7013 3020 0001 2972 8708
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Vertellus®

July 30, 2014

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611

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AIR ENFORCEMENT BRANCH
U.S. EPA REGION 5

Air and Radiation Division
EPA Region 5
77 W. Jackson Blvd (AE-17J)
Chicago, IL 60604
Attn: Compliance Tracker

Office of Region Counsel
EPA Region 5
77 W. Jackson Blvd (C-14J)
Chicago, IL 60604

RE: DOJ No. 90-5-2-1-09022
Vertellus Agriculture & Nutrition Specialties LLC
Indianapolis Indiana
Compliance Status Report

To Whom It May Concern:

Vertellus Agriculture & Nutrition Specialties LLC (Vertellus) respectfully submits the enclosed Compliance Status Report as required in Section VII. Reporting Requirements of the Consent Decree between the United States of America and Vertellus, Civil Action No. 1:09-cv-1030 SEB-TAB.

If you have any questions, please contact me at 317-248-6511.

Sincerely,

Tamra Kress
Environmental Manager

Cc: John Jones, Vertellus
Tom Mesevage, Vertellus
Constantinos Loukeris, EPA
Deboraha Carlson, EPA
Martin Yeates, IDEM (via email)

Vertellus Agriculture & Nutrition Specialties LLC
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Indianapolis, IN 46242-0912
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Vertellus Agriculture & Nutrition Specialties LLC Indianapolis Indiana

Compliance Status Report

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1. Purpose

The Enhanced LDAR Program (ELP) required by the Consent Decree (CD) with the U.S. Environmental Protection Agency (EPA), Civil Action No. 1:09-cv-1030 SEB-TAB as Lodged on August 21, 2009 and Effective December 1, 2009 (CD), requires Vertellus Agriculture & Nutrition Specialties LLC (Vertellus) to submit this Compliance Status Report by July 31st of each year until termination of the CD. The following sections of the report are as outlined in paragraph 61.

2. The Number of Personnel Assigned to LDAR Functions at the Facility and the Percentage of Time Each Person Dedicated to Performing His/Her LDAR Functions

The following table includes the persons at the facility having a role in the LDAR program as described in the Facility-Wide LDAR Document and the percentage of time dedicated to LDAR Functions for the following time periods:

Effective Date December 1, 2009 – June 30, 2010

July 1, 2010 – June 30, 2011

July 1, 2011- June 30, 2012

July 1, 2012- June 30, 2013

July 1 2013- June 30, 2014

Role	**% Time Dedicated to LDAR Functions**				
	2010 (Dec 1, 2009-June 30, 2010)	2011 (July 1, 2010-June 30, 2011)	2012 (July 1, 2011-June 30, 2012)	2013 (July 1, 2012-June 30, 2013)	2014 (July 1, 2013-June 30, 2014)
Environmental Manager	20%	5%	5%	5%	5%
Environmental Specialist	50%	25%	25%	25%	25%
Environmental Unit Manager	40%	20%	20%	20%	20%
Environmental Unit Operator	75%	35%	0%	0%	0%
Maintenance Manager	20%	5%	2%	2%	2%
Maintenance Supervisor		15%	10%	10%	10%
Production Assistant	40%	25%	25%	5%	0%
Reliability Engineer	20%	20%	10%	5%	5%
Maintenance Planner		15%	20%	15%	15%
Mechanics	3.5%	3.5%	3.5%	3.0%	3.0%
EMSI (LDAR Contractor)	696 man-hours	2,678 man-hours	1,471 man-hours	1,753 man-hours	2,189 man-hours

Note that the percentage of time dedicated to LDAR functions is only an estimate since plant personnel are not required to record or assign hours to projects/tasks. The reduction in percent time spent by Vertellus and EMSI personnel reflects the shift from the initial implementation of the program to the ongoing monitoring now conducted by EMSI. EMSI has a full-time person on site and is responsible for the weekly pump inspections and all equipment monitoring and maintenance coordination of repairs for follow-up monitoring.

3. An Identification and Description of any Non-Compliance with the Requirements of Section V (Compliance Requirements)

The applicable sections of the CD are identified here to ensure complete reporting of any non-compliance.

A. Applicability of the Enhanced LDAR Program

The applicable requirements of the ELP and any federal, state, or local LDAR program are identified in the Facility-Wide LDAR document. The facility complies with the most stringent requirements. As a part of the Third-Party Audit, this information was reviewed and it was confirmed that Vertellus is in compliance with the most stringent LDAR requirements.

B. Facility-Wide LDAR Document

The Facility-Wide LDAR Document was developed as required within six months of the Date of Lodging and includes all of the information identified in paragraph 14 of the CD. The document is not a required submittal but was sent to EPA in February 2010. The document must be reviewed and updated on an annual basis as needed by no later than 60 days after each annual LDAR Audit Completion Date. The facility-wide LDAR document was reviewed and updated on July 24, 2014.

C. Monitoring Frequencies and Equipment

The monitoring frequencies by equipment type are identified in the Facility-Wide LDAR Document. Emission Monitoring Service, Inc. (EMSI) initiated the second quarter monitoring in April 2010, within nine months after the Date of Lodging of the CD. All monitoring data is collected using a data logger and is downloaded to the Guideware LDAR database at least weekly.

Vertellus identified two (2) valves classified as Difficult to Monitor that are required to be monitored annually and were missed in 2012. The tag numbers are 2639 and 2640. Monitoring data in 2010, 2011, and 2013 indicates that neither valve has leaked. The Single Component Inspection History Report for each valve is included in Appendix F. The change from EMSI's CLEAR database to using Guideware as the database should help prevent missed monitoring on equipment, specifically those Difficult to Monitor.

D. Leak Definitions

The leak definitions by equipment type are identified in the Facility-Wide LDAR Document. The leak definitions as identified in the CD were implemented in April 2010 which is within nine months after the Date of Lodging of the CD.

E. Repairs

As reported in the semi-annual HON, Pharma, and benzene reports included in Appendix A, all repairs were completed within 15 days or the equipment was placed on the Delay of Repair List (DORL). Quasi-Directed Maintenance was completed as required in the CD. For repairs/replacements completed per the CD, see Section 5 of this report.

F. Delay of Repair (DOR)

Vertellus complies with the DOR requirements for LDAR. There were no areas of non-compliance for the reporting period.

G. Equipment Replacement and Improvement Program

Installing New Valves. The MOC program is described in the Facility-Wide LDAR Document under Section 4 (Tracking Program). The MOC program and incorporation of the ELP requirements into the piping specifications within the Engineering Guidelines ensures that new valves installed to each Covered Process Unit and placed in LDAR service are either Certified Low-Leaking Valves or fitted with Certified Low-Leaking Valve Packing.

List of all Valves in the Covered Process Units. The list of Existing Valves was submitted to EPA on May 20, 2010 as required by the CD.

Replacing or Repacking Valves Found Leaking at or above 250 ppm. For details see section 5 of this report.

Replacing or Repacking Valves with a Screening Value between 100 and 250 ppm during the Subsequent Maintenance Shutdowns. After the First Maintenance Shutdown for the Covered Process Units it was determined that it would be more efficient to immediately enter the work order for replacement of valves with screening values between 100 ppm and 250 ppm. The valves are replaced as soon as possible or during the next equipment shutdown. A list of all valves with screening values between 100 ppm and 250 ppm was generated and is included in Appendix B.

Commercial Unavailability of Certified Low-Leaking Valve or Certified Low-Leak Valve Packing. Since the last report, no valves have been identified for replacement that could not be replaced with low-leak equipment.

Installing New Connectors. The MOC program is described in the Facility-Wide LDAR Document under Section 4 (Tracking Program). The MOC program and incorporation of the ELP requirements into the piping specifications within the Engineering Guidelines ensures that best efforts are used to install new connectors that are least likely to leak to each Covered Process Unit.

Replacing or improving connectors that leak (Screening Value at or above 250 ppm) two or more times in a rolling 24-month period. Per the CD, the leak definitions were applied starting with the second quarter monitoring for 2010 (no later than nine months from Date of Lodging). For the list of connectors that were found leaking during the semi-annual monitoring, see Section 5 of this report.

H. Management of Change (MOC)

The MOC program is described in the Facility-Wide LDAR Document under Section 4 (Tracking Program). The MOC program and incorporation of the ELP requirements into the piping specification within the Engineering Guidelines ensures that changes within the Covered Units are reviewed for LDAR compliance.

I. Training

Completion of training for all employees and contractors responsible for LDAR monitoring, maintenance of equipment, repairs, or any other duties generated by the program must be completed with one year after Date of Lodging (August 2010). Employee training was completed by August 21, 2010. Annual refresher training was competed in 2013 and will be completed during the calendar year of 2014.

J. Quality Assurance/Quality Control

Daily certifications by the monitoring technician (EMSI) are completed on each day that monitoring occurs. These records are kept on-site and reviewed as a part of the quarterly audits completed by Vertellus personnel and as a part of the Third-Party LDAR Audit. No instances of non-compliance have been identified since the last report.

K. LDAR Audits and Corrective Action

In 2013, the Audit Completion Date was June 28, 2013. The Preliminary Corrective Action Plan (CAP) was completed by July 16, 2013. The final CAP was submitted to EPA on July 19, 2013. There were no corrective actions required.

The LDAR Audit Commencement Date for this year was April 16, 2014. The Audit Completion Date was June 24, 2014. The Final CAP was submitted to EPA on July 30, 2014. No areas of non-compliance are identified in this report.

L. Certification of Compliance

Within 180 days after the initial LDAR Audit Completion Date, Vertellus shall submit the Certification of Compliance as required by paragraph 47. This certification was submitted to EPA on December 13, 2010.

M. Recordkeeping

Vertellus is in compliance with the recordkeeping requirements of the CD.

N. Operation and Maintenance of the Plant 41 Incinerator

See Section 10 of this report.

4. **An Identification of any Problems Encountered in Complying with the Requirements of Section V (Compliance Requirements)**

Since the submittal of the last Compliance status Report, no problems have been encountered in complying with the requirements of the CD. Areas of non-compliance are noted in the appropriate sections of this report. Any corrective actions will be detailed in the Final CAP Report.

5. **The Information Required in Paragraph 37-Equipment Replacement/Improvement Report**

Paragraph 37 requires the following information be provided in this report:

- Actions taken to comply with Subsection G, including identifying each piece of equipment that triggered a requirement in Subsection G, the screening value for that piece of equipment, the type of action taken (replacement, repacking, improvement, elimination), and the date when action was taken. In Appendix C, is a list of all pieces of equipment found leaking and subject to the requirements of Subsection G (commencing no later than nine months after Date of Lodging).
- Identify any required actions that were not taken and explain why. No actions required.
- Identify the schedule for any known, future replacements, repacking, improvements, or eliminations. None at this time.

6. **A Description of the LDAR Trainings that Have Been Done in Accordance with this Consent Decree**

As provided in Section 3 of this report, completion of training for all employees and contractors responsible for LDAR monitoring, maintenance of equipment, repairs, or any other duties generated by the program must be completed with one year after Date of

Lodging (August 2010). Employee training was completed by August 21, 2010. Annual refresher training for 2013 was completed. Training for 2014 is underway.

7. **Any Deviations Identified in the QA/QC performed under Subsection J of Section V (Compliance Requirements)**

   Deviations are provided in Section 3 of this report.

8. **A Summary of LDAR Audit Results including Specifically Identifying all Areas of Non-Compliance**

   A copy of the Leak Detection and Repair Program Audit Report completed by August Mack Environmental is provided in Appendix D. No areas of non-compliance were identified during the audit.

9. **The Status of all Actions Under any CAP that Was Submitted During the Reporting Period**

   No action items were required for the CAP submitted on July 19, 2013 or in the CAP submitted on July 30, 2014.

10. **The Documents and Information required under Subsection N of Section V (Compliance Requirements)**

    The TO Bypass Incident Reports are included in Appendix E. It should be noted that process feed to the reactors is stopped (which shuts down the process) when the thermal oxidizer shuts down. Vertellus does not operate the process without the control device.

Certification Statement and Signature

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is, to the best of my knowledge and belief, true, accurate, and complete.

Site Director
Brian Bence

Signature

7/29/2014
Date

APPENDIX A

SEMI-ANNUAL HON, PHARMA, BENZENE REPORTS

Vertellus™

CERTIFIED MAIL –7011 3500 0003 0606 9924

January 28, 2014

Indiana Department of Environmental Management
Office of Air Quality
Compliance and Enforcement Branch
100 North Senate Avenue
Mail Code 61-53, IGCN 1003
Indianapolis, IN 46204-2251

RE: Semi-Annual Equipment Leak Reports
Title V Permit

To Whom It May Concern:

Vertellus Agriculture & Nutrition Specialties LLC submits these semi-annual equipment leak reports as required under condition D.6.27., D.7.16., and D.9.16. of the modified Title V permit issued February 7, 2013. The attached report is a summary of the information required in permit conditions D.6.27.(a), D.7.16.(a), and D.9.16. for the period from July 1, 2013 through December 31, 2013.

If you have any questions, please contact me at (317)247-8141 ext. 6652.

Sincerely,
Vertellus Agriculture & Nutrition Specialties LLC

James D. Gross II
Environmental Specialist

Enclosures
Cc:
US EPA, Region 5 (w/encl.)
Tamra Kress – Vertellus Agriculture & Nutrition Specialties LLC (w/encl.)

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SEMIANNUAL EQUIPMENT LEAK REPORT FOR BENZENE

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 40
PERMIT CONDITION: D.7.16.

PERMIT CONDITION D.7.16.(a)(2)(A) and (B) - VALVES IN BENZENE SERVICE

July
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

August
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

September
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

October
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

November
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

December
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(b)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

PERMIT CONDITION D.7.16.(a)(2)(C) and (D)- PUMPS IN BENZENE SERVICE

July
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

August
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

September
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

October
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

November
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

December
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(b) and (d)(6)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

PERMIT CONDITION D.7.16.(a)(2)(E)- DELAY OF REPAIRS

There was no delay of repairs.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR BENZENE (cont.)

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 40
PERMIT CONDITION: D.7.16.

PERMIT CONDITION D.7.16.(a)(3)- PROCESS SHUTDOWN DATES

8/1/2013 – 8/4/2013				
8/16/2013 – 8/18/2013				
9/21/2013 – 9/28/2013				
11/18/2013 – 11/19/2013				

PERMIT CONDITION D.7.16.(a)(4)- Revisions to items in initial Report
A revised table of equipment subject to monitoring and their monitoring frequencies is provided below.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 40	Pumps	8	Monthly leak detection and repair program
Plant 40	Valves	187	Quarterly leak detection and repair program

This equipment was added to the leak detection and repair program because of a change of service in the equipment.

PERMIT CONDITION D.7.16.(a)(5)- Results of all Performance Testing
No performance tests are required at this time.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(i) and (ii)– VALVES IN GAS/VAPOR & LL SERVICE

3rd Quarter 2013

(1)	2	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.168(b).
(2)	0.12%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(1).
(3)	0.18%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(2).
(4)	1658	= THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(5)	0	= THE NUMBER OF GAS/VAPOR & LL VALVES WITH VISUAL LEAKS
(6)	1	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(7)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (2)

*See explanation below for delay of repair

4th Quarter 2013

(1)	2	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.168(b).
(2)	0.12%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(1).
(3)	0.12%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(2).
(4)	1672	= THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(5)	0	= THE NUMBER OF GAS/VAPOR & LL VALVES WITH VISUAL LEAKS
(6)	0	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(7)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (2)

Permit Condition D.6.27(a)(2)(iii) and (iv)– PUMPS IN LL SERVICE

July

(8)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	2.38%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	0.78%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	42	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

August

(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	0.78%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	42	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

September

(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	0.40%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	43	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

October

(8)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	2.33%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	0.78%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	43	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

November

(8)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	2.38%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	1.18%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	42	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON (Cont.)

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(iii) and (iv)– PUMPS IN LL SERVICE (cont.)

December

(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(9)	3	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(10)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(11)	1.18%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(12)	40	= THE NUMBER OF LL PUMPS MONITORED.
(13)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

Permit Condition D.6.27(a)(2)(v) and (vi) – CONNECTORS IN GAS/VAPOR & LL SERVICE

2nd Half 2013

(14)	16	= THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS DETECTED VIA 63.174(a).
(15)	0.23%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE CONNECTORS VIA 63.174(i)(2).
(16)	6996	= THE NUMBER OF GAS/VAPOR & LL CONNECTORS MONITORED.
(17)	1	= THE NUMBER OF GAS/VAPOR & LL CONNECTORS WITH VISUAL LEAKS
(18)	4	= THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(19)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE CONNECTORS INCLUDED IN (15).

* See explanation below for delay of repairs.

40 CFR 63.182(d)(2)(vii) and (viii)– AGITATORS IN LL SERVICE

July

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

August

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS .

September

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS .

October

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS .

November

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS .

December

(18)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a).
(19)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(b)
(20)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(21)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS .

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON (Cont.)

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(vii) - DELAY OF REPAIRS
The four connectors and one valve were not repaired within 15 days because a process unit shutdown was required to repair them.

Permit Condition D.6.27(a)(2)(viii) - MONITORING RESULTS FOR 63.164(i), D.6.7.(a), and D.6.13(d)
40 CFR 63.164(i), 63.165(a), and 63.172(f) are not applicable at this time.

Permit Condition D.6.27(a)(2)(ix)
No report at this time.

Permit Condition D.6.27(a)(2)(x)
No change in connector monitoring at this time.

Permit Condition D.6.27.(a)(3)
A revised table of equipment subject to monitoring and their monitoring frequencies is provided below.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 27	Pumps	43	Monthly leak detection and repair program
Plant 27	Agitator	1	Monthly leak detection and repair program
Plant 27	Valves	1659	Quarterly leak detection and repair program
Plant 27	Difficult to Monitor Valves	14	Annual leak detection and repair program
Plant 27	Connectors	6904	Semi-Annual leak detection and repair program
Plant 27	Difficult to Monitor Connectors	98	Annual leak detection and repair program

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(e)

63.1255(h)(3)(ii)(A) & (B) – VALVES IN GAS/VAPOR & LL SERVICE

3rd Quarter

(1) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.1255(e)(3).
(2) 0.00% = THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES AS CALCULATED VIA 63.1255(e)(6).
(3) 370 = THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(4) 0 = THE NUMBER OF GAS/VAPOR & LL VALVES VISUALLY LEAKING
(5) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.
(6) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (4).

4th Quarter

(1) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.1255(e)(3).
(2) 0.00% = THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES AS CALCULATED VIA 63.1255(e)(6).
(3) 372 = THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(4) 0 = THE NUMBER OF GAS/VAPOR & LL VALVES VISUALLY LEAKING
(5) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.
(6) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (4).

63.1255(e)(5)(vi)(A)

There were no valve reassignments this reporting period.

63.1255(e)(5)(vi)(B)

$\%V_{LO} = 0.0\%$

63.1255(h)(3)(ii)(C) & (D) – PUMPS IN LL SERVICE

July

(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

August

(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

September

(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT (CONT.)

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(e)

63.1255(h)(3)(ii)(C) & (D) – PUMPS IN LL SERVICE (cont.)

October
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

November
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS

December
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(8) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(9) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(10) 12 = THE NUMBER OF LL PUMPS MONITORED.
(11) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(12) .1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(13) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS

63.1255(h)(3)(ii)(C) & (D) – AGITATORS IN LL SERVICE

July
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

August
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

September
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

October
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

November
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

December
(14) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(15) 0 = THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(16) 1 = THE NUMBER OF LL AGITATORS MONITORED
(17) 0 = THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT (CONT.)

REPORT PERIOD FROM: 07/01/2013 to 12/31/2013
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(e)

63.1255(h)(3)(ii)(E) & (F) – COMPRESSORS
There are no compressors in HAP service. Therefore this section is not applicable.

63.1255(h)(3)(ii)(G) & (H) – CONNECTORS IN GAS/VAPOR & LL SERVICE
2nd Half 2013
(18) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS DETECTED VIA 63.1255(b)(4)(iii).
(19) 0.00% = THE PERCENT OF LEAKING GAS/VAPOR & LL CONNECTORS AS CALCULATED BY 63.1255(b)(4)(iii).
(20) 1683 = THE NUMBER OF GAS/VAPOR & LL CONNECTORS MONITORED.
(21) 0 = THE NUMBER OF GAS/VAPOR & LL CONNECTORS WITH VISUAL LEAKS.
(22) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.
(23) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE CONNECTORS INCLUDED IN (15).
(24) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL SERVICE CONNECTORS DETECTED VISUALLY

63.1255(h)(3)(ii)(I) - DELAY OF REPAIRS
There was no delay of repairs during this reporting period.

63.1255(h)(3)(ii)(J) – MONITORING RESULTS FOR 63.164(i), 63.165(a), and 63.172(f)
40 CFR 63.164(i), 63.165(a), and 63.172(f) are not applicable at this time.

63.1255(h)(3)(ii)(K) – INITIATION OF A MONTHLY MONITORING PROGRAM UNDER 63.1255(c)(4)(ii) or 63.1255(e)(4)(i)
A monthly monitoring program under 63.1255(c)(4)(ii) or 63.1255(e)(4(i) is not required at this time.

63.1255(h)(3)(ii)(L) – CHANGE IN CONNECTOR MONITORING PER 63.174(c)
Monitoring of connectors that have been opened or had the seal broken will be done in accordance with 63.174.(c)(1)(ii). This does not apply to connectors that are repaired in accordance with D.9.4.

63.1255(h)(3)(iii)
This requirement is not applicable at this time, since Vertellus does not operate any batch processes.

**63.1255(h)(3)(iv) **
A revised table of equipment subject to monitoring and their monitoring frequencies is provided below.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 41	Agitator	1	Monthly leak detection and repair program
Plant 41	Pumps	12	Monthly leak detection and repair program
Plant 41	Valves	370	Quarterly leak detection and repair program
Plant 41	Difficult to Monitor Valves	3	Annual leak detection and repair program
Plant 41	Connectors	1664	Semi-Annual leak detection and repair program
Plant 41	Difficult to Monitor Connectors	19	Annual leak detection and repair program

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AND
City of Indianapolis
Office of Environemental Services

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Mailing Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-7552-00315

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

Annual Compliance Certification Letter _____

Test Result (specify) _____

X Report (specify) 2nd Semi-Annual Equipment Leak Report

Notification (specify) _____

Affidavit (specify) _____

Other (specify) _____

I certify, that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name: Brian Bence
Title/Position: Site Director
Phone: 317-390-2412
Date: January 27, 2014

Vertellus™

CERTIFIED MAIL –7013 3020 0001 2974 2797

July 17, 2014

Indiana Department of Environmental Management
Office of Air Quality
Compliance and Enforcement Branch
100 North Senate Avenue
Mail Code 61-53, IGCN 1003
Indianapolis, IN 46204-2251

RE: Semi-Annual Equipment Leak Reports
Title V Permit

To Whom It May Concern:

Vertellus Agriculture & Nutrition Specialties LLC submits these semi-annual equipment leak reports as required under condition D.6.27., D.7.16., and D.9.16. of the modified Title V permit issued February 7, 2013. The attached report is a summary of the information required in permit conditions D.6.27.(a), D.7.16.(a), and D.9.16. for the period from January 1, 2014 through June 30, 2014.

If you have any questions, please contact me at (317)247-8141 ext. 6652.

Sincerely,
Vertellus Agriculture & Nutrition Specialties LLC

James D. Gross II

James D. Gross II
Environmental Specialist

Enclosures
Cc:
US EPA, Region 5 (w/encl.)
Tamra Kress – Vertellus Agriculture & Nutrition Specialties LLC (w/encl.)

Vertellus Agriculture & Nutrition Specialties LLC
1500 South Tibbs Avenue
Indianapolis, IN 46241
Phone. 317 247 8141 www.vertellus.com

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SEMIANNUAL EQUIPMENT LEAK REPORT FOR BENZENE

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PERMIT CONDITION: D.7.16.
PROCESS UNIT IDENTIFICATION, D.7.16.(a)(1): Plant 40

PERMIT CONDITION D.7.16.(a)(2)(A) and (B) - VALVES IN BENZENE SERVICE

January
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

February
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

March
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

April
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

May
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

June
(1) 0 = NUMBER OF VALVES THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.9.(a)
(2) 0 = NUMBER OF VALVES FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

PERMIT CONDITION D.7.16.(a)(2)(C) and (D)- PUMPS IN BENZENE SERVICE

January
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) & (b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

February
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) &(b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

March
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) & (b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

April
(1) 1 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) & (b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

May
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) & (b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

June
(1) 0 = NUMBER OF PUMPS THAT LEAKS WERE DETECTED VIA PERMIT CONDITION D.7.4.(a) & (b)
(2) 0 = NUMBER OF PUMPS FOR WHICH LEAKS WERE NOT REPAIRED WITHIN 15 DAYS

PERMIT CONDITION D.7.16.(a)(2)(E) and (F)- COMPRESSORS IN BENZENE SERVICE

There are no compressors in benzene service.

PERMIT CONDITION D.7.16.(a)(2)(G)- DELAY OF REPAIRS

There was no delay of repairs.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR BENZENE (cont.)

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PERMIT CONDITION: D.7.16.
PROCESS UNIT IDENTIFICATION, D.7.16.(a)(1): Plant 40

PERMIT CONDITION D.7.16.(a)(3)- PROCESS SHUTDOWN DATES

1/9/2014-1/19/2014				
5/4/2014				
6/7/2014-6/10/2014				
6/12/2014				

PERMIT CONDITION D.7.16.(a)(4)- Revisions to items in initial Report
Below is an updated count for the number of valves monitored in Plant 40.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 40	Valves	186	Quarterly leak detection and repair program

PERMIT CONDITION D.7.16.(a)(5)- Results of all Performance Testing
There is no equipment operated under no detectable emissions; therefore results of performance testing or monitoring is not required.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(i) and (ii)– VALVES IN GAS/VAPOR & LL SERVICE

1st Quarter 2014

(1)	12	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.168(b).
(2)	0.72%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(1).
(3)	0.42%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(2).
(4)	1659	= THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(5)	0	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(6)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (1)

2nd Quarter 2014

(1)	7	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.168(b).
(2)	0.43%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(1).
(3)	0.58%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES VIA 63.168(e)(2).
(4)	1640	= THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(5)	4	= THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(6)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (1)

Permit Condition D.6.27(a)(2)(iii) and (iv)– PUMPS IN LL SERVICE

January

(7)	2	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	4.65%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.56%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

February

(7)	1	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	2.33%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.95%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

March

(7)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.95%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

April

(7)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.56%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

May

(7)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.16%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

*See delay of repair explanations.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON (Cont.)

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(iii) and (iv)– PUMPS IN LL SERVICE (cont.)

June

(7)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(1) AND 63.163(b)(2).
(8)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.163(b)(3)
(9)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(4).
(10)	1.16%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.163(d)(2).
(11)	43	= THE NUMBER OF LL PUMPS MONITORED.
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*

40 CFR 63.173– AGITATORS IN LL SERVICE

January

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

February

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

March

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

April

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

May

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

June

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.173(a)
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.167(b)
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED.
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS

Permit Condition D.6.27(a)(2)(v) and (vi) – CONNECTORS IN GAS/VAPOR & LL SERVICE

(17)	9	= THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS DETECTED VIA 63.174(a).
(18)	0.13%	= THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE CONNECTORS VIA 63.174(i)(2).
(19)	6765	= THE NUMBER OF GAS/VAPOR & LL CONNECTORS MONITORED.
(20)	1	= THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(21)	0	= THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE CONNECTORS INCLUDED IN (17).

*See delay of repair explanations.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR HON (Cont.)

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 27
PERMIT CONDITION: D.6.27.

Permit Condition D.6.27(a)(2)(vii) - DELAY OF REPAIRS
There were two (2) valves and one (1) connector that were put on delay of repair because they required a process unit shutdown to repair. There was one (1) valve that parts had to be ordered for the repair..

Permit Condition D.6.27(a)(2)(viii) - MONITORING RESULTS FOR 63.164(i), 63.165(a), and 63.172(f)
40 CFR 63.164(i), 63.165(a), and 63.172(f) are not applicable at this time.

Permit Condition D.6.27(a)(2)(ix)
No monthly monitoring program or quality improvement program initiated at this time.

Permit Condition D.6.27(a)(2)(x)
Monitoring of connectors that have been opened or had the seal broken will be done in accordance with D.6.14.(c)(1)(ii). This does not apply to connectors that are repaired in accordance with D.6.14.(d)..

Permit Condition D.6.27(a)(3)
A revised table of equipment subject to monitoring and their monitoring frequencies is provided below.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 27	Valves	1639	Quarterly leak detection and repair program
Plant 27	Connectors	6736	Semi-Annual leak detection and repair program
Plant 27	Difficult to Monitor Connectors	98	Annual leak detection and repair program
Plant 27	Inaccessible Connectors	1	Annual leak detection and repair program

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(a)

63.1255(h)(3)(ii)(A) & (B) – VALVES IN GAS/VAPOR & LL SERVICE

1st Quarter 2014

(1) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.1255(e)(3).
(2) 0.00% = THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES AS CALCULATED VIA 63.1255(e)(6).
(3) 370 = THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(4) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.*
(5) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (1).

2nd Quarter 2014

(1) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES DETECTED VIA 63.1255(e)(3).
(2) 0.00% =THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE VALVES AS CALCULATED VIA 63.1255(e)(6).
(3) 373 = THE NUMBER OF GAS/VAPOR & LL VALVES MONITORED.
(4) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL VALVES THAT WERE NOT REPAIRED WITHIN 15 DAYS.
(5) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE VALVES INCLUDED IN (1).

63.1255(e)(5)(vi)(A)

There were no valve reassignments this reporting period.

63.1255(e)(5)(vi)(B)

$\%V_{LO} = 0.00\%$

63.1255(h)(3)(ii)(C) & (D) – PUMPS IN LL SERVICE

January

(6) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv)
(9) 12 = THE NUMBER OF LL PUMPS MONITORED.
(10) 1.39% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

February

(6) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(9) 12 = THE NUMBER OF LL PUMPS MONITORED.
(10) 0.69% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

March

(6) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(9) 12 = THE NUMBER OF LL PUMPS MONITORED.
(10) 0.00% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

April

(6) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7) 0 = THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8) 0.00% = THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(9) 12 = THE NUMBER OF LL PUMPS MONITORED.
(10) 0.00% = THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11) 1 = THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12) 0 = THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

- See delay of repair explanations

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT (CONT.)

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(a)

63.1255(h)(3)(ii)(C) & (D) – PUMPS IN LL SERVICE (cont.)

May

(6)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7)	2	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(9)	12	= THE NUMBER OF LL PUMPS MONITORED.
(10)	0.00%	= THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11)	1	= THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

June

(6)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(B).
(7)	0	= THE NUMBER OF LEAKING LL PUMPS DETECTED VIA 63.1255(c)(2)(iii)
(8)	0.00%	= THE PERCENT OF LEAKING LL SERVICE PUMPS AS CALCULATED BY 63.1255(c)(4)(iv).
(9)	12	= THE NUMBER OF LL PUMPS MONITORED.
(10)	0.00%	= THE ROLLING 12 MONTH AVERAGE PERCENT LEAKING AS CALCUALTED BY 63.1255(c)(4)(ii)
(11)	1	= THE ROLLING 12 MONTH NUMBER OF LEAKING PUPMS AS CALCULATED BY 63.1255(c)(4)(ii)
(12)	0	= THE NUMBER OF LEAKING LL PUMPS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

63.1255(h)(3)(ii)(C) & (D) – AGITATORS IN LL SERVICE

January

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

February

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

March

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

April

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(15)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

May

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

June

(13)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(i) AND (c)(2)(ii)(A).
(14)	0	= THE NUMBER OF LEAKING LL AGITATORS DETECTED VIA 63.1255(c)(2)(iii).
(15)	1	= THE NUMBER OF LL AGITATORS MONITORED
(16)	0	= THE NUMBER OF LEAKING LL AGITATORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.

63.1255(h)(3)(ii)(E) & (F) – COMPRESSORS

There are no compressors in HAP service. Therefore this section is not applicable.

SEMIANNUAL EQUIPMENT LEAK REPORT FOR PHARMA MACT (CONT.)

REPORT PERIOD FROM: 01/01/2014 to 06/30/2014
PROCESS UNIT: Plant 41
Permit Condition: D.9.16.(a)

63.1255(h)(3)(ii)(G) & (H) – CONNECTORS IN GAS/VAPOR & LL SERVICE

(17) 1 = THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS DETECTED VIA 63.174(a)(1) and (2).
(18) 0.06% = THE PERCENT OF LEAKING GAS/VAPOR & LL SERVICE CONNECTORS AS CALCULATED BY 63.174(i).
(19) 1661 = THE NUMBER OF GAS/VAPOR & LL CONNECTORS MONITORED.
(20) 0 = THE NUMBER OF LEAKING GAS/VAPOR & LL CONNECTORS THAT WERE NOT REPAIRED WITHIN 15 DAYS.
(21) 0 = THE NUMBER OF NONREPAIRABLE GAS/VAPOR & LL SERVICE CONNECTORS INCLUDED IN (15).

63.1255(h)(3)(ii)(I) - DELAY OF REPAIRS

There was no delay of repairs this reporting period.

63.1255(h)(3)(ii)(J) – MONITORING RESULTS FOR 63.164(i), 63.165(a), and 63.172(f)

40 CFR 63.164(i), 63.165(a), and 63.172(f) are not applicable at this time.

63.1255(h)(3)(ii)(K) – INITIATION OF A MONTHLY MONITORING PROGRAM UNDER 63.1255(c)(4)(ii) or 63.1255(e)(4)(i)

A monthly monitoring program under 63.1255(c)(4)(ii) or 63.1255(e)(4(i) is not required at this time.

63.1255(h)(3)(ii)(L) – CHANGE IN CONNECTOR MONITORING PER 63.174(c)

Monitoring of connectors that have been opened or had the seal broken will be done in accordance with 63.174.(c)(1)(ii).
This does not apply to connectors that are repaired in accordance with D.9.4.

63.1255(h)(3)(iii)

This requirement is not applicable at this time, since Vertellus does not operate any batch processes.

63.1255(h)(3)(iv)

A revised table of equipment subject to monitoring and their monitoring frequencies is provided below.

Process Group Identification	Type of Equipment	Number of each Equipment	Method of Compliance
Plant 41	Valves	371	Quarterly leak detection and repair program
Plant 41	Difficult to Monitor Valves	3	Annual leak detection and repair program
Plant 41	Connectors	1659	Semi-Annual leak detection and repair program
Plant 41	Difficult to Monitor Connectors	19	Annual Leak detection and repair program

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AND
City of Indianapolis
Office of Environemental Services

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Vertellus Agriculture & Nutrition Specialties LLC
Source Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Mailing Address: 1500 South Tibbs Avenue, Indianapolis, Indiana 46242
Part 70 Permit No.: T097-7552-00315

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

Annual Compliance Certification Letter _____

Test Result (specify) _____

X Report (specify) Semi-Annual Equipment Leak Report

Notification (specify) _____

Affidavit (specify) _____

Other (specify) _____

I certify, that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name: Brian Bence
Title/Position: Site Director
Phone: 317-390-2412
Date: July 17, 2014

APPENDIX B

LIST OF VALVES WITH SCREENING VALUES BETWEEN 100 PPM AND 250 PPM

Screening Value Between 100-250 PPM

Area	Tag #	Monitoring Date	Reading	Replacement Date	Description
27-PYRID	3241	5/18/2010	146	5/11/2011	REPLACED VALVE
27-PYRID	3506	5/22/2010	207	11/2/2010	REPLACED VALVE
27-PYRID	2769	6/25/2010	131	5/10/2011	REPLACED VALVE
27-PYRID	4043	10/16/2010	126	6/23/2011	REPLACED VALVE
27-PYRID	4043	10/16/2010	126	6/23/2011	REPLACED VALVE
27-PYRID	2046	12/14/2010	132	6/23/2011	REPLACED VALVE
27-PYRID	2111	12/14/2010	120	6/23/2011	REPLACED VALVE
27-PYRID	2979	12/15/2010	215	5/10/2011	REPLACED VALVE
27-PYRID	2979	12/15/2010	215	5/10/2011	REPLACED VALVE
27-PYRID	2980	12/15/2010	187	6/23/2011	REPLACED VALVE
27-PYRID	2980	12/15/2010	187	6/23/2011	REPLACED PACKING
27-PYRID	2981	12/15/2010	131	6/23/2011	REPLACED VALVE
27-PYRID	2981	12/15/2010	131	6/23/2011	REPLACED VALVE
27-PYRID	2982	12/15/2010	119	6/23/2011	REPLACED VALVE
27-PYRID	2982	12/15/2010	119	6/23/2011	REPLACED VALVE
41-CYANO	265	12/16/2010	111	4/27/2011	REPLACED VALVE
41-CYANO	324	12/16/2010	185	11/23/2011	REPLACED VALVE
27-PYRID	2732	12/16/2010	180	6/23/2011	REPLACED VALVE
27-PYRID	2734	12/16/2010	163	6/23/2011	REPLACED VALVE
27-PYRID	2654	12/16/2010	224	6/23/2011	REPLACED VALVE
27-PYRID	2655	12/16/2010	151	6/23/2011	REPLACED VALVE
27-PYRID	2656	12/16/2010	122	6/23/2011	REPLACED VALVE
27-PYRID	2656	12/16/2010	122	6/23/2011	REPLACED VALVE
27-PYRID	2657	12/16/2010	102	6/23/2012	REPLACED VALVE
27-PYRID	2455	1/14/2011	135	6/22/2011	REPLACED VALVE
27-PYRID	2215	1/17/2011	162	6/23/2011	REPLACED VALVE
27-PYRID	2215	1/17/2011	162	6/23/2011	REPLACED VALVE
41-CYANO	307	1/21/2011	120	6/20/2011	REPLACED VALVE
27-PYRID	3847	1/25/2011	181	5/16/2011	REPLACED VALVE
27-PYRID	3214	2/15/2011	117	5/10/2011	REPLACED VALVE
27-PYRID	3584	2/22/2011	207	6/23/2011	REPLACED VALVE
27-PYRID	3721	2/22/2011	230	5/16/2011	REPLACED VALVE
27-PYRID	2167	4/6/2011	140	6/23/2011	REPLACED VALVE
27-PYRID	02610L	4/8/2011	136	6/23/2011	REPLACED VALVE
27-PYRID	2705	4/13/2011	105	7/1/2011	REPLACED VALVE
41-CYANO	215	4/20/2011	143	6/20/2011	REPLACED VALVE
27-PYRID	3327	5/2/2011	103	6/23/2011	REPLACED VALVE
27-PYRID	3451	5/2/2011	131	6/23/2011	REPLACED VALVE
27-PYRID	3601	5/4/2011	132	6/23/2011	REPLACED VALVE
41-CYANO	25	6/1/2011	168	2/7/2012	REPLACED VALVE
41-CYANO	66	6/2/2011	120	9/22/2011	Permanently Out of Service
27-PYRID	2544	7/12/2011	122	2/28/2012	Permanently Out of Service

Screening Value Between 100-250 PPM

Area	Tag #	Monitoring Date	Reading	Replacement Date	Description
27-PYRID	2545	7/12/2011	154	2/28/2012	Permanently Out of Service
27-PYRID	2546	7/12/2011	180	2/28/2012	Permanently Out of Service
27-PYRID	2547	7/12/2011	175	2/28/2012	Permanently Out of Service
27-PYRID	02624-000	7/13/2011	109	2/28/2012	Permanently Out of Service
27-PYRID	2628	7/13/2011	117	3/16/2012	REPLACED VALVE
27-PYRID	2702	7/13/2011	164	2/28/2012	REPLACED VALVE
27-PYRID	2849	7/14/2011	106	7/18/2012	Permanently Out of Service
27-PYRID	2875	7/14/2011	136	7/2/2012	REPLACED VALVE
27-PYRID	3907	7/14/2011	238	3/20/2012	REPLACED VALVE
27-PYRID	3044	8/2/2011	116	10/14/2010	REPLACED VALVE
27-PYRID	3994	10/4/2011	141	7/2/2012	REPLACED VALVE
27-PYRID	2436	10/6/2011	131	6/29/2012	REPLACED VALVE
27-PYRID	2538	10/10/2011	113	2/28/2012	REPLACED VALVE
27-PYRID	2564	10/10/2011	149	3/5/2012	REPLACED VALVE
27-PYRID	2868	10/11/2011	116	9/7/2012	REPLACED PACKING
27-PYRID	3908	10/17/2011	226	3/20/2012	REPLACED VALVE
27-PYRID	3911	10/17/2011	194	3/20/2012	REPLACED VALVE
27-PYRID	3912	10/17/2011	122	3/20/2012	REPLACED VALVE
27-PYRID	3914	10/17/2011	117	3/20/2012	REPLACED VALVE
27-PYRID	3915	10/17/2011	146	3/20/2012	REPLACED VALVE
27-PYRID	3915	10/17/2011	146	3/20/2012	REPLACED VALVE
27-PYRID	3208	11/1/2011	103	3/20/2012	REPLACED VALVE
27-PYRID	3237	11/8/2011	104	3/19/2012	REPLACED VALVE
27-PYRID	3545	11/9/2011	161	3/15/2012	REPLACED VALVE
27-PYRID	3584	11/10/2011	187	6/23/2011	Already LLValve
27-PYRID	3576	11/10/2011	115	2/20/2012	REPLACED VALVE
27-PYRID	3592	11/10/2011	126	2/20/2012	REPLACED VALVE
27-PYRID	3095	2/2/2012	101	6/29/2012	REPLACED VALVE
27-PYRID	02614A	4/12/2012	138	4/18/2012	REPLACED VALVE
27-PYRID	2624	4/12/2012	101	3/16/2012	Already LLValve
27-PYRID	2646	4/12/2012	122	7/2/2012	REPLACED VALVE
27-PYRID	2715	4/12/2012	139	8/22/2012	REPLACED VALVE
27-PYRID	3890	8/23/2012	212	3/12/2013	REPLACED VALVE
27-PYRID	2159	1/22/2013	165	3/14/2013	REPLACED VALVE
27-PYRID	2501	1/24/2013	117	3/14/2013	REPLACED VALVE
27-PYRID	2676	1/24/2013	176	3/18/2013	REPLACED VALVE
27-PYRID	2677	1/24/2013	126	3/18/2013	REPLACED VALVE
27-PYRID	2393	4/9/2013	139	5/30/2013	REPLACED VALVE
27-PYRID	2595	4/10/2013	156	7/12/2013	REPLACED VALVE
27-PYRID	2720	4/15/2013	112	6/27/2013	REPLACED VALVE
41-CYANO	118	6/4/2013	138	8/14/2013	REPLACED VALVE
27-PYRID	3948	7/18/2013	168	7/13/2014	REPLACED VALVE

Screening Value Between 100-250 PPM

Area	Tag #	Monitoring Date	Reading	Replacement Date	Description
27-PYRID	2675	7/16/2013	121	8/30/2013	REPLACED VALVE
27-PYRID	2517	1/20/2014	120	7/13/2014	REPLACED VALVE
27-PYRID	2004	4/15/2014	119	7/18/2014	REPLACED VALVE
27-PYRID	3216	8/12/2013	110	9/10/2013	REPLACED PACKING
27-PYRID	3281	2/14/2014	150	6/3/2014	REPLACED VALVE
27-PYRID	3877	2/20/2014	129	6/3/2014	REPLACED VALVE
27-PYRID	3881	2/20/2014	188	6/3/2014	REPLACED VALVE

