

PROSPECTING  
in the  
Black Rock - Long Creek Vicinity  
near  
The Sweetwater River  
FREMONT COUNTY, WYOMING

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Cheyenne, Wyo., June 1st, 1907

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IN THE  
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IN  
FREMONT COUNTY, WYO.

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SITUATION.

The District mentioned in this pamphlet has recently attracted attention owing to a number of gold discoveries, and lies north of the Sweetwater River in the south-eastern portion of Fremont County, Wyoming, as shown on the attached map.

FIRST DISCOVERIES.

In the winter of 1906 and 1907, Mr. Dennis Sheehan, a prominent cattleman living on the Sweetwater River, near Rongis post-office, and Mr. James Graham, a former member of the Wyoming Legislature from Fremont County, had their attention attracted to a number of quartz outcrops, and, on taking some samples of the rock, obtained gold values, and immediately began work on one or two of the properties.

EXTENT.

The most prominent discoveries have been made on several leads, one of which is known as the Rainbow Lode, on one of the

western tributaries of Long's Creek, and the District now extends from this point in an easterly direction to the Lone Tree, and thence to the King Solomon and Wild Horse claims near Black Rock Cañon, a distance of about fifteen miles; the belt is about six miles wide as at present understood. By referring to the attached map, the locality above noted is shown under the red star, and its relation to the surrounding country may be readily traced.

#### TRANSPORTATION AND ROUTES.

The nearest railroad point is at Wolton on the Wyoming and North-Western Railroad, distant about fifty miles from Black Rock Cañon, and fifty-five miles from Shéehan's Ranch. To reach the District teams may be taken from Wolton, (fifty-five miles), Moneta, (sixty miles), or Shoshoni, (sixty-five miles), but the best road is from Wolton by way of Clator's Ranch, (eighteen miles out), to Asbell's Ranch, (twenty-five miles), and thence *via* Diamond Springs and Sage Hen Creek to Black Rock Cañon. The roads are good, water may be obtained all along the route, and the trip made without difficulty.

The route from Moneta is up Muskrat Creek, by way of Love's Ranch, to Black Rock Cañon; from Shoshoni, to Muskrat Post-office, up Muskrat Creek, by way of Love's Ranch to Black Rock Cañon.

The District may also be reached from Lander, by way of the old stage road from Lander to Myersville and Rongis, about sixty miles. Teams may be had at any of the above places, at prices varying from \$5.00 to \$7.50 per day and expenses. Hotels are located at Wolton, Moneta, Shoshoni and Lander, and supplies and outfits may be purchased at these points.

The District may also be reached from the south from Rawlins, on the Union Pacific R. R., by way of the old stage road from Rawlins to Rongis. The distance is about seventy-five miles, and stops may be made at the old stage stations along this route. The Sweetwater River may usually be forded without difficulty at all seasons of the year, and accommodations can usually be secured at the various ranches throughout the locality, but those intending to make an extended stay should carry their own camp outfit

from either of the above points. Feed and water may be obtained without difficulty throughout the region.

#### GENERAL DESCRIPTION.

The country along the Sweetwater River in this locality consists of a number of low granite hills, rising from five hundred to eight hundred feet above the general level of the valley, with a series of high benches toward the north, and enclosing broad valleys and basins covered with sage brush, with a few scrub trees (pines and cedars), growing on some of the hills. These hills have a general easterly and westerly direction, and the included valleys and basins all drain toward the south into the various small creeks that lead into the Sweetwater Valley proper. These hills consist of a series of isolated granite outcrops, varying from half a mile to a mile or so long, usually devoid of vegetation, and a series of ridges, of greater extent than the granites, of granite and schist, all of which have the same general easterly and westerly trend or direction, and it is on these latter ridges that the gold discoveries have been made. Some of these latter ridges extend into the sage brush covered flats, forming long points, which are usually found to be caused by one of the larger dykes of the region.

