WSRC-TR--91-166

DE92 009641

1990 WASTE TANK INSPECTION PROGRAM

Received by WASH
Mar 1 6 1992

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INTRODUCTION

Aqueous radioactive wastes from Savannah River Site separations processes are contained in large underground carbon steel tanks. Tank conditions are evaluated by inspection (1,2) using periscopes, still photography, and video systems for visual imagery. Inspections made in 1990 are the subject of this report.

Period covered: January 1 through December 31, 1990.

SUMMARY

The 1990 inspection program revealed the condition of the Savannah River Site waste tanks was basically unchanged from that indicated in previous reports.

Two additional crack sites were observed in tank 9. These are cracks that developed before the end of 1960.

A fourth crack site was confirmed in tank 20. This site had been suspected of being a failure since 1984.

Rainwater leaked into the annuli of tanks 9 and 10 changing the configuration and distribution of leaked waste in both annuli.

Rainwater leaked into the annulus of tank 15 reactivating three leaksites. A very small quantity of waste seeped from the primary vessel before the leakage was arrested.

In 1990 a total of 6,156 photographs and 67 visual or video inspections were made.

DISCUSSION

Radioactive Waste Management

Aqueous radioactive wastes are contained in large underground carbon steel tanks of two general structural designs. The single containment tanks are circular and they are encased in concrete. The double containment tanks consist of an enclosed primary tank set inside a 5-foot-high secondary catch pan or, in the latest design, a complete secondary tank. The space between the outside of the primary tank and the inside of the secondary liner is termed the annulus. Inspection ports or risers are located at various positions on top of the primary vessel and above the annulus. Inspection apparatus is lowered through the risers to observe and document tank conditions.

The radioactivity of the waste requires that the inspection equipment used in both annuli and tank interiors be operated remotely. Details of the equipment and procedures for inspection are contained in DPSP 79-1003 (3).

Inspection Program

The policy developed for photographic inspections in 1972 specifies biennial inspection in the annuli of all tanks and annual inspection of those tanks in which waste has breached the primary vessel. Biennial inspections do not include all annulus risers, so the time required to inspect a tank through all risers could be as long as 4 years. However, the wide angle photography method developed in 1974 was used to make annual inspections in risers which are not scheduled for a more detailed inspection.

The 1990 inspection program used four visual imagery techniques. The primary methods for making scheduled inspections were the direct photography techniques, i.e., the direct photograph technique for making a series of photographs providing detailed views of the tank and the wide-angle photography technique for obtaining overview of large areas of and in the tanks with a single photograph. Closed circuit television systems and periscopes were generally used to further investigate questionable conditions found during scheduled inspections and to troubleshoot process problems.

PROGRAM IMPLEMENTATION

Visual Imagery

The wide-angle photographic (WAP) technique was used to inspect and photographically record conditions in all double-wall tanks and in single-wall tanks 18 and 19.

The direct photographic (DP) technique was used to inspect and photographically record conditions in the annuli of double-wall tanks.

Periscopes and closed circuit TV systems (CCTV) were used to inspect and photographically record conditions in single-wall tanks, double-wall tanks and ancillary cells and vessels.

Inspections Results

The 1990 inspection program was successfully completed. The annuli of all double-wall tanks and the interiors of single-wall tanks were inspected at accessible risers by a least one photographic technique.

These inspections revealed that condition of the waste tanks remained virtually unchanged in 1990. No evidence of corrosion was observed and no new leaksites were found.

In tank 9, two crack sites that developed before the end of 1960 were observed. Both cracks were at a vertical weld high on the top knuckle of the tank, 18 to 23 inches below the tank top. The cracks were evidenced by small deposits of dry leaked waste on the exterior of the primary steel vessel. These are obviously old cracks since the tank content has not been as high as the cracks since 1960.

Rainwater leaked into the annuli of tanks 9 and 10 changing the configuration and distribution of the wastes that has been in these annuli for many years. Based on inspections made in 1989 it had been assumed that additional wastes had seeped from the primary vessels into the annuli of both tanks. This assumption was made since there was insufficient evidence to indicate another mechanism for the changing configuration of the waste in these annuli. However, weekly inspections of these annuli were continued in 1990 and a

correlation was established between changes to the wastes and rainfall.

A program has been developed and equipment is being procured to establish continuous monitoring in the annuli of tanks 9 and 10 to determine where rainwater enters these annuli so the leakpaths can be eliminated.

Three leaksites were reactivated in tank 15. Water leaked into the annulus during August when almost seven inches of rain fell. Subsequent humid conditions in the annulus caused three old leaksites to seep small quantities of waste increasing the volume of dry leaked waste deposited on the exterior wall of the primary vessel. The high humidity also changed the surface configurations of other waste deposits on the tank wall. Of the three sites that seeped additional waste, only one continued to seep after the initial observation made on August 29. At that site seepage continued until mid December resulting in about 10cc of dry waste being deposited on the exterior wall of the primary vessel.

In tank 20 another failure in the steel liner was confirmed. This site has been suspected of being a failure since the inspection made on June 27, 1984. Inspection made June 28, 1990 confirmed this site on the east wall twenty-six feet above the tank bottom to be a failure. It is the fourth failure identified in the steel liner of this tank. Waste was removed from the tank in 1982. All four of the leaksites are at elevations well above the liquid ballast in the tank.

In tank 48 several tests were conducted in an effort to locate the leaksites in the five failed cooling coils as part of the study to determine if the failures were corrosion induced. These tests indicated that cooling coils 3 and 16 had failed inside the primary vessel and 1 and 5 had failed outside the primary vessel. Test to determine location of the leaksite in cooling coil 18 was unsuccessful.

Water marks, stained surfaces, and calcite deposits in the annuli of several tanks (see Table 1) indicated that rain and/or groundwater leaked into these annuli. The inleakage occurred around poor riser plug seals, failed seals where process pipes penetrate tank annuli below grade, and at other locations.

REFERENCES

1. ERDA-1537, Final Environmental Impact Statement, Waste Management Operations, SRP, pp II-103 through-115.
2. Kiger, E. O., Evaluation of SRP Waste Storage Tanks, DPSPU 73-11-3, May. 1973.
3. McNatt, F. G., SRP Waste Tank Inspection Manual, DPSP 79-1003, January, 1979.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	01	East	A	04/06/90		5435:01-17		No change
		North	A	03/15/90		5396:01-20		No change
		South	A	03/19/90		5389:01-17		No change
		West	A	03/19/90		5390:01-17		No change
F	02	East	A	03/13/90	5377:01			Normal
		North	A	03/13/90	5377:03			Normal
		North	A	03/19/90		5398:01-17		Normal
		South	A	03/13/90	5377:02			Normal
		West	A	04/06/90	5432:01			Normal
		Center	I	02/08/90	5305:01-02			Inspection revealed the surface of the waste below this riser was liquid. Plans are to install a reel tape at this location.
F	03	East	A	03/13/90	5378:03			Normal
		North	A	03/13/90	5378:04			Normal
		South	A	03/13/90	5378:02			Normal
		South	A	03/19/90		5407:01-17		Normal
		West	A	03/13/90	5378:01			Normal
		1	I	03/01/90	5348:01-04			Inspection was made to determine if the absence of liquid was the cause of reel tape malfunctions. The surface of the waste was not liquid.
F	04	East	A	03/13/90	5379:01			Normal
H	04	North	A	09/17/90			5650:01-27	Normal
F	04	South	A	03/19/90		5391:01-17		Normal
		West	A	03/13/90	5379:02			Normal
		1	I	06/27/90	5551:01-02			Inspection was made to determine if the liquid waste was covered by a salt crust. No salt or solid waste was observed on or above the supernate.
F	05	East	A	03/23/90	5399:01			Normal
		North	A	03/23/90	5399:03			Normal
		South	A	03/23/90	5399:02			Normal
		West	A	03/19/90		5392:01-17		Normal
		01	I	08/15/90	5614:01-02			Inspection was made to determine if salt deposits had formed on the cooling coils. No significant salt buildup was observed.

The numbers listed under WAP, DP, and PSP identify photographs in the WMT files.
WAP = wide angle photography; DP = direct photography; PSP = periscopic photography;
DB = diversion box; EVAP = evaporator; CRC = cesium removal column

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	06	East	A	03/22/90	5397:02			Normal
		North	A	04/06/90	5433:01			Normal
		South	A	03/19/90		5408:01-17		Normal
		West	A	03/19/90		5412:01-17		Normal
		02	I	08/15/90	5615:01-02			Inspection was made to determine if salt deposits had formed on the cooling coils. No significant salt buildup was observed.
F	07	North	A	04/06/90	5434:01			Normal
H	07	South	A	09/26/90		5656:01-17		Normal
F	07	West	A	03/23/90	5400:01			Normal
F	08	East	A	03/23/90	5401:01			Normal
		North	A	03/19/90		5393:01-17		Normal
		South	A	03/23/90	5401:02			Normal
		West	A	03/19/90		5411:01-17		Normal
H	09	South	A	01/04/90		5213:01-05		No change
		South	A	01/12/90		5216:01-07		No change
		South	A	01/17/90		5241:01-04		No change
		South	A	01/25/90		5268:01-06		No change
		South	A	01/31/90		5275:01-07		No change
		South	A	02/07/90	5298:01-04			No change
		South	A	02/13/90		5306:01-05		The surface of the dry leaked waste had changed. The dry waste in the annulus is nominally 8-10 inches deep. A small void in the surface of the dry waste had developed adjacent to the primary vessel wall. It appeared that water had leaked into the annulus, dissolved, and relocated some of the waste.
		South	A	02/20/90		5333:01-04		No change
		South	A	02/28/90		5344:01-07		No change
		South	A	03/06/90		5352:01-07		No change
		South	A	03/14/90		5380:01-07		No change
		South	A	03/14/90	5384:01-29			Inspection was made to check the riser liner and annulus adjacent to the riser for a leak path that allowed rain or groundwater to enter the annulus. The riser liner

