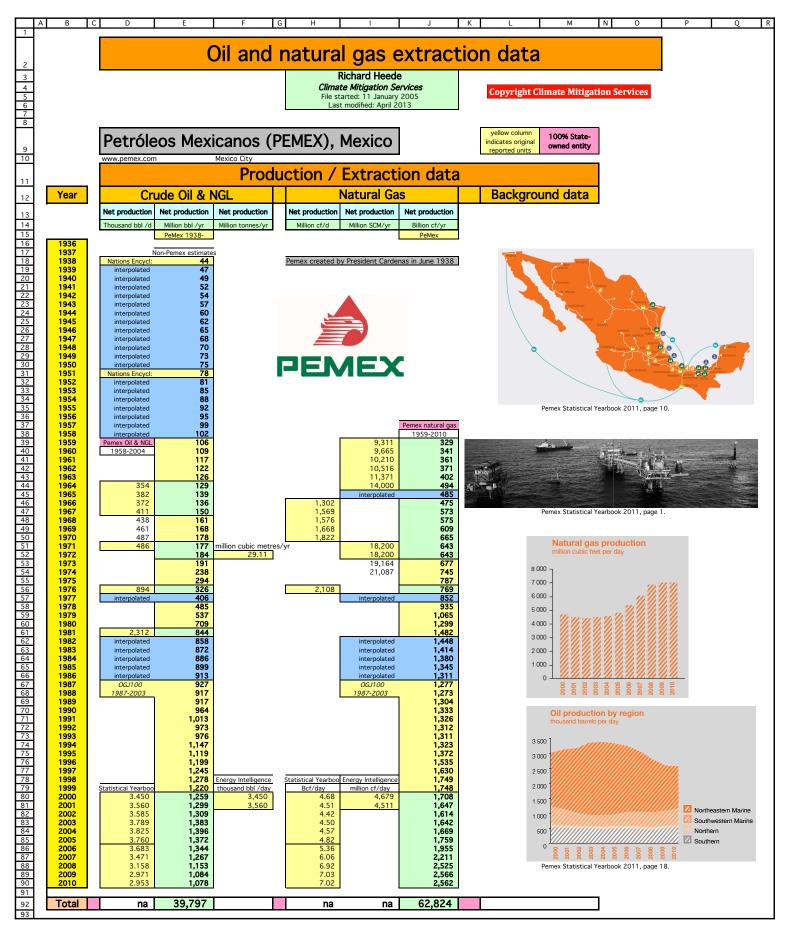
PEMEX



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96 97	200	8	Thousan	d bbl /d 3,257	Millio	n bbl /yr 1,189								n cf/d 3,953	Bc	f.yr 1,443											
98 99														2, <i>Oil and</i> Imacresea	<i>Governanc</i> rch.com	e.	-										
100 101					US En	ergy Info	rmatior	n Admii	nistrati	ion, In	ternati	onal I	Energy	Statistic	s				ι	Jpdated	d April 20	013					
102 103			Mex			exico	www.ei	a.gov/e	meu/int		Mexico		Me	xico		xico	ed & Fla gross	Mexico			exico						
104 105			Crude k bbl p			bbl per y					Markete :f per ye	ar		tural gas er year	Vented Bcf pe		%	Reinject Bcf per y	ear		s Prod'n per year						
106 107 108	198 198 198	1		2,129 2,554		777 932 1,096	1					NA NA		900 969		156 251			NA NA		N						
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111 112	198 198	5		3,016 2,787		1,101						NA		999 886		108 69			NA NA		N	A					
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117 118	199 199	2		3,137 3,123		1,145	)				8	399 379		899 879		-	0% 0%		-		89 87	9					
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122	199	6		3,278 3,410		1,197					1,0	064 166		1,064 1,166		162 253	13% 18%		-		1,03 1,22 1,41	6					
124	199 199	8		3,495 3,345		1,276 1,221	5				1,2	266 287		1,266 1,287		274 205	18% 14%		:		1,54 1,49	0					
125 126 127	200 200	1		3,450 3,560		1,259 1,299						314 302		1,314 1,302		196 154	13% 11%		:		1,51 1,45						
128 129 130	200 200	3		3,585 3,789		1,309	;				1,4	334 400		1,334 1,400		115 109	8% 7%		:		1,44 1,50	9					
130 131 132	200 200 200	5		3,825 3,760		1,396	<u>!</u>				1,5	464 522		1,252		59 66 89	4% 4% 5%		-		1,52	3					
132 133 134	200	7		3,683 3,471 3,157		1,344 1,267 1,152					1,6	741 578 594		1,741 1,678 1,694		199 488	11% 22%		-		1,83 1,87 2,18	8					
135 136	200 201	9		2,971 2,953		1,085 1,078	5				1,7	722 799		1,722 1,799		255 154	13% 8%		:		1,97 1,95	7					
137 138	201 201			2,934 2,910		1,071 1,062	2					761		1,761		NA			-		1,76	_					
139 140 141							1:	990-201	1 total	S	29,0	075		28,691		2,958	9.2%		-		32,02	8					
142 143																											
144 145				2000	2001	2002 20	003 2004	2005	2006	2007	2008	2009	2010	2010/2009 (%)		Frequency ind	lex ( numbe	r of disabling	2000	2001	2002	2003	2004 2005	5 2006	2007	2008 1	2009 2
146 147		Production ( Liquid hyd Crude o	irocarbons	3 450 3 012		3 585 3 7 3 177 3 3	789 3 825			3 471 3 076	3 157 2 792	2 971 2 601	2 953 2 576	-0.6 -1.0		accidents pe Petróleos Mex Pemex-Explo	kicanos	man-hours worked) Production	1.19 1.66	1.00 1.26	1.17 1.14	1.09	1.50 1.0 1.67 1.2				0.42
140			sates and	438	433		118 442		427	395	366	370	377	2.0		Pernex-Refini	ing and Basic Pe	atrochemicals	0.72 0.90 1.06	0.69 0.50 0.56	1.10 1.01 0.88	0.63 0.92 1.13	1.23 1.1 0.38 0.2 2.00 1.1	6 0.59 6 0.07	0.27	0.24 0.53	0.32 0.10 0.45
151 152			is (MMcfd) processing	4 679	1 252	1 245 1 2	498 4 573 286 1 303	3 1 284	1 284	6 058 1 270	6 919 1 261	7 031	7 020	-0.2 -8.6		Petróleos Me Severity index	ixicanos : (number of	lost workdays	1.49	1.86	1.79	1.54	1.85 0.7				0.07
147 148 149 150 151 152 153 154 155			nicals ° (Mt)	1 450 11 501	1 473 10 377	1 481 1 5 9 880 10 2	356 1 587 298 10 731		1 546 10 961	1 512 11 757	1 491 11 973	1 525 11 956	1 416 13 188	-7.2 10.3		per million of Petróleos Mex Pernex-Explo	licanos		89 117	93 140	96 126	96 92	100 6 107 7			27 41	26 44
156		Volume (Mb Refined pr		1 726	1 712	1 658 1 6	584 1 718	3 1 771	1 762	1 815	1 826	1 771	1 762	-0.5		Pernex-Refini Pernex-Gas a Pernex-Petro	and Basic Pe	etrochemicals	72 102 111	50 79 132	92 48 108	78 184 146	89 7. 137 5 151 8	6 9	2	17 44 43	17 13 31
