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Annual Radioactive Waste Tank Inspection Program - 2000^(U)



Westinghouse Savannah River Company Savannah River Site Aiken, SC 29808

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R. S. Waltz W. R. West



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Acronyms and Abbreviations

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

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Introduction

Aqueous radioactive wastes from Savannah River Site (SRS) separations and vitrification processes are contained in large underground carbon steel tanks. Inspections made during 2000 to evaluate these vessels and other waste handling facilities along with evaluations based on data from previous inspections are the subject of this report.

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Summary

The 2000 inspection program revealed that the structural integrity and waste confinement capability of the Savannah River Site waste tanks remained unchanged from 1999, with two exceptions. Two new leaksites were identified in Tank 15 during routine photographic inspection. A small amount of waste had seeped from the tank, but had not reached the annulus floor. The sites appear to be stable.

In all, 4110 photographs were made, 594 visual and video inspections were performed, and 3 helium leak tests were conducted.

Prior to issuance of this report, in February 2001 several leaksites were identified in Tank 6 after refilling of the tank. These sites are being evaluated and will be documented in the 2001 inspection report.

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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. In addition, H tank farm receives recycle waste from the DWPF vitrification process. Some of this waste has been transferred to F Area waste tanks. 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 NaNO3 and NaNO2. 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 MnO2 and Fe(OH)2 with a fission product content up to 950 curies per gallon.

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

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

The annulus of each double-wall tank is equipped with at least two single-point conductivity probes for leak detection. These probes are located at the bottom of the annulus and on opposite sides of the tank. The single-wall tanks are built on slabs with a network of leak collection channels that drain to a common sump. Continuous sump level monitoring and frequent sump liquid sampling provide the leak detection. Besides the automatic surveillance, routine

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direct visual surveys are made in the annular spaces, and nonroutine direct visual surveys are made in primary tanks through opened access risers and/or inspection ports in the roof.

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

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

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

Inspection Program

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 an ongoing program. This report gives results of the 2000 inspections and summarizes significant findings of previous in-service inspections for each waste tank.

Tank Description

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

Type I Tanks

The 12 original storage tanks constructed between 1951 and 1953 are designated Type I tanks. Tanks 1 through 8 are in F Area and Tanks 9 through 12 are in H Area. Each primary tank has a capacity of 750,000 gallons, is 75 feet in diameter and 24 1/2 feet high. Figure 1 shows the essential features of Type I tanks, including the primary tank, the secondary pan, and the concrete support structure.

The primary container is a closed cylindrical tank with flat top and bottom constructed from 1/2-inchthick 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 1/2inch-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.



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

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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 all but 8 feet of tank. The duct has distribution outlets and its cross-sectional area decreases as the distance from the air supply increases. Access to the tank interior is provided at eight locations, and to the annular space at four locations, through riser pipes. Each of the 12 riser pipes is capped at the top with a concrete plug. Each plug is provided with two 5-inch-diameter ports equipped with removable plugs. Some of these ports provide access for inspections.

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

Type II Tanks

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

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

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



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

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Inspection Program

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

A dehumidification duct in the annulus of each tank is routed from the tank top to the bottom of the annulus where it encircles all but 8 feet of the tank. The duct has distribution outlets and its crosssectional area decreases as the distance from the air supply increases.

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

Type IV Tanks

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



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

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

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

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

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

Type III Tanks

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

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.



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

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Inspection Program

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 bott	om	1/2
Upper knuck	le	1/2
Outer wall		
Upper ban	d	1/2
Middle ba	nd	5/8
Lower bar	ıd	3/4
Inner wall		
Upper ban	d	1/2
Lower bar	nd	5/8
Lower knuck	de	
Outer	(tanks 25-28 and	7/8
	33-51)	
	(tanks 29 through	1
	32)	
Inner	·	5/8

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

The secondary vessel is 5 feet larger in diameter than the tank, thus providing an outer annulus 2 1/2 feet wide. The secondary vessel is made of 3/8-inch-thick steel throughout. Its sidewalls rise to the full height of the primary tank. The nested two-vessel assembly is surrounded by a cylindrical reinforced concrete enclosure with a 30-inch-thick wall. The enclosure has a 48-inch-thick flat reinforced concrete roof that is supported by the concrete wall and a central column that fits within the inner cylinder of the vessel. The 48-inch-thick concrete provides radiation shielding; hence, no earth overburden is required.

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

A dehumidification duct in the annulus of each tank is routed from the tank top to the bottom of the annulus where it encircles the tank. The duct has air inlets and its cross-sectional area decreases as distance from the exhaust fan 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 4 to 8 inches. All inspection access ports are equipped with removable plugs.

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

The Quality Assurance Program included inspection of all radiographs by two independent groups of certified weld inspectors, and all radiographs were permanently stored for future reference. All spots on the inside or outside of the primary tanks and the inside of the secondary tanks, where clips or lugs were removed and where other excisions were made, were examined by magnetic particle or liquid penetrant techniques, and any defects were repaired.

All butt welds on the secondary tanks were vacuum leak-tested. All welds in the bottom assemblies of the primary tanks, including knuckle rings and lowest course welds, were vacuum leak-tested before each bottom assembly was lowered into final position, and then tested a second time after the stress-relieving operation. A full hydrostatic test, the filling of each primary tank to a depth of 32 feet and allowing the fill to stand 48 hours, was conducted after stress

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relieving. No leaks were found by the hydrostatic tests. All circumferential welds in the pipe loops of the deployable cooling coil bundles below the 1/2-inch-thick plate at the base of the riser plug were radiographed. The assembled cooler piping was tested hydrostatically to 500 psig and halide leak-tested at 300 psig. Welds in the distributed cooling coils were radiographed and similarly leak-tested.

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

Inspection Methods

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

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

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

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Program Implementation

Visual Imagery

The 2000 inspection program used two visual imagery techniques: photography and closed circuit television. The primary inspection methods were direct photography techniques; e.g., making a series of photographs providing detailed views of the tank and wide-angle photography for obtaining overviews of large areas. Closed circuit television systems were generally used to further investigate conditions found during scheduled inspections and to troubleshoot process problems in tanks and ancillaries.

The inspection program objective to continuously evaluate the waste tanks was satisfied in 2000 by photographic and videotape documentation. Inspections were made through all accessible annulus risers of the double-wall tanks and at least one inspection was made in the interior of each singlewall 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. 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.

2000 Inspection Results

The 2000 inspection program was successfully completed. The annuli of all double-wall tanks were inspected via all accessible risers and the interiors of single-wall tanks remaining in service were inspected. Other inspections of waste tanks and ancillaries were performed as required by operating conditions and equipment performance.

Tank 15 inspection revealed two additional leaksites near the bottom circumferential weld. One was visible beneath riser 55 and another beneath riser 207. A small amount of waste had seeped from the tank but had not reached the annulus floor. Rainwater continued to leak into the annulus of most tanks. Inleakage was evidenced primarily by surface stains, occasionally by calciferous deposits, changed configuration in leaked waste in the annulus, and by mild surface corrosion where annulus ventilation was inadequate to maintain the annulus dry.

Except as noted above, the conditions of the tanks remained essentially unchanged from the conditions reported in 1999. Details and results for inspections of the tanks and ancillaries performed in 2000 are listed in Appendix B.

Summary of Inspection Results

The following is a brief description of tank conditions as revealed by inspections and examinations made through 2000.

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.

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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.

In January 2001, after refilling of the tank, an annulus conductivity probe alarm was received and liquid was observed on the annulus floor. Remote inspections using a magnetic wheeled crawler identified six leaksites. These inspections will be documented in the 2001 inspection report.

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 (13%) 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 (19%) of the exterior of the primary vessel wall have not shown the source of the leaked waste or any other leaksite(s). Inspections have shown no significant surface corrosion, and the ultrasonic measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 11

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

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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, 1985, and 2000 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 during a visual inspection. Currently, the annulus pan contains 12 to 13 inches of dry leaked waste. Eightynine percent of the exterior of the primary vessel wall is observable via the 18 risers that provide access to the annulus. Inspections have located 33 leaksites and it is estimated that there are about 50 leaksites in this tank. All of the observed leaksites are near the bottom circumferential weld that is 2.5 feet above the tank bottom, except for one leaksite that was observed approximately 24 feet above the tank bottom. Inspections have shown no significant surface corrosion, and ultrasonic measurements made in 1979 and 1983 showed no detectable thinning of the tank wall.

Tank 15

Tank 15 was placed in service in 1960. Inspections in 1972 below one of the four risers providing access to the annulus revealed two leaksites near the bottom circumferential weld about 2.5 feet above the tank bottom. Twelve additional risers were installed, increasing the observable portion of the primary

vessel wall from 25% to 96%. Inspections in 1973, via the additional risers, revealed eleven other leaksites. Later inspections revealed three other sites where cracks penetrated the steel wall, one was observed in 1994 and two were observed in 1997. Inspections in 2000 revealed two additional leaksites near the bottom circumferential weld. A total of 18 leaksites have been identified.

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. Seventythree 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.

Program Implementation

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 inleakage had occurred. Ultrasonic that measurements made in 1982 and 1985 showed no detectable thinning of the liner bottom. Activities to remove all waste from the tank began in 2000.

Tank 20

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

Tank 21

Tank 21 was placed in service in 1961. Examinations of the steel liner have shown no evidence of failure, significant surface corrosion, or other anomalies. Ultrasonic measurements made in 1973, 1977, 1980, and 1983 showed no detectable thinning of the liner bottom.

Tank 22

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

Tank 23

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

Tank 24

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

Tank 25

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

Tank 26

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

Tank 27

Tank 27 was placed in service in 1980. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic

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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 measurements made in 1980, 1981, 1984, and 1985 showed no detectable thinning of the tank wall.

Tank 40

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

Program Implementation

Tank 41

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

Tank 42

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

Tank 43

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

Tank 44

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

Tank 45

Tank 45 was placed in service in 1982. Examinations of 100% of the exterior of the primary vessel wall and the annulus have shown no leakage, significant surface corrosion, or other anomalies. Ultrasonic thickness measurements made in 1980, 1981, and 1984 showed no detectable thinning of the tank wall.

Tank 46

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

Tank 47

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

Tank 48

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

Tank 49

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

Tank 50

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

Tank 51

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

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Appendix A—Waste Tanks at SRS

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

SRS Waste Tank Specifications

* 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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AREA	TANK OR ANCILLARY	ACCESS OI (A OR	PENII I)	<u>NG</u> DATE	DATE IDENTIFICATION NUMBER			REMARKS
F	01	East	(A)	08/29/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
F	01	East	(A)	09/03/00	CCTV	1	641	The probe was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
F	01	East	(A)	09/03/00	DP	1	P00204:01-17	Tank condition had not changed.
F	01	North	(A)	09/03/00	DP	1	P00205:01-17	Tank condition had not changed.
F	01	South	(A)	09/03/00	DP	1	P00206:01-17	Tank condition had not changed.
F	01	West	(A)	09/03/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	01	West	(A)	09/07/00	DP	1	P00207:01-17	Tank condition had not changed.
F	02	East	(A)	03/15/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
F	02	East	(A)	04/24/00	DP	1	P00087:01-17	Tank condition was normal.
F	02	North	(A)	03/13/00	WAP	1	P00071:03	Tank condition was normal.
F	02	North	(A)	03/15/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	02	South	(A)	03/13/00	WAP	1	P00071:01	Tank condition was normal.
F	02	South	(A)	03/15/00	ССТV	1	641	The conductivity probe was deployed at the setpoint.
F	02	West	(A)	03/13/00	WAP	1	P00071:02	Tank condition was normal.
F	03	East	(A)	03/13/00	WAP	1	P00072:02	Tank condition was normal.
F	03	North	(A)	03/13/00	WAP	1	P00072:01	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.

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

AREA	TANK OR ANCILLARY	<u>ACCESS O</u> (A OR	PENII I)	<u>NG</u> DATE	INSPECTION METHOD DATE IDENTIFICATION NUMBER			REMARKS	
F	03	North	(A)	05/03/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	03	South	(A)	03/13/00	WAP	1	P00072:03	Tank condition was normal.	
F	03	South	(A)	05/03/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	03	West	(A)	04/24/00	DP •	1	P00088:01-16	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.	
F	03	West	(A)	05/03/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.	
F	04	East	(A)	03/13/00	WAP	1	P00073:03	Tank condition was normal.	
F	04	East	(A)	03/15/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.	
F	04	North	(A)	03/13/00	WAP	1	P00073:01	Tank condition was normal.	
F	04	North	(A)	03/27/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	04	South	(A)	03/27/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	04	South	(A)	04/24/00	DP	1	P00089:01-15	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.	
F	04	West	(A)	03/13/00	WAP	1	P00073:02	Tank condition was normal.	
F	05	East	(A)	03/13/00	WAP	1	P00074:01	Tank condition was normal.	
F	05	North	(A)	04/27/00	DP	1	P00091:01-16	Tank condition was normal.	
F	05	North	(A)	05/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	05	South	(A)	03/13/00	WAP	1	P00074:02	Tank condition was normal.	
F	05	South	(A)	05/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	05	West	(A)	03/13/00	WAP	1	P00074:03	Tank condition was normal.	
F	05	West	(A)	05/09/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.	

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AREA	TANK OR ANCILLARY	ACCESS O (A OR	PENIN R I)	<u>IG</u> DATE	INSPECTION METHOD			REMARKS		
F	05	06	(I)	10/17/00	CCTV	1	718	CCTV was used to document position of HLLCP. The conductivity probe was not visible.		
F	05	06	(I)	10/18/00	CCTV	1	719	CCTV was used to inspect for obstructions in the HLLCP standpipe. Inspection revealed an abandoned conductivity probe in the standpipe.		
F	05	06	(I)	11/24/00	CCTV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		
F	05	07	(I)	11/26/00	ССТV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		
F	06	East	(A)	03/13/00	WAP	1	P00075:01	Tank condition was normal.		
F	06	East	(A)	05/09/00	сстv	1	641	The magnetically mounted thermocouple was deployed at the setpoint.		
F	06	North	(A)	04/27/00	DP	1	P00092:01-16	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.		
F	06	North	(A)	05/09/00	CCTV	1	641	The conductivity probe in the North riser was lifted so that it could be observed, then lowered to the floor. The probe was not visible where it came to rest beneath the ventilation duct.		
F	06	South	(A)	03/13/00	WAP	1	P00075:02	Tank condition was normal.		
F	06	South	(A)	05/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.		
F	06	West	(A)	03/13/00	WAP	1	P00075:03	Tank condition was normal.		
F	06	06	(I)	10/17/00	CCTV	1	718	CCTV was used to document position of the transfer jet conductivity probe. The conductivity probe did not extend below the bottom of the standpipe.		
F	06	06	(I)	10/18/00	CCTV	1	719	CCTV was used to document position of the transfer jet conductivity probe. The conductivity probe did not extend below the bottom of the standpipe.		
F	06	06	(I)	11/25/00	ССТV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		
F	06	06	(I)	12/21/00	CCTV	1	643B	The conductivity probe was deployed at the setpoint.		

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AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	IG DATE	INSPE IDENTIF		N <u>METHOD</u> ON NUMBER	REMARKS		
F	07	VB-01	01/31/00	CCTV	1	643	CCTV was used to deploy conductivity probes 3501A and 3501B. The conductivity probes were deployed at the setpoint.		
F	07	VB-01	03/07/00	CCTV	1	643	CCTV was used to position the conductivity probes. The probes were deployed at the setpoint.		
F	07	VB-01	04/13/00	CCTV	1	643	The conductivity probes were deployed at the setpoint.		
F	07	VB-01	04/16/00	CCTV	1	NA	CCTV revealed that all valves were leak free.		
F	07	VB-01	11/02/00	CCTV	1	712	CCTV was used to perform leak check of valves. No leaks were observed. However, a piece of rubber tubing was observed on the floor.		
F	07	VB-01	11/25/00	ССТV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		
F	07	VB-02	01/31/00	CCTV	1	643	CCTV was used to deploy conductivity probes 3502A and 3502B. The conductivity probes were deployed at the setpoint.		
F	07	VB-02	04/13/00	CCTV	1	643	The conductivity probes were deployed at the setpoint.		
F	07	VB-02	04/16/00	CCTV	1	NA	CCTV revealed that all valves were leak free.		
F	07	VB-02	11/02/00	CCTV	1	712	CCTV was used to perform leak check of valves. No leaks were observed. However, debris was observed on the floor.		
F	07	VB-02	11/24/00	CCTV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		
F	07	VB-03	01/31/00	CCTV	/	643	CCTV was used to deploy conductivity probes 3503A and 3503B. The conductivity probes were deployed at the setpoint.		
F	07	VB-03	04/13/00	CCTV	1	643	The conductivity probes were deployed at the setpoint.		
F	07	VB-03	04/16/00	CCTV	1	NA	CCTV revealed that all valves were leak free.		
F	07	VB-03	11/02/00	CCTV	/	712	CCTV was used to perform leak check of valves. No leaks were observed. A piece of rubber tubing was observed on the floor.		
F	07	VB-03	11/25/00	CCTV	1	NA	CCTV was used to monitor for leaks during leak check. No leaks were observed.		

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AREA	TANK OR ANCILLARY	ACCESS OPEN (A OR I)	ACCESS OPENING INSPECTION METHOD (A OR I) DATE IDENTIFICATION NUMBER				REMARKS		
F	07	VB-03	12/29/00	CCTV	1	NA	CCTV was used to verify operation of valve. Inspection revealed that the valve opened and closed properly.		
F	07	VB-04	02/17/00	CCTV	1	NA	CCTV was used to deploy conductivity probes 3504A and 3504B. The conductivity probes were positioned on the valve box floor.		
F	07	VB-04	04/13/00	CCTV	1	643	The conductivity probes were deployed at the setpoint.		
F	07	VB-04	04/16/00	CCTV	1	NA	CCTV revealed that all valves were leak free.		
F	07	VB-04	10/01/00	CCTV	1	712	CCTV was used to leak check valve WTS-V-63. No leaks were observed.		
F	07	• VB-04	11/02/00	CCTV	1	712	CCTV was used to perform leak check of valves. No leaks were observed.		
F	07	VB-05	01/31/00	CCTV	1	643	CCTV was used to deploy conductivity probes 3500A and 3500B. The conductivity probes were deployed at the setpoint.		
F	07	VB-05	04/13/00	CCTV	1	643	The conductivity probes were deployed at the setpoint.		
F	07	VB-05	04/16/00	CCTV	1	NA	CCTV revealed that all valves were leak free.		
F	07	VB-05	10/01/00	CCTV	1	712	CCTV was used to leak check valve WTS-V-82.No leaks were observed.		
F	07	VB-05	11/02/00	CCTV	1	712	CCTV was used to perform leak check on valves. No leaks were observed.		
F	07	VB-05	11/11/00	CCTV	Ι	NA	CCTV was used to document conditions inside the valve box in response to a conductivity probe alarm. Condensation had formed on the walls of the valve box. The conductivity probes were deployed at the setpoint, and no standing liquid was observed.		
F	07	VB-05	11/16/00	ССТV	1	NA	CCTV was used to document conditions inside the valve box. Inspection revealed that the conductivity probes were deployed at the setpoint and were not contacting the floor. Stains and marks on the valve box walls indicate the presence of water in the past; however, no standing liquid was observed.		
F	07	North (A)	03/13/00	WAP	1	P00076:02	Tank condition was normal.		
F	07	North (A)	05/03/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.		
F	07	South (A)	04/27/00	DP	1	P00093:01-16	Tank condition was normal.		

