SECTION 2, PETERSON OPTION.

The drilling of 1914 on this option had shown a small amount of hard ore on the contact in the N.W. corner of the option. The drilling done here in 1914 indicated that this ore was merely a narrow seam under the quartzite, also that the contact here was either faulted to the North at depth, or was very irregular.

At the close of the year 1914, hole No. 70 was being drilled in order to further prove up this ore, and determine if it would be advisable to retain this option any longer. The hole was started Dec. 15th, and at the end of the year was down to a depth of 262 ft., or 45 ft. below ledge in slate. In 1915 this hole was drilled 456 ft. deeper, and passed through slate, graywhacke, quartzite, conglomorate jasper, and stopped in hard ore jasper at a depth of 718 ft. As this hole failed to prove up any ore, this option was formally surrendered on May 12th, 1915.

BARNES & HECKER, LEASE NO. 31. SEC.2.

Early in 1914 it was decided to put down several holes on this lease in order to prove if the ore found here was continuous between the old drill holes. The work done during 1914 was not successful in proving that the ore body was continuous, but it had not yet been completed at the close of the year.

Hole No. 68 was started on July 8th, 1914, and on Dec. 31st, was down 835 ft. in soft ore jasper. The hole was stopped on Feb. 13th at a depth of 1165 ft. in soft ore jasper. It was in dike from a depth of 1088 ft. to 1,111 ft., but failed to show any ore.

Hole No. 69 was started Sept. 24th, 1914, and on Dec. 31st was down 514 ft. in soft ore jasper. It wqs stopped on Feb. 5th at a depth of 891 ft., the last 116 ft. being in paint rock dike. It showed lean silicious ore, with some good ore between depths of 605 ft. and 775 ft. Analyses of this hole is as follows:

DEPTH.			IRON	PHOS.
605 ft. to	665 ft.	60 ft.	46.00	.040
675	705	30	52.80	.099
705	715	10	57.60	.117
715	720	5	54.20	.137
720	775	55	46.24	.113

The results of these holes were very disappointing, and with the other holes which were drilled here in 1914, proved conclusively that the ore body on this lease was not continuous; it also disproved the theory that the ore encountered in the old drill holes represented the tops of ore chimneys coming up from the South. It then seemed that the only change of finding an ore body here that would warrant opening a mine, would be in the territory adjacent to the fault with a S.W. strike, which had been found in several drill holes put down through the ice on North Lake. This fault passed several hundred feet South of the ore found West of the Lake, and at this point it would require a very deep hole to strike the crotch of the fault. It was decided to drill a hole on North Lake that would strike the crotch of the fault at a depth not to exceed 700 ft. This hole was located on the S.E. quarter of the N.E. quarter of Section 2, about 200 ft. North of the South shore of the lake. It was started on March 31st, and completed on June 5th at a depth of 683 ft. It showed 124 ft. of surface, and was drilled 559 ft. in soft ore jasper, with some runs of lean ore, and was stopped in slate. Results of this hole were disappointing, as it was hoped that ore would be found here. No further drilling for ore has been done during 1915 here. Following is a summary of the work done on the Barnes & Hecker Lease in 1915.

NO. OF HOLES DRILLED,	(3)
FT. STANDPIPING,	124
FT. DRILLING,	1266
TOTAL,	1390 ft.

In 1914 it was decided that it would be advisable to locate the fault further West in order that one or more deep holes might be put down to strike the intersection of the fault and slate footwall,

where there was a good chance of finding ore. The first four standpipes were put down near the center line of the section on the Moore-Chase Lease No. 28. These holes were not successful, and later in the year other stand pipes were put down further West, half way across the forty, which succeeded in locating the fault. Holes 71 to 74 inclusive, were put down further West on this same forty. The following is a summary of the standpining and drilling on the Chase Lease, No. 28:

NO. OF HOLES DRILLED,	(10)
FEET STANDPIPING,	1,715
FEET DRILLED IN ROCK,	978
TOTAL,	2,693

All the drilling and standpiping of 1915 on Section 2, both on the Barnes & Hecker Lease and Chase Lease No. 28, was done in an effort to prove up the ore body at the West end of North Lake on the Barnes & Hecker lease. No positive results were obtained from this work, and it is probable that it will require at least another year to reach some definite conclusion in regard to opening a mine here.

SECTION 3, CHASE.