#### GEOLOGY.

The general geology of this section is somewhat similar to that of the South Pass Gold District, which lies about fifty miles to the west from Sheehan's Ranch, and many of the rocks here known are similar to the schists and dykes of the South Pass District. The granite outcrops are evidently the remains of a series of ridges of granite, which have been a part of a mountain chain, formerly extending throughout this region, and there is no evidence to show that any comparatively recent changes have taken place in these formations. All the sedimentary formations in this locality are apparently flat and undisturbed, lying unconformably against the granite in many instances. The schist ridges have the general easterly and westerly trend above noted, and are composed of bands of hornblende and black mica-schist, occurring with occasional dykes of diorite and allied dyke rocks, which usually lie conformably with the schist, and have the same gen-

eral trend. There are no sedimentary formations in this immediate locality, and the broad, flat basins are evidently filled with the wash of the surrounding hills, but no deep cuts or gulches are available to show the composition of the formations underlying these flats. It is evident in a number of cases that the schist ledges and dykes extend out into these basins, and this fact should be carefully investigated during prospecting operations.

#### MINERALIZATION.

As has been already stated, only surface work has been done in this District, and therefore only surface conditions may be herein described.

All the mineral showings yet made have been found to occur in ledges, mostly composed of mineralized quartz and ledge matter, lying in the schist or included between the schist and dykes of some of the dioritic dyke rocks before noted.

The outcrops of these ledges usually show quartz stained by iron oxides, presenting a "rusty" appearance, and frequently called "burnt" quartz and "burnt" ledges, due to the different oxides of iron, limonite and hematite, throughout the rocks.

The surface of these outcrops is usually very hard, due to weathering of the rocks, and immediately beneath shows a much softer condition, with the quartz much fractured and broken, and pockets of soft, spongy brown and yellow limonite occurring in the seams and crevices.

Brown carbonate of iron also occurs throughout the ledge matter and many varieties of quartz, such as white and rose quartz, jaspilite, "agate" and "flint" quartz, all mixed with the ledge matter.

#### SOME OF THE FIRST LOCATIONS.

The Rainbow Lode on the west end of the District visited at this time, shows a ledge of quartzose schist lying in granite, much mineralized with iron oxides, and showing stringers and bands of quartz along its course.

East of the Rainbow is the Queen of Sheba group, where a shallow shaft has been sunk on a huge quartz outcrop which shows the iron oxides in great quantity and some copper stains. Some

iron sulphides are here noted in the dump material and examination of the surface indicates other ore shoots that should be cross-cut at depth.

The Lone Tree claims lie east of the latter group, and here is shown one of the most promising prospects yet opened. A shallow shaft and cut have shown a wide ledge of oxidized iron and quartz, the latter lying in bodies and masses throughout the ledge, and the iron impregnates the entire mass. All the oxidized forms of iron are here noted, and some sulphides of copper and iron.

The work here has not yet shown the full width of the ledge, but surface indications show it to be from twenty to thirty feet wide, and it is considered that these surface showings fully warrant the expenditure necessary to open it up and prove the ores.

East of the Lone Tree lies the Gold Ledge property, which shows a quartz-iron-schist ledge extending along the north side of one of the long granite-schist ridges. Here are noted several dykes of dioritic rocks at intervals. This property may be economically developed by a tunnel to a considerable depth and shows a similar surface condition to the Lone Tree group.