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	South	A	03/14/90	5384:01-29			appeared to be in good condition. No leak path was found.
		South	A	03/21/90		5404:01-06		The surface of the dry waste in the annulus had changed slightly since 3-14-90.
		South	A	03/27/90		5414:01-17		The tank and annulus condition appeared unchanged since inspected on 8-5-88 except for the changes in the surface of the dry waste that have been documented by preceeding weekly inspections.
		South	A	03/27/90	5421:01			Stains and marks visible in the annulus were caused by the inleakage of water.
		South	A	04/02/90		5424:01-04		No change
		South	A	04/03/90			5428:01-10	Inspection revealed water had leaked into the riser. Water marks indicated that the seal between the riser plug and riser liner had failed.
		South	A	04/09/90		5437:01-04		No change
		South	A	04/16/90		5469:01-04		No change
		South	A	04/23/90		5478:01-06		No change
		South	A	04/30/90		5483:01-05		No change
		South	A	05/07/90		5488:01-05		No change
		South	A	05/14/90		5500:01-06		Two additional nodules of dry waste had formed atop the dry waste layer in the annulus. These nodules are less than an inch in diameter.
		South	A	05/21/90		5508:01-04		No change
		South	A	05/29/90		5519:01-05		The surface of the dry waste in the annulus had changed slightly since 5-21-90.

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SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	South	A	06/04/90		5523:01-04		The surface of the dry waste in the annulus changed slightly.
		South	A	06/13/90		5530:01-06		The surface of the dry waste in the annulus changed slightly.
		South	A	06/18/90		5540:01-04		No change.
		South	A	06/25/90		5547:01-05		The surface of the dry waste in the annulus changed slightly.
		South	A	07/03/90		5554:01-07		The surface of the dry waste in the annulus changed slightly.
		South	A	07/09/90		5558:01-04		The surface of the dry waste in the annulus changed slightly.
		South	A	07/16/90		5573:01-08		The surface of the dry waste in the annulus changed slightly.
		South	A	07/23/90		5579:01-04		The surface of the dry waste in the annulus changed slightly.
		South	A	07/30/90		5591:01-05		The surface of the dry waste in the annulus changed slightly.
		South	A	08/06/90		5605:01-04		The surface of the dry waste in the annulus changed slightly.
		South	A	08/13/90		5611:01-05		The surface of the dry waste in the annulus changed slightly.
		South	A	08/20/90		5618:01-04		The surface of the dry waste in the annulus changed slightly.
		South	A	08/27/90		5626:01-07		Water was observed in the annulus after heavy rainfall. 6.86 inches fell during the preceding week.
		South	A	09/04/90		5634:01-04		Waste on the annulus floor was still wet.
		South	A	09/10/90		5643:01-04		Waste on the annulus floor was still wet.

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SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	South	A	09/18/90		5647:01-06		Waste on the annulus floor was still wet.
		South	A	09/24/90		5653:01-06		Waste on the annulus floor was still wet.
		South	A	10/03/90		5658:01-04		Waste on the annulus floor was still wet.
		South	A	10/08/90		5664:01-04		Waste on the annulus floor was still wet.
		South	A	10/16/90		5669:01-04		Additional water was observed in the annulus after heavy rainfalls totaling 11.53 inches fell during the preceding week.
		South	A	10/23/90		5675:01-05		Waste on the annulus floor was still wet.
		South	A	10/29/90		5684:01-04		Waste on the annulus floor was still wet.
		South	A	11/05/90		5689:01-04		Waste on the annulus floor was still wet.
		South	A	11/12/90		5701:01-05		Waste on the annulus floor was still wet.
		South	A	11/19/90		5705:01-04		Waste on the annulus floor was still wet.
		South	A	11/26/90		5710:01-04		Waste on the annulus floor was still wet.
		South	A	12/03/90		5716:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		South	A	12/10/90		5721:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		South	A	12/17/90		5726:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.

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SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	South	A	12/26/90		5731:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		South	A	12/31/90		5737:01-04		The annulus appeared to be dry.
		West	A	01/04/90		5215:01-04		No change
		West	A	01/12/90		5217:01-05		No change
		West	A	01/17/90		5240:01-04		No change
		West	A	01/25/90		5269:01-06		The surface of the dry waste in the annulus changed slightly.
		West	A	01/31/90		5276:01-04		No change
		West	A	02/07/90		5299:01-05		No change
		West	A	02/13/90		5307:01-05		No change
		West	A	02/20/90		5332:01-04		No change
		West	A	02/28/90		5345:01-07		No change
		West	A	03/06/90		5353:01-04		No change
		West	A	03/14/90		5381:01-05		No change
		West	A	03/14/90	5385:01-29			Inspection was made to check the riser liner and annulus adjacent to the riser for a leak path that allowed rain or groundwater to enter the annulus. The riser liner appeared to be in good condition. No leak path was found.
		West	A	03/21/90		5404:01-04		No change
		West	A	03/27/90		5415:01-17		No change
		West	A	04/02/90	5423:01			The tank and annulus condition appeared unchanged since inspected on 3-24-88 except for the changes in the surface of dry waste that have been documented by preceeding weekly inspections.
		West	A	04/02/90		5425:01-7		No change
		West	A	04/03/90		5429:01-07		Inspection revealed water had leaked into the riser. Water marks indicated that the seal between the riser plug

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Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	West	A	04/03/90			5429:01-07	and riser liner had failed.
		West	A	04/04/90			5430:01-08	Two leaksites were observed high on the tank wall. The cracks were estimated to be 271 and 276 inches above the tank bottom. Both cracks were on a vertical plate weld in the top knuckle plate course. The leaksites were evident because of small deposits of leaked waste on the tank exterior. These obviously are old leaksites since the tank content has not been as high as the cracks since 1960.
		West	A	04/09/90			5438:01-04	No change
		West	A	04/16/90			5470:04-04	No change
		West	A	04/23/90			5479:01-04	No change
		West	A	04/30/90			5484:01-04	No change
		West	A	05/07/90			5489:01	No change
		West	A	05/14/90			5501:01-06	The surface of the dry waste in the annulus changed slightly.
		West	A	05/21/90			5509:01-04	No change
		West	A	05/29/90			5518:01-04	No change
		West	A	06/04/90			5524:01-04	No change
		West	A	06/13/90			5529:01-05	No change
		West	A	06/18/90			5539:01-04	No change
		West	A	06/25/90			5546:01-05	No change
		West	A	07/03/90			5553:01-04	No change
		West	A	07/09/90			5557:01-04	No change
		West	A	07/16/90			5572:01-08	No change
		West	A	07/23/90			5578:01-04	The surface of the dry waste in the annulus changed slightly.
		West	A	07/30/90			5590:01-05	The surface of the dry waste in the annulus changed slightly.
		West	A	08/06/90			5604:01-04	No change

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	West	A	08/18/90		5610:01-04		No change
		West	A	08/20/90		5617:01-05		No change
		West	A	08/27/90		5625:01-06		Water was observed in the annulus after heavy rainfall. 6.86 inches fell during the preceding week.
		West	A	09/04/90		5633:01-04		Waste on the annulus floor was still wet.
		West	A	09/10/90		5642:01-04		Waste on the annulus floor was still wet.
		West	A	09/18/90		5646:01-05		Waste on the annulus floor was still wet. The conductivity probe was not properly positioned.
		West	A	09/24/90		5652:01-06		Waste on the annulus floor was still wet. The conductivity probe was not properly positioned. on the annulus floor. The thermocouple that is to be magnetically mounted on the tank wall was not contacting the wall.
		West	A	10/03/90		5657:01-05		Waste on the annulus floor was still wet. The conductivity probe was not properly positioned on the annulus floor. The thermocouple was properly positioned on the tank wall.
		West	A	10/08/90		5663:01-04		Waste on the annulus floor was still wet. The conductivity probe was not properly positioned on the annulus floor.
		West	A	10/16/90		5668:01-05		Additional water was observed in the annulus after heavy rainfalls totaling 11.53 inches fell during the preceding week. The conductivity probe was properly positioned in the annulus.

