

2009 Minerals Yearbook

TUNISIA

THE MINERAL INDUSTRY OF TUNISIA

By Mowafa Taib

Tunisia was a significant producer of phosphate rock and phosphate-based fertilizer, which were the country's main contribution to the world's mineral commodities. Tunisia was the world's fifth ranked producer of phosphate rock in 2009 and accounted for 4.4% of the world supply of phosphate rock. Other mineral commodities produced in Tunisia in 2009 included aluminum fluoride, cement, common clays, crude oil, gypsum, iron and steel, iron ore, lime, natural gas, refined petroleum products, and salt (Jasinski, 2010).

Minerals in the National Economy

In 2009, the Tunisian economy grew by 3.1% at 1990 prices compared with a 4.5% growth rate in 2008. The mining sector's share of the gross domestic product (GDP) at 2009 prices decreased slightly to 1.0% from 1.1% in 2008. The share of the hydrocarbon sector decreased slightly to 6.5% of the GDP from 6.7% in 2008. The value of phosphate products exports, which included phosphate rock, phosphate fertilizers, and phosphoric acid, accounted for 6.5% of the country's total exports whereas that of manufactured building materials accounted for 1.7%. The added value, in constant prices, of the mining sector to the Tunisian economy continued to be negative, as it had been since 2006. It was -1.6% in 2009 and -4.0% in 2008 compared with a positive added value of 5.7% in 2005. The added value of the hydrocarbon sector, on the other hand, was 3.5% compared with -5.1% in 2008. Overall, the added value of the industrial sector, which included building materials, energy, mining, and phosphate products, was -0.3% in 2009 compared with 2.1% in 2008 and 9.9% in 2007 (Central Bank of Tunisia, 2010, p. 52, 66-67).

Government Policies and Programs

Mineral exploration and production activities were regulated by the Mining Code (law No. 2003-30 of April 28, 2003), and crude 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 oil company of Tunisia [Entreprise Tunisienne d'Activités Pétrolières (ETAP)] 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 2009, there were notable decreases in the production of such mineral commodities as iron ore, which decreased,

by 28.4%; aluminum fluoride, by 7.0%; crude oil (including condensates), by 3.4%; and phosphate rock, by 3.2%. Production of steel, however, increased, by 89%; that of sea salt, by 31.2%; natural gas, by 22.8%; and manufactured building materials, such as earthenware tiles and mosaic, by 7.1% and 4.3%, respectively, compared with their respective production volumes in 2008. No production had been reported for barite, lead, and zinc ores since 2005 owing to waning reserves at existing mining sites. Cement production, which totaled 7.5 million metric tons per year (Mt/yr) in 2009, was at about the same output level as in 2008 (table 1).

Structure of the Mineral Industry

Government-owned Compagnie des Phosphates de Gafsa (CPG) carried out all phosphate mining and fertilizer manufacturing activities in Tunisia. Groupe Chimique Tunisien (GCT), which was merged with CPG in 1996, produced phosphate-based fertilizers. Much of the cement sector had been privatized in the 1990s, which resulted in the creation of local companies and the entry of European and regional companies into the Tunisian cement market. State-owned Société Tunisienne de Sidérurgie [Tunisian Steel Manufacturing Co.], which was also known as El-Fouladh, was the sole steel-billet producer in the country. Privately owned steel mills, such as Intermetal S.A. and Tunisacier Steelworks, produced concrete-reinforcing bar (rebar) (Arab Steel, 2009).

The Government pursued policies to encourage international companies to work in Tunisia, as well as to help local small- and medium-sized industrial businesses compete with international companies. ETAP expanded its production partnerships with several international oil companies and monitored their exploration and production operations to protect the interests of the Government in the hydrocarbon sector.

