Annual Radioactive Waste Tank Inspection Program - 1999

by

C. J. Moore

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Contents

Acronyms and Abbreviations.....	1
Introduction	3
Summary.....	5
Inspection Program.....	7
Background	7
Tank Description.....	8
Inspection Methods	13
Program Implementation	15
Visual Imagery.....	15
1999 Inspection Results	15
Summary of Inspection Results.....	16
Appendix A—Waste Tanks at SRS	23
Appendix B—Summary of 1999 Inspections	25
List of Figures	
1. Type I Waste Storage Tank	8
2. Type II Waste Storage Tank	9
3. Type IV Waste Storage Tank.....	10
4. Type III Waste Storage Tank	11

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Acronyms and Abbreviations

A	Annulus
ASME	American Society of Mechanical Engineers
BFV	Back Flush Valve
CCTV	Closed Circuit Television
CCWS	Chromate Cooling Water System
COP	Clean Out Port
CTS	Concentrate Transfer System
CSTE	Concentration Storage and Transfer Engineering
CWT	Concentrated Waste Tank
DB	Diversion Box
DOE-SR	Department of Energy-Savannah River
DP	Direct Photography
ERIP	Encasement Riser Inspection Port
ETF	Effluent Treatment Facility
EVAP	Evaporator
F	Fahrenheit
GDL	Gravity Drain Line
HELIUM	Helium leak test
HLLCP	High Liquid Level Conductivity Probe
HPFP	High Point Flush Pit
I	Interior
IAL	Intra-Area Line
ITPFC	In-Tank-Precipitation Filter Cell
JB	Junction Box
LDB	Leak Detection Box
LPPP	Low Point Pump Pit
LPS	Leak Probe Sleeve
MLDB	Modified Leak Detection Box
OD	Outside Diameter
PHOTO	Photographs by Non-Remote Technique
PP	Pump Pit
psig	pounds per square inch gauge
PSP	Periscopic Photography
PT	Pump Tank
RCP	Reinforced Concrete Pipe
SRS	Savannah River Site
SSD	Storm Sewer Drain
SSMH	Storm Sewer Manhole
STE	Shift Technical Engineer
SWS	Storm Water Sewer
UT	Ultrasonic Test
VB	Valve Box
VP	Video Photograph
WAP	Wide-Angle Photography
WLE	Waste Line Encasement
WME	Waste Management Engineering
WSRC	Westinghouse Savannah River Company
WT	Waste Transfer Line

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Introduction

Aqueous radioactive wastes from Savannah River Site (SRS) separations processes are contained in large underground carbon steel tanks. Inspections made during 1999 to evaluate these vessels and auxiliary appurtenances along with evaluations based on data accrued by inspections performed since the tanks were constructed are the subject of this report.

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Summary

The 1999 inspection program revealed that the structural integrity and waste confinement capability of the Savannah River Site waste tanks remained unchanged from 1998.

A total of 3979 photographs were made, 616 visual and video inspections were performed, and 12 helium leak tests were conducted.

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Inspection Program

Background

Alkaline aqueous radioactive wastes produced at the Savannah River Site are received and managed in large underground tanks. The waste came primarily from nuclear fuel reprocessing operations in the separations areas (F and H) and contains most of the radioactive fission products from SRS operations. The waste stored in the tanks is present in three phases: sludge, supernate, and salt formed by supernate evaporation and cooling. The supernate and salt phases consist primarily of NaNO_3 and NaNO_2 . The fission product content is 1 to 20 curies per gallon for the supernate and 1 to 5 curies per gallon for the salt. The sludge consists primarily of MnO_2 and Fe(OH)_2 , with a fission product content up to 950 curies per gallon.

Waste tank leak detection capabilities are essential to meet the primary objective of the SRS radioactive waste management program: to manage the waste in such a manner as to minimize the radiation exposure and associated risk to man and his environment over the lifetime of the radionuclides.

The detection of leaked waste is based on two principles: disappearance of material from its proper location and appearance of material in an improper location. At SRS, primary reliance is on the latter because the quantity of the waste detectable in an improper location is much less than that detectable by inventory change in a large tank. Capacity of SRS tanks is 0.75 to 1.3 million gallons. Although rigorous tank inventory surveillance is practiced, primary leak detection methods rely on automatic surveillance of those areas into which the leaked waste is most likely to migrate.

The annulus of each double-wall tank is equipped with at least two single-point conductivity probes for leak detection. These probes are located at the bottom of the annulus and on opposite sides of the tank. The single-wall tanks are built on slabs with a network of leak collection channels that drain to a common sump. Continuous sump level monitoring and frequent sump liquid sampling provide the leak detection. Besides the automatic surveillance, routine direct visual surveys are made in the annular spaces, and nonroutine direct visual surveys are made in primary tanks through opened access risers and/or inspection ports in the roof.

In 1961-62, following leakage of waste into the annuli of Tanks 9, 10, 14, and 16, the first remote imaging inspections were made of some tanks using a periscope. Random inspections continued through 1970. A program was initiated in November 1971 to periodically inspect all waste tanks, using remote visual imagery techniques to monitor for corrosion and other degradation, waste leakage, anomalies of any type, and to investigate process or equipment concerns.

Steel thickness measurements have been made periodically of waste tanks using ultrasonic techniques to monitor for general corrosion. An analog-type instrument was used in 1967 and 1969 to measure the thickness of the primary wall of selected double-wall tanks. In 1972, a more precise instrument was put in service. About 24,000 measurements made over a period of 14 years (1972 through 1985) indicated that no thinning of SRS tanks had occurred. The only tank at SRS that has experienced detectable corrosion is Tank 23, a tank with a unique service history. The upper wall interior surfaces show general corrosion with mild pitting. The pitting is broad but shallow. This tank was used to receive contaminated water from 244-H, the Receiving Basin for Off-Site Fuels, and 245-H, the Resin Regeneration Facility. Steel thickness measurements were resumed in 1994 using an updated ultrasonic testing (UT) system.

Inspections are complicated by factors such as radiation and radioactive contamination, remote operation as far as 40 feet below grade, and insertion of equipment through small (generally 5 to 8-inch-diameter) access openings. Inspection techniques to circumvent these difficulties have been developed; they yield quality visual images and thickness measurements. The techniques include photographic systems, closed circuit television systems, and ultrasonic systems to measure steel thicknesses.

Waste tank inspection has been important in leak detection. The leaksites in nine of eleven cracked tanks have been identified by direct visual inspection or by one of the remote inspection techniques. Since the inspection program was initiated in 1971, six tanks were found to have leaksites that were not recognized before the program was implemented. In

Inspection Program

the double-wall tanks, annulus conductivity probes were not activated by these leaks because of the small amount of leakage. The leaked waste evaporated to dryness, sealing the cracks before any leaked waste reached a leak detection probe. However, remote inspections detected the dry deposits of leaked waste in the annuli of these tanks.

The waste tank in-service inspection program is an ongoing program. This report gives results of the 1999 inspections and summarizes significant findings of previous in-service inspections for each waste tank.

Tank Description

SRS has subsurface storage tanks of four different designs. All of the tanks are constructed of carbon steel and reinforced concrete. They serve as containment vessels for storage and processing of radioactive wastes. Appendix A lists tank location, design type, project number, and construction period. A brief description of the different tank designs is given in the following paragraphs.

Type I Tanks

The 12 original storage tanks constructed between 1951 and 1953 are designated Type I tanks. Tanks 1 through 8 are in F Area and Tanks 9 through 12 are in H Area. Each primary tank has a capacity of

750,000 gallons, is 75 feet in diameter and 24 1/2 feet high. Figure 1 shows the essential features of Type I tanks, including the primary tank, the secondary pan, and the concrete support structure.

The primary container is a closed cylindrical tank with flat top and bottom constructed from 1/2-inch-thick steel plates. The top and bottom are joined to the cylindrical sidewall by curved knuckle plates. The primary tank is set within a circular pan of 1/2-inch-thick steel plates. The annulus pan is 5 feet deep and 5 feet larger in diameter than the primary tank, thus forming an annular space 2 1/2 feet wide. The tank and pan are set on a 30-inch-thick base slab and are enclosed by a cylindrical 22-inch-thick reinforced concrete wall and a flat concrete roof, also 22 inches thick. There are twelve 2-foot-diameter concrete columns within the primary tank to support the roof. Each column has a flared capital and is encased in 1/2-inch-thick steel plate.

A 9-foot layer of earth was placed over the tanks for radiation shielding. Cooling for each type I tank is provided by 36 parallel (water pipe) cooling coils.

Figure 1. Cooled Waste Storage Tank, Type I (Original 750,000 Gallons).

A dehumidification duct in the annulus of each tank is routed from the tank top to the bottom of the annulus, where it encircles the tank. The duct has distribution outlets and its cross-sectional area decreases as the distance from the air supply increases. Access to the tank interior is provided at eight locations, and to the annular space at four locations, through riser pipes. Each of the 12 riser pipes is capped at the top with a concrete plug. Each plug is provided with two 5-inch-diameter ports equipped with removable plugs. Some of these ports provide access for inspections.

All welds in the pan and primary tank were radiographically inspected, defects were corrected, and the welds were rechecked radiographically. The welds in the flat bottoms of both the pan and the tank were vacuum-tested for leaks. Additionally, both vessels were hydrostatically tested. The water was maintained at full height in the tank for 24 hours before inspection for leaks was made. Cooling water piping was hydrostatically tested at 300 psig and then leak-tested with 100 psig air pressure in the piping.

Type II Tanks

Tanks 13 through 16, constructed in H Area in 1955 and 1956, are designated Type II tanks. Figure 2 is a cross section of this type. Each primary tank has a capacity of 1,030,000 gallons and is 85 feet in diameter and 27 feet high.

The primary container for Type II tanks consists of two concentric steel cylinders assembled with a flat bottom and a flat top into a form somewhat like a doughnut. The top and bottom are joined to the outer cylinder by rings of curved knuckle plates. The inner cylinder is flared at the top to accommodate the roof support column. This cylinder is joined to the flat steel top with a continuous butt weld and to a base fastened to the bottom with a continuous T-weld. Steel thicknesses are:

Plate	Thickness, inch
Top and bottom	1/2
Upper knuckle	9/16
Wall	5/8
Lower knuckle	7/8

Figure 2. Cooled Waste Storage Tank, Type II (Original 1,030,000 Gallons).

Inspection Program

The primary tank is set on a 1-inch sand bed within a circular pan of 1/2-inch thick steel plate, 5 feet deep and 5 feet larger in diameter than the primary tank, thus forming an annular space 2 1/2 feet wide. The tank and pan assembly is surrounded by a cylindrical reinforced concrete enclosure with a 33-inch-thick wall and a flat concrete roof that is 45 inches thick. The tank and pan assembly and the surrounding wall are set on a foundation slab that is 42 inches thick. The roof is supported by both the wall and a central concrete column that fits within the inner cylinder of the vessel. The 45-inch-thick concrete roof provides radiation shielding; therefore, no earth overburden is required. Cooling for each Type II tank is provided by 44 parallel (water pipe) cooling coils. Access to the tank interior is provided at eight locations, and to the annular space at four locations, through riser pipes. Each of the 12 riser pipes is capped at the top with a concrete plug. Each plug is provided with two 5-inch-diameter ports equipped with removable plugs. The ports provide access for inspection. In addition to the four annulus risers, other access openings (10 to 14 additional openings per tank) have been drilled into the annulus of each of these tanks to permit inspection of seventy-three to ninety-six percent of the exterior walls of the primary vessels.

A dehumidification duct in the annulus of each tank is routed from the tank top to the bottom of the annulus, where it encircles the tank. The duct has

distribution outlets and its cross-sectional area decreases as the distance from the air supply increases.

All welds in the primary tanks were radiographically inspected, defects were corrected, and the welds were rechecked radiographically. However, the annulus pans were not inspected radiographically. The welds in the flat bottoms of these pans and the primary tanks were vacuum-tested for leaks, and the primary and secondary vessels were hydrostatically tested. Cooling water piping was hydrostatically tested at 300 psig and then leak-tested, with 100 psig air pressure in the piping.

Type IV Tanks

Tanks 17 through 24 are single-wall-uncooled tanks. These tanks were designed for storage of waste that does not require auxiliary cooling. Tanks 17 through 20 were constructed in F Area in 1958 and Tanks 21 through 24 were constructed in H Area between 1959 and 1961. Each tank has a capacity of 1,300,000 gallons and is 85 feet in diameter and 34 feet high (Figure 3).

Figure 3. Uncooled Waste Storage Tank, Type IV (Prestressed Concrete Walls, 1,300,000 Gallons).

Each Type IV tank is basically a steel-lined, prestressed-concrete tank in the form of a vertical cylinder with a domed roof. Carbon steel plates, 3/8 inch thick, were used to form the cylindrical sides and flat bottom portion of the steel liners. The knuckle plates at the junction of the bottom and the sidewall are 7/16 inch thick. Concrete was built up around the steel vessel by the "shotcrete" technique.

Radiation shielding of the Type IV tanks in F Area was accomplished by applying at least 32 inches of earth over each of the 7-inch-thick concrete domes. H-Area tanks were shielded similarly, except that the earth cover was at least 44 inches thick to accommodate a somewhat higher radiation level from the waste.

Access to the interior of the tank is provided at six locations through riser pipes. Each riser pipe is capped at the top with a concrete plug. Some of these risers provide access for inspection.

All welds in the steel liners were radiographically inspected. All of the welded tank-bottom seams and the upper seams of the knuckle rings were vacuum leak-tested. Prior to the back-filling operation, each tank was hydrostatically tested by filling with water to the normal fill line. The tank was allowed to remain filled until it was to be placed in use for waste storage.

Type III Tanks

The most recently constructed tanks are designated as Type III tanks (Figure 4). Twenty-seven tanks were built between 1967 and 1981. Tanks 25 through 28, 33 and 34, and 44 through 47 are located in F Area. Tanks 29 through 32, 35 through 43, and 48 through 51 are located in H Area.

Figure 4. Cooled Waste Storage Tank, Type III (Stress Relieved Primary Liner, 1,300,000 Gallons).

Inspection Program

The Type III tank design was developed after an investigation into the causes of the leaks from the primary vessel of the Type I and Type II tanks. The study concluded that the leak-producing mechanism was nitrate-induced, stress-corrosion cracking at sites in or near the weld seams, and that stress relieving after fabrication should eliminate the cracking. For the type III tanks, means were provided for heating each finished tank to relieve the stresses generated during fabrication. In addition, some stress patterns were avoided, or minimized, by mounting the roof supporting column on the foundation pad rather than on the bottom of the primary tank (as in Types I and II), and by providing an annular clearance around the roof supporting column. Each primary tank holds 1,300,000 gallons and is 85 feet in diameter and 33 feet high.

Type III tanks are similar to the doughnut-like design of Type II tanks. Each primary vessel is made of two concentric cylinders joined to washer-shaped top and bottom plates by curved knuckle plates. Steel thicknesses are:

Plate	Thickness, inch
Top and bottom	1/2
Upper knuckle	1/2
Outer wall	
Upper band	1/2
Middle band	5/8
Lower band	3/4
Inner wall	
Upper band	1/2
Lower band	5/8
Lower knuckle	
Outer (tanks 25-28 and 33-51)	7/8
(tanks 29 through 32)	1
Inner	5/8

The primary tank is set on a 6-inch bed of insulating concrete within the secondary containment vessel. The concrete bed is grooved radially so that ventilating air can flow from the inner to the outer annulus. If any waste were to leak from the tank bottom or center annulus wall, liquid would move through the grooves, facilitating detection in the outer annulus.

The secondary vessel is 5 feet larger in diameter than the tank, thus providing an outer annulus 2 1/2 feet wide. The secondary vessel is made of 3/8-inch-thick steel throughout. Its sidewalls rise to the full height of the primary tank. The nested two-vessel assembly is surrounded by a cylindrical reinforced concrete

enclosure with a 30-inch-thick wall. The enclosure has a 48-inch-thick flat reinforced concrete roof that is supported by the concrete wall and a central column that fits within the inner cylinder of the vessel. The 48-inch-thick concrete provides radiation shielding; hence, no earth overburden is required.

Cooling for the Type III tanks is provided by either deployable (water pipe) cooling coil bundles installed through risers in the tank top, or 23 parallel (water pipe) cooling coils distributed throughout the tank.

A dehumidification duct in the annulus of each tank is routed from the tank top to the bottom of the annulus where it encircles the tank. The duct has distribution outlets and its cross-sectional area decreases as distance from the air supply increases. In these tanks, additional airflow is directed through the inner annulus, passing beneath the primary tank through radial grooves in the concrete base slab, and is exhausted into the outer annulus.

Tanks 29 through 34 were placed in service prior to 1976. These tanks were constructed with annulus riser pipes at four locations, providing inspection access through 5-inch-diameter ports. All other Type III tanks were placed in service after 1976 and have annulus riser pipes at 18 locations, that are 8-inches in diameter. These ports are equidistant around the tank and provide for inspection of all of the exterior wall of the primary vessel. In 1982, fourteen to sixteen additional 8-inch diameter ports per tank were drilled in the tops of Tanks 29 through 34 to provide adequate access ports for inspection of all of the exterior wall of their primary vessels. All Type III tanks have interior riser pipes at various locations that provide inspection access through ports with diameters ranging from 5 to 8 inches. All inspection access ports are equipped with removable plugs.

All butt welds on the primary tanks were radiographically inspected, except welds on the horizontal roof surface. On the secondary vessels of Tanks 29 through 34, all butt welds joining bottom plates, knuckle plates, and the lowest courses of center-column and outer-wall plates, were radiographically inspected. On all other Type III tanks, all plate welds in the secondary tanks were radiographically inspected. All defects were corrected and the welds were rechecked radiographically.

The Quality Assurance Program included inspection of all radiographs by two independent groups of certified weld inspectors, and all radiographs were permanently stored for future reference. All spots on the inside or outside of the primary tanks and the

inside of the secondary tanks, where clips or lugs were removed and where other excisions were made, were examined by magnetic particle or liquid penetrant techniques, and any defects were repaired.

All butt welds on the secondary tanks were vacuum leak-tested. All welds in the bottom assemblies of the primary tanks, including knuckle rings and lowest course welds, were vacuum leak-tested before each bottom assembly was lowered into final position, and then tested a second time after the stress-relieving operation. A full hydrostatic test, the filling of each primary tank to a depth of 32 feet and allowing it to stand 48 hours, was conducted after stress relieving. No leaks were found by the hydrostatic tests. All circumferential welds in the pipe loops of the deployable cooling coil bundles below the 1/2-inch-thick plate at the base of the riser plug were radiographed. The assembled cooler piping was tested hydrostatically to 500 psig and halide leak-tested at 300 psig. Welds in the distributed cooling coils were radiographed and similarly leak-tested.

The primary tank was stress-relieved in place after all high temperature work (other than roof attachments) had been completed. Full stress relief, at 1100°F, was accomplished in accordance with the general requirements of the ASME Boiler and Pressure Vessel code.

Inspection Methods

Techniques have been developed for remote examination and evaluation of the waste tanks and waste tank ancillaries. For visual imaging, direct photography systems developed at SRS were the primary method used. Closed circuit television systems were also used where direct photography was not possible or where these systems provided a more comprehensive examination. Only the direct photography systems will be described since the video systems are similar to systems used widely in industry.

Wide-angle direct photography was used for general inspections of double-wall tank annuli and the primary vessels of both double-wall tanks and single-wall tanks. This technique used a camera that surveys a large area in a single photograph. The camera used for wide-angle photography was a Contax G1 camera body, with a Zeiss Hologon 16mm f/8 fixed aperture lens. This lens is distortion free with a field of view of approximately 100 degrees. A bank of four electronic flash units was synchronized with these cameras to provide illumination. This camera is not shielded since residence time in a tank is minimal.

Another direct photography technique was used for detailed inspections. The camera is shielded to reduce the degrading effect of ionizing radiation on the photographic film. The camera's residence time in a waste tank for this technique is longer than the wide-angle direct photographic technique (i.e., a few minutes versus a few seconds); hence, shielding is required. The camera used was the Contax G1 camera with a Zeiss Hologon 16mm f/8 lens, the same as used for the wide-angle direct photography. Illumination is provided by a single electronic flash unit.

