IRON CLIFFS COMPANY

ISHPEMING,MICHIGAN.

A G E N T ' S A N N U A L R E P O R T.

F O R

Year ending November 30,1902.

I N D E X.

IRON CLIFFS COMPANY.

Ishpeming, Michigan, January 12th,1903.

Mr. Wm. G. Mather, President,

Cleveland, Ohio.

Dear Sir:

I beg to submit the following report of the operations of the Mines of the Iron Cliffs Company, for the year ending November 30th, 1902.

The maps, statements and inventory appertaining to this report have been sent you.

BARNUM MINE.

No ore has been mined from this property by the Lake Superior Iron Company during the year.

CLIFFS SHAFT MINE.

The following amount of ore has been mined from the different levels during the year:

LEVEL	"A" SHAFT	"B" SHAFT	TOTAL
First Sublevel	7592	26545	34137
Second Sublevel		19391	19391
First	46378	21048	67426
Second	37624	4393	42017
Third	10142	34729	44871
Fourth	2517	7414	9931
Fifth	25155	2130	27285
Sixth	27551		27551
Seventh	6393		6393
	163352	115650	279002

AVERAGE ANALYSES OF MINE SAMPLES FOR 1902.

	Iron	Phos
Cliffs Shaft Ore, Crushed,	62.20	112
Cliffs Shaft Ore, Coarse,	64.00	094

ORE SHIPMENTS FOR 1902.

	POCKET	STOCKPILE	TOTAL	TOTAL LAST YEAR
Coarse Ore	49878		49878	31938
Crushed Ore	123056	209279	332335	192479
Total	172934	209279	382213	224417
Last Year	156380	68037	224417	
Increase - 70.3% -			157796	

AVERAGE ANALYSIS OF CARGOES FOR 1902.

	Iron.
Cliffs Shaft Ore, Crushed	61.60
Cliffs Shaft Ore, Coarse	62.70

ORE STATEMENT, NOVEMBER 30th, 1902.

	Cliffs Shaft	Last Year
On hand December 1st, 1901,	124445	75594
Output for year,	279002	273268
Total	403447	348862
Shipments	382213	224417
Bal. in stock Nov, 30th, 1902,	21234	124445
Decrease in ore on hand,	103211	
Increase in output, - 2.1% -	5734	

Cliffs Shaft.

CLIFFS SHAFT.

AVERAGE WAGES AND PRODUCT.

Product 279002 tons 1902.	SURFACE		UNDERGROUND		TOTAL	
Product 273268 tons 1901.	1902	1901	1902	1901	1902	1901
Average No. men working,	72	74	254	245	326	319
Average wages per day	1.86	1.87	2.16	2.16	2.09	2.09
Average wages per Mo.25 days,	46.50	46.75	54.00	54.00	52.25	52.25
Average Product per man per day,	12.51	12.06	3.67	3.71	2.84	2.84
Labor cost per ton,	.148	.155	.588	.582	.736	.738
Difference in labor cost per ton,	.007	.010	.006	.003	.002	.013
Average Prod.Breaking & Tramming,			5.39	5.40		
Average wages for contractors,			2.25	2.24		
Average wages for Miners,			2.38	2.36		
Average wages for trammers,			1.95	1.96		

STATEMENT OF EXPLOSIVES USED FOR BREAKING ORE.

KIND	QUANTITY	PRICE	AMOUNT	AMOUNT 1901.
50% Powder	120980	.12	14517.60	13956.00
Fuse	141397	4.263	602.87	488.80
Caps	40142	6.261	251.35	218.50
Exploders	2300	.30	69.03	166.52
Wire	217	.30	65.10	125.10
			15505.95	14954.92

	1902	1901
Product	279002	273268
Lbs Powder per ton of ore	433	420
Cost per ton for explosives	.055	.055

Cliffs Shaft.

CLIFFS SHAFT.

STATEMENT OF COMPARATIVE WAGES.

