REPORT OF MINERAL EXAMINATION

Claimant: Darrell Brown, et al
Canyonville, Oregon

Subject: Validity of Mining Claims

Lands Involved:
17 placer claims totaling 2,115 acres in sections 11 and 12, T. 38 S., R. 11 W., and sections 7, 11, 13, 14, 15, 16, 17, 22, 23, and 24, T. 38 S., R. 10 W., W.M., within the Siskiyou National Forest, Curry County, Oregon.

Examined by: Lloyd E. Holmgren

Dates of Examination:
August 1, 3, 4, and 5, 1961

Accompanied by:
Robert Mansfield, August 1, 1961
Jim Petty, August 3, 4, and 5, 1961

Reason for Examination:
Possible conflict with administrative management Kalmiopsis Wild Area and special-use permit for access to mining claims.

Pertinent Information

On February 7, 1961, Mr. Darrell Brown discussed these mining claims with the mining section and his proposal to put a road into Chetco Bar via Slide Creek and the Chetco drainage. Geologic publications dating back to 1916 discuss gold placers and lodes in the general area of Mr. Brown's claims. The area has produced some gold in times past and the geological environment seems favorable for production of more gold. His original plan was to put his road on the south side of Slide Creek to get into the bottom, but his subsequent studies showed that the only feasible approach was from Chetco Pass on the north side of Slide Creek, crossing Slide Creek near its junction with the Chetco River. From this point the road then was to follow the Chetco River all the way down to Chetco Bar. Steep cliffs and box canyons interfered and the road was changed to get on to the ridge south of the Chetco and thence downgrade to Taggart Bar. From Taggart Bar the road hugs the north side of Chetco River past Sluice Creek to a point 1/4 mile below the mouth of Box Canyon Creek.
The immediate problem was the question of access to mining claims in the Kalmiopsis Wild Area. Mr. Brown's original plans would have kept the road almost entirely on his mining claims. Due to the steep topography, cliffs, and box canyons, the road was changed and now some 4½ miles are on national forest land.

Mr. Brown did considerable testing of the high bars and of the river itself before pushing the road into the area. He had satisfied himself that the values present in the river gravels and high bars justified the expenditure of some $40,000 to extend the road to Chetco Bar.

This preliminary examination was made to determine whether or not the Forest Service could issue a special-use permit for the road into the area.

Location and Topography

The placer claims in question are located in the drainage of the Chetco River from Chetco Pass on the east to just below the confluence of the Chetco River with Box Canyon Creek. The accompanying map shows the location of the claims as plotted from the recorded location certificate. The claims are reached via county and Forest Service roads from Highway 199 at Selma traveling north from Selma to a point 1/2 mile below the Illinois River Falls then via Forest Road to Chetco Pass. From this point the claimant has built an access road to Slide Creek and on down the Chetco River to Chetco Bar.

The topography of the area is typical of southwestern Oregon consisting of mountain ridges and peaks, all of irregular contour. These mountains form a portion of the Coast Range. The steep mountain ridges and peaks are the most outstanding feature, the river valleys are also interesting. Most of the stream valleys usually are narrow and show quite precipitous slopes near their bottom and in some cases where rock structures are favorable the streams flow through narrow canyons and gorges.

The climate in the general area is relatively mild. Rainfall is fairly heavy, averaging 60 to 70 inches per year. Snow rarely stays on the ground for more than a few days in the lower elevations, but may stay on the higher peaks for a few months during the winter months.

Areal Geology

The general geology of the area is quite complex and surface exposures in most cases are obscure because of soil and brush cover.

At the head of the Slide Creek drainage the principal rocks consist of serpentine and peridotite with consequent lateritic soil development. Downstream toward the junction of Slide Creek with the Chetco River the principal rocks are of the granitoid intrusive types, mainly diorite, quartz diorite, and granodiorite. The granitoid rock types comprise the
greater portion of the claim area to well below Box Canyon Creek.

