



# 2008 Minerals Yearbook

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## TUNISIA

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# THE MINERAL INDUSTRY OF TUNISIA

By Mowafa Taib

Production of phosphate rock and phosphate-based fertilizers was Tunisia's major contribution to the world mineral markets. In 2008, Tunisia was ranked as the world's top fifth producer of phosphate rock and accounted for about 4.7% of the world supply of phosphate rock. Additionally, Tunisia produced aluminum fluoride, cement, clay, crude petroleum, fertilizer, gypsum, iron ore, lime, natural gas, refined petroleum products, salt, and steel (Jasinski, 2009).

## Minerals in the National Economy

In 2008, the Tunisian mining sector contributed 1.0% of the country's gross domestic product (GDP) at current prices compared with 0.6% of the GDP in 2007. The share of the hydrocarbon sector increased to 8.2% of the GDP from 7.4% in 2007 and 5.5% in 2006. The increase was mainly because of higher crude oil prices in the international markets in 2008. The mining sector's contribution to the growth of Tunisia's industrial sector in real terms decreased by 4.0% in 2008 compared with an increase of 1.0% in 2007 and 7.6% in 2006. Similarly, the hydrocarbon sector's contribution to the economic growth in 2008 decreased by 6.5% compared with an increase of 22.5% in 2007.

Fuel and industrial minerals played an important role in Tunisia's external trade. The value of energy exports, which included crude oil and refined petroleum products exports, was 17.3% of total exports, and the value of energy imports, which included coal, crude oil, natural gas, and refined petroleum products, was 16.2% of the country's total imports. Exports of phosphate rock and phosphate-based products accounted for 12.4% of the value of total exports, and the value of building materials exports accounted for 1.7% of total exports. Overall, the combined value of building materials, energy, mining, and phosphate products exports was about 32.2% of total exports. Poland received 45% of Tunisia's phosphate rock exports followed by Ukraine, which received about 15%. Exports of diammonium phosphate (DAP) went to India (26%), Turkey (21%), Italy (7%), and France and Vietnam (6% each). The remaining DAP exports were received by China, Iran, and Pakistan. About one-half of the phosphoric acid exports, which increased in value by 158% in 2008 compared with the value in 2007, was destined for India. Triple superphosphate exports, which increased in value by 136% in 2008 compared with the value in 2007, were received mainly by Iran (26%), Brazil, (24%), and Bangladesh (15%). Tunisia's mineral imports included crude oil from Libya, natural gas from Algeria, and refined petroleum products from Switzerland and the United Kingdom. Sulfur imports increased to 1.78 million metric tons (Mt) in 2008 from 1.39 Mt in 2007. About 46% of sulfur imports, which were used for the manufacturing of phosphate-based fertilizers, were mainly from Russia, and the rest were from Kazakhstan, Kuwait, Saudi Arabia, and the United Arab Emirates (Central Bank of Tunisia, 2009, p. 61, 63, 121, 125-126).

The influx of foreign direct investment (FDI) to Tunisia had been on a steady increase in the past 5 years. In 2008, the FDI was \$2.76 billion, which was an increase of 64% compared with that of 2007. About 57% of the FDI went to the energy sector whereas 19% went to the manufacturing sector. The increase in investment in the energy and chemical industries was an indication of the degree of success of the Government's policy of upgrading the industry resources to ensure sustainable production (Central Bank of Tunisia, 2009, p. 62).

## Government Policies and Programs

The Mining Code (law No. 2003-30 of April 28, 2003) regulated mineral exploration and production activities in Tunisia, and oil and gas production were governed by the Hydrocarbons Code (law No. 99-93 of August 17, 1999) and its supplement (law No. 2002-23 of February 2002). The Hydrocarbons Code allows a prospecting period of 1 year, a maximum of 5 years for exploration, and 30 years for production. The law reduces the tax rate to 50% from 75% if the state-owned *Entreprise Tunisienne d'Activités Pétrolières* (ETAP) [Tunisian National Oil Co.] holds a 40% share of the concession. In 2008, the Government introduced steps to stimulate and sustain exports, including paying 50% of the employer's contribution to the social security fund in case companies were to lay off workers temporarily or reduce their work to part time from full time (Central Bank of Tunisia, 2009, p. 61).

