



Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Vermont Yankee
185 Old Ferry Rd.
P.O. Box 500
Brattleboro, VT 05302
Tel 802-257-5271

October 20, 2004

Docket No. 50-271

BVY 04-116

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**Subject: Vermont Yankee Nuclear Power Station
Vermont Yankee 2004 Summary Reports for
In-service Inspection and Repairs or Replacements**

In accordance with ASME Section XI, Code Case N-532-1 "Alternative Requirements to Repair and Replacement Documentation Requirements and In-service Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000," Vermont Yankee (VY) hereby submits 2004 Form OAR-1 Owner's Activity Report for Inservice Inspections and the 2004 Form NIS-2A Repair/Replacement Certification Record for Repairs and Replacements. These reports describe in-service inspections, repairs and replacements performed during the period October 25, 2002 through May 4, 2004. VY's fourth ten-year interval began September 1, 2003.

We trust that the information provided is adequate; however, should you have questions or require additional information, please contact Mr. James M. DeVincentis at (802)258-4236.

There are no new commitments being made in this submittal.

Sincerely,


for James M. DeVincentis
Manager, Licensing

Attachments (2)

A047

cc: Mr. Richard B. Ennis, Project Manager
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation
Mail Stop O 8 B1
Washington, DC 20555

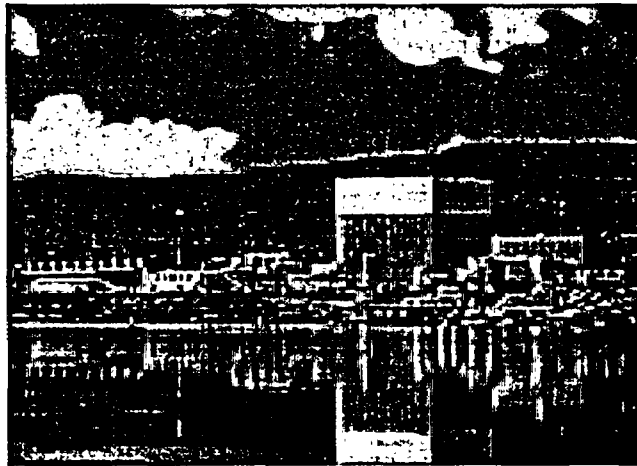
Mr. Samuel J. Collins
Regional Administrator, Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

USNRC Resident Inspector
Entergy Nuclear Vermont Yankee, LLC
320 Governor Hunt Road
P.O. Box 157
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner
VT Department of Public Service
112 State Street – Drawer 20
Montpelier, Vermont 05620-2601



Entergy Nuclear Northeast Vermont Yankee




Owner's Activity Report (OAR-1) for Inservice Inspections

October 25, 2002 through May 4, 2004

Reviewed By: 
Inservice Inspection Coordinator

Date: 7-13-04

Approved By: 
System Engineering Manager

Date: 8/10/04

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number 04-01-01

Owner Entergy Nuclear Northeast, 185 Old Ferry Road, Brattleboro, VT 05352
(Name and Address of Owner)

Plant Entergy Nuclear Northeast, P.O. Box 157, Governor Hunt Road, Vernon, VT 05354-0157
(Name and Address of Plant)

Unit No. 1 Commercial service date 11-30-1972 Refueling outage no. 24
(If applicable)

Current inspection interval 4th Inspection Interval
(1st, 2nd, 3rd, 4th, other)

Current inspection period 1st Inspection Period
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 1998 Edition, 2000 Addenda

Date and revision of inspection plan PP 7015 Vermont Yankee Inservice Inspection Program, Revision 3, dated 9/1/2003

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan _____
N/A

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct and that the examinations, tests, repairs, replacements, evaluations and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. DPR-28 Expiration Date 03-21-2012
(if applicable)

Signed [Signature] Director ENGINEERING Date 8-23-04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I the undersigned, holding a valid commission issue by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Vermont and employed by Hartford Steam Boiler of Connecticut of Connecticut have inspected the items described in this Owner's Activity Report, during the period October 25, 2002 to May 4, 2004, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs or replacements, evaluation and corrective measures described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from the connected with this inspection.

