



2013 Minerals Yearbook

TUNISIA

THE MINERAL INDUSTRY OF TUNISIA

By Mowafa Taib

In 2013, Tunisia supplied phosphate rock, phosphate-based fertilizers, and modest quantities of fuel minerals to countries located mainly in Asia and Europe. The mineral industry of Tunisia was focused on mineral fuel production, phosphate rock mining, and the manufacturing of phosphate and phosphate-based fertilizers and chemicals. The list of mineral commodities produced in Tunisia in 2013 included aluminum fluoride, cement, crude oil, gypsum, iron and steel, iron ore, lime, natural gas, phosphate-based fertilizers, phosphate rock, refined petroleum products, salt, and sulfuric acid (table 1).

In 2013, Tunisia was in its third year of political transition following the “Jasmine Revolution,” which started as an antigovernment protest in December 2010 that spread throughout the country and ended with the fall of the Government. Tension between the political parties, which were represented in a coalition Government, reached a crisis point following the assassination of two prominent politicians, one of whom was a labor union leader, in February and July. The country planned to hold parliamentary and presidential elections in 2014 (Arieff and Humud, 2014, p. 3, 5).

According to the World Bank’s Doing Business indicators, Tunisia ranked 60th among 189 economies in the world in terms of the ease of doing business. The country was the leading country in North Africa and the fifth in the Middle East and North Africa region in the World Bank’s Doing Business rankings (World Bank, The, 2014).

Minerals in the National Economy

The gross domestic product (GDP) of Tunisia increased in real terms at a rate of 2.3% in 2013 compared with an increase of 3.9% in 2012 and a decrease of 1.9% in 2011. Although the economy recovered from the recession of 2011 that was caused by the political and civil unrest in late 2010 and most of 2011, the growth rates of 2012 and 2013 (and the projected rate for 2014) were less than the annual rate of 5% that was reported for 2005 through 2010. The contribution of the manufacturing industries (which included the building materials, ceramic, chemical, electrical, mechanical, and textile industries) to the country’s economic growth was 0.3% in 2013 compared with 0.7% in 2012. The contribution of the chemical industries, which included fertilizer manufacturing, to the country’s economic growth increased to 0.1% in 2013 from –0.1% in 2012. The building materials sector’s contribution to economic growth decreased to 0% in 2013 from 1.0% in 2012. The contribution of the nonmanufacturing industry, which included hydrocarbon extraction and mining, to economic growth in real terms, was –0.3% in 2013 compared with 0.1% in 2012, of which the mining sector’s contribution to economic growth in 2013 decreased to 0% from 0.1% in 2012, and the hydrocarbon sector’s contribution decreased to –0.3% in 2013 from 0.1% in 2012 (Central Bank of Tunisia, 2014, p. 24, 26–27).

According to the Central Bank of Tunisia, 2,700 jobs were created in the energy and mining sectors in Tunisia in 2013 compared with 5,700 jobs in 2012. Although the percentage of jobs added in the energy and mining sector decreased by 53% in 2013 compared with that of 2012, the trend was positive and represented a significant turnaround from the negative trend in job creation in the sector during 2010 and 2011 when 1,700 jobs and 1,500 jobs, respectively, were lost. The manufacturing industries also provided about 28,300 additional jobs in 2013 compared with 30,000 additional jobs in 2012 and a loss of 25,500 jobs in 2011 (Central Bank of Tunisia, 2014, p. 31).

Foreign direct investment (FDI) flows from the world into Tunisia decreased to about \$1.1 billion in 2013 after rebounding to \$1.6 billion in 2012 following a decline of \$1.2 billion in 2011. The substantial decrease of FDI flows into Tunisia was attributed to continued political unrest in the country during 2013, which created a “wait-and-see” climate for potential international investors. In 2013, 60% of FDI went to the energy sector compared with 35% in 2012. The manufacturing industries received 28% of the FDI in 2013, which was up from 21% in 2012 (Central Bank of Tunisia, 2014, p. 52; United Nations Conference on Trade and Development, 2014, p. 205).