157 158 159		LPG Motor ga	Isolines	330 531	325 550	565 6	327 328 500 636	671	305 718	300 760	292 792	281 792	288 802	2.5 1.2		Petróleos Me Environmental	xicanos I protection		32	52	40	51	53 2	7 11	2	4	3
160 161		Jet fuel Diesel Fuel oil		56 285 492	276 475	271 2	54 58 295 303 355 332	320	61 345 264	68 358 257	382 220	55 359 209	56 371 185	1.6 3.4 -11.5		Sulfur oxide e Carbon dioxis Total discharg	de emission ges to water	s (CO <sub>2</sub> ) (t/Mt) (kg/Mt)	2.06 133 17.14	2.15 125 13.19	1.49 111 9.16	1.65 117 7.61	1.49 1.2 112 9 6.39 6.3	0 114 5 6.99	124 7.71	150 7.27	2.87 166 11.70
162 163		Others Dry gas (M	Mcfd)	32 2 061	30	31	53 61 521 2 756	66	68	71 3 064	76 3 086	75 3 1 1 9	60	-19.6 4.3		Disposal of h Leakage and Events		aste * (%)	76.50	77.00 1 249	84.80 839	97.99 791	98.19 158.2 338 39			149.36 10 329	216
164 165		Petrocherr	nicals <sup>e</sup> (Mt)	3 505		3 295 3 1 (2011) St				4 041 4.	4 191	4 064	4 247	4.5		Volume (t)			6 252 F	8031 Pemex (	19 995 (2011) S	9570 Statistic	5488 352 al Yearbo	8 3 434 ok, pag	14 992 e 9.	1970	7 033 27
166 167													_					www.ri.peme	x.com/f	iles/cor	ntent/AE	_E_Pe			-		
169 170	_							Crude Oil		quid F	iyaroo			arrels dail					<b>D</b> t				N		(million o	Product Subic feet	
171 172			Total	Total		By t	type	Crude Oil			By regio	n		Natural Gas		Tota	al _	Asso Hydrocarbon g	By ty ociated as Ni	itrogen		on ciated	Marine		outhern	Nort	nern
173 174	200	3	3,683	Crude 3,256	Heavy 2,244	Light 83		ralight 180	Mari 2.6	ine 580	Southen	n N	lorthern 84	liquids <sup>®</sup> 427	2006 2007	5,3		3,090 3,302		0 143		,266 ,613	1,776 2,150		1,352 1,353		.228 .556
175 176	200	7 5	3,471	3,076	2,039	83	8	199	2,5	524	465		87	395	2008	6,9	19	3,690		629	2,	,599	2,924		1,451	2,	544
177	200 200		3,157 2,971	2,792 2,601	1,766			210 270	2,2	246 010	459 498		87 93	366 370	2009 January	7,0		3,984		496 563		, <b>550</b> ,543	2,894 3,033		1,600 1,538		537
180 181		uary iruary	3,050 3,027	2,685 2,663	1,638 1,623	8 80	14	231 237	2,1		475 472		90 92	366 364	February March	7,0	09	3,976 3,945		525 485	2	,507 ,523	2,984 2,885		1,531 1,551	2,	494 518
182 183	Ma		3,026 3,021	2,652 2,642	1,586			251 264	2,0		490 495		94 93	374 379	April May	6,9 7,0		4,027 3,979		416 474		,521 ,550	2,909 2,927		1,544 1,538		511 539
184 185	Ma Jur	/	2,991 2,882	2,609 2,519	1,534 1,447	81	0	265 270	2,0		493 493		94 98	382 363	June	7,1	21	4,052		526	2	,543	3,031		1,560	2,	529
186	Jul Au	just	2,927 2,915	2,561 2,542	1,487 1,461	80	0	268 281	1,9	967 940	498 508		97 94	366 373	July August September	7,0 7,1 7,0	21	4,001 4,038 4,004		504 527 474	2	,550 ,556 ,544	2,936 2,921 2,833		1,575 1,657 1,667	2,	543 543 523
189 190	Oc	ober	2,963	2,599	1,494	\$ 81	8	283 289	1,9	994	513 514		92 92	364	October November	7,1	70	4,018		566 488	2	,586 ,588	2,915 2,742		1,686 1,670	2,	569 573
160   161   162   163   164   165   166   167   168   169   177   173   174   175   176   177   178   181   182   183   184   185   188   188   188   181   182   183   184   185   181   182   183   184   185   181   182   192   193   194	De	vember cember	2,923 2,972	2,553 2,593	1,457 1,465	5 82	7	294 301		983	504 518		92 91	369 380	December	6,8	72	3,877		407	2	,588	2,619		1,675	2,	578
193 194	201	D	2,953 Pemex (2	2,576 2011) Mo	1,422 onthly Pe	e 83 troleum S		320 Nov11.	1,9	942	532		102	377	2010	7,0	20	3,860 Pemex (201	I 1) Mont	683 hly Pet:		,477 Statistic	2,755 cs, Nov11.		1,765	2,	500
195																											

