

IX. Oil Pollution in U.S. and International Waters

Table 82 lists pollution spills on the OCS that are greater than 1 barrel. In 1995, there were 35 spills on the OCS from facilities or operational activity on Federal leases. These incidents resulted in the release of 774 bbl of pollutant (i.e., crude oil, condensate, refined product, mineral oil, diesel, or natural gas) into offshore waters. Three of those 35 spills released more than 50 bbl. In 1995, there were no spills of 1,000 bbl or greater from OCS facilities or operations (see table 83).

Table 84 lists the number of blowouts from offshore wells. In 1995, there was one blowout during exploratory drilling in the GOM and there were none during production operations. Over the last 25 years, of the 24,237 wells spudded on the OCS, there have been 151 blowouts, less than 0.7 percent of the total. Between 1970 and 1995, the total spillage from OCS operations amounted to 122,076 bbl of pollutants. This spillage is less than 0.002 percent of the oil produced from OCS facilities.

Table 85 reports on the number of crude oil and refined petroleum product spills of 1,000 bbl or more from tankers in coastal and offshore waters worldwide since 1974. In 1995, there were 7 such tanker spills, which released 68,959 bbl of oil. None of these spills occurred in U.S. coastal and offshore waters (see table 86).

The information on spill incidents from OCS facilities comes from a database file maintained by MMS headquarters and each regional office. Information on tanker spills comes from MMS's Technical Analysis Group (TAG) in the Environmental Policy and Programs Division. All the spills in the TAG database must be from a vessel — usually a tanker or barge — that carried a petroleum product as cargo. The spill may be cargo or fuel from the carrier and must be at least 1,000 bbl in size.

An MMS contract established the worldwide tanker spill database in 1983. Since 1983, TAG has maintained and verified the database in-house. The TAG adds U.S. Coast Guard data annually. Additional information comes from the Institut Français du Pétrole tanker database for the years 1974–87 and the *Oil Spill Bulletin* for events during 1986 and 1987. Current information usually comes from the *Oil Spill Intelligence Report* (OSIR), *Golob's Oil Pollution Bulletin*, newspaper accounts, and various reports concerning oil-spill events.

The most recent updates to the database include OSIR's *1995 International Spill Statistic Summary* (March 1996) and data from the U.S. Coast Guard's Marine Safety Information System database.

Table 82 Number and Volume of Spills of More than 1 Barrel of All Pollutants from Facilities and Operations on Federal OCS Leases, 1970–95

Year	Gulf of Mexico OCS			Pacific OCS			Total OCS Spillage (bbl)
	No. of Spills		Total Spillage (bbl)	No. of Spills		Total Spillage (bbl)	
	>1 and ≤50 (bbl)	> 50 (bbl)		>1 and ≤50 (bbl)	> 50 (bbl)		
1970	8	5	83,894	0	0	0	83,894
1971	267	7	2,441	0	0	0	2,441
1972	204	1	999	0	0	0	999
1973	178	5	23,125	0	0	0	23,125
1974	80	7	24,453	0	0	0	24,453
1975	109	2	761	0	0	0	761
1976	66	3	5,021	1	0	2	5,023
1977	70	3	1,080	1	0	4	1,084
1978	77	3	1,525	0	0	0	1,525
1979	106	4	2,627	1	0	2	2,629
1980	49	8	2,826	2	0	7	2,833
1981	51	5	5,794	10	0	75	5,869
1982	71	3	1,137	1	0	3	¹ 1,140
1983	92	9	2,554	3	0	5	² 2,583
1984	58	1	378	3	0	36	³ 416
1985	72	6	1,716	3	0	9	⁴ 1,727
1986	45	3	572	3	0	12	584
1987	35	1	231	2	0	11	242
1988	30	3	15,971	1	0	2	⁵ 15,978
1989	24	1	476	3	0	8	484
1990	35	3	19,308	0	1	100	19,408
1991	33	1	646	3	0	61	707
1992	29	2	2,336	0	0	0	2,336
1993	24	0	147	0	0	0	147
1994	20	4	4,725	3	0	83	4,808
1995	<u>31</u>	<u>3</u>	<u>773</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>774</u>
Total	1,856	88	121,622	41	1	421	122,076

¹ This total includes 1 spill of 9 barrels on the Alaska OCS.