APPENDIX C

REPORT OF EQUIPMENT LEAKS SUBJECT TO SUBPART G

VALVES

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	LLValve	LLPacking	LowLeakDate	Comments
41-CYANO	00019	90000641	VALVE	MT-600.211	3/18/2011	727		VP	TP	3/23/2011	3/23/2011	9	TRUE	FALSE	4/27/2011	WORK ORDER CHANGED FROM 90000602
41-CYANO	00019	90000641	VALVE	MT-600.211	3/18/2011	727		VP			3/29/2011		TRUE	FALSE	4/27/2011	WORK ORDER CHANGED FROM 90000602
41-CYANO	00019	90000641	VALVE	MT-600.211	3/18/2011	727		VP	RV	4/26/2011	4/27/2011	34	TRUE	FALSE	4/27/2011	WORK ORDER CHANGED FROM 90000602
41-CYANO	00059	90000142	VALVE	PP-213B	7/28/2010		VSBL	BON	TBON	7/28/2010	7/28/2010	95	TRUE	FALSE	8/10/2010	
41-CYANO	00167	90000840	VALVE	PP-006D	6/7/2011	44500		VP	RV	6/10/2011	6/10/2011	10	TRUE	FALSE	6/10/2011	
41-CYANO	00170	90000612	VALVE	PP-006D	3/25/2011	1315		VP	TP	3/29/2011	3/29/2011	78	TRUE	FALSE	4/27/2011	
41-CYANO	00170	90000612	VALVE	PP-006D	3/25/2011	1315		VP			4/21/2011		TRUE	FALSE	4/27/2011	
41-CYANO	00170	90000612	VALVE	PP-006D	3/25/2011	1315		VP	RV	4/26/2011	4/27/2011	8	TRUE	FALSE	4/27/2011	
41-CYANO	00215	90000606	VALVE	PP-010A	3/21/2011	635		VP	TP	3/23/2011	3/23/2011	1318	TRUE	FALSE	6/20/2011	
41-CYANO	00215	90000606	VALVE	PP-010A	3/21/2011	635		VP			3/29/2011		TRUE	FALSE	6/20/2011	
41-CYANO	00215	90000606	VALVE	PP-010A	3/21/2011	635		VP	RV	6/20/2011	6/21/2011	11	TRUE	FALSE	6/20/2011	
41-CYANO	00235	90000803	VALVE	PP-034A	6/8/2011	540		VP	TP	6/13/2011	6/13/2011	9	TRUE	FALSE	8/1/2011	
41-CYANO	00235	90000803	VALVE	PP-034A	6/8/2011	540		VP			7/27/2011		TRUE	FALSE	8/1/2011	
41-CYANO	00235	90000803	VALVE	PP-034A	6/8/2011	540		VP	RV	8/1/2011	8/2/2011	2	TRUE	FALSE	8/1/2011	
41-CYANO	00267	90000438	VALVE	MS-6	12/16/2010	2040		VP	TP	12/17/2010	12/17/2010	12	TRUE	FALSE	6/16/2011	
41-CYANO	00307	90000439	VALVE	MS-034A	12/16/2010	878		VP	TP	12/20/2010	12/21/2010	94	TRUE	FALSE	6/20/2011	
41-CYANO	00307	90000439	VALVE	MS-034A	12/16/2010	878		VP			1/7/2011		TRUE	FALSE	6/20/2011	
41-CYANO	00307	90000439	VALVE	MS-034A	12/16/2010	878		VP	RV	6/20/2011	6/21/2011	10	TRUE	FALSE	6/20/2011	
41-CYANO	00308	90000460	VALVE	MS-034A	12/16/2010	647		BON	WO	12/16/2010	12/16/2010	646	TRUE	FALSE	6/20/2011	
41-CYANO	00308	90000460	VALVE	MS-034A	12/16/2010	647		BON	TBON	12/30/2010	12/30/2010	996	TRUE	FALSE	6/20/2011	
41-CYANO	00308	90000460	VALVE	MS-034A	12/16/2010	647		BON			12/30/2010		TRUE	FALSE	6/20/2011	
41-CYANO	00308	90000460	VALVE	MS-034A	12/16/2010	647		BON	RV	6/20/2011	6/21/2011	9	TRUE	FALSE	6/20/2011	
41-CYANO	00310	90000461	VALVE	AS-008	12/16/2010	836		VP	TP	12/17/2010	12/17/2010	40	TRUE	FALSE	6/20/2011	
41-CYANO	00310	90000461	VALVE	AS-008	12/16/2010	836		VP	RV	6/20/2011	6/21/2011	7	TRUE	FALSE	6/20/2011	
41-CYANO	00319	90001445	VALVE	MS-34A	12/29/2011		VSBL	SC	RV	1/3/2012	1/3/2012	1	TRUE	FALSE	1/3/2012	
41-CYANO	00320	90000462	VALVE	MS-034A	12/16/2010	881		VP	TP	12/16/2010	12/16/2010	1215	FALSE	TRUE	12/23/2010	
41-CYANO	00320	90000462	VALVE	MS-034A	12/16/2010	881		VP	RP	12/23/2010	12/28/2010	6	FALSE	TRUE	12/23/2010	
41-CYANO	00324	90001340	VALVE	MS-034A	11/21/2011		VSBL	VP	RV	11/23/2011	11/23/2011	8	TRUE	FALSE	11/23/2011	
41-CYANO	01726	90000610	VALVE	MT-600.11	3/21/2011	1445		VP	TP	3/23/2011	3/23/2011	414	TRUE	FALSE	4/26/2011	
41-CYANO	01726	90000610	VALVE	MT-600.11	3/21/2011	1445		VP			3/30/2011		TRUE	FALSE	4/26/2011	
41-CYANO	01726	90000610	VALVE	MT-600.11	3/21/2011	1445		VP	RV	4/26/2011	5/4/2011	2	TRUE	FALSE	4/26/2011	
41-CYANO	01728	90000611	VALVE	MT-600.11	3/21/2011	615		VP	TP	3/23/2011	3/23/2011	69	TRUE	FALSE	4/26/2011	
41-CYANO	01728	90000611	VALVE	MT-600.11	3/21/2011	615		VP			3/30/2011		TRUE	FALSE	4/26/2011	
41-CYANO	01728	90000611	VALVE	MT-600.11	3/21/2011	615		VP	RV	4/26/2011	5/4/2011	2	TRUE	FALSE	4/26/2011	
27-PYRID	02003	90000201	VALVE	TK-263	8/31/2010	614		VP	RV	9/2/2010	9/3/2010	6	TRUE	FALSE	9/2/2010	
27-PYRID	2004	90002720	VALVE	TK-263	1/13/2014 11:39	564	FALSE	PLUG	TIGHTEN BOLTS	1/15/2014 13:50	1/16/2014 12:23	132	TRUE	FALSE	7/18/2014	CHECK VALVE
27-PYRID	02014	90000424	VALVE	PP-035	12/14/2010	5223		VP	TP	12/16/2010	12/16/2010	938	TRUE	FALSE	12/21/2010	
27-PYRID	02014	90000424	VALVE	PP-035	12/14/2010	5223		VP	RV	12/21/2010	12/29/2010	4	TRUE	FALSE	12/21/2010	
27-PYRID	02046	90000002	VALVE	TK-263	5/19/2010	887		VP	TP	5/21/2010	5/21/2010	1253	TRUE	FALSE	6/23/2011	
27-PYRID	02046	90000002	VALVE	TK-263	5/19/2010	887		VP	TP	5/24/2010	5/24/2010	64	TRUE	FALSE	6/23/2011	
27-PYRID	02053	90000003	VALVE	TK-263	5/19/2010	3126		VP	TP	5/21/2010	5/21/2010	7	TRUE	FALSE	6/20/2011	
27-PYRID	2110	90002081	VALVE	TK-262	1/22/2013 14:17	690	FALSE	VALVE PAC	TIGHTEN PACKING	1/23/2013 6:30	1/23/2013 16:52	2568	TRUE	FALSE	2/7/2013	
27-PYRID	2110	90002081	VALVE	TK-262	1/22/2013 14:17	690	FALSE	VALVE PAC	REPLACE VALVE	2/7/2013 19:00	2/11/2013 13:03	12	TRUE	FALSE	2/7/2013	ON DOR LIST
27-PYRID	02123	90000426	VALVE	TK-262	12/14/2010	1013		VP	TP	12/16/2010	12/16/2010	8	TRUE	FALSE	12/14/2010	ALREADY A LL VALVE WHEN LEAK FOUND
27-PYRID	02144	90000623	VALVE	TK-262	4/6/2011	733		VP	TP	4/10/2011	4/11/2011	25	TRUE	FALSE	5/3/2011	
27-PYRID	02144	90000623	VALVE	TK-262	4/6/2011	733		VP	RV	5/3/2011	5/4/2011	2	TRUE	FALSE	5/3/2011	
27-PYRID	02150	90000427	VALVE	TK-262	12/14/2010	1469		VP	TP	12/16/2010	12/16/2010	47	TRUE	FALSE	12/21/2010	
27-PYRID	02150	90000427	VALVE	TK-262	12/14/2010	1469		VP	RV	12/21/2010	12/29/2010	3	TRUE	FALSE	12/21/2010	
27-PYRID	2151	90002400	VALVE	TK-262	7/10/2013 15:46	595	FALSE	VALVE PAC	TIGHTEN BOLTS	7/15/2013 14:30	7/15/2013 16:02	66	TRUE	FALSE	7/16/2014	CHECK VALVE
27-PYRID	2151	90002861	VALVE	TK-262	4/16/2014 10:56	1594	FALSE	PLUG	METHOD USED NOT AV	4/17/2014 2:00	4/17/2014 13:52	1247	TRUE	FALSE	7/16/2014	CHECK VALVE
27-PYRID	2152	90002560	VALVE	TK-262	10/3/2013 11:20	3348	FALSE	VALVE PAC	TIGHTEN PACKING	10/4/2013 2:00	10/4/2013 12:16	304	TRUE	FALSE	10/14/2013	
27-PYRID	2152	90002560	VALVE	TK-262	10/3/2013 11:20	3348	FALSE	VALVE PAC	REPLACE VALVE	10/17/2013 3:30	10/17/2013 13:52	8	TRUE	FALSE	10/14/2013	
27-PYRID	2161	90002130	VALVE	PP-032	3/11/2013 0:00	0	TRUE	VALVE PAC	REPLACE VALVE	5/1/2013 14:00	5/2/2013 14:11	2	TRUE	FALSE	5/1/2013	
27-PYRID	2161	90002130	VALVE	PP-032	3/11/2013 0:00	0	TRUE	VALVE PAC	ENVIRONMENTALLY RI	3/14/2013 13:00			TRUE	FALSE	5/1/2013	
27-PYRID	02165	90000428	VALVE	PP-032	12/14/2010	666		VP	TP	12/16/2010	12/16/2010	575	TRUE	FALSE	12/21/2010	
27-PYRID	02165	90000428	VALVE	PP-032	12/14/2010	666		VP	RV	12/20/2010	12/21/2010	111	TRUE	FALSE	12/21/2010	
27-PYRID	02171	90001748	VALVE	TK-261	7/9/2012	1216		BON	TBON	7/11/2012	7/11/2012	47	TRUE	FALSE	7/20/2012	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	LLValve	LLPacking	LowLeakDate	Comments
27-PYRID	02171	90001748	VALVE	TK-261	7/9/2012	1216		BON	RV	7/20/2012	7/20/2012	1	TRUE	FALSE	7/20/2012	
27-PYRID	02179	90000624	VALVE	TK-260	4/6/2011	548		VP	TP	4/10/2011	4/11/2011	47	TRUE	FALSE	5/9/2011	
27-PYRID	02179	90000624	VALVE	TK-260	4/6/2011	548		VP			5/3/2011		TRUE	FALSE	5/9/2011	
27-PYRID	02179	90000624	VALVE	TK-260	4/6/2011	548		VP	RV	5/9/2011	5/9/2011	5	TRUE	FALSE	5/9/2011	
27-PYRID	02221	90000470	VALVE	PP001A/B	1/17/2011	536		VP	TP	1/18/2011	1/18/2011	35	TRUE	FALSE	1/19/2011	
27-PYRID	02221	90000470	VALVE	PP001A/B	1/17/2011	536		VP	RV	1/19/2011	1/19/2011	2	TRUE	FALSE	1/19/2011	
27-PYRID	2285.1	90002180	VALVE	PP 290A/B	4/1/2013 15:40	0	TRUE	BONNET	METHOD USED NOT AV	4/8/2013 8:30	4/8/2013 12:27	3	FALSE	FALSE		CHECK VALVE
27-PYRID	2285.1	90002180	VALVE	PP 290A/B	4/1/2013 15:40	0	TRUE	BONNET	ENVIRONMENTALLY RE	4/2/2013 14:00			FALSE	FALSE		CHECK VALVE
27-PYRID	02320	90001862	VALVE	PP 230A/B	10/21/2012	1393		VP	RV	10/30/2012	10/30/2012	7	TRUE	FALSE	10/30/2012	REMOVED FROM SERVICE 10/22/12
27-PYRID	02339	90000203	VALVE	PP 230A/B	9/3/2010	731		VP	TP	9/8/2010	9/8/2010	602	TRUE	FALSE	11/1/2010	
27-PYRID	02339	90000203	VALVE	PP 230A/B	9/3/2010	731		VP			9/9/2010		TRUE	FALSE	11/1/2010	
27-PYRID	02339	90000203	VALVE	PP 230A/B	9/3/2010	731		VP	RV	11/1/2010	11/15/2010	4	TRUE	FALSE	11/1/2010	
27-PYRID	02341	90000429	VALVE	PP 230A/B	12/14/2010	930		VP	TP	12/16/2010	12/16/2010	743	TRUE	FALSE	1/11/2011	
27-PYRID	02341	90000429	VALVE	PP 230A/B	12/14/2010	930		VP	N/A	12/29/2010	12/29/2010	5	TRUE	FALSE	1/11/2011	
27-PYRID	02341	90000429	VALVE	PP 230A/B	12/14/2010	930		VP	RV	1/11/2011	1/14/2011	2	TRUE	FALSE	1/11/2011	
27-PYRID	02343	90000409	VALVE	PP 230A/B	1/14/2011	575		VP	TP	1/18/2011	1/18/2011	33	FALSE	TRUE	1/31/2011	
27-PYRID	02343	90000409	VALVE	PP 230A/B	1/14/2011	575		VP	RP	1/31/2011	2/3/2011	2	FALSE	TRUE	1/31/2011	
27-PYRID	02343	90000625	VALVE	PP 230A/B	4/6/2011	550		VP	TP	4/10/2011	4/11/2011	40	FALSE	TRUE	1/31/2011	
27-PYRID	02345	90000430	VALVE	PP 230A/B	12/14/2010	729		VP	TP	12/16/2010	12/16/2010	48	TRUE	FALSE	1/11/2011	
27-PYRID	02345	90000430	VALVE	PP 230A/B	12/14/2010	729		VP	RV	1/11/2011	1/14/2011	1	TRUE	FALSE	1/11/2011	
27-PYRID	2354	90002740	VALVE	PP 230A/B	1/20/2014 14:07	553	FALSE	BONNET	TIGHTEN BONNET	1/22/2014 5:15	1/22/2014 16:10	2	FALSE	FALSE		CHECK VALVE
27-PYRID	02362	90000585	VALVE	PP 002A/B	3/17/2011	3545	VSBL	BON	TBON	3/20/2011	3/21/2011	4	TRUE	FALSE	5/9/2011	
27-PYRID	02362	90000585	VALVE	PP 002A/B	3/17/2011	3545	VSBL	BON			4/11/2011		TRUE	FALSE	5/9/2011	
27-PYRID	02362	90000585	VALVE	PP 002A/B	3/17/2011	3545	VSBL	BON	RV	5/9/2011	5/9/2011	5	TRUE	FALSE	5/9/2011	
27-PYRID	2363	90002220	VALVE	PP 002A/B	4/9/2013 11:57	7487	FALSE	BONNET	TIGHTEN BONNET	4/11/2013 13:00	4/11/2013 15:22	4	TRUE	FALSE	5/9/2013	
27-PYRID	02369	90000410	VALVE	PP 002A/B	1/14/2011	551		VP	TP	1/18/2011	1/18/2011	3	TRUE	FALSE	1/31/2011	
27-PYRID	02369	90000410	VALVE	PP 002A/B	1/14/2011	551		VP	RV	1/31/2011	2/2/2011	2	TRUE	FALSE	1/31/2011	
27-PYRID	02372	90000431	VALVE	PP 002A/B	12/14/2010	777		VP	TP	12/16/2010	12/16/2010	4881	TRUE	FALSE	1/11/2011	
27-PYRID	02372	90000431	VALVE	PP 002A/B	12/14/2010	777		VP			12/29/2010		TRUE	FALSE	1/11/2011	
27-PYRID	02372	90000431	VALVE	PP 002A/B	12/14/2010	777		VP	RV	1/11/2011	1/14/2011	3	TRUE	FALSE	1/11/2011	
27-PYRID	02373	90001680	VALVE	PP 002A/B	4/11/2012	536		VP	RV	4/16/2012	4/16/2012	2	TRUE	FALSE	4/16/2012	
27-PYRID	02384	90000421	VALVE	PP 002A/B	12/14/2010	478		VP	TP	12/16/2010	12/16/2010	441	TRUE	FALSE	1/11/2011	
27-PYRID	02384	90000421	VALVE	PP 002A/B	12/14/2010	478		VP			12/29/2010		TRUE	FALSE	1/11/2011	
27-PYRID	02384	90000421	VALVE	PP 002A/B	12/14/2010	478		VP	RV	1/11/2011	1/14/2011	3	TRUE	FALSE	1/11/2011	
27-PYRID	2392	90002083	VALVE	PP 002A/B	1/23/2013 14:32	6591	FALSE	VALVE PAC	CLEAN AND TIGHTEN	1/28/2013 14:30	1/28/2013 15:29	60	TRUE	FALSE	2/6/2013	
27-PYRID	2392	90002863	VALVE	PP 002A/B	4/16/2014 15:15	1476	FALSE	BONNET	TIGHTEN BOLTS	4/17/2014 1:30	4/17/2014 13:56	1250	TRUE	FALSE	6/3/2014	
27-PYRID	2392	90002863	VALVE	PP 002A/B	4/16/2014 15:15	1476	FALSE	BONNET	REPLACE VALVE	6/3/2014 13:45	6/4/2014 13:10	4	TRUE	FALSE	6/3/2014	
27-PYRID	2412	90002741	VALVE	PP 002A/B	1/20/2014 14:29	1436	FALSE	VALVE PAC	TIGHTEN PACKING	1/22/2014 5:30	1/22/2014 16:09	5	TRUE	FALSE	7/13/2014	
27-PYRID	02455	90000642	VALVE	MT-620.212	4/7/2011	1260		VP	TP	4/10/2011	4/11/2011	585	TRUE	FALSE	6/23/2011	
27-PYRID	02455	90000642	VALVE	MT-620.212	4/7/2011	1260		VP			4/20/2011		TRUE	FALSE	6/23/2011	
27-PYRID	02455	90000642	VALVE	MT-620.212	4/7/2011	1260		VP	RV	6/22/2011	6/23/2011	3	TRUE	FALSE	6/23/2011	
27-PYRID	02490	90001521	VALVE	TT-624.162	1/18/2012	502		VP	TP	1/19/2012	1/19/2012	32	FALSE	TRUE	2/20/2012	
27-PYRID	02490	90001521	VALVE	TT-624.162	1/18/2012	502		VP	RP	2/13/2012	2/20/2012	2	FALSE	TRUE	2/20/2012	
27-PYRID	02506	90001863	VALVE	PP-624.159A	10/21/2012	886		VP	RV	10/30/2012	10/30/2012	8	TRUE	FALSE	10/30/2012	REMOVED FROM SERVICE 10/22/12
27-PYRID	02507	90001864	VALVE	PP-624.159A	10/21/2012	693		VP	RV	10/30/2012	10/30/2012	8	TRUE	FALSE	10/30/2012	REMOVED FROM SERVICE 10/22/12
27-PYRID	2508	90002842	VALVE	PP-624.159A	4/15/2014 12:15	860	FALSE	VALVE PAC	REPLACE VALVE	4/16/2014 6:00	4/16/2014 13:27	9	TRUE	FALSE	4/16/2014	
27-PYRID	02511	90000087	VALVE	PP-624.159A	6/4/2010	68	VSBL	VP	WASH	6/9/2010	6/9/2010	4	FALSE	FALSE		LEAK <100 PPM
27-PYRID	2511	90002744	VALVE	PP-624.159A	1/20/2014 15:48	565	FALSE	VALVE PAC	TIGHTEN BONNET	1/22/2014 5:45	1/22/2014 16:24	561	FALSE	TRUE	2/1/2014	CONTROL VALVE Replaced Packing
27-PYRID	2511	90002744	VALVE	PP-624.159A	1/20/2014 15:48	565	FALSE	VALVE PAC	REPLACE/ADD PACKING	2/1/2014 14:00	2/4/2014 13:51	1	FALSE	TRUE	2/1/2014	CONTROL VALVE Replaced Packing
27-PYRID	02558	90001200	VALVE	TK-244	10/10/2011	737		VP	TP	10/13/2011	10/13/2011	14	TRUE	FALSE	10/26/2011	
27-PYRID	02558	90001200	VALVE	TK-244	10/10/2011	737		VP	RV	10/25/2011	10/26/2011	10	TRUE	FALSE	10/26/2011	
27-PYRID	02614	90000845	VALVE	MT620.251	7/13/2011	737		VP	TP	7/15/2011	7/15/2011	37	TRUE	FALSE	8/11/2011	
27-PYRID	02614	90000845	VALVE	MT620.251	7/13/2011	737		VP	RV	8/11/2011	8/12/2011	2	TRUE	FALSE	8/11/2011	
27-PYRID	2631	90002760	VALVE	pp622.242	1/21/2014 13:23	543	FALSE	VALVE PAC	TIGHTEN PACKING	1/26/2014 16:30	1/27/2014 14:34	4	TRUE	FALSE	7/14/2014	
27-PYRID	02644	90001920	VALVE	pp622.256a	10/30/2012	1581		VP	RV	11/2/2012	11/2/2012	3	TRUE	FALSE	11/2/2012	
27-PYRID	2652	90002406	VALVE	pp622.256b	7/16/2013 12:19	575	FALSE	VALVE PAC	TIGHTEN PACKING	7/17/2013 17:30	7/18/2013 12:27	725	TRUE	FALSE	10/25/2013	
27-PYRID	2652	90002406	VALVE	pp622.256b	7/16/2013 12:19	575	FALSE	VALVE PAC	REPLACE VALVE	10/25/2013 6:00	10/25/2013 11:06	5	TRUE	FALSE	10/25/2013	
27-PYRID	02667	90000088	VALVE	pp622.270a	6/10/2010	2476		VP	TP	6/11/2010	6/11/2010	142	TRUE	FALSE	6/12/2010	
27-PYRID	02668	90000848	VALVE	pp622.270a	7/13/2011	3831		VP	TP	7/15/2011	7/15/2011	29	TRUE	FALSE	8/11/2011	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	LLValve	LLPacking	LowLeakDate	Comments
27-PYRID	02668	90000848	VALVE	pp622.270a	7/13/2011	3831		VP	RV	8/11/2011	8/12/2011	2	TRUE	FALSE	8/11/2011	
27-PYRID	02669	90000244	VALVE	pp622.270a	9/10/2010	688		VP	TP	9/15/2010	9/15/2010	565	TRUE	FALSE	9/24/2010	
27-PYRID	02669	90000244	VALVE	pp622.270a	9/10/2010	688		VP	RV	9/24/2010	9/25/2010	68	TRUE	FALSE	9/24/2010	
27-PYRID	02670	90001683	VALVE	pp622.270a	4/12/2012	1018		VP	TP	4/17/2012	4/17/2012	42	TRUE	FALSE	5/17/2012	
27-PYRID	02670	90001683	VALVE	pp622.270a	4/12/2012	1018		VP			5/16/2012		TRUE	FALSE	5/17/2012	
27-PYRID	02670	90001683	VALVE	pp622.270a	4/12/2012	1018		VP	RV	5/17/2012	5/17/2012	1	TRUE	FALSE	5/17/2012	
27-PYRID	2684	90002763	VALVE	pp622.270a	1/21/2014 14:00	870	FALSE	BONNET	TIGHTEN BONNET	1/26/2014 16:10	1/27/2014 14:33	2	TRUE	FALSE	7/13/2014	
27-PYRID	02687	90000849	VALVE	pp622.270a	7/13/2011	764		VP	TP	7/15/2011	7/15/2011	4	TRUE	FALSE	8/11/2011	
27-PYRID	02687	90000849	VALVE	pp622.270a	7/13/2011	764		VP	RV	8/11/2011	8/12/2011	3	TRUE	FALSE	8/11/2011	
27-PYRID	02690	90001562	VALVE	pp622.270a	1/19/2012	633		VP	TP	1/23/2012	1/23/2012	586	TRUE	FALSE	2/1/2012	
27-PYRID	02690	90001562	VALVE	pp622.270a	1/19/2012	633		VP	RV	1/31/2012	2/1/2012	32	TRUE	FALSE	2/1/2012	
27-PYRID	02691	90000089	VALVE	pp622.270a	6/10/2010	627		VP	TP	6/11/2010	6/11/2010	54	TRUE	FALSE	6/12/2010	
27-PYRID	02698	90000090	VALVE	pp622.270b	6/10/2010	663		VP	TP	6/11/2010	6/11/2010	746	TRUE	FALSE	6/12/2010	
27-PYRID	02698	90000090	VALVE	pp622.270b	6/10/2010	663		VP	RV	6/12/2010	6/21/2010	3	TRUE	FALSE	6/12/2010	
27-PYRID	02700	90001684	VALVE	pp622.270b	4/12/2012	536		VP	TP	4/17/2012	4/17/2012	10	TRUE	FALSE	5/17/2012	
27-PYRID	02700	90001684	VALVE	pp622.270b	4/12/2012	536		VP			5/16/2012		TRUE	FALSE	5/17/2012	
27-PYRID	02700	90001684	VALVE	pp622.270b	4/12/2012	536		VP	RV	5/17/2012	5/17/2012	1	TRUE	FALSE	5/17/2012	
27-PYRID	02713	90001685	VALVE	pp622.270b	4/12/2012	1025		VP	TP	4/17/2012	4/17/2012	101	TRUE	FALSE	5/17/2012	
27-PYRID	02713	90001685	VALVE	pp622.270b	4/12/2012	1025		VP			5/16/2012		TRUE	FALSE	5/17/2012	
27-PYRID	02713	90001685	VALVE	pp622.270b	4/12/2012	1025		VP	RV	5/17/2012	5/17/2012	1	TRUE	FALSE	5/17/2012	
27-PYRID	02714	90001751	VALVE	pp622.270b	7/12/2012	1145		VP	TP	7/16/2012	7/16/2012	19	TRUE	FALSE	8/22/2012	
27-PYRID	02714	90001751	VALVE	pp622.270b	7/12/2012	1145		VP	RV	8/22/2012	8/22/2012	9	TRUE	FALSE	8/22/2012	Valve temporarily removed from service
27-PYRID	02738	90001686	VALVE	pp622.270b	4/12/2012	639		VP	TP	4/17/2012	4/17/2012	15	TRUE	FALSE	7/20/2012	
27-PYRID	02738	90001686	VALVE	pp622.270b	4/12/2012	639		VP			5/16/2012		TRUE	FALSE	7/20/2012	
27-PYRID	02738	90001686	VALVE	pp622.270b	4/12/2012	639		VP	RV	5/17/2012	5/17/2012	1	TRUE	FALSE	7/20/2012	
27-PYRID	02738	90001752	VALVE	pp622.270b	7/12/2012	585		VP	TP	7/16/2012	7/16/2012	711	TRUE	FALSE	7/20/2012	
27-PYRID	02738	90001752	VALVE	pp622.270b	7/12/2012	585		VP	RV	7/20/2012	7/20/2012	1	TRUE	FALSE	7/20/2012	
27-PYRID	02748	90000069	VALVE	pp622.270b	6/25/2010	6976		VP	RV	6/30/2010	6/30/2010	18	TRUE	FALSE	6/30/2010	
27-PYRID	02750	90000070	VALVE	pp622.270b	6/25/2010	291		VP	TP	6/30/2010	6/30/2010	20	TRUE	FALSE	6/29/2010	
27-PYRID	02752	90001563	VALVE	pp622.270b	1/19/2012	882		VP	RV	1/23/2012	1/23/2012	146	TRUE	FALSE	1/27/2012	
27-PYRID	02752	90001563	VALVE	pp622.270b	1/19/2012	882		VP	TP	1/27/2012	1/27/2012	2	TRUE	FALSE	1/27/2012	
27-PYRID	02756	90001564	VALVE	pp622.270b	1/19/2012	946		VP	RV	1/23/2012	1/23/2012	117	TRUE	FALSE	2/1/2012	
27-PYRID	02756	90001564	VALVE	pp622.270b	1/19/2012	946		VP	TP	1/31/2012	2/1/2012	15	TRUE	FALSE	2/1/2012	
27-PYRID	2829	90002882	VALVE	PP623.171	4/17/2014 11:15	2091	FALSE	BONNET	TIGHTEN BOLTS	4/22/2014 11:37	4/22/2014 13:59	626	TRUE	FALSE	6/3/2014	
27-PYRID	2829	90002882	VALVE	PP623.171	4/17/2014 11:15	2091	FALSE	BONNET	REPLACE VALVE	6/3/2014 13:30	6/4/2014 13:15	2	TRUE	FALSE	6/3/2014	
27-PYRID	2831	90002044	VALVE	PP623.171	1/24/2013 16:23	405	FALSE	VALVE PAC	TIGHTEN PACKING	1/25/2013 14:00	1/25/2013 15:30	383	FALSE	TRUE	2/7/2013	
27-PYRID	2831	90002044	VALVE	PP623.171	1/24/2013 16:23	405	FALSE	VALVE PAC	REPLACE/ADD PACKING	2/7/2013 12:50	2/11/2013 12:47	8	FALSE	TRUE	2/7/2013	
27-PYRID	02845	90000067	VALVE	PP622.102	6/21/2010	440		VP	TP	6/25/2010	6/25/2010	298	FALSE	TRUE	8/4/2010	
27-PYRID	02845	90000067	VALVE	PP622.102	6/21/2010	440		VP			7/23/2010		FALSE	TRUE	8/4/2010	
27-PYRID	02845	90000067	VALVE	PP622.102	6/21/2010	440		VP	RP	8/4/2010	8/4/2010	0	FALSE	TRUE	8/4/2010	
27-PYRID	02845	90000067	VALVE	PP622.102	8/9/2010	1030		VP	TP	8/10/2010	8/10/2010	161	FALSE	TRUE	8/4/2010	
27-PYRID	02851	90000229	VALVE	PP622.102	9/14/2010	672		VP	TP	9/19/2010	9/20/2010	657	TRUE	FALSE	7/18/2012	
27-PYRID	02851	90000229	VALVE	PP622.102	9/14/2010	672		VP			9/20/2010		TRUE	FALSE	7/18/2012	
27-PYRID	02851	90000229	VALVE	PP622.102	9/14/2010	672		VP	ERHS	11/1/2010	11/15/2010	4	TRUE	FALSE	7/18/2012	
27-PYRID	02874	90000833	VALVE	PP622.045A	7/14/2011	1062		VP	TP	7/18/2011	7/19/2011	52	TRUE	FALSE	7/2/2012	
27-PYRID	02874	90000833	VALVE	PP622.045A	7/14/2011	1062		VP	RV	8/11/2011	8/12/2011	3	TRUE	FALSE	7/2/2012	
27-PYRID	02874	90001524	VALVE	PP622.045A	1/23/2012	646		VP	TP	1/27/2012	1/27/2012	83	TRUE	FALSE	7/2/2012	
27-PYRID	02893	90000068	VALVE	PP622.045B	6/21/2010	499		VP	TP	6/25/2010	6/25/2010	329	FALSE	TRUE	7/23/2010	
27-PYRID	02893	90000068	VALVE	PP622.045B	6/21/2010	499		VP	RP	7/23/2010	7/28/2010	4	FALSE	TRUE	7/23/2010	
27-PYRID	02909	90000123	VALVE	PP621.140B	7/16/2010	2959		OT	RV	7/17/2010	7/17/2010	4	TRUE	FALSE	7/17/2010	BODY CRACK
27-PYRID	02933	90000940	VALVE	PP621.140A	8/15/2011		VSBL	SC	RV	8/17/2011	8/18/2011	7	TRUE	FALSE	8/17/2011	
27-PYRID	02967	90000834	VALVE	PP 621.140	7/14/2011	613		VP	RP	7/15/2011	7/15/2011	24	FALSE	TRUE	7/15/2011	
27-PYRID	2967	90002227	VALVE	PP 621.140	4/16/2013 11:48	466	FALSE	VALVE PAC	TIGHTEN PACKING	4/17/2013 14:30	4/17/2013 15:40	918	FALSE	TRUE	5/30/2013	
27-PYRID	2967	90002227	VALVE	PP 621.140	4/16/2013 11:48	466	FALSE	VALVE PAC	REPLACE/ADD PACKING	5/30/2013 15:00	6/3/2013 13:59	4	FALSE	TRUE	5/30/2013	
27-PYRID	2967	90002901	VALVE	PP 621.140	4/18/2014 9:18	731	FALSE	VALVE PAC	TIGHTEN PACKING	4/22/2014 11:30	4/22/2014 15:52	204	FALSE	TRUE	5/30/2013	
27-PYRID	02978	90000432	VALVE	PP 621.140	12/15/2010	4305		BON	WO	12/20/2010	12/21/2010	1674	FALSE	FALSE		REMOVED FROM SERVICE 3/11/11
27-PYRID	02978	90000432	VALVE	PP 621.140	12/15/2010	4305		BON	TBOL	12/27/2010	12/28/2010	2	FALSE	FALSE		REMOVED FROM SERVICE 3/11/11
27-PYRID	03044	90000261	VALVE	TT 622 110	9/16/2010	1053		VP	TP	9/19/2010	9/20/2010	77	FALSE	TRUE	10/14/2010	
27-PYRID	03044	90000261	VALVE	TT 622 110	9/16/2010	1053		VP	RP	10/14/2010	10/15/2010	12	FALSE	TRUE	10/14/2010	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	LLValve	LLPacking	LowLeakDate	Comments
27-PYRID	03044	90000480	VALVE	TT 622 110	2/7/2011	502		VP	TP	2/9/2011	2/9/2011	3	FALSE	TRUE	10/14/2010	
27-PYRID	03049	90001281	VALVE	TT 622 110	11/1/2011	967		VP	TP	11/2/2011	11/2/2011	5	TRUE	FALSE	11/30/2011	
27-PYRID	03049	90001281	VALVE	TT 622 110	11/1/2011	967		VP	RV	11/30/2011	11/30/2011	10	TRUE	FALSE	11/30/2011	
27-PYRID	03062	90000433	VALVE	TT 622 104	12/15/2010	525		VP	WO	12/20/2010	12/21/2010	1796	TRUE	FALSE	6/23/2011	
27-PYRID	03062	90000433	VALVE	TT 622 104	12/15/2010	525		VP	N/A	12/22/2010	12/23/2010	154	TRUE	FALSE	6/23/2011	
27-PYRID	03127	90000001	VALVE	AS 622.103	5/14/2010	10700		VP	TP	5/19/2010	5/19/2010	32767	FALSE	TRUE	7/8/2010	
27-PYRID	03127	90000001	VALVE	AS 622.103	5/14/2010	10700		VP	RP	5/21/2010	5/24/2010	13700	FALSE	TRUE	7/8/2010	
27-PYRID	03127	90000001	VALVE	AS 622.103	5/14/2010	10700		VP	TP	5/26/2010	5/26/2010	82	FALSE	TRUE	7/8/2010	
27-PYRID	3159	90002883	VALVE	MS 621 045	5/7/2014 15:02	628	FALSE	VALVE PAC	TIGHTEN PACKING	5/9/2014 6:00	5/9/2014 12:16	6	TRUE	FALSE	7/14/2014	
27-PYRID	03224	90000541	VALVE	MT 621 004	2/15/2011	566		VP	TP	2/18/2011	2/18/2011	584	TRUE	FALSE	3/8/2011	
27-PYRID	03224	90000541	VALVE	MT 621 004	2/15/2011	566		VP			2/18/2011		TRUE	FALSE	3/8/2011	
27-PYRID	03224	90000541	VALVE	MT 621 004	2/15/2011	566		VP	RV	3/8/2011	3/11/2011	2	TRUE	FALSE	3/8/2011	
27-PYRID	3255	90002921	VALVE	MR 621 012	5/8/2014 11:27	369	FALSE	VALVE PAC	TIGHTEN PACKING	5/12/2014 22:30	5/13/2014 13:34	6	TRUE	FALSE	7/15/2014	
27-PYRID	3279	90002780	VALVE	TT 610 007F	2/13/2014 15:41	315	FALSE	VALVE PAC	TIGHTEN PACKING	2/18/2014 6:30	2/18/2014 14:45	5	TRUE	FALSE	7/13/2014	
27-PYRID	3298	90002800	VALVE	TT 610 007D	2/14/2014 10:59	974	FALSE	VALVE PAC	TIGHTEN PACKING	2/18/2014 6:00	2/18/2014 14:43	24	TRUE	FALSE	7/13/2014	
27-PYRID	3299	90002281	VALVE	TT 610 007D	5/14/2013 12:00	2436	FALSE	BONNET	CLEANED RESIDUE	5/15/2013 18:00	5/16/2013 14:44	1766	TRUE	FALSE	7/19/2013	
27-PYRID	3299	90002281	VALVE	TT 610 007D	5/14/2013 12:00	2436	FALSE	BONNET	ENVIRONMENTALLY RE	5/29/2013 11:00			TRUE	FALSE	7/19/2013	REMOVED FROM SERVICE 5/29/13
27-PYRID	03308	90000500	VALVE	TT 610 007C	2/7/2011		VSBL	VP	TP	2/7/2011	2/8/2011	6	TRUE	FALSE	3/7/2011	
27-PYRID	03308	90000500	VALVE	TT 610 007C	2/7/2011		VSBL	VP	RV	3/7/2011	3/11/2011	2	TRUE	FALSE	3/7/2011	
27-PYRID	3309	90002801	VALVE	TT 610 007C	2/14/2014 11:22	372	FALSE	VALVE PAC	TIGHTEN PACKING	2/19/2014 5:30	2/19/2014 10:51	197	TRUE	FALSE	7/13/2014	
27-PYRID	3309	90002908	VALVE	TT 610 007C	5/14/2014 15:44	595	FALSE	BONNET	TIGHTEN BONNET	5/16/2014 2:00	5/16/2014 5:19	23	TRUE	FALSE	7/13/2014	
27-PYRID	03316	10087690	VALVE	TT 610 007C	5/18/2010	484		BON	WO	5/19/2010	5/19/2010	484	TRUE	FALSE	7/1/2010	
27-PYRID	03316	10087690	VALVE	TT 610 007C	5/18/2010	484		BON	RV	6/1/2010	6/1/2010	4	TRUE	FALSE	7/1/2010	
27-PYRID	03318	90001284	VALVE	TT 610 007B	11/8/2011	720		BON	TP	11/11/2011	11/11/2011	9779	TRUE	FALSE	12/1/2011	
27-PYRID	03318	90001284	VALVE	TT 610 007B	11/8/2011	720		BON	TP	11/15/2011	11/15/2011	5084	TRUE	FALSE	12/1/2011	
27-PYRID	03318	90001284	VALVE	TT 610 007B	11/8/2011	720		BON			11/23/2011		TRUE	FALSE	12/1/2011	
27-PYRID	03318	90001284	VALVE	TT 610 007B	11/8/2011	720		BON	RV	12/1/2011	12/5/2011	1	TRUE	FALSE	12/1/2011	
27-PYRID	03319	90000740	VALVE	TT 610 007B	5/2/2011	901		BON	TBON	5/4/2011	5/5/2011	1038	TRUE	FALSE	6/24/2011	
27-PYRID	03319	90000740	VALVE	TT 610 007B	5/2/2011	901		BON			5/17/2011		TRUE	FALSE	6/24/2011	
27-PYRID	03319	90000740	VALVE	TT 610 007B	5/2/2011	901		BON	RV	6/22/2011	6/24/2011	1	TRUE	FALSE	6/24/2011	
27-PYRID	3326	90002802	VALVE	TT 610 007B	2/14/2014 11:57	3047	FALSE	VALVE PAC	REPLACE VALVE	2/19/2014 6:00	2/19/2014 10:53	6	TRUE	FALSE	2/19/2014	
27-PYRID	3327	90002282	VALVE	TT 610 007B	5/14/2013 12:16	580	FALSE	VALVE PAC	REPLACE VALVE	5/15/2013 18:00	5/16/2013 12:43	6	TRUE	FALSE	5/15/2013	
27-PYRID	03332	90000437	VALVE	TT 610 007A	12/15/2010	363		BON	TBON	12/20/2010	12/21/2010	6	TRUE	FALSE	2/1/2011	
27-PYRID	03332	90000437	VALVE	TT 610 007A	12/15/2010	363		BON	RV	2/1/2011	2/8/2011	3	TRUE	FALSE	2/1/2011	
27-PYRID	3335	90002783	VALVE	TT 610 007A	2/17/2014 10:35	535	FALSE	VALVE PAC	CLEAN VALVE	2/21/2014 17:39	2/21/2014 17:41	155	TRUE	FALSE	7/13/2014	
27-PYRID	03340	10087717	VALVE	TT 621 008A	5/18/2010	1464		VP	WO	5/20/2010	5/20/2010	1464	FALSE	FALSE		BEFORE CD
27-PYRID	03340	10087717	VALVE	TT 621 008A	5/18/2010	1464		VP	TP	5/24/2010	5/24/2010	4	FALSE	FALSE		BEFORE CD
27-PYRID	03453	90000741	VALVE	MR 621 012	5/2/2011	629		VP	TP	5/4/2011	5/5/2011	532	TRUE	FALSE	5/10/2011	
27-PYRID	03453	90000741	VALVE	MR 621 012	5/2/2011	629		VP	RV	5/10/2011	5/10/2011	67	TRUE	FALSE	5/10/2011	
27-PYRID	03473	90001569	VALVE	MR 621 012	2/21/2012	667		VP	TP	2/24/2012	2/24/2012	67	TRUE	FALSE	5/23/2012	
27-PYRID	03473	90001569	VALVE	MR 621 012	2/21/2012	667		VP			3/20/2012		TRUE	FALSE	5/23/2012	
27-PYRID	03473	90001569	VALVE	MR 621 012	2/21/2012	667		VP	RV	5/23/2012	5/23/2012	3	TRUE	FALSE	5/23/2012	
27-PYRID	03506	90000264	VALVE	TT 610 007G	9/28/2010	306	VSBL	VP	TP	9/30/2010	10/1/2010	67	TRUE	FALSE	11/2/2010	11/2/10 10:30 RV
27-PYRID	03565	90000266	VALVE	TT 610 007C	9/28/2010	991		VP	TP	9/30/2010	10/1/2010	287	TRUE	FALSE	10/2/2010	
27-PYRID	03565	90000266	VALVE	TT 610 007C	9/28/2010	991		VP	RV	10/2/2010	10/4/2010	5	TRUE	FALSE	10/2/2010	
27-PYRID	03575	90000183	VALVE	PP 308A	8/17/2010	268		VP	TP	8/22/2010	8/23/2010	832	FALSE	TRUE	9/16/2010	
27-PYRID	03575	90000183	VALVE	PP 308A	8/17/2010	268		VP			8/30/2010		FALSE	TRUE	9/16/2010	
27-PYRID	03575	90000183	VALVE	PP 308A	8/17/2010	268		VP	RP	9/16/2010	9/17/2010	30	FALSE	TRUE	9/16/2010	
27-PYRID	03575		VALVE	PP 308A	8/23/2010	832		VP	WASH	8/27/2010	8/27/2010	558	FALSE	TRUE	9/16/2010	
27-PYRID	03575		VALVE	PP 308A	8/23/2010	832		VP			8/30/2010		FALSE	TRUE	9/16/2010	
27-PYRID	03575		VALVE	PP 308A	8/23/2010	832		VP	RP	9/16/2010	9/17/2010	30	FALSE	TRUE	9/16/2010	
27-PYRID	03575	90000549	VALVE	PP 308A	2/22/2011	571		VP	TP	2/25/2011	2/25/2011	29	FALSE	TRUE	9/16/2010	NEW CERTIFIED LL PACKING AGAIN
27-PYRID	03575	90000721	VALVE	PP 308A	5/3/2011	554		VP	TP	5/5/2011	5/5/2011	603	FALSE	TRUE	9/16/2010	NEW CERTIFIED LL PACKING AGAIN
27-PYRID	03575	90000721	VALVE	PP 308A	5/3/2011	554		VP	RP	5/12/2011	5/12/2011	6	FALSE	TRUE	9/16/2010	
27-PYRID	03575	90000882	VALVE	PP 308A	8/9/2011	612		VP	TP	8/12/2011	8/12/2011	2	FALSE	TRUE	9/16/2010	
27-PYRID	3577	90002621	VALVE	PP 308A	11/11/2013 13:33	1841	FALSE	VALVE PAC	TIGHTEN PACKING	11/15/2013 4:00	11/15/2013 12:39	89	TRUE	FALSE	12/9/2013	
27-PYRID	03578	90001285	VALVE	PP 308A	11/10/2011	593		VP	TP	11/15/2011	11/15/2011	2	TRUE	FALSE	11/29/2011	
27-PYRID	03578	90001285	VALVE	PP 308A	11/10/2011	593		VP	RV	11/29/2011	11/29/2011	8	TRUE	FALSE	11/29/2011	
27-PYRID	03579	90000722	VALVE	PP 308A	5/3/2011	534		VP	TP	5/5/2011	5/5/2011	101	TRUE	FALSE	5/16/2011	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	LLValve	LLPacking	LowLeakDate	Comments
27-PYRID	03579	90000722	VALVE	PP 308A	5/3/2011	534		VP	RV	5/16/2011	5/17/2011	2	TRUE	FALSE	5/16/2011	
27-PYRID	3579	90002120	VALVE	PP 308A	2/6/2013 12:35	168800	FALSE	BONNET	TIGHTEN BONNET	2/11/2013 14:30	2/11/2013 15:49	18700	TRUE	FALSE	2/21/2013	
27-PYRID	3579	90002120	VALVE	PP 308A	2/6/2013 12:35	168800	FALSE	BONNET	TIGHTEN BONNET	2/21/2013 2:00	2/21/2013 11:08	571	TRUE	FALSE	2/21/2013	
27-PYRID	3579	90002120	VALVE	PP 308A	2/6/2013 12:35	168800	FALSE	BONNET	REPLACE VALVE	2/21/2013 15:00	2/21/2013 16:10	4	TRUE	FALSE	2/21/2013	
27-PYRID	03583	90000723	VALVE	PP 308B	5/3/2011	6145		VP	TP	5/5/2011	5/5/2011	11	TRUE	FALSE	5/16/2011	
27-PYRID	03583	90000723	VALVE	PP 308B	5/3/2011	6145		VP	RV	5/16/2011	5/17/2011	1	TRUE	FALSE	5/16/2011	
27-PYRID	03585	90000725	VALVE	PP 308B	5/3/2011	9672		BON	TBON	5/5/2011	5/5/2011	37200	TRUE	FALSE	5/16/2011	
27-PYRID	03585	90000725	VALVE	PP 308B	5/3/2011	9672		BON	RV	5/16/2011	5/17/2011	2	TRUE	FALSE	5/16/2011	
27-PYRID	03587	90001695	VALVE	PP 308B	5/3/2012	747		VP	TP	5/8/2012	5/8/2012	117	TRUE	FALSE	5/23/2012	
27-PYRID	03587	90001695	VALVE	PP 308B	5/3/2012	747		VP	RV	5/22/2012	5/23/2012	3	TRUE	FALSE	5/23/2012	
27-PYRID	3601	90002265	VALVE	PP 308B	5/15/2013 12:38	452	FALSE	VALVE PAC	TIGHTEN PACKING	5/16/2013 22:30	5/17/2013 11:03	133	TRUE	FALSE	6/23/2011	ALREADY A LL VALVE WHEN LEAK FOUND
27-PYRID	03604	90000729	VALVE	PP 308B	5/4/2011	560		VP	TP	5/9/2011	5/9/2011	78	FALSE	TRUE	5/12/2011	
27-PYRID	03604	90000729	VALVE	PP 308B	5/4/2011	560		VP	RP	5/12/2011	5/12/2011	6	FALSE	TRUE	5/12/2011	
27-PYRID	03605	90001661	VALVE	PP 308B	4/2/2012	1214		VP	RV	4/4/2012	4/4/2012	2	TRUE	FALSE	11/10/2011	
27-PYRID	03606	90001320	VALVE	PP 308B	11/16/2011	10000		VP	TP	11/21/2011	11/21/2011	591	TRUE	FALSE	11/10/2011	
27-PYRID	03606	90001320	VALVE	PP 308B	11/16/2011	10000		VP	TP	11/23/2011	11/23/2011	34	TRUE	FALSE	11/10/2011	
27-PYRID	03606	90001922	VALVE	PP 308B	11/14/2012	121400		VP	TP	11/19/2012	11/19/2012	383	TRUE	FALSE	12/3/2012	
27-PYRID	03606	90001922	VALVE	PP 308B	11/14/2012	121400		VP	RV	12/3/2012	12/5/2012	10	TRUE	FALSE	12/3/2012	
27-PYRID	03607	90001321	VALVE	PP 308B	11/16/2011	1325		BON	TP	11/21/2011	11/21/2011	55	TRUE	FALSE	11/10/2011	
27-PYRID	03796	90000382	VALVE	PP 604A	11/11/2010		VSBL	VP	RV	11/15/2010	11/15/2010	4	TRUE	FALSE	11/15/2010	
27-PYRID	03797	90001568	VALVE	PP 604A	2/14/2012	661		VP	RV	2/17/2012	2/20/2012	2	TRUE	FALSE	2/20/2012	
27-PYRID	3808	90002141	VALVE	PP 604B	2/11/2013 12:06	354	FALSE	VALVE PAC	TIGHTEN PACKING	2/13/2013 9:00	2/13/2013 11:40	46	FALSE	TRUE	3/13/2013	
27-PYRID	03829	90000221	VALVE	MT 603	8/19/2010	1302		VP	TP	8/23/2010	8/23/2010	4326	TRUE	FALSE	11/3/2010	
27-PYRID	03829	90000221	VALVE	MT 603	8/19/2010	1302		VP	INJ	9/3/2010	9/3/2010	164	TRUE	FALSE	11/3/2010	
27-PYRID	03829	90000221	VALVE	MT 603	8/19/2010	1302		VP			9/16/2010		TRUE	FALSE	11/3/2010	
27-PYRID	03829	90000221	VALVE	MT 603	8/19/2010	1302		VP	RV	11/3/2010	11/15/2010	7	TRUE	FALSE	11/3/2010	
27-PYRID	03847	90000464	VALVE	MT 604	12/16/2010	620		VP	TP	12/20/2010	12/21/2010	134	TRUE	FALSE	5/16/2011	
27-PYRID	03847	90000464	VALVE	MT 604	12/16/2010	620		VP			1/10/2011		TRUE	FALSE	5/16/2011	
27-PYRID	03847	90000464	VALVE	MT 604	12/16/2010	620		VP	RV	5/16/2011	5/17/2011	2	TRUE	FALSE	5/16/2011	
27-PYRID	3874	90002791	VALVE	MT 607	2/20/2014 13:50	548	FALSE	VALVE PAC	TIGHTEN PACKING	2/21/2014 11:00	2/21/2014 16:27	9	TRUE	FALSE	7/13/2014	
27-PYRID	3879	90002789	VALVE	MT 607	2/20/2014 13:57	520	FALSE	VALVE PAC	TIGHTEN PACKING	2/21/2014 8:30	2/21/2014 16:29	9	TRUE	FALSE	7/13/2014	
27-PYRID	3880	90002787	VALVE	MT 607	2/20/2014 13:59	692	FALSE	VALVE PAC	TIGHTEN PACKING	2/21/2014 9:00	2/21/2014 16:31	17	TRUE	FALSE	7/13/2014	
41-CYANO	03924	10087622	VALVE	PP-600.002	5/11/2010	1868		VP	CLV	5/14/2010	5/14/2010	1598	TRUE	FALSE	6/1/2011	
41-CYANO	03924	10087622	VALVE	PP-600.002	5/11/2010	1868		VP	TP	5/17/2010	5/18/2010	3	TRUE	FALSE	6/1/2011	
27-PYRID	03974	90001701	VALVE	MT-621.093	5/8/2012	671		VP	RV	5/10/2012	5/10/2012	3	TRUE	FALSE	5/10/2012	
27-PYRID	4007	90002064	VALVE	MT-620.233	1/22/2013 12:47	262	FALSE	BONNET	TIGHTEN BONNET	1/25/2013 13:00	1/25/2013 15:35	13	TRUE	FALSE	2/11/2013	
27-PYRID	04019	90001481	VALVE	MT-620.234	1/5/2012	947		VP	TP	1/9/2012	1/9/2012	2	TRUE	FALSE	1/23/2012	
27-PYRID	04019	90001481	VALVE	MT-620.234	1/5/2012	947		VP	RV	1/23/2012	1/23/2012	4	TRUE	FALSE	1/23/2012	
41-CYANO	01701A	90000609	VALVE	MT-600.13	3/21/2011	1008		VP	TP	3/22/2011	3/23/2011	88	TRUE	FALSE	4/26/2011	
41-CYANO	01701A	90000609	VALVE	MT-600.13	3/21/2011	1008		VP			3/30/2011		TRUE	FALSE	4/26/2011	
41-CYANO	01701A	90000609	VALVE	MT-600.13	3/21/2011	1008		VP	RV	4/26/2011	5/4/2011	1	TRUE	FALSE	4/26/2011	
27-PYRID	02611H	90000580	VALVE	TK254	3/6/2011		VSBL	VP	RV	3/9/2011	3/9/2011	4	TRUE	FALSE	3/9/2011	VALVE DRY LOCK FITTING VSBL LEAK
27-PYRID	02613E	90002043	VALVE	MT620.252	1/24/2013 12:57	398	FALSE	VALVE PAC	TIGHTEN PACKING	1/29/2013 6:00	1/29/2013 12:06	30	TRUE	FALSE	4/3/2013	
27-PYRID	02614D	90001660	VALVE	MT620.251	4/2/2012	897		VP	RV	4/4/2012	4/4/2012	1	TRUE	FALSE	4/4/2012	
27-PYRID	03824A	90001401	VALVE	MT 602	11/23/2011	943		BON	TBON	11/28/2011	11/28/2011	1	FALSE	FALSE		CHECK VALVE
27-PYRID	2118G	90000021	VALVE	TK-262	5/23/2010	32100		VP	CS	5/25/2010	5/25/2010	5	TRUE	FALSE	7/6/2010	
27-PYRID	2118G	90000021	VALVE	TK-262	5/23/2010	32100		VP			6/7/2010		TRUE	FALSE	7/6/2010	
27-PYRID	2118G	90000021	VALVE	TK-262	5/23/2010	32100		VP	RV	7/6/2010	7/16/2010	4	TRUE	FALSE	7/6/2010	
27-PYRID	2614C	90000065	VALVE	MT620.251	6/9/2010	1060		VP	TP	6/11/2010	6/11/2010	867	TRUE	FALSE	6/23/2010	
27-PYRID	2614C	90000065	VALVE	MT620.251	6/9/2010	1060		VP	RV	6/23/2010	6/24/2010	5	TRUE	FALSE	6/23/2010	

