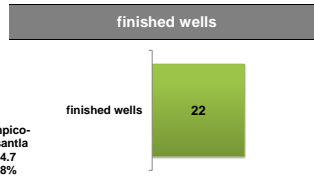
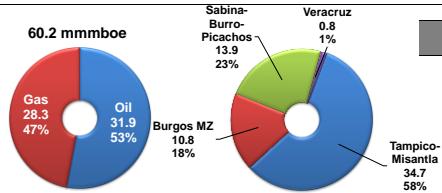
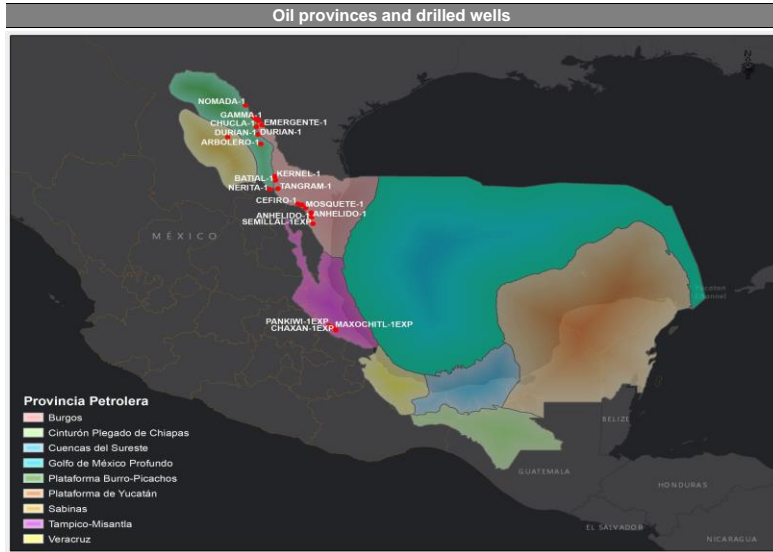


NATIONAL HYDROCARBONS COMMISSION  
Shale exploration and extraction of oil and gas  
July 2019

Prospective resources			
Oil province	Oil mmb	Gas Tcf	OE mmmboe
Tampico-Misantla	30.7	20.7	34.7
Burgos MZ	0.0	53.8	10.8
Sabinas-Burro-Picachos	0.6	67.0	13.9
Veracruz	0.6	0.0	0.8
<b>Total Shale</b>	<b>31.9</b>	<b>141.5</b>	<b>60.2</b>



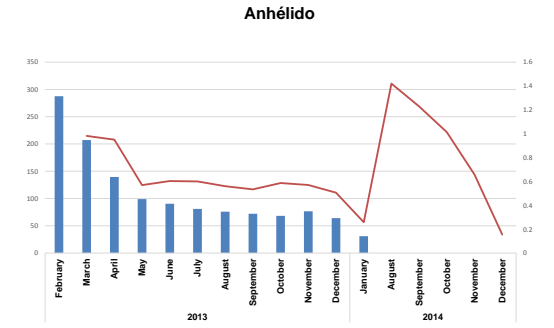
Field	Remaining gas reserves <sup>1</sup>		
	1P (mmcf)	2P (mmcf)	3P (mmcf)
Anhérido	0.00	0.00	0.00
Chucula	1.78	1.78	1.78
Emergente	0.13	13.75	13.75
Habano	1.69	1.69	1.69
Nuncio	1.89	1.89	133.71
Tangram	17.97	89.89	269.71