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Program Implementation

Visual Imagery

The 1999 inspection program used two visual imagery techniques: photography and closed circuit television. The primary inspection methods were direct photography techniques; e.g., making a series of photographs providing detailed views of the tank and wide-angle photography for obtaining overviews of large areas. Closed circuit television systems were generally used to further investigate conditions found during scheduled inspections and to troubleshoot process problems in tanks and ancillaries.

The inspection program objective to continuously evaluate the waste tanks was satisfied in 1999 by photographic and videotape documentation. Inspections were made through all accessible annulus risers of the double-wall tanks, and at least one inspection was made in the interior of each single-wall tank.

For Tanks 1 through 12, inspections are limited to no more than 25% of the exterior of the primary vessel wall and the annular space due to limited annulus access. This is considered adequate since the tanks are inactive; i.e., waste is not routinely transferred to or from them. These tanks are continuously monitored for leakage by instrumentation installed in their annuli. Additionally, for those tanks that have known leaksites in the primary vessel, the supernate phase has been removed, minimized, or the level lowered below the level of known leaksites.

1999 Inspection Results

The 1999 inspection program was successfully completed. The annuli of all double-wall tanks were inspected via all accessible risers, and the interiors of single-wall tanks remaining in service were inspected. Other inspections of waste tanks and ancillaries were performed as required by operating conditions and equipment performance.

Inspection in the annulus of Tank 11 revealed nodules on the steel pan, the secondary containment vessel, which was potentially an indication of through-wall penetrations. The nodules appeared to contain corrosion products and a white colored substance possibly associated with concrete from the

outside of the pan. This raised concerns for through-wall penetration. A pressure wash was used to remove the nodules beneath the south riser. Subsequent inspection revealed the pan to be in good condition. No significant pitting was observed. The area beneath the nodules had experienced mild surface corrosion.

Tank 14 inspection revealed that nodules formed of dry leaked waste had fallen away from three leaksites in the tank wall. These leaksites are located beneath risers 13, 151, and 259. At two other leaksites beneath riser 259, the volume of dry leaked waste had increased slightly, indicating that additional waste had seeped from the tank.

Tank 15 inspection revealed a thin trace of waste highlighting the crack beneath riser 55. This waste was not present when inspected in March 1998. Evidently the waste leached from the crack when ambient air humidity was high.

A degraded concrete condition was observed in Tank 23. The inspection showed that the base of the concrete dome was cracked or crushed for about fifteen feet immediately above the interface with the tank wall. Structural analysis concluded that the acceptance criteria are still met, and the tank remains in normal service.

Rainwater continued to leak into the annulus of most tanks. Inleakage was evidenced primarily by surface stains, occasionally by calciferous deposits, changed configuration in leaked waste in the annulus, and by mild surface corrosion where annulus ventilation was inadequate to maintain the annulus dry.

Except as noted above, the conditions of the tanks remained essentially unchanged from the conditions reported in 1998. Details and results of inspections of the tanks and ancillaries performed in 1999 are listed in Appendix B.

*Program Implementation***Summary of Inspection Results**

The following is a brief description of tank conditions as revealed by inspections and examinations made through 1999.

Tank 1

Tank 1 was placed in service in 1954. A small amount of dry waste was observed on the annulus floor in 1969. Subsequent inspections have revealed no additional leakage. Inspection of the exterior wall of the primary vessel is limited to 25% using existing inspection techniques through the four risers that provide access to the annulus. Examination of the observable portion of the tank wall has not revealed the location of the leak(s). Inspection photographs of the steel surface of the tank and the annulus have shown no significant surface corrosion or other anomalies. Ultrasonic measurements made in 1978, 1979, 1981, 1983, and 1985 showed that no detectable thinning of the tank wall had occurred.

Tank 2

Tank 2 was placed in service in 1955. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1967, 1972, 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 3

Tank 3 was placed in service in 1956. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 4

Tank 4 was placed in service in 1961. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 5

Tank 5 was placed in service in 1959. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no

leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 6

Tank 6 was placed in service in 1964. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1974, 1977, 1978, 1979, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 7

Tank 7 was placed in service in 1954. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1974, 1979, 1981, 1983, and 1985 showed no detectable thinning of the tank wall.

Tank 8

Tank 8 was placed in service in 1956. Examinations of the observable portion (25%) of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 9

Tank 9 was placed in service in 1955. Leakage from the tank primary vessel into the annulus pan may have occurred as early as 1955 when the "necklace" alarm, a conductivity leak detection device, shorted out permanently. Leakage was not certain until liquid waste was observed in the annulus pan in 1957. Currently, the annulus pan contains 8 to 10 inches of dry leaked waste. Examinations of the observable portion (25%) of the exterior of the primary vessel wall have shown three leaksites high on the tank wall; 269, 271, and 276 inches above the tank bottom. None of these leaksites is the source of the leaked waste in the annulus pan. The waste leaked at these sites was only enough to form localized small nodules. The leak(s) that are the source of the waste in the annulus pan have not been observed. Inspections have shown no significant surface corrosion, and the ultrasonic measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 10

Tank 10 was placed in service in 1955. The first indication that Tank 10 had leaked was in 1959 when dry waste was discovered in the annulus pan during a visual inspection. Currently, the annulus pan contains about 2 inches of dry leaked waste. Examinations of the observable portion (25%) of the exterior of the primary vessel wall have not shown the source of the leaked waste or any other leaksite(s). Inspections have shown no significant surface corrosion, and the ultrasonic measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 11

Tank 11 was placed in service in 1955. Twenty-five percent of the exterior of the primary vessel wall is observable via the four risers that provide access to the annulus. Inspections performed in 1974 revealed two leaksites. The leaksites are 189 and 235 inches above the tank bottom. Inspections have shown no significant surface corrosion, and ultrasonic measurements made in 1973, 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 12

Tank 12 was placed in service in 1956. Twenty-five percent of the exterior of the primary vessel wall is observable via the four risers that provide access to the annulus. Inspections in 1974 revealed two leaksites. The leaksites are 93 and 105 inches above the tank bottom. Inspections have shown no significant surface corrosion, and ultrasonic measurements made in 1972, 1973, 1977, 1981, 1983, and 1985 showed no detectable thinning of the tank wall.

Tank 13

Tank 13 was placed in service in 1956. Ninety percent of the exterior of the primary vessel wall is observable via the 13 risers that provide access to the annulus. Inspections in 1977 revealed a leaksite 279 inches above the tank bottom. In 1980, another leaksite was discovered 269 inches above the tank bottom. Inspections have shown no significant surface corrosion, and ultrasonic measurements made in 1974, 1979, and 1985 showed no detectable thinning of the tank wall.

Tank 14

Tank 14 was placed in service in 1957. The first indication that tank 14 had leaked was in 1959 when dry leaked waste was observed in the annulus pan. Currently, the annulus pan contains 12 to 13 inches

of dry leaked waste. Eighty-nine percent of the exterior of the primary vessel wall is observable via the 18 risers that provide access to the annulus. Inspections have located 33 leaksites and it is estimated that there are about 50 leaksites in this tank. All of the observed leaksites are near the bottom circumferential weld that is 2.5 feet above the tank bottom, except for one leaksite that was observed approximately 24 feet above the tank bottom. Inspections have shown no significant surface corrosion, and ultrasonic measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 15

Tank 15 was placed in service in 1960. Inspections in 1972 below one of the four risers providing access to the annulus revealed two leaksites near the bottom circumferential weld about 2.5 feet above the tank bottom. Twelve additional risers were installed, increasing the observable portion of the primary vessel wall from 25% to 96%. Inspections in 1973, via the additional risers, revealed eleven other leaksites. Later, inspections revealed three other sites where cracks penetrated the steel wall, one was observed in 1994 and two were observed in 1997.

Inspections have shown mild corrosion of the steel surfaces in the tank annulus. Ultrasonic measurements made in 1972, 1977, 1980, and 1984 showed no detectable thinning of the tank wall.

Tank 16

Tank 16 was placed in service in 1959. Liquid waste was detected in the annulus pan in 1959. Seventy-three percent of the exterior wall of the primary vessel is observable via the sixteen risers that provide access to the annulus. Inspections in 1961 and 1962, through 13 risers, revealed about 175 leaksites in the tank wall. In October 1961 and March 1962, two 5 3/4-inch-diameter samples were cut from the top horizontal circumferential weld of the tank wall about 40 feet apart. Metallurgical examination indicated the cause of the cracks was nitrate-induced stress corrosion. Extensive inspection performed since 1972 indicated that the primary vessel wall has 300 to 350 leaksites. In 1978, 70% of the leaked waste in the annulus pan was removed, leaving an insoluble heel containing approximately 30,000 curies ¹³⁷Cs. Waste removal from the interior of the primary vessel was completed in 1980. Inspections have shown no significant surface corrosion. No ultrasonic steel thickness measurements of the tank were made because of the number of leaksites and the presence of leaked waste deposits on the primary vessel exterior. This tank is presently "out of service".

Program Implementation

Tank 17

Tank 17 was placed in service in 1961. Examinations of the steel liner have shown no evidence of failure, significant surface corrosion, or other anomalies. Tank 17 was removed from service and closed on or about December 15, 1997.

Tank 18

Tank 18 was placed in service in 1959. Examinations of the steel liner have shown no evidence of failure, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1977, 1980, and 1983 showed no detectable thinning of the liner bottom.

Tank 19

Tank 19 was placed in service in 1961 and emptied in 1981. The tank has remained empty except for ballast water. Examinations of the steel liner have revealed two failures; i.e. sites where inleakage had occurred. The failures are in the wall of the steel liner at heights of 317 inches and 330 inches. Inspection records photographically document that these leaksites existed before 1994. However, inspections made from the interior of this single-wall (visual inspection of the exterior is not possible) had to track changes in artifacts at the sites by periodic observation to judge that inleakage had occurred. Ultrasonic measurements made in 1982 and 1985 showed no detectable thinning of the liner bottom.

Tank 20

Tank 20 was placed in service in 1960. Examinations of the steel liner have revealed four failure sites. In 1983, leaksites were observed in the wall of the steel liner at heights of 22, 24.5, and 26.5 feet. In 1990, a leaksite was confirmed in the liner wall at a height of 26.25 feet. This site had been suspect since 1984. This is a single-wall tank with no annulus. The leaksites in the steel liner were detected by inspections made from the tank interior, since inspection of the exterior was not possible. Artifacts observed on the interior wall indicated water had leaked through the steel liner into the tank. It is possible that a small quantity of waste may have leaked from the steel liner. However, groundwater monitoring has given no indication that waste escaped the encasement. Tank 20 was removed from service and closed on or about July 30, 1997.

Tank 21

Tank 21 was placed in service in 1961. Examinations of the steel liner have shown no evidence of failure,

significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1980, and 1983 showed no detectable thinning of the liner bottom.

Tank 22

Tank 22 was placed in service in 1965. Examinations of the steel liner have shown no evidence of failure, significant surface corrosion, or other anomalies. Water was discovered leaking through the concrete roof in 1994. Ultrasonic measurements made in 1974, 1977, 1980, and 1983 showed no detectable thinning of the liner bottom.

Tank 23

Tank 23 was placed in service in 1964. Examinations of the steel liner have revealed corrosion but no evidence of failure. Ultrasonic measurements made in 1973, 1977, 1980, and 1983 showed no detectable thinning of the liner bottom. Examinations of the steel liner have shown rust and tubercles on the surface of the upper portion. This tank served as a receiver tank for inhibited contaminated water from Buildings 244-H, the Receiving Basin for Off-Site Fuels, and 245-H, the Resin Regeneration Facility. The tank was filled to less than 50% capacity to maintain the remaining space for emergency use. This mode of operation exposed only the lower half of the tank to the inhibited contents and exposed the upper half of the tank to a warm humid atmosphere. In 1984, rust and tubercles were cleaned from two small areas, exposing the steel surface. The cleaned liner surface was generally corroded with mild pitting. The pits were broad and shallow. In 1999, cracked or crushed concrete was noted in the tank dome, spanning about fifteen feet immediately above the tank wall.

Tank 24

Tank 24 was placed in service in 1963. Examinations of the steel liner have shown no evidence of failure, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1984 showed no detectable thinning of the liner.

Tank 25

Tank 25 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 26

Tank 26 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 27

Tank 27 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 28

Tank 28 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 29

Tank 29 was placed in service in 1971. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1973 and 1974 showed no detectable thinning of the tank wall.

Tank 30

Tank 30 was placed in service in 1974. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1975 showed no detectable thinning of the tank wall.

Tank 31

Tank 31 was placed in service in 1972. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies.

Tank 32

Tank 32 was placed in service in 1971. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies.

Tank 33

Tank 33 was placed in service in 1969. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies.

Tank 34

Tank 34 was placed in service in 1972. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies.

Tank 35

Tank 35 was placed in service in 1977. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 36

Tank 36 was placed in service in 1977. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 37

Tank 37 was placed in service in 1978. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1977, 1981, and 1985 showed no detectable thinning of the tank wall.

Tank 38

Tank 38 was placed in service in 1981. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 39

Tank 39 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage,

Program Implementation

significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, 1984, and 1985 showed no detectable thinning of the tank wall.

Tank 40

Tank 40 was placed in service in 1986. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, 1984, and 1996 showed no service-induced corrosion.

Tank 41

Tank 41 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 42

Tank 42 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, 1984, 1985, 1990, 1995, and 1996 showed no service-induced corrosion.

Tank 43

Tank 43 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, 1984, and 1985 showed no detectable thinning of the tank wall.

Tank 44

Tank 44 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 45

Tank 45 was placed in service in 1982. Examinations of 100% of the exterior of the primary

vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 46

Tank 46 was placed in service as an emergency spare tank in 1980. It was placed in waste storage service in 1994 when it began receiving concentrate from the 2F evaporator. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no significant surface corrosion or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 47

Tank 47 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 48

Tank 48 was placed in service in 1983. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1982, 1994, 1995, 1996, and 1997 showed no service-induced corrosion.

Tank 49

Tank 49 was placed in service in 1983. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1982, prior to placing the tank in service, and again in 1995 using the P-scan System to provide reference measurements for the future.

Tank 50

Tank 50 was placed in service in 1983. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1982, 1994, and 1995 showed no service-induced corrosion.

Tank 51

Tank 51 was placed in service in 1986. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1982, 1996, and 1997 showed no service-induced corrosion.

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Appendix A—Waste Tanks at SRS

SRS Waste Tank Specifications

Number	Location	Type	Project Number	Construction Period	Type of Construction*
1-8	F	I	8980	1951-1953	Double wall-cooled
9-12	H	I	8980	1951-1953	Double wall-cooled
13-16	H	II	8980 P.W.O.	1955-1956	Double wall-cooled
17-20	F	IV	981031	1958	Single wall-uncooled
21-24	H	IV	981089	1962	Single wall-uncooled
25-28	F	IIIA	951493 (75-1-a)	1975-1978	Double wall-cooled
29-32	H	III	981232	1967-1970	Double wall-cooled
33-34	F	III	950974	1969-1972	Double wall-cooled
35-37	H	IIIA	951463 (74-1-a)	1974-1977	Double wall-cooled
38-43	H	IIIA	951618 (76-8-A)	1976-1980	Double wall-cooled
44-47	F	IIIA	951747	1977-1980	Double wall-cooled
48-51	H	IIIA	951828 (78-18-b)	1978-1981	Double wall-cooled

* Tanks 32 and 35 have removable, roof-supported cooling coils. Tanks 30, 33, and 34 have bottom-supported deployable cooling coils. Tanks 29 and 31 have some deployable and some close-packed cooling assemblies, all bottom-supported. All other cooled tanks have permanently installed cooling coils, roof-supported in Type I and II and bottom-supported in Type III tanks.

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Appendix B—Summary of 1999 Inspections

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	01	East	(A)	02/11/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	01	East	(A)	10/05/99	DP	P990692:01-17	Tank condition had not changed.
F	01	East	(A)	11/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	01	North	(A)	10/12/99	WAP	P990693:01	Tank condition had not changed.
F	01	South	(A)	11/03/99	DP	P990698:01-17	Tank condition had not changed.
F	01	West	(A)	11/03/99	DP	P990699:01-17	Tank condition had not changed.
F	01	West	(A)	11/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	02	East	(A)	05/17/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	02	East	(A)	09/13/99	WAP	P990670:03	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
F	02	North	(A)	06/01/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	02	North	(A)	09/14/99	WAP	P990670:02	Tank condition was normal.
F	02	South	(A)	05/27/99	DP	P990582:01-17	Tank condition was normal.
F	02	South	(A)	06/01/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	02	West	(A)	09/14/99	WAP	P990670:01	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	03	East	(A)	09/13/99	WAP	P990671:03	Tank condition was normal.
F	03	North	(A)	05/27/99	DP	P990583:01-17	Tank condition was normal.
F	03	North	(A)	06/07/99	CCTV	556	The conductivity probe was deployed at the setpoint.

(A) = annulus; BFV = back flush valve; CCTV = closed circuit television; CCWS = chromate cooling water system; COP = clean out port; CTS = concentrate transfer system; CWT = concentrated waste tank; DB = diversion box; DP = direct photography; ERIP = encasement riser inspection port; ETF = effluent treatment facility; EVAP = evaporator; GDL = gravity drain line; HELIUM = helium leak test; HLLCP = high liquid level conductivity probe; (I) = interior; ITPFC = in-tank precipitation filter cell; JB = junction box; LDB = leak detection box; LPPP = low point pump pit; LPS = leak probe sleeve; MLDB = modified leak detection box; PP = pump pit; PSP = periscopic photography; RCP = reinforced concrete pipe; SWS = storm water sewer; UT = ultrasonic test; VB = valve box; VP = video photograph; WAP = wide angle photography; WLE = waste line encasement