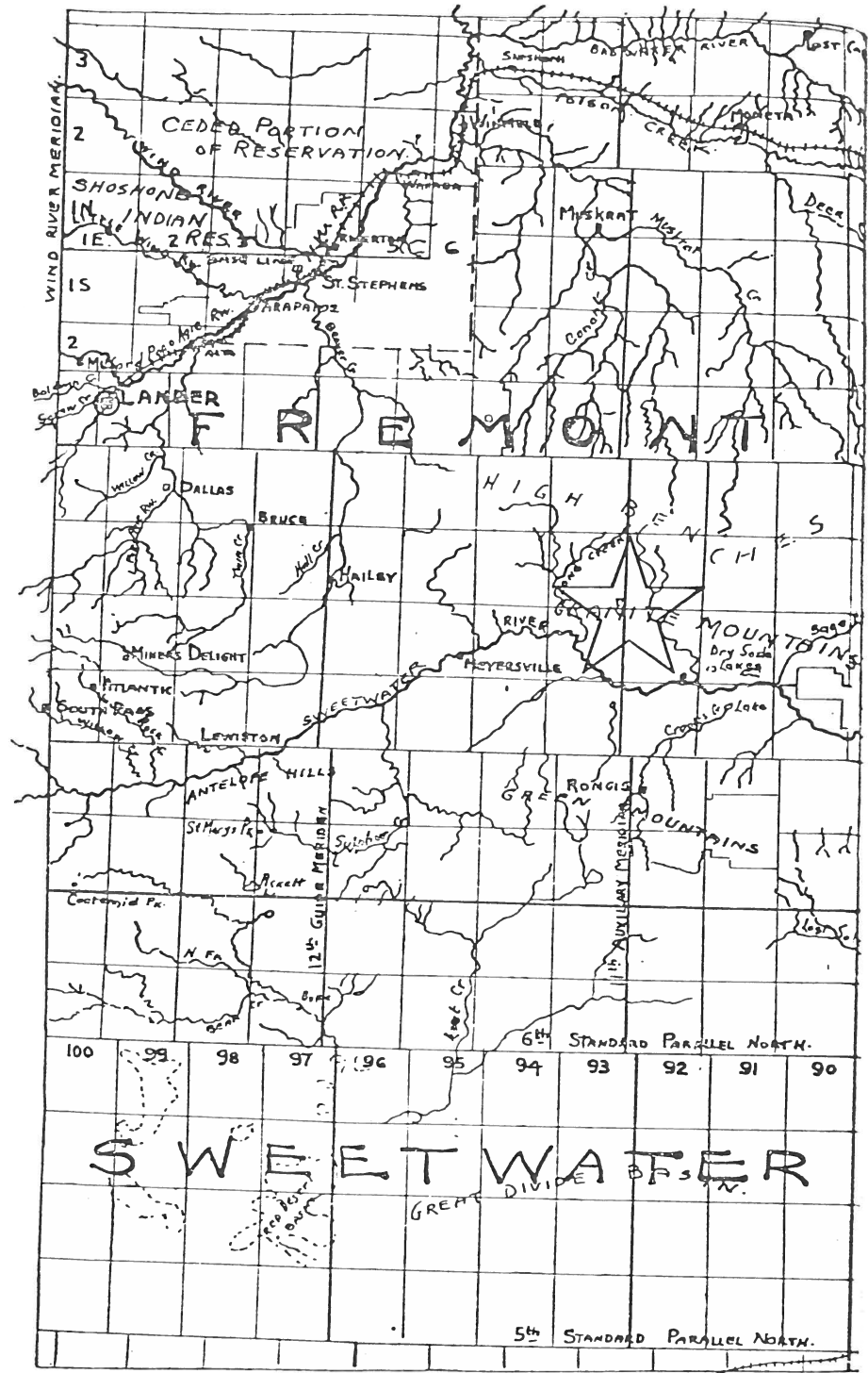
Near the eastern end of this ridge is a second outcrop of a similar ledge, the quartz and surface rock conditions being the same as above.

On the south side of this ridge is situated the Cedar Reef group, showing a mineralized diorite carrying gold. It is undeveloped but warrants further investigation.