	1902	1901	Increase or Decrease for 1902.
SURFACE			
Total number of days	22305	22659¼	
Average rate	1.86	1.87	Decrease .01
Amount	41447.57	42394.44	Decrease 946.87
UNDERGROUND			
Total number of Days	75966¾	73571¼	
Average rate	2.16	2.16	
Amount	163934.73	159182.92	Increase 4751.81
Total Days	98271¾	96230½	
Average rate	2.09	2.09	
Total Amount	205382.30	201577.36	Increase 3804.94

CRUSHER PLANT.

The following statement shows the cost of operating the crushers for the past year; and a comparison with the work of the preceding year.

	OPERATING COST		REPAIR COST		TOTAL COST		
	Amount	Per ton	Amount	Per T	Amount	Per T 1902	Per T 1901
Operating Engines	3966.87	017	36.08	000	4002.95	.017	.016
Operating Crushers	3602.28	015	836.32	004	4438.60	.019	.028
Total Crushing Cost	7569.15	032	872.40	004	8441.55	.036	.044
Tramming to R R Pocket	2694.19	012	291.62	001	2985.81	.013	.014
Total Cost 1902	10263.34	044	1164.02	005	11427.36	.049	.058
Total Cost 1901	10535.37	043	3473.95	005	14009.32	.058	.060
Labor Cost						.033	.034
Supply Cost						.016	.024
Total						.049	.058
Per Cent	.90		.10		100		
No. of men employed	13						
Product per man per day						61	65

CLIFFS SHAFT MINE.

The cost of Mining 279,002 tons of ore has been as follows:

	1902	1901	Increase	Decrease
PRODUCT	279002	273268	5734	
General Expense	.020	.019	.001	
Maintenance	.028	.039		.011
Mining Expense	.891	.895		.004
Cost of Production	.939	.953		.014
EXPLORATORY	.019	.012	.007	
DEPRECIATION				
Inventory	.008	.012		.004
Improvement	.002	.013		.011
New Construction (Dry)	.017		.017	
Royalty		.001		.001
Steam Shovel	.002	.003		.001
Total	.029	.029		
Less Credits	.000	.000		
Total Depreciation	.029	.029		
Taxes	.064	.057	.007	
Central Office	.031	.027	.004	
Cost on Stockpile	1.082	1.078	.004	
Loading & Shipping	.024	.015	.009	
Total Cost	1.106	1.093	.013	

Loading and shipping. Comparison figured on basis of actual tons loaded.

1901,	68037 tons,	Cost	.024
1902,	207882 "	"	.018
	Decrease		.006

Cliffs Shaft.

CLIFFS SHAFT.

The work in the different parts of the mine has been as follows: The maps have been tinted to show the extensions for the year, and for convenience of reference each stope given the number of its contract.

"A" SHAFT.

The sublevel above the first level where No.4 was working at the date of the last annual report,is exhausted. The ore only extended 80 feet West, and was cut out by the jasper. This contract was then moved to the sill floor, and is now stoping West. The ore on the bottom is only 8 feet wide, but the back of the stope 22 feet above is double this width. The stope is between two walls of slate but is not on the true foot. The trend of the slate is now more to the North, and the stope is following in this direction.

FIRST LEVEL.

No.5 has been extended 150 feet West. The stope is 25 feet wide and 22 feet high, and has ore on both sides. In the back the ore is too lean to mine. The breast is still in good ore, but the deposit is turning to the North. As will be noted from the map, this is entirely new ground. No work ever having been done on this level so far West.

At 29 the stope was carried over a bench of rock 10 feet high, and has followed the ore 100 feet West, and 50 feet south. There is now only a small amount of ore in the breast between jasper walls. This will be followed in hopes of its opening out again. The West 100 feet still has ore to the South. For the first 125 feet there was jasper in the back of the stope, but the last 25 feet shows good ore. A raise will be put up at this point to test its heighth.

Contract No.22 first drifted through 25 feet of jasper, and then 30 feet of ore before striking the slate. The stope was then turned East, and has been driven 50 feet. It is 22 feet wide and 27 feet high. The ore being taken off to the jasper hanging. On the North side there is still ore, but on the South a wall of slate.

