

RECENT OIL SHALE ACTIVITIES IN CHINA

Jialin QIAN

China University of Petroleum, Beijing, China

1. In 2008, Fushun Mining Group Co., in Liaoning Province, will produce 330,000 tonnes shale oil, by utilizing 220 Fushun retorts, each with the daily processing capacity of 100 tonnes oil shale, the production cost for 1 ton shale oil accounts for about 150 USD, the selling price more than 510 USD. Part of shale ash is used for producing cement and bricks. Fushun is importing an ATP retort, with daily processing capacity of 6000 t oil shale. It will be put into trial operation at the end of the next year.
2. In Huadian city, Jilin Province, a small power station has been operating well for some years. At the power station there are three sets of circulating fluidized-bed boilers for combusting pulverized oil shale. The boilers are equipped with electric generators (capacity of 18 MW). Annual consumption of oil shale accounts for 480,000 tonnes.
In Huadian, three private small oil shale retorting plants, equipped with 20 Fushun retorts are continuously in operation, with the annual production of shale oil about 50,000 tonnes. The retorted shale is used for oil shale power plants as feed fuel. The production cost for 1 ton shale oil accounts for about 300 USD, while the selling price reaches 440–600 USD.
In Huadian, Zheng da Company and Fuxin Coal Company in cooperation with Huadian government are conducting a large project for producing 200,000 tonnes shale oil annually, with comprehensive utilization of retorted shale. Capital investments are about more than 300 million USD. At first six modified Fushun retorts will be set up this year.
3. A private company, in Wang Qin County, Jilin Province, built 20 Fushun retorts for processing Wang Qin oil shale.
4. A private company, in Se Chi county, Guang Dong Province, built and operated a small oil shale power plant equipped with electric generator (capacity of 12 MW). Maoming oil shale is used.
5. China National Coal Company supports the Harbin Coal Chemical Company, in Heilongjiang Province, in building and operating a pulverized oil shale fluidized-bed retorting pilot plant with the processing capacity of daily 50 tonnes oil shale. Preliminary results at continuous

operation were obtained. The feasibility study report for building an industrial retorting test plant with the daily processing capacity of 2000 tonnes oil shale has been reviewed .

6. China National Petroleum Company (CNPC) with the Da Qin Oil Field Company, in cooperation with Da Lian University of Technology (as process developer), has decided to use particulate oil shale retorting technology and to build a commercial test plant with the daily capacity of 2000 tonnes oil shale. The feasibility study report has been reviewed.
7. Professor Jialin QIAN, as the chief editor, published a book in July, 2008, written in Chinese, titled “Oil Shale – Petroleum Alternative” (cost 80 USD at international book market). English version of the book will be published at the end of the next year.