[Signature] Commissions VT 888 N, I, N, S, A, B
Inspector's Signature National Board, State, Province and Endorsements

Date 9-15-04

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited For This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
CLASS 1					
B-A	28	7	78%	25%	Relief Request ISI 08 allows the use of RMS for grading purposes as an alternative to ASME Section XI, Appendix VIII, Supplement 4, paragraph 3.2.c for examination of RPV shell welds. Code coverage for RFO-24 examinations is as follows: Component Nos. CD, D1, D2, G1 = greater than 90%; E1 = 79.15%; E2 = 79.06%; G2 = 88.83%. Welds F1 and F2 are totally obstructed by Shroud tie rods. Reexamination of previously recorded flaw in Weld EF was performed; no relevant changes.
B-B	N/A	N/A	N/A	N/A	No B-B Category welds exist at Vermont Yankee.
B-D	58	0	0%	0%	No examinations scheduled or performed during RFO-24.
B-F	22	2	29%	9%	Relief Request ISI 04 allows the use of Code Case N-663 (surface examination not required). Relief Request ISI 07 allows the use of BWRVIP-75 for examination frequency for weld overlays. Relief Request ISI 10 allows the use of PDI qualification in lieu of Supplement 11 requirements.
B-G-1	208	48	100%	23%	Relief Request ISI 03 allows the use of Code Case N-652 for bolting examination. Bushing visual not required when stud is in-place. Flange Thread, Item B6.40, examination required only if the connection is disassembled.
B-G-2	135	15	N/A When Disassembled	11%	Relief Request ISI 03 allows the use of Code Case N-652 for bolting examination. One scheduled exam performed (Flange Bolting on N7-B); remaining 14 examined under "when-disassembled" requirement.
B-J	65	15	68%	23%	Relief Request ISI 02 allows the use of Code Case N-560 for Category B-J selection and examination criteria. Nine (9) components were examined during RFO-24 in accordance with Code Case N-560. SLC weld SL11-F12, Item B9.40 socket weld: original PT exam was Code-rejectable; expanded scope to include 100% of welds on 1-1/2" SLC11 Line (reference Inservice Discrepancy Reports 2004-006, 2004-008, 2004-011); a total of 41 additional welds were examined. UT of welds RH30-1 and RH30-6: 75% coverage achieved on each weld due to component configuration.

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
CLASS 1 (continued)					
B-K	3	0	0%	0%	No examinations scheduled or performed during RFO-24.
B-L-1	N/A	N/A	N/A	N/A	No B-L-1 Category welds exist at Vermont Yankee.
B-L-2	2	0	0%	0%	No examinations scheduled or performed during RFO-24.
B-M-1	N/A	N/A	N/A	N/A	No B-M-1 Category welds exist at Vermont Yankee.
B-M-2	43	10	N/A When Disassembled	23%	Examined in accordance with "when-disassembled" requirement.
B-N-1	1	1	N/A	N/A	The examination requirements for Category B-N-1 are defined in Program Procedure PP 7027 "Reactor Vessel Internals Inspection Program." Category B.N.1, Item No. B13.10 is a general interior inspection of the vessel performed each outage. It includes all in-vessel examinations performed for any reason. As such, there is no overall target for exams to be completed each period or interval.
B-N-2	23	10	N/A	N/A	The examination requirements for Category B-N-2 are defined in Program Procedure PP 7027 "Reactor Vessel Internals Inspection Program." Percent complete is not noted since examinations are deferrable to end of interval.
B-O	6	2	100%	33%	Surface examination may be performed in lieu of UT.
B-P	6	1	50%	17%	The examination selection and frequency for Category B-P is defined in Program Procedure PP 7034 "Inservice Inspection Pressure Test Program."