This slate has not yet been tested, and we may find ore behind it. The breast is still in good ore. To the West the ore is 15 feet wide, but no work has yet been done to test its extent.

SECOND LEVEL.

No.7 has been extended 75 feet East and 25 feet South. At this point the ore was cut out by slate. This contract has now been moved back 125 feet, and a raise put up 38 feet to the top of the ore, stopping in jasper. This contract will now take the ore from the back of the old stope.

No.9 is drifting West under 22. The ore is only 10 feet wide and very hard. The face of the stope is now in jasper. It is intended to put up a raise from this point to take the ore from the bottom of 22 stope, when this contract is finished. The foot wall of this deposit is jasper and the hanging slate.

THIRD LEVEL.

No.6 was extended 85 feet West and struck Jasper. A raise was then put up on the ore lying on this jasper and holed to the second level "B" shaft. The ore was only about 12 feet wide and of low grade, running not more than 56.00 in iron. 50 feet East of the breast of this stope a cross cut was driven North, first through 6 feet of slate, and then 7 feet of ore, which was followed 75 feet West and 50 feet South, and was finally cut out by slate. A raise is now being put up 20 feet from the breast.

No.21 which, on the date of the last annual report had crossed 18 feet of ore, struck the foot wall at 20 feet. This has proven to be the widest part of the deposit. To the West a stope was carried 60 feet with an average width of 15 feet of ore, and was stopped in mixed ore and jasper, and a cross cut driven 40 feet West to connect with the old workings for ventilation. The ore was then stoped 110 feet East stopping in jasper. The first 50 feet was 10 feet wide, and the last 60 feet only 8 feet. The ore however, was of high grade.

At the end of the stope a raise was put up to connect with the second level. This raise showed ore in the East side with a dip to the East, and the supposition is it extends down to the main level beyond the slate. In the breast of the old stope a cross cut is now being driven East to test this.

110 feet North East of the shaft No.29 is driving a cross cut North and at 50 feet has just struck ore. This opens up an entirely new territory. The ore was discovered by means of a diamond drill which was located by Prof. Smyth after a careful study of the geological formation underground. Reference is made to his report for more detailed particulars of his conclusions and recommendations.

It may not be out of place here to say that his work has been of great value, both at this mine, and all other properties of the Company.

300feet East of the shaft No.1 contract has raised 10 feet on the jasper and is now stoping West on top of this rock between two pillars taking the ore to the 2nd level.

No work is being done on the 4th level except at No.3.

227 feet East of the shaft a cross cut was driven North to reach the ore shown by diamond drilling, which has been referred to at 29 on the 3rd level. After passing through 92 feet of slate, the ore was struck and found to be about 20 feet wide. It lies between slate walls and is of high grade. The width of the ore to the East has not yet been tested. To the West it has been opened up for a distance of about 50 feet. At present the breast is in mixed ore and slate. The most promising territory however, is to the East, and it may turn out to be quite an important find. A raise is now being put up to the 3rd level for ventilation.

FIFTH LEVEL.

At No.12 the stope was continued West 75 feet and stopped in soap rock. A cross cut was then driven North and after passing through 27 feet of mixed jasper and slate crossed 15 feet of ore. This was followed 40 feet East when the ore

was again cut out by jasper. To the West the body pinches out by the foot and hanging walls coming together. An exploring drift is now being carried North.

No.31 was extended 35 feet South and struck the slate, showing a total width of 215 feet of ore. As will be seen from the map, a stope was driven East 100 feet and stopped in slate. The last 25 feet was only 10 feet wide. The ore should extend much farther East, and the ground will be tested during the coming year with a diamond drill. Five stopes have been driven to the West on this deposit, all of which have been cut out by slate except No.31 which is following the rock on the West side of the ore. A raise from the 6th level shows the ore on the East side of the main drift to be only 15 feet thick. This deposit has proved very disappointing, as we had every reason to believe from developments on the date of the last annual report that an unusually large body of ore had been found. There are so many faults and rock intrusions in the bottom of the mine that we may find the extension by more thorough exploration.

SIXTH LEVEL.