Government Policies and Programs

Tunisia’s mining code (law No. 2003–30 of April 28, 2003) regulated mining activity in the country, including prospecting, exploration, and production. Mines are state-owned properties in Tunisia, and they are regulated by the Office National des Mines (OMN) [National Office of Mines], which also conducts geologic research, prepares geologic and geophysical maps, and promotes private operations of mines. The mining code sets a tax rate of 25% on profits from mining operations but includes a 5-year tax holiday that starts at the beginning of mine production (National Office of Mines, 2014).

Crude oil and natural gas production is 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 1 year for prospecting, 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 (Entreprise Tunisienne d’Activités Pétrolières, 2014).

Production

In 2013, phosphate rock production increased by 19%; white cement, by 18%; and iron ore, by 9%. Gypsum output decreased by 19%; lime, by 14%; and crude oil, by 10%. The performance of the fertilizer manufacturing sector was mixed, with production increasing for diammonium phosphate

and hyperphosphate and decreasing for ammonium nitrate, compound fertilizers, and dicalcium sulfate. Data on mineral production are in 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. CPG had the capacity to produce phosphate rock from eight open-cast mines, most of which are located in Gafsa Governorate. CPG operated 11 phosphate rock washing plants, including 4 at Al-Mitlawi, 3 at M'dhilla, and 1 each at Kef Eddour, Oum El Araies, and Redeyef. Group Chimique Tunisien (GCT), which had merged with CPG in 1996, produced phosphate-based fertilizers. GCT owned four industrial sites, which are located at Gabes, M'dhilla, Sfax, and Skhira.

Tunisian Indian Fertilizers S.A. (TIFERT) was a joint venture of CPG and GCT (35% interest each) and Coromandel International Ltd. (CFL) and Gujarat State Fertilisers and Chemicals Ltd. (GSFC) (both of India; 15% interest each). Much of Tunisia's cement production was carried out by private companies, which included domestic as well as Italian, Portuguese, and Spanish companies. 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 produced rebar (table 2) (Arab Fertilizers Association, 2014, p. 42–43).

Mineral Trade

In 2013, Tunisian trade increased in value by about 4.3% for exports and 3.5% for imports compared with those of 2012. Hydrocarbon exports accounted for 15% of the total exports, and mineral commodity exports, including phosphate rock and phosphate-based products, accounted for 6% of the country's total exports. The value of the mining exports, including phosphate rock, phosphate-based fertilizers, and chemicals, in 2013, was similar to that of 2012 but remained 23.2% less than the value of mining products exports in 2010. The reason for the stagnation in the sector in 2013 was attributed to the ongoing societal tension, which brought about disturbances at phosphate rock production sites and transportation routes. In terms of tonnage, exports of phosphate rock and phosphate-based products increased by 13.3% in 2013 compared with those of 2012. The increase in the tonnage of exports of phosphate rock and phosphate-based products helped substantially in offsetting the negative effects of the decreases in the prices of phosphate products on the international market, which was 17.6% for diammonium phosphate and 20.3% for phosphate rock (Central Bank of Tunisia, 2014, p. 46).

Exports of energy and petroleum products decreased in value by about 5.4% compared with those of 2012. The decrease in the value of hydrocarbon exports was attributed to the decreases in the volume of exports of crude oil by 3.1% and refined products exports by 9.9%. Imports of coke, crude oil, natural gas, and refined petroleum products, which made up about 17% of total imports in 2012, increased in

value by 33.4% compared with those of 2011 (Central Bank of Tunisia, 2014, p. 45–46).

Commodity Review

Metals

Lead and Zinc.—A 50–50 joint venture of Celamin Holdings N.L. of Australia and Tunisian Mining Services S.A. (TMS) was created to remediate four old lead and zinc mines, produce lead and zinc from dumps and tailings at the sites, and perform an environmental cleanup for those sites. Celamin, which was conducting a feasibility study for the project in 2013, expected that the project would have the potential to produce between 2.5 and 3.0 million metric tons (Mt) grading between 2.4% and 2.8% lead and between 2.6% and 3.0% zinc. The joint venture was also awarded three exploration permits in northern Tunisia in areas with existing lead and zinc mineralization with the purpose of developing lead and zinc mines. Celamin reported that it was finalizing a program for the project's development (Celamin Holdings N.L., 2014c, d).