## Production

In 2008, there were notable increases in Tunisia's mineral production, including that of ammonium nitrate, which increased by 396%; crude steel, by 34%; liquefied petroleum gas (LPG), by 21%; iron ore, by 17%; hyperphosphate, by 16%; and salt, by 14%. Production of sodium tripolyphosphate decreased by 22%; dicalcium phosphate, by 18%; phosphoric acid, by 11%; crude oil, by 10%; and phosphate rock, by 4% (table 1).

## Structure of the Mineral Industry

Phosphate mining and fertilizer manufacturing activities in Tunisia were carried out by Government-owned *Compagnie des Phosphates de Gafsa* (CPG) [Gafsa Phosphate Co.]. The Government owned two cement companies, which were responsible for about 25% of the country's cement production; the other three-fourths of the country's cement production came from four private companies (table 2). ETAP continued to enter into partnerships with international and regional oil companies and to monitor hydrocarbon exploration and production operations in the country to protect the interests of the Government. By yearend 2008, ETAP had awarded 36 onshore and 16 offshore permits, including 41 exploration permits and

11 prospecting permits. In 2008, three prospecting permits (the Jenein Center, the Sidi Mansuor, and the Tozeur) were converted into exploration permits; three 3-year extensions were granted for the Grombalia, the Ras Marmour, and the Nord Des Chotts exploration permits; one 2-year extension was guaranteed for the Sfax offshore exploration permit; one 1-year extension was granted to PA Resources of Sweden for the Makthar exploration permit; and a third renewable period for the Borj El Khadra Exploration Permit was approved (Tunisian National Oil Co., 2008, p. 5; E and P Tunisian News, 2009).

## Commodity Review

### Metals

**Iron and Steel.**—In 2008, iron ore production increased by 17% compared with a decrease of 16% in 2007. The iron ore output level in 2008 was similar to levels achieved in 2005 and 2006. The increase in iron ore production was owing to greater output at the Djerissa and the Tamera-Douria Mines. The Djerissa Mine produced 117,000 metric tons (t) of hematite and 14,000 t of siderite, and the Tamera-Douria Mine produced 80,000 t of hematite (Central Bank of Tunisia, 2009, p. 73).

Sales of iron ore to the local market by state-owned Société Tunisienne de Sidérurgie [Tunisian Steel Manufacturing Co.], which was also known as El-Fouladh, increased by 17% compared with those of 2007. El-Fouladh, which produced 82,000 t of billet from locally produced and imported iron ore in 2008, imported an additional 251,000 t of steel rods from Turkey and Ukraine to meet the growing demand of the local market for construction material. Demand for steel products by the domestic market was projected to be 1 million metric tons per year (Mt/yr) by 2010. El-Fouladh moved forward with expanding its production capacity to 200,000 metric tons per year (t/yr) of crude steel from the current (2008) capacity of 100,000 t/yr by constructing a second 100,000-t/yr-capacity electric arc furnace (EAF). The second EAF was expected to be completed in the first quarter of 2009 (Arab Steel, 2008a, b; Central Bank of Tunisia, 2009, p. 73).

**Lead and Zinc.**—No lead or zinc was produced in Tunisia in 2008 despite intensified exploration activity by Albidon Ltd. and Maghreb Minerals p.l.c. in 2007. Maghreb Minerals was looking for partners for the Bou Jabeur-Gite Este deposit after realizing that production would be too costly under current (2008) lead and zinc prices. The new partner was expected to increase project resources, which would allow for mining more than 0.55 Mt/yr. The company had been exploring for barite, fluorite, lead, silver, and zinc in the Mejerda region in northern Tunisia (Proactiveinvestors UK, 2009).

### Industrial Minerals

**Cement.**—In 2008, production of cement in Tunisia was about 7.88 Mt, including about 7.56 Mt of gray cement and 316,000 t of white cement. White cement was produced solely by Société Tuniso-Andalouse de Ciment Blanc S.A. at Feriana. In addition to the increased demand for cement by the local market, there was greater demand for Tunisian cement by the

neighboring markets of Algeria and Libya. In 2008, about 1.67 Mt of cement was exported, mainly to Libya, compared with 1.55 Mt in 2007.