The soap rock which was referred to in the last annual report as having been struck in the breast of No.11 turned the stope to the South East as anticipated, and the ore has been followed 100 feet in this direction. The stope is 16 feet wide and 18 feet high, the back being slate. The North side of the stope is slate and the South jasper. The stope is now turned due South and has ore in the breast. A small test drift was driven 65 feet South in mixed ore and jasper. To the East of the South deposit No.18 of last year stopped in soap rock. A small cross cut was driven East through 3 feet of rock and 20 feet of mixed ore and jasper and stopped in rank jasper. However a raise from the 7th level 30 feet North East of this cross cut, was put up all in ore, and from the top of this raise a drift has been driven 30 feet East in ore about 10 feet wide, between walls of slate. This should continue some distance East and connect with the ore which was shown Cliffs Shaft.

by the diamond drill hole from the East end of the 6th level.

SEVENTH LEVEL.

The ore struck last year by No.8 was only 30 feet wide, and as it was directly under a pillar on the 6th level, it could not be mined. From the South side of this deposit a cross cut was driven 60 feet East mainly in mixed ore and soap rock, stopping in jasper. The outlook was so unfavorable that the men were brought back and a new cross cut started 25 feet North of this. After passing through 60 feet of slate, 30 feet of ore was crossed, but this also had to be left, because underneath a pillar on the level above. The drift was then turned North East following jasper foot wall, and at a distance of 75 feet struck ore.

Contract No.8 has carried a stope 50 feet North East, 20 feet wide and 22 feet high, with ore on both sides,and in the breast where this ore was first struck a raise was put up to the 6th level and drifting started East, which has been referred to in description of 6th level.

The development of the 7th level indicates that we will have more rock drifting per ton of ore than the upper levels, and that the cost of mining will be correspondingly increased.

EIGHTH LEVEL.

During the year the shaft has been sunk 50 feet and is now on the 8th level, and drifting has just begun. To the East the drift is in 47 feet and to the West 22 feet.

CLIFFS SHAFT MINE.

"B" SHAFT.

From the South side of the second sublevel three raises have been put up 38 feet by contract 25-1, all of which were in ore. The second and third have been connected at this heighth by a drift. While there is good ore above the tops of these raises, we do not think it safe to open out any large stopes, owing to the fact that there are only 100 feet of capping between this and the sand, which was shown by a diamond drill hole to be of rotten soap stone. Above the capping there is 80 feet of quick sand, which could not be controlled if it broke through into the workings below, and the probable quantity of ore that could have been obtained from this point would not justify such a risk.

200 feet East of the West end of the second sub a raise was put up 30 feet and stopped in jasper. Contract 25-1 is now putting up a raise on the foot wall in the West end of the second sub. No other work is being done on this level.

FIRST SUBLEVEL.

During the year this level has been extended 50 feet West and No.20 is now raising on the foot through a large pillar. No.25-2 is raising from the East end of the sub, and have areached a heigth of 70 feet corresponding to the top of the raises from the second sub. This contract will now stope the ore from the South side of the raise on the foot wall. There is ore both East and West, which will be developed later.

FIRST LEVEL.

550 feet West of the shaft No.14 is stoping but has just struck the foot wall, 20 feet from the main drift.

No.17 struck jasper after drifiing 10 feet further East than was shown by last anuual map. A drift was then driven South following a small deposit of ore 8 feet wide and 7 feet high lying on the jasper foot with slate on the East. At the end of 20 feet the ore opened out in width and heigth, and a stope was extended

50 feet South in ore, 20 feet wide and 18 feet high, at which point it was cut out by slate. A test hole was then drilled in the slate and struck ore at 8 feet. A drift was driven through the rock and a stope opened. The ore was 18 feet wide and 16 feet high, but only continued 50 feet to the South. A raise was put up 30 feet high when the ore cut out. This is apparently the end of the deposit.

No.17 is now raising 70 feet North of the breast of this stope, but the ore is badly mixed.

