

Table 4-7. Petroleum Hydrocarbon Releases in the 100-N Area

Group	WIDS Number	Location	Description
Group 1 – 166-N & 1715-N	UPR-100-N-17	166-N diesel oil supply line leak	In August 1966, an estimated 302,832 L (80,000 gal) of diesel leaked from a failed transfer system near the 166-N facility. In August 1967, J.M. Shelby documented the possible impacts on the Columbia River. Diesel was slipping from the bluff below the 166-N Tank Farm and into the river. A trench was excavated below the bluff to collect the diesel to be burned off; WIDS site 100-N-65 diesel burn trench (BNWL-CC-1296; UNI-228).
	UPR-100-N-18	166-N diesel oil supply line leak	In August 1973, an estimated 757 L (200 gal) of diesel oil leaked from a transfer line between 166-N and 184-N facilities (PNL-6456; UNI-228).
	UPR-100-N-20	166-N diesel oil supply line leak	In June 1985, an estimated 757 L (200 gal) of diesel oil leaked from a transfer line near Tank 1 in the 166-N facility (UNI-228).
	UPR-100-N-24	166-N diesel oil supply line leak	On February 1, 1987, a line leak was reported. Petroleum product type and quantity were not reported. No further information is available (WHC-SD-EN-TI-251).
Group 2 – 184-N	UPR-100-N-42	184-N day tank area liquid unplanned release	On October 9, 1987, an unspecified quantity of petroleum material with an unspecified description was documented around the 184-N facility day tanks (WIDS).
	UPR-100-N-19	184-N day tank fuel oil line leak	In April 1984, an estimated 28,391 L (7,500 gal) of No. 6 fuel oil leaked at the 184-N day tank facility. It was reported that all the fuel oil stayed within the tank confinement basin and did not penetrate the hard-packed sand bottom. Waste oil was removed and disposed (UNI-228).
	UPR-100-N-21	184-N diesel oil day tank overflow	On April 25, 1986, an estimated 3,028 L (800 gal) of diesel oil spilled into the area surrounding a day tank at 184-N. Approximately 2,461 L (650 gal) were reported as pumped/cleaned up. Nearby monitoring well 199-N-16 reported no detections (WIDS).
	UPR-100-N-22	Diesel oil supply line leak No. 1	On June 23, 1986, an estimated 3,785 L (1,000 gal) of diesel oil leaked from a transfer line. This release was detected in nearby well 199-N-16 (WIDS). An unspecified quantity of petroleum material was pumped from the well (WHC-SD-EN-TI-251).
	UPR-100-N-23	Diesel oil supply line leak No. 2	On January 10, 1987, an estimated 757 L (200 gal) of diesel oil leaked from a transfer line. This release was detected in nearby well 199-N-16. An unspecified quantity of petroleum material was pumped from the well (WHC-SD-EN-TI-251).
	100-N-12	184-N pipeline spill	A spill inside the 184-N pipeline that leaked to the outside occurred on October 14, 1987. An unknown amount of fuel oil leaked from a loose pipe fitting at the 184-N annex. Spill was contained in a drain trench and cleaned up (WIDS).

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Group	WIDS Number	Location	Description
Group 2 – Other Miscellaneous Sites	UPR-100-N-43	166-N to 184-N transfer line multiple leak	Diesel oil leaks occurred at three locations along a pipeline from 166-N to 184-N at three different flange points. The exact locations of the flange points were not provided. The release was reported on April 26, 1989. In total, 46 drums and 8 dump trucks of contaminated soil were removed. Sampling was conducted in nearby wells 199-N-16 and 199-N-17 and oil was detected. Reported as cleaned up by April 26, 1989 (DOE/RL-90-22; WHC-C-89-047-100N-20).
	UPR-100-N-36	184-N annex diesel generator area release	During excavation between 184-N and 153-N (area of approximately 40 m by 18 m (130 ft by 60 ft), a strong smell of petroleum was noted. Neither date nor quantity of material is reported (WIDS).
	100-N-36	Oil-stained pad (near 107-N Building)	This site was once used to support an air compressor. Neither date nor amount of petroleum material leaked is available; however, available documentation suggests that the quantity was minimal and limited to the soil immediately beneath the pad. The small amount of petroleum released may have leaked to the ground through a crack between the concrete pads and asphalt (WIDS).
	100-N-35	Hanford Generating Plant/Bonneville Power Administration switchyard	This portion of the 100-N Area is still in use by the Bonneville Power Administration and is reported to contain spills of oil materials that could contain polychlorinated biphenyls.
	100-N-65	Diesel burn pit adjacent to river	This site was a trench/pit excavated adjacent to the river to intercept and burn diesel oil before it could significantly affect the Columbia River (refer to UPR-100-N-17). In 1994, the trench was backfilled with material to the top of the adjacent berm (WIDS).
	124-N-2	182-N septic system	This site was a septic system east of 182-N that was reported to have had petroleum introduced into it. This site includes a septic tank and seepage pit and was reported pumped and isolated after the 124-N-10 Septic Treatment Facility was placed in service in February 1987 (WIDS).

Sources: BNWL-CC-1296, *Environmental Significance of Diesel Fuel Entering Columbia River at 100-N*.

DOE/RL-90-22, *RCRA Facility Investigation/Corrective Measures Study Work Plan for the 100-NR-1 Operable Unit, Hanford Site, Richland, Washington*.

PNL-6456, *Hazard Ranking System Evaluation of CERCLA Inactive Waste Sites at Hanford: Volume 1 – Evaluation Methods and Results*.

UNI-228, *Oil Spill Prevention, Control, and Countermeasures Plan*.

WHC-C-89-047-100N-20, *Critique Report, 184-N Powerhouse Diesel Oil Leak (April 26, 1989)*.

WHC-SD-EN-TI-251, *100-N Area Technical Baseline Report*.

WIDS = Waste Information Data System