Industrial Minerals

Cement.—Carthage Cement was a publicly listed company that owned and operated the Carthage cement plant, which commenced production in October following a year-long delay owing to financial problems and a change of ownership. The Carthage cement plant was a greenfield plant built at Djebel Ressay, which is located 40 kilometers (km) southwest of the capital city of Tunis. Carthage Cement had been established by Bina Holding and Global Investment House of Kuwait (50.24% interest). The \$510 million plant had the capacity to produce 2.2 million metric tons per year (Mt/yr) of cement. The Government sold its minority share in the plant through the alternative investment market of the Tunisia Stock Exchange to Riahi Group (9.20%), Naifer Group (6.75%), and individual investors (33.80%) (table 2; Carthage Cement, 2014).

Fluorspar.—Industries Chimiques du Fluor S.A. (ICF) produced 38,000 metric tons (t) of aluminum fluoride at its plant near Gabes Port in southern Tunisia. Production was slightly less than the company's annual capacity of 42,000 metric tons per year (t/yr). Almost all aluminum fluoride output was exported for use by aluminum smelters in such countries as Bahrain, Cameroon, Canada, Egypt, France, Greece, Mozambique, the Netherlands, South Africa, and Turkey. IFC consumed about 75,000 t/yr of acid-grade fluorspar, 45,000 t/yr of hydrated alumina, 55,000 t/yr of sulfuric acid, and 20,000 t/yr of oleum (or fuming sulfuric acid). The company, which also has the capacity to produce 100,000 t/yr of anhydrite, had been importing fluorspar since the closure of the Zaghouan fluorite mine in 1992 (Industries Chimiques du Fluor S.A., 2014).

Tunisia has more than 30 locations with barite and fluorite deposits that could be developed into barite and fluorite mines, including the Jebel Kohol and Zaghouan deposits in the northeast. The Zaghouan deposit produced more than 5 Mt of barite and fluorite between 1967 and 1992. Recent studies indicated the presence of substantial fluorite and barite deposits

in the vicinity of the old Hamman Zriba Mine that holds 650,000 t of proven reserves and 2 Mt of probable reserves of ore containing 25% barite and 30% fluorite (Azizi, 2014, p. 45).

Phosphate Rock.—For the third year in a row, the country's output of phosphate rock remained less than one-half the 8.1 Mt produced in 2010. Most phosphate rock produced was used domestically to manufacture phosphate fertilizer and other phosphate-based products. Most of the phosphate rock produced was transferred to the GCT and the TIFERT fertilizer manufacturing plants to meet previously contracted delivery targets of phosphate-based fertilizer (table 1; Arab Fertilizer Association, 2014, p. 41).

Phosphoric acid production at TIFERT's Skhira plant commenced in the second quarter of 2013 after a 2-year delay because of the civil unrest. The first shipment of phosphoric acid was exported to India in July. TIFERT's plant was 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 TIFERT plant was expected to consume 1.4 Mt/yr of phosphate rock to produce 360,000 t/yr of phosphoric acid. The entire production of the plant would be exported to India through a long-term purchasing agreement, whereas production from the GCT plant would continue to be used for phosphate fertilizer manufacturing and for export to other world markets (Duncan's Fertiliser, 2011; Pilla, 2013).