TABLE 1
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Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	09	West	A	10/23/90		5674:01-07		Waste on the annulus floor was still wet.
		West	A	10/29/90		5683:01-04		Waste on the annulus floor was still wet.
		West	A	11/05/90		5688:01-06		Waste on the annulus floor was still wet.
		West	A	11/12/90		5700:01-05		Waste on the annulus floor was still wet.
		West	A	11/19/90		5704:01-04		Waste on the annulus floor was still wet.
		West	A	11/26/90		5709:01-04		Waste on the annulus floor was still wet.
		West	A	12/03/90		5715:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		West	A	12/10/90		5720:02-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		West	A	12/17/90		5725:01-04		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		West	A	12/26/90		5730:01-05		No rainwater was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		West	A	12/31/90		5736:01-05		The annulus appeared to be dry.
		05	I	03/15/90	5386:01-02			Inspection was made to determine if the absence of liquid was the cause of reel tape malfunctions. The surface of the waste was not liquid.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	10	East	A	04/02/90	5422:01			Stains and marks visible in the annulus were caused by the inleakage of water.
North	A	01/04/90			5212:01-04			No change
North	A	01/12/90			5218:01-04			No change
North	A	01/17/90			5243:01-04			No change
North	A	01/25/90			5270:01-05			No change
North	A	01/31/90			5277:01-04			No change
North	A	02/07/90			5300:01-04			No change
North	A	02/13/90			5309:01-04			No change
North	A	02/20/90			5335:01-05			No change
North	A	02/28/90			5346:01-04			No change
North	A	03/06/90			5354:01-06			No change
North	A	03/14/90			5382:01-06			No change
North	A	03/21/90			5406:01-04			No change
North	A	03/27/90			5418:01-17			The tank and annulus condition appeared unchanged since inspected on 4-4-89 except for the changes in the surface of the dry waste that have been documented by pre- ceding weekly inspec- tions.
North	A	04/02/90			5426:01-04			No change
North	A	04/09/90			5439:01-04			No change
North	A	04/16/90			5471:01-04			No change
North	A	04/23/90			5480:01-04			No change
North	A	04/30/90			5485:01-04			No change
North	A	05/07/90			5490:01-04			No change
North	A	05/14/90			5502:01-04			No change
North	A	05/21/90			5510:01-05			No change
North	A	05/29/90			5520:01-04			No change
North	A	06/04/90			5525:01-04			No change
North	A	06/13/90			5532:01-04			No change
North	A	06/18/90			5542:01-04			No change
North	A	06/25/90			5549:01-04			No change
North	A	07/03/90			5556:01-04			No change
North	A	07/09/90			5560:01-04			No change
North	A	07/16/90			5575:01-05			No change
North	A	07/23/90			5581:01-04			No change
North	A	07/30/90			5593:01-04			No change

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	10	North	A	08/06/90		5607:01-04		No change
		North	A	08/13/90		5613:01-04		No change
		North	A	08/20/90		5620:01-04		No change
		North	A	08/27/90		5628:01-04		Water was observed in the annulus after heavy rainfall. 6.86 inches fell during the preceding week.
		North	A	09/04/90		5636:01-04		Waste on the annulus floor was still wet.
		North	A	09/10/90		5645:01-04		Waste on the annulus floor was still wet.
		North	A	09/18/90		5649:01-04		The water on the annulus floor had evaporated.
		North	A	09/24/90		5655:01-04		A few of the nodules of dry waste that formed as the water evaporated had increased slightly in size.
		North	A	10/03/90		5660:01-04		No change
		North	A	10/08/90		5666:01-04		No change
		North	A	10/16/90		5671:01-04		No rainfall was observed in the annulus beneath this riser. However, the leaked waste on the annulus floor appeared to be damp.
		North	A	10/23/90		5677:01-04		An area of the annulus pan wall above the leaked waste on the annulus floor was damp. This indicates that rainwater leaked into the annulus and wetted the waste beneath this riser.
		North	A	10/29/90		5686:01-04		The annulus floor appeared dry.
		North	A	11/05/90		5691:01-04		The surface of the leaked waste had changed. It appeared the rainwater that had leaked into the annulus during the week of 10-8-90 dissolved and relocated some of the waste.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	10	North	A	11/12/90		5703:01-04		No change
		North	A	11/19/90		5707:01-04		No change
		North	A	11/26/90		5712:01-04		No change
		North	A	12/03/90		5718:01-04		No change
		North	A	12/10/90		5723:01-04		No change
		North	A	12/17/90		5728:01-04		No change
		North	A	12/26/90		5733:01-03		No change
		North	A	12/31/90		5739:01-04		No change
		West	A	01/04/90		5214:01-04		No change
		West	A	01/12/90		5219:01-07		No change
		West	A	01/17/90		5242:01-04		No change
		West	A	01/25/90		5271:01-06		No change
		West	A	01/31/90		5278:01-05		No change
		West	A	02/07/90		5301:01-04		No change
		West	A	02/13/90		5308:01-05		No change
		West	A	02/20/90		5334:01-04		No change
		West	A	02/28/90		5347:01-04		No change
		West	A	03/06/90		5355:01-05		No change
		West	A	03/14/90		5383:01-06		No change
		West	A	03/21/90		5405:01-04		No change
		West	A	03/27/90		5416:01-17		No change
		West	A	04/02/90		5427:01-04		No change
		West	A	04/09/90		5440:01-04		No change
		West	A	04/16/90		5472:01-04		No change
		West	A	04/23/90		5481:01-04		No change
		West	A	04/30/90		5486:01-04		No change
		West	A	05/07/90		5491:01-05		No change
		West	A	05/14/90		5503:01-04		No change
		West	A	05/21/90		5511:01-05		No change
		West	A	05/29/90		5521:01-04		No change
		West	A	06/04/90		5526:01-04		No change
		West	A	06/13/90		5531:01-05		No change
		West	A	06/18/90		5541:01-04		No change
		West	A	06/25/90		5548:01-05		No change
		West	A	07/03/90		5555:01-05		No change
		West	A	07/09/90		5559:01-04		No change
		West	A	07/16/90		5574:01-06		No change
		West	A	07/23/90		5580:01-06		Water was observed in the annulus after a heavy rainfall, 1.5 inches fell on 7-22-90.
		West	A	07/30/90		5592:01-04		The quantity of water in the annulus was slightly more than observed on 7-23-90. Two inches of rainfall occurred on 7-25-90.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	10	West	A	08/06/90		5605:01-04		Approximately half of the water that was observed in the annulus on 7-30 had evaporated.
		West	A	08/13/90		5612:01-04		No change was observed in the tank condition. The annulus was essentially dry.
		West	A	08/20/90		5619:01-04		No change
		West	A	08/27/90		5627:01-04		Water was observed in the annulus after heavy rainfall. 6.86 inches fell during the preceding week.
		West	A	09/04/90		5635:01-04		Waste on the annulus floor was still wet.
		West	A	09/10/90		5644:01-04		Waste on the annulus floor was still wet.
		West	A	09/18/90		5648:01-04		Waste on the annulus floor was still wet.
		West	A	09/24/90		5654:01-04		The water on the annulus floor had evaporated.
		West	A	10/03/90		5659:01-04		No change.
		West	A	10/08/90		5665:01-04		No change.
		West	A	10/16/90		5670:01-04		Additional water was observed in the annulus after heavy rainfalls totaling 11.53 inches fell during the preceding week.
		West	A	10/23/90		5676:01-05		Waste on the annulus floor was still wet.
		West	A	10/29/90		5685:01-04		Waste on the annulus floor was still wet.
		West	A	11/05/90		5690:01-04		The annulus floor was still damp from inleakage of rainwater the week of 10-8-90.
		West	A	11/12/90		5702:01-04		The waste on the annulus floor appeared to be dry.
		West	A	11/19/90		5706:01-04		No change
		West	A	11/26/90		5711:01-04		No change
		West	A	12/03/90		5717:01-04		No change

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	10	West	A	12/10/90		5722:01-04		No change
		West	A	12/17/90		5727:01-04		No change
		West	A	12/26/90		5732:01-04		No change
		West	A	12/31/90		5738:01-04		No change
		01	I	03/15/90	5387:01-03			No liquid was observed. A crust of salt crystals covered the supernate.
H	11	East	A	03/27/90		5420:01-17		No change
		North	A	03/27/90		5419:01-17		No change
		South	A	07/30/90	5594:04			No change
		West	A	03/27/90	5409:01			No change
		06	I	07/30/90	5595:01			Inspection was made to determine if salt deposits had accumulated on the cooling coils. Very little salt was desposited on the coils.
H	12	East	A	03/27/90	5410:02			No change
		North	A	03/27/90		5417:01-17		No change
		South	A	03/27/90	5410:01			No change
		West	A	03/27/90		5413:01-17		No change
H	13	010	A	04/12/90		5465:01-17		No change
		032	A	04/12/90		5466:01-17		No change
		055	A	04/12/90		5467:01-17		No change
		071	A	04/12/90		5468:01-17		No change
		107	A	04/12/90	5460:05			No change
		151	A	04/12/90		5463:01-17		No change
		175	A	04/12/90	5460:02			No change
		207	A	04/12/90	5460:04			No change
		228	A	04/12/90		5464:01-17		No change
		East	A	04/12/90	5460:03			No change
		North	A	04/12/90		5461:01-17		Stains and marks visible in the annulus were caused by the inleakage of water.
		South	A	04/12/90		5462:01-17		No change
		West	A	04/12/90	5460:01			No change
		04A	I	06/12/90	5528:01			Inspection was made to determine if salt deposits had formed on the cooling coils. No significant salt buildup was observed.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	14	South		05/04/90				CCTV was used to inspect the annulus and verified that adequate clearance existed between the wall and the duct for installing the new replacement jet.
			A	04/10/90	5441:08			No change
			A	07/11/90		5570:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
			A	04/10/90	5441:09			No change
			A	04/10/90		5442:01-17		No change
			A	07/11/90		5561:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
			A	04/10/90		5436:01-17		No change
			A	07/11/90		5562:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
			A	04/10/90		5443:01-17		No change
			A	07/11/90		5563:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
			A	04/10/90		5444:01-17		No change
			A	07/11/90		5564:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	14	125	A	07/11/90		5564:01-05		change had occurred.
		151	A	04/10/90	5441:02			No change
		151	A	07/11/90		5565:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
		170	A	04/10/90	5441:03			Stains and marks visible in the annulus were caused by the inleakage of water.
		170	A	07/11/90		5566:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
		207	A	04/10/90	5441:05			No change
		207	A	07/11/90		5567:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
		235	A	04/10/90	5441:06			No change
		235	A	07/11/90		5568:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.
		259	A	04/10/90	5441:07			No change
		259	A	07/11/90		5569:01-05		Inspection was made to determine if any change in annulus conditions had occurred during the 6 weeks the ventilation fan was out of service. No change had occurred.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	14	East	A	04/10/90	5441:04			Stains and marks visible in the annulus were caused by the inleakage of water.
		North	A	04/10/90	5441:01			No change
		3'6"	I	03/15/90	5388:01-02			Inspection was made to determine if the absence of liquid was the cause of reel tape malfunctions. Except for a small pool of liquid below the 3'6" riser, the waste surface was not liquid.
H	15	010	A	04/11/90	5453:08			No change
		010	A	09/04/90		5637:01-15		The annulus floor was wet. Rainwater leaked into the annulus during heavy rainfalls that occurred the week of 8-21-90.
		032	A	04/11/90		5456:01-17		No change
		055	A	04/11/90		5455:01-17		No change
		071	A	04/11/90		5457:01-17		No change
		107	A	04/11/90	5453:04			Stains and marks visible in the annulus were caused by the inleakage of water.
		107	A	09/04/90		5640:01-14		Changes occurred at two leaksites that are visible from both riser 107 and 117. Apparently humid conditions prevailed in the annulus after sufficient rainfall had leaked into the annulus to cover the floor. There was no evidence that additional waste leaked into the annulus. However, changes were observed in the surface contours of the leaked dry waste deposits at these two leaksites.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	15	117	A	04/11/90	5453:03			No change
		117	A	09/04/90		5638:01-15		Changes occurred at two leaksites that are visible from both riser 107 and 117. Apparently humid conditions prevail- ed in the annulus after sufficient rainfall had leaked into the annulus to cover the floor. There was no evidence that additional waste leaked into the annulus. However, changes were observed in the surface contours of the leaked dry waste deposits at these two leaksites.
		137	A	04/11/90	5453:02			No change
		137	A	08/29/90		5631:01-12		Changes occurred at the three leaksites beneath riser 137. Apparently humid conditions prevail- ed in the annulus after sufficient rainwater leaked into the annulus to cover the floor. 6.86 inches of rain fell dur- ing the preceding week. Two of the leaksites appear to have become temporarily active and a small quantity of addi- tional waste seeped into the annulus. The dry waste deposit had fallen away from the third leak- site but there was no evidence that additional waste had seeped from this site.
		137	A	10/03/90		5661:01-17		A small quantity of waste had seeped from the tank into the annulus. A very small nodule, less than an inch in diameter, of dry waste had formed at

