Annual Radioactive Waste Tank Inspection Program - 1997^(U)

Westinghouse Savannah River Company
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Acronyms and Abbreviations

A	Annulus
ASME	American Society of Mechanical Engineers
CCTV	Closed Circuit Television
CCWS	Chromate Cooling Water System
CTS	Concentrate Transfer System
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
HLWE	High Level Waste Engineering
HPFP	High Point Flush Pit
I	Interior
IAL	Intra-Area Line
ITPFC	In-Tank-Precipitation Filter Cell
LDB	Leak Detection Box
LPPP	Low Point Pump Pit
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 1997 to evaluate these vessels and 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 1997 inspection program revealed that the structural integrity and waste confinement of the Savannah River Site waste tanks remained unchanged, except for Tank 15. No evidence of structural degradation or loss of waste confinement was observed for other tanks. Ongoing evaluation and inspection of the artifacts reported last year on the wall of Tank 15 indicated cracks through the tank wall beneath riser 207. Artifacts were observed beneath riser 182 that indicated through-wall crack(s), and beneath riser 55, which potentially indicated through-wall crack(s). Because the cracks occurred above the level of the waste in the tank, only a trace of waste seeped to the exterior wall surface to reveal these crack sites. In 1972 and 1973, thirteen leaksites were identified in Tank 15. These recent findings bring the total known crack sites to fifteen.

A total of 4344 photographs were made, 298 visual and video inspections were performed, 11 helium leak tests were conducted, and ultrasonic wall thickness mapping was performed at a total of 8 locations in 2 waste tanks.

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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 $\text{Fe}(\text{OH})_2$ 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 periscopic systems, direct 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 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 comprised of visual imagery inspection and ultrasonic steel thickness measurement. This report gives results of the 1997 inspection program 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.

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.

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

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

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

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).

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.

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

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

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.

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 cylin-

drical 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 exci-

sions 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. Optical periscopes, borescopes, and 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 other systems were used less frequently and are similar to systems used widely in industry. Tank wall thickness measurements were made using a crawler developed at SRS that was interfaced with the P-scan Ultrasonic Inspection System.

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 were synchronized with these cameras to provide illumination. These cameras are 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.

Thickness measurements were made with the P-scan Ultrasonic Inspection System. The System was interfaced with a SRS developed tank-wall crawler to perform examination of the Type III waste tanks. The crawler design permits access to tank walls via openings as small as eight inches in diameter. P-scan is a highly developed ultrasonic technique for corrosion mapping and weld inspection. Acquired data are stored on disks for evaluation. The system provides documentation of 100% of the measured area and color imaging of inspection results. Adjustable color levels can be used to display percentage of area examined within specific thickness ranges. The system calculates the minimum, maximum, and mean values for each scan.

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Program Implementation

Visual Imagery

The 1997 inspection program used three visual imagery techniques: photography, closed circuit television, and periscopic inspection. 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 and periscopes 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 1997 by photographic 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.

Ultrasonic Testing

The P-scan Ultrasonic Testing System with a remotely controlled crawler was used to perform thickness mapping on vertical strips of the wall of two tanks.

1997 Inspection Results

The 1997 inspection program was successfully completed. The annuli of all double-wall tanks and the interiors of single-wall tanks were inspected at accessible risers by at least one photographic technique. Other inspections were made as required by operating conditions and equipment performance. Details and results for inspections of waste tanks and waste tank ancillaries performed in 1997 are listed in Appendix B.

Inspection of Tank 15 confirmed that the artifacts observed earlier on the exterior wall adjacent to the middle girth weld beneath riser 207 indicated through-wall cracks; identified through-wall crack(s) at a site viewed beneath riser 182; and identified artifact beneath riser 55 that potentially indicates a through-wall crack. All of these crack sites are five to ten feet above the waste level.

The crack site beneath riser 207 propagated through the steel wall since 1992. This crack site evidenced itself slowly by the formation of a trace of waste, a thin formation of waste that appeared to highlight a hairline crack, on the exterior surface of the tank wall. The detailed photographic inspection made in 1992 showed no indication of a crack; the surface appeared unchanged from earlier inspection. The 1994 inspection showed artifact on the tank wall that was better defined, and evidenced a crack when again inspected in 1996. Inspection in 1997 showed additional evidence of through-wall crack; i.e., a slight increase in the waste deposit on the wall. The crack site developed at an elevation about five feet above the waste in the tank. The fact that crack(s) propagated through the wall above the waste level explains the slow presentation of a minute quantity of waste on the exterior wall. Evidently, the waste was leached from the crack by condensate that formed on the exterior wall during annulus ventilation outages.

Tank 15 has thirteen other known crack sites that were identified by the initial inspection of the tank performed during 1972 and 1973. These recently identified crack sites are the first cracks observed in any double-wall tank that penetrated the steel wall above the level of the waste in the tank.

The condition of other tanks remained virtually unchanged from conditions reported in 1996 except for some mild corrosion of steel surfaces in tank annuli. Rainwater continued to leak into the annulus of most tanks. The inleakage was evidenced mostly by surface stains; occasionally by calciferous deposits; occasionally by changed configuration of leaked waste in the annulus (see Appendix B); and by mild surface corrosion where ventilation was inadequate for maintaining the annulus dry.

Ultrasonic measurements were performed on Tanks 48 and 51. The measurements were equivalent to previous measurements, indicating no service induced corrosion, i.e. pitting or thinning of the tank wall.

Summary of Inspection Results

The following is a brief description of tank conditions as revealed by inspections and examinations made through 1996.

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 leak-site(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 circumferen-

tial 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. Two more sites where cracks penetrated the steel wall were photographically documented, one in 1994 and one in 1997. These two crack sites are the first observed in SRS waste tanks that are known to have propagated through the steel wall above the level of waste in the tank. Also in 1997, artifacts were documented that potentially indicate another site where a crack(s) penetrated the wall above the waste level. 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".

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, signifi-

cant 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 serves 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.

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 corro-

sion, 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, significant surface corrosion, or other anomalies. Ultrasonic thickness measure-

ments 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.

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	IIIA	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 1997 Inspections