CONNECTORS/OEL

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
41-CYANO	2.6	90002940	CONNECTOR	MT-600.211	6/5/2014 13:47	687	FALSE	UNION	TIGHTEN UNION	6/9/2014 2:00	6/9/2014 14:10	9	
41-CYANO	00006.03	90000800	CONNECTOR	MT-600.213	6/1/2011	977		FLG	RG	6/6/2011	6/6/2011	21	
41-CYANO	00053.01	90000644	SCONN	PP-213B	4/8/2011		VSBL	SC	TSC	4/10/2011	4/11/2011	1	
41-CYANO	00061.06	90000604	SCONN	PP-213C	3/18/2011	1499		PLG	TPLG	3/23/2011	3/23/2011	3	
41-CYANO	67.6	90002941	POEL	PP-213C	6/10/2014 11:30	508	FALSE	PLUG	CLEAN AND TIGHTEN	6/11/2014 6:00	6/11/2014 10:54	5	
41-CYANO	00072.04	90000820	SCONN	PP-211A	6/2/2011	660		U	TU	6/7/2011	6/8/2011	6	
41-CYANO	00074.05		SCONN	PP-211A	12/1/2011	11400		U	TU	12/1/2011	12/1/2011	109	
41-CYANO	00082.02	90001720	SCONN	MT-600.215	6/4/2012	802		SC	CLT	6/6/2012	6/6/2012	18	
41-CYANO	00082.06	90000761	CONNECTOR	MT-600.215	5/24/2011	745		SC	TFIT	5/27/2011	5/27/2011	4	
41-CYANO	00099.02	90000435	CONNECTOR	MT-600.235	12/15/2010	5135		CAP	TCAP	12/17/2010	12/17/2010	718	
41-CYANO	00099.02	90000435	CONNECTOR	MT-600.235	12/15/2010	5135		CAP	TCAP	12/30/2010	12/30/2010	71	
41-CYANO	117.2	90002961	CONNECTOR	AS-2	6/11/2014 14:07	386	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	6/12/2014 8:00	6/12/2014 14:11	177	
41-CYANO	00144.03	90000783	SCONN	AS-4	5/24/2011	265		SC	TFIT	5/27/2011	5/27/2011	4	
41-CYANO	00147.03	90000185	CONNECTOR	AS-4	8/24/2010	1733		SC	TCON	8/25/2010	8/26/2010	39	
41-CYANO	00175.01	90000082	SCONN	PP-006C	6/2/2010	2880		SC	TSC	6/4/2010	6/4/2010	619	
41-CYANO	00175.01	90000082	SCONN	PP-006C	6/2/2010	2880		SC	RV	6/8/2010	6/8/2010	3	
41-CYANO	00175.03	90000613	CONNECTOR	PP-006C	3/25/2011	929		CAP	TCAP	3/29/2011	3/29/2011	197	
41-CYANO	00194.01	90000083	CONNECTOR	PP-006C	6/2/2010	581		FLG	TFLG	6/4/2010	6/4/2010	739	
41-CYANO	00194.01	90000083	CONNECTOR	PP-006C	6/2/2010	581		FLG	ERHS	6/8/2010	6/8/2010	50	
41-CYANO	00194.01	90000083	CONNECTOR	PP-006C	6/2/2010	581		FLG	TFLG	6/11/2010	6/11/2010	116	
41-CYANO	00213.04	90000186	SCONN	PP-010A	8/24/2010	13300		PLG	TPLG	8/25/2010	8/26/2010	1045	
41-CYANO	00213.04	90000186	SCONN	PP-010A	8/24/2010	13300		PLG	RPLG	8/29/2010	8/30/2010	4	
41-CYANO	00224.06	90000607	CONNECTOR	PP-010A/B	3/21/2011	741		CAP	TCAP	3/22/2011	3/23/2011	626	
41-CYANO	00224.06	90000607	CONNECTOR	PP-010A/B	3/21/2011	741		CAP	TCAP	4/5/2011	4/5/2011	224	
41-CYANO	00230.08	90002001	SCONN	PP-034A	12/28/2012	503	NP	U	RU	1/2/2013	1/4/2013	3	
41-CYANO	00233.02	90000802	SCONN	PP-034A	6/8/2011	519		PLG	RPLG	6/13/2011	6/13/2011	7	
41-CYANO	00238.03	90000804	CONNECTOR	PP-034A	6/8/2011	607		SC	TSC	6/13/2011	6/13/2011	13	
41-CYANO	00242.04	90000805	SCONN	PP-034A	6/8/2011	989		U	RU	6/13/2011	6/13/2011	579	
41-CYANO	00242.04	90000805	SCONN	PP-034A	6/8/2011	989		U	RU	6/16/2011	6/17/2011	71	
41-CYANO	00268.01	90000815	SCONN	MS-6	6/9/2011	629		SC	TSC	6/10/2011	6/10/2011	507	
41-CYANO	00268.01	90000815	SCONN	MS-6	6/9/2011	629		SC	RV	6/16/2011	6/17/2011	23	
41-CYANO	00269.05	90000084	SCONN	MS-6	6/2/2010	17500		SC	TSC	6/4/2010	6/4/2010	16300	
41-CYANO	00269.05	90000084	SCONN	MS-6	6/2/2010	17500		SC	ERHS	6/8/2010	6/8/2010	3	
41-CYANO	00269.05	90000084	SCONN	MS-6	6/2/2010	17500		SC	TSC	6/11/2010	6/11/2010	15	
41-CYANO	00319.02	90001464	SCONN	MS-034A	12/20/2011	3	VSBL	SC	TSC	12/22/2011	12/22/2011	1	
41-CYANO	324.02	90002280	CONNECTOR	MS-034A	5/8/2013 15:42	7326	FALSE	SCREWED CONNECTO	TIGHTEN CONNECTOI	5/9/2013 17:00	5/10/2013 11:18	487	
41-CYANO	324.02	90002280	CONNECTOR	MS-034A	5/8/2013 15:42	7326	FALSE	SCREWED CONNECTO	REPLACE FITTING	5/11/2013 0:42	5/13/2013 16:15	3	
41-CYANO	01703	90001723	CONNECTOR	MT-600.13	6/13/2012	860		GAU	RG	6/18/2012	6/18/2012	4	
41-CYANO	01705.07	90000608	SCONN	MT-600.13	3/21/2011	710		CAP	TCAP	3/22/2011	3/23/2011	54	
41-CYANO	01717.09	90000187	SCONN	PP-600.02X	8/26/2010	3747		U	RU	8/29/2010	8/30/2010	5	
41-CYANO	01718.01	90000188	CONNECTOR	MT-600.12	8/26/2010	684		SC	ERHS	8/31/2010	9/1/2010	0	
41-CYANO	01718.01	90000188	CONNECTOR	MT-600.12	8/26/2010	684		SC	RSC	9/10/2010	9/10/2010	0	
41-CYANO	01718.02	90000188	CONNECTOR	MT-600.12	8/26/2010	665		SC	ERHS	8/31/2010	9/1/2010	0	
41-CYANO	01718.02	90000188	CONNECTOR	MT-600.12	8/26/2010	665		SC	RSC	9/10/2010	9/10/2010	0	
41-CYANO	01718.03	90000102	CONNECTOR	MT-600.12	6/24/2010	2631		SC	TSC	6/29/2010	6/29/2010	111	
41-CYANO	01732.10	90000189	SCONN	MT-600.11	8/26/2010	564		TEE	RT	8/30/2010	8/30/2010	4	
41-CYANO	01734.05	90000823	SCONN	MT-600.11	6/22/2011	5386		OT	RG	6/27/2011	6/27/2011	2	
41-CYANO	01734.08	90000824	SCONN	MT-600.11	6/22/2011	510		OT	RG	6/27/2011	6/27/2011	2	
41-CYANO	01742.01	90000825	SCONN	MT-600.11	6/22/2011	823		OT	RG	6/27/2011	6/27/2011	13	
41-CYANO	01742.02	90001443	SCONN	MT-600.11	12/21/2011	669		SC	TSC	12/22/2011	12/22/2011	77	
41-CYANO	01742.03	90000826	SCONN	MT-600.11	6/22/2011	587		OT	RG	6/27/2011	6/27/2011	8	
41-CYANO	01742.04	90000762	SCONN	MT-600.11	5/24/2011	8042		U	TU	5/27/2011	5/27/2011	4486	
41-CYANO	01742.04	90000762	SCONN	MT-600.11	5/24/2011	8042		U	RU	6/7/2011	6/7/2011	2	
41-CYANO	01747.01	90000827	SCONN	MT-600.13	6/22/2011	4712		U	ERHS	6/27/2011	6/27/2011	4	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	02007.06	90000401	SCONN	TK-263	12/8/2010		VSBL	SC	CL	12/8/2010	12/9/2010	6	
27-PYRID	02007.06	90000401	SCONN	TK-263	12/8/2010		VSBL	SC			12/28/2010		
27-PYRID	02007.06	90000401	SCONN	TK-263	12/8/2010		VSBL	SC	RC	2/9/2011	2/9/2011	35	
27-PYRID	02017	90000202	CONNECTOR	PP-035	8/31/2010	654		SG	TBOL	9/2/2010	9/2/2010	142	
27-PYRID	02017	90001585	CONNECTOR	PP-035	3/6/2012	2095		SG	TSG	3/9/2012	3/9/2012	18	
27-PYRID	02017	90001585	CONNECTOR	PP-035	3/6/2012	2095		SG	RSG	4/5/2012	4/9/2012	2	
27-PYRID	2017	90002501	CONNECTOR	PP-035	9/4/2013 11:08	599	FALSE	SIGHTGLASS	CLEAN AND TIGHTEN	9/6/2013 4:00	9/6/2013 13:04	293	
27-PYRID	2017	90002501	CONNECTOR	PP-035	9/4/2013 11:08	599	FALSE	SIGHTGLASS	REPLACE GASKET	9/12/2013 6:00	9/12/2013 11:48	2	
27-PYRID	2021.9	90002820	CONNECTOR	PP-035	3/10/2014 15:05	274	FALSE	TUBING CONNECTOR	REPLACE FITTING	3/12/2014 13:00	3/12/2014 15:02	4	
27-PYRID	02022.03	90001482	SCONN	PP-035	1/5/2012	640		PLG	RPLG	1/9/2012	1/9/2012	1	
27-PYRID	2032.03	90001180	VALVE	TK-263	10/4/2011	642		SC	RG	10/5/2011	10/5/2011	1	
27-PYRID	2033.02	90001180	VALVE	TK-263	10/4/2011	1570		SC	RG	10/5/2011	10/5/2011	2	
27-PYRID	2039.03	90002163	CONNECTOR	TK-263	3/5/2013 14:10	1459	FALSE	SCREWED CONNECTO	REPLACE CONNECTOR	3/7/2013 6:30	3/7/2013 15:24	4	
27-PYRID	02042.04	90000425	CONNECTOR	TK-263	12/14/2010	2047		CAP	TCAP	12/16/2010	12/16/2010	37	
27-PYRID	02076.03	90000601	CONNECTOR	TK-262	3/16/2011	852		FLG	TFLG	3/18/2011	3/18/2011	2475	
27-PYRID	02076.03	90000601	CONNECTOR	TK-262	3/16/2011	852		FLG	TFLG	3/18/2011	3/18/2011	791	
27-PYRID	02076.03	90000601	CONNECTOR	TK-262	3/16/2011	852		FLG			3/31/2011		
27-PYRID	02076.03	90000601	CONNECTOR	TK-262	3/16/2011	852		FLG	RG	5/11/2011	5/11/2011	6	
27-PYRID	2088.03	90002080	POEL	TK-262	1/22/2013 14:03	460	FALSE	CAP	TIGHTEN CAP	1/23/2013 5:30	1/23/2013 16:51	7	
27-PYRID	02104.01	90000006	CONNECTOR	PP-770	5/20/2010	981		FLG	TFLG	5/25/2010	5/25/2010	49	
27-PYRID	02106.04	90001041	SCONN	PP-770	9/8/2011	926		U	RU	9/12/2011	9/12/2011	9	
27-PYRID	02108.02	90000007	CONNECTOR	TK-263	5/20/2010	656		FLG	TFLG	5/25/2010	5/25/2010	51	
27-PYRID	02108.02	90001589	CONNECTOR	TK-263	3/12/2012	851		FLG	TFLG	3/16/2012	3/16/2012	542	
27-PYRID	02108.02	90001589	CONNECTOR	TK-263	3/12/2012	851		FLG	TFLG	3/20/2012	3/20/2012	174	
27-PYRID	02108.02	90001589	CONNECTOR	TK-263	3/12/2012	851		FLG			4/3/2012		
27-PYRID	02108.02	90001589	CONNECTOR	TK-263	3/12/2012	851		FLG	RG	7/2/2012	7/2/2012	1	
27-PYRID	2109.4	90002502	CONNECTOR	TK-262	9/4/2013 14:13	1287	FALSE	FLANGE	TIGHTEN FLANGE	9/5/2013 17:15	9/6/2013 13:06	566	
27-PYRID	2109.4	90002502	CONNECTOR	TK-262	9/4/2013 14:13	1287	FALSE	FLANGE	REPLACE GASKET	9/13/2013 15:00	9/16/2013 13:18	4	
27-PYRID	02110.05	90000008	CONNECTOR	TK-262	5/20/2010	1114		FLG	TFLG	5/25/2010	5/25/2010	729	
27-PYRID	02110.05	90000008	CONNECTOR	TK-262	5/20/2010	1114		FLG			6/3/2010	716	
27-PYRID	02110.05	90000008	CONNECTOR	TK-262	5/20/2010	1114		FLG	RFLG	7/8/2010	7/16/2010	4	
27-PYRID	02111.01	90001590	CONNECTOR	TK-263	3/12/2012	909		FLG	TFLG	3/16/2012	3/16/2012	73	
27-PYRID	02111.02	90001861	CONNECTOR	TK-263	9/10/2012	679		FLG	TFLG	9/13/2012	9/13/2012	96	
27-PYRID	02112.01	90000009	SCONN	TK-262	5/20/2010	368		PLG	TPLG	5/25/2010	5/25/2010	4	
27-PYRID	02112.01	90001747	SCONN	TK-262	7/9/2012	48000		PLG	RPLG	7/11/2012	7/11/2012	13	
27-PYRID	2112.01	90002082	POEL	TK-262	1/22/2013 14:23	1538	FALSE	PLUG	TIGHTEN PLUG	1/23/2013 6:00	1/23/2013 16:53	3	
27-PYRID	02112.03	90000600	SCONN	TK-262	3/16/2011	777		SC	RPLG	3/18/2011	3/18/2011	2	REPLACED SC WITH PLG. PLG IN SYSTEM AS 02112.01
27-PYRID	02115.04	90000842	SCONN	TK-262	7/6/2011	945		PLG	RPLG	7/8/2011	7/8/2011	1	
27-PYRID	02115.09	90001240	SCONN	TK-262	10/26/2011	624		SC	RSC	10/31/2011	10/31/2011	4	
27-PYRID	2115.4	90002722	POEL	TK-262	1/13/2014 13:18	789	FALSE	PLUG	REPLACE PLUG	1/15/2014 15:00	1/16/2014 12:21	3	
27-PYRID	02132	90000010	CONNECTOR	TK-262	5/20/2010	800		FLG	TFLG	5/25/2010	5/25/2010	90	
27-PYRID	02142.06	90000402	SCONN		12/8/2010		VSBL	SC	CL	12/9/2010	12/9/2010	9	
27-PYRID	02142.06	90000402	SCONN		12/8/2010		VSBL	SC			12/28/2010		
27-PYRID	02142.06	90000402	SCONN		12/8/2010		VSBL	SC	RSC	2/9/2011	2/10/2011	6	
27-PYRID	02147.01	90000843	SCONN	TK-262	7/6/2011	28700		PLG	RPLG	7/7/2011	7/8/2011	1	
27-PYRID	2152.3	90002805	CONNECTOR	TK-262	3/4/2014 16:03	477	FALSE	SCREWED CONNECTO	CLEAN AND TIGHTEN	3/9/2014 22:30	3/10/2014 14:50	10	
27-PYRID	02156	90000014	CONNECTOR	PP-032	5/23/2010	603		SG	SEJ	5/27/2010	5/27/2010	819	
27-PYRID	02156	90000014	CONNECTOR	PP-032	5/23/2010	603		SG	RSG	6/3/2010	6/3/2010	4	
27-PYRID	2156	90002144	CONNECTOR	PP-032	3/8/2013 12:04	623	FALSE	SIGHTGLASS	TIGHTEN SIGHTGLASS	3/13/2013 11:00	3/13/2013 12:52	1416	
27-PYRID	2156	90002144	CONNECTOR	PP-032	3/8/2013 12:04	623	FALSE	SIGHTGLASS	ENVIRONMENTALLY F	3/14/2013 15:00	3/18/2013 13:00	2	
27-PYRID	02157.06	90000240	CONNECTOR	PP-032	9/2/2010	937		CAP	TCAP	9/3/2010	9/3/2010	5	
27-PYRID	02158.03	90001520	SCONN	PP-032	1/12/2012	5026		PLG	TPLG	1/16/2012	1/16/2012	701	
27-PYRID	02158.03	90001520	SCONN	PP-032	1/12/2012	5026		PLG	RV	1/18/2012	1/18/2012	9	
27-PYRID	02162.01	90000241	SCONN	PP-032	9/2/2010	520		PLG	TPLG	9/3/2010	9/3/2010	3	
27-PYRID	2164.1	90002503	CONNECTOR	PP-032	9/4/2013 15:06	832	FALSE	SCREWED CONNECTO	CLEAN AND TIGHTEN	9/5/2013 17:30	9/6/2013 13:08	6	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	02183.05	90001620	CONNECTOR	TK-261	3/13/2012	588		OT	TCPL	3/16/2012	3/16/2012	692	
27-PYRID	02183.05	90001620	CONNECTOR	TK-261	3/13/2012	588		OT	RFTG	3/20/2012	3/20/2012	6	
27-PYRID	02183.06	90000583	CONNECTOR	TK-261	3/17/2011	674		SC	TSC	3/20/2011	3/21/2011	4	
27-PYRID	02207.05	90000584	SCONN	TK-261	3/17/2011	854		U	TU	3/20/2011	3/21/2011	4	
27-PYRID	02215.01	90001540	SCONN	PP001A/B	1/16/2012	951		PLG	TPLG	1/18/2012	1/18/2012	29	
27-PYRID	02215.04	90001061	CONNECTOR	PP001A/B	9/13/2011	1299		SC	TFIT	9/15/2011	9/15/2011	4	
27-PYRID	02218.01	90000022	CONNECTOR	PP001A/B	5/23/2010	679		FLG	OT	5/27/2010	5/27/2010	6	
27-PYRID	02218.02	90000023	CONNECTOR	PP001A/B	5/23/2010	620		FLG	RG	5/27/2010	5/27/2010	6	
27-PYRID	02338.02	90001621	SCONN	PP 230A/B	3/13/2012	582		SC	TSC	3/16/2012	3/16/2012	532	
27-PYRID	02338.02	90001621	SCONN	PP 230A/B	3/13/2012	582		SC	RSC	3/20/2012	3/20/2012	5	
27-PYRID	2352.3	90002862	POEL	PP 230A/B	4/16/2014 14:55	1510	FALSE	PLUG	TIGHTEN PLUG	4/17/2014 1:00	4/17/2014 13:55	31	
27-PYRID	02355.01	90000582	SCONN	PP 230A/B	3/17/2011	624		SC	TSC	3/20/2011	3/21/2011	4	
27-PYRID	02355.02	90001668	SCONN	PP 230A/B	5/9/2012	343		SC	TSC	5/11/2012	5/11/2012	179	
27-PYRID	2357.1	90002888	CONNECTOR	PP 230A/B	5/22/2014 16:43	1558	FALSE	FLANGE	TIGHTEN FLANGE	5/27/2014 14:30	5/27/2014 15:31	720	
27-PYRID	2357.1	90002888	CONNECTOR	PP 230A/B	5/22/2014 16:43	1558	FALSE	FLANGE	REPLACE GASKET	6/6/2014 2:30	6/6/2014 11:01	7	
27-PYRID	02367.02	90001080	CONNECTOR	PP 002A/B	9/14/2011	562		GAU	RCON	9/19/2011	9/19/2011	5	
27-PYRID	02414.02	90000205	SCONN	PP 002A/B	9/9/2010	1534		SC	TFIT	9/12/2010	9/13/2010	1160	
27-PYRID	02414.02	90000205	SCONN	PP 002A/B	9/9/2010	1534		SC			9/14/2010		
27-PYRID	02414.02	90000205	SCONN	PP 002A/B	9/9/2010	1534		SC	RSC	11/1/2010	11/15/2010	4	
27-PYRID	02415.02	90000206	CONNECTOR	PP 002A/B	9/9/2010	543		FLG	TFLG	9/12/2010	9/13/2010	579	
27-PYRID	02415.02	90000206	CONNECTOR	PP 002A/B	9/9/2010	543		FLG			9/14/2010		
27-PYRID	02415.02	90000206	CONNECTOR	PP 002A/B	9/9/2010	543		FLG	RV	11/1/2010	11/15/2010	4	
27-PYRID	02429.02	90001081	CONNECTOR	MT-620.212	9/14/2011	644		FLG	TFLG	9/19/2011	9/19/2011	5	
27-PYRID	2431.4	90002798	CONNECTOR	MT-620.212	3/6/2014 11:01	4841	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	3/7/2014 10:30	3/7/2014 15:51	906	
27-PYRID	2431.4	90002798	CONNECTOR	MT-620.212	3/6/2014 11:01	4841	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	3/21/2014 14:40	3/21/2014 18:21	2	
27-PYRID	02437.04	90000040	SCONN	MT-620.212	5/26/2010	9130		SC	TCON	5/26/2010	5/26/2010	13600	
27-PYRID	02437.04	90000040	SCONN	MT-620.212	5/26/2010	9130		SC	ERHS	6/30/2010	7/16/2010	7	
27-PYRID	02437.07	90000041	SCONN	MT-620.212	5/26/2010	375		SC	TCON	5/26/2010	5/26/2010	286	
27-PYRID	02437.07	90000041	SCONN	MT-620.212	5/26/2010	375		SC	ERHS	6/30/2010	7/16/2010	5	
27-PYRID	02438.02	90000605	SCONN	MT-620.212	3/18/2011	681		SC	TSC	3/23/2011	3/23/2011	3	
27-PYRID	02444.06	90000080	CONNECTOR	MT-620.212	6/1/2010	11200		CAP	TCAP	6/4/2010	6/4/2010	24	
27-PYRID	02456.01	90000586	CONNECTOR	MT-620.212	3/22/2011	1372		FLG	TFLG	3/22/2011	3/23/2011	6	
27-PYRID	02458.01	90000588	SCONN	MT-620.212	3/22/2011	800		FLG	TFLG	3/22/2011	3/23/2011	6	
27-PYRID	02459.01	90000081	CONNECTOR	MT-620.212	6/1/2010	12400		FLG	SEJ	6/3/2010	6/4/2010	32767	
27-PYRID	02459.01	90000081	CONNECTOR	MT-620.212	6/1/2010	12400		FLG			6/11/2010		
27-PYRID	02459.01	90000081	CONNECTOR	MT-620.212	6/1/2010	12400		FLG	ERHS	7/9/2010	7/16/2010	35	
27-PYRID	02495.07	90001760	CONNECTOR	TT-624.162	7/11/2012	6346		PLG	TCAP	7/16/2012	7/16/2012	3	
27-PYRID	02501.04	90000844	CONNECTOR	PP-624.159B	7/12/2011	119900		CAP	TCAP	7/13/2011	7/13/2011	12	
27-PYRID	2501.4	90002743	POEL	PP-624.159B	1/20/2014 15:46	616	FALSE	CAP	REPLACE CAP	1/22/2014 6:00	1/22/2014 16:22	2	
27-PYRID	2508.08	90002145	CONNECTOR	PP-624.159A	3/12/2013 15:42	1241	FALSE	UNION	REPLACE FITTING	3/14/2013 11:30	3/14/2013 16:54	18	
27-PYRID	2516.03	90002146	CONNECTOR	PP-624.159A	3/12/2013 15:50	1346	FALSE	SCREWED CONNECTO	REPLACE FITTING	3/14/2013 11:00	3/14/2013 16:54	12	
27-PYRID	2516.6	90002520	CONNECTOR	PP-624.159A	9/10/2013 16:04	556	FALSE	UNION	REPLACE FITTING	9/12/2013 6:30	9/12/2013 11:55	2	
27-PYRID	2516.7	90002843	POEL	PP-624.159A	4/15/2014 11:54	604	FALSE	PLUG	REPLACE PLUG	4/16/2014 5:30	4/16/2014 13:29	22	
27-PYRID	2517.1	90002745	POEL	PP-624.159A	1/20/2014 15:52	1065	FALSE	PLUG	TIGHTEN PLUG	1/22/2014 5:00	1/22/2014 16:25	71	
27-PYRID	2518.01	90002221	POEL	PP-624.159A	4/9/2013 14:14	408	FALSE	PLUG	TIGHTEN PLUG	4/11/2013 12:30	4/11/2013 15:23	2	
27-PYRID	2518.1	90002844	POEL	PP-624.159A	4/15/2014 12:01	601	FALSE	CAP	REPLACE CAP	4/16/2014 5:00	4/16/2014 13:29	16	
27-PYRID	02541.03	90001601	CONNECTOR	PP-620.240	3/15/2012	521		FLG	TFLG	3/20/2012	3/20/2012	748	
27-PYRID	02541.03	90001601	CONNECTOR	PP-620.240	3/15/2012	521		FLG	RG	3/23/2012	3/23/2012	22	
27-PYRID	02551.01	90001882	SCONN	TK-244	9/13/2012	4179		SC	TSC	9/14/2012	9/14/2012	2	
27-PYRID	02551.03	90000643	CONNECTOR	TK-244	4/7/2011	706		CAP	RC	4/10/2011	4/11/2011	2	
27-PYRID	02551.04	90001602	SCONN	TK-244	3/15/2012	1126		SC	TSC	3/20/2012	3/20/2012	77	
27-PYRID	2570.04	90002222	POEL	TK-241	4/9/2013 15:07	388	FALSE	CAP	TIGHTEN CAP	4/11/2013 13:15	4/11/2013 15:25	2	
27-PYRID	02598.04	90001101	CONNECTOR	TK-255	9/15/2011	664		GAU	TG	9/19/2011	9/19/2011	1434	
27-PYRID	02598.04	90001101	CONNECTOR	TK-255	9/15/2011	664		GAU			9/21/2011		
27-PYRID	02598.04	90001101	CONNECTOR	TK-255	9/15/2011	664		GAU	RPLG	10/28/2011	10/28/2011	13	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	02612.01	90000063	CONNECTOR	TK254	6/9/2010	790		FLG	TFLG	6/11/2010	6/11/2010	715	
27-PYRID	02612.01	90000063	CONNECTOR	TK254	6/9/2010	790		FLG	RG	6/15/2010	6/21/2010	8	
27-PYRID	2616.3	90002920	CONNECTOR	MT620.251	4/22/2014 14:27	579	FALSE	SCREWED CONNECTO	CLEAN AND TIGHTEN	4/25/2014 1:00	4/25/2014 12:15	4	
27-PYRID	02622.04	90000064	CONNECTOR	pp622.242	6/9/2010	1686		CAP	TCAP	6/11/2010	6/11/2010	9	
27-PYRID	02622.04	90000465	CONNECTOR	pp622.242	12/16/2010	15000	NC	CAP	TCAP	12/16/2010	12/16/2010	13	
27-PYRID	02622.04	90000660	CONNECTOR	pp622.242	4/8/2011	11300		CAP	RV	4/10/2011	4/11/2011	17300	
27-PYRID	02622.04	90000660	CONNECTOR	pp622.242	4/8/2011	11300		CAP	RC	4/21/2011	4/21/2011	4	OEL cap replaced
27-PYRID	02622.04	90001560	CONNECTOR	pp622.242	1/19/2012	8718		CAP	RV	1/23/2012	1/23/2012	9	
27-PYRID	02622.04	90001762	CONNECTOR	pp622.242	7/11/2012	632		CAP	RC	7/16/2012	7/16/2012	1	
27-PYRID	2622.4	90002402	POEL	pp622.242	7/16/2013 11:56	23700	FALSE	CAP	REPLACE CAP	7/16/2013 17:00	7/17/2013 10:59	28	
27-PYRID	2622.4	90002880	POEL	pp622.242	4/17/2014 14:37	11800	FALSE	CAP	REPLACE CAP	4/22/2014 11:30	4/22/2014 14:00	32	
27-PYRID	2623.05	90002164	CONNECTOR	pp622.242	3/14/2013 12:57	589	FALSE	UNION	TIGHTEN FITTING	3/18/2013 15:00	3/19/2013 14:58	686	
27-PYRID	2623.05	90002164	CONNECTOR	pp622.242	3/14/2013 12:57	589	FALSE	UNION	CLEAN AND TIGHTEN	3/27/2013 12:30	3/27/2013 13:45	10	
27-PYRID	2623.08	90002165	CONNECTOR	pp622.242	3/14/2013 12:59	15800	FALSE	ELBOW	TIGHTEN FITTING	3/18/2013 15:00	3/19/2013 14:59	27900	
27-PYRID	2623.08	90002165	CONNECTOR	pp622.242	3/14/2013 12:59	15800	FALSE	ELBOW	CLEAN AND TIGHTEN	3/27/2013 12:30	3/27/2013 13:46	6	
27-PYRID	02623.09	90000223	SCONN	pp622.242	9/10/2010	10000		SC	TSC	9/15/2010	9/15/2010	22400	
27-PYRID	02623.09	90000223	SCONN	pp622.242	9/10/2010	10000		SC	RSC	9/25/2010	9/25/2010	3	
27-PYRID	2623.8	90002403	CONNECTOR	pp622.242	7/16/2013 0:00	0	TRUE	ELBOW	TIGHTEN FITTING	7/16/2013 16:15	7/17/2013 10:57	5446	
27-PYRID	2623.8	90002403	CONNECTOR	pp622.242	7/16/2013 0:00	0	TRUE	ELBOW	REPLACE FITTING	7/26/2013 13:15	7/26/2013 14:09	3	
27-PYRID	2626.1	90002404	POEL	pp622.242	7/16/2013 12:02	386	FALSE	PLUG	TIGHTEN PLUG	7/17/2013 17:30	7/18/2013 12:30	66	
27-PYRID	02631.05	90001884	SCONN	pp622.242	9/18/2012	536		U	TU	9/21/2012	9/21/2012	13	
27-PYRID	02632.03	90001561	CONNECTOR	pp622.242	1/19/2012	16000		CAP	RC	1/23/2012	1/23/2012	2	
27-PYRID	2632.4	90002561	POEL	pp622.242	10/3/2013 14:41	491	FALSE	CAP	REPLACE CAP	10/4/2013 2:15	10/4/2013 12:20	36	
27-PYRID	2632.4	90002761	POEL	pp622.242	1/21/2014 13:24	951	FALSE	CAP	REPLACE CAP	1/26/2014 16:00	1/27/2014 14:31	1	
27-PYRID	02641.07	90001102	CONNECTOR	pp622.256a	9/15/2011	772		OT	CR	9/20/2011	9/20/2011	548	
27-PYRID	02641.07	90001102	CONNECTOR	pp622.256a	9/15/2011	772		OT	RFLG	9/30/2011	9/30/2011	10	
27-PYRID	02653.06	90000466	CONNECTOR	pp622.256b	12/16/2010	115100		CAP	TCAP	12/16/2010	12/16/2010	83	
27-PYRID	02653.06	90000847	CONNECTOR	pp622.256b	7/13/2011	8849		CAP	TCAP	7/18/2011	7/19/2011	737	
27-PYRID	02653.06	90000847	CONNECTOR	pp622.256b	7/13/2011	8849		CAP	RF	7/21/2011	7/21/2011	153	
27-PYRID	02653.06	90001184	CONNECTOR	pp622.256b	10/12/2011	5124		CAP	RC	10/17/2011	10/17/2011	2682	
27-PYRID	02653.06	90001184	CONNECTOR	pp622.256b	10/12/2011	5124		CAP	RC	10/24/2011	10/24/2011	30	
27-PYRID	2653.06	90002223	POEL	pp622.256b	4/15/2013 14:39	742	FALSE	CAP	REPLACE CAP	4/17/2013 2:00	4/17/2013 11:49	1	
27-PYRID	2653.6	90002407	POEL	pp622.256b	7/16/2013 12:22	5418	FALSE	CAP	REPLACE CAP	7/16/2013 16:45	7/17/2013 11:00	12	
27-PYRID	2653.6	90002562	POEL	pp622.256b	10/3/2013 14:53	598	FALSE	CAP	REPLACE CAP	10/4/2013 2:30	10/4/2013 12:21	15	
27-PYRID	2653.6	90002762	POEL	pp622.256b	1/21/2014 13:36	848	FALSE	CAP	REPLACE CAP	1/26/2014 16:15	1/27/2014 14:32	2	
27-PYRID	02667.04	90001103	CONNECTOR	pp622.270a	9/15/2011	733		FLG	TFLG	9/19/2011	9/19/2011	31	
27-PYRID	02678.01	90000661	CONNECTOR	pp622.270a	4/13/2011	561		CAP	TCAP	4/15/2011	4/15/2011	16	
27-PYRID	02678.01	90001750	CONNECTOR	pp622.270a	7/12/2012	1192		CAP	RC	7/16/2012	7/16/2012	9	
27-PYRID	2678.01	90002224	POEL	pp622.270a	4/15/2013 14:50	366	FALSE	CAP	REPLACE PLUG	4/17/2013 2:15	4/17/2013 11:50	0	
27-PYRID	2679.8	90002408	POEL	pp622.270a	7/16/2013 12:41	553	FALSE	CAP	REPLACE CAP	7/16/2013 17:15	7/17/2013 11:01	26	
27-PYRID	2684.06	90002166	CONNECTOR	pp622.270a	3/14/2013 14:26	583	FALSE	UNION	TIGHTEN UNION	3/19/2013 6:30	3/19/2013 15:00	12200	
27-PYRID	2684.06	90002166	CONNECTOR	pp622.270a	3/14/2013 14:26	583	FALSE	UNION	REPLACE FITTING	4/2/2013 14:00	4/3/2013 14:11	1	
27-PYRID	2684.06	90002166	CONNECTOR	pp622.270a	3/14/2013 14:26	583	FALSE	UNION	ENVIRONMENTALLY F	3/27/2013 14:42			
27-PYRID	2693.05	90002225	POEL	pp622.270a	4/15/2013 14:58	2357	FALSE	PLUG	REPLACE PLUG	4/17/2013 2:30	4/17/2013 11:51	0	
27-PYRID	2693.5	90002563	POEL	pp622.270a	10/3/2013 15:24	458	FALSE	PLUG	REPLACE PLUG	10/4/2013 2:45	10/4/2013 12:23	10	
27-PYRID	2705.5	90002564	POEL	pp622.270b	10/3/2013 15:32	3929	FALSE	CAP	REPLACE CAP	10/4/2013 2:45	10/4/2013 12:27	318	
27-PYRID	2705.5	90002564	POEL	pp622.270b	10/3/2013 15:32	3929	FALSE	CAP	REPLACE CAP	10/16/2013 2:00	10/16/2013 13:05	5	
27-PYRID	02716.02	90001885	CONNECTOR	pp622.270b	9/18/2012	2656		FLG	TFLG	9/21/2012	9/21/2012	986	
27-PYRID	02716.02	90001885	CONNECTOR	pp622.270b	9/18/2012	2656		FLG			10/3/2012		
27-PYRID	02716.02	90001885	CONNECTOR	pp622.270b	9/18/2012	2656		FLG	SEJ	10/30/2012	10/30/2012	7	
27-PYRID	2737.11	90002167	CONNECTOR	pp622.270b	3/14/2013 15:27	1338	FALSE	UNION	REPLACE FITTING	3/18/2013 16:30	3/19/2013 15:01	70	
27-PYRID	02751.05	90000224	SCONN	pp622.270b	9/13/2010	657		SC	TSC	9/15/2010	9/15/2010	16	
27-PYRID	02753.03	90000225	CONNECTOR	pp622.270b	9/13/2010	14	VSBL	FLG	CL	9/17/2010	9/17/2010	4	LEAK WAS FOUND TO BE ON A WELD AFTER CLEANING
27-PYRID	02778.03	90000640	CONNECTOR	622.244	3/22/2011	677		FLG	TFLG	3/23/2011	3/23/2011	634	WORK OREDER CHANGED FROM 90000589
27-PYRID	02778.03	90000640	CONNECTOR	622.244	3/22/2011	677		FLG	RG	3/24/2011	3/24/2011	1	WORK OREDER CHANGED FROM 90000589

