTP Condition Assessment and Risk Reduction

Introduction

In mid-2007, CH2M HILL OMI staff with assistance from City of Albany staff? performed an onsite condition assessment of the Vine Street Water Treatment Plant (WTP) and selected? water booster stations and wastewater lift stations. Four pie charts shown as Exhibits E-1 through E-4 show the distribution of asset condition below. Exhibit E-1 shows all assets (Vine Street WTP, booster stations, and lift stations). Exhibits E-2 and E-3 break out the assets by booster station (water) and lift station (wastewater). The last exhibit shows just the Vine Street WTP assets. For specific information on the scoring of assets, three attachments (Attachments E-1, E-2, and E-3) at the end of this report have each asset and its detailed consequence and likelihood scoring. In addition, this report includes risk reduction detail sheets for the Vine St. WTP (Attachment E-4) and the field data sheets in Attachment E-5.

The assets at the Vine Street WTP were in remarkably good condition for its age, with 96 percent of the assets in the "Very Good" or "Minor Defects" categories (see Exhibit E-4). The remaining assets below these categories were low-risk items that would not have significant impact upon failure.

The condition assessment team did have concerns regarding the buildings at the facility. However, these concerns are not addressed in this condition assessment as a seismic study was performed and those conditions are covered under that report.

Risk Reduction Recommendations

The highest risk assets at the Vine Street WTP are the electrical components. These components were the electrical disconnects associated with all the pumps. It appears that the "consequence" of these failures cannot be mitigated unless a redundant unit is purchased. Also, the "likelihood" component of risk is limited in methods for mitigation. These disconnects are not in poor condition and they are not obsolete. Therefore, replacing them doesn't make much sense and would only reduce the risk slightly. The best risk reduction for these items is to improve the O&M protocols. The best method is to install a predictive maintenance task within the new CMMS that calls for thermography of these items every 2 years and a periodic visual inspection.

There are also five valve actuators that should be considered for replacement. While the consequence of failure is low, the likelihood is high due to the condition of those assets.

Risk reduction details can be found in Attachment E-4. These show the original risk score, mitigation step, and resulting risk score.

CVO\080080012 E-1

(Please note that equipment located in the high service pump station at the Vine Street site was assessed in the initial condition assessment in October 2006. The risk mitigation was provided with that report, specifically for Pump and Motor 15a).

EXHIBIT E-1Condition Rating Summary (All Assets)

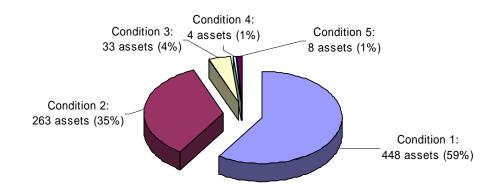
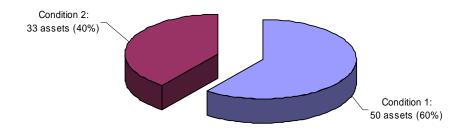


EXHIBIT E-2Booster Station Asset Condition Distribution



E-2 CVO\080080012

EXHIBIT E-3Lift Station Asset Condition Distribution

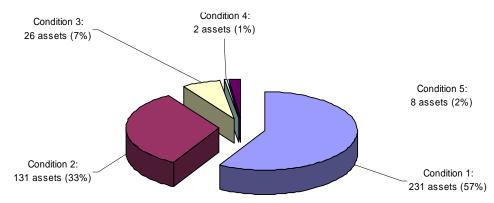
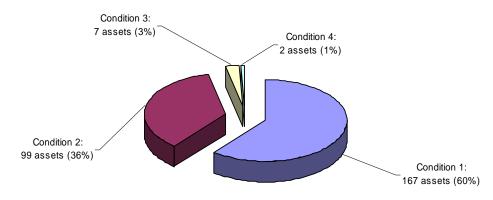


EXHIBIT E-4 Vine Street Asset Condition Distribution



CVO\080080012 E-3

E-4 CVO\080080012

ATTACHMENT E-1

Booster Stations and Vine Street Asset Risk Rank

												lm	oact				Like	ihood			Triggers	
Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
ELC-DIS-009	Main Disconnect For Pumps 2 4 6 8	Albany WTS	Vine St WTP	12	1	2.08	9.308	0.222	1.007	10	10	10	1	10		2	4	7	1	1	1	2
CRTL-PMP-021	Pump No 21 Motor Control Center	Albany WTS	Queen Ave	13	2	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
CRTL-PMP-022	Pump No 22 Motor Control Center	Albany WTS	Queen Ave	14	3	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-005	Pump No 11 Main Disconnect	Albany WTS	Vine St WTP	15	4	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-012	Pump Main Disconnect	Albany WTS	Queen Ave	16	5	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-003	Pump No 13 Main Disconnect	Albany WTS	Vine St WTP	17	6	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-010	Pump No 21 Disconnect	Albany WTS	Queen Ave	18	7	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-011	Pump No 22 Disconnect	Albany WTS	Queen Ave	19	8	1.98	5.833	0.333	1.02	10	4	4	7	10	4	2	4	10	10	1	1	4
ELC-DIS-001	Disconnect For Pump#1	Albany WTS	Vine St WTP	22	9	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-002	Disconnect For Pump#2	Albany WTS	Vine St WTP	23	10	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-003	Disconnect For Pump#3	Albany WTS	Vine St WTP	24	11	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-004	Disconnect For Pump#4	Albany WTS	Vine St WTP	25	12	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-005	Disconnect For Pump#5	Albany WTS	Vine St WTP	26	13	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-007	Disconnect For Pump#7	Albany WTS	Vine St WTP	27	14	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
PMP-PMP-15a	No 15 Pump	Albany WTS	Vine St WTP	28	15	1.86	3.167	0.587	1	10	1	1	7	7	1	7	4	1	1	1	1	1
PMP-DIS-002	Pump No 14 Main Disconnect	Albany WTS	Vine St WTP	29	16	1.83	5.167	0.333	1.06	10	4	4	7	7	4	2	4	10	10	1	1	10
PMP-MTR-15M	No 15 Motor	Albany WTS	Vine St WTP	34	17	1.76	3	0.587	1	10	1	1	4	7	1	7	4	1	1	1	1	1
ELC-DIS-006	Disconnect For Pump#6	Albany WTS	Vine St WTP	44	18	1.67	7.462	0.222	1.007	10	7	10	1	7		2	4	7	1	1	1	2
CTRL-PMP-41	Pump No 41 Motor Control Center	Albany WTS	34 th Ave	55	19	1.46	5.833	0.249	1.007	10	4	4	7	10	4	2	4	10	2	1	1	2
PMP-DIS-004	Pump No 12 Main Disconnect	Albany WTS	Vine St WTP	58	20	1.39	5.167	0.254	1.06	10	4	4	7	7	4	1	4	10	10	1	1	10
ELC-DIS-008	Main Disconnect For Pumps 1 3 5 7 9	Albany WTS	Vine St WTP	60	21	1.34	9.308	0.143	1.007	10	10	10	1	10		1	4	7	1	1	1	2
MCC-MCC-001	Motor Control Center	Albany WTS	North Albany	65	22	1.31	5.833	0.222	1.007	10	4	4	7	10	4	2	4	7	1	1	1	2
CTRL-PMP-42	Pump No 42 Motor Control Center	Albany WTS	34 th Ave	66	23	1.27	5.833	0.217	1.007	10	4	4	7	10	4	2	4	4	2	1	1	2
CTRL-PMP-43	Pump No 43 Motor Control Center	Albany WTS	34 th Ave	67	24	1.27	5.833	0.217	1.007	10	4	4	7	10	4	2	4	4	2	1	1	2
DRV-MXR-01	Upflow Clarifier, Accelator - DRV-MXR-01	Albany WTS	Vine St WTP	71	25	1.25	5.333	0.232	1.01	7	7	1	7	4	7	2	2	10			1	2
PMP-MTR-09	Motor #9 Raw Water Pump VFD	Albany WTS	Vine St WTP	72	26	1.21	7.167	0.169	1	10	4	7	4	7	10	2	2	1	1	1	1	1
FED-VOL-05	Soda Ash Feeder #1 - FED-VOL-05	Albany WTS	Vine St WTP	76	27	1.14	3.167	0.36	1	7	7	4	1	1	1	4	2	7	1	1	1	1
PIP-LRG-04	Large Filter Piping - PIP-LRG-04	Albany WTS	Vine St WTP	78	28	1.12	9.167	0.122	1	10	10	10	7	7	10	1	1	7	2	1	1	1
PIP-SML-06	Small Filter Piping - PIP-SML-06	Albany WTS	Vine St WTP	79	29	1.12	9.167	0.122	1	10	10	10	7	7	10	1	1	7	2	1	1	1
PMP-CVT-01	#1 Raw Water Pump	Albany WTS	Vine St WTP	84	30	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-02	#2 Raw Water Pump	Albany WTS	Vine St WTP	85	31	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-CVT-03	#3 Raw Water Pump	Albany WTS	Vine St WTP	86	32	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-04	#4 Raw Water Pump	Albany WTS	Vine St WTP	87	33	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-05	#5 Raw Water Pump	Albany WTS	Vine St WTP	88	34	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-07	#7 Raw Water Pump	Albany WTS	Vine St WTP	89	35	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-DIS-15	Disconnect Transfer Pump #1	Albany WTS	Vine St WTP	102	36	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-DIS-16	Disconnect Transfer Pump #2	Albany WTS	Vine St WTP	103	37	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-DIS-18	Disconnect Backwash Pump #16	Albany WTS	Vine St WTP	104	38	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-DIS-19	Disconnect Backwash Pump #10	Albany WTS	Vine St WTP	105	39	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-CVT-08	#8 Raw Water Pump VFD	Albany WTS	Vine St WTP	108	40	1.03	7.167	0.143	1.007	10	7	7	4	4	10	1	4	7	1	1	1	2
PMP-CVT-09	#9 Raw Water Pump VFD	Albany WTS	Vine St WTP	109	41	1.03	7.167	0.143	1.007	10	7	7	4	4	10	1	4	7	1	1	1	2
ROBICON8	Robicon VFD Pump Control – Robicon 8	Albany WTS	Vine St WTP	115	42	0.98	4.833	0.201	1.01	10	1	1	7	7	7	2	1	7	2	2	1	1
PMP-DIS-001	Pump No 15 Main Disconnect	Albany WTS	Vine St WTP	116	43	0.98	5.833	0.159	1.06	10	4	4	7	10	4	1	4	10	1	1	1	10
WTP1-04 PUMP STA	Pump Station Structure	Albany WTS	Vine St WTP	118	44	0.96	2.5	0.376	1.023	10	1	4	10	1	1	4	2	10	1	1	2	2
PMP-MTR-10	Bachwash Pump 10	Albany WTS	Vine St WTP	131	45	0.87	4.333	0.201	1	10	7	1	4	7	1	2	2	7	1	1	1	1
PMP-MTR-16	Motor #16 BW Pump	Albany WTS	Vine St WTP	132	46	0.87	4.333	0.201	1	10	7	1	4	7	1	2	2	7	1	1	1	1
CTRL-PMP-61a	Main Disconnect	Albany WTS	Gibson Hill	144	47	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
PMP-DIS-006	Pump no 41 Disconnect	Albany WTS	34th Ave	158	48	0.81	5.833	0.138	1.007	10	4	4	7	10	4	1	4	4	2	1	1	2
PMP-DIS-007	Pump No 42 Disconnect	Albany WTS	34th Ave	159	49	0.81	5.833	0.138	1.007	10	4	4	7	10	4	1	4	4	2	1	1	2
PMP-DIS-008	Pump No 43 Disconnect	Albany WTS	34th Ave	160	50	0.81	5.833	0.138	1.007	10	4	4	7	10	4	1	4	4	2	1	1	2
PMP-CVT-19	Transfer Pump #3 VFD	Albany WTS	Vine St WTP	161	51	0.8	4	0.201	1	10	1	1	7	7	4	2	2	7	1	1	1	1
CTRL-PMP-61b	Transfer Switch	Albany WTS	Gibson Hill	162	52	0.79	5.5	0.143	1	4	4	4	7	10	4	1	4	7	1	1	1	1
CTRL-PMP-61c	Motor Control Center	Albany WTS	Gibson Hill	163	53	0.79	5.5	0.143	1	4	4	4	7	10	4	1	4	7	1	1	1	1
DRV-MXR-02	Upflow Clarifier, Accelator - DRV-MXR-02	Albany WTS	Vine St WTP	164	54	0.78	5.333	0.144	1.01	7	7	1	7	4	7	1	2	10			1	2
CTRL-SCADA-GH	SCADA Panel	Albany WTS	Gibson Hill	165	55	0.76	3.167	0.238	1.007	4	4	4	4	4	1	2	4	10	1	1	1	2
PS GIB STRUCTURE	PS Gibson Hill Structure	Albany WTS	Gibson Hill	189	56	0.66	3	0.217	1.007	10	1	7	10	1	1	2	2	10	1	1	1	2
PMP-MTR-01	Motor #1 Raw Water Pump	Albany WTS	Vine St WTP	195	57	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-02	Motor #2 Raw Water Pump	Albany WTS	Vine St WTP	196	58	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-03	Motor #3 Raw Water Pump	Albany WTS	Vine St WTP	197	59	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-04	Motor #4 Raw Water Pump	Albany WTS	Vine St WTP	198	60	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-05	Motor #5 Raw Water Pump	Albany WTS	Vine St WTP	199	61	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-07	Motor #7 Raw Water Pump	Albany WTS	Vine St WTP	200	62	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-08	Motor #8 Raw Water Pump VFD	Albany WTS	Vine St WTP	201	63	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
SCR-ROT-01	Intake Screen Drive - SCR-ROT-01	Albany WTS	Vine St WTP	202	64	0.64	3	0.215	1	10	1	1	4	7	1	2	2	7			1	1

E1-2

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-CVT-16	#16 BW Pump: Filters 7-10	Albany WTS	Vine St WTP	205	65	0.64	3.167	0.201	1	10	1	1	7	7	1	2	2	7	1	1	1	1
FED-VOL-06	Soda Ash Feeder #2 - FED-VOL-06	Albany WTS	Vine St WTP	206	66	0.64	3.167	0.201	1	7	7	4	1	1	1	2	2	7	1	1	1	1
ROBICON9	Robicon VFD #9 - Robicon 9	Albany WTS	Vine St WTP	207	67	0.63	3.167	0.196	1.01	10	1	1	7	7	1	2	2	4	2	2	1	1
PH-MON-01	PH Monitor Finish Water - PH-MON-01	Albany WTS	Vine St WTP	208	68	0.61	3.5	0.175	1	4	7	7	1	1	1	2	1	4	1	1	1	1
PH-MON-02	PH Monitor Clearwell - PH-MON-02	Albany WTS	Vine St WTP	209	69	0.61	3.5	0.175	1	4	7	7	1	1	1	2	1	4	1	1	1	1
PMP-CHP-11	No 11 HP Pump	Albany WTS	Vine St WTP	210	70	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-13	No 13 HP Pump	Albany WTS	Vine St WTP	211	71	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-14	No 14 HP Pump	Albany WTS	Vine St WTP	212	72	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-15	#15 HP Pump VFD	Albany WTS	Vine St WTP	213	73	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-21	Pump No 21	Albany WTS	Queen Ave	214	74	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CVT-51	N.ALB Pump No 51 Split Case Centrifugal	Albany WTS	North Albany	215	75	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CVT-52	N.ALB Pump No 52 Split Case Centrifugal	Albany WTS	North Albany	216	76	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-41	Pump No 41	Albany WTS	34th Ave	217	77	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-42	Pump No 42	Albany WTS	34th Ave	218	78	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-43	Pump No 43	Albany WTS	34th Ave	219	79	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP=PMP-12a	No 12 Pump	Albany WTS	Vine St WTP	220	80	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-MTR-17	Motor #17 Transfer Pump #1	Albany WTS	Vine St WTP	221	81	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-MTR-18	Motor #18 Transfer Pump #2	Albany WTS	Vine St WTP	222	82	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-SAM-01	Control Bed Sample Pump #1 - PMP-SAM-01	Albany WTS	Vine St WTP	223	83	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-SAM-02	Control Bed Sample Pump #2 - PMP-SAM-02	Albany WTS	Vine St WTP	224	84	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
CAN-GAT-01A	Radial Canal Gate Actuator	Albany WTS	Vine St WTP	228	85	0.6	4.667	0.127	1.007	4	1	7	1	1	10	1	1	4	4	1	1	2
CL2-ANL-01	CL-17 Analyzer, Clearwell Free Chlorine - CL2-ANL-01	Albany WTS	Vine St WTP	230	86	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
CL2-ANL-02	CL-17 Analyzer, Finish - CL2-ANL-02	Albany WTS	Vine St WTP	231	87	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
CL2-ANL-03	CL-17 Analyzer Settled Water - CL2-ANL-03	Albany WTS	Vine St WTP	232	88	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
PMP-MTR-51	N.ALB Pump No 51 Split Case Centrifugal	Albany WTS	North Albany	235	89	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-52	N.ALB Pump No 52 Split Case Centrifugal	Albany WTS	North Albany	236	90	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-21	Pump No 21	Albany WTS	Queen Ave	237	91	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-22	Pump No 22	Albany WTS	Queen Ave	238	92	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-12	No 12 Motor	Albany WTS	Vine St WTP	239	93	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-13	No 13 HP Pump	Albany WTS	Vine St WTP	240	94	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-14	No 14 HP Pump	Albany WTS	Vine St WTP	241	95	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PSR 34 STRUCTURE	PSR 34 Structure	Albany WTS	34th Ave	249	96	0.56	2.5	0.217	1.023	10	1	4	10	1	1	2	2	10	1	1	2	2
PSR QUEEN AVE	Queen Avenue Structure	Albany WTS	Queen Ave	250	97	0.56	2.5	0.217	1.023	10	1	4	10	1	1	2	2	10	1	1	2	2