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	01	East (A)	10/25/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	01	East (A)	10/25/97	DP / P970240:01-16	Tank condition had not changed.
F	01	East (A)	11/11/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	01	East (A)	11/18/97	CCTV / 444	CCTV was used to validate the deployment of the magnetically mounted thermocouple. The new thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	01	North (A)	10/25/97	WAP / P970238:01	Tank condition had not changed.
F	01	South (A)	10/28/97	DP / P970243:01-14	Tank condition had not changed.
F	01	West (A)	10/24/97	CCTV / 444	CCTV was used to determine the position of the conductivity probe. The probe was improperly deployed. It was approximately 3 inches above the annulus floor.
F	01	West (A)	10/25/97	DP / P970239:01-16	Tank condition had not changed.
F	01	West (A)	11/11/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	02	East (A)	05/05/97	WAP / P970098:01	Tank condition was normal.
F	02	East (A)	09/30/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	02	North (A)	10/02/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	02	North (A)	10/28/97	WAP / P970241:01	Tank condition was normal.
F	02	South (A)	05/05/97	WAP / P970098:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
F	02	South (A)	09/30/97	CCTV	/ 444	The conductivity probe was observed properly positioned on the annulus floor.
F	02	West (A)	02/05/97	DP	/ P970029:01-17	Tank condition was normal. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus.
F	03	East (A)	02/04/97	DP	/ P970030:01-17	Tank condition was normal. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus.
F	03	North (A)	05/05/97	WAP	/ P970099:03	Tank condition was normal.
F	03	North (A)	09/30/97	CCTV	/ 444	The conductivity probe was observed properly positioned on the annulus floor.
F	03	South (A)	05/05/97	WAP	/ P970099:01	Tank condition was normal.
F	03	South (A)	09/30/97	CCTV	/ 444	The conductivity probe was observed properly positioned on the annulus floor.
F	03	West (A)	05/05/97	WAP	/ P970099:02	Tank condition was normal. Stains and marks observed on the ventilation duct and annulus floor were caused by water that had leaked into the annulus.
F	03	West (A)	09/30/97	CCTV	/ 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	04	East (A)	10/02/97	CCTV	/ 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	04	East (A)	10/28/97	WAP	/ P970242:01	Tank condition was normal.
F	04	North (A)	05/05/97	WAP	/ P970100:01	Tank condition was normal.
F	04	North (A)	09/30/97	CCTV	/ 444	CCTV was used to determine the position of the conductivity probe. The probe cable was seen leading downward and disappearing beneath the ventilation duct indicating a probe was deployed on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	04	South (A)	02/04/97	DP / P970031:01-17	Tank condition was normal. Stains and marks observed on the primary vessel wall and ventilation duct were caused by water that had leaked into the annulus.
F	04	South (A)	09/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	04	West (A)	05/05/97	WAP / P970100:02	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
F	05	East (A)	02/04/97	DP / P970032:01-17	Tank condition was normal. Stains observed on the primary vessel wall were caused by water that had leaked into the annulus.
F	05	North (A)	05/05/97	WAP / P970101:03	Tank condition was normal.
F	05	North (A)	09/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	05	South (A)	05/05/97	WAP / P970101:01	Tank condition was normal.
F	05	South (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	05	West (A)	05/05/97	WAP / P970101:02	Tank condition was normal.
F	05	West (A)	09/30/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	06	East (A)	03/04/97	WAP / P970039:03	Tank condition was normal.
F	06	East (A)	03/05/97	DP / P970038:01-17	Tank condition was normal. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	06	North (A)	03/04/97	WAP / P970039:04	Tank condition was normal.
F	06	North (A)	03/04/97	DP / P970037:01-17	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	06	North (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	06	South (A)	03/04/97	WAP / P970039:01	Tank condition was normal.
F	06	South (A)	03/05/97	DP / P970036:01-17	Tank condition was normal.
F	06	South (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	06	West (A)	03/04/97	WAP / P970039:02	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
F	06	West (A)	03/04/97	DP / P970035:01-17	Tank condition was normal.
F	06	Center (I)	02/19/97	CCTV / 453	CCTV was used to monitor transfer of liquid from Tank 17. The transfer was successfully completed.
F	-07	VB #5	07/17/97	CCTV / 479	CCTV was used to determine the valve position. The valve was in the open position.
F	07	VB #5	09/18/97	CCTV / 381	CCTV was used to investigate leakage into the valve box. Mud was observed on the valve box floor and in the jacket where the line enters and exits the box.
F	07	North (A)	05/05/97	WAP / P970103:01	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
F	07	North (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	07	South (A)	02/04/97	DP / P970033:01-17	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
F	07	South (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	07	West (A)	05/05/97	WAP / P970103:02	Tank condition was normal.
F	07	West (A)	09/24/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	08	East (A)	02/04/97	DP / P970034:01-17	Tank condition was normal. Stains and marks observed on the ventilation duct and annulus floor were caused by water that had leaked into the annulus.
F	08	East (A)	09/24/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	08	North (A)	05/05/97	WAP / P970102:03	Tank condition was normal.
F	08	North (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	08	South (A)	05/05/97	WAP / P970102:01	Tank condition was normal.
F	08	South (A)	09/24/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	08	West (A)	05/05/97	WAP / P970102:02	Tank condition was normal. Stains and marks observed on the ledge at the top of the secondary pan were caused by water that had leaked into the annulus.
H	09	South (A)	03/19/97	DP / P970092:01-15	Tank condition had not changed. Water had leaked into the annulus and reconfigured the leaked waste on the annulus floor.
H	09	South (A)	05/14/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	09	West (A)	03/18/97	WAP / P970086:01	Tank condition had not changed. Water had leaked into the annulus and reconfigured the leaked waste on the annulus floor.
H	09	West (A)	05/15/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	10	East (A)	03/19/97	DP / P970093:01-15	Tank condition had not changed. Stains observed on the primary vessel wall were caused by water that had leaked into the annulus. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	10	East (A)	05/22/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	10	North (A)	05/21/97	DP / P970104:01-18	Tank condition had not changed.
H	10	North (A)	05/21/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	10	West (A)	03/18/97	WAP / P970087:01	Tank condition had not changed.
H	11	East (A)	03/18/97	WAP / P970088:02	Tank condition had not changed.
H	11	North (A)	03/18/97	WAP / P970088:01	Tank condition had not changed.
H	11	North (A)	06/02/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	11	South (A)	03/19/97	DP / P970094:01-15	Tank condition had not changed.
H	11	South (A)	05/29/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	11	West (A)	03/19/97	DP / P970095:01-15	Tank condition had not changed. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	12		10/30/97	CCTV / NA	CCTV was used to determine if the purge reheater steam coil was leaking. The presence of steam in the reheater chest indicated that there was a leak.
H	12	East (A)	03/19/97	DP / P970096:01-15	Tank condition had not changed. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	12	North (A)	03/18/97	WAP / P970089:01	Tank condition had not changed. Appearance of stains and marks observed on the ventilation duct had been altered by humid conditions that prevailed during a steam outage to the ventilation systems.
H	12	North (A)	06/04/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	12	South (A)	03/19/97	DP / P970097:01-16	Tank condition had not changed.
H	12	South (A)	06/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	12	West (A)	03/18/97	WAP / P970089:02	Tank condition had not changed. Stains and marks observed on the annulus floor were caused by water that had leaked in the annulus.
H	13	010 (A)	03/05/97	WAP / P970044:03	Tank condition had not changed. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	13	010 (A)	03/17/97	CCTV / NA	Inspection revealed that stains and marks observed on top of the ventilation distribution duct were caused by rust stained water that had leaked into the annulus via the ventilation outlet.
H	13	032 (A)	03/05/97	WAP / P970044:04	Tank condition had not changed.
H	13	055 (A)	03/05/97	WAP / P970044:05	Tank condition had not changed.
H	13	071 (A)	03/05/97	WAP / P970044:06	Tank condition had not changed. Stains and marks observed on the ventilation duct and ledge at the top of the secondary pan were caused by water that had leaked around the riser plug.
H	13	151 (A)	03/05/97	WAP / P970044:07	Tank condition had not changed. Stains and marks observed on the ventilation duct and ledge at the top of the secondary pan were caused by water that had leaked around the riser plug.
H	13	175 (A)	03/05/97	DP / P970047:01-17	Tank condition had not changed.
H	13	207 (A)	03/05/97	DP / P970048:01-17	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	13	228 (A)	03/17/97	WAP / P970090:01	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	13	East (A)	03/05/97	DP / P970045:01-17	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	13	North (A)	03/05/97	WAP / P970044:01	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	13	North (A)	07/15/97	CCTV / 444	CCTV was used to validate the deployment of the conductivity probe. The probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	13	South (A)	03/05/97	WAP / P970044:02	Tank condition had not changed. Stains and marks observed on the ledge at the top of the secondary pan were caused by water that had leaked into the annulus.
H	13	South (A)	07/14/97	CCTV / 444	CCTV was used to validate the deployment of the conductivity probe. The probe was observed properly positioned on the annulus floor.
H	13	West (A)	03/05/97	DP / P970046:01-16	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	14	013 (A)	03/10/97	DP / P970075:01-17	Tank condition had not changed. Water had leaked into the annulus, changing the appearance of stains and deposits on the primary vessel wall. Calciferous deposits washed down the wall made it impossible to determine if the leaksite on the bottom girth weld had changed since inspected on 2/22/95. Rainwater was observed in the annulus.
H	14	032 (A)	03/10/97	WAP / P970083:01	Tank condition had not changed. Water had leaked into the annulus and reconfigured the leaked waste in the annulus pan. Rainwater was observed in the annulus.
H	14	065 (A)	03/10/97	WAP / P970083:02	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of the stains on the primary vessel wall, and reconfigured the leaked waste in the annulus pan. Rainwater was observed in the annulus.
H	14	108 (A)	03/10/97	WAP / P970083:03	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of the stains on the primary vessel wall, and reconfigured the leaked waste in the annulus pan.
H	14	118 (A)	03/10/97	WAP / P970083:04	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of the stains on the primary vessel wall, and reconfigured the leaked waste in the annulus pan.
H	14	125 (A)	03/10/97	WAP / P970083:05	Tank condition had not changed. Water had leaked into the annulus and reconfigured the leaked waste in the annulus pan.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	14	151 (A)	03/10/97	DP / P970076:01-17	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of the stains on the primary vessel wall, ventilation duct, around the nodules of leaked waste on the primary vessel wall, and reconfigured the leaked waste in the annulus pan.
H	14	169 (A)	03/10/97	DP / P970077:01-17	Tank condition had not changed. Water had leaked into the annulus, changing the appearance of stains, marks, and deposits on the primary vessel wall, and reconfigured the leaked waste in the annulus pan.
H	14	207 (A)	03/10/97	DP / P970078:01-17	Tank condition had not changed. Water had leaked into the annulus, changing the appearance of stains and deposits on the primary vessel wall, ventilation duct, and reconfigured the leaked waste in the annulus pan. Rainwater was observed in the annulus.
H	14	235 (A)	03/10/97	DP / P970079:01-17	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of stains, marks, and deposits on the primary vessel wall, ventilation duct, and reconfigured the leaked waste in the annulus pan. Rainwater was observed in the annulus.
H	14	259 (A)	03/10/97	DP / P970080:01-17	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of stains, marks, and deposits on the primary vessel wall, ventilation duct, and reconfigured the leaked waste in the annulus pan. Rainwater was observed in the annulus. A nodule of leaked waste had become detached and fallen from the primary vessel wall.
H	14	East (A)	03/10/97	DP / P970073:01-16	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of stains on the primary vessel wall, and reconfigured the leaked waste in the annulus. Rainwater was observed in the annulus.
H	14	East (A)	07/22/97	CCTV / 444	CCTV was used to validate the deployment of the conductivity probe. The probe was observed properly positioned approximately one inch above the dry waste.
H	14	North (A)	03/10/97	DP / P970074:01-16	Tank condition had not changed. Water had leaked into the annulus, changed the appearance of stains on the primary vessel wall, and reconfigured the leaked waste in the annulus. Rainwater was observed in the annulus. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	14	North (A)	11/17/97	CCTV / 444	The conductivity probe was observed properly positioned between 1/2 and 1 inch above the leaked waste.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
H	15	010 (A)	03/12/97	DP	/ P970068:01-15	Tank condition had not changed.
H	15	032 (A)	03/12/97	WAP	/ P970082:04	Tank condition had not changed. Stains and marks observed on the annulus floor were changed by water that had leaked into the annulus.
H	15	055 (A)	03/12/97	WAP	/ P970082:05	Artifacts on the external surface of the primary vessel wall at a vertical plate weld above the middle girth weld indicated that a crack may exist at this location.
H	15	071 (A)	03/12/97	WAP	/ P970082:06	Tank condition had not changed.
H	15	107 (A)	03/12/97	DP	/ P970064:01-15	Tank condition had not changed. Stains and marks observed on the primary vessel wall and the annulus floor were caused by water that had leaked into the annulus.
H	15	117 (A)	03/12/97	DP	/ P970066:01-15	Tank condition had not changed. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus. The shape of a salt nodule on the bottom girth weld appeared to have been changed by water that had leaked into the annulus and cascaded down the primary vessel wall. (This is the same nodule observed from access opening 137 on 3/12/97.)
H	15	137 (A)	03/12/97	DP	/ P970067:01-17	Tank condition had not changed. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus. The shape of a salt nodule on the bottom girth weld appeared to have been changed by water that had leaked into the annulus and cascaded down the primary vessel wall. (This is the same nodule observed from access opening 117 on 3/12/97.)
H	15	171 (A)	03/12/97	DP	/ P970065:01-15	Tank condition had not changed. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus.
H	15	182 (A)	03/17/97	DP	/ P970085:01-15	Artifacts on the steel wall beneath the middle girth weld indicate a crack site exists at this location.
