

Table 7. Crude Oil Production, Actual vs. Forecasts

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
(million barrels per day)														
AEO82	8.79	8.85	8.84	8.80	8.66	8.21								
AEO83	8.67	8.71	8.66	8.72	8.80	8.63								8.11
AEO84	8.86	8.70	8.59	8.45	8.28	8.25								7.19
AEO85	8.92	8.96	9.01	8.78	8.38	8.05	7.64	7.27	6.89	6.68	6.53			
AEO86		8.80	8.63	8.30	7.90	7.43	6.95	6.60	6.36	6.20	5.99	5.80	5.66	5.54
AEO87			8.31	8.18	8.00	7.63	7.34	7.09	6.86	6.64	6.54			
AEO89				8.18	7.97	7.64	7.25	6.87	6.59	6.37	6.17	6.05	6.00	5.94
AEO90					7.67	7.37								6.40
AEO91						7.23	6.98	7.10	7.11	7.01	6.79	6.48	6.22	5.92
AEO92							7.37	7.17	6.99	6.89	6.68	6.45	6.28	6.16
AEO93								7.20	6.94	6.79	6.52	6.22	6.00	5.84
AEO94									6.87	6.50	6.18	5.92	5.72	5.54
AEO95										6.58	6.32	6.04	5.74	5.58
AEO96											6.54	6.33	6.16	5.95
AEO97												6.47	6.32	6.15
AEO98													6.41	6.39
AEO99														6.41
AEO2000														
AEO2001														
AEO2002														
AEO2003														
Actual	8.97	8.68	8.35	8.14	7.61	7.36	7.42	7.19	6.85	6.66	6.56	6.48	6.45	6.25
Average Absolute Error (Across AEOs)	0.16	0.12	0.34	0.35	0.59	0.50	0.24	0.17	0.17	0.19	0.34	0.29	0.40	0.36
(percent error)														
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
AEO82	-2.0	2.0	5.9	8.1	13.8	11.6								
AEO83	-3.4	0.3	3.7	7.1	15.6	17.3								23.6
AEO84	-1.2	0.2	2.9	3.8	8.8	12.2								9.6
AEO85	-0.6	3.2	7.9	7.9	10.1	9.4	3.0	1.1	0.6	0.3	-0.5			
AEO86		1.4	3.4	2.0	3.8	1.0	-6.3	-8.2	-7.1	-6.9	-8.7	-10.5	-12.3	-11.4
AEO87			-0.5	0.5	5.1	3.7	-1.0	-1.4	0.2	-0.3	-0.3			
AEO89				0.5	4.7	3.9	-2.2	-4.5	-3.7	-4.4	-5.9	-6.7	-7.0	-5.0
AEO90					0.7	0.2								-2.4
AEO91						-1.7	-5.9	-1.3	3.8	5.2	3.5	0.0	-3.6	-5.3
AEO92							-0.6	-0.3	2.1	3.4	1.8	-0.5	-2.7	-1.5
AEO93								0.1	1.4	1.9	-0.6	-4.0	-7.0	-6.6
AEO94									0.3	-2.4	-5.8	-8.7	-11.3	-11.4
AEO95										-1.2	-3.7	-6.8	-11.0	-10.7
AEO96											-0.3	-2.3	-4.5	-4.8
AEO97												-0.2	-2.0	-1.6
AEO98													-0.6	2.2
AEO99														2.5
AEO2000														
AEO2001														
AEO2002														
AEO2003														
Average Absolute Percent Error (Across AEOs)	1.8	1.4	4.0	4.3	7.8	6.8	3.2	2.4	2.4	2.9	5.1	4.4	6.2	5.7

Table 7. Crude Oil Production, Actual vs. Forecasts

	Absolute Forecasting Errors as Compared to Actual Historical Figures														
	1999	2000	2001	2002	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AEO82					0.18	0.17	0.49	0.66	1.05	0.85					
AEO83					0.30	0.03	0.31	0.58	1.19	1.27					1.55
AEO84					0.11	0.02	0.24	0.31	0.67	0.89					0.63
AEO85					0.05	0.28	0.66	0.64	0.77	0.69	0.22	0.08	0.04	0.02	0.03
AEO86	5.45	5.43				0.12	0.28	0.16	0.29	0.07	0.47	0.59	0.49	0.46	0.57
AEO87		6.03				0.04	0.04	0.39	0.27	0.08	0.10	0.01	0.02		0.02
AEO89	5.90	5.89					0.04	0.36	0.28	0.17	0.32	0.26	0.29	0.39	
AEO90		5.86						0.06	0.01						0.16
AEO91	5.64	5.36	5.11	4.90					0.13	0.44	0.09	0.26	0.35	0.23	
AEO92	6.06	5.91	5.79	5.71						0.05	0.02	0.14	0.23	0.12	
AEO93	5.72	5.60	5.54	5.50							0.01	0.09	0.13	0.04	
AEO94	5.35	5.18	5.07	5.00								0.02	0.16	0.38	
AEO95	5.39	5.35	5.27	5.25									0.08	0.24	
AEO96	5.79	5.65	5.51	5.42											0.02
AEO97	6.02	5.87	5.73	5.63											
AEO98	6.28	6.17	6.08	6.01											
AEO99	6.33	6.29	6.21	6.05											
AEO2000	6.01	5.98	5.81	5.65											
AEO2001		5.89	5.92	6.04											
AEO2002			5.84	5.85											
AEO2003				5.89											
Actual	5.88	5.82	5.80	5.82											
Average Absolute Error (Across AEOs)	0.27	0.28	0.29	0.33											

