

Conversion to the Metric System

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Public Law 100-418, the Omnibus Trade and Competitiveness Act of 1988, states: "It is the declared policy of the United States—

(1) to designate the metric system of measurement as the preferred system of weights and measures for United States trade and commerce. . . .

(2) to require that each Federal agency, by the end of Fiscal Year 1992, use the metric system of measurement in its procurements, grants, and other business-related activities."{39}

Table C1 is in keeping with the spirit of this law. The petroleum industry in the United States is slowly moving in the direction prescribed by this law and the data collected by EIA are collected in the units that are still common to the U.S. petroleum industry, namely barrels and cubic feet. Standard metric conversion factors were used to convert the National level volumes in **Table 1** to the metric equivalents in **Table C1**. Barrels were multiplied by 0.1589873 to convert to cubic meters and cubic feet were multiplied by 0.02831685 to convert to cubic meters.

Table C1. U.S. Proved Reserves of Crude Oil, Dry Natural Gas, and Natural Gas Liquids, in Metric Units, 1988 – 1998

Year	Adjustments (1)	Revision Increases (2)	Revision Decreases (3)	Revisions ^a and Adjustments (4)	Extensions (5)	New Field Discoveries (6)	New Reservoir Discoveries in Old Fields (7)	Total ^b Discoveries (8)	Production (9)	Proved ^c Reserves 12/31 (10)	Change from Prior Year (11)
Crude Oil (million cubic meters)											
1988	57.8	426.7	194.1	290.4	56.4	11.3	20.2	87.9	446.9	4,264.8	-68.6
1989	33.9	428.9	217.0	245.8	81.7	17.8	14.3	113.8	411.1	4,213.3	-51.5
1990	13.7	394.8	159.0	249.5	72.5	15.6	21.5	109.6	398.3	4,174.1	-39.2
1991	25.9	333.4	297.9	61.4	58.0	15.4	14.6	88.0	399.4	3,924.1	-250.0
1992	46.2	286.8	170.0	163.0	62.2	1.3	13.5	77.0	388.9	3,775.2	-148.9
1993	43.1	319.7	241.0	121.8	56.6	50.7	17.5	124.8	371.9	3,649.9	-125.3
1994	30.1	375.8	215.7	190.2	63.1	10.2	17.6	90.9	360.6	3,570.4	-79.5
1995	19.4	289.8	126.4	182.8	79.5	18.1	54.5	152.1	351.8	3,553.5	-16.9
1996	28.0	273.9	156.8	145.1	86.3	38.6	22.4	147.3	345.5	3,500.4	-53.1
1997	82.7	317.7	172.3	228.0	75.8	101.3	18.9	196.0	339.9	3,584.2	83.8
1998	-101.5	437.5	355.2	-19.2	52.0	24.2	19.1	95.3	316.5	3,344.1	-240.4
Dry Natural Gas (billion cubic meters)											
1988	62.09	661.68	^d 1,088.13	-364.36	192.64	46.38	54.06	293.08	472.04	^d 4,757.91	-543.32
1989	85.33	755.30	669.50	171.13	179.50	41.06	63.51	284.07	480.91	4,732.20	-25.71
1990	44.08	537.48	380.66	200.90	225.18	56.75	68.30	350.23	487.98	4,795.35	63.15
1991	83.82	563.22	438.17	208.87	144.13	24.01	45.42	213.56	487.11	4,730.67	-64.68
1992	63.29	511.26	338.73	235.82	132.38	18.38	48.82	199.58	493.36	4,672.71	-57.96
1993	27.51	498.29	346.82	178.98	172.82	25.46	52.84	251.12	503.73	4,599.08	-73.63
1994	55.08	604.99	449.70	210.37	196.55	53.63	98.54	348.72	518.82	4,639.35	40.27
1995	16.42	579.50	360.50	235.42	193.77	47.18	69.43	310.38	508.74	4,676.41	37.06
1996	107.18	485.12	369.42	222.88	219.65	41.09	88.07	348.81	534.08	4,714.02	37.61
1997	-16.70	613.28	474.47	122.10	299.73	75.92	67.45	443.10	544.00	4,735.22	21.22
1998	-46.30	792.96	630.42	116.24	232.11	30.41	61.22	323.74	530.09	4,645.12	-90.11
Natural Gas Liquids (million cubic meters)											
1988	1.8	185.7	113.7	73.8	42.6	6.5	11.4	60.5	119.9	1,309.7	14.4
1989	-44.0	181.7	162.2	-24.5	41.2	13.2	11.8	66.2	116.2	1,235.2	-74.5
1990	-13.2	131.5	96.3	22.0	47.5	6.2	11.6	65.3	116.4	1,206.1	-29.1
1991	37.1	131.2	110.5	57.8	30.0	4.0	8.7	42.7	119.9	1,186.7	-19.4
1992	35.7	128.1	86.6	77.2	30.2	3.2	10.2	43.6	122.9	1,184.6	-2.1
1993	16.2	121.5	101.8	35.9	39.0	3.8	10.2	53.0	125.3	1,148.2	-36.4
1994	6.9	138.8	107.5	38.2	49.9	8.6	20.8	79.3	125.8	1,139.9	-8.3
1995	30.5	153.9	109.9	74.5	68.7	8.3	10.7	87.7	125.8	1,176.3	36.4
1996	75.5	134.2	106.4	103.3	71.7	10.3	17.3	99.3	135.1	1,243.8	67.5
1997	-2.4	190.6	144.7	43.6	85.1	18.1	14.3	117.5	137.4	1,267.6	23.8
1998	-57.4	207.0	173.9	-24.3	60.9	10.5	14.0	85.4	132.4	1,196.2	-71.4

^aRevisions and adjustments = Col. 1 + Col. 2 – Col. 3.

^bTotal discoveries = Col. 5 + Col. 6 + Col. 7.

^cProved reserves = Col. 10 from prior year + Col. 4 + Col. 8 – Col. 9.

^dAn unusually large revision decrease to North Slope dry natural gas reserves was made in 1988. It recognizes some 696.59 billion cubic meters of downward revisions reported during prior years by operators because of economic and market conditions. EIA in previous years carried these reserves in the proved category.

Notes: Old means discovered in a prior year. New means discovered during the report year. The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." The following conversion factors were used to convert data in Columns 2, 3, 5, 6, 7, 9, and 10: barrels = 0.1589873 per cubic meter, cubic feet = 0.02831685 per cubic meter. Number of decimal digits varies in order to accurately reproduce corresponding equivalents shown on Table 1 in Chapter 2.

Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1988–1998 annual reports, DOE/EIA-0216.{12–21}