² This total includes 2 spills totaling 24 barrels on the Atlantic OCS.

³ This total includes 1 spill of 2 barrels on the Alaska OCS.

⁴ This total includes 1 spill of 2 barrels on the Alaska OCS.

⁵ This total includes 1 spill of 19 barrels on the Alaska OCS.

Table 83 Spills of 1,000 Barrels or More from Facilities and Operations on Federal OCS Leases, 1964–95

(The 25 spills reported here are from oil and gas activities on the Gulf of Mexico OCS, except for the 1969 blowout in the Santa Barbara Channel on the Pacific OCS.)

Year	Location	Cause of Accident	Spillage (bbl)
1964	Eugene Island	Freighter struck platform	2,559
	Eugene Island	Platform in hurricane	5,180
	Ship Shoal	Platform in hurricane	5,100
	Ship Shoal	Platform in hurricane	1,589
1965	Ship Shoal	Well blowout	1,688
1967	West Delta	Anchor damage to pipeline	160,638
1968	South Timbalier	Anchor damage to pipeline	6,000
1969	Santa Barbara Channel	Well blowout	80,000
	Main Pass	Anchor damage to pipeline	7,532
	Ship Shoal	Ship struck platform during storm	2,500
1970	Main Pass	Well blowout	30,000
	South Timbalier	Well blowout	53,000
1973	West Delta	Structural failure, tank rupture	9,935
	South Pelto	Storage barge sank	7,000
	West Delta	Pipeline corrosion	5,000
1974	Eugene Island	Anchor damage to pipeline	19,833
	Main Pass	Hurricane damage to pipeline	3,500
1976	Eugene Island	Shrimp trawl damage to pipeline	4,000
1979	Main Pass	Vessel collided with semisubmersible	1,500
1980	High Island	Pump failure, tank spill	1,456
1981	South Pass	Anchor damage to pipeline	5,100
1988	Galveston	Anchor damage to pipeline	15,576
1990	Ship Shoal	Anchor damage to pipeline	14,423
	Eugene Island	Trawl damage to pipeline valve	4,569
1992	South Pelto	Hurricane damage to pipeline	2,000
1994	Ship Shoal	Anchor or trawl damage to pipeline	4,207
Total			453,885

Table 84 Blowouts and Spillage from Federal Offshore Wells Compared to Crude Oil and Condensate Production on Federal OCS Leases, 1971–95

(Only crude oil and condensate blowout spillage is given here in barrels for the 150 blowouts that occurred during the past 22 years.)

Year	Well Starts	Drilling Blowouts				Nondrilling Blowouts						Total Blowouts		OCS Production MMbbl
		Exploration		Development		Production		Workover		Completion				
		No.	bbl	No.	bbl	No.	bbl	No.	bbl	No.	bbl	No.	bbl	
1971	851	1	0	1	0	2	450	1	0	0	0	5	450	406.9
1972	845	2	0	2	0	1	0	0	0	0	0	5	0	396.0
1973	820	2	0	1	0	0	0	0	0	0	0	3	0	384.8
1974	802	1	0	1	0	4	275	0	0	0	0	6	275	354.9
1975	842	4	0	1	0	0	0	1	0	1	0	7	0	325.3
1976	1,078	1	0	4	0	1	0	0	0	0	0	6	0	314.5
1977	1,240	3	0	1	0	1	0	3	0	1	0	9	0	296.0
1978	1,164	3	0	4	0	0	0	3	0	1	0	11	0	288.0
1979	1,140	4	0	1	0	0	0	0	0	0	0	5	0	274.2
1980	1,158	3	0	1	0	2	1	1	0	1	0	8	1	274.7
1981	1,208	1	0	2	0	1	0	3	64	3	0	10	64	282.9
1982	1,255	1	0	4	0	0	0	4	0	0	0	9	0	314.5
1983	1,180	5	0	5	0	0	0	2	0	0	0	12	0	350.8
1984	1,352	3	0	1	0	0	0	1	0	0	0	5	0	385.1
1985	1,169	3	0	1	0	0	0	2	40	0	0	6	40	380.0
1986	694	0	0	1	0	0	0	1	0	0	0	2	0	384.3
1987	845	2	0	0	0	3	0	1	0	2	60	8	60	358.8
1988	950	1	0	1	0	0	0	1	0	0	0	3	0	332.7
1989	947	2	0	¹ 5	0	² 3	0	1	0	0	0	11	0	313.7
1990	1,018	1	0	1	0	0	0	3	9	1	0	6	9	304.5
1991	726	3	0	³ 3	0	0	0	0	0	0	0	6	0	326.4
1992	431	2	100	0	0	0	0	0	0	0	0	2	100	337.9
1993	879	0	0	⁴ 4	0	0	0	0	0	0	0	4	0	352.7
1994	845	0	0	0	0	0	0	1	0	0	0	1	0	370.4
1995	<u>798</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>429.2</u>
Total	24,237	49	100	85	0	38	726	29	113	10	60	151	999	8,539.2