	1999	2000	2001	2002	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
(absolute percent error)															
AEO82					2.0	2.0	5.9	8.1	13.8	11.6					
AEO83					3.4	0.3	3.7	7.1	15.6	17.3					23.6
AEO84					1.2	0.2	2.9	3.8	8.8	12.2					9.6
AEO85					0.6	3.2	7.9	7.9	10.1	9.4	3.0	1.1	0.6	0.3	0.5
AEO86	-7.3	-6.7				1.4	3.4	2.0	3.8	1.0	6.3	8.2	7.1	6.9	8.7
AEO87		3.6					0.5	0.5	5.1	3.7	1.0	1.4	0.2	0.3	0.3
AEO89	0.3	1.2						0.5	4.7	3.9	2.2	4.5	3.7	4.4	5.9
AEO90		0.7							0.7	0.2					2.4
AEO91	-4.1	-7.9	-11.9	-16						1.7	5.9	1.3	3.8	5.2	3.5
AEO92	3.0	1.5	-0.2	-2							0.6	0.3	2.1	3.4	1.8
AEO93	-2.7	-3.8	-4.5	-5								0.1	1.4	1.9	0.6
AEO94	-9.0	-11.0	-12.6	-14									0.3	2.4	5.8
AEO95	-8.4	-8.1	-9.2	-10										1.2	3.7
AEO96	-1.6	-3.0	-5.0	-7											0.3
AEO97	2.4	0.8	-1.2	-3											
AEO98	6.8	6.0	4.8	3											
AEO99	7.6	8.0	7.1	4											
AEO2000	2.2	2.7	0.2	-3											
AEO2001		1.2	2.1	4											
AEO2002			0.7	1											
AEO2003				1											
Average Absolute Percent Error (Across AEOs)	4.6	4.8	5.0	6											

Table 7. Crude Oil Production, Actual vs. Forecasts

	1996	1997	1998	1999	2000	2001	2002	Average Absolute Error (Across Years)
AEO82								0.57
AEO83								0.75
AEO84								0.41
AEO85								0.32
AEO86	0.68	0.79	0.71	0.43	0.39			0.43
AEO87								0.11
AEO89	0.43	0.45	0.31	0.02	0.07			0.26
AEO90								0.08
AEO91	0.00	0.23	0.33	0.24	0.46	0.69	0.92	0.34
AEO92	0.03	0.17	0.09	0.18	0.09	0.01	0.11	0.10
AEO93	0.26	0.45	0.41	0.16	0.22	0.26	0.32	0.21
AEO94	0.56	0.73	0.71	0.53	0.64	0.73	0.82	0.53
AEO95	0.44	0.71	0.67	0.49	0.47	0.53	0.57	0.47
AEO96	0.15	0.29	0.30	0.09	0.17	0.29	0.40	0.21
AEO97	0.01	0.13	0.10	0.14	0.05	0.07	0.19	0.10
AEO98		0.04	0.14	0.40	0.35	0.28	0.19	0.23
AEO99			0.16	0.45	0.47	0.41	0.23	0.34
AEO2000				0.13	0.16	0.01	0.17	0.12
AEO2001					0.07	0.12	0.22	0.14
AEO2002						0.04	0.03	0.04
AEO2003							0.07	0.07
Actual								
Average Absolute Error (Across AEOs)								0.31

	1996	1997	1998	1999	2000	2001	2002	Average Absolute Percent Error (Across Years)
AEO82								7.2
AEO83								10.2
AEO84								5.5
AEO85								4.1
AEO86	10.5	12.3	11.4	7.3	6.7			6.5
AEO87								1.4
AEO89	6.7	7.0	5.0	0.3	1.2			3.8
AEO90								1.1
AEO91	0.0	3.6	5.3	4.1	7.9	11.9	15.8	5.4
AEO92	0.5	2.7	1.5	3.0	1.5	0.2	1.8	1.6
AEO93	4.0	7.0	6.6	2.7	3.8	4.5	5.4	3.5
AEO94	8.7	11.3	11.4	9.0	11.0	12.6	14.0	8.7
AEO95	6.8	11.0	10.7	8.4	8.1	9.2	9.7	7.6
AEO96	2.3	4.5	4.8	1.6	3.0	5.0	6.8	3.5
AEO97	0.2	2.0	1.6	2.4	0.8	1.2	3.2	1.6
AEO98		0.6	2.2	6.8	6.0	4.8	3.3	4.0
AEO99			2.5	7.6	8.0	7.1	4.0	5.9
AEO2000				2.2	2.7	0.2	2.9	2.0
AEO2001					1.2	2.1	3.8	2.4
AEO2002						0.7	0.6	0.7
AEO2003							1.2	1.2
Average Absolute Percent Error (Across AEOs)								4.7