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
CTRL-POWER-NA	Control Panel	Albany WTS	North Albany	251	98	0.55	3.833	0.143	1.007	4	4	4	1	4	4	1	4	7	1	1	1	2
PS No Albany Str	PS North Albany Structure	Albany WTS	North Albany	253	99	0.54	2.5	0.217	1	10	1	4	10	1	1	2	2	10	1	1	1	1
ELC-MCC-001	Clarifier Drive 1	Albany WTS	Vine St WTP	262	100	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
ELC-MCC-002	Clarifier Drive 2	Albany WTS	Vine St WTP	263	101	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
ELEC-PAN-01	Service Panel A	Albany WTS	Vine St WTP	264	102	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
PMP-CVT-17	Transfer Pump #1	Albany WTS	Vine St WTP	278	103	0.49	4	0.122	1	10	1	1	7	7	4	1	2	7	1	1	1	1
PMP-CVT-18	Transfer Pump #2	Albany WTS	Vine St WTP	279	104	0.49	4	0.122	1	10	1	1	7	7	4	1	2	7	1	1	1	1
TUR-SCT-01	Raw Water Scatterimeter - TUR-SCT-01	Albany WTS	Vine St WTP	284	105	0.49	2.167	0.222	1.007	10	4	1	1	1	1	2	4	7	1	1	1	2
CAN-GAT-01	Radial Canal Gate - CAN-GAT-01	Albany WTS	Vine St WTP	287	106	0.46	4.833	0.095	1.007	4	1	7	4	1	10	1	1	4	1	1	1	2
CON-CEN-01	Accel.Concentrator #1 - CON-CEN-01	Albany WTS	Vine St WTP	295	107	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-02	Accel.Concentrator #2 - CON-CEN-02	Albany WTS	Vine St WTP	296	108	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-07	Accel.#2 Concentrator #1 - CON-CEN-07	Albany WTS	Vine St WTP	297	109	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-08	Accel.#2 Concentrator #2 - CON-CEN-08	Albany WTS	Vine St WTP	298	110	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-09	Accel.#2 Concentrator #3 - CON-CEN-09	Albany WTS	Vine St WTP	299	111	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-10	Accel.#2 Concentrator #4 - CON-CEN-10	Albany WTS	Vine St WTP	300	112	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
VAL-BFV-38A	#1 Filter To Waste - Valve 38 Actuator	Albany WTS	Vine St WTP	303	113	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-39A	#2 Filter To Waste - Valve 39 Actuator	Albany WTS	Vine St WTP	304	114	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-40A	#3 Filter To Waste - Valve 40 Actuator	Albany WTS	Vine St WTP	305	115	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-41A	#4 Filter To Waste - Valve 41 Actuator	Albany WTS	Vine St WTP	306	116	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-42A	#5 Filter To Waste - Valve 42 Actuator	Albany WTS	Vine St WTP	307	117	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
PMP-MTR-61	W.W. Pump No 61 Split Case Centrifugal	Albany WTS	Gibson Hill	328	118	0.41	2.833	0.143	1	7	1	1	4	7	1	1	4	7	1	1	1	1
PMP-MTR-62	W.W. Pump No 62 Split Case Centrifugal	Albany WTS	Gibson Hill	329	119	0.41	2.833	0.143	1	7	1	1	4	7	1	1	4	7	1	1	1	1
PMP-CVT-61	W.W. Pump No 61 Split Case Centrifugal	Albany WTS	Gibson Hill	330	120	0.41	2.833	0.143	1	7	1	1	4	7	1	1	4	7	1	1	1	1
PMP-CVT-62	W.W. Pump No 62 Split Case Centrifugal	Albany WTS	Gibson Hill	331	121	0.41	2.833	0.143	1	7	1	1	4	7	1	1	4	7	1	1	1	1
CW-LEVEL-1	Transfer Pump Pipe Gallery - CW-Level-1	Albany WTS	Vine St WTP	333	122	0.4	2	0.201	1	7	1	1	1	4	1	2	2	7	1	1	1	1
PMP-CVT-10	#10 BW Pump: Filters 1-6	Albany WTS	Vine St WTP	335	123	0.39	3.167	0.122	1	10	1	1	7	7	1	1	2	7	1	1	1	1
PMP-MTR-19	Motor #19 Transfer Pump #3 VFD	Albany WTS	Vine St WTP	345	124	0.37	3	0.122	1	10	1	1	4	7	1	1	2	7	1	1	1	1
PMP-DIS-009	Transformer Disconnect	Albany WTS	34th Ave	348	125	0.35	3.167	0.111	1	10	1	1	7	7	1	1	4	1	1	1	1	1
PMP-CHP-22	Pump No 22	Albany WTS	Queen Ave	349	126	0.35	3.167	0.111	1	10	1	1	7	7	1	1	4	1	1	1	1	1
PMP-MTR-43	Pump No 43	Albany WTS	34th Ave	350	127	0.35	3.167	0.111	1	10	1	1	7	7	1	1	4	1	1	1	1	1
RTU-RTU-003	RTU	Albany WTS	Vine St WTP	351	128	0.35	2	0.175	1	4	1	1	1	1	4	2	2	2	1	1	1	1
PMP-SUM-01	Raw Water Sump	Albany WTS	Vine St WTP	356	129	0.35	2.833	0.122	1	10	1	1	1	7	1	1	2	7	1	1	1	1
SCR-DRV-01	Canal Screen Drive Unit - SCR-DRV-01	Albany WTS	Vine St WTP	357	130	0.34	3	0.115	1	10	1	1	4	7	1	1	1	7			1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-MTR-11	No 11 HP PUMP	Albany WTS	Vine St WTP	358	131	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
PMP-MTR-41	Pump No 41	Albany WTS	34th Ave	359	132	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
PMP-MTR-42	Pump No 42	Albany WTS	34th Ave	360	133	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
PMP-MTR-15	Motor #15 HP Pump VFD	Albany WTS	Vine St WTP	361	134	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
WT1-04S-VFD-03	Small Filter Building VFD #3	Albany WTS	Vine St WTP	362	135	0.32	1.5	0.212	1.01	7	1	1	4	1	1	2	2	7	2	2	1	1
ELC-BRK-001	Main Breaker	Albany WTS	Vine St WTP	368	136	0.32	3	0.106	1	4	4	4	1	4	1	1	2	4	1	1	1	1
MXR-SOL-03	Fluoride Mixer	Albany WTS	Vine St WTP	369	137	0.32	2.5	0.126	1	4	7	1	1	1	1	1	2	7			1	1
VAL-BAL-150	Surface Wash Shutoff #1 Filter - VAL-BAL-150	Albany WTS	Vine St WTP	374	138	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-150A	Surface Wash Shutoff #1 Filter - Valve Actuator	Albany WTS	Vine St WTP	375	139	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-152	Surface Wash Shutoff #2 Filter - VAL-BAL-152	Albany WTS	Vine St WTP	376	140	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-152A	Surface Wash Shutoff #2 Filter - Valve Actuator	Albany WTS	Vine St WTP	377	141	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-154	Surface Wash Shutoff #3 Filter - VAL-BAL-154	Albany WTS	Vine St WTP	378	142	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-154A	Surface Wash Shutoff #3 Filter - Valve Actuator	Albany WTS	Vine St WTP	379	143	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-156	Surface Wash Shutoff #4 Filter - VAL-BAL-156	Albany WTS	Vine St WTP	380	144	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-156A	Surface Wash Shutoff #4 Filter - Valve Actuator	Albany WTS	Vine St WTP	381	145	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-158	Surface Wash Shutoff #5 Filter - VAL-BAL-158	Albany WTS	Vine St WTP	382	146	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-158A	Surface Wash Shutoff #5 Filter - Valve Actuator	Albany WTS	Vine St WTP	383	147	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
TUR-20C-12	Process Turbidimeter CNTRL BDS - TUR-20C-12	Albany WTS	Vine St WTP	392	148	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-01	Process Turbidimeter Filter #1 - TUR-20D-01	Albany WTS	Vine St WTP	393	149	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-02	Process Turbidimeter Filter #2 - TUR-20D-02	Albany WTS	Vine St WTP	394	150	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-03	Process Turbidimeter Filter #3 - TUR-20D-03	Albany WTS	Vine St WTP	395	151	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-04	Process Turbidimeter Filter #4 - TUR-20D-04	Albany WTS	Vine St WTP	396	152	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-05	Process Turbidimeter Filter #5 - TUR-20D-05	Albany WTS	Vine St WTP	397	153	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-06	Process Turbidimeter Filter #6 - TUR-20D-06	Albany WTS	Vine St WTP	398	154	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-07	Process Turbidimeter Filter #7 - TUR-20D-07	Albany WTS	Vine St WTP	399	155	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-08	Process Turbidimeter Filter #8 - TUR-20D-08	Albany WTS	Vine St WTP	400	156	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-09	Process Turbidimeter Filter #9 - TUR-20D-09	Albany WTS	Vine St WTP	401	157	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-10	Process Turbidimeter Filter #10 - TUR-20D-10	Albany WTS	Vine St WTP	402	158	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-11	Process Turbidimeter Clearwell - TUR-20D-11	Albany WTS	Vine St WTP	403	159	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
COM-AIR-02	Quincy Air Compressor - COM-AIR-02	Albany WTS	Vine St WTP	414	160	0.24	2.5	0.097	1	4	4	1	1	4	1	1	1	4		1	1	1
VAL-BFV-14A	#1 Filter Influent - Valve 14 Actuator	Albany WTS	Vine St WTP	415	161	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-15A	#1 Filter Waste - Valve 15 Actuator	Albany WTS	Vine St WTP	416	162	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-17A	#1 Filter Effluent - Valve 17 Actuator	Albany WTS	Vine St WTP	417	163	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2

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VAL-BFV-18A	#2 Filter Influent - Valve 18 Actuator	Albany WTS	Vine St WTP	418	164	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-30A	#5 Filter Influent - Valve 30 Actuator	Albany WTS	Vine St WTP	419	165	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-19A	#2 Filter Waste - Valve 19 Actuator	Albany WTS	Vine St WTP	420	166	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-22A	#3 Filter Influent - Valve 22 Actuator	Albany WTS	Vine St WTP	421	167	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-23A	#3 Filter Waste - Valve 23 Actuator	Albany WTS	Vine St WTP	422	168	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-25A	#3 Filter Effluent - Valve 25 Actuator	Albany WTS	Vine St WTP	423	169	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-41	#4 Filter To Waste - VAL-BFV-41	Albany WTS	Vine St WTP	426	170	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-40	#3 Filter To Waste - VAL-BFV-40	Albany WTS	Vine St WTP	427	171	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-39	#2 Filter To Waste - VAL-BFV-39	Albany WTS	Vine St WTP	428	172	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-42	#5 Filter To Waste - VAL-BFV-42	Albany WTS	Vine St WTP	429	173	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-38	#1 Filter To Waste - VAL-BFV-38	Albany WTS	Vine St WTP	430	174	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
MET-FLO-04	Metering Device	Albany WTS	Queen Ave	433	175	0.23	1.833	0.127	1.007	4	4	1	1	1	1	1	4	4	1	1	1	2
RTU-RTU-004	PSR 34th Ave RTU Data Radio	Albany WTS	34th Ave	434	176	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
RTU-RTU-005	PSR 34th Ave RTU ScadaPack	Albany WTS	34th Ave	435	177	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
RTU-RTU-006	PSR Queen Ave RTU Data Radio	Albany WTS	Queen Ave	436	178	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
RTU-RTU-007	PSR Queen Ave RTU Scada Pack	Albany WTS	Queen Ave	437	179	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
RTU-RTU-001	RTU Data Radio	Albany WTS	North Albany	438	180	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
RTU-RTU-002	RTU SCADA Pack	Albany WTS	North Albany	439	181	0.23	1.333	0.175	1	4	1	1	4	1	1	2	2	2	1	1	1	1
FAN-FAN-002	MCC Colling Fan	Albany WTS	North Albany	447	182	0.23	1.167	0.196	1	4	1	1	1	1	1	2	4	2	1	1	1	1
VAL-BFV-31A	#5 Filter Waste - Valve 31 Actuator	Albany WTS	Vine St WTP	448	183	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-26A	#4 Filter Influent - Valve 26 Actuator	Albany WTS	Vine St WTP	449	184	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-27A	#4 Filter Waste - Valve 27 Actuator	Albany WTS	Vine St WTP	450	185	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-52A	#8 Influent - Valve 52 Actuator	Albany WTS	Vine St WTP	451	186	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-54A	#8 Filter To Waste - Valve 54 Actuator	Albany WTS	Vine St WTP	452	187	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-50A	#8 Backwash - Valve 50 Actuator	Albany WTS	Vine St WTP	453	188	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-53A	#8 Effluent - Valve 53 Actuator	Albany WTS	Vine St WTP	454	189	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-59A	#7 Filter To Waste - Valve 59 Actuator	Albany WTS	Vine St WTP	455	190	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-TEL-01A	Telescoping Valve Actuator	Albany WTS	Vine St WTP	456	191	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-CHK-07	#4 Check Valve - VAL-CHK-07	Albany WTS	Vine St WTP	457	192	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-CHK-08	#5 Check Valve - VAL-CHK-08	Albany WTS	Vine St WTP	458	193	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-58A	#7 Backwash - Valve 58 Actuator	Albany WTS	Vine St WTP	459	194	0.23		0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-70A	Surface Wash Control #7 Filter - Valve 70 Actuator	Albany WTS	Vine St WTP	460	195	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-71A	Surface Wash Control #8 Filter - Valve 71 Actuator	Albany WTS	Vine St WTP	461	196	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-72A	Surface Wash Control #9 Filter - Valve 72 Actuator	Albany WTS	Vine St WTP	462	197	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-73A	Surface Wash Control #10 Filter - Valve 73 Actuator	Albany WTS	Vine St WTP	463	198	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
PMP-VLV-002	Pump No 11 Clay Valve	Albany WTS	Vine St WTP	464	199	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
PMP-VLV-033	Distribution System Isolation Valve	Albany WTS	Queen Ave	465	200	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
PMP-VLV-017	Pump No 41 Clay Valve	Albany WTS	34th Ave	466	201	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
MET-FLO-05	Sparling Meter BW 1-6 - MET-FLO-05	Albany WTS	Vine St WTP	467	202	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-02	Sparling Meter Filter #2 - MET-FIL-02	Albany WTS	Vine St WTP	469	203	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-03	Sparling Meter Filter #3 - MET-FIL-03	Albany WTS	Vine St WTP	470	204	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-04	Sparling Meter Filter #4 - MET-FIL-04	Albany WTS	Vine St WTP	471	205	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-05	Sparling Meter Filter #5 - MET-FIL-05	Albany WTS	Vine St WTP	472	206	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
INT-INT-002	Pressure Transducer	Albany WTS	North Albany	474	207	0.22	2.333	0.095	1	1	4	1	1	4	1	1	2	2	1	1	1	1
MET-FIL-06	Sparling Meter Filter #6 - MET-FIL-06	Albany WTS	Vine St WTP	481	208	0.2	1.167	0.175	1	4	1	1	1	1	1	2	1	4	1	1	1	1
VAL-TEL-02	Telescoping Valve	Albany WTS	Vine St WTP	554	209	0.18	1.333	0.132	1.01	7	1	1	1	1	1	1	2	7	2		1	2
VAL-TEL-01	Telescoping Valve	Albany WTS	Vine St WTP	555	210	0.18	1.333	0.132	1.01	7	1	1	1	1	1	1	2	7	2		1	2
VAL-AIR-01	Backwash Line Air Release - VAL-AIR-01	Albany WTS	Vine St WTP	567	211	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
VAL-AIR-02	Backwash Line Air Release - VAL-AIR-02	Albany WTS	Vine St WTP	568	212	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
VAL-AIR-03	Backwash Line Air Release - VAL-AIR-03	Albany WTS	Vine St WTP	569	213	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
CRN-001	Overhead Crane	Albany WTS	Vine St WTP	571	214	0.14	1.333	0.106	1	7	1	1	1	1	1	1	2	4	1	1	1	1
FAN-FAN-001	Building Fan	Albany WTS	North Albany	573	215	0.14	1.167	0.116	1	4	1	1	1	1	1	1	4	2	1	1	1	1
PMP-VLV-010	Pump No 14 Suction Valve	Albany WTS	Vine St WTP	574	216	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-011	Pump No 14 Clay Valve	Albany WTS	Vine St WTP	575	217	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-012	Pump No 14 Discharge Valve	Albany WTS	Vine St WTP	576	218	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-013	Pump No 15 Suction Valve	Albany WTS	Vine St WTP	577	219	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-014	Pump No 15 Discharge Valve Actuated	Albany WTS	Vine St WTP	578	220	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-015	Pump No 15 Check Valve	Albany WTS	Vine St WTP	579	221	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-008	Pump No 13 Clay Valve	Albany WTS	Vine St WTP	580	222	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-030	Pump No 22 Clay Valve	Albany WTS	Queen Ave	581	223	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-21A	#2 Filter Effluent - Valve 21 Actuator	Albany WTS	Vine St WTP	582	224	0.14	1.333	0.101	1.007	7	1	1	1	1	1	1	2	1	2	1	1	2
VAL-BFV-29A	#4 Filter Effluent - Valve 29 Actuator	Albany WTS	Vine St WTP	583	225	0.14	1.333	0.101	1.007	7	1	1	1	1	1	1	2	1	2	1	1	2
VAL-BFV-30	#5 Filter Influent - VAL-BFV-30	Albany WTS	Vine St WTP	584	226	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-27	#4 Filter Waste - VAL-BFV-27	Albany WTS	Vine St WTP	585	227	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-32	#5 Filter Backwash - VAL-BFV-32	Albany WTS	Vine St WTP	586	228	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-31	#5 Filter Waste - VAL-BFV-31	Albany WTS	Vine St WTP	587	229	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1