											Change 2010/2009
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	(%)
1											
	3 560	3 585	3 789	3 825	3 760	3 683	3 471	3 157	2 971	2 953	-0.6
	3 127	3 177	3 371	3 383	3 333	3 256	3 076	2 792	2 601	2 576	-1.0
	5 121	0.07	0.0/1	0.000	0 000	0 200	0.010	2102	2 001	2 3/0	-1.0
	433				426	427			370	077	20
		408	418	442			395	366		377	
	4 511	4 423	4 498	4 573	4 818	5 356	6 058	6 9 1 9	7 031	7 020	-0.2
	1 252	1 245	1 286	1 303	1 284	1 284	1 270	1 261	1 295	1 184	-8.6
	1 473	1 481	1 556	1 587	1 554	1 546	1 512	1 491	1 525	1 4 1 6	-7.2
	10 377	9 880	10 298	10 731	10 603	10 961	11 757	11 973	11 956	13 188	10.3
	1 712	1 658	1 684	1 718	1 771	1 762	1 815	1 826	1 771	1 762	-0.5
	325	332	327	328	313	305	300	292	281	288	-0.5
	550	565	600	636	671	718	760	792	792	802	1.2
	55	53	54	58	59	61	68	65	55	56	1.6
	276	271	295	303	320	345	358	382	359	371	3.4
	475	406	355	332	341	264	257	220	209	185	-11.5
	30	31	53	61	66	68	71	76	75	60	-19.6
	1 993	2 425	2 621	2 756	2 632	2 955	3 064	3 086	3 1 1 9	3 254	4.3
	3 495	3 295	3 181	3 568	3 795	3 869	4 0 4 1	4 191	4 064	4 247	4.5
			) Statis								
	I CITIEX	(2011	, statis		.ai 000K	, page					