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	03	South	(A)	06/07/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	03	South	(A)	09/13/99	WAP	P990671:01	Tank condition was normal.
F	03	West	(A)	06/07/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	03	West	(A)	09/13/99	WAP	P990671:02	Tank condition was normal.
F	04	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	04	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	04	East	(A)	06/01/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	04	East	(A)	09/14/99	WAP	P990672:03	Tank condition was normal.
F	04	North	(A)	06/01/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	04	North	(A)	09/14/99	WAP	P990672:02	Tank condition was normal.
F	04	South	(A)	06/01/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	04	South	(A)	09/14/99	WAP	P990672:01	Tank condition was normal.
F	04	West	(A)	05/27/99	DP	P990584:01-17	Tank condition was normal.
F	05	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	05	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	05	East	(A)	09/13/99	WAP	P990673:03	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked in the annulus.
F	05	North	(A)	06/07/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	05	North	(A)	09/13/99	WAP	P990673:02	Tank condition was normal.
F	05	South	(A)	05/27/99	DP	P990585:01-17	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
F	05	South	(A)	06/07/99	CCTV	556	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	05	West	(A)	06/08/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	05	West	(A)	09/13/99	WAP	P990673:01	Tank condition was normal. An increase of stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	05	Center	(I)	06/19/99	CCTV	590	Monitored and documented steel taping performed via riser 6 and the center riser to observe for dusting and determine uniformity of sludge level. No dusting was observed.
F	06	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	06	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	06	East	(A)	06/08/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	06	East	(A)	09/13/99	WAP	P990674:03	Tank condition was normal.
F	06	North	(A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	06	North	(A)	09/13/99	WAP	P990674:02	Tank condition was normal.
F	06	South	(A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	06	South	(A)	09/13/99	WAP	P990674:01	Tank condition was normal.
F	06	West	(A)	05/27/99	DP	P990586:01-17	Tank condition was normal.
F	07	LDB-01		01/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	07	LDB-02		01/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	07	LDB-A		05/26/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	07	LDB-B		05/26/99	CCTV	554	The conductivity probe was not observed.
F	07	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	07	VB		07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	07	VB-1	09/09/99	CCTV	559	Inspection of the drain line revealed that the drain line was free of obstructions; however, approximately two to three inches of mud had accumulated at the weir.
F	07	VB-2	09/02/99	CCTV	559	Inspection of the drain line revealed that the drain line was free of obstructions; however, approximately two to three inches of mud had accumulated at the weir.
F	07	VB-3	09/02/99	CCTV	559	Inspection of the drain line revealed that the drain line was free of obstructions; however, approximately two to three inches of mud had accumulated at the weir.
F	07	VB-4	09/09/99	CCTV	559	Inspection of the drain line revealed that the drain line was free of obstructions; however, approximately two to three inches of mud had accumulated at the weir.
F	07	VB-5	09/09/99	CCTV	559	Inspection of the drain line revealed that the drain line was free of obstructions; however, approximately two to three inches of mud had accumulated at the weir.
F	07	North (A)	05/27/99	DP	P990587:01-17	Tank condition was normal.
F	07	North (A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	07	South (A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	07	South (A)	09/13/99	WAP	P990675:01	Tank condition was normal.
F	07	West (A)	06/08/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	07	West (A)	09/13/99	WAP	P990675:02	Tank condition was normal.
F	07	01 (I)	07/21/99	CCTV	601	Documented riser equipment
F	07	07 (I)	07/21/99	CCTV	601	Documented riser equipment
F	07	Center (I)	07/21/99	CCTV	601	Documented riser equipment
F	07	Center (I)	11/04/99	CCTV	602	Documented tank contents. No unusual conditions were observed.
F	08	Flush Box	08/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	08	Flush Box	11/05/99	CCTV	554	Determined the length of the conductivity probe standpipes for proper installation of the conductivity probes.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	08	Spray Chamber	08/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	08	VB	07/28/99	CCTV	559	The conductivity probe was deployed at the setpoint.
F	08	East (A)	06/08/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	08	East (A)	09/13/99	WAP	P990676:03	Tank condition was normal.
F	08	East (A)	09/15/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	08	North (A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	08	North (A)	09/13/99	WAP	P990676:02	Tank condition was normal. A masselin cloth was observed on top of the annulus steel pan near the annulus jet.
F	08	South (A)	05/27/99	DP	P990588:01-17	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	08	South (A)	06/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	08	West (A)	09/13/99	WAP	P990676:01	Tank condition was normal.
F	08	01 (I)	02/11/99	CCTV	549	Provided video support for mechanical removal of a metal bar attached to a cooling coil. The inspection verified removal of the bar cleared the space beneath the riser for pump installation.
F	08	01 (I)	02/16/99	CCTV	549	Provided video support for the mechanical remote removal of a metal plate approximately 2" X 2" attached to the bottom of the riser sleeve. Inspection verified removal of the plate gave adequate clearance for pump installation.
F	08	01 (I)	02/18/99	CCTV		Provided video support for guiding mechanical shaping of riser and verified the riser dimensions were adequate to permit installation of a pump.
F	08	02 (I)	10/02/99	CCTV	615	Observed for obstructions beneath slurry pump #1 as it was raised. No obstructions were observed, and the discharge was clean and free of pluggage.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	08	02	(I)	10/07/99	CCTV	624	Determined that there was no obstruction that could have prevented rotation of pump #3. However, the pump was impacted into the sludge.
F	08	02	(I)	12/15/99	CCTV	624	Determined the direction of discharge from the slurry pump in Riser 1.
F	08	02	(I)	12/15/99	CCTV	624	Determined the direction of discharge from the slurry pump in Riser 3.
F	08	03	(I)	02/03/99	CCTV	549	Provided video support for the mechanical removal of obstructions and determining the riser dimension was adequate to permit installation of a pump.
F	08	04	(I)	05/03/99	CCTV	580	Provided video support for the flushing of the transfer jet. During the flushing of the discharge side, material which appeared to be sludge was washed down to the intake screen.
F	08	04	(I)	05/11/99	CCTV	582	Monitored and documented water flow through the jet.
F	08	04	(I)	06/02/99	CCTV	580	Inspection revealed no obstructions that would interfere with the installation of a cradle in the center riser.
F	08	04	(I)	09/08/99	CCTV	615	Inspection of reel tape revealed the reel tape probe was not centered in the standpipe allowing the probe to get caught on the outer edge of the riser liner during cycling. Reel tape was repositioned for proper function.
F	08	04	(I)	10/07/99	CCTV	624	Determined that there was no obstruction that could have prevented rotation of pump #3. However, the pump was impacted into the sludge.
F	08	06	(I)	05/18/99	CCTV	549	Monitored flushing of the transfer jet.
F	08	06	(I)	06/24/99	CCTV	594	Determined and documented that no obstruction existed beneath riser 6. Documented the installation of a slurry pump.
F	08	08	(I)	01/14/99	CCTV	549	Assisted with guiding mechanical shaping of riser and verified the riser dimensions were adequate to permit installation of a pump.
F	08	08	(I)	01/19/99	CCTV	549	Assisted with guiding mechanical shaping of riser and verified the riser dimensions were adequate to permit installation of a pump.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	08	08	(I)	01/21/99	CCTV	549	Assisted with guiding mechanical shaping of riser and verified the riser dimensions were adequate to permit installation of a pump.
H	09	South	(A)	05/05/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	09	South	(A)	09/23/99	DP	P990678:01-17	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	09	West	(A)	04/28/99	CCTV	NA	Assisted in moving the conductivity probe out of the waste to clear the alarm.
H	09	West	(A)	06/23/99	CCTV	556	The conductivity probe and magnetically mounted thermocouple were deployed at the setpoint.
H	09	West	(A)	09/02/99	WAP	P990665:01	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	10	MLDB-07		01/22/99	CCTV	554	Documented positioning the conductivity probe on the MLDB floor.
H	10	MLDB-07		08/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	10	East	(A)	07/01/99	CCTV	556	Assisted with positioning a new conductivity probe in the annulus at the setpoint.
H	10	East	(A)	07/20/99	CCTV	NA	Assisted with positioning the magnetically mounted thermocouple. The thermocouple could not be positioned due to tangled wires.
H	10	East	(A)	07/22/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	10	East	(A)	08/24/99	CCTV	NA	Assisted with positioning a new magnetically mounted thermocouple at the setpoint.
H	10	East	(A)	09/23/99	DP	P990679:01-17	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	10	North	(A)	06/17/99	CCTV	556	Assisted with positioning a new conductivity probe in the annulus at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	10	North	(A)	06/17/99	DP	P990629:01-17	Tank condition had not changed. The leaked waste on the annulus floor had been reconfigured by rainwater which had leaked into the annulus.
H	10	West	(A)	09/01/99	WAP	P990666:01	Tank condition had not changed.
H	11	East	(A)	04/06/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or innocuous deposits formed by inleakage and dripping from above.
H	11	East	(A)	05/17/99	CCTV	571	Documented areas of potential surface corrosion observed on the ventilation duct and annulus floor pan.
H	11	East	(A)	09/01/99	WAP	P990667:02	Tank condition had not changed. An increase in stains on the annulus floor was caused by condensate falling from the annulus cover plates.
H	11	North	(A)	03/16/99	CCTV	556	Assisted in deployment of the conductivity probe. The probe was placed in a holder to position it 1.5 inches above the pan floor. The holder was placed on the floor between the ventilation duct and the tank primary vessel wall.
H	11	North	(A)	03/17/99	CCTV	571	Documented deposits on the surface of the secondary containment pan which indicate the possibility of corrosion through the pan wall.
H	11	North	(A)	04/05/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or innocuous deposits formed by inleakage and dripping from above.
H	11	North	(A)	05/19/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or are innocuous deposits formed by inleakage and dripping from above.
H	11	North	(A)	09/01/99	WAP	P990667:01	Tank condition had not changed.
H	11	South	(A)	03/17/99	CCTV	556	Assisted in deployment of the conductivity probe. The probe was placed in a holder to position it 1.5 inches above the pan floor. The holder was placed on the floor between the ventilation duct and the tank primary vessel wall.

AREA	TANK OR ANCILLARY	<u>ACCESS OPENING</u> (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	11	South	(A)	03/17/99	CCTV	571	Documented deposits on the surface of the secondary containment pan which indicate the possibility of corrosion through the pan wall.
H	11	South	(A)	04/06/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or are innocuous deposits formed by inleakage and dripping from above.
H	11	South	(A)	05/19/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or are innocuous deposits formed by inleakage and dripping from above. White deposits were observed on the concrete curb which forms a retaining ring to contain the sand pad beneath the tank. The white material may be dry leaked waste or calciferous deposits. Sampling of the deposits will be necessary to determine composition.
H	11	South	(A)	05/25/99	DP	P990589:01-17	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. Evidence of mild surface corrosion on the annulus floor was observed.
H	11	South	(A)	09/03/99	CCTV	613	Inspected the annulus pan floor prior to cleaning and supported the cleaning activities.
H	11	South	(A)	09/07/99	CCTV	613	Inspected the annulus floor after cleaning was performed on 09/03/99. The area cleaned showed surface corrosion. No deep pitting or indication of throughwall penetration was found.
H	11	South	(A)	10/21/99	CCTV	613	Observed and evaluated cleaning a small area of the annulus pan floor. After cleaning, observation indicated no through wall penetration. Small areas where the paint had flaked away showed shallow corrosion of the steel surface.
H	11	West	(A)	04/05/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or innocuous deposits formed by inleakage and dripping from above.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	11	West	(A)	05/17/99	CCTV	571	Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or innocuous deposits formed by inleakage and dripping from above.
H	11	West	(A)	05/17/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	11	West	(A)	05/25/99	DP	P990590:01-18	Tank condition was normal. Stains and marks on the primary vessel wall have increased since inspected on 3/19/97. Examination and documentation was performed of the pan surfaces where nodules were found. The nodules were potential indications of pan steel corrosion or innocuous deposits formed by inleakage and dripping from above.
H	11	06	(I)	03/10/99	CCTV	568	Inspection of jet in riser 07 determined the elevation of the suction leg was below the liquid. The couplings were observed at the liquid level.
H	12	East	(A)	05/27/99	DP	P990591:01-17	Tank condition had not changed.
H	12	East	(A)	05/27/99	DP	P990591:15	The conductivity probe was deployed at the setpoint.
H	12	North	(A)	09/02/99	WAP	P990668:01	Tank condition had not changed.
H	12	North	(A)	11/02/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	12	South	(A)	05/27/99	DP	P990592:01-17	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	12	South	(A)	11/02/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	12	West	(A)	09/02/99	WAP	P990668:02	Tank condition had not changed.
H	12	Center	(I)	06/08/99	CCTV	588	Monitored and documented steel taping performed via riser 6 and the center riser and to observe for dusting and determine uniformity of sludge level. No dusting was observed.
H	13	LDB-02		01/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	13	010	(A)	03/11/99	WAP	P990546:02	Tank condition had not changed.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	13	013	(A)	03/11/99	CCTV	556	The probe in the south riser was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
H	13	032	(A)	03/11/99	WAP	P990546:03	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	055	(A)	03/11/99	WAP	P990546:04	Tank condition had not changed.
H	13	071	(A)	03/11/99	WAP	P990546:05	Tank condition had not changed.
H	13	107	(A)	09/24/99	WAP	P990685:02	Tank condition had not changed.
H	13	151	(A)	03/11/99	WAP	P990546:06	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	175	(A)	02/16/99	DP	P990524:01-17	Tank condition had not changed.
H	13	207	(A)	02/16/99	DP	P990525:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	228	(A)	03/11/99	WAP	P990546:07	Tank condition had not changed. Stains, marks and deposits on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	East	(A)	02/16/99	DP	P990522:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	North	(A)	03/11/99	WAP	P990546:01	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	13	North	(A)	10/19/99	CCTV	556	The conductivity probe and the magnetically mounted thermocouple were deployed at the setpoint.
H	13	North	(A)	11/13/99	CCTV	556	The conductivity probe and the magnetically mounted thermocouple were deployed at the setpoint.
H	13	South	(A)	09/24/99	WAP	P990685:01	Tank condition had not changed. Stains and marks on the primary vessel wall indicated that water continued to leak into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	13	South	(A)	10/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	13	West	(A)	02/16/99	DP	P990523:01-17	Tank condition had not changed.
H	14	013	(A)	02/16/99	DP	P990515:01-16	Tank condition had not changed. Stains, marks and calciferous deposits on the primary vessel wall were caused by water which had leaked into the annulus. A nodule of leaked waste at a crack site adjacent to the bottom girth weld had fallen off of the primary vessel wall. The surface of leaked waste in the annulus had been reconfigured by water which had leaked into the annulus.
H	14	032	(A)	09/24/99	WAP	P990686:01	Tank condition had not changed. Stains and marks on the primary vessel wall have increased since inspected on 3/10/97 indicating water continued to leak into the annulus.
H	14	065	(A)	09/24/99	WAP	P990686:02	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	14	108	(A)	09/24/99	WAP	P990686:03	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	14	118	(A)	02/16/99	DP	P990516:01-15	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. Small areas of mild surface corrosion were observed on the primary vessel wall above the bottom girth weld. The surface of the leaked waste in the annulus had been reconfigured by rainwater which had leaked into the annulus.
H	14	125	(A)	09/24/99	WAP	P990686:04	Tank condition had not changed. Water had leaked into the annulus and reconfigured the surface of the leaked waste in the annulus pan.
H	14	151	(A)	02/16/99	DP	P990517:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. Small areas of mild surface corrosion were observed on the primary vessel wall. The surface of leaked waste in the annulus had been reconfigured by water which had leaked into the annulus. A small nodule of leaked waste had fallen off of the primary vessel wall.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>	
H	14	170	(A)	02/16/99	DP	P990518:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. The surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus.
H	14	207	(A)	02/16/99	DP	P990519:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. The surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus. Calciferous deposits on the primary vessel wall had been washed away by water which had leaked into the annulus and cascaded down the wall.
H	14	235	(A)	02/16/99	DP	P990520:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. The surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus.
H	14	259	(A)	02/16/99	DP	P990521:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. The surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus. A nodule of leaked waste has fallen off of the tank wall and two leak sites showed evidence of additional seepage from the tank since inspected on 03/10/97.
H	14	East	(A)	02/16/99	DP	P990514:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus and the surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus.
H	14	East	(A)	04/26/99	CCTV	556	The probe was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
H	14	North	(A)	02/16/99	DP	P990513:01-16	Tank condition had not changed. The surface of the leaked waste in the annulus had been reconfigured by water which had leaked into the annulus.