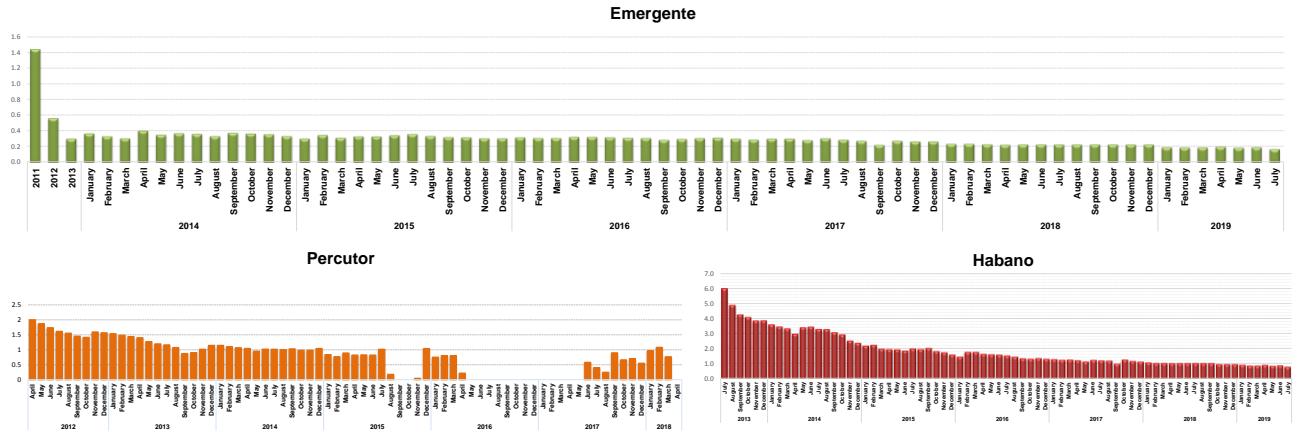
Oil and gas drilled wells in shale

Well	Total depth (mts)	Termination	Producer interval (mts)	Municipality	State	Expected hydrocarbon	Historical Production
Anhérido 1 <sup>a</sup>	3,945	28-dic-12	2,847-2,922	Cruillas	Tamaulipas		Yes
Anhérido-2 <sup>a</sup>	3,450	10-ago-14	-	Cruillas	Tamaulipas		Yes
Arbolero 1	4,007	07-jul-12	3,878-3,825	Anáhuac	Nuevo León		No
Batal 1	4,199	21-may-14	4,110-4,160	Los Herreras	Nuevo León		No
Céfiro 1	4,598	28-sep-14	4,502-4,560	Burgos	Tamaulipas		No
Chaxan-1exp	4,479	En perforación	-	Poza Rica	Veracruz		No
Chucula 1	3,705	30-mar-13	3,560-3,645	Hidalgo	Coahuila		No
Durian 1	4,250	05-jul-13	4,155-4,215	Anáhuac	Nuevo León		No
Emergente 1	4,071	17-feb-11	3,618-3,670	Hidalgo	Coahuila		Yes
Gamma 1	3,793	22-dic-13	3,690-3,740	Guerrero	Coahuila		No
Habano 1 <sup>a</sup>	3,770	15-abr-13	3,703-3,643	Hidalgo	Coahuila		Yes
Habano-2 <sup>a</sup>	3,520	04-jun-13	-	Hidalgo	Coahuila		Yes
Habano-21 <sup>a</sup>	3,725	15-feb-13	-	Hidalgo	Coahuila		Yes
Habano-71 <sup>a</sup>	3,682	13-abr-13	-	Hidalgo	Coahuila		Yes
Kaneni-1exp	4,894	En perforación	En perforación	Castillos de Teayo	Veracruz		No
Kernel 1	4,404	31-dic-13	4,292-4,364	Melchor Ocampo	Nuevo León		No
Maxochil-1exp	5,407	En perforación	En perforación	Venustiano Carranz	Puebla		No
Montañas 1	3,200	30-abr-12	3,155-3,080	Guerrero	Coahuila		No
Mosquete 1	4,156	11-jun-14	4,030-4,094	Burgos	Tamaulipas		No
Nerita 1	4,100	08-ago-14	3,922-4,013	Los Ramones	Nuevo León		No
Nómada 1	2,850	30-jun-12	2,806-2,737	Nava	Coahuila		No
Nuncio 1	4,900	23-nov-13	4,821-4,865	Burgos	Tamaulipas		No
Pankwi-1exp	5,060	En perforación	En perforación	Pantepec	Puebla		No
Percutor 1	3,436	30-mar-12	3,330-3,390	Progreso	Coahuila		Yes
Semilal-1exp	3,900	En perforación	En perforación	Jiménez	Tamaulipas		No
Serbal 1	4,750	28-ene-15	4,620-4,715	Cruillas	Tamaulipas		No
Tangram 1	4,426	31-dic-13	4,320-4,400	China	Nuevo León		No

Oil (bd) and gas (mmcf)



Gas production (mmcf)



Source: Petroleos Mexicanos; institutional database. Reserve information sent to the National Hydrocarbons Commission, Portal information from PEMEX-Secretary of Energy.  
Information of Anhelidos oil production is reported as not available in Petroleos Mexicanos institutional data base since February 2014, in the case of natural gas, it is reported as not available from February to July 2014 and from January 2015 to the present.  
1 / 1P, 2P, 3P: data through 2019.