THE MANLEY HOT SPRINGS DISTRICT

The Hot Springs District was visited by the writer from Sept. 21-26, 1938, for the purpose of obtaining data on mining and prospecting. A fairly complete tabulation of present activities is appended. The individual operations are covered by means of the Placer Mining Forms, which have been forwarded to the Territorial Department of Mines at Juneau. As this district has been visited by another associate engineer of the Department of Mines, and is covered in a general way by a recent U.S.G.S. report (Bull 844-D), this report will confine itself to present mining, prospecting, and related activities.

Prospecting and Mining

There has been considerable activity this season, and both production and prospecting should continue to increase for several years. The larger outfits have large reserves of workable ground and are carrying on, or starting, drilling programs on several creeks that have been worked in the past, but which are unproductive at present. Also several individuals and small groups will prospect this winter, using light 4 and 5 inch drills, on what may be considered in part as new creeks. Others have been prospecting by means of open cuts and shafts. While it was impossible to evaluate the individual prospects in the time available, the fact remains that a good deal of prospecting is going on, and the outlook for future gold production is good.

In general the creeks mined in this district are shallow, thawed and wet. Deep, frozen mining ground is encountered on Sullivan, Deep and Woodchopper Creeks, on lower Boulder Creek, and around Wolverine Creek on the North Fork of Baker Creek. Because of the wet ground, drills usually are necessary for prospecting.

Hutlinana Creek and its tributaries in the vicinity of Hutlinana Hot Springs have been staked and several drilling outfits will prospect there this
winter. The region between the upper Huitlinana, the Rampart District and the Livengood District, while somewhat difficult of access at present, is regarded as promising, and doubtless will be given more attention by prospectors in the near future.

Twenty-five claims on Eureka Creek are under option to the Cleary Hills Mining Co., and were drilled last summer. The Montana Mining Co. has optioned most of the claims on Seattle and Rhode Island Creeks and intends to drill there this winter. Twenty-five claims on Eureka Creek are under option to the Cleary Hills Mining Co., and were drilled last summer. The Montana Mining Co. has optioned most of the claims on Seattle and Rhode Island Creeks and intends to drill there this winter. The Montana Mining Co. started mining on Omega Creek last year with no preliminary prospecting. As they do not know the exact location or extent of the workable ground, the cuts have not been located to best advantage, and some good ground has been covered with tailings. Under the present management a drilling program has been started, and it is anticipated that they will get straightened out.

The high benches on Pioneer Creek, most of which is held by Mrs. Linnie F. Duncan, appear to have been largely worked out. The creek has been little worked, and is a possible dragline proposition, although considerable tailings from the bench have been dumped on it.

In the Tofty area there still is some drift mining and prospecting on Sullivan and Deep Creeks. Some of this deep ground may be dredgable. The American Creek dredge is again operating, under competent management, and should be more successful than in the past. There are no serious operating difficulties on American Creek, except that it has not been possible to thaw ground for dredging during the following summer. The wind keeps the creek swept bare of snow, so that with no insulating covering the gravel freezes back 9 or 10 feet to bedrock during the winter. This fall the manager intends to try flooding a thawed area to see if the ice covering will afford sufficient insulation to prevent deep freezing back.

Some difficulty in prospecting accurately with small drills, especially in wet ground, is anticipated. The use of caissons and portable pumps in shallow, wet
ground was recommended, either to supplement or to replace the drilling. In some cases small test cuts would be more satisfactory.

Transportation and Communication

The roads in the Eureka and Tofty areas are shown in the sketch maps in U.S.G.S. Bull. 844-D, excepting about seven miles of recently built road leading from the mouth of Pioneer Creek to upper Omega Creek. The roads in the Eureka area are fairly good in dry weather and soft in wet weather. The chief need is for a heavy topping of gravel. Portions of the roads have been graveled recently. The available gravel in this area appears to be of poor quality for road surfacing and not well distributed.

The road from Hot Springs to Tofty was impassable. In many places deep gullies have been eroded, removing all traces of the road. A small Road Commission crew was laying corduroy on parts of the road between Hot Springs and Blowback Creek. This seems to be the only means of building a fairly permanent road over the moss, niggerheads, and generally swampy country that this road must traverse. The soil is easily eroded when the moss covering is stripped, hence it would appear that grading does more harm than good.

The cost of building and maintaining satisfactory roads over this type of country appears from casual observation to be disproportionate to the benefits derived. It would seem that the operators could freight in their heavy supplies in the spring, using cats and sleds. Under normal spring conditions this would be cheaper than freighting by truck over poor roads.

The Hot Springs District is well supplied with suitable landing fields, as shown by the following list:
<table>
<thead>
<tr>
<th>Location</th>
<th>Approx. Size</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Springs</td>
<td>1100 x 300</td>
<td>Condition Good</td>
</tr>
<tr>
<td>Eureka (Mouth Pioneer Cr.)</td>
<td>1200 x 300</td>
<td>&quot;</td>
</tr>
<tr>
<td>Omega Cr. at Alpha Cr.</td>
<td>1200 x 300</td>
<td>&quot; Fair</td>
</tr>
<tr>
<td>Sullivan Cr. (nr. Tofty Gulch)</td>
<td>1200 x 300</td>
<td>&quot; Soft in wet weather. Built by Cleary Hills Min. Co., called Cleary Hill Field</td>
</tr>
<tr>
<td>Head of Deep Cr. (nr. Miller Cr.)</td>
<td>1200 x 300</td>
<td>Condition Fair. Called Miller Field.</td>
</tr>
<tr>
<td>American Cr.</td>
<td>1500 x 200</td>
<td>&quot; Good; built on tailings by Am. Cr. Min. Co.</td>
</tr>
</tbody>
</table>

Airplane freight and passenger rates from Hot Springs to the various landing fields are relatively low and the service is good. It should be feasible to use this service for emergencies and for shipping in perishables, while the bulk of the supplies could be brought in by cats and sleds, as previously indicated. Telephone service is available from the landing fields and most of the mines to Hot Springs. The lines are kept in repair by Mr. Gus Benson, who also is commissioner and recorder for the district.

\[W. R. \text{Jencking, Assc. Min. Eng.}\]