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H	14	North	(A)	04/26/99	CCTV	556	Inspection verified that the conductivity probe was approximately 1-2 inches above the leaked waste, hanging vertically with the bottom extending below the top of the ventilation duct. The magnetically mounted thermocouple was deployed at the setpoint.
H	15	010	(A)	09/23/99	DP	P990681:01-17	Tank condition had not changed.
H	15	010	(A)	10/21/99	CCTV	556	The probe in the south riser was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
H	15	032	(A)	03/29/99	WAP	P990547:07	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
H	15	055	(A)	03/29/99	WAP	P990547:06	Tank condition had not changed. A white deposit has seeped through and highlighted the crack since inspected on 03/20/97.
H	15	071	(A)	03/29/99	WAP	P990547:05	Tank condition had not changed.
H	15	107	(A)	09/23/99	DP	P990680:01-17	Tank condition had not changed. Stains and deposits on the primary vessel wall appeared to be calciferous material deposited by water leaking into the annulus.
H	15	107	(A)	10/25/99	CCTV	556	The probe in IP-117 was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
H	15	137	(A)	09/23/99	DP	P990683:01-17	Tank condition had not changed.
H	15	171	(A)	09/23/99	DP	P990682:01-16	Tank condition had not changed.
H	15	182	(A)	09/23/99	DP	P990684:01-17	Tank condition had not changed.
H	15	207	(A)	07/15/99	CCTV	598	Inspection revealed the white deposits observed on the primary vessel wall and annulus floor on 3/29/99 were calciferous deposits formed by rainwater inleakage leaching the concrete tank top.
H	15	207	(A)	09/24/99	WAP	P990687:01	Tank condition had not changed.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	15	223	(A)	03/29/99	WAP	P990547:01	Tank condition had not changed. Stains, marks, and deposits on the primary vessel wall and annulus floor were observed. Further investigation performed on 07/15/99 revealed that calciferous deposits had increased since 03/20/97.
H	15	242	(A)	11/03/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	15	East	(A)	03/29/99	WAP	P990547:02	Tank condition had not changed.
H	15	North	(A)	03/29/99	WAP	P990547:03	Tank condition had not changed. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
H	15	South	(A)	12/02/99	DP	P990702:01-17	Tank condition had not changed. Deposits were observed on the annulus floor.
H	15	West	(A)	03/29/99	WAP	P990547:04	Tank condition had not changed.
H	15	01	(I)	06/14/99	CCTV	590	CCTV was used to record steel taping and to observe for dusting and determine uniformity of sludge level. No dusting was observed. No free standing liquid was observed in the tank. Abandoned steel tapes were observed below riser 01.
H	16	VB		08/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	16	035	(A)	10/26/99	DP	P990694:01-16	Tank condition had not changed. Stains observed on the primary vessel wall, secondary vessel wall and the annulus floor have been altered by condensate formed on these steel surfaces. A piece of plastic sleeving was observed on top of the ventilation duct.
H	16	118	(A)	10/26/99	DP	P990695:01-16	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus. The appearance of stains observed on the primary vessel wall, secondary vessel wall and the annulus floor have been altered by condensate formed on these steel surfaces.
H	16	207	(A)	10/26/99	DP	P990696:01-16	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus. The appearance of stains observed on the primary vessel wall, secondary vessel wall and the annulus floor have been altered by condensate formed on these steel surfaces.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	16	262	(A)	10/26/99	DP	P990697:01-17	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water which had leaked onto the annulus. The appearance of stains observed on the primary vessel wall, secondary vessel wall and the annulus floor have been altered by condensate formed on these steel surfaces.
H	16	East	(A)	11/04/99	WAP	P990700:01	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. Water had leaked into the annulus and reconfigured the leaked waste in the annulus pan.
H	16	West	(A)	11/04/99	WAP	P990700:02	Tank condition had not changed. Water had leaked into the annulus and reconfigured the leaked waste in the annulus pan.
F	18	MLDB-10		01/12/99	CCTV	554	Assisted in determining the position of the conductivity probe. The probe was not visible due to debris in the MLDB.
F	18	MLDB-12		01/12/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	18	Center	(I)	07/14/99	CCTV	593	Documented overall condition of tank interior. No anomalies were observed.
F	18	Center	(I)	11/18/99	CCTV	637	Tank steel wall and concrete dome condition was normal. However, stains and marks on the dome indicated water continued to leak into the tank via the risers.
F	19	Center	(I)	11/11/99	CCTV	636	Tank steel wall condition had not changed and the concrete dome was normal.
H	21	MLDB-01		05/09/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	21	MLDB-01		05/13/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	21	VB		05/10/99	CCTV	555	Verified the position of valves WTS-V-359 and 360 in the closed position.
H	21	VB		06/06/99	CCTV	559	Viewed leak check of valves WTS-V-359 and 360. The valves were leak free.
H	21	NE	(I)	08/25/99	CCTV	616	Inspected overall condition of the tank wall and concrete dome. A few small surface voids were observed in the concrete dome. Water marks and stains were observed on the concrete dome.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	21	NE	(I)	08/31/99	CCTV	617	Inspected overall condition of the tank wall and concrete dome. A few small surface voids were observed in the concrete dome. Water marks and stains were observed on the concrete dome.
H	21	NE	(I)	12/01/99	CCTV	629	Tank steel wall and concrete dome condition were normal. Some calciferous deposits, which indicate that water has been leaking through the concrete dome for an extended period of time, were observed.
H	22	MLDB-01		09/14/99	CCTV		The conductivity probe was deployed at the setpoint.
H	22	MLDB-02		02/25/99	CCTV	554	The conductivity probe was deployed at the setpoint. However, mud was observed on the bottom of the MLDB.
H	22	MLDB-02		02/26/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	22	MLDB-02		03/04/99	CCTV	554	Inspection was made to determine the reason the probe was in the alarm mode. The probe was properly positioned. However, the bottom of the MLDB was covered with a moist residue.
H	22	MLDB-02		04/14/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	22	VB		02/18/99	HELIUM	HE-99-001	Helium tracer test of the transfer line from the Tank 22 valve box to Tank 22 identified a leak site location for excavation and repair.
H	22	VB		02/22/99	HELIUM	HE-99-002	Helium tracer test of the transfer line from the Tank 22 valve box to Tank 22 validated the results of the test performed on 02/18/99.
H	22	NE	(I)	08/25/99	CCTV	616	Inspected overall condition of the tank wall and concrete dome. Water marks and stains were observed on the concrete dome.
H	22	NW	(I)	08/25/99	CCTV	616	Inspected overall condition of the tank wall and concrete dome. Water marks and stains were observed on the concrete dome.
H	22	NW	(I)	08/30/99	CCTV	617	Inspected overall condition of the tank wall and concrete dome. Water marks and stains were observed on the concrete dome.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	22	NW	(I)	11/30/99	CCTV	629	Tank condition was normal. Inspection revealed artifacts and calciferous deposits on the dome which indicate long-term water leakage at three locations.
H	23	SW	(I)	06/24/99	CCTV	593	Tank steel wall condition was normal. Inspection of the concrete dome revealed a few small surface voids, water marks and stains, and an anomaly at the interface of the concrete dome and tank wall that require additional investigation.
H	23	SW	(I)	08/18/99	CCTV	608	A followup inspection to define the anomaly found on 6/24/99 revealed some crushing of the dome at the tank wall and dome interface. The crushed concrete spanned approximately fifteen feet at the base of the dome. Water intrusion was also observed on the concrete dome.
H	24	North		10/12/99	CCTV	559	Documented conditions of the riser and equipment configuration. Inspection revealed no evidence of waste leakage in the riser. The conductivity probe was not visible. An open drain path through the jet shielding plate to the tank was observed.
H	24	North		12/14/99	CCTV	NA	Determined the length of the conductivity probe standpipe in the riser to establish distance to setpoint for the conductivity probe installation.
H	24	NW	(I)	11/04/99	CCTV	629	Tank steel wall and concrete dome condition was normal.
F	25	LDB-02		02/22/99	CCTV	554	The conductivity probe was deployed at setpoint.
F	25	LDB-03		02/23/99	CCTV		Inspection revealed debris beneath the standpipe, which prevented the conductivity probe from being properly positioned.
F	25	LDB-03		05/24/99	CCTV	554	The conductivity probe was not observed. Debris and mud was observed on the floor beneath the standpipe.
F	25	LDB-03		06/02/99	CCTV	554	Inspection was used to evaluate the effectiveness of flushing. The LDB drained freely and the conductivity probe was deployed at the setpoint.
F	25	LDB-03		06/08/99	CCTV	554	Assisted with the positioning of a new conductivity probe at the setpoint.
F	25	A-01	(A)	01/29/99	WAP	P990494:01	Tank condition was normal.
F	25	A-02	(A)	01/29/99	WAP	P990494:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	25	A-02	(A)	03/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	25	A-03	(A)	01/29/99	WAP	P990494:03	Tank condition was normal.
F	25	A-03	(A)	03/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	25	A-04	(A)	03/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	25	A-04	(A)	06/29/99	WAP	P990633:01	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	25	P-01	(A)	01/29/99	WAP	P990494:04	Tank condition was normal.
F	25	P-02	(A)	01/29/99	WAP	P990494:05	Tank condition was normal.
F	25	P-03	(A)	01/29/99	DP	P990490:01-25	Tank condition was normal.
F	25	P-04	(A)	01/29/99	DP	P990491:01-25	Tank condition was normal.
F	25	P-05	(A)	01/29/99	WAP	P990494:06	Tank condition was normal. An unidentified item was observed on the floor.
F	25	P-05	(A)	02/23/99	CCTV	NA	Inspection revealed that the item observed on 01/29/99 WAP was a radiological tag.
F	25	P-06	(A)	01/29/99	WAP	P990494:07	Tank condition was normal.
F	25	P-07	(A)	01/29/99	WAP	P990494:08	Tank condition was normal.
F	25	P-08	(A)	01/29/99	WAP	P990494:09	Tank condition was normal.
F	25	P-09	(A)	01/29/99	WAP	P990494:10	Tank condition was normal. Stains and marks on top of the ventilation duct were caused by water which had leaked into the annulus.
F	25	P-10	(A)	01/29/99	WAP	P990494:11	Tank condition was normal.
F	25	P-11	(A)	01/29/99	DP	P990492:01-25	Tank condition was normal.
F	25	P-12	(A)	01/29/99	DP	P990493:01-25	Tank condition was normal.
F	25	P-13	(A)	01/29/99	WAP	P990494:12	Tank condition was normal.
F	25	P-14	(A)	01/29/99	WAP	P990494:13	Tank condition was normal.
F	26	LDB-02		02/27/99	CCTV	554	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	METHOD	FILE I.D. #	REMARKS
F	26	LDB-04	03/05/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	26	LDB-05	02/27/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	26	LDB-07	03/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	26	LDB-08	02/27/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	26	LDB-10	05/26/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	26	A-01 (A)	04/20/99	DP	P990650:01-24	Tank condition was normal.
F	26	A-02 (A)	04/20/99	DP	P990563:01-24	Tank condition was normal.
F	26	A-02 (A)	04/20/99	DP	P990563:21	The conductivity probe was deployed at the setpoint.
F	26	A-03 (A)	04/20/99	DP	P990564:01-25	Tank condition was normal.
F	26	A-03 (A)	04/20/99	DP	P990564:21	The conductivity probe was deployed at the setpoint.
F	26	A-04 (A)	04/20/99	DP	P990565:01-25	Tank condition was normal.
F	26	A-04 (A)	04/20/99	DP	P990565:21	The conductivity probe was deployed at the setpoint.
F	26	P-01 (A)	01/29/99	WAP	P990495:01	Tank condition was normal.
F	26	P-02 (A)	01/29/99	WAP	P990495:02	Tank condition was normal.
F	26	P-03 (A)	01/29/99	WAP	P990495:03	Tank condition was normal.
F	26	P-04 (A)	01/29/99	WAP	P990495:04	Tank condition was normal.
F	26	P-05 (A)	01/29/99	WAP	P990495:05	Tank condition was normal.
F	26	P-06 (A)	01/29/99	WAP	P990495:06	Tank condition was normal.
F	26	P-07 (A)	01/29/99	WAP	P990495:07	Tank condition was normal.
F	26	P-08 (A)	01/29/99	WAP	P990495:08	Tank condition was normal.
F	26	P-09 (A)	01/29/99	WAP	P990495:09	Tank condition was normal.
F	26	P-10 (A)	01/29/99	WAP	P990495:10	Tank condition was normal.
F	26	P-11 (A)	01/29/99	WAP	P990495:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	26	P-12	(A)	01/29/99	WAP	P990495:12	Tank condition was normal.
F	26	P-13	(A)	01/29/99	WAP	P990495:13	Tank condition was normal.
F	26	P-14	(A)	01/29/99	WAP	P990495:14	Tank condition was normal.
F	26	H	(I)	02/27/99	CCTV	562	Inspection revealed some foam or froth and a small amount of organic material floating on the liquid.
F	27	LDB-01		02/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	27	LDB-04		01/22/99	CCTV	554	The conductivity probe was deployed at the setpoint. There was a considerable amount of residue on the floor of the LDB.
F	27	LDB-05		02/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	27	A-01	(A)	01/29/99	WAP	P990485:01	Tank condition was normal.
F	27	A-02	(A)	01/29/99	WAP	P990485:02	Tank condition was normal.
F	27	A-02	(A)	08/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	27	A-03	(A)	06/29/99	WAP	P990634:01	Tank condition was normal.
F	27	A-03	(A)	08/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	27	A-04	(A)	01/29/99	WAP	P990485:03	Tank condition was normal.
F	27	A-04	(A)	08/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	27	P-01	(A)	01/29/99	WAP	P990485:04	Tank condition was normal.
F	27	P-02	(A)	01/29/99	WAP	P990485:05	Tank condition was normal.
F	27	P-03	(A)	01/29/99	DP	P990486:01-25	Tank condition was normal.
F	27	P-04	(A)	01/29/99	DP	P990487:01-25	Tank condition was normal.
F	27	P-05	(A)	01/29/99	WAP	P990485:06	Tank condition was normal.
F	27	P-06	(A)	01/29/99	WAP	P990485:07	Tank condition was normal.
F	27	P-07	(A)	01/29/99	WAP	P990485:08	Tank condition was normal.
F	27	P-08	(A)	01/29/99	WAP	P990485:09	Tank condition was normal.
F	27	P-09	(A)	01/29/99	WAP	P990485:10	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	27	P-10	(A)	01/29/99	DP	P990488:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	27	P-11	(A)	01/29/99	DP	P990489:01-25	Tank condition was normal.
F	27	P-12	(A)	01/29/99	WAP	P990485:11	Tank condition was normal.
F	27	P-13	(A)	01/29/99	WAP	P990485:12	Tank condition was normal.
F	27	P-14	(A)	01/29/99	WAP	P990485:13	Tank condition was normal.
F	28	LDB-01		06/08/99	CCTV	NA	Inspection was used to determine that the LDB was successfully flushed.
F	28	LDB-01		06/10/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	28	LDB-03		04/21/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	28	LDB-04		06/08/99	CCTV	NA	Inspection was used to determine that the LDB was successfully flushed.
F	28	LDB-04		06/10/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	28	VB 1		01/20/99	CCTV	554	Verified that the conductivity probe was positioned on the bottom of the VB.
F	28	VB 2		01/20/99	CCTV	554	Verified that the conductivity probe was positioned on the bottom of the VB.
F	28	A-01	(A)	04/20/99	DP	P990566:01-26	Tank condition was normal.
F	28	A-02	(A)	04/20/99	DP	P990569:01-25	Tank condition was normal.
F	28	A-02	(A)	08/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	28	A-03	(A)	04/20/99	DP	P9980567:01-25	Tank condition was normal.
F	28	A-03	(A)	08/16/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	28	A-04	(A)	04/20/99	DP	P990568:01-25	Tank condition was normal.
F	28	A-04	(A)	04/20/99	DP	P990568:21	The conductivity probe was deployed at the setpoint.
F	28	P-01	(A)	01/29/99	WAP	P990496:01	Tank condition was normal.
F	28	P-02	(A)	01/29/99	WAP	P990496:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	28	P-03	(A)	01/29/99	WAP	P990496:03	Tank condition was normal.
F	28	P-04	(A)	01/29/99	WAP	P990496:04	Tank condition was normal.
F	28	P-05	(A)	01/29/99	WAP	P990496:05	Tank condition was normal.
F	28	P-06	(A)	01/29/99	WAP	P990496:06	Tank condition was normal.
F	28	P-07	(A)	01/29/99	WAP	P990496:07	Tank condition was normal.
F	28	P-08	(A)	01/29/99	WAP	P990496:08	Tank condition was normal.
F	28	P-09	(A)	01/29/99	WAP	P990496:09	Tank condition was normal.
F	28	P-10	(A)	01/29/99	WAP	P990496:10	Tank condition was normal.
F	28	P-11	(A)	01/29/99	WAP	P990496:11	Tank condition was normal.
F	28	P-12	(A)	01/29/99	WAP	P990496:12	Tank condition was normal.
F	28	P-13	(A)	01/29/99	WAP	P990496:13	Tank condition was normal.
F	28	P-14	(A)	01/29/99	WAP	P990496:14	Tank condition was normal.
H	29	LE-10229		12/15/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	29	LE-10230		12/15/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	29	LPS		09/17/99	CCTV	554	Determined the length of the leak probe sleeve on the tank side-lift steam for proper setpoint of the conductivity probe.
H	29	A-01	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	29	A-01	(A)	06/03/99	DP	P990617:01-25	Tank condition was normal. Stains on the annulus floor were caused by water which had leaked into the annulus where a supernate inlet transfer line penetrates the annulus.
H	29	A-02	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	29	A-02	(A)	08/30/99	DP	P990663:01-25	Tank condition was normal.
H	29	A-03	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	29	A-03	(A)	06/03/99	DP	P990618:01-25	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	29	A-04	(A)	04/19/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	29	A-04	(A)	06/03/99	DP	P990619:01-25	Tank condition was normal.
H	29	P-01	(A)	05/11/99	WAP	P990573:01	Tank condition was normal.
H	29	P-02	(A)	05/11/99	WAP	P990573:02	Tank condition was normal.
H	29	P-03	(A)	05/11/99	WAP	P990573:03	Tank condition was normal.
H	29	P-04	(A)	05/11/99	WAP	P990573:04	Tank condition was normal.
H	29	P-05	(A)	05/11/99	WAP	P990573:05	Tank condition was normal.
H	29	P-06	(A)	05/11/99	WAP	P990573:06	Tank condition was normal.
H	29	P-07	(A)	05/11/99	WAP	P990573:07	Tank condition was normal.
H	29	P-08	(A)	05/11/99	WAP	P990573:08	Tank condition was normal.
H	29	P-09	(A)	05/11/99	WAP	P990573:09	Tank condition was normal.
H	29	P-10	(A)	05/11/99	WAP	P990573:10	Tank condition was normal.
H	29	P-11	(A)	05/11/99	WAP	P990573:11	Tank condition was normal.
H	29	P-12	(A)	05/11/99	WAP	P990573:12	Tank condition was normal.
H	29	P-13	(A)	05/11/99	WAP	P990573:13	Tank condition was normal.
H	29	P-14	(A)	05/11/99	WAP	P990573:14	Tank condition was normal.
H	29	C-02	(I)	01/28/99	CCTV	564	Facilitated the removal of the loop line spool piece installed in the riser and the installation of a backflush valve. Verified that the BFV and nozzle were properly aligned.
H	30	LPS		09/18/99	CCTV	554	Determined the length of the leak probe sleeve on the tank side-North for proper setpoint of the conductivity probe.
H	30	A-01	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	30	A-01	(A)	06/02/99	DP	P990620:01-25	Tank condition was normal.
H	30	A-02	(A)	04/15/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	30	A-02	(A)	06/01/99	DP	P990621:01-26	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	30	A-03	(A)	04/15/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	30	A-03	(A)	06/01/99	DP	P990622:01-25	Tank condition was normal.
H	30	A-04	(A)	04/19/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	30	A-04	(A)	06/02/99	DP	P990623:01-25	Tank condition was normal.
H	30	P-01	(A)	05/11/99	WAP	P990579:01	Tank condition was normal.
H	30	P-02	(A)	05/11/99	WAP	P990579:02	Tank condition was normal.
H	30	P-03	(A)	05/11/99	WAP	P990579:03	Tank condition was normal.
H	30	P-04	(A)	05/11/99	WAP	P990579:04	Tank condition was normal.
H	30	P-05	(A)	05/11/99	WAP	P990579:05	Tank condition was normal.
H	30	P-06	(A)	03/25/99	WAP	P990551:01	Tank condition was normal.
H	30	P-07	(A)	03/25/99	WAP	P990551:02	Tank condition was normal.
H	30	P-08	(A)	03/25/99	WAP	P990551:03	Tank condition was normal.
H	30	P-09	(A)	03/25/99	WAP	P990551:04	Tank condition was normal.
H	30	P-10	(A)	03/25/99	WAP	P990551:05	Tank condition was normal.
H	30	P-11	(A)	03/25/99	WAP	P990551:06	Tank condition was normal.
H	30	P-12	(A)	03/25/99	WAP	P990551:07	Tank condition was normal.
H	30	P-13	(A)	03/25/99	WAP	P990551:08	Tank condition was normal. A masselin cloth was observed on the annulus floor.
H	30	P-14	(A)	03/25/99	WAP	P990551:09	Tank condition was normal.
H	30	C-02	(I)	04/29/99	CCTV	NA	Inspection of the thermowell for the BFV revealed that there were no obstruction that would prevent the thermocouple from being inserted.
H	31	A-01	(A)	04/15/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	31	A-01	(A)	06/01/99	DP	P990613:01-25	Tank condition was normal.
H	31	A-02	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	31	A-02	(A)	06/01/99	DP	P990614:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	31	A-03	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	31	A-03	(A)	06/02/99	DP	P990615:01-25	Tank condition was normal.
H	31	A-04	(A)	04/15/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	31	A-04	(A)	06/02/99	DP	P990616:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall, ventilation duct, and annulus floor were caused by water which had leaked into the annulus. Nylon rope and an abandoned probe wire were observed on the annulus floor beneath the riser.
H	31	A-04	(A)	08/10/99	CCTV	556	A new magnetically mounted thermocouple was deployed at the setpoint.
H	31	P-01	(A)	05/11/99	WAP	P990581:01	Tank condition was normal.
H	31	P-02	(A)	05/11/99	WAP	P990581:02	Tank condition was normal.
H	31	P-03	(A)	03/25/99	WAP	P990552:01	Tank condition was normal.
H	31	P-04	(A)	03/25/99	WAP	P990552:02	Tank condition was normal.
H	31	P-05	(A)	03/25/99	WAP	P990552:03	Tank condition was normal.
H	31	P-06	(A)	03/25/99	WAP	P990552:04	Tank condition was normal.
H	31	P-07	(A)	03/25/99	WAP	P990552:05	Tank condition was normal.
H	31	P-08	(A)	03/25/99	WAP	P990552:06	Tank condition was normal.
H	31	P-09	(A)	03/25/99	WAP	P990552:07	Tank condition was normal.
H	31	P-10	(A)	03/25/99	WAP	P990552:08	Tank condition was normal.
H	31	P-11	(A)	03/25/99	WAP	P990552:09	Tank condition was normal.
H	31	P-12	(A)	03/25/99	WAP	P990552:10	Tank condition was normal.
H	31	P-13	(A)	03/25/99	WAP	P990552:11	Tank condition was normal.
H	31	P-14	(A)	06/03/99	WAP	P990628:01	Tank condition was normal.
H	32	LDB-101		09/18/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	32	LDB-101		11/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	METHOD	FILE I.D. #	REMARKS
H	32	LDB-102	09/21/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	32	LDB-102	09/21/99	CCTV	554	During measurement and reinstallation of the conductivity probe, inspection of the standpipe revealed an obstruction at approximately 102 inches from the top of the standpipe. The obstruction appears to be an aluminum rod.
H	32	LDB-102	09/21/99	CCTV	554	The conductivity probe was deployed at the setpoint on the northeast side of tank.
H	32	LDB-102	09/22/99	CCTV	554	Assisted with removal an obstruction from the standpipe. A piece of galvanized metal rod approximately 2 1/2 feet long was removed.
H	32	LDB-102	09/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	32	LDB-102	11/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	32	LDB-103	11/22/99	CCTV	554	The conductivity probe was positioned on the LDB floor.
H	32	LE-10008-A	12/08/99	CCTV	NA	Determined the length of the conductivity probe standpipe in the riser to establish distance to setpoint for the conductivity probe installation.
H	32	LE-10008-B	12/08/99	CCTV	NA	Determined the length of the conductivity probe standpipe in the riser to establish distance to setpoint for the conductivity probe installation.
H	32	LPS-10813	09/17/99	CCTV	554	Determined the length of the leak probe sleeve on the tank side-evaporator pot transfer line for proper installation of the conductivity probe.
H	32	LPS-6063	09/17/99	CCTV	554	Determined the length of the leak probe sleeve on the tank side-evaporator sump transfer line for proper installation of the conductivity probe.
H	32	A-01 (A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	32	A-01 (A)	06/02/99	DP	P990624:01-25	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
H	32	A-02 (A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	32	A-02	(A)	06/02/99	DP	P990625:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall have increased since inspected on 04/20/95.
H	32	A-03	(A)	04/19/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	32	A-03	(A)	06/02/99	DP	P990626:01-25	Tank condition was normal.
H	32	A-04	(A)	04/19/99	CCTV	556	The magnetically mounted thermocouple was not positioned correctly.
H	32	A-04	(A)	04/20/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
H	32	A-04	(A)	06/02/99	DP	P990627:01-25	Tank condition was normal. An abandoned probe wire, two masselin cloths, and a swipe were observed on the annulus floor.
H	32	P-01	(A)	05/11/99	WAP	P990578:01	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 5/18/98.
H	32	P-02	(A)	05/11/99	WAP	P990578:02	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 5/18/98.
H	32	P-03	(A)	05/11/99	WAP	P990578:03	Tank condition was normal.
H	32	P-04	(A)	05/11/99	WAP	P990578:04	Tank condition was normal.
H	32	P-05	(A)	05/11/99	WAP	P990578:05	Tank condition was normal.
H	32	P-06	(A)	05/11/99	WAP	P990578:06	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 6/24/97.
H	32	P-07	(A)	05/11/99	WAP	P990578:07	Tank condition was normal.
H	32	P-08	(A)	05/11/99	WAP	P990578:08	Tank condition was normal.
H	32	P-09	(A)	05/11/99	WAP	P990578:09	Tank condition was normal. Calciferous deposits on the secondary vessel wall and annulus floor have increased since inspected on 6/24/97.
H	32	P-10	(A)	05/11/99	WAP	P990578:10	Tank condition was normal. Calciferous deposits on the secondary vessel wall and annulus floor have increased since inspected on 6/24/97.
H	32	P-11	(A)	05/11/99	WAP	P990578:11	Tank condition was normal.
H	32	P-12	(A)	08/31/99	DP	P990664:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	32	P-13	(A)	05/11/99	WAP	P990578:12	Tank condition was normal.
H	32	P-14	(A)	05/11/99	WAP	P990578:13	Tank condition was normal.
H	32	P-15	(A)	05/11/99	WAP	P990578:14	Tank condition was normal.
H	32	C-02	(I)	02/26/99	CCTV	561	Determined that no obstruction was present beneath the riser that would interfere with the installation of the feed pump.
H	32	C-02	(I)	04/14/99	CCTV	574	Documented the piping configuration inside the riser and assist in removing loop piping.
H	32	C-02	(I)	05/04/99	CCTV	581	Inspection determined riser C-02 ready for feed pump installation.
H	32	C-02	(I)	05/20/99	CCTV	584	Installed mockup to check dimensions of pump for installation and nozzle elevations. Inspection revealed pump dimensions were adequate for pump installation.
H	32	E-02	(I)	05/20/99	CCTV	586	Inspection of PVC liner of the port where the reel tape enters the tank revealed that the liner was intact. However, stains and rust buildup was observed on the lower edge of the riser.
F	33			04/28/99	HELIUM	HE-99-006	A helium tracer test verified the integrity of the FDB-03 to Tank 33 transfer line.
F	33	A-01	(A)	06/10/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	33	A-01	(A)	07/27/99	DP	P990639:01-25	Tank condition was normal. The secondary vessel wall was wet. Water leaked into the annulus between the annulus cover plate and the top of the secondary vessel wall.
F	33	A-02	(A)	07/27/99	DP	P990640:01-25	Tank condition was normal. The secondary vessel wall was wet. Water leaked in the annulus between the annulus cover plate and the secondary vessel wall.
F	33	A-02	(A)	10/12/99	CCTV	556	The conductivity probe was deployed at the setpoint. An abandoned probe wire was observed on the annulus floor.
F	33	A-03	(A)	06/10/99	CCTV	556	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	33	A-03	(A)	07/27/99	DP	P990641:01-25	Tank condition was normal. The secondary vessel wall was wet. Water leaked in the annulus between the annulus cover plate and the top of the secondary vessel wall.
F	33	A-04	(A)	06/10/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	33	A-04	(A)	07/27/99	DP	P990642:01-25	Tank condition was normal. The secondary vessel wall was wet. Water leaked in the annulus between the annulus cover plate and the top of the secondary vessel wall.
F	33	P-01	(A)	05/05/99	WAP	P990570:01	Tank condition was normal.
F	33	P-02	(A)	05/05/99	WAP	P990570:02	Tank condition was normal.
F	33	P-03	(A)	05/05/99	WAP	P990570:03	Tank condition was normal.
F	33	P-04	(A)	05/05/99	WAP	P990570:04	Tank condition was normal.
F	33	P-05	(A)	05/05/99	WAP	P990570:05	Tank condition was normal.
F	33	P-06	(A)	05/05/99	WAP	P990570:06	Tank condition was normal.
F	33	P-07	(A)	05/05/99	WAP	P990570:07	Tank condition was normal.
F	33	P-08	(A)	05/05/99	WAP	P990570:08	Tank condition was normal.
F	33	P-09	(A)	05/06/99	WAP	P990572:01	Tank condition was normal.
F	33	P-10	(A)	05/06/99	WAP	P990572:02	Tank condition was normal.
F	33	P-11	(A)	05/05/99	WAP	P990570:09	Tank condition was normal.
F	33	P-12	(A)	05/05/99	WAP	P990570:10	Tank condition was normal.
F	33	P-13	(A)	05/05/99	WAP	P990570:11	Tank condition was normal.
F	33	P-14	(A)	05/05/99	WAP	P990570:12	Tank condition was normal.
F	33	P-15	(A)	05/05/99	WAP	P990570:13	Tank condition was normal.
F	33	P-16	(A)	05/05/99	WAP	P990570:14	Tank condition was normal.
F	33	H	(I)	04/14/99	CCTV	573	Documented surface conditions. Inspection revealed a turbid liquid with small flotsam that could possibly be organic material. Tank overview appears normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	34			04/28/99	HELIUM	HE-99-007	A helium tracer test verified the integrity of the FDB-03 to Tank 34 transfer line.
F	34	A-01	(A)	06/10/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	34	A-01	(A)	07/27/99	DP	P990643:01-25	Tank condition was normal. Stains and marks on the primary and secondary vessel walls and the ventilation duct were caused by water leakage.
F	34	A-02	(A)	06/10/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	34	A-02	(A)	07/27/99	DP	P990645:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked in between the annulus cover plate and the secondary vessel wall. A plastic bag was observed on the annulus floor.
F	34	A-03	(A)	06/10/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	34	A-03	(A)	07/27/99	DP	P990648:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked in between the annulus cover plate and the secondary vessel wall.
F	34	A-04	(A)	06/10/99	CCTV	556	The magnetically mounted thermocouple was deployed at the setpoint.
F	34	A-04	(A)	07/27/99	DP	P990649:01-25	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-01	(A)	05/05/99	WAP	P990571:01	Tank condition was normal.
F	34	P-02	(A)	05/05/99	WAP	P990571:02	Tank condition was normal.
F	34	P-03	(A)	05/05/99	WAP	P990571:03	Tank condition was normal.
F	34	P-04	(A)	05/05/99	WAP	P990571:04	Tank condition was normal.
F	34	P-05	(A)	05/05/99	WAP	P990571:05	Tank condition was normal.
F	34	P-06	(A)	05/05/99	WAP	P990571:06	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-07	(A)	05/05/99	WAP	P990571:07	Tank condition was normal.
F	34	P-08	(A)	05/05/99	WAP	P990571:08	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	34	P-09	(A)	05/06/99	WAP	P990571:09	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-10	(A)	05/06/99	WAP	P990571:10	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-11	(A)	05/06/99	WAP	P990571:11	Tank condition was normal.
F	34	P-12	(A)	05/06/99	WAP	P990571:12	Tank condition was normal.
F	34	P-13	(A)	05/06/99	WAP	P990571:13	Tank condition was normal.
F	34	P-14	(A)	05/06/99	WAP	P990571:14	Tank condition was normal.
F	34	P-15	(A)	05/06/99	WAP	P990571:15	Tank condition was normal.
F	34	P-16	(A)	05/06/99	WAP	P990571:16	Tank condition was normal.
H	35	A-01	(A)	02/03/99	WAP	P990509:01	Tank condition was normal.
H	35	A-02	(A)	02/03/99	WAP	P990509:02	Tank condition was normal.
H	35	A-02	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	35	A-03	(A)	02/03/99	WAP	P990509:03	Tank condition was normal.
H	35	A-03	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	35	A-04	(A)	02/03/99	WAP	P990509:04	Tank condition was normal.
H	35	A-04	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	35	P-01	(A)	02/08/99	DP	P990497:01-25	Tank condition was normal. A piece of paper approximately 10 X 18 inches was observed on the annulus floor.
H	35	P-02	(A)	02/08/99	DP	P990498:01-25	Tank condition was normal.
H	35	P-03	(A)	02/08/99	DP	P990499:01-25	Tank condition was normal.
H	35	P-04	(A)	02/08/99	DP	P990500:01-25	Tank condition was normal.
H	35	P-05	(A)	02/03/99	WAP	P990509:05	Tank condition was normal.
H	35	P-06	(A)	02/03/99	WAP	P990509:06	Tank condition was normal.
H	35	P-07	(A)	02/03/99	WAP	P990509:07	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	35	P-08	(A)	02/03/99	WAP	P990509:08	Tank condition was normal.
H	35	P-09	(A)	02/03/99	WAP	P990509:09	Tank condition was normal.
H	35	P-10	(A)	02/03/99	WAP	P990509:10	Tank condition was normal.
H	35	P-11	(A)	02/03/99	WAP	P990509:11	Tank condition was normal.
H	35	P-12	(A)	02/03/99	WAP	P990509:12	Tank condition was normal.
H	35	P-13	(A)	02/03/99	WAP	P990509:13	Tank condition was normal.
H	35	P-14	(A)	02/03/99	WAP	P990509:14	Tank condition was normal.
H	35	B-04	(I)	07/20/99	CCTV	600	Inspection revealed that the TTJ was in the supernate.
H	35	B-04	(I)	08/26/99	CCTV	600	Inspection revealed that the suction leg of the TTJ was at the supernate surface.
H	35	C-01	(I)	10/27/99	CCTV	559	Inspection revealed that the downcomer was properly positioned.
H	36	A-01	(A)	02/03/99	WAP	P990510:01	Tank condition was normal.
H	36	A-02	(A)	02/03/99	WAP	P990510:02	Tank condition was normal.
H	36	A-02	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	36	A-03	(A)	02/03/99	WAP	P990510:03	Tank condition was normal.
H	36	A-03	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	36	A-04	(A)	02/03/99	WAP	P990510:04	Tank condition was normal.
H	36	A-04	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	36	P-01	(A)	02/08/99	DP	P990504:01-25	Tank condition was normal.
H	36	P-02	(A)	02/08/99	DP	P990505:01-25	Tank condition was normal.
H	36	P-03	(A)	02/08/99	DP	P990506:01-25	Tank condition was normal. A cylindrical object approximately 2 to 3 inches in diameter was observed on the annulus floor.
H	36	P-04	(A)	02/08/99	DP	P990507:01-25	Tank condition was normal.
H	36	P-05	(A)	02/03/99	WAP	P990510:05	Tank condition was normal.
H	36	P-06	(A)	02/03/99	WAP	P990510:06	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	36	P-07	(A)	02/03/99	WAP	P990510:07	Tank condition was normal.
H	36	P-08	(A)	02/03/99	WAP	P990510:08	Tank condition was normal.
H	36	P-09	(A)	02/03/99	WAP	P990510:09	Tank condition was normal.
H	36	P-10	(A)	02/03/99	WAP	P990510:10	Tank condition was normal.
H	36	P-11	(A)	02/03/99	WAP	P990510:11	Tank condition was normal.
H	36	P-12	(A)	02/03/99	WAP	P990510:12	Tank condition was normal.
H	36	P-13	(A)	02/03/99	WAP	P990510:13	Tank condition was normal.
H	36	P-14	(A)	02/03/99	WAP	P990510:14	Tank condition was normal.
H	37	A-01	(A)	02/03/99	WAP	P990511:01	Tank condition was normal.
H	37	A-02	(A)	02/03/99	WAP	P990511:02	Tank condition was normal.
H	37	A-02	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	37	A-03	(A)	02/03/99	WAP	P990511:03	Tank condition was normal.
H	37	A-03	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	37	A-04	(A)	02/03/99	WAP	P990511:04	Tank condition was normal.
H	37	A-04	(A)	02/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	37	P-01	(A)	02/08/99	DP	P990501:01-25	Tank condition was normal.
H	37	P-02	(A)	02/08/99	DP	P990502:01-25	Tank condition was normal.
H	37	P-03	(A)	02/08/99	DP	P990503:01-25	Tank condition was normal.
H	37	P-04	(A)	02/08/99	DP	P990508:01-25	Tank condition was normal.
H	37	P-05	(A)	02/03/99	WAP	P990511:05	Tank condition was normal.
H	37	P-06	(A)	02/03/99	WAP	P990511:06	Tank condition was normal.
H	37	P-07	(A)	02/03/99	WAP	P990511:07	Tank condition was normal.
H	37	P-08	(A)	02/03/99	WAP	P990511:08	Tank condition was normal.
H	37	P-09	(A)	02/03/99	WAP	P990511:09	Tank condition was normal.
H	37	P-10	(A)	02/03/99	WAP	P990511:10	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	37	P-11	(A)	02/24/99	WAP	P990526:01	Tank condition was normal.
H	37	P-12	(A)	02/03/99	WAP	P990511:11	Tank condition was normal.
H	37	P-13	(A)	02/03/99	WAP	P990511:12	Tank condition was normal.
H	37	P-14	(A)	02/03/99	WAP	P990511:13	Tank condition was normal.
H	38	COP 3		03/18/99	CCTV	501	Inspection of GDL indicated free of solids. Approximately 22 feet of the GDL were inspected in both directions from the COP.
H	38	GDL		09/17/99	HELIUM	HE-99-011	Helium tracer testing verified the integrity of the core pipe of the gravity drain line from 242-16H Evaporator to Tank 38.
H	38	LDB-01		09/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	38	A-01	(A)	03/01/99	WAP	P990535:01	Tank condition was normal.
H	38	A-02	(A)	03/01/99	WAP	P990535:02	Tank condition was normal.
H	38	A-02	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	38	A-03	(A)	03/01/99	WAP	P990535:03	Tank condition was normal.
H	38	A-03	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	38	A-04	(A)	03/01/99	WAP	P990535:04	Tank condition was normal.
H	38	A-04	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	38	P-01	(A)	03/02/99	DP	P990531:01-25	Tank condition was normal.
H	38	P-02	(A)	03/02/99	DP	P990532:01-25	Tank condition was normal.
H	38	P-03	(A)	03/02/99	DP	P990533:01-25	Tank condition was normal.
H	38	P-04	(A)	03/02/99	DP	P990534:01-25	Tank condition was normal.
H	38	P-05	(A)	03/01/99	WAP	P990535:05	Tank condition was normal.
H	38	P-06	(A)	03/01/99	WAP	P990535:06	Tank condition was normal.
H	38	P-07	(A)	03/08/99	WAP	P990543:01	Tank condition was normal.
H	38	P-08	(A)	03/01/99	WAP	P990535:07	Tank condition was normal.
H	38	P-09	(A)	03/01/99	WAP	P990535:08	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	38	P-10	(A)	03/01/99	WAP	P990535:09	Tank condition was normal.
H	38	P-11	(A)	03/01/99	WAP	P990535:10	Tank condition was normal.
H	38	P-12	(A)	03/01/99	WAP	P990535:11	Tank condition was normal.
H	38	P-13	(A)	03/01/99	WAP	P990535:12	Tank condition was normal.
H	38	P-14	(A)	03/01/99	WAP	P990535:13	Tank condition was normal.
H	38	G	(I)	03/04/99	CCTV	565	Documented salt sounding, reel tape operations, and surface conditions. The reel tape was operating properly and nothing adhered to the probe.
H	38	G	(I)	03/24/99	CCTV	565	Documented the conditions of the waste after liquid was added. Inspection revealed some floating solids and a film/scum on the supernate surface.
H	38	G	(I)	12/09/99	CCTV	565	Documented conditions of the waste surface after the tank was decanted. The waste surface was sludge with small pools of liquid visible. Minimal salt formation was observed on the cooling coils.
H	38	H	(I)	03/04/99	CCTV	565	Documented surface conditions. No salt mounding was observed except beneath the C-03 drop riser where the mound height was approximately one foot. The suction leg screen on the transfer jet in riser C-01 was visible.
H	38	H	(I)	03/23/99	CCTV	565	Documented tank interior and surface condition. Inspection revealed some floating solids and a film on the supernate surface.
H	39	LDB-01		06/04/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	39	LDB-01		11/03/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	39	A-01	(A)	03/01/99	WAP	P990536:01	Tank condition was normal.
H	39	A-02	(A)	03/01/99	WAP	P990536:02	Tank condition was normal.
H	39	A-02	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	39	A-03	(A)	03/01/99	WAP	P990536:03	Tank condition was normal.
H	39	A-03	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	39	A-04	(A)	03/01/99	WAP	P990536:04	Tank condition was normal.
H	39	A-04	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	39	P-01	(A)	03/01/99	WAP	P990536:05	Tank condition was normal.
H	39	P-02	(A)	03/02/99	DP	P990527:01-25	Tank condition was normal.
H	39	P-03	(A)	03/01/99	WAP	P990536:06	Tank condition was normal.
H	39	P-04	(A)	03/02/99	DP	P990528:01-25	Tank condition was normal.
H	39	P-05	(A)	03/01/99	WAP	P990536:07	Tank condition was normal.
H	39	P-06	(A)	03/10/99	DP	P990541:01-25	Tank condition was normal.
H	39	P-07	(A)	03/01/99	WAP	P990536:08	Tank condition was normal.
H	39	P-08	(A)	03/01/99	WAP	P990536:09	Tank condition was normal.
H	39	P-09	(A)	03/02/99	DP	P990529:01-25	Tank condition was normal.
H	39	P-10	(A)	03/02/99	DP	P990530:01-25	Tank condition was normal.
H	39	P-11	(A)	03/01/99	WAP	P990536:10	Tank condition was normal.
H	39	P-12	(A)	03/01/99	WAP	P990536:11	Tank condition was normal.
H	39	P-13	(A)	03/01/99	WAP	P990536:12	Tank condition was normal.
H	39	P-14	(A)	03/01/99	WAP	P990536:13	Tank condition was normal.
H	40	VB		02/02/99	CCTV	563	Assisted with leak check valve WTS-V-22 and 27. Valve 27 was leaking at the valve body.
H	40	VB		04/28/99	CCTV	587	Assisted with leak check of valves WTS-V-21, 22, 23, 24, 25, 26, 27, and 2009.
H	40	VB		07/17/99	CCTV	607A	Assisted with leak check. Valve WTS-V-22 was verified leak free.
H	40	VB		08/06/99	CCTV	607	Inspected for leakage. Waste was observed on the floor. Two conductivity probes were observed. One was approximately 1 1/2 inches off the floor and the other was contacting the floor.
H	40	VB		08/12/99	CCTV		Inspected for leak source observed on 08/06/99. Valve WTS-V-23 was observed leaking.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	40	VB		08/18/99	CCTV	607	Inspection revealed a leak at the Gray Loc connection on the north side of Jumper 23. The connector was not closed completely. The conductivity probes were positioned one inch above the valve box floor.
H	40	VB		08/24/99	CCTV	607A	Inspected for leak source. Valve WTS-V-23 and 26 were observed leaking.
H	40	VB		08/30/99	CCTV	607A	Assisted with leak check of valves WTS-V-22,23, and 26. Valve WTS-V-22 leaked, and valves WTS-V-23, & 26 were repaired and leak check performed. Valve WTS-V-26 was still leaking.
H	40	VB		08/31/99	CCTV	607A	Assisted with leak check. Valve WTS-V-21 was leak free and WTS-V-22 was observed leaking after being repaired.
H	40	VB		09/01/99	CCTV	607A	Assisted with leak check of valves WTS-V-22 and 26. The valves were leaking.
H	40	VB		09/03/99	CCTV	607A	Assisted with leak check of valves WTS-V-22 and 26. The valves were leak free.
H	40	A-01	(A)	05/19/99	WAP	P990574:01	Tank condition was normal.
H	40	A-02	(A)	05/19/99	WAP	P990574:02	Tank condition was normal.
H	40	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	40	A-03	(A)	05/19/99	WAP	P990574:03	Tank condition was normal.
H	40	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	40	A-04	(A)	05/19/99	WAP	P990574:04	Tank condition was normal.
H	40	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	40	P-01	(A)	10/01/99	WAP	P990691:01	Tank condition was normal.
H	40	P-02	(A)	10/01/99	WAP	P990691:02	Tank condition was normal.
H	40	P-03	(A)	05/19/99	WAP	P990574:05	Tank condition was normal.
H	40	P-04	(A)	08/11/99	DP	P990651:01-25	Tank condition was normal.
H	40	P-05	(A)	05/19/99	WAP	P990574:06	Tank condition was normal.
H	40	P-06	(A)	08/11/99	DP	P990652:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	40	P-07	(A)	05/19/99	WAP	P990574:07	Tank condition was normal.
H	40	P-08	(A)	05/19/99	WAP	P990574:08	Tank condition was normal.
H	40	P-09	(A)	05/19/99	WAP	P990574:09	Tank condition was normal.
H	40	P-10	(A)	09/29/99	DP	P990689:01-25	Tank condition was normal.
H	40	P-11	(A)	05/19/99	WAP	P990574:10	Tank condition was normal.
H	40	P-12	(A)	05/19/99	WAP	P990574:11	Tank condition was normal.
H	40	P-12	(A)	07/06/99	WAP	P990636:01	Tank condition was normal.
H	40	P-13	(A)	05/19/99	WAP	P990574:12	Tank condition was normal.
H	40	P-14	(A)	05/19/99	WAP	P990574:13	Tank condition was normal.
H	40	B-05	(I)	03/11/99	CCTV	570	Inspected telescoping jet in riser C-01. Inspection revealed the east deflector was damaged during installation and preventing the jet from extending fully .
H	40	B-05	(I)	04/28/99	CCTV	559	Inspection revealed the deflector on the west side of the C-01 riser was operating properly.
H	40	B-05	(I)	05/13/99	CCTV	570	Inspection revealed damaged deflector was successfully removed.
H	40	B-05	(I)	10/14/99	CCTV	570	Inspected the TTJ in the C-01 and found no obstructions which could prevent telescoping.
H	40	B-05	(I)	10/21/99	CCTV	625	Inspection revealed the jet could not be lowered due to mechanical problems.
H	40	B-05	(I)	10/27/99	CCTV	625 & 626	Assisted with the successful lowering of the TTJ and documenting its position in the tank.
H	40	C-01	(I)	07/17/99	CCTV	NA	Assisted with leak check. TTJ flanges were observed leak free.
H	40	C-01	(I)	10/28/99	CCTV	626	Assisted with leak check the TTJ. No leakage was observed.
H	41	A-01	(A)	05/24/99	WAP	P990575:01	Tank condition was normal.
H	41	A-02	(A)	05/24/99	WAP	P990575:02	Tank condition was normal.
H	41	A-02	(A)	05/25/99	CCTV	556	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	41	A-03	(A)	05/24/99	WAP	P990575:03	Tank condition was normal. Debris was observed on the annulus floor and refractory pad.
H	41	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	41	A-04	(A)	05/24/99	WAP	P990575:04	Tank condition was normal.
H	41	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	41	P-01	(A)	08/11/99	DP	P990653:01-24	Tank condition was normal.
H	41	P-02	(A)	07/26/99	DP	P990644:01-25	Tank condition was normal. Stains on top of the ventilation duct indicate that water has leaked into the annulus.
H	41	P-03	(A)	07/26/99	DP	P990646:01-25	Tank condition was normal. Stains on top of the ventilation duct indicate that water had leaked into the annulus. Stains and marks on the annulus floor, beneath the annulus outlet, indicate that water or condensation formed in the outlet had fallen to the floor.
H	41	P-04	(A)	07/26/99	DP	P990647:01-25	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
H	41	P-05	(A)	05/24/99	WAP	P990575:05	Tank condition was normal.
H	41	P-06	(A)	05/24/99	WAP	P990575:06	Tank condition was normal.
H	41	P-07	(A)	05/24/99	WAP	P990575:07	Tank condition was normal.
H	41	P-08	(A)	05/24/99	WAP	P990575:08	Tank condition was normal.
H	41	P-08	(A)	07/01/99	CCTV	559	Inspection revealed stains which indicated water had leaked into the annulus where the line designated SP penetrates the annulus near the A-03 riser.
H	41	P-09	(A)	05/24/99	WAP	P990575:09	Tank condition was normal.
H	41	P-10	(A)	05/24/99	WAP	P990575:10	Tank condition was normal.
H	41	P-11	(A)	05/24/99	WAP	P990575:11	Tank condition was normal.
H	41	P-12	(A)	05/24/99	WAP	P990575:12	Tank condition was normal.
H	41	P-13	(A)	05/24/99	WAP	P990575:13	Tank condition was normal.
H	41	P-14	(A)	05/24/99	WAP	P990575:14	Tank condition was normal.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	42	VB		09/16/99	CCTV	559	Inspection revealed liquid on the west side of the valve box. Both conductivity probes were in the liquid.
H	42	VB		09/16/99	CCTV	559	Conductivity probe #1 was positioned approximately one inch off the valve box floor.
H	42	VB		09/17/99	CCTV	559	Conductivity probe #2 was positioned approximately one inch off the valve box floor.
H	42	A-01	(A)	05/26/99	WAP	P990580:01	Tank condition was normal.
H	42	A-02	(A)	05/26/99	WAP	P990580:02	Tank condition was normal. An absorbent swipe was observed on the annulus floor.
H	42	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	42	A-03	(A)	05/26/99	WAP	P990580:03	Tank condition was normal.
H	42	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	42	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	42	A-04	(A)	09/15/99	WAP	P990677:01	Tank condition was normal.
H	42	P-01	(A)	08/12/99	DP	P990654:01-25	Tank condition was normal.
H	42	P-02	(A)	08/12/99	DP	P990655:01-25	Tank condition was normal.
H	42	P-03	(A)	05/26/99	WAP	P990580:04	Tank condition was normal.
H	42	P-04	(A)	05/26/99	WAP	P990580:05	Tank condition was normal.
H	42	P-05	(A)	05/26/99	WAP	P990580:06	Tank condition was normal.
H	42	P-06	(A)	05/26/99	WAP	P990580:07	Tank condition was normal.
H	42	P-07	(A)	05/26/99	WAP	P990580:08	Tank condition was normal.
H	42	P-08	(A)	05/26/99	WAP	P990580:09	Tank condition was normal.
H	42	P-09	(A)	08/12/99	DP	P990656:01-22	Tank condition was normal.
H	42	P-10	(A)	08/12/99	DP	P990657:01-25	Tank condition was normal.
H	42	P-11	(A)	05/26/99	WAP	P990580:10	Tank condition was normal.
H	42	P-12	(A)	05/26/99	WAP	P990580:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	42	P-13	(A)	05/26/99	WAP	P990580:12	Tank condition was normal.
H	42	P-14	(A)	05/26/99	WAP	P990580:13	Tank condition was normal.
H	42	B-02	(I)	07/30/99	CCTV	603	Inspection of the tank interior revealed sludge mounding above the liquid level.
H	42	C-03	(I)	07/30/99	CCTV	603	Inspection of the tank interior revealed sludge mounding above the liquid level.
H	43			09/17/99	HELIUM	HE-99-012	Helium tracer testing verified the integrity of the overheads transfer line from the 242-16H evaporator to Tank 43.
H	43	LDB-01		07/15/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	43	LDB-04		03/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	43	LDB-07		03/18/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	43	LDB-07		03/18/99	HELIUM	HE-99-003	Helium tracer testing verified the integrity of the overheads transfer line from the 242-16H evaporator to Tank 43.
H	43	LDB-07		09/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	43	A-01	(A)	03/01/99	WAP	P990537:01	Tank condition was normal.
H	43	A-02	(A)	03/01/99	WAP	P990537:02	Tank condition was normal.
H	43	A-02	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	43	A-03	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	43	A-03	(A)	03/08/99	WAP	P990544:04	Tank condition was normal.
H	43	A-04	(A)	03/01/99	WAP	P990537:03	Tank condition was normal.
H	43	A-04	(A)	03/04/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	43	P-01	(A)	03/02/99	DP	P990538:01-25	Tank condition was normal.
H	43	P-02	(A)	03/02/99	DP	P990539:01-25	Tank condition was normal.
H	43	P-03	(A)	03/10/99	DP	P990542:01-25	Tank condition was normal.
H	43	P-04	(A)	03/02/99	DP	P990540:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	43	P-05	(A)	03/01/99	WAP	P990537:04	Tank condition was normal.
H	43	P-06	(A)	03/08/99	WAP	P990544:02	Tank condition was normal.
H	43	P-07	(A)	03/08/99	WAP	P990544:03	Tank condition was normal.
H	43	P-08	(A)	03/08/99	WAP	P990544:05	Tank condition was normal.
H	43	P-09	(A)	03/08/99	WAP	P990544:01	Tank condition was normal. Stains and marks on the ventilation duct and annulus floor were caused by water which had leaked into the annulus.
H	43	P-10	(A)	03/01/99	WAP	P990537:05	Tank condition was normal.
H	43	P-11	(A)	03/01/99	WAP	P990537:06	Tank condition was normal.
H	43	P-12	(A)	03/01/99	WAP	P990537:07	Tank condition was normal.
H	43	P-13	(A)	03/01/99	WAP	P990537:08	Tank condition was normal.
H	43	P-14	(A)	03/01/99	WAP	P990537:09	Tank condition was normal.
H	43	C-01	(I)	11/15/99	CCTV	635	Inspection revealed a leak at the cam locks for the TTJ.
H	43	C-01	(I)	11/18/99	CCTV	635	Inspection revealed that the jet was leak free after the gaskets were replaced at the cam locks.
H	43	H	(I)	01/13/99	CCTV	558	Documented surface conditions. Inspection revealed very little organic material on the surface. Two small masses were observed floating on the surface. The reel tape and cooling coils appeared to be covered by a thin "oily" residue.
H	43	H	(I)	06/22/99	CCTV	592	Assisted in obtaining an organic sample and to document surface conditions. A thin transparent film was noted on the liquid surface with a few floating solids.
F	44	LDB-02		05/24/99	CCTV	554	The conductivity probe was deployed at the setpoint. A small amount of debris was observed beneath the probe.
F	44	A-01	(A)	06/28/99	WAP	P990631:01	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus. A masselin cloth was observed on the annulus floor.
F	44	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	44	A-02	(A)	06/28/99	WAP	P990631:02	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	44	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	44	A-03	(A)	06/28/99	WAP	P990631:03	Tank condition was normal.
F	44	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	44	A-04	(A)	06/28/99	WAP	P990631:04	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	44	P-01	(A)	06/29/99	WAP	P990635:01	Tank condition was normal.
F	44	P-02	(A)	06/29/99	WAP	P990635:02	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus. A masselin cloth was observed on the annulus floor.
F	44	P-03	(A)	05/28/99	DP	P990596:01-25	Tank condition was normal.
F	44	P-04	(A)	05/28/99	DP	P990597:01-25	Tank condition was normal.
F	44	P-05	(A)	05/28/99	DP	P990598:01-25	Tank condition was normal.
F	44	P-06	(A)	05/28/99	DP	P990599:01-25	Tank condition was normal.
F	44	P-07	(A)	05/28/99	DP	P990600:01-24	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 6/20/95.
F	44	P-08	(A)	06/28/99	WAP	P990631:05	Tank condition was normal.
F	44	P-09	(A)	06/28/99	WAP	P990631:06	Tank condition was normal.
F	44	P-10	(A)	06/28/99	WAP	P990631:07	Tank condition was normal.
F	44	P-11	(A)	06/28/99	WAP	P990631:08	Tank condition was normal.
F	44	P-12	(A)	06/28/99	WAP	P990631:09	Tank condition was normal.
F	44	P-13	(A)	06/28/99	WAP	P990631:10	Tank condition was normal.
F	44	P-14	(A)	06/28/99	WAP	P990631:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	44	G	(I)	04/27/99	CCTV	578	Inspection revealed that the surface below the G riser was salt with no liquid visible. The surface was liquid at other locations in the tank.
F	44	G	(I)	08/26/99	CCTV	610	Investigated malfunction of the reel tape. The reel tape was embedded in the salt crystals. The waste surface was salt with some small pools of liquid.
F	44	G	(I)	12/07/99	CCTV	559	Observed and documented flushing and removing of old reel tape and to ensure proper operation of newly installed reel tape.
F	45	LDB-02		01/06/99	CCTV	554	Positioned the conductivity probe in the LDB at the setpoint.
F	45	LDB-02		03/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	45	LDB-03		09/02/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	45	A-01	(A)	06/28/99	WAP	P990632:01	Tank condition was normal.
F	45	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	45	A-02	(A)	06/28/99	WAP	P990632:02	Tank condition was normal.
F	45	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	45	A-03	(A)	06/28/99	WAP	P990632:03	Tank condition was normal.
F	45	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	45	A-04	(A)	06/28/99	WAP	P990632:04	Tank condition was normal.
F	45	A-04	(A)	12/02/99	WAP	P990701:01	Tank condition was normal.
F	45	P-01	(A)	06/28/99	WAP	P990632:05	Tank condition was normal.
F	45	P-02	(A)	06/28/99	WAP	P990632:06	Tank condition was normal.
F	45	P-03	(A)	05/28/99	DP	P990601:01-24	Tank condition was normal.
F	45	P-04	(A)	05/28/99	DP	P990602:01-23	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	45	P-05	(A)	05/28/99	DP	P990603:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	45	P-06	(A)	05/28/99	DP	P990604:01-25	Tank condition was normal.
F	45	P-07	(A)	05/28/99	DP	P990605:01-21	Tank condition was normal. White material was observed scattered on the annulus floor.
F	45	P-08	(A)	06/28/99	WAP	P990632:07	Tank condition was normal.
F	45	P-09	(A)	06/28/99	WAP	P990632:08	Tank condition was normal.
F	45	P-10	(A)	06/28/99	WAP	P990632:09	Tank condition was normal.
F	45	P-11	(A)	06/28/99	WAP	P990632:10	Tank condition was normal.
F	45	P-12	(A)	06/28/99	WAP	P990632:11	Tank condition was normal.
F	45	P-13	(A)	06/28/99	WAP	P990632:12	Tank condition was normal.
F	45	P-14	(A)	06/28/99	WAP	P990632:13	Tank condition was normal.
F	46	LDB-01		11/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-01		12/01/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-02		01/13/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-02		01/19/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-02		03/05/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-02		11/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-02		12/01/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-03		03/06/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	LDB-04		03/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	46	A-01	(A)	05/06/99	WAP	P990576:01	Tank condition was normal.
F	46	A-02	(A)	05/06/99	WAP	P990576:02	Tank condition was normal. Stains and marks on the ventilation duct and annulus floor had increased due to water which had leaked into the annulus.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	46	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	46	A-03	(A)	05/06/99	WAP	P990576:03	Tank condition was normal.
F	46	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	46	A-04	(A)	05/06/99	WAP	P990576:04	Tank condition was normal.
F	46	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	46	P-01	(A)	05/06/99	WAP	P990576:05	Tank condition was normal. Stains and marks on the ventilation duct and annulus floor had increased due to water which had leaked into the annulus.
F	46	P-02	(A)	05/06/99	WAP	P990576:06	Tank condition was normal.
F	46	P-03	(A)	05/28/99	DP	P990606:01-24	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 6/15/95.
F	46	P-04	(A)	05/28/99	DP	P990607:01-20	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 6/15/95.
F	46	P-05	(A)	05/28/99	DP	P990608:01-21	Tank condition was normal.
F	46	P-06	(A)	05/28/99	DP	P990609:01-25	Tank condition was normal.
F	46	P-07	(A)	06/21/99	DP	P990630:01-25	Tank condition was normal. Stains and marks on the ventilation duct and annulus floor were caused by water which had leaked into the annulus. Mild surface corrosion was observed on the annulus floor.
F	46	P-07	(A)	07/06/99	CCTV	559	Determined source of inleakage. The stains on the secondary vessel wall were from water which had leaked between the cover plate and the top of the secondary vessel wall.
F	46	P-08	(A)	05/06/99	WAP	P990576:07	Tank condition was normal. Stains and marks on the ventilation duct and annulus floor were caused by water which had leaked into the annulus.
F	46	P-09	(A)	05/06/99	WAP	P990576:08	Tank condition was normal.
F	46	P-10	(A)	05/06/99	WAP	P990576:09	Tank condition was normal. Calciferous deposits on the secondary vessel wall have increased since inspected on 5/15/98.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	46	P-11	(A)	05/06/99	WAP	P990576:10	Tank condition was normal.
F	46	P-12	(A)	05/06/99	WAP	P990576:11	Tank condition was normal.
F	46	P-12	(A)	07/06/99	CCTV	559	Identified a plastic respirator bag observed on the annulus floor.
F	46	P-13	(A)	05/06/99	WAP	P990576:12	Tank condition was normal.
F	46	P-14	(A)	05/06/99	WAP	P990576:13	Tank condition was normal.
F	46	H	(I)	03/06/99	CCTV	567	Steam and liquid was observed leaking from the jet in riser C-01.
F	46	H	(I)	04/08/99	CCTV	572	Assisted with the replacement and leak check of the transfer jet. No leakage was observed.
F	47	LDB-01		03/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	LDB-02		03/06/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	LDB-03		03/06/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	LDB-03		04/05/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	LDB-03		04/08/99	CCTV	554	The conductivity probe was removed to wipe moisture off of probe to clear alarm and then deployed at the setpoint.
F	47	LDB-03		04/27/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	LDB-03		05/20/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	47	A-01	(A)	05/06/99	WAP	P990577:01	Tank condition was normal.
F	47	A-02	(A)	05/06/99	WAP	P990577:02	Tank condition was normal.
F	47	A-02	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	47	A-03	(A)	05/06/99	WAP	P990577:03	Tank condition was normal.
F	47	A-03	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	47	A-04	(A)	05/06/99	WAP	P990577:04	Tank condition was normal. A riser plug gasket was observed on the ventilation duct.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
F	47	A-04	(A)	05/26/99	CCTV	556	The conductivity probe was deployed at the setpoint.
F	47	P-01	(A)	05/06/99	WAP	P990577:05	Tank condition was normal.
F	47	P-02	(A)	05/06/99	WAP	P990577:06	Tank condition was normal.
F	47	P-03	(A)	06/21/99	DP	P990637:01-25	Tank condition was normal.
F	47	P-04	(A)	05/28/99	DP	P990610:01-20	Tank condition was normal. An absorbent swipe was observed on the annulus floor.
F	47	P-05	(A)	06/21/99	DP	P990638:01-25	Tank condition was normal. Chromate deposits on the primary vessel wall and annulus floor have increased since inspected on 05/25/95.
F	47	P-06	(A)	05/28/99	DP	P990611:01-25	Tank condition was normal. Chromate deposits on the primary vessel wall and annulus floor have increased since inspected on 05/25/95.
F	47	P-07	(A)	05/28/99	DP	P990612:01-22	Tank condition was normal. A masselin cloth was observed on the annulus floor.
F	47	P-08	(A)	05/06/99	WAP	P990577:07	Tank condition was normal.
F	47	P-09	(A)	05/06/99	WAP	P990577:08	Tank condition was normal.
F	47	P-10	(A)	05/06/99	WAP	P990577:09	Tank condition was normal.
F	47	P-11	(A)	05/06/99	WAP	P990577:10	Tank condition was normal.
F	47	P-12	(A)	05/06/99	WAP	P990577:11	Tank condition was normal.
F	47	P-13	(A)	05/06/99	WAP	P990577:12	Tank condition was normal.
F	47	P-14	(A)	05/06/99	WAP	P990577:13	Tank condition was normal.
H	48	A-01	(A)	09/28/99	WAP	P990688:01	Tank condition was normal. Stains and marks on the primary vessel wall, secondary vessel wall, and the annulus floor indicated water has leaked into the annulus.
H	48	A-02	(A)	03/15/99	WAP	P990548:01	Tank condition was normal.
H	48	A-02	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	48	A-03	(A)	03/15/99	WAP	P990548:02	Tank condition was normal.
H	48	A-03	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	48	A-04	(A)	03/15/99	WAP	P990548:03	Tank condition was normal.
H	48	A-04	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	48	P-01	(A)	03/15/99	WAP	P990548:04	Tank condition was normal.
H	48	P-02	(A)	03/15/99	WAP	P990548:05	Tank condition was normal. A masselin cloth was observed on the annulus floor.
H	48	P-03	(A)	04/13/99	DP	P990553:01-25	Tank condition was normal.
H	48	P-04	(A)	04/15/99	DP	P990593:01-24	Tank condition was normal.
H	48	P-05	(A)	04/15/99	DP	P990594:01-25	Tank condition was normal.
H	48	P-06	(A)	03/15/99	WAP	P990548:06	Tank condition was normal.
H	48	P-07	(A)	03/15/99	WAP	P990548:07	Tank condition was normal.
H	48	P-08	(A)	03/15/99	WAP	P990548:08	Tank condition was normal.
H	48	P-09	(A)	03/15/99	WAP	P990548:09	Tank condition was normal.
H	48	P-10	(A)	04/15/99	DP	P990595:01-25	Tank condition was normal.
H	48	P-11	(A)	03/15/99	WAP	P990548:10	Tank condition was normal.
H	48	P-13	(A)	03/15/99	WAP	P990548:11	Tank condition was normal.
H	48	P-14	(A)	09/28/99	WAP	P990688:02	Tank condition was normal. Stains and marks on the primary vessel wall, secondary vessel wall, and the annulus floor indicated water has leaked into the annulus.
H	49	A-01	(A)	03/10/99	WAP	P990545:01	Tank condition was normal.
H	49	A-02	(A)	03/10/99	WAP	P990545:02	Tank condition was normal.
H	49	A-02	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	49	A-03	(A)	03/10/99	WAP	P990545:03	Tank condition was normal.
H	49	A-03	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	49	A-04	(A)	03/10/99	WAP	P990545:04	Tank condition was normal.
H	49	A-04	(A)	04/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	49	P-01	(A)	03/10/99	WAP	P990545:05	Tank condition was normal.
H	49	P-02	(A)	03/10/99	WAP	P990545:06	Tank condition was normal.
H	49	P-03	(A)	04/13/99	DP	P990554:01-24	Tank condition was normal.
H	49	P-04	(A)	04/13/99	DP	P990555:01-25	Tank condition was normal.
H	49	P-05	(A)	04/13/99	DP	P990556:01-25	Tank condition was normal.
H	49	P-06	(A)	04/15/99	DP	P990557:01-25	Tank condition was normal.
H	49	P-07	(A)	04/15/99	DP	P990558:01-25	Tank condition was normal.
H	49	P-08	(A)	03/10/99	WAP	P990545:07	Tank condition was normal.
H	49	P-09	(A)	03/10/99	WAP	P990545:08	Tank condition was normal.
H	49	P-10	(A)	03/10/99	WAP	P990545:09	Tank condition was normal.
H	49	P-11	(A)	03/10/99	WAP	P990545:10	Tank condition was normal.
H	49	P-12	(A)	03/10/99	WAP	P990545:11	Tank condition was normal.
H	49	P-13	(A)	03/10/99	WAP	P990545:12	Tank condition was normal.
H	49	P-14	(A)	03/10/99	WAP	P990545:13	Tank condition was normal.
H	49	C-03	(I)	01/19/99	CCTV	301	Documented condition of the nitrogen nozzle. Nozzle condition had not changed; no evidence of degradation was observed.
H	49	C-03	(I)	01/19/99	CCTV	558	Documented surface condition. The waste surface was a mix of liquid and reflective solids which were beginning to form a crust.
H	49	C-03	(I)	10/11/99	CCTV	623	Documented the waste surface condition. The waste surface was damp salt with pools of liquid visible beneath several access risers.
H	49	G	(I)	01/19/99	CCTV	558	Documented the waste surface condition. The waste surface was a mix of liquid and reflective solids which were beginning to form a crust.
H	49	G	(I)	01/19/99	CCTV	301	Inspection was made to document condition of the nitrogen nozzle. Nozzle condition had not changed; no evidence of degradation was observed.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	49	G	(I)	10/11/99	CCTV	623	Documented the waste surface condition. The waste surface was damp salt with pools of liquid visible beneath several access risers.
H	50	A-01	(A)	03/15/99	WAP	P990549:01	Tank condition was normal.
H	50	A-02	(A)	03/15/99	WAP	P990549:02	Tank condition was normal.
H	50	A-02	(A)	04/12/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	50	A-03	(A)	03/15/99	WAP	P990549:03	Tank condition was normal.
H	50	A-03	(A)	04/12/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	50	A-04	(A)	03/15/99	WAP	P990549:04	Tank condition was normal.
H	50	A-04	(A)	04/12/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	50	P-01	(A)	03/15/99	WAP	P990549:05	Tank condition was normal.
H	50	P-02	(A)	03/15/99	WAP	P990549:06	Tank condition was normal.
H	50	P-03	(A)	04/12/99	DP	P990559:01-24	Tank condition was normal. Marks and deposits on the primary vessel wall were caused by water which had leaked into the annulus.
H	50	P-04	(A)	04/12/99	DP	P990560:01-25	Tank condition was normal.
H	50	P-05	(A)	04/12/99	DP	P990561:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
H	50	P-06	(A)	04/12/99	DP	P990562:01-25	Tank condition was normal.
H	50	P-07	(A)	09/29/99	DP	P990690:01-25	Tank condition was normal. The refractory pad steel band and approximately 4 inches of the bottom of the ventilation duct appears to be wet.
H	50	P-08	(A)	03/15/99	WAP	P990549:07	Tank condition was normal.
H	50	P-09	(A)	03/15/99	WAP	P990549:08	Tank condition was normal.
H	50	P-10	(A)	03/15/99	WAP	P990549:09	Tank condition was normal.
H	50	P-11	(A)	03/15/99	WAP	P990549:10	Tank condition was normal.
H	50	P-12	(A)	03/15/99	WAP	P990549:11	Tank condition was normal.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>		<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	50	P-13	(A)	03/15/99	WAP	P990549:12	Tank condition was normal.
H	50	P-14	(A)	03/15/99	WAP	P990549:13	Tank condition was normal.
H	51			03/18/99	CCTV	NA	Inspection of the conduit from the gang valve house south of Tank 51 revealed dirt inside the line approximately 8 1/2 to 8 3/4 feet from the open end.
H	51	VB		09/16/99	CCTV	559	The conductivity probe was deployed at the setpoint.
H	51	VB		09/16/99	CCTV	559	The conductivity probe was deployed at the setpoint.
H	51	A-01	(A)	03/22/99	WAP	P990550:01	Tank condition was normal.
H	51	A-02	(A)	02/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	51	A-02	(A)	02/08/99	WAP	P990512:01	Tank condition was normal.
H	51	A-03	(A)	03/22/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	51	A-03	(A)	03/22/99	WAP	P990550:02	Tank condition was normal.
H	51	A-04	(A)	02/08/99	CCTV	556	The conductivity probe was deployed at the setpoint.
H	51	A-04	(A)	02/08/99	WAP	P990512:02	Tank condition was normal.
H	51	P-01	(A)	03/22/99	WAP	P990550:03	Tank condition was normal.
H	51	P-02	(A)	03/22/99	WAP	P990550:04	Tank condition was normal.
H	51	P-03	(A)	08/17/99	DP	P990662:01-25	Tank condition was normal.
H	51	P-04	(A)	08/16/99	DP	P990658:01-25	Tank condition was normal. A masselin cloth was observed on the annulus floor.
H	51	P-05	(A)	08/16/99	DP	P990659:01-25	Tank condition was normal. The primary vessel wall was wet. Stains and deposits observed on the wall indicated that chromated cooling water had leaked into the annulus.
H	51	P-05	(A)	11/16/99	CCTV	559	Inspection for dampness after cooling coil #7 had been valved off revealed the areas were dry.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	METHOD	FILE I.D. #	REMARKS
H	51	P-06	(A)	08/16/99	DP	P990660:01-25	Tank condition was normal. The primary vessel wall was wet. Stains and deposits observed on the wall indicated that chromated cooling water had leaked into the annulus.
H	51	P-06	(A)	11/16/99	CCTV	559	Inspection for dampness after cooling coil #7 had been valved off revealed the areas were dry.
H	51	P-07	(A)	08/17/99	DP	P990661:01-25	Tank condition was normal.
H	51	P-08	(A)	03/22/99	WAP	P990550:05	Tank condition was normal.
H	51	P-09	(A)	03/22/99	WAP	P990550:06	Tank condition was normal.
H	51	P-10	(A)	03/22/99	WAP	P990550:07	Tank condition was normal.
H	51	P-11	(A)	02/08/99	WAP	P990512:03	Tank condition was normal.
H	51	P-12	(A)	02/08/99	WAP	P990512:04	Tank condition was normal.
H	51	P-13	(A)	02/08/99	WAP	P990512:05	Tank condition was normal.
H	51	P-14	(A)	03/22/99	WAP	P990550:08	Tank condition was normal.
H	51	V-01	(I)	04/21/99	CCTV	NA	Verified the discharge connector was located on the south side inside the riser opening.
H	51	V-01	(I)	04/27/99	CCTV	559	Viewing of backflush valve during transfer revealed the valve was not leaking.
F	CTS	SE		06/09/99	CCTV	589	Documented the conditions in the CTS. Water was observed in the sump area only.
H	CTS	LDB-04		02/09/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	CTS	Underliner Sump		01/22/99	CCTV	559	Inspection revealed the standpipe contained water and debris.
H	CTS	Underliner Sump		05/18/99	CCTV	559	Documented the conditions in the underliner sump and aided with attempts to remove the debris.
H	CTS	Underliner Sump		05/26/99	CCTV	559	Monitored flushing and pumping out water in preparation to install the conductivity probe. Debris, including steel tubing, plastic tubing, hose clamps and a crescent wrench were observed.
F	DB-01			07/22/99	CCTV	601	Provided video support for remote removal of jumpers and installation of dummies. Made videotape to document the final equipment configuration.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	METHOD	FILE I.D. #	REMARKS
F	DB-02		08/18/99	CCTV	555	Verified position of valves WTS-V-89, 90, 91, 92, 93, 95, 96, 98, 99, 302, and 303. Valve 99 was in the open position. All other valves were in the closed position.
F	DB-02		10/04/99	CCTV	NA	Verified the position of valves WTS-V-99 and 302. Valve 99 was in the open position and valve 302 was in the closed position.
F	DB-02		10/06/99	CCTV	NA	Verified the position of valve WTS-V-22. The valve was in the open position.
F	DB-02		10/07/99	CCTV	NA	Verified the position of valve WTS-V-22. The valve was in the closed position.
F	DB-02		12/28/99	CCTV	555	Documented position of valve WTS-V-89 in the closed position.
F	DB-02	LDB-01	06/08/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	LDB-02	01/20/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	LDB-02	06/08/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	LDB-02	06/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	LDB-12	06/17/99	CCTV	NA	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-01	01/13/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
F	DB-02	MLDB-01	01/20/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
F	DB-02	MLDB-01	06/10/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-02	01/20/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
F	DB-02	MLDB-02	06/09/99	CCTV	NA	Documented the condition of the interior of the MLDB. No unusual conditions were observed.
F	DB-02	MLDB-02	06/10/99	HELIUM	HE-99-009	Helium tracer test was performed on MLDB-02 at FDB-02. The test revealed a leaksite at MLDB-02.
F	DB-02	MLDB-02	12/16/99	CCTV	554	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	DB-02	MLDB-03	04/26/99	CCTV	NA	Inspection revealed water was encountered approximately 11 1/2 feet into the standpipe. Water was 7 1/2 feet deep in the containment.
F	DB-02	MLDB-03	05/13/99	CCTV	NA	Inspection revealed liquid and mud on the bottom of the MLDB up to the standpipe.
F	DB-02	MLDB-03	06/16/99	HELIUM	HE-99-010	Helium tracer test was performed on MLDB-03 at FDB-02. The test revealed a leaksite at MLDB-03.
F	DB-02	MLDB-03	12/16/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-04	03/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-05	01/20/99	CCTV	554	Documented position of the conductivity probe. The probe was not visible due to water in the MLDB.
F	DB-02	MLDB-05	03/11/99	CCTV	554	Inspection revealed the conductivity probe standpipe was submerged in liquid. No probe was visible.
F	DB-02	MLDB-05	03/17/99	CCTV	554	Inspection revealed that the probe placement could not be determined. Access to the interior of the MLDB was blocked by what appeared to be plastic tubing.
F	DB-02	MLDB-05	04/12/99	CCTV	554	Inspection revealed the conductivity probe location could not be determined because of an abandoned hose and water obstructing view in the MLDB.
F	DB-02	MLDB-05	04/21/99	CCTV	554	Inspection revealed the conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-05	05/08/99	CCTV	554	Inspection revealed the conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-06	01/20/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
F	DB-02	MLDB-08	01/06/99	CCTV	554	Determined the conductivity probe was not positioned at setpoint due to the debris directly underneath the standpipe.
F	DB-02	MLDB-08	01/11/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-08	05/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	METHOD	FILE I.D. #	REMARKS
F	DB-02	MLDB-09	01/13/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
H	DB-02		01/11/99	CCTV	555	Verified the position of valves WTS-V-136, 142, and 146. The valves were in the closed position.
H	DB-02		02/16/99	CCTV	555	Verified the position of valves WTS-V-142 and 146. The valves were in the closed position.
H	DB-02		03/11/99	CCTV	555	Verified the position of valve WTS-V-142. The valve was in the closed position.
H	DB-02		09/26/99	CCTV		Verified position of valves WTS-V-128, 133, 134, 136, 140, 141, 142, 145, 146, and 147. The valves were in the closed position.
H	DB-02	LDB-01	01/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-02	MLDB-04	01/28/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-02	MLDB-05	01/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-02	MLDB-06	01/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-02	MLDB-06	04/15/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-03		08/17/99	CCTV	555	Verified the position of valves WTS-V-151 and 153. Valve 151 was in the closed position and valve 153 was in the open position.
F	DB-03	MLDB-01	01/25/99	CCTV	554	Verified position of the conductivity probe. The probe was positioned on the MLDB floor.
F	DB-03	MLDB-01	01/27/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-03	MLDB-01	04/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-03	MLDB-02	04/06/99	CCTV	554	Inspection revealed the conductivity probe was resting in mud.
F	DB-03	MLDB-02	04/07/99	CCTV	554	Inspection revealed after flushing the conductivity probe was positioned on the MLDB floor.
F	DB-03	MLDB-02	04/08/99	CCTV	554	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	DB-03	MLDB-02	04/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04		08/19/99	CCTV	555	Verified the position of valves WTS-V-224, 226 and 229. The valves were in the closed position.
F	DB-04		08/29/99	CCTV	555	Verified the position of valve WTS-V-224. The valve was in the closed position.
F	DB-04		08/31/99	CCTV	555	Verified the position of valve WTS-V-224. The valve was in the closed position.
F	DB-04		10/07/99	CCTV	NA	Verified the position of valve WTS-V-224. The valve was in the closed position.
F	DB-04		11/05/99	CCTV	555	Verified position of valve WTS-V-224. The valve was in the closed position.
F	DB-04		11/11/99	CCTV	555	Verified position of valve WTS-V-224. The valve was in the closed position.
F	DB-04		12/28/99	CCTV	555	Verified position of valve WTS-V-224. The valve was in the closed position.
F	DB-04	LDB-01	05/07/99	CCTV	559	Documented an attempt made to chase the threads in the drain utilizing a tap. The attempt was unsuccessful because the drain plug did not line up properly with the drain guide pipe. After several attempts, the plug was successfully installed in the drain allowing a pressure test to be performed.
F	DB-04	LDB-01	05/09/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-01	05/16/99	CCTV	554	Assisted with positioning the conductivity probe in the LDB. The probe was deployed at the setpoint.
F	DB-04	LDB-02	01/07/99	CCTV	554	Inspection determined the conductivity probe was not visible.
F	DB-04	LDB-02	05/08/99	CCTV	554	Documented position of the conductivity probe. The probe was not visible.
F	DB-04	LDB-02	06/22/99	CCTV	NA	Inspection revealed that the LDB was successfully flushed.
F	DB-04	LDB-02	06/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-03	03/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	DB-04	LDB-04	01/07/99	CCTV	554	Inspection determined an obstruction was in the conductivity probe standpipe. The probe was not deployed.
F	DB-04	LDB-04	01/26/99	CCTV	NA	Inspection determined the conductivity probe was not visible.
F	DB-04	LDB-04	01/28/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-05	03/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-06	05/20/99	CCTV	554	The conductivity probe was deployed at the setpoint. Debris was observed beneath the probe.
F	DB-04	LDB-07	06/17/99	CCTV	NA	Inspection revealed that the LDB was successfully flushed.
F	DB-04	LDB-07	06/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-08	04/21/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-10	01/26/99	CCTV	NA	Inspection determined the conductivity probe was not visible.
F	DB-04	LDB-10	06/21/99	CCTV	NA	Inspection revealed that the LDB was successfully flushed.
F	DB-04	LDB-10	06/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-12	06/17/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-13	01/26/99	CCTV	NA	Inspection determined the conductivity probe was not visible. The MLDB contained water.
F	DB-04	LDB-13	03/11/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-14	05/08/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-15	01/26/99	CCTV	554	Verified the conductivity probe was positioned on the MLDB floor.
H	DB-04		08/09/99	CCTV	559	Determined that water was in the sump.
H	DB-05		02/22/99	CCTV	555	Verified the position of valves WTS-V-105, 106, 107, 108, and 109. The valves were in the closed position.