All the work done on the South half of the N.E. quarter, or in the territory adjacent to the Chase Mine, will be reported under this heading. This is the land under lease from the Barnes Land Co., covered by Lease No. 32. In 1914 there was a total of eleven holes put down, in one of which 17 ft. of high grade ore was found. At the end of 1914 a hole was being put down to locate the contact at a point 300 ft. to the East of the hole which found ore. This hole, No. 63, struck ledge on Jan. 4th at a depth of 160 ft., and was finished on Feb. 24th, at a depth of 253 ft. It passed through slate, quartzite, and into hard ore jasper, in which it was stopped.

Hole No. 64 was drilled along the supposed line of the contact, about 75 ft. West of the hole which had found ore. It was started on Feb. 8th, and completed on March 11th. It struck ledge at 106

ft., and was drilled to a depth of 210 ft. This hole started in conglomorate jasper, and was stopped in hard ore jasper.

Hole No. 67 was located South of the hole where ore had been encountered, and was planned to strike the ore body at greater depth. It was started on March 12th, and completed on April 10th at a depth of 208 ft. It struck ledge at 168 ft., and was drilled 40 ft. through quartzite and hard ore jasper, but no ore was found.

One more hole, No. 69, was drilled further East on the 16th line. It started on April 12th, and finished May 20th, at a depth of 320 ft. This hole struck ledge at 185 ft., and was drilled 135 ft., through graywhacke, quartzite and hard ore jasper. No further work was done in this territory, as there was apparently no ore here on the hard ore contact. The following is a summary of the work done here in 1915.

NO. OF HOLES DRILLED	(4)
FEET STANDPIPING,	520
FEET DRILLING,	482
TOTAL,	1002

SECTION 3, BARNES LAND CO.

All exploring work done on the South half of the N.W. quarter, appears under this heading. A total of seven holes were put down here West of the old Dexter Mine, and some ore was found on the contact at one point, but not enough to warrant further explorations.

The first hole, No. 65, was located about 900 ft. West of the Dexter shaft; it was started on Feb. 6th, and was finished March 5th at a depth of 145 ft. This hole struck ledge at a depth of 80 ft., and was drilled 65 ft. in dike.

Hole No. 66 was located about 100 ft. South of hole No. 65. It started on March 6th, and was completed on March 29th at a depth of 163 ft. It struck ledge at 92 ft., and was drilled 71 ft. through quartzite, 10½ ft. of second class ore, and was stopped in dike.

Hole No. 68 was next drilled about 100 ft. East of hole No.

66. It was started on March 30th, and finished April 20th, at a depth of 152 ft. This hole struck ledge at 104 ft., and was drilled 48 ft. further in ore and dike. It was in high grade ore from 104 to 128 ft., which averaged over 60% iron, .058 phosphorous, then in lean ore from 128 to 142 ft., and was stopped in dike.

Hole No. 70 was next drilled, being located about 100 ft. South of hole No. 66, to strike the ore found in No. 68, at greater depth. It was started April 21st, and completed May 29th at a depth of 243 ft. in quartzite, slate, jasper and was stopped in dike.

Hole No. 71 was located about 500 ft. West of No. 66, in order to prove up the contact further West across the S.W.¼ of the N.W.¼. This hole was started on May 21st, and completed on June 26th at a depth of 400 ft. It struck ledge at 79 ft., and was drilled 321 ft. through quartzite, and stopped in dike.

Hole No. 72 was located Southeast of hole No. 66, nearer the Dexter Mine. It was started on June 1st, and completed August 2nd at a depth of 562 ft. It struck ledge at 129 ft., and was drilled 433 ft., passing through graywhacke, quartzite, ore, jasper and dike, being stopped in soft ore jasper. Analyses is given below.

DEPTH.		IRON	PHOS.
360 ft.	to 365 ft.	59.10	.133
365	380	61.60	.089
425	430	53.30	.060

One other hole, No. 73, was drilled near the West side of Section 3. It was started June 28th, and finished on July 30th at a depth of 271 ft. It struck ledge at 91 ft., and was drilled 180 ft. through quartzite, dike, and was stopped in quartzite and jasper. Following is a summary of the standpiping and drilling done on this part of the Barnes Lease.

NO. OF HOLES DRILLED,	(7)
FEET STANDPIPING,	704
FEET DRILLING,	1361
TOTAL,	2065 ft.

Although some ore was found in three of these holes, there was not enough to warrant further explorations, and shortly after the Chase Mine closed down, Lease No. 32 from the Barnes Land Company on the North half of Section 3 was surrendered.