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	15	137	A	10/03/90		5661:01-17		the leaksite where the dry waste deposits had fallen away in August 1990.
		137	A	10/08/90		5667:01-11		No change
		137	A	10/16/90		5672:01-10		The waste deposit observed on 10-3-90 had fallen from the tank wall. Additional seepage had occurred forming three small nodules of dry waste. The total volume of dry waste deposited at the site was estimated to be about 1 cubic centimeter.
		137	A	10/29/90		5687:01-12		Some additional waste seeped from the tank since inspected on 10-16-90. The volume of dry waste at the leaksite increased from about 1cc to about 2cc.
		137	A	11/05/90		5692:01-12		Some additional waste seeped from the tank since inspected on 10-29-90. The volume of dry waste at the leaksite increased from about 2cc to about 3cc.
		137	A	11/19/90		5708:01-12		Some additional waste seeped from the tank since inspected on 11-5-90. The volume of dry waste at the leaksite increased from about 3cc to about 4cc.
		137	A	11/26/90		5713:01-12		There was a slight increase in the volume of leaked waste at the leaksite.
		137	A	12/03/90		5719:01-12		Some additional waste seeped from the tank since inspected on 11-26-90. The increase was extremely small.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	15	137	A	12/10/90		5724:01-06		Some additional waste seeped from the tank since inspected on 12-3-90. The increase was extremely small.
		137	A	12/17/90		5729:01-09		No change
		137	A	12/26/90		5734:01-10		No change
		171	A	04/11/90	5453:05			No change
		171	A	09/04/90		5639:01-15		The annulus floor was wet. Rainwater leaked into the annulus during heavy rainfalls that occurred the week of 8-21-90.
		182	A	04/11/90	5453:06			No change
		207	A	04/11/90		5458:01-17		Stains and marks visible in the annulus were caused by the inleakage of water.
		223	A	04/11/90		5459:01-17		No change
	East		A	04/11/90		5454:01-17		No change
	North		A	04/11/90		5451:01-17		No change
	North		A	04/11/90	5453:01			No change
	North		A	08/27/90		5629:01-09		Changes occurred at the three leaksites beneath riser 137. These sites are visible from the north riser. Apparently humid conditions prevailed in the annulus after sufficient rainwater leaked into the annulus to cover the floor. 6.86 inches of rain fell during the preceding week. Two of the leaksites appear to have become temporarily active and a small quantity of additional waste seeped into the annulus. The dry waste deposit had fallen away from the third leak-site but there was no evidence that additional waste had seeped from this site.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	15	South	A	04/11/90	5453:07			No change
		South	A	08/27/90		5630:01-08		Photographs were taken to determine amount of rainwater in annulus. The depth of the rainwater on the annulus floor was estimated to be approximately 1 inch.
		West	A	04/11/90		5452:01-17		No change
		001	I	11/14/90				CCTV used to document the configuration of the waste surface in the tank.
		001	I	11/15/90				CCTV used to document the configuration of the waste surface in the tank.
		006	I	05/31/90			5527:01-72	Photographs were taken to document the current conditions in the tank.
H	16	035	A	04/10/90		5445:01-17		No change
		118	A	04/10/90		5446:01-18		No change
		207	A	04/10/90		5447:01-17		No change
		262	A	04/10/90		5448:01-17		Inspection was made to document the current condition of the annulus beneath riser 262. This is the first inspection at 262 since 1976. Equipment installed at this riser from 1977 through 1989 made the riser inaccessible for inspection purposes. No unusual condition was observed.
		East	A	04/10/90		5449:01-17		No change
		West	A	04/10/90		5450:01-17		No change
F	17	NW	I	06/15/90			5544:01-48	Normal
		West	I	05/17/90			5505:01-48	Water marks and damp areas were observed where water had leaked into the tank at the Southeast riser