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H	DB-05		05/10/99	CCTV	555	Verified the position of valves WTS-V-105, 560, and 563. Valves 105 and 563 were in the closed position. Valve 560 was in the open position.
H	DB-05		05/12/99	CCTV	555	Verified the position of valve WTS-V-105. The valve was in the closed position.
H	DB-05		07/22/99	CCTV	555	Verified the position of valve WTS-V-108. The valve was in the closed position.
H	DB-05		11/06/99	CCTV	555	Verified position of valve WTS-V-107. The valve was in the closed position.
F	DB-06	LDB-01	01/12/99	CCTV	554	Determined that the conductivity probe was positioned on the LDB floor.
F	DB-06	Underliner Sump	11/10/99	CCTV	NA	Documented conditions in the underliner sump. Sand, silt, mud, and water were observed in the bottom of the standpipe. The conductivity probe could not be observed.
H	DB-06		06/29/99	CCTV	555	Verified the position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		07/01/99	CCTV	555	Verified the position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		07/07/99	CCTV	555	Verified the position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		07/22/99	CCTV	555	Verified the position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		08/04/99	CCTV	559	Inspection revealed no extraneous material was present which would prevent the conductivity probe from being properly installed in the sump area.
H	DB-06		08/12/99	CCTV	555	Verified the position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		11/12/99	CCTV	555	Verified position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		11/22/99	CCTV	555	Verified position of valve WTS-V-56. The valve was in the closed position.
H	DB-06		12/30/99	CCTV	555	Documented position of valve WTS-V-56. The valve was in the closed position.
H	DB-06	LDB-01	02/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-06	LDB-02	02/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.