	1 518	1 249	839	791	338	399	404	392	329	21
	6 252	8 03 1	19 995	9 570	5 488	3 528	3 434	14 992	1 970	7 03
		Pemex	(2011	) Statis	stical Y	earboo	k, page	9.		
www.ri.peme	k.com/	files/co	ontent/	AEE	Petrole	os%20	Mexica	inos in	a 201'	1.pdf

203 27 971

0.42 0.43 0.66 0.18 0.29 0.09

								(industand bi	arroio dan							(million cui	bic feet dai	
					Crude Oil			By type							By region			
				By type		By region			Natural		Total	Associate	ed	Non	Marine	Southern	Northern	
	Total	Total		Бу туре					Gas			Hydrocarbon gas	Nitrogen	associated				
		Crude	Heavy	Light	Extralight	Marine	Southern	Northern	liquids"	2006	5,356	3,090	0	2,266	1,776	1,352	2,228	
006	3,683	3,256	2,244	831	180	2,680	491	84	427	2007	6,058	3,302	143	2,613	2,150	1,353	2,55	
007 6	3,471	3,076	2,039	838	199	2,524	465	87	395	2008	6,919	3,690	629	2,599	2,924	1,451	2,54	
:008	3,157	2,792	1,766	815	210	2,246	459	87	366	2009	7,031	3,984	496	2,550	2,894	1,600	2,53	
009	2,971	2,601	1,520	812	270	2,010	498	93	370	January	7,091	3,985	563	2,543	3,033	1,538	2,52	
										February	7,009	3,976	525	2,507	2,984	1,531	2,49	
January	3,050	2,685	1,638	815	231	2,120	475	90	366	March	6,953	3,945	485	2,507	2,885	1,551	2,48	
February	3,027	2,663	1,623	804	237	2,100	472	92	364	Warun	0,500	3,540	400	2,323	2,000	1,001	2,0	
March	3,026	2,652	1,586	815	251	2,069	490	94	374	A	6,964	4,027	110	2,521	2,909	1,544	2,51	
And	3,021	2,642	1,558	820	264	2,054	495	93	379	April	7,003	3,979	416 474		2,909		2,51	
April	2,991	2,609	1,536	810	265	2,034	493	94	3/9	May				2,550		1,538		
May June	2,991	2,509	1,034	802	205	1,928	493	94	362	June	7,121	4,052	526	2,543	3,031	1,560	2,52	
Julio	2,002	2,010	1,443	002	270	1,020	400	30	303									
July	2,927	2,561	1,487	806	268	1.967	498	97	366	July	7,055	4,001	504	2,550	2,936	1,575	2,54	
August	2,915	2,542	1,461	800	281	1,940	508	94	373	August	7,121	4,038	527	2,556	2,921	1,657	2,54	
September	2,963	2,599	1,494	822	283	1,994	513	92	364	September	7,023	4,004	474	2,544	2,833	1,667	2,52	
October	2,962	2,602	1,494	818	289	1,996	514	92	361	October	7,170	4,018	566	2,586	2,915	1,686	2,5	
November	2.923	2,553	1,457	802	294	1,957	504	92	369	November	6,985	3,909	488	2,588	2,742	1,670	2,5	
December	2,972	2,593	1,465	827	301	1,983	518	91	380	December	6,872	3,877	407	2,588	2,619	1,675	2,5	
010	2,953	2,576	1,422	834	320	1,942	532	102	377	2010	7,020	3,860	683	2,477	2,755	1,765	2,5	
	Pemex	(2011) Mo	nthly Petro	leum Stati	stics, Nov11.							Pemex (2011)	Monthly Petro	oleum Statistic	s, Nov11.			