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	02794.02	90000594	CONNECTOR	622.242	3/22/2011	318		SC	TSC	3/23/2011	3/23/2011	15	
27-PYRID	02799.01	90001142	CONNECTOR	622.241	9/21/2011	42900		SC	RF	9/26/2011	9/26/2011	1	
27-PYRID	2817.01	90002226	POEL	PP623.170	4/15/2013 15:48	349	FALSE	CAP	REPLACE CAP	4/17/2013 3:00	4/17/2013 11:53	0	
27-PYRID	02822.01	90001145	SCONN	PP623.170	9/21/2011	925		SC	TSC	9/26/2011	9/26/2011	31	
27-PYRID	02839.07	90000662	SCONN	PP623.150	4/13/2011	776		PLG	RPLG	4/15/2011	4/15/2011	24	
27-PYRID	02860.02	90000592	SCONN	PP622.045A	3/22/2011	2078		SC	RSC	3/22/2011	3/23/2011	4	
27-PYRID	02860.04	90000593	CONNECTOR	PP622.045A	3/22/2011	1316		GAU	TG	3/23/2011	3/23/2011	3	
27-PYRID	02873.09	90001523	SCONN	PP622.045A	1/23/2012	1066		PLG	RPLG	1/27/2012	1/27/2012	2	
27-PYRID	02890.08	90000663	SCONN	PP622.045B	4/13/2011	844		PLG	RPLG	4/15/2011	4/15/2011	3	
27-PYRID	2905.2	90002809	CONNECTOR	PP622.045B	3/13/2014 15:49	282	FALSE	SCREWED CONNECTO	REPLACE FITTING	3/14/2014 5:45	3/14/2014 9:28	0	
27-PYRID	2921.2	90002485	CONNECTOR	PP621.140A	9/18/2013 12:27	540	FALSE	SCREWED CONNECTO	TIGHTEN SCREWED C	9/20/2013 6:30	9/20/2013 14:41	809	
27-PYRID	2921.2	90002485	CONNECTOR	PP621.140A	9/18/2013 12:27	540	FALSE	SCREWED CONNECTO	REPLACE FITTING	10/25/2013 7:00	10/25/2013 11:11	5	
27-PYRID	2933.4	90002900	POEL	PP621.140A	4/18/2014 9:05	1268	FALSE	PLUG	REPLACE PLUG	4/22/2014 6:00	4/22/2014 15:52	71	
27-PYRID	02935.05	90000664	SCONN	PP621.140A	4/13/2011	1016		PLG	RPLG	4/15/2011	4/15/2011	4	
27-PYRID	2947.8	90002810	CONNECTOR	PP621.140A	3/13/2014 16:05	403	FALSE	TUBING CONNECTOR	TIGHTEN FITTING	3/14/2014 5:30	3/14/2014 9:26	0	
27-PYRID	02948.01	90001596	SCONN	PP621.140A	3/21/2012	1095		SC	TSC	3/23/2012	3/23/2012	606	
27-PYRID	02948.01	90001596	SCONN	PP621.140A	3/21/2012	1095		SC			4/5/2012		
27-PYRID	02948.01	90001596	SCONN	PP621.140A	3/21/2012	1095		SC	RSC	7/2/2012	7/2/2012	1	
27-PYRID	02963.05	90000209	SCONN	PP 621.140	9/15/2010	805		SC	RSC	9/19/2010	9/20/2010	6	
27-PYRID	2971.1	90002486	CONNECTOR	PP 621.140	9/18/2013 13:14	705	FALSE	SCREWED CONNECTO	TIGHTEN SCREWED C	9/20/2013 6:00	9/20/2013 14:37	2	
27-PYRID	03002.04	10087602	SCONN	TT 623 160	5/12/2010	1835		U	TU	5/14/2010	5/14/2010	660	
27-PYRID	03002.04	10087602	SCONN	TT 623 160	5/12/2010	1835		U	TU	5/21/2010	5/21/2010	10	
27-PYRID	03006.01	90001543	SCONN	TT 623 160	2/1/2012	596		PLG	RPLG	2/6/2012	2/6/2012	3	
27-PYRID	03027.05	10087603	SCONN	MS 621 140	5/12/2010	3671		SC	TSC	5/14/2010	5/14/2010	4376	
27-PYRID	03027.05	10087603	SCONN	MS 621 140	5/12/2010	3671		SC	RU	5/19/2010	5/19/2010	4	
27-PYRID	03028.02	10087605	SCONN	MS 621 140	5/12/2010	6349		U	TU	5/14/2010	5/14/2010	2811	
27-PYRID	03028.02	10087605	SCONN	MS 621 140	5/12/2010	6349		U	RU	5/19/2010	5/19/2010	4	
27-PYRID	03041.04	90000260	SCONN	TT 622 110	9/16/2010	351	VSBL	PLG	RPLG	9/19/2010	9/20/2010	7	
27-PYRID	3041.4	90002905	POEL	TT 622 110	5/6/2014 15:20	582	FALSE	PLUG	CLEAN AND TIGHTEN	5/9/2014 8:30	5/9/2014 15:47	4	
27-PYRID	03042.03	90000000	SCONN	TT 622 110	5/14/2010	5061		TC	TCON	5/19/2010	5/19/2010	14100	
27-PYRID	03042.03	90000000	SCONN	TT 622 110	5/14/2010	5061		TC	TCON	5/27/2010	5/27/2010	24800	
27-PYRID	03042.03	90000000	SCONN	TT 622 110	5/14/2010	5061		TC	SEJ	5/27/2010	5/27/2010	20000	
27-PYRID	03042.03	90000000	SCONN	TT 622 110	5/14/2010	5061		TC	RCON	7/9/2010	7/9/2010	0	
27-PYRID	03042.03	90000122	SCONN	TT 622 110	7/16/2010	20800		TC	TCON	7/16/2010	7/16/2010	28200	
27-PYRID	03042.03	90000122	SCONN	TT 622 110	7/16/2010	20800		TC			7/23/2010		
27-PYRID	03042.03	90000122	SCONN	TT 622 110	7/16/2010	20800		TC	RCON	8/4/2010	8/9/2010	22	
27-PYRID	03049.07	90000262	SCONN	TT 622 110	9/16/2010	678		PLG	TPLG	9/19/2010	9/20/2010	4	
27-PYRID	03050.01	10087607	SCONN	TT 622 110	5/12/2010	2550		SC	TSC	5/14/2010	5/14/2010	2070	
27-PYRID	03050.01	10087607	SCONN	TT 622 110	5/12/2010	2550		SC	RPL	5/21/2010	5/21/2010	18	
27-PYRID	03050.04	90000263	SCONN	TT 622 110	9/16/2010	4106		SC	RSC	9/19/2010	9/20/2010	3	
27-PYRID	3050.5	90002904	POEL	TT 622 110	5/6/2014 15:29	800	FALSE	PLUG	CLEAN AND TIGHTEN	5/9/2014 9:00	5/9/2014 15:49	4	
27-PYRID	03068.01	10087606	CONNECTOR	MS 622 106	5/12/2010	2911		PLG	TBOL	5/14/2010	5/14/2010	18	
27-PYRID	3085.1	90002442	CONNECTOR	MT 251	8/6/2013 13:11	891	FALSE	COUPLING	SEAL JOB	8/8/2013 11:45	8/8/2013 14:17	24	
27-PYRID	3085.12	90002911	CONNECTOR	MT 251	5/23/2014 9:16	3100	FALSE	FLANGE	TIGHTEN FLANGE	5/27/2014 22:30	5/28/2014 10:36	27	
27-PYRID	3085.6	90002443	CONNECTOR	MT 251	8/6/2013 13:24	454	FALSE	COUPLING	SEAL JOB	8/8/2013 11:00	8/8/2013 14:18	11	
27-PYRID	3087.1	90002912	CONNECTOR	MT 252	5/23/2014 9:05	8800	FALSE	FLANGE	TIGHTEN FLANGE	5/27/2014 23:30	5/28/2014 11:06	31	
27-PYRID	3173.04	90002160	CONNECTOR	TT 621 008A	2/12/2013 12:57	506	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	2/13/2013 1:00	2/13/2013 11:43	7	
27-PYRID	3208.11	90002424	CONNECTOR	MT 621 004	8/8/2013 14:43	2907	FALSE	UNION	TIGHTEN UNION	8/12/2013 23:15	8/13/2013 12:50	2031	
27-PYRID	3208.11	90002424	CONNECTOR	MT 621 004	8/8/2013 14:43	2907	FALSE	UNION	REPLACE FITTING	8/22/2013 9:00	8/22/2013 12:40	4	
27-PYRID	3208.12	90002425	CONNECTOR	MT 621 004	8/8/2013 14:44	742	FALSE	UNION	TIGHTEN UNION	8/12/2013 22:45	8/13/2013 12:51	325	
27-PYRID	3208.12	90002425	CONNECTOR	MT 621 004	8/8/2013 14:44	742	FALSE	UNION	REPLACE FITTING	8/22/2013 9:00	8/22/2013 12:40	3	
27-PYRID	3208.8	90002423	CONNECTOR	MT 621 004	8/8/2013 14:41	412	FALSE	TUBING CONNECTOR	TIGHTEN CONNECTOI	8/12/2013 23:00	8/13/2013 12:49	82	
27-PYRID	03216.03	90000300	CONNECTO	MT 621 004	9/27/2010	581		SC	TSC	9/30/2010	10/1/2010	10	
27-PYRID	03216.03	90000300	CONNECTOR	MT 621 004	9/27/2010	581		SC	TSC	9/30/2010	10/1/2010	10	
27-PYRID	03216.03	90000542	CONNECTOR	MT 621 004	2/15/2011	707		SC	TSC	2/18/2011	2/18/2011	714	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03216.03	90000542	CONNECTOR	MT 621 004	2/15/2011	707		SC			2/18/2011		
27-PYRID	03216.03	90000542	CONNECTOR	MT 621 004	2/15/2011	707		SC	RSC	3/8/2011	3/11/2011	2	replaced
27-PYRID	03225.01	90000540	SCONN	MT 621 004	2/15/2011	595		SC	TSC	2/18/2011	2/18/2011	534	
27-PYRID	03225.01	90000540	SCONN	MT 621 004	2/15/2011	595		SC			2/23/2011		
27-PYRID	03225.01	90000540	SCONN	MT 621 004	2/15/2011	595		SC	RSC	3/8/2011	3/11/2011	2	
27-PYRID	03229.07	90001545	SCONN	MT 621 004	2/8/2012	967		TEE	TFIT	2/10/2012	2/10/2012	534	
27-PYRID	03229.07	90001545	SCONN	MT 621 004	2/8/2012	967		TEE	RFTG	2/15/2012	2/20/2012	10	
27-PYRID	03234.05	10087693	SCONN	AS 621 027	5/18/2010	875		U	TU	5/21/2010	5/21/2010	1309	
27-PYRID	03234.05	10087693	SCONN	AS 621 027	5/18/2010	875		U	TU	5/27/2010	5/27/2010	981	
27-PYRID	03234.05	10087693	SCONN	AS 621 027	5/18/2010	875		U	TU	5/27/2010	5/27/2010	2213	
27-PYRID	03234.05	10087693	SCONN	AS 621 027	5/18/2010	875		U	ERHS	7/9/2010	7/16/2010	7	
27-PYRID	03235.03	90000900	SCONN	AS 621 027	8/4/2011	3401		PLG	RPLG	8/8/2011	8/8/2011	9	
27-PYRID	03235.03	90001282	SCONN	AS 621 027	11/8/2011	641		PLG	TPLG	11/11/2011	11/11/2011	129	
27-PYRID	3235.3	90002884	POEL	AS 621 027	5/7/2014 15:53	543	FALSE	PLUG	TIGHTEN PLUG	5/9/2014 6:15	5/9/2014 12:14	4	
27-PYRID	03236.09	90001283	SCONN	AS 621 027	11/8/2011	661		PLG	TPLG	11/11/2011	11/11/2011	114	
27-PYRID	03241.01	10087692	CONNECTOR	AS 621 027	5/18/2010	486		FLG	TFLG	5/21/2010	5/21/2010	25	
27-PYRID	3242.05	90002122	CONNECTOR	AS 621 027	2/13/2013 11:51	418	FALSE	TUBING CONNECTOR	TIGHTEN FITTING	2/15/2013 5:30	2/15/2013 11:25	132	
27-PYRID	03247.01	RPDB4W/O	CONNECTOR	AS 621 027	9/16/2010	459		FLG	CL	9/16/2010	9/16/2010	120	
27-PYRID	3247.01	90002123	CONNECTOR	AS 621 027	2/13/2013 12:07	546	FALSE	FLANGE	TIGHTEN FLANGE	2/15/2013 5:45	2/15/2013 11:27	405	
27-PYRID	3247.01	90002123	CONNECTOR	AS 621 027	2/13/2013 12:07	546	FALSE	FLANGE	REPLACE GASKET	3/15/2013 11:00	3/18/2013 12:55	2	
27-PYRID	3249.01	90002124	CONNECTOR	AS 621 027	2/13/2013 12:10	505	FALSE	GAUGE	TIGHTEN GAUGE	2/15/2013 6:30	2/15/2013 11:28	66	
27-PYRID	03272.01	10087691	CONNECTOR	TT 610 007G	5/18/2010	736		GAU	TG	5/18/2010	5/21/2010	3	
27-PYRID	3277.01	90002200	CONNECTOR	TT 610 007G	4/5/2013 10:52	0	TRUE	FLANGE	TIGHTEN FLANGE	4/8/2013 14:30	4/8/2013 14:53	6	
27-PYRID	3279.1	90002781	CONNECTOR	TT 610 007F	2/13/2014 15:44	342	FALSE	SCREWED CONNECTO	REPLACE SCREWED C	2/18/2014 6:15	2/18/2014 14:46	5	
27-PYRID	3279.2	90002782	CONNECTOR	TT 610 007F	2/13/2014 15:45	357	FALSE	SCREWED CONNECTO	REPLACE FITTING	2/18/2014 6:45	2/18/2014 14:46	5	
27-PYRID	03281.02	90000901	CONNECTOR	TT 610 007F	8/4/2011	46300		FLG	RG	8/8/2011	8/8/2011	1	
27-PYRID	03282.02	90000902	CONNECTOR	TT 610 007F	8/4/2011	1721		FLG	RG	8/8/2011	8/8/2011	2	
27-PYRID	03284.02	90000903	CONNECTOR	TT 610 007F	8/4/2011	715		FLG	RG	8/8/2011	8/8/2011	6	
27-PYRID	03293.02	90001964	CONNECTOR	TT 610 007E	11/26/2012		VSBL	FLG	RG	11/30/2012	12/5/2012	6	
27-PYRID	03295.02	90001964	CONNECTOR	TT 610 007E	11/26/2012		VSBL	FLG	RG	11/30/2012	12/5/2012	8	
27-PYRID	03296.02	90001964	CONNECTOR	TT 610 007E	11/26/2012		VSBL	FLG	RG	11/30/2012	12/5/2012	6	
27-PYRID	03320.04	90001525	CONNECTOR	TT 610 007B	2/8/2012	728		SC	TCPL	2/10/2012	2/10/2012	4	
27-PYRID	03320.04	90001843	CONNECTOR	TT 610 007B	8/13/2012	2607		SC	RSC	8/16/2012	8/17/2012	4	
27-PYRID	03322.04	90001844	CONNECTOR	TT 610 007B	8/13/2012	14900		FLG	TFLG	8/16/2012	8/16/2012	1297	
27-PYRID	03322.04	90001844	CONNECTOR	TT 610 007B	8/13/2012	14900		FLG	RG	8/27/2012	8/27/2012	4	
27-PYRID	03323.04	90001845	CONNECTOR	TT 610 007B	8/13/2012	6243		FLG	TFLG	8/16/2012	8/16/2012	892	
27-PYRID	03323.04	90001845	CONNECTOR	TT 610 007B	8/13/2012	6243		FLG	RG	8/27/2012	8/27/2012	4	
27-PYRID	03324.04	90001846	CONNECTOR	TT 610 007B	8/13/2012	5357		FLG	TFLG	8/16/2012	8/16/2012	627	
27-PYRID	03324.04	90001846	CONNECTOR	TT 610 007B	8/13/2012	5357		FLG	RG	8/27/2012	8/27/2012	3	
27-PYRID	03325.03	90001480	CONNECTOR	TT 610 007B	1/2/2012		VSBL	FLG	RG	1/6/2012	1/6/2012	9	
27-PYRID	03325.04	90001847	CONNECTOR	TT 610 007B	8/13/2012	602		FLG	TFLG	8/16/2012	8/16/2012	12600	
27-PYRID	03325.04	90001847	CONNECTOR	TT 610 007B	8/13/2012	602		FLG	RG	8/27/2012	8/27/2012	4	
27-PYRID	03327.04	90001848	CONNECTOR	TT 610 007B	8/13/2012	1294		FLG	TFLG	8/16/2012	8/16/2012	1634	
27-PYRID	03327.04	90001848	CONNECTOR	TT 610 007B	8/13/2012	1294		FLG	RG	8/27/2012	8/27/2012	3	
27-PYRID	03332.04	90001849	CONNECTOR	TT 610 007A	8/13/2012	36200		FLG	TFLG	8/15/2012	8/15/2012	29800	
27-PYRID	03332.04	90001849	CONNECTOR	TT 610 007A	8/13/2012	36200		FLG	RG	8/27/2012	8/27/2012	3	
27-PYRID	3337.3	90002784	CONNECTOR	TT 610 007A	2/17/2014 10:40	286	FALSE	SCREWED CONNECTO	CLEANED RESIDUE	2/21/2014 17:41	2/21/2014 17:43	353	
27-PYRID	3337.3	90002784	CONNECTOR	TT 610 007A	2/17/2014 10:40	286	FALSE	SCREWED CONNECTO	CLEAN AND TIGHTEN	3/4/2014 4:00	3/4/2014 13:43	14	
27-PYRID	3358.8	90002922	POEL	TT 621 029	5/8/2014 15:18	256	FALSE	PLUG	CLEAN AND TIGHTEN	5/12/2014 21:30	5/13/2014 13:36	6	
27-PYRID	3363.5	90002923	POEL	TT 621 029	5/8/2014 15:23	296	FALSE	PLUG	CLEAN AND TIGHTEN	5/12/2014 20:30	5/13/2014 13:40	4	
27-PYRID	03390.01	90000924	SCONN	TA 621 029	8/16/2011	546		SC	TFIT	8/18/2011	8/18/2011	737	
27-PYRID	03390.01	90000924	SCONN	TA 621 029	8/16/2011	546		SC			8/26/2011		
27-PYRID	03390.01	90000924	SCONN	TA 621 029	8/16/2011	546		SC	ERHS	9/17/2011	9/19/2011	4	
27-PYRID	03398.01	90000925	SCONN	TA 621 029	8/16/2011	5839		SC	TFIT	8/18/2011	8/18/2011	5912	
27-PYRID	03398.01	90000925	SCONN	TA 621 029	8/16/2011	5839		SC			8/26/2011		

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03398.01	90000925	SCONN	TA 621 029	8/16/2011	5839		SC	ERHS	9/17/2011	9/19/2011	4	
27-PYRID	03410.01	90000943	CONNECTOR	MR 621 012	8/23/2011	905		CAP	TCAP	8/26/2011	8/26/2011	1085	
27-PYRID	03410.01	90000943	CONNECTOR	MR 621 012	8/23/2011	905		CAP			9/6/2011		
27-PYRID	03410.01	90000943	CONNECTOR	MR 621 012	8/23/2011	905		CAP	RC	9/17/2011	9/19/2011	4	
27-PYRID	3471.6	90002804	CONNECTOR	MR 621 012	2/18/2014 12:11	723	FALSE	FLANGE	TIGHTEN FLANGE	2/20/2014 6:00	2/20/2014 15:43	1107	
27-PYRID	3471.6	90002804	CONNECTOR	MR 621 012	2/18/2014 12:11	723	FALSE	FLANGE	TIGHTEN BOLTS	3/5/2014 9:00	3/5/2014 14:06	236	
27-PYRID	03478.01	90001850	CONNECTOR	MR 621 012	8/16/2012	1023		SC	TSC	8/21/2012	8/21/2012	1811	
27-PYRID	03478.01	90001850	CONNECTOR	MR 621 012	8/16/2012	1023		SC			8/27/2012		
27-PYRID	03478.01	90001850	CONNECTOR	MR 621 012	8/16/2012	1023		SC	RF	9/10/2012	9/10/2012	3	
27-PYRID	03478.02	90001851	SCONN	MR 621 012	8/16/2012	2284		SC	TSC	8/21/2012	8/21/2012	688	
27-PYRID	03478.02	90001851	SCONN	MR 621 012	8/16/2012	2284		SC			8/27/2012		
27-PYRID	03478.02	90001851	SCONN	MR 621 012	8/16/2012	2284		SC	RF	9/10/2012	9/10/2012	3	
27-PYRID	03511.08	90000926	SCONN	TT 610 007E	8/24/2011	18600		SC	TFIT	8/26/2011	8/26/2011	30700	
27-PYRID	03511.08	90000926	SCONN	TT 610 007E	8/24/2011	18600		SC	RF	8/30/2011	8/30/2011	2	
27-PYRID	03511.10	90000927	SCONN	TT 610 007E	8/24/2011	1207		SC	TFIT	8/26/2011	8/26/2011	1913	
27-PYRID	03511.10	90000927	SCONN	TT 610 007E	8/24/2011	1207		SC	RF	8/30/2011	8/30/2011	2	
27-PYRID	3511.12	90002785	CONNECTOR	TT 610 007E	2/18/2014 15:27	664	FALSE	SCREWED CONNECTO	CLEANED RESIDUE	2/21/2014 17:34	2/21/2014 17:36	647	
27-PYRID	3511.12	90002785	CONNECTOR	TT 610 007E	2/18/2014 15:27	664	FALSE	SCREWED CONNECTO	CLEANED RESIDUE	3/5/2014 10:15	3/5/2014 14:09	24	
27-PYRID	03515.10	90000020	SCONN	TT 610 007C	5/22/2010	810		SC	TCON	5/26/2010	5/26/2010	8	
27-PYRID	03515.11	90000265	SCONN	TT 610 007C	9/28/2010	1014		SC	TSC	9/30/2010	10/1/2010	514	
27-PYRID	03515.11	90000265	SCONN	TT 610 007C	9/28/2010	1014		SC	TSC	10/3/2010	10/4/2010	5	
27-PYRID	3515.13	90002786	CONNECTOR	TT 610 007C	2/18/2014 16:03	637	FALSE	SCREWED CONNECTO	CLEANED RESIDUE	2/21/2014 17:36	2/21/2014 17:38	700	
27-PYRID	3515.13	90002786	CONNECTOR	TT 610 007C	2/18/2014 16:03	637	FALSE	SCREWED CONNECTO	CLEANED RESIDUE	3/5/2014 10:15	3/5/2014 14:25	227	
27-PYRID	03530.01	90000004	SCONN	MR 621 012	5/19/2010	2482		PLG	TPLG	5/21/2010	5/21/2010	2021	
27-PYRID	03530.01	90000004	SCONN	MR 621 012	5/19/2010	2482		PLG			5/28/2010		
27-PYRID	03530.01	90000004	SCONN	MR 621 012	5/19/2010	2482		PLG	RV	7/7/2010	7/16/2010	7	
27-PYRID	03530.10	90000005	SCONN	MR 621 012	5/19/2010	1285		PLG	TPLG	5/21/2010	5/21/2010	1050	
27-PYRID	03530.10	90000005	SCONN	MR 621 012	5/19/2010	1285		PLG			5/28/2010		
27-PYRID	03530.10	90000005	SCONN	MR 621 012	5/19/2010	1285		PLG	RV	7/7/2010	7/16/2010	7	
27-PYRID	3542.03	90002161	POEL	MR 621 012	2/19/2013 15:17	658	FALSE	PLUG	TIGHTEN PLUG	2/21/2013 2:30	2/21/2013 11:11	37	
27-PYRID	03544.03	90001241	CONNECTOR	MR 621 012	11/9/2011	765		CAP	RC	11/14/2011	11/14/2011	3	
27-PYRID	3544.3	90002462	POEL	MR 621 012	8/19/2013 14:21	637	FALSE	PLUG	TIGHTEN PLUG	8/20/2013 12:00	8/20/2013 14:14	3	
27-PYRID	3544.3	90002620	POEL	MR 621 012	11/6/2013 14:09	725	FALSE	PLUG	TIGHTEN PLUG	11/11/2013 12:20	11/11/2013 13:26	315	
27-PYRID	3544.3	90002620	POEL	MR 621 012	11/6/2013 14:09	725	FALSE	PLUG	CLEAN AND TIGHTEN	11/19/2013 9:30	11/19/2013 15:00	2	
27-PYRID	03578.03	90001693	SCONN	PP 308A	5/3/2012	3785		SC	RSC	5/8/2012	5/8/2012	35	
27-PYRID	3578.03	90002263	CONNECTOR	PP 308A	5/15/2013 12:00	447	FALSE	SCREWED CONNECTO	TIGHTEN CONNECTOR	5/16/2013 23:00	5/17/2013 10:57	174	
27-PYRID	03579.03	90001461	CONNECTOR	PP 308A	12/6/2011		VSBL	FLG	TFLG	12/8/2011	12/8/2011	9	
27-PYRID	03583.07	90001728	CONNECTOR	PP 308B	7/7/2012		VSBL	GAU	TFIT	7/12/2012	7/13/2012	7	
27-PYRID	03584.05	90000724	CONNECTOR	PP 308B	5/3/2011	563		U	TU	5/5/2011	5/5/2011	25	
27-PYRID	03584.08	90000548	CONNECTOR	PP 308B	2/22/2011	559		CAP	TCAP	2/23/2011	2/24/2011	3503	
27-PYRID	03584.08	90000548	CONNECTOR	PP 308B	2/22/2011	559		CAP			3/8/2011		
27-PYRID	03584.08	90000548	CONNECTOR	PP 308B	2/22/2011	559		CAP	RC	5/4/2011	5/5/2011	51	
27-PYRID	03584.08	90000883	CONNECTOR	PP 308B	8/9/2011	2100		CAP	RC	8/11/2011	8/11/2011	5	
27-PYRID	03584.08	90001286	CONNECTOR	PP 308B	11/10/2011	995		CAP	RC	11/15/2011	11/15/2011	5073	
27-PYRID	03584.08	90001286	CONNECTOR	PP 308B	11/10/2011	995		CAP	RC	11/23/2011	11/25/2011	87	
27-PYRID	03584.08	90001567	CONNECTOR	PP 308B	2/14/2012	1644		CAP	RV	2/17/2012	2/20/2012	2	
27-PYRID	03584.08	90001694	CONNECTOR	PP 308B	5/3/2012	678		CAP	RC	5/8/2012	5/8/2012	63600	
27-PYRID	03584.08	90001694	CONNECTOR	PP 308B	5/3/2012	678		CAP	RC	5/15/2012	5/15/2012	2	
27-PYRID	3584.08	90002121	POEL	PP 308B	2/6/2013 15:00	1514	FALSE	CAP	TIGHTEN CAP	2/11/2013 14:00	2/11/2013 15:55	25	
27-PYRID	3584.8	90002622	POEL	PP 308B	11/11/2013 14:00	568	FALSE	CAP	OTHER SPECIFY IN CO	11/15/2013 6:00	11/15/2013 12:34	5	
27-PYRID	3584.8	90002902	POEL	PP 308B	5/6/2014 14:54	1438	FALSE	CAP	REPLACE CAP	5/9/2014 5:00	5/9/2014 12:22	4	
27-PYRID	03586.05	90001287	SCONN	PP 308B	11/10/2011	810		U	RC	11/15/2011	11/15/2011	59	
27-PYRID	03598.09	90000463	SCONN	PP 308B	12/16/2010	288		PLG	RPLG	12/20/2010	12/21/2010	2	
27-PYRID	3599.07	90002264	CONNECTOR	PP 308B	5/15/2013 12:31	290	FALSE	PLUG	TIGHTEN PLUG	5/16/2013 23:30	5/17/2013 11:00	46	
27-PYRID	3599.6	90002623	CONNECTOR	PP 308B	11/11/2013 14:12	310	FALSE	SCREWED CONNECTO	TIGHTEN CONNECTOR	11/15/2013 4:15	11/15/2013 12:37	625	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03600.01	90000200	CONNECTOR	PP 308B	8/18/2010	4328		SC	WO	8/19/2010	8/20/2010	4927	
27-PYRID	03600.01	90000200	CONNECTOR	PP 308B	8/18/2010	4328		SC	RCON	9/1/2010	9/1/2010	5	
27-PYRID	03600.02	90000200	CONNECTOR	PP 308B	8/18/2010	614		SC	WO	8/19/2010	8/20/2010	663	
27-PYRID	03600.02	90000200	CONNECTOR	PP 308B	8/18/2010	614		SC	RCON	9/1/2010	9/1/2010	4	
27-PYRID	03602.01	90000727	CONNECTOR	PP 308B	5/4/2011	875		SC	TSC	5/6/2011	5/6/2011	770	
27-PYRID	03602.01	90000727	CONNECTOR	PP 308B	5/4/2011	875		SC	RF	5/16/2011	5/17/2011	1	
27-PYRID	03602.05	90001921	SCONN	PP 308B	11/14/2012	1484		U	CLT	11/19/2012	11/19/2012	155	
27-PYRID	03603.07	90000728	SCONN	PP 308B	5/4/2011	1327		U	TU	5/6/2011	5/6/2011	516	
27-PYRID	03603.07	90000728	SCONN	PP 308B	5/4/2011	1327		U	RF	5/16/2011	5/17/2011	1	
27-PYRID	03715.01		SCONN	TT 303	08/19/10	559		PLG	RPLG	08/24/10	08/25/10	5	
27-PYRID	03715.01	90000220	SCONN	TT 303	8/19/2010	559		PLG	RPLG	8/24/2010	8/25/2010	5	
27-PYRID	03715.01	90000730	SCONN	TT 303	5/4/2011	2496		PLG	TPLG	5/6/2011	5/6/2011	2422	
27-PYRID	03715.01	90000730	SCONN	TT 303	5/4/2011	2496		PLG	RV	5/16/2011	5/17/2011	2	OEL cap replaced
27-PYRID	03715.01	90000730	SCONN	TT 303	5/4/2011	2496		PLG	RV	5/16/2011	5/17/2011	2	
27-PYRID	3719.02	90002266	CONNECTOR	TT 303	5/15/2013 13:00	356	FALSE	SCREWED CONNECTO	TIGHTEN CONNECTOF	5/16/2013 22:00	5/17/2013 11:06	40	
27-PYRID	3719.2	90002885	CONNECTOR	TT 303	5/7/2014 11:41	258	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	5/9/2014 5:45	5/9/2014 12:25	4	
27-PYRID	03721.01	90000547	CONNECTOR	TT 303	2/22/2011	571		FLG	TFLG	2/23/2011	2/24/2011	1434	
27-PYRID	03721.01	90000547	CONNECTOR	TT 303	2/22/2011	571		FLG			3/8/2011		
27-PYRID	03721.01	90000547	CONNECTOR	TT 303	2/22/2011	571		FLG	RG	5/16/2011	5/17/2011	2	
27-PYRID	03726.04	90000731	SCONN	TT 302	5/4/2011	518		SC	TCON	5/6/2011	5/6/2011	801	
27-PYRID	03726.04	90000731	SCONN	TT 302	5/4/2011	518		SC	RF	5/16/2011	5/17/2011	3	
27-PYRID	3728.7	90002886	CONNECTOR	TT 302	5/7/2014 12:04	278	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	5/9/2014 6:00	5/9/2014 12:24	3	
27-PYRID	3737.04	90002267	CONNECTOR	MT 307	5/15/2013 15:30	728	FALSE	SIGHTGLASS	TIGHTEN SIGHTGLASS	5/16/2013 21:30	5/17/2013 10:51	49300	
27-PYRID	3737.04	90002267	CONNECTOR	MT 307	5/15/2013 15:30	728	FALSE	SIGHTGLASS	CLEAN AND TIGHTEN	5/30/2013 11:00	5/30/2013 11:52	845	
27-PYRID	3737.04	90002267	CONNECTOR	MT 307	5/15/2013 15:30	728	FALSE	SIGHTGLASS	REPLACE SIGHT GLASS	5/31/2013 8:30	5/31/2013 11:17	3	
27-PYRID	3774.05	90002301	CONNECTOR	PP 692 751	5/16/2013 13:25	457	FALSE	UNION	REPLACE FITTING	5/21/2013 2:00	5/21/2013 13:42	3	
27-PYRID	03778.13	90001708	SCONN	PP 692 751	5/16/2012	1051		U	TFIT	5/21/2012	5/21/2012	888	
27-PYRID	03778.13	90001708	SCONN	PP 692 751	5/16/2012	1051		U	RF	5/22/2012	5/23/2012	4	
27-PYRID	3784.3	90002793	POEL	MT 692 750	2/20/2014 12:42	319	FALSE	PLUG	TIGHTEN PLUG	2/24/2014 16:44	2/24/2014 16:45	20	
27-PYRID	03785.03	90001923	SCONN	MT 692 750	11/14/2012	602		TEE	CLT	11/19/2012	11/19/2012	159	
27-PYRID	3786.5	90002924	CONNECTOR	MT 692 750	5/8/2014 15:20	265	FALSE	UNION	REPLACE CONNECTOF	5/13/2014 14:00	5/13/2014 15:27	9	
27-PYRID	03792.11	90001924	SCONN	MT 692 750	11/14/2012	8789		TEE	CLT	11/19/2012	11/19/2012	197	
27-PYRID	03796.05	90000742	CONNECTOR	PP 604A	5/5/2011	2960		CAP	RC	5/9/2011	5/9/2011	3	
27-PYRID	03797.01	90000743	CONNECTOR	PP 604A	5/5/2011	641		GAU	RF	5/9/2011	5/9/2011	3	
27-PYRID	3797.04	90002302	CONNECTOR	PP 604A	5/16/2013 15:12	2024	FALSE	SCREWED CONNECTO	TIGHTEN SCREWED C	5/21/2013 12:30	5/21/2013 13:44	770	
27-PYRID	3797.04	90002302	CONNECTOR	PP 604A	5/16/2013 15:12	2024	FALSE	SCREWED CONNECTO	REPLACE FITTING	5/30/2013 10:00	5/30/2013 11:51	4	
27-PYRID	3797.1	90002640	CONNECTOR	PP 604A	11/13/2013 14:07	321	FALSE	GAUGE	REPLACE FITTING	11/18/2013 5:00	11/18/2013 13:05	18	
27-PYRID	3797.6	90002909	CONNECTOR	PP 604A	5/20/2014 15:14	295	FALSE	UNION	TIGHTEN UNION	5/22/2014 8:30	5/22/2014 13:48	4	
27-PYRID	03821.06	90001943	CONNECTOR	MT 602	11/15/2012	955		FLG	CR	11/16/2012	11/16/2012	3	
27-PYRID	03823.06	90001400	CONNECTOR	MT 602	11/23/2011	643		CAP	RC	11/28/2011	11/28/2011	1	
27-PYRID	03834.02	90000744	SCONN	MT 603	5/5/2011	977		SC	TFIT	5/9/2011	5/9/2011	3	
27-PYRID	03834.09	90001824	CONNECTOR	MT 603	8/23/2012	546	NC	CAP	RC	8/24/2012	8/24/2012	5	
27-PYRID	03846.01	90000745	SCONN	MT 604	5/5/2011	875		PLG	RPLG	5/9/2011	5/9/2011	3	
27-PYRID	03853.01	90000222	SCONN	MT 607	8/19/2010	768		SC	WO	8/23/2010	8/23/2010	522	Need to empy tank
27-PYRID	03853.01	90000222	SCONN	MT 607	8/19/2010	768		SC	TSC	8/25/2010	8/31/2010	3	
27-PYRID	3853.07	90002142	POEL	MT 607	2/11/2013 12:27	950	FALSE	CAP	REPLACE CAP	2/14/2013 5:30	2/14/2013 14:56	2	
27-PYRID	3853.7	90002792	POEL	MT 607	2/20/2014 13:41	11600	FALSE	CAP	TIGHTEN CAP	2/21/2014 11:30	2/21/2014 16:22	12	
27-PYRID	3853.7	90002910	POEL	MT 607	5/21/2014 14:52	255	FALSE	CAP	TIGHTEN CAP	5/22/2014 9:00	5/22/2014 13:49	3	
27-PYRID	3877.1	90002790	POEL	MT 607	2/20/2014 13:53	759	FALSE	PLUG	TIGHTEN PLUG	2/21/2014 10:45	2/21/2014 16:28	11	
27-PYRID	3880.1	90002788	POEL	MT 607	2/20/2014 14:00	586	FALSE	PLUG	TIGHTEN PLUG	2/21/2014 9:15	2/21/2014 16:31	10	
27-PYRID	03907.02		CONNECTOR	PP-620.163	3/29/2011	826		SC	TSC	3/29/2011	3/29/2011	2	
27-PYRID	03938.01	90001580	CONNECTOR	PP-602	3/1/2012	740		FLG	RG	3/6/2012	3/6/2012	185	
27-PYRID	03952.01	90001581	SCONN	MT-601	3/1/2012	860		SG	RSG	3/6/2012	3/6/2012	3	
27-PYRID	03952.01	90001743	SCONN	MT-601	7/5/2012	2898		SG	TSG	7/10/2012	7/10/2012	12	
27-PYRID	3955.3	90002601	POEL	MT-621.092	10/29/2013 11:21	346	FALSE	PLUG	CLEAN AND TIGHTEN	10/31/2013 6:00	10/31/2013 13:08	4	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03975.02	90001702	SCONN	MT-621.093	5/8/2012	532		SC	RSC	5/10/2012	5/10/2012	3	
27-PYRID	3979.09	90002126	CONNECTOR	PP-621.093	3/4/2013 14:21	765	FALSE	GAUGE	TIGHTEN GAUGE	3/6/2013 7:00	3/6/2013 13:22	3	
27-PYRID	3984.1	90002488	CONNECTOR	PP-621.093	9/18/2013 14:37	643	FALSE	SCREWED CONNECTO	TIGHTEN SCREWED C	9/20/2013 5:30	9/20/2013 14:43	527	
27-PYRID	3984.1	90002488	CONNECTOR	PP-621.093	9/18/2013 14:37	643	FALSE	SCREWED CONNECTO	REPLACE SCREWED C	10/1/2013 23:00	10/2/2013 11:28	4	
27-PYRID	3986.1	90002489	CONNECTOR	PP-621.093	9/18/2013 14:40	531	FALSE	FLANGE	TIGHTEN FLANGE	9/23/2013 4:00	9/23/2013 11:06	5	
27-PYRID	4015.2	90002484	CONNECTOR	MT-620.234	9/17/2013 16:45	2930	FALSE	FLANGE	TIGHTEN FLANGE	9/19/2013 14:00	9/19/2013 16:25	653	
27-PYRID	4015.2	90002484	CONNECTOR	MT-620.234	9/17/2013 16:45	2930	FALSE	FLANGE	REPLACE FITTING	10/25/2013 7:00	10/25/2013 11:03	5	
27-PYRID	04021.04	90001666	SCONN	MT-620.234	5/9/2012	1098		U	RF	5/11/2012	5/11/2012	6	
27-PYRID	04051.06	90000340	SCONN	TK-256	10/8/2010	10800		U	IC	10/10/2010	10/11/2010	6	
27-PYRID	04051.19	90000341	CONNECTOR	TK-256	10/8/2010	10200		FLG	IC	10/10/2010	10/11/2010	5	
27-PYRID	04055.03	90000342	CONNECTOR	TK-256	10/8/2010	10500		FLG	IC	10/10/2010	10/11/2010	11	
41-CYANO	0113A.02	90000821	SCONN	AS-2	6/6/2011	510		SC	TSC	6/7/2011	6/8/2011	4477	
41-CYANO	0113A.02	90000821	SCONN	AS-2	6/6/2011	510		SC	RU	6/16/2011	6/17/2011	13	
41-CYANO	0113A.07	90001740	SCONN	AS-2	6/5/2012	6213		U	RU	6/7/2012	6/7/2012	2	
27-PYRID	02006A.03	90001584	SCONN	TK-263	3/6/2012	588		SC	TSC	3/9/2012	3/9/2012	3	
27-PYRID	02006A.06	90000828	CONNECTOR	TK-263	7/5/2011	2893		CAP	RC	7/6/2011	7/6/2011	1227	
27-PYRID	02006A.06	90000828	CONNECTOR	TK-263	7/5/2011	2893		CAP	TCAP	7/12/2011	7/12/2011	6	
27-PYRID	02006A.7	90002500	CONNECTOR	TK-263	9/4/2013 10:51	550	FALSE	COUPLING	CLEAN AND TIGHTEN	9/5/2013 15:00	9/6/2013 13:10	6	
41-CYANO	0241A.06	90000436	SCONN	PP-034A	12/15/2010	540		PLG	TPLG	12/17/2010	12/17/2010	9	
27-PYRID	02610G.03	90000207	SCONN	TK254	9/10/2010	604		SC	TSC	9/14/2010	9/14/2010	28700	
27-PYRID	02610G.03	90000207	SCONN	TK254	9/10/2010	604		SC	RU	9/25/2010	9/25/2010	2	
27-PYRID	02610J.02	90002201	POEL	TK254	4/10/2013 12:06	961	FALSE	CAP	TIGHTEN CAP	4/12/2013 6:50	4/12/2013 12:58	0	
27-PYRID	02611A.05	90000208	SCONN	TK254	9/10/2010	11100		SC	TSC	9/14/2010	9/14/2010	10300	
27-PYRID	02611A.05	90000208	SCONN	TK254	9/10/2010	11100		SC	RSC	9/25/2010	9/25/2010	2	
27-PYRID	02612C.03	90001681	CONNECTOR	TK254	4/12/2012	3175		CAP	RC	4/17/2012	4/17/2012	3	
27-PYRID	02612C.03	90001761	CONNECTOR	TK254	7/11/2012	641		CAP	RC	7/16/2012	7/16/2012	3	
27-PYRID	02612C.4	90002541	POEL	TK254	10/4/2013 8:15	4739	FALSE	CAP	REPLACE CAP	10/4/2013 11:05	10/4/2013 12:25	11	
27-PYRID	02612E.02	90002042	POEL	TK254	1/24/2013 12:50	522	FALSE	PLUG	REPLACE PLUG	1/29/2013 5:30	1/29/2013 12:07	6	
27-PYRID	02613D.10	90002041	POEL	MT620.252	1/24/2013 12:54	257	FALSE	PLUG	REPLACE PLUG	1/29/2013 5:45	1/29/2013 12:05	4	
27-PYRID	02614B.03	90000595	SCONN	MT620.251	3/23/2011	624		SC	RSC	3/27/2011	3/28/2011	2	
27-PYRID	02614D.12	90000846	CONNECTOR	MT620.251	7/13/2011	573		CAP	TCAP	7/18/2011	7/19/2011	30	
27-PYRID	02614D.12	90002202	POEL	MT620.251	4/10/2013 12:26	453	FALSE	CAP	TIGHTEN CAP	4/12/2013 6:30	4/12/2013 12:59	3	
27-PYRID	02614E.05	90001682	SCONN	MT620.251	4/12/2012	628		PLG	RPLG	4/17/2012	4/17/2012	3	
27-PYRID	02616A.4	90002381	POEL	MT620.251	7/15/2013 15:42	121000	FALSE	CAP	REPLACE CAP	7/19/2013 4:00	7/19/2013 12:15	3	
27-PYRID	02799.12B	90001887	CONNECTOR	622.241	9/20/2012	42000		SC	TCON	9/24/2012	9/24/2012	44800	
27-PYRID	02799.12B	90001887	CONNECTOR	622.241	9/20/2012	42000		SC			10/5/2012		
27-PYRID	02799.12B	90001887	CONNECTOR	622.241	9/20/2012	42000		SC	RSC	10/30/2012	10/30/2012	7	
27-PYRID	02804.15A	90001144	CONNECTOR	622.24	9/21/2011	16200		OT	CR	9/26/2011	9/26/2011	6476	
27-PYRID	02804.15A	90001144	CONNECTOR	622.24	9/21/2011	16200		OT	SEJ	9/30/2011	9/30/2011	18	
27-PYRID	02804.15B	90001604	CONNECTOR	622.24	3/20/2012	9739		OT	CS	3/22/2012	3/22/2012	12	
27-PYRID	02837B.5	90002764	POEL	PP623.150	1/21/2014 15:21	849	FALSE	PLUG	REPLACE PLUG	1/26/2014 17:00	1/27/2014 14:35	2	
27-PYRID	02844A.03	90002132	CONNECTOR	PP623.150	3/18/2013 13:45	1362	FALSE	SCREWED CONNECTO	TIGHTEN FITTING	3/22/2013 13:45	3/22/2013 13:45	1041	
27-PYRID	02844A.03	90002132	CONNECTOR	PP623.150	3/18/2013 13:45	1362	FALSE	SCREWED CONNECTO	REPLACE SCREWED C	5/30/2013 13:00	6/3/2013 13:58	2	
27-PYRID	03008A.07	90000860	SCONN	TT 623 160	8/2/2011	2705		U	TU	8/3/2011	8/3/2011	2	
27-PYRID	03050A.6	90002903	POEL	TT 622 110	5/6/2014 15:30	39800	FALSE	PLUG	CLEAN AND TIGHTEN	5/9/2014 9:30	5/9/2014 15:51	4	
27-PYRID	03277B.01	90002200	CONNECTOR	TT 610 007G	4/5/2013 10:52	0	TRUE	FLANGE	TIGHTEN FLANGE	4/8/2013 14:30	4/8/2013 14:54	6	
27-PYRID	03277B.2	90002460	CONNECTOR	TT 610 007G	8/12/2013 15:28	1135	FALSE	FLANGE	TIGHTEN FLANGE	8/14/2013 21:00	8/15/2013 14:10	711	
27-PYRID	03277B.2	90002460	CONNECTOR	TT 610 007G	8/12/2013 15:28	1135	FALSE	FLANGE	REPLACE GASKET	8/21/2013 12:30	8/21/2013 14:53	3	
27-PYRID	03377A.01	90000923	SCONN	TA 621 029	8/16/2011	567		SC	TFIT	8/18/2011	8/18/2011	577	
27-PYRID	03377A.01	90000923	SCONN	TA 621 029	8/16/2011	567		SC			8/26/2011		
27-PYRID	03377A.01	90000923	SCONN	TA 621 029	8/16/2011	567		SC	ERHS	9/17/2011	9/19/2011	4	
27-PYRID	03402B.02	90001822	SCONN	TA 621 029	8/14/2012	785		SC	TSC	8/15/2012	8/15/2012	10	
27-PYRID	03530A.02	90000960	SCONN	MR 621 012	8/25/2011	2633		SC	TFIT	8/29/2011	8/29/2011	121	
27-PYRID	03530A.02	90001526	SCONN	MR 621 012	2/22/2012	916		SC	RSC	2/24/2012	2/24/2012	2	
27-PYRID	03907C.01	90001147	SCONN	PP-620.163	9/22/2011	629		SG	RSG	9/26/2011	9/27/2011	3	