AREA	TANK OR ANCILLARY	ACCESS O (A OF	PENIN R I)	<u>IG</u> DATE	INSPECTION METHOD IDENTIFICATION NUMBER			REMARKS
F	07	South	(A)	05/03/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	07	West	(A)	03/13/00	WAP	1	P00076:01	Tank condition was normal.
F	07	West	(A)	05/03/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
F	07	05	(I)	09/21/00	CCTV	1	643B	Inspection of Neutron Detector well interior showed no unusual conditions. Approximately 25 feet of the interior was inspected.
F	07	05	(I)	10/26/00	CCTV	1	643B	Inspection of Neutron Detector well interior showed no unusual conditions. The entire length of the well was inspected.
F	07	07	(I)	09/01/00	CCTV	1	643B	CCTV inspection was performed to document the conditions of the tank. No unusual conditions were observed. A pipe(Neutron Detector well) approximately 4 inches in diameter extending from riser 5 into the liquid was observed.
F	07	08	(I)	11/15/00	CCTV	1	643B	CCTV was used to document equipment configuration beneath the riser. Inspection revealed a thermowell extending approximately 2 to 3 inches below the bottom of the riser plug and dip tubes installed in a removable plug extending approximately 8 feet below the riser plug. A permanently installed transfer line terminal (downcomer) enters the riser approximately 6 to 7 feet below the riser.
F	08	LDB-17		04/16/00	CCTV	1	642	CCTV was used to observe for leaks during hydrotesting and repositioning of the conductivity probes. No leaks were observed and both probes were on the LDB floor.
F	08	LDB-17		11/26/00	CCTV	1	559	CCTV was used to perform leak check. No leaks were observed.
F	08	LDB-17		12/17/00	CCTV	1	642	CCTV was used to document condition of conductivity probes 8630A and 8630B after an alarm was received. No standing liquid was observed; however, the probes were raised and dried, then redeployed at the setpoint.
F	08	East	(A)	03/13/00	WAP	1	P00077:02	Tank condition was normal.
F	08	East	(A)	05/02/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.

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AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DAT			<u>INSPE</u> IDENTIFI		ON METHOD	REMARKS	
F	08	North	(A)	03/13/00	WAP	1	P00077:03	Tank condition was normal.	
F	08	North	(A)	05/02/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	08	South	(A)	03/13/00	WAP	1	P00077:01	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.	
F	08	South	(A)	05/02/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	08	West	(A)	04/24/00	DP	1	P00090:01-16	Tank condition was normal.	
F	08	04	(I)	02/29/00	CCTV	Ι	624	CCTV was used to troubleshoot reel tape. The reel tape appeared to be contacting the thermowell bundle located in the same riser. The thermowell bundle appears to be bent in the direction of the reel tape.	
F	08	04	(I)	05/31/00	CCTV	1	686	CCTV was used to monitor startup and operation of slurry pumps in risers 1, 3, 5 and 8. No unusual conditions were observed.	
F	08	04	(I)	05/31/00	CCTV	1	686	CCTV was used to observe flushing of reel tape. Inspection revealed that the spray ring appears to be clogged. No flush water was observed.	
F	08	04	(I)	09/01/00	CCTV	1	702	Inspections were performed to document slurrying activities in tank from 7/17/00 to 9/1/00. No unusual conditions were observed.	
F	08	07	(I)	04/16/00	CCTV	1	NA	CCTV system was used to monitor for leakage during hydrotesting of FDB-02 to Tank 8 transfer line. No evidence of leakage was observed.	
Н	09	South	(A)	02/08/00	WAP	1	P00011:01	Tank condition had not changed. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.	
н	09	South	(A)	02/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Н	09	West	(A)	02/08/00	DP	1	P00010:01-17	Tank condition had not changed. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.	
Н	09	West	(A)	02/09/00	CCTV	1	641	The conductivity probe and magnetically mounted thermocouple were deployed at the setpoint.	

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AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		I <u>G</u> DATE	INSPECTION METHOD IDENTIFICATION NUMBER		<u>ON METHOD</u> ION NUMBER	REMARKS
H	10	East	(A)	02/10/00	ССТV	1	641	The conductivity probe and magnetically mounted thermocouple were deployed at the setpoint.
Н	10	East	(A)	02/10/00	WAP	1	P00018:02	Tank condition had not changed.
Н	10	North	(A)	02/10/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	10	North	(A)	02/10/00	WAP	1	P00018:01	Tank condition had not changed. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.
Н	10	West	(A)	02/10/00	DP	1	P00017:01-17	Tank condition had not changed. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.
Η	11	East	(A)	02/04/00	DP	1	P00013:01-17	Tank condition had not changed. White deposits observed on the annulus pan were caused by water dripping from the annulus pan ledge.
Н	11	North	(A)	02/04/00	DP	1	P00012:01-17	Tank condition had not changed. Stains on the primary vessel wall have increased since inspected on 2/25/98. White deposits observed on the annulus pan were caused by water dripping from the annulus pan ledge.
н	11	North	(A)	02/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	11	South	(A)	01/12/00	CCTV	1	613	CCTV inspection determined that the white deposits which were washed from the grout curbing beneath the tank perimeter on 9/2/99 had not reformed. Inspection of the surface of the steel pan revealed no changes since observed on 10/21/99.
Н	11	South	(A)	02/04/00	WAP	1	P00014:01	Tank condition had not changed. Stains on the primary vessel wall have increased since inspected on 2/25/98.
Н	11	South	(A)	02/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	11	South	(A)	06/13/00	CCTV	1	613	CCTV was used to document conditions of annulus steel pan. Inspection of the surface of the steel pan revealed no changes since inspected on 1/12/00.
Η	11	South	(A)	09/28/00	CCTV	1	613	CCTV was used to document conditions of annulus steel pan. Inspection of the surface of the steel pan revealed no changes since inspected on 6/13/00.
	TANK OR ANCILLARY	ACCESS O		NG	INSPE	CTIC	ON METHOD	DEMARKO
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AREA					IDENTIFI	CA		REMARKS
Н	11	West	(A)	02/04/00	WAP	1	P00014:02	Tank condition had not changed. Stains on the primary vessel wall have increased since inspected on 2/25/98.
Н	11	West	(A)	02/09/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Η	11	07	(I)	03/23/00	CCTV	1	670	CCTV was used to document equipment piping configuration in the riser. A previously unidentified pipe was determined to be an abandoned section of pipe used during salt mining operations beneath the riser.
Н	12	East	(A)	02/09/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Н	12	East	(A)	02/10/00	WAP	1	P00019:01	Tank condition had not changed.
Н	12	East	(A)	11/23/00	ССТV	1	643	The magnetically mounted thermocouple was deployed at the setpoint.
н	12	North	(A)	02/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	12	North	(A)	02/09/00	DP	1	P00016:01-17	Tank condition had not changed.
н	12	South	(A)	02/09/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	12	South	(A)	02/10/00	WAP	1	P00019:02	Tank condition had not changed.
Н	12	West	(A)	02/09/00	DP	1	P00015:01-17	Tank condition had not changed.
Н	13	LDB-02		02/10/00	CCTV	1	642	The conductivity probe was positioned at the setpoint.
Н	13	010	(A)	02/11/00	DP	1	P00025:01-17	Tank condition had not changed.
Н	13	032	(A)	02/11/00	DP	1	P00026:01-17	Tank condition had not changed.
Н	13	055	(A)	02/11/00	DP	1	P00027:01-16	Tank condition had not changed.
Н	13	071	(A)	02/11/00	DP	1	P00028:01-17	Tank condition had not changed.
Н	13	107	(A)	02/11/00	DP	1	P00023:01-16	Tank condition had not changed.
н	13	107	(A)	07/31/00	UT	Ι	UT-00-002	Thickness, mapping, crack detection and weld inspection revealed no reportable conditions. A summary of the inspection, including areas scanned and results, can be found in report TSD-NDE-20000588.

AREA	TANK OR ANCILLARY	ANK OR <u>ACCESS OPENING</u> ICILLARY (A OR I) <u>DATE</u>					<u>ON METHOD</u> FION NUMBER	REMARKS
Н	13	151	(A)	02/11/00	DP	1	P00024:01-16	Tank condition had not changed.
Н	13	175	(A)	02/11/00	WAP	1	P00020:03	Tank condition had not changed.
Н	13	207	(A)	02/11/00	WAP	1	P00020:04	Tank condition had not changed.
Н	13	228	(A)	02/11/00	DP	1	P00029:01-17	Tank condition had not changed.
Η	13	228	(A)	07/13/00	UT	1	UT-00-001	Thickness, mapping, crack detection and weld inspection revealed no reportable conditions. A summary of the inspection, including areas scanned and results, can be found in report TSD-NDE-20000588.
Н	13	East	(A)	02/11/00	WAP	1	P00020:02	Tank condition had not changed.
Н	13	North	(A)	02/11/00	DP	1	P00022:01-17	Tank condition had not changed.
н	13	North	(A)	09/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	13	North	(A)	09/21/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Н	13	South	(A)	02/11/00	DP	1	P00021:01-16	Tank condition had not changed.
Н	13	South	(A)	09/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	13	West	(A)	02/11/00	WAP	1	P00020:01	Tank condition had not changed. Stains and marks on the primary vessel wall have increased since inspected on 10/9/98 due to water which had leaked into the annulus.
Н	14	013	(A)	10/25/00	WAP	1	P00214:01	Tank condition had not changed.
Н	14	032	(A)	10/25/00	WAP	1	P00214:02	Tank condition had not changed.
Н	14	065	(A)	10/27/00	DP	1	P00216:01-17	Tank condition had not changed.
Н	14	108	(A)	10/27/00	DP	1	P00217:01-17	Tank condition had not changed.
Н	14	118	(A)	10/27/00	WAP	I	P00215:02	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. The surface of the leaked waste had been reconfigured by water which had leaked into the annulus.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	PENING I)	DATE	INSPE IDENTIF		ON METHOD	REMARKS
Н	14	125	(A)	10/27/00	DP	1	P00218:01-17	Tank condition had not changed. The surface of the leaked waste had been reconfigured by water which had leaked into the annulus.
Н	14	151	(A)	09/08/00	WAP	1	P00208:01	Tank condition had not changed.
Н	14	170	(A)	10/25/00	WAP	1	P00214:03	Tank condition had not changed.
Н	14	207	(A)	10/25/00	WAP	1	P00214:04	Tank condition had not changed.
Н	14	235	(A)	10/25/00	WAP	1	P00214:05	Tank condition had not changed.
Н	14	259	(A)	10/25/00	WAP	1	P00214:06	Tank condition had not changed.
Н	14	East	(A)	09/08/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	14	East	(A)	09/08/00	WAP	1	P00213:01	Tank condition had not changed.
Н	14	North	(A)	09/08/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
н	14	North	(A)	09/08/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	14	North	(A)	10/27/00	WAP	1	P00215:01	Tank condition had not changed.
Н	15	Purge Reheater		06/30/00	CCTV	1	NA	CCTV was used to observe for a steam leak in the purge reheater. No steam was observed in the filter housing.
Н	15	Purge Reheater		07/13/00	CCTV	1	NA	CCTV was used to observe for a steam leak in the purge reheater. Results of this inspection were inconclusive.
Н	15	010	(A)	02/25/00	WAP	1	P00064:03	Tank condition had not changed.
Н	15	032	(A)	02/25/00	DP	1	P00053:01-17	Tank condition had not changed. Inspection revealed stains and marks on the primary vessel wall which have increased significantly since inspected on 3/98. This increase appears to have been caused by water which had leaked into the annulus.
Н	15	055	(A)	02/25/00	DP	1	P00054:01-17	Stains and deposits on the primary vessel wall indicate a previously unidentified through wall crack which exists approximately 3 - 4 inches below the bottom girth weld.

		ACCESS O (A OF	NG DATE					
					IDENTIF			REMARKS
н	15	071	(A)	02/25/00	DP	1	P00055:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. An increase in deposits on the floor was observed since last inspected on 3/98.
Н	15	107	(A)	02/25/00	WAP	1	P00064:04	Tank condition had not changed.
Н	15	107	(A)	03/16/00	CCTV	1	641	The probe in IP-117 was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.
Н	15	137	(A)	02/25/00	WAP	1	P00064:05	Tank condition had not changed.
Н	15	171	(A)	02/25/00	WAP	1	P00064:06	Tank condition had not changed.
Н	15	182	(A)	02/25/00	WAP	1	P00064:07	Tank condition had not changed.
Н	15	207	(A)	02/25/00	DP	1	P00056:01-16	Stains and deposits on the primary vessel wall indicate a previously unidentified through wall crack which exists on the bottom girth weld and next to a vertical weld on the lower plate. Also, an increase in calciferous stains was observed on the primary vessel wall.
Н	15	223	(A)	02/25/00	DP	1	P00057:01-17	Tank condition had not changed. An increase in deposits on the annulus floor by I. P. 207 was observed. The deposits appear to be calciferous and were washed down the tank by water inleakage.
Н	15	242	(A)	03/16/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Н	15	East	(A)	02/25/00	WAP	1	P00064:02	Tank condition had not changed.
Η	15	North	(A)	03/16/00	DP	1	P00081:01-17	Tank condition had not changed. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.
Н	15	South	(A)	02/25/00	WAP	1	P00064:01	Tank condition had not changed.
Η	15	South	(A)	03/16/00	CCTV	1	641	The probe in the was lifted up so that it could be observed, then lowered to the floor between the ventilation duct and the secondary vessel wall. The probe was not visible where it came to rest beneath the ventilation duct.

	TANK OR	ACCESS O	PENIN	IG	INSPE	СТІС	ON METHOD	
AREA	ANCILLARY	(A OR	: 1)	DATE	IDENTIF		ION NUMBER	REMARKS
Н	15	West	(A)	03/16/00	DP	1	P00082:01-17	Tank condition had not changed. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus. Water which had entered the annulus had evaporated and reconfigured the leaked waste in the annulus pan.
Н	16	035	(A)	02/25/00	WAP	1	P00065:01	Tank condition had not changed.
Н	16	118	(A)	02/25/00	WAP	1	P00065:02	Tank condition had not changed. Leaked waste on the annulus floor had been redistributed by water which had leaked into the annulus.
Н	16	207	(A)	02/25/00	WAP	1	P00065:03	Tank condition had not changed. Leaked waste on the annulus floor had been redistributed by water which had leaked into the annulus.
Н	16	262	(A)	02/25/00	WAP	1	P00065:04	Tank condition had not changed. Leaked waste on the annulus floor had been redistributed by water which had leaked into the annulus.
Н	16	East	(A)	02/25/00	DP	1	P00058:01-17	Tank condition had not changed. Leaked waste on the annulus floor had been redistributed by water which had leaked into the annulus.
Н	16	West	(A)	02/25/00	DP	1	P00063:01-17	Tank condition had not changed. Leaked waste on the annulus floor had been redistributed by water which had leaked into the annulus.
F	18	Leak Detection Sump		07/09/00	ССТV	1	643	CCTV was used to inspect the leak detection sump encasement for water inleakage. Water was observed approximately 40 feet below the standpipe opening.
F	18	Leak Detection Sump		09/07/00	ССТV	1	NA	CCTV was used to inspect leak detection sump encasement. Water was observed approximately 41 feet below the four inch standpipe opening.
F	18	MLDB-10		04/13/00	CCTV	1	656	CCTV was used to document conditions of the MLDB. Inspection revealed solids covering approximately 1/3 - 1/2 of the drain line.
F	18	MLDB-10		05/08/00	CCTV	1	643	Inspection revealed that the MLDB appeared to be clean with no obstructions to the drain.
F	18	MLDB-10		05/11/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	18	MLDB-12		08/13/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.

	TANK OR	ACCESS O		IG	INSPE	CTIO	N METHOD	
AREA	ANCILLARY	10 A)	. 1)		IDENTIF	CAII	ON NUMBER	REMARKS
F	18	MLDB-12		09/29/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	18	Center	(I)	08/30/00	CCTV	1	643	Inspection revealed that there was an accumulation of abandoned steel tapes below the Center riser. The steel tapes did not interfere with the operation of the reel tape, however, the bob appears to have deposits attached.
F	18	Center	(I)	09/05/00	ССТV	1	NA	CCTV was used to inspect reel tape. Inspection revealed that reel tape was functioning normally. However, significant amounts of foam were observed floating on the liquid surface.
F	18	Center	(I)	09/15/00	ССТV	1	709	Tank steel wall and concrete dome condition were normal. Stains and marks on the concrete dome indicated water had leaked into the tank via the risers.
F	18	Center	(I)	12/31/00	сстv	1	698 A/B	CCTV was used to support waste removal activities from Tank 19. The removal of waste into Tank 18 continued from 11/22/00 through 12/31/00.
F	18	West	(I)	02/10/00	ССТV	1	656	CCTV was provided to assist with removing obstructions and preparing the transfer line for installation of a wall nozzle. The nozzle was successfully installed.
F	18	West	(I)	08/17/00	ССТV	1	704	Inspection revealed that the pump would properly match up with the nozzles installed in the West riser.
F	19	Leak Detection Sump		07/13/00	CCTV	1	643	CCTV was used to inspect the leak detection sump encasement for water inleakage. No unusual conditions were observed; however, water was observed approximately 53 inches from the top of the encasement.
F	19	Leak Detection Sump		08/11/00	CCTV	1	643	CCTV was used to document conditions of the leak detection sump encasement . Approximately 25 feet of the discharge line was inspected and no unusual conditions were observed. However, water was observed approximately 40 feet below the top of the outer encasement.
F	19	Leak Detection Sump		08/25/00	CCTV	1	643B	CCTV was used to document conditions of leak detection sump encasement. No abnormalities were observed in the piping or the sump encasement.

AREA	TANK OR ANCILLARY	ACCESS OI (A OR	<u>G</u> DATE	INSPE IDENTIFI	CTIO CATI	<u>N METHOD</u> ON NUMBER	REMARKS	
F	19	Center	(I)	09/15/00	CCTV	1	710	Tank steel wall condition had not changed and the concrete dome was normal.
F	19	Center	(I)	10/06/00	CCTV	1	698	CCTV was used to investigate reel tape. Inspection revealed that reel tape was wrapped around a thermowell. The reel tape was raised until free of thermowell and then lowered to proper setpoint.
F	19	Center	(I)	12/31/00	ССТV	1	698 A/B	CCTV was used to support waste removal activities from 8/1/00 through 12/31/00.
F	19	NE	(I)	02/02/00	CCTV	1	NA	CCTV was used to determine if the riser dimensions were adequate by deploying a "go/no go" gauge. The riser gauge did not clear the riser.
F	19	NE	(I)	10/24/00	CCTV	1	NA	Inspection verified that valve WTS-V-30 was operating properly.
F	19	West	(I)	04/16/00	ССТV	1	675	CCTV was used to inspect the HLLCP. Inspection revealed that the probe was contacting the waste.
н	21	MLDB-01		04/27/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	21	NE	(I)	06/29/00	ССТV	1	643	Inspection of the plastic liner of the port where the reel tape entered the tank showed no evidence of degradation.
Н	21	NE	(I)	10/04/00	CCTV	Ι	717	Tank steel wall condition and concrete dome were normal. Stains and marks on the concrete dome were caused by inleakage of water around the risers.
Η	21	NE	(1)	12/05/00	CCTV	1	734	CCTV was used to document waste surface conditions. There appears to be an "oily" film covering approximately 40 - 50% of the surface with some globular material floating on the surface. Some of the material is visible just below the liquid surface.
Н	22	MLDB-01		08/30/00	ССТV	1	NA	Inspection revealed that the conductivity probe was contacting mud in the bottom of the MLDB.
Н	22	MLDB-01		08/30/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	22	MLDB-01		09/12/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.