OilGasOxy\_Shell.xls

Natural Gas Production

PEMEX

#### Cell: 19

#### Comment: Rick Heeder

"Petróleos Mexicanos or Pemex is a Mexican state-owned petroleum company. Pemex has a total asset worth of \$415.75 billion, and is the world's second largest non-publicly listed company by total market value, and Latin America's second largest enterprise by annual revenue as of 2009. However, the majority of its shares are non-publicly listed and under control of the Mexican government. The value of its publicly listed shares totalled \$102 billion in 2010, representing approximately one guarter of the company's total worth.

Asphalt and pitch had been worked in Mexico since the time of the Aztecs. Small quantities of oil were first refined into kerosene around 1876 near Tampico. By 1917 commercial quantities of oil were being extracted and refined by subsidiaries of the British Pearson and American Doheny companies, and had attracted the attention of the Mexican government who then claimed all mineral rights for the state as part of its Constitution. In 1938, President Lázaro Cárdenas sided with oil workers striking against foreign-owned oil companies for an increase in pay and social services. On March 18, 1938, citing the 27th article of the 1917 constitution, President Cárdenas embarked on the state-expropriation of all resources and facilities, nationalizing the United States and Anglo-Dutch operating companies, creating Pemex. In retaliation, many foreign governments closed their markets to Mexican oil. In spite of the boycott, Pemex developed into one of the largest oil companies in the world and helped Mexico become the fifth-largest oil exporter in the world.

In 1979, Pemex's Ixtoc I exploratory oil well in the Bay of Campeche suffered a blowout resulting in one of the largest oil spills in history. Pemex spent \$100 million to clean up the spill and avoided most compensation claims by asserting sovereign immunity as a state-run company.

#### en.wikipedia.org/wiki/Pemex

See also: History of Petroleos Mexicanos at www.pemex.com/index.cfm?action=content&sectionID=112&catID=11682, though uninformative:

"1937: After a series of events that damaged the relationship between employees and companies, a strike broke out against the foreign oil companies paralyzing the country. The Conciliation and Arbitration Board ruled in favor of the workers, but the companies filed a writ of amparo in the Nations Supreme Court of Justice.

1938: As the writ of amparo was rejected, the Supreme Court ratified the judgment rendered by the Federal Conciliation and Arbitration Board in favor of the workers. After the companies' rejection to fulfill the court order, during the afternoon of March 18th, President Lazaro Cardenas del Rio issued an executive order to expropriate the real estate property and the movable property of 17 oil companies in favor of the Nation. On June 7, Petroleos Mexicanos is created."

### Cell: M9

### Comment: Rick Heede:

World Bank, 2008b, page 357: "Petroleos Mexicanos is a decentralized public entity of the Mexican government. The Mexican government owns 100% of PEMEX. The company is a decentralized entity of the federal aovernment.'

World Bank (2008b) A Citizen's Guide to National Oil Companies, Part B: Data Directory, World Bank, Washington, & Center for Energy Economics, Bureau of Economic Geology Jackson School of Geosciences University of Texas, Austin, 764 pp.

See also: Stojanovski, Ognen (2012) "Handcuffed; an assess-ment of Pemex's performance and strategy," pp. 280-333, in Victor et al. eds, Oil and Governance, Cambridge Univ. Press, 1034 pp

# Cell: D12

Comment: Rick Heede

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list net production. Crude production includes natural gas liquids (NGL) unless noted.

#### Cell: H12

#### Comment: Rick Heeder

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil.

Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide").

"SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day.

Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are probably typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production.

ExxonMobil Corporation (2004) 2003 Financial and Operating Review, www.exxonmobil.com, p. 55.

## Cell: E15

# Comment: Rick Heede:

Petroelos Mexicanos was created by President Lazaro Cardenas in June of 1938.