H	15	207 (A)	03/12/97	WAP	/ P970082:07	Tank condition had not changed.
H	15	207 (A)	10/14/97	CCTV	/ NA	CCTV was used to view the crack site. The quantity of solids on the exterior wall that weeped from the crack had increased slightly since observed on 06/14/96. The quantity of solids at the crack site remained small; i.e., only enough solids were present to highlight the crack. The length of the crack(s) was estimated to be 12 to 15 inches.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	15	223 (A)	03/12/97	WAP / P970082:08	Tank condition had not changed.
H	15	242 (A)	11/12/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	15	East (A)	03/12/97	WAP / P970082:02	Tank condition had not changed.
H	15	North (A)	03/12/97	WAP / P970082:01	Tank condition had not changed.
H	15	North (A)	11/17/97	CCTV / 444	CCTV was used to determine the position of the conductivity probe. The probe was lifted up so that it could be observed and then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe is not visible after it is lowered behind the duct.
H	15	South (A)	03/17/97	DP / P970084:01-15	Tank condition had not changed. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	15	South (A)	07/28/97	CCTV / 444	CCTV was used to validate deployment of the conductivity probe. The probe was observed properly positioned on the annulus floor.
H	15	West (A)	03/12/97	WAP / P970082:03	Tank condition had not changed.
H	16	035 (A)	03/11/97	DP / P970072:01-16	Tank condition had not changed. Appearance of stains and deposits observed on the secondary vessel wall and the annulus floor had been altered by condensate formed on these surfaces during a long outage of the annulus ventilation system.
H	16	118 (A)	03/11/97	DP / P970069:01-14	Tank condition had not changed. Water had leaked into the annulus, changed the stains on the primary vessel wall, and reconfigured the leaked waste in the annulus.
H	16	207 (A)	03/11/97	DP / P970070:01-14	Tank condition had not changed. Appearance of stains and deposits observed on the secondary vessel wall and the annulus floor had been altered by condensate formed on these surfaces during a long outage of the annulus ventilation system.
H	16	262 (A)	03/11/97	DP / P970071:01-15	Tank condition had not changed. Appearance of stains and deposits observed on the secondary vessel wall and the annulus floor had been altered by condensate formed on these surfaces during a long outage of the annulus ventilation system.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	16	East (A)	03/11/97	WAP / P970081:01	Tank condition had not changed. Appearance of stains and deposits observed on the secondary vessel wall and the annulus floor had been altered by condensate formed on these surfaces during a long outage of the annulus ventilation system.
H	16	West (A)	03/11/97	WAP / P970081:02	Tank condition had not changed. Appearance of stains and deposits observed on the secondary vessel wall and the annulus floor had been altered by condensate formed on these surfaces during a long outage of the annulus ventilation system.
F	17	Center (I)	01/17/97	VISUAL / NA	Inspection was made to determine if the vapor space sample pipe opened into the tank or the thermowell. Inspection revealed that a thermowell was installed inside the piping and that the sample pipe was open to the tank vapor space.
F	17	Center (I)	01/22/97	CCTV /	CCTV was used to support tank closure activities. The tank was closed on 12/15/97.
F	17	Center (I)	03/08/97	WAP / P970041:01-09	Tank condition was normal.
F	18	Center (A)	10/29/97	WAP / P970245:01-09	Tank condition was normal. Stains and marks observed on the tank wall were caused by water that had leaked into the tank via the risers.
F	19	NE (I)	12/10/97	CCTV / 494	Tank condition had not changed.
F	20	Center (I)	02/06/97	CCTV / 445	CCTV was used to support tank closure activities. The tank was closed on 07/22/97.
H	21	MLDB-01	12/09/97	CCTV / NA	CCTV was used to guide deployment of the conductivity probe in the MLDB at Tank 21. The deployment effort was unsuccessful.
H	21	MLDB-01	12/11/97	CCTV / NA	CCTV was used to guide deployment of the conductivity probe in the MLDB at Tank 21. The probe cable was 18" too short for proper positioning of the probe.
H	21	MLDB-01	12/17/97	CCTV / 458	CCTV was used to guide deployment of the conductivity probe in the MLDB at Tank 21. The probe was positioned within 1 inch of the bottom of the MLDB.
H	21	NE (I)	10/17/97	WAP / P970236:01-10	Tank condition was normal. Stains and marks observed on the concrete dome between the south and southwest risers indicated that water had leaked through the concrete dome.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	22	MLDB-01	03/25/97	CCTV / 458	CCTV inspection was used to determine reason the conductivity probe was in the alarm mode. The inspection revealed approximately 1/2 inch of liquid in the bottom of the MLDB.
H	22	MLDB-01	10/30/97	CCTV / 458	CCTV was used to document contents of the MLDB. Liquid and solids were observed. The contents appeared oily and dark.
H	22	MLDB-01	11/11/97	CCTV / 458	CCTV was used to view conditions in the MLDB. After 1 quart of liquid was added to the MLDB, inspection revealed a thin film on the surface that prevented the conductivity probe from alarming. The MLDB was cleaned and a new conductivity probe was installed.
H	22	MLDB-01	11/12/97	CCTV / 458	CCTV was used to determine the position of the conductivity probe. The probe was positioned within 1 inch of the bottom of the MLDB.
H	22	MLDB-02	03/25/97	CCTV / 458	CCTV inspection was used to determine reason the conductivity probe was in the alarm mode. The inspection revealed approximately 5 inches of liquid in the bottom of the MLDB.
H	22	MLDB-02	10/30/97	CCTV / 458	CCTV was used to document contents of the MLDB. Liquid and solids were observed. The contents appeared oily and dark.
H	22	MLDB-02	11/11/97	CCTV / 458	CCTV was used to view conditions in the MLDB. After 1 quart of liquid was added to the MLDB, inspection revealed a thin film on the surface that prevented the conductivity probe from alarming. The MLDB was cleaned and a new conductivity probe was installed.
H	22	MLDB-02	11/12/97	CCTV / 458	CCTV was used to determine the position of the conductivity probe. The probe was positioned within 1 inch of the bottom of the MLDB.
H	22	VB	10/07/97	HELIUM / HE-97-010	Testing verified the integrity of the core pipe from Tank 22 valve box to Tank 22.
H	22	NE (I)	10/31/97	WAP / P970246:07-12	Tank condition was normal. Stains and deposits observed on the concrete dome were caused by water that had leaked through the concrete dome.
H	22	NW (I)	10/31/97	WAP / P970246:01-06	Tank condition was normal.
H	23	SW (I)	10/17/97	PSP / P970235:01-12	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	24	Center (I)	02/26/97	CCTV / 450	CCTV was used to check the integrity of the tank thermowell. Inspection revealed that the thermowell had failed immediately below the tank top. The thermocouple entered the tank via the failure; the thermocouple was in the waste.
H	24	North (I)	04/10/97	CCTV / 463	CCTV inspection determined that the high level conductivity probe was in the tank space not in the riser.
H	24	SE (I)	10/31/97	WAP / P970247:07-12	Tank condition was normal.
H	24	SW (I)	10/31/97	WAP / P970247:01-06	Tank condition was normal.
F	25	A-01 (A)	01/15/97	WAP / P970005:01	Tank condition was normal.
F	25	A-02 (A)	01/15/97	WAP / P970005:02	Tank condition was normal.
F	25	A-02 (A)	04/15/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	25	A-03 (A)	01/15/97	WAP / P970005:03	Tank condition was normal.
F	25	A-03 (A)	04/15/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	25	A-04 (A)	01/15/97	WAP / P970005:04	Tank condition was normal.
F	25	A-04 (A)	04/15/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	25	P-01 (A)	08/12/97	DP / P970176:01-25	Tank condition was normal.
F	25	P-02 (A)	08/12/97	DP / P970177:01-25	Tank condition was normal.
F	25	P-03 (A)	01/15/97	WAP / P970005:05	Tank condition was normal.
F	25	P-04 (A)	01/15/97	WAP / P970005:06	Tank condition was normal.
F	25	P-05 (A)	01/15/97	WAP / P970005:07	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	25	P-06 (A)	01/15/97	WAP / P970005:08	Tank condition was normal.
F	25	P-07 (A)	01/15/97	WAP / P970005:09	Tank condition was normal.
F	25	P-07 (A)	08/12/97	DP / P970178:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall and annulus floor were caused by water that had leaked into the annulus.
F	25	P-08 (A)	08/12/97	DP / P970179:01-25	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus. The ventilation fan had been out of service for an extended period of time permitting mild surface corrosion of the annulus floor.
F	25	P-08 (A)	09/11/97	CCTV / 485	CCTV inspection confirmed surface corrosion on the annulus floor.
F	25	P-09 (A)	08/12/97	DP / P970180:01-25	Tank condition was normal.
F	25	P-10 (A)	01/15/97	WAP / P970005:10	Tank condition was normal.
F	25	P-11 (A)	01/15/97	WAP / P970005:11	Tank condition was normal.
F	25	P-12 (A)	01/15/97	WAP / P970005:12	Tank condition was normal.
F	25	P-13 (A)	01/15/97	WAP / P970005:13	Tank condition was normal.
F	25	P-14 (A)	01/15/97	WAP / P970005:14	Tank condition was normal.
F	26	A-01 (A)	01/15/97	WAP / P970006:01	Tank condition was normal.
F	26	A-02 (A)	01/15/97	WAP / P970006:02	Tank condition was normal.
F	26	A-02 (A)	05/05/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	26	A-03 (A)	01/15/97	WAP / P970006:03	Tank condition was normal.
F	26	A-03 (A)	04/15/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
F	26	A-04	(A)	01/15/97	WAP /	P970006:04	Tank condition was normal.
F	26	A-04	(A)	04/15/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
F	26	P-01	(A)	01/15/97	WAP /	P970006:05	Tank condition was normal.
F	26	P-02	(A)	01/15/97	WAP /	P970006:06	Tank condition was normal.
F	26	P-02	(A)	09/11/97	CCTV /	485	CCTV revealed mild surface corrosion on the annulus floor below the annulus air outlet duct.
F	26	P-03	(A)	08/12/97	DP /	P970181:01-25	Tank condition was normal.
F	26	P-04	(A)	10/08/97	DP /	P970209:01-25	Tank condition was normal.
F	26	P-05	(A)	01/15/97	WAP /	P970006:07	Tank condition was normal.
F	26	P-06	(A)	01/15/97	WAP /	P970006:08	Tank condition was normal.
F	26	P-07	(A)	01/15/97	WAP /	P970006:09	Tank condition was normal.
F	26	P-08	(A)	01/15/97	WAP /	P970006:10	Tank condition was normal.
F	26	P-09	(A)	01/15/97	WAP /	P970006:11	Tank condition was normal.
F	26	P-10	(A)	08/12/97	DP /	P970182:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	26	P-11	(A)	08/12/97	DP /	P970183:01-25	Tank condition was normal.
F	26	P-12	(A)	01/15/97	WAP /	P970006:12	Tank condition was normal.
F	26	P-13	(A)	01/15/97	WAP /	P970006:13	Tank condition was normal.
F	26	P-14	(A)	01/15/97	WAP /	P970006:14	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	26	E-02 (I)	02/07/97	CCTV / 448	CCTV was used to assist maintenance with the removal of the reel tape that was tangled with the conductivity probe and pulled into the conductivity probe sleeve. The reel tape was removed from the conductivity probe sleeve restoring functions of both devices.
F	26	H (I)	01/03/97	CCTV / 438	CCTV was used to investigate for inleakage. No evidence of inleakage was observed.
F	26	R-01 (I)	09/18/97	CCTV / NA	CCTV revealed the feed pump connector assembly was in the open position.
F	27	A-01 (A)	01/14/97	WAP / P970007:01	Tank condition was normal.
F	27	A-02 (A)	01/14/97	WAP / P970007:02	Tank condition was normal.
F	27	A-02 (A)	02/05/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	27	A-02 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	27	A-03 (A)	01/14/97	WAP / P970007:03	Tank condition was normal.
F	27	A-03 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	27	A-04 (A)	01/14/97	WAP / P970007:04	Tank condition was normal.
F	27	A-04 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	27	P-01 (A)	08/13/97	DP / P970184:01-25	Tank condition was normal. A piece of plastic sheeting was observed on the floor near the annulus jet.
F	27	P-02 (A)	08/13/97	DP / P970185:01-25	Tank condition was normal.
F	27	P-03 (A)	01/14/97	WAP / P970007:05	Tank condition was normal.
F	27	P-04 (A)	01/14/97	WAP / P970007:06	Tank condition was normal.
F	27	P-05 (A)	01/14/97	WAP / P970007:07	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	27	P-06 (A)	01/14/97	WAP / P970007:08	Tank condition was normal.
F	27	P-07 (A)	08/13/97	DP / P970186:01-25	Tank condition was normal.
F	27	P-08 (A)	08/13/97	DP / P970187:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	27	P-09 (A)	08/13/97	DP / P970188:01-25	Tank condition was normal.
F	27	P-10 (A)	01/14/97	WAP / P970007:09	Tank condition was normal.
F	27	P-11 (A)	01/28/97	WAP / P970007:10	Tank condition was normal.
F	27	P-12 (A)	01/14/97	WAP / P970007:11	Tank condition was normal.
F	27	P-13 (A)	01/14/97	WAP / P970007:12	Tank condition was normal.
F	27	P-14 (I)	01/14/97	WAP / P970007:13	Tank condition was normal.
F	28	A-01 (A)	01/14/97	WAP / P970008:01	Tank condition was normal.
F	28	A-02 (A)	01/14/97	WAP / P970008:02	Tank condition was normal.
F	28	A-02 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	28	A-03 (A)	01/14/97	WAP / P970008:03	Tank condition was normal.
F	28	A-03 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	28	A-04 (A)	01/14/97	WAP / P970008:04	Tank condition was normal.
F	28	A-04 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	28	P-01 (A)	01/14/97	WAP / P970008:05	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	28	P-02 (A)	01/14/97	WAP / P970008:06	Tank condition was normal. Stains observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	28	P-03 (A)	08/13/97	DP / P970189:01-25	Tank condition was normal.
F	28	P-04 (A)	01/14/97	WAP / P970008:07	Tank condition was normal.
F	28	P-05 (A)	01/14/97	WAP / P970008:08	Tank condition was normal.
F	28	P-06 (A)	08/13/97	DP / P970190:01-25	Tank condition was normal.
F	28	P-07 (A)	02/10/97	WAP / P970008:09	Tank condition was normal.
F	28	P-08 (A)	08/13/97	DP / P970191:01-25	Tank condition was normal.
F	28	P-09 (A)	01/14/97	WAP / P970008:10	Tank condition was normal.
F	28	P-10 (A)	01/14/97	WAP / P970008:11	Tank condition was normal.
F	28	P-11 (A)	01/14/97	WAP / P970008:12	Tank condition was normal.
F	28	P-12 (A)	08/13/97	DP / P970192:01-25	Tank condition was normal.
F	28	P-13 (A)	02/10/97	WAP / P970008:13	Tank condition was normal.
F	28	P-14 (A)	01/14/97	WAP / P970008:14	Tank condition was normal.
H	29	A-01 (A)	06/03/97	WAP / P970161:01	Tank condition was normal.
H	29	A-01 (A)	06/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	29	A-01 (A)	07/22/97	CCTV / NA	CCTV was used to assist with the removal of debris from the annulus floor. The conductivity probe was observed properly positioned on the annulus floor.
H	29	A-02 (A)	06/03/97	WAP / P970161:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	29	A-02 (A)	06/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	29	A-02 (A)	07/22/97	CCTV / NA	CCTV was used to assist with the removal of debris from the annulus floor. The conductivity probe was observed properly positioned on the annulus floor.
H	29	A-02 (A)	11/03/97	CCTV / 492	The conductivity probe was observed properly positioned on the annulus floor.
H	29	A-03 (A)	06/03/97	WAP / P970161:03	Tank condition was normal.
H	29	A-04 (A)	06/03/97	WAP / P970161:04	Tank condition was normal.
H	29	A-04 (A)	06/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	29	A-04 (A)	11/03/97	CCTV / 492	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	29	P-01 (A)	06/03/97	WAP / P970161:05	Tank condition was normal.
H	29	P-02 (A)	06/09/97	DP / P970141:01-25	Tank condition was normal.
H	29	P-03 (A)	06/03/97	WAP / P970161:06	Tank condition was normal.
H	29	P-04 (A)	06/03/97	WAP / P970161:07	Tank condition was normal.
H	29	P-05 (A)	06/09/97	DP / P970151:01-25	Tank condition was normal.
H	29	P-06 (A)	06/03/97	WAP / P970161:08	Tank condition was normal.