¹ Two of the drilling blowouts occurred during drilling for sulphur.

² One blowout occurred during abandonment operations.

³ Two of the drilling blowouts occurred during drilling for sulphur.

⁴ Two of the drilling blowouts occurred during drilling for sulphur on the same well.

Table 85 Spills of 1,000 Barrels or More from Tankers in Coastal and Offshore Waters Worldwide, 1974–95

<i>Year</i>	<i>Crude Oil</i>		<i>Refined Product</i>		<i>All Products</i>	
	<i>No. of Spills</i>	<i>Spillage (bbl)</i>	<i>No. of Spills</i>	<i>Spillage (bbl)</i>	<i>No. of Spills</i>	<i>Spillage (bbl)</i>
1974	19	809,911	26	717,356	45	1,527,267
1975	19	1,775,276	22	521,202	41	2,296,478
1976	18	1,980,715	23	981,759	41	2,962,474
1977	15	1,884,014	24	815,332	39	2,699,346
1978	17	3,095,689	23	469,029	40	3,564,718
1979	22	3,833,214	38	928,598	60	4,761,812
1980	11	1,256,861	24	341,247	35	1,598,108
1981	7	43,350	20	412,280	27	455,630
1982	6	230,556	14	89,743	20	320,299
1983	13	2,587,918	16	335,165	29	2,923,083
1984	6	189,585	22	138,817	28	328,402
1985	5	538,678	21	171,224	26	709,902
1986	6	63,085	9	121,844	15	184,929
1987	11	109,698	9	129,593	20	239,291
1988	7	1,089,559	5	241,143	12	1,330,702
1989	12	1,219,945	20	126,962	32	1,346,907
1990	8	217,386	9	165,560	17	382,946
1991	6	641,036	4	10,882	10	651,918
1992	6	625,996	9	400,943	15	1,026,939
1993	5	805,984	9	127,290	14	933,274
1994	7	527,062	7	271,992	14	799,054
1995	<u>2</u>	<u>8,133</u>	<u>5</u>	<u>60,826</u>	<u>7</u>	<u>68,959</u>
Total	228	23,533,651	359	7,578,787	587	31,112,438

Table 86 Spills of 1,000 Barrels or More from Tankers in U.S. Coastal and Offshore Waters, 1974–95

(Spills reported here exclude those that occurred off U.S. Territories and Possessions.)

Year	Crude Oil		Refined Product		All Products	
	No. of Spills	Spillage (bbl)	No. of Spills	Spillage (bbl)	No. of Spills	Spillage (bbl)
1974	2	57,328	3	10,358	5	67,686
1975	4	304,800	4	149,701	8	454,501
1976	2	8,600	6	380,740	8	389,340
1977	2	16,686	2	15,715	4	32,401
1978	0	0	4	14,447	4	14,447
1979	4	273,437	4	10,045	8	283,482
1980	2	34,000	4	29,952	6	63,952
1981	2	28,571	2	3,476	4	32,047
1982	0	0	2	2,466	2	2,466
1983	1	1,200	2	2,786	3	3,986
1984	1	66,452	10	74,523	11	140,975
1985	2	16,047	3	7,475	5	23,522
1986	3	9,990	2	14,422	5	24,412
1987	3	31,310	0	0	3	31,310
1988	2	16,850	2	24,000	4	40,850
1989	2	242,200	3	19,834	5	262,034
1990	2	102,315	2	7,405	4	109,720
1991	0	0	0	0	0	0
1992	1	2,310	1	3,450	2	5,760
1993	0	0	0	0	0	0
1994	0	0	0	0	0	0
1995	0	0	0	0	0	0
Total	35	1,212,096	56	768,890	91	1,982,891