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
CLASS 2					
C-A	4	0	0%	0%	No examinations scheduled or performed during RFO-24.
C-B	12	0	0%	0%	No examinations scheduled or performed during RFO-24.
C-C	7	2	67%	29%	MT exam of integral attachment welds on supports FDW-HD36 and FDW-HD39: 50% coverage achieved due to component configuration. Inservice Discrepancy Reports 2004-012 and 2004-013 were generated as the result of indications found during examination of supports FDW-HD36 and FDW-HD39.
C-D	0	0	N/A	N/A	No Category C-D bolting exists at Vermont Yankee.
C-F-1	0	0	N/A	N/A	No Category C-F-1 welds exist at Vermont Yankee.
C-F-2	63	8	36%	13%	Relief Request ISI 04 allows the use of Code Case N-663 (surface examination not required).
C-G	N/A	N/A	N/A	N/A	No Category C-G welds exist at Vermont Yankee.
C-H	141	0	0%	0%	The examination selection and frequency for Category C-H is defined in Program Procedure PP 7034 "Inservice Inspection Pressure Test Program."

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
CLASS 3					
D-A	10	2	100%	20%	None
D-B	72	0	0%	0%	The examination selection and frequency for Category D-B is defined in Program Procedure PP 7034 "Inservice Inspection Pressure Test Program."

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
IWF COMPONENT SUPPORTS					
F-A	109	22	59%	20%	None

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
AUGMENTED					
AUGMENTED Class 2 Welds	8	3	100%	38%	Augmented examinations in accordance with Interval 3 SER. Reference Memo BVY 94-124.
AUGMENTED Class 2 Supports	7	3	100%	43%	Augmented examinations in accordance with Interval 3 SER. Reference Memo BVY 94-124.

TABLE 1					
ABSTRACT OF EXAMINATIONS AND TESTS					
Examination Category	Total Examinations Required for The Interval	Total Examinations Credited for This Period	Total Examinations Credited (%) For The Period	Total Examinations Credited (%) To Date for The Interval	Remarks
IWE COMPONENT SUPPORTS					
E-A	942	135	46%	14%	135 of 290 examinations required for Interval 4, Period 1 were performed during RFO-24.

Table 2

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Item Description	Flaw Characterization (IWA-3300)	Flaw or Relevant Condition Found During Scheduled Section XI Examination or Test (Yes / No)	Results
B-J	B9.40	Socket Weld	Liquid Penetrant exam revealed rejectable indications on Weld SL11-F12.	Yes	As a result of these rejectable indications Inservice Discrepancy Report 2004-006 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-041 which required the indications to be removed. The indications were removed and an acceptable final Liquid Penetrant examination was performed. As a result of these indications examination scope was expanded to include six (6) additional welds on the 1-1/2" SLC Line.
B-J	B9.40	Socket Weld	Liquid Penetrant exam revealed rejectable indications on Weld SL11-F27.	No	These indications were found as a result of the scope expansion performed for weld SL11-F12 (above). As a result of these rejectable indications Inservice Discrepancy Report 2004-008 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-045 which required the indications to be removed. The indications were removed and an acceptable final Liquid Penetrant examination was performed. As a result of these indications examination scope was expanded to include 100% of the welds on the 1-1/2" SLC Line.
B-J	B9.40	Socket Weld	Liquid Penetrant exam revealed rejectable indications on Weld SL11-F28.	No	These indications were found as a result of the scope expansion performed for weld SL11-F12 (above). As a result of these rejectable indications Inservice Discrepancy Report 2004-008 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-045 which required the indications to be removed. The indications were removed and an acceptable final Liquid Penetrant examination was performed. As a result of these indications examination scope was expanded to include 100% of the welds on the 1-1/2" SLC Line.
B-J	B9.40	Socket Weld	Liquid Penetrant exam revealed a rejectable indication on Weld SL11-F17.	No	These indications were found as a result of the scope expansion performed for weld SL11-F27 & 28 (above). As a result of these rejectable indications Inservice Discrepancy Report 2004-011 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-045 which required the indications to be removed. The indications were removed and an acceptable final Liquid Penetrant examination was performed.
B-J	B9.40	Socket Weld	Liquid Penetrant exam revealed rejectable indications on Weld SL11-F25B.	No	These indications were found as a result of the scope expansion performed for weld SL11-F27 & 28 (above). As a result of these rejectable indications Inservice Discrepancy Report 2004-011 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-045 which required the indications to be removed. The indications were removed and an acceptable final Liquid Penetrant examination was performed.
C-C	C3.20	Integral Attachment	Magnetic Particle exam revealed rejectable indications in the weld of Integral Attachment FDW-HD36.	Yes	As a result of these rejectable indications Inservice Discrepancy Report 2004-012 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-050 which required the indications to be removed. The indications were removed and an acceptable final Magnetic Particle examination was performed.
C-C	C3.20	Integral Attachment	Magnetic Particle exam revealed rejectable indications in the weld of Integral Attachment FDW-HD39.	Yes	As a result of these rejectable indications Inservice Discrepancy Report 2004-013 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-051 which required the indications to be removed. The indications were removed and an acceptable final Magnetic Particle examination was performed.
F-A	F1.20	Spring Can	Visual VT-3 exam of Spring Can HPCI-HD35C revealed the spring can setting out of tolerance.	Yes	As a result of the out-of-tolerance spring can setting Inservice Discrepancy Report 2004-003 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-034 which required the spring settings to be reset within tolerance. The spring cans were reset and an acceptable final VT-3 examination was performed.