H	29	P-07 (A)	06/03/97	WAP / P970161:09	Tank condition was normal. Stains observed on top of the ventilation duct and secondary vessel wall had increased due to the inleakage of water at inadequate seals where pipes penetrate the secondary vessel wall and pass through the annulus.
H	29	P-08 (A)	06/09/97	DP / P970152:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	29	P-09 (A)	06/03/97	WAP / P970161:10	Tank condition was normal.
H	29	P-10 (A)	06/03/97	WAP / P970161:11	Tank condition was normal.
H	29	P-11 (A)	06/09/97	DP / P970153:01-25	Tank condition was normal.
H	29	P-12 (A)	06/09/97	DP / P970154:01-25	Tank condition was normal.
H	29	P-13 (A)	06/03/97	WAP / P970161:12	Tank condition was normal.
H	29	P-14 (A)	06/03/97	WAP / P970161:13	Tank condition was normal.
H	29	P-14 (A)	06/09/97	DP / P970155:01-25	Tank condition was normal.
H	29	E-02 (I)	01/20/97	CCTV / 431	CCTV was used to examine the plastic liner in the port where the reel tape entered the tank. The liner was degraded. Fragments had broken out causing partial blockage and creating access for the tape to contact the steel tank before exiting the port through the tank top.
H	30	A-01 (A)	04/29/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	30	A-01 (A)	06/04/97	WAP / P970149:01	Tank condition was normal.
H	30	A-02 (A)	04/29/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	30	A-02 (A)	06/04/97	WAP / P970149:02	Tank condition was normal.
H	30	A-03 (A)	06/04/97	WAP / P970149:03	Tank condition was normal.
H	30	A-04 (A)	04/29/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	30	A-04 (A)	06/04/97	WAP / P970149:04	Tank condition was normal.
H	30	A-04 (A)	06/30/97	CCTV / 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>		<u>REMARKS</u>
H	30	A-04 (A)	11/20/97	CCTV	/ 444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	30	P-01 (A)	06/24/97	WAP	/ P970162:01	Tank condition was normal.
H	30	P-02 (A)	06/23/97	DP	/ P970168:01-25	Tank condition was normal.
H	30	P-03 (A)	10/09/97	WAP	/ P970224:01	Tank condition was normal.
H	30	P-04 (A)	10/09/97	WAP	/ P970224:02	Tank condition was normal.
H	30	P-05 (A)	06/23/97	DP	/ P970169:01-25	Tank condition was normal.
H	30	P-06 (A)	10/09/97	WAP	/ P970224:03	Tank condition was normal.
H	30	P-07 (A)	10/09/97	WAP	/ P970224:04	Tank condition was normal.
H	30	P-08 (A)	06/23/97	DP	/ P970170:01-25	Tank condition was normal.
H	30	P-09 (A)	06/04/97	WAP	/ P970149:05	Tank condition was normal.
H	30	P-10 (A)	06/04/97	WAP	/ P970149:06	Tank condition was normal.
H	30	P-11 (A)	06/04/97	WAP	/ P970149:07	Tank condition was normal.
H	30	P-12 (A)	06/04/97	WAP	/ P970149:08	Tank condition was normal.
H	30	P-13 (A)	06/04/97	WAP	/ P970149:09	Tank condition was normal.
H	30	P-14 (A)	06/23/97	DP	/ P970171:01-25	Tank condition was normal.
H	30	E-02 (I)	01/16/97	CCTV	/	CCTV was used to examine the plastic liner in the port where the reel tape entered the tank. The liner was degraded. Fragments had broken out causing partial blockage and creating access for the tape to contact the steel tank before exiting the port through the tank top.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
H	31	A-01	(A)	04/29/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
H	31	A-01	(A)	06/04/97	WAP /	P970150:01	Tank condition was normal.
H	31	A-02	(A)	04/29/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
H	31	A-02	(A)	06/04/97	WAP /	P970150:02	Tank condition was normal.
H	31	A-03	(A)	06/04/97	WAP /	P970150:03	Tank condition was normal.
H	31	A-04	(A)	04/29/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
H	31	A-04	(A)	06/04/97	WAP /	P970150:04	Tank condition was normal.
H	31	A-04	(A)	06/30/97	CCTV /	444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	31	A-04	(A)	11/20/97	CCTV /	444	The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	31	P-01	(A)	06/26/97	WAP /	P970163:01	Tank condition was normal.
H	31	P-02	(A)	06/10/97	DP /	P970156:01-25	Tank condition was normal. Stains observed on the secondary vessel wall were caused by water that had leaked into the annulus.
H	31	P-03	(A)	06/04/97	WAP /	P970150:05	Tank condition was normal.
H	31	P-04	(A)	06/04/97	WAP /	P970150:06	Tank condition was normal.
H	31	P-05	(A)	06/10/97	DP /	P970157:01-25	Tank condition was normal.
H	31	P-06	(A)	06/04/97	WAP /	P970150:07	Tank condition was normal.
H	31	P-07	(A)	06/04/97	WAP /	P970150:08	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	31	P-08 (A)	06/10/97	DP / P970158:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall and top of the ventilation duct were caused by water that had leaked into the annulus.
H	31	P-09 (A)	06/04/97	WAP / P970150:09	Tank condition was normal.
H	31	P-10 (A)	06/04/97	WAP / P970150:10	Tank condition was normal.
H	31	P-11 (A)	06/04/97	WAP / P970150:11	Tank condition was normal.
H	31	P-12 (A)	06/10/97	DP / P970159:01-25	Tank condition was normal. Stains observed on the secondary vessel wall were caused by water that had leaked into the annulus.
H	31	P-13 (A)	06/26/97	WAP / P970163:02	Tank condition was normal.
H	31	P-14 (A)	06/10/97	DP / P970160:01-25	Tank condition was normal.
H	32	A-01 (A)	06/24/97	WAP / P970164:01	Tank condition was normal.
H	32	A-01 (A)	07/02/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	32	A-02 (A)	06/24/97	WAP / P970164:02	Tank condition was normal. Stains and marks observed on the top of the ventilation duct were caused by water that had leaked into the annulus.
H	32	A-02 (A)	07/02/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	32	A-03 (A)	06/24/97	WAP / P970164:03	Tank condition was normal.
H	32	A-04 (A)	06/24/97	WAP / P970164:04	Tank condition was normal.
H	32	A-04 (A)	06/30/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
H	32	P-01 (A)	06/24/97	WAP / P970164:05	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	32	P-02 (A)	06/11/97	DP / P970143:01-25	Tank condition was normal.
H	32	P-03 (A)	06/24/97	WAP / P970164:06	Tank condition was normal.
H	32	P-04 (A)	06/24/97	WAP / P970164:07	Tank condition was normal.
H	32	P-05 (A)	06/11/97	DP / P970144:01-25	Tank condition was normal.
H	32	P-06 (A)	06/24/97	WAP / P970164:08	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
H	32	P-07 (A)	06/24/97	WAP / P970164:09	Tank condition was normal.
H	32	P-08 (A)	06/11/97	DP / P970145:01-25	Tank condition was normal.
H	32	P-09 (A)	06/24/97	WAP / P970164:10	Tank condition was normal.
H	32	P-10 (A)	06/24/97	WAP / P970164:11	Tank condition was normal.
H	32	P-11 (A)	06/24/97	WAP / P970164:12	Tank condition was normal.
H	32	P-12 (A)	06/11/97	DP / P970146:01-25	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus where the concentrate transfer line inlet penetrates the secondary vessel wall.
H	32	P-13 (A)	06/24/97	WAP / P970164:13	Tank condition was normal.
H	32	P-14 (A)	06/11/97	DP / P970147:01-25	Tank condition was normal.
H	32	P-15 (A)	06/11/97	DP / P970148:01-25	Tank condition was normal. Stains observed on the secondary vessel wall and the ventilation duct were caused by water that had leaked into the annulus.
F	33	A-01 (A)	01/28/97	WAP / P970024:01	Tank condition was normal.
F	33	A-01 (A)	07/31/97	OCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
F	33	A-02	(A)	01/28/97	WAP /	P970024:02	Tank condition was normal.
F	33	A-02	(A)	07/31/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
F	33	A-03	(A)	01/28/97	WAP /	P970024:03	Tank condition was normal.
F	33	A-04	(A)	01/28/97	WAP /	P970024:04	Tank condition was normal.
F	33	A-04	(A)	07/31/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	33	A-04	(A)	08/26/97	CCTV /	444	CCTV was used to assist with the repositioning of the magnetically mounted thermocouple. The thermocouple was observed properly positioned within one foot of the bottom girth weld.
F	33	P-01	(A)	01/28/97	WAP /	P970024:05	Tank condition was normal.
F	33	P-02	(A)	10/08/97	DP /	P970212:01-25	Tank condition was normal.
F	33	P-03	(A)	01/28/97	WAP /	P970024:06	Tank condition was normal.
F	33	P-04	(A)	02/10/97	WAP /	P970024:07	Tank condition was normal.
F	33	P-05	(A)	10/08/97	DP /	P970214:01-25	Tank condition was normal.
F	33	P-06	(A)	01/28/97	WAP /	P970024:08	Tank condition was normal.
F	33	P-07	(A)	01/28/97	WAP /	P970024:09	Tank condition was normal.
F	33	P-08	(A)	10/08/97	DP /	P970215:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	33	P-09	(A)	01/28/97	WAP /	P970024:10	Tank condition was normal.
F	33	P-10	(A)	01/28/97	WAP /	P970024:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	33	P-11 (A)	01/28/97	WAP / P970024:12	Tank condition was normal.
F	33	P-12 (A)	10/21/97	DP / P970237:01-25	Tank condition was normal.
F	33	P-13 (A)	01/28/97	WAP / P970024:13	Tank condition was normal.
F	33	P-14 (A)	10/08/97	DP / P970216:01-23	Tank condition was normal.
F	33	P-15 (A)	10/08/97	DP / P970213:01-25	Tank condition was normal.
F	33	P-16 (A)	01/28/97	WAP / P970024:14	Tank condition was normal. Stains observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	33	C-01 (I)	07/01/97	CCTV / 476	Inspection revealed the telescoping transfer jet was not fully retracted.
F	34	A-01 (A)	01/28/97	WAP / P970025:01	Tank condition was normal.
F	34	A-01 (A)	07/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	34	A-02 (A)	01/28/97	WAP / P970025:02	Tank condition was normal.
F	34	A-02 (A)	07/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	34	A-03 (A)	01/28/97	WAP / P970025:03	Tank condition was normal.
F	34	A-04 (A)	01/28/97	WAP / P970025:04	Tank condition was normal.
F	34	A-04 (A)	07/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. The magnetically mounted thermocouple was observed improperly positioned. The thermocouple was positioned approximately 8 feet above the bottom girth weld. It is 7 feet higher than the accepted upper boundary.
F	34	A-04 (A)	08/25/97	CCTV / 444	CCTV was used to assist with the deploying of the magnetically mounted thermocouple. The thermocouple was observed properly positioned within one foot of the bottom girth weld.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	34	P-01 (A)	01/28/97	WAP / P970025:05	Tank condition was normal.
F	34	P-02 (A)	10/08/97	DP / P970222:01-25	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
F	34	P-03 (A)	01/28/97	WAP / P970025:06	Tank condition was normal.
F	34	P-04 (A)	01/28/97	WAP / P970025:07	Tank condition was normal.
F	34	P-05 (A)	10/08/97	DP / P970223:01-25	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
F	34	P-06 (A)	01/28/97	WAP / P970025:08	Tank condition was normal.
F	34	P-07 (A)	01/28/97	WAP / P970025:09	Tank condition was normal.
F	34	P-08 (A)	10/08/97	DP / P970218:01-24	Tank condition was normal. Stains and marks observed on the primary vessel wall, secondary vessel wall and on top of the ventilation duct were caused by water that had leaked into the annulus.
F	34	P-09 (A)	01/28/97	WAP / P970025:10	Tank condition was normal.
F	34	P-10 (A)	01/28/97	WAP / P970025:11	Tank condition was normal.
F	34	P-11 (A)	01/28/97	WAP / P970025:12	Tank condition was normal.
F	34	P-12 (A)	10/08/97	DP / P970217:01-25	Tank condition was normal. Stains and marks observed on the ventilation duct were caused by water that had leaked into the annulus.
F	34	P-13 (A)	01/28/97	WAP / P970025:13	Tank condition was normal.
F	34	P-14 (A)	10/08/97	DP / P970220:01-25	Tank condition was normal.
F	34	P-15 (A)	10/08/97	DP / P970221:01-25	Tank condition was normal.
F	34	P-16 (A)	01/28/97	WAP / P970025:14	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	34	C-01 (I)	04/24/97	CCTV / 466	CCTV was used to facilitate remote operation for replacement and observation for leak-testing of the transfer jet.
H	35		01/07/97	HELIUM / HE-97-001	Helium tracer testing identified leak locations in the steam line between the Tank 35-37 gang valve house and the annulus jet.
H	35	A-01 (A)	03/03/97	WAP / P970040:01	Tank condition was normal.
H	35	A-02 (A)	02/27/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	35	A-02 (A)	03/03/97	WAP / P970040:02	Tank condition was normal. Abandoned conductivity probe wires were observed on the annulus floor.
H	35	A-03 (A)	02/27/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	35	A-03 (A)	03/03/97	WAP / P970040:03	Tank condition was normal.
H	35	A-04 (A)	02/25/97	CCTV / 397	CCTV was used to investigate and document the condition of the annulus between the A-04 and P-12 risers. Water stains and damp areas were observed on the primary vessel wall, tank top knuckles, annulus cover plates, and cover plate supports. Mild surface corrosion observed on the primary vessel walls, transfer lines, cover plates, and cover plate supports on 06/04/96 were essentially unchanged.
H	35	A-04 (A)	02/27/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	35	A-04 (A)	03/03/97	WAP / P970040:04	Tank condition was normal.
H	35	A-04 (A)	05/19/97	CCTV / 470	CCTV was used to determine if steam was still entering the annulus via the annulus wall penetration for the CTS loop line. No steam was observed.
H	35	A-04 (A)	05/22/97	CCTV / 470	After the source for the steam inleakage was isolated, the annulus was drier then when inspected on 05/19/97.
H	35	A-04 (A)	07/24/97	CCTV / 470	CCTV was used to document the condition of the annulus. Inspection revealed that the annulus coverplate, primary vessel wall, and secondary vessel wall were free of moisture. No other unusual conditions were observed.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>	<u>REMARKS</u>
H	35	P-01 (A)	06/26/97	WAP / P970165:01	Tank condition was normal.
H	35	P-01 (A)	10/09/97	WAP / P970225:01	Tank condition was normal.
H	35	P-02 (A)	03/03/97	WAP / P970040:05	Tank condition was normal.
H	35	P-03 (A)	03/03/97	WAP / P970040:06	Tank condition was normal.
H	35	P-04 (A)	03/03/97	WAP / P970040:07	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	35	P-05 (A)	03/06/97	DP / P970059:01-25	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	35	P-06 (A)	03/03/97	WAP / P970040:08	Tank condition was normal.
H	35	P-07 (A)	03/06/97	DP / P970060:01-25	Tank condition was normal.
H	35	P-08 (A)	03/03/97	WAP / P970040:09	Tank condition was normal.
H	35	P-09 (A)	03/06/97	DP / P970061:01-25	Tank condition was normal.
H	35	P-10 (A)	03/03/97	WAP / P970040:10	Tank condition was normal.
H	35	P-11 (A)	03/06/97	DP / P970062:01-25	Tank condition was normal.
H	35	P-12 (A)	03/03/97	WAP / P970040:11	Tank condition was normal.
H	35	P-13 (A)	03/06/97	DP / P970063:01-25	Tank condition was normal.
H	35	P-14 (A)	03/03/97	WAP / P970040:12	Tank condition was normal.
H	36	A-01 (A)	03/03/97	WAP / P970042:01	Tank condition was normal.
H	36	A-02 (A)	03/03/97	WAP / P970042:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	36	A-02 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	36	A-03 (A)	03/03/97	WAP / P970042:03	Tank condition was normal.
H	36	A-03 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	36	A-04 (A)	03/03/97	WAP / P970042:04	Tank condition was normal.
H	36	A-04 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	36	P-01 (A)	03/03/97	WAP / P970042:05	Tank condition was normal.
H	36	P-02 (A)	03/03/97	WAP / P970042:06	Tank condition was normal.
H	36	P-03 (A)	03/03/97	WAP / P970042:07	Tank condition was normal.
H	36	P-04 (A)	06/26/97	WAP / P970166:01	Tank condition was normal.
H	36	P-04 (A)	10/09/97	WAP / P970226:01	Tank condition was normal.
H	36	P-05 (A)	03/06/97	DP / P970054:01-25	Tank condition was normal.
H	36	P-06 (A)	03/03/97	WAP / P970042:08	Tank condition was normal.
H	36	P-07 (A)	03/06/97	DP / P970055:01-25	Tank condition was normal.
H	36	P-08 (A)	03/03/97	WAP / P970042:09	Tank condition was normal.
H	36	P-09 (A)	03/06/97	DP / P970056:01-25	Tank condition was normal.
H	36	P-10 (A)	03/03/97	WAP / P970042:10	Tank condition was normal.
H	36	P-11 (A)	03/06/97	DP / P970057:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	36	P-12 (A)	03/03/97	WAP / P970042:11	Tank condition was normal.
H	36	P-13 (A)	03/06/97	DP / P970058:01-25	Tank condition was normal. An increase in stains observed on the secondary vessel wall beneath the location where the steam and supernate lines penetrate the wall, indicates that groundwater continued to leak past the penetration packing.