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	18	C	I	11/30/90	5714:01-10			Normal
F	19	East	I	04/25/90			5482:01-73	Normal
		NE	I	03/20/90	5395:01-04			Inspection was made to determine if solid waste protruding above the liquid level was the cause of inaccurate reel tape measurements. No solid waste was observed above the liquid level.
		SW	I	03/20/90	5394:01			Inspection was made to determine if solid waste protruding above the liquid level was the cause of inaccurate reel tape measurements. No solid waste was observed above the liquid level.
		SW	I	05/08/90			5494:01-48	Normal
F	20	West	I	04/30/90			5487:01-48	Normal
		East	I	06/28/90			5552:01-53	Calcite deposits on the inside of the steel liner indicated that another failure exist in the tank liner. This failure is 26 ft. above the tank bottom in the east wall. This makes a total of four failures that have been identified in the tank liner.
		NE	I	06/22/90			5550:01-50	No change was observed in the tank condition except the leaksite identified in the inspection made at east riser on 6-28.
H	21	NE	I	07/19/90			5582:01-49	Normal
		South	I	08/13/90			5616:01-06	Inspection was made to confirm which of the process lines that open into this riser had been plugged. A lead plug was installed in the process line on the west side of the riser. All other lines were open.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	22	NW	I	01/17/90				Inspection using CCTV revealed leakage into the spray chamber when the transfer pump was operated.
		NW	I	08/31/90			5641:01-50	A large area beneath the NW riser was wet and stained. Investigation showed water trickling into the tank from the exhaust outlet in the NW riser.
		NW	I	09/19/90			5651:01	Inspection revealed no leakage into the tank at the ventilation exhaust outlet during hydrostatic test of the reheater.
		NW	I	09/24/90			VISUAL	Visual inspection revealed no leakage into the tank at the ventilation exhaust outlet during hydrostatic test of the reheater.
H	23	SW	I	07/24/90			5596:01-24	Normal
H	24	NW	I	07/11/90			5571:01-49	Normal
F	25	A-01	A	01/15/90	5247:02			Normal
		A-02	A	01/15/90	5247:06			Normal
		A-03	A	01/18/90	5264:03			Normal
		A-04	A	01/18/90	5264:05			Normal
		P-01	A	01/15/90	5247:01			Normal
		P-02	A	01/15/90	5247:03			Normal
		P-03	A	01/15/90	5247:04			Normal
		P-04	A	01/15/90	5247:05			Normal
		P-05	A	01/15/90	5247:08			Normal
		P-05	A	01/22/90		5257:01-25		Normal
		P-06	A	01/15/90	5247:09			Normal
		P-06	A	01/22/90		5258:01-25		Normal
		P-07	A	01/15/90	5247:07			Normal
		P-08	A	01/18/90	5264:01			Normal
		P-09	A	01/18/90	5264:02			Normal
		P-10	A	01/15/90		5244:01-25		Normal
		P-11	A	01/18/90	5264:04			Normal
		P-12	A	01/18/90	5264:06			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	25	P-13	A	01/15/90		5245:01-25		White particles observed on the annulus floor and atop the purge duct appeared to be gilsulate insulation.
		P-14	A	01/15/90		5246:01-25		White particles observed on the annulus floor and atop the purge duct appeared to be gilsulate insulation.
F	26	A-01	A	01/18/90	5265:02			Normal
		A-02	A	01/18/90	5265:06			Normal
		A-03	A	01/18/90	5265:10			Normal
		A-04	A	01/18/90	5265:13			Normal
		P-01	A	01/18/90	5265:01			Normal
		P-02	A	01/18/90	5265:03			Normal
		P-03	A	01/18/90	5265:04			Normal
		P-04	A	01/18/90	5265:05			Normal
		P-05	A	01/15/90		5248:01-25		Normal
		P-06	A	01/15/90		5249:01-25		Normal
		P-07	A	01/18/90	5265:07			Normal
		P-08	A	01/18/90	5265:08			Normal
		P-09	A	01/18/90	5265:09			Normal
		P-10	A	01/18/90	5265:11			Normal
		P-11	A	01/18/90	5265:12			Normal
		P-12	A	01/15/90		5250:01-25		Normal
		P-13	A	01/15/90		5252:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-14	A	01/15/90		5251:01-25		Normal
F	27	A-01	A	01/22/90	5267:13			Normal
		A-02	A	01/22/90	5267:05			Normal
		A-03	A	01/22/90	5267:09			Normal
		A-04	A	01/22/90	5267:12			Normal
		P-01	A	01/22/90	5267:01			Normal
		P-02	A	01/22/90	5267:02			Normal
		P-03	A	01/22/90	5267:03			Normal
		P-04	A	01/22/90	5267:04			Normal
		P-05	A	01/18/90		5253:01-25		Normal
		P-06	A	01/18/90		5254:01-25		Normal
		P-07	A	01/22/90	5267:06			Normal
		P-08	A	01/22/90	5267:07			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	27	P-09	A	01/22/90	5267:08			Normal
		P-10	A	01/22/90	5267:10			Normal
		P-11	A	01/22/90	5267:11			Normal
		P-12	A	01/18/90		5259:01-25		Normal
		P-13	A	01/18/90		5255:01-25		Normal
		P-14	A	01/18/90		5260:01-25		Normal
F	28	A-01	A	01/22/90	5266:12			Normal
		A-02	A	01/22/90	5266:05			Normal
		A-03	A	01/22/90	5266:08			Normal
		A-04	A	01/22/90	5266:10			Normal
		P-01	A	01/22/90	5266:01			Condition of the tank and annulus appeared normal. The calcite deposits in the annulus had not changed since inspected in 1983.
		P-02	A	01/26/90		5272:01-25		Normal
		P-03	A	01/22/90	5266:02			Normal
		P-04	A	01/22/90	5266:03			Normal
		P-05	A	01/18/90		5262:01-25		Normal
		P-06	A	01/22/90	5266:04			Normal
		P-07	A	01/22/90	5266:06			Normal
		P-08	A	01/22/90	5266:07			Normal
		P-09	A	01/26/90		5273:01-25		Normal
		P-10	A	01/18/90		5261:01-25		Normal
		P-11	A	01/22/90	5266:09			Normal
		P-12	A	01/22/90	5266:11			Normal
		P-13	A	01/18/90		5263:01-25		Normal
		P-14	A	01/26/90		5274:01-25		Normal
H	29		A	11/29/90				CCTV inspection of annulus dampers revealed that the damper to the outer annulus was stuck in the closed position.
		A-01	A	05/08/90	5492:01			Normal
		A-02	A	05/08/90	5492:04			Normal
		A-03	A	05/08/90	5492:07			Normal
		A-04	A	05/08/90	5492:10			Normal
		P-01	A	08/07/90	5608:01			Normal
		P-02	A	05/08/90	5492:09			Normal
		P-03	A	04/17/90		5473:01-25		Normal
		P-04	A	05/08/90	5492:11			Normal
		P-05	A	05/08/90	5492:12			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	29	P-06	A	04/17/90		5474:01-25		Normal
		P-07	A	05/08/90	5492:02			Normal
		P-08	A	05/08/90	5492:03			Normal
		P-09	A	04/17/90		5475:01-25		Normal
		P-10	A	04/17/90		5476:01-25		Normal
		P-11	A	05/08/90	5492:05			Normal
		P-12	A	05/08/90	5492:06			Normal
		P-13	A	04/17/90		5477:01-25		Normal
		P-14	A	05/08/90	5492:08			Normal
	30	A-01	A	05/08/90	5493:01			Normal
		A-02	A	05/08/90	5493:04			Normal
		A-03	A	05/08/90	5493:07			Normal
		A-04	A	05/08/90	5493:11			Normal
		P-01	A	05/08/90	5493:09			Normal
		P-02	A	05/08/90	5493:10			Normal
		P-03	A	05/08/90		5495:01-25		Normal
		P-04	A	05/08/90	5493:12			Normal
		P-05	A	05/08/90	5493:13			Normal
		P-06	A	05/08/90		5496:01-25		Normal
		P-07	A	05/08/90	5493:02			Normal
		P-08	A	05/08/90	5493:03			Normal
		P-09	A	05/08/90		5497:01-25		Normal
		P-10	A	05/08/90		5498:01-25		Normal
		P-11	A	05/08/90	5493:05			Normal
		P-12	A	05/08/90	5493:06			Normal
		P-13	A	05/08/90		5499:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-14	A	05/08/90	5493:08			Normal
H	31	A-01	A	05/18/90	5506:01			Normal
		A-03	A	05/18/90	5506:06			Normal
		A-04	A	05/23/90	5522:01			Normal
		P-01	A	06/15/90	5537:03			Normal
		P-02	A	06/15/90	5537:02			Normal
		P-03	A	05/24/90		5513:01-25		Normal
		P-04	A	05/23/90	5522:02			Normal
		P-05	A	06/15/90	5537:01			Normal
		P-06	A	06/25/90		5545:01-25		Normal
		P-07	A	05/18/90	5506:02			Normal
		P-08	A	05/18/90	5506:03			Normal
		P-09	A	06/15/90		5533:01-05		Normal
		P-10	A	05/24/90		5514:01-25		Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	31	P-11	A	05/18/90	5506:04			Normal
		P-12	A	05/18/90	5506:05			Normal
		P-12	A	06/15/90	5537:04			Normal
		P-13	A	06/15/90		5534:01-25		Normal
		P-14	A	05/18/90	5506:07			Normal
	32	CRC		06/06/90				CCTV used to inspect the overall condition. No unusual condition was observed.
		CRC		10/30/90				CCTV used to inspect the screen and welds. No unusual condition was observed.
H	32		A	11/29/90				CCTV inspection of annulus dampers verified that both dampers were operational.
		A-01	A	05/18/90	5507:01			Normal
		A-02	A	05/18/90	5507:04			Normal
		A-03	A	05/18/90	5507:07			Normal
		A-04	A	05/18/90	5507:12			Normal
		P-02	A	05/18/90	5507:10			Normal
								Normal
		P-02	A	05/18/90	5507:11			Normal
								Normal
		P-03	A	05/24/90		5515:01-25		Normal
		P-04	A	05/18/90	5507:13			Normal
		P-05	A	06/15/90	5538:01			Normal
		P-06	A	05/24/90		5516:01-24		Normal
		P-07	A	05/18/90	5507:02			Normal
		P-08	A	05/18/90	5507:03			Normal
		P-09	A	06/15/90		5535:01-25		Normal
		P-10	A	05/24/90		5517:01-25		Calcite deposits on the duct and annulus floor were caused by the in-leakage of water.
		P-10	A	06/15/90		5543:01-12		Inspection was made to determine the route of water leaking into the annulus. Calcite deposits indicated that water had entered at bolt holes in the secondary liner for the annulus cover plate support brackets.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	32	P-11	A	05/18/90	5507:05			Normal
		P-12	A	05/18/90	5507:06			Normal
		P-13	A	06/15/90		5536:01-25		Normal
		P-14	A	05/18/90	5507:08			Normal
		P-15	A	05/18/90	5507:09			Normal
F	33	A-01	A	03/08/90	5367:01			Normal
		A-02	A	03/08/90	5367:03			Normal
		A-03	A	03/12/90	5375:05			Normal
		A-04	A	03/08/90	5367:08			Normal
		P-01	A	03/08/90	5367:06			Normal
		P-02	A	03/08/90	5367:07			Normal
		P-03	A	03/07/90		5359:01-25		Normal
		P-04	A	03/08/90	5367:09			Normal
		P-05	A	03/08/90	5367:10			Normal
		P-06	A	03/07/90		5360:01-25		Normal
		P-07	A	03/08/90	5367:02			Normal
		P-08	A	03/12/90	5375:01			Normal
		P-09	A	03/07/90		5361:01-25		Normal
		P-10	A	03/07/90		5362:01-25		Normal
		P-11	A	03/12/90	5375:02			Normal
		P-12	A	03/12/90	5375:03			Normal
F	34	P-13	A	03/07/90		5373:01-25		Normal
		P-14	A	03/12/90	5375:04			Normal
		P-15	A	03/08/90	5367:04			Normal
		P-16	A	03/08/90	5367:05			Normal
		A-01	A	03/08/90	5368:01			Stains and marks on the tank wall were caused by the leakage of water.
		A-02	A	03/08/90	5368:04			Normal
		A-03	A	03/08/90	5368:09			Normal
		A-04	A	03/12/90	5376:01			Water marks indicated that the riser plug gasket had allowed rain water to leak into the annulus beneath riser P-3 since inspected on 2-8-89.
		P-01	A	03/08/90	5368:11			Normal
		P-02	A	03/08/90	5368:12			Normal
		P-03	A	03/08/90		5363:01-25		Normal
		P-04	A	03/08/90	5368:13			Normal
		P-05	A	03/08/90	5368:14			Normal
		P-06	A	03/08/90		5365:01-25		Stains and marks in annulus on tank wall were caused by leakage of water.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	34	P-07	A	03/08/90	5368:02			Normal
		P-08	A	03/08/90	5368:03			Normal
		P-09	A	03/08/90		5364:01-25		Normal
		P-10	A	03/12/90		5374:01-25		Normal
		P-11	A	03/08/90	5368:05			Normal
		P-12	A	03/08/90	5368:06			Normal
		P-13	A	03/08/90		5366:01-25		Normal
		P-14	A	03/08/90	5368:07			Normal
		P-15	A	03/08/90	5368:08			Normal
		P-16	A	03/08/90	5368:10			Normal
H	35		A	11/29/90				CCTV inspection of annulus dampers verified that both dampers were operational.
		A-01	A	08/03/90		5600:01-25		Normal
		A-02	A	08/03/90		5601:01-25		Normal
		A-03	A	08/03/90		5602:01-25		Normal
		A-04	A	08/03/90		5603:01-25		Normal
		P-01	A	08/07/90	5609:01			Normal
		P-02	A	08/07/90	5609:02			Normal
		P-03	A	08/07/90	5609:03			Normal
		P-04	A	08/07/90	5609:04			Normal
		P-05	A	08/07/90	5609:05			Normal
		P-06	A	08/07/90	5609:06			Normal
		P-07	A	08/07/90	5609:07			Normal
		P-08	A	08/07/90	5609:08			Normal
		P-09	A	08/07/90	5609:09			Normal
		P-10	A	08/07/90	5609:10			Normal
		P-11	A	08/07/90	5609:11			Normal
		P-12	A	08/07/90	5609:12			Normal
		P-13	A	08/07/90	5609:13			Normal
		P-14	A	08/07/90	5609:14			Normal
	36	A-01	A	07/24/90		5583:01-25		Normal
		A-02	A	07/24/90		5584:01-25		Normal
		A-03	A	07/24/90		5585:01-25		Normal
		A-04	A	07/24/90		5586:01-25		Normal
		P-01	A	07/24/90	5583:01			Normal
		P-02	A	07/18/90	5575:01			Normal
		P-03	A	07/18/90	5576:02			Normal
		P-04	A	07/18/90	5576:03			Normal
		P-05	A	07/18/90	5576:04			Normal
		P-06	A	07/18/90	5576:05			Normal
		P-07	A	07/18/90	5576:06			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	36	P-08	A	07/18/90	5576:07			Normal
		P-09	A	07/18/90	5576:08			Normal
		P-10	A	07/18/90	5576:09			Normal
		P-11	A	07/18/90	5576:10			Normal
		P-12	A	07/18/90	5576:11			Normal