In 2013, the Bir El Afou phosphate project, which was a joint venture of Celamin (51%) and TMS (49%) was established to develop a phosphate rock mine capable of producing and exporting 1.5 Mt/yr of phosphate rock grading 32% phosphorus pentoxide (P_2O_5 ; after flotation) from the Bir El Afou deposit, renewed its Bir El Afou and Chaketma exploration permits for 3 more years until 2016. The Bir El Afou deposit is located in northeastern Tunisia near the Algerian border and had estimated resources of 23 to 27 Mt of phosphate rock grading 14% to 16% P_2O_5 . In 2012, Celamin completed a bankable feasibility study for the project. In late 2013, Celamin withdrew from the project and transferred its assets to TMS. The company attributed its withdrawal from the Bir El Afou project to its intention to focus on the Chaketma phosphate rock project (Celamin Holdings N.L., 2014a, p. 3).

In October, Celamin created a new partnership company with TMS, Chaketma Phosphate S.A. (Celamin, 51% interest; TMS, 49% interest) that replaced the original 50–50 joint venture of the two companies. The Chaketma exploration permit covers an area of 52 square kilometers and had a target potential of 150 to 200 Mt of phosphate rock grading 17% to 22% P_2O_5 . Celamin planned to complete the definitive feasibility study and develop an operation plan for the project (Celamin Holdings N.L., 2014b).

Mineral Fuels

Natural Gas and Petroleum.—Output of natural gas and crude oil decrease slightly in 2013 compared with that of 2012. Crude oil and natural gas production had been trending downward in the past 5 years, especially oil and gas output by international oil companies working in Tunisia. On the other hand, natural gas production from ETAP's concessions

was trending upward, whereas production by other companies working in Tunisia decreased between 2009 and 2013. Tunisia's hydrocarbon reserves at the end of 2013 were estimated to be 430 million barrels of crude oil and 65 billion cubic meters of natural gas. In 2013, state-owned ETAP was responsible for 80% and about 66% of total crude oil (and condensate) and natural gas produced in Tunisia, respectively. The remaining hydrocarbon output was produced by international oil companies operating in Tunisia. International, local, and regional companies were conducting exploration and production activities and together held 38 exploration licenses for crude oil and natural gas in the country, including 30 onshore and 18 offshore licenses (Entreprise Tunisienne d'Activités Pétrolières, 2014, p. 21, 23).

Hydrocarbon exploration activities in 2013 included three two-dimensional (2-D) and seven three-dimensional (3-D) seismic surveys, which covered 2,688 km and 2,926 km², respectively. The 2-D surveys included the Korane-Ras, the Nadhour-Ras, and the Rihaneonshore permits, which were operated by Repsol of Spain, and the Hammamet offshore permit, which was operated by Storm Venture International of Canada. The 3-D surveys included the Borj El Khadra, the Cosmos, the Franig, the Laarich, the Mahdia, the Makhouga, and the Zaaframe permits (Entreprise Tunisienne d'Activités Pétrolières, 2014, p. 32–33).

In 2013, ETAP approved the construction of the South Tunisian Gas Pipeline (STGP) project, which included building a central processing facility at the Nawara gasfield in southern Tunisia, a 370-km-long gas pipeline with a capacity of 10 million cubic meters per day, and a natural gas treatment plant to produce liquefied petroleum gas in the Ghannouch Industrial area near Gabes. In March 2014, OMV AG of Austria, which had five exploration permits in Tunisia, agreed to invest about \$650 million in the STGP project, which was expected to begin production in 2016 (Oil and Gas Journal, 2014).

Outlook

The Government is increasing production and export of phosphate rock and phosphate-based fertilizers to the levels before civil unrest. The Government set a target of 8 Mt/yr of phosphate rock production by 2016 and 12 Mt/yr by 2020 (Santos, 2014). The flow of FDI is expected to increase in 2014 following the country's planned elections, and investors are likely to remain interested in Tunisia's energy and mining sector because of the country's geographical location and its capability to produce and export industrial mineral commodities, such as aluminum fluoride, cement, phosphate fertilizers, and salt, to Asia, Europe, and other North African countries.

References Cited

- Arab Fertilizers Association, 2014, Fertilizer statistical report 2013: Cairo, Egypt, Arab Fertilizers Association, 84 p.
- Arieff, Alexis, and Humud, C.E., 2014, Political transition in Tunisia: Congressional Research Service, October, 20 p. (Accessed November 17, 2014, at <http://fas.org/sgp/crs/row/RS21666.pdf>.)