H	36	P-14 (A)	03/03/97	WAP / P970042:12	Tank condition was normal.
H	36	E-02 (I)	01/13/97	CCTV / NA	CCTV was used to examine the plastic liner of the port where the reel tape entered the tank. No indication of deterioration in the liner was observed. No unusual condition was observed.
H	37	A-01 (A)	03/03/97	WAP / P970043:01	Tank condition was normal. Stains and marks on the secondary vessel wall and ventilation duct were caused by water that had leaked into the annulus.
H	37	A-02 (A)	03/03/97	WAP / P970043:02	Tank condition was normal.
H	37	A-02 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	37	A-03 (A)	03/03/97	WAP / P970043:03	Tank condition was normal.
H	37	A-03 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	37	A-04 (A)	03/03/97	WAP / P970043:04	Tank condition was normal.
H	37	A-04 (A)	03/03/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	37	Inner (A)	01/23/97	CCTV / 442	CCTV was used to determine the position of the conductivity probe inside the conductivity probe stand pipe located in the center annulus. Inspection revealed the probe wire was broken 15 ft inside the stand pipe. The conductivity probe was observed at the bottom of the stand pipe.
H	37	Inner (A)	02/24/97	CCTV / 449	CCTV was used to remove an abandoned conductivity probe and to document the condition of the conductivity standpipe. After the probe was removed, it was noted that sufficient corrosion products had accumulated at the bottom of the standpipe to support the probe in the standpipe and prevent it from entering the inner annular space.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	37	P-01 (A)	03/03/97	WAP / P970043:05	Tank condition was normal.
H	37	P-02 (A)	03/03/97	WAP / P970043:06	Tank condition was normal.
H	37	P-03 (A)	03/03/97	WAP / P970043:07	Tank condition was normal.
H	37	P-04 (A)	03/03/97	WAP / P970043:08	Tank condition was normal.
H	37	P-05 (A)	03/06/97	DP / P970049:01-25	Tank condition was normal.
H	37	P-06 (A)	03/03/97	WAP / P970043:09	Tank condition was normal.
H	37	P-07 (A)	03/06/97	DP / P970050:01-25	Tank condition was normal.
H	37	P-08 (A)	06/26/97	WAP / P970167:01	Tank condition was normal.
H	37	P-08 (A)	10/09/97	WAP / P970227:01	Tank condition was normal.
H	37	P-09 (A)	03/06/97	DP / P970051:01-25	Tank condition was normal.
H	37	P-10 (A)	03/03/97	WAP / P970043:10	Tank condition was normal.
H	37	P-11 (A)	03/06/97	DP / P970052:01-25	Tank condition was normal.
H	37	P-12 (A)	03/03/97	WAP / P970043:11	Tank condition was normal.
H	37	P-13 (A)	03/06/97	DP / P970053:01-25	Tank condition was normal.
H	37	P-14 (A)	03/03/97	WAP / P970043:12	Tank condition was normal.
H	38	A-01 (A)	01/08/97	WAP / P970009:01	Tank condition was normal. Stains and marks observed on the ventilation duct were caused by water that had leaked into the annulus.
H	38	A-02 (A)	01/22/97	WAP / P970009:02	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>	<u>REMARKS</u>
H	38	A-02 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	38	A-02 (A)	10/09/97	WAP / P970228:01	Tank condition was normal.
H	38	A-03 (A)	01/08/97	WAP / P970009:03	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	38	A-03 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	38	A-04 (A)	01/08/97	WAP / P970009:04	Tank condition was normal.
H	38	A-04 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	38	P-01 (A)	01/08/97	WAP / P970009:05	Tank condition was normal.
H	38	P-02 (A)	01/08/97	WAP / P970009:06	Tank condition was normal.
H	38	P-03 (A)	01/08/97	WAP / P970009:07	Tank condition was normal.
H	38	P-04 (A)	01/08/97	WAP / P970009:08	Tank condition was normal.
H	38	P-05 (A)	01/08/97	WAP / P970009:09	Tank condition was normal.
H	38	P-06 (A)	01/08/97	WAP / P970009:10	Tank condition was normal.
H	38	P-07 (A)	01/08/97	WAP / P970009:11	Tank condition was normal.
H	38	P-08 (A)	01/08/97	WAP / P970009:12	Tank condition was normal.
H	38	P-09 (A)	01/08/97	WAP / P970009:13	Tank condition was normal.
H	38	P-10 (A)	01/20/97	DP / P970015:01-25	Tank condition was normal.
H	38	P-11 (A)	01/20/97	DP / P970016:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	38	P-12 (A)	01/20/97	DP / P970017:01-25	Tank condition was normal.
H	38	P-13 (A)	01/20/97	DP / P970018:01-25	Tank condition was normal.
H	38	P-14 (A)	01/20/97	DP / P970019:01-25	Tank condition was normal.
H	38	H (I)	01/06/97	CCTV / 439	CCTV was used to determine and document configuration and distribution of salt deposits in the tank.
H	38 GDL		10/23/97	HELIUM / HE-97-011	Test verified the integrity of the core pipe of the GDL from the 242-16H evaporator to Tank 38.
H	38 GDL	COP #3	08/01/97	CCTV / 481	Inspection revealed deposits on the pipe wall reduced the cross-sectional area by approximately 50%.
H	38 GDL	COP #3	08/26/97	CCTV / 483B	CCTV was used to document condition of the GDL after cleaning with a water jet using 8000 psig pressure. The line was clean except for a few clusters of loose solids in the line between the COP and the evaporator.
H	38 GDL	COP #3	10/02/97	CCTV / 488	CCTV was used to document condition of the GDL from the COP. Approximately 13 feet of line was inspected towards Tank 38. No significant deposits were observed. Approximately 14 feet of line was inspected towards the evaporator. A thin layer of solids was observed on the pipe wall.
H	38 GDL	COP #3	11/12/97	CCTV / 488	Inspection revealed that the thickness of the deposit on the pipe wall had increased since inspected on 10/02/97. The thickness varied from 1/8 to 1/4 inch.
H	38 GDL	COP #3	12/05/97	CCTV / 488	CCTV was used to determine and document the condition of the GDL from the COP. Approximately 12 feet of line was inspected towards Tank 38. Approximately 13 feet of line was inspected towards the evaporator. The thickness of deposits on the pipe wall had increased slightly.
H	38 GDL	C-03 (I)	08/02/97	CCTV / 481	CCTV was used to observe operation of the BFV. The back-flush valve operated properly.
H	38 GDL	C-03 (I)	08/27/97	CCTV / 483B	CCTV was used prior to reinstalling the BFV to document the effectiveness of water jet cleaning the GDL. Deposits had not been cleaned from the lower 15 feet of the line. Otherwise, the pipe was clean except for a few clusters of unattached solids.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	38 GDL	C-03 (I)	08/28/97	CCTV / NA	CCTV was used to leak-check the BFV. No leakage was observed.
H	38 GDL	C-03 (I)	09/02/97	CCTV / NA	CCTV was used to observe leak-check of the BFV. No leakage was observed.
H	38 GDL	C-03 (I)	08/14/97	CCTV / 481	CCTV was used to document the conditions in the GDL via the BFV. Deposits reduced the cross-sectional area of the pipe approximately 50%.
H	39	A-01 (A)	10/09/97	WAP / P970230:01	Tank condition was normal.
H	39	A-02 (A)	01/08/97	WAP / P970010:01	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	39	A-02 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	39	A-03 (A)	01/08/97	WAP / P970010:02	Tank condition was normal.
H	39	A-03 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	39	A-04 (A)	01/08/97	WAP / P970010:03	Tank condition was normal.
H	39	A-04 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	39	P-01 (A)	10/09/97	WAP / P970230:02	Tank condition was normal.
H	39	P-02 (A)	01/08/97	WAP / P970010:04	Tank condition was normal.
H	39	P-03 (A)	01/08/97	WAP / P970010:05	Tank condition was normal.
H	39	P-04 (A)	01/08/97	WAP / P970010:06	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
H	39	P-05 (A)	01/22/97	WAP / P970020:01	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
H	39	P-06	(A)	01/22/97	WAP /	P970020:02	Tank condition was normal.
H	39	P-07	(A)	01/22/97	WAP /	P970020:03	Tank condition was normal.
H	39	P-08	(A)	01/22/97	WAP /	P970020:04	Tank condition was normal.
H	39	P-09	(A)	01/22/97	WAP /	P970020:05	Tank condition was normal.
H	39	P-10	(A)	01/22/97	WAP /	P970020:06	Tank condition was normal.
H	39	P-11	(A)	01/21/97	DP /	P970011:01-25	Tank condition was normal.
H	39	P-12	(A)	01/21/97	DP /	P970012:01-25	Tank condition was normal.
H	39	P-13	(A)	01/21/97	DP /	P970013:01-25	Tank condition was normal.
H	39	P-14	(A)	01/21/97	DP /	P970014:01-25	Tank condition was normal.
H	39	H	(I)	01/22/97	CCTV /	441	CCTV was used to determine that the transfer jet anti-syphon tube was not plugged.
H	39	H	(I)	02/07/97	CCTV /	446	CCTV was used to leak check the C-01 riser transfer jet. No leakage was observed.
H	40	A-01	(A)	05/21/97	DP /	P970105:01-25	Tank condition was normal.
H	40	A-02	(A)	05/13/97	CCTV /	444	CCTV was used to determine the position of the conductivity probe. The probe was suspended from its conductor. It was not on the annulus floor.
H	40	A-02	(A)	05/21/97	DP /	P970106:01-25	Tank condition was normal.
H	40	A-02	(A)	05/21/97	DP /	P970106:21	The conductivity probe was observed properly positioned on the annulus floor.
H	40	A-02	(A)	07/02/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.
H	40	A-03	(A)	05/13/97	CCTV /	444	The conductivity probe was observed properly positioned on the annulus floor.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>		<u>REMARKS</u>
H	40	A-03 (A)	05/21/97	DP	/ P970107:01-25	Tank condition was normal.
H	40	A-04 (A)	05/13/97	CCTV	/ 444	The conductivity probe was observed properly positioned on the annulus floor.
H	40	A-04 (A)	05/21/97	DP	/ P970108:01-25	Tank condition was normal.
H	40	P-01 (A)	10/07/97	WAP	/ P970210:01	Tank condition was normal.
H	40	P-02 (A)	05/20/97	DP	/ P970109:01-20	Tank condition was normal.
H	40	P-03 (A)	10/07/97	WAP	/ P970210:02	Tank condition was normal.
H	40	P-04 (A)	10/07/97	WAP	/ P970210:03	Tank condition was normal.
H	40	P-05 (A)	10/07/97	WAP	/ P970210:04	Tank condition was normal.
H	40	P-06 (A)	10/07/97	WAP	/ P970210:05	Tank condition was normal.
H	40	P-07 (A)	10/07/97	WAP	/ P970210:06	Tank condition was normal.
H	40	P-08 (A)	10/07/97	WAP	/ P970210:07	Tank condition was normal.
H	40	P-09 (A)	10/07/97	WAP	/ P970210:08	Tank condition was normal.
H	40	P-10 (A)	10/07/97	WAP	/ P970210:09	Tank condition was normal.
H	40	P-11 (A)	10/07/97	WAP	/ P970210:10	Tank condition was normal.
H	40	P-12 (A)	05/20/97	DP	/ P970110:01-23	Tank condition was normal.
H	40	P-13 (A)	05/20/97	DP	/ P970111:01-23	Tank condition was normal.
H	40	P-14 (A)	10/07/97	WAP	/ P970210:11	Tank condition was normal.
H	41	A-01 (A)	10/06/97	WAP	/ P970211:01	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	41	A-02 (A)	05/08/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	41	A-02 (A)	10/06/97	WAP / P970211:02	Tank condition was normal.
H	41	A-03 (A)	05/08/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	41	A-03 (A)	10/06/97	WAP / P970211:03	Tank condition was normal.
H	41	A-04 (A)	05/08/97	CCTV / 444	CCTV was used to determine the position of the conductivity probe. The probe was suspended from its conductor. It was not on the annulus floor.
H	41	A-04 (A)	07/02/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor. An abandoned second probe remains on the annulus floor near the active probe.
H	41	A-04 (A)	10/06/97	WAP / P970211:04	Tank condition was normal.
H	41	P-01 (A)	10/06/97	WAP / P970211:05	Tank condition was normal.
H	41	P-02 (A)	10/06/97	WAP / P970211:06	Tank condition was normal.
H	41	P-03 (A)	10/06/97	WAP / P970211:07	Tank condition was normal.
H	41	P-04 (A)	10/06/97	WAP / P970211:08	Tank condition was normal.
H	41	P-05 (A)	10/06/97	WAP / P970211:09	Tank condition was normal.
H	41	P-06 (A)	10/06/97	WAP / P970211:10	Tank condition was normal.
H	41	P-07 (A)	10/13/97	WAP / P970234:01	Tank condition was normal.
H	41	P-08 (A)	10/06/97	WAP / P970211:11	Tank condition was normal.
H	41	P-09 (A)	10/06/97	WAP / P970211:12	Tank condition was normal.
H	41	P-10 (A)	05/19/97	DP / P970112:01-23	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	41	P-11 (A)	05/19/97	DP / P970113:01-23	Tank condition was normal.
H	41	P-12 (A)	05/19/97	DP / P970114:01-23	Tank condition was normal.
H	41	P-13 (A)	05/19/97	DP / P970115:01-23	Tank condition was normal.
H	41	P-14 (A)	05/19/97	DP / P970116:01-24	Tank condition was normal.
H	42	A-01 (A)	05/21/97	DP / P970117:01-25	Tank condition was normal.
H	42	A-02 (A)	05/13/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	42	A-02 (A)	05/21/97	DP / P970118:01-25	Tank condition was normal.
H	42	A-03 (A)	05/13/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	42	A-03 (A)	05/21/97	DP / P970119:01-25	Tank condition was normal.
H	42	A-03 (A)	10/07/97	WAP / P970219:01	Tank condition was normal.
H	42	A-04 (A)	05/13/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	42	A-04 (A)	05/21/97	DP / P970120:01-25	Tank condition was normal.
H	42	P-01 (A)	10/07/97	WAP / P970219:02	Tank condition was normal.
H	42	P-02 (A)	10/07/97	WAP / P970219:03	Tank condition was normal.
H	42	P-03 (A)	10/07/97	WAP / P970219:04	Tank condition was normal.
H	42	P-04 (A)	10/07/97	WAP / P970219:05	Tank condition was normal.
H	42	P-05 (A)	10/07/97	WAP / P970219:06	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	42	P-06 (A)	10/07/97	WAP / P970219:07	Tank condition was normal.
H	42	P-07 (A)	10/07/97	WAP / P970219:08	Tank condition was normal.
H	42	P-08 (A)	10/07/97	WAP / P970219:09	Tank condition was normal.
H	42	P-09 (A)	10/07/97	WAP / P970219:10	Tank condition was normal.
H	42	P-10 (A)	10/07/97	WAP / P970219:11	Tank condition was normal.
H	42	P-11 (A)	10/07/97	WAP / P970219:12	Tank condition was normal.
H	42	P-12 (A)	05/20/97	DP / P970121:01-25	Tank condition was normal.
H	42	P-13 (A)	05/20/97	DP / P970122:01-23	Tank condition was normal.
H	42	P-14 (A)	05/20/97	DP / P970123:01-23	Tank condition was normal.
H	42	B-02 (I)	12/22/97	CCTV / 495	CCTV was used to observe leak check of the TTJ installed in the C-01 riser. A leak was observed at the stuffing box on the steam leg. All stuffing boxes were repacked. Another leak check showed the TTJ still leaked.
H	43		02/24/97	HELIUM / HE-97-002	A helium tracer test was performed on the overheads transfer line from the 242-16H evaporator to Tank 43. The test revealed the line was acceptable for service.
H	43		07/28/97	HELIUM / HE-97-009	A helium tracer test was performed on the overheads transfer line from the 242-16H evaporator to Tank 43. The test revealed the line was acceptable for service.
H	43	A-01 (A)	01/22/97	WAP / P970021:01	Tank condition was normal.
H	43	A-02 (A)	01/22/97	WAP / P970021:02	Tank condition was normal.
H	43	A-02 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	43	A-03 (A)	01/22/97	WAP / P970021:03	Tank condition was normal.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>	<u>REMARKS</u>
H	43	A-03 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	43	A-04 (A)	01/22/97	WAP / P970021:04	Tank condition was normal.
H	43	A-04 (A)	05/12/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	43	P-01 (A)	01/22/97	WAP / P970021:05	Tank condition was normal.
H	43	P-02 (A)	01/22/97	WAP / P970021:06	Tank condition was normal.
H	43	P-03 (A)	01/22/97	WAP / P970021:07	Tank condition was normal.
H	43	P-04 (A)	01/22/97	WAP / P970021:08	Tank condition was normal.
H	43	P-05 (A)	01/22/97	WAP / P970021:09	Tank condition was normal.
H	43	P-06 (A)	01/22/97	WAP / P970021:10	Tank condition was normal.
H	43	P-07 (A)	01/22/97	WAP / P970021:11	Tank condition was normal.
H	43	P-08 (A)	01/22/97	WAP / P970021:12	Tank condition was normal.
H	43	P-09 (A)	10/09/97	WAP / P970229:01	Tank condition was normal. Stains and marks observed on top of the ventilation duct were caused by water that had leaked into the annulus.
H	43	P-09 (A)	11/08/97	CCTV / 381	CCTV was used to locate the source of water inleakage into the annulus. Water was observed entering the annulus where the line designated WS7 penetrates the concrete vault below grade. The source of the water was a failed condensate drainline for the 241-16H evaporator.
H	43	P-10 (A)	01/27/97	DP / P970022:01-25	Tank condition was normal.
H	43	P-11 (A)	01/27/97	DP / P970023:01-25	Tank condition was normal.
H	43	P-12 (A)	01/27/97	DP / P970027:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	43	P-13 (A)	01/27/97	DP / P970028:01-25	Tank condition was normal.