	TANK OR	ACCESS O	PENI	NG	INSPE	стю	N METHOD	
AREA	ANCILLARY 22	(A OR I)		DATE	IDENTIF		ION NUMBER	REMARKS
Н		MLDB-01		12/31/00	CCTV	1	642	CCTV was used to document conditions in the MLDB after a conductivity probe alarm was received. Inspection revealed that probe was on bottom of the MLDB. Moisture was observed on the floor.
Н	22	MLDB-02		04/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	22	MLDB-02		10/24/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	22	NE	(I)	09/13/00	CCTV	1	708	CCTV was used to document conditions of tank interior and concrete dome. An crack was noted on the concrete dome. There is no evidence of gross spalling, which is an indication of rebar rusting. Therefore, the crack is not a structural crack, but a pattern crack. The crack appears to be old, since there appears to be no change in the crack's appearance from 1993 to present.
Н	22	NE	(I)	11/14/00	CCTV	1	736	Inspection verified that transfer pump was operating properly.
н	22	NW	(I)	12/05/00	CCTV	1	734	CCTV was used to document conditions of waste surface. There appears to be an "oily" film covering approximately 30 - 40% of the surface; however, it appears to be translucent with no solids observed.
Н	22	NW	(I)	12/11/00	CCTV	1	734	CCTV was used to assist with sampling of material on the waste surface.
Н	23	North	(I)	08/31/00	CCTV	1	643B	CCTV was used to document conditions of the TTJ and service piping. The TTJ appeared to be free of rust and in good condition.
Н	23	SW	(I)	07/25/00	CCTV	1	608	Tank steel wall condition was normal. Inspection of the concrete dome revealed a few small surface voids, water marks and stains. Water was observed leaking in the NW riser.
н	23	SW	(I)	10/06/00	CCTV	1	643B	CCTV was used to observe for inleakage at the NW riser after the domestic water lines were isolated. Inleakage was observed; however it was at a reduced rate.
Н	24	Ν	(I)	12/20/00	CCTV	1	643B	CCTV was used to assist with the repositioning of the conductivity probe.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	PENING I)	DATE	INSPE IDENTIF	CTIOI	<u>N METHOD</u> ON NUMBER	REMARKS
H	24	North	(I)	04/06/00	CCTV	1	676	Inspection of the TTJ revealed the steam line had raised through the seal plate during retraction.
н	24	North	(I)	04/17/00	CCTV	1	678	CCTV was performed to determine if the steam line in the riser would move as the TTJ was raised and lowered and to determine if the flange was damaged. No unusual conditions were observed and no movement in the steam line was detected.
Н	24	North	(I)	05/11/00	CCTV	1	678	CCTV was used to leak check TTJ piping in riser. No leaks were observed.
Н	24	North	(I)	08/10/00	CCTV	1	678	The conductivity probe was deployed at the setpoint.
Н	24	North	(I)	10/27/00	сстv	1	678	CCTV was used to document conditions inside the riser in response to a conductivity probe alarm. No unusual conditions were observed, and the riser interior appeared to be dry.
Н	24	North	(I)	10/29/00	CCTV	1	678	CCTV was used to document conditions inside riser. Inspection revealed some solids and moisture on the shield plate.
Н	24	North	(I)	10/30/00	CCTV	1	678	CCTV was used to document conditions inside riser. There appeared to be solids on the shield plate surface beneath the conductivity probe.
Н	24	North	(I)	11/01/00	CCTV	1	678	The conductivity probe was deployed at the setpoint.
Н	24	North	(I)	11/02/00	CCTV	1	678	CCTV was used to monitor the TTJ during transfer. A leak was observed at the nozzle.
Н	24	North	(I)	11/04/00	CCTV	1	NA	CCTV was used to monitor the TTJ during transfer. The inspection was inconclusive. The conductivity probe appears to be free of deposits.
Н	24	North	(I)	11/17/00	CCTV	1	NA	CCTV was used to monitor the TTJ during transfer. A leak was observed at the nozzle.
Н	24	NW	(I)	04/12/00	CCTV	1	678	Inspection revealed that the TTJ was extending properly below the riser.
Н	24	NW	(I)	04/17/00	CCTV	1	678	CCTV was used to monitor the TTJ as it was raised and lowered for proper deployment. The TTJ operated properly.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DATE			<u>INSPE</u> IDENTIFI	CTIC	<u>ON METHOD</u> TON NUMBER	REMARKS
H	24	NW	(I)	05/11/00	CCTV	1	678	CCTV was used to document tank conditions and to monitor transfer. A small leak was observed at the packing boxes on the TTJ. No other unusual conditions were observed.
н	24	SW	(I)	03/10/00	CCTV	1	662	Tank condition was normal. Stains and marks observed on the concrete dome indicated inleakage near the Northeast riser. No other unusual conditions were observed.
н	24	SW	(1)	11/30/00	CCTV	1	734	CCTV was used to document conditions of the waste surface. Inspection revealed that the surface was 80 - 90% covered with an "oily" film and had some floating globulars and some solids which had a "Rice Crispies" appearance.
Н	24	. SW	(I)	12/12/00	CCTV	1	734	CCTV was used to assist with sampling of material floating on the waste surface.
F	25	A-01	(A)	05/22/00	DP	1	P00112:01-25	Tank condition was normal.
F	25	A-02	(A)	05/22/00	DP	1	P00113:01-24	Tank condition was normal.
F	25	A-02	(A)	05/22/00	DP	1	P00113:20	The conductivity probe was deployed at the setpoint.
F	25	A-03	(A)	05/22/00	DP	1	P00114:01-25	Tank condition was normal.
F	25	A-03	(A)	05/22/00	DP	1	P00114:21	The conductivity probe was deployed at the setpoint.
F	25	A-04	(A)	05/22/00	DP	1	P00115:01-25	Tank condition was normal.
F	25	A-04	(A)	05/22/00	DP	1	P00115:21	The conductivity probe was deployed at the setpoint.
F	25	P-01	(A)	05/01/00	WAP	1	P00094:01	Tank condition was normal.
F	25	P-02	(A)	05/01/00	WAP	1	P00094:02	Tank condition was normal.
F	25	P-03	(A)	05/01/00	WAP	1	P00094:03	Tank condition was normal.
F	25	P-04	(A)	05/01/00	WAP	1	P00094:04	Tank condition was normal.
F	25	P-05	(A)	05/01/00	WAP	1	P00094:05	Tank condition was normal.
F	25	P-06	(A)	05/01/00	WAP	1	P00094:06	Tank condition was normal.
F	25	P-07	(A)	05/01/00	WAP	1	P00094:07	Tank condition was normal.
F	25	P-08	(A)	05/01/00	WAP	1	P00094:08	Tank condition was normal.

AREA	TANK OR ANCILLARY	<u>ACCESS O</u> (A OR	PENII R I)	<u>NG</u> DATE	<u>INSPE</u> IDENTIF	CTI ICA	<u>ON METHOD</u> TION NUMBER	REMARKS
F	25	P-09	(A)	05/01/00	WAP	1	P00094:09	Tank condition was normal.
F	25	P-10	(A)	05/01/00	WAP	1	P00094:10	Tank condition was normal.
F	25	P-11	(A)	05/01/00	WAP	1	P00094:11	Tank condition was normal.
F	25	P-12	(A)	05/01/00	WAP	1	P00094:12	Tank condition was normal.
F	25	P-13	(A)	05/01/00	WAP	1	P00094:13	Tank condition was normal.
F	25	P-14	(A)	05/01/00	WAP	1	P00094:14	Tank condition was normal.
F	26	LDB-04		07/24/00	CCTV	1	642	The probe was improperly positioned. It was resting on the bottom of the LDB.
F	26	LDB-04		09/01/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	26	R-02		04/19/00	CCTV	1	680	CCTV was used to document replacement of feed pump. After pump was replaced a successful leak check was performed.
F	26	A-01	(A)	05/30/00	WAP	1	P00137:01	Tank condition was normal.
F	26	A-02	(A)	05/30/00	WAP	1	P00137:02	Tank condition was normal.
F	26	A-02	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	26	A-03	(A)	05/30/00	WAP	1	P00137:03	Tank condition was normal.
F	26	A-03	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	26	A-04	(A)	05/30/00	WAP	1	P00137:04	Tank condition was normal.
F	26	A-04	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	26	P-01	(A)	05/24/00	DP	1	P00116:01-25	Tank condition was normal.
F	26	P-02	(A)	05/24/00	DP	1	P00117:01-25	Tank condition was normal.
F	26	P-03	(A)	05/30/00	WAP	1	P00137:05	Tank condition was normal.
F	26	P-04	(A)	05/30/00	WAP	1	P00137:06	Tank condition was normal.
F	26	P-05	(A)	05/30/00	WAP	1	P00137:07	Tank condition was normal.
F	26	P-06	(A)	05/30/00	WAP	1	P00137:08	Tank condition was normal.
F	26	P-07	(A)	05/24/00	DP	1	P00118:01-24	Tank condition was normal.

AREA	TANK OR ANCILLARY	NG DATE	INSPE		<u>ON METHOD</u> TION NUMBER	REMARKS		
F	26	P-08	(A)	05/24/00	DP	1	P00119:01-25	Tank condition was normal.
F	26	P-09	(A)	05/24/00	DP	1	P00120:01-25	Tank condition was normal.
F	26	P-10	(A)	05/30/00	WAP	1	P00137:09	Tank condition was normal.
F	26	P-11	(A)	05/30/00	WAP	1	P00137:10	Tank condition was normal.
F	26	P-12	(A)	05/30/00	WAP	1	P00137:11	Tank condition was normal.
F	26	P-13	(A)	05/30/00	WAP	1	P00137:12	Tank condition was normal.
F	26	P-14	(A)	05/30/00	WAP	1	P00137:13	Tank condition was normal.
F	27	LDB-01		03/20/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	27	LDB-05		03/20/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	27	A-01	(A)	05/22/00	DP	1	P00121:01-25	Tank condition was normal.
F	27	A-02	(A)	05/22/00	DP	1	P00122:01-25	Tank condition was normal. Stains and marks observed on the secondary vessel wall were caused by water which had leaked into the annulus.
F	27	A-02	(A)	05/22/00	DP	1	P00122:21	The conductivity probe was deployed at the setpoint.
F	27	A-03	(A)	05/22/00	DP	1	P00123:01-25	Tank condition was normal.
F	27	A-03	(A)	05/22/00	DP	1	P00123:21	The conductivity probe was deployed at the setpoint.
F	27	A-04	(A)	05/22/00	DP	1	P00124:01-25	Tank condition was normal.
F	27	A-04	(A)	05/22/00	DP	1	P00124:21	The conductivity probe was deployed at the setpoint.
F	27	P-01	(A)	05/01/00	WAP	1	P00110:01	Tank condition was normal.
F	27	P-02	(A)	05/01/00	WAP	1	P00110:02	Tank condition was normal.
F	27	P-03	(A)	05/01/00	WAP	1	P00110:03	Tank condition was normal.
F	27	P-04	(A)	05/01/00	WAP	1	P00110:04	Tank condition was normal.
F	27	P-05	(A)	05/01/00	WAP	1	P00110:05	Tank condition was normal.
F	27	P-06	(A)	05/01/00	WAP	1	P00110:06	Tank condition was normal.
F	27	P-07	(A)	05/01/00	WAP	1	P00110:07	Tank condition was normal.

ARFA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DATE			INSPE		<u>ON METHOD</u> FION NUMBER	DEMADKS
F	27	P-08	(A)	05/01/00		1	P00110:08	Tank condition was normal
•	21	1 00	(, ,	00/01/00	•••	1	F00110.00	rank condition was normal.
F	27	P-09	(A)	05/01/00	WAP	1	P00110:09	Tank condition was normal.
F	27	P-10	(A)	05/01/00	WAP	1	P00110:10	Tank condition was normal.
F	27	P-11	(A)	05/01/00	WAP	1	P00110:11	Tank condition was normal.
F	27	P-12	(A)	05/01/00	WAP	1	P00110:12	Tank condition was normal.
F	27	P-13	(A)	05/01/00	WAP	1	P00110:13	Tank condition was normal.
F	27	P-14	(A)	05/01/00	WAP	1	P00110:14	Tank condition was normal.
F	28	Underliner Sump		04/18/00	CCTV	1	NA	Inspection revealed a blockage in the conductivity probe standpipe.
F	28	A-01	(A)	05/01/00	WAP	1	P00111:01	Tank condition was normal.
F	28	A-02	(A)	05/01/00	WAP	1	P00111:02	Tank condition was normal.
F	28	A-02	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	28	A-03	(A)	05/01/00	WAP	1	P00111:03	Tank condition was normal.
F	28	A-03	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	28	A-04	(A)	05/01/00	WAP	1	P00111:04	Tank condition was normal.
F	28	A-04	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	28	P-01	(A)	06/13/00	DP	1	P00155:01-25	Tank condition was normal.
F	28	P-02	(A)	05/01/00	WAP	1	P00111:05	Tank condition was normal.
F	28	P-03	(A)	05/01/00	WAP	1	P00111:06	Tank condition was normal.
F	28	P-04	(A)	06/13/00	DP	1	P00156:01-25	Tank condition was normal.
F	28	P-05	(A)	05/01/00	WAP	1	P00111:07	Tank condition was normal.
F	28	P-06	(A)	05/01/00	WAP	1	P00111:08	Tank condition was normal.
F	28	P-07	(A)	05/24/00	DP	1	P00125:01-24	Tank condition was normal.
F	28	P-08	(A)	05/01/00	WAP	1	P00111:09	Tank condition was normal.
F	28	P-09	(A)	05/01/00	WAP	1	P00111:10	Tank condition was normal.

TANK OR		ACCESS O	PENII	NG	INSPE	СТІС	ON METHOD		
AREA	ANCILLARY	(A OF	R I)	DATE	IDENTIF		TION NUMBER	REMARKS	
F	28	P-10	(A)	05/01/00	WAP	1	P00111:11	Tank condition was normal.	
F	28	P-11	(A)	05/24/00	DP	1	P00126:01-25	Tank condition was normal.	
F	28	P-12	(A)	05/01/00	WAP	1	P00111:12	Tank condition was normal.	
F	28	P-13	(A)	05/01/00	WAP	1	P00111:13	Tank condition was normal.	
F	28	P-14	(A)	05/01/00	WAP	1	P00111:14	Tank condition was normal.	
Н	29	LPS		08/31/00	CCTV	1	NA	A video probe was used to determine the length of leak probe sleeve LE3348-D. The sleeve was 8' 3 3/4" in length.	
Н	29	A-01	(A)	07/04/00	WAP	1	P00158:01	Tank condition was normal.	
Η	29	A-01	(A)	07/05/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Н	29	A-02	(A)	07/20/00	WAP	1	P00165:01	Tank condition was normal.	
Н	29	A-02	(A)	09/10/00	CCTV	1	641	The conductivity probe was deployed at the setpoint. An absorbent swipe was observed on the annulus floor.	
Н	29	A-03	(A)	07/04/00	WAP	1	P00158:02	Tank condition was normal.	
Н	29	A-03	(A)	09/10/00	CCTV	1	641	The conductivity probe was deployed at the setpoint. A small box approximately 2x1x1 inches was observed on the annulus floor.	
Н	29	A-04	(A)	07/04/00	WAP	1	P00158:03	Tank condition was normal.	
Н	29	A-04	(A)	07/05/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.	
Н	29	P-01	(A)	07/17/00	DP	1	P00166:01-25	Tank condition was normal.	
Н	29	P-02	(A)	07/04/00	WAP	1	P00158:04	Tank condition was normal.	
Н	29	P-03	(A)	07/04/00	WAP	1	P00158:05	Tank condition was normal.	
Н	29	P-04	(A)	07/17/00	DP	1	P00167:01-25	Tank condition was normal.	
Н	29	P-05	(A)	07/04/00	WAP	1	P00158:06	Tank condition was normal.	
Н	29	P-06	(A)	07/04/00	WAP	1	P00158:07	Tank condition was normal.	
Н	29	P-07	(A)	07/04/00	WAP	1	P00158:08	Tank condition was normal.	
Н	29	P-07	(A)	07/17/00	DP	1	P00168:01-25	Tank condition was normal.	

	TANK OR	ACCESS OPENING (A OR I) DATE IDENTIFICATION NU				N METHOD			
	20	 P_08	, (Δ)		\\\\\AP	1	D00165:02	Tank condition was normal	
	23	1-00	(~)	01120/00	V VAI	1	F00105.02	Tank condition was normal.	
Н	29	P-09	(A)	07/20/00	WAP	1	P00165:03	Tank condition was normal.	
Н	29	P-10	(A)	07/20/00	WAP	1	P00165:04	Tank condition was normal.	
Н	29	P-11	(A)	07/20/00	WAP	1	P00165:05	Tank condition was normal.	
Н	29	P-12	(A)	07/20/00	WAP	1	P00165:06	Tank condition was normal.	
Н	29	P-13	(A)	07/04/00	WAP	1	P00158:09	Tank condition was normal.	
Н	29	P-14	(A)	07/04/00	WAP	1	P00158:10	Tank condition was normal.	
Н	29	C-02	(I)	02/08/00	ССТV	1	654	CCTV was used to assist with the testing and leak check of BFV. The BFV was operating properly, and only minor leakage was observed.	
н	29	C-02	(I)	03/29/00	CCTV	1	671	Inspection documented that BFV was properly installed.	
н	29	C-03	(I)	04/30/00	CCTV	1	671	CCTV was used to assist with the installation of BFV.	
Н	29	D-02	()	05/08/00	ССТV	1	643	CCTV was used to document position of HLLCP. The probe was not visible due to obstruction created by installed brace.	
Н	29	E-02	(I)	05/16/00	ССТV	1	643	CCTV revealed that the HLLCP was not contacting the waste. However, the probe was in close proximity to installed thermowell that could cause spurious alarms.	
Н	30	LDB-107		09/21/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.	
Н	30	A-01	(A)	06/14/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Н	30	A-01	(A)	07/24/00	WAP	1	P00178:01	Tank condition was normal.	
Н	30	A-02	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Н	30	A-02	(A)	06/15/00	WAP	1	P00153:01	Tank condition was normal.	
н	30	A-03	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Н	30	A-03	(A)	06/15/00	WAP	1	P00153:02	Tank condition was normal.	
Н	30	A-04	(A)	06/14/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.	

	TANK OR	ACCESS OF	G	INSPE	СТІС	ON METHOD		
AREA	ANCILLARY	(A OR	I)	DATE	IDENTIFI		TION NUMBER	REMARKS
Н	30	A-04	(A)	07/24/00	WAP	1	P00178:02	Tank condition was normal.
Н	30	P-01	(A)	07/23/00	DP	1	P00176:01-25	Tank condition was normal. An absorbent swipe was observed on the annulus floor.
Н	30	P-02	(A)	09/13/00	WAP	1	P00209:01	Tank condition was normal.
Н	30	P-03	(A)	07/24/00	WAP	1	P00178:03	Tank condition was normal.
Н	30	P-04	(A)	07/23/00	DP	1	P00177:01-25	Tank condition was normal.
Н	30	P-05	(A)	07/24/00	WAP	1	P00178:04	Tank condition was normal.
Н	30	P-06	(A)	06/15/00	WAP	1	P00153:03	Tank condition was normal.
Н	30	P-07	(A)	07/21/00	DP	1	P00169:01-25	Tank condition was normal.
Н	30	P-08	(A)	06/15/00	WAP	1	P00153:04	Tank condition was normal.
н	30	P-09	(A)	06/15/00	WAP	1	P00153:05	Tank condition was normal.
н	30	P-10	(A)	06/15/00	WAP	1	P00153:06	Tank condition was normal.
Н	30	P-11	(A)	07/21/00	DP	1	P00170:01-25	Tank condition was normal.
н	30	P-12	(A)	07/21/00	DP	1	P00171:01-25	Tank condition was normal.
н	30	P-13	(A)	06/15/00	WAP	1	P00153:07	Tank condition was normal.
Н	30	P-14	(A)	06/15/00	WAP	1	P00153:08	Tank condition was normal.
н	30	C-02	(I)	02/03/00	CCTV	1	652	Inspection revealed the BFV was properly aligned.
Н	30	C-02	(I)	02/22/00	CCTV	1	658	Inspection revealed that the BFV malfunction was caused by the positior of the valve. The valve was wedged and tilted to one side.
Н	30	C-02	(I)	03/15/00	CCTV	1	658	CCTV was used to assist in checking alignment pins in the trunion guides on the BFV.
Н	30	C-02	(I)	03/18/00	CCTV	1	668	CCTV was used to assist with adjustments to and testing of BFV.
Н	30	C-02	(I)	03/20/00	CCTV	1	669	CCTV was used to assist with the installation and adjustment of BFV.
н	30	C-02	(I)	03/22/00	CCTV	1	669	CCTV was used to observe BFV components for engineering review.