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H	DB-06	LDB-03	03/02/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-06	LDB-04	02/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-06	LDB-05	02/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07		01/11/99	CCTV	555	Verified the position of valves WTS-V-56, 58, 157, and 158. The valves were in the closed position.
H	DB-07		01/26/99	CCTV	555	Verified the position of valve WTS-V-163. The valve was in the closed position.
H	DB-07		03/04/99	CCTV	555	Verified the position of valves WTS-V-157, 158 and 159. The valves were in the closed position.
H	DB-07		03/17/99	CCTV	555	Verified the position of valves WTS-V-157 and 158. The valves were in the closed position.
H	DB-07		03/26/99	CCTV	555	Verified the position of valve WTS-V-163. The valve was in the closed position.
H	DB-07		05/01/99	CCTV	555	Verified the position of valve WTS-V-163. The valve was in the closed position.
H	DB-07		05/04/99	CCTV	555	Verified the position of valves WTS-V-159, 160, 161, and 162. The valves were in the closed position.
H	DB-07		05/20/99	CCTV	555	Verified the position of valve WTS-V-61. The valve was in the closed position.
H	DB-07		06/09/99	CCTV	555	Verified the position of valve WTS-V-62. The valve was in the closed position.
H	DB-07		06/14/99	CCTV	555	Verified the position of valves WTS-V-156 and 157. Valves 156 and 157 were in the closed position.
H	DB-07		06/15/99	CCTV	555	Verified the position of valve WTS-V-57. The valve stops did not completely come to rest on the pins. The valve was not fully closed.
H	DB-07		07/08/99	CCTV	555	Verified the position of valves WTS-V-52 and 53. The valves were in the closed position.
H	DB-07		07/17/99	CCTV	NA	Verified the position of valve WTS-V-163. The valve was not fully closed.