No.13 on the sublevel 38 feet above the main level has been extended 100 feet East and stopped in jasper. They have now started 50 feet West of the breast to open a stope towards the hanging. To the West of the raise no work has been done. The ore at this point is 15 feet wide.

No.23 on the same sublevel has been extended 125 feet East and 50 feet South, and has also stopped in jasper. This contract has just started to stope West from the top of the raise.

The limits of this ore body now seem to have been defined, although it is possible that more ore may be found by explorations East and West.

SECOND LEVEL.

The only work now being done on this level is at No.15, which is raising on the West end to take out a bottom below the first level. Between 425 and 500 feet West of the shaft three raises were put up 25 feet on the foot wall, all stopping in soap rock.

THIRD LEVEL.

The stope at No.2 has been extended 100 feet South, the ore being 18 feet wide and 20 feet high and was stopped in jasper. From the breast of this stope a drift was carried 50 feet South East following a small seam of ore, which was cut out by the slate. From the face of this drift a raise was put up 40 feet, all in ore, but had to be stopped on account of poor ventilation. 30 feet North of this raise a second one is being put up and is now 65 feet high, all in ore, and will be

continued to the first level to connect with No.17.

No.28 has raised from the 3rd level to the first level, and has holed to No.17, 100 feet West from the breast of the stope. At present this contract is stoping East on the elevation of the second level, in ore 17 feet wide.

No.19 struck rock shortly after the date of the last annual report. A raise was then put up South East on the foot, and holed to the second level. 18 feet above the main level the ore was horizontal for a distance of 30 feet. To reach this ore a cross cut was driven from the level, and the ore above milled through this drift, thus saving a second handling. All the ore between the two pillars above on the second level was taken out.

No.19 was then moved to a point 200 feet South West of the shaft, and 18 feet of ore taken from the back of an old stope, for a distance of about 75 feet. From this point they were moved 200 feet East of the shaft and are now putting up a raise to the second level, all in ore, about 18 feet thick and 20 feet wide, between a jasper foot and slate hanging.

FOURTH LEVEL.

No.16 stope described last year was cut out by slate, and a raise put up on the foot wall to the 3rd level. The ore was only 20 feet wide lying between soap rock walls.

From the North side of this stope a horizontal diamond drill hole was drilled North, and crossed several small veins of ore, the largest being 4 feet wide.

No.16 then started a cross cut to reach this ore, and since striking it has been following it East. For the first 20 feet the ore was only 4 feet wide but from that point it began to increase, and for 30 feet was an average width of 15 feet with ore in the back. It is now narrowing again, and at the breast is only 5 feet wide with every appearance of being cut out by the foot and hanging coming together.

CLIFFS SHAFT MINE. "B" SHAFT.

No.26 stope holed to No.16. This contract was then started South West on the same deposit. Where the stope began the ore was 16 feet wide, but in 25 feet had narrowed to 8 feet. This ore was followed South West for a distance of 200 feet. At no point being over 15 feet wide, and was finally cut out by the foot and hanging coming together. The ore was uniformly wider in the bottom, and consequently the indications are favorable for a larger body on the 5th level.

FIFTH LEVEL.

No work has been done during the year East of the shaft. The raise spoken of in the last report was holed to the 4th level.

The cross cut 100 feet West of the shaft referred to last year was driven under the ore body above, but no ore found, showing that the ore does not continue to this level. A raise will be put up later to take the ore above.

The main drift has been extended 315 feet to the West, the entire distance being in siderite. This drift will be continued to reach the ore spoken of last year at 16 and 19.

"B" shaft will not be sunk again until more is known of the ground to the West. The West drift will be continued West until it strikes the hanging.

No new bodies of ore have been discovered in "B" shaft during the year, and the exploratory work in this part of the mine has been very discouraging. It certainly seems as if ore should exist to the West, at the depth of the 5th level.

On the upper levels, as has been explained in previous reports, the ground is badly faulted, and it is therefore not advisable to undertake any expensive explorations through them. Should we find that the faulting continues to the 5th level, I should then recommend sinking the shaft for at least 100 feet and extend an exploring drift as far West as is practicable. While the developments in "A" shaft have offset the failures in "B" shaft, at the same time should we not be able to mine the usual amount of ore from the West shaft, the output would decrease

owing to our inability to handle more ore than we are now doing from "A" shaft.