Cementos de Portugal SGPS, S.A. (Cimpor) announced a plan to increase its production capacity at the Jebel Oust plant to 2.4 Mt/yr from 1.6 Mt/yr by building an additional clinker production line (Global Cement Magazine, 2008). Bina Holding of Tunisia and Global Investment House (GIH), which was a Kuwaiti investment company, agreed to establish Carthage Cement as a greenfield cement plant with a production capacity of 2 Mt/yr. GIH acquired one of the largest quarries in North Africa. The quarry, which is located 25 kilometers (km) from the capital city of Tunis, covers a 2.2-square-kilometer (km<sup>2</sup>) area and has 0.3 km<sup>2</sup> of gravel quarries under production as well as an estimated 250-Mt limestone deposit (Gulf News, 2008).

**Phosphate Rock.**—CPG extracted 11.6 Mt of raw phosphate in 2008 compared with 12.3 Mt in 2007. The combined output of the Jallabia, the Kef Eddour, and the Kef Eschfaier Mines accounted for 66% of the total phosphate rock extracted in Tunisia in 2008. The remaining 34% was produced at the Metlaoui, the Mzida, the Oum Laraies, and the Redeyef Mines. In 2008, about 879,000 t of phosphate rock was exported. The volume of phosphate rock exports in 2008 was 29% less than the 1.2 Mt exported in 2007. Despite the significant decrease in the volume of phosphate rock exports, income from phosphate rock exports in 2008 was more than that of 2007 because of a 250% increase in phosphate rock prices on the international market, which reached \$146 per metric ton. Group Chimique Tunisienne (GCT) [Tunisian Chemical Group], which was the fertilizer manufacturing entity of CPG, processed phosphate rock at its four industrial sites in Gabes, M'Dhilla, Sfax, and Skhira.

In 2008, Tunisian Indian Fertilizers S.A. (TIFERT) awarded Technip S.A. of France a contract to build a sulfuric acid plant at the town of Skhira, which is located near the Gulf of Gabes in mideastern Tunisia. TIFERT was established in 2007 as a joint venture of GCT (35% interest) and Indian companies Coromandel Fertilizers Ltd. (CFL), Gujarat State Fertilizers, and Chemicals Ltd. (GSFC) (15% interest each). TIFERT planned to use phosphate rock and sulfuric acid to produce 1.3 Mt/yr of phosphoric acid for subsequent fertilizer production. Phosphoric acid production at the \$165 million project was expected to begin in 2010 (Express India, 2008; Technip S.A., 2008).

**Salt.**—In 2008, marine salt production increased by 14% following a 17% decrease in 2007. More than 80% of the salt output was produced by Government-owned Compagnie Générale des Salines de Tunisie (COTUSAL) [Tunisia Salt Co.], and the remaining 20% was produced by private producers. Total salt exports were about 1 Mt and domestic salt sales were 107,000 t (Central Bank of Tunisia, 2009, p. 64).

### Mineral Fuels

**Natural Gas.**—The output of dry natural gas in Tunisia in 2008 decreased by about 7% compared with that of 2007. The decrease was attributed to the maintenance-related stoppage of production at the Miskar gasfield and to the delay in the start of gas production at the Chergui field. The gas royalty,

which the Government earned from the passage of the Trans Mediterranean gas pipeline through its land and territorial waters, was 10% more than the royalty received in 2007 (Central Bank of Tunisia, 2009, p. 67).

In August 2008, Petrofac Ltd. of the United Kingdom commenced first gas production from the Chergui offshore field, which is located 30 km from the city of Sfax. ETAP held 55% interest in the field as a development partner and Petrofac, which was the operator, held 45% interest. The natural gas would be delivered by way of a 57-km pipeline to the onshore facility of Société Tunisienne de L'Electric et du Gaz [Tunisian State Gas and Electricity Co.]. Natural gas production from the Chergui field was expected to be about 207 million cubic meters per year for a minimum of 4 years (Petrofac Ltd., 2008).

**Petroleum.**—In 2008, petroleum production was about 10% less than the record production reported in 2007, which was a record increase of 39% compared with the level of increase for the previous year; the output in 2008 was still greater than that achieved in 2005 and 2006, however. The decrease in crude output in 2008 was attributable to decreased production from the Oudna (a 73% decrease), the Didon (29%), and the Adam (14%) oilfields; however, output increases were reported at the Hajeb Guebibia (a 69% increase), the Oued Zar (23%), and the Asstart (3%) fields. The output of the Cherouq field in 2008 increased to about 2.5 million barrels per year from 30,000 barrels per year in 2007 (Central Bank of Tunisia, 2009, p. 64, 66).