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03907C.02	90001888	SCONN	PP-620.163	9/20/2012	2752		SC	TCON	9/24/2012	9/24/2012	741	
27-PYRID	03907C.02	90001888	SCONN	PP-620.163	9/20/2012	2752		SC	TSG	10/3/2012	10/3/2012	8	
27-PYRID	03907C.02	90002133	CONNECTOR	PP-620.163	3/19/2013 11:17	1104	FALSE	SIGHTGLASS	REPLACE SIGHT GLAS	3/22/2013 15:00	3/25/2013 12:34	4	
27-PYRID	03907C.5	90002487	CONNECTOR	PP-620.163	9/18/2013 13:50	541	FALSE	UNION	TIGHTEN UNION	9/20/2013 6:30	9/20/2013 14:40	2	
27-PYRID	2788.12B	90002806	CONNECTOR	622.243	3/11/2014 15:58	600	FALSE	SEALANT	OTHER (SPECIFY IN C	3/13/2014 14:45	3/13/2014 14:56	400	
27-PYRID	2788.12B	90002806	CONNECTOR	622.243	3/11/2014 15:58	600	FALSE	SEALANT	REPLACE GASKET	6/3/2014 14:00	6/4/2014 13:07	27	
27-PYRID	2794.18A	90002482	CONNECTOR	622.242	9/17/2013 14:48	1130	FALSE	FLANGE	TIGHTEN FLANGE	9/19/2013 10:00	9/19/2013 16:22	611	
27-PYRID	2794.18A	90002482	CONNECTOR	622.242	9/17/2013 14:48	1130	FALSE	FLANGE	OTHER (SPECIFY IN C	10/25/2013 7:00	10/25/2013 11:01	5	
27-PYRID	2799.12B	90002147	CONNECTOR	622.241	3/15/2013 11:33	3535	FALSE	CONNECTOR	TIGHTEN CONNECTO	3/20/2013 6:30	3/20/2013 16:24	1019	
27-PYRID	2799.12B	90002147	CONNECTOR	622.241	3/15/2013 11:33	3535	FALSE	CONNECTOR	REPLACE SAMPLE PO	5/25/2013 16:00	6/4/2013 16:15	4	

Agitators

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03852	10087524	AGITATOR	MT 607	4/28/2010	975		AS	TP	4/30/2010	4/30/2010	873	
27-PYRID	03852	10087524	AGITATOR	MT 607	4/28/2010	975		AS	TP	5/11/2010	5/11/2010	135	
27-PYRID	03859		AGITATOR	MT 622	4/28/2010	866		AS	TP	4/30/2010	5/5/2010	107	
27-PYRID	03852		AGITATOR	MT 607	9/17/2010		VSBL	AS	VI	9/20/2010	9/20/2010	0	
27-PYRID	03852		AGITATOR	MT 607	9/28/2010		VSBL	AS	OT	10/3/2010	10/6/2010	230	
27-PYRID	03852	90000381	AGITATOR	MT 607	11/11/2010		VSBL	AS	TP	11/15/2010	11/15/2010	42	
27-PYRID	03852A	90002021	AGITATOR	MT 607	12/14/2012	67	VSBL	AS	TP	12/19/2012	12/20/2012	37	

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Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
41-CYANO	00044	90000061	PUMP	PP-213A	6/1/2010	30700	VSBL	PS	ERHS	6/3/2010	6/4/2010	2	
41-CYANO	00044	90000061	PUMP	PP-213A	6/1/2010	30700	VSBL	PS	RS	6/7/2010	6/7/2010	5	
41-CYANO	44	90002125	PUMP	PP-213A	3/3/2013 0:00	0	TRUE	PUMP HOUSING	REPLACE PUMP HOUSING	3/12/2013 14:30	3/12/2013 17:10	6	
41-CYANO	44	90002125	PUMP	PP-213A	3/3/2013 0:00	0	TRUE	PUMP HOUSING	ENVIRONMENTALLY REMOVE	3/5/2013 16:00			
41-CYANO	44	90002269	PUMP	PP-213A	5/30/2013 0:00	0	TRUE	PUMP SEAL	ADJUST SEAL	6/4/2013 13:30	6/4/2013 15:58	8	
41-CYANO	00051		PUMP	PP-213B	5/17/2010		VSBL	PS	RS	5/20/2010	5/20/2010	4	
41-CYANO	00051	90000581	PUMP	PP-213B	3/14/2011		VSBL	PS	RS	3/17/2011	3/18/2011	2	
41-CYANO	51	90002927	PUMP	PP-213B	5/21/2014 18:12	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	6/3/2014 8:30	6/3/2014 11:31	6	
41-CYANO	51	90002927	PUMP	PP-213B	5/21/2014 18:12	0	TRUE	PUMP SEAL	ENVIRONMENTALLY REMOVE	5/26/2014 5:00			
41-CYANO	00060		PUMP	PP-213C	4/21/2010	687	VSBL	PS	RS	4/24/2010	4/24/2010	25000	
41-CYANO	00060		PUMP	PP-213C	4/21/2010	687	VSBL	PS	TS	5/4/2010	5/5/2010	16	
41-CYANO	00060	90000145	PUMP	PP-213C	7/30/2010		VSBL	PS	RS	7/31/2010	8/3/2010	11	
41-CYANO	00060	90000401	PUMP	PP-213C	2/25/2011		VSBL	PS	RS	2/26/2011	2/28/2011	4	
41-CYANO	60	90002926	PUMP	PP-213C	5/15/2014 14:39	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	5/20/2014 7:00	5/20/2014 14:57	6	
41-CYANO	00069	90000243	PUMP	PP-211A	9/9/2010	1133	VSBL	PS	RS	9/12/2010	9/13/2010	5	
41-CYANO	00069	90000406	PUMP	PP-211A	1/5/2011	2390		PS	RS	1/6/2011	1/7/2011	83	
41-CYANO	00069	90000471	PUMP	PP-211A	1/24/2011	123000	VSBL	PS	RS	1/25/2011	1/25/2011	5	
41-CYANO	00069	90000550	PUMP	PP-211A	2/22/2011	94900		PS	RS	2/24/2011	2/25/2011	7	
41-CYANO	00069	90000782	PUMP	PP-211A	5/23/2011	3423		PS	RS	5/27/2011	5/27/2011	26	
41-CYANO	00069	90001083	PUMP	PP-211A	9/15/2011		VSBL	PS	RPS	9/20/2011	9/20/2011	7	
41-CYANO	00069	90001665	PUMP	PP-211A	4/16/2012	36900		PS	RPS	4/20/2012	4/20/2012	2	
41-CYANO	00069	90001665	PUMP	PP-211A	4/16/2012	36900		PS	ERHS	4/24/2012	4/24/2012	2	
41-CYANO	00069	90001854	PUMP	PP-211A	8/22/2012	956		PS	RPS	8/24/2012	8/24/2012	14	
41-CYANO	69	90002140	PUMP	PP-211A	2/11/2013 12:52	972100	FALSE	PUMP SEAL	RPS	2/14/2013 6:00	2/14/2013 14:54	1412	
41-CYANO	69	90002140	PUMP	PP-211A	2/11/2013 12:52	972100	FALSE	PUMP SEAL	WORK ORDER	2/26/2013 2:00	2/26/2013 2:00	0	
41-CYANO	69	90002127	PUMP	PP-211A	3/4/2013 13:39	33500	FALSE	PUMP SEAL	REPLACE PUMP SEAL	3/6/2013 6:00	3/6/2013 13:25	33200	
41-CYANO	69	90002127	PUMP	PP-211A	3/4/2013 13:39	33500	FALSE	PUMP SEAL	REPLACE PUMP SEAL	4/3/2013 13:00	4/3/2013 14:13	1	
41-CYANO	69	90002127	PUMP	PP-211A	3/4/2013 13:39	33500	FALSE	PUMP SEAL	ENVIRONMENTALLY REMOVE	3/19/2013 14:00			
41-CYANO	00154	90001901	PUMP	PP-161	9/19/2012	656		PS	WSEA	9/24/2012	9/24/2012	848	
41-CYANO	00154	90001901	PUMP	PP-161	9/19/2012	656		PS	RPS	9/25/2012	9/25/2012	6	
41-CYANO	00164	90000101	PUMP	PP-006D	6/23/2010	689		PS	RS	6/27/2010	6/28/2010	3	
41-CYANO	00164	90000360	PUMP	PP-006D	10/17/2010		VSBL	PS	RS	10/18/2010	10/23/2010	7	
41-CYANO	00164		PUMP	PP-006D	1/23/2011		VSBL	PS	RS	1/24/2011	1/24/2011	6	
41-CYANO	00164		PUMP	PP-006D	3/4/2011		VSBL	PS	RS	3/4/2011	3/5/2011	7	
41-CYANO	164	90002240	PUMP	PP-006D	4/10/2013 14:52	508	FALSE	PLUG	TIGHTEN PLUG	4/12/2013 6:00	4/12/2013 12:56	5	
41-CYANO	00171		PUMP	PP-006C	4/21/2010	769		PLG	TPLG	4/23/2010	4/23/2010	8	
41-CYANO	00171	90000361	PUMP	PP-006C	10/17/2010		VSBL	PS	RS	10/18/2010	10/23/2010	97	
41-CYANO	00171	90000560	PUMP	PP-006C	3/3/2011		VSBL	PS	RS	3/3/2011	3/4/2011	10	
41-CYANO	00171	90000645	PUMP	PP-006C	4/12/2011		VSBL	TC	RT	4/12/2011	4/12/2011	4	
41-CYANO	00171	10094000	PUMP	PP-006C	4/25/2011	5	VSBL	PS	RPS	4/26/2011	4/27/2011	1	

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Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
41-CYANO	00171	90000920	PUMP	PP-006C	8/14/2011		VSBL	PS	RPS	8/15/2011	8/16/2011	65	
41-CYANO	00171	90001322	PUMP	PP-006C	11/18/2011		VSBL	PS	RPS	11/21/2011	11/21/2011	7	
41-CYANO	00171	90001547	PUMP	PP-006C	2/13/2012		VSBL	PS	RPS	2/15/2012	2/15/2012	21	
41-CYANO	00171	90001731	PUMP	PP-006C	7/15/2012		VSBL	PS	RPS	7/16/2012	7/16/2012	2	
41-CYANO	00205	90000763	PUMP	PP-010B	5/27/2011		VSBL	PS	RPS	5/31/2011	5/31/2011	6	
41-CYANO	00213		PUMP	PP-010A	6/29/2010		VSBL	PS	OT	6/29/2010	6/29/2010	5	
41-CYANO	00213	90000121	PUMP	PP-010A	7/12/2010		VSBL	PS	RS	7/16/2010	7/16/2010	7	
41-CYANO	00213	90000320	PUMP	PP-010A	10/6/2010	4851		PLG	TPLG	10/7/2010	10/8/2010	41	
41-CYANO	00213	90000320	PUMP	PP-010A	10/6/2010	4851		PLG	RPLG	10/14/2010	10/15/2010	4	
41-CYANO	01712		PUMP	PP-600.02X	4/22/2010	3872		PS	RS	4/27/2010	4/27/2010	5	
27-PYRID	02020		PUMP	PP-035	4/19/2010	4486		PS	WO	4/19/2010	4/19/2010	3950	
27-PYRID	02020		PUMP	PP-035	4/19/2010	4486		PS	ADS	5/3/2010	5/3/2010	2223	
27-PYRID	02020		PUMP	PP-035	4/19/2010	4486		PS	ADS	5/4/2010	5/4/2010	128	
27-PYRID	02020		PUMP	PP-035	5/17/2010		VSBL	PS	ADS	5/22/2010	5/22/2010	136	
27-PYRID	02020		PUMP	PP-035	6/23/2010	2900		PS	ADS	6/26/2010	6/28/2010	7	3RD RPR: RETURN TO SERVICE
27-PYRID	02020	90000100	PUMP	PP-035	6/23/2010	2900		PS	ERHS	6/28/2010	6/28/2010	7	3RD RPR: RETURN TO SERVICE
27-PYRID	02020	90000100	PUMP	PP-035	6/23/2010	2900		PS	RS	6/29/2010	6/29/2010	4	3RD RPR: RETURN TO SERVICE
27-PYRID	02020	90000100	PUMP	PP-035	8/15/2011	1929		PS	OT	8/17/2011	8/18/2011	127	
27-PYRID	02020	90000921	PUMP	PP-035	3/19/2012	1824		PS	RG	3/21/2012	3/22/2012	950	
27-PYRID	02020	90001592	PUMP	PP-035	3/19/2012	1824		PS	CLPS	3/27/2012	3/27/2012	29	
27-PYRID	02020	90001592	PUMP	PP-035	11/13/2012	6429		PS	RG	11/15/2012	11/15/2012	11	
27-PYRID	02020	90001960	PUMP	PP-035	3/5/2013 13:45	1569	FALSE	PUMP SEAL	CR	3/8/2013 9:00	3/8/2013 11:11	14	
27-PYRID	2020	90002162	PUMP	PP-035	1/13/2014 11:51	1633	FALSE	BOLT ON PUMP	ADJUST SEAL	1/15/2014 14:30	1/16/2014 12:19	3	
27-PYRID	2020	90002721	PUMP	PP-768	7/29/2010		VSBL	PS	CLEAN AND TIGHTEN	7/29/2010	8/3/2010	11	
27-PYRID	02091	90000144	PUMP	PP-770	5/11/2010	2945		PS	RS	5/13/2010	5/14/2010	47	
27-PYRID	02107	10087621	PUMP	PP-770	7/29/2010		VSBL	PS	ADS	7/29/2010	8/3/2010	11	
27-PYRID	02107	90000143	PUMP	PP-770	4/24/2013 23:11	0	TRUE	PUMP SEAL	RS	4/29/2013 6:00	4/29/2013 14:52	0	
27-PYRID	2107	90002242	PUMP	PP001A/B	5/30/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	6/4/2013 13:00	6/4/2013 16:01	8	
27-PYRID	2214	90002268	PUMP	PP001A/B	2/21/2014 10:59	678	FALSE	PUMP SEAL	ADJUST SEAL	3/17/2014 4:00	3/21/2014 13:32	7	
27-PYRID	2231	90002797	PUMP	PP001A/B	2/21/2014 10:59	678	FALSE	PUMP SEAL	REPLACE PUMP SEAL	2/26/2014 4:00			
27-PYRID	2231	90002797	PUMP	TK 202	12/3/2010		VSBL	PS	ENVIRONMENTALLY REMOVE	12/7/2010	12/8/2010	110	
27-PYRID	02244	90000400	PUMP	TK 202	5/6/2011		VSBL	PS	ADS		5/10/2011		
27-PYRID	02244	90000760	PUMP	TK 202	5/6/2011		VSBL	PS	RPS	5/16/2011	5/17/2011	2	
27-PYRID	02244	90000760	PUMP	TK 202	4/16/2012	4	VSBL	PS	ERHS	4/20/2012	4/20/2012	3	
27-PYRID	02244	90001663	PUMP	TK 202	4/16/2012	4	VSBL	PS	RPS	4/24/2012	4/24/2012	2	
27-PYRID	02244	90001663	PUMP	TK 202	10/17/2012		VSBL	PS	RPS	10/30/2012	10/30/2012	7	REMOVED FROM SERVICE 10/17/12
27-PYRID	02244	90001890	PUMP	TK 202	6/28/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	7/15/2013 6:00	7/15/2013 14:33	0	
27-PYRID	2244	90002361	PUMP	TK 202	6/28/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	7/15/2013 6:00	7/15/2013 14:33	0	
27-PYRID	2244	90002361	PUMP	TK 202	6/28/2013 0:00	0	TRUE	PUMP SEAL	ENVIRONMENTALLY REMOVE	6/28/2013 0:00			
27-PYRID	2244	90002361	PUMP	TK 202	6/28/2013 0:00	0	TRUE	PUMP SEAL	ENVIRONMENTALLY REMOVE	6/28/2013 0:00			
27-PYRID	2244	90002361	PUMP	TK 202	8/22/2013 12:52	575	FALSE	PUMP SEAL	REPLACE PUMP SEAL	8/23/2013 6:00	8/23/2013 10:55	8	
27-PYRID	2244	90002480	PUMP	TK 202	9/23/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	9/27/2013 6:00	9/27/2013 19:39	5	
27-PYRID	2244	90002540	PUMP	TK 200	3/14/2011		VSBL	PS	ERHS	3/16/2011	3/16/2011		
27-PYRID	02269	90000566	PUMP	TK 200	3/14/2011		VSBL	PS	RS	3/26/2011	3/28/2011	2	
27-PYRID	02269	90000566	PUMP	TK 200	5/17/2011		VSBL	PS	ERHS	5/18/2011	5/18/2011		
27-PYRID	02269	90000780	PUMP	TK 200	5/17/2011		VSBL	PS			6/1/2011		
27-PYRID	02269	90000780	PUMP	TK 200	5/17/2011		VSBL	PS	RPS	6/3/2011	6/13/2011	2	
27-PYRID	02269	90000780	PUMP	TK 200	11/2/2011		VSBL	PS	RPS	11/7/2011	11/7/2011	1	
27-PYRID	02269	90001262	PUMP	PP 230A/B	11/18/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	11/21/2013 17:00	11/27/2013 11:43	0	
27-PYRID	2297	90002680	PUMP	PP 230A/B	3/14/2011		VSBL	PS	RS	3/16/2011	3/16/2011	3	
27-PYRID	02313	90000567	PUMP	PP 230A/B	7/24/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	8/2/2013 6:00	8/2/2013 12:53	3	
27-PYRID	2313	90002440	PUMP	PP 230A/B	7/24/2013 0:00	0	TRUE	PUMP SEAL	ENVIRONMENTALLY REMOVE	7/26/2013 6:00			
27-PYRID	2313	90002440	PUMP										

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Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	02370		PUMP	PP 002A/B	4/28/2010	2453		PS	WO	4/29/2010	5/3/2010	2453	
27-PYRID	02370		PUMP	PP 002A/B	4/28/2010	2453		PS	RS	5/4/2010	5/5/2010	50	
27-PYRID	02370	90000060	PUMP	PP 002A/B	6/1/2010		VSBL	PS	ADS	6/2/2010	6/2/2010	10	
27-PYRID	02370	90001182	PUMP	PP 002A/B	10/12/2011		VSBL	PS	ADS	10/17/2011	10/18/2011	1	
27-PYRID	02370	90001853	PUMP	PP 002A/B	8/22/2012	1077		PLG	TPLG	8/24/2012	8/24/2012	8	
27-PYRID	02371	10087620	PUMP	PP 002A/B	5/11/2010	2449		PS	ADS	5/14/2010	5/14/2010	8	
27-PYRID	2429	90002401	PUMP	MT-620.212	7/11/2013 15:22	511	FALSE	PUMP SEAL	ADJUST SEAL	7/16/2013 14:30	7/17/2013 10:53	33	
27-PYRID	2429	90002742	PUMP	MT-620.212	1/20/2014 14:44	690	FALSE	PUMP SEAL	TIGHTEN SEAL	1/22/2014 8:30	1/22/2014 16:07	96	
27-PYRID	02610	90001120	PUMP	TK254	9/20/2011	1538		PS	RPS	9/23/2011	9/23/2011	1	
27-PYRID	02610	90001221	PUMP	TK254	10/18/2011	5258		PS	ADS	10/23/2011	10/24/2011	11	
27-PYRID	02617	90000182	PUMP	pp622.242	8/16/2010	822		PS	RS	8/18/2010	8/18/2010	4	
27-PYRID	02617	90000405	PUMP	pp622.242	1/5/2011	1148		PS	RS	1/10/2011	1/10/2011	18	
27-PYRID	02625	90000124	PUMP	pp622.242	7/17/2010		VSBL	PS	RS	7/21/2010	7/23/2010	4	
27-PYRID	02625	90000568	PUMP	pp622.242	3/30/2011	652		PS	RPS	4/4/2011	4/5/2011	2	
27-PYRID	02625	90000666	PUMP	pp622.242	4/25/2011	585		PS	ADS	4/27/2011	4/27/2011	10	
27-PYRID	02625	90001463	PUMP	pp622.242	12/19/2011	631		PS	ADS	12/21/2011	12/21/2011	17	
27-PYRID	02625	90001900	PUMP	pp622.242	9/19/2012	54800		PS	WSEA	9/24/2012	9/24/2012	10700	
27-PYRID	02625	90001900	PUMP	pp622.242	9/19/2012	54800		PS	RPS	9/25/2012	9/25/2012	4913	
27-PYRID	02625	90001900	PUMP	pp622.242	9/19/2012	54800		PS	RPS	10/1/2012	10/1/2012	848	
27-PYRID	02625	90001900	PUMP	pp622.242	9/19/2012	54800		PS	RPS	10/4/2012	10/4/2012	313	
27-PYRID	2625	90002148	PUMP	pp622.242	3/19/2013 14:09	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	3/20/2013 21:00	3/21/2013 11:22	1	
27-PYRID	2625	90002660	PUMP	pp622.242	11/18/2013 14:06	1401	FALSE	PUMP SEAL	REPLACE PUMP SEAL	11/20/2013 2:00	11/20/2013 10:27	0	
27-PYRID	2625	90002794	PUMP	pp622.242	2/20/2014 15:59	1208	FALSE	PUMP SEAL	TIGHTEN SEAL	2/21/2014 13:00	2/21/2014 16:16	1940	
27-PYRID	2625	90002794	PUMP	pp622.242	2/20/2014 15:59	1208	FALSE	PUMP SEAL	REPLACE PUMP SEAL	3/5/2014 6:00	3/5/2014 14:16	7	
27-PYRID	02641	90000569	PUMP	pp622.256a	3/30/2011	749		PS	RPS	4/3/2011	4/4/2011	3	
27-PYRID	02647	90000423	PUMP	pp622.256b	12/14/2010	12600		PS	RS	12/16/2010	12/17/2010	5	
27-PYRID	02647	90000667	PUMP	pp622.256b	4/25/2011	705		PS	ADS	4/27/2011	4/27/2011	632	
27-PYRID	02647	90000667	PUMP	pp622.256b	4/25/2011	705		PS			5/10/2011		
27-PYRID	02647	90000667	PUMP	pp622.256b	4/25/2011	705		PS	RPS	5/11/2011	5/11/2011	9	
27-PYRID	02647	90001160	PUMP	pp622.256b	9/29/2011		VSBL	PS	RPS	9/30/2011	9/30/2011	2	
27-PYRID	02647	90001566	PUMP	pp622.256b	2/14/2012	2139		PS	RPS	2/17/2012	2/20/2012	3	
27-PYRID	02647	90001690	PUMP	pp622.256b	4/25/2012		VSBL	PS	RPS	4/25/2012	4/25/2012	1	
27-PYRID	02647	90001696	PUMP	pp622.256b	5/10/2012		VSBL	PS	RPS	5/11/2012	5/16/2012	40	
27-PYRID	02647	90001823	PUMP	pp622.256b	8/11/2012		VSBL	PS	RPS		8/11/2012		
27-PYRID	02647	90001823	PUMP	pp622.256b	8/11/2012		VSBL	PS	ERHS	8/21/2012	8/21/2012	2	
27-PYRID	2647	90002405	PUMP	pp622.256b	7/16/2013 12:15	7254	FALSE	PUMP SEAL	RPS	7/17/2013 5:00	7/17/2013 11:00	17	
27-PYRID	2647	90002702	PUMP	pp622.256b	12/14/2013 0:00	0	TRUE	PUMP SEAL	REPLACE PUMP SEAL	12/17/2013 8:00	12/17/2013 13:54	3	
27-PYRID	02815	90000835	PUMP	PP623.170	7/20/2011	1229		PS	REPLACE PUMP SEAL	7/22/2011	7/29/2011	2	
27-PYRID	02824	90001522	PUMP	PP623.171	1/23/2012	652		PS	RPS	1/27/2012	1/27/2012	2	
27-PYRID	2824	90002881	PUMP	PP623.171	4/17/2014 11:12	826	FALSE	PUMP SEAL	RPS	4/22/2014 11:35	4/22/2014 13:57	38	
27-PYRID	02886	90001594	PUMP	PP622.041A	3/19/2012	546		PS	REPLACE PUMP SEAL	3/23/2012	3/23/2012	4	
27-PYRID	02886	90001594	PUMP	PP622.041A	3/19/2012	546		PS	ERHS	3/27/2012	3/27/2012	4	
27-PYRID	02916	90000242	PUMP	PP621.140B	9/9/2010	645	VSBL	PS	RPS	9/12/2010	9/13/2010	84	
27-PYRID	02916	90000242	PUMP	PP621.140B	9/9/2010	645	VSBL	PS	ERHS	9/30/2010	10/15/2010	24	
27-PYRID	02929	90000180	PUMP	PP621.140A	8/15/2010		VSBL	PS	RS	8/18/2010	8/18/2010	2	
27-PYRID	03574		PUMP	PP 308A	4/28/2010	956		TC	RS	4/30/2010	4/30/2010	1556	5/14/2010 03:05:00 DOR RPR
27-PYRID	03574		PUMP	PP 308A	4/28/2010	956		TC	TCON	5/13/2010	5/13/2010	2661	5/14/2010 03:05:00 DOR RPR
27-PYRID	03574		PUMP	PP 308A	4/28/2010	956		TC	TCON	5/13/2010	5/13/2010	4	5/14/2010 03:05:00 DOR RPR
27-PYRID	03574		PUMP	PP 308A	4/28/2010	956		TC	ERHS	5/14/2010	5/14/2010	4	5/14/2010 03:05:00 DOR RPR
27-PYRID	03574		PUMP	PP 308A	12/8/2013 0:00	0	TRUE	PUMP SEAL	RCON	12/13/2013 21:00	12/16/2013 15:00	2	
27-PYRID	3574	90002700	PUMP	PP 308A	12/7/2010		VSBL	PS	REPLACE PUMP SEAL	12/8/2010	12/8/2010	8	
27-PYRID	03580	90000420	PUMP	PP 308B	12/8/2013 0:00	0	TRUE	PUMP SEAL	RS	12/16/2013 16:30	12/16/2013 15:02	3	
27-PYRID	3580	90002701	PUMP	PP 308B					REPLACE PUMP SEAL				

Pumps

Area	Tag #	WO #	Class	Equip	Monitor Date	Monitor Reading	VSBL Code	Part Leaking	Repair Method	Repair Date	Remonitor Date	Remonitor Reading	Comments
27-PYRID	03771	90001700	PUMP	PP 692 751	5/8/2012	819		PS	RPS	5/11/2012	5/11/2012	3	
27-PYRID	03794	10087623	PUMP	PP 604A	5/11/2010	1263		PS	RG	5/14/2010	5/14/2010	90	
27-PYRID	03794	90000546	PUMP	PP 604A	2/21/2011		VSBL	PS	RS	2/24/2011	2/25/2011	155	
27-PYRID	03794	90001595	PUMP	PP 604A	3/19/2012	3312		PS	RPS	3/21/2012	3/22/2012	8	
27-PYRID	03909	90000669	PUMP	PP-620.163	4/25/2011	960		PS	RPS	4/27/2011	4/28/2011	2	
27-PYRID	3909	90002600	PUMP	PP-620.163	10/29/2013 11:07	1326	FALSE	PUMP SEAL	REPLACE PUMP SEAL	10/31/2013 6:00	10/31/2013 13:22	4	
41-CYANO	03926	90000784	PUMP	PP-600.002	5/25/2011	1508		PS	RPS	5/27/2011	5/27/2011	2	
27-PYRID	03964	90001593	PUMP	PP-621.092	3/19/2012	703		PS	CLPS	3/21/2012	3/22/2012	114	
27-PYRID	3964	90002602	PUMP	PP-621.092	10/29/2013 11:44	519	FALSE	PUMP SEAL	REPLACE PUMP SEAL	11/3/2013 23:00	11/4/2013 13:11	13	
27-PYRID	03965	90000422	PUMP	PP-621.093	12/14/2010	1444		PS	RS	12/16/2010	12/16/2010	2006	
27-PYRID	03965	90000422	PUMP	PP-621.093	12/14/2010	1444		PS	RS	12/18/2010	12/21/2010	9	
27-PYRID	03965	90000668	PUMP	PP-621.093	4/25/2011	3195		PS	RPS	4/27/2011	4/27/2011	6	
27-PYRID	03965	90002020	PUMP	PP-621.093	12/14/2012	840		PS	RPS	12/17/2012	12/17/2012	76	
27-PYRID	3965	90002063	PUMP	PP-621.093	1/22/2013 12:17	574	FALSE	PLUG	ADJUST SEAL	1/25/2013 15:30	1/25/2013 15:33	886	
27-PYRID	3965	90002063	PUMP	PP-621.093	1/22/2013 12:17	574	FALSE	PLUG	REPLACE PLUG	2/5/2013 5:00	2/5/2013 12:01	3	
27-PYRID	03989	90000380	PUMP	PP-265	11/11/2010		VSBL	PLG	TPLG	11/15/2010	11/15/2010	4	
41-CYANO	230A	90002962	PUMP	PP-034A	6/11/2014 14:31	654	FALSE	PUMP SEAL	CLEANED PUMP SEAL	6/12/2014 9:00	6/12/2014 13:57	651	Replaced seal 6/23/14

APPENDIX D

THIRD-PARTY LEAK DETECTION AND REPAIR AUDIT REPORT

Third-Party Leak Detection and Repair Audit

Vertellus Agriculture & Nutrition Specialties LLC

PROJECT #: JO0530.250

PREPARED FOR:
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1500 S. Tibbs Avenue
Indianapolis, Indiana 46241-0076

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ISSUE DATE:
June 2014

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THIRD-PARTY LEAK DETECTION AND REPAIR AUDIT VERTELLUS AGRICULTURE & NUTRITION SPECIALTIES LLC INDIANAPOLIS, INDIANA AUGUST MACK PROJECT NUMBER JO0530.250

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LEAK DETECTION AND REPAIR AUDIT
VERTELLUS AGRICULTURE & NUTRITION SPECIALTIES LLC
INDIANAPOLIS, INDIANA
AUGUST MACK PROJECT NUMBER JO0530.250

INTRODUCTION

August Mack Environmental, Inc. (August Mack) has completed the 2014 third-party Leak Detection and Repair (LDAR) audit at the Vertellus Agriculture & Nutrition Specialties LLC (Vertellus) facility located in Indianapolis, Indiana. The LDAR audit was performed to comply with the requirements set forth in the Consent Decree (CD) with the United States Environmental Protection Agency (USEPA), Civil Action No. 1:09-cv-1030 SEB-TAB as lodged on August 21, 2009 and effective December 1, 2009. The third-party LDAR Audit Commencement Date was April 16, 2014. Audit activities were completed with the issuance of this report on June 24, 2014. The audit covers the period of time from April 1, 2013 to March 31, 2014.

As required by Section K of the CD, Vertellus must retain a third-party to conduct an LDAR audit once every twelve months. Each LDAR audit shall include:

- A review of compliance with all applicable LDAR requirements;
- A review of whether any pieces of equipment are not included in the LDAR program that are required to be included;
- Verification that equipment was monitored at the appropriate frequency;
- Verification that proper documentation and sign-offs have been recorded for equipment placed on the Delay of Repair (DOR) list;
- Confirm that all repairs have been completed within the required periods;
- A review of monitoring data and equipment counts for feasibility and unusual trends;

- Verification that proper calibration records and monitoring instrument maintenance information are maintained;
- Verification that other LDAR program records are maintained as required; and,
- Comparative monitoring and calculation of comparative monitoring percentages and ratios.

The comparative monitoring portions of the 2014 audit apply to Covered Equipment in Plant 27, as required by the CD. Comparative monitoring of Covered Equipment in Plant 27 was performed in the 2014 third-party audit. The LDAR regulations review applies to the facility-wide LDAR program and the remaining portions of the CD apply to the Covered Process Units (Plant 27 and Plant 41). In addition to Plant 27 and Plant 41, the Vertellus LDAR program also consists of the Utilities Plant (Plant 29), the Vinylpyridine (VP) Plant (Plant 40), the Wheeler Plant/Spec Chem (Plant 47) and Amino Pyridine (AP) Plant (Plant 48).

LDAR REGULATIONS REVIEW

The various process units (plants) at the Vertellus facility are subject to multiple LDAR regulations. As required by the CD, monitoring frequencies specified by the CD come into force no later than nine months after the Date of Lodging and thus are effective starting in May 2010. Table 1 identifies each of the plants to which LDAR regulations apply and lists the applicable LDAR requirements.

TABLE 1
Process Unit LDAR Applicability

Process Unit	Applicable LDAR Requirements
Plant 27	40 CFR Part 63, Subpart H (HON); Consent Decree
Plant 29	40 CFR Part 264/265, Subpart BB
Plant 40	40 CFR Part 61, Subpart J; 40 CFR Part 265, Subpart BB
Plant 41	40 CFR Part 63, Subpart GGG (Pharma); Consent Decree
Plant 47	40 CFR Part 265, Subpart BB
Plant 48	40 CFR Part 265, Subpart BB

Vertellus has incorporated into the facility-wide LDAR program the requirements of the various applicable LDAR regulations. By incorporating the Enhanced LDAR requirements of the CD as well as the requirements of HON; Pharma; 40 CFR Part 61, Subpart J; and 40 CFR Part 264/265, Subpart BB into the facility-wide LDAR program, Vertellus ensures compliance with all applicable LDAR regulations. A review of the LDAR regulations listed in Table 1 as compared to the facility-wide program was completed. August Mack confirmed that Vertellus has identified the most stringent requirements that apply to each process unit and equipment type. The Vertellus LDAR database has been populated with the regulatory leak definitions and the periodic monitoring frequency for each equipment type subject to LDAR regulations.

QA/QC REQUIREMENTS REVIEW

In accordance with the CD, August Mack reviewed compliance with Quality Assurance and Quality Control (QA/QC) requirements as described in Subparagraphs 41.a through 41.g. Each item was reviewed as described below. Subparagraph 41.h is not required to be reviewed as part of the third-party audit.