### Cell: E17

## Comment: Rick Heede:

The Nations Encyclopedia ("The Encyclopedia of the Nations is a complete source for detailed information about one hundred ninety three countries in the world, information about the United Nations and the associated agencies, and World Leaders."): www.nationsencyclopedia.com/ and specifically: www.country-data.com/cgi-bin/query/r-8749.html

Despite disruption caused by the Revolution, Mexico's oil production peaked in 1921 at 193 million barrels (some 25 percent of world production), largely as a result of increased international demand generated by World War I. During much of the 1920s, Mexico was second only to the United States in petroleum output and led the world in oil exports. By the early 1930s, however, output had fallen to just 20 percent of its 1921 level as a consequence of worldwide economic depression, the lack of new oil discoveries, increased taxation, political instability, and Venezuela's emergence as a more attractive source of petroleum. Production began to recover with the 1932 discovery of the Poza Rica field near Veracruz, which became Mexico's main source of petroleum until the late 1950s.

In 1938 President Lázaro Cárdenas nationalized the petroleum industry, giving the Mexican government a monopoly in the exploration, production, refining, and distribution of oil and natural gas, and in the manufacture and sale of basic petrochemicals. Although Cárdenas offered compensation, United States oil companies pressured the United States government to embargo all imports from Mexico in order to discourage similar nationalizations in other countries. The boycott was in effect briefly, but the United States government soon pressured the oil companies to come to terms with Mexico as a result of President Franklin D. Roosevelt's Good

Neighbor Policy and United States security needs arising from World War II. In 1943 Mexico and the oil companies reached a final settlement under which the companies received US\$24 million (a fraction of the book value of the expropriated facilities) as compensation. Nevertheless, the oil nationalization deprived Mexico of foreign capital and expertise for some twenty years. Mexico's oil output expanded at an average annual rate of 6 percent between 1938 and 1971. Production increased from 44 million barrels in 1938 to 78 million barrels in 1951. Domestic demand progressively exceeded

output, and in 1957 Mexico became a net importer of petroleum products. Production rose to 177 million barrels by 1971 with the exploitation of new oil fields in the isthmus of Tehuantepec and natural gas reserves near the northeastern border city of Reynosa, but the gap between domestic demand and production continued to widen.

Extensive oil discoveries in the 1970s increased Mexico's domestic output and export revenues. In 1972 explorers discovered deep oil wells in the states of Chiapas and Campeche that showed huge reservoirs of petroleum extending for 200 kilometers northeast below the Bahía de Campeche, and possibly in the opposite direction toward Guatemala. Almost every drilling operation conducted after 1972 struck oil. In 1973 oil production surpassed the peak of 190 million barrels achieved in the early 1920s. In 1974 Pemex announced additional petroleum discoveries in Veracruz, Baja California Norte, Chiapas, and Tabasco.

By 1975 Mexico's oil output once again exceeded internal demand, providing a margin for export. President López Portillo announced in 1976 that Mexico's proven hydrocarbon reserves had risen to 11 billion barrels. They rose further to 72.5 billion barrels by 1983. López Portillo decided to increase domestic production and use the value of Mexico's petroleum reserves as collateral for massive international loans, most of which went to Pemex. Between 1977 and 1980, the oil company received US\$12.6 billion in international credit, representing 37 percent of Mexico's total foreign debt. It used the money to construct and operate offshore drilling platforms, build onshore processing facilities, enlarge its refineries, engage in further exploration, prove fresh reserves, and purchase capital goods and technical expertise from abroad. These investments helped to increase petroleum output from 400 million barrels in 1977 to 1.1 billion barrels by 1982. Between 1983 and 1991, Mexico's petroleum exports by volume remained roughly constant at 1.4 million barrels per day (bpd), while total production increased from 2.7 million bpd to 3.1 million bpd.'

## Cell: E39

Comment: Rick Heede

Oil plus NGL production for 1959-1963 from Petroleos Mexicanos (1964) Informe del Director General, p. 22.

#### Cell: 139

#### Comment: Rick Heede:

Natural gas production for 1959-1963 from Petroleos Mexicanos (1964) Informe del Director General, p. 22.

# Cell: D44

## Comment: Rick Heede:

Oil plus NGL production for 1964-1967 from Petroleos Mexicanos (1965) Petroleum Policy, by Mr. Jesus Reyes Heroles (Dir Gen), p. 3.

Note: 1966 production is estimated at 388 kbbld, but we adjust this figure downwards based on the next year's annual report that notes 1967 production was 11 percent above 1966 (411 kbbld): ie, 1966 = ~372.4 k/bbłd.