AREA	TANK OR ANCILLARY	ACCESS O (A OF	<u>PENIR</u> R I)	<u>NG</u> DATE	INSPE IDENTIF		ION NUMBER	REMARKS
н	30	C-02	(I)	03/27/00	ССТV	1	669	CCTV was used to make measurements of the nozzles to determine if the BFV would seat properly.
н	30	C-02	(I)	03/28/00	CCTV	1	669	Inspection revealed that the BFV was properly installed.
Н	30	C-02	(I)	04/26/00	CCTV	1	681	CCTV was used to assist with removal of BFV.
Н	30	C-02	(I)	05/01/00	CCTV	1	681	CCTV was used to assist with the lowering of a scale model into the riser to check measurements and lineup of nozzles for BFV valve.
н	30	C-02	(I)	07/05/00	CCTV	1	681	Inspection of the BFV revealed no accumulation of salt.
Н	30	C-02	(I)	07/11/00	CCTV	1	681	CCTV was used to assist with removal of BFV.
Н	30	C-02	(I)	07/18/00	CCTV	1	NA	CCTV was used to assist with the installation and cycling of the BFV.
н	30	н	(I)	11/07/00	CCTV	1	724	CCTV was used to determine location of leak site(s) in cooling coils. Due to the high vapor content in the tank, the leak site was not located during the inspection. However, the cooling coils and thermowells appear to be encrusted in approximately 4 to 6 inches of salt. No other unusual conditions were observed.
н	30	н	(I)	11/28/00	CCTV	1	681	CCTV was used to determine location of leak site(s) on cooling coils B6, B9 and B10. Cooling coils B6 and B9 were leaking below the liquid surface. The leak site on cooling coil B-10 could not be identified.
Н	31	A-01	(A)	04/18/00	ССТV	1	641	The conductivity probe was deployed at the setpoint.
Н	31	A-01	(A)	06/15/00	WAP	1	P00154:01	Tank condition was normal.
н	31	A-02	(A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	31	A-02	(A)	06/15/00	WAP	1	P00154:02	Tank condition was normal.
н	31	A-03	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	31	A-03	(A)	06/15/00	WAP	1	P00154:03	Tank condition was normal.
Н	31	A-04	(A)	04/18/00	CCTV	1	641	The magneticallỳ mounted thermocouple was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	<u>NG</u> DATE	INSPE IDENTIF	CTIC ICA1	<u>ON METHOD</u> TION NUMBER	REMARKS	
Н	31	A-04	(A)	06/15/00	WAP	1	P00154:04	Tank condition was normal.
Н	31	P-01	(A)	07/25/00	DP	1	P00180:01-25	Tank condition was normal.
Н	31	P-02	(A)	06/15/00	WAP	1	P00154:05	Tank condition was normal.
Н	31	P-03	(A)	06/15/00	WAP	1	P00154:06	Tank condition was normal.
Н	31	P-04	(A)	07/01/00	DP	1	P00157:01-25	Tank condition was normal.
Н	31	P-05	(A)	06/15/00	WAP	1	P00154:07	Tank condition was normal.
Н	31	P-06	(A)	06/15/00	WAP	1	P00154:08	Tank condition was normal.
Н	31	P-07	(A)	07/12/00	DP	1	P00163:01-25	Tank condition was normal. A masselin cloth was observed on the annulus floor.
Н	31	P-08	(A)	06/15/00	WAP	1	P00154:09	Tank condition was normal.
Н	31	P-09	(A)	06/15/00	WAP	1	P00154:10	Tank condition was normal.
Н	31	P-10	(A)	06/15/00	WAP	1	P00154:11	Tank condition was normal.
н	31	P-11	(A)	07/12/00	DP	1	P00164:01-25	Tank condition was normal.
Н	31	P-12	(A)	06/15/00	WAP	1	P00154:12	Tank condition was normal.
Н	31	P-13	(A)	06/15/00	WAP	1	P00154:13	Tank condition was normal.
Н	31	P-14	(A)	06/15/00	WAP	1	P00154:14	Tank condition was normal.
Н	32	A-01	(A)	04/11/00	WAP	1	P00085:01	Tank condition was normal.
н	32	A-01	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	32	A-02	(A)	04/11/00	WAP	1	P00085:02	Tank condition was normal.
Н	32	A-02	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Η	32	A-03	(A)	04/11/00	WAP	Ι	P00085:03	Tank condition was normal. Stains and marks on the secondary vessel wall have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
Н	32	A-03	(A)	06/13/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	DATE	<u>INSPE</u> IDENTIFI	CTIC ICA1	<u>ON METHOD</u> FION NUMBER	REMARKS		
Н	32	A-04	(A)	04/11/00	WAP	1	P00085:04	Tank condition was normal. A masselin cloth and two absorbent swipes were observed on the annulus floor and on top of the ventilation duct.
Н	32	A-04	(A)	06/14/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Н	32	A-04	(A)	06/21/00	ССТV	1	641	CCTV was used to assist in the deployment of magnetically mounted thermocouple. The thermocouple would not adhere to the primary vessel wall because the cable was too heavy.
Н	32	A-04	(A)	07/11/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
Η	32	P-01	(A)	07/17/00	DP	1	P00172:01-25	Tank condition was normal. Deposits of the secondary vessel wall have increased since last inspection due to water inleakage after the concrete tank top was pressure washed. Inspection revealed what appeared to be a deposit on the primary vessel wall. Further inspections will be made.
Н	32	P-01	(A)	07/29/00	CCTV	1	643	CCTV was used to investigate deposits observed on the primary vessel wall. No abnormalities were observed. Tank condition was normal.
н	32	P-02	(A)	04/11/00	WAP	1	P00085:05	Tank condition was normal.
н	32	P-03	(A)	04/11/00	WAP	1	P00085:06	Tank condition was normal.
Н	32	P-04	(A)	07/17/00	DP	1	P00173:01-25	Tank condition was normal.
Н	32	P-05	(A)	04/11/00	WAP	1	P00085:07	Tank condition was normal.
Н	32	P-06	(A)	04/11/00	WAP	1	P00085:08	Tank condition was normal.
н	32	P-07	(A)	07/17/00	DP	1	P00174:01-25	Tank condition was normal.
Н	32	P-08	(A)	04/11/00	WAP	I	P00085:09	Tank condition was normal. Stains and marks on the secondary vessel wall have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
н	32	P-09	(A)	04/11/00	WAP	1	P00085:10	Tank condition was normal.

	TANK OR	ACCESS OPENING (A OR I) DATE					ON METHOD	DEMADKS
H	32	P-10	(A)	04/11/00	WAP	1	P00085:11	Tank condition was normal. Stains and marks on the secondary vessel wall, top of the ventilation duct and annulus floor have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
Н	32	P-11	(A)	07/17/00	DP	1	P00175:01-25	Tank condition was normal. Deposits of the secondary vessel wall, ventilation duct and annulus floor have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
Н	32	P-12	(A)	07/25/00	WAP	1	P00179:01	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water inleakage after the concrete tank top was pressure washed.
Н	32	P-13	(A)	04/11/00	WAP	1	P00085:12	Tank condition was normal. Stains and marks on the secondary vessel wall have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
Н	32	P-14	(A)	04/11/00	WAP	1	P00085:13	Tank condition was normal.
Н	32	P-15	(A)	04/11/00	WAP	1	P00085:14	Tank condition was normal. Stains and marks on the secondary vessel wall have increased since last inspection due to water inleakage after the concrete tank top was pressure washed.
Н	32	B-02	(I)	05/17/00	ССТV	1	682	CCTV was used to inspect feed pump nozzles for leaks. No leaks were observed.
н	32	н	(I)	11/14/00	CCTV	1	730	Inspection documented conditions of waste surface. Inspection revealed solids floating on the liquid surface. Approximately 3 to 6 inches of salt had accumulated on the cooling coils.
F	33	A-01	(A)	06/21/00	CCTV	Ι	641	The conductivity probe was deployed at the setpoint.
F	33	A-01	(A)	07/04/00	WAP	1	P00159:01	Tank condition was normal.
F	33	A-02	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint. An abandoned probe was observed on the annulus floor.
F	33	A-02	(A)	07/04/00	WAP	1	P00159:02	Tank condition was normal.
F	33	A-03	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	<u>NG</u> DATE	INSPE IDENTIFI		<u>ON METHOD</u> FION NUMBER	REMARKS	
F	33	A-03	(A)	07/04/00	WAP	1	P00159:03	Tank condition was normal.
F	33	A-04	(A)	06/21/00	CCTV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
F	33	A-04	(A)	07/04/00	WAP	1	P00159:04	Tank condition was normal.
F	33	P-01	(A)	08/22/00	DP	1	P00196:01-25	Tank condition was normal. A sheet of paper was observed on the annulus floor.
F	33	P-02	(A)	07/04/00	WAP	1	P00159:05	Tank condition was normal.
F	33	P-03	(A)	07/04/00	WAP	1	P00159:06	Tank condition was normal.
F	33	P-04	(A)	09/07/00	DP	1	P00210:01-25	Tank condition was normal.
F	33	P-05	(A)	07/04/00	WAP	1	P00159:07	Tank condition was normal.
F	33	P-06	(A)	07/04/00	WAP	1	P00159:08	Tank condition was normal.
F	33	P-07	(A)	08/22/00	DP	1	P00197:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall were caused by water which had leaked into the annulus.
F	33	P-08	(A)	07/04/00	WAP	1	P00159:09	Tank condition was normal.
F	33	P-09	(A)	07/04/00	WAP	1	P00159:10	Tank condition was normal.
F	33	P-10	(A)	07/04/00	WAP	1	P00159:11	Tank condition was normal.
F	33	P-11	(A)	08/22/00	DP	1	P00198:01-25	Tank condition was normal. An orange extension cord was observed on the annulus floor beneath riser A-02.
F	33	P-12	(A)	07/04/00	WAP	1	P00159:12	Tank condition was normal.
F	33	P-13	(A)	07/04/00	WAP	1	P00159:13	Tank condition was normal.
F	33	P-14	(A)	07/04/00	WAP	1	P00159:14	Tank condition was normal.
F	33	P-15	(A)	07/04/00	WAP	1	P00159:15	Tank condition was normal.
F	33	P-16	(A)	09/07/00	DP	1	P00211:01-25	Tank condition was normal.
F	33	C-01	(I)	12/13/00	CCTV	1	740	CCTV was used to document type and size of downcomer. The inspection was inconclusive.
F	34	A-01	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.

AREA	TANK OR ANCILLARY	ACCESS O (A OF	<u>NG</u> DATE	<u>INSPE</u> IDENTIFI		<u>ON METHOD</u> TION NUMBER	REMARKS	
F	34	A-01	(A)	07/04/00	·WAP	1	P00160:01	Tank condition was normal.
F	34	A-02	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	34	A-02	(A)	07/04/00	WAP	1	P00160:02	Tank condition was normal.
F	34	A-03	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	34	A-03	(A)	07/04/00	WAP	1	P00160:03	Tank condition was normal.
F	34	A-04	(A)	06/21/00	ССТV	1	641	The magnetically mounted thermocouple was deployed at the setpoint.
F	34	A-04	(A)	07/04/00	WAP	1	P00160:04	Tank condition was normal.
F	34	P-01	(A)	08/24/00	DP	1	P00199:01-25	Tank condition was normal.
F	34	P-02	(A)	07/04/00	WAP	1	P00160:05	Tank condition was normal.
F	34	P-03	(A)	07/04/00	WAP	1	P00160:06	Tank condition was normal.
F	34	P-04	(A)	08/24/00	DP	1	P00200:01-24	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-05	(A)	07/04/00	WAP	1	P00160:07	Tank condition was normal.
F	34	P-06	(A)	07/04/00	WAP	1	P00160:08	Tank condition was normal.
F	34	P-07	(A)	08/24/00	DP	1	P00201:01-25	Tank condition was normal. Stains and marks on the primary vessel wall were caused by water which had leaked into the annulus.
F	34	P-08	(A)	07/04/00	WAP	1	P00160:09	Tank condition was normal.
F	34	P-09	(A)	07/04/00	WAP	1	P00160:10	Tank condition was normal.
F	34	P-10	(A)	07/04/00	WAP	1	P00160:11	Tank condition was normal.
F	34	P-11	(A)	08/24/00	DP	1	P00202:01-25	Tank condition was normal.
F	34	P-12	(A)	07/04/00	WAP	1	P00160:12	Tank condition was normal.
F	34	P-13	(A)	07/04/00	WAP	1	P00160:13	Tank condition was normal.
F	34	P-14	(A)	07/04/00	WAP	1	P00160:14	Tank condition was normal.
F	34	P-15	(A)	07/04/00	WAP	1	P00160:15	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DATE			<u>INSPE</u> IDENTIF	CTI ICA	<u>ON METHOD</u> FION NUMBER	REMARKS
F	34	P-16	(A)	08/24/00	DP	1	P00203:01-25	Tank condition was normal.
Н	35	A-01	(A)	03/09/00	WAP	1	P00078:01	Tank condition was normal.
Н	35	A-02	(A)	03/09/00	WAP	1	P00078:02	Tank condition was normal.
Н	35	A-02	(A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	35	A-03	(A)	03/09/00	WAP	1	P00078:03	Tank condition was normal.
Н	35	A-03	(A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
н	35	A-04	(A)	03/09/00	WAP	1	P00078:04	Tank condition was normal.
Н	35	A-04	(A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	35	P-01	(A)	03/09/00	WAP	1	P00078:05	Tank condition was normal.
Н	35	P-02	(A)	03/09/00	WAP	1	P00078:06	Tank condition was normal.
Н	35	P-03	(A)	03/09/00	WAP	1	P00078:07	Tank condition was normal.
Н	35	P-04	(A)	03/09/00	WAP	1	P00078:08	Tank condition was normal.
н	35	P-05	(A)	03/09/00	WAP	1	P00078:09	Tank condition was normal.
Н	35	P-06	(A)	04/18/00	DP	1	P00095:01-22	Tank condition was normal.
Н	35	P-07	(A)	03/09/00	WAP	1	P00078:10	Tank condition was normal.
Н	35	P-08	(A)	04/18/00	DP	1	P00096:01-24	Tank condition was normal.
Н	35	P-09	(A)	03/09/00	WAP	1	P00078:11	Tank condition was normal.
Н	35	P-10	(A)	04/18/00	DP	1	P00097:01-22	Tank condition was normal.
Н	35	P-11	(A)	03/09/00	WAP	1	P00078:12	Tank condition was normal.
Н	35	P-12	(A)	04/18/00	DP	1	P00098:01-22	Tank condition was normal.
Н	35	P-13	(A)	03/09/00	WAP	1	P00078:13	Tank condition was normal.
Н	35	P-14	(A)	04/18/00	DP	1	P00099:01-24	Tank condition was normal. A plastic bag was observed on the refractory pad.
Н	35	B-06	(I)	11/29/00	CCTV	1	733	CCTV was used to document conditions of reel tape. The reel tape "bob" was coated with a white material, and deposits were observed on the tip.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	PENI R I)	<u>NG</u> DATE	<u>INSPE</u> IDENTIFI		<u>ON METHOD</u> TION NUMBER	REMARKS
Н	35	B-06	(I)	12/05/00	CCTV	1	NA	CCTV was used to monitor tank during transfer.
Н	36	A-01	(A)	05/22/00	WAP	1	P00079:01	Tank condition was normal.
Н	36	A-02	(A)	03/09/00	WAP	1	P00079:02	Tank condition was normal.
н	36	A-02	(A)	04/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	36	A-03	(A)	03/09/00	WAP	1	P00079:03	Tank condition was normal.
Н	36	A-03	(A)	04/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	36	A-04	(A)	03/09/00	WAP	1	P00079:04	Tank condition was normal.
Н	36	A-04	(A)	04/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	36	P-01	(A)	03/09/00	WAP	1	P00079:05	Tank condition was normal.
н	36	P-02	(A)	03/09/00	WAP	1	P00079:06	Tank condition was normal.
Н	36	P-03	(A)	03/09/00	WAP	1	P00079:07	Tank condition was normal.
Н	36	P-04	(A)	03/09/00	WAP	1	P00079:08	Tank condition was normal.
Н	36	P-05	(A)	03/09/00	WAP	1	P00079:09	Tank condition was normal.
Н	36	P-06	(A)	05/09/00	DP	1	P00105:01-25	Tank condition was normal.
Н	36	[,] P-07	(A)	03/09/00	WAP	1	P00079:10	Tank condition was normal.
Н	36	P-08	(A)	05/09/00	DP	1	P00106:01-25	Tank condition was normal.
Н	36	P-09	(A)	03/09/00	WAP	1	P00079:11	Tank condition was normal.
Н	36	P-10	(A)	05/09/00	DP	1	P00108:01-25	Tank condition was normal.
н	36	P-11	(A)	03/09/00	WAP	1	P00079:12	Tank condition was normal.
н	36	P-12	(A)	05/09/00	DP	1	P00107:01-25	Tank condition was normal.
Н	36	P-13	(A)	03/09/00	WAP	1	P00079:13	Tank condition was normal.
Н	36	P-14	(A)	05/09/00	DP	1	P00109:01-25	Tank condition was normal.
Н	37	A-01	(A)	05/22/00	WAP	1	P00086:13	Tank condition was normal.
Н	37	A-02	(A)	04/12/00	WAP	1	P00086:01	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENII (A OR I)	<u>NG</u> DATE	INSPE IDENTIFI	CTIC	<u>ON METHOD</u> FION NUMBER	REMARKS
Н	37	A-02 (A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	37	A-03 (A)	04/12/00	WAP	1	P00086:02	Tank condition was normal.
н	37	A-03 (A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	37	A-04 (A)	04/12/00	WAP	1	P00086:03	Tank condition was normal.
н	37	A-04 (A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	37	P-01 (A)	04/12/00	WAP	1	P00086:04	Tank condition was normal.
Н	37	P-02 (A)	04/12/00	WAP	1	P00086:05	Tank condition was normal.
Н	37	P-03 (A)	04/12/00	WAP	1	P00086:06	Tank condition was normal.
Н	37	P-04 (A)	04/12/00	WAP	1	P00086:07	Tank condition was normal.
Н	37	P-05 (A)	04/12/00	WAP	1	P00086:08	Tank condition was normal.
Н	37	P-06 (A)	04/18/00	DP	1	P00100:01-24	Tank condition was normal.
Н	37	P-07 (A)	04/12/00	WAP	1	P00086:09	Tank condition was normal.
Н	37	P-08 (A)	04/18/00	DP	1	P00101:01-22	Tank condition was normal.
Н	37	P-09 (A)	04/12/00	WAP	1	P00086:10	Tank condition was normal.
Н	37	P-10 (A)	04/18/00	DP	1	P00102:01-23	Tank condition was normal.
Н	37	P-11 (A)	04/12/00	WAP	1	P00086:11	Tank condition was normal.
Н	37	P-12 (A)	04/18/00	DP	1	P00103:01-24	Tank condition was normal.
н	37	P-13 (A)	04/12/00	WAP	1	P00086:12	Tank condition was normal.
Н	37	P-14 (A)	04/18/00	DP	1	P00104:01-23	Tank condition was normal.
Н	38	GDL	09/27/00	HELIUM	1	HE-00-003	Helium tracer testing verified the integrity of the core pipe of the gravity drain line from 242-16H Evaporator to Tank 38.
Н	38	LDB-01	09/14/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	38	LDB-01	09/27/00	CCTV	1	NA	The conductivity probe was deployed at the setpoint.
Н	38	A-01 (A)	03/15/00	WAP	1	P00083:01	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		<u>NG</u> DATE	INSPECTION METHOD IDENTIFICATION NUMBER			REMARKS
Η	38	A-02	(A)	03/15/00	WAP	1	P00083:02	Tank condition was normal.
Н	38	A-02	(A)	06/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	38	A-03	(A)	03/15/00	WAP	1	P00083:03	Tank condition was normal.
Н	38	A-03	(A)	06/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	38	A-04	(A)	03/15/00	WAP	1	P00083:04	Tank condition was normal.
Н	38	A-04	(A)	06/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	38	P-01	(A)	03/15/00	WAP	1	P00083:05	Tank condition was normal.
Н	38	P-02	(A)	03/15/00	WAP	1	P00083:06	Tank condition was normal.
Н	38	P-03	(A)	03/15/00	WAP	1	P00083:07	Tank condition was normal.
Н	38	P-04	(A)	03/15/00	WAP	1	P00083:08	Tank condition was normal.
Н	38	P-05	(A)	05/25/00	DP	1	P00127:01-25	Tank condition was normal.
н	38	P-06	(A)	05/25/00	DP	1	P00128:01-25	Tank condition was normal.
Н	38	P-07	(A)	05/25/00	DP	1	P00129:01-25	Tank condition was normal.
н	38	P-08	(A)	05/25/00	DP	1	P00130:01-25	Tank condition was normal. Stains and marks on the secondary vessel wall beneath the penetration line designated "SP" have increased since inspected on 4/22/96.
Н	38	P-09	(A)	05/25/00	DP	1	P00131:01-25	Tank condition was normal.
Н	38	P-10	(A)	03/15/00	WAP	1	P00083:09	Tank condition was normal.
н	38	P-11	(A)	03/15/00	WAP	1	P00083:10	Tank condition was normal.
Н	38	P-12	(A)	03/15/00	WAP	1	P00083:11	Tank condition was normal.
н	38	P-13	(A)	03/15/00	WAP	1	P00083:12	Tank condition was normal.
Н	38	P-14	(A)	03/15/00	WAP	1	P00083:13	Tank condition was normal.
н	38	Н	(I)	12/06/00	CCTV	I	737	Inspection documented conditions of waste surface. Approximately 30 - 40% of the waste surface was covered with a floating transparent film.
Н	39	LDB-01		04/12/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.

