## THE MINERAL INDUSTRY OF

# **IRAQ**

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The mineral industry of Iraq was dominated by the production of hydrocarbons. In 2002, Iraq's nominal gross domestic product (GDP) was estimated to be \$14.7 billion, and real GDP was estimated to have fallen by about 6.5% (Australian Department of Foreign Affairs and Trade, 2003§2). Crude oil exports accounted for about 50% of nominal GDP. GDP derived from purchasing power parity calculations<sup>3</sup> was estimated to be about \$58 million (U.S. Central Intelligence Agency, 2003§). Soon after Iraq's invasion of Kuwait in 1990, the United Nations (U.N.) Security Council Resolution 661 restricted international trade with Iraq. Official Iraqi crude oil exports had resumed in 1996 under U.N. Security Council Resolution 986 (known as the Oil for Humanitarian Aid Agreement, or the oil-for-food program), although unofficial export routes also were used to evade the trade embargo on Iraqi crude oil and petroleum products (Hoyos, 2002). In 2002, the oil-for-food program was modified by Security Council Resolutions 1409, 1443, 1447, and 1454. U.N. Security Council Resolution 1441 addressed Iraq's noncompliance with prior resolutions, especially with regard to the U.N.'s weapons inspection program.

In 2002, Iraq's average crude oil production was 2.023 million barrels per day (Mbbl/d) (U.S. Energy Information Administration, 2003b§). Other mineral production, which included clay, gypsum, limestone, salt, sand and gravel, sulfur, and phosphate rock, was minimal. International sanctions restricted development of Iraqi oilfields by a number of multinational petroleum companies that held buy-back or production-sharing contracts. In 2002, Iraq's South Oil Co. developed and began production from the Majnoon Field, which TotalFinaElf S.A. of France had hoped to develop once sanctions were lifted. In addition to the sanctions, the possibility of a U.S.-led strike on the existing Iraqi regime also adversely affected potential foreign investment (Middle East Economic Digest, 2002; Mena Report, 2002§; Mitchell, 2002§).

In 2002, an average of 459,000 barrels per day (bbl/d) of exported Iraqi crude oil reached the United States. This accounted for about 4% of gross U.S. crude oil imports. The U.S. Energy Information Administration (2003c§) reported

that the United States imported an average of 795,000 barrels per day (bbl/d) from Iraq in 2001 and 620,000 bbl/d in 2000. U.N.-approved exports of Iraqi crude oil (about 1.8 Mbbl/d) were transported by pipeline to the Port of Mina al-Bakr, Iraq, and the Ceyhan oil terminal in Turkey. Iraq also shipped about 90,000 bbl/d of crude oil and products to Jordan by truck under U.N. approval. From about 150,000 to 200,000 bbl/d of crude oil was piped to Syria, and between 80,000 and 200,000 bbl/d of crude oil and petroleum products reportedly were smuggled out of Iraq by boat or truck. In 2002, international patrols seized 976 boats that were suspected of smuggling petroleum from Iraq (Mena Report, 2003§; U.S. Energy Information Administration, 2003a§).

Additional coverage of the Iraqi petroleum sector is available in the Iraq Country Analysis Brief prepared by the U.S. Energy Information Administration (2003a§).

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- U.S. Energy Information Administration, 2003b (June), Table 1.1a—World crude oil production (including lease condensate)—1990-present, International Petroleum Monthly, accessed July 8, 2003, at URL http://www.eia.doe.gov/emeu/ipsr/t11a.xls.
- U.S. Energy Information Administration, 2003c (June), Table 4.10—United States—Oil imports—1991-2002, International Petroleum Monthly, accessed July 8, 2003, at URL http://www.eia.doe.gov/emeu/ipsr/t410.xls.

<sup>&</sup>lt;sup>1</sup>Where necessary, values have been converted from Iraqi dinars (ID) to U.S. dollars (US\$) at the average rate of ID0.0986=US\$1.00.

<sup>&</sup>lt;sup>2</sup>References that include a section mark (§) are found in the Internet References Cited section.

<sup>&</sup>lt;sup>3</sup>For an explanation of GDP calculated at purchasing power parity methodology, see URL http://www.odci.gov/cia/publications/factbook/docs/notesanddefs.html#2001.

 ${\it TABLE~1} \\ {\it IRAQ:~ESTIMATED~PRODUCTION~OF~MINERAL~COMMODITIES}^{1,\,2}$ 

(Thousand metric tons unless otherwise specified)

Commodity <sup>3</sup>	1998	1999	2000	2001	2002
METALS					
Steel, crude	50 <sup>r</sup>	50 <sup>r</sup>	50	50	25
INDUSTRIAL MINERALS					
Cement, hydraulic	2,000	2,000	2,000	2,000	2,000
Nitrogen, N content of ammonia	220	220	200	200	200
Phosphate rock, beneficiated, phosphorus pentoxide content	300	300	200	100	100
Salt	250	300	300	300	300
Sulfur, elemental:					
Native, Frasch	98	98	98	98	98
Byproduct <sup>4</sup>	2	2	2	2	2
Total	100	100	100	100	100
MINERAL FUELS AND RELATED MATERIALS					
Gas, natural:					
Gross million cubic meters	6,000	7,000	7,500	7,000	7,000
Dry do.	3,000	2,800	3,000	2,920	2,900
Natural gas plant liquids thousand 42-gallon barrels	8,000	3,000	4,000	4,000	4,000
Petroleum:					
Crude, including lease condensate do.	750,000 5	915,000 5	937,000	860,000	740,000
Refinery products do.	180,000	125,000	140,000	170,000	170,000

Revised.

<sup>&</sup>lt;sup>1</sup>Includes data available through July 9, 2003.

<sup>&</sup>lt;sup>2</sup>Estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>In addition to commodities listed, the following also may have been produced but information is inadequate to estimate output: secondary aluminum, clay, fertilizers, gypsum, secondary lead, lime, limestone, industrial (glass or silica) sand, sand and gravel, and stone.

<sup>&</sup>lt;sup>4</sup>Presumably from petroleum and natural gas processing.

<sup>&</sup>lt;sup>5</sup>Reported figure.