		P-13	A	07/18/90	5576:12			Normal
		P-14	A	07/18/90	5576:13			Normal
		A-01	A	07/31/90		5597:01-23		Normal
		A-02	A	07/31/90		5598:01-25		Normal
		A-03	A	07/31/90		5599:01-25		Normal
		A-04	A	07/24/90		5587:01-25		Normal
		P-01	A	07/18/90	5577:01			Normal
		P-02	A	07/18/90	5577:02			Normal
		P-03	A	07/18/90	5577:03			Normal
H	37	P-04	A	07/18/90	5577:04			Normal
		P-05	A	07/18/90	5577:05			Normal
		P-06	A	07/18/90	5577:06			Normal
		P-07	A	07/18/90	5577:07			Normal
		P-08	A	07/18/90	5577:08			Normal
		P-09	A	07/25/90	5589:01			Normal
		P-10	A	07/18/90	5577:09			Water marks indicated that the riser plug gasket had allowed rain- water to leak into the annulus since the inspection on 3-1-90.
		P-11	A	07/18/90	5577:10			Normal
		P-12	A	07/18/90	5577:11			Normal
		P-13	A	07/18/90	5577:12			Normal
		P-14	A	07/18/90	5577:13			Normal
H	38	A-01	A	02/01/90		5289:01-25		Normal
		A-02	A	02/01/90		5290:01-25		Normal
		A-03	A	02/01/90		5291:01-25		Normal
		A-04	A	02/01/90		5292:01-25		Normal
		P-01	A	02/01/90	5287:02			Normal
		P-02	A	02/02/90	5287:03			Normal
		P-03	A	02/01/90	5287:04			Normal
		P-04	A	02/01/90	5287:05			Normal
		P-05	A	02/01/90	5287:06			Normal
		P-06	A	02/01/90	5287:07			Normal
		P-07	A	02/01/90	5287:08			Normal
		P-08	A	02/01/90	5287:09			Normal
		P-09	A	02/01/90	5287:10			Particulates observed on the annulus floor appeared to be gilsulate insulation.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	38	P-10	A	02/01/90	5287:11			Particulates observed on the annulus floor appeared to be gilsulate insulation.
		P-11	A	02/01/90	5287:12			Normal
		P-12	A	02/01/90	5298:13			Normal
		P-13	A	02/01/90	5287:14			Particulates observed on the annulus floor appeared to be gilsulate insulation.
		P-14	A	02/01/90	5287:01			Normal
H	39	A-01	A	02/01/90		5294:01-25		Normal
		A-02	A	02/01/90		5295:01-25		Normal
		A-03	A	02/01/90		5296:01-25		Normal
		A-04	A	02/01/90		5297:01-25		Normal
		P-01	A	02/01/90	5288:12			Normal
		P-02	A	02/01/90	5288:01			Normal
		P-03	A	02/01/90	5288:02			Normal
		P-04	A	02/01/90	5288:03			Normal
		P-05	A	02/01/90	5288:04			Normal
		P-06	A	02/01/90	5288:05			Normal
		P-07	A	02/01/90	5288:06			Normal
		P-08	A	02/27/90	5342:01			Normal
		P-09	A	02/01/90	5288:08			Normal
		P-10	A	02/01/90	5288:09			Normal
		P-11	A	02/01/90	5288:10			Normal
		P-12	A	02/01/90	5288:11			Normal
		P-13	A	02/01/90	5288:14			Normal
		P-14	A	02/01/90	5288:13			Normal
H	40	A-01	A	01/30/90	5279:01			Normal
								Normal
		A-01	A	01/30/90	5279:02			Normal
								Normal
		A-02	A	01/30/90	5279:05			Normal
		A-03	A	01/30/90	5279:09			Normal
		A-04	A	01/30/90	5279:12			Normal
		P-02A	A	01/30/90	5279:03			Normal
		P-03	A	01/30/90	5279:04			Normal
		P-04	A	01/30/90	5279:06			Normal
		P-05	A	01/30/90		5280:01-25		Normal
		P-06	A	01/30/90	5279:07			Normal
		P-07	A	01/30/90	5279:08			Normal
		P-08	A	01/30/90		5281:01-25		Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	40	P-09	A	01/30/90	5279:10			Normal
		P-10	A	01/30/90	5279:11			Normal
		P-11	A	01/30/90		5282:01-25		Normal
		P-12	A	01/30/90	5279:13			Normal
		P-13	A	01/30/90	5279:14			Normal
		P-14	A	01/30/90		5283:01-25		Normal
H	41	A-01	A	02/09/90		5310:01-25		Normal
		A-02	A	02/09/90		5312:01-25		Normal
		A-03	A	02/09/90		5311:01-25		Normal
		A-04	A	02/09/90		5313:01-25		Normal
		P-01	A	02/06/90	5303:01			Normal
		P-02	A	02/06/90	5303:02			Normal
		P-03	A	02/06/90	5303:03			Normal
		P-04	A	02/06/90	5303:04			Normal
		P-05	A	02/06/90	5303:05			Normal
		P-06	A	02/06/90	5303:06			Normal
		P-07	A	02/06/90	5303:07			Normal
		P-08	A	02/06/90	5303:08			Normal
		P-09	A	02/06/90	5303:09			Normal
		P-10	A	02/06/90	5303:10			Normal
H	42	P-11	A	02/06/90	5303:11			Normal
		P-12	A	02/06/90	5303:12			Normal
		P-13	A	02/06/90	5303:13			Normal
		P-14	A	02/06/90	5303:14			Normal
		A-01	A	01/30/90	5286:14			Normal
		A-02	A	01/30/90	5286:03			Normal
		A-03	A	02/01/90		5293:01-25		Normal
		A-04	A	01/30/90	5286:10			Normal
		P-01	A	01/30/90	5286:01			Normal
		P-02	A	01/30/90	5286:02			Normal
		P-03	A	02/06/90		5302:01-25		Normal
		P-04	A	01/30/90	5284:04			Normal
		P-05	A	01/30/90	5286:05			Normal
		P-06	A	01/30/90	5286:06			Normal
H	43	P-07	A	01/30/90		5284:01-25		Normal
		P-08	A	01/30/90	5286:07			Normal
		P-09	A	01/30/90	5286:08			Normal
		P-10	A	01/30/90	5286:09			Normal
		P-11	A	01/30/90		5285:01-25		Normal
		P-12	A	01/30/90	5286:11			Normal
		P-13	A	01/30/90	5286:12			Normal
		P-14	A	01/30/90	5286:13			Normal
		A-01	A	02/09/90		5314:01-25		Gilsulate insulation on the annulus floor had been redistributed since photographed on 2-12-86.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	43	A-01	A	05/15/90	5504:08			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		A-02	A	02/09/90		5315:01-25		Gilsulate insulation on the annulus floor had been redistributed since photographed on 2-12-86.
		A-02	A	05/15/90	5504:05			Normal
		A-03	A	02/09/90		5316:01-25		Gilsulate insulation on the annulus floor had been redistributed since photographed on 2-7-86.
		A-03	A	05/15/90	5504:16			Normal
		A-04	A	02/09/90		5317:01-25		Normal
		P-01	A	02/06/90	5304:01			Normal
		P-01	A	05/15/90	5504:07			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-02	A	02/06/90	5304:02			Normal
		P-02	A	05/15/90	5504:06			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-03	A	02/06/90	5304:03			Normal
		P-04	A	02/06/90	5304:04			Normal
		P-04	A	05/15/90	5504:03			Normal
		P-05	A	02/06/90	5304:05			Normal
		P-05	A	05/15/90	5504:04			Normal
		P-06	A	02/06/90	5304:06			Normal
		P-06	A	05/15/90	5504:02			Normal
		P-07	A	02/06/90	5304:07			Normal
		P-07	A	05/15/90	5504:01			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	43	P-08	A	02/06/90	5304:08			Normal
		P-08	A	05/15/90	5504:15			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-09	A	02/06/90	5304:09			Normal
		P-09	A	05/15/90	5504:14			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-10	A	02/06/90	5304:10			Normal
		P-10	A	05/15/90	5504:13			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-11	A	02/06/90	5304:11			Normal
		P-11	A	05/15/90	5504:12			Photographs were taken to document the current condition in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-12	A	02/06/90	5304:12			Normal
		P-12	A	05/15/90	5504:11			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
		P-13	A	02/06/90	5304:13			Normal
		P-13	A	05/15/90	5504:10			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	43	P-13	A	05/15/90	5504:10			5-10-90.
		P-14	A	02/06/90	5304:14			Normal
		P-14	A	05/15/90	5504:09			Photographs were taken to document the current conditions in the annulus since flush water was inadvertently directed into the annulus on 5-10-90.
F	44	A-01	A	01/11/90	5236:01			Normal
		A-02	A	01/11/90	5236:06			Normal
		A-03	A	01/11/90	5236:08			Stains and marks visible in the annulus were caused by the inleakage of water.
		A-04	A	01/11/90	5236:12			Stains and marks visible in the annulus were caused by the inleakage of water.
		P-01	A	01/11/90		5221:01-25		Normal
		P-02	A	01/11/90		5222:01-25		Normal
		P-03	A	01/11/90	5236:02			Normal
		P-04	A	01/11/90	5236:03			Normal
		P-05	A	01/11/90	5236:04			Normal
		P-06	A	01/11/90	5236:05			Normal
		P-07	A	01/11/90	5236:07			Normal
		P-08	A	01/11/90		5223:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-09	A	01/18/90		5256:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-10	A	01/11/90	5236:09			Normal
		P-11	A	01/11/90	5236:10			Normal
		P-12	A	01/11/90	5236:11			Normal
		P-13	A	01/11/90	5236:13			Normal
		P-14	A	01/11/90	5236:14			Normal
F	45	A-01	A	01/11/90	5237:01			Stains and marks visible in the annulus were caused by the inleakage of water.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	45	A-02	A	01/11/90	5237:06			Normal
		A-03	A	01/11/90	5237:08			Normal
		A-04	A	01/11/90	5237:12			Normal
		P-01	A	01/11/90		5224:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-01	A	01/31/90			VISUAL	Visual inspection was made to search for the leakpath that allowed rainwater to enter the annulus. The inspection was made with water running into the valve house sump drain for 1-1/2 hours. No leakage into the annulus was observed.
		P-02	A	01/11/90		5225:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-03	A	01/11/90	5237:02			Water marks indicated that the riser plug gasket had allowed rainwater to leak into the annulus since inspected on 1/5/89.
		P-04	A	01/11/90	5237:03			Normal
		P-05	A	01/11/90	5237:04			Normal
		P-06	A	01/11/90	5237:05			Normal
		P-07	A	01/11/90	5237:07			Normal
		P-08	A	01/11/90		5226:01-25		Normal
		P-09	A	01/11/90		5227:01-25		Normal
		P-10	A	01/11/90	5237:09			Normal
F	46	P-11	A	01/11/90	5237:10			Normal
		P-12	A	01/11/90	5237:11			Normal
		P-13	A	01/11/90	5237:13			Normal
		P-14	A	01/11/90	5237:14			Normal
		A-01	A	01/11/90	5238:01			Normal
		A-02	A	01/11/90	5238:11			Normal
		A-03	A	01/11/90	5238:08			Normal
		A-04	A	01/11/90	5238:04			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
F	46	P-01	A	01/11/90		5228:01-25		Normal
		P-02	A	01/11/90		5229:01-25		Normal
		P-03	A	01/11/90	5238:03			Normal
		P-04	A	01/11/90	5238:05			Normal
		P-05	A	01/11/90	5238:06			Normal
		P-06	A	01/11/90	5238:07			Normal
		P-07	A	01/11/90	5238:09			Normal
		P-08	A	01/11/90		5230:01-25		Stains and marks visible in the annulus were caused by the inleakage of water.
		P-09	A	01/11/90		5231:01-25		Normal
		P-10	A	01/11/90	5238:10			Normal
		P-11	A	01/11/90	5238:12			Normal
		P-12	A	01/11/90	5238:13			Normal
		P-13	A	01/11/90	5238:14			Normal
		P-14	A	01/11/90	5238:02			Normal
F	47	A-01	A	01/11/90	5239:11			Normal
		A-02	A	01/11/90	5239:09			Normal
		A-03	A	01/11/90	5239:06			Normal
		A-04	A	01/11/90	5239:01			Normal
		P-01	A	01/11/90		5232:01-25		Normal
		P-02	A	01/11/90		5233:01-25		Normal
		P-03	A	01/11/90	5239:02			Normal
		P-04	A	01/11/90	5239:03			Normal
		P-05	A	01/11/90	5239:04			Normal
		P-06	A	01/11/90	5239:05			Normal
		P-07	A	01/11/90	5239:07			Normal
		P-08	A	01/11/90		5234:01-25		Normal
		P-09	A	01/11/90		5235:01-25		Normal
		P-10	A	01/11/90	5239:08			Normal
		P-11	A	01/11/90	5239:10			Normal
		P-12	A	01/11/90	5239:12			Normal
		P-13	A	01/11/90	5239:13			Normal
		P-14	A	01/11/90	5239:14			Normal
H	48	A-01	A	02/27/90	5343:18			Normal
		A-01	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	A-02	A	02/27/90	5343:05			Normal
		A-02	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		A-03	A	02/21/90		5340:01-25		Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		A-03	A	02/27/90	5343:09			Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		A-03	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		A-03	A	12/13/90			5735:01-08	Inspection from this riser showed cooling coil 5 leaked into the annulus. When coils 3 and 5 were pressurized to approximately 100 psig. There was no evidence that coil 3 leaked into the annulus.
		A-04	A	02/27/90	5343:14			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	A-04	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-01	A	02/12/90		5318:01-25		Normal
		P-01	A	02/27/90	5343:01			Normal
		P-01	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-02	A	02/12/90		5319:01-25		Normal
		P-02	A	02/27/90	5343:02			Normal
		P-02	A	10/19/90			5679:01	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-03	A	02/27/90	5343:03			Normal
		P-03	A	10/19/90			5680:01	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-04	A	02/27/90	5343:04			Normal
		P-04	A	10/19/90			5681:01	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-05	A	02/27/90	5343:06			Normal
		P-05	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-06	A	02/21/90		5339:01-25		Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-06	A	02/27/90	5343:07			Normal
		P-06	A	10/19/90			5673:01-02	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. Leakage into the annulus was observed from this riser.
		P-06	A	11/01/90			VISUAL	Tests were conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspections were made at risers P6, P7 & P14. The water was valved on to cooling coil