Mineral Trade

In 2009, the balance of trade for Tunisia was negative, as it had been for many years. The value of the Tunisian exports decreased by about 14% in 2009 compared with an increase of 20% in 2008. Similarly, the value of imports decreased by about 9% in 2009 compared with an increase of 18% in 2008. The value of exports of phosphate rock and phosphate-based products decreased by about 50% in 2009 compared with an increase of about 130% in 2008. The volume of phosphate rock exports, which was 491,000 metric tons (t) in 2009, was 44% less than in 2008. In 2009, the value of phosphate rock exports was about 70% less than that of 2008 but 23% more than that of 2007. Exports of phosphate rock went to Poland (about 43%), Turkey (12%), and New Zealand (about 11%). Exports of phosphoric acid were received mainly by India (57%) and France (about 12%). The decrease in the value of phosphate rock exports was attributable to the reduced demand in world markets because

TUNISIA—2009 40.1

of the global financial crisis. The share of phosphate rock and phosphate-based products in the country's total exports decreased to 8.1% in 2009 from 13.2% in 2008. Exports of other mineral commodities decreased by 56% in 2009 compared with an increase of about 127% in 2008, and their share in total exports decreased to 0.5% from 0.9% during the same period. Exports of crude oil increased by 2.7% in volume and decreased by 35% in value whereas refined petroleum products exports decreased by 0.4% in volume and by 36.8% in value in 2009 compared with that of 2008. Imports of coke, crude oil, natural gas, and refined petroleum products decreased significantly in terms of both value and volume during the same period of comparison (Central Bank of Tunisia, 2010, p. 127, 130-132).

Commodity Review

Metals

Iron and Steel.—Iron ore production decreased by 28.4% to 151,000 t in 2009 from 211,000 t in 2008, which was a record low for the country. The sharp decrease in iron ore output was the result of the diminishing reserves of iron ore at the Jerissa and the Tamera-Douaria Mines. In July, El-Fouladh, which was the sole steel producer in Tunisia and which was 91% Government-owned, increased its operational capability to 200,000 metric tons per year (t/yr) from 100,000 t/yr of crude steel following the completion of the installation of a second 100,000-t/yr-capacity electric arc furnace (EAF). El-Fouladh produced 155,000 t of steel billet in 2009, which was an increase of 89% compared with the 82,000 t produced in 2008. The sales of iron ore to the local market by El-Fouladh were 28% lower than in 2008. In 2009, the volume of iron ore exports was just 10,000 t. In 2009, Tunisia exported 10,000 t of iron ore and imported 8,500 t of iron carbonate. The country also imported more than 100,000 t of rebar to meet the growing demand of the Tunisian construction industry; the demand for rebar was expected to reach 1 Mt by 2010. In November, El-Fouladh offered up to 50% of the company assets for privatization, and 12 steel producers expressed interest (Arab Steel, 2009; Central Bank of Tunisia, 2010, p. 68).

Lead and Zinc.—Maghreb Minerals plc of the United Kingdom, which held exploration permits for barite, fluorite, and zinc in Tunisia, did not conduct any drilling programs in 2009 and kept its operations in the country on care-and-maintenance status. The company did not find investors for its Gite de l'Est-Bou Jabeur lead and zinc project owing to the drop in mineral prices that was a result of the world financial crisis (Maghreb Minerals plc, 2010).

Industrial Minerals

Cement.—More than 85% of the cement produced by Tunisia's seven cement producers in 2009 was consumed locally; the remaining 15% was exported largely to Algeria and Libya. In 2009, the combined export volume of white and gray cement was 1.1 Mt, which was about 35% less than the 1.7 Mt of cement that was exported in 2008. The value of cement

exports was 7.5% of Tunisia's total industrial sector exports (Central Bank of Tunisia, 2010, p. 75).

The construction of a new greenfield cement plant at Djebel Ressas, which is located 40 kilometers (km) southwest of Tunis, continued in 2009 by Les Ciment de Carthage (Carthage Cement), which had been established by Bina Holding and Global Investment House of Kuwait. The plant would have 2.3 Mt/yr of cement production capacity and was expected to begin production in 2012. Bina Holding held about 51% interest in the plant, and the remaining shares were expected to be offered to investors when the company is listed on the alternative investment market of the Tunisia Stock Exchange in 2010 (Tunisia Online News, 2010).

