THE MINERAL INDUSTRY OF

SYRIA

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In 1998, natural gas and petroleum, which dominated Syria's mineral industry, accounted for 60% of the nation's exports and 40% of the gross domestic product (Financial Times, 1998). Other significant mineral industries included gypsum and phosphate rock mining, the manufacture of fertilizers and cement, and the manufacture of steel from domestic and imported scrap.

The substantial increase in natural gas production in recent years resulted from the development of five nonassociated gasfields in the Palmyra region between 1996 and 1998 and the expansion of processing facilities. In November 1998, Conoco Inc. of the United States and Elf Aquitaine Group of France signed a contract with the Syrian Petroleum Co. to develop associated gas resources in the Deir al-Zor area at a total cost of \$450 million. The project will capture natural gas being flared in conjunction with petroleum production and will include development of the Tabiyeh gas condensate field. The contract included the construction of a gas-gathering system, a gas-processing plant, and a 250-kilometer pipeline to transport more than 4 million cubic meters per day of gas to the national grid (Middle East Economic Digest, 1998a).

Crude oil production averaged 553,000 barrels per day (bbl/d) in 1998. The Al-Furat Petroleum Co., a joint venture among Syrian Petroleum Co., Syria Shell Petroleum Development B.V., and the Southern African Developing Mining and Mineral Industry Exchange (Deminex), was the country's largest producer, yielding about 340,000 to 350,000 bbl/d of 36.4° API Syrian Light crude oil. The Syrian Petroleum Co. produced nearly 150,000 bbl/d of heavy 24° API Suwaidiyah crude oil, the Deir Es-Zor Petroleum Co. produced about 40,000 to 50,000 bbl/d of light crude oil, and the Al-Khabur Petroleum Co. produced about 12,000 bbl/d from the Kishma Field, which came on-stream in late 1997.

In 1998, Tullow Oil plc of Ireland decided to abandon its Syrian operation and closed a 24% stake in the Ash-Sham East concession in the Eurhrates Basin near the Iraqi border. The field was brought on-stream at about 12,000 bbl/d, but production levels have since fallen (Middle East Economic Digest, 1998b).

Syrian refining policy was to operate its two refineries at full capacity to maximize the production of middle distillates. This policy, however, resulted in large surpluses of fuel oil and diesel oil, most of which were exported to Cyprus and Lebanon, and required the importation of about 5 million barrels per year of middle distillates for while domestic consumption.

Proven recoverable natural gas reserves were 234.5 billion cubic meters as of January 1, 1998. About 55% was nonassociated gas; 25%, cap gas; and the remaining 20%,

associated gas. Estimated recoverable petroleum reserves were 2.5 billion barrels. Syria's known hydrocarbon reserves were concentrated in seven major fields, the largest of which was Suwaydiyah in the extreme northeastern section of the country. Proven reserves of this field alone were reported to be 1 billion barrels of liquid hydrocarbons and 5.6 billion cubic meters of natural gas (Arab Petroleum Research Center, 1999, p. 417).

For more extensive coverage of the mineral industry of Syria, see the 1997 Minerals Yearbook, Volume III, International Review of Africa and the Middle East.

References Cited

Arab Petroleum Research Center, 1999, Syria, *in* Arab oil & gas directory: Arab Petroleum Research Center, 640 p.

Financial Times, 1998, Syria sees its oil dream collapsing: Financial Times, October 30, p. 4.

Middle East Economic Digest, 1998a, Syria, Conoco/Elf sign gas contract: Middle East Economic Digest, v. 42, no. 49, December 4, p. 25.

———1998b, Tullow Oil pulls out: Middle East Economic Digest, v. 42, no. 48, November 27, p. 16.

Major Sources Of Information

Ministry of Oil

P.O. Box 3378

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Telephone: (963) 11 541-624

Ministry of Environment

P.O. Box 3773

Damascus, Syria

Telephone: (963) 11 333-0510

Fax: (963) 11 333-5645

Svrian Petroleum Co.

P.O. Box 7660

Damascus, Syria

Telephone: (963) 11 226-817

Banias Refining Co.

P.O. Box 26

Banias, Syria

Telephone: (963) 43 238-307

General Company of Homs Refinery

P.O. Box 352

Homs, Syria

Telephone: (963) 31 516-401/470-101

Fax: (963) 31 516-410

General Company for Phosphate and Mines

Palmyra Rd., P.O. Box 288

Homs, Syria

Telephone: (963) 31 20405

¹Deceased.

$\begin{tabular}{ll} TABLE~1\\ SYRIA:~PRODUCTION~OF~MINERAL~COMMODITIES~1/\\ \end{tabular}$

(Metric tons unless otherwise specified)

Commodity	1994	1995	1996	1997	1998 e/
Cement, hydraulic thousand tons	5,000	4,463	5,000 e/	4,460	4,500
Gas, natural: e/					
Gross million cubic meters	5,000	5,000	5,500	6,400	8,000
Dry do.	2,800	2,900	3,000	4,560	5,900 2/
Gypsum	301,600	335,683	325,000 e/	325,000 e/	300,000
Iron and steel, steel, crude e/	70,000	70,000	70,000	70,000	70,000
Natural gas liquids e/ thousand 42-gallon barrels	1,800	1,800	2,000	2,250	2,500
Nitrogen:					
N content of ammonia	67,000	63,500	80,400	83,700	129,200
N content of urea	54,500	28,700	46,000	54,400	100,000
Petroleum:					
Crude	211,335	222,650	220,500	204,800	201,895
Refinery products:					
Liquefied petroleum gas thousand 42-gallon barrels	2,000	2,100	2,122	2,170	2,215 2/
Gasoline do.	11,100	11,907	11,406	11,400	11,785 2/
Naphtha do.	3,000	1,676	1,685	1,700	1,710 2/
Jet fuel do.	3,000	1,753	1,728	1,725	2,029 2/
Kerosene do.	1,400	1,484	1,491	1,500	1,546 2/
Distillate fuel oil do.	27,000	29,951	30,078	30,600	30,772 2/
Residual fuel oil do.	35,000	34,891	35,038	35,000	34,978 2/
Asphalt do.	1,600	1,900	1,916	1,900	1,900
Other do.	1,800	1,800	1,900	1,900	2,000
Total do.	85,900	87,462	87,364	87,895	88,935
Phosphate rock:					
Gross weight thousand tons	1,203	1,551	2,189	2,392	2,496
P2O5 content e/ do.	371	477 2/	670	730	765
Salt	127,000 e/	111,000	72,000	70,000	163,392
Stone, sand and gravel: e/					
Stone, dimension, marble thousand cubic meters	1,800	1,800	1,156	1,150	1,200
Sand and gravel thousand tons	4,200	4,200	4,200	4,200	4,200
Sulfur, byproduct of petroleum and natural gas e/	10,000	9,824 2/	10,000	10,000	10,000

e/ Estimated.

^{1/} Table includes data available through December 1, 1999.

^{2/} Reported figure.