Inclusion in LDAR Program

As required by CD Subparagraph 41.a, August Mack reviewed whether any pieces of equipment that are required to be in the LDAR program are not included in the LDAR program. This review was performed at the time of the comparative monitoring. Based on the review, all pieces of equipment that are required to be in the LDAR program have been included.

Monitoring Frequency

As required by CD Subparagraph 41.b, August Mack verified that equipment was monitored at the appropriate frequency. The monitoring records in the LDAR database were provided by Mr. Jim Gross. A randomly selected sample of database entries for each equipment type in Plant 27 was reviewed for time period covered by the audit. The equipment types reviewed included pumps, agitators, valves, connectors, and open-ended lines at the closure device (OELCDs).

In accordance with CD Subparagraph 15.c, pumps in Plant 27 and Plant 41 are required to be monitored monthly. Based on the sample of database records for four pumps in Plant 27, pumps are being monitored at the required monthly interval.

In accordance with CD Subparagraph 15.c, agitators in Plant 27 and Plant 41 are required to be monitored monthly. Based on the sample of database records for one agitator, agitators are being monitored at the required monthly interval.

In accordance with CD Subparagraph 15.a, valves in Plant 27 and Plant 41 are required to be monitored quarterly. Based on the sample of database records for eight valves in Plant 27, valves are being monitored at the required quarterly interval.

In accordance with CD Subparagraph 15.b, connectors in Plant 27 and Plant 41 are required to be monitored semi-annually. Based on the sample of database records for

twelve connectors in Plant 27, connectors are being monitored at the required semi-annual interval.

In accordance with CD Subparagraph 15.d, OELCDs in Plant 27 and Plant 41 are required to be monitored quarterly. Based on the sample of database records for four OELCDs, OELCDs are being monitored at the required quarterly interval.

Delay of Repair

As required by CD Subparagraph 41.c, August Mack verified that proper documentation and sign-offs have been recorded for all equipment placed on the DOR list. Required sign-off documentation from the relevant process unit supervisor (or person of similar authority) indicating that the piece of Covered Equipment is technically infeasible to repair without a process unit shutdown was reviewed for validity. Repair records were reviewed to ensure repair (or replacement, repacking, improvement, or elimination, as described in the CD) has been completed on the Covered Equipment by the end of the next process shutdown.

Based on the record review, one leaking connector (Tag #03599-006) did not have a documented successful repair or re-monitoring concentration documented. This connector was discovered to be leaking on November 11, 2013. An unsuccessful attempt at repair was completed on November 15, 2013. A DOR sign-off was completed for the connector, which indicated it was tentatively scheduled to be fixed during the next process shutdown (on December 31, 2013). August Mack did not locate records of the successful repair. All other records indicate that the facility is following the correct DOR protocol.

Repair Timeframes

As required by CD Subparagraph 41.d, August Mack verified that repairs have been performed in the required periods. Vertellus utilizes an LDAR database that includes

an indicator on the main menu that identifies the number of open leaks, the number of units for which repairs are overdue, the number of units for which repairs are due on the current day, the number of units for which repairs are due the following day, and the number of units for which repairs are due within two to three days. All repair records for the entire year for equipment in Plant 27 and Plant 41 were reviewed to ensure that the proper repair timeframes were followed.

LDAR regulations and the CD require that the first attempt at repair must be performed no later than 5 days after the leak has been detected. Adherence to this requirement was verified through a review of the repair records in the LDAR database. For each entry reviewed, the first attempt at repair was documented as being performed within five days of the leak being detected.

The final attempt at repair must be performed within 15 days after the leak has been detected or the equipment may be placed on the DOR list. Adherence to this requirement was verified through a review of the repair records in the LDAR database. For each entry reviewed, the final attempt at repair was completed or the piece of equipment was placed on the DOR list within 15 days of the leak being detected.

Monitoring Feasibility and Unusual Trends

As required by CD Subparagraph 41.e, August Mack reviewed monitoring data and equipment counts for feasibility and unusual trends. Detailed monitoring reports were reviewed for ten randomly selected days from April 1, 2013 to March 31, 2014. The monitoring reports provided counts of the number of components monitored on each of the monitoring dates. The maximum number of components monitored in a reviewed day was 705 on Wednesday, September 4, 2013. Based on the times reported from beginning to the end of the work shift, this equates to approximately 25 seconds per monitoring point. Since the time spent on most pieces of equipment is typically less

than 30 seconds, this count is considered feasible. The audit team did not identify any unusual trends in the monitoring.

Calibration Records and Instrument Maintenance

As required by CD Subparagraph 41.f, August Mack verified that proper calibration records and monitoring instrument maintenance information is maintained. Calibration records were reviewed for monitoring performed by EMSI between April 1, 2013 and March 31 of 2014. A review of the records indicates that the monitoring equipment was calibrated each day prior to initiating monitoring for that day. Calibration records are maintained on file by EMSI at the Vertellus facility. Monitoring instrument maintenance information was not available for review during the audit.

As part of the calibration log review, August Mack verified that the individual calibration logs completed by EMSI for monitoring performed at Vertellus contained all required information. All reviewed calibration logs included the daily certification statement required by Paragraph 40 of the CD. In addition, calibration drift assessment records were reviewed. In each case the calibration drift assessment indicated a drift of less than 10%, which is considered acceptable.

Additional LDAR Program Records

As required by CD Subparagraph 41.g, August Mack verified that other LDAR program records are maintained as required. Documentation of the required quarterly QA/QC audits performed by Vertellus was reviewed as part of the third-party audit.

COMPARATIVE MONITORING

Comparative Monitoring of Covered Equipment to satisfy the requirement of the Vertellus CD, Paragraph 44, was performed by August Mack at Vertellus Plant 27 on Thursday, May 22 and Friday, May 23. Field activities, including equipment

calibration, monitoring and documentation, were performed by August Mack. A summary of field activities is included as Appendix A. Comparative monitoring equipment calibration logs are included as Appendix B.

A total of 1,498 pieces of Covered Equipment in Plant 27 were monitored during the two day comparative monitoring period. The equipment monitored consisted of 7 pumps, 265 valves, 1 agitator, 1,130 connectors, and 95 OELCDs. This represents approximately 16% of pumps, 15% of valves, 100% of agitators, 21% of connectors, and 14% of OELCDs in Plant 27. Comparative Monitoring leak percentages determined by August Mack during the 2014 audit are provided in Table 2. Comparative monitoring data is included as Appendix C.

TABLE 2
Plant 27 Comparative Monitoring

Equipment Type	Number Monitored	Number Leaking	Comparative Monitoring Audit Leak Percentage	Leak Definition
Valve	265	0	0.00%	250 ppm
Pump	7	0	0.00%	500 ppm
Agitator	1	0	0.00%	500 ppm
Connector	1,130	3	0.27%	250 ppm
OELCD	95	0	0.00%	250 ppm

For the Covered Process Unit audited during the 2014 third-party LDAR audit (Plant 27) the historic, average leak percentage from prior monitoring events was calculated for each equipment type. This calculation is based on monitoring performed by Vertellus during the regular periodic monitoring immediately preceding the comparative monitoring. The average number monitored and average number leaking is based on the preceding four (4) periods for valves, twelve (12) periods for pumps, twelve (12) periods for agitators, two (2) periods for connectors, and four (4) periods for

OELCDs. Historic periodic monitoring leak percentages determined by Vertellus are provided in Table 3 below.

TABLE 3
Plant 27 Historic Periodic Monitoring

Equipment Type	Average Number Monitored	Average Number Leaking	Historic Average Leak Percentage
Valve	1,702	6	0.35%
Pump	42	1	2.38%
Agitator	1	0	0.00%
Connector	4,528	20	0.44%
OELCD	662	8	1.21%

For each Covered Equipment Type in each Covered Process Unit, the Comparative Monitoring Leak Ratio was calculated. The Comparative Monitoring Leak Ratio is the ratio of the comparative monitoring leak percentage shown in Table 2 to the historic periodic monitoring leak percentage shown in Table 3 for each Covered Equipment Type. The Comparative Monitoring Leak Ratio for each equipment type in Plant 27 is provided in Table 4 below.

TABLE 4
Plant 27 Comparative Monitoring Leak Ratio

Equipment Type	Comparative Monitoring Audit Leak Percentage	Historic Average Leak Percentage	Comparative Monitoring Leak Ratio
Valve	0.00%	0.35%	0.00
Pump	0.00%	2.38%	0.00
Agitator	0.00%	0.00%	0.00
Connector	0.27%	0.44%	0.61
OELCD	0.00%	1.21%	0.00

In accordance with Consent Decree Subparagraph 46.a "Requirements of a CAP", Vertellus is required to include in the preliminary Corrective Action Plan (CAP) all of the actions that have been taken or will be taken to address the systemic causes of a

Comparative Monitoring Leak Ratio of 3.0 or higher. Based on the Comparative Monitoring Leak Ratios presented in Table 4, no equipment types were found to have a ratio of 3.0 or higher.

SUMMARY OF AUDIT RESULTS

A summary of the LDAR audit results is provided below.

- **LDAR Regulations Review**
  - No issues were identified with respect to application of LDAR regulations in general. All pieces of equipment are classified under the proper regulatory requirements.
- **Inclusion in LDAR Program**
  - Based on the review, all pieces of equipment that are required to be in the LDAR program have been included.
- **QA / QC Requirements Review:**
  - Based on review of management of change (MOC) records, the facility is properly documenting process changes which affect the LDAR program.
  - No issues were identified with respect to monitoring frequency of the various equipment types.
  - Based on the record review, one leaking connector (Tag #03599-006) did not have a documented successful repair or monitoring concentration documented. This connector was discovered to be leaking on November 11, 2013. An unsuccessful attempt at repair was completed on November 15, 2013. A DOR sign-off was completed for the connector, which indicated it tentatively scheduled to be fixed during the next process shutdown (on December 31, 2013). August Mack did not locate records of the successful repair. All other records indicated that the facility is following the correct DOR protocol.

- No issues were identified with respect to repair timeframes at the Vertellus facility. The facility appears to be in compliance with CD and other LDAR requirements.
- No issues were identified with respect to monitoring feasibility or unusual trends in monitoring or monitoring results.
- No issues were identified with respect to calibration records for monitoring equipment used by Vertellus or contractor personnel. Instrument maintenance records were not available for review and should be maintained on file by Vertellus.
- No issues were identified with respect to other LDAR program records.

- **Comparative Monitoring:**
  - Comparative monitoring resulted in lower leak percentages for pumps, valves, connectors, and OELCDs then the historic monitoring performed by Vertellus. The resulting Comparative Monitoring Leak Ratios were all less than 3.0.

APPENDIX A

Summary of Field Activities

Comparative Monitoring, as required by the Consent Decree, was performed by August Mack at Vertellus Plant 27 on Thursday, May 22 and Friday, May 23. Field activities, including equipment calibration, monitoring and documentation, were performed by August Mack.

Monitoring Equipment

Two (2) Thermo Scientific TVA-1000B (FIDs) were used for the onsite monitoring. The FIDs were calibrated using zero-air and methane-in-air span gases at 100 ppm, 500 ppm and 10,000 ppm concentrations. Daily calibration of the FID was performed prior to comparative monitoring activities using the zero-air and the three span gases. Calibration was recorded on the calibration log by field personnel. A calibration drift check was performed on each afternoon to ensure the proper calibration was maintained.

Monitoring Methodology

Prior to initiating monitoring in an area of Plant 27, monitoring personnel recorded background VOC concentrations at least six (6) feet away from the equipment to be monitored for leaks. Background concentrations of VOCs were approximately 3.0 – 5.0 ppm in most process areas. In cases where the background concentration was within the drift of the TVA-1000B when moving between pieces of equipment to be monitored, the background was assumed to be unchanged from the previous documented background concentration. All monitoring techniques were consistent with EPA Method 21.

APPENDIX B

Comparative Monitoring Calibration Logs

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Daily Analyzer Calibration Form:

Analyzer Model: TVA-1000B **Analyzer Serial No.:** 1722220188

Leak Definition / Calibration Certified Gases:

Zero Air Cylinder No.: 9647263 Gas Type (Methane, etc.): METHANE

Cylinder No.: 9448192 PPMV Concentration: 100 Exp. Date: AUGUST 2015

Cylinder No.: FAO-150A-500-3 PPMV Concentration: 514 Exp. Date: MAY 2018

Cylinder No.: FAO-150A-10000-3 PPMV Concentration: 10,300 Exp. Date: MAY 2018

Clean or replace all filters daily.

Daily Calibration Information Section

		Calibration Gas Results (ppmv)						
	Time	Zero	100	500/ND	1,000	2,000	10,000	Dilution *
Morning	8:15	-2	105	518	—	—	10,300	
Afternoon	1:15	-2	107	507	—	—	10,400	
Evening								

Note: Dilution * If a dilution probe will be used, it will need to be calibrated as well as documentation on the response time test performed during your quarterly certification.

Note: Drift When checking calibration throughout the day, if a calibration value drifts by 10% or more, the analyzer needs to be recalibrated.

Note: Method 21 Only one calibration is required per Method 21. It is recommended that a minimum of a morning and noon calibration check is performed.

If maintenance or a modification to sample pumping system or flow configuration is made that would change the response time, a new response time test (See Quarterly Certification Sheet) is required.

Per Method 21 a response factor needs to be determined for each compound of interest by either testing or by reference sources. The established response factor shall be ≤ 10. If response factor is ≥ 10, calibrate with the compound of interest or select an analyzer with a response factor ≤ 10.

Calibrator Signature: [signature] **Date:** 5/22/14

August Mack
ENVIRONMENTAL

FOXBORO

Daily Analyzer Calibration Form:

Analyzer Model: TVA-1000B **Analyzer Serial No.:** ~~[illegible]~~ 121906667

Leak Definition / Calibration Certified Gases:

Zero Air Cylinder No.: 964263 Gas Type (Methane, etc.): METHANE

Cylinder No.: 948192 PPMV Concentration: 100 Exp. Date: AUGUST 2015

Cylinder No.: FKO-150A-500-3 PPMV Concentration: 514 Exp. Date: MAY 2018

Cylinder No.: FKO-150A-10000-3 PPMV Concentration: 10,300 Exp. Date: MAY 2018

Clean or replace all filters daily.

Daily Calibration Information Section

		Calibration Gas Results (ppmv)						
	Time	Zero	100	500/ND	1,000	2,000	10,000	Dilution *
Morning	757	2.6	102	503	—	—	9940	
Afternoon	1:45	0.[illegible]	103	502	—	—	9650	
Evening								

Note: Dilution * If a dilution probe will be used, it will need to be calibrated as well as documentation on the response time test performed during your quarterly certification.

Note: Drift When checking calibration throughout the day, if a calibration value drifts by 10% or more, the analyzer needs to be recalibrated.

Note: Method 21 Only one calibration is required per Method 21. It is recommended that a minimum of a morning and noon calibration check is performed.

If maintenance or a modification to sample pumping system or flow configuration is made that would change the response time, a new response time test (See Quarterly Certification Sheet) is required.

Per Method 21 a response factor needs to be determined for each compound of interest by either testing or by reference sources. The established response factor shall be ≤ 10. If response factor is ≥ 10, calibrate with the compound of interest or select an analyzer with a response factor ≤ 10.

Calibrator Signature: [signature] **Date:** 5-22-14

August Mack
ENVIRONMENTAL

THERMO

Daily Analyzer Calibration Form:

Analyzer Model: TVA 1000B **Analyzer Serial No.:** 1722220188

Leak Definition / Calibration Certified Gases:

Zero Air Cylinder No.: 964263 Gas Type (Methane, etc.): METHANE

Cylinder No.: 968192 PPMV Concentration: 60 Exp. Date: 8/2015

Cylinder No.: AMO-150A-500-3 PPMV Concentration: 514 Exp. Date: 5/2018

Cylinder No.: AMO-150A-10000-3 PPMV Concentration: 10,300 Exp. Date: 5/2018

Clean or replace all filters daily.

Daily Calibration Information Section

		Calibration Gas Results (ppmv)						
	Time	Zero	100	500/ND	1,000	2,000	10,000	Dilution *
Morning	0735	0.2	105	507	—	—	10,500	
Afternoon	1:15	~~0.2~~ 113	109	483	—	—	9,800	
Evening								

Note: Dilution * If a dilution probe will be used, it will need to be calibrated as well as documentation on the response time test performed during your quarterly certification.

Note: Drift When checking calibration throughout the day, if a calibration value drifts by 10% or more, the analyzer needs to be recalibrated.

Note: Method 21 Only one calibration is required per Method 21. It is recommended that a minimum of a morning and noon calibration check is performed.

If maintenance or a modification to sample pumping system or flow configuration is made that would change the response time, a new response time test (See Quarterly Certification Sheet) is required.

Per Method 21 a response factor needs to be determined for each compound of interest by either testing or by reference sources. The established response factor shall be ≤ 10. If response factor is ≥ 10, calibrate with the compound of interest or select an analyzer with a response factor ≤ 10.

Calibrator Signature: _____ **Date:** 5/23/14

August Mack
ENVIRONMENTAL

FORM 20

Daily Analyzer Calibration Form:

Analyzer Model: TVA-1000B **Analyzer Serial No.:** 12190667

Leak Definition / Calibration Certified Gases:

Zero Air Cylinder No.: 964263 Gas Type (Methane, etc.): METHANE
Cylinder No.: 948192 PPMV Concentration: 100 Exp. Date: ~~8/15~~ 8/2015
Cylinder No.: PMD-150A-500-3 PPMV Concentration: 514 Exp. Date: 5/2018
Cylinder No.: PMD-150A-10000-3 PPMV Concentration: 10,300 Exp. Date: 5/2018

Clean or replace all filters daily.

Daily Calibration Information Section

		Calibration Gas Results (ppmv)						
	Time	Zero	100	500/ND	1,000	2,000	10,000	Dilution *
Morning	0732	0.85	107	496	—	—	10,200	—
Afternoon	1305	0.25	106	485	—	—	10300	—
Evening								

Note: Dilution * If a dilution probe will be used, it will need to be calibrated as well as documentation on the response time test performed during your quarterly certification.

Note: Drift When checking calibration throughout the day, if a calibration value drifts by 10% or more, the analyzer needs to be recalibrated.

Note: Method 21 Only one calibration is required per Method 21. It is recommended that a minimum of a morning and noon calibration check is performed.

If maintenance or a modification to sample pumping system or flow configuration is made that would change the response time, a new response time test (See Quarterly Certification Sheet) is required.

Per Method 21 a response factor needs to be determined for each compound of interest by either testing or by reference sources. The established response factor shall be ≤ 10. If response factor is ≥ 10, calibrate with the compound of interest or select an analyzer with a response factor ≤ 10.

Calibrator Signature: [signature] **Date:** 5-23-14

APPENDIX C

Comparative Monitoring Data

COMPARATIVE MONITORING DATA 1/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
Location3	Tag	Description	type	Subtype	Product	Monitoring Value
TK-263	02001-002	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 36	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02003-000	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 36	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02003A-001	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 36	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02003A-008	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 36	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK-263	02003A-011	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 36	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK-263	02006-003	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 35	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02006A-000	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 35	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02009-001	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 PLATFORM AC	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02013-000	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC	RVLV	RELIEF VALVE	BENZENE	BACKGROUND
TK-263	02013-012	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02013-020	IW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 34 35FT S OVER CEN1	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-035	02015-003	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 34 PP-035	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-035	02016-002	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 34 PP-035	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-035	02016-005	NW SDE UNIT 27 TK-263 RAIL LOADING AC SPOT 34 PP-035	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-035	02017-001	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 FLWMTR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-035	02019-002	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DRN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-035	02020-000	NW SDE UNIT 27 TK-263 RL LDING SPT 34 AC PP-035 AC SPT TK 34-36	PUMP	PUMP SEAL	BENZENE	BACKGROUND
PP-035	02021-005	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DSCHRG	CONNECTOR	TEE	BENZENE	BACKGROUND
PP-035	02021-007	W SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DSCHRG TU	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
PP-035	02022-002	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DSCHRG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 2/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-035	02022-004	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DSCHRG	CONNECTOR	TEE	BENZENE	BACKGROUND
PP-035	02023-003	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 DSCHRG	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-035	02024-001	NW SDE UNIT 27 TK-263 RAIL LOADING SPOT 34 AC PP-035 N2	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02029-001	NW SDE UNIT 27 TK-263 Base	POEL	PLUG	BENZENE	BACKGROUND
TK-263	02029-004	NW SDE UNIT 27 TK-263 Base	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02031-003	NW SDE UNIT 27 TK-263 Base	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-263	02032-000	NW SDE UNIT 27 TK-263 Base	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02033-003	NW SDE UNIT 27 TK-263 Base	POEL	PLUG	BENZENE	BACKGROUND
TK-263	02034-000	NW SDE UNIT 27 TK-263 Base	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02036-000	NW SDE UNIT 27 TK-263 Base	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02036-001	NW SDE UNIT 27 TK-263 Base	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02036-002	NW SDE UNIT 27 TK-263 Base	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02037-008	NW SDE UNIT 27 TK-263 Base	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-263	02037-009	NW SDE UNIT 27 TK-263 Base	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02037-010	NW SDE UNIT 27 TK-263 Base	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-263	02038-003	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-263	02038-005	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02038-009	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-263	02039-001	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02039-002	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-263	02039-003	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 3/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-263	02039-005	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	GAUGE	BENZENE	BACKGROUND
TK-263	02041-002	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02041-007	NW SDE UNIT 27 TK-263 Base 15FT SE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02042-005	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-263	02042-008	NW SDE UNIT 27 TK-263 Base 30FT SE next pipe to west	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02043-005	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-263	02044-002	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02044-003	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02044-007	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02044-011	NW SDE UNIT 27 TK-263 Base 30FT SE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-263	02045F-001	NW SDE UNIT 27 TK-263 TOP E SIDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02045G-001	NW SDE UNIT 27 TK-263 TOP E SIDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02045H-002	NW SDE UNIT 27 TK-263 TOP E SIDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02045J-006	NW SDE UNIT 27 TK-263 TOP E SIDE	POEL	PLUG	BENZENE	BACKGROUND
TK-263	02045K-000	NW SDE UNIT 27 TK-263 TOP E SIDE	VALVE	CHECK VALVE	BENZENE	BACKGROUND
TK-263	02045K-002	NW SDE UNIT 27 TK-263 TOP E SIDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02046-000	NW SDE UNIT 27 TK-263 TOP S SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02047-002	NW SDE UNIT 27 TK-263 TOP S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02048-000	NW SDE UNIT 27 TK-263 TOP S SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02049-001	NW SDE UNIT 27 TK-263 TOP S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02049-002	NW SDE UNIT 27 TK-263 TOP S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 4/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-263	02050-001	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02051-001	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02051-004	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-263	02052-000	NW SDE UNIT 27 TK-263 TOP W SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-263	02052-001	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02052-002	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02056-002	NW SDE UNIT 27 TK-263 TOP W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02058-005	NW SDE UNIT 27 TK-263 TOP W SDE BHND 2057 RLF ATM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02068-000	NW SDE UNIT 27 TK-262 BASE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02068-002	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02069-000	NW SDE UNIT 27 TK-262 BASE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02069-002	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02069-003	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-262	02071-017	NW SDE UNIT 27 TK-262 BASE HOSE	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02072-000	NW SDE UNIT 27 TK-262 BASE	RVLV	RELIEF VALVE	BENZENE	BACKGROUND
TK-262	02072-002	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02072-014	NW SDE UNIT 27 TK-262 BASE 6FT FROM RELIEF CVS	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02072-021	NW SDE UNIT 27 TK-262 BASE 25FT S OF RELIEF CVS	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02072-028	NW SDE UNIT 27 TK-262 BASE 25FT S OF RELIEF CVS	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02072-030	NW SDE UNIT 27 TK-262 BASE 25FT S OF RELIEF CVS	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02074-000	NW SDE UNIT 27 TK-262 BASE	VALVE	BALL	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 5/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-262	02074-005	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02075-003	NW SDE UNIT 27 TK-262 BASE	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02076-003	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02076-004	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02077-005	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02078-001	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02078-002	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK-262	02079-000	NW SDE UNIT 27 TK-262 BASE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02079-002	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02080-006	NW SDE UNIT 27 TK-262 BASE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02081-000	NW SDE UNIT 27 TK-262 BASE 20FT E	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02083-000	NW SDE UNIT 27 TK-262 BASE 20FT E	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02084-000	NW SDE UNIT 27 TK-262 BASE 20FT E	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02084-002	NW SDE UNIT 27 TK-262 BASE 20FT E	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02084-004	NW SDE UNIT 27 TK-262 BASE 20FT E	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-262	02084-006	NW SDE UNIT 27 TK-262 BASE 20FT E	CONNECTOR	GAUGE	BENZENE	BACKGROUND
TK-262	02085-003	NW SDE UNIT 27 TK-262 BASE 20FT E	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02085-011	NW SDE UNIT 27 TK-262 BASE 20FT E follow hose	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02086-002	NW SDE UNIT 27 TK-262 BASE 20FT E	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02087-003	NW SDE UNIT 27 TK-262 BASE 30FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02087-015	NW SDE UNIT 27 TK-262 BASE 30FT SE	CONNECTOR	ELBOW	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 6/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-262	02089-000	NW SDE UNIT 27 TK-262 BASE 30FT SE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02089-001	NW SDE UNIT 27 TK-262 BASE 30FT SE	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02089-003	NW SDE UNIT 27 TK-262 BASE 30FT SE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02090-000	NW SDE UNIT 27 TK-262 BASE 30FT SE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02090-001	NW SDE UNIT 27 TK-262 BASE 30FT SE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-768	02093-002	NW SDE UNIT 27 PP-768 ABV PMP	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-768	02094-002	NW SDE UNIT 27 PP-768 ABV PMP	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-768	02094-003	NW SDE UNIT 27 PP-768 ABV PMP	POEL	PLUG	BENZENE	BACKGROUND
PP-768	02094-006	NW SDE UNIT 27 PP-768 ABV PMP	CONNECTOR	TEE	BENZENE	BACKGROUND
PP-768	02094-009	NW SDE UNIT 27 PP-768 ABV PMP	CONNECTOR	GAUGE	BENZENE	BACKGROUND
PP-768	02097-001	NW SDE UNIT 27 PP-768 PMP SCTN	CONNECTOR	GAUGE	BENZENE	BACKGROUND
PP-768	02099-001	NW SDE UNIT 27 PP-768 PMP SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-770	02101-002	NW SDE UNIT 27 PP-770 PMP SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-770	02102-001	NW SDE UNIT 27 PP-770 PMP SCTN	CONNECTOR	GAUGE	BENZENE	BACKGROUND
PP-770	02102-002	NW SDE UNIT 27 PP-770 PMP SCTN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-770	02104-000	NW SDE UNIT 27 PP-770 PMP SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-770	02104-001	NW SDE UNIT 27 PP-770 PMP SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-770	02105-002	NW SDE UNIT 27 PP-770 PMP DSCHRG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-770	02106-000	NW SDE UNIT 27 PP-770 PMP DSCHRG	VALVE	BALL	BENZENE	BACKGROUND
PP-770	02106-001	NW SDE UNIT 27 PP-770 PMP DSCHRG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-770	02106-006	NW SDE UNIT 27 PP-770 PMP DSCHRG	CONNECTOR	TEE	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 7/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-770	02107-004	NW SDE UNIT 27 PP-770 PMP DSCHRG	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02108-002	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02109-000	NW SDE UNIT 27 30FT S BSE TK-262	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02109-007	NW SDE UNIT 27 30FT S BSE TK-262 3FT S VLV 2109	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02110-000	NW SDE UNIT 27 30FT S BSE TK-262	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02110-001	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02110-007	NW SDE UNIT 27 30FT S BSE TK-262 3FT S VLV 2109	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02110-008	NW SDE UNIT 27 30FT S BSE TK-262 3FT S VLV 2109	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02111-001	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-263	02111-002	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02112-003	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02112-007	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-262	02112-008	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02113-002	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02113-004	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-262	02113-005	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02113-007	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02114-005	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02114-015	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02114-016	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02114-036	NW SDE UNIT 27 30FT SW BSE TK-262 UP DWN TEE WITH S. LINE	CONNECTOR	TEE	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 8/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-262	02114-038	NW SDE UNIT 27 30FT SW BSE TK-262 90 LEADING N.	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02114-043	JW SDE UNIT 27 30FT SW BSE TK-262 S 8FT OF TK262 WESTERN SUPPOR	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-262	02114-045	JW SDE UNIT 27 30FT SW BSE TK-262 N 12FT OF TK262 WESTERN SUPPC	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02114A-000	NW SDE UNIT 27 30FT S BSE TK-262	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02114A-001	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02115-002	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-263	02117-000	NW SDE UNIT 27 30FT SE BSE TK-262 NEAR YELLOW BRIDGE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02118-002	NW SDE UNIT 27 TOP TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02118D-001	NW SDE UNIT 27 TOP TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02118G-003	NW SDE UNIT 27 TOP TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02118G-004	NW SDE UNIT 27 TOP TK-262	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-262	02118H-001	NW SDE UNIT 27 TOP TK-262	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02118H-004	NW SDE UNIT 27 TOP TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02118H-005	NW SDE UNIT 27 TOP TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02118H-006	NW SDE UNIT 27 TOP TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02118H-007	NW SDE UNIT 27 TOP TK-262	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02118H-009	NW SDE UNIT 27 TOP TK-262	POEL	PLUG	BENZENE	BACKGROUND
TK-262	02118J-001	NW SDE UNIT 27 TOP TK-262	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02119-000	NW SDE UNIT 27 TOP TK-262 W SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02119-004	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-262	02120-004	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	TEE	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 9/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-262	02120-008	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02121-002	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02123-000	NW SDE UNIT 27 TOP TK-262 W SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02123-001	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02123-003	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02126-002	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02127-002	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02127-004	NW SDE UNIT 27 TOP TK-262 W SDE	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02127-008	NW SDE UNIT 27 30FT S BSE TK-262	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-262	02128-002	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02128-003	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02129-002	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02130-000	NW SDE UNIT 27 TOP TK-262 S SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02133-002	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02135-002	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02136-000	NW SDE UNIT 27 TOP TK-262 S SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-262	02136-001	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02136-004	NW SDE UNIT 27 TOP TK-262 S SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02142-000	IW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 33 LOADING AR	VALVE	MOTOR OPERATED VALVE	BENZENE	BACKGROUND
TK-262	02143-003	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 33	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02146-000	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS 15 S OF SPOT 33	RVLV	RELIEF VALVE	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 10/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-262	02146-008	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS 15 S OF SPOT 33	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02146-011	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS 15 S OF SPOT 33	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-262	02146-012	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS 15 S OF SPOT 33	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02146-014	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS 15 S OF SPOT 33	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02146-017	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS AT SPOT 33	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-262	02147-004	W SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 LOADING AR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-262	02149-003	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-262	02153-002	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 N2 SYSTEM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-032	02154-001	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02154-002	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02154-005	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02156-002	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02157-002	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 DRN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-032	02158-003	IW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 DSCH	POEL	PLUG	BENZENE	BACKGROUND
PP-032	02158-006	IW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 DSCH	CONNECTOR	TEE	BENZENE	BACKGROUND
PP-032	02158-009	IW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 DSCH	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-032	02159-005	W SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 32 PP-032 DSCHF	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02161-000	W SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 31 RAIL LOADIN	VALVE	MOTOR OPERATED VALVE	BENZENE	BACKGROUND
PP-032	02161-001	NW SDE UNIT 27 SPOT 31 RAIL LOADING ARMN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-032	02163-000	NW SDE UNIT 27 TK-262 S RAIL LOADING RACKS SPOT 31	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-001B	02167-000	N SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001B SPOT 8	VALVE	BALL	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 11/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-001B	02167-003	N SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001B SPOT 8	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK-260	02168-001	N SDE UNIT 27 TK-261 NW SDE TRANSFER FROM TK-260	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-260	02168-003	N SDE UNIT 27 TK-261 NW SDE TRANSFER FROM TK-260	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-261	02169A-002	N SDE UNIT 27 TK-261 NW SDE TRANSFER FROM TK-261	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02170-009	SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001A/PP-001B TO TK	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-261	02170-014	SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001A/PP-001B TO TK	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-261	02170-020	SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001A/PP-001B TO TK	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02170-022	SDE UNIT 27 TK-261 NW SDE TRANSFER FROM PP-001A/PP-001B TO TK	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02171-000	N SDE UNIT 27 TK-261 SW SDE	VALVE	GATE VALVE	BENZENE	BACKGROUND
TK-261	02171-003	N SDE UNIT 27 TK-261 SW SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02173-002	N SDE UNIT 27 TK-260 E SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02174-000	N SDE UNIT 27 TK-260 E SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-260	02174-002	N SDE UNIT 27 TK-260 E SDE	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-260	02174-007	N SDE UNIT 27 TK-260 E SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-260	02175-003	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
TK-260	02175-004	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-260	02175-006	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-260	02175-010	N SDE UNIT 27 TK-260 NE SDE S 90	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-260	02176-000	N SDE UNIT 27 TK-260 NE SDE	VALVE	BALL	BENZENE	BACKGROUND
TK-260	02176-004	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-260	02176-010	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 12/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-260	02177-004	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-260	02177-005	N SDE UNIT 27 TK-260 NE SDE	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-260	02177-016	N SDE UNIT 27 TK-260 NE SDE 90 3FT E SPOT 7 SIGN	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-260	02177-021	N SDE UNIT 27 TK-260 NE SDE 15FT N OF TEE 3FT W SPOT 7 SIGN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-260	02177-025	N SDE UNIT 27 TK-260 NE SDE 20FT N OF TEE 3FT W SPOT 7 SIGN	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK-260	02179-000	N SDE UNIT 27 TK-260 NE SDE	VALVE	GATE VALVE	BENZENE	BACKGROUND
TK-261	02180-002	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02183-005	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK-261	02184-002	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02184-003	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02186-001	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02186-004	N SDE UNIT 27 TK-261 E SDE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02187-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02188-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02190-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02191-000	TOP OF TANK 261	VALVE	BALL	BENZENE	BACKGROUND
TK-261	02192-003	TOP OF TANK 261	CONNECTOR	TEE	BENZENE	BACKGROUND
TK-261	02193-001	TOP OF TANK 261	CONNECTOR	GAUGE	BENZENE	BACKGROUND
TK-261	02194-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02194-002	TOP OF TANK 261	RVLV	PRESSURE SAFETY VALVE	BENZENE	BACKGROUND
TK-261	02197-000	TOP OF TANK 261	RVLV	ATMOSPHERIC RELIEF VALVE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-260	02198-000	TOP OF TANK 261	VALVE	CHECK VALVE	BENZENE	BACKGROUND
TK-260	02198-002	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02199-002	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02200B-002	TOP OF TANK 261	CONNECTOR	FLANGED CONNECTOR	BENZENE	BACKGROUND
TK-260	02200B-007	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02201-000	TOP OF TANK 261	VALVE	BALL	BENZENE	BACKGROUND
TK-260	02201-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02201A-000	TOP OF TANK 261	VALVE	BALL	BENZENE	BACKGROUND
TK-260	02201A-007	TOP OF TANK 261	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-260	02205-001	TOP OF TANK 261	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-260	02206-000	TOP OF TANK 261	VALVE	BALL	BENZENE	BACKGROUND
TK-260	02206-002	TOP OF TANK 261	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02207-006	NW SDE UNIT 27 TK-261 Base 6FT ne	CONNECTOR	UNION	BENZENE	BACKGROUND
TK-261	02208-001	NW SDE UNIT 27 TK-261 Base 6FT ne	POEL	BLIND FLANGE	BENZENE	BACKGROUND
TK-261	02208-002	NW SDE UNIT 27 TK-261 Base 6FT ne	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02209-002	NW SDE UNIT 27 TK-261 10FT E OF TK 260 @ SPOT 7 LR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK-261	02211-002	NW SDE UNIT 27 TK-261 10FT E OF TK 260 @ SPOT 7 LR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK-261	02213-002	NW SDE UNIT 27 TK-261 10FT E OF TK 260 @ SPOT 7 LR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP001A/B	02215-002	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP001A/B	02215-004	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	COUPLING	BENZENE	BACKGROUND
PP001A/B	02215A-000	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	VALVE	BALL	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 14/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP001A/B	02215A-003	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
PP001A/B	02216-000	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	VALVE	BALL	BENZENE	BACKGROUND
PP001A/B	02216-001	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP001A/B	02217-002	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP001A/B	02220-006	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	GAUGE	BENZENE	BACKGROUND
PP001A/B	02223-000	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	VALVE	BALL	BENZENE	BACKGROUND
PP001A/B	02227-003	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP001A/B	02228-003	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP001A/B	02230-000	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	VALVE	BALL	BENZENE	BACKGROUND
PP001A/B	02230A-003	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	TEE	BENZENE	BACKGROUND
PP001A/B	02230A-004	NW SDE UNIT 27 E OF TK 261 @ PP 001A/B	CONNECTOR	TEE	BENZENE	BACKGROUND
PP 230A/B	02328-003	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02329-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02330-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02333-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02334-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02336-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02337-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02340-002	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02341-002	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02342-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP 230A/B	02345-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02346-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02351-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02351-004	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	ELBOW	BENZENE	BACKGROUND
PP 230A/B	02353-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02354-002	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 230A/B	02355-003	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	GAUGE	BENZENE	BACKGROUND
PP 230A/B	02357-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B @ CL	CONNECTOR	FLANGE	BENZENE	520
PP 230A/B	02358-003	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B	CONNECTOR	UNION	BENZENE	BACKGROUND
PP 230A/B	02358-004	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 230A/B	02359-000	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B	VALVE	BALL	BENZENE	BACKGROUND
PP 230A/B	02359-001	NW SDE UNIT 27 S OF TK 208 4FT E OF PP 230A/B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 002A/B	02362-003	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02364-003	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	UNION	BENZENE	BACKGROUND
PP 002A/B	02365-000	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	VALVE	BALL	BENZENE	BACKGROUND
PP 002A/B	02365-004	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02366-001	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 002A/B	02373-002	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02379-001	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 002A/B	02379-004	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02380-003	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP 002A/B	02383-000	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	VALVE	BALL	BENZENE	BACKGROUND
PP 002A/B	02383-001	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02385-002	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02386-000	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	VALVE	BALL	BENZENE	BACKGROUND
PP 002A/B	02386-001	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02386-002	NW SDE UNIT 27 E OF TK 208 @ PP 002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02392-002	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02394-001	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02395-002	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02396-002	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
PP 002A/B	02400-003	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
PP 002A/B	02403-001	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02404-001	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	ELBOW	BENZENE	BACKGROUND
PP 002A/B	02404-002	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	POEL	PLUG	BENZENE	BACKGROUND
PP 002A/B	02408-000	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	VALVE	BALL	BENZENE	BACKGROUND
PP 002A/B	02408-003	NW SDE UNIT 27 E OF TK 208 @ FILTERS E OF PP002A/B	CONNECTOR	TEE	BENZENE	BACKGROUND
PP 002A/B	02411-002	NW SDE UNIT 27 5 FT NE OF TK 209 @ PR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 002A/B	02414-000	NW SDE UNIT 27 5 FT NE OF TK 209 @ PR	VALVE	BALL	BENZENE	BACKGROUND
PP 002A/B	02415-001	NW SDE UNIT 27 5 FT NE OF TK 209 @ PR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 260/261	02416-000	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8	VALVE	BALL	BENZENE	BACKGROUND
MT 260/261	02416-002	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 260/261	02417-008	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 260/261	02418-001	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8 OVHD	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 260/261	02419-006	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8 TOP	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 260/261	02420-000	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8 TOP	VALVE	MOTOR OPERATED VALVE	BENZENE	BACKGROUND
MT 260/261	02420-003	NW SDE UNIT 27 10 FT SE OF TK 206 @ LR SPT 8 TOP	CONNECTOR	FLANGE	BENZENE	BACKGROUND
GF-610.007	02421-000	NW SDE UNIT 27 15 ft NW TK-211 TOTAL ORGANIC FLOW LINE	VALVE	BALL	ORGFEED AC FRM PROP METOL	BACKGROUND
GF-610.007	02421-001	NW SDE UNIT 27 15 ft NW TK-211 TOTAL ORGANIC FLOW LINE	CONNECTOR	SCREWED CONNECTOR	ORGFEED AC FRM PROP METOL	BACKGROUND
MT-620.212	02430-004	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	GAUGE	BENZENE	BACKGROUND
MT-620.212	02431-003	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
MT-620.212	02431-004	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MT-620.212	02432-002	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT-620.212	02433-004	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	POEL	PLUG	BENZENE	BACKGROUND
MT-620.212	02433-008	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.212	02437-001	N SDE UNIT 27 10ft S TK-213 PUMP PP212A DSCHRG	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT-620.212	02442-002	N SDE UNIT 27 10ft S TK-213 PUMP PP212A SCTN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT-624.162	02478-005	N SDE UNIT 27 10FT W OF AS-624.155 (N2 STRIPPER) E SIDE TT	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT-624.162	02479-001	N SDE UNIT 27 10FT W OF AS-624.155 (N2 STRIPPER) E SIDE TT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT-624.162	02483-004	N SDE UNIT 27 10FT W OF AS-624.155 (N2 STRIPPER) E SIDE TT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT-624.162	02483-005	N SDE UNIT 27 10FT W OF AS-624.155 (N2 STRIPPER) E SIDE TT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT-624.162	02486-000	N SDE UNIT 27 10FT W OF AS-624.155 (N2 STRIPPER) E SIDE TT	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT-624.162	02490-004	N SDE UNIT 27 CONTROL LOOP FV162_1 10FT NE AS-624.155	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TI-624.162	02496-002	N SDE UNIT 27 CONTROL LOOP FV162_1 10FT NE AS-624.155	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159B	02498-001	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159B DSCHRG	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159B	02500-002	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159B DSCHRG	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159B	02501-000	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159B DSCHRG	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159B	02501-002	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159B DSCHRG	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159B	02502-003	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159B SCTN	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02505-008	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159A DSCHRG	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02508-004	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159A DRAIN	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02510A-003	N SDE UNIT 27 12FT N OPERATORS BUILDING PP164.159A SCTN	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02512-003	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02513-000	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02513-001	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02515-001	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02516-001	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02516-002	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02518-000	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02518-003	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02518-005	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02519-000	SDE UNIT 27 12FT N OPERATORS BUILDING 5FT E PP159A CONTROL LC	VALVE	METER VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02523-004	SDE UNIT 27 12FT N OPERATORS BUILDING 2FT E PP159A CONTROL LC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02523-007	SDE UNIT 27 12FT N OPERATORS BUILDING 2FT E PP159A CONTROL LC	CONNECTOR	TUBING CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-624.159A	02523-008	DE UNIT 27 12FT N OPERATORS BUILDING 2FT E PP159A CONTROL LC	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.159A	02524-001	DE UNIT 27 12FT N OPERATORS BUILDING 2FT E PP159A CONTROL LC	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02525-000	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02526-000	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02527-006	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02528-000	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	VALVE	SIGHT GLASS VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02528-004	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02529-004	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02530-001	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02530-004	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-624.158	02531-006	DE UNIT 27 VENT FAN PLATFORM ON N SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02536-001	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM SCTN	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02537-000	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM S DSCHRG LINE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02537-001	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM S DSCHRG LINE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02538-001	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM S DSCHRG LINE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02539A-000	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM N DSCHRG LINE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02539A-001	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM N DSCHRG LINE	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02540-000	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM N DSCHRG LINE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02540-002	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM N DSCHRG LINE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02541-002	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM PP240 DSCHRG	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02541-005	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM PP240 DSCHRG	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-620.240	02548-000	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM PP240 DRAIN	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP-620.240	02549-005	N SDE UNIT 27 PP-240 20FT NE HYDRANT PLATFORM PP240 DSCHRG	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02553-001	N SDE UNIT 27 TK 244 SW SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02557-001	N SDE UNIT 27 TK 244 NW SIDE STUBOUT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02560-002	N SDE UNIT 27 TK 243 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02561-003	N SDE UNIT 27 TK 243 E SIDE	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02561-004	N SDE UNIT 27 TK 243 E SIDE	CONNECTOR	GAUGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02563-000	N SDE UNIT 27 TK 243 E SIDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02563A-003	N SDE UNIT 27 TK 243 E SIDE BOTTOM LEFT OF MANWAY	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-244	02563B-003	N SDE UNIT 27 TK 243 NW SIDE UNDERSIDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-242	02564-000	N SDE UNIT 27 TK 242 W SIDE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-242	02565-000	N SDE UNIT 27 TK 242 W SIDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-242	02566-003	N SDE UNIT 27 TK 242 E SIDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-242	02566-004	N SDE UNIT 27 TK 242 E SIDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02568-000	N SDE UNIT 27 TK 241 W SIDE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02568-004	N SDE UNIT 27 TK 241 W SIDE	POEL	BLIND FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02570-002	N SDE UNIT 27 TK 241 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02571-002	N SDE UNIT 27 TK 241 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02571-006	N SDE UNIT 27 TK 241 E SIDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-241	02572-004	N SDE UNIT 27 TK 241 E SIDE	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02573-003	N SDE UNIT 27 TK 240 W SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-240	02574-001	N SDE UNIT 27 TK 240 SW SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02575-002	N SDE UNIT 27 TK 240 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02576-002	N SDE UNIT 27 TK 240 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02576-004	N SDE UNIT 27 TK 240 E SIDE	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02577-000	N SDE UNIT 27 TK 240 E SIDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02577-003	N SDE UNIT 27 TK 240 E SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-240	02577-012	N SDE UNIT 27 TK 240 E SIDE	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-000	NE SDE UNIT 27 TK 255 2FT NE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-003	NE SDE UNIT 27 TK 255 2FT NE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-004	NE SDE UNIT 27 TK 255 2FT NE	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-008	NE SDE UNIT 27 TK 255 2FT NE	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-009	NE SDE UNIT 27 TK 255 2FT NE	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580-010	NE SDE UNIT 27 TK 255 2FT NE	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580A-000	NE SDE UNIT 27 5 FT NW TK256 FOLLOW LINE W FROM Tag 02580	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-251	02580A-002	NE SDE UNIT 27 5 FT NW TK256 FOLLOW LINE W FROM Tag 02580	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02581-003	NE SDE UNIT 27 TK 256 N SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02583-005	NE SDE UNIT 27 TK 256 N SIDE	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02583-007	NE SDE UNIT 27 TK 256 N SIDE	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02583-008	NE SDE UNIT 27 TK 256 N SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02592-001	NE SDE UNIT 27 TK 256 S SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02592-002	NE SDE UNIT 27 TK 256 S SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK-256	02593-000	NE SDE UNIT 27 TK 256 S SIDE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02593-001	NE SDE UNIT 27 TK 256 S SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-255	02597-000	NE SDE UNIT 27 TK 255 S SIDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-255	02598-001	NE SDE UNIT 27 TK 255 S SIDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-255	02598-002	NE SDE UNIT 27 TK 255 S SIDE	POEL	BLIND FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TK-256	02608-000	NE SDE UNIT 27 TK 256 S SIDE S 5FT	VALVE	BALL	BENZENE	BACKGROUND
TK-256	02608-002	NE SDE UNIT 27 TK 256 S SIDE S 5FT	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02610-000	NE CRNR 27 TKFRM AT PP254 PMP N TK254 BENZ UNLOAD TRANS	PUMP	PUMP SEAL	BENZENE	BACKGROUND
TK254	02610A-001	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT DRN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK254	02610A-002	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT DRN	CONNECTOR	COUPLING	BENZENE	BACKGROUND
TK254	02610A-005	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT DRN	POEL	PLUG	BENZENE	BACKGROUND
TK254	02610G-001	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT BYPASS	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK254	02610G-003	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT BYPASS	CONNECTOR	UNION	BENZENE	BACKGROUND
TK254	02610G-004	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT BYPASS	CONNECTOR	UNION	BENZENE	BACKGROUND
TK254	02610H-001	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT DISC BLD	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02610K-002	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT DISC BLK	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02610L-002	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT SUCT DBL BLK SYSTEM	CONNECTOR	UNION	BENZENE	BACKGROUND
TK254	02610L-004	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT SUCT DBL	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK254	02610L-007	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT SUCT DBL BLK SYSTEM	POEL	PLUG	BENZENE	BACKGROUND
TK254	02610M-002	NE CRNR 27 TKFRM AT PP254 PMP N TK254 AT SUCT DBL	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02611-001	NE CRNR 27 TKFRM AT E SDE TK254 BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TK254	02611-002	NE CRNR 27 TKFRM AT E SDE TK254 BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02611B-001	NE CRNR 27 TKFRM AT E SDE TK254 BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02611B-003	NE CRNR 27 TKFRM AT E SDE TK254 BTM	POEL	CAP	BENZENE	BACKGROUND
TK254	02611C-002	NE CRNR 27 TKFRM AT S SDE TK254 BTM LT254.1	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02611D-000	NE CRNR 27 TKFRM AT NW SDE TK254 BTM	VALVE	BALL	BENZENE	BACKGROUND
TK254	02611H-002	N END 27 TKFRM AT W SDE TK254 TOP RAIL RKS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TK254	02612B-003	NE END 27 TKFRM AT TK253 W SDE AT MNWAY	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK254	02612D-002	NE END 27 TKFRM AT TK253 W SDE AT MNWAY	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK254	02612D-008	NE END 27 TKFRM AT TK253 W SDE AT MNWAY	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TK254	02612F-001	NE END 27 TKFRM AT TK253 W SDE AT MNWAY	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TK254	02612F-004	NE END 27 TKFRM AT TK253 W SDE AT MNWAY	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT620.252	02613-002	NE SDE UNIT 27 TK-252 E SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613-003	NE SDE UNIT 27 TK-252 E SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613A-001	NE SDE UNIT 27 TK-252 SE SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613B-001	NE SDE UNIT 27 TK-252 W SDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613C-003	NE SDE UNIT 27 TK-252 W SDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613D-000	NE SDE UNIT 27 TK-252 W SDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613D-003	NE SDE UNIT 27 TK-252 W SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.252	02613D-006	NE SDE UNIT 27 TK-252 W SDE LINE BTW TNKS	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02614A-000	NE SDE UNIT 27 TK-251 E SDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02614B-003	NE SDE UNIT 27 TK-251 E SDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT620.251	02614C-000	NE SDE UNIT 27 TK-251 SE SDE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02614D-000	NE SDE UNIT 27 TK-251 W SDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02614D-012	NE SDE UNIT 27 TK-251 W SDE	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02615-000	NE SDE UNIT 27 TK-250 E SDE	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02615-002	NE SDE UNIT 27 TK-251 E SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02615-004	NE SDE UNIT 27 TK-251 E SDE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616-004	NE SDE UNIT 27 TK-251 W SIDE	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616A-001	NE SDE UNIT 27 TK-251 W SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616B-003	NE SDE UNIT 27 TK-251 W SIDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616B-004	NE SDE UNIT 27 TK-251 W SIDE	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616C-000	NE SDE UNIT 27 3 FT SE tK257	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616C-001	NE SDE UNIT 27 3 FT SE tK257	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT620.251	02616C-003	NE SDE UNIT 27 3 FT SE tK257	POEL	BLIND FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.242	02617-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 ST1 EAST REFULX	PUMP	PUMP SEAL	BENZENE	BACKGROUND
pp622.242	02617-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.242	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.242	02618-003	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 disc	POEL	BLIND FLANGE	BENZENE	BACKGROUND
pp622.242	02620-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 disc	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
pp622.242	02620-004	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 disc at gau	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
pp622.242	02620-012	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 disc at gau	CONNECTOR	ELBOW	BENZENE	BACKGROUND
pp622.242	02622-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 disc at gau	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
pp622.242	02623-003	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 suct	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.242	02623-007	E SDE UNIT 27 s TKFRM2 AT 27pp622.242 suct	POEL	PLUG	BENZENE	BACKGROUND
pp622.242	02626-005	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc	CONNECTOR	UNION	BENZENE	BACKGROUND
pp622.242	02627-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.242	02628-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc	VALVE	GATE VALVE	BENZENE	BACKGROUND
pp622.242	02628-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.242	02630-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc at gau	VALVE	BALL	BENZENE	BACKGROUND
pp622.242	02630-005	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc at gau	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
pp622.242	02630-008	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc at gau	CONNECTOR	TEE	BENZENE	BACKGROUND
pp622.242	02631-001	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc at gau	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
pp622.242	02631-005	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 disc at gau	CONNECTOR	UNION	BENZENE	BACKGROUND
pp622.242	02633-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 suct	VALVE	BALL	BENZENE	BACKGROUND
pp622.242	02634-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 suct	VALVE	BALL	BENZENE	BACKGROUND
pp622.242	02635-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.243 suct	VALVE	BALL	BENZENE	BACKGROUND
pp622.256a	02641-007	E SDE UNIT 27 s TKFRM2 AT 27pp622.256a disc	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.256a	02643-003	E SDE UNIT 27 s TKFRM2 AT 27pp622.256a disc	CONNECTOR	ELBOW	BENZENE	BACKGROUND
pp622.256a	02645-002	E SDE UNIT 27 s TKFRM2 AT 27pp622.256a disc	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
pp622.256a	02646-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.256a disc	VALVE	BALL	BENZENE	BACKGROUND
pp622.256b	02647-002	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b suct	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.256b	02647-006	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b disc	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.256b	02647-008	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b disc	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.256b	02649-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b disc	VALVE	BALL	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.256b	02652-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b disc at gau	VALVE	BALL	BENZENE	BACKGROUND
pp622.256b	02654-006	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b suct	POEL	PLUG	BENZENE	BACKGROUND
pp622.256b	02661-000	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b off disc lne	VALVE	BALL	BENZENE	BACKGROUND
pp622.256b	02661-002	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b off disc lne	CONNECTOR	UNION	BENZENE	BACKGROUND
pp622.256b	02661-003	E SDE UNIT 27 s TKFRM2 AT 27pp622.256b off disc lne	POEL	PLUG	BENZENE	BACKGROUND
pp622.270a	02664-002	s TKFRM2 on pmp row AT 27pp622.270a suct	CONNECTOR	FLANGE	BENZENE	BACKGROUND
pp622.270a	02665-000	s TKFRM2 on pmp row AT 27pp622.270a disc	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02670-000	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02670-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02671-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02671-002	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02672-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02673-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e oh pmp 180-3	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02674-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02674-003	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	POEL	BLIND FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02675-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	POEL	BLIND FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02675-002	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02676-002	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02678-001	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02678-006	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02678-007	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND

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	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.270a	02679-000	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02679-008	s TKFRM2 on pmp row AT 27pp622.270a disc manif e	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02682-001	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02682-002	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02682-004	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02684-000	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02684-002	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct 4way	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02685-001	s TKFRM2 on pmp row AT 27pp622.270a blw disc manif e on suct	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02688-003	s TKFRM2 on pmp row AT 27pp622.270a cntr manif on suct	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02691-002	s TKFRM2 on pmp row AT 27pp622.270a cntr manif on disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02692-001	s TKFRM2 on pmp row AT 27pp622.270a cntr manif on suct	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02693-001	s TKFRM2 on pmp row AT 27pp622.270a cntr manif on suct drn	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02693-003	s TKFRM2 on pmp row AT 27pp622.270a cntr manif on suct drn	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02694-000	s TKFRM2 on pmp row AT 27pp622.270a disc	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02694-004	s TKFRM2 on pmp row AT 27pp622.270a disc	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02694-008	s TKFRM2 on pmp row AT 27pp622.270a disc	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270a	02695-002	s TKFRM2 on pmp row AT 27pp622.270a disc	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02697-002	s TKFRM2 on pmp row AT 27pp622.270b	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02698-001	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02698-002	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02699-002	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.270b	02700-000	s TKFRM2 on pmp row AT 27pp622.270b disc	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02700-001	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02701-000	s TKFRM2 on pmp row AT 27pp622.270b disc	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02703-002	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02705-000	s TKFRM2 on pmp row AT 27pp622.270b disc	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02705-001	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02705-003	s TKFRM2 on pmp row AT 27pp622.270b disc	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02710-001	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02710-002	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02711-002	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02712-002	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02713-002	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02713-003	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02718-003	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02720-001	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02722-001	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02723-000	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02723-001	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02723-002	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02724-000	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02725-004	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.270b	02725-007	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02725-013	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02725-014	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif	CONNECTOR	GAUGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02730-005	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif n2 lne	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02730-009	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif n2 lne	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02730-012	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif n2 lne	CONNECTOR	GAUGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02730-014	s TKFRM2 on pmp row AT 27pp622.270b disc at w manif n2 lne	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02735-000	s TKFRM2 on pmp row AT 27pp622.270b suct drn	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02736-002	s TKFRM2 on pmp row AT 27pp622.270b suct	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02737-004	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02737-005	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02738-000	s TKFRM2 on pmp row AT 27pp622.270b disc bld	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02738-004	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02738-005	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02740-003	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02741-002	s TKFRM2 on pmp row AT 27pp622.270b disc bld	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02742-001	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02744-002	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02746-001	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02746-002	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02749-001	sw tk254 btms manif at grad	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.270b	02750-001	sw tk254 btms manif at grad	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02750-005	sw tk254 btms manif at grad	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02752-000	sw tk254 btms manif at grad	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02752-002	sw tk254 btms manif at grad	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02753-004	sw tk254 btms manif at grad	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02753-005	sw tk254 btms manif at grad	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02753-008	sw tk254 btms manif at grad	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02754-002	sw tk254 btms manif at grad	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02754-005	sw tk254 btms manif at grad	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02757-004	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02757-010	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02758-001	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02758-002	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02758-005	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02759-004	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02760-006	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02763-000	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02764-005	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02764-007	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02764-008	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02765-002	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
pp622.270b	02765-009	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02766-001	s TKFRM2 on pmp row AT 27pp622.270b disc cntr manif sw tk254	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02770-002	BTW TK254 AND TK233 OH IN PB	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02770-003	BTW TK254 AND TK233 OH IN PB	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02770-004	BTW TK254 AND TK233 OH IN PB	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02773-000	BTW TK254 AND TK233 OH IN PB	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
pp622.270b	02773-002	BTW TK254 AND TK233 OH IN PB	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02778-000	27 TKFRM AT TK244 TOP	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02778-001	27 TKFRM AT TK244 TOP	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-000	27 TKFRM AT TK244 TOP TAKE OFF LNE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-005	27 TKFRM AT TK244 TOP	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-009	27 TKFRM AT TK244 TOP	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-010	27 TKFRM AT TK244 TOP	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-012	27 TKFRM AT TK244 TOP SQUARE FLG	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-014	27 TKFRM AT TK244 TOP W SDE AT RAIL	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02779-016	27 TKFRM AT TK244 TOP W SDE AT RAIL	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.244	02780-002	27 TKFRM AT TK244 TOP W SDE AT RAIL FLM ARRSTR	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.242	02794-001	27 TKFRM AT TK242 TOP W SDE AT RAIL	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02795-006	27 TKFRM AT TK241 TOP	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02796-002	27 TKFRM AT TK241 TOP FLM ARRSTR	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02798-001	27 TKFRM AT TK241 TOP	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
622.241	02799-001	27 TKFRM AT TK241 TOP	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02799-003	27 TKFRM AT TK241 TOP	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02799-004	27 TKFRM AT TK241 TOP	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02799-006	27 TKFRM AT TK241 TOP	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02799-008	27 TKFRM AT TK241 TOP	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
622.241	02800-006	27 TKFRM AT TK241 TOP	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02815-000	E SDE BOX PLANT AT PP170 RFLX PMP N1 REFLUX NORTH	PUMP	PUMP SEAL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02815-001	E SDE BOX PLANT AT PP170 RFLX PMP SUCT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02815-002	E SDE BOX PLANT AT PP170 RFLX PMP SUCT	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02816-002	E SDE BOX PLANT AT PP170 RFLX PMP DISC GAU	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02817-000	E SDE BOX PLANT AT PP170 RFLX PMP DISC GAU	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02817-006	E SDE BOX PLANT AT PP170 RFLX PMP DISC GAU	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02817-009	E SDE BOX PLANT AT PP170 RFLX PMP DISC GAU	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02818-001	E SDE BOX PLANT AT PP170 RFLX PMP DISC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02819-001	E SDE BOX PLANT AT PP170 RFLX PMP DISC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02820-002	E SDE BOX PLANT AT PP170 RFLX PMP DISC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02822-000	E SDE BOX PLANT AT PP170 RFLX PMP SUCT	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.170	02822-001	E SDE BOX PLANT AT PP170 RFLX PMP SUCT	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02824-003	E SDE BOX PLANT AT PP171 RFLX PMP DISC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02825-001	E SDE BOX PLANT AT PP171 RFLX PMP DISC GAU	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02825-002	E SDE BOX PLANT AT PP171 RFLX PMP DISC GAU	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP623.171	02826-004	E SDE BOX PLANT AT PP171 RFLX PMP DISC GAU	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02827-002	E SDE BOX PLANT AT PP171 RFLX PMP DISC	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02829-003	E SDE BOX PLANT AT S SDE AS108 OH LNE FRM LV150.1	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02833-000	E SDE BOX PLANT AT PP171 RFLX PMP DISC AT LV150.1	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.171	02834-003	E SDE BOX PLANT AT PP171 RFLX PMP SUCT	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02837B-005	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02838-004	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02838-008	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02838-009	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02838-010	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02839-000	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02839-003	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02839-004	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02841-000	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	VALVE	SIGHT GLASS VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02841-001	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	SIGHT GLASS	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02842-000	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02842-003	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP623.150	02842-010	E SDE BOX PLANT S AS108 AT MS623.150 RFLX DRM W SDE	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.102	02845-001	NW SDE BOX PLANT INSDE RED BX FV102.4	CONNECTOR	FLANGE	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.102	02846-002	NW SDE BOX PLANT INSDE RED BX FV102.4	CONNECTOR	SCREWED CONNECTOR	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.102	02846-004	NW SDE BOX PLANT INSDE RED BX FV102.4	CONNECTOR	TEE	ORGEXTR - BENZ PYR BASES	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP622.102	02847-002	NW SDE BOX PLANT INSDE RED BX FV102.4	CONNECTOR	ELBOW	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.102	02847-004	NW SDE BOX PLANT INSDE RED BX FV102.4	CONNECTOR	SCREWED CONNECTOR	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.102	02848-000	NW SDE BOX PLANT INSDE RED BX FV102.4	VALVE	BALL	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.102	02856-004	W SDE BOX PLANT E RED BX FOR FV102.4 DWNSTRM LNE TO SCHIEBA	CONNECTOR	FLANGE	ORGEXTR - BENZ PYR BASES	BACKGROUND
PP622.045A	02861-000	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02861-003	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02863-005	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02869-004	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02871-003	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02871-006	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02872-003	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02872-004	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02873-002	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02875-006	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879-002	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879A-000	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879A-001	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879B-000	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879B-003	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879C-000	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02879C-007	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP622.045A	02880-002	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02881-000	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045A ON DRAWING)	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02886A-002	NW SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.041A	02889-002	W SDE BOX PLANT SE RED BX 50FT PP041B (PP621.041A ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02890-001	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02890-002	N SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02891-001	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02891-002	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02893-001	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02895-003	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02895-004	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02895-005	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02895-006	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02895-007	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02896-002	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045B	02899-000	W SDE BOX PLANT SE RED BX 50FT PP041A (PP621.045B ON DRAWING)	VALVE	METER VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A/B	02901-000	PMP ROW BX PLT AT FV.041A INST FE.041A E PP045/41 PMPS	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP622.045A	02903-000	PMP ROW BX PLT AT FV.041A BYPASS PP045/41 PMPS	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
AR622.102	02906-004	E SDE BX PLT SCHIEBEL EXT AR622.102 E SDE	POEL	BLIND FLANGE	ORGFEED AC FRM PROP METOL	BACKGROUND
AR622.102	02906-005	E SDE BX PLT SCHIEBEL EXT AR622.102 E SDE	POEL	BLIND FLANGE	ORGFEED AC FRM PROP METOL	BACKGROUND
PP621.140B	02910-004	NE SDE UNIT 27 PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP621.140B	02910-005	NE SDE UNIT 27 PP-140B E SIDE OPERATORS BUILDING	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140B	02912-002	NE SDE UNIT 27 PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140B	02917-002	NE SDE UNIT 27 PP-140B E SIDE OPERATORS BUILDING PP-140B	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140B	02918-002	NE SDE UNIT 27 PP-140B E SIDE OPERATORS BUILDING PP-140B	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02921-000	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02923-004	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02924-002	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02926-000	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02926-003	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02926-005	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02927-002	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02927-003	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02928-002	NE SDE UNIT 27 ABOVE PP-140B E SIDE OPERATORS BUILDING	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02931-000	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DRAIN	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02931-007	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DRAIN	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02933-000	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A SCTN	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02939-001	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02941-001	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02944-001	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02944-002	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02945-001	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP621.140A	02945-002	IE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A DSCHR	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02947-003	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02948-002	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02948-004	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP621.140A	02948-008	NE SDE UNIT 27 PP-140A E SIDE OPERATORS BUILDING PP-140A	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03023-002	NTER OF UNIT27 ON 2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPE	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03024-001	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03024-003	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-000	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-002	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-005	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-006	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-007	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-008	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03025-010	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03026-002	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03026-005	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	TUBING CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03028-001	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON MS 621 140	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03029-000	ID LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON DECK S OF MS 621	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03030-002	ID LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON DECK S OF MS 621	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03032-000	ID LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON DECK S OF MS 62	VALVE	CONTROL VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MS 621 140	03032-002	ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON DECK S OF MS 62	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03037-003	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON TT 621 142	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 621 140	03039-000	2ND LVL PLTFRM WEST OF #1 BENZENE STRIPPER ON TT 621 142	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03041-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03042-005	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	CONNECTOR	TUBING CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03045-001	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03046-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	VALVE	GATE VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03048-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	VALVE	METER VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03050-001	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 110	03050A-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER ON TT 622 110	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03052-003	D LVL PLTFRM NW OF #1 BENZENE STRIPPER ON DECK ABOVE TT 622	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03052-004	D LVL PLTFRM NW OF #1 BENZENE STRIPPER ON DECK ABOVE TT 622	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03052-005	D LVL PLTFRM NW OF #1 BENZENE STRIPPER ON DECK ABOVE TT 622	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03057-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03057-001	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 622 104	03060-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	VALVE	SIGHT GLASS VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 622 106	03065-000	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 622 106	03065-001	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 622 106	03066-000	D LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106 UNDER GR	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 622 106	03071-001	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MS 622 106	03071-005	2ND LVL PLTFRM NW OF #1 BENZENE STRIPPER @ MS 622 106	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 250	03073-002	TOP OF T250	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03073-003	TOP OF T250	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03073-004	TOP OF T250	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03074-000	TOP OF T250	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03074-003	TOP OF T250	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03075-000	TOP OF T250	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03075-002	TOP OF T250	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03075-008	TOP OF T250	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03075-009	TOP OF T250	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03075-015	TOP OF T250	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03076-002	TOP OF T250	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 250	03079-008	TOP OF T250	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03080-005	TOP OF T251	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03080-008	TOP OF T251	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03080-009	TOP OF T251	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03080-011	TOP OF T251	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03081-001	TOP OF T251	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03081-006	TOP OF T251	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03081-017	TOP OF T251	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03084-002	TOP OF T251	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03085-002	TOP OF T251	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 251	03085-004	TOP OF T251	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 251	03085-012	TOP OF T251	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	3,100
MT 252	03086-002	TOP OF T252	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03086-003	TOP OF T252	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03086-007	TOP OF T252	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03086-009	TOP OF T252	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03086-010	TOP OF T252	CONNECTOR	COUPLING	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03087-001	TOP OF T252	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	8,800
MT 252	03088-001	TOP OF T252	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03089-000	TOP OF T252	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03090-002	TOP OF T252	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03092-000	TOP OF T252	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03092-001	TOP OF T252	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03093-000	TOP OF T252	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03093-009	TOP OF T252	CONNECTOR	ELBOW	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03094-002	TOP OF T252	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03094-005	TOP OF T252	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 252	03095-008	TOP OF T252	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03099-001	TOP OF T253	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03099-002	TOP OF T253	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03100-001	TOP OF T253	POEL	CAP	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 253	03100-002	TOP OF T253	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03100-003	TOP OF T253	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03101-002	TOP OF T253	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 253	03103-002	TOP OF T253	CONNECTOR	UNION	ACETANITRILE TOLUENE BENZ	BACKGROUND
MT 254	03105-003	TOP OF T254	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 254	03105-005	TOP OF T254	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 254	03106-005	TOP OF T254	CONNECTOR	FLANGE	BENZENE	BACKGROUND
AS 621 041A	03149-000	TOP AS621 041A COL OH LNE	VALVE	METER VALVE	BENZENE	BACKGROUND
MS 621 045	03152-000	S BX PLT PLTFRM 2ND LVL AT MS 621 045	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MS 621 045	03152-005	S BX PLT PLTFRM 2ND LVL AT MS 621 045 TOP	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MS 621 045	03153-000	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	VALVE	BALL	UNKNOWN	BACKGROUND
MS 621 045	03154-001	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MS 621 045	03155-001	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MS 621 045	03155-005	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MS 621 045	03155-007	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MS 621 045	03157-003	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MS 621 045	03157-006	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MS 621 045	03158-003	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MS 621 045	03159-003	S BX PLT PLTFRM 2ND LVL AT MS 621 045 BTM	POEL	PLUG	UNKNOWN	BACKGROUND
MS 621 045	03161-000	S BX PLT PLTFRM 2ND LVL AT MS 621 045	VALVE	BALL	UNKNOWN	BACKGROUND
MS 621 045	03161-003	S BX PLT PLTFRM 2ND LVL AT MS 621 045	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MS 621 045	03161-005	S BX PLT PLTFRM 2ND LVL AT MS 621 045 on NW side tK	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MS 621 045	03161-008	S BX PLT PLTFRM 2ND LVL AT MS 621 045 on NW side tK	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MS 621 045	03162-009	S BX PLT PLTFRM 2ND LVL AT SE SDE OF MS 621 045 UNDER GRATE	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03166-003	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	UNION	UNKNOWN	BACKGROUND
TT 621 008A	03167-000	S BX PLT PLTFRM 2ND LVL AT TT 621 008	VALVE	BALL	UNKNOWN	BACKGROUND
TT 621 008A	03167-003	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
TT 621 008A	03168-000	S BX PLT PLTFRM 2ND LVL AT TT 621 008	VALVE	BALL	UNKNOWN	BACKGROUND
TT 621 008A	03169-003	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03170-001	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03171-001	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03173-004	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
TT 621 008A	03173-006	S BX PLT PLTFRM 2ND LVL AT TT 621 008	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MT 621 004	03174-001	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03174-002	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03174-004	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	POEL	CAP	UNKNOWN	BACKGROUND
MT 621 004	03175-001	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03176-004	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03176-006	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03176-008	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03177-008	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03177-010	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 621 004	03181-000	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	VALVE	BALL	UNKNOWN	BACKGROUND
MT 621 004	03184-001	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	RUPTURE DISK	UNKNOWN	BACKGROUND
MT 621 004	03184-004	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	CROSS	UNKNOWN	BACKGROUND
MT 621 004	03184-006	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	POEL	PLUG	UNKNOWN	BACKGROUND
MT 621 004	03184-007	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	GAUGE	UNKNOWN	BACKGROUND
MT 621 004	03185-002	S BX PLT PLTFRM 2ND LVL OFF TOP OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03187-000	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03187-003	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03187-005	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03187-006	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03190-002	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03191-001	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03191-005	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03193-000	S BX PLT PLTFRM 2ND LVL ON MT 621 004 BTM	VALVE	BALL	UNKNOWN	BACKGROUND
MT 621 004	03199-000	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	VALVE	BALL	UNKNOWN	BACKGROUND
MT 621 004	03199-002	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03200-007	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03200-010	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03200-012	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03201-005	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03201-006	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	TEE	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 621 004	03201-014	S BX PLT PLTFRM 2ND LVL S OF MT 621 004 OFF TOP	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03213-003	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
MT 621 004	03215-001	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03215-008	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MT 621 004	03215-010	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MT 621 004	03216-005	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	COUPLING	UNKNOWN	BACKGROUND
MT 621 004	03217-009	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03218-000	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	VALVE	BALL	UNKNOWN	BACKGROUND
MT 621 004	03219-001	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MT 621 004	03221-001	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03221-005	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03221-009	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	ELBOW	UNKNOWN	BACKGROUND
MT 621 004	03221-011	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	COUPLING	UNKNOWN	BACKGROUND
MT 621 004	03221-012	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	COUPLING	UNKNOWN	BACKGROUND
MT 621 004	03222-004	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03222-006	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	COUPLING	UNKNOWN	BACKGROUND
MT 621 004	03223-009	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	ELBOW	UNKNOWN	BACKGROUND
MT 621 004	03223-010	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MT 621 004	03226-000	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	VALVE	BALL	UNKNOWN	BACKGROUND
MT 621 004	03226-002	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03226-003	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	POEL	BLIND FLANGE	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 621 004	03227-001	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MT 621 004	03229-007	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
MT 621 004	03229-008	S BX PLT PLTFRM 2ND LVL 15FT S OF MT 621 004	CONNECTOR	TEE	UNKNOWN	BACKGROUND
AS 621 027	03231-004	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03235-001	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03236-013	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	POEL	PLUG	UNKNOWN	BACKGROUND
AS 621 027	03237-000	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	VALVE	BALL	UNKNOWN	BACKGROUND
AS 621 027	03237-001	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	POEL	PLUG	UNKNOWN	BACKGROUND
AS 621 027	03237-002	S BX PLT PLTFRM 2ND LVL SW SDE OF AS621 027 @ POT	CONNECTOR	UNION	UNKNOWN	BACKGROUND
MR 621 012	03257-002	S BX PLT PLTFRM 3RD LVL AT MR621 012	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
MR 621 012	03260-000	S BX PLT PLTFRM 3RD LVL AT MR621 012	VALVE	WELDED PROCESS VALVE	UNKNOWN	BACKGROUND
MR 621 012	03261-001	S BX PLT PLTFRM 3RD LVL AT MR621 012	CONNECTOR	UNION	UNKNOWN	BACKGROUND
TT 621 008A	03265-000	S BX PLT PLTFRM 3RD LVL AT TT621 008A	VALVE	BALL	UNKNOWN	BACKGROUND
TT 621 008A	03265-003	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	TEE	UNKNOWN	BACKGROUND
TT 621 008A	03265-005	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	TEE	UNKNOWN	BACKGROUND
TT 621 008A	03265-006	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	TEE	UNKNOWN	BACKGROUND
TT 621 008A	03266-000	S BX PLT PLTFRM 3RD LVL AT TT621 008A	VALVE	BALL	UNKNOWN	BACKGROUND
TT 621 008A	03266-006	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	TEE	UNKNOWN	BACKGROUND
TT 621 008A	03267-002	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	ELBOW	UNKNOWN	BACKGROUND
TT 621 008A	03268-000	S BX PLT PLTFRM 3RD LVL AT TT621 008A	VALVE	BALL	UNKNOWN	BACKGROUND
TT 621 008A	03269-003	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 621 008A	03269-009	S BX PLT PLTFRM 3RD LVL AT TT621 008A	CONNECTOR	UNION	UNKNOWN	BACKGROUND
TT 610 007G	03270-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	VALVE	GATE VALVE	UNKNOWN	BACKGROUND
TT 610 007G	03270-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03271-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007G	03271-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03273-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007G	03274-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03275-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03276-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007G	03276-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03276-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03277-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03277-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007G	03277B-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007G	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03280-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007F	03281-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007F	03281-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03282-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03283-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03283-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03284-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 610 007F	03285-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007F	03286-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007F	03287-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007F	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007E	03288-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007E	03293-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007E	03294-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007E	03294-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007E	03296-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007E	03297-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007E	03297-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007E	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03298-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03303-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03304-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03304-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03305-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007D	03307-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007D	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03308-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	VALVE	GATE VALVE	UNKNOWN	BACKGROUND
TT 610 007C	03308-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03310-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007C	03311-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03312-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND