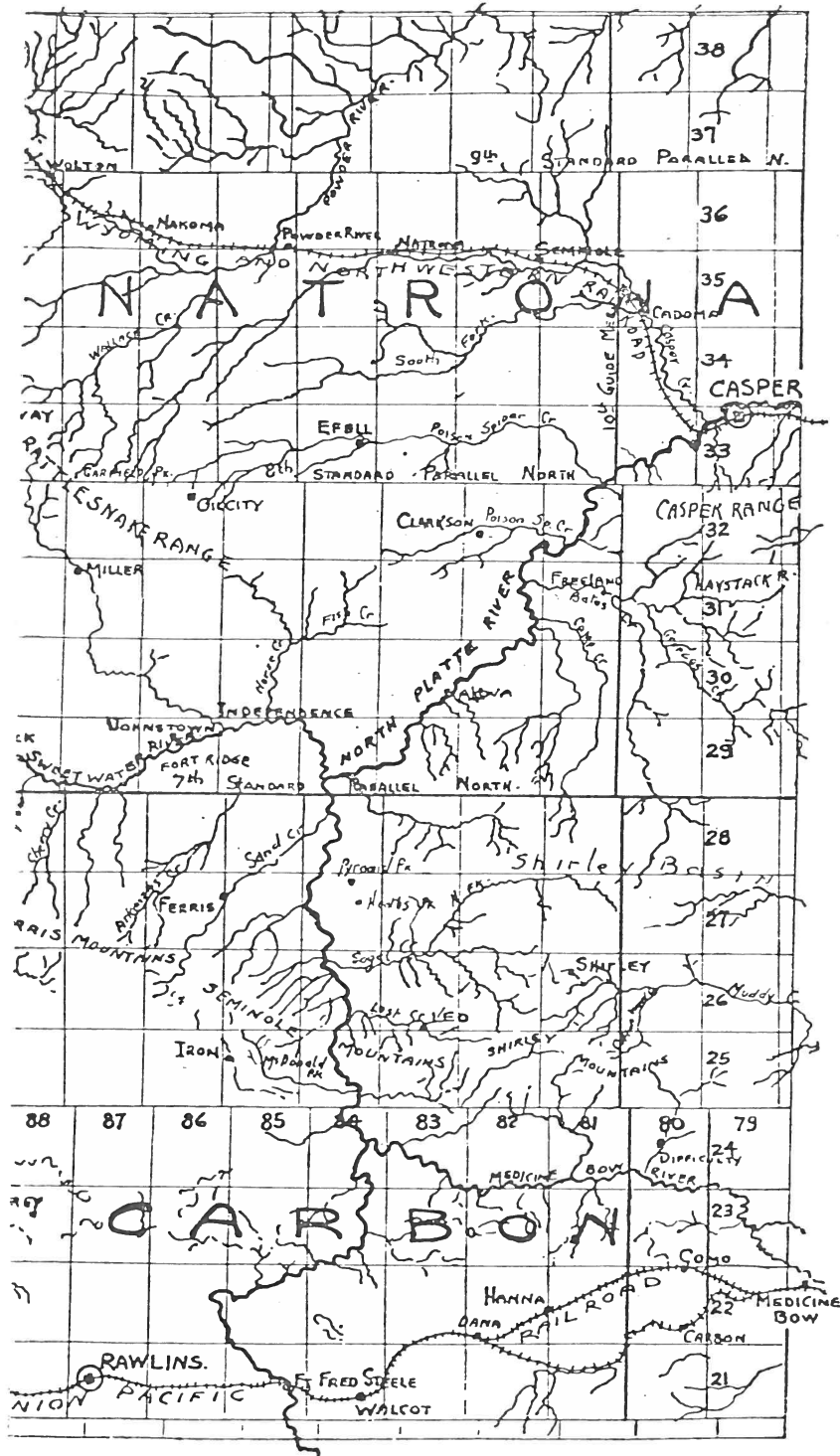
One of the properties not visited, but showing similar ore, from samples exhibited, is the Midnight group, which lies three miles north of the Lone Tree group and the Gold Ledge.

South-east of the latter groups lies the Fremont group on another ridge, similar to the above. Here a huge outcrop of quartz and schist heavily stained and impregnated with iron oxides is noted on the top of the ridge, and extends across a wide gulch on the north side, associated with a strong diorite dyke and a huge outcrop of white quartz on either side.

The King Solomon group is situated in Section 36, T. 31 N., R. 92 W., and is one of the first discoveries of the District. Here the ledge outcrops on a smooth sage brush covered hill, and by several holes in the outcrop is shown to be about thirty feet wide, the trend of the formation being north-east and south-west.



Outline Map showing a portion of Central Wyoming. T



Rock - Long Creek District is indicated by red star.



Only surface work has been done and a couple of ten-foot holes have shown the ledge conditions here. The main ledge matter is quartz, of many colors and kinds, and the iron oxides and carbonate show in masses and streaks filling the ledge matter.

This is considered one of the best showings in this locality and amply justifies the proving of these showings by deep workings at the earliest possible moment.

Three and a half miles east of the King Solomon and one and one-half miles north-east of Black Rock Springs, is the Wild Horse group, showing a series of outcrops on smooth prairie land. Here the formation is schist showing ledges of mineralized quartz, but the trend of the formation is north-west and south-east, and the ledges run with the schist.

No work has yet been done on these ledges, but the surface and holes in the quartz show a condition similar to the other properties just described, and fully warrants development.

These are some of the showings already made. Other locations will follow and development work show a further extent of the ores than is now apparent, but these are given to indicate the possible extent and condition of the ledges.

VALUES AND ASSAYS.