Phosphate Rock.—CPG, which managed seven open quarries and one underground mine, was responsible for mining phosphate rock. The quarries at Kef Eddour, Kef Eschfaier, and Jallabia produced 28%, 21%, and 12% of the 11.2 Mt of phosphate rock extracted in 2009, respectively. About 7.3 Mt of washed phosphate rock was produced mainly by the washing plants of Metlaoui, M'dhilla, and Kef Eddour (Central Bank of Tunisia, 2010, p. 68). GCT, which was the fertilizer-manufacturing unit within CPG, produced phosphoric acid at the Skhira industrial site, triple superphosphate at the M'Dhalia and the Sfax industrial sites, and diammonium phosphate and other fertilizers at the Gabes industrial site.

Tunisian Indian Fertilizers S.A. (TIFERT), which was a joint venture of CPG, GCT (35% interest each), Coromandel Fertilizers Ltd. (CFL), and Gujarat State Fertilizers and Chemicals Ltd. (GSFC) (both of India and each of which had 15% interest), moved forward with building a phosphoric acid plant. TIFERT's plant was being built alongside the existing phosphoric acid plant operated by GCT at Skhira, which is located 50 km north of the town of Gabes in mideastern Tunisia. The plant, which was being constructed by Technip S.A. of France, was scheduled to commence operations in 2010 with a production capacity of 1.3 Mt/yr of phosphoric acid. The plant would use sulfuric acid and phosphate rock to produce phosphoric acid. The entire production of the plant would be exported to CFL and GSFC through a long-term purchasing agreement to supply these companies with phosphoric acid (Technip S.A., 2008; Acid Plant Database, 2009).

Salt.—Production of marine salt increased by about 31% in 2009 compared with that of 2008. State-owned Compagnie Generale des Salines de Tunisie (COTUSAL) increased its production of salt by 11.5% to 901,000 t in 2009 from 808,000 t in 2008. Private salt producers, including Saida S.A. and Tunisel Co., increased their share of production to 35% in 2009 from about 24% in 2008. Tunisel produced 395,000 t of salt in 2009, which was a 270% increase compared with the 95,000 t the company produced in 2008 (Central Bank of Tunisia, 2010, p. 69).

Mineral Fuels

Natural Gas and Petroleum.—Tunisia's natural gas production increased by 23% in 2009 compared with that of 2008, including a 6.6% increase in output from the Miskar field. Production was expected to increase further in 2010 with the

commissioning of the Hasdrubal offshore gasfield in December 2009, which was operated by BG Group of the United Kingdom and ETAP (each of which had a 50% interest). Most crude oil production in 2009 came from six major fields. Production from the Adam concession, which included the Adam, the Dalia, and the Hawa fields, decreased by 26.5%; the output of the El Borma field decreased by 16.8%; and production at the Ashtart and the Oudhna fields decreased by 15.0% and 15.6%, respectively. Production at the Cheroug oilfield increased by one-third, and that of El Borma oilfield was slightly more than in the previous year (Central Bank of Tunisia, 2010, p. 71-73).

The pace of exploration and search activity in the petroleum sector was somewhat slower than that of the past 3 years because of lower world crude oil prices. Drilling of crude oil wells decreased to 8 in 2009 from 19 in 2009. Consequently, 3 oil discoveries were reported in Tunisia in 2009 compared with 11 discoveries in 2008. In 2009, in addition to state-owned ETAP, 57 international and Tunisian companies held 46 research permits and 8 exploration licenses (Central Bank of Tunisia, 2010, p. 72).

DualEX Energy International Inc. of Canada signed an oil and gas production-sharing agreement with ETAP that covers a 416-square-kilometer area near the city of Kairaoun, which is located in the center of Tunisia. Under the agreement, DualEX and ETAP would invest \$4 million in the operation (Alexander's Gas & Oil Connections, 2009).

Outlook

Tunisia's mineral industry is expected to continue to play a vital role in Tunisia's economy and to account for a large share of the country's exports. Exports of phosphate rock and phosphate-based products are expected to recover in 2010 after plunging in 2009 in the aftermath of the world financial crisis. The steel industry is expected to increase its dependency on imported iron ore because of the decrease in iron ore produced locally. The Government will likely continue to give incentives to attract international investment in the energy, real estate, and tourism sectors; however, investment in the manufacturing sector would likely continue to increase largely because of Tunisia's proximity to European markets and the country's investment laws.