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-06	A	11/01/90			VISUAL	#3. No leakage was observed.
		P-06	A	11/02/90			VISUAL	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-06	A	11/05/90			VISUAL	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-06	A	11/06/90			VISUAL	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-06	A	11/07/90			VISUAL	Inspections were made with water valved off to all cooling coils. No leakage was observed.
		P-06	A	11/08/90			VISUAL	Inspections were made with water valved off to all cooling coils. No leakage was observed.
		P-07	A	02/21/90		5341:01-25		Stains, marks, and wet spots visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-07	A	02/27/90		5343:08		Stains, marks, and wet spots visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-07	A	03/02/90			5356:01-03	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. Sixteen hours after flow to the coil was valved off, the wet

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-07	A	03/02/90			5356:01-03	areas of the tank wall became dry.
		P-07	A	03/05/90			5357:01-02	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. This inspection revealed the tank wall remained dry.
		P-07	A	03/06/90			5358:01-02	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. This inspection revealed the tank wall remained dry.
		P-07	A	10/19/90			5678:01	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. Leakage into the annulus was observed from this riser.
		P-07	A	11/01/90			5693:01-02	Inspections were made with water valved on to cooling coil #3. Wet area was observed on the upper tank wall.
		P-07	A	11/02/90			VISUAL	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. Wet area observed on 11-1-90 was smaller.
		P-07	A	11/05/90			5694:01-02	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. Wet area observed on 11-1-90 was smaller.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-07	A	11/06/90			5696:01-02	Inspections were made with water valved off to cooling coil #'s 3, 5, 15 & 18. Wet area observed on 11-1-90 was smaller.
		P-07	A	11/07/90			5698:01-02	Inspections were made with water valved off to all cooling coils. Area observed wet on 11-1-90 to 11-6-90 was dry.
		P-07	A	11/08/90			VISUAL	Inspections were made with water valved off to all cooling coils. No leakage was observed.
		P-07	A	11/09/90			VISUAL	Inspections were made with water valved on to all cooling coils. No leakage was observed.
		P-07	A	11/12/90			VISUAL	Inspections were made with water valved on to cooling coil #5. No leakage was observed.
		P-07	A	11/13/90			VISUAL	Inspections were made with water valved on to cooling coil #16. No leakage was observed.
		P-07	A	11/14/90			VISUAL	Inspections were made with water valved on to cooling coil #18. No leakage was observed.
		P-07	A	11/15/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-07	A	11/16/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-07	A	11/20/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-07	A	11/21/90			VISUAL	Inspections were made with water valved on to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-07	A	11/26/90			VISUAL	Inspections were made with water valved on to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-07	A	12/13/90			VISUAL	No leakage into the annulus was observed from this riser when cooling coils 3 and 5 were pressurized to approximately 100 psig.
		P-08	A	02/12/90		5320:01-25		Stains, marks, and wet spots visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-08	A	02/21/90		5338:01-05		Tank wall had dried since inspection of 2-12-90.
		P-08	A	02/27/90	5343:10			Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-08	A	03/01/90			5349:01-07	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. A few hours after flow to the coil was valved off, the wet areas of the tank wall became dry.
		P-08	A	03/02/90			5370:01-04	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. A few hours