No data given for natural gas production in our photocopy.

PEMEX

Oil plus NGL production for 1967 from Petroleos Mexicanos (1968) Petroleum Policy, by Mr. Jesus Reyes Heroles (Dir Gen), p. 6.

#### Cell: H47 Comment: Rick Heede:

Natural gas production for 1967 from Petroleos Mexicanos (1968) Petroleum Policy, by Mr. Jesus Reyes Heroles (Dir Gen), p. 6. Note: we derive 1966 gas production from this report's increased production of 8.3 percent over 1966.

### Cell: E48

Comment: Rick Heede:

Oil plus NGL production for 1969 from Petroleos Mexicanos (1970) Petroleum Policy, by Mr. Jesus Reyes Heroles (Dir Gen), p. 5-6.

#### Cell: E49 Comment: Rick Heede:

Oil plus NGL production for 1969 from Petroleos Mexicanos (1970) Petroleum Policy, by Mr. Jesus Reves Heroles (Dir Gen), p. 12.

### Cell: F52

Comment: Rick Heede:

Oil plus NGL production for 1972 from Petroleos Mexicanos (1973) Informe del Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 16.

Data only given in production units of million cubic metres or oil per year. Using the previous year's annual report plus 3.45 percent increase to calculate 1972 production (= 183.5 million bbl), the datum given of 29.111 million cubic meters of oil produced in 1972, then 1 million cubic metres equals 6.304 bbl.

## Cell: E53

### Comment: Rick Heede:

Oil plus NGL production for 1973 from Petroleos Mexicanos (1974) Informe del Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 4.

## **Cell:** E54

## Comment: Rick Heede:

Oil plus NGL production for 1974 from Petroleos Mexicanos (1975) Informe del Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 9 and 16.

### **Cell:** E55

Comment: Rick Heede:

Oil plus NGL production for 1975 from Petroleos Mexicanos (1976) Report of the Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 9 and 10.

## Cell: D56

Comment: Rick Heede:

Oil plus NGL production for 1976 from Petroleos Mexicanos (1977) Informe del Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 4.

#### **Cell:** E58

Comment: Rick Heede:

Oil plus NGL production for 1978 from Petroleos Mexicanos (1979) Informe del Director General, by Ing. Antonio Dovali Jaime (Dir Gen), p. 10.

#### Cell: E59

Comment: Rick Heede:

Oil plus NGL production for 1979-1980 from Petroleos Mexicanos (1981) Memoria de Labores, p. 73.

## Cell: D61

Comment: Rick Heede:

Oil plus NGL production for 1981 from Petroleos Mexicanos (1982) Memoria de Labores, p. 79.

## Cell: D80

Comment: Rick Heede

PEMEX (2011) Statistical Yearbook, page 4. Adds crude oil and natural gas liquids; in 2000: 3.012 + 0.438 million bbl per day; crude oil 87.3 percent of total liquids.

## Cell: F80

Comment: Rick Heede: Oil and gas data from El (2003) Top 100, p. 198.

**Cell:** H80

### Comment: Rick Heede:

PEMEX (2011) Statistical Yearbook, page 23.

### Cell: 180

Comment: Rick Heede: El (2003) Top 100, p. 194.

#### Cell: J84

Comment: Rick Heede:

Pemex data is identical to OGJ100.

## Cell: D86

Comment: Rick Heede:

Pemex (2011) Monthly Petroleum Statistics, Nov11. Table reproduced at right, and adds crude oil & NGLs.

### Cell: H86 Comment: Rick Heede:

Pemex (2011) Monthly Petroleum Statistics, Nov11.

#### Cell: E97

Comment: Rick Heede:

Pemex "working interest liquids production in 2008" at 3,257 thousand bbl per day.

Victor, Hults, & Thurber, 2012, Introduction, Table 1.1, page 24, in Victor et al, eds, 2012, Oil and Governance. Table 1.1 is based on information from Wood Mackenzie's Pathfinder Database; www.woodmacresearch.com

#### Cell: J97 Comment: Rick Heede:

Pemex "working interest natural gas production in 2008" at 3,953 thousand cf per day. Victor, Hults, & Thurber, 2012, Introduction, Table 1.1, page 24, in Victor et al, eds, 2012, Oil and Governance. Table 1.1 is based on information from Wood Mackenzie's Pathfinder Database; www.woodmacresearch.com