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TUNISIA—2009 40.3

 $\label{eq:table 1} TABLE~1$ TUNISIA: PRODUCTION OF MINERAL COMMODITIES 1

(Thousand metric tons unless otherwise specified)

Commodity ²	2005	2006	2007	2008	2009
METALS					
Iron and steel:					
Iron ore:	206	21.4	100	211	
Direct shipping ore and concentrate, gross weight	206	214	180	211	151
Fe content ^e	108	112	94	110	79
Metal:					
Steel, crude	66	68	61	82	155
Concrete-reinforcing bars	441	501	454	426 ^r	337
Lead, mine output, Pb content metric tons	8,708				
Silver, metal, primary ^e kilograms	1,200				
Zine:					
Concentrate, gross weight metric tons	29,412				
Zn content do.	15,889				
INDUSTRIAL MINERALS					
Cement, hydraulic:					
Gray	6,358	6,599	6,725 ^r	7,243 ^r	7,181
White	333	333	327	316	330
Total	6,691 ^r	6,932 ^r	7,052 ^r	7,559 ^r	7,511
Clays:					
Common	5,500 ^r	5,600 r	5,800 ^r	6,160 r	6,450
Mosaic tile thousand square meters	22,200 r	22,000 r	22,000 ^r	23,200 r	24,200
Earthenware tile do.	25,000 r	26,000 r	26,000 ^r	28,000 r	30,000
Fertilizers:					
Ammonium nitrate	149	153	25	124	155
Compound fertilizers	28	15	25	23	28
Diammonium phosphate	1,115	1,093	1,008	1,017	1,124
Dicalcium phosphate	100	66	88	72	64
Hyperphosphate	30	26	31	36	7
Phosphoric acid	1,217	1,181	1,140 ^r	1,009 ^r	1,115
Sodium tripolyphosphate	141	142	143	112	112
Triple superphosphate	848	801 ^r	806	863	747
Fluorine, aluminum fluoride	42	43	42	43	40
Gypsum ³	113	151	157 ^r	177 ^r	360
Lime	424	401	395	369	366
Phosphate rock, washed, gross weight	8,220	7,801	8,002	7,539 ^r	7,298
Salt, marine	1,132	1,127	933	1,063	1,395
MINERAL FUELS AND RELATED MATERIALS	ŕ	ŕ		,	
Gas, natural:					
Gross million cubic meters	2,373 ^r	2,163 ^r	2,062 r	2,068 ^r	2,540
Dry do.	1,899	1,682 r	1,599 ^r	1,499 ^r	1,589
Petroleum:	,	,	,	,	,
Crude thousand 42-gallon barrels	26,200	25,200	35,100	32,485 ^r	31,390
Refinery products:	-,	.,	,	- ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Liquefied petroleum gas do.	1,385 ^r	1,304 ^r	1,212 ^r	1,569 ^r	1,766
Gasoline do.	2,073	1,775	1,465	1,350	1,106
Naphtha do.	1,070	1,110	1,743	1,513	1,562
Distillate fuel oil do.	3,600	3,780	4,140	4,110	4,387
Residual fuel oil do.	4,060	4,020	4,320	4,450	4,330
Paraffin oil do.	1,635	971	928	859	621
White spirit do.	77	85	102	110	102
Total do.	13,900 ^r	13,045 ^r	13,910 ^r	13,961 ^r	13,873

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through September 30, 2010.

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

³Does not include phosphatic gypsum (waste product) generated during fertilizer production.