H	43	P-14 (A)	01/27/97	DP / P970026:01-25	Tank condition was normal.
H	43	C-03 (I)	08/21/97	CCTV / 381	CCTV was used to document condition of ventline towards 242-16H Evaporator. The line was clean. No deposits or residue were observed. Maximum insertion was 16 feet from the catheter line adapter.
H	43	R (I)	06/18/97	CCTV / 473	CCTV was used to assist in replacement of the feed pump enductor assemblies. The feed pump was improperly seated. After adjustment, the feed pump was properly seated and the connector head was tightened. All connections checked leak free.
F	44	A-01 (A)	08/19/97	DP / P970193:01-25	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
F	44	A-02 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	44	A-02 (A)	08/19/97	DP / P970194:01-25	Tank condition was normal.
F	44	A-03 (A)	03/26/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	44	A-03 (A)	08/26/97	DP / P970195:01-25	Tank condition was normal.
F	44	A-04 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	44	A-04 (A)	08/26/97	DP / P970196:01-25	Tank condition was normal.
F	44	P-01 (A)	01/13/97	WAP / P970001:01	Tank condition was normal.
F	44	P-02 (A)	01/13/97	WAP / P970001:02	Tank condition was normal.
F	44	P-03 (A)	01/13/97	WAP / P970001:03	Tank condition was normal.
F	44	P-04 (A)	01/13/97	WAP / P970001:04	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	44	P-05 (A)	01/13/97	WAP / P970001:05	Tank condition was normal.
F	44	P-06 (A)	01/13/97	WAP / P970001:06	Tank condition was normal.
F	44	P-07 (A)	01/13/97	WAP / P970001:07	Tank condition was normal.
F	44	P-08 (A)	01/13/97	WAP / P970001:08	Tank condition was normal.
F	44	P-09 (A)	01/13/97	WAP / P970001:09	Tank condition was normal.
F	44	P-10 (A)	01/13/97	WAP / P970001:10	Tank condition was normal.
F	44	P-11 (A)	01/13/97	WAP / P970001:11	Tank condition was normal.
F	44	P-12 (A)	01/13/97	WAP / P970001:12	Tank condition was normal.
F	44	P-13 (A)	01/13/97	WAP / P970001:13	Tank condition was normal.
F	44	P-14 (A)	01/13/97	WAP / P970001:14	Tank condition was normal.
F	44	G (I)	01/08/97	CCTV / 440	Inspection was made to investigate the cause of liquid level discrepancies. The surface of the waste was liquid. No unusual condition was observed.
F	45	A-01 (A)	08/26/97	DP / P970197:01-25	Tank condition was normal.
F	45	A-02 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	45	A-02 (A)	09/04/97	DP / P970200:01-25	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus. An abandoned conductivity probe and cable were observed on the annulus floor.
F	45	A-03 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	45	A-03 (A)	08/26/97	DP / P970198:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	45	A-04 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	45	A-04 (A)	08/26/97	DP / P970199:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-01 (A)	01/13/97	WAP / P970002:01	Tank condition was normal. Stains and marks observed on the primary vessel wall, secondary vessel wall and annulus floor were caused by water that had leaked into the annulus.
F	45	P-02 (A)	01/13/97	WAP / P970002:02	Tank condition was normal. Stains and marks observed on the primary vessel wall, secondary vessel wall and annulus floor were caused by water that had leaked into the annulus.
F	45	P-03 (A)	01/13/97	WAP / P970002:03	Tank condition was normal. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus. The configuration of previously formed calciferous deposits on the annulus floor had been changed slightly by water that had leaked into the annulus.
F	45	P-04 (A)	01/13/97	WAP / P970002:04	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water that had leaked into the annulus.
F	45	P-05 (A)	01/13/97	WAP / P970002:05	Tank condition was normal.
F	45	P-06 (A)	01/13/97	WAP / P970002:06	Tank condition was normal.
F	45	P-07 (A)	01/13/97	WAP / P970002:07	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-08 (A)	01/13/97	WAP / P970002:08	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-09 (A)	01/13/97	WAP / P970002:09	Tank condition was normal. Stains and marks observed on the primary vessel wall, secondary vessel wall, and the ventilation duct were caused by water that had leaked into the annulus.
F	45	P-10 (A)	01/13/97	WAP / P970002:10	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	45	P-11 (A)	01/13/97	WAP / P970002:11	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-12 (A)	01/13/97	WAP / P970002:12	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-13 (A)	01/13/97	WAP / P970002:13	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	45	P-14 (A)	01/13/97	WAP / P970002:14	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	46	LDB-01	05/15/97	HELIUM / HE-97-007	A helium tracer test performed on the transfer line from Tank 46 to FDB-04 located a leak site at LDB-01 at Tank 46.
F	46	A-01 (A)	09/04/97	DP / P970201:01-25	Tank condition was normal. Stains and marks observed on the ventilation duct and annulus floor were caused by water that had leaked into the annulus. Some of the previously formed calciferous deposits had been washed off the ventilation duct by water that had leaked into the annulus.
F	46	A-02 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	46	A-02 (A)	09/04/97	DP / P970202:01-25	Tank condition was normal. Stains and marks observed on the annulus floor were caused by water that had leaked into the annulus.
F	46	A-03 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	46	A-03 (A)	09/04/97	DP / P970203:01-25	Tank condition was normal.
F	46	A-04 (A)	09/11/97	DP / P970206:01-25	Tank condition was normal.
F	46	P-01 (A)	01/13/97	WAP / P970003:01	Tank condition was normal.
F	46	P-02 (A)	01/13/97	WAP / P970003:02	Tank condition was normal.
F	46	P-03 (A)	01/13/97	WAP / P970003:03	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	46	P-04 (A)	01/13/97	WAP / P970003:04	Tank condition was normal.
F	46	P-04 (A)	03/31/97	CCTV / 444	The conductivity probe located beneath the A-04 riser was observed properly positioned on the annulus floor.
F	46	P-05 (A)	01/13/97	WAP / P970003:05	Tank condition was normal.
F	46	P-06 (A)	01/13/97	WAP / P970003:06	Tank condition was normal.
F	46	P-07 (A)	01/13/97	WAP / P970003:07	Tank condition was normal.
F	46	P-08 (A)	01/13/97	WAP / P970003:08	Tank condition was normal.
F	46	P-09 (A)	01/13/97	WAP / P970003:09	Tank condition was normal.
F	46	P-10 (A)	01/13/97	WAP / P970003:10	Tank condition was normal.
F	46	P-11 (A)	01/13/97	WAP / P970003:11	Tank condition was normal.
F	46	P-12 (A)	01/13/97	WAP / P970003:12	Tank condition was normal.
F	46	P-13 (A)	01/13/97	WAP / P970003:13	Tank condition was normal.
F	46	P-14 (A)	01/13/97	WAP / P970003:14	Tank condition was normal.
F	46	H (I)	04/02/97	CCTV / 460	CCTV was used to determine and document the configuration and distribution of salt deposits in the tank. Salt formations were observed on the cooling coils and the tank wall.
F	47	A-01 (A)	09/04/97	DP / P970204:01-25	Tank condition was normal.
F	47	A-02 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	47	A-02 (A)	09/04/97	DP / P970205:01-25	Tank condition was normal.
F	47	A-03 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	47	A-03 (A)	09/03/97	DP / P970208:01-25	Tank condition was normal. Stained areas on the annulus floor had increased. Water that had leaked into the annulus washed chromate residue off the tank wall to the floor. The residue was from a cooling coil leak above the tank top that occurred in the past.
F	47	A-04 (A)	03/31/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
F	47	A-04 (A)	09/03/97	DP / P970207:01-25	Tank condition was normal.
F	47	P-01 (A)	02/10/97	WAP / P970004:01	Tank condition was normal.
F	47	P-02 (A)	02/10/97	WAP / P970004:02	Tank condition was normal.
F	47	P-03 (A)	01/14/97	WAP / P970004:03	Tank condition was normal.
F	47	P-04 (A)	01/14/97	WAP / P970004:04	Tank condition was normal.
F	47	P-05 (A)	01/14/97	WAP / P970004:05	Tank condition was normal.
F	47	P-06 (A)	01/14/97	WAP / P970004:06	Tank condition was normal.
F	47	P-07 (A)	01/14/97	WAP / P970004:07	Tank condition was normal.
F	47	P-08 (A)	01/14/97	WAP / P970004:08	Tank condition was normal.
F	47	P-09 (A)	01/14/97	WAP / P970004:09	Tank condition was normal.
F	47	P-10 (A)	01/14/97	WAP / P970004:10	Tank condition was normal.
F	47	P-11 (A)	01/14/97	WAP / P970004:11	Tank condition was normal. Stains observed on the secondary vessel wall were caused by water that had leaked into the annulus.
F	47	P-12 (A)	02/10/97	WAP / P970004:12	Tank condition was normal.
F	47	P-13 (A)	01/14/97	WAP / P970004:13	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	47	P-14 (A)	01/14/97	WAP / P970004:14	Tank condition was normal.
H	48	A-01 (A)	05/13/97	DP / P970129:01-20	Tank condition was normal.
H	48	A-02 (A)	05/13/97	DP / P970130:01-23	Tank condition was normal. The conductivity probe was observed properly positioned on the annulus floor.
H	48	A-03 (A)	05/13/97	DP / P970131:01-23	Tank condition was normal.
H	48	A-03 (A)	10/16/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	48	A-04 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	48	A-04 (A)	05/13/97	DP / P970132:01-20	Tank condition was normal.
H	48	F (A)	05/19/97	CCTV / 381	Inspection was made to verify and document that blanks were installed in both the annulus jet supply and discharge lines.
H	48	P-01 (A)	10/13/97	WAP / P970231:01	Tank condition was normal.
H	48	P-02 (A)	07/23/97	WAP / P970174:01	Tank condition was normal.
H	48	P-02 (A)	10/13/97	WAP / P970231:02	Tank condition was normal.
H	48	P-03 (A)	03/27/97	UT / UT-97-004	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	48	P-03 (A)	10/30/97	WAP / P970244:01	Tank condition was normal.
H	48	P-04 (A)	07/23/97	WAP / P970174:02	Tank condition was normal.
H	48	P-05 (A)	07/23/97	WAP / P970174:03	Tank condition was normal. Stains observed on the secondary vessel wall, ventilation duct, and annulus floor were caused by water that had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
H	48	P-06 (A)	03/18/97	UT	/ UT-97-001	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	48	P-06 (A)	07/23/97	WAP	/ P970174:04	Tank condition was normal.
H	48	P-07 (A)	07/23/97	WAP	/ P970174:05	Tank condition was normal. Stains and marks observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus.
H	48	P-08 (A)	07/23/97	WAP	/ P970174:06	Tank condition was normal. Stains observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	48	P-09 (A)	07/23/97	WAP	/ P970174:07	Tank condition was normal. Stains observed on the primary vessel wall were caused by water that had leaked into the annulus.
H	48	P-10 (A)	03/20/97	UT	/ UT-97-002	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	48	P-10 (A)	07/23/97	WAP	/ P970174:08	Tank condition was normal. A plastic respirator bag was observed on the annulus floor.
H	48	P-11 (A)	07/23/97	WAP	/ P970174:09	Tank condition was normal.
H	48	P-13 (A)	03/25/97	UT	/ UT-97-003	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	48	P-13 (A)	07/23/97	WAP	/ P970174:10	Tank condition was normal.
H	48	P-14 (A)	07/23/97	WAP	/ P970174:11	Tank condition was normal.
H	48	B-02 (I)	11/12/97	CCTV	/ 412	Inspection was made to document condition of the nitrogen nozzles in the B-02 and C-03 risers. Nozzle condition had not changed; no evidence of degradation was observed.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	49	LDB-06	07/15/97	CCTV / NA	Inspection revealed an abandoned probe in the conductivity probe stand pipe.
H	49	A-01 (A)	05/13/97	DP / P970133:01-21	Tank condition was normal.
H	49	A-02 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	49	A-02 (A)	05/13/97	DP / P970134:01-23	Tank condition was normal.
H	49	A-03 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	49	A-03 (A)	05/13/97	DP / P970135:01-22	Tank condition was normal.
H	49	A-04 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	49	A-04 (A)	05/13/97	DP / P970136:01-21	Tank condition was normal.
H	49	F (A)	05/19/97	CCTV / 381	Inspection was made to verify and document that blanks were installed in both the annulus jet supply and discharge lines.
H	49	P-01 (A)	07/21/97	WAP / P970173:01	Tank condition was normal.
H	49	P-02 (A)	07/21/97	WAP / P970173:02	Tank condition was normal.
H	49	P-03 (A)	07/21/97	WAP / P970173:03	Tank condition was normal.
H	49	P-04 (A)	07/21/97	WAP / P970173:04	Tank condition was normal.
H	49	P-05 (A)	07/21/97	WAP / P970173:05	Tank condition was normal. Stains observed on the ventilation duct and annulus floor were caused by water that had leaked into the annulus.
H	49	P-06 (A)	07/21/97	WAP / P970173:06	Tank condition was normal.
H	49	P-07 (A)	07/21/97	WAP / P970173:07	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	49	P-08 (A)	07/21/97	WAP / P970173:08	Tank condition was normal. Stains observed on the ventilation duct and annulus floor were caused by water that had leaked into the annulus.
H	49	P-09 (A)	07/21/97	WAP / P970173:09	Tank condition was normal.
H	49	P-10 (A)	07/21/97	WAP / P970173:10	Tank condition was normal.
H	49	P-11 (A)	07/21/97	WAP / P970173:11	Tank condition was normal.
H	49	P-12 (A)	07/21/97	WAP / P970173:12	Tank condition was normal.
H	49	P-13 (A)	07/21/97	WAP / P970173:13	Tank condition was normal.
H	49	P-14 (A)	07/21/97	WAP / P970173:14	Tank condition was normal.
H	49	C-03 (I)	11/12/97	CCTV / 301	Inspection was made to document condition of the nitrogen nozzle. Nozzle condition had not changed; no evidence of degradation was observed.
H	49	G (I)	11/12/97	CCTV / 301	Inspection was made to document condition of the nitrogen nozzle. Nozzle condition had not changed; no evidence of degradation was observed.
H	50		11/27/97	CCTV / 381	CCTV was used to assist with leak-check of the valve box. A leak was observed at a coupling on the piping to the C-01 riser.
H	50	A-01 (A)	05/08/97	DP / P970137:01-23	Tank condition was normal.
H	50	A-02 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	50	A-02 (A)	05/08/97	DP / P970138:01-24	Tank condition was normal. Stains, watermarks, and gisulate were observed in the annulus below the penetration for the line designated SP.
H	50	A-03 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	50	A-03 (A)	05/08/97	DP / P970139:01-25	Tank condition was normal. Chromate stains and marks observed on 06/03/93 have been washed from the primary vessel wall by water that leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	50	A-04 (A)	05/07/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	50	A-04 (A)	05/08/97	DP / P970140:01-25	Tank condition was normal.
H	50	P-01 (A)	07/21/97	WAP / P970172:01	Tank condition was normal.
H	50	P-02 (A)	07/21/97	WAP / P970172:02	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-02 (A)	12/31/97	CCTV / 496	CCTV was used to investigate and determine the source of the water leaking into the annulus. Water was observed leaking into the annulus from the primary vessel top indicating the source was a failed flush water or cooling water header. Subsequent observation during valving of suspect sources revealed the water was from the failed cooling water header serving coil 23.
H	50	P-03 (A)	07/21/97	WAP / P970172:03	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-04 (A)	07/21/97	WAP / P970172:04	Tank condition was normal. Stains observed on the ventilation duct and the annulus floor were caused by water that had leaked into the annulus.
H	50	P-05 (A)	07/21/97	WAP / P970172:05	Tank condition was normal. Stains observed on the secondary vessel wall, ventilation duct, and annulus floor had increased due to the inleakage of water from around the failed seal where the line designated SP enters the annulus.
H	50	P-06 (A)	07/21/97	WAP / P970172:06	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-07 (A)	10/13/97	WAP / P970232:01	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-08 (A)	07/21/97	WAP / P970172:07	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-09 (A)	07/21/97	WAP / P970172:08	Tank condition was normal. Stains observed on the primary vessel wall and annulus floor were caused by water that had leaked into the annulus.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>	<u>REMARKS</u>