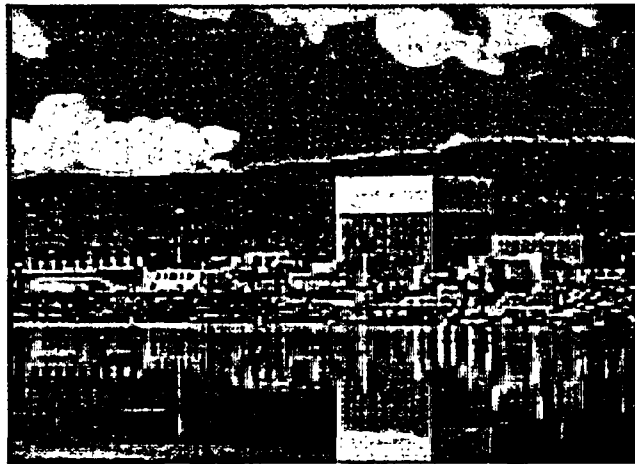
Table 2

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category	Item Number	Item Description	Flaw Characterization (IWA-3300)	Flaw or Relevant Condition Found During Scheduled Section XI Examination or Test (Yes / No)	Results
F-A	F1.20	Spring Can	Visual VT-3 exam of Spring Can HPCI-HD35D revealed the east spring can setting out of tolerance.	Yes	As a result of the out-of-tolerance spring can setting Inservice Discrepancy Report 2004-002 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-033 which required the spring settings to be reset within tolerance. The spring cans were reset and an acceptable final VT-3 examination was performed.
F-A	F1.20	Spring Can	Visual VT-3 exam of Spring Can HPCI-HD84 revealed both spring can readings off-scale.	Yes	As a result of the out-of-tolerance spring can setting Inservice Discrepancy Report 2004-001 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-032 which required the spring settings to be reset within tolerance. The spring cans were reset and an acceptable final Visual examination was performed.
F-A	F1.20	Integral Attachment	Visual VT-3 preservice exam revealed missing welds and drawing discrepancies on Integral Attachment RCIC-HD63C.	No	As a result of the missing welds and drawing discrepancies Inservice Discrepancy Report 2004-007 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-044 which accepted the conditions as-is and identified drawing 5920-6438, R/0 as being incorrect. The drawing deficiency was documented via CR-VTY-2004-01322 in order to have the drawing revised.
F-A	F1.20	Restraint	Visual VT-3 exam revealed minor corrosion on Restraint RSW-H226B.	No	As a result of this corrosion Inservice Discrepancy Report 2004-004 was generated in order to obtain Engineering evaluation. Mechanical / Design Engineering issued Technical Evaluation 2004-043 which accepted the conditions as-is, however, the corrosion was removed and an acceptable final VT-3 examination was performed.