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Asset Name	Description	System Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-33	#5 Filter Effluent - VAL-BFV-33	Albany WTS Vine St WTP	588	230	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-22	#3 Filter Influent - VAL-BFV-22	Albany WTS Vine St WTP	589	231	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-23	#3 Filter Waste - VAL-BFV-23	Albany WTS Vine St WTP	590	232	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-20	#2 Filter Backwash - VAL-BFV-20	Albany WTS Vine St WTP	591	233	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-20A	#2 Filter Backwash - Valve 20 Actuator	Albany WTS Vine St WTP	592	234	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-21	#2 Filter Effluent - VAL-BFV-21	Albany WTS Vine St WTP	593	235	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-28	#4 Filter Backwash - VAL-BFV-28	Albany WTS Vine St WTP	594	236	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-28A	#4 Filter Backwash - Valve 28 Actuator	Albany WTS Vine St WTP	595	237	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-29	#4 Filter Effluent - VAL-BFV-29	Albany WTS Vine St WTP	596	238	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-26	#4 Filter Influent - VAL-BFV-26	Albany WTS Vine St WTP	597	239	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-24	#3 Filter Backwash - VAL-BFV-24	Albany WTS Vine St WTP	598	240	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-24A	#3 Filter Backwash - Valve 24 Actuator	Albany WTS Vine St WTP	599	241	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-50	#8 Backwash - VAL-BFV-50	Albany WTS Vine St WTP	600	242	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-15	#1 Filter Waste - VAL-BFV-15	Albany WTS Vine St WTP	601	243	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-14	#1 Filter Influent - VAL-BFV-14	Albany WTS Vine St WTP	602	244	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-19	#2 Filter Waste - VAL-BFV-19	Albany WTS Vine St WTP	603	245	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-18	#2 Filter Influent - VAL-BFV-18	Albany WTS Vine St WTP	604	246	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-16	#1 Filter Backwash - VAL-BFV-16	Albany WTS Vine St WTP	605	247	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-16A	#1 Filter Backwash - Valve 16 Actuator	Albany WTS Vine St WTP	606	248	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-17	#1 Filter Effluent - VAL-BFV-17	Albany WTS Vine St WTP	607	249	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
MET-FIL-07	Sparling Meter Filter #7 - MET-FIL-07	Albany WTS Vine St WTP	608	250	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-08	Sparling Meter Filter #8 - MET-FIL-08	Albany WTS Vine St WTP	609	251	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-09	Sparling Meter Filter #9 - MET-FIL-09	Albany WTS Vine St WTP	610	252	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-10	Sparling Meter Filter #10 - MET-FIL-10	Albany WTS Vine St WTP	611	253	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FLO-06	Sparling Meter BW 7-10 - MET-FLO-06	Albany WTS Vine St WTP	612	254	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
CTRL-ALARM-GH	Alarm System	Albany WTS Gibson Hill	621	255	0.13	1.333	0.095	1	4	1	1	4	1	1	1	2	2	1	1	1	1
VAL-PMP-52B	Valve	Albany WTS North Albany	622	256	0.13	1.333	0.095	1	7	1	1	1	1	1	1	2	2	1	1	1	1
VAL-BFV-33A	#5 Filter Effluent - Valve 33 Actuator	Albany WTS Vine St WTP	624	257	0.12	1.333	0.09	1.007	7	1	1	1	1	1	1	2	1	1	1	1	2
VAL-BFV-32A	#5 Filter Backwash - Valve 32 Actuator	Albany WTS Vine St WTP	625	258	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-53	#8 Effluent - VAL-BFV-53	Albany WTS Vine St WTP	626	259	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-55	#7 Influent - VAL-BFV-55	Albany WTS Vine St WTP	627	260	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-55A	#7 Influent - Valve 55 Actuator	Albany WTS Vine St WTP	628	261	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-56	#7 Effluent - VAL-BFV-56	Albany WTS Vine St WTP	629	262	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-51	#8 Waste - VAL-BFV-51	Albany WTS	Vine St WTP	630	263	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-51A	#8 Waste - Valve 51 Actuator	Albany WTS	Vine St WTP	631	264	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-52	#8 Influent - VAL-BFV-52	Albany WTS	Vine St WTP	632	265	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-44	#2 Transfer Pump - VAL-BFV-44	Albany WTS	Vine St WTP	633	266	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-45	#3 Transfer Pump - VAL-BFV-45	Albany WTS	Vine St WTP	634	267	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-60	#10 Waste - VAL-BFV-60	Albany WTS	Vine St WTP	635	268	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-60A	#10 Waste -Valve 60 Actuator	Albany WTS	Vine St WTP	636	269	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-61	#10 Influent - VAL-BFV-61	Albany WTS	Vine St WTP	637	270	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-61A	#10 Influent - Valve 61 Actuator	Albany WTS	Vine St WTP	638	271	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-54	#8 Filter-To-Waste - VAL-BFV-54	Albany WTS	Vine St WTP	639	272	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-57	#7 Waste - VAL-BFV-57	Albany WTS	Vine St WTP	640	273	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-57A	#7 Waste - Valve 57 Actuator	Albany WTS	Vine St WTP	641	274	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-58	#7 Backwash - VAL-BFV-58	Albany WTS	Vine St WTP	642	275	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-63	#10 Effluent - VAL-BFV-63	Albany WTS	Vine St WTP	643	276	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-63A	#10 Effluent - Valve 63 Actuator	Albany WTS	Vine St WTP	644	277	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-64	#9 Influent - VAL-BFV-64	Albany WTS	Vine St WTP	645	278	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-64A	#9 Influent - Valve 64 Actuator	Albany WTS	Vine St WTP	646	279	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-65	#9 Waste - VAL-BFV-65	Albany WTS	Vine St WTP	647	280	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-65A	#9 Waste - Valve 65 Actuator	Albany WTS	Vine St WTP	648	281	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-66	#9 Backwash - VAL-BFV-66	Albany WTS	Vine St WTP	649	282	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-66A	#9 Backwash - Valve 66 Actuator	Albany WTS	Vine St WTP	650	283	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-67	#10 Filter-To-Waste - VAL-BFV-67	Albany WTS	Vine St WTP	651	284	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-67A	#10 Filter To Waste - Valve 67 Actuator	Albany WTS	Vine St WTP	652	285	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-68	#9 Filter-To-Waste - VAL-BFV-68	Albany WTS	Vine St WTP	653	286	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-68A	#9 Filter To Waste - Valve 68 Actuator	Albany WTS	Vine St WTP	654	287	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-69	#9 Effluent - VAL-BFV-69	Albany WTS	Vine St WTP	655	288	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-69A	#9 Effluent - Valve 69 Actuator	Albany WTS	Vine St WTP	656	289	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-70	Surface Wash Control #7 Filter - VAL-BFV-70	Albany WTS	Vine St WTP	657	290	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-61	Valve	Albany WTS	Gibson Hill	658	291	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-61A	Valve	Albany WTS	Gibson Hill	659	292	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-61B	Valve	Albany WTS	Gibson Hill	660	293	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-62	Valve	Albany WTS	Gibson Hill	661	294	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-62A	Valve	Albany WTS	Gibson Hill	662	295	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-PMP-62B	Valve	Albany WTS	Gibson Hill	663	296	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-RPV-02	Backflow Prevention - VAL-RPV-02	Albany WTS	Vine St WTP	664	297	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-TEL-02A	Telescoping Valve Actuator	Albany WTS	Vine St WTP	665	298	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-VAL-001	Pressure Relief Valve (Clay Valve)	Albany WTS	North Albany	666	299	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-04	#1 Pump Check Valve - VAL-CHK-04	Albany WTS	Vine St WTP	667	300	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-05	#2 Pump Check Valve - VAL-CHK-05	Albany WTS	Vine St WTP	668	301	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-06	#3 Check Valve - VAL-CHK-06	Albany WTS	Vine St WTP	669	302	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-GAT-38	Backflow PRV - VAL-GAT-38	Albany WTS	Vine St WTP	670	303	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-PMP-51A	Valve	Albany WTS	North Albany	671	304	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-51B	Valve	Albany WTS	North Albany	672	305	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-PMP-52A	Valve	Albany WTS	North Albany	673	306	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-73	Surface Wash Control #10 Filter - VAL-BFV-73	Albany WTS	Vine St WTP	674	307	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-72	Surface Wash Control #9 Filter - VAL-BFV-72	Albany WTS	Vine St WTP	675	308	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-71	Surface Wash Control #8 Filter - VAL-BFV-71	Albany WTS	Vine St WTP	676	309	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-59	#7 Filter-To-Waste - VAL-BFV-59	Albany WTS	Vine St WTP	677	310	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-10	#7 Check Valve - VAL-CHK-10	Albany WTS	Vine St WTP	678	311	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-11	#8 Check Valve - VAL-CHK-11	Albany WTS	Vine St WTP	679	312	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-12	#9 Check Valve - VAL-CHK-12	Albany WTS	Vine St WTP	680	313	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-18	#1 Transfer Pump - VAL-CHK-18	Albany WTS	Vine St WTP	681	314	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-19	#2 Transfer Pump - VAL-CHK-19	Albany WTS	Vine St WTP	682	315	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-20	#3 Transfer Pump - VAL-CHK-20	Albany WTS	Vine St WTP	683	316	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-22	PRV - VAL-CHK-22	Albany WTS	Vine St WTP	684	317	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-23	PRV - VAL-CHK-23	Albany WTS	Vine St WTP	685	318	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-08	#1 Gate Valve - VAL-GAT-08	Albany WTS	Vine St WTP	686	319	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-09	#2 Gate Valve - VAL-GAT-09	Albany WTS	Vine St WTP	687	320	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-10	#3 Gate Valve - VAL-GAT-10	Albany WTS	Vine St WTP	688	321	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-11	#4 Gate Valve - VAL-GAT-11	Albany WTS	Vine St WTP	689	322	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-12	#5 Gate Valve - VAL-GAT-12	Albany WTS	Vine St WTP	690	323	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-13	#6 Gate Valve - VAL-GAT-13	Albany WTS	Vine St WTP	691	324	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-14	#7 Gate Valve - VAL-GAT-14	Albany WTS	Vine St WTP	692	325	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-15	#8 Gate Valve - VAL-GAT-15	Albany WTS	Vine St WTP	693	326	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-16	#9 Gate Valve - VAL-GAT-16	Albany WTS	Vine St WTP	694	327	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-34	#1 Transfer Pump - VAL-GAT-34	Albany WTS	Vine St WTP	695	328	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1

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Asset Name	Description	System Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP VLV-007	Pump No 13 Suction Valve	Albany WTS Vine St WTP	696	329	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-13	Backwash Pump Intertie - VAL-BFV-13	Albany WTS Vine St WTP	697	330	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-031	Pump No 22 Discharge Valve	Albany WTS Queen Ave	698	331	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-032	Reservoir Isolation Valve	Albany WTS Queen Ave	699	332	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-009	Pump No 13 Discharge Valve	Albany WTS Vine St WTP	700	333	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-016	Pump No 41 Suction Valve	Albany WTS 34th Ave	701	334	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-018	Pump No 41 Discharge Valve	Albany WTS 34th Ave	702	335	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-019	Pump No 42 Suction Valve	Albany WTS 34th Ave	703	336	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-021	Pump No 42 Discharge Valve	Albany WTS 34th Ave	704	337	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-022	Pump No 43 Suction Valve	Albany WTS 34th Ave	705	338	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-023	Pump No 43 Clay valve	Albany WTS 34th Ave	706	339	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-024	Pump No 43 Discharge Valve	Albany WTS 34th Ave	707	340	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-025	PSR 34th Ave Altitude Valve	Albany WTS 34th Ave	708	341	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-026	Pump No 21 Suction Valve	Albany WTS Queen Ave	709	342	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-027	Pump No 21 Clay Valve	Albany WTS Queen Ave	710	343	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-028	Pump No 21 Discharge Valve	Albany WTS Queen Ave	711	344	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-029	Pump No 22 Suction Valve	Albany WTS Queen Ave	712	345	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-003	Pump No 11 Discharge Valve	Albany WTS Vine St WTP	713	346	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-004	Pump No 12 Suction Valve	Albany WTS Vine St WTP	714	347	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-005	Pump No 12 Discharge Valve Actuated	Albany WTS Vine St WTP	715	348	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-001	Pump No 11 Suction Valve	Albany WTS Vine St WTP	716	349	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
HTR-HTR-001	Unit Heater	Albany WTS North Albany	718	350	0.12	1	0.116	1	1	1	1	1	1	1	1	4	2	1	1	1	1
VAL-PRES-63	Valve	Albany WTS Gibson Hill	748	351	0.11	1.167	0.095	1	4	1	1	1	1	1	1	2	2	1	1	1	1
VAL-BFV-56A	#7 Effluent - Valve 56 Actuator	Albany WTS Vine St WTP	749	352	0.11	1.333	0.079	1	7	1	1	1	1	1	1	1	1	1	1	1	1
PMP-VLV-020	Pump No 42 Clay Valve	Albany WTS 34th Ave	750	353	0.11	1.333	0.079	1	7	1	1	1	1	1	1	1	1	1	1	1	1
VAL-GAT-37	Backflow PRV - VAL-GAT-37	Albany WTS Vine St WTP	751	354	0.11	1.167	0.09	1	4	1	1	1	1	1	1	2	1	1		1	1
INT-FLW-001	Flow Meter	Albany WTS North Albany	752	355	0.1	1	0.095	1	1	1	1	1	1	1	1	2	2	1	1	1	1
VAL-BFV-62	#10 Backwash - VAL-BFV-62	Albany WTS Vine St WTP	753	356	0.09	1	0.09	1	1	1	1	1	1	1	1	2	1	1	1	1	1
BAS-ACL-01	Upflow Clarifier, Accelator - BAS-ACL-01	Albany WTS Vine St WTP																			
GATE CNTRL	Canal Gate Controls - Gate CNTRL	Albany WTS Vine St WTP																1			
GATE CNTRLA	Canal Gate Control Actuator	Albany WTS Vine St WTP																			
GEN-HYD-01	Hydroelectric Generator - GEN-HYD-01	Albany WTS Vine St WTP																			
PMP-CVT-06	#6 Raw Water Pump	Albany WTS Vine St WTP																2	1		

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-CVT-20	Transfer Pump #4 VFD	Albany WTS	Vine St WTP																1	1		
PMP-MTR-06	Motor #6 Raw Water Pump	Albany WTS	Vine St WTP																1	1		
PMP-MTR-20	Motor #20 Transfer Pump #4 VFD	Albany WTS	Vine St WTP																1	1		
RAW-VAL-01	Raw Water Valve - Raw-VAL-01	Albany WTS	Vine St WTP																			
RAW-VAL-01A	Raw Water Valve Actuator-Raw-VAL-01	Albany WTS	Vine St WTP																			
VAL-BAL-160	Surface Wash Shutoff #6 Filter - VAL-BAL-160	Albany WTS	Vine St WTP																			
VAL-BAL-160A	Surface Wash Shutoff #6 Filter - Valve Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-25	#3 Filter Effluent - VAL-BFV-25	Albany WTS	Vine St WTP																2	1		
VAL-BFV-34	#6 Filter Influent - VAL-BFV-34	Albany WTS	Vine St WTP																2			
VAL-BFV-34A	#6 Filter Influent - Valve 34 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-35	#6 Filter Waste - VAL-BFV-35	Albany WTS	Vine St WTP																2			
VAL-BFV-35A	#6 Filter Waste - Valve 35 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-36	#6 Filter Backwash - VAL-BFV-36	Albany WTS	Vine St WTP																			
VAL-BFV-36A	#6 Filter Backwash - Valve 36 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-37	#6 Filter Effluent - VAL-BFV-37	Albany WTS	Vine St WTP																			
VAL-BFV-37A	#6 Filter Effluent - Valve 37 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-43	#6 Filter To Waste - VAL-BFV-43	Albany WTS	Vine St WTP																			
VAL-BFV-43A	#6 Filter To Waste - Valve 43 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-46	#4 Transfer Pump - VAL-BFV-46	Albany WTS	Vine St WTP																			
VAL-BFV-62A	#10 Backwash - Valve 62 Actuator	Albany WTS	Vine St WTP													1			1	1		
VAL-CHK-09	#6 Check Valve - VAL-CHK-09	Albany WTS	Vine St WTP																			
VAL-CHK-21	#4 Transfer Pump - VAL-CHK-21	Albany WTS	Vine St WTP																			
WT1-01-VFD-08	Large Filter Building VFD #8	Albany WTS	Vine St WTP																			
WT1-01-VFD-09	Large Filter Building VFD #9	Albany WTS	Vine St WTP																			
WT1-04L-VFD-04	Small Filter Building VFD #4	Albany WTS	Vine St WTP																			