$\label{eq:table 2} \text{TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2009}$

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity ¹
Aluminum fluoride	Industries Chimiques du Fluor	Ghannouch, near Gabes	26 capacity
Cement:	industries Chimiques du Fidor	Ghamilouen, near Gabes	
Portland	Société des Ciment d'Enfidha (Cementos Portland Valderrivas, S.A., 88%)	Enfidha	2,000
Do.	Société des Ciment de Jbel Oust (Cimentos de Portugal SGPS, S.A., 100%)	Jbel Oust	1,560
Do.	Société des Ciment de Gabès (Secil-Companhia Geral de Cal e Cimento, S.A., 99%)	Gabes	1,250
Do.	Société des Ciment d'Oum el Kélil (Government, 100%)	Le Kef	1,250
Do.	Les Ciment de Bizerte	Bizerte	840
Do.	Société des Ciments Artificiels Tunisiens (Colacem S.p.A., 100%)	Ben Arous	1,000
White	Société Tuniso-Andalouse de Ciment Blanc S.A. (Grupo Prasa, 100%)	Feriana	210
Fertilizer:	Società Tambo Tindurata de Ciment Bianto St. 1. (Grapo Tinou, 10070)	1 0110110	210
Ammonium nitrate	Group Chimique Tunisienne (GCT) (Government, 100%)	Ghannouch, near Gabes	330
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
Iron and steel:			
Iron ore	Société de Djebel Djerissa (Government, 91%)	Djerissa Mine	107
Do.	do.	Tamera-Douaria 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
Do.	Tunisacier Steelworks (private, 100%)	Bizerte	100
Natural gas million	BG plc, 100%	Miskar field	523
cubic meters	20 p.s., 10070	111101101	020
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	Oued Zar/Hammouda	150
20.	(ETAP), 50%	field	100
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	Sabria field	14
Do. do.	Ltd., 45% Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Société	Ezzaouia field	10
	MARETAP S.A., 45%		
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
Petroleum:			
Crude thousand	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V.,	Adam field	6,500
42-gallon barrels	25%; Pioneer Natural Resources Co., 20%; Talisman Energy Inc., 5%		,
Do. do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Baraka field	4,000
Do. do.	PA Resources A.B., 100%	Didon field	3,750
Do. do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Société de	Ashtart field	3,550
20.	Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 50%	. 10110111 11010	5,550
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
	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP),	El Hajeb/Guebiba field	2,020
Do. do.	50%	El liajeo, Gaeolea lleia	,

See footnotes at end of table.

TUNISIA—2009 40.5

TABLE 2—Continued TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2009

(Thousand metric tons unless otherwise specified)

G E			Location of	Annual
	Commodity Major operating companies and major equity owners		main facilities	capacity1
Petroleum—Continue				
Crude—Continued 42-	thousand gallon barrels	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.	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 Perenco Ltd., 49%	Franig field	780
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 Tuniso-Kuwaitian Petroleum Co., 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	El Ain/Gremda field	365
		Services S.A., 49%		
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.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Société de Développement du Permis du Sud (SODEPS), 50%	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., 100%	Sanrhar field	34
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Baguel field	20
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V., 25%; Pioneer Natural Resources Co., 20%; Talisman Energy Inc., 5%	Abir field	10
Do.	do.	Winstar Resources Ltd., 100%	Ech-chouech field	10
Do.	do.	Canadax Energy Inc., 80%	Robbana field	7
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 75%	Mahares field	1
Refined	do.	Société Tunisienne des Industries du Raffinage (Government, 100%)	Bizerte	12,775
Phosphate rock		Compagnie des Phosphates de Gafsa (Government, 100%)	Kef Eddour Mine	1,500
Do.		do.	Kef Eschfaier Mine	2,300
Do.		do.	Jallabia Mining Center	1,300
Do. Do.		do. do.	Metlaoui, Mzida, Redeye and Uom Laraies Mines	2,600
Phosphoric acid		Group Chimique Tunisienne (GCT) (Government, 100%)	Ghannouch, near Gabes	470
Do.		do.	Skhira	375
Do.		do.	M'Dhilla	183
Do.		do.	Sfax	131
Salt		Compagnie Générale des Salines de Tunisie (COTUSAL)	Sfax and Zarzis	900
Do.		TUNISEL	Sebkhet Lasdhibet	350
Do.		SAIDA S.A.	Sebkhet Sidi El Heni	250
D 1 Div 374	NY . 21.1.1			

Do., do. Ditto. NA Not available.

¹Actual production may significantly exceed nominal capacity.

²Does not include production capacity of 30,000 metric tons per year of explosives-grade ammonium nitrate.