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H	DB-07		07/21/99	CCTV	555	Verified the position of valve WTS-V-163. The valve was in the closed position. A slight gap between the valve stop and pins was observed. However, the stops on the valve stem were completely closed.
H	DB-07		07/31/99	CCTV	NA	Verified the position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		08/01/99	CCTV	555	Verified the position of valves WTS-V-63 and 163. The valves were in the closed position.
H	DB-07		08/19/99	CCTV	NA	Verified the position of valves WTS-V-159, 160 and 161. The valves were in the closed position.
H	DB-07		09/03/99	CCTV	555	Verified the position of valve WTS-V-163. The valve was in the closed position.
H	DB-07		09/08/99	CCTV	555	Verified the position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		09/10/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were placed in the open position. After vent/drain, valve 62 was placed in the closed position.
H	DB-07		09/10/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		09/13/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the open position.
H	DB-07		09/14/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the open position.
H	DB-07		09/23/99	CCTV	619	Assisted with a leak check of Jumper 13(HDB7)5F. A leak was observed at the 5F connector head.
H	DB-07		10/01/99	CCTV	555	Verified the position of valves WTS-V-57, 59, 60, 63, 156 and 162. Valves 60, 63 and 162 were in the closed position. Valve 57 was open halfway at bottom stop; top stop was closed. Valve 59 was open quarter-way at bottom stop; top stop was spinning. Valve 156 was not fully closed at the bottom stop; however, the top stop was closed.