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ATTACHMENT E-2

Wastewater Lift Stations

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS08-CTP-001	Pump Control Panel	Albany LS	34th Avenue	1	1	3.49	9.167	0.381	1	10	7	10	7	10	10	4	4	7	1	1	1	1
LS06-STR-001	Oak Creek Structure	Albany LS	Oak Creek	2	2	3.33	8	0.397	1.05	10	7	7	10	10	7	4	4	10	1	1	4	1
LS14-STR-001	Charlotte Lift Station	Albany LS	Charlotte Street	3	3	2.38	6	0.397	1	10	4	4	10	10	4	4	4	10	1	1	1	1
LS12-STR-001	Wah Chan Lift Station	Albany LS	Wah Chang	4	4	2.37	8.667	0.238	1.15	10	7	10	10	7	10	2	4	10	1	1	10	1
LS04-CTP-001	Pump Control Panel	Albany LS	Queen Avenue	5	5	2.33	6	0.381	1.02	7	4	7	4	10	4	4	4	7	1	1	1	4
LS05-STR-001	Umatilla List Station Structure	Albany LS	Umatilla	6	6	2.32	5.833	0.397	1	7	7	4	10	7	4	4	4	10	1	1	1	1
LS07-STR-001	College Green Lift Station	Albany LS	College Green	7	7	2.22	9.333	0.238	1	10	7	10	10	10	10	2	4	10	1	1	1	1
LS08-STR-001	34th Avenue Lift Station	Albany LS	34th Avenue	8	8	2.22	9.333	0.238	1	10	7	10	10	10	10	2	4	10	1	1	1	1
LS19-STR-001	North Albany Lift Station	Albany LS	North Albany	9	9	2.22	9.333	0.238	1	10	7	10	10	10	10	2	4	10	1	1	1	1
LS09-CTP-001	Pump Control Panel	Albany LS	Marion Street	10	10	2.17	5.667	0.381	1.007	10	4	4	4	10	4	4	4	7	1	1	1	2
LS11-CTP-001	Pump Control Panel	Albany LS	Lawndale	11	11	2.17	5.667	0.381	1.007	10	4	4	4	10	4	4	4	7	1	1	1	2
LS20-STR-001	Columbus Street Lift Station	Albany LS	Columbus Street	20	12	1.91	8	0.238	1	10	7	7	10	10	7	2	4	10	1	1	1	1
LS13-STR-001	Century Drive Lift Station	Albany LS	Century Dr	21	13	1.91	8	0.238	1	10	7	7	10	10	7	2	4	10	1	1	1	1
PUMP013	Centrifugal Pump	Albany LS	34th Avenue	30	14	1.8	9.167	0.196	1	10	7	10	7	10	10	2	4	2	1	1	1	1
PUMP014	Centrifugal Pump	Albany LS	34th Avenue	31	15	1.8	9.167	0.196	1	10	7	10	7	10	10	2	4	2	1	1	1	1
LS18-STR-001	Millersburg Lift Station	Albany LS	Millersburg	32	16	1.79	7.5	0.238	1	10	7	4	10	10	7	2	4	10	1	1	1	1
MOTOR014	Motor - 3 Phase	Albany LS	34th Avenue	33	17	1.76	9	0.196	1	7	7	10	7	10	10	2	4	2	1	1	1	1
LS06-MCC-001	Motor Control Center	Albany LS	Oak Creek	35	18	1.75	7.833	0.222	1.007	10	7	7	7	10	7	2	4	7	1	1	1	2
MOTOR011	Motor - 3 Phase	Albany LS	College Green	36	19	1.73	8.833	0.196	1	7	7	10	4	10	10	2	4	2	1	1	1	1
MOTOR012	Motor - 3 Phase	Albany LS	College Green	37	20	1.73	8.833	0.196	1	7	7	10	4	10	10	2	4	2	1	1	1	1
MOTOR013	Motor - 3 Phase	Albany LS	34th Avenue	38	21	1.73	8.833	0.196	1	7	7	10	4	10	10	2	4	2	1	1	1	1
MOTOR001	Motor - 3 Phase	Albany LS	North Albany	39	22	1.73	8.833	0.196	1	7	7	10	4	10	10	2	4	2	1	1	1	1
MOTOR002	Motor - 3 Phase	Albany LS	North Albany	40	23	1.73	8.833	0.196	1	7	7	10	4	10	10	2	4	2	1	1	1	1
LS19-BATT-001	UPS Battery Backup	Albany LS	North Albany	41	24	1.7	9.167	0.175	1.06	10	7	10	7	10	10	1	4	7	4	1	1	10
LS07-BATT-001	UPS Battery Backup	Albany LS	College Green	42	25	1.7	9.167	0.175	1.06	10	7	10	7	10	10	1	4	7	4	1	1	10
LS08-CONV-001	12V Power Supply Converter	Albany LS	34th Avenue	43	26	1.7	9.167	0.175	1.06	10	7	10	7	10	10	1	4	7	4	1	1	10
PUMP023	Centrifugal Pump	Albany LS	Wah Chang	45	27	1.63	7.167	0.228	1	10	7	10	7	1	10	2	4	2	4	1	1	1
PUMP024	Centrifugal Pump	Albany LS	Wah Chang	46	28	1.63	7.167	0.228	1	10	7	10	7	1	10	2	4	2	4	1	1	1
LS12-POT-001	Vacuum Pot	Albany LS	Wah Chang	47	29	1.59	6.667	0.238	1	1	7	10	7	1	10	2	4	4	4	1	1	1
LS12-BATT-001	UPS Battery Backup	Albany LS	Wah Chang	48	30	1.57	9	0.175	1	10	7	10	4	10	10	1	4	7	4	1	1	1
LS12-ELC-001	Added Transfer Switch	Albany LS	Wah Chang	49	31	1.57	9	0.175	1	10	7	10	4	10	10	1	4	7	4	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
MOTOR023	Motor - 3 Phase	Albany LS	Wah Chang	50	32	1.52	6.833	0.222	1	10	7	10	1	1	10	2	4	7	1	1	1	1
MOTOR024	Motor - 3 Phase	Albany LS	Wah Chang	51	33	1.52	6.833	0.222	1	10	7	10	1	1	10	2	4	7	1	1	1	1
LS04-STR-001	Queen Avenue structure	Albany LS	Queen Avenue	52	34	1.52	6.333	0.238	1.007	7	4	7	10	10	4	2	4	10	1	1	1	2
PUMP009	Centrifugal Pump	Albany LS	Oak Creek	53	35	1.5	7.667	0.196	1	10	7	7	4	10	7	2	4	2	1	1	1	1
PUMP010	Centrifugal Pump	Albany LS	Oak Creek	54	36	1.5	7.667	0.196	1	10	7	7	4	10	7	2	4	2	1	1	1	1
LS15-STR-001	Burkhart Lift Station	Albany LS	Burkhart Creek	56	37	1.43	6	0.238	1	10	4	4	10	10	4	2	4	10	1	1	1	1
LS05-CTP-001	Pump Control Panel	Albany LS	Umatilla	57	38	1.41	6.333	0.222	1	7	7	4	7	10	4	2	4	7	1	1	1	1
LS05-CONV-001	12V Power Supply Converter	Albany LS	Umatilla	59	39	1.37	6.167	0.222	1	7	7	4	4	10	4	2	4	7	1	1	1	1
LS07-CTP-001	Pump Control Panel	Albany LS	College Green	61	40	1.31	9.167	0.143	1	10	7	10	7	10	10	1	4	7	1	1	1	1
LS09-CONV-001	12V Power Supply Converter	Albany LS	Marion Street	62	41	1.31	5.833	0.222	1.007	10	4	4	7	10	4	2	4	7	1	1	1	2
PUMP007	Pump	Albany LS	Umatilla	63	42	1.31	5.5	0.206	1.15	7	7	4	4	7	4	2	4	4	1	1	10	1
PUMP008	Pump	Albany LS	Umatilla	64	43	1.31	5.5	0.206	1.15	7	7	4	4	7	4	2	4	4	1	1	10	1
LS10-CTP-001	Pump Control Panel	Albany LS	Oak Street	68	44	1.27	5.667	0.222	1.007	10	4	4	4	10	4	2	4	7	1	1	1	2
LS15-CTP-001	Pump Control Panel	Albany LS	Burkhart Creek	69	45	1.27	5.667	0.222	1.007	10	4	4	4	10	4	2	4	7	1	1	1	2
LS14-CTP-001	Pump Control Panel	Albany LS	Charlotte Street	70	46	1.27	5.667	0.222	1.007	10	4	4	4	10	4	2	4	7	1	1	1	2
LS18-CTP-001	Pump Control Panel	Albany LS	Millersburg	73	47	1.19	5.333	0.222	1	4	4	4	4	10	4	2	4	7	1	1	1	1
PUMP005	Centrifugal Pump	Albany LS	Queen Avenue	74	48	1.18	6	0.196	1	7	4	7	4	10	4	2	4	2	1	1	1	1
PUMP006	Centrifugal Pump	Albany LS	Queen Avenue	75	49	1.18	6	0.196	1	7	4	7	4	10	4	2	4	2	1	1	1	1
LS06-CONV-001	12V Power Supply Converter	Albany LS	Oak Creek	77	50	1.13	7.833	0.143	1.007	10	7	7	7	10	7	1	4	7	1	1	1	2
LS03-STR-001	Maple Lift station Structure	Albany LS	Maple Street	80	51	1.11	4.667	0.238	1	10	4	4	10	4	4	2	4	10	1	1	1	1
LS09-STR-001	Marion Street Lift Station	Albany LS	Marion Street	81	52	1.11	4.667	0.238	1	10	4	4	10	4	4	2	4	10	1	1	1	1
LS11-STR-001	Lawndale Street Lift Station	Albany LS	Lawndale	82	53	1.11	4.667	0.238	1	10	4	4	10	4	4	2	4	10	1	1	1	1
LS10-STR-001	Oak Street Structure	Albany LS	Oak Street	83	54	1.11	4.667	0.238	1	10	4	4	10	4	4	2	4	10	1	1	1	1
MOTOR007	Motor - 3 Phase	Albany LS	Umatilla	90	55	1.1	5.333	0.206	1	7	7	4	1	7	4	2	4	4	1	1	1	1
MOTOR008	Motor - 3 Phase	Albany LS	Umatilla	91	56	1.1	5.333	0.206	1	7	7	4	1	7	4	2	4	4	1	1	1	1
LS20-CTP-001	Pump Control Panel	Albany LS	Columbus Street	92	57	1.1	7.667	0.143	1	7	7	7	7	10	7	1	4	7	1	1	1	1
LS13-CTP-001	Pump Control Panel	Albany LS	Century Dr	93	58	1.1	7.667	0.143	1	7	7	7	7	10	7	1	4	7	1	1	1	1
MOTOR021	Motor - 3 Phase	Albany LS	Century Dr	94	59	1.08	5.5	0.196	1	7	7	7	4	1	7	2	4	2	1	1	1	1
MOTOR022	Motor - 3 Phase	Albany LS	Century Dr	95	60	1.08	5.5	0.196	1	7	7	7	4	1	7	2	4	2	1	1	1	1
PUMP002	Centrifugal Pump	Albany LS	North Albany	96	61	1.07	9.167	0.116	1	10	7	10	7	10	10	1	4	2	1	1	1	1
PUMP011	Pump	Albany LS	College Green	97	62	1.07	9.167	0.116	1	10	7	10	7	10	10	1	4	2	1	1	1	1
PUMP012	Pump	Albany LS	College Green	98	63	1.07	9.167	0.116	1	10	7	10	7	10	10	1	4	2	1	1	1	1
LS12-POT-002	Vacuum Pot 2	Albany LS	Wah Chang	99	64	1.06	6.667	0.159	1	1	7	10	7	1	10	1	4	4	4	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS12-PMP-002	Vacuum Pump	Albany LS	Wah Chang	100	65	1.06	6.667	0.159	1	1	7	10	7	1	10	1	4	4	4	1	1	1
LS12-PMP-003	Vacuum Pump	Albany LS	Wah Chang	101	66	1.06	6.667	0.159	1	1	7	10	7	1	10	1	4	4	4	1	1	1
MOTOR009	Motor - 3 Phase	Albany LS	Oak Creek	106	67	1.04	5.333	0.196	1	7	7	7	1	1	7	2	4	2	1	1	1	1
MOTOR010	Motor - 3 Phase	Albany LS	Oak Creek	107	68	1.04	5.333	0.196	1	7	7	7	1	1	7	2	4	2	1	1	1	1
LS12-PMP-001	Submersible Pump	Albany LS	Wah Chang	110	69	1.01	5.167	0.196	1	1	7	7	4	1	7	2	4	2	1	1	1	1
LS12-CTP-001	Pump Control Panel	Albany LS	Wah Chang	111	70	1	7	0.143	1	10	7	10	4	1	10	1	4	7	1	1	1	1
LS16-CTP-001	Pump Control Panel	Albany LS	Truax Creek	112	71	1	5	0.196	1.017	10	7	1	4	10	1	2	4	2	1	1	2	1
LS20-BATT-001	UPS Battery Backup	Albany LS	Columbus Street	113	72	1	7.833	0.127	1	10	7	7	7	10	7	1	4	4	1	1	1	1
PUMP001	Centrifugal Pump	Albany LS	North Albany	114	73	0.99	8.5	0.116	1	10	7	10	7	7	10	1	4	2	1	1	1	1
LS03-RADIO-001	RTU Radio	Albany LS	Maple Street	117	74	0.97	1.167	0.831	1	1	1	1	4	1	1	10	4	2	1	1	1	1
LS08-MTR-001	Metering Device	Albany LS	34th Avenue	119	75	0.95	5	0.191	1	1	1	10	1	1	10	2	4	1	1	1	1	1
LS16-STR-001	Truax Creek Lift Station	Albany LS	Truax Creek	120	76	0.95	4	0.238	1	10	7	1	10	4	1	2	4	10	1	1	1	1
LS10-FAN-001	Fan	Albany LS	Oak Street	121	77	0.93	1	0.857	1.09	1	1	1	1	1	1	10	4	1	4	10	1	1
LS08-PMP-001	Submersible Pump	Albany LS	34th Avenue	122	78	0.93	6.5	0.143	1	4	7	10	1	1	10	1	4	7	1	1	1	1
LS07-PMP-001	Submersible Pump	Albany LS	College Green	123	79	0.93	6.5	0.143	1	4	7	10	1	1	10	1	4	7	1	1	1	1
LS07-PMP-002	Submersible Pump	Albany LS	College Green	124	80	0.93	6.5	0.143	1	4	7	10	1	1	10	1	4	7	1	1	1	1
LS19-PMP-001	Submersible Pump	Albany LS	North Albany	125	81	0.93	6.5	0.143	1	4	7	10	1	1	10	1	4	7	1	1	1	1
LS03-MTR-001	Metering Device	Albany LS	Maple Street	126	82	0.91	2.5	0.365	1	1	1	4	4	1	4	4	4	4	1	1	1	1
LS12-GEN-001	Generator	Albany LS	Wah Chang	127	83	0.91	7.167	0.127	1	1	7	10	4	4	10	1	4	4	1	1	1	1
LS18-CONV-001	12V Power Supply Converter	Albany LS	Millersburg	128	84	0.9	5.667	0.159	1	7	4	4	7	10	4	1	4	10	1	1	1	1
LS04-CONV-001	12V Power Supply Converter	Albany LS	Queen Avenue	129	85	0.9	6.167	0.143	1.02	7	4	7	7	10	4	1	4	7	1	1	1	4
LS05-BATT-001	UPS Battery Backup	Albany LS	Umatilla	130	86	0.88	6.167	0.143	1	7	7	4	4	10	4	1	4	7	1	1	1	1
LS03-HVC-001	HVAC	Albany LS	Maple Street	133	87	0.86	1	0.857	1	1	1	1	1	1	1	10	4	7	1	1	1	1
LS14-CONV-001	12V Power Supply Converter	Albany LS	Charlotte Street	134	88	0.84	5.833	0.143	1.007	10	4	4	7	10	4	1	4	7	1	1	1	2
LS14-FAN-001S	Fan	Albany LS	Charlotte Street	135	89	0.84	1	0.836	1	1	1	1	1	1	1	10	4	1	2	1	1	1
LS15-FAN-001S	Fan	Albany LS	Burkhart Creek	136	90	0.84	1	0.836	1	1	1	1	1	1	1	10	4	1	2	1	1	1
LS09-BATT-001	UPS Battery Backup	Albany LS	Marion Street	137	91	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS10-CONV-001	12V Power Supply Converter	Albany LS	Oak Street	138	92	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS11-CONV-001	12V Power Supply Converter	Albany LS	Lawndale	139	93	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS03-VFD-001	Variable Frequency Drive	Albany LS	Maple Street	140	94	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS03-VFD-002	Variable Frequency Drive	Albany LS	Maple Street	141	95	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS03-VFD-003	Variable Frequency Drive	Albany LS	Maple Street	142	96	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1