The following estimate of ore in sight was made by our Engineering Department:

	"A" Shaft	"B" Shaft	Total	Less 10% for rock
Floors	670,000	524,000	1,194,000	1,074,600
Pillars	180,000	156,000	336,000	302,400
Partly developed	115,000	167,000	282,000	253,800
Totals	965,000	847,000	1,812,000	1,630,800
In this estimate is included under "Partly developed", 90,000 tons for Back of 1st, Level,	40,000	50,000		
As in Last year and 1900 are deducted,				
Ore to support Lake Bancroft			195,000	175,000
Ore to support Machinery			380,000	342,000
Ore to support Excelsior Addition			50,000	45,000
Total to be deducted,				562,000
Total available for mining,				1,068,800

FATAL ACCIDENTS.

There has been only one fatal accident at this Mine during the year, and that of such a character that no blame can attach to any one.

On October 2nd James Collins was riding on the tram car from the Crusher, when the car jumped the track and fell to the ground below, a distance of 50 feet, carrying Collins with it, and breaking his back.

It has been impossible to obtain a satisfactory explanation of the cause of the car jumping the track. It had passed the curve and was running on a straight track, which even after the accident, was found to be in perfect condition.

The car had only been recently overhauled, and in fact the track, car, rope and all other equipment was in first class condition.

While it is possible that a small piece of ore may have fallen from the car when it was coming out, and derailed it going back, it does not seem probable, and a more rational explanation is that the man who was operating the haulage engine found that the car was going too fast, and suddenly shut off the steam, allowing the rope to become slack, and when he again started the engine, jerked the car, and threw it off the track.

NEW DRY.

A new dry has been built to replace the one burned last year, which is a model of convenience and cleanliness.

It is a one story brick building, 135 x 30 feet, and in addition to separate changing and wash rooms, has a dining room 20 x 28 feet, and an emergency hospital, 11 x 11'6".

The changing room is equipped with steel lockers, and the drying racks for the underground clothes are placed under hoods, so that the odor usually so disagreeable in this class of buildings is practically eliminated.

In the wash room each man has a separate granite ware basin, which is much more cleanly than the old way of washing from troughs and buckets. This room also contains ten shower baths, which have proved a most acceptable addition. They are constantly used and on Saturday evenings it is necessary to keep the dry open an hour or two after the usual closing time.

Curiously enough the dining room is not generally used. The men seeming to prefer to eat their "cribs" in the changing room. I cannot account for this, as the dining room is much more attractive, as a table is provided and benches, for the miner's comfort.

Cliffs Shaft.

CLIFFS SHAFT MINE.

I hope this feature of the building will gradually be appreciated, and that it will be more extensively used during the coming year.

The floors of the building are of cement, and are washed out each morning making it possible to keep the building perfectly clean.

NEW HOUSES.

The new houses which were built last year on the shore of Lake Bancroft have not been as popular as expected, principally on account of the restrictions. Owing to the size and location of the lots, it was not deemed advisable to permit the erection of cow sheds and chicken coops, and for this reason the houses were designed with a full basement, providing room for the storage of coal and provisions. As a sanitary measure, water closets were placed in the houses, rather than to have the usual outhouses.

There are at present four houses vacant. There can certainly be no fault found with the rent, as they are cheaper than any houses of like size in the city. Now that the filling has been completed, except the top dressing, and arrangements made for building fences early in the spring, there will probably be no difficulty in renting these houses, when the weather becomes mild enough for people to move comfortably.

In the end I have no doubt but what the men will appreciate these houses, even with the restrictions referred to, and that we will have no trouble in keeping them occupied.

At the time that they were building, we had double the number of applications than there were houses, and anticipated that they would be in great demand. Since that time however, there havebeen quite a number of new houses built in the city, which may account for the present conditions.

Cliffs Shaft.

CLIFFS SHAFT MINE.