- Azizi, Mahmoud, 2014, Barite and fluorite ores at Zaghouan in northeast of Tunisia, *in* Proceedings of the 13th Arab International Mineral Resources Conference and Its Accompanying Exhibit Exhibition, April 28–30, 2014, Marrakech, Morocco: Rabat, Morocco, Arab Industrial Development and Mining Organization, p. 45–55.
- Carthage Cement, 2014, En bref: Carthage Cement. (Accessed February 3, 2015, at <http://www.carthagecement.com.tn/fr/en-bref-1>.)
- Celamin Holdings N.L., 2014a, Annual report—30 June 2014: Celamin Holdings N.L., 60 p. (Accessed October 23, 2014, at <http://www.asx.com.au/asxpdf/20140930/pdf/42sky1w3q8kpm5.pdf>.)
- Celamin Holdings N.L., 2014b, Chaketma phosphate project: Celamin Holdings N.L. (Accessed October 23, 2014, at <http://www.celaminnl.com.au/chaketma.php>.)
- Celamin Holdings N.L., 2014c, North Tunisia base-metals project: Celamin Holdings N.L. (Accessed October 23, 2014, at <http://www.celaminnl.com.au/tunisia-m.php>.)
- Celamin Holdings N.L., 2014d, Tunisia tailings project: Celamin Holdings N.L. Web page. (Accessed October 23, 2014, at <http://www.celaminnl.com.au/tunisia.php>.)
- Central Bank of Tunisia, 2014, Annual report fiscal year 2013: Central Bank of Tunisia, October, 127 p. (Accessed November 11, 2014, at <http://www.bct.gov.tn/bct/siteprod/english/publications>.)
- Duncan's Fertiliser, 2011, Tunisian Indian Fertilisers (TIFERT) commissioning delayed due to political unrest: Duncan's Fertiliser, July 11. (Accessed September 30, 2011, at <http://duncanfertiliser.blogspot.com/2011/07/tunisian-indian-fertilisers-tifert.html>.)
- Entreprise Tunisienne d'Activités Pétrolières, 2014, Rapport annuel 2013: Entreprise Tunisienne d'Activités Pétrolières, 98 p. (Accessed February 6, 2015, at http://www.etap.com.tn/rapports/RapportAnnuel/fr/files/res/downloads/RA_2013.pdf.)
- Industries Chimiques du Fluor S.A., 2014, Raw materials: Industries Chimiques du Fluor S.A. Web page. (Accessed March 9, 2015, at http://www.icf.ind.tn/index.php?option=com_content&view=article&id=49&Itemid=41.)
- National Office of Mines, 2014, Mining code: National Office of Mines [Tunisia]. (Accessed September 12, 2014, at <http://www.onm.nat.tn/en/index.php?p=permism>.)
- Oil and Gas Journal, 2014, OMV to invest €500 million in Nawara gas field: Oil and Gas Journal, May 30. (Accessed November 18, 2014, at <http://www.ogj.com/articles/2014/05/omv-to-invest-500-million-in-nawara-gas-field.html>.)
- Pilla, Viswanath, 2013, Coromandel's Tunisia phosphoric acid plant starts operations: HT Media, July 12. (Accessed November 17, 2014, at <http://www.livemint.com/Companies/53kvTYDtGdj39BcTk7Eb9N/Coromandels-Tunisia-phosphoric-acid-plant-starts-operations.html>.)
- Santos, Aurea, 2014, Tunisia wants four-fold increase in phosphate production: Brazil Arab News Agency, May 6. (Accessed November 10, 2014, at <http://www2.anba.com.br/noticia/21863658/business-opportunities/tunisia-wants-four-fold-increase-in-phosphate-production>.)
- United Nations Conference on Trade and Development, 2014, World investment report 2014: New York, New York, and Geneva, Switzerland, United Nations Conference on Trade and Development, 228 p. (Accessed December 1, 2014, at http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf.)
- World Bank, The, 2014, Doing business—Economy rankings: The World Bank, June. (Accessed November 18, 2014, at <http://www.doingbusiness.org/rankings>.)