LS03-VFD-004	Variable Frequency Drive	Albany LS	Maple Street	143	97	0.83	5.833	0.143	1	10	4	4	7	10	4	1	4	7	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PUMP025	Centrifugal Pump	Albany LS	Charlotte Street	145	98	0.83	3.667	0.206	1.1	10	4	4	4	1	4	2	4	4	1	1	7	1
PUMP026	Centrifugal Pump	Albany LS	Charlotte Street	146	99	0.83	3.667	0.206	1.1	10	4	4	4	1	4	2	4	4	1	1	7	1
LS12-FAN-001S	Fan	Albany LS	Wah Chang	147	100	0.83	1	0.831	1	1	1	1	1	1	1	10	4	2	1	1	1	1
PUMP019	Centrifugal Pump	Albany LS	Lawndale	148	101	0.83	3.667	0.196	1.15	10	4	4	4	1	4	2	4	2	1	1	10	1
PUMP020	Centrifugal Pump	Albany LS	Lawndale	149	102	0.83	3.667	0.196	1.15	10	4	4	4	1	4	2	4	2	1	1	10	1
PUMP015	Centrifugal Pump	Albany LS	Marion Street	150	103	0.83	3.667	0.196	1.15	10	4	4	4	1	4	2	4	2	1	1	10	1
PUMP016	Centrifugal Pump	Albany LS	Marion Street	151	104	0.83	3.667	0.196	1.15	10	4	4	4	1	4	2	4	2	1	1	10	1
LS08-FAN-001S	Fan	Albany LS	34th Avenue	152	105	0.83	1	0.825	1	1	1	1	1	1	1	10	4	1	1	1	1	1
LS13-FIL-002	Filter	Albany LS	Century Dr	153	106	0.83	1	0.825	1	1	1	1	1	1	1	10	4	1	1	1	1	1
PUMP035	Centrifugal Pump	Albany LS	Columbus Street	154	107	0.82	4.167	0.196	1	7	4	4	4	4	4	2	4	2	1	1	1	1
PUMP036	Centrifugal Pump	Albany LS	Columbus Street	155	108	0.82	4.167	0.196	1	7	4	4	4	4	4	2	4	2	1	1	1	1
LS05-PMP-001	Submersible Pump	Albany LS	Umatilla	156	109	0.82	3.667	0.222	1	1	7	4	1	1	4	2	4	7	1	1	1	1
LS04-PMP-001	Submersible Pump	Albany LS	Queen Avenue	157	110	0.82	3.667	0.222	1	4	4	7	1	1	4	2	4	7	1	1	1	1
MOTOR025	Motor - 1 Phase	Albany LS	Charlotte Street	166	111	0.76	3.333	0.206	1.1	7	4	4	1	1	4	2	4	4	1	1	7	1
MOTOR026	Motor - 1 Phase	Albany LS	Charlotte Street	167	112	0.76	3.333	0.206	1.1	7	4	4	1	1	4	2	4	4	1	1	7	1
MOTOR027	Motor - 3 Phase	Albany LS	Burkhart Creek	168	113	0.76	3.333	0.206	1.1	7	4	4	1	1	4	2	4	4	1	1	7	1
MOTOR028	Motor - 3 Phase	Albany LS	Burkhart Creek	169	114	0.76	3.333	0.206	1.1	7	4	4	1	1	4	2	4	4	1	1	7	1
LS14-PMP-002	Vacuum Pump	Albany LS	Charlotte Street	170	115	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS14-POT-001	Vacuum Primer Pot	Albany LS	Charlotte Street	171	116	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS09-PMP-002	Vacuum Pump	Albany LS	Marion Street	172	117	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS09-PMP-003	Vacuum Pump	Albany LS	Marion Street	173	118	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS11-PMP-002	Vacuum Pump	Albany LS	Lawndale	174	119	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS11-PMP-003	Vacuum Pump	Albany LS	Lawndale	175	120	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS10-PMP-002	Vacuum Pump	Albany LS	Oak Street	176	121	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
LS10-PMP-003	Vacuum Pump	Albany LS	Oak Street	177	122	0.75	3.167	0.238	1	4	4	4	1	1	4	2	4	4	4	1	1	1
MOTOR005	Motor - 3 Phase	Albany LS	Queen Avenue	178	123	0.75	3.833	0.196	1	7	4	7	1	1	4	2	4	2	1	1	1	1
MOTOR006	Motor - 3 Phase	Albany LS	Queen Avenue	179	124	0.75	3.833	0.196	1	7	4	7	1	1	4	2	4	2	1	1	1	1
LS15-CONV-001	12V Power Supply Converter	Albany LS	Burkhart Creek	180	125	0.74	5.167	0.143	1.007	10	4	4	7	7	4	1	4	7	1	1	1	2
LS13-PMP-001	Submersible Pump	Albany LS	Century Dr	181	126	0.74	3.333	0.222	1	7	4	4	1	1	4	2	4	7	1	1	1	1
LS14-POT-002	Vacuum Primer Pot	Albany LS	Charlotte Street	182	127	0.74	4.667	0.159	1	4	7	4	1	1	7	1	4	4	4	1	1	1
LS16-CONV-001	12V Power Supply Converter	Albany LS	Truax Creek	183	128	0.72	5	0.143	1	10	7	1	4	10	1	1	4	7	1	1	1	1
LS14-PMP-001	Submersible Pump	Albany LS	Charlotte Street	184	129	0.7	3.167	0.222	1	4	4	4	1	1	4	2	4	7	1	1	1	1
LS10-PMP-001	Submersible Pump	Albany LS	Oak Street	185	130	0.7	3.167	0.222	1	4	4	4	1	1	4	2	4	7	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS03-TANK-001	Fuel Tank	Albany LS	Maple Street	186	131	0.7	3.167	0.222	1	1	4	4	4	1	4	2	4	7	1	1	1	1
MOTOR037	Motor - 3 Phase	Albany LS	Maple Street	187	132	0.67	3.5	0.191	1	7	4	4	4	1	4	2	4	1	1	1	1	1
MOTOR038	Motor - 3 Phase	Albany LS	Maple Street	188	133	0.67	3.5	0.191	1	7	4	4	4	1	4	2	4	1	1	1	1	1
MOTOR015	Motor - 3 Phase	Albany LS	Marion Street	190	134	0.65	3.333	0.196	1	7	4	4	1	1	4	2	4	2	1	1	1	1
MOTOR016	Motor - 3 Phase	Albany LS	Marion Street	191	135	0.65	3.333	0.196	1	7	4	4	1	1	4	2	4	2	1	1	1	1
MOTOR017	Motor - 1 Phase	Albany LS	Oak Street	192	136	0.65	3.333	0.196	1	7	4	4	1	1	4	2	4	2	1	1	1	1
MOTOR018	Motor - 1 Phase	Albany LS	Oak Street	193	137	0.65	3.333	0.196	1	7	4	4	1	1	4	2	4	2	1	1	1	1
MOTOR020	Motor - 3 Phase	Albany LS	Lawndale	194	138	0.65	3.333	0.196	1	7	4	4	1	1	4	2	4	2	1	1	1	1
MOTOR035	Motor - 3 Phase	Albany LS	Columbus Street	203	139	0.64	5.5	0.116	1	7	4	4	4	10	4	1	4	2	1	1	1	1
MOTOR036	Motor - 3 Phase	Albany LS	Columbus Street	204	140	0.64	5.5	0.116	1	7	4	4	4	10	4	1	4	2	1	1	1	1
LS16-HTR-001	Heater	Albany LS	Truax Creek	225	141	0.6	1	0.603	1	1	1	1	1	1	1	7	4	4	1	1	1	1
PUMP029	Centrifugal Pump	Albany LS	Truax Creek	226	142	0.6	3	0.196	1.017	10	7	1	4	1	1	2	4	2	1	1	2	1
PUMP030	Centrifugal Pump	Albany LS	Truax Creek	227	143	0.6	3	0.196	1.017	10	7	1	4	1	1	2	4	2	1	1	2	1
LS04-FAN-001	Fan	Albany LS	Queen Avenue	229	144	0.59	1	0.587	1	1	1	1	1	1	1	7	4	1	1	1	1	1
LS16-PMP-002	Vacuum Pump	Albany LS	Truax Creek	233	145	0.57	2.5	0.217	1.057	4	7	1	1	1	1	2	4	4	2	1	2	7
LS16-PMP-003	Vacuum Pump	Albany LS	Truax Creek	234	146	0.57	2.5	0.217	1.057	4	7	1	1	1	1	2	4	4	2	1	2	7
LS14-MIL-001	Sensor Unit	Albany LS	Charlotte Street	242	147	0.56	2.333	0.238	1	1	1	4	1	1	4	2	4	4	4	1	1	1
LS08-MIL-001	Sensor Unit	Albany LS	34th Avenue	243	148	0.56	5	0.111	1	1	1	10	1	1	10	1	4	1	1	1	1	1
LS07-MIL-001	Sensor Unit	Albany LS	College Green	244	149	0.56	5	0.111	1	1	1	10	1	1	10	1	4	1	1	1	1	1
LS07-MTR-001	Metering Device	Albany LS	College Green	245	150	0.56	5	0.111	1	1	1	10	1	1	10	1	4	1	1	1	1	1
LS16-PMP-001	Submersible Pump	Albany LS	Truax Creek	246	151	0.56	2.5	0.222	1	4	7	1	1	1	1	2	4	7	1	1	1	1
LS19-MIL-001	Sensor Unit	Albany LS	North Albany	247	152	0.56	5	0.111	1	1	1	10	1	1	10	1	4	1	1	1	1	1
LS19-MTR-001	Metering Device	Albany LS	North Albany	248	153	0.56	5	0.111	1	1	1	10	1	1	10	1	4	1	1	1	1	1
LS03-GEN-001	Generator	Albany LS	Maple Street	252	154	0.55	3.833	0.143	1	1	4	1	4	10	1	1	4	7	1	1	1	1
MOTOR029	Motor - 3 Phase	Albany LS	Truax Creek	254	155	0.53	2.667	0.196	1.017	7	7	1	1	1	1	2	4	2	1	1	2	1
MOTOR030	Motor - 3 Phase	Albany LS	Truax Creek	255	156	0.53	2.667	0.196	1.017	7	7	1	1	1	1	2	4	2	1	1	2	1
PUMP021	Centrifugal Pump	Albany LS	Century Dr	256	157	0.52	4.5	0.116	1	10	4	4	7	4	4	1	4	2	1	1	1	1
PUMP022	Centrifugal Pump	Albany LS	Century Dr	257	158	0.52	4.5	0.116	1	10	4	4	7	4	4	1	4	2	1	1	1	1
LS05-MIL-001	Sensor Unit	Albany LS	Umatilla	258	159	0.52	3.667	0.138	1.02	1	7	4	1	1	4	1	4	4	2	1	1	4
LS05-MTR-001	Metering Device	Albany LS	Umatilla	259	160	0.52	3.667	0.138	1.02	1	7	4	1	1	4	1	4	4	2	1	1	4
PUMP027	Centrifugal Pump	Albany LS	Burkhart Creek	260	161	0.51	3.667	0.127	1.1	10	4	4	4	1	4	1	4	4	1	1	7	1
PUMP028	Centrifugal Pump	Albany LS	Burkhart Creek	261	162	0.51	3.667	0.127	1.1	10	4	4	4	1	4	1	4	4	1	1	7	1
LS09-POT-001	Vacuum Primer Pot	Albany LS	Marion Street	265	163	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS10-POT-001	Vacuum Primer Pot	Albany LS	Oak Street	266	164	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS11-POT-001	Vacuum Primer Pot	Albany LS	Lawndale	267	165	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS11-POT-002	Vacuum Primer Pot	Albany LS	Lawndale	268	166	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS14-PMP-003	Vacuum Pump	Albany LS	Charlotte Street	269	167	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS15-PMP-001	Vacuum Pump	Albany LS	Burkhart Creek	270	168	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS15-PMP-002	Vacuum Pump	Albany LS	Burkhart Creek	271	169	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS15-POT-001	Vacuum Primer Pot	Albany LS	Burkhart Creek	272	170	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS15-POT-002	Vacuum Primer Pot	Albany LS	Burkhart Creek	273	171	0.5	3.167	0.159	1	4	4	4	1	1	4	1	4	4	4	1	1	1
LS11-MTR-001	Metering Device	Albany LS	Lawndale	274	172	0.49	2.333	0.206	1.02	1	1	4	1	1	4	2	4	4	1	1	1	4
LS10-MIL-001	Sensor Unit	Albany LS	Oak Street	275	173	0.49	2.333	0.206	1.02	1	1	4	1	1	4	2	4	4	1	1	1	4
PUMP017	Centrifugal Pump	Albany LS	Oak Street	276	174	0.49	3.667	0.116	1.15	10	4	4	4	1	4	1	4	2	1	1	10	1
PUMP018	Centrifugal Pump	Albany LS	Oak Street	277	175	0.49	3.667	0.116	1.15	10	4	4	4	1	4	1	4	2	1	1	10	1
MOTOR033	Motor - 3 Phase	Albany LS	Millersburg	280	176	0.49	4.167	0.116	1	7	4	4	4	4	4	1	4	2	1	1	1	1
MOTOR034	Motor - 3 Phase	Albany LS	Millersburg	281	177	0.49	4.167	0.116	1	7	4	4	4	4	4	1	4	2	1	1	1	1
PUMP033	Pump	Albany LS	Millersburg	282	178	0.49	4.167	0.116	1	7	4	4	4	4	4	1	4	2	1	1	1	1
PUMP034	Pump	Albany LS	Millersburg	283	179	0.49	4.167	0.116	1	7	4	4	4	4	4	1	4	2	1	1	1	1
LS06-MIL-001	Sensor Unit	Albany LS	Oak Creek	285	180	0.47	3.667	0.127	1	1	1	7	1	1	7	1	4	4	1	1	1	1
LS06-MTR-001	Metering Device	Albany LS	Oak Creek	286	181	0.47	3.667	0.127	1	1	1	7	1	1	7	1	4	4	1	1	1	1
LS08-RADIO-001	RTU Radio	Albany LS	34th Avenue	288	182	0.46	1.167	0.386	1.02	1	1	1	4	1	1	4	4	2	4	1	1	4
LS08-RTU-001	Remote Terminal Unit	Albany LS	34th Avenue	289	183	0.46	1.167	0.386	1.02	1	1	1	4	1	1	4	4	2	4	1	1	4
LS11-PMP-001	Submersible Pump	Albany LS	Lawndale	290	184	0.45	3.167	0.143	1	4	4	4	1	1	4	1	4	7	1	1	1	1
LS09-PMP-001	Submersible Pump	Albany LS	Marion Street	291	185	0.45	3.167	0.143	1	4	4	4	1	1	4	1	4	7	1	1	1	1
LS15-PMP-003	Submersible Pump	Albany LS	Burkhart Creek	292	186	0.45	3.167	0.143	1	4	4	4	1	1	4	1	4	7	1	1	1	1
LS20-PMP-001	Submersible Pump	Albany LS	Columbus Street	293	187	0.45	3.167	0.143	1	4	4	4	1	1	4	1	4	7	1	1	1	1
LS20-PMP-002	Submersible Pump	Albany LS	Columbus Street	294	188	0.45	3.167	0.143	1	4	4	4	1	1	4	1	4	7	1	1	1	1
LS04-RADIO-001	RTU Radio	Albany LS	Queen Avenue	301	189	0.45	1.167	0.376	1.02	1	1	1	4	1	1	4	4	4	2	1	1	4
LS04-RTU-001	Remote Terminal Unit	Albany LS	Queen Avenue	302	190	0.45	1.167	0.376	1.02	1	1	1	4	1	1	4	4	4	2	1	1	4
LS15-RADIO-001	RTU Radio	Albany LS	Burkhart Creek	308	191	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4
LS15-RTU-001	Remote Terminal Unit	Albany LS	Burkhart Creek	309	192	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4
LS14-RADIO-001	RTU Radio	Albany LS	Charlotte Street	310	193	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4
LS14-RTU-001	Remote Terminal Unit	Albany LS	Charlotte Street	311	194	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4
LS10-RADIO-001	RTU Radio	Albany LS	Oak Street	312	195	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4
LS10-RTU-001	Remote Terminal Unit	Albany LS	Oak Street	313	196	0.44	1.167	0.365	1.02	1	1	1	4	1	1	4	4	4	1	1	1	4