Pioneer Natural Resources Tunisia Ltd., which was a subsidiary of Pioneer Natural Resources Co. of the United States, owned an interest in five blocks covering about 12,000 km<sup>2</sup> of the Ghadames Basin located south of Tunisia. Pioneer was the operator of the the Anaguid and the Cherouq Blocks. The company conducted exploration activity at the Adam, the Anaguid, the Borj El Khadra, and the Cherouq Blocks. Pioneer produced about 2.3 Mbbl of oil and 24.5 million cubic meters of gas in 2008 (Pioneer Natural Resources Co., 2009, p. 28).

In 2008, the 50-50 joint venture of ETAP and OMV A.G. drilled for gas and oil at the Jenein Sud exploration permit, which is located in southern Tunisia. The joint venture reported condensate and natural gas discoveries at its Ahlem-1 and Sourour-1 exploration wells (OMV A.G., 2008).

Qatar Petroleum International (QPI), which signed an agreement with the Government in 2007 to build a new 140,000-barrel-per-day-capacity oil refinery at Skhira near the Gulf of Gabes, withdrew from the project. Petrofac was mentioned as a potential successor for QPI as a builder and operator of the planned refinery. La Société de Transport des Hydrocarbures par Pipelines (Sotrapil), which was the Government's pipeline oil transport company, called off a planned project to build a pipeline that was proposed to carry refined oil from the Bizerte refinery on the northern coast of Tunisia to an existing pipeline that links the Sidi El Kilani oilfield with Skhira oil terminal (Middle East Economic Digest, 2007; Hadfield, 2008; Alexander's Gas & Oil Connections, 2009).

## Outlook

Tunisia's mineral industry is expected to continue to play an important role in the country's economy and to account for a significant share of its exports. Phosphate rock and phosphate-based products are expected to be the main exports of the chemical and mining industries. The proposed increase in the production capacity of the iron and steel industry is expected to meet the growing demand for steel products by the local market. The Government will likely continue to give incentives to attract international investment in the hydrocarbon sector; however, the success of these policies will depend on the hydrocarbon prices in the world markets.

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TABLE 1  
TUNISIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Thousand metric tons unless otherwise specified)

Commodity <sup>2</sup>	2004	2005	2006	2007	2008
METALS					
Iron and steel:					
Iron ore:					
Direct shipping ore and concentrate, gross weight	256	206	214	180	211
Fe content <sup>e</sup>	134	108	112	94	110
Metal:					
Steel, crude	70 <sup>r</sup>	66 <sup>r</sup>	68 <sup>r</sup>	61 <sup>r</sup>	82
Concrete-reinforcing bars	258	441	501	454	421
Lead, mine output, Pb content	metric tons	5,470	8,708	--	--
Silver, metal, primary <sup>e</sup>	kilograms	2,400	1,200	--	--
Zinc:					
Concentrate, gross weight	metric tons	52,747	29,412	--	--
Zn content	do.	29,011	15,889	--	--
INDUSTRIAL MINERALS					
Barite	metric tons	1,813	--	--	--
Cement, hydraulic:					
Gray		6,485	6,358	6,599	7,052
White		204	333	333	327 <sup>r</sup>
Total		6,689 <sup>r</sup>	6,691	6,932	7,379 <sup>r</sup>
Clays:					
Common		5,140 <sup>r</sup>	5,310 <sup>r</sup>	5,380 <sup>r</sup>	5,550 <sup>r</sup>
Mosaic tile	thousand square meters	19,750	21,000	22,500	22,500
Earthenware tile	do.	15,100	15,690	15,900	16,300
Fertilizers:					
Ammonium nitrate		134	149	153	25 <sup>r</sup>
Compound fertilizers		32	28	15	25
Diammonium phosphate		1,314	1,115	1,093	1,008
Dicalcium phosphate		73	100	66	88
Hyperphosphate		21	30	26	31
Phosphoric acid		1,241	1,217	1,181	2,374 <sup>r</sup>
Sodium tripolyphosphate		126	141	142	143
Triple superphosphate		868	848	800	806 <sup>r</sup>
Fluorine, aluminum fluoride		42	42	43	42 <sup>r</sup>
Gypsum <sup>e, 3</sup>		109 <sup>r</sup>	113	151	250 <sup>r</sup>
Lime		476	424	401	395
Phosphate rock, washed, gross weight		8,051	8,220	7,801	8,002 <sup>r</sup>
Salt, marine		1,117	1,132	1,127	933
MINERAL FUELS AND RELATED MATERIALS					
Gas, natural:					
Gross	million cubic meters	2,298	2,343	2,136 <sup>r</sup>	2,036 <sup>r</sup>
Dry	do.	1,858	1,899	1,661 <sup>r</sup>	1,579 <sup>r</sup>
Petroleum:					
Crude	thousand 42-gallon barrels	25,700	26,200	25,200	35,100
Refinery products:					
Liquefied petroleum gas	do.	1,250	1,260	1,280	1,180
Gasoline	do.	3,317 <sup>r</sup>	2,073 <sup>r</sup>	1,775 <sup>r</sup>	1,465 <sup>r</sup>
Naphtha	do.	378	1,070	1,110	1,743
Distillate fuel oil	do.	3,220	3,600	3,780	4,140
Residual fuel oil	do.	3,960	4,060	4,020	4,320
Paraffin oil	do.	1,207	1,635	971	928
White spirit	do.	68	77	85	102
Total	do.	13,400 <sup>r</sup>	13,775 <sup>r</sup>	13,021 <sup>r</sup>	13,878 <sup>r</sup>