TABLE 1
TUNISIA: PRODUCTION OF MINERAL COMMODITIES¹

(Thousand metric tons unless otherwise specified)

Commodity ²	2009	2010	2011	2012	2013		
METALS							
Iron and steel:							
Iron ore:							
Gross weight	151	180	172	223	244		
Fe content ^c	79	94	90	117	127		
Metal:							
Steel, crude	155	115	119	109	109		
Hot-rolled	400	500	380	380	380		
INDUSTRIAL MINERALS							
Cement, hydraulic:							
Portland	7,186	7,561	6,652	6,785	6,964		
White	328	509	403	456	540		
Total	7,514	8,070	7,055	7,241	7,504		
Fertilizers:							
Ammonium nitrate	155	169	138	182	131		
Compound fertilizers	28	28	17	46	13		
Diammonium phosphate	1,124	1,277	560	666	824		
Dicalcium phosphate	64	77	55	57	46		
Hyperphosphate	7	29	23	22	32		
Phosphoric acid	1,115	1,214	568	778	747		
Sodium tripolyphosphate	112	144	85	116	127		
Triple superphosphate	747	740	401	494	520		
Fluorine, aluminum fluoride	40	40	35	38	38		
Gypsum	360	435	534	776	632		
Lime	366	343	282	340	293		
Phosphate rock, washed, gross weight	7,409	8,149	2,479	2,762	3,283		
Salt, marine	1,280	1,804	1,181	1,132	1,146		
Sulfuric acid	NA	4,868	4,500	3,200 ^r	3,200		
MINERAL FUELS AND RELATED MATERIALS							
Gas, natural:							
Gross ^e		million cubic meters	3,200	3,400	3,300	3,300	3,300
Dry		do.	2,717	3,201	3,002	2,873 ^r	2,868
Petroleum:							
Crude		thousand 42-gallon barrels	30,295	28,762	24,820	24,400 ^r	22,035
Refinery products:							
Liquefied petroleum gas		do.	1,766	1,239	1,065	1,267	1,253
Gasoline		do.	1,317	448	246	225	275
Distillate fuel oil		do.	4,047	4,047	1,276	4,288	4,816
Naphtha		do.	1,499	1,500	1,288	3,058	2,969
Paraffin oil		do.	621	621	320	291	290
Residual fuel oil		do.	4,292	4,307	1,892	4,404	3,676
White spirit		do.	102	102	476	153	194
Total		do.	13,644	12,264	6,563	13,686	13,473

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

¹Table includes data available through February 9, 2015.

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

Source: National Institute of Statistics (Tunisia)