Entergy Nuclear Northeast Vermont Yankee



Repair/Replacement Certification Record (NIS-2A) for Repairs and Replacements

October 25, 2002 through May 4, 2004

Reviewed By: 
Repair/Replacement Coordinator

Date: 7/13/04

Approved By: 
System Engineering Manager

Date: 8/10/04

FORM NIS-2A REPAIR/REPLACEMENT CERTIFICATION RECORD

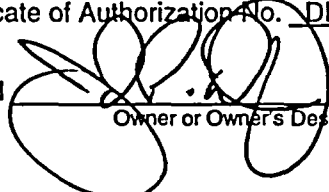
OWNER'S CERTIFICATE OF CONFORMANCE

I certify that the repairs and replacements represent by Repairs/Replacement
repair or replacement

Plan number AP 0070, ASME Section XI Repair and Replacement Procedure, Revision 3, dated 9-1-2003 conforms to the requirements of Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. DPR-28 Expiration Date 3-21-2012

Signed  Director Engineer Date 8-24-04
Owner or Owner's Designee, Title


CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issue by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Vermont and employed by Hartford Steam Boiler of Connecticut

of Connecticut have inspected the items described in Repair/Replacement Plan, number AP 0070, Revision 3, during the period October 25, 2002 to May 4, 2004

and state that to the best of my knowledge and belief, the Owner has performed all activities described in the Repair/Replacement Plan in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the activities described in the Repair/Replacement Plan. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from the connected with this inspection.

 Commissions VT N, I, NS, A, B
Inspector's Signature National Board, State, Province and Endorsements

Date 9-15-04

ATTACHMENT 3

FOURTH INTERVAL

FIRST PERIOD
Refuel Outage 24

TABLE 3

ABSTRACT OF REPAIRS, REPLACEMENTS OR CORRECTIVE MEASURES REQUIRED FOR CONTINUED SERVICE

Code Class	Repair / Replacement or Corrective Measure	Item Description and Description of Work	Flaw or Relevant Condition Found During Scheduled Section XI Examination or Test (Yes/No)	Close Date	Repair / Replacement Plan Number
2	Replacement	Replace Bonnet Studs, V11-12A	No	01/21/2003	WO-00-004934-000
3	Repair	SR-72-3A, Repair & return to stock	No	03/25/2003	WO 00-000597-004
2	Replacement	DG-1-1B, Replace Oil Level Regulator	No	04/08/2002	WO 00-007020-000
2	Replacement	DG-1-1A, Burks Pump Replacement	No	05/03/2002	WO 01-005930-000
2	Replacement	DG-1-1A, Cooler Head Replacement	No	01/21/2003	WO 02-001970-000
2	Replacement	DG-1-1A Cooler Head, New Studs	No	08/06/2002	WO 02-001970-002
1	Repair	Rebuild SV-2-70A (Serial # BL1139)	No	11/08/2002	WO 01-005469-000
1	Repair	Rebuild MSIV Actuator	No	05/11/2004	WO 01-005531-001
1	Repair	Rebuild MSIV Actuator	No	05/11/2004	WO 01-005530-002
2	Replacement	Replace Accumulator #06-23	No	02/24/2003	WO 02-005751-000
3	Replacement	Replace Suction Barrel P-8-1B	No	04/29/2003	MM 2002-021, WO 02-003448-000
3	Repair	Repair Valve Body V70-1D	No	03/28/2003	WO 00-006998-000
3	Replacement	Replace Suction Barrel P-8-1D	No	06/10/2003	MM 2002-035, WO 02-003446-000
3	Replacement	Replace Fasteners E-20-1A	No	03/11/2003	WO 01-004142-000
3	Replacement	Replace Bolting P-213-1A	No	03/12/2003	WO 01-004419-001
3	Replacement	Replace Studs and Nuts S-3-1B	No	03/24/2003	WO 02-004872-000
2	Repair	Modify Flange Bolt Holes	No	04/10/2003	WO 02-005017-000
3	Replacement	Replace Bolting P-8-1B	No	04/16/2003	WO 02-003448-003
3	Replacement	Replace Valve Internals V10-89A	No	05/09/2003	WO 00-001859-000
2	Replacement	Replace Bolting E-14-1A	No	05/09/2003	WO 03-000859-000
2	Replacement	Replace Valve SR-14-20A	No	07/15/2003	WO 01-004343-000
3	Replacement	Replace Valve V70-216D	No	06/04/2003	WO 02-003446-009
3	Repair	Remove Defect and Inspect 24" SW-1B Pipe	No	09/12/2003	WO 03-004454-006
3	Repair	Repair 24" SW-1B Pipe	No	09/12/2003	MM 2003-041
3	Replacement	Replace Suction Barrel P-8-1C	No	11/20/2003	MM 2002-036, WO 02-003447-000