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AREA	TANK OR ANCILLARY	ACCESS O (A OF	<u>PENII</u> R I)	<u>NG</u> DATE	INSPE IDENTIFI		<u>ON METHOD</u> FION NUMBER	REMARKS
Н	39	LDB-01		10/18/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	39	A-01	(A)	03/15/00	WAP	1	P00084:01	Tank condition was normal.
Н	39	A-02	(A)	03/15/00	WAP	1	P00084:02	Tank condition was normal.
Н	39	A-02	(A)	06/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	39	A-03	(A)	03/15/00	WAP	1	P00084:03	Tank condition was normal.
н	39	A-03	(A)	06/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	39	A-04	(A)	03/15/00	WAP	1	P00084:04	Tank condition was normal.
Н	39	A-04	(A)	06/06/00	ССТV	1	641	The conductivity probe was deployed at the setpoint.
Н	39	P-01	(A)	05/25/00	DP	1	P00132:01-25	Tank condition was normal.
Н	39	P-02	(A)	03/15/00	WAP	1	P00084:05	Tank condition was normal.
Н	39	P-03	(A)	05/25/00	DP	1	P00133:01-25	Tank condition was normal.
Н	39	P-04	(A)	03/15/00	WAP	1	P00084:06	Tank condition was normal.
Н	39	P-05	(A)	05/25/00	DP	1	P00134:01-25	Tank condition was normal.
Н	39	P-06	(A)	07/07/00	WAP	1	P00161:01	Tank condition was normal.
Н	39	P-07	(A)	05/25/00	DP	1	P00135:01-25	Tank condition was normal.
Н	39	P-08	(A)	05/25/00	DP	1	P00136:01-25	Tank condition was normal.
Н	39	P-09	(A)	03/15/00	WAP	1	P00084:07	Tank condition was normal.
Н	39	P-10	(A)	03/15/00	WAP	1	P00084:08	Tank condition was normal.
Н	39	P-11	(A)	03/15/00	WAP	1	P00084:09	Tank condition was normal.
Н	39	P-12	(A)	03/15/00	WAP	1	P00084:10	Tank condition was normal.
Н	39	P-13	(A)	10/10/00	WAP	1	P00212:01	Tank condition was normal.
Н	39	P-14	(A)	03/15/00	WAP	1	P00084:11	Tank condition was normal.
Н	39	C-01	(I)	11/06/00	CCTV	1	729	CCTV was used to facilitate remote operations during transfer jet rotation.
Н	39	Н	(I)	11/04/00	CCTV	1	729	CCTV was used to assist in the rotation of the transfer jet and removal of the downcomer.

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TANK OR AREA ANCILLARY		ACCESS O (A OR	PENII R I)	<u>NG</u> DATE	INSPE IDENTIFI		<u>ON METHOD</u> FION NUMBER	REMARKS
Н	40	Valve Box		04/25/00	CCTV	1	NA	CCTV was used to position conductivity probes in the transfer valve box. The conductivity probes were deployed at the setpoint.
Н	40	Valve Box		11/04/00	ССТV	1	559	CCTV was used to position conductivity probes in the transfer valve box. The conductivity probes were deployed at the setpoint.
Н	40	A-01	(A)	03/06/00	WAP	1	P00067:01	Tank condition was normal.
Н	40	A-02	(A)	02/24/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	40	A-02	(A)	03/06/00	WAP	1	P00067:02	Tank condition was normal.
Н	40	A-03	(A)	02/24/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	40	A-03	(A)	03/09/00	DP	1	P00080:01-25	Tank condition was normal.
Н	40	A-04	(A)	03/03/00	WAP	1	P00067:03	Tank condition was normal.
Н	40	A-04	(A)	03/06/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	40	A-04	(A)	04/18/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	40	P-01	(A)	02/24/00	DP	1	P00040:01-25	Tank condition was normal.
Н	40	P-02	(A)	03/06/00	WAP	1	P00067:04	Tank condition was normal.
н	40	P-03	(A)	02/24/00	DP	1	P00041:01-26	Tank condition was normal.
Н	40	P-04	(A)	03/06/00	WAP	1	P00067:05	Tank condition was normal.
Н	40	P-05	(A)	03/06/00	WAP	1	P00067:06	Tank condition was normal.
Н	40	P-06	(A)	03/06/00	WAP	1	P00067:07	Tank condition was normal.
Н	40	P-07	(A)	02/24/00	DP	1	P00042:01-25	Tank condition was normal.
Н	40	P-08	(A)	03/06/00	WAP	1	P00067:08	Tank condition was normal.
Н	40	P-09	(A)	02/24/00	DP	1	P00043:01-25	Tank condition was normal.
Н	40	P-10	(A)	03/03/00	WAP	1	P00067:09	Tank condition was normal.
Н	40	P-11	(A)	03/06/00	WAP	1	P00067:10	Tank condition was normal.
Н	40	P-12	(A)	03/06/00	WAP	1	P00067:11	Tank condition was normal.

AREA	TANK OR ANCILLARY	TANK ORACCESS OPENINGINSPECTION METHODANCILLARY(A OR I)DATEIDENTIFICATION NUMBER				N METHOD	REMARKS	
н	40	P-13	(A)	03/06/00	WAP	1	P00067:12	Tank condition was normal.
Н	40	P-14	(A)	03/03/00	WAP	1	P00067:13	Tank condition was normal.
Н	40	B-02	(I)	02/03/00	ССТV	1	655	CCTV was used to inspect pump column prior to removal. Inspection revealed column to be clean and free of sludge and salt.
Н	40	B-02	(I)	02/10/00	CCTV	1	NA	CCTV revealed the slurry pump turntable frame was properly aligned on the spray chamber.
Н	40	B-03	(I)	01/06/00	CCTV	1	643	Inspection of the B-02 slurry pump to verify configuration prior to removal was inconclusive.
Н	40	B-05	(I)	02/29/00	CCTV	1	659	CCTV was used to inspect riser V-02 for obstructions and to observe operation of G slurry pump. Inspection revealed no obstructions in or under riser V-02. Significant liquid movement was observed around G slurry pump at speeds of 1750 and 1800 rpm.
Н	40	B-05	(I)	09/30/00	CCTV	1	711	CCTV was used to assist in raising the TTJ five inches above the liquid surface.
Н	40	B-05	(I)	11/03/00	ССТV	1	728	CCTV was used to assist with lowering the TTJ. The TTJ was lowered to 120" above the tank bottom.
Н	40	B-05	(I)	11/19/00	CCTV	1	732	CCTV was used to monitor the surface conditions during Tank 40 to Tank 32 transfer startup. Liquid was observed being discharged from a missing flush water fitting on the discharge side of the TTJ.
Н	40	B-05	(I)	11/20/00	CCTV	1	732	CCTV was used to inspect the surface of the waste beneath the TTJ. The liquid appeared to be clear and the TTJ was visible beneath the surface.
н	40	B-05	(I)	12/05/00	CCTV	1	743	CCTV was used to document tank conditions prior to transfer.
Н	40	B-05	(I)	12/06/00	CCTV	1	743	CCTV was used to monitor tank conditions during transfer.
н	40	B-05	(I)	12/07/00	CCTV	1	743	CCTV was used to monitor tank conditions during transfer.
Н	40	B-05	(I)	12/08/00	сстv	1	743	CCTV was used to assist with lowering the TTJ in to a height of 90.5 inches above the sludge layer.
Н	40	B-05	(I)	12/09/00	CCTV	1	743	CCTV was used to monitor tank conditions during transfer.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) E		<u>G</u> DATE	INSPECTION METHOD IDENTIFICATION NUMBER			REMARKS
H	40	B-05	(I)	12/10/00	CCTV	1	743	CCTV was used to monitor tank conditions during transfer.
Н	40	B-05	(I)	12/12/00	CCTV	1	743	CCTV was used to assist in repositioning the TTJ.
н	40	B-06	(I)	03/31/00	CCTV	1	674	CCTV was used to monitor removal of B-06 slurry pump.
н	40	B-06	(I)	04/05/00	CCTV	1	NA	CCTV verified proper installation of slurry pump turntable.
Н	40	C-03	(I)	01/13/00	ССТV	1	643	CCTV revealed that the B-02 slurry pump had a flange on the bottom column.
Н	40	C-03	(I)	02/03/00	CCTV	Ι	655	CCTV was used to observe removal of B-02 slurry pump.
Н	40	C-03	(I)	05/03/00	CCTV	1	690	Inspection documented surface agitation during operation of the B-02 slurry pump.
Н	40	G	(I)	01/06/00	CCTV	1	NA	CCTV was used to view alignment check from the top of riser which revealed the slurry pump turntable frame was properly aligned on the spray chamber.
Н	40	V-02	(I)	08/12/00	CCTV	1	694	Inspection revealed a leak which appeared to come from the flush water/inhibited water nozzle connections.
Н	40	V-02	(I)	08/19/00	CCTV	1	694	CCTV was used to document leak check of valve IW-V-292. No leaks were observed at the valve; however, a leak from an undetermined source was observed.
Н	40	V-02	(I)	09/28/00	CCTV	1	694	CCTV was used to perform leak check of flush water connection. Leakage was observed.
Н	40	V-02	(I)	10/03/00	CCTV	1	694	CCTV was used to document leak check of flush water jumper after gaskets were replaced. Leakage was observed.
Η	40	V-02	(I)	10/11/00	CCTV	1	694	CCTV was used to document leak check of the flush water jumper. No leaks were observed at the gasket. However, other leakage was observed in the riser.
Н	40	V-02	(I)	10/13/00	CCTV	1	694	CCTV was used to document leak check the flush water jumper and nipple connector after cleaning and resealing. No leaks were observed.
Н	41	A-01	(A)	02/23/00	WAP	Ι	P00052:01	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DATE		<u>INSPE</u> IDENTIFI		<u>ON METHOD</u> FION NUMBER	REMARKS	
Н	41	A-02	(A)	02/23/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	41	A-02	(A)	02/23/00	WAP	1	P00052:02	Tank condition was normal. A masselin cloth was observed on the annulus floor.
Н	41	A-03	(A)	02/23/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	41	A-03	(A)	02/23/00	WAP	1	P00052:03	Tank condition was normal.
Н	41	A-04	(A)	02/23/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	41	A-04	(A)	02/23/00	WAP	1	P00052:04	Tank condition was normal.
Н	41	P-01	(A)	02/23/00	WAP	1	P00052:05	Tank condition was normal.
Н	41	P-02	(A)	02/23/00	WAP	1	P00052:06	Tank condition was normal.
Н	41	P-03	(A)	02/23/00	WAP	1	P00052:07	Tank condition was normal.
н	41	P-04	(A)	02/23/00	WAP	1	P00052:08	Tank condition was normal.
н	41	P-05	(A)	02/23/00	DP	1	P00044:01-26	Tank condition was normal.
Н	41	P-06	(A)	02/23/00	DP	1	P00045:01-25	Tank condition was normal.
н	41	P-07	(A)	02/23/00	DP	1	P00046:01-25	Tank condition was normal.
н	41	P-08	(A)	02/23/00	DP	1	P00047:01-25	Tank condition was normal.
Н	41	P-09	(A)	02/23/00	DP	1	P00048:01-25	Tank condition was normal.
Н	41	P-10	(A)	02/23/00	WAP	1	P00052:09	Tank condition was normal.
н	41	P-11	(A)	02/23/00	WAP	1	P00052:10	Tank condition was normal.
Н	41	P-12	(A)	02/23/00	WAP	1	P00052:11	Tank condition was normal.
н	41	P-13	(A)	02/23/00	WAP	1	P00052:12	Tank condition was normal.
Н	41	P-14	(A)	02/23/00	WAP	1	P00052:13	Tank condition was normal. An object which appears to be a masselin cloth was observed on the annulus floor.
Н	42	LDB-01		05/23/00	CCTV	1	642	CCTV was used to document position of the conductivity probe. Inspection revealed the probe was positioned on top of an abandoned probe. Debris was also observed in the standpipe.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		<u>NG</u> DATE	INSPECTION METHOD IDENTIFICATION NUMBER			REMARKS
н	42	LDB-02		07/18/00	CCTV	1	NA	CCTV was used to document position of the conductivity probe. The conductivity probe was not visible because of mud and loose corrosion particles at the bottom of the standpipe.
н	42	LDB-02		08/06/00	CCTV	1	NA	CCTV was used to assist with inspection of conductivity probe standpipe. Inspection revealed that the standpipe was plugged and full of liquid.
Н	42	LDB-02		08/13/00	CCTV	1	642	CCTV was used to assist with flushing of LDB and deployment of conductivity probe. After flushing, the conductivity probe was deployed at the setpoint.
Н	42	A-01	(A)	02/25/00	WAP	1	P00066:01	Tank condition was normal.
Н	42	A-02	(A)	02/25/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	42	A-02	(A)	02/25/00	WAP	1	P00066:02	Tank condition was normal.
Н	42	A-03	(A)	02/25/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	42	A-03	(A)	02/25/00	WAP	1	P00066:03	Tank condition was normal.
Н	42	A-04	(A)	02/25/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	42	A-04	(A)	02/25/00	WAP	1	P00066:04	Tank condition was normal.
Н	42	P-01	(A)	02/25/00	WAP	1	P00066:05	Tank condition was normal.
н	42	P-02	(A)	02/25/00	WAP	1	P00066:06	Tank condition was normal.
Н	42	P-03	(A)	02/25/00	WAP	1	P00066:07	Tank condition was normal.
Н	42	P-04	(A)	02/25/00	DP	1	P00059:01-21	Tank condition was normal.
Н	42	P-05	(A)	02/25/00	DP	1	P00060:01-22	Tank condition was normal.
н	42	P-06	(A)	02/25/00	DP	1	P00061:01-23	Tank condition was normal.
н	42	P-07	(A)	02/25/00	WAP	1	P00066:08	Tank condition was normal.
Н	42	P-08	(A)	02/25/00	DP	1	P00062:01-22	Tank condition was normal.
Н	42	P-09	(A)	02/25/00	WAP	1	P00066:09	Tank condition was normal.
Н	42	P-10	(A)	03/09/00	WAP	1	P00070:01	Tank condition was normal.
Н	42	P-11	(A)	02/25/00	WAP	1	P00066:10	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS O (A OF	PENII R I)	<u>NG</u> DATE	<u>INSPE</u> IDENTIFI		<u>ON METHOD</u> FION NUMBER	REMARKS
Н	42	 P-12	(A)	02/25/00	WAP	1	P00066:11	Tank condition was normal.
н	42	P-13	(A)	02/25/00	WAP	1	P00066:12	Tank condition was normal.
Н	42	P-14	(A)	02/25/00	WAP	1	P00066:13	Tank condition was normal.
Н	42	C-03	(I)	08/09/00	сстv	1	701	CCTV was used to assist with removal of temporary blank and installation of a downcomer.
Н	43	LDB-01		12/06/00	CCTV	1	642	The conductivity probe was deployed at the setpoint. The tip of the probe was in water.
Н	43	LDB-02		03/09/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	43	LDB-06		07/13/00	CCTV	1	642	The conductivity probe was deployed at the setpoint. A substantial amount of loose corrosion particles was observed in the LDB and the middle dip tube.
Н	43	LDB-07		03/15/00	CCTV	1	NA	The conductivity probe was deployed at the setpoint.
Н	43	LDB-07		09/12/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	43	A-01	(A)	05/31/00	WAP	1	P00138:01	Tank condition was normal.
Н	43	A-02	(A)	05/31/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	43	A-02	(A)	05/31/00	WAP	1	P00138:02	Tank condition was normal.
Н	43	A-03	(A)	06/01/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	43	A-03	(A)	07/07/00	WAP	1	P00162:02	Tank condition was normal. Stains and marks on the secondary vessel wall indicate water inleakage from penetration line designated "WS7".
Н	43	A-04	(A)	05/31/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	43	A-04	(A)	05/31/00	WAP	1	P00138:03	Tank condition was normal.
Н	43	P-01	(A)	05/31/00	WAP	1	P00138:04	Tank condition was normal.
Н	43	P-02	(A)	05/31/00	WAP	1	P00138:05	Tank condition was normal.
н	43	P-03	(A)	07/07/00	WAP	1	P00162:01	Tank condition was normal.
Н	43	P-04	(A)	05/31/00	WAP	1	P00138:06	Tank condition was normal.
Н	43	P-05	(A)	06/14/00	DP	1	P00147:01-25	Tank condition was normal.

AREA	TANK OR ANCILLARY	ACCESS O (A OF	PENI R I)	<u>NG</u> DATE	INSPE IDENTIF		<u>ON METHOD</u> TION NUMBER	REMARKS	
Н	43	P-06	(A)	06/01/00	DP	1	P00139:01-25	Tank condition was normal.	
Н	43	P-07	(A)	06/01/00	DP	1	P00140:01-25	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus.	
Н	43	P-08	(A)	06/01/00	DP	1	P00141:01-25	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus. Stains and marks on the secondary vessel wall indicate packing from penetration line designated "WS7" have failed.	
Н	43	P-09	(A)	06/01/00	DP	1	P00142:01-25	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus. Stains and marks on the secondary vessel wall indicate packing from penetration line designated "WS7" have failed.	
н	43	P-10	(A)	05/31/00	WAP	1	P00138:07	Tank condition was normal.	
Н	43	P-11	(A)	05/31/00	WAP	1	P00138:08	Tank condition was normal.	
Н	43	P-12	(A)	05/31/00	WAP	1	P00138:09	Tank condition was normal.	
Н	43	P-13	(A)	05/31/00	WAP	1	P00138:10	Tank condition was normal.	
Н	43	P-14	(A)	05/31/00	WAP	1	P00138:11	Tank condition was normal.	
Η	43	н	(I)	12/07/00	CCTV	1	737	Inspection documented that the waste surface was covered, approximately 50 - 60%, with a transparent "oily" film along with material floating on the surface.	
н	43	Н	(I)	12/23/00	CCTV	1	737	CCTV was used to assist with sampling of the waste surface.	
F	44	A-01	(A)	06/07/00	WAP	1	P00143:01	Tank condition was normal.	
F	44	A-02	(A)	06/07/00	WAP	1	P00143:02	Tank condition was normal.	
F	44	A-02	(A)	06/14/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	44	A-03	(A)	06/07/00	WAP	1	P00143:03	Tank condition was normal.	
F	44	A-03	(A)	06/14/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	44	A-04	(A)	06/07/00	WAP	1	P00143:04	Tank condition was normal.	