TABLE 2
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum fluoride		Industries Chimiques du Fluor (ICF)	Gabes	42
Cement:				
Portland		Ciment des Méditerranée Gafsa S.A.	Gafsa	3,000
Do.		Carthage Cement (Bina Holding and Global Investment House, 50.24%; public stocks; 33.80% Riha Group, 9.20%; Naifer Group, 5.75%)	Djebel Ressas	2,200
Do.		Société des Ciment d'Enfidha (Cementos Portland Valderrivas, S.A., 88%)	Enfidha	1,400
Do.		Société des Ciment de Jbel Oust (Cimentos de Portugal SGPS, S.A., 100%)	Jbel Oust	1,200
Do.		Société des Ciment de Gabès (Secil-Companhia Geral de Cal e Cimento, S.A., 100%)	Gabes	1,000
Do.		Société des Ciments Artificiels Tunisiens (Colacem S.p.A., 100%)	Ben Arous	1,000
Do.		Société des Ciment d'Oum el Kéil (Government, 100%)	Le Kef	870
Do.		Les Ciment de Bizerte	Bizerte	840
White		Société Tuniso-Andalouse de Ciment Blanc S.A. (Sotacib) (Grupo Prasa, 100%)	Feriana	600
Fertilizer:				
Ammonium nitrate		Group Chimique Tunisien (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	100
Do.		do.	Tamera-Douaria Mine	50
Steel, crude		Société Tunisienne de Sidérurgie (El-Fouladh) (Government, 91%)	El Fouladh	200
Steel, rolled, bar and rod		Intermetal S.A. (private, 100%)	Ben Arous	300
Do.		Tunisacier Steelworks (private, 100%)	Bizerte	100
Lime, hydraulic		Les Ciment de Bizerte	do.	70
Natural gas	million cubic meters	BG Group plc, 100%	Miskar field	523
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Perenco Ltd., 50%	Franig field	143,000
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Oued Zar/Hammouda field	83,000
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	242,000
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Petrofac Ltd., 45%	Chergui field	244,000
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz field	13,000
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Perenco Ltd., 50%	Baguel/Tarfa field	13,000
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Winstar Resources Ltd., 45%	Sabria field	9,000
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and British Gas Tunisia Ltd., 50%	Hasdrubal field	1,002,000
Petroleum:				
Crude	thousand 42-gallon barrels	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V., 25%; Pioneer Natural Resources Co., 20%; Talisman Energy Inc., 5%	Adam field	2,243
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Baraka field	519
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%	Asstart field	2,055
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Maamoura field	360
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Oud Zar/Hammouda field	1,309
Do.	do.	British Gas Tunisia Ltd., 100%	Miskar field	1,420

See footnotes at end of table

TABLE 2—Continued
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum—Continued:				
Crude—	thousand	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and	El Hajeb/Guebiba field	1,178
Continued:	42-gallon barrels	Eni Tunisia B.V., 49%)		
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and OMV A.G., 50%)	Chorouq field	1,415
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Franig and Baguel/ Tarfa fields	231
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 Thyna Petroleum Services S.A., 49%	Cercina field	560
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Tuniso-Kuwaitian Company of Petroleum, 45%	Sidi El Kilani field	345
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Société MARETAP S.A., 45%	Ezzouia field	162
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Thyna Petroleum Services S.A., 49%	El Ain/Gremda field	230
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	143
Do.	do.	do.	Rhemoura field	202
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz field	150
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%	Mazrane field	19
Do.	do.	Petrofac Ltd., 55%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 45%	Cherqui field	113
Do.	do.	Winstar Resources Ltd., 100%	Sanrhar field	34
Do.	do.	do.	Ech-chouech field	10
Do.	do.	Canadax Energy Inc., 80%	Robbana field	7
Refined	do.	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.	Kef Eschfaier Mine	2,300
Do.		do.	Jallabia Mining Center	1,300
Do.		do.	Metlaoui, Mzida, Redeye: and Uom Laraies Mines	2,600
Phosphoric acid		Group Chimique Tunisien (GCT) (Government, 100%)	Ghannouch, near Gabes	470
Do.		do.	Skhira	375
Do.		do.	M'dhilla	183
Do.		do.	Sfax	131
Do.		Tunisian Indian Fertilizers S.A. (TIFERT) (Compagnie des Phosphates de Gafsa (CPG), 35%; Group Chimique Tunisien (GCT), 35%; Coromandel International Ltd., 15%; Gujarat State Fertilizers and Chemical Ltd., 15%)	Skhira	360
Salt		Compagnie Générale des Salines de Tunisie (COTUSAL)	Sfax and Zarzis	900
Do.		TUNISEL	Sebket Lasdhibet	350
Do.		SAIDA S.A.	Sebket Sidi El Heni	250
Sodium tripolyphosphate		Société Chimique (ALKIMIA) (Group Chimique Tunisien (GCT), 39.1%; IMER Co., 22.12%; Driss Group, 17.05%; Carte Insurance. 9.77%; Societe Tunisienne d'Engrais Chimiques S.A., 7.23%; others, 4.73%)	Gabes	200

Do., do. Ditto.