SOUTH DAKOTA – 2007 Mineral Summary
Production, Exploration and Environmental Issues

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http://www.state.sd.us/denr/DES/mining/mineprg.htm

Production

Gold: Gold continued to remain the leading mineral commodity in South Dakota in terms of value. Gold production in South Dakota decreased slightly in 2007, but the value increased due to higher gold prices. Wharf Resources Inc. produced 57,628 ounces of gold in 2007, and was the only company reporting gold production since it is the only large scale gold mine still operating in the state. This represents a slight decrease in the amount of gold produced compared to 2006. The average price of gold in 2007 was $695.39, yielding a gross value of about $40 million. This was five percent higher than the 2006 gross value of $38 million. Wharf was also the only company to report silver production, which is a by-product of its gold recovery process. A total of 133,718 ounces of silver was recovered in 2007. At an average price of $13.38, the value of the silver was $1,789,147. This is a decrease from the 184,444 ounces and $2,130,328 value reported in 2006.

Table 1 compares gold and silver production for 2006 and 2007 in South Dakota.

Table 1 – Gold and Silver Production in South Dakota 2006 and 2007

Gold Production		
Company	2007 Production (ounces)	2006 Production (ounces)
Wharf Resources	57,628	63,039
Total	**57,628**	**63,039**
Estimated Value	**$40,073,935**	**$38,041,515**
Silver Production		
Wharf Resources	133,718	184,444
Total	**133,718**	**184,444**
Estimated Value	**$1,789,147**	**$2,130,328**
Combined Gold and Silver Value	**$41,863,082**	**$40,171,843**

In July, the National Science Foundation selected the Homestake underground mine in Lead as the site for a deep underground science and engineering laboratory. Crews re-entered the mine in July to begin refurbishing the mine infrastructure and installing the equipment needed to pump out water that has been filling the mine since it was closed.

In August and September, the Department of Environment and Natural Resources conducted a final inspection of the Golden Reward Mine near Lead. Wharf Resources, who owns the mine, plans to submit a petition for release of reclamation liability for the mine site in early 2008.

There are currently 11 mine permits that cover six large scale gold mining operations in South Dakota. Wharf Resources, the only gold mine still actively mining in South Dakota, holds four of these permits. No new mine permits were issued to large scale gold operations in 2007. However, Wharf Resources

was granted a permit amendment in August 2007 for a 40 acre expansion of its current mining operation near Lead, South Dakota. The expansion will allow Wharf to continue mining through 2010. The company is also looking at other expansion opportunities in the mine area that could further extend the life of the mine.

Industrial and Other Minerals: Industrial and other mineral production for 2007 is summarized in Table 2. During the 2007 reporting period, 501 companies and individuals had active mine licenses in South Dakota. An operator must obtain a license to mine for sand, gravel, pegmatite minerals, materials used in the process of making cement or lime, and rock to be crushed and used in construction. There are also mine permits that cover mining other minerals such as slate, bentonite, placer gold, and dimension stone.

Table 2 – 2007 Non-Metallic Mineral Production

Mineral	Production (Tons)
Agricultural Lime	2,000
Bentonite	0
Dimension Stone	252,592
Gypsum	53,016
Iron Ore	72,017
Limestone	3,539,908
Mica Schist	2,000
Pegmatite Minerals	3,375
Placer Gold Ore	61
Quartzite	3,244,475
Shale	227,453
Slate	2,333
Sand & Gravel	14,826,098

Source: Annual reports submitted by mining companies

Sand and gravel remained the major non-metallic mineral commodity produced during 2007 with 14,826,098 tons reported. Sand and gravel is produced in nearly every county in South Dakota and is used mainly for road construction projects.

Limestone remained the second most prolific non-metallic mineral commodity produced during 2007 with 3,539,908 tons reported. Limestone is produced in the Black Hills of western South Dakota and is used primarily in the production of cement and for construction projects. Quartzite production followed closely in third at 3,244,475 tons reported in 2007. It is quarried from four locations in southeastern South Dakota. Most of the quartzite is crushed and used in construction or for railroad ballast. Some larger blocks are used for rip-rap and occasionally for decorative purposes.

A total of 252,592 tons of dimension stone was mined by Dakota Granite Company and Cold Spring Granite Company from quarries near Milbank in northeastern South Dakota. Due to its beauty and distinctive red color, the "mahogany" granite is used primarily for monuments and building construction. Much of it goes to international markets. Dakota Granite submitted a permit amendment in April 2007 to expand its quarry. The department issued the permit amendment in February 2008.

Other minerals produced in smaller amounts during 2007 include agricultural lime, gypsum, iron ore, mica schist, pegmatite minerals (feldspar, mica, rose quartz), placer gold, shale, and slate.

Exploration

In 2007, three exploration permits were issued. Powertech (USA) Inc. was issued a permit for uranium exploration in Fall River and Custer Counties in southwest South Dakota. This was the first uranium exploration permit issued in more than 20 years in South Dakota. Powertech drilled approximately 70 uranium exploration holes in 2007 and plans to conduct additional uranium exploration in 2008.

Gold exploration activities in South Dakota increased in 2007 compared to the previous year. Two exploration permits were issued to Wharf Resources (USA), Inc. for gold exploration near its mine located six miles northwest of Lead, South Dakota. The company drilled 133 exploration holes in 2007. The department also received a permit application for gold exploration in Lawrence County from Capella Resources Inc. in 2007. The department's approval of the permit is pending.

In other exploration activities in the state, GCC Dacotah drilled two exploration holes for limestone in Pennington County. One placer gold operation also reported exploration activities in Lawrence County.

Environmental Issues

Gilt Edge Mine: EPA continued acid water treatment at the Gilt Edge Superfund Site in 2007. A total of 134.7 million gallons were treated and discharged in 2007, and water treatment will continue in 2008. EPA and the state are working on finalizing a feasibility study outlining reclamation options for the site.

New In Situ Leach Mining Regulations Adopted: Due to growing interest in uranium mining and to prepare for the possibility of uranium in situ leach mining operations moving into South Dakota, the 2006 Legislature passed a bill authorizing the Board of Minerals and Environment to promulgate rules for the construction, operation, monitoring, and closure of uranium and other in situ leach mines. On January 18, 2007, the board held a public hearing on new in situ leach mining regulations. The hearing was attended by representatives of the uranium mining industry, environmental organizations, and Native American groups. After considering written and oral comments from the public and the department, the board adopted the rules which became effective in July 2007.