The house on the East end of the North row settled so much that it was found necessary to move it to the West end of the same row. The two remaining houses on the East end of the North and South rows have also settled to some extent, but by shimming them up we have been able to keep them in fairly good condition. There has been no apparent settling for some months, and there will probably be no further trouble with them.

The houses in the old location have been kept in the usual repair.

Reference is made to the Summary of House Repairs, for particulars of the work done during the year.

All the locations of the Company, were as usual, cleaned in the spring and are in excellent sanitary condition.

Cliffs Shaft.

SALISBURY MINE.

The total tons of ore mined from the different levels during the year is as follows:

LEVEL	TONS	
12th	5924	
14th	13099	
17th	124140	
18th	35523	
Total tons		178686

AVERAGE ANALYSIS OF MINE SAMPLES FOR 1902.

	Iron	Phos
Salisbury Bessemer	62.80	.054
Salisbury Ore	60.90	.102

ORE SHIPMENTS FOR 1902.

	POCKET	STOCKPILE	TOTAL	TOTAL LAST YEAR
Salisbury Bessemer	51195	33017	84212	98672
Salisbury	65783	35299	101082	78526
Salisbury No.3.				5227
Total	116978	68316	185294	182425
Last Year	106537	75888	182425	
Increase - 1.6% -			2869	

AVERAGE ANALYSIS OF CARGO SHIPMENTS FOR 1902.

Salisbury Iron 59.90

Salisbury.

SALISBURY MINE.

ORE STATEMENT NOVEMBER 30th, 1902.

	BESSEMER	SALISBURY	TOTAL	TOTAL LAST YEAR	
On hand December 1st, 1901,	2658	21904	24562	26069	
Output for year,	89612	89074	178686	180918	
Total	92270	110978	203248	206987	
Shipments	84212	101082	185294	182425	
Balance in stock,	8058	9896	17954	24562	
Decrease in Output - 1.2% -			2232		

AVERAGE WAGES AND PRODUCT.

Product 178686 tons 1902 Product 180918 tons 1901	SURFACE		UNDERGROUND		TOTAL		
	1902	1901	1902	1901	1902	1901	
Average No. men working	40	41	160	152	200	193	
Average wages per day	1.85	1.86	2.40	2.38	2.29	2.26	
Average wages per Mo.25 days	46.25	46.50	60.00	59.50	57.25	56.50	
Aver.Prod.per man per day	15.02	14.45	3.72	4.00	2.98	3.12	Compare
Labor cost per ton	.123	.128	.646	.599	.769	.728	
Diff.in labor cost per ton	-.005	.022	+.047	.040	+.041	.060	
Aver.Prod.Breaking & Trammg			5.15	5.43			
Averages wages for contractors			2.45	2.43			
Average wages for miners			2.53	2.52			
Average wages for trammers			2.01	1.98			

Salisbury.

SALISBURY MINE.

STATEMENT OF EXPLOSIVES USED FOR BREAKING ORE.

KIND	QUANTITY	PRICE	AMOUNT	AMOUNT 1901.
50% Powder	1600	.12	192.00	1696.80
40% Powder	15450	.10½	1622.25	488.25
Fuse	58200	4.25	247.34	243.62
Caps	20450	6.205	126.90	122.63
Exploders	50	.30	1.50	
Wire	2	.30	.60	
Total			2190.59	2551.30
			1902	1901
Product			178686	180918
Lbs of powder per ton of ore			.105	.105
Cost per ton for explosives			.012	.014
Decrease			.002	

STATEMENT OF COMPARATIVE WAGES.

	1902	1901	Increase or Dec for 1902
SURFACE			
Total number of days	11891	12519½	
Average rate	1.85	1.86	Dec .01
Amount	22050.93	23246.88	Dec 1195.95
UNDERGROUND			
Total number of days	48061¾	45566¼	
Average rate	2.40	2.38	Inc .02
Amount	115416.14	1084 0440	Inc 7011.74
Total days	59952¾	58085¾	
Average rate	2.29	2.26	Inc .03
Total amount	137467.07	131651.28	