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS06-PMP-001	Submersible Pump	Albany LS	Oak Creek	314	197	0.43	3	0.143	1	4	1	7	1	1	4	1	4	7	1	1	1	1
LS16-RADIO-001	RTU Radio	Albany LS	Truax Creek	315	198	0.42	1.167	0.355	1.02	1	1	1	4	1	1	4	4	2	1	1	1	4
LS16-RTU-001	Remote Terminal Unit	Albany LS	Truax Creek	316	199	0.42	1.167	0.355	1.02	1	1	1	4	1	1	4	4	2	1	1	1	4
LS11-FAN-001	Fan	Albany LS	Lawndale	317	200	0.42	1	0.381	1.09	1	1	1	1	1	1	4	4	1	4	10	1	1
LS09-FAN-001	Fan	Albany LS	Marion Street	318	201	0.42	1	0.381	1.09	1	1	1	1	1	1	4	4	1	4	10	1	1
LS13-MIL-001	Sensor Unit	Albany LS	Century Dr	319	202	0.41	3.667	0.111	1	1	1	7	1	1	7	1	4	1	1	1	1	1
LS13-MTR-001	Metering Device	Albany LS	Century Dr	320	203	0.41	3.667	0.111	1	1	1	7	1	1	7	1	4	1	1	1	1	1
LS20-MIL-001	Sensor Unit	Albany LS	Columbus Street	321	204	0.41	3.667	0.111	1	1	1	7	1	1	7	1	4	1	1	1	1	1
LS20-MTR-001	Metering Device	Albany LS	Columbus Street	322	205	0.41	3.667	0.111	1	1	1	7	1	1	7	1	4	1	1	1	1	1
LS18-RTU-001	Remote Terminal Unit	Albany LS	Millersburg	323	206	0.41	1.167	0.349	1	1	1	1	4	1	1	4	4	1	1	1	1	1
PUMP037	Submersible Pump	Albany LS	Maple Street	324	207	0.41	3.667	0.111	1	7	4	4	7	1	4	1	4	1	1	1	1	1
PUMP038	Submersible Pump	Albany LS	Maple Street	325	208	0.41	3.667	0.111	1	7	4	4	7	1	4	1	4	1	1	1	1	1
PUMP039	Submersible Pump	Albany LS	Maple Street	326	209	0.41	3.667	0.111	1	7	4	4	7	1	4	1	4	1	1	1	1	1
PUMP040	Submersible Pump	Albany LS	Maple Street	327	210	0.41	3.667	0.111	1	7	4	4	7	1	4	1	4	1	1	1	1	1
LS03-MTR-003	Metering Device	Albany LS	Maple Street	332	211	0.4	3.167	0.127	1	1	4	4	4	1	4	1	4	4	1	1	1	1
MOTOR019	Motor - 3 Phase	Albany LS	Lawndale	334	212	0.39	3.333	0.116	1	7	4	4	1	1	4	1	4	2	1	1	1	1
LS18-MIL-001	Sensor Unit	Albany LS	Millersburg	336	213	0.37	3.333	0.111	1	4	4	4	4	1	4	1	4	1	1	1	1	1
LS18-MTR-001	Metering Device	Albany LS	Millersburg	337	214	0.37	3.333	0.111	1	4	4	4	4	1	4	1	4	1	1	1	1	1
LS14-MTR-001	Metering Device	Albany LS	Charlotte Street	338	215	0.37	2.333	0.159	1	1	1	4	1	1	4	1	4	4	4	1	1	1
LS15-MIL-001	Sensor Unit	Albany LS	Burkhart Creek	339	216	0.37	2.333	0.159	1	1	1	4	1	1	4	1	4	4	4	1	1	1
LS15-MTR-001	Metering Device	Albany LS	Burkhart Creek	340	217	0.37	2.333	0.159	1	1	1	4	1	1	4	1	4	4	4	1	1	1
LS13-PMP-002	Vacuum Pump	Albany LS	Century Dr	341	218	0.37	3.167	0.116	1	4	4	4	1	1	4	1	4	2	1	1	1	1
LS04-MIL-001	Sensor Unit	Albany LS	Queen Avenue	342	219	0.37	2.833	0.127	1.02	1	1	7	1	1	4	1	4	4	1	1	1	4
LS04-MTR-001	Metering Device	Albany LS	Queen Avenue	343	220	0.37	2.833	0.127	1.02	1	1	7	1	1	4	1	4	4	1	1	1	4
LS05-DEH-001	Dehumidifier	Albany LS	Umatilla	344	221	0.37	1	0.365	1	1	1	1	1	1	1	4	4	4	1	1	1	1
LS16-POT-001	Vacuum Primer Pot	Albany LS	Truax Creek	346	222	0.36	2.5	0.138	1.057	4	7	1	1	1	1	1	4	4	2	1	2	7
LS14-FAN-001	Fan	Albany LS	Charlotte Street	347	223	0.36	1	0.36	1	1	1	1	1	1	1	4	4	1	2	1	1	1
LS18-FAN-001	Fan	Albany LS	Millersburg	352	224	0.35	1	0.349	1	1	1	1	1	1	1	4	4	1	1	1	1	1
LS13-PMP-003	Vacuum Pump	Albany LS	Century Dr	353	225	0.35	3	0.116	1	1	4	4	1	1	4	1	4	2	1	1	1	1
LS13-POT-001	Vacuum Primer Pot	Albany LS	Century Dr	354	226	0.35	3	0.116	1	1	4	4	1	1	4	1	4	2	1	1	1	1
LS13-POT-002	Vacuum Primer Pot	Albany LS	Century Dr	355	227	0.35	3	0.116	1	1	4	4	1	1	4	1	4	2	1	1	1	1
LS03-FLW-001	Maple Flow Meter No 1	Albany LS	Maple Street	363	228	0.32	2.5	0.127	1	1	1	4	4	1	4	1	4	4	1	1	1	1
LS03-FLW-002	Maple Flow Meter No 2	Albany LS	Maple Street	364	229	0.32	2.5	0.127	1	1	1	4	4	1	4	1	4	4	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS03-MIL-001	Sensor Unit	Albany LS	Maple Street	365	230	0.32	2.5	0.127	1	1	1	4	4	1	4	1	4	4	1	1	1	1
LS03-MIL-002	Sensor Unit	Albany LS	Maple Street	366	231	0.32	2.5	0.127	1	1	1	4	4	1	4	1	4	4	1	1	1	1
LS03-MIL-003	Sensor Unit	Albany LS	Maple Street	367	232	0.32	2.5	0.127	1	1	1	4	4	1	4	1	4	4	1	1	1	1
LS09-MIL-001	Sensor Unit	Albany LS	Marion Street	370	233	0.3	2.333	0.127	1.02	1	1	4	1	1	4	1	4	4	1	1	1	4
LS09-MTR-001	Metering Device	Albany LS	Marion Street	371	234	0.3	2.333	0.127	1.02	1	1	4	1	1	4	1	4	4	1	1	1	4
LS10-MTR-001	Metering Device	Albany LS	Oak Street	372	235	0.3	2.333	0.127	1.02	1	1	4	1	1	4	1	4	4	1	1	1	4
LS11-MIL-001	Sensor Unit	Albany LS	Lawndale	373	236	0.3	2.333	0.127	1.02	1	1	4	1	1	4	1	4	4	1	1	1	4
LS08-VLV-004	Pump No 2 Check Valve	Albany LS	34th Avenue	384	237	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS13-VLV-003	Pump No 2 Discharge Valve	Albany LS	Century Dr	385	238	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS04-VLV-001	Pump No 1 Suction Valve	Albany LS	Queen Avenue	386	239	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS04-VLV-002	Pump No 1 Check Valve	Albany LS	Queen Avenue	387	240	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS04-VLV-003	Pump No 2 Suction	Albany LS	Queen Avenue	388	241	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS04-VLV-004	Pump No 2 Check Valve	Albany LS	Queen Avenue	389	242	0.3	1.333	0.222	1	7	1	1	1	1	1	2	4	7	1	1	1	1
LS19-RADIO-001	RTU Radio	Albany LS	North Albany	390	243	0.27	1.167	0.228	1.02	1	1	1	4	1	1	2	4	2	4	1	1	4
LS19-RTU-001	Remote Terminal Unit	Albany LS	North Albany	391	244	0.27	1.167	0.228	1.02	1	1	1	4	1	1	2	4	2	4	1	1	4
LS03-MTR-002	Metering Device	Albany LS	Maple Street	404	245	0.27	2.5	0.106	1	1	1	4	4	1	4	1	2	4	1	1	1	1
LS19-VLV-003	Pump No 2 Discharge Valve	Albany LS	North Albany	405	246	0.26	1.833	0.143	1	7	1	4	1	1	1	1	4	7	1	1	1	1
LS05-RADIO-001	RTU Radio	Albany LS	Umatilla	406	247	0.26	1.167	0.217	1.02	1	1	1	4	1	1	2	4	4	2	1	1	4
LS05-RTU-001	Remote Terminal Unit	Albany LS	Umatilla	407	248	0.26	1.167	0.217	1.02	1	1	1	4	1	1	2	4	4	2	1	1	4
LS06-RADIO-001	RTU Radio	Albany LS	Oak Creek	408	249	0.25	1.167	0.217	1	1	1	1	4	1	1	2	4	4	2	1	1	1
LS06-RTU-001	Remote Terminal Unit	Albany LS	Oak Creek	409	250	0.25	1.167	0.217	1	1	1	1	4	1	1	2	4	4	2	1	1	1
LS09-RADIO-001	RTU Radio	Albany LS	Marion Street	410	251	0.25	1.167	0.206	1.02	1	1	1	4	1	1	2	4	4	1	1	1	4
LS09-RTU-001	Remote Terminal Unit	Albany LS	Marion Street	411	252	0.25	1.167	0.206	1.02	1	1	1	4	1	1	2	4	4	1	1	1	4
LS11-RADIO-001	RTU Radio	Albany LS	Lawndale	412	253	0.25	1.167	0.206	1.02	1	1	1	4	1	1	2	4	4	1	1	1	4
LS11-RTU-001	Remote Terminal Unit	Albany LS	Lawndale	413	254	0.25	1.167	0.206	1.02	1	1	1	4	1	1	2	4	4	1	1	1	4
LS12-RADIO-001	RTU Radio	Albany LS	Wah Chang	424	255	0.24	1.167	0.206	1	1	1	1	4	1	1	2	4	4	1	1	1	1
LS12-RTU-001	Remote Terminal Unit	Albany LS	Wah Chang	425	256	0.24	1.167	0.206	1	1	1	1	4	1	1	2	4	4	1	1	1	1
LS06-FAN-001M	Motor - 1 Phase	Albany LS	Oak Creek	431	257	0.24	1	0.238	1	1	1	1	1	1	1	2	4	10	1	1	1	1
LS06-FAN-002M	Motor	Albany LS	Oak Creek	432	258	0.24	1	0.238	1	1	1	1	1	1	1	2	4	10	1	1	1	1
LS06-VLV-001	Pump 009 Suction Valve	Albany LS	Oak Creek	440	259	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1
LS06-VLV-002	Pump 009 Check Valve	Albany LS	Oak Creek	441	260	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1
LS06-VLV-003	Pump 009 Discharge Valve	Albany LS	Oak Creek	442	261	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1
LS06-VLV-004	Pump 10 Suction Valve	Albany LS	Oak Creek	443	262	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS06-VLV-005	Pump 10 Check Valve	Albany LS	Oak Creek	444	263	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1
LS06-VLV-006	Pump 10 Discharge Valve	Albany LS	Oak Creek	445	264	0.23	1.333	0.175	1	7	1	1	1	1	1	1	4	7	4	1	1	1
LS03-RTU-001	Remote Terminal Unit	Albany LS	Maple Street	446	265	0.23	1.167	0.196	1	1	1	1	4	1	1	2	4	2	1	1	1	1
LS20-RADIO-001	RTU Radio	Albany LS	Columbus Street	468	266	0.22	1.167	0.191	1	1	1	1	4	1	1	2	4	1	1	1	1	1
LS18-RADIO-001	RTU Radio	Albany LS	Millersburg	473	267	0.22	1.167	0.191	1	1	1	1	4	1	1	2	4	1	1	1	1	1
LS16-MTR-001	Metering Device	Albany LS	Truax Creek	475	268	0.22	1	0.217	1	1	1	1	1	1	1	2	4	4	2	1	1	1
LS20-VLV-001	Pump No 1 Suction Valve	Albany LS	Columbus Street	476	269	0.21	1.5	0.143	1	10	1	1	1	1	1	1	4	7	1	1	1	1
LS06-HTR-001	Heater	Albany LS	Oak Creek	477	270	0.21	1.667	0.127	1.007	1	1	1	1	4	1	1	4	4	1	1	1	2
LS12-HTR-001	Heater	Albany LS	Wah Chang	478	271	0.21	1	0.206	1	1	1	1	1	1	1	2	4	4	1	1	1	1
LS12-DEH-001	Dehumidifier	Albany LS	Wah Chang	479	272	0.21	1	0.206	1	1	1	1	1	1	1	2	4	4	1	1	1	1
LS18-HTR-001	Heater	Albany LS	Millersburg	480	273	0.21	1	0.206	1	1	1	1	1	1	1	2	4	4	1	1	1	1
LS20-VLV-002	Pump No 1 Check Valve	Albany LS	Columbus Street	482	274	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS20-VLV-003	Pump No 1 Discharge Valve	Albany LS	Columbus Street	483	275	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS20-VLV-004	Pump No 2 Suction Valve	Albany LS	Columbus Street	484	276	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS20-VLV-005	Pump No 2 Check Valve	Albany LS	Columbus Street	485	277	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS20-VLV-006	Pump No 2 Discharge Valve	Albany LS	Columbus Street	486	278	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS20-RTU-001	Remote Terminal Unit	Albany LS	Columbus Street	487	279	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS20-FAN-003	Fan	Albany LS	Columbus Street	488	280	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS19-VLV-004	Pump No 2 Check Valve	Albany LS	North Albany	489	281	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS19-DEH-001	Dehumidifier	Albany LS	North Albany	490	282	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS19-DEH-002	Dehumidifier	Albany LS	North Albany	491	283	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS19-VLV-001	Pump No 1 Discharge Valve	Albany LS	North Albany	492	284	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS19-VLV-002	Pump No 1 Check Valve	Albany LS	North Albany	493	285	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS15-VLV-001	Pump No 1 Discharge Valve	Albany LS	Burkhart Creek	494	286	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS15-VLV-002	Pump No 1 Check Valve	Albany LS	Burkhart Creek	495	287	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS15-VLV-003	Pump No 2 Discharge Valve	Albany LS	Burkhart Creek	496	288	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS15-VLV-004	Pump No 2 Check Valve	Albany LS	Burkhart Creek	497	289	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS11-VLV-001	Pump No 1 Check Valve	Albany LS	Lawndale	498	290	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS11-VLV-002	Pump No 1 Discharge Valve	Albany LS	Lawndale	499	291	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS11-VLV-003	Pump No 2 Check Valve	Albany LS	Lawndale	500	292	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS11-VLV-004	Pump No 2 Discharge Valve	Albany LS	Lawndale	501	293	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS11-DEH-001	Dehumidifier	Albany LS	Lawndale	502	294	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS10-VLV-001	Pump No 1 Discharge valve	Albany LS	Oak Street	503	295	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS10-VLV-002	Pump No 1 Check Valve	Albany LS	Oak Street	504	296	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS10-VLV-003	Pump No 2 Discharge Valve	Albany LS	Oak Street	505	297	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS10-VLV-004	Pump No 2 Check Valve	Albany LS	Oak Street	506	298	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS09-VLV-001	Pump No 1 Check Valve	Albany LS	Marion Street	507	299	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS09-VLV-002	Pump No 1 Discharge Valve	Albany LS	Marion Street	508	300	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS09-VLV-003	Pump No 2 Check Valve	Albany LS	Marion Street	509	301	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS09-VLV-004	Pump No 2 Discharge Valve	Albany LS	Marion Street	510	302	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-VLV-005	Pump No 1 Suction Valve	Albany LS	34th Avenue	511	303	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-VLV-006	Pump No 2 Suction Valve	Albany LS	34th Avenue	512	304	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-VLV-001	Pump No 1 Discharge Valve	Albany LS	34th Avenue	513	305	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-VLV-002	Pump No 1 Check Valve	Albany LS	34th Avenue	514	306	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-VLV-003	Pump No 2 Discharge Valve	Albany LS	34th Avenue	515	307	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS13-DEH-001	Dehumidifier	Albany LS	Century Dr	516	308	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS12-VLV-001	Pump No 1 Discharge Valve	Albany LS	Wah Chang	517	309	0.19	1.333	0.143	1	4	1	1	4	1	1	1	4	7	1	1	1	1
LS12-VLV-002	Pump No 1 Check Valve	Albany LS	Wah Chang	518	310	0.19	1.333	0.143	1	4	1	1	4	1	1	1	4	7	1	1	1	1
LS12-VLV-003	Pump No 2 Discharge Valve	Albany LS	Wah Chang	519	311	0.19	1.333	0.143	1	4	1	1	4	1	1	1	4	7	1	1	1	1
LS12-VLV-004	Pump No 2 Check Valve	Albany LS	Wah Chang	520	312	0.19	1.333	0.143	1	4	1	1	4	1	1	1	4	7	1	1	1	1
LS13-VLV-004	Pump No 2 Check Valve	Albany LS	Century Dr	521	313	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS13-VLV-001	Pump No 1 Discharge Valve	Albany LS	Century Dr	522	314	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS13-VLV-002	Pump No1 Check Valve	Albany LS	Century Dr	523	315	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS15-DEH-001	Dehumidifier	Albany LS	Burkhart Creek	524	316	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS14-VLV-001	Pump No 1 Discharge Valve	Albany LS	Charlotte Street	525	317	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS14-VLV-002	Pump No 1 Check Valve	Albany LS	Charlotte Street	526	318	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS14-VLV-003	Pump No 2 Discharge Valve	Albany LS	Charlotte Street	527	319	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS14-VLV-004	Pump No 2 Check Valve	Albany LS	Charlotte Street	528	320	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS08-DEH-001	Dehumidifier	Albany LS	34th Avenue	529	321	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS08-FAN-001	Fan	Albany LS	34th Avenue	530	322	0.19	1	0.191	1	1	1	1	1	1	1	2	4	1	1	1	1	1
LS07-VLV-001	Pump No 1 Discharge Valve	Albany LS	College Green	531	323	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-VLV-002	Pump No 1 Check Valve	Albany LS	College Green	532	324	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-VLV-003	Pump No 1 Suction Valve	Albany LS	College Green	533	325	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-VLV-004	Pump No 2 Discharge Valve	Albany LS	College Green	534	326	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-VLV-005	Pump N0 2 Check Valve	Albany LS	College Green	535	327	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-VLV-006	Pump No 2 Suction Valve	Albany LS	College Green	536	328	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS03-ACT-001	Actuator	Albany LS	Maple Street	537	329	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-001	Pump No 1 Check Valve	Albany LS	Maple Street	538	330	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-002	Pump No 1 Discharge Valve	Albany LS	Maple Street	539	331	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-003	Pump No 1 Air Release Valve	Albany LS	Maple Street	540	332	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-004	Pump No 2 Check Valve	Albany LS	Maple Street	541	333	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-005	Pump No 2 Discharge Valve	Albany LS	Maple Street	542	334	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-006	Pump No 2 Air Release Valve	Albany LS	Maple Street	543	335	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-007	Pump No 3 Check Valve	Albany LS	Maple Street	544	336	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-008	Pump No 3 Discharge Valve	Albany LS	Maple Street	545	337	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-009	Pump No 3 Air Release Valve	Albany LS	Maple Street	546	338	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-010	Pump No 4 Check Valve	Albany LS	Maple Street	547	339	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-011	Pump No 4 Discharge Valve	Albany LS	Maple Street	548	340	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS03-VLV-012	Pump No 4 Air Release Valve	Albany LS	Maple Street	549	341	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS18-VLV-001	Added Pump No 1 Check Valve	Albany LS	Millersburg	550	342	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS18-VLV-002	Added Pump no 1 Discharge Valve	Albany LS	Millersburg	551	343	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS18-VLV-003	Added Pump No 2 Check Valve	Albany LS	Millersburg	552	344	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS18-VLV-004	Added Pump No 2 Discharge Valve	Albany LS	Millersburg	553	345	0.19	1.333	0.143	1	7	1	1	1	1	1	1	4	7	1	1	1	1
LS07-RADIO-001	RTU Radio	Albany LS	College Green	556	346	0.18	1.167	0.148	1.02	1	1	1	4	1	1	1	4	2	4	1	1	4
LS07-RTU-001	Remote Terminal Unit	Albany LS	College Green	557	347	0.18	1.167	0.148	1.02	1	1	1	4	1	1	1	4	2	4	1	1	4
LS05-VLV-001	Pump No 1 Discharge Valve	Albany LS	Umatilla	558	348	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS05-VLV-002	Pump No 1 Check Valve	Albany LS	Umatilla	559	349	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS05-VLV-003	Pump No 1 Suction Valve	Albany LS	Umatilla	560	350	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS05-VLV-004	Pump No 2 Discharge Valve	Albany LS	Umatilla	561	351	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS05-VLV-005	Pump No 2 Check Valve	Albany LS	Umatilla	562	352	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS05-VLV-006	Pump No 2 Suction Valve	Albany LS	Umatilla	563	353	0.17	1.167	0.143	1	4	1	1	1	1	1	1	4	7	1	1	1	1
LS03-CRANE-001	Floor Crane	Albany LS	Maple Street	564	354	0.17	1.167	0.143	1	1	1	1	4	1	1	1	4	7	1	1	1	1
LS06-FAN-002	Fan	Albany LS	Oak Creek	565	355	0.16	1	0.159	1	1	1	1	1	1	1	1	4	10	1	1	1	1
LS06-FAN-001	Fan	Albany LS	Oak Creek	566	356	0.16	1	0.159	1	1	1	1	1	1	1	1	4	10	1	1	1	1
LS03-HOIST-001	Hoist	Albany LS	Maple Street	570	357	0.14	1	0.143	1	1	1	1	1	1	1	1	4	7	1	1	1	1
LS16-MIL-001	Sensor Unit	Albany LS	Truax Creek	572	358	0.14	1	0.138	1	1	1	1	1	1	1	1	4	4	2	1	1	1
LS13-RADIO-001	RTU Radio	Albany LS	Century Dr	613	359	0.13	1.167	0.111	1	1	1	1	4	1	1	1	4	1	1	1	1	1
LS13-RTU-001	Remote Terminal Unit	Albany LS	Century Dr	614	360	0.13	1.167	0.111	1	1	1	1	4	1	1	1	4	1	1	1	1	1
LS13-HTR-001	Heater	Albany LS	Century Dr	615	361	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS12-MIL-001	Sensor Unit	Albany LS	Wah Chang	616	362	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1
LS12-MTR-001	Metering Device	Albany LS	Wah Chang	617	363	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1
LS12-SENSOR-001	Sensor Unit	Albany LS	Wah Chang	618	364	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1
LS12-SENSOR-002	Sensor Unit	Albany LS	Wah Chang	619	365	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1
LS20-HTR-001	Heater	Albany LS	Columbus Street	620	366	0.13	1	0.127	1	1	1	1	1	1	1	1	4	4	1	1	1	1
LS15-FAN-001	Fan	Albany LS	Burkhart Creek	623	367	0.12	1	0.122	1	1	1	1	1	1	1	1	4	1	2	1	1	1
LS12-FAN-001	Fan	Albany LS	Wah Chang	717	368	0.12	1	0.116	1	1	1	1	1	1	1	1	4	2	1	1	1	1
LS07-DEH-001	Dehumidifier	Albany LS	College Green	719	369	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS07-FAN-001	Fan	Albany LS	College Green	720	370	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS07-FAN-001S	Fan	Albany LS	College Green	721	371	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS07-FIL-001	Filter	Albany LS	College Green	722	372	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS07-FIL-002	Filter	Albany LS	College Green	723	373	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS06-FIL-001	Filter	Albany LS	Oak Creek	724	374	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS06-FIL-002	Filter	Albany LS	Oak Creek	725	375	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS05-FAN-001	Fan	Albany LS	Umatilla	726	376	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS04-FIL-001	Filter	Albany LS	Queen Avenue	727	377	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS04-FIL-002	Filter	Albany LS	Queen Avenue	728	378	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS11-FIL-002	Filter	Albany LS	Lawndale	729	379	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS09-DEH-001	Dehumidifier	Albany LS	Marion Street	730	380	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS09-FIL-001	Filter	Albany LS	Marion Street	731	381	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS09-FIL-002	Filter	Albany LS	Marion Street	732	382	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS15-FIL-001	Filter	Albany LS	Burkhart Creek	733	383	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS15-FIL-002	Filter	Albany LS	Burkhart Creek	734	384	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS14-DEH-001	Dehumidifier	Albany LS	Charlotte Street	735	385	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS14-FIL-001	Filter	Albany LS	Charlotte Street	736	386	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS14-FIL-002	Filter	Albany LS	Charlotte Street	737	387	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS14-HTR-001	Heater	Albany LS	Charlotte Street	738	388	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS13-FAN-001	Fan	Albany LS	Century Dr	739	389	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS13-FAN-001S	Fan	Albany LS	Century Dr	740	390	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS20-DEH-001	Dehumidifier	Albany LS	Columbus Street	741	391	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS20-FAN-001	Fan	Albany LS	Columbus Street	742	392	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS20-FAN-002	Fan	Albany LS	Columbus Street	743	393	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS16-FIL-001	Filter	Albany LS	Truax Creek	744	394	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
LS19-FAN-001	Fan	Albany LS	North Albany	745	395	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS19-FIL-001	Filter	Albany LS	North Albany	746	396	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS19-FIL-002	Filter	Albany LS	North Albany	747	397	0.11	1	0.111	1	1	1	1	1	1	1	1	4	1	1	1	1	1
LS11-FIL-001	Filter	Albany LS	Lawndale		398		1		1	1	1	1	1	1	1		4	1	1	1	1	1
LS11-HTR-001	Heater	Albany LS	Lawndale		399		1		1	1	1	1	1	1	1		4	2	1	1	1	1
LS13-FIL-001	Filter	Albany LS	Century Dr		400	_	1		1	1	1	1	1	1	1		4	1	1	1	1	1
VAL-GAT-999	Finished Water To CW Fill Valve	Albany LS	Vine St WTP		401											1						
VAL-GAT-999A	Finished Water To CW Fill Valve Actuator	Albany LS	Vine St WTP		402																	