H	50	P-10 (A)	07/21/97	WAP / P970172:09	Tank condition was normal. Stains observed on the annulus floor were caused by water that had leaked into the annulus.
H	50	P-11 (A)	07/21/97	WAP / P970172:10	Tank condition was normal.
H	50	P-12 (A)	07/21/97	WAP / P970172:11	Tank condition was normal.
H	50	P-13 (A)	07/21/97	WAP / P970172:12	Tank condition was normal.
H	50	P-14 (A)	07/21/97	WAP / P970172:13	Tank condition was normal.
H	50	C-01 (I)	04/08/97	CCTV / 461	Inspection determined that no downcomer was installed in the C-01 riser and blanks were C-clamped onto the inlet lines.
H	50	C-01 (I)	07/08/97	CCTV / 461	CCTV was used to assist with the removal of a blind flange from the inlet nozzle.
H	51	A-01 (A)	05/14/97	DP / P970124:01-23	Tank condition was normal.
H	51	A-02 (A)	05/08/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	51	A-02 (A)	05/14/97	DP / P970125:01-25	Tank condition was normal.
H	51	A-03 (A)	05/13/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	51	A-03 (A)	05/14/97	DP / P970126:01-24	Tank condition was normal.
H	51	A-04 (A)	05/08/97	CCTV / 444	The conductivity probe was observed properly positioned on the annulus floor.
H	51	A-04 (A)	05/14/97	DP / P970127:01-23	Tank condition was normal.
H	51	P-01 (A)	07/23/97	WAP / P970175:01	Tank condition was normal.
H	51	P-02 (A)	07/23/97	WAP / P970175:02	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	51	P-03 (A)	07/23/97	WAP / P970175:03	Tank condition was normal.
H	51	P-03 (A)	12/16/97	UT / UT-97-008	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	51	P-04 (A)	07/23/97	WAP / P970175:04	Tank condition was normal.
H	51	P-05 (A)	07/23/97	WAP / P970175:05	Tank condition was normal.
H	51	P-06 (A)	07/23/97	WAP / P970175:06	Tank condition was normal. Stains observed on the primary vessel wall were caused by water that had leaked in the annulus.
H	51	P-06 (A)	12/12/97	UT / UT-97-006	Thickness mapping of the tank wall was performed on a vertical strip six-inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	51	P-07 (A)	10/13/97	WAP / P970233:01	Tank condition was normal. Stains and marks observed on the annulus floor beneath the riser were caused by water that had leaked in around the riser plug.
H	51	P-08 (A)	07/23/97	WAP / P970175:07	Tank condition was normal.
H	51	P-09 (A)	07/23/97	WAP / P970175:08	Tank condition was normal.
H	51	P-10 (A)	07/23/97	WAP / P970175:09	Tank condition was normal.
H	51	P-10 (A)	12/19/97	UT / UT-97-007	Thickness mapping of the tank wall was performed on a vertical strip six-inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	51	P-11 (A)	07/23/97	WAP / P970175:10	Tank condition was normal.
H	51	P-12 (A)	07/23/97	WAP / P970175:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	51	P-13 (A)	07/23/97	WAP / P970175:12	Tank condition was normal.
H	51	P-13 (A)	12/11/97	UT / UT-97-005	Thickness mapping of the tank wall was performed on a vertical strip six inches wide from the top knuckle to the bottom knuckle. Analysis of the data revealed no detectable wall loss since the previous examination. No pitting or other degradation of the wall was detected.
H	51	P-14 (A)	07/23/97	WAP / P970175:13	Tank condition was normal.
H	51	B-03 (I)	02/26/97	CCTV / 451	CCTV was used to investigate and document waste surface condition beneath the reel tape. No unusual condition was observed.
H	51	B-03 (I)	03/06/97	CCTV / 451	Inspection during agitation revealed the existence of a mound of sludge adjacent to the east wall. Also, froth was being formed on the liquid surface.
H	51	B-03 (I)	06/24/97	CCTV / 474	Inspection was made to document exposed sludge. The tank surface was liquid except for a sludge mound above the liquid on the east side of the tank.
H	51	B-03 (I)	10/01/97	CCTV / 486	CCTV was used to assist during flushing and removal of the B-04 slurry pump.
ETF	CWT	02 (I)	10/13/97	CCTV / 491	Inspection was made to document the interior of the Concentrated Waste Tank #2. Deposits were observed on the tank walls, dip tubes, and agitator blades. Estimated volume of deposits were 20 to 30% of tank capacity.
H	DB-01		06/16/97	CCTV / NA	Inspection was made to determine if the cell covers were properly positioned before core drilling additional access ports. Cell covers were observed properly positioned.
F	DB-03		04/25/97	HELIUM / HE-97-005	A helium tracer test verified the integrity of the transfer line from DB-03 to Tank 33.
F	DB-03		04/25/97	HELIUM / HE-97-006	A helium tracer test verified the integrity of the transfer line from DB-03 to Tank 34.
F	DB-03		09/17/97	CCTV / 381	Inspection was made to determine the elevation from the sump bottom and the top of the conductivity probe standpipe for proper conductivity probe installation.
F	DB-04		05/14/97	CCTV / 467	Inspection was made to determine the type of valve stop on valve #5. The valve has flat bar stops.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	DB-04	JB-01	08/12/97	CCTV / NA	Inspection was made to determine the length of the conductivity probe standpipe. The standpipe measured 7 feet. Approximately 4 inches of water was observed at the bottom of the standpipe and LDB.
H	DB-04	JB-01	09/03/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 30 transfer line jacket.
H	DB-04	JB-01	09/04/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 29 transfer line jacket.
H	DB-04	JB-01	09/04/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 32 transfer line jacket.
H	DB-04	JB-01	09/09/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 31 transfer line jacket.
H	DB-04	JB-02	08/12/97	CCTV / NA	Inspection was made to determine the length of the conductivity probe standpipe. The standpipe measured 7 feet. Approximately 4 inches of water was observed at the bottom of the standpipe and LDB.
H	DB-04	JB-02	09/03/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 30 transfer line jacket.
H	DB-04	JB-02	09/04/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 29 transfer line jacket.
H	DB-04	JB-02	09/04/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 32 transfer line jacket.
H	DB-04	JB-02	09/09/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe to Tank 31 transfer line jacket.
H	DB-04	Sump	09/09/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe at DB-04 Sump to Tank 29 Junction Box #1.
H	DB-04	Sump	09/09/97	CCTV / NA	CCTV was used to assist with positioning and determining the insertion depth for the conductivity probe in the standpipe at DB-04 Sump to Tank 29 Junction Box #2.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER		REMARKS
H	DB-05		01/18/97	CCTV	/ 381	CCTV was used to document leak check of valve 249 (#6). The valve was leak free.
H	DB-06	LDB-01	03/25/97	HELIUM	/ HE-97-003	Helium tracer testing was performed to locate leaksite in the transfer line from DB-06 to Tank 35. The test was inconclusive.
H	DB-06	LDB-01	04/01/97	HELIUM	/ HE-97-004	A helium tracer test performed on the transfer line from DB-06 to Tank 35 located a leaksite east of Tank 35.
H	DB-06	LDB-01	07/16/97	HELIUM	/ HE-97-008	Helium tracer test identified a leaking valve on the jacket ventline adjacent to Tank 35.
H	DB-07		08/11/97	CCTV	/ 381	Inspection was made to document the as found position and operability of valve #17. The shear pin on the bottom of the universal joint was sheared.
H	DB-07		08/15/97	CCTV	/ NA	CCTV was used to document the leak check of jumper after repair. Nozzles 17 and 6B were leak free.
H	DB-07		09/17/97	CCTV	/ 484	CCTV was used to verify valve #7 was opening and closing. The valve operated properly.
H	DB-07		10/17/97	CCTV	/ 484	Inspection was made to document the operability of valve #7. The valve was verified as fully closed by observing the mechanical stops on the valve extension assembly.
F	EVAP-16	SE	03/12/97	CCTV	/ 455	CCTV was used to inspect and document conditions in the evaporator cell. No unusual condition was observed.
F	EVAP-16	Underliner Sump	02/10/97	CCTV	/ 447	CCTV was used to document condition of the underliner sump. A section of flexible conduit was observed. No evidence of water inleakage or other unusual conditions were observed.
H	EVAP-16		01/06/97	CCTV	/ 437	CCTV was used to document conditions in Overhead Tank #1. No unusual conditions were observed.
H	EVAP-16	Lift Jumper	08/25/97	CCTV	/ 483B	CCTV was used to check the separator pot, the joining GDL, and lift line for pluggage. A thin layer of solids was observed on all metal surfaces.
H	EVAP-16	Lift Jumper	08/26/97	CCTV	/ 483B	Inspection revealed that deposits in the horizontal segment of the GDL immediately below the separator pot were insignificant and this line segment did not require cleaning. Inspection also revealed that the separator pot inlet line was free of deposits after cleaning.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	EVAP-16	Lift Jumper	08/27/97	CCTV / 483B	CCTV was used to document the effectiveness of 3000 psi pressure washing of the GDL downstream of the separator pot. Deposits remained on the piping walls after cleaning.
H	EVAP-16	Lift Jumper	10/02/97	CCTV / 488	CCTV was used to document the condition in the lift jumper. The inspection revealed no significant buildup on interior of separator pot, or any significant increase of deposit on the vertical section of the GDL immediately below the separator pot.
H	EVAP-16	Lift Jumper	12/06/97	CCTV / 488	CCTV was used to document the condition of the lift jumper. Approximately 10 feet of the inlet line was inspected. No significant deposits were observed.
H	EVAP-16	Nozzle B	08/23/97	CCTV / 483B	CCTV was used to inspect the evaporator pot interior. Pot interior surface and components showed no degradation or excessive deposits.
H	EVAP-16	SW	07/29/97	CCTV / 455	CCTV was used to inspect and document the condition of the evaporator cell. No unusual condition was observed. Cell condition was normal.
H	EVAP-16	SW	12/31/97	CCTV / 455	Inspection was made to investigate liquid buildup in the cell sump. No unusual condition was observed. The buildup appeared to result from rain water that leaked into the cell through joints between the cell cover slabs.
F	FDB-04		11/04/97	CCTV / 493	CCTV was used to assist with removal, regasketing, and replacement of jumpers and also to document the leak check. No unusual conditions were observed and jumpers were leak-free.
H	ITPFC-01	02	01/09/97	CCTV / NA	CCTV was used to observe and document a leak check per procedure SW16.1-SOP-96H-2 Section 4.5 attachment 27. No evidence of leakage was observed.
H	ITPFC-01	02	03/20/97	CCTV / 457	CCTV was used to observe and document a leak check of jumper 7N(HFC-1)A per procedure SW16.1-SOP-96H-2. No leakage was observed.
H	ITPFC-02	02	03/20/97	CCTV / 457	CCTV was used to observe and document a leak check of jumper 7N(HFC-2)A per procedure SW16.1-SOP-96H-2. No leakage was observed.
F	PP-01	MLDB-05	06/16/97	CCTV / NA	Inspection was made to determine the overall length of the MLDB standpipe. It was 230 inches to the top of the conductivity probe standpipe and 209 inches to the top of the bottom 12 inch flange. Liquid was observed in the MLDB.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
F	PP-01	MLDB-05	07/14/97	CCTV / 478	CCTV was used to check the box for extraneous material. None was observed.
F	PP-01	MLDB-5	05/27/97	CCTV / 472	Inspection was made to determine if the conductivity probe standpipe was obstructed. The pipe was unobstructed.
H	PP-01	NE	03/26/97	CCTV / NA	Inspection was made to document the condition of the pump pit and to verify access for installation of the conductivity probe after construction core drilled cell covers. Observations made above the liquid level of approximately 50 inches revealed no obstructions.
H	PP-02	NE	04/08/97	CCTV / 462	Inspection was made to document the condition of the pump pit and to verify access for installation of the conductivity probe after construction core drilled cell covers. No obstructions were observed above the sump that is located in the southeast corner of the pit.
H	PP-02	SW	04/08/97	CCTV / 462	Inspection was made to document the condition of the pump pit and to verify access for installation of the conductivity probe after construction core drilled cell covers. No obstructions were observed above the sump that is located in the southeast corner of the pit.
F	PP-03	LDB-02	05/21/97	CCTV / 472	Inspection was made to document conditions in the LDB. Rust-like deposits were observed in the bottom of the conductivity probe standpipe. The material prevented the conductivity probe from being fully deployed. The material was found 244.5 inches into the standpipe.
F	PP-03	LDB-02	05/29/97	CCTV / NA	A follow-up inspection using a 90-degree viewing angle determined that the material in the standpipe was high enough to prevent viewing from the standpipe into the LDB, i.e., the standpipe was essentially plugged.
F	PP-03	LDB-02	08/11/97	CCTV / NA	CCTV was used to determine if LDB-02 was draining. Water introduced into the conductivity probe standpipe did not flow into the LDB, indicating blockage at the bottom of the conductivity probe standpipe.
F	PP-03	LDB-02	08/14/97	CCTV / 482	Inspection was made to document the condition of the LDB. No liquid was observed at the level of the overflow drain. Liquid was observed in the bottom of the conductivity probe standpipe and the drain standpipe, indicating blockage in the drainline.
H	PP-03	NE	03/11/97	CCTV / 454	Inspection was made to document conditions of the pump pit, and to verify access for installation of the conductivity probe after construction core drilled cell covers. No obstructions were observed above the sump in the southeast corner of the pit.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	PP-04	NE	04/03/97	CCTV / 462	Inspection was made to document conditions of the pump pit, and to verify access for installation of the conductivity probe after construction core drilled cell covers. No obstructions were observed above the sump, which is located in the southeast corner of the pit.
H	PP-04	SW	04/03/97	CCTV / 462	Inspection was made to document conditions of the pump pit, and to verify access for installation of the conductivity probe after construction core drilled cell covers. No obstructions were observed above the sump, which is located in the southeast corner of the pit.
H	PP-08		05/01/97	CCTV / NA	CCTV was used to verify proper transfer pump motor operation. No unusual condition was observed.
H	PP-08		10/01/97	CCTV / 480	CCTV was used to facilitate remote operation for pump repair and to document the contents of the pump tank. Approximate level of liquid was 11 inches. Frit was observed on the bottom of the pump tank. No other unusual condition was observed.
F	PT-02		05/07/97	CCTV / 381	CCTV was used to document installation of a passive vent in the pump tank.
F	PT-03		05/07/97	CCTV / 381	CCTV was used to document installation of a passive vent in the pump tank.
H	PT-08		09/30/97	CCTV / 480	Inspection was made to determine and document the contents of the pump tank. Solids were observed on the bottom of the pump tank. The solids, which appears to be frit, had settled out on the agitator blades and other horizontal surfaces in the pump tank.
H	PT-10		07/21/97	CCTV / 480	Inspection was made to determine and document the contents of the pump tank. Approximate level of liquid was 5 inches. Glass frit was observed over the bottom of the pump tank except around the dip tubes.
H	RHLWE		04/15/97	CCTV / 465	CCTV was used to verify and document that internal lines of the replacement evaporator pot are clean and free of obstructions prior to operation. Nine of 13 lines inspected contained liquid.
F	SWS	2F-03	11/25/97	CCTV / 475	Condition of the drain had not changed since inspection on 05/01/96.
F	SWS	2F-09	06/26/97	CCTV / 475	Condition of the drain had not changed since inspection on 05/01/96.