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-08	A	03/02/90			5370:01-04	after flow to the coil was valved off, the wet areas of the tank wall became dry.
		P-08	A	03/05/90			5371:01-05	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. A few hours after flow to the coil was valved off, the wet areas of the tank wall became dry.
		P-08	A	03/06/90			5372:01-05	Tests and inspections were performed that ultimately revealed that cooling coil 1 was leaking water into the annulus. A few hours after flow to the coil was valved off, the wet areas of the tank wall became dry.
		P-08	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-09	A	02/12/90			5321:01-25	Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.
		P-09	A	02/27/90	5343:11			Stains and marks visible on the tank wall indicated that water leaked into the annulus. Tests will be performed to identify the source of the water.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-09	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-10	A	02/27/90	5343:12			Normal
		P-10	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-11	A	02/27/90	5343:13			Normal
		P-11	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-12	A	02/27/90	5343:15			Normal
		P-12	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-13	A	02/27/90	5343:16			Normal
		P-13	A	10/19/90			VISUAL	A test was conducted to determine if any of the failed cooling coils (3, 5, 16 or 18) leaked into the annulus. Inspection was made with water valved to the failed coils. No leakage into the annulus was observed from this riser.
		P-14	A	02/27/90	5343:17			Normal
		P-14	A	11/01/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-14	A	11/02/90			VISUAL	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-14	A	11/05/90			5695:01-03	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. Wet area was observed on upper tank wall.
		P-14	A	11/06/90			5697:01-02	Inspections were made with water valved off to cooling coil #'s 3, 5, 16 & 18. Wet area observed 11-5-90 was smaller.
		P-14	A	11/07/90			5699:01-02	Inspections were made with water valved off to all cooling coils. Area observed wet on 11-5-90 and 11-6-90 was dry.
		P-14	A	11/08/90			VISUAL	Inspections were made with water valved off to all cooling coils. No leakage was observed.
		P-14	A	11/09/90			VISUAL	Inspections were made with water valved on to all cooling coils. No leakage was observed.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	P-14	A	11/12/90			VISUAL	Inspections were made with water valved on to cooling coil #5. No leakage was observed.
		P-14	A	11/13/90			VISUAL	Inspections were made with water valved on to cooling coil 16. No leakage was observed.
		P-14	A	11/14/90			VISUAL	Inspections were made with water valved on to cooling coil #18. No leakage was observed.
		P-14	A	11/15/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-14	A	11/16/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-14	A	11/20/90			VISUAL	Inspections were made with water valved on to cooling coil #3. No leakage was observed.
		P-14	A	11/21/90			VISUAL	Inspections were made with water valved on to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-14	A	11/26/90			VISUAL	Inspections were made with water valved on to cooling coil #'s 3, 5, 16 & 18. No leakage was observed.
		P-14	A	12/13/90			VISUAL	No leakage into the annulus was observed from this riser when cooling coils 16 and 18 were pressurized to approximately 100 psig.
		C-01	I	12/13/90				CCTV was used to search for cooling coil leak-sites. Water was observed dropping to the tank bottom when cooling coil 16 was pressurized. The leaksite was not located.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	48	C-03	I	10/04/90			5662:01-77	Steel surfaces of the tank interior and the cooling coils were inspected. No evidence of unusual corrosion was observed. C.F. Jenkins and D.T. Hobbs of SRL participated in the inspection.
		C-03	I	12/13/90				CCTV was used to search for cooling coil leak-sites. Water was observed dropping to the tank bottom when cooling coil 3 was pressurized. The leaksite was not located.
H	49	A-01	A	03/05/90	5369:01			Normal
		A-02	A	03/05/90	5369:03			Normal
		A-03	A	03/05/90	5369:07			Normal
		A-04	A	03/21/90	5402:06			Normal
		P-01	A	02/20/90		5336:01-25		Normal
		P-02	A	02/12/90		5322:01-25		Normal
		P-03	A	03/21/90	5402:05			Normal
		P-04	A	03/05/90	5369:02			Normal
		P-05	A	03/05/90	5369:04			Normal
		P-06	A	03/05/90	5369:05			Normal
		P-07	A	03/05/90	5369:06			Normal
		P-08	A	02/20/90		5337:01-25		Normal
		P-09	A	02/12/90		5323:01-25		Normal
		P-10	A	03/05/90	5369:08			Normal
H	50	P-11	A	03/21/90	5402:04			Normal
		P-12	A	03/21/90	5402:03			Normal
		P-13	A	03/21/90	5402:02			Normal
		P-14	A	03/21/90	5402:01			Normal
		A-01	A	03/05/90	5350:01			Normal
		A-02	A	03/05/90	5350:04			Normal
		A-03	A	03/05/90	5350:11			Stains and marks on the tank wall were caused by the inleakage of water.
		A-04	A	03/05/90	5350:11			Normal
		P-01	A	02/14/90		5324:01-25		The condition of the tank wall and annulus was normal. The screen was missing from suction leg of the annulus jet installed in the Friser.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	50	P-02	A	02/14/90		5325:01-25		Normal
		P-03	A	03/05/90	5350:02			Normal
		P-04	A	03/05/90	5350:03			Normal
		P-05	A	03/05/90	5350:05			Stains and marks on the tank wall were caused by the inleakage of water.
		P-05	A	04/05/90	5431:01			Normal
		P-06	A	03/05/90	5350:06			Normal
		P-07	A	03/05/90	5350:07			Normal
		P-08	A	02/14/90		5326:01-25		Normal
		P-09	A	02/14/90		5327:01-25		Stains and marks visible in the annulus on the tank wall caused by the inleakage of water.
		P-10	A	03/05/90	5350:09			Normal
		P-11	A	03/05/90	5350:10			Normal
		P-12	A	03/05/90	5350:12			Normal
		P-13	A	03/05/90	5350:13			Normal
		P-14	A	03/05/90	5350:14			Normal
H	51	A-01	A	03/05/90	5351:02			Normal
		A-02	A	03/05/90	5351:05			Normal
		A-03	A	03/05/90	5351:08			Normal
		A-04	A	03/05/90	5351:12			Normal
		P-01	A	02/14/90		5328:01-25		Stains and marks visible in the annulus on the floor caused by the in- leakage of water.
		P-02	A	02/14/90		5329:01-25		Stains and marks visible in the annulus on the floor caused by the in- leakage of water.
		P-03	A	03/05/90	5351:03			Normal
		P-04	A	03/05/90	5351:04			Normal
		P-05	A	03/05/90	5351:06			Normal
		P-06	A	03/05/90	5351:07			Normal
		P-07	A	03/05/90	5351:08			Normal
		P-08	A	02/14/90		5330:01-25		Normal
		P-09	A	02/14/90		5331:01-25		Normal
		P-10	A	03/05/90	5351:10			Normal
		P-11	A	03/05/90	5351:11			Normal
		P-12	A	03/05/90	5351:13			Normal
		P-13	A	03/05/90	5351:14			Normal
		P-14	A	03/05/90	5351:01			Normal

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	96H			12/17/90				Since direct viewing was not possible, CCTV was used to provide visual imagery needed for QA verification of the ITP Filter No. 1 tubes to shell sheets welds. Per M. L. Blake and W. D. McMullin the welds met requirements.
H	DB7	03	I	06/08/90			VISUAL	Visual inspection was made to observe nozzle #11 for leakage. No leakage was observed.
H	EVAP1			01/03/90				CCTV inspection was made in the evaporator cell to check dip tubes in the sump for damage or plug-gage. Two dummy Hanford connectors were found in the sump. The sump could not be jetted out enough to view the bottom of the dip tubes.
				04/30/90				CCTV used to inspect the vent line for possible holes, cracks, or failures in the welds. No failure was observed during this inspection.
				05/02/90				CCTV used inspect cell while DOP test was performed on vent line. DOP was detected escaping from vent line jacket at a failure near the north end of line.
				05/31/90				CCTV used to document overall conditions in vent line cell prior to construction entering cell to make repairs. Debris found throughout cell and approximately 4 inches of water.

TABLE 1
SUMMARY OF INSPECTIONS

Area	Tank or Vessel	Inspection Port	Annulus or Interior	Date	Type of Inspection and Identification Numbers			Remarks
					WAP	DP	PSP	
H	EVAP1			08/22/90				DOP injected into the 242-1H evaporator vent line jacket was observed escaping into the concrete encasement. However, the leak was not located using CCTV.
				08/31/90				CCTV was used to document the leaksite in the vent line jacket. The leaksite was an incomplete circumferential weld joining the 8 inch diameter pipe to the reducer. The weld lacked about 1 inch being complete.
		East		03/20/90				CCTV used to document overall conditions of Evaporator cell and sump.
		NW		08/29/90				A CCTV inspection was made to determine if the east catheter line had been crimp sealed. No crimp was observed in the line.

The numbers listed under WAP, DP, and PSP identify photographs in the WMT files.
WAP = wide angle photography; DP = direct photography; PSP = periscopic photography;
DB = diversion box; EVAP = evaporator; CRC = cesium removal column

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