ATTACHMENT E-3

Vine Street Water Plant

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
ELC-DIS-009	Main Disconnect For Pumps 2 4 6 8	Albany WTS	Vine St WTP	12	1	2.08	9.308	0.222	1.007	10	10	10	1	10		2	4	7	1	1	1	2
PMP-DIS-005	Pump No 11 Main Disconnect	Albany WTS	Vine St WTP	15	2	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
PMP-DIS-003	Pump No 13 Main Disconnect	Albany WTS	Vine St WTP	17	3	2.06	5.833	0.333	1.06	10	4	4	7	10	4	2	4	10	10	1	1	10
ELC-DIS-001	Disconnect For Pump#1	Albany WTS	Vine St WTP	22	4	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-002	Disconnect For Pump#2	Albany WTS	Vine St WTP	23	5	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-003	Disconnect For Pump#3	Albany WTS	Vine St WTP	24	6	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-004	Disconnect For Pump#4	Albany WTS	Vine St WTP	25	7	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-005	Disconnect For Pump#5	Albany WTS	Vine St WTP	26	8	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
ELC-DIS-007	Disconnect For Pump#7	Albany WTS	Vine St WTP	27	9	1.88	8.385	0.222	1.007	10	7	10	1	10		2	4	7	1	1	1	2
PMP-PMP-15a	No 15 Pump	Albany WTS	Vine St WTP	28	10	1.86	3.167	0.587	1	10	1	1	7	7	1	7	4	1	1	1	1	1
PMP-DIS-002	Pump No 14 Main Disconnect	Albany WTS	Vine St WTP	29	11	1.83	5.167	0.333	1.06	10	4	4	7	7	4	2	4	10	10	1	1	10
PMP-MTR-15m	No 15 Motor	Albany WTS	Vine St WTP	34	12	1.76	3	0.587	1	10	1	1	4	7	1	7	4	1	1	1	1	1
ELC-DIS-006	Disconnect For Pump#6	Albany WTS	Vine St WTP	44	13	1.67	7.462	0.222	1.007	10	7	10	1	7		2	4	7	1	1	1	2
PMP-DIS-004	Pump No 12 Main Disconnect	Albany WTS	Vine St WTP	58	14	1.39	5.167	0.254	1.06	10	4	4	7	7	4	1	4	10	10	1	1	10
ELC-DIS-008	Main Disconnect For Pumps 1 3 5 7 9	Albany WTS	Vine St WTP	60	15	1.34	9.308	0.143	1.007	10	10	10	1	10		1	4	7	1	1	1	2
DRV-MXR-01	Upflow Clarifier, Accelator - DRV-MXR-01	Albany WTS	Vine St WTP	71	16	1.25	5.333	0.232	1.01	7	7	1	7	4	7	2	2	10			1	2
PMP-MTR-09	Motor #9 Raw Water Pump VFD	Albany WTS	Vine St WTP	72	17	1.21	7.167	0.169	1	10	4	7	4	7	10	2	2	1	1	1	1	1
FED-VOL-05	Soda Ash Feeder #1 - FED-VOL-05	Albany WTS	Vine St WTP	76	18	1.14	3.167	0.36	1	7	7	4	1	1	1	4	2	7	1	1	1	1
PIP-LRG-04	Large Filter Piping - PIP-LRG-04	Albany WTS	Vine St WTP	78	19	1.12	9.167	0.122	1	10	10	10	7	7	10	1	1	7	2	1	1	1
PIP-SML-06	Small Filter Piping - PIP-SML-06	Albany WTS	Vine St WTP	79	20	1.12	9.167	0.122	1	10	10	10	7	7	10	1	1	7	2	1	1	1
PMP-CVT-01	#1 Raw Water Pump	Albany WTS	Vine St WTP	84	21	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-02	#2 Raw Water Pump	Albany WTS	Vine St WTP	85	22	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-03	#3 Raw Water Pump	Albany WTS	Vine St WTP	86	23	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-04	#4 Raw Water Pump	Albany WTS	Vine St WTP	87	24	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-05	#5 Raw Water Pump	Albany WTS	Vine St WTP	88	25	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-CVT-07	#7 Raw Water Pump	Albany WTS	Vine St WTP	89	26	1.11	7.167	0.153	1.007	10	7	7	4	4	10	1	4	7	2	1	1	2
PMP-DIS-15	Disconnect Transfer Pump #1	Albany WTS	Vine St WTP	102	27	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-DIS-16	Disconnect Transfer Pump #2	Albany WTS	Vine St WTP	103	28	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-DIS-18	Disconnect Backwash Pump #16	Albany WTS	Vine St WTP	104	29	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-DIS-19	Disconnect Backwash Pump #10	Albany WTS	Vine St WTP	105	30	1.05	5.167	0.201	1.007	10	4	4	7	7	4	2	2	7	1	1	1	2
PMP-CVT-08	#8 Raw Water Pump VFD	Albany WTS	Vine St WTP	108	31	1.03	7.167	0.143	1.007	10	7	7	4	4	10	1	4	7	1	1	1	2
PMP-CVT-09	#9 Raw Water Pump VFD	Albany WTS	Vine St WTP	109	32	1.03	7.167	0.143	1.007	10	7	7	4	4	10	1	4	7	1	1	1	2
ROBICON8	Robicon VFD Pump Control – Robicon 8	Albany WTS	Vine St WTP	115	33	0.98	4.833	0.201	1.01	10	1	1	7	7	7	2	1	7	2	2	1	1
PMP-DIS-001	Pump No 15 Main Disconnect	Albany WTS	Vine St WTP	116	34	0.98	5.833	0.159	1.06	10	4	4	7	10	4	1	4	10	1	1	1	10
WTP1-04 PUMP STA	Pump Station Structure	Albany WTS	Vine St WTP	118	35	0.96	2.5	0.376	1.023	10	1	4	10	1	1	4	2	10	1	1	2	2
PMP-MTR-10	Bachwash Pump 10	Albany WTS	Vine St WTP	131	36	0.87	4.333	0.201	1	10	7	1	4	7	1	2	2	7	1	1	1	1
PMP-MTR-16	Motor #16 BW Pump	Albany WTS	Vine St WTP	132	37	0.87	4.333	0.201	1	10	7	1	4	7	1	2	2	7	1	1	1	1
PMP-CVT-19	Transfer Pump #3 VFD	Albany WTS	Vine St WTP	161	38	8.0	4	0.201	1	10	1	1	7	7	4	2	2	7	1	1	1	1
DRV-MXR-02	Upflow Clarifier, Accelator - DRV-MXR-02	Albany WTS	Vine St WTP	164	39	0.78	5.333	0.144	1.01	7	7	1	7	4	7	1	2	10			1	2
PMP-MTR-01	Motor #1 Raw Water Pump	Albany WTS	Vine St WTP	195	40	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-02	Motor #2 Raw Water Pump	Albany WTS	Vine St WTP	196	41	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-03	Motor #3 Raw Water Pump	Albany WTS	Vine St WTP	197	42	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-04	Motor #4 Raw Water Pump	Albany WTS	Vine St WTP	198	43	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-05	Motor #5 Raw Water Pump	Albany WTS	Vine St WTP	199	44	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-07	Motor #7 Raw Water Pump	Albany WTS	Vine St WTP	200	45	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
PMP-MTR-08	Motor #8 Raw Water Pump VFD	Albany WTS	Vine St WTP	201	46	0.64	7.167	0.09	1	10	4	7	4	7	10	1	2	1	1	1	1	1
SCR-ROT-01	Intake Screen Drive - SCR-ROT-01	Albany WTS	Vine St WTP	202	47	0.64	3	0.215	1	10	1	1	4	7	1	2	2	7			1	1
PMP-CVT-16	#16 BW Pump: Filters 7-10	Albany WTS	Vine St WTP	205	48	0.64	3.167	0.201	1	10	1	1	7	7	1	2	2	7	1	1	1	1
FED-VOL-06	Soda Ash Feeder #2 - FED-VOL-06	Albany WTS	Vine St WTP	206	49	0.64	3.167	0.201	1	7	7	4	1	1	1	2	2	7	1	1	1	1
ROBICON9	Robicon VFD #9 - Robicon 9	Albany WTS	Vine St WTP	207	50	0.63	3.167	0.196	1.01	10	1	1	7	7	1	2	2	4	2	2	1	1
PH-MON-01	PH Monitor Finish Water - PH-MON-01	Albany WTS	Vine St WTP	208	51	0.61	3.5	0.175	1	4	7	7	1	1	1	2	1	4	1	1	1	1
PH-MON-02	PH Monitor ClearwelL - PH-MON-02	Albany WTS	Vine St WTP	209	52	0.61	3.5	0.175	1	4	7	7	1	1	1	2	1	4	1	1	1	1
PMP-CHP-11	No 11 HP Pump	Albany WTS	Vine St WTP	210	53	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-13	No 13 HP Pump	Albany WTS	Vine St WTP	211	54	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-14	No 14 HP Pump	Albany WTS	Vine St WTP	212	55	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP-CHP-15	#15 HP Pump VFD	Albany WTS	Vine St WTP	213	56	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1
PMP=PMP-12a	No 12 Pump	Albany WTS	Vine St WTP	220	57	0.6	3.167	0.191	1	10	1	1	7	7	1	2	4	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-MTR-17	Motor #17 Transfer Pump #1	Albany WTS	Vine St WTP	221	58	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-MTR-18	Motor #18 Transfer Pump #2	Albany WTS	Vine St WTP	222	59	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-SAM-01	Control Bed Sample Pump #1 - PMP-SAM-01	Albany WTS	Vine St WTP	223	60	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
PMP-SAM-02	Control Bed Sample Pump #2 - PMP-SAM-02	Albany WTS	Vine St WTP	224	61	0.6	3	0.201	1	10	1	1	4	7	1	2	2	7	1	1	1	1
CAN-GAT-01A	Radial Canal Gate Actuator	Albany WTS	Vine St WTP	228	62	0.6	4.667	0.127	1.007	4	1	7	1	1	10	1	1	4	4	1	1	2
CL2-ANL-01	CL-17 Analyzer, Clearwell Free Chlorine - CL2-ANL-01	Albany WTS	Vine St WTP	230	63	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
CL2-ANL-02	CL-17 Analyzer, Finish - CL2-ANL-02	Albany WTS	Vine St WTP	231	64	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
CL2-ANL-03	CL-17 Analyzer Settled Water - CL2-ANL-03	Albany WTS	Vine St WTP	232	65	0.58	6	0.095	1.007	4	7	7	4	4	7	1	2	2	1	1	1	2
PMP-MTR-12	No 12 Motor	Albany WTS	Vine St WTP	239	66	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-13	No 13 HP Pump	Albany WTS	Vine St WTP	240	67	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
PMP-MTR-14	No 14 HP Pump	Albany WTS	Vine St WTP	241	68	0.57	3	0.191	1	10	1	1	4	7	1	2	4	1	1	1	1	1
ELC-MCC-001	Clarifier Drive 1	Albany WTS	Vine St WTP	262	69	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
ELC-MCC-002	Clarifier Drive 2	Albany WTS	Vine St WTP	263	70	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
ELEC-PAN-01	Service Panel A	Albany WTS	Vine St WTP	264	71	0.5	2.5	0.201	1	7	4	4	1	1	1	2	2	7	1	1	1	1
PMP-CVT-17	Transfer Pump #1	Albany WTS	Vine St WTP	278	72	0.49	4	0.122	1	10	1	1	7	7	4	1	2	7	1	1	1	1
PMP-CVT-18	Transfer Pump #2	Albany WTS	Vine St WTP	279	73	0.49	4	0.122	1	10	1	1	7	7	4	1	2	7	1	1	1	1
TUR-SCT-01	Raw Water Scatterimeter - TUR-SCT-01	Albany WTS	Vine St WTP	284	74	0.49	2.167	0.222	1.007	10	4	1	1	1	1	2	4	7	1	1	1	2
CAN-GAT-01	Radial Canal Gate - CAN-GAT-01	Albany WTS	Vine St WTP	287	75	0.46	4.833	0.095	1.007	4	1	7	4	1	10	1	1	4	1	1	1	2
CON-CEN-01	ACCEL. Concentrator #1 - CON-CEN-01	Albany WTS	Vine St WTP	295	76	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-02	ACCEL. Concentrator #2 - CON-CEN-02	Albany WTS	Vine St WTP	296	77	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-07	ACCEL.#2 Concentrator #1 - CON-CEN-07	Albany WTS	Vine St WTP	297	78	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-08	ACCEL.#2 Concentrator #2 - CON-CEN-08	Albany WTS	Vine St WTP	298	79	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-09	ACCEL.#2 Concentrator #3 - CON-CEN-09	Albany WTS	Vine St WTP	299	80	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
CON-CEN-10	ACCEL.#2 Concentrator #4 - CON-CEN-10	Albany WTS	Vine St WTP	300	81	0.45	2.167	0.206	1.007	1	4	4	1	1	1	2	4	4	1	1	1	2
VAL-BFV-38A	#1 Filter To Waste - Valve 38 Actuator	Albany WTS	Vine St WTP	303	82	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-39A	#2 Filter To Waste - Valve 39 Actuator	Albany WTS	Vine St WTP	304	83	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-40A	#3 Filter To Waste - Valve 40 Actuator	Albany WTS	Vine St WTP	305	84	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-41A	#4 Filter To Waste - Valve 41 Actuator	Albany WTS	Vine St WTP	306	85	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
VAL-BFV-42A	#5 Filter To Waste - Valve 42 Actuator	Albany WTS	Vine St WTP	307	86	0.44	1.333	0.328	1.007	7	1	1	1	1	1	4	2	1	1	1	1	2
CW-LEVEL-1	Transfer Pump Pipe Gallery - CW-Level-1	Albany WTS	Vine St WTP	333	87	0.4	2	0.201	1	7	1	1	1	4	1	2	2	7	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-CVT-10	#10 BW Pump: Filters 1-6	Albany WTS	Vine St WTP	335	88	0.39	3.167	0.122	1	10	1	1	7	7	1	1	2	7	1	1	1	1
PMP-MTR-19	Motor #19 Transfer Pump #3 VFD	Albany WTS	Vine St WTP	345	89	0.37	3	0.122	1	10	1	1	4	7	1	1	2	7	1	1	1	1
RTU-RTU-003	RTU	Albany WTS	Vine St WTP	351	90	0.35	2	0.175	1	4	1	1	1	1	4	2	2	2	1	1	1	1
PMP-SUM-01	Raw Water Sump	Albany WTS	Vine St WTP	356	91	0.35	2.833	0.122	1	10	1	1	1	7	1	1	2	7	1	1	1	1
SCR-DRV-01	Canal Screen Drive Unit - SCR-DRV-01	Albany WTS	Vine St WTP	357	92	0.34	3	0.115	1	10	1	1	4	7	1	1	1	7			1	1
PMP-MTR-11	No 11 HP Pump	Albany WTS	Vine St WTP	358	93	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
PMP-MTR-15	Motor #15 HP Pump VFD	Albany WTS	Vine St WTP	361	94	0.33	3	0.111	1	10	1	1	4	7	1	1	4	1	1	1	1	1
WT1-04S-VFD-03	Small Filter Building VFD #3	Albany WTS	Vine St WTP	362	95	0.32	1.5	0.212	1.01	7	1	1	4	1	1	2	2	7	2	2	1	1
ELC-BRK-001	Main Breaker	Albany WTS	Vine St WTP	368	96	0.32	3	0.106	1	4	4	4	1	4	1	1	2	4	1	1	1	1
MXR-SOL-03	Fluoride Mixer	Albany WTS	Vine St WTP	369	97	0.32	2.5	0.126	1	4	7	1	1	1	1	1	2	7			1	1
VAL-BAL-150	Surface Wash Shutoff #1 Filter - VAL-BAL-150	Albany WTS	Vine St WTP	374	98	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-150A	Surface Wash Shutoff #1 Filter - Valve Actuator	Albany WTS	Vine St WTP	375	99	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-152	Surface Wash Shutoff #2 Filter - VAL-BAL-152	Albany WTS	Vine St WTP	376	100	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-152A	Surface Wash Shutoff #2 Filter - Valve Actuator	Albany WTS	Vine St WTP	377	101	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-154	Surface Wash Shutoff #3 Filter - VAL-BAL-154	Albany WTS	Vine St WTP	378	102	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-154A	Surface Wash Shutoff #3 Filter - Valve Actuator	Albany WTS	Vine St WTP	379	103	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-156	Surface Wash Shutoff #4 Filter - VAL-BAL-156	Albany WTS	Vine St WTP	380	104	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-156A	Surface Wash Shutoff #4 Filter - Valve Actuator	Albany WTS	Vine St WTP	381	105	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-158	Surface Wash Shutoff #5 Filter - VAL-BAL-158	Albany WTS	Vine St WTP	382	106	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
VAL-BAL-158A	Surface Wash Shutoff #5 Filter - Valve Actuator	Albany WTS	Vine St WTP	383	107	0.3	1.5	0.201	1	10	1	1	1	1	1	2	2	7	1	1	1	1
TUR-20C-12	Process Turbidimeter CNTRL BDS - TUR-20C-12	Albany WTS	Vine St WTP	392	108	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-01	Process Turbidimeter Filter #1 - TUR-20D-01	Albany WTS	Vine St WTP	393	109	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-02	Process Turbidimeter Filter #2 - TUR-20D-02	Albany WTS	Vine St WTP	394	110	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-03	Process Turbidimeter Filter #3 - TUR-20D-03	Albany WTS	Vine St WTP	395	111	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-04	Process Turbidimeter Filter #4 - TUR-20D-04	Albany WTS	Vine St WTP	396	112	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-05	Process Turbidimeter Filter #5 - TUR-20D-05	Albany WTS	Vine St WTP	397	113	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-06	Process Turbidimeter Filter #6 - TUR-20D-06	Albany WTS	Vine St WTP	398	114	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-07	Process Turbidimeter Filter #7 - TUR-20D-07	Albany WTS	Vine St WTP	399	115	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-08	Process Turbidimeter Filter #8 - TUR-20D-08	Albany WTS	Vine St WTP	400	116	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-09	Process Turbidimeter Filter #9 - TUR-20D-09	Albany WTS	Vine St WTP	401	117	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
TUR-20D-10	Process Turbidimeter Filter #10 - TUR-20D-10	Albany WTS	Vine St WTP	402	118	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
TUR-20D-11	Process Turbidimeter Clearwell - TUR-20D-11	Albany WTS	Vine St WTP	403	119	0.27	2.833	0.095	1	10	7	1	1	1	1	1	2	2	1	1	1	1
COM-AIR-02	Quincy Air Compressor - COM-AIR-02	Albany WTS	Vine St WTP	414	120	0.24	2.5	0.097	1	4	4	1	1	4	1	1	1	4		1	1	1
VAL-BFV-14A	#1 Filter Influent - Valve 14 Actuator	Albany WTS	Vine St WTP	415	121	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-15A	#1 Filter Waste - Valve 15 Actuator	Albany WTS	Vine St WTP	416	122	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-17A	#1 Filter Effluent - Valve 17 Actuator	Albany WTS	Vine St WTP	417	123	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-18A	#2 Filter Influent - Valve 18 Actuator	Albany WTS	Vine St WTP	418	124	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-30A	#5 Filter Influent - Valve 30 Actuator	Albany WTS	Vine St WTP	419	125	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-19A	#2 Filter Waste - Valve 19 Actuator	Albany WTS	Vine St WTP	420	126	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-22A	#3 Filter Influent - Valve 22 Actuator	Albany WTS	Vine St WTP	421	127	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-23A	#3 Filter Waste - Valve 23 Actuator	Albany WTS	Vine St WTP	422	128	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-25A	#3 Filter Effluent - Valve 25 Actuator	Albany WTS	Vine St WTP	423	129	0.24	1.333	0.18	1.007	7	1	1	1	1	1	2	2	1	2	1	1	2
VAL-BFV-41	#4 Filter To Waste - VAL-BFV-41	Albany WTS	Vine St WTP	426	130	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-40	#3 Filter To Waste - VAL-BFV-40	Albany WTS	Vine St WTP	427	131	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-39	#2 Filter To Waste - VAL-BFV-39	Albany WTS	Vine St WTP	428	132	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-42	#5 Filter To Waste - VAL-BFV-42	Albany WTS	Vine St WTP	429	133	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-38	#1 Filter To Waste - VAL-BFV-38	Albany WTS	Vine St WTP	430	134	0.24	1.333	0.18	1	7	1	1	1	1	1	2	2	1	2	1	1	1
VAL-BFV-31A	#5 Filter Waste - Valve 31 Actuator	Albany WTS	Vine St WTP	448	135	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-26A	#4 Filter Influent - Valve 26 Actuator	Albany WTS	Vine St WTP	449	136	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-27A	#4 Filter Waste - Valve 27 Actuator	Albany WTS	Vine St WTP	450	137	0.23	1.333	0.169	1.007	7	1	1	1	1	1	2	2	1	1	1	1	2
VAL-BFV-52A	#8 Influent - Valve 52 Actuator	Albany WTS	Vine St WTP	451	138	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-54A	#8 Filter To Waste - Valve 54 Actuator	Albany WTS	Vine St WTP	452	139	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-50A	#8 Backwash - Valve 50 Actuator	Albany WTS	Vine St WTP	453	140	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-53A	#8 Effluent - Valve 53 Actuator	Albany WTS	Vine St WTP	454	141	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-59A	#7 Filter To Waste - Valve 59 Actuator	Albany WTS	Vine St WTP	455	142	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-TEL-01A	Telescoping Valve Actuator	Albany WTS	Vine St WTP	456	143	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-CHK-07	#4 Check Valve - VAL-CHK-07	Albany WTS	Vine St WTP	457	144	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-CHK-08	#5 Check ValvE - VAL-CHK-08	Albany WTS	Vine St WTP	458	145	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-58A	#7 Backwash - Valve 58 Actuator	Albany WTS	Vine St WTP	459	146	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-70A	Surface Wash Control #7 Filter - Valve 70 Actuator	Albany WTS	Vine St WTP	460	147	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1