Again it is here noted that this district is undeveloped and all values and assays of ores relate solely to surface ores.

Samples have been assayed from all over the district and returns are here given, as far as available.

ASSAYS FROM VARIOUS PROPERTIES.

BY HON. LEROY GRANT:	GOLD
Assays from different parts of the District	\$2.00 to \$4.00
BY H. C. BEELER:	
King Solomon . . . . . 1	\$2.00
King Solomon . . . . . 2	2.00
Jasper Quartz . . . . . 3	2.00
Banded Jasper Quartz . . . . . 4	2.80
Red Quartz . . . . . 5	1.60
Cedar Reef Claim . . . . . 6	2.00

By D. H. SHEEHAN:

King Solomon.....	1	\$18.00
King Solomon.....	2	10.00
King Solomon.....	3	8.00
King Solomon.....	4	2.00
King Solomon.....	5	7.00
Wild Horse .....		20.00
Midnight .....		18.00
Cedar Reef.....		4.00

By JAS. GRAHAM:

Lone Tree .....	73.00, 15 % Copper
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By D. H. SHEEHAN:

Black Mountain .....	1	\$ 4.00
Black Mountain .....	2	9.00
Black Mountain .....	3	10.00
Black Mountain .....	4	18.00

Samples of quartz were crushed and panned and in many cases free gold was noted where only a small assay value was returned. Some of the gold was quite coarse and heavy.

Special samples have been returned to the Geologist, as authoritatively showing values of \$100.00 per ton and upwards, but the location of the ores not given out.

In all the samples taken by the Geologist, gold was found by assay or pan test and others make the same statement after more extensive tests.

It is evident that the gold is present in these ledges in commercial quantity, and the ores already found fully warrant the further opening up and development of the District.

#### TIMBER AND WATER.

There is practically no timber on these ridges, the timber of this region being obtained from the Green Mountains on the south side of Sweetwater River.

Water is obtained from the Sweetwater River, the creeks of the region and numerous springs noted in various parts of the District.

FUEL.

Aside from the few scrub pines and cedars on some of the hills, there is no fuel in this immediate vicinity, and all wood fuel must be hauled from the mountains south of the Sweetwater River. Coal exists south of the river and west of the District, as well as at Powder River on the Wyoming and Northwestern R. R., but a long haul is required in each case, and the use of gasoline or distillate hoists is recommended in all preliminary work.

With the opening up of paying mines will come a railroad to the Sweetwater Valley and the question of fuel when required in large quantities will be solved at once. Analysis of Casper and Lander oils will be sent to any one on application.

ALTITUDES.

The general altitude of the Sweetwater Valley is from 6,000 feet to 6,500 feet in this locality, and these adjacent hills rarely rise over 1,000 feet above the river, making the working altitude low and the climate good.

ADJACENT DISTRICTS.

South of the Sweetwater River lies a chain of mountains which have been little prospected, but have shown some fine samples of copper and gold ores. Reference to the attached map will show these ranges, and their approaches, and a bulletin on the showings here made may be issued later, as well as one on the Rattlesnake Range, which may be noted east of the Long Creek-Black Rock Section, beginning at Black Mountain and extending easterly.

Copies of this and other Bulletins on Wyoming may be obtained free of charge, by addressing

HENRY C. BEELER,

*State Geologist,*

Cheyenne, Wyoming.

## GENERAL INFORMATION

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For all information relating to rights to use water in Wyoming for mining or any other purpose, address

CLARENCE T. JOHNSTON, State Engineer,  
Cheyenne, Wyo.

For all information relating to the regulations of the Wyoming State Land Board and mines on State lands, address

ROBERT P. FULLER, Public Land Commissioner,  
Cheyenne, Wyo.

For all information relating to Coal Mines and Mining in Wyoming, address

DAVID M. ELIAS,  
State Coal Mine Inspector, District No. 1,  
Rock Springs, Wyo.

NOAH YOUNG,  
State Coal Mine Inspector, District No. 2,  
Glenrock, Wyo.

For all information relating to Metal Mines and Mining in Wyoming, address

HENRY C. BEELER, State Geologist,  
Cheyenne, Wyo.

For general information regarding the STATE OF WYOMING, address

WYOMING IMMIGRATION COMMISSION,  
Cheyenne, Wyo.