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)		<u>NG</u> DATE	<u>INSPE</u> IDENTIFI	CTIC CA	<u>ON METHOD</u> FION NUMBER	REMARKS
F	44	A-04	(A)	06/14/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	44	P-01	(A)	06/07/00	WAP	1	P00143:05	Tank condition was normal.
F	44	P-02	(A)	06/07/00	WAP	1	P00143:06	Tank condition was normal.
F	44	P-03	(A)	06/07/00	WAP	1	P00143:07	Tank condition was normal.
F	44	P-04	(A)	06/07/00	WAP	1	P00143:08	Tank condition was normal.
F	44	P-05	(A)	06/07/00	WAP	1	P00143:09	Tank condition was normal.
F	44	P-06	(A)	06/07/00	WAP	1	P00143:10	Tank condition was normal.
F	44	P-07	(A)	06/07/00	WAP	1	P00143:11	Tank condition was normal.
F	44	P-08	(A)	06/07/00	WAP	1	P00143:12	Tank condition was normal.
F	44	P-09	(A)	06/07/00	WAP	1	P00143:13	Tank condition was normal.
F	44	P-10	(A)	06/15/00	DP	1	P00152:01-25	Tank condition was normal.
F	44	P-11	(A)	06/15/00	DP	1	P00148:01-25	Tank condition was normal.
F	44	P-12	(A)	06/15/00	DP	1	P00149:01-25	Tank condition was normal.
F	44	P-13	(A)	06/15/00	DP	1	P00150:01-25	Tank condition was normal.
F	44	P-14	(A)	06/15/00	DP	1	P00151:01-25	Tank condition was normal.
F	44	G	(1)	05/24/00	ССТV	1	685	CCTV was used to verify reel tape operations and document tank conditions. Inspection revealed reel tape to be functioning properly and area beneath reel tape riser appears to be liquid.
F	44	G	(I)	10/04/00	CCTV	1	685	Inspection documented conditions of the waste surface. Inspection revealed salt crystallization on the liquid surface. There was a small pool of liquid beneath the reel tape.
F	45	Underliner Sump		02/02/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	45	A-01	(A)	06/07/00	WAP	1	P00144:01	Tank condition was normal.
F	45	A-02	(A)	06/07/00	WAP	1	P00144:02	Tank condition was normal.
F	45	A-02	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint. An abandoned probe was observed on the annulus floor.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I) DATE			INSPECTION METHOD IDENTIFICATION NUMBER			REMARKS	
F	45	A-03	(A)	06/07/00	WAP	1	P00144:03	Tank condition was normal.	
F	45	A-03	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	45	A-04	(A)	06/07/00	WAP	1	P00144:04	Tank condition was normal.	
F	45	A-04	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	45	P-01	(A)	06/07/00	WAP	1	P00144:05	Tank condition was normal.	
F	45	P-02	(A)	06/07/00	WAP	1	P00144:06	Tank condition was normal.	
F	45	P-03	(A)	06/07/00	WAP	1	P00144:07	Tank condition was normal.	
F	45	P-04	(A)	06/07/00	WAP	1	P00144:08	Tank condition was normal.	
F	45	P-05	(A)	06/07/00	WAP	1	P00144:09	Tank condition was normal.	
F	45	P-06	(A)	06/07/00	WAP	1	P00144:10	Tank condition was normal.	
F	45	P-07	(A)	06/07/00	WAP	1	P00144:11	Tank condition was normal.	
F	45	P-08	(A)	06/07/00	WAP	1	P00144:12	Tank condition was normal.	
F	45	P-09	(A)	06/07/00	WAP	1	P00144:13	Tank condition was normal.	
F	45	P-10	(A)	08/19/00	DP	1	P00181:01-25	Tank condition was normal. Wet stains and marks were visible on the secondary vessel wall due to water intrusion at the interface of the secondary vessel wall and the annulus cover plate.	
F	45	P-11	(A)	08/19/00	DP	1	P00182:01-25	Tank condition was normal. Wet stains and marks were visible on the secondary vessel wall due to water intrusion at the interface of the secondary vessel wall and the annulus cover plate.	
F	45	P-12	(A)	08/19/00	DP	Ι	P00183:01-25	Tank condition was normal. Wet stains and marks were visible on the secondary vessel wall due to water intrusion at the interface of the secondary vessel wall and the annulus cover plate.	
F	45	P-13	(A)	08/19/00	DP	Ι	P00184:01-24	Tank condition was normal. Wet stains and marks were visible on the secondary vessel wall and the top of the ventilation duct due to water intrusion at the interface of the secondary vessel wall and the annulus cover plate.	
		ACCESS O		NG DATE					
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F	45	P-14	(A)	08/19/00	DP	1	P00190:01-25	Tank condition was normal. Wet stains and marks were visible on the secondary vessel wall and the top of the ventilation duct due to water intrusion at the interface of the secondary vessel wall and the annulus cover plate.	
F	46	LDB-02		07/26/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.	
F	46	LDB-02		10/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.	
F	46	A-01	(A)	06/08/00	WAP	1	P00145:01	Tank condition was normal.	
F	46	A-02	(A)	06/08/00	WAP	1	P00145:02	Tank condition was normal.	
F	46	A-02	(A)	06/20/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	46	A-03	(A)	06/08/00	WAP	1	P00145:03	Tank condition was normal.	
F	46	A-03	(A)	06/20/00	ССТV	1	641	The conductivity probe was deployed at the setpoint.	
F	46	A-04	(A)	06/08/00	WAP	1	P00145:04	Tank condition was normal.	
F	46	A-04	(A)	06/20/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
F	46	P-01	(A)	06/08/00	WAP	1	P00145:05	Tank condition was normal.	
F	46	P-02	(A)	06/08/00	WAP	1	P00145:06	Tank condition was normal.	
F	46	P-03	(A)	06/08/00	WAP	1	P00145:07	Tank condition was normal.	
F	46	P-04	(A)	06/08/00	WAP	1	P00145:08	Tank condition was normal. Inspection revealed what appeared to be a deposit on the primary vessel wall. Further inspections will be made.	
F	46	P-04	(A)	06/21/00	CCTV	1		CCTV was used to investigate deposits observed on the primary vessel wall. No abnormalities were observed. Tank condition was normal.	
F	46	P-05	(A)	06/08/00	WAP	Ι	P00145:09	Tank condition was normal.	
F	46	P-06	(A)	06/08/00	WAP	1	P00145:10	Tank condition was normal.	
F	46	P-07	(A)	06/08/00	WAP	1	P00145:11	Tank condition was normal.	
F	46	P-08	(A)	06/08/00	WAP	1	P00145:12	Tank condition was normal.	
F	46	P-09	(A)	06/08/00	WAP	1	P00145:13	Tank condition was normal.	

	TANK OR	R ACCESS OPENING			INSPE	СТІС		
AREA	ANCILLARY	(A OR	R I)	DATE	IDENTIF		TION NUMBER	REMARKS
F	46	P-10	(A)	08/19/00	DP	1	P00186:01-25	Tank condition was normal. Stains and marks on the annulus floor and the ventilation duct were caused by water which had leaked into the annulus.
F	46	P-11	(A)	08/19/00	DP	1	P00187:01-25	Tank condition was normal. Stains and marks on the primary vessel wall, secondary vessel wall and the ventilation duct were caused by water which had leaked into the annulus.
F	46	P-12	(A)	08/19/00	DP	1	P00188:01-25	Tank condition was normal.
F	46	P-13	(A)	08/20/00	DP	1	P00189:01-25	Tank condition was normal. Stains and marks on the primary vessel wall, secondary vessel wall and the ventilation duct were caused by water which had leaked into the annulus.
F	46	P-14	(A)	08/20/00	DP	1	P00185:01-25	Tank condition was normal. Stains and marks on the annulus floor were caused by water which had leaked into the annulus.
F	47	A-01	(A)	06/08/00	WAP	1	P00146:01	Tank condition was normal.
F	47	A-02	(A)	06/08/00	WAP	1	P00146:02	Tank condition was normal.
F	47	A-02	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	47	A-03	(A)	06/08/00	WAP	1	P00146:03	Tank condition was normal.
F	47	A-03	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	47	A-04	(A)	06/08/00	WAP	1	P00146:04	Tank condition was normal.
F	47	A-04	(A)	06/21/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
F	47	P-01	(A)	06/08/00	WAP	1	P00146:05	Tank condition was normal.
F	47	P-02	(A)	06/08/00	WAP	1	P00146:06	Tank condition was normal.
F	47	P-03	(A)	06/08/00	WAP	1	P00146:07	Tank condition was normal.
F	47	P-04	(A)	06/08/00	WAP	1	P00146:08	Tank condition was normal.
F	47	P-05	(A)	06/08/00	WAP	1	P00146:09	Tank condition was normal.
F	47	P-06	(A)	06/08/00	WAP	1	P00146:10	Tank condition was normal.
F	47	P-07	(A)	06/08/00	WAP	1	P00146:11	Tank condition was normal. A masselin cloth was observed on the annulus floor.

		ACCESS O		NG DATE	INSPECTION METHOD			
					IDENTIFI			REMARKS
F	47	P-08	(A)	06/08/00	WAP	1	P00146:12	Tank condition was normal.
F	47	P-09	(A)	06/08/00	WAP	1	P00146:13	Tank condition was normal.
F	47	P-10	(A)	08/20/00	DP	1	P00191:01-24	Tank condition was normal.
F	47	P-11	(A)	08/20/00	DP	1	P00192:01-25	Tank condition was normal.
F	47	P-12	(A)	08/20/00	DP	1	P00193:01-25	Tank condition was normal.
F	47	P-13	(A)	08/20/00	DP	1	P00194:01-25	Tank condition was normal.
F	47	P-14	(A)	08/20/00	DP	1	P00195:01-25	Tank condition was normal.
H	48	LDB Drain Cell		11/08/00	CCTV	1	NA	The conductivity probe was deployed at the setpoint.
н	48	A-01	(A)	03/09/00	WAP	1	P00069:01	Tank condition was normal.
Н	48	A-02	(A)	02/22/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	48	A-02	(A)	03/03/00	WAP	1	P00068:01	Tank condition was normal.
Н	48	A-03	(A)	02/22/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	48	A-03	(A)	03/03/00	WAP	1	P00068:02	Tank condition was normal.
Н	48	A-04	(A)	02/22/00	ССТV	1	641	The conductivity probe was deployed at the setpoint.
Н	48	A-04	(A)	03/03/00	WAP	1	P00068:03	Tank condition was normal.
Н	48	P-01	(A)	03/03/00	WAP	1	P00068:04	Tank condition was normal.
Н	48	P-02	(A)	03/03/00	WAP	1	P00068:05	Tank condition was normal.
Н	48	P-03	(A)	03/03/00	WAP	1	P00068:06	Tank condition was normal.
Н	48	P-04	(A)	03/03/00	WAP	1	P00068:07	Tank condition was normal.
Н	48	P-05	(A)	03/03/00	WAP	1	P00068:08	Tank condition was normal.
Н	48	P-06	(A)	03/03/00	WAP	1	P00068:09	Tank condition was normal.
Н	48	P-07	(A)	03/03/00	WAP	1	P00068:10	Tank condition was normal.
Н	48	P-08	(A)	03/03/00	WAP	1	P00068:11	Tank condition was normal.
Н	48	P-09	(A)	03/03/00	WAP	1	P00068:12	Tank condition was normal.

	TANK OR	ACCESS O	NG	INSPE	СТІС	ON METHOD		
AREA		(A OF	R I)	DATE	IDENTIFI		TION NUMBER	REMARKS
Н	48	P-10	(A)	03/03/00	WAP	1	P00068:13	Tank condition was normal.
Н	48	P-11	(A)	02/22/00	DP	1	P00049:01-22	Tank condition was normal. A piece of rubber tubing was observed on the annulus floor.
Н	48	P-13	(A)	02/22/00	DP	1	P00050:01-25	Tank condition was normal.
Н	48	P-14	(A)	02/22/00	DP	1	P00051:01-22	Tank condition was normal.
Н	49	LDB-03		03/01/00	CCTV	!	NA	Inspection revealed a blockage in the conductivity probe standpipe.
Н	49	LDB-03		04/04/00	CCTV	1	NA	CCTV system was used to assist with cleaning of conductivity probe standpipe. Blockage was still present after cleaning.
Н	49	Underliner Sump		07/20/00	CCTV	1	NA	CCTV was used to position the conductivity probe. The sump contained extraneous material which prevented the probe from being properly positioned.
Н	49	Valve Box		03/01/00	CCTV	1	643	Conductivity probe WTS-LE-2010 was deployed at the setpoint.
Н	49	Valve Box		06/20/00	CCTV	1	689	Conductivity probe WTS-LE-2009 was deployed at the setpoint.
Н	49	A-01	(A)	01/20/00	WAP	1	P00008:01	Tank condition was normal.
Н	49	A-02	(A)	01/20/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	49	A-02	(A)	01/20/00	WAP	1	P00008:02	Tank condition was normal.
Н	49	A-03	(A)	01/20/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
н	49	A-03	(A)	01/20/00	WAP	1	P00008:03	Tank condition was normal. The top of the ventilation duct appeared to be wet.
Н	49	A-04	(A)	01/20/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	49	A-04	(A)	01/20/00	WAP	1	P00008:04	Tank condition was normal.
Н	49	P-01	(A)	01/20/00	WAP	1	P00008:05	Tank condition was normal.
Н	49	P-02	(A)	01/20/00	WAP	1	P00008:06	Tank condition was normal.
Н	49	P-03	(A)	01/20/00	WAP	1	P00008:07	Tank condition was normal.
Н	49	P-04	(A)	01/20/00	WAP	1	P00008:08	Tank condition was normal.
н	49	P-05	(A)	01/20/00	WAP	1	P00008:09	Tank condition was normal.

AREA	TANK OR ANCILLARY ACCESS OPENING (A OR I) DATE		N <u>G</u> DATE	<u>INSPE</u> IDENTIFI	CTIC CA1	<u>ON METHOD</u> TION NUMBER	REMARKS	
H	49	P-06	(A)	01/20/00	WAP	1	P00008:10	Tank condition was normal.
Н	49	P-07	(A)	01/20/00	WAP	1	P00008:11	Tank condition was normal.
Н	49	P-08	(A)	01/20/00	WAP	1	P00008:12	Tank condition was normal. The secondary vessel wall and the top of the ventilation duct appeared to be wet.
Н	49	P-08	(A)	02/15/00	CCTV	1	663	CCTV system was used to determine if packing at the penetration lines had failed allowing rainwater to enter the annulus. Inspection was inconclusive.
Н	49	P-09	(A)	01/20/00	WAP	1	P00008:13	Tank condition was normal. The secondary vessel wall and the top of the ventilation duct appeared to be wet.
Н	49	P-10	(A)	02/15/00	DP	1	P00030:01-25	Tank condition was normal.
Н	49	P-11	(A)	02/15/00	DP	1	P00031:01-25	Tank condition was normal.
Н	49	P-12	(A)	02/15/00	DP	1	P00032:01-22	Tank condition was normal.
н	49	P-13	(A)	02/15/00	DP	1	P00033:01-22	Tank condition was normal.
Н	49	P-14	(A)	02/15/00	DP	1	P00034:01-24	Tank condition was normal.
Н	49	B-05	(I)	03/29/00	CCTV	1	672	CCTV was used to document equipment configuration in the spray chamber and to observe for obstructions. No obstructions were observed.
Н	49	C-03	(I)	03/07/00	CCTV	1	666	CCTV was used to assist with obtaining a sample of waste solids from the tank surface.
Н	49	C-03	(I)	03/29/00	CCTV	1	672	CCTV was used to document salt formation on cooling coils beneath the riser and to assist with the evaluation of sampling options.
Н	49	C-03	(I)	04/10/00	CCTV	1	673	CCTV system was used to assist with retrieving a sample of the material attached to the cooling coils.
н	49	C-03	(!)	04/27/00	CCTV	1	623	CCTV inspection revealed surface agitation in the NNE quadrant of the tank. The foam appears to be accumulating in this portion of the tank. No other unusual conditions were observed.
Н	49	C-03	(I)	05/04/00	CCTV	1	623	Inspection documented waste surface conditions. Inspection revealed solids on the liquid surface. Slurry pumps were not in operation.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	PENIN I)	IG DATE	INSPE IDENTIFI	CTIOI CATI	<u>N METHOD</u> ON NUMBER	REMARKS
Н	49	C-03	(I)	09/25/00	CCTV	1	623	Inspection documented waste surface conditions. No abnormalities were observed.
Н	49	C-03	(I)	10/29/00	ССТV	1	724	Inspection documented waste surface conditions. A ring of deposits approximately 2 to 4 inches wide was observed on the tank wall above the liquid.
Н	49	C-03	(I)	11/03/00	ССТV	1	724	Inspection documented waste surface conditions. No solids were observed on the waste surface. A light coating was observed on the walls and cooling coils.
Н	49	C-03	(I)	11/05/00	CCTV	Ι	724	Inspection documented waste surface conditions after the addition of inhibited water and slurry pump operation. The solids were still observable on the tank wall.
Н	49	C-03	(1)	11/13/00	CCTV	1	724	Inspection documented waste surface conditions. Inspection revealed a liquid surface with no accumulation of salt observed except for a ring around the tank wall approximately one foot above the liquid level.
Н	49	G	(I)	02/02/00	CCTV	Ι	653	CCTV system was used to determine which port in the C-01 riser was free of obstructions to allow installation of a gas chromatograph sample pipe. Inspection identified a blind flange with a C-clamp installed on two nozzles. The gas chromatograph sample pipe was successfully installed.
Н	49	G	(I)	03/29/00	ССТV	1	672	Inspection documented salt formation on cooling coils beneath the riser and evaluated sampling options.
Н	49	G	(I)	05/04/00	CCTV	Ι	623	Inspection documented conditions of waste surface. Inspection revealed solids on the liquid surface. Slurry pumps were not in operation.
Н	49	G	(I)	09/25/00	ССТV	1	623	Inspection documented waste surface conditions. No abnormalities were observed.
Н	49	G	(I)	10/29/00	CCTV	1	724	Inspection documented waste surface conditions. A ring of deposits approximately 2 to 4 inches wide was observed on the tank wall above the liquid.

AREA	TANK OR ANCILLARY	ACCESS O (A OR	IG DATE	INSPE IDENTIFI		ON METHOD TON NUMBER	REMARKS	
Н	49	G	(I)	11/03/00	CCTV	1	724	Inspection documented waste surface conditions. No solids were observed on the waste surface. A light coating of salt was observed on the walls and cooling coils.
Н	50	Underliner Sump		07/06/00	CCTV	1	689	The conductivity probe was deployed at the setpoint.
н	50	Valve Box		06/22/00	CCTV	1	689	Conductivity probe WTS-LE-2052 was deployed at the setpoint.
Н	50	Valve Box		06/22/00	CCTV	1	689	Conductivity probe WTS-LE-2053 was deployed at the setpoint.
Н	50	A-01	(A)	01/19/00	WAP	1	P00007:01	Tank condition was normal.
Н	50	A-02	(A)	01/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	50	A-02	(A)	01/26/00	WAP	1	P00009:01	Tank condition was normal.
Н	50	A-03	(A)	01/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	50	A-03	(A)	01/26/00	WAP	1	P00009:02	Tank condition was normal.
н	50	A-04	(A)	01/19/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.
Н	50	A-04	(A)	01/19/00	WAP	1	P00007:02	Tank condition was normal.
Н	50	P-01	(A)	01/19/00	WAP	1	P00007:03	Tank condition was normal.
Н	50	P-02	(A)	01/19/00	WAP	1	P00007:04	Tank condition was normal.
Н	50	P-03	(A)	01/19/00	WAP	1	P00007:05	Tank condition was normal.
Н	50	P-04	(A)	01/19/00	WAP	1	P00007:06	Tank condition was normal.
Н	50	P-05	(A)	01/19/00	WAP	1	P00007:07	Tank condition was normal.
Н	50	P-06	(A)	01/19/00	WAP	1	P00007:08	Tank condition was normal.
Н	50	P-07	(A)	01/19/00	WAP	1	P00007:09	Tank condition was normal.
Н	50	P-08	(A)	01/19/00	WAP	1	P00007:10	Tank condition was normal.
н	50	P-09	(A)	01/19/00	WAP	1	P00007:11	Tank condition was normal.
Н	50	P-10	(A)	02/15/00	DP	1	P00035:01-20	Tank condition was normal.
н	50	P-11	(A)	02/15/00	DP	1	P00036:01-22	Tank condition was normal.