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VAL-BFV-71A	Surface Wash Control #8 Filter - Valve 71 Actuator	Albany WTS	Vine St WTP	461	148	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-72A	Surface Wash Control #9 Filter - Valve 72 Actuator	Albany WTS	Vine St WTP	462	149	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
VAL-BFV-73A	Surface Wash Control #10 Filter - Valve 73 Actuator	Albany WTS	Vine St WTP	463	150	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
PMP-VLV-002	Pump No 11 Clay Valve	Albany WTS	Vine St WTP	464	151	0.23	1.333	0.169	1	7	1	1	1	1	1	2	2	1	1	1	1	1
MET-FLO-05	Sparling Meter BW 1-6 - MET-FLO-05	Albany WTS	Vine St WTP	467	152	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-02	Sparling Meter Filter #2 - MET-FIL-02	Albany WTS	Vine St WTP	469	153	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-03	Sparling Meter Filter #3 - MET-FIL-03	Albany WTS	Vine St WTP	470	154	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-04	Sparling Meter Filter #4 - MET-FIL-04	Albany WTS	Vine St WTP	471	155	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-05	Sparling Meter Filter #5 - MET-FIL-05	Albany WTS	Vine St WTP	472	156	0.22	1.167	0.191	1	4	1	1	1	1	1	2	1	7	1	1	1	1
MET-FIL-06	Sparling Meter Filter #6 - MET-FIL-06	Albany WTS	Vine St WTP	481	157	0.2	1.167	0.175	1	4	1	1	1	1	1	2	1	4	1	1	1	1
VAL-TEL-02	Telescoping Valve	Albany WTS	Vine St WTP	554	158	0.18	1.333	0.132	1.01	7	1	1	1	1	1	1	2	7	2		1	2
VAL-TEL-01	Telescoping Valve	Albany WTS	Vine St WTP	555	159	0.18	1.333	0.132	1.01	7	1	1	1	1	1	1	2	7	2		1	2
VAL-AIR-01	Backwash Line Air Release - VAL-AIR-01	Albany WTS	Vine St WTP	567	160	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
VAL-AIR-02	Backwash Line Air Release - VAL-AIR-02	Albany WTS	Vine St WTP	568	161	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
VAL-AIR-03	Backwash Line Air Release - VAL-AIR-03	Albany WTS	Vine St WTP	569	162	0.14	1.5	0.095	1.007	10	1	1	1	1	1	1	2	2	1	1	1	2
CRN-001	Overhead Crane	Albany WTS	Vine St WTP	571	163	0.14	1.333	0.106	1	7	1	1	1	1	1	1	2	4	1	1	1	1
PMP-VLV-010	Pump No 14 Suction Valve	Albany WTS	Vine St WTP	574	164	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-011	Pump No 14 Clay Valve	Albany WTS	Vine St WTP	575	165	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-012	Pump No 14 Discharge Valve	Albany WTS	Vine St WTP	576	166	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-013	Pump No 15 Suction Valve	Albany WTS	Vine St WTP	577	167	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-014	Pump No 15 Discharge Valve Actuated	Albany WTS	Vine St WTP	578	168	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-015	Pump No 15 Check Valve	Albany WTS	Vine St WTP	579	169	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-008	Pump No 13 Clay Valve	Albany WTS	Vine St WTP	580	170	0.14	1.5	0.09	1	10	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-21A	#2 Filter Effluent - Valve 21 Actuator	Albany WTS	Vine St WTP	582	171	0.14	1.333	0.101	1.007	7	1	1	1	1	1	1	2	1	2	1	1	2
VAL-BFV-29A	#4 Filter Effluent - Valve 29 Actuator	Albany WTS	Vine St WTP	583	172	0.14	1.333	0.101	1.007	7	1	1	1	1	1	1	2	1	2	1	1	2
VAL-BFV-30	#5 Filter Influent - VAL-BFV-30	Albany WTS	Vine St WTP	584	173	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-27	#4 Filter Waste - VAL-BFV-27	Albany WTS	Vine St WTP	585	174	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-32	#5 Filter Backwash - VAL-BFV-32	Albany WTS	Vine St WTP	586	175	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-31	#5 Filter Waste - VAL-BFV-31	Albany WTS	Vine St WTP	587	176	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-33	#5 Filter Effluent - VAL-BFV-33	Albany WTS	Vine St WTP	588	177	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-22	#3 Filter Influent - VAL-BFV-22	Albany WTS	Vine St WTP	589	178	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-23	#3 Filter Waste - VAL-BFV-23	Albany WTS	Vine St WTP	590	179	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-20	#2 Filter Backwash - VAL-BFV-20	Albany WTS	Vine St WTP	591	180	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-20A	#2 Filter Backwash - Valve 20 Actuator	Albany WTS	Vine St WTP	592	181	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-21	#2 Filter Effluent - VAL-BFV-21	Albany WTS	Vine St WTP	593	182	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-28	#4 Filter Backwash - VAL-BFV-28	Albany WTS	Vine St WTP	594	183	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-28A	#4 Filter Backwash - Valve 28 Actuator	Albany WTS	Vine St WTP	595	184	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-29	#4 Filter Effluent - VAL-BFV-29	Albany WTS	Vine St WTP	596	185	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-26	#4 Filter Influent - VAL-BFV-26	Albany WTS	Vine St WTP	597	186	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-24	#3 Filter BackwasH - VAL-BFV-24	Albany WTS	Vine St WTP	598	187	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-24A	#3 Filter Backwash - Valve 24 Actuator	Albany WTS	Vine St WTP	599	188	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-50	#8 Backwash - VAL-BFV-50	Albany WTS	Vine St WTP	600	189	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-15	#1 Filter Waste - VAL-BFV-15	Albany WTS	Vine St WTP	601	190	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-14	#1 Filter Influent - VAL-BFV-14	Albany WTS	Vine St WTP	602	191	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-19	#2 Filter Waste - VAL-BFV-19	Albany WTS	Vine St WTP	603	192	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-18	#2 Filter Influent - VAL-BFV-18	Albany WTS	Vine St WTP	604	193	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-16	#1 Filter Backwash - VAL-BFV-16	Albany WTS	Vine St WTP	605	194	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-16A	#1 Filter Backwash - Valve 16 Actuator	Albany WTS	Vine St WTP	606	195	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
VAL-BFV-17	#1 Filter Effluent - VAL-BFV-17	Albany WTS	Vine St WTP	607	196	0.13	1.333	0.101	1	7	1	1	1	1	1	1	2	1	2	1	1	1
MET-FIL-07	Sparling Meter Filter #7 - MET-FIL-07	Albany WTS	Vine St WTP	608	197	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-08	Sparling Meter Filter #8 - MET-FIL-08	Albany WTS	Vine St WTP	609	198	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-09	Sparling Meter Filter #9 - MET-FIL-09	Albany WTS	Vine St WTP	610	199	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FIL-10	Sparling Meter Filter #10 - MET-FIL-10	Albany WTS	Vine St WTP	611	200	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
MET-FLO-06	Sparling Meter BW 7-10 - MET-FLO-06	Albany WTS	Vine St WTP	612	201	0.13	1.167	0.111	1	4	1	1	1	1	1	1	1	7	1	1	1	1
VAL-BFV-33A	#5 Filter Effluent - Valve 33 Actuator	Albany WTS	Vine St WTP	624	202	0.12	1.333	0.09	1.007	7	1	1	1	1	1	1	2	1	1	1	1	2
VAL-BFV-32A	#5 Filter Backwash - Valve 32 Actuator	Albany WTS	Vine St WTP	625	203	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-53	#8 Effluent - VAL-BFV-53	Albany WTS	Vine St WTP	626	204	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-55	#7 Influent - VAL-BFV-55	Albany WTS	Vine St WTP	627	205	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-55A	#7 Influent - VALVE 55 ACTUATOR	Albany WTS	Vine St WTP	628	206	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-56	#7 Effluent - VAL-BFV-56	Albany WTS	Vine St WTP	629	207	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-51	#8 Waste - VAL-BFV-51	Albany WTS	Vine St WTP	630	208	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-51A	#8 Waste - VALVE 51 ACTUATOR	Albany WTS	Vine St WTP	631	209	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-52	#8 Influent - VAL-BFV-52	Albany WTS	Vine St WTP	632	210	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-44	#2 Transfer Pump - VAL-BFV-44	Albany WTS	Vine St WTP	633	211	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-45	#3 Transfer Pump - VAL-BFV-45	Albany WTS	Vine St WTP	634	212	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-60	#10 Waste - VAL-BFV-60	Albany WTS	Vine St WTP	635	213	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-60A	#10 Waste -Valve 60 Actuator	Albany WTS	Vine St WTP	636	214	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-61	#10 Influent - VAL-BFV-61	Albany WTS	Vine St WTP	637	215	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-61A	#10 Influent - Valve 61 Actuator	Albany WTS	Vine St WTP	638	216	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-54	#8 Filter-To-Waste - VAL-BFV-54	Albany WTS	Vine St WTP	639	217	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-57	#7 Waste - VAL-BFV-57	Albany WTS	Vine St WTP	640	218	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-57A	#7 Waste - Valve 57 Actuator	Albany WTS	Vine St WTP	641	219	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-58	#7 Backwash - VAL-BFV-58	Albany WTS	Vine St WTP	642	220	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-63	#10 Effluent - VAL-BFV-63	Albany WTS	Vine St WTP	643	221	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-63A	#10 Effluent - Valve 63 Actuator	Albany WTS	Vine St WTP	644	222	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-64	#9 Influent - VAL-BFV-64	Albany WTS	Vine St WTP	645	223	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-64A	#9 Influent - Valve 64 Actuator	Albany WTS	Vine St WTP	646	224	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-65	#9 Waste - VAL-BFV-65	Albany WTS	Vine St WTP	647	225	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-65A	#9 Waste - Valve 65 Actuator	Albany WTS	Vine St WTP	648	226	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-66	#9 Backwash - VAL-BFV-66	Albany WTS	Vine St WTP	649	227	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-66A	#9 Backwash - Valve 66 Actuator	Albany WTS	Vine St WTP	650	228	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-67	#10 Filter-To-Waste - VAL-BFV-67	Albany WTS	Vine St WTP	651	229	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-67A	#10 Filter To Waste - Valve 67 Actuator	Albany WTS	Vine St WTP	652	230	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-68	#9 Filter-To-Waste - VAL-BFV-68	Albany WTS	Vine St WTP	653	231	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-68A	#9 Filter To Waste - Valve 68 Actuator	Albany WTS	Vine St WTP	654	232	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-69	#9 Effluent - VAL-BFV-69	Albany WTS	Vine St WTP	655	233	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-69A	#9 Effluent - VALVE 69 ACTUATOR	Albany WTS	Vine St WTP	656	234	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-70	Surface Wash Control #7 Filter - VAL-BFV-70	Albany WTS	Vine St WTP	657	235	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-RPV-02	Backflow Prevention - VAL-RPV-02	Albany WTS	Vine St WTP	664	236	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-TEL-02A	Telescoping Valve Actuator	Albany WTS	Vine St WTP	665	237	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1

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Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-CHK-04	#1 Pump Check Valve - VAL-CHK-04	Albany WTS	Vine St WTP	667	238	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-05	#2 Pump Check Valve - VAL-CHK-05	Albany WTS	Vine St WTP	668	239	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-06	#3 Check Valve - VAL-CHK-06	Albany WTS	Vine St WTP	669	240	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-GAT-38	Backflow PRV - VAL-GAT-38	Albany WTS	Vine St WTP	670	241	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-BFV-73	Surface Wash ControL #10 FILTER - VAL-BFV-73	Albany WTS	Vine St WTP	674	242	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-72	Surface Wash Control #9 FILTER - VAL-BFV-72	Albany WTS	Vine St WTP	675	243	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-71	Surface Wash Control #8 FILTER - VAL-BFV-71	Albany WTS	Vine St WTP	676	244	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-59	#7 Filter-To-Waste - VAL-BFV-59	Albany WTS	Vine St WTP	677	245	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-10	#7 Check Valve - VAL-CHK-10	Albany WTS	Vine St WTP	678	246	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-CHK-11	#8 Check Valve - VAL-CHK-11	Albany WTS	Vine St WTP	679	247	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-12	#9 Check Valve - VAL-CHK-12	Albany WTS	Vine St WTP	680	248	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-18	#1 Transfer Pump - VAL-CHK-18	Albany WTS	Vine St WTP	681	249	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-19	#2 Transfer Pump - VAL-CHK-19	Albany WTS	Vine St WTP	682	250	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-20	#3 Transfer Pump - VAL-CHK-20	Albany WTS	Vine St WTP	683	251	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-22	PRV - VAL-CHK-22	Albany WTS	Vine St WTP	684	252	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-CHK-23	PRV - VAL-CHK-23	Albany WTS	Vine St WTP	685	253	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-08	#1 Gate Valve - VAL-GAT-08	Albany WTS	Vine St WTP	686	254	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-09	#2 Gate Valve - VAL-GAT-09	Albany WTS	Vine St WTP	687	255	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-10	#3 Gate Valve - VAL-GAT-10	Albany WTS	Vine St WTP	688	256	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-11	#4 Gate Valve - VAL-GAT-11	Albany WTS	Vine St WTP	689	257	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-12	#5 Gate Valve - VAL-GAT-12	Albany WTS	Vine St WTP	690	258	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-13	#6 Gate Valve - VAL-GAT-13	Albany WTS	Vine St WTP	691	259	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-14	#7 Gate Valve - VAL-GAT-14	Albany WTS	Vine St WTP	692	260	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-15	#8 Gate Valve - VAL-GAT-15	Albany WTS	Vine St WTP	693	261	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-16	#9 Gate Valve - VAL-GAT-16	Albany WTS	Vine St WTP	694	262	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
VAL-GAT-34	#1 Transfer Pump - VAL-GAT-34	Albany WTS	Vine St WTP	695	263	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1		1	1
PMP VLV-007	Pump No 13 Suction Valve	Albany WTS	Vine St WTP	696	264	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-13	Backwash Pump Intertie - VAL-BFV-13	Albany WTS	Vine St WTP	697	265	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-009	Pump No 13 Discharge Valve	Albany WTS	Vine St WTP	700	266	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-003	Pump No 11 Discharge Valve	Albany WTS	Vine St WTP	713	267	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1

												Imp	act				Likeli	hood			Triggers	S
Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
PMP-VLV-004	Pump No 12 Suction Valve	Albany WTS	Vine St WTP	714	268	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-005	Pump No 12 Discharge Valve Actuated	Albany WTS	Vine St WTP	715	269	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
PMP-VLV-001	Pump No 11 Suction Valve	Albany WTS	Vine St WTP	716	270	0.12	1.333	0.09	1	7	1	1	1	1	1	1	2	1	1	1	1	1
VAL-BFV-56A	#7 Effluent - Valve 56 ACTUATOR	Albany WTS	Vine St WTP	749	271	0.11	1.333	0.079	1	7	1	1	1	1	1	1	1	1	1	1	1	1
VAL-GAT-37	Backflow PRV - VAL-GAT-37	Albany WTS	Vine St WTP	751	272	0.11	1.167	0.09	1	4	1	1	1	1	1	1	2	1	1		1	1
VAL-BFV-62	#10 Backwash - VAL-BFV-62	Albany WTS	Vine St WTP	753	273	0.09	1	0.09	1	1	1	1	1	1	1	1	2	1	1	1	1	1
\$\$BAS-ACL-01	Upflow Clarifier, Accelator - BAS-ACL-01	Albany WTS	Vine St WTP																			
GATE CNTRL	Canal Gate Controls - Gate CNTRL	Albany WTS	Vine St WTP																1			
GATE CNTRLA	Canal Gate Control Actuator	Albany WTS	Vine St WTP																			
GEN-HYD-01	Hydroelectric Generator - GEN-HYD-01	Albany WTS	Vine St WTP																			
PMP-CVT-06	#6 Raw Water Pump	Albany WTS	Vine St WTP																2	1		
PMP-CVT-20	Transfer Pump #4 VFD	Albany WTS	Vine St WTP																1	1		
PMP-MTR-06	Motor #6 Raw Water Pump	Albany WTS	Vine St WTP																1	1		
PMP-MTR-20	Motor #20 Transfer Pump #4 VFD	Albany WTS	Vine St WTP																1	1		
RAW-VAL-01	Raw Water Valve - Raw-VAL-01	Albany WTS	Vine St WTP																			
RAW-VAL-01A	Raw Water Valve Actuator-Raw-VAL-01	Albany WTS	Vine St WTP																			
VAL-BAL-160	Surface Wash Shutoff #6 Filter - VAL-BAL-160	Albany WTS	Vine St WTP																			
VAL-BAL-160A	Surface Wash Shutoff #6 Filter - Valve Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-25	#3 Filter Effluent - VAL-BFV-25	Albany WTS	Vine St WTP																2	1		
VAL-BFV-34	#6 Filter Influent - VAL-BFV-34	Albany WTS	Vine St WTP																2			
VAL-BFV-34A	#6 Filter Influent - Valve 34 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-35	#6 Filter Waste - VAL-BFV-35	Albany WTS	Vine St WTP																2			
VAL-BFV-35A	#6 Filter Waste - Valve 35 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-36	#6 Filter Backwash - VAL-BFV-36	Albany WTS	Vine St WTP																			
VAL-BFV-36A	#6 Filter Backwash - Valve 36 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-37	#6 Filter Effluent - VAL-BFV-37	Albany WTS	Vine St WTP																			
VAL-BFV-37A	#6 Filter Effluent - Valve 37 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-43	#6 Filter To Waste - VAL-BFV-43	Albany WTS	Vine St WTP																			
VAL-BFV-43A	#6 Filter To Waste - Valve 43 Actuator	Albany WTS	Vine St WTP																			
VAL-BFV-46	#4 Transfer Pump - VAL-BFV-46	Albany WTS	Vine St WTP																			

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												lmp	act				Likeli	hood		Tr	riggers	S
Asset Name	Description	System	Facility	Over All Rank	Rank	Total Score	Consequence Score	Likelihood Score	Trigger Score	Availability to Return asset to Service	Compliance with Regulations	Disruption to Community/ Public Image	Financial Impact (repair/ replace, private property)	Health and Safety of Employees and Public	Service Reliability	Condition Assessment Overall	Effective Operating Protocols	Planned Redundancy	Reliability	Annual Maintenance Cost	Capacity and Utilization	Obsolescence
VAL-BFV-62A	#10 Backwash - Valve 62 Actuator	Albany WTS	Vine St WTP													1			4	1		
VAL-CHK-09	#6 Check Valve - VAL-CHK-09	Albany WTS	Vine St WTP																			
VAL-CHK-21	#4 Transfer Pump - VAL-CHK-21	Albany WTS	Vine St WTP																			
WT1-01-VFD-08	Large Filter Building VFD #8	Albany WTS	Vine St WTP																			
WT1-01-VFD-09	Large Filter Building VFD #9	Albany WTS	Vine St WTP																			
WT1-04L-VFD-04	Small Filter Building VFD #4	Albany WTS	Vine St WTP																			

ATTACHMENT E-4

Vine St. WTP Risk Reduction Detail Sheet

	Location	DI .			
	Vine Street Water	Plant			
	Asset Posing Unaccep	table Risk			
Asset ID	Asset Common Name				Risk Score
ELEC-DIS-009	Main Disconnect for Pum	ps 2,4,6, and 8			2.08
	Primary Cause of Risk		Secondar	y Cause of Risk	
Туре	Category	Туре		Category	
Consequence	Effective O&M Protocols	Consequence			
✓ Likelihood		Likelihood			
	Risk Reduction Op	tion #1			
		Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary	Predictive Maintenance Performed every two years	1.79	0.29	N/A	1,500/2yr
Secondary	. rouletine maintenance : enemied every time years		0.20	1,071	1,000.231
	Risk Reduction Op	tion #2 Risk Score w/	Reduction in	Estimated Life and	Risk
Addresses	Description	Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
Primary		Орион	Kisk ocole	Cost	Reduction.cost
Secondary					
					I
	Combined Risk Reduction of Completing	Both Option #1	and Option #2	2	
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Audiesses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					
Notes/Comments	Handle and CMMC to binner Deadinting Maintanana				
	Use the new CMMS to trigger Predictive Maintenance (Thermography) on the disconnects.				
	(Thermography) on the disconnects.				

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	Location				
	Vine Street Water	r Plant			
	Asset Posing Unaccep	otable Risk			
Asset ID	Asset Common Name				Risk Score
ELC-DIS-001 ELC-DIS-002 ELC-DIS-003 ELC-DIS-004 ELC-DIS-005 ELC-DIS-007	Pump 1, 2, 3, 4, 5, and 7 ele	ctrical disconne	cts		1.88
	Primary Cause of Risk		Seconda	ry Cause of Risk	
Туре	Category	Туре		Category	
☐ Consequence	Effective O&M	Consequence			
Addresses	Risk Reduction Op	Risk Score w/	Reduction in	Estimated Lifecycle	
✓ Primary ☐ Secondary	New CMMS with Predictive Maintenenace Task every two years	Option 1.61	Risk Score 0.27	Cost N/A	Reduction:Cost
	B: LB L (; 0	. 40	1		
Addresses	Risk Reduction Op Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cos
Primary Secondary					
	Combined Risk Reduction of Completing	Both Option #1	and Option #2	2	
Addresses	Description	Risk Score w/ Option	Reduction in Risk Score	Estimated Lifecycle Cost	Risk Reduction:Cost
☐ Primary ☐ Secondary					
Notes/Comments					

Use the new CMMS to trigger Predictive Maintenance

(Thermography) on the disconnects.

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	Loca				
	Vine Street	Water Plant			
	Asset Posing Un	accontable Pick			
Asset ID		Name / Location			Risk Score
VAL-BFV-38A	#1 FILTER TO WASTE - VALVE 38 ACTUATOR	Hame / Education			NISK GCOIC
VAL-BFV-36A VAL-BFV-39A	#2 FILTER TO WASTE - VALVE 39 ACTUATOR				
VAL-BFV-39A VAL-BFV-40A	#3 FILTER TO WASTE - VALVE 39 ACTUATOR				0.44
VAL-BFV-40A	#4 FILTER TO WASTE - VALVE 40 ACTUATOR				0.44
VAL-BFV-41A VAL-BFV-42A	#5 FILTER TO WASTE - VALVE 41 ACTUATOR				
VAL-DFV-42A	#5 FILTER TO WASTE - VALVE 42 ACTUATOR				
	Primary Cause of Risk		Secondar	ry Cause of Risk	
Туре	Category	Туре	Seconda	Category	
Consequence	Category	Consequence		Category	
Likelihood	Condition Assesment Overall	Likelihood			
LIKEIII IOOU		Likelillood			
	Risk Reducti	on Ontion #1			
		Risk Score w/	Reduction in	Estimated Lifecycle	Risk
Addresses	Description	Option	Risk Score	Cost	Reduction:Cost
Primary	Replace Actuators	0.12	0.32	N/A	\$17.500
Secondary	Replace Actuators	0.12	0.32	IV/A	\$17,500
	Risk Reduction	on Option #2			
Addresses	Description	Risk Score w/	Reduction in	Estimated Lifecycle	Risk
		Option	Risk Score	Cost	Reduction:Cost
Primary					
Secondary					
	Combined Risk Reduction of Compl	eting Both Option #1 and Risk Score w/	Option #2 Reduction in	Estimated Lifernals	Risk
Addresses	Description	Option	Reduction in	Estimated Lifecycle Cost	Reduction:Cost
Primary		Орион	Nisk ocore	Cost	Reduction.cost
Secondary					
	1		1	1	ı
Notes/Comments					
	Replace actuators.				
	· ·				

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ATTACHMENT E-5

Field Data

This attachment presents the field data compiled on components of the City of Albany's Vine Street Water Treatment Plant (listed below in order of appearance).

- Raw Water Canal
- Control Building
- Elm Street Telescoping Valve
- Filter 1-6 Bldg SML
- Filter 7-10 Bldg LG
- Hydroelectric Area
- Raw Water Building
- Soda Ash Building
- Clarifier Accelerator #1
- Clarifier Accelerator #2

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