Diller in U.S.G.S. Bulletin 546 calls these granitoid intrusive rocks greenstones, which covers a rather extensive and varied series of rocks, but Wells has shown them as diorites, granodiorites, and quartz diorite on his map MF 38 published by the U.S.G.S. in 1955.

History and Production

The Higgins mine at the head of Slide Creek on the Chetco side of the divide was located in 1903. The claims extend along a contact of greenstone and serpentine. The gold apparently has not been transported, but was set free by decomposition of the rocks in and along the contact. The exact production from this group of claims is not known, but it is reported as considerable from high-grade pockets.

The Empire, Hustis, and Anderson Groups and the Bacon and Miller Groups are in the same drainage as the claims in question, but at higher elevations, and production was reported in the early 1900's and as late as 1956. Nothing is known of later activity in the area. The early work in the district apparently was the sluicing and washing of the available auriferous residual material clinging to the slopes. No mention is made in any of the old reports of sluicing the river gravels themselves, but there is no doubt that the source of the gold now found in the river channel and bars came from the auriferous material higher up on the slopes of the drainage.

Discovery

It was decided, in view of the limited time available, to check the bars and river gravels in the lower reaches of the claims first and then as time permitted to check the bars and gravels upstream toward Slide Creek.

Two checks of the river gravels were made in the main channel of the Chetco River just below the junction of Box Canyon Creek.

The first check involved a small volume of gravel (8 cubic feet) and on the basis of the gold recovered from this test the value per cubic yard amounts to $1.10.

Another test was made of one cubic yard of material in the same stretch of river gravel. On the basis of gold recovered on this check the value per cubic yard amounts to $1.96.

A small Venturi-type jet with built-in riffles and cocoa mat was used in checking the gravels in the stream. Due to the large volume of water put through the Venturi by the pump that was available there is no doubt that some of the values were carried over due to high pressure in the tube and over the riffles. An apparatus of this nature would not, of course, be
used in a commercial operation, although the jet-suction principle of the Venturi is perfectly practical if sufficient sluice box area is available for the dredged material.

Panning checks of material from the bars, from the gravels at the mouth of Baby Foot Creek and Slide Creek show by visual examination about the same values per cubic yard as were found in the lower reaches of the area of the claims.

In the time available for this examination it was not possible to estimate with any degree of accuracy the volume of gravels present in the high bars. Preliminary examination on the ground and comparison from aerial photos results in calculations showing approximately the following volumes present in the three major gravel bars exclusive of the gravel in the river channel proper.

<table>
<thead>
<tr>
<th>Bar</th>
<th>Volume</th>
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<tbody>
<tr>
<td>Slide Creek - Baby Foot Bar</td>
<td>950,000 cubic yards</td>
</tr>
<tr>
<td>Taggart Bar</td>
<td>1,500,000 cubic yards</td>
</tr>
<tr>
<td>Chetco Bar</td>
<td>4,250,000 cubic yards</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6,700,000 cubic yards</strong></td>
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This figure is an estimate only and true volumes can only be arrived at by extensive testing of gravel depths and an accurate survey of areas.

Values obtained from checking the river bars and random panning from other locations on the claims seems to indicate values something in an excess of $1.00 per cubic yard.

Dredging costs in this area using the suction type dredge now being considered by Mr. Brown should not greatly exceed 50¢ to 60¢ per yard even taking into account the difficulty of bringing in equipment and supplies. This leaves an ample margin to conduct a profitable dredging operation.

Conclusions

It is believed, on the basis of this preliminary examination, that at least a good part of the river gravels as well as the high bars contain gold values sufficient to sustain a discovery on some of the claim area. To evaluate each of the located claims and possibly to break down the area into ten-acre tracts is impractical at this time and would involve time and expense that is not warranted at present.
Recommendations

It is recommended that the special-use permit be issued Mr. Darrell Brown with, of course, the usual provisions or stipulations as to road grade, drainage, etc.

Date: SEP 25 1961

APPROVED:

W. E. BATES
Assistant Regional Forester
SEP 26 1961

[Signature]

LLOYD E. HOLMGREN, Mining Engineer