	TANK OR	ANK OR ACCESS OPENING			INSPE	стіс	ON METHOD		
AREA		(A OR	(I)	DATE	IDENTIFI	CAT		REMARKS	
Н	50	P-12	(A)	02/15/00	DP	1	P00037:01-20	Tank condition was normal. A masselin cloth was observed on the annulus floor.	
Н	50	P-13	(A)	02/15/00	DP	1	P00038:01-21	Tank condition was normal.	
Н	50	P-14	(A)	02/15/00	DP	1	P00039:01-24	Tank condition was normal.	
Н	51	Drain Valve Box		06/21/00	CCTV	1	689	Conductivity probe WTS-LE-2024 was deployed at the setpoint.	
Н	51	Underliner Sump		06/27/00	CCTV	1	689	The conductivity probe was deployed at the setpoint.	
Н	51	Valve Box		06/21/00	CCTV	1	689	Conductivity probe WTS-LE-2028 was deployed at the setpoint.	
Н	51	Valve Box		06/21/00	CCTV	1	689	Conductivity probe WTS-LE-2029 was deployed at the setpoint.	
Н	51	A-01	(A)	01/17/00	WAP	1	P00006:01	Tank condition was normal.	
Н	51	A-02	(A)	01/17/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Η	51	A-02	(A)	01/17/00	WAP	1	P00006:02	Tank condition was normal. Stains and marks on the primary vessel wall were caused by chromate cooling water which had leaked into the annulus.	
Н	51	A-03	(A)	01/17/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Η	51	A-03	(A)	01/17/00	WAP	1	P00006:03	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus.	
Н	51	A-04	(A)	01/17/00	CCTV	1	641	The conductivity probe was deployed at the setpoint.	
Η	51	A-04	(A)	01/17/00	WAP	1	P00006:04	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus.	
Н	51	P-01	(A)	01/17/00	WAP	1	P00006:05	Tank condition was normal.	
Н	51	P-02	(A)	01/17/00	WAP	1	P00006:06	Tank condition was normal.	
Н	51	P-03	(A)	01/17/00	WAP	1	P00006:07	Tank condition was normal.	
Н	51	P-04	(A)	01/17/00	WAP	1	P00006:08	Tank condition was normal.	
Н	51	P-05	(A)	01/17/00	WAP	1	P00006:09	Tank condition was normal.	
н	51	P-06	(A)	01/17/00	WAP	1	P00006:10	Tank condition was normal.	

AREA	TANK OR ANCILLARY	ACCESS O (A OF	PENIN R I)	IG DATE	INSPE IDENTIFI	CTIC CA1	<u>ON METHOD</u> FION NUMBER	REMARKS
Н	51	P-07	(A)	01/17/00	WAP	1	P00006:11	Tank condition was normal.
Н	51	P-08	(A)	01/17/00	WAP	1	P00006:12	Tank condition was normal. Stains and marks observed on the primary vessel wall were caused by water which had leaked into the annulus.
Η	51	P-09	(A)	01/17/00	WAP	1	P00006:13	Tank condition was normal. Stains and deposits observed on the primary vessel wall were caused by water leaking into the annulus or water from a failed cooling coil leaking above the tank.
Н	51	P-10	(A)	01/17/00	DP	1	P00001:01-25	Tank condition was normal. Stains and deposits observed on the primary vessel wall were caused by water leaking into the annulus or water from a failed cooling coil leaking above the tank.
Н	51	P-11	(A)	01/17/00	DP	1	P00002:01-25	Tank condition was normal. The upper knuckle plate of the primary vessel wall was wet indicating the possibility a cooling coil had failed and leaked above the tank.
Н	51	P-12	(A)	01/17/00	DP	1	P00003:01-25	Tank condition was normal.
Н	51	P-13	(A)	01/17/00	DP	Ι	P00004:01-25	Tank condition was normal. A component of an ultrasonic wall thickness mapping device, a cart housing two magnetic wheels, which became detached during use remains at the location where it was abandoned on the annulus floor.
Н	51	P-14	(A)	01/17/00	DP	1	P00005:01-25	Tank condition was normal.
Η	51	C-01	(I)	06/28/00	CCTV	1	689	The conductivity probe for the spray chamber was deployed at the setpoint.
Н	51	V-01	(I)	03/03/00	CCTV	1	661	CCTV was used to monitor the waste transfer to DWPF.
Н	51	V-01	(I)	04/12/00	CCTV	1	677	CCTV was used to assist construction with obtaining measurements of installed equipment and to document conditions of spray chamber.
Н	51	V-01	(I)	05/18/00	CCTV	1	643	CCTV was used to observe the installation of a new riser plug.
Н	CCWS			07/18/00	HELIUM	1	HE-00-002	A helium tracer test was done to determine the location of the leak in the CCWS supply header from the West Pump House to Tanks 9 - 16. The test was inconclusive.

AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	<u>G</u> DATE	INSPE IDENTIF		<u>N METHOD</u> ON NUMBER	REMARKS
F	CT-01		10/12/00	CCTV	1	643B	CCTV was used to observe for inleakage into the catch tank. No leaks were observed. However, the sump was full of water.
Н	CTS	LDB-04	03/08/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	DB-02		01/05/00	CCTV	1	NA	Inspection verified position of valve WTS-V-89 in the closed position.
F	DB-02		01/06/00	CCTV	1	NA	Inspection verified position of valves WTS-V-89, 93, and 303 in the closed position.
F	DB-02		01/10/00	CCTV	1	NA	Inspection verified position of valve WTS-V-89 in the closed position.
F	DB-02		03/05/00	CCTV	1	NA	Inspection verified position of valves WTS-V-91, 95, 96, 98, and 99 in the closed position.
F	DB-02		03/07/00	CCTV	1	NA	CCTV was used to assist with leak check of jumpers after regasketing. A leak was observed at nozzles 28 and 30.
F	DB-02		03/08/00	CCTV	1	NA	CCTV was used to assist with leak check of jumpers after retightening jumpers. A leak was observed at nozzles 28 and 30.
F	DB-02		03/14/00	ССТV	1	NA	Inspection verified position of valves WTS-V-95, 96, 97, 98 and 99 in the closed position.
F	DB-02		03/18/00	ССТV	1	NA	Inspection verified position of valves WTS-V-90, 91 and 98 in the closed position.
F	DB-02		03/26/00	ССТV	1	NA	CCTV was used to perform leak check of wall nozzle 27. The nozzle was leak free.
F	DB-02		03/28/00	CCTV	1	643	CCTV was used to perform leak check of wall nozzle 27. The nozzle was leak free.
F	DB-02		04/11/00	CCTV	1	683	CCTV was used to assist with hydrotesting. A leak was observed at valve WTS-V-95.
F	DB-02		04/16/00	ССТV	1	679	CCTV revealed that valve WTS-V-95 was leaking. No other leaks were observed.
F	DB-02		04/27/00	CCTV	1	683	Inspection documented jumper replacement.
F	DB-02		05/05/00	CCTV	1	683	CCTV was used to perform a leak check of installed jumpers and valves. No leaks were observed.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPEC	CTIO CAT	<u>N METHOD</u> ION NUMBER	REMARKS
F	DB-02		06/28/00	CCTV	1	NA	Inspection verified position of valve WTS-V-90 in the closed position.
F	DB-02		12/29/00	CCTV	1	NA	CCTV was used to verify operability of valve WTS-V-76. Inspection revealed that the valve opened and closed properly.
F	DB-02	MLDB-01	03/11/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-01	03/11/00	HELIUM	1	HE-00-001	A helium tracer test identified leaksite at the transfer line north of MLDB-01.
F	DB-02	MLDB-04	05/23/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	DB-02	MLDB-07	09/20/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-02		01/27/00	CCTV	1	NA	Inspection verified position of valve WTS-V-147 in the closed position.
Н	DB-02		03/07/00	CCTV	1	NA	Inspection verified position of valves WTS-V-90, 91, 95, 98 and 99. Valves 90, 91 and 98 were in the closed position. Valves 95 and 99 were in the open position.
Н	DB-02		03/14/00	CCTV	1	NA	Inspection verified position of valve WTS-V-137 in the closed position.
н	DB-02		06/07/00	CCTV	Ι	NA	Inspection verified position of valves WTS-V-128, 129, 130, 131, 134, 135, 138, 139, 140, 141, 142, 143, 144, 145 and 147 in the closed position. WTS-V-134 did not fully close because the pin appeared to be sheared.
Н	DB-02	LDB-01	01/13/00	CCTV	1	642	The conductivity probe was deployed at the setpoint. Mud was observed on the bottom of the LDB.
Н	DB-02	LDB-01	07/27/00	CCTV	1	642	The conductivity probe was deployed at the setpoint. Inspection revealed mud in the bottom of the LDB. No obstructions were visible in the probe standpipe.
Н	DB-02	LDB-01	11/10/00	CCTV	1	NA	The conductivity probe was deployed at the setpoint.
Н	DB-02	LDB-01	11/11/00	CCTV	1	NA	CCTV was used to document position of conductivity probe. The probe was deployed at the setpoint. Mud and other extraneous material was observed on the bottom of the LDB.
Н	DB-02	LDB-02	11/10/00	CCTV	1	NA	CCTV was used to document position of conductivity probe. The probe was not visible beneath the standpipe.

AREA	TANK OR <u>ACCESS OPENING</u> ANCILLARY (A OR I) DAT			<u>INSPE</u> IDENTIFI	CTIO CAT	<u>N METHOD</u> ION NUMBER	REMARKS
Н	DB-02	MLDB-04	02/08/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-02	MLDB-05	02/08/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-02	MLDB-06	02/09/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	DB-03		03/28/00	ССТV	1	NA	Inspection verified position of valves WTS-V-150, 151, 152, 153 and 154. Valves 150, 151, 152 and 154 were in the closed position. Valve 153 was in the open position.
F	DB-03		04/25/00	CCTV	Ι	NA	Inspection verified position of valve WTS-V-150 in the closed position.
F	DB-03		06/05/00	CCTV	1	NA	Inspection verified position of valves WTS-V-150, 152 and 153 in the closed position.
F	DB-03		06/07/00	CCTV	1	NA	Inspection verified position of valve WTS-V-153 in the open position.
F	DB-03		08/26/00	CCTV	1	NA	Inspection verified position of valves WTS-V-150 and 153. WTS-V-150 was in the closed position. WTS-V-153 was in the open position.
Н	DB-03		03/07/00	CCTV	1	660	CCTV was used to assist in identifying configuration of current sump pump and sump pump discharge piping.
Н	DB-03		08/02/00	CCTV	1	643	CCTV was used to observe the sump for decrease. No change in the level was observed. It appears that the sump level is too low for the pump to prime.
F	DB-04		01/05/00	ССТV	1	NA	Inspection verified position of valve WTS-V-224 in the closed position.
F	DB-04		01/06/00	ССТV	1	NA	Inspection verified position of valves WTS-V-224 and 236 in the closed position.
F	DB-04		01/10/00	CCTV	1	NA	Inspection verified position of valve WTS-V-224 in the closed position.
F	DB-04		08/31/00	CCTV	Ι	643B	Inspection documented the position of valve WTS-V-237 in the open position. Inspection revealed that the shear pin on the valve is broken.
F	DB-04		08/31/00	CCTV	1	643B	Inspection documented condition of valve WTS-V-237. Inspection revealed that the valve was not turning, and a pin was sheared

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	<u>INSPE</u> IDENTIFI	CTION CATI	<u>N METHOD</u> ON NUMBER	REMARKS
F	DB-04		09/02/00	CCTV	1	NA	CCTV was used to document position of valve WTS-V-237. The valve was in the closed position.
F	DB-04		09/05/00	CCTV	1	NA	Inspection verified position of valve WTS-V-237. The valve was documented open then closed.
F	DB-04		09/13/00	ССТV	1	NA	Inspection verified position of valve WTS-V-237. The valve was verified closed then opened.
F	DB-04		09/19/00	CCTV	1	NA	Inspection verified position of valve WTS-V-237 in the closed position.
F	DB-04		09/27/00	CCTV	1	NA	Inspection verified position of valve WTS-V-237 in the closed position.
F	DB-04		10/12/00	ĊCTV	1	NA	Inspection verified the position of valve WTS-V-237 in the open position.
F	DB-04		10/13/00	CCTV	1	NA	Inspection verified the position of valve WTS-V-237 in the closed position.
F	DB-04		10/18/00	CCTV	1	NA	Inspection verified position of valve WTS-V-237 in the closed position.
F	DB-04		11/08/00	ССТV	1	643B	Inspection documented that valve WTS-V-237 was approximately 95% open.
F	DB-04	LDB-03	09/15/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
F	DB-04	LDB-04	03/20/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-04		01/31/00	CCTV	1	NA	Inspection verified position of valves WTS-V-36 and 540 in the closed position.
Н	DB-04		02/16/00	CCTV	1	657	CCTV was used to determine source of inleakage. Source of inleakage was indeterminate.
Н	DB-04		07/07/00	CCTV	1	NA	CCTV was used to determine if there were any obstructions or debris that would prevent the sump from being jetted out. No unusual conditions were observed.
Н	DB-04		07/12/00	CCTV	1	643	Inspection documented conditions of sump. No unusual conditions were observed.
Н	DB-05		01/27/00	CCTV	1	NA	Inspection verified position of valve WTS-V-108 in the closed position.
н	DB-05		01/31/00	CCTV	1	NA	Inspection verified position of valve WTS-V-108 in the closed position.

AREA	TANK OR ANCILLARY	ACCESS OPENI (A OR I)	NG DATE	INSPE		N METHOD ON NUMBER	REMARKS
Н	DB-05	<u> </u>	02/18/00	CCTV	1	NA	Inspection verified position of valve WTS-V-108 in the closed position.
Н	DB-05		02/25/00	CCTV	1	NA	Inspection verified position of valve WTS-V-108 in the closed position.
Н	DB-05		05/09/00	сстv	1	NA	Inspection verified position of valves CTS-V-105 and 109 in the closed position.
Н	DB-05		05/11/00	CCTV	1	NA	Inspection verified position of valves WTS-V-105 and 107 in the closed position. The pin on valve 107 appears to be in need of repair.
Н	DB-05		05/11/00	ССТV	1	NA	CCTV was used to leak check nozzle 5 during Tank 24 transfer. No leaks were observed.
Η	DB-05		05/15/00	CCTV	1	NA	Inspection verified position of valve WTS-V-105 in the closed position.
Н	DB-05		05/16/00	ССТV	1	NA	Inspection verified position of valves WTS-V-105 and 107 in the closed position.
Н	DB-05		06/08/00	CCTV	1	NA	Inspection verified position of valves WTS-V-106, 108 and 109 in the closed position.
F	DB-06	Underliner Sump	07/17/00	CCTV	1	NA	CCTV was used to assist with deployment of conductivity probe. The standpipe contained water which prevented the probe from being installed.
F	DB-06	Underliner Sump	07/19/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06		01/27/00	CCTV	1	NA	Inspection verified position of valves WTS-V-54, 55, 56, 57, and 58 in the closed position.
Н	DB-06		02/17/00	ССТV	1	NA	Inspection verified position of valve WTS-V-62 in the closed position.
н	DB-06		03/06/00	ССТV	1	NA	Inspection verified position of valve WTS-V-56 in the closed position.
Н	DB-06		05/26/00	ССТV	/	643	Inspection documented position of valves WTS-V-57 and 58 in the closed position. Inspection also revealed that the configuration of the high, medium and low dip tubes could not be determined because the dip tubes extended below the liquid level in the sump.
Н	DB-06		06/08/00	CCTV	1	NA	Inspection verified position of valves WTS-V-56, 57 and 58 in the closed position.

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H	 DB-06		06/17/00	ССТV	1	688	CCTV was used to assist with the removal of abandoned conductivity probe wires from the sump conductivity probe standpipe.
Η	DB-06		06/18/00	CCTV	1	688	CCTV was used to document conditions inside the sump conductivity probe standpipe. Inspection revealed an abandoned probe in the standpipe.
Н	DB-06		06/18/00	CCTV	1	688	CCTV was used to assist in removal of abandoned conductivity probe in the sump conductivity probe standpipe.
Н	DB-06		07/19/00	CCTV	1	NA	Inspection verified conditions of valve port sleeves. Inspection revealed no degradation of the concrete.
Н	DB-06		09/08/00	CCTV	1	NA	Inspection verified position of valve WTS-V-56 in the closed position.
н	DB-06		11/23/00	CCTV	1	NA	Inspection verified position of valve WTS-V-57 in the closed position.
Н	DB-06		12/21/00	CCTV	1	NA	Inspection verified position of valve WTS-V-57 in the closed position.
н	DB-06	LDB-01	02/28/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-06	LDB-02	02/28/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-06	LDB-03	02/29/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-04	02/29/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-05	03/15/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-V-01	05/04/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-V-03	05/04/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-V-3402	05/04/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-V-3403	05/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-06	LDB-V-3404	05/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-07		01/25/00	CCTV	1	NA	Inspection verified position of valves WTS-V-159, 160, and 161 in the closed position.

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AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPE IDENTIFI	CTIO	<u>N METHOD</u> ON NUMBER	REMARKS
H	DB-07		01/26/00	CCTV	1	NA	- Inspection verified position of valves WTS-V-52, 53, 54, 56, 58, 62, 157, 158, 159, 160, 161, 163, and 165 in the closed position.
Н	DB-07		02/02/00	ССТV	1	NA	Inspection verified position of valves WTS-V-159, 160, and 161 in the closed position.
Н	DB-07		03/01/00	CCTV	1	NA	Inspection verified position of valves WTS-V-52, 53, 54, 56, 58, 157, 158, 162, 163, and 165 in the closed position.
Н	DB-07		03/06/00	CCTV	1	NA	Inspection verified position of valves WTS-V-157, 158 and 159 in the closed position.
Н	DB-07		03/23/00	CCTV	1	NA	Inspection verified position of valve WTS-V-117 in the closed position.
Н	DB-07		06/08/00	CCTV	Ι	NA	Inspection verified position of valves WTS-V-54, 56, 58, 62, 157, 158, 159, 160, 161, 163 and 165 in the closed position.
Н	DB-07		08/08/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-07		11/13/00	CCTV	1	NA	Inspection verified position of valve WTS-V-160 in the closed position.
Н	DB-07		11/23/00	CCTV	1	NA	Inspection verified position of valve WTS-V-163. The valve was in the closed position; however, a small gap was observed between the stop and the valve body.
Н	DB-07		11/29/00	CCTV	1	NA	Inspection verified position of the upper and lower stops on valve WTS-V-163. The stops are not lined up properly. The top stop closes completely, but the stops on the valve body do not.
н	DB-07		12/21/00	CCTV	1	NA	Inspection verified position of valve WTS-V-163 in the closed position.
Н	DB-07	LDB-01	04/05/00	ССТV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-01	09/20/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-03	02/23/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-03	08/08/00	CCTV	1	642	Inspection revealed that the conductivity probe could not be properly positioned due to extraneous material under the standpipe.

AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	I <u>G</u> DATE	<u>INSPE</u> IDENTIFI	CTIO ICATI	N METHOD ON NUMBER	REMARKS
Н	DB-07	LDB-03	08/09/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-04	05/02/00	CCTV	1	NA	The conductivity probe was deployed at the setpoint.
н	DB-07	LDB-04	11/08/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-07	LDB-05	02/23/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-06	05/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-06	11/09/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-07	05/04/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	DB-07	LDB-07	11/08/00	CCTV	Ι	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-08	04/05/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	DB-07	LDB-08	09/21/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Η	DB-08		01/07/00	CCTV	1	646	Inspection revealed a sheared valve pin on WTS-V-201 which prevented the valve from operating properly. Leaked waste was observed around the valve body.
Н	DB-08		01/28/00	CCTV	1	651	CCTV was used to assist in the repair and leak check of valve WTS-V-201. No leaks were observed.
Н	DB-08		02/17/00	CCTV	1	NA	Inspection verified position of valves WTS-V-94, 95, 97, 98 and 99 in the closed position.
Н	DB-08		02/29/00	ССТV	1	NA	Inspection verified position of valve WTS-V-200 in the closed position.
Н	DB-08		03/06/00	ССТV	1	NA	Inspection verified position of valve WTS-V-200 in the closed position.
Н	DB-08		06/12/00	CCTV	1	NA	Inspection verified position of valves WTS-V-194, 195, 197, 198, 199 and 200 in the closed position.
Н	DB-08		09/08/00	CCTV	1	NA	Inspection verified position of valve WTS-V-200 in the closed position.
Н	DB-08		11/23/00	CCTV	1	NA	Inspection verified position of valve WTS-V-200 in the closed position.
н	DB-08		12/21/00	CCTV	1	NA	Inspection verified position of valve WTS-V-200 in the closed position.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPE IDENTIFI	CTION CATIO	METHOD N NUMBER	REMARKS
F	EVAP-16		07/01/00	CCTV	1	650	Inspection verified that the E-02 dummy connector head was properly positioned on the nozzle.
F	EVAP-16		07/01/00	CCTV	1	650	CCTV was used to obtain a sample of solids from the evaporator vessel and document conditions. No accumulation of solids was observed on the warming coils, evaporator walls, tube bundle or piping. One to three inches of fine solids were observed at the base of the cone. Mercury was also observed.
F	EVAP-16		07/09/00	CCTV	1	NA	CCTV was used to perform leak check on the E-02 nozzle. No leaks were observed.
F	EVAP-16	E-04	01/19/00	CCTV	1	650	CCTV was used to determine the thickness of the layer of solids in the evaporator pot. In the bottom of the cone a layer of fine silt like particles was estimated to be less than half an inch thick. Solids were not observed on the warming coils or the steam chest.
F	EVAP-16	E-04	01/28/00	CCTV	1	650	CCTV was used to assist and document the sampling of solids at the bottom of the evaporator pot.
F	EVAP-16	SE	01/03/00	CCTV	1	643	CCTV was used to observe a leak check at connector head "N". The connector head was leak free.
F	EVAP-16	Sump	02/06/00	CCTV	Ι	NA	CCTV was used to assist with the leak check of the E-04 nozzle during desalt and descale. The nozzle was leak free.
F	EVAP-16	Sump	08/30/00	CCTV	1	707	Inspection of the evaporator cell revealed no unusual conditions.
н	EVAP-16		01/11/00	CCTV	Ι	648	Inspection of the welds on the lift jumper and catheter lines attached to the jumper for evidence of stress or cracking while under the load of the cell cover showed no evidence of cracking or unusual condition.
н	EVAP-16		01/19/00	CCTV	Ι	648	CCTV was used to determine if the lift jumper had been displaced and if it would "spring back" when the cell cover that contacted the catheter flange was removed. The catheter lines moved less than 1/2".