	Agitator Connector POEL		TYPE CODES			PUMP RVLV VALVE
TT 610 007C	03313-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007C	03315-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03315-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03315-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03316-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007C	03316-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007C	03316-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007C	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03320-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03321-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03322-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007B	03322-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03323-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007B	03324-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03325-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007B	03326-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007B	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007A	03328-001	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03329-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03330-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03331-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03331-004	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03332-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 610 007A	03333-000	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	VALVE	BALL	UNKNOWN	BACKGROUND
TT 610 007A	03335-003	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 610 007A	03337-002	S BX PLT PLTFRM 3RD LVL E SDE AT TT610 007A	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03339-002	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
TT 621 008A	03339-003	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	POEL	PLUG	UNKNOWN	BACKGROUND
TT 621 008A	03340-001	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03341-006	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
TT 621 008A	03342-001	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
TT 621 008A	03345-002	4TH LVL OF S PLTFRM IN BX PLT AT CNTRL LP	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 008A	03348-004	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03350-002	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03350-004	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	UNION	UNKNOWN	BACKGROUND
AS 621 027	03351-001	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03351-002	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03352-004	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	TEE	UNKNOWN	BACKGROUND
AS 621 027	03352-005	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	TEE	UNKNOWN	BACKGROUND
AS 621 027	03353-001	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
AS 621 027	03355-005	4TH LVL OF S PLTFRM IN BX PLT E SDE AT RAIL	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
TT 621 029	03356-003	4TH LVL OF BX PLT S PLTFRM @ TT 621 029AB	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 621 029	03357-001	4TH LVL OF BX PLT S PLTFRM @ TT 621 029AB	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 029	03359-000	4TH LVL OF BX PLT S PLTFRM @ TT 621 029AB	VALVE	BALL	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 621 029	03361-005	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 621 029	03362-000	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	VALVE	BALL	BENZENE	BACKGROUND
TT 621 029	03363-001	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 029	03363-005	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	POEL	PLUG	BENZENE	BACKGROUND
TT 621 029	03364-000	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	VALVE	BALL	BENZENE	BACKGROUND
TT 621 029	03364-001	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 029	03364-002	4TH LVL OF BX PLT S PLTFRM @ TT 621 029CD	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 029	03365-004	4TH LVL OF BX PLT S PLTFRM @ TT 621 029EF	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 621 029	03367-003	4TH LVL OF BX PLT S PLTFRM @ TT 621 029EF	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 029	03367-004	4TH LVL OF BX PLT S PLTFRM @ TT 621 029EF	POEL	PLUG	BENZENE	BACKGROUND
TT 621 029	03368-001	4TH LVL OF BX PLT S PLTFRM @ TT 621 029EF	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 041B	03369-000	4TH LVL OF BX PLT S PLTFRM N OF TT 621 029EF	RVLV	PRESSURE RELIEF VALVE	BENZENE	BACKGROUND
TT 621 041B	03371-003	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 621 041B	03371-006	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 041B	03371-007	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 041B	03371-008	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 621 041B	03372-002	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 041B	03372-003	4TH LVL OF BX PLT S PLTFRM @ TT 621 041B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 041A	03373-000	4TH LVL OF BX PLT S PLTFRM @ TT 621 041A	VALVE	BALL	BENZENE	BACKGROUND
TT 621 041A	03373-004	4TH LVL OF BX PLT S PLTFRM @ TT 621 041A	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 621 041A	03373-005	4TH LVL OF BX PLT S PLTFRM @ TT 621 041A	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 621 041A	03373-009	4TH LVL OF BX PLT S PLTFRM @ TT 621 041A	POEL	PLUG	BENZENE	BACKGROUND
TT 621 041A	03374-000	4TH LVL OF BX PLT S PLTFRM @ TT 621 041A	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03378-002	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03379-001	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03381-001	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	POEL	BLIND FLANGE	BENZENE	BACKGROUND
TA 621 029	03383-001	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03385-005	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03385-007	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03385-010	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03386-004	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03386-006	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03386-007	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	POEL	PLUG	BENZENE	BACKGROUND
TA 621 029	03387-000	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	VALVE	BALL	BENZENE	BACKGROUND
TA 621 029	03391-003	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03392-000	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	VALVE	GATE VALVE	BENZENE	BACKGROUND
TA 621 029	03392-001	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03392-002	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03395-003	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03397-000	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	VALVE	BALL	BENZENE	BACKGROUND
TA 621 029	03398-004	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03399-001	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TA 621 029	03399-004	4TH LVL OF BX PLT S PLTFRM @ PLTFRM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03400-000	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	VALVE	BALL	BENZENE	BACKGROUND
TA 621 029	03400-001	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	POEL	BLIND FLANGE	BENZENE	BACKGROUND
TA 621 029	03400-002	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03401-000	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03401-002	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA 621 029	03402-002	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03402-004	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03402A-003	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
TA 621 029	03402B-001	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	POEL	PLUG	BENZENE	BACKGROUND
TA 621 029	03402B-004	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	TEE	BENZENE	BACKGROUND
TA 621 029	03402B-005	4TH LVL OF BX PLT S PLTFRM @ BTM E SDE OF F FAN	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03404-000	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	WELDED PROCESS VALVE	BENZENE	BACKGROUND
MR 621 012	03405-004	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03405-005	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03407-001	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	POEL	CAP	BENZENE	BACKGROUND
MR 621 012	03407-003	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03410-001	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	POEL	CAP	BENZENE	BACKGROUND
MR 621 012	03411-000	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	WELDED PROCESS VALVE	BENZENE	BACKGROUND
MR 621 012	03412-002	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03413-001	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	POEL	CAP	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03413-003	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03414-002	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03414-003	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03416-001	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03416-002	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03418-001	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03419-000	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03419-005	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03420-002	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	POEL	CAP	BENZENE	BACKGROUND
MR 621 012	03421-002	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03421-005	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03423-003	5TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03425-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	GATE VALVE	BENZENE	BACKGROUND
MR 621 012	03427-003	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03428-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03429-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03438-002	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03441-002	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03442-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03444-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03444-003	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03447-001	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03451-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03452-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	GATE VALVE	BENZENE	BACKGROUND
MR 621 012	03453-003	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03460-003	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03460-004	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03466-002	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03467-000	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03467-002	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03469-002	6TH LVL OF BX PLT S PLTFRM AT BX PLT REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03471-000	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03471-001	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03471-002	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03471-007	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03473-001	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03473-004	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03474-001	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03474-003	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03474-004	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03476-007	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATERS	POEL	PLUG	BENZENE	BACKGROUND
MR 621 012	03478-002	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR OVR HD HEATERS	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03478-003	2ND LVL OF BX PLT S PLTFRM @ VAPORIZOR OVR HD HEATERS	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03484-004	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03484-005	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03484-007	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03485-000	1ST LVL OF BX PLT S PLTFRM @ REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03485-001	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03485-002	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MR 621 012	03485-003	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03486-000	1ST LVL OF BX PLT S PLTFRM @ REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03487-002	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03487-003	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03489-000	1ST LVL OF BX PLT S PLTFRM @ REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03489-006	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	TEE	BENZENE	BACKGROUND
MR 621 012	03490-002	1ST LVL OF BX PLT S PLTFRM @ REACTOR	POEL	CAP	BENZENE	BACKGROUND
MR 621 012	03491-003	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03492-000	1ST LVL OF BX PLT S PLTFRM @ REACTOR	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03492-003	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03492-005	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03493-002	1ST LVL OF BX PLT S PLTFRM @ REACTOR	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03494-003	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03496-000	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	VALVE	BALL	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03497A-001	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03498-000	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03501-001	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	POEL	PLUG	BENZENE	BACKGROUND
MR 621 012	03502-003	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03504-005	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03505-000	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03505-001	1ST LVL OF BX PLT S PLTFRM @ VAPORIZOR HEATER	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 610 007G	03507-000	1ST LVL OF BX PLT S PLTFRM @ TT 610 007G	RVLV	PRESSURE RELIEF VALVE	BENZENE	BACKGROUND
TT 610 007G	03507-007	1ST LVL OF BX PLT S PLTFRM @ TT 610 007G	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007F	03508-002	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007F	03508-005	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007F	03509-000	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007F	03509-001	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007F	03509-003	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007E	03510-003	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007E	03511-004	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007E	03511-008	1ST LVL OF BX PLT S PLTFRM @ TT 610 007F	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007D	03512-000	1ST LVL OF BX PLT S PLTFRM @ TT 610 007D	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007D	03513-007	1ST LVL OF BX PLT S PLTFRM @ TT 610 007D	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007D	03513-009	1ST LVL OF BX PLT S PLTFRM @ TT 610 007D	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007D	03513-013	1ST LVL OF BX PLT S PLTFRM @ TT 610 007D	CONNECTOR	ELBOW	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 610 007D	03513-014	1ST LVL OF BX PLT S PLTFRM @ TT 610 007D	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007B	03516-002	1ST LVL OF BX PLT S PLTFRM @ TT 610 007B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007B	03517-001	1ST LVL OF BX PLT S PLTFRM @ TT 610 007B	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007B	03517-007	1ST LVL OF BX PLT S PLTFRM @ TT 610 007B	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007B	03517-012	1ST LVL OF BX PLT S PLTFRM @ TT 610 007B	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007A	03518-002	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007A	03519-006	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007A	03519-008	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007A	03519-010	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007	03521-001	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A-G HEADER	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 610 007	03524-000	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A-G HEADER	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007	03526-001	1ST LVL OF BX PLT S PLTFRM @ TT 610 007A-G HEADER	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03529-003	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03530-003	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03530-004	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03530A-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03530A-004	UNDER BX PLT REACTOR AT BTM	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03530A-005	UNDER BX PLT REACTOR AT BTM	CONNECTOR	COUPLING	BENZENE	BACKGROUND
MR 621 012	03530A-006	UNDER BX PLT REACTOR AT BTM	POEL	PLUG	BENZENE	BACKGROUND
MR 621 012	03531A-000	UNDER BX PLT REACTOR AT BTM	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03531A-004	UNDER BX PLT REACTOR AT BTM	CONNECTOR	TEE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03531A-008	UNDER BX PLT REACTOR AT BTM	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03533-000	UNDER BX PLT REACTOR AT BTM	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03533-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03534-000	UNDER BX PLT REACTOR AT BTM	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03534-001	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03534A-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03534B-001	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03535-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03537-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03538-000	UNDER BX PLT REACTOR AT BTM	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03538-001	UNDER BX PLT REACTOR AT BTM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03539-002	UNDER BX PLT REACTOR AT BTM	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03542-003	UNDER BX PLT REACTOR AT BTM	POEL	PLUG	BENZENE	BACKGROUND
MR 621 012	03543-001	UNDER BX PLT REACTOR AT BTM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03544-000	UNDER BX PLT REACTOR AT BTM	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03545-000	UNDER BX PLT REACTOR AT BTM	VALVE	GATE VALVE	BENZENE	BACKGROUND
MR 621 012	03546-000	UNDER BX PLT REACTOR 10FT NE	VALVE	BALL	BENZENE	BACKGROUND
MR 621 012	03546-004	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MR 621 012	03547-002	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03548-002	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03548-005	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TEE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MR 621 012	03549-001	UNDER BX PLT REACTOR 10FT NE	POEL	CAP	BENZENE	BACKGROUND
MR 621 012	03553-000	UNDER BX PLT REACTOR 10FT NE	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MR 621 012	03553-002	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03553-007	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03553-011	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03553-012	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03553-013	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	UNION	BENZENE	BACKGROUND
MR 621 012	03553-016	UNDER BX PLT REACTOR 10FT NE	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MR 621 012	03554-001	UNDER BX PLT REACTOR 10FT N ON PLTFRM	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007A	03556B-000	ON PLTFRM UNDER TT 610 007A-G	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007A	03556B-002	ON PLTFRM UNDER TT 610 007A-G	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 610 007A	03556B-005	ON PLTFRM UNDER TT 610 007A-G	CONNECTOR	UNION	BENZENE	BACKGROUND
TT 610 007B	03559-001	ON PLTFRM UNDER TT 610 007B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007C	03560-003	ON PLTFRM UNDER TT 610 007C	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007D	03562-002	ON PLTFRM UNDER TT 610 007D	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007D	03562-003	ON PLTFRM UNDER TT 610 007D	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007F	03567-000	ON PLTFRM UNDER TT 610 007F	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007G	03569-001	ON PLTFRM UNDER TT 610 007G	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007G	03570-000	ON PLTFRM UNDER TT 610 007G	VALVE	BALL	BENZENE	BACKGROUND
TT 610 007G	03570-001	ON PLTFRM UNDER TT 610 007G	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TT 610 007G	03570-002	ON PLTFRM UNDER TT 610 007G	POEL	BLIND FLANGE	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 610 007G	03572-004	10FT N OF PLTFRM UNDER TT 610 007G	CONNECTOR	TEE	BENZENE	BACKGROUND
TT 610 007G	03572-006	10FT N OF PLTFRM UNDER TT 610 007G	CONNECTOR	GAUGE	BENZENE	BACKGROUND
TT 610 007G	03572A-003	10FT N OF PLTFRM UNDER TT 610 007G	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 610 007G	03572B-002	10FT N OF PLTFRM UNDER TT 610 007G	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TT 610 007G	03572C-003	10FT N OF PLTFRM UNDER TT 610 007G	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 308A	03576-000	NE SDE OF UNIT27 AT P308A&B	VALVE	BALL	UNKNOWN	BACKGROUND
PP 308A	03577-000	NE SDE OF UNIT27 AT P308A&B	VALVE	BALL	UNKNOWN	BACKGROUND
PP 308A	03578-002	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308A	03578-004	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	UNION	UNKNOWN	BACKGROUND
PP 308A	03579-000	NE SDE OF UNIT27 AT P308A&B	VALVE	BALL	UNKNOWN	BACKGROUND
PP 308B	03580-000	NE SDE OF UNIT27 AT P308A&B D1 REFLUX WEST	PUMP	PUMP SEAL	UNKNOWN	BACKGROUND
PP 308B	03582-002	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
PP 308B	03586-003	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308B	03586-006	NE SDE OF UNIT27 AT P308A&B	POEL	PLUG	UNKNOWN	BACKGROUND
PP 308B	03587-000	NE SDE OF UNIT27 AT P308A&B	VALVE	BALL	UNKNOWN	BACKGROUND
PP 308B	03587-001	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
PP 308A	03591-002	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308A	03593-005	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308A	03593-006	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	TUBING CONNECTOR	UNKNOWN	BACKGROUND
PP 308B	03594-000	NE SDE OF UNIT27 AT P308A&B	VALVE	METER VALVE	UNKNOWN	BACKGROUND
PP 308B	03597-000	NE SDE OF UNIT27 AT P308A&B	VALVE	BALL	UNKNOWN	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP 308B	03597-007	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308B	03597-011	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	TEE	UNKNOWN	BACKGROUND
PP 308B	03597-012	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	TEE	UNKNOWN	BACKGROUND
PP 308B	03598-005	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	TEE	UNKNOWN	BACKGROUND
PP 308B	03598-007	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308B	03598-008	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	SCREWED CONNECTOR	UNKNOWN	BACKGROUND
PP 308B	03599-001	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	FLANGE	UNKNOWN	BACKGROUND
PP 308B	03600-005	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	TUBING CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP 308B	03604-000	NE SDE OF UNIT27 AT P308A&B	VALVE	CONTROL VALVE	ACETANITRILE TOLUENE BENZ	BACKGROUND
PP 308B	03605-003	NE SDE OF UNIT27 AT P308A&B	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03715-003	NE SDE OF UNIT27 AT TT303	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03715-004	NE SDE OF UNIT27 AT TT303	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03716-000	NE SDE OF UNIT27 AT TT303	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03717-004	NE SDE OF UNIT27 AT TT303	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03719-000	NE SDE OF UNIT27 AT TT303	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03721-002	NE SDE OF UNIT27 AT TT303	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03722-000	NE SDE OF UNIT27 AT TT303	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03722-001	NE SDE OF UNIT27 AT TT303	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 303	03722-005	NE SDE OF UNIT27 AT TT303	POEL	PLUG	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03724-000	NE SDE OF UNIT27 AT TT303	VALVE	BALL	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03724-002	NE SDE OF UNIT27 AT TT303	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
TT 302	03724-004	NE SDE OF UNIT27 AT TT303	CONNECTOR	SCREWED CONNECTOR	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03724-007	NE SDE OF UNIT27 AT TT303	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03725-001	NE SDE OF UNIT27 AT TT303	CONNECTOR	FLANGE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03725-006	NE SDE OF UNIT27 AT TT303	CONNECTOR	TEE	ACETANITRILE TOLUENE BENZ	BACKGROUND
TT 302	03728-012	NE SDE UNIT27 AT TT302	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 302	03732-000	NE SDE UNIT27 AT TT302	VALVE	BALL	BENZENE	BACKGROUND
TT 302	03732-001	NE SDE UNIT27 AT TT302	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
TT 302	03733-002	NE SDE UNIT27 AT TT302	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 307	03735-000	NE SDE UNIT27 UNDER MT307 15FT OVR HD	VALVE	BALL	BENZENE	BACKGROUND
MT 307	03735-001	NE SDE UNIT27 UNDER MT307 15FT OVR HD	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 307	03740-006	NE SDE UNIT27 AT STAIRS TO 1ST LVL OF F FAN PLTFRM	CONNECTOR	ELBOW	BENZENE	BACKGROUND
TA-305	03744-000	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ TT305	CONNECTOR	FLANGE	BENZENE	BACKGROUND
TA-305	03744-001	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ TT305	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MS 305A	03745-001	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ MS305A	POEL	PLUG	BENZENE	BACKGROUND
MS 305A	03745-005	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ MS305A	CONNECTOR	COUPLING	BENZENE	BACKGROUND
MS 305A	03745-008	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ MS305A	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MS 305A	03745-010	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ MS305A	CONNECTOR	TEE	BENZENE	BACKGROUND
TT 306	03748-000	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ TT306	VALVE	BALL	BENZENE	BACKGROUND
TT 306	03748-004	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ TT306	CONNECTOR	TEE	BENZENE	BACKGROUND
TT 306	03748-006	NE SDE UNIT27 2ND LVL PLTFRM S SDE F FANS @ TT306	CONNECTOR	TEE	BENZENE	BACKGROUND
AS-304	03749-001	NE SDE UNIT27 2ND LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
AS-304	03749-004	NE SDE UNIT27 2ND LVL PLTFRM N SDE F FANS @ AS305	POEL	PLUG	BENZENE	BACKGROUND
AS-304	03754-002	NE SDE UNIT27 3RD LVL PLTFRM N SDE F FANS @ AS305 OVR HD	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
AS-304	03754-005	NE SDE UNIT27 3RD LVL PLTFRM N SDE F FANS @ AS305 OVR HD	POEL	PLUG	BENZENE	BACKGROUND
AS-304	03756-000	NE SDE UNIT27 3RD LVL PLTFRM N SDE F FANS @ AS305 OVR HD	VALVE	BALL	BENZENE	BACKGROUND
AS-304	03756-001	NE SDE UNIT27 3RD LVL PLTFRM N SDE F FANS @ AS305 OVR HD	POEL	CAP	BENZENE	BACKGROUND
AS-304	03756-003	NE SDE UNIT27 3RD LVL PLTFRM N SDE F FANS @ AS305 OVR HD	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
AS-304	03759-000	NE SDE UNIT27 4TH LVL PLTFRM N SDE F FANS @ AS305 OVR HD	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
AS-304	03762-003	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
AS-304	03763-000	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	VALVE	BALL	BENZENE	BACKGROUND
AS-304	03763-005	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	UNION	BENZENE	BACKGROUND
AS-304	03763-009	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	TEE	BENZENE	BACKGROUND
AS-304	03763-010	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	UNION	BENZENE	BACKGROUND
AS-304	03763-014	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	TEE	BENZENE	BACKGROUND
AS-304	03763-022	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	TEE	BENZENE	BACKGROUND
AS-304	03763-023	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	TEE	BENZENE	BACKGROUND
AS-304	03763-032	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	UNION	BENZENE	BACKGROUND
AS-304	03763-034	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	ELBOW	BENZENE	BACKGROUND
AS-304	03766-000	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	VALVE	METER VALVE	BENZENE	BACKGROUND
AS-304	03768-000	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
AS-304	03768-001	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	ELBOW	BENZENE	BACKGROUND
AS-304	03768-004	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305 45	CONNECTOR	ELBOW	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
AS-304	03768-007	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	ELBOW	BENZENE	BACKGROUND
AS-304	03768-010	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	UNION	BENZENE	BACKGROUND
AS-304	03768-013	NE SDE UNIT27 TOP LVL PLTFRM N SDE F FANS @ AS305	CONNECTOR	ELBOW	BENZENE	BACKGROUND
PP 692 751	03771-000	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	PUMP	PUMP SEAL		BACKGROUND
PP 692 751	03774-006	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
PP 692 751	03775-000	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	VALVE	CHECK VALVE	BENZENE	BACKGROUND
PP 692 751	03777-004	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	UNION	BENZENE	BACKGROUND
PP 692 751	03777-005	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	UNION	BENZENE	BACKGROUND
PP 692 751	03777-006	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	POEL	PLUG	BENZENE	BACKGROUND
PP 692 751	03777-013	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	TEE	BENZENE	BACKGROUND
PP 692 751	03778-001	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 692 751	03778-005	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT P692 751	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 692 750	03780-002	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 692 750	03782-001	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 692 750	03782-005	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 692 750	03783-002	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	TUBING CONNECTOR	BENZENE	BACKGROUND
MT 692 750	03784-002	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 692 750	03784-003	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	POEL	PLUG	BENZENE	BACKGROUND
MT 692 750	03785-001	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 692 750	03785-005	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 692 750	03785-006	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 692 750	03786-003	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 692 750	03786-004	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 692 750	03787-000	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750	VALVE	METER VALVE	BENZENE	BACKGROUND
MT 692 750	03790-008	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750 ON TOP	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 692 750	03792-005	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750 ON TOP	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 692 750	03792-009	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750 ON TOP	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 692 750	03792-012	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750 ON TOP	POEL	PLUG	BENZENE	BACKGROUND
MT 692 750	03793-001	NE SDE UNIT27 GRND LVL E SDE OF F FANS AT MT692 750 ON TOP	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604A	03796-002	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 604A	03796-005	DAB TNK FRM N SDE OFTANKS @ P604A&B	POEL	PLUG	BENZENE	BACKGROUND
PP 604A	03799-002	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604A	03800-001	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604A	03800-002	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604A	03802-001	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 604A	03803-000	DAB TNK FRM N SDE OFTANKS @ P604A&B	VALVE	BALL	BENZENE	BACKGROUND
PP 604A	03803-003	DAB TNK FRM N SDE OFTANKS @ P604A&B	POEL	PLUG	BENZENE	BACKGROUND
PP 604A	03803-003	DAB TNK FRM N SDE OFTANKS @ P604A&B	POEL	PLUG	BENZENE	BACKGROUND
PP 604B	03807-001	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604B	03808-002	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP 604B	03809-001	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP 604B	03809-002	DAB TNK FRM N SDE OFTANKS @ P604A&B	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 604	03811-000	DAB TNK FRM N SDE OFTANKS @ MT604	VALVE	BALL	BENZENE	BACKGROUND
MT 604	03812-003	DAB TNK FRM N SDE OFTANKS @ MT604	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03813-003	DAB TNK FRM N SDE OFTANKS @ MT604	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03815-002	DAB TNK FRM N SDE OFTANKS @ MT604	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 602	03816A-000	DAB TNK FRM N SDE OFTANKS @ MT604	VALVE	SAMPLING VALVE	BENZENE	BACKGROUND
MT 604	03816A-003	DAB TNK FRM N SDE OFTANKS @ MT604	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 602	03821-001	DAB TNK FRM @ MT602	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 602	03822-000	DAB TNK FRM @ MT602	VALVE	GATE VALVE	BENZENE	BACKGROUND
MT 602	03822-001	DAB TNK FRM @ MT602	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 602	03823-003	DAB TNK FRM @ MT602 45	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 602	03823-004	DAB TNK FRM @ MT602	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03829-001	DAB TNK FRM @ MT603	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03829-004	DAB TNK FRM @ MT603	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03830-001	DAB TNK FRM @ MT603	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03831-001	DAB TNK FRM @ MT603	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03832-001	DAB TNK FRM @ MT603	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03832-003	DAB TNK FRM @ MT603	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 603	03832-005	DAB TNK FRM @ MT603	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03834-001	DAB TNK FRM @ MT603	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03834-002	DAB TNK FRM @ MT603 45	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 603	03834-003	DAB TNK FRM @ MT603 45	CONNECTOR	ELBOW	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 603	03834-007	DAB TNK FRM @ MT603	CONNECTOR	COUPLING	BENZENE	BACKGROUND
MT 603	03838-002	DAB TNK FRM @ MANIFOLD N OF T604	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03840-001	DAB TNK FRM @ MANIFOLD N OF T604	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03841-002	DAB TNK FRM @ MANIFOLD N OF T604	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03842-002	DAB TNK FRM @ MANIFOLD N OF T604	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03846-000	DAB TNK FRM @ T607	VALVE	CHECK VALVE	BENZENE	BACKGROUND
MT 604	03846-002	DAB TNK FRM @ T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03846-004	DAB TNK FRM @ T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03847-001	DAB TNK FRM @ T607	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03848-002	DAB TNK FRM @ T607	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 604	03848-003	DAB TNK FRM @ T607 45	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 604	03848-007	DAB TNK FRM @ T607	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 604	03849-000	DAB TNK FRM @ T607	VALVE	BALL	BENZENE	BACKGROUND
MT 604	03849-003	DAB TNK FRM @ T607	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 604	03849-004	DAB TNK FRM @ T607	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 604	03849-006	DAB TNK FRM @ T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 607	03850-001	DAB TNK FRM @ T607	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 607	03850-003	DAB TNK FRM @ T607	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 622	03855-000	DAB TNK FRM @ T622	VALVE	BALL	BENZENE	BACKGROUND
MT 607	03874-000	DAB TNK FRM ON TOP OF T607	VALVE	BALL	BENZENE	BACKGROUND
MT 607	03874-010	DAB TNK FRM ON TOP OF T607	CONNECTOR	ELBOW	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 607	03877-003	DAB TNK FRM ON TOP OF T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 607	03878-001	DAB TNK FRM ON TOP OF T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 607	03879-001	DAB TNK FRM ON TOP OF T607	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 607	03880-002	DAB TNK FRM ON TOP OF T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 607	03880-003	DAB TNK FRM ON TOP OF T607	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 607	03881-000	DAB TNK FRM ON TOP OF T607	VALVE	BALL	BENZENE	BACKGROUND
MT 607	03883-002	DAB TNK FRM ON TOP OF T607	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 607	03883-003	DAB TNK FRM ON TOP OF T607	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 607	03883-004	DAB TNK FRM ON TOP OF T607	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03885-001	DAB TNK FRM ON TOP OF T604	POEL	PLUG	BENZENE	BACKGROUND
MT 604	03886-001	DAB TNK FRM ON TOP OF T604	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03888-003	DAB TNK FRM ON TOP OF T604	POEL	CAP	BENZENE	BACKGROUND
MT 604	03888-005	DAB TNK FRM ON TOP OF T604	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 604	03888-013	DAB TNK FRM ON TOP OF T604	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 604	03890-002	DAB TNK FRM ON TOP OF T604	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 604	03890-010	DAB TNK FRM ON TOP OF T604	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 604	03890-016	DAB TNK FRM ON TOP OF T604	CONNECTOR	TEE	BENZENE	BACKGROUND
MT 602	03893-003	DAB TNK FRM ON TOP OF T602	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 602	03894-003	DAB TNK FRM ON TOP OF T602	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 602	03894-006	DAB TNK FRM ON TOP OF T602	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 602	03894-007	DAB TNK FRM ON TOP OF T602	CONNECTOR	ELBOW	BENZENE	BACKGROUND

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	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT 602	03895-003	DAB TNK FRM ON TOP OF T602	CONNECTOR	COUPLING	BENZENE	BACKGROUND
MT 602	03895-006	DAB TNK FRM ON TOP OF T602	CONNECTOR	COUPLING	BENZENE	BACKGROUND
MT 602	03895-010	DAB TNK FRM ON TOP OF T602	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 602	03895-015	DAB TNK FRM ON TOP OF T602	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 602	03896-002	DAB TNK FRM ON TOP OF T602	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03897-005	DAB TNK FRM ON TOP OF T601	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 603	03897-010	DAB TNK FRM ON TOP OF T601	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT 603	03897-012	DAB TNK FRM ON TOP OF T601	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT 603	03898-000	DAB TNK FRM ON TOP OF T601	VALVE	BALL	BENZENE	BACKGROUND
MT 603	03898-005	DAB TNK FRM ON TOP OF T601	CONNECTOR	UNION	BENZENE	BACKGROUND
MT 603	03899-001	DAB TNK FRM ON TOP OF T601	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03899-003	DAB TNK FRM ON TOP OF T601	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03901-003	DAB TNK FRM ON TOP OF T601	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03902-002	DAB TNK FRM ON TOP OF T601	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT 603	03904-000	DAB TNK FRM ON TOP OF T603	VALVE	BALL	BENZENE	BACKGROUND
MT 603	03904-002	DAB TNK FRM ON TOP OF T603	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-620.163	03906-001	NW 41 BLDG @ VENT TANK BTM. SUCT PP-620.163	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-620.163	03906-002	NW 41 BLDG @ VENT TANK BTM. SUCT PP-620.163	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-620.163	03907A-000	NW 41 BLDG @ VENT TANK BTM. BTM SG	VALVE	BALL	BENZENE	BACKGROUND
PP-620.163	03907C-000	NW 41 BLDG @ VENT TANK BTM. BTM SG	VALVE	SIGHT GLASS VALVE	BENZENE	BACKGROUND
PP-620.163	03907C-001	NW 41 BLDG @ VENT TANK BTM. BTM SG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
PP-620.163	03907C-004	NW 41 BLDG @ VENT TANK BTM. BTM SG	CONNECTOR	UNION	BENZENE	BACKGROUND
PP-620.163	03907D-002	NW 41 BLDG @ VENT TANK BTM. BTM SG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-620.163	03907F-000	NW 41 BLDG @ VENT TANK BTM. TOP SG	VALVE	BALL	BENZENE	BACKGROUND
PP-620.163	03907F-001	NW 41 BLDG @ VENT TANK BTM. TOP SG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-620.163	03907F-002	NW 41 BLDG @ VENT TANK BTM. TOP SG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-620.163	03907G-002	NW 41 BLDG @ VENT TANK BTM. TOP SG	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-620.163	03908-003	NW 41 BLDG @ VENT TANK BTM. SUCT PP-620.163	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-620.163	03910-001	NW 41 BLDG @ VENT TANK BTM. DISC PP-620.163 ON N2 LINE	CONNECTOR	FLANGE	BENZENE	BACKGROUND
PP-620.163	03911-003	NW 41 BLDG @ VENT TANK BTM. DISC PP-620.163 ON N2 LINE	CONNECTOR	TEE	BENZENE	BACKGROUND
PP-620.163	03911-006	NW 41 BLDG @ VENT TANK BTM. DISC PP-620.163 ON N2 LINE	CONNECTOR	UNION	BENZENE	BACKGROUND
PP-265	03989-000	NW OF BOX PLANT. S TK233. ST1 VENT TANK PUMP	PUMP	PUMP SEAL	BENZENE	BACKGROUND
PP-265	03994-000	NW OF BOX PLANT. S TK233. ST1 VENT TANK PUMP DISCH BV	VALVE	BALL	BENZENE	BACKGROUND
PP-265	03994-003	NW OF BOX PLANT. S TK233. ST1 VENT TANK PUMP DISCH BV	CONNECTOR	COUPLING	BENZENE	BACKGROUND
PP-265	03999-002	V OF BOX PLANT. S TK233. ST1 VENT TANK PUMP SUCT BV > DRIP DRI	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-265	03999-003	V OF BOX PLANT. S TK233. ST1 VENT TANK PUMP SUCT BV > DRIP DRI	CONNECTOR	UNION	BENZENE	BACKGROUND
PP-265	03999-005	V OF BOX PLANT. S TK233. ST1 VENT TANK PUMP SUCT BV > DRIP DRI	CONNECTOR	UNION	BENZENE	BACKGROUND
PP-265	03999-006	V OF BOX PLANT. S TK233. ST1 VENT TANK PUMP SUCT BV > DRIP DRI	CONNECTOR	ELBOW	BENZENE	BACKGROUND
PP-265	03999-008	V OF BOX PLANT. S TK233. ST1 VENT TANK PUMP SUCT BV > DRIP DRI	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
PP-265	03999-012	NW OF BOX PLANT. SW TK233. TOP DRIP DRUM	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
MT-620.233	04001-003	NW OF BOX PLANT. BLW TK233. BV FROM PUMP	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04001-004	NW OF BOX PLANT. BLW TK233. BV FROM PUMP	CONNECTOR	UNION	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 71/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT-620.233	04001-008	NW OF BOX PLANT. BLW TK233. BV FROM PUMP	CONNECTOR	TEE	BENZENE	BACKGROUND
MT-620.233	04002-000	NW OF BOX PLANT. BV BLW TK233.	VALVE	BALL	BENZENE	BACKGROUND
MT-620.233	04002-010	NW OF BOX PLANT. BV BLW TK233.	CONNECTOR	TEE	BENZENE	BACKGROUND
MT-620.233	04003-011	NW OF BOX PLANT. BV BLW TK233.	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04003-017	NW OF BOX PLANT. BV BLW TK233. BLW PLTF	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04003-018	NW OF BOX PLANT. BV BLW TK233. BLW PLTF	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04004-001	NW OF BOX PLANT. BV BLW TK233. @ MNFLD	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04004-002	NW OF BOX PLANT. BV BLW TK233. @ MNFLD	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04004-012	NW OF BOX PLANT. BV BLW TK233. @ MNFLD	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04005-000	NW OF BOX PLANT. BV BLW TK233. @ MNFLD OH	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04008-000	NW OF BOX PLANT. BV BLW TK233.	VALVE	BALL	BENZENE	BACKGROUND
MT-620.233	04008-001	NW OF BOX PLANT. BV BLW TK233. TOP	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT-620.233	04009-000	NW OF BOX PLANT. LPB BLW TK233.	VALVE	BALL	BENZENE	BACKGROUND
MT-620.233	04010-002	NW OF BOX PLANT. BV BLW TK233.	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT-620.233	04010-004	NW OF BOX PLANT. BV BLW TK233.	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04010-005	NW OF BOX PLANT. BV BLW TK233.	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04011-000	NW OF BOX PLANT. BLDR BLW TK233. BLW TAG #04000	VALVE	BALL	BENZENE	BACKGROUND
MT-620.233	04011-003	NW OF BOX PLANT. BLDR BLW TK233. BLW TAG #04000	CONNECTOR	CONNECTOR	BENZENE	BACKGROUND
MT-620.233	04027-006	NW OF BOX PLANT. N ON TK233	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.234	04034-007	NW OF BOX PLANT. TOP OF TK234 ABV MW.	CONNECTOR	ELBOW	BENZENE	BACKGROUND
MT-620.233	04038-003	NW OF BOX PLANT. TOP OF TK233 @ MW.	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND

COMPARATIVE MONITORING DATA 72/72

	Agitator Connector POEL	TYPE CODES				PUMP RVLV VALVE
MT-620.233	04039-004	NW OF BOX PLANT. TOP OF TK233 ABV MW.	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04040-001	NW OF BOX PLANT. TOP OF TK233 ABV MW.	CONNECTOR	SCREWED CONNECTOR	BENZENE	BACKGROUND
MT-620.233	04040-003	NW OF BOX PLANT. TOP OF TK233 ABV MW.	CONNECTOR	UNION	BENZENE	BACKGROUND
MT-620.233	04043B-001	NW OF BOX PLANT. TOP OF TK233 MID.	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT-620.233	04044-002	NW OF BOX PLANT. TOP OF TK233 N SIDE.	CONNECTOR	FLANGE	BENZENE	BACKGROUND
MT-620.233	04045-000	NW OF BOX PLANT. TOP OF TK233 N SIDE.	VALVE	BALL	BENZENE	BACKGROUND
MT-620.233	04046-001	' OF BOX PLANT. LINE FROM TOP OF TK233 TO OH NW 234. FOLLOW L	CONNECTOR	ELBOW	BENZENE	BACKGROUND

APPENDIX D

Calibration Gas Certifications

PORTAGAS

ISO 9001:2008 Certified

CERTIFICATE OF ANALYSIS

1202 E Sam Houston Parkway S.
Pasadena, TX 77503
Phone:(800) 548 2268 Fax:(713) 928 9961
Email : Admin@portagas.com

PO Number: UP002143

Date: 9-Jul-2012

Manufactured For:
Ashtead Technology Rentals
10635 Richmond Avene Suite 100
Houston TX 77042
United States Of America

Customer Part No:
Cylinder Size: 17DS
Cylinder Lot No: 948192
Unit Of Measure: Mole
Expiration Date: Aug-2015

Component	Nominal	Uncertainty
METHANE	100 PPM (vol)	+/-2%
AIR	BALANCE	

This mixture was manufactured or transfilled from a standard which has been gravimetrically blended with NIST traceable balance. Balances are calibrated by a certified third party with certified NIST weights and NIST test number.

NIST Number: 64893-1/049-52011

Quality Assurance Manager

1202 E. SAM HOUSTON PKWY S. ▫ PASADENA, TX 77503
1-800-548-2268 ▫ (713) 928-6477 ▫ FAX (713) 928-9961
www.portagas.com

CERTIFICATE OF ANALYSIS

PORTA GAS

ISO9001:2008 Accredited
ISO17025:2005 Accredited

1202 E Sam Houston Parkway S,
Pasadena, TX 77503
Phone:(800) 548 2268 Fax:(713) 928 9961

PO Number: UP010705 **Date:** 26-Nov-2013

Manufactured For:
Pine Environmental Services (Ashtead Technology Rentals)
10635 Richmond Avene Suite 100
Houston TX 77042
United States Of America

Customer Part No:
Cylinder Size: 100GAL
Cylinder Lot No: 964263
Unit Of Measure: Mole
Expiration Date: Dec-2016

Component	Nominal	Uncertainty	
AIR ZERO			

The mixture was manufactured or transfilled from a standard which has been gravimetrically blended with NIST traceable balance. Balances are calibrated by a certified third party with certified NIST weights and NIST test numbers. **NIST Number: 683061A-1/049-52912.** The uncertainty is expressed as an expanded uncertainty *U=kuc* with *uc* determined by experiment and a coverage factor *k*=2. The certified value +-U is presented with a level of confidence of approximately 95%.

Quality Assurance Manager

PJLA Calibration
ILAC-MRA
PJLA Testing

GASCO AFFILIATES, LLC.

320 Scarlet Blvd.
Oldsmar, FL 34677
(800) 910-0051
fax: (866) 755-8920
www.gascogas.com

CERTIFICATE OF ANALYSIS

Date: May 15, 2014
Order Number: UP016165
Lot Number: FAO-150A-10000-3

Customer: Pine Environmental Services

Use Before: 05/15/2018

Component	Specification (+/- 10%)	Analytical Result (+/- 2%)
Methane	10,000 PPM	10,300 PPM
Air	Balance	Balance

Cylinder Size: 1.2 Cu. Ft.
Contents: 34 Liter

Valve: CGA 600
Pressure: 500 psig

The calibration gas prepared by Gasco is considered a certified standard. It is prepared by gravimetric, or partial pressure techniques. The calibration standard provided is certified against Gasco's G.M.I.S. (Gas Manufacturer's Intermediate Standard) which is either prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

Analyst:

Rebecca Ortiz

GASCO AFFILIATES, LLC.

320 Scarlet Blvd.
Oldsmar, FL 34677
(800) 910-0051
fax: (866) 755-8920
www.gascogas.com

CERTIFICATE OF ANALYSIS

Date: May 15, 2014
Order Number: UP016165
Lot Number: FAO-150A-500-3

Customer: Pine Environmental Services

Use Before: 05/15/2018

Component	Specification (+/- 10%)	Analytical Result (+/- 2%)
Methane	500 PPM	514 PPM
Air	Balance	Balance

Cylinder Size: 1.2 Cu. Ft.
Contents: 34 Liter

Valve: CGA 600
Pressure: 500 psig

The calibration gas prepared by Gasco is considered a certified standard. It is prepared by gravimetric, or partial pressure techniques. The calibration standard provided is certified against Gasco's G.M.I.S. (Gas Manufacturer's Intermediate Standard) which is either prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

Analyst:

Rebecca Ortiz

APPENDIX E

TO BYPASS INCIDENT REPORTS

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 11/1/2013 Time: 03:24	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 11/1/2013 Time: 03:25	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

An upset in the boiler feed water system caused the shutdown of the waste-heat boiler on the TO. This in turn caused the TO to shutdown.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The utilities department corrected the problem with the feed water system and returned the boilers to normal operation.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Brian Bera		11/8/2013
Name:	**Signature:**	**Date:**

Revision 0
9/22/08
I/2766513.1

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 11/9/2013 Time: 14:09	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 11/9/2013 Time: 14:10	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

One of the boilers shut down unexpectedly, due to a malfunction of the low water level switch. The resulting upset of the boiler feed water system caused the TO waste heat boiler to go down, shutting down the TO and the cyano plant.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The malfunctioning switch is being replaced.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 11/25/13

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 11/17/2013 Time: 15:56	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 11/17/2013 Time: 15:57	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The site experienced a power outage, which shut down the entire site, including the thermal oxidizer.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

IPL restored power to the site.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 11/25/13

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 11/24/2013 Time: 00:58	**Date:** 11/24/2013 Time: 02:30	**Date:** 11/24/2013 Time: 05:51	**Date:** 11/24/2013 Time: 09:32
Malfunction ended:	**Date:** 11/24/2013 Time: 00:59	**Date:** 11/24/2013 Time: 02:31	**Date:** 11/24/2013 Time: 05:52	**Date:** 11/24/2013 Time: 09:33

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☒ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The high pressure switch on the waste heat boiler froze due to extreme temperatures. The switch failed in the fail-safe position shutting down the boiler, TO, and Cyano Plant.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

A shelter has been put up around the waste heat boiler to prevent freezing issues during cold weather.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bace	**Signature:**		**Date:** 12/13/2013

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 11/29/2013 Time: 12:26	**Date:** Time:	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 11/29/2013 Time: 12:27	**Date:** Time:	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☒ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The thermocouple in the Thermal Oxidizer stack failed and defaulted to the high-high temperature reading, causing the Thermal Oxidizer to shut down.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The failed thermocouple was replaced.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bow	**Signature:**		**Date:** 12/13/2013

ALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 12/10/2013 Time: 04:40	**Date:** Time:	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 12/10/2013 Time: 04:41	**Date:** Time:	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☒ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The low level switch on the waste heat boiler water drum froze shutting down the boiler and the TO.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The Thermal Oxidizer was re-started when the boiler had stabilized. Better protection is being installed around the boiler instrumentation.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bare	**Signature:**		**Date:** 4/3/2013

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 1/4/2014 Time: 22:56	**Date:** 1/5/2014 Time: 00:28	**Date:** 1/5/2014 Time: 01:13
Malfunction ended:	**Date:** 1/4/2014 Time: 22:57	**Date:** 1/5/2014 Time: 00:29	**Date:** 1/5/2014 Time: 01:14

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☒ Process upset
- ☒ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The drum level controller on the waste heat recovery boiler was out of calibration. This and extremely cold weather that had an impact on maintaining normal process operations led to TO shutdown.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The controller was re-calibrated.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 2/17/2014

Revision 0
9/22/08
1/2766513.1

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 1/5/2014 Time: 02:50	**Date:** 1/5/2014 Time: 12:32	**Date:** 1/7/2014 Time: 07:44
Malfunction ended:	**Date:** 1/5/2014 Time: 02:51	**Date:** 1/5/2014 Time: 12:33	**Date:** 1/7/2014 Time: 07:45

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☒ Process upset
- ☒ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The drum level controller on the waste heat recovery boiler was out of calibration. This and extremely cold weather that had an impact on maintaining normal process operations led to TO shutdown.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The controller was re-calibrated.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Berce	**Signature:**	**Date:** 2/17/2014

Revision 0
9/22/08
I/7266513.1

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 1/9/2014 Time: 02:02	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 1/9/2014 Time: 02:03	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☒ Process upset
- ☒ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The drum level controller on the waste heat recovery boiler was out of calibration. This and extremely cold weather that had an impact on maintaining normal process operations led to TO shutdown.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The controller was re-calibrated.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bonce	**Signature:**	**Date:** 2/17/2014

Revision 0
9/22/08
I/2266513.1

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 1/9/2014 Time: 17:21	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 1/9/2014 Time: 17:22	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

We lost power to the boiler feed water pumps, due to a melted hot tap on a transformer. The site was shut down.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The transformer was repaired.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bera	**Signature:**	**Date:** 2/17/2014

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 1/30/2014 Time: 22:03	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 1/30/2014 Time: 22:04	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☒ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The transformer that supplies power to the air system went down. The air pressure dropped, causing the natural gas valve on the thermal oxidizer to close.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The transformer was replaced.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bona	**Signature:** [signature]	**Date:** 2/11/2014

Revision 0
9/22/08
1/2266513.1

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 2/15/2014 Time: 15:54	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 2/15/2014 Time: 15:55	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

One of the boiler feed water pumps failed resulting in the loss of steam pressure which caused the TO to shut down due to the resulting process upset.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The other pump was put online, and the failed pump is being evaluated.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bosca	**Signature:**	**Date:** 3/18/2014

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 2/21/2014 Time: 02:13	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 2/~~13~~ 24/2014 Time: 02:14	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☒ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

Some instabilities in the process ammonia feed system caused the thermal oxidizer to shut down during the start-up after a maintenance shutdown.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The operator found a valve not lined in properly. After that was fixed, the plant was re-started.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bova	**Signature:**	**Date:** 3/18/2014

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 3/14/2014 **Time:** 09:22	**Date:** **Time:**	**Date:** **Time:**
Malfunction ended:	**Date:** 3/14/2014 **Time:** 09:23	**Date:** **Time:**	**Date:** **Time:**

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☒ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

An upset in the steam system caused the TO waste heat boiler to be unstable, shutting down the thermal oxidizer.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The issues with the steam load were addressed by the Utility department.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Brown	**Signature:**	**Date:** 3/18/2014

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 3/20/2014 Time: 16:19	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 3/20/2014 Time: 16:20	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☒ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

Flow was temporarily lost to the ammonia scrubber feed, due to opening a rarely used bypass process line which was plugged. The resulting process upset caused the T.O. to go down on high stack temperature.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The lines were all cleared of plugging material.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bowie	**Signature:**	**Date:** 4/14/2014

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 4/6/2014 Time: 00:46	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 4/6/2014 Time: 00:46	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☒ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

A pipe in the waste heat recovery boiler at the top of the thermal oxidizer stack developed some leaks, introducing water into the stack and chamber of the thermal oxidizer. This caused the thermal oxidizer to go down.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The leaking pipe was being repaired.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bodco	**Signature:**	**Date:** 4/14/2014

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/10/2014 Time: 04:16	**Date:** 5/10/2014 Time: 06:37	**Date:** 5/11/2014 Time: 09:18
Malfunction ended:	**Date:** 5/10/2014 Time: 04:17	**Date:** 5/10/2014 Time: 06:38	**Date:** 5/11/2014 Time: 09:19

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☒ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The Thermal Oxidizer Waste Heat Recovery Boiler experienced a low-low level in the drum, causing the Thermal Oxidizer to shut down.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The instrumentation was checked by a control mechanic to ensure proper operation and no problems were found with the instrumentation. The exact cause of the low water level in the waste heat boiler drum could not be determined from trending the data. The plant was stabilized and the process restarted.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 6/24/14

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/11/2014 Time: 10:08	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 5/11/2014 Time: 10:09	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☒ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☒ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

During start-up, the stack experienced high-high temperature, causing the Thermal Oxidizer to shut down again.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

This was caused by too much ammonia in the waste gas during start-up. The process was stabilized and the plant was re-started.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 6/24/14

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/15/2014 Time: 00:52	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 5/15/2014 Time: 00:53	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☒ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The Thermal Oxidizer Waste Heat Recovery Boiler experienced low-low level in the drum, causing it to shut down the Thermal Oxidizer.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The instrumentation was checked by a control mechanic to ensure proper operation and no problems were found with the instrumentation. The exact cause of the low water level in the waste heat boiler drum could not be determined from trending the data. The plant was stabilized and the process restarted.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 6/24/14

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/16/2014 Time: 13:28	**Date:** 5/16/2014 Time: 13:38	**Date:** Time:
Malfunction ended:	**Date:** 5/16/2014 Time: 13:29	**Date:** 5/16/2014 Time: 13:39	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☒ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

An instrument technician was calibrating the O2 analyzer on the Thermal Oxidizer stack, and this caused the Thermal Oxidizer to shut down.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

Calibration was completed and the plant was re-started.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 6/24/14

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/22/2014 Time: 14:05	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 5/22/2014 Time: 14:06	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☒ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☒ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☒ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

While some pumps in the ammonia recovery system were being flushed out, the Thermal Oxidizer experienced some temperature swings due to the changes in the waste gas supplied to it, and kicked out due to high-high stack temperature.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

Everything was stabilized and the plant was re-started.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Benec	**Signature:**	**Date:** 6/24/14

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 5/29/2014 Time: 05:53	**Date:** 5/29/2014 Time: 18:56	**Date:** Time:
Malfunction ended:	**Date:** 5/29/2014 Time: 05:54	**Date:** 5/29/2014 Time: 18:57	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☒ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The waste heat recovery boiler on the thermal oxidizer experience a high-high pressure condition, causing it to shut down the thermal oxidizer and cyano plant.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The instrumentation was checked by the control mechanic for proper operation and no problems were found. The operating data was trended for the TO and no problems were found. The plant was stabilized and the process was restarted.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 6/24/14

Revision 0
9/22/08

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 6/18/2014 Time: 17:20	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 6/18/2014 Time: 17:21	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☒ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The site experienced a power outage.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

Power was restored and the plant was re-started.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 7/18/14

MALFUNCTION INCIDENT REPORT
Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 6/19/2014 Time: 20:04	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 6/19/2014 Time: 20:05	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☒ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☐ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The TO shut down on a high-high stack temperature. The exact cause could not be determined from trending the process.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

The plant was stabilized and restarted.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ Yes ☐ No*
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ NA ☐ Yes ☐ No

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ Yes ☒ No
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 7/18/14

MALFUNCTION INCIDENT REPORT

Plant 41

This report form applies to the following areas:
Cyano Reactors and Ammonia Recovery System

Complete this form immediately following any malfunction of the Thermal Oxidizer.

1) Malfunction Period(s)

Malfunction began:	**Date:** 6/26/2014 Time: 14:44	**Date:** Time:	**Date:** Time:
Malfunction ended:	**Date:** 6/26/2014 Time: 14:45	**Date:** Time:	**Date:** Time:

2) Actions to minimize duration of bypass:
The process control interlocks for the Thermal Oxidizer (TO) are linked directly to the reactor process feed pumps and control valve. When an interlock on the TO shuts down the equipment, the process feed is immediately stopped shutting down the entire Cyanopyridine process. The bypass valve opens to allow the TO to purge which is required to safely restart after a shutdown.

3) What type of malfunction occurred? (Check all that apply.)

- ☐ Instrument nitrogen less than 60 psi
- ☐ Instrument air less than 60 psi
- ☐ Stack temperature less than 700°C
- ☐ Chamber temperature greater than 1038°C
- ☐ Stack temperature greater than 1032°C
- ☒ Loss of electrical power
- ☐ Other utility disruption [Describe below]
- ☐ Fire eye lost sight of flame
- ☐ Plant start-up
- ☐ Plant shutdown
- ☐ PHD data lost
- ☐ Erratic Thermal Oxidizer temperature
- ☐ Operator error
- ☐ Mechanical failure
- ☐ Process upset
- ☐ Instrument/control parameters
- ☐ Other [Describe below]

4) What is the root cause(s) of the malfunction incident?

The facility experienced a power outage.

5) What corrective action(s) has been or will be taken to address the root cause(s) of the malfunction incident?

Power was restored to the facility and the plant was restarted.

6) Was the Start-up, Shutdown, Malfunction Plan (SSMP) followed? ☒ **Yes** ☐ **No***
*If not, provide explanation:

7) If the SSMP was not followed, was IDEM notified? ☒ **NA** ☐ **Yes** ☐ **No**

8) Are revisions to the SSMP needed to better address future malfunction incidents? ☐ **Yes** ☒ **No**
If so, provide recommendations:

Name: Brian Bence	**Signature:**	**Date:** 7/18/14

APPENDIX F

SINGLE COMPONENT INSPECTION HISTORY REPORTS

Single Component Inspection History Report

Vertellus

Unit:	27-PYRID	Tag:	02640-000
Area:	01	Component Type:	VALVE
Equipment:	pp622.242	Service Type:	LIGHT LIQUID

Inspection:							Repair:		ReInspection:		
Date:	Inspector:	Instr:	PPM:	Bkg:	Leak Source:	Leak?:	Date:	Type:	Date:	PPM:	Leak?:
10/30/2013	DEREK AKERS	V02	3	0		N					
10/11/2011	EMMANUEL CHAMBERS	3	10	1		N					
6/9/2010	JOE MCHUGH	10035	5	1		N					

Difficult to monitor

Single Component Inspection History Report

Vertellus

Unit:	27-PYRID	Tag:	02639-000
Area:	01	Component Type:	VALVE
Equipment:	pp622.242	Service Type:	LIGHT LIQUID

Inspection:							Repair:		ReInspection:		
Date:	Inspector:	Instr:	PPM:	Bkg:	Leak Source:	Leak?:	Date:	Type:	Date:	PPM:	Leak?:
10/3/2013	DEREK AKERS	V02	5	0		N					
10/11/2011	EMMANUEL CHAMBERS	3	10	1		N					
6/9/2010	JOE MCHUGH	10035	6	1		N					

DTM