<u>AREA</u>	<u>TANK OR ANCILLARY</u>	<u>ACCESS OPENING (A OR I)</u>	<u>DATE</u>	<u>INSPECTION METHOD IDENTIFICATION NUMBER</u>		<u>REMARKS</u>
F	SWS	3F-04	06/26/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/01/96.
F	SWS	3F-06	12/01/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/01/96.
F	SWS	3F-09	06/25/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/01/96.
F	SWS	4F-03	06/24/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 10/23/96.
F	SWS	4F-04	06/24/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/02/96.
F	SWS	4F-05	06/24/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/01/96.
F	SWS	4F-08	06/24/97	CCTV	/ 475	No evidence of structural failure or significant infiltration through the liner was observed. However, the liner in the bottom drain had experienced additional erosion since inspection on 05/01/96.
F	SWS	4F-09	06/24/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/02/96.
F	SWS	4F-12	06/24/97	CCTV	/ 475	No evidence of structural failure or significant infiltration through the liner was observed. However, the brick and concrete liner beneath the steam condensate drain line had experienced additional erosion since inspection on 05/01/96.
F	SWS	4F-13	06/24/97	CCTV	/ 475	Sediment approximately 1 inch deep was observed in the inlet and outlet RCP. No other changes in the drain were observed since inspection on 05/01/96.
F	SWS	4F-15	06/24/97	CCTV	/ 475	No evidence of structural failure or significant infiltration through the liner was observed. However, the brick liner beneath the steam condensate drain had experienced additional erosion since inspection on 05/01/96.
F	SWS	4F-17	06/25/97	CCTV	/ 475	Condition of the drain had not changed since inspection on 05/20/96.
H	SWS	2H-02	11/25/97	CCTV	/ 477	Condition of the drain had not changed since inspection on 09/25/96.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD IDENTIFICATION NUMBER	REMARKS
H	SWS	2H-04	07/14/97	CCTV / 477	Condition of the drain had not changed since inspection on 09/25/96.
H	SWS	2H-07	11/25/97	CCTV / 477	Inspection was made to document the conditions and to establish a base line for future inspections. Sediment approximately 5 inches deep was observed in the 18 inch inlet RCP and approximately 3 inches deep in the outlet RCP. No evidence of structural failure or significant infiltration through the liner was observed.
H	SWS	2H-08	07/15/97	CCTV / 477	Condition of the drain had not changed since inspection on 11/05/96.
H	SWS	2H-09	07/07/97	CCTV / 477	Inspection revealed approximately 5 inches of sand and silt in the RCP outlet, and what appears to be solids suspended in the RCP inlet. No significant infiltration was observed. Additional inspection will be performed.
H	SWS	2H-09	10/15/97	CCTV / 477	Inspection revealed approximately 5 inches of sand and silt in the outlet RCP, and approximately 6 inches of sand and silt in the inlet RCP.
H	SWS	2H-10	07/07/97	CCTV / 477	Condition of the drain had not changed since inspection on 09/25/96.
H	SWS	3F-08	11/25/97	CCTV / 475	Inspection was made to document the conditions and to establish a base line for future inspections. Sediment and debris approximately 4 inches deep was observed in the inlet and outlet RCP and along the bottom of the drain. No evidence of structural failure or significant infiltration was observed.
H	SWS	4F-11	11/25/97	CCTV / 475	No evidence of structural failure or significant infiltration was observed. However, steam condensate discharge had caused additional erosion of the 18-inch reinforced concrete pipe.
H	SWS	4F-19	11/25/97	CCTV / 475	Condition of the drain had not changed since inspection on 10/17/96.
H	SWS	6H-05	07/15/97	CCTV / 477	Sediment approximately 1 inch deep was observed in the RCP. No other changes in the drain were observed since inspection on 09/26/96.
H	SWS	6H-08	07/15/97	CCTV / 477	Condition of the drain had not changed since inspection on 11/06/96.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPECTION METHOD		REMARKS
				IDENTIFICATION	NUMBER	
H	SWS	6H-09	07/15/97	CCTV /	477	No evidence of structural failure or significant infiltration through the liner was observed. However, the bottom liner had experienced additional erosion since inspection on 09/26/96.
H	SWS	6H-10	07/15/97	CCTV /	477	Condition of the drain had not changed since inspection on 11/06/96.
H	SWS	7H-01	07/16/97	CCTV /	477	Sediment approximately 6 inches deep was observed in the RCP. No other changes in the drain were observed since inspection on 10/10/96.
H	SWS	7H-02	10/15/97	CCTV /	477	Condition of the drain had not changed since inspection on 09/24/96.
H	SWS	7H-05	10/15/97	CCTV /	477	Condition of the drain had not changed since inspection on 09/24/96.
F	WLE	2F	10/10/97	CCTV /	490	Encasement structural condition had not changed.
F	WLE	5F	10/10/97	CCTV /	490	Encasement structural condition had not changed.
F	WLE	6F	10/10/97	CCTV /	490	Encasement structural condition had not changed.
H	WLE	2H	02/18/97	CCTV /	452	Encasement structural condition had not changed. Condensate was observed on the bottom of the cell covers, transfer lines, and the encasement walls and floor.
H	WLE	5H	02/18/97	CCTV /	452	Encasement structural condition had not changed. Condensate was observed on the bottom of the cell covers, transfer lines, and the encasement walls and floor.
H	WLE	6H	02/18/97	CCTV /	452	Encasement structural condition had not changed. Condensate was observed on the bottom of the cell covers, transfer lines, and the encasement walls and floor.
H	WLE	7H	02/18/97	CCTV /	452	Encasement structural condition had not changed. Condensate was observed on the bottom of the cell covers, transfer lines, and the encasement walls and floor.