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AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	INSPE IDENTIFI	CTION CATIO	<u>METHOD</u> N NUMBER	REMARKS
Н	EVAP-16		05/17/00	CCTV	1	684	CCTV was used to inspect the inlet and outlet nozzles on the East Lift Jumper, the inlet and outlet on the West Lift Jumper and the East nozzle on the vent jumper. No solids or deposits were observed on the East Lift Jumper or the Vent Jumper, however, a small amount of solids were observed on the outlet of the West Lift Jumper.
Η	EVAP-16		05/17/00	CCTV	1	684	CCTV was used to inspect the East Lift Line, Tank 41 Gravity Drain Line, Tank 43 Gravity Drain Line, West Lift Line and Tank 38 Gravity Drain Line. Approximately 14'4" of the East Lift was inspected and 9 feet of the lower section was coated with solids. Approximately 21'4" of Tank 41 GDL and 19'4" of Tank 43 GDL was inspected. No solids or deposits were observed. Deposits on the West Lift were observed 2'5" from the E-01 nozzle. Only 3'2" of line could be inspected. It appears to be 75-80% plugged. The Tank 38 GDL appears to be 40-60% plugged. Approximately 17'11" of the vertical section was inspected. Solids were also observed in the bottom of the evaporator vessel.
Н	EVAP-16	(08/16/00	CCTV	1	684	CCTV was used to assist in loosening of nozzles E4, E3, N12, N2 and N6.
Η	EVAP-16	(08/16/00	CCTV	1	684	CCTV was used to assist with jumper replacement. Dummy nozzle E4 was removed. Jumper E3 to N12 was removed, regasketed and repositioned on E4 and N12.
Н	EVAP-16		10/18/00	CCTV	1	720	CCTV was used to assist with the installation of dummy Hanford connectors on nozzles 9 and 10.
Н	EVAP-16		10/20/00	CCTV	1	684	CCTV was used to assist with the attachment of a guide tube to the evaporator pot. The guide tube was successfully installed and appeared to be flush with nozzle E-02.
Η	EVAP-16	·	11/28/00	ССТV	1	720	Inspection documented condition of nozzles 1, 2, and 3. Inspection revealed that the dummy Hanford connector on Nozzle #1 was tightened, the connector on Nozzle #2 was installed but loose, and Nozzle #3 did not have any dummy connector heads installed.

TANK OR AREA ANCILLARY		ACCESS OPENING (A OR I)	DATE	INSPE IDENTIF		<u>N METHOD</u> ON NUMBER	REMARKS
Н	EVAP-16	COP #3	02/09/00	CCTV	1	648	Inspection documented conditions in the GDL. Approximately 25 feet towards the evaporator and approximately 25 feet towards Tank 38 was inspected. The line was free of deposits, and only minor scaling was observed on the bottom of the GDL.
Η	EVAP-16	E-04	01/06/00	сстv	1	648	Inspection revealed an accumulation of solids on the tube bundle, warming coils, pot walls and other surfaces. There were loose solids at the bottom of the cone.
н	EVAP-16	E-04	02/16/00	CCTV	1	648	Inspection revealed deposits on the pot interior walls, warming coils, some service lines and stay rods. A slight buildup of deposits on the tube bundle was also noted. A sample from the interior walls was obtained.
Н	EVAP-16	Lift jumper	01/19/00	CCTV	I	648	Inspection of the lift jumper inlet and outlet lines showed no changes since last inspected on 9/10/98. However, a slight increase of deposits on the catheter lines was observed. The inlet was inspected to the nozzle on the evaporator vessel, and the base/cone of the lift jumper was inspected for the outlet side.
Н	EVAP-16	Lift Jumper	03/14/00	CCTV	1	648	CCTV was used to document conditions of the 2H Evaporator lift line and Tank 38 GDL. Inspection of the lift line shows solids approximately 2 feet from the nozzle face obstructing 75-80% of the line. Inspection of the vertical section of the GDL shows 30-40% of the line is obstructed.
Η	EVAP-16	SW	01/05/00	CCTV	1	645	Inspection documented conditions of the evaporator pot exterior, cell covers and jumpers. No unusual evidence of leakage was observed, and no increase in deposits at previous leak locations was observed. However, a catheter flange for the west lift jumper was attached in an upside down position, and one of the lines was displaced under the load caused by the flange guide contacting the cell cover.
н	EVAP-16	SW	10/12/00	CCTV	1	716	Inspection documented condition of the evaporator cell, pot exterior, and associated piping. No unusual conditions were observed. However, approximately 1 - 2 feet of water was observed on the cell floor.

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AREA	TANK OR ANCILLARY	ACCESS OPEN (A OR I)	ING DATE	INSPE IDENTIF		METHOD ON NUMBER	REMARKS
Н	EVAP-16	E-04 (I)	10/23/00	CCTV	1	723	Inspection documented the conditions of the pot interior. Solids were observed on the vessel side walls, demister spray ring, warming coils, thermowells and service piping. Approximately twelve inches of liquid remained in the bottom of the cone. The solids had some color differences starting at the warming coil/tube bundle. The solids were 1 - 2 inches on the thermowells and warming coil; however, the entire warming coil was not encrusted.
Н	EVAP-16	E-04 (l)	11/13/00	CCTV	Ι	723	CCTV was used to facilitate sampling of solids on the evaporator vessel interior wall and warming coil. Solids were obtained from the walls; however, a sample from the warming coil was unsuccessful.
н	EVAP-25		02/15/00	CCTV	1	664	CCTV was used to perform a leak check of jumpers Y5555-100-121(east separator jumper), Y5555-100-123 (separator drain jumper), and Y5555-100-124 (separator drain jumper) during pre-start testing of BFV in tanks 29 and 30. A leak was observed at the U2 nozzle and was retightened and found to be leak free. No other leaks were observed.
Н	EVAP-25		04/07/00	ССТV	1	NA	CCTV was used to inspect evaporator cell for any abnormalities. A leak was observed at the N-2 nozzle.
Н	EVAP-25		04/19/00	ССТV	1	NA	Inspection verified the condition of the condenser vent line. No unusual conditions were observed.
Н	EVAP-25		05/21/00	CCTV	1	NA	CCTV was used to monitor lift jumper during initial evaporator operation. A small amount of leakage was observed at the connector head, and deposits were observed on the evaporator vessel exterior.
Н	EVAP-25	Lift Jumper	01/06/00	CCTV	1	647	CCTV was used to inspect the inlet and outlet sides of the lift jumper. The jumper was inspected from the catheter lines to the Hanford connectors on the lift line and GDL. No deposits or scaling were observed.
Н	EVAP-25	NE	01/06/00	CCTV	1	647	CCTV was used to inspect the lift line on the northeast side of the evaporator pot. No abnormalities were observed.

AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	<u>G</u> DATE	INSPE IDENTIFI	INSPECTION METHOD DENTIFICATION NUMBER		REMARKS
Н	EVAP-25	NE	05/28/00	CCTV	1	687	CCTV was used to monitor lift jumper during initial evaporator operation. A small amount of leakage was observed at the connector head, and deposits were observed on the evaporator shell. Deposits have continued to build up.
Н	EVAP-25	NE	06/19/00	ССТV	1	695	CCTV was used to monitor deposits on exterior of evaporator pot during operation.
Н	EVAP-25	NE	06/29/00	CCTV	1	695	CCTV was used to monitor deposits on exterior of evaporator pot. The deposits have continued to increase since last inspection performed on 11/28/99.
н	EVAP-25	NE	09/28/00	CCTV	1	695	CCTV was used to document conditions of evaporator cell. No increase of salt deposits was observed since last inspection. Salt deposits on the second ridge, however, appear to be peeling off.
н	EVAP-25	NE	10/05/00	CCTV	1	714	CCTV was used to assist with the flushing of the pot exterior. Deposits were removed permitting an inspection of the welds on the vessel skin. A weld on the skin between the gussets does not appear complete.
Н	EVAP-25	NE	10/07/00	CCTV	1	713	Inspection documented conditions in the evaporator lift jumper/separator pot. The inlet and outlet lines from the separator pot to the Hanford connectors were inspected. No unusual conditions were observed.
Н	EVAP-25	NE	11/01/00	CCTV	1	722	Inspection documented conditions inside the evaporator cell. No significant changes were observed since last inspected on 9/28/00.
Н	EVAP-25	NE	11/06/00	CCTV	1	722	CCTV was used to document conditions inside the evaporator cell. No significant changes were observed since last inspected on 7/11/00.
Н	EVAP-25	NE	11/28/00	CCTV	1	722	CCTV was used to document conditions of evaporator pot exterior and to assist in obtaining a sample of solids on the pot exterior. No abnormalities were observed in the evaporator cell. Inspection also revealed that the condenser vent line was free of damage or blockage.
Н	EVAP-25	NW	10/05/00	CCTV	1	714	CCTV was used to assist with the flushing of the pot exterior.

TANK OR AREA ANCILLARY		ACCESS OPENIN (A OR I)	I <u>G</u> DATE	INSPECTION METHOD			REMARKS
Н	EVAP-25	SE	10/05/00	CCTV	1	714	CCTV was used to assist with the flushing of the pot exterior.
Н	EVAP-25	Steam Lance	12/07/00	CCTV	1	735	CCTV was used to document conditions in the bottom of the vessel cone via the steam lance. The line was clean, and no deposits were observed. However, a light scale was observed on the vessel wall where the steam lance opens into the bottom of the conical region.
Н	EVAP-25	SW	10/05/00	CCTV	1	714	CCTV was used to assist with the flushing of the pot exterior.
н	EVAP-25	(1)	10/07/00	CCTV	1	721	CCTV was used to inspect tube bundles, warming coils, exposed surfaces, and the interior of the evaporator pot. No unusual conditions were observed.
Н	EVAP-25	F-02 (I)	11/22/00	CCTV	1	735	CCTV was used to inspect tube bundles, warming coils, exposed surfaces, and the interior of the evaporator pot. No unusual conditions were observed.
F	IAL High Point		01/05/00	CCTV	1	NA	Inspection verified position of valves IT-V-40, 41, 45 and 46 in the closed position.
F	IAL High Point		01/10/00	CCTV	1	NA	Inspection verified position of valves IT-V-40, 41, 45 and 46 in the closed position.
F	IAL High Point		01/12/00	CCTV	1	649	Inspection documented conditions of the High Point Pit in response to a conductivity probe alarm. A small amount of liquid was observed on the floor flowing toward the sump area.
F	IAL High Point		01/14/00	CCTV	1	649	CCTV was used to monitor for any leakage during the pump out of FPT-03. No leakage was observed; however, crystallized salt observed on the floor indicated a jumper connection has leaked.
F •	IAL High Point		02/17/00	CCTV	1	649	CCTV was used to inspect high point pit. A leak on nozzle connection downstream of valve IT-V-43 was observed.
F	IAL High Point		02/18/00	CCTV	1	NA	Inspection verified the testing of the sump pump. The pump failed to operate.
F	IAL High Point		02/28/00	CCTV	1	649	Inspection revealed the sump was dry. One probe was approximately 1/8 inch lower than the second probe.

AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	I <u>G</u> DATE	<u>INSPE</u> IDENTIF	<u>CTIOI</u> ICATI	<u>N METHOD</u> ON NUMBER	REMARKS
F	IAL High Point		04/12/00	CCTV	1	NA	Inspection verified position of valves IT-V-40, 41, 42, 43, 44, 45, 46 and 47 in the closed position.
F	IAL High Point		06/27/00	CCTV	1	NA	Inspection verified position of valves IT-V-44 and 47 in the closed position.
F	IAL High Point		06/28/00	ССТV	1	NA	Inspection verified the leak check of jumpers Sump(G-100)A and 1246(G-100)A during flushing in preparation for removal. No leaks were observed.
F	IAL High Point		06/29/00	CCTV	1	693	CCTV was used to facilitate the removal of jumpers Sump(G-100)A and 1246(G-100)A. Measurement of nozzles and placement of dummy connector heads were also documented.
F	IAL High Point		07/30/00	CCTV	1	NA	Inspection revealed that the probes were properly positioned in the sump and that dummy connector heads 4 and 6 were leak free.
F	IAL High Point		08/11/00	CCTV	1	705	CCTV was used to facilitate installation of jumper 1, 2, 4, 6(G-100)A
F	IAL High Point		08/12/00	CCTV	1	705	Inspection revealed that S-connector can not be positioned properly.
F	IAL High Point		08/15/00	CCTV	1	705	Documented position of valve IT-V-44 in the closed position.
F	IAL High Point		08/17/00	CCTV	1	705	Inspection documented leak check of nozzles 1, 2, 4 and 6. No leaks were observed.
F	IAL High Point		08/21/00	ССТV	1	705	Inspection documented position of valves IT-V-44 and 47 in the closed position.
F	IAL High Point		12/28/00	CCTV	1	NA	Inspection verified position of valves IT-V-40 and 41 in the open position.
F	IAL High Point	Sump	11/07/00	CCTV	1	NA	Inspection verified conditions inside the pit and sump. No liquid was observed in the sump.
F	IAL High Point	Sump	12/02/00	ССТV	1	NA	Inspection verified conditions in the sump and position of the sump conductivity probes. No liquid was visible in the sump or on the probes. A build-up of solids was visible on the tip of one of the probes.
F	IAL High Point	Sump	12/13/00	CCTV	Ι	738	CCTV was used to facilitate cleaning of the conductivity probe in the sump.

AREA	TANK OR ANCILLARY	ACCESS OPENING (A OR I)	DATE	<u>INSPE</u> IDENTIFI	CTIO CAT	<u>N METHOD</u> ION NUMBER	REMARKS
F	IAL High Point	Sump	12/14/00	CCTV	1	738	Inspection documented sump condition in response to a conductivity probe alarm. The floor appeared dry.
F	IAL High Point	Sump	12/17/00	CCTV	1	NA	CCTV was used to monitor for leaks during the Tank 8 to Tank 40 transfer. No leaks were observed.
F	IAL High Point	Sump	12/19/00	CCTV	1	NA	CCTV was used to monitor for leaks during the Tank 8 to Tank 40 transfer. No leaks were observed.
F	IAL High Point	Sump	12/27/00	CCTV	1	NA	CCTV was used to monitor for leaks during the Tank 8 to Tank 40 transfer. No leaks were observed.
F	IAL High Point	Sump	12/29/00	CCTV	1	NA	CCTV was used to monitor for leaks during the Tank 22 to Tank 6 transfer. No leaks were observed.
F	PP-01		08/10/00	ССТV	1	683	Inspection revealed that the passive hydrogen vent was properly positioned.
F	PP-01		08/17/00	CCTV	1	NA	Inspection verified position of valve WTS-V-101 in the closed position.
F	PP-01		09/07/00	CCTV	1	559	Inspection verified that pump tank overflow line was free of obstructions as per SW 10.6 - PCO 2.9 Section 4.25.
F	PP-01		11/21/00	CCTV	1	559	Inspection verified that the passive hydrogen vent was free of obstructions.
F	PP-02		09/24/00	CCTV	1	559	Inspection documented conditions inside pump pit cell. Inspection revealed water covering pit floor.
Н	PP-05	LDB-02	10/23/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Н	PP-05	LDB-05	10/25/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	PP-06		06/01/00	CCTV	1	643	Inspection revealed that valves WIS-V-175 and 176 were not in the location beneath the valve ports per prints. Valve WIS-V-137 and 145 had damaged stops which allowed the valves to spin freely.
Н	PP-06		06/17/00	CCTV	1	691	CCTV was used to facilitate removal of jumper 8-A(HPP-6)1-A, 2-A. Blank connector heads were installed on nozzles 1-A, 2-A and 8-A.

AREA	TANK OR ANCILLARY	ACCESS OPENIN (A OR I)	I <u>G</u> DATE	INSPE		N METHOD	REMARKS
H	PP-06		07/14/00	ССТУ	1	697	Inspection documented leak check of nozzle 2A. No leaks were observed.
н	PP-06		07/15/00	CCTV	1	697	Inspection documented leak check of nozzles 6 and 19. No leaks were observed.
н	PP-06	LDB-07	10/24/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
н	PP-07		02/29/00	ССТV	1	665	CCTV was used to facilitate removal/replacement of jumpers and the installation of a blind flange at wall nozzle 19. A leak check was performed after all jumpers were installed. No leaks were observed.
Н	PP-07		05/31/00	CCTV	1	692	Inspection documented the removal of blank flange in connector head at nozzle 19 and to verify that automatic valves were functioning. The flange was removed and no unusual conditions were observed.
Н	PP-07		06/27/00	CCTV	1	NA	Inspection verified leak check of connector head at nozzle 19. No leaks were observed.
Η	PP-07		08/05/00	CCTV	1	700	CCTV was used to facilitate removal of jumpers 6(HPP7)16X and 5(HPP7)20; the replacement of jumpers 5(HPP7)2,20 and 6(HPP7)16X; and leak check of nozzles 5, 2 and 20. Manipulation of valves 280 and 281 was also performed.
Н	PP-07		08/22/00	CCTV	1	643B	Inspection documented that valves FV-6953 and 6954 were operating correctly.
Н	PP-07		08/29/00	CCTV	1	700	Inspection documented leak check of wall nozzle 23. No leaks were observed.
Н	PP-07		08/30/00	CCTV	1	700	Inspection documented leak check of nozzles 2, 23Z and 23. No leaks were observed.
Н	PP-5&6	LDB-05	04/26/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.
Η	PP-5&6	LDB-05	05/18/00	CCTV	1	NA	CCTV was used to assist with the installation of a new conductivity probe. The new conductivity probe could not be positioned at the setpoint. The old conductivity probe was reinstalled and verified to be at the setpoint.
н	PP-5&6	LDB-07	04/25/00	CCTV	1	642	The conductivity probe was deployed at the setpoint.

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F	Storm Water Gates		11/10/00	CCTV	1	643B	Inspection documented the flow of water from the storm water diversion gates to determine flow rate.
Н	SWS	4H-03	10/19/00	ссти	1	612B	Inspection documented conditions and establish a baseline for future inspections. No evidence of structural damage or significant infiltration was observed.
Η	SWS	4H-05	10/19/00	CCTV	1	612B	Inspection documented the conditions and establish a baseline for future inspections. No evidence of structural failure was observed. However, sediment approximately 4 - 5 inches deep was observed in both the drain pipe outlet and drain pipe inlet.
Н	SWS	5H-01	10/19/00	CCTV	1	612B	Inspection documented the conditions and establish a baseline for future inspections. No evidence of structural damage or significant infiltration through the lines was observed. The outlet piping has been fitted with a liner and shows no evidence of intrusion.
Н	SWS	6H-10	10/05/00	CCTV	1	715	Inspection documented the conditions inside the storm sewer. Conditions had not changed since last inspected on 07/15/97.
F	WLE	5F	12/13/00	CCTV	1	742	Inspection documented conditions of the transfer line encasement. No changes were observed since last inspected on 10/10/97.