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. <sup>r</sup>Revised. do. Ditto. -- Zero.

<sup>1</sup>Table includes data available through March 31, 2010.

<sup>2</sup>In addition to the commodities listed, a variety of crude construction materials (sand and gravel and stone) was produced, but available information is inadequate to make reliable estimates of output.

<sup>3</sup>Does not include phosphatic gypsum (waste product) generated during fertilizer production.



TABLE 2  
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>1</sup>	
Aluminum fluoride	Industries Chimiques du Fluor	Ghannouch, near Gabes	46	
<b>Cement:</b>				
Portland	Société des Ciment d'Enfidha (Cementos Portland Valderrivas, S.A., 88%)	Enfidha	2,000	
Do.	Société des Ciment de Jbel Oust (Cementos de Portugal SGPS, S.A. (Cimpor), 100%)	Jbel Oust	1,600	
Do.	Société des Ciment de Gabès (Secil-Companhia Geral de Cal e Cimento, S.A., 99%)	Gabes	1,100	
Do.	Société des Ciment d'Oum el Kéhil (Government, 100%)	Le Kef	970	
Do.	Société des Ciment de Bizerte (Government, 100%)	Bizerte	840	
Do.	Société des Ciments Artificiels Tunisiens (Colacem S.p.A., 100%)	Ben Arous	800	
White	Société Tuniso-Andalouse de Ciment Blanc S.A. (Grupo Prasa, 100%)	Feriana	333 <sup>2</sup>	
<b>Fertilizer:</b>				
Ammonium nitrate	Group Chimique Tunisienne (Government, 100%)	Ghannouch, near Gabes	330 <sup>3</sup>	
Diammonium phosphate	do.	do.	1,300	
Triple superphosphate	do.	M'Dhilla	465	
Do.	do.	Sfax	330	
Gypsum	Les Plâtres Tunisiens (Knauf Gips KG)	Maknassy	100	
<b>Iron and steel:</b>				
Iron ore	Société de Djebel Djerissa (Government, 100%)	Djerissa Mine	107	
Do.	do.	Tamera Mine	73	
Steel, crude	Tunisian Steel Manufacturing Co. (El-Fouladh) (Government, 100%)	El Fouladh	200	
Steel, rolled, bar and rod	Intermetal S.A. (Private, 100%)	Ben Arous	300	
Natural gas	million cubic meters BG plc, 100%	Miskar field	523	
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Perenco Ltd., 50%	Franig field	170
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Oued Zar/Hammouda field	150
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V., 25%; Pioneer Natural Resources Co., 20%; Talisman Energy Inc., 5%	Adam field	130
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	El Borma field	80
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Petrofac Ltd., 45%	Chergui field	70
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz field	40
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Perenco Ltd., 50%	Baguel/Tarfa field	40
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Winstar Resources Ltd., 45%	Sabria field	14
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Société MARETAP S.A., 45%	Ezzaouia field	10
Do.	do.	Lundin Petroleum A.B.	Zinnia field	2
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and British Gas Tunisia Ltd., 50%	Hasdrubal field	NA
<b>Petroleum:</b>				
Crude	thousand 42-gallon barrels Eni Tunisia B.V., 25%; Pioneer Natural Resources Corp., 20%; Talisman Energy Inc., 5%	Adam field	6,500	
Do.	do.	PA Resources A.B., 100%	Didon field	3,750
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Société de Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 50%	Ashtart field	3,550
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	El Borma field	3,345
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Pioneer Natural Resources Co., 50%	Cheroug field	2,510
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	El Hajeb/Guebiba field	2,020
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Oud Zar/Hammouda field	1,880
Do.	do.	Lundin Petroleum A.B., 40%; Atlantis Technology Service, 40%; Entreprise Tunisienne d'Activités Pétrolières (ETAP), 20%	Oudna field	1,470
Do.	do.	British Gas Tunisia Ltd., 100%	Miskar field	1,420
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Franig field	780