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H	DB-07		10/01/99	CCTV	555	Verified the position of valves WTS-V-52, 53, 62, 159, 160, 161, and 163. The valves were in the closed position. Valve 53 had salt on the valve body, valve 161 was found in the open position, and valves 52 and 163 were closed.
H	DB-07		10/02/99	CCTV	555	Assisted with performing a leak check of jumper 13(HDB7)5F after regasketing. A leak was observed at 5F connector head. Valves 62 and 163 were in the closed position.
H	DB-07		10/02/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		10/07/99	CCTV	555	Assisted with leak check of jumper 13(HDB7)5F. A leak was observed at the 5F connector head.
H	DB-07		10/07/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the open position.
H	DB-07		10/13/99	CCTV	619	Assisted with cleaning and regasketing nozzles for jumper 13(HBD7)5F and to perform a leak check. The jumper was leak free.
H	DB-07		10/16/99	CCTV	555	Verified the position of valves WTS-V-52, 53, 57, 59, 60, 61, 62, 63, 156, 162 and 163. The valves were in the closed position. Valves 59 and 62 showed some shaft/valve slipping.
H	DB-07		10/17/99	CCTV	555	Verified the position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		10/22/99	CCTV	555	Verified the position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		10/22/99	CCTV	555	Verified the position of valves WTS-V-159, 160 and 161. The valves were in the closed position.
H	DB-07		11/02/99	CCTV	555	Verified position of valves WTS-V-62 and 163. The valves were in the closed position.
H	DB-07		11/08/99	CCTV	555	Verified position of valves WTS-V-62 and 163. Valve 62 was in the closed position and valve 163 was almost closed.
H	DB-07		11/11/99	CCTV	555	Documented the position of valve WTS-V-158. The valve was in the closed position.

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H	DB-07		11/12/99	CCTV	555	Verified position of valves WTS-V-157, 158, and 159. The valves were in the closed position.
H	DB-07		11/16/99	CCTV	555	Verified the position of valve WTS-V-58. The valve was in the closed position.
H	DB-07		11/22/99	CCTV	555	Verified the position of valves WTS-V-62, 157, 158, 159, 160, 161 and 165. The valves were in the closed position.
H	DB-07	LDB-01	05/04/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-01	10/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-03	05/03/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-03	08/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-04	06/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-04	11/29/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-05	05/03/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-05	08/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-06	06/24/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-06	11/30/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-07	06/28/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-07	11/30/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-08	05/04/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	DB-07	LDB-08	10/25/99	CCTV	554	The conductivity probe was deployed at the setpoint.
F	EVAP-16		04/23/99	CCTV	576	Inspection in the cell revealed that conditions were normal. No evidence of leaks was found.

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F	EVAP-16		10/28/99	CCTV	630	Inspection of the evaporator cell revealed no unusual conditions. A small amount of what appeared to be mercury was observed on the floor in the NE corner. The (N) instrument jumper was removed and regasketed. The jumper was replaced and leak tested. On the first attempt, the jumper leaked. Wall nozzle 4 was tightened additionally and on the subsequent leak test the jumper was leak free.
F	EVAP-16	SE	12/15/99	CCTV	630	Assisted with leak check of jumpers after an increase in the sump was detected. The "N" instrument jumper connector was leaking steam at the nozzle.
F	EVAP-16	SE	12/31/99	CCTV	559	Inspection revealed that the instrument jumper connector head was not properly seated. The connector head was reseated and tightened. The leak check was deferred and scheduled as a pre startup activity.
H	EVAP-16		03/31/99	CCTV	555	Inspected the evaporator cell and leak check WTS-V-262. No leaks were observed.
H	EVAP-16		07/01/99	CCTV	595	Verified the position of valves WEE-V-236 and 255 and documented leak check. No leaks were observed.
H	EVAP-16	E-04	10/31/99	CCTV	627	Assisted with remote sampling of the evaporator pot. Inspection revealed solids on the vessel wall, tube bundle, heating coils, and other exposed surfaces. A sample of solids was collected from the bottom of the vessel.
H	EVAP-16	SW	11/02/99	CCTV	628	Inspection of the evaporator pot and cell showed no signs of degradation. An accumulation of salt was observed on the vent jumper at the top of the west separator pot which indicated that the gasket had failed. A plastic bag was observed in the sump. Extraneous items were observed on the floor.
H	EVAP-16	SW	11/10/99	CCTV	628	Assisted with performing leak check after the gasket was replaced on the vent jumper. No leakage was observed.
H	EVAP-25		01/26/99	CCTV	560	Inspection revealed that the rubber O-ring around the demister did not make a complete seal against the evaporator vessel.
H	EVAP-25		10/27/99	CCTV	621	The conductivity probe for ETF overhead line was deployed at the setpoint.

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H	EVAP-25	GDL Cell	11/28/99	CCTV	639	Inspection of GDL cell area revealed surface corrosion along the welds on top of the pipes. The ceiling and walls were satisfactory. The floor area contained extraneous items such as a broom, a fire extinguisher, a plastic bag, a light stand and tools.
H	EVAP-25	LDB-105	11/01/99	CCTV	554	Inspection revealed water in the standpipe.
H	EVAP-25	LDB-105	11/23/99	CCTV	554	Documented that the conductivity probe was positioned on the LDB floor.
H	EVAP-25	LDB-112	09/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	EVAP-25	LDB-122	11/01/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	EVAP-25	LDB-122	11/04/99	CCTV	554	Determined the length of the standpipe. The measured length was 254 inches.
H	EVAP-25	NE	03/31/99	CCTV	575	Performed a baseline inspection of the 242-25H evaporator cell after operation with simulated waste. Inspection revealed a residue of simulated waste at a lift jumper connector.
H	EVAP-25	NE	06/09/99	CCTV	575	Performed a baseline inspection. Dry leaked simulated waste was observed on the cell floor and on the exterior wall of the evaporator pot.
H	EVAP-25	NE	10/04/99	CCTV	621	Documented conditions in sump and cell area. An accumulation of deposits on nozzle U-2 indicate that the gasket had failed.
H	EVAP-25	NE	11/28/99	CCTV	639	Inspection of the evaporator cell area revealed stains and deposits on the floor, the lift jumper nozzle plate, and the pot insulation.
H	EVAP-25	NE	12/28/99	CCTV	639	Documented conditions in the evaporator cell and of the pot exterior. No changes were observed since last inspected on 11/28/99.
H	EVAP-25	NW	11/28/99	CCTV	639	Inspection of the evaporator cell area revealed stains and deposits on the floor, the lift jumper nozzle plate, and the pot insulation.
H	EVAP-25	SE	11/28/99	CCTV	639	Inspection of the evaporator cell area revealed stains and deposits on the floor, the lift jumper nozzle plate, and the pot insulation.

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H	EVAP-25	Simulate Tank	06/29/99	CCTV	559	Inspection revealed no accumulation of material on underside of dome that would prevent relief valve from operating properly. No other unusual conditions were observed.
H	EVAP-25	SW	09/28/99	CCTV	621	Inspection of the condition in the sump area and cell area revealed liquid about one foot deep in the cell.
H	EVAP-25	SW	10/06/99	CCTV	621	Inspection revealed an accumulation of dried waste simulant on the cell floor. The accumulation height was approximately 8 to 10 inches sloping from the NE corner to the SW sump corner. The Jupiter Jumper, SS liner, evaporator pot and other associated piping was coated with the salt.
H	EVAP-25	SW	10/19/99	CCTV	621	Inspection revealed accumulation of waste simulant on the floor and along the sump area. After the cleaning efforts the pot, walls, and nozzles appear to be free of simulant.
H	EVAP-25	SW	11/08/99	CCTV	633	Inspection of the interior of the evaporator pot after simulated waste was processed revealed no unusual buildup on the walls, the demister, the tube bundles, or in the cone area were observed.
H	EVAP-25	SW	11/28/99	CCTV	639	Inspection of the evaporator cell area revealed stains and deposits on the floor, the lift jumper nozzle plate, and the pot insulation.
	IAL	High Point	02/10/99	CCTV	555	Verified the position of valves IT-V-40, 41, 42, 43, 44, 45, 46, and 47. All the valves were in the closed position except for 43. It was in the open position.
	IAL	High Point	11/03/99	CCTV	555	Verified position of valves IT-V-40, 41, 42, 43, 44, 45, 46, and 47. The valves were in the closed position.
	IAL	High Point	11/11/99	CCTV	555	Verified position of valves IT-V-41, 43, 45, and 46. The valves were in the closed position.
	IAL	High Point	11/12/99	CCTV	555	Verified position of valves IT-V-41, 43, 45, and 46. The valves were in the closed position.
	IAL	High Point	11/22/99	CCTV	555	Documented the position of valves IT-V-41, 43, 45 and 46. The valves were in the closed position.

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F	IAL High Point		12/28/99	CCTV	555	Documented position of valves IT-V-40, 41, 45, and 46. The valves were in the closed position.
H	LDB Drain Cell		07/08/99	CCTV	596	The conductivity probe was properly positioned. A sample vial with string, a steel rod, mud, hose, and cable were observed on the floor or in the sump.
F	PP-01		02/11/99	CCTV	555	Verified the position of valves IT-V-1 and 2. Valve 1 was not manipulated and was found to be 85% open. Valve 2 was in the closed position.
F	PP-01		08/09/99	CCTV	605	Inspection of the sump pump wiring revealed all wiring was intact.
F	PP-01		08/14/99	CCTV	618	Provided video support to guide installation of the sump pump and to document it pumped out the sump adequately to clear alarms.
F	PP-01		08/18/99	CCTV	555	Verified position of valves WTS-V-1, 2, 100, 101, 102, and 226. Valve 1 was found to be positioned half open. All valves were left in the closed position.
F	PP-01		10/06/99	CCTV	NA	Verified the position of valve IT-V-1. The valve was observed to be 3/4 of the way open.
F	PP-03		04/27/99	CCTV	579	Documented conditions of the pump pit and the configuration of jumpers. No unusual conditions were observed.
H	PP-05		03/05/99	CCTV	566	Provided video to aid with remote sampling of the pump tank. An organic layer, dip, and variable depth (sludge) sample were obtained. Some solids and pieces of rubber gloves were observed on the surface of the liquid in the tank.
H	PP-07	SE	04/22/99	CCTV	577	Verified that the pump tank overflow lines were free of obstructions.
H	PP-08	SE	04/22/99	CCTV	577	Verified that the pump tank overflow lines were free of obstructions.
H	PP-09	SE	04/22/99	CCTV	577	Verified that the pump tank overflow lines were free of obstructions.
H	PP-10	SE	04/23/99	CCTV	577	Verified that the pump tank overflow lines were free of obstructions.
H	PP-5&6	LDB-01	01/13/99	CCTV	554	The conductivity probe was deployed at the setpoint.

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H	PP-5&6	LDB-02	02/02/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-05	01/12/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-05	06/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-05	11/23/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-07	01/12/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-07	06/22/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PP-5&6	LDB-07	11/09/99	CCTV	554	The conductivity probe was deployed at the setpoint.
H	PT-10		08/04/99	CCTV	604	Used video to document the contents of the pump tank, to inspect for frit, and to check for obstruction at the pump tank overflow discharge and the ventilation opening. Some solids were observed on the bottom of the pump tank. No obstruction was observed.
H	PT-10		08/19/99	CCTV	604	Used video to assist with sampling for organic and checking for obstruction at the overflow discharge. The sampling was performed successfully. The overflow was clear of obstruction.
F	SWS	2F-03	08/30/99	CCTV	609	Documented condition of storm drain. Inspection revealed conditions had not changed since inspected on 11/25/97.
F	SWS	2F-09	08/11/99	CCTV	606	Documented conditions of the RCP south of 2F-09. Approximately 40 feet of this segment was clean. At 42 feet, an accumulation of rocks and debris was observed which prevented further inspection.
F	SWS	2F-09	08/11/99	CCTV	606	Documented conditions of the RCP east of 2F-09. Approximately 96 feet of the RCP was inspected and sand was observed in the entire line with deepest sand, three to four inches, accumulating at the outlet.
F	SWS	2F-09	08/11/99	CCTV	606	Documented conditions of the RCP west of 2F-09. Approximately 110 feet of this segment was inspected and the line appeared to be free of debris and sand. No unusual conditions were observed.

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F	SWS	2F-09	08/30/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/26/97.
F	SWS	3F-04	08/25/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/26/97.
F	SWS	3F-09	08/25/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/25/97.
F	SWS	4F-03	08/23/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97 except that water level appears to be higher.
F	SWS	4F-04	08/23/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97 except that water level appears to be higher.
F	SWS	4F-05	08/23/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97 except that water level appears to be higher.
F	SWS	4F-08	08/25/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97.
F	SWS	4F-09	08/25/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97.
F	SWS	4F-13	08/23/99	CCTV	609	Documented condition of storm drain. Inspection revealed conditions had not changed since inspected on 08/5/98.
F	SWS	4F-15	08/31/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/24/97.
F	SWS	4F-17	08/31/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 06/25/97.
F	SWS	4F-19	08/31/99	CCTV	609	Documented condition of storm drain. Conditions had not changed since inspected on 11/25/97.
H	SWS	2H-02	09/07/99	CCTV	612A	Documented condition of the storm sewer. Conditions had not changed since inspected on 11/25/97.
H	SWS	2H-04	09/07/99	CCTV	612A	Documented conditions of the storm sewer. Conditions had not changed since inspected on 7/14/97.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	SWS	2H-06	09/22/99	CCTV	612B	Documented the condition and establish a baseline for future inspections. Some sediment (1/4" to 1/2" deep) was observed in the inlet pipes and in one of the outlet pipes. Some rocks were observed on the bottom of the storm sewer. Some minor erosion was observed between some of the bricks and around the pipes. No evidence of structural failure or significant infiltration was observed.
H	SWS	2H-07	09/07/99	CCTV	612A	Documented the condition of the storm sewer. Conditions had not changed since inspected on 11/25/97.
H	SWS	2H-08	09/07/99	CCTV	612A	Documented the condition of the storm sewer. Minor erosion of mortar between the bricks was noted. Also, a crack was observed on the concrete floor on the bottom of the sewer. No evidence of significant structural failure or significant infiltration was observed.
H	SWS	2H-09	09/07/99	CCTV	612A	Documented the condition of the storm sewer. Conditions had not changed since inspected on 10/15/97.
H	SWS	2H-10	09/07/99	CCTV	612A	Documented the condition of the storm sewer. Conditions had not changed since inspected on 07/07/97.
H	SWS	6H-05	09/08/99	CCTV	612	Documented the condition inside the storm sewer. Conditions had not changed since inspected on 07/15/97.
H	SWS	6H-08	09/08/99	CCTV	612	Documented the condition inside the storm sewer. Minor erosion of the mortar between the bricks was observed. A crack was observed in the concrete liner of the storm sewer. No evidence of structural failure or significant infiltration was observed.
H	SWS	6H-09	09/08/99	CCTV	612	Documented the condition inside the storm sewer. Conditions had not changed since inspected on 07/15/97.
H	SWS	7H-01	09/16/99	CCTV	612	Documented the condition inside the storm sewer. A crack in the concrete was observed on the side wall. No further significant damage was observed since last inspection.
H	SWS	7H-02	09/16/99	CCTV	612	Documented the condition inside the storm sewer. Conditions had not changed since inspected on 10/15/97.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
F	WLE	02	09/22/99	CCTV	622	Inspection revealed that structural condition had not changed. Seal material from joints between the cover plates continued to fall from the joints.
F	WLE	05	09/22/99	CCTV	622	Inspection revealed that structural condition had not changed. Seal material from joints between the cover plates continued to fall from the joints. The cracked concrete cover remained above transfer lines. Condensate was present on the concrete cover plates and transfer lines.
F	WLE	06	09/22/99	CCTV	622	Inspection revealed that structural condition had not changed.
H	WLE	02	04/13/99	CCTV	583	Inspection revealed that structural condition had not changed. Moisture was observed on the bottom of cell covers, transfer lines, encasement walls, and floor. Stains and marks on encasement walls were caused by water leakage, which appears to be minimal. Some cracking of grout material where pipes passed through the wall was observed.
H	WLE	05	04/25/99	CCTV	583	Inspection revealed that structural condition had not changed. Moisture was observed on the bottom of cell covers, transfer lines, and floor. There is an accumulation of mud and joint waterproofing debris on the floor and on transfer lines. Stains and marks on encasement walls were caused by water leakage, which appears to be minimal.
H	WLE	06	04/25/99	CCTV	583	Inspection revealed that structural condition had not changed. Moisture was observed on the bottom of cell covers, transfer lines, and floor. There is an accumulation of mud and joint waterproofing debris on the floor and on transfer lines. Stains and marks on encasement walls were caused by water leakage, which appears to be minimal. Small stalactites were observed hanging from the ceiling.
H	WLE	07	04/13/99	CCTV	583	Inspection revealed that structural condition had not changed. Moisture was observed on the bottom of cell covers and floor. Stains and marks on encasement walls were caused by water leakage, which appears to be minimal. Small stalactites were observed hanging from the ceiling.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>METHOD</u>	<u>FILE I.D. #</u>	<u>REMARKS</u>
H	WPH		03/19/99	HELIUM	HE-99-004	Helium tracer test was performed on the chromated cooling water supply header from the West Pump House to Tanks 29-32. The test was inconclusive.
H	WPH		03/23/99	HELIUM	HE-99-005	Helium tracer test was performed on the chromated cooling water supply header from the West Pump House to Tanks 29-32. The test revealed a leaksite located north of Tank 30 for excavation and repair.
H	WPH		06/03/99	HELIUM	HE-99-008	Helium tracer test was performed on the chromated cooling water supply header from the West Pump House to Tanks 29-32. The test revealed a leaksite located north of Tank 30.

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