#### Do I Need To Stake A Claim?

Staking a claim is not part of placer mining. Once you have obtained a licence and set up your equipment, you have a limit of 14 days maximum to work the same area. After this time, you must move your operation to another location (a minimum of 100 metres down the river).

# **Royalty Payment**

Royalty payments depend on the amount of gold recovered during the licence year (one year from the licence date). If 1 troy ounce (31.1g) or less is recovered, no royalty is due. If more than one troy ounce is recovered, a royalty of 5%must be paid. The royalty payments ensure that people of Alberta – the resource owners – receive a fair return on their resources.

# Links

The application form is can be downloaded from the Alberta Energy website: www.energy.alberta.ca/minerals/718.asp

This pamphlet can be downloaded at: www.energy.alberta.ca/minerals/1063.asp

All Acts and regulations are available online at: www.qp.alberta.ca/Laws\_Online.cfm

Codes of Practice: Watercourse crossings: environment.alberta.ca/02514.html

# Recreational Placer Mining Licence

(Metallic and Industrial Minerals Licence)

For the purpose of recreational placer mining with a sluice box or rocker.

\$50 (+GST) application fee

Valid for 5 years

A licence holder can remain in one spot for up to 14 days at a time.

#### Contact

For policy or regulation interpretation, copies of this brochure as well as the Regulation and application forms contact:

Coal & Mineral Development Resource Revenue and Operations Division Alberta Energy North Petroleum Plaza 9945 - 108<sup>th</sup> Street Edmonton, Alberta T5K 2G6

ph. 780-427-7707 fax. 780-422-5447 email. cmd.energy@gov.ab.ca web. www.energy.alberta.ca Going for Gold in Alberta ISBN 978-1-4601-0571-9 (Print) ISBN 978-1-4601-0572-6 (Online) January 2013

CMD Information Series - 02

# Going for Gold Alberta



A Guide to Recreational Panning and Placer Mining



Prospectors have been searching for placer gold in the river systems of north-central Alberta since the mid-1800s. In the years since then, many of the richest deposits have probably been located and mined. This means that amateur prospectors today are unlikely to strike it rich. But searching for gold and reliving a little of Alberta's history can still be fun.

In Alberta, gold is almost always found as tiny particles mixed with streambed deposits of sand and gravel. These deposits are called "placers"

#### Placer Gold

Millions of years of erosion and stream transportation have reduced placer gold to miniscule pieces, often called "flour gold". Normally, gold is associated with "black sand", which consists of tiny particles of other heavy minerals.

Placer gold can range from light yellow to a dull, coppery yellow. It may also be covered with a film of iron oxide, giving it a rusty colour. Pyrite or "fools gold" can be distinguished from real gold because it is brittle and crushes easily.

#### **Gold Locations**

Gold has been found in parts of the Red Deer, North Saskatchewan, McLeod, Athabasca and Peace River Systems. However, the Alberta Government does not produce a map showing the gold-bearing areas.

Amateur prospectors should check the insides of watercourse bends, pool bottoms and the upstream end of sand or gravel bars for black sand. As stream currents slow down, the black sand will settle out in these spots. Flour gold is normally found near the surface of placer deposits and may even be trapped in the roots of grasses or other vegetation.

### **Panning**

The most common way of locating placer deposits and recovering the gold is by panning. The easiest way to learn how to pan is through an experienced instructor. Libraries, bookstores and some specialty equipment stores also have information on gold panning.

## **Placer Mining**

In addition to panning, gold can be recovered by washing placer sediments through a mechanical extracting device such as a sluice box or rocker. This is called placer mining.

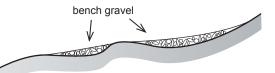
#### Do I Need A Licence?

If you will be panning for gold using only a gold pan, a licence is not required.

If you will be placer mining (using a sluice box or rocker) a recreational placer mining licence is required. Each person involved must hold a valid licence.

A recreational placer mining licence must be obtained before any equipment is set up. It is valid for five years, and allows a licence holder to occupy a location for a maximum of 14 days.

Placer mining licence applications can be obtained from the Coal & Mineral Development Branch of Alberta Energy (see contact information). The fee is \$50.00 plus GST. After obtaining a licence, the prospector can select a mining site anywhere along a watercourse, providing permission has been obtained from the leaseholder or landowner if access is required through private land or occupied Crown land.



Before placer mining can be carried out within a city, town, village, park, recreation area or historic site, permission must be obtained from the appropriate administering agency. The placer miner must also get permission from a surface owner if access is not Crown land.

# Are There Regulations For Placer Mining?

Prospectors must follow the guidelines outlined in the *Metallic and Industrial Minerals Tenure Regulation* (Part 2), which is available from the Department of Energy. Since placer mining can damage stream banks, disrupt stream ecology and interfere with existing land and water uses in the area, it is important to follow the regulations. Restrictions exist on some rivers, so check Part 2 of the Regulation for details.

Designated officials from the Alberta Energy and Alberta Environment and Sustainable Resource Development, as well as the police, have the right to check prospectors and their placer mining operations to make sure they have a valid licence and are complying with the regulations. If the regulations are not followed, the licence may be cancelled.

#### The regulation prohibits the following:

- placer mining without a licence or on Crown land that is under permit or lease to someone else;
- using any mechanical method (eg. backhoe, suction dredge, front-end loader) to move material into the sluice box. This type of heavy equipment can damage stream-banks and affect stream ecology;
- discharging silt-laden wastewater from a sluice box directly into a watercourse. This water should be drained into a settling pond to allow fine sediments to settle out before it is released into the stream;

- using mercury within 100 metres of a river, stream, watercourse or other body of water.
   Mercury is highly toxic and will contaminate the watercourse;
- operating a sluice box or other equipment within 15 metres of another licensee's equipment;
- allowing water to flow through pump to a sluice box or other equipment at a flow rate greater than 11 litres per second;
- using a screen mesh greater than 2.54 millimeters on the water intake to the sluice box or other equipment;
- conducting placer mining on certain watercourses outside designated periods.
   See Part 2 of the Metallic and Industrial Minerals Tenure Regulation for further information.
- conducting placer mining on a watercourse where the channel width is less than 20 metres at the desired location, without written consent from Alberta Environment and Sustainable Resources.

# Will Placer Mining Damage Fish Habitat?

Yes, it can. For this reason, there are regulations that restrict the type of equipment that can be used and the time of year mining can take place. For example, using a dredge (particularly a suction dredge), backhoe or other heavy equipment is not permitted because it can damage both the streambank and stream ecology. Mercury is not allowed in placer mining since it is highly toxic. Its use in gold amalgamation is part of a technical process that is not appropriate for this type of mining.