See footnotes at end of table

TABLE 2—Continued  
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>1</sup>
Petroleum—Continued:				
Crude—Continued	thousand 42-gallon barrels	Ecumed Petroleum Corp., 75%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 25%	Al Manzah field	720
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Thyna Petroleum Services S.A., 49%	Cercina field	560
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Compagnie Tuniso-Koweïtienne de Pétrole (CTKP), 45%	Sidi El Kilani field	460
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Société MARETAP S.A., 45%	Ezzouia field	430
Do.	do.	Lundin Petroleum A.B./EGEP	Sidi El Itayem field	390
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Thyna Petroleum Services S.A., 49%	El Ain/Gremda field	365
Do.	do.	Candax Energy Inc. and Ecumed Petroleum Corp., 74%, and PA Resources A.B., 24%	El Bibane field	350
Do.	do.	Winstar Resources Ltd.	Chouech Essaida field	300
Do.	do.	PA Resources A.B., 70%, and Société de Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 30%	Douleb/Semmama field	190
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Winstar Resources Ltd., 45%	Sabria field	183
Do.	do.	do.	Rhemoura field	170
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz field	150
Do.	do.	do.	Larich field	130
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Société de Développement du Permis du Sud (SODEPS), 50%	Debbech field	73
Do.	do.	do.	Nakhil field	60
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Baguel/Tarfa field	65
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%	Mazrane field	45
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Circle Oil Plc, 49%	Beni Khalled field	40
Do.	do.	Petrofac Ltd., 55%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 45%	Cherqui field	35
Do.	do.	Winstar Resources Ltd.	Sanrhar field	34
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Baguel field	20
Do.	do.	Eni Tunisia B.V.	Abir field	10
Do.	do.	Winstar Resources Ltd.	Ec-chouech field	10
Do.	do.	Canadax Energy Inc., 80%	Robbana field	7
Do.	do.	Lundin Petroleum A.B.	Zinnia field	6
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 75%	Mahares field	1
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Baraka field	NA
Do.	do.	Thani Tunisia El-Jem B.V.	EL Jem field	NA
Do.	do.	OMV A.G.	Jenein field	NA
Refined		Société Tunisienne des Industries du Raffinage (Government, 100%)	Bizerte	12,775
Phosphate rock		Compagnie des Phosphates de Gafsa (CPG) (Government, 100%)	Kef Eddour Mine	1,500
Do.	do.	do.	Kef Eschfaier Mine	2,300
Do.	do.	do.	Jallabia Mining Center	1,300
Do.	do.	do.	Metlaoui, Mzida, Redeye and Uom Laraiés Mines	2,600
Do.	do.	do.		
Phosphoric acid		Group Chimique Tunisienne (GCT) (Government, 100%)	Ghannouch, near Gabes	470
Do.	do.	do.	Skhira	375
Do.	do.	do.	M'Dhilla	183
Do.	do.	do.	Sfax	131
Salt		Compagnie Générale des Salines de Tunisie (COTUSAL)	Sfax and Zarzis	800
Do.		SAIDA S.A.	Sebkhet Sidi El Heni	250

Do., do. Ditto. NA Not available

<sup>1</sup>Actual production may significantly exceed nominal capacity.

<sup>2</sup>Nominal capacity is 260,000 metric tons per year (t/yr).

<sup>3</sup>Does not include production capacity of 30,000 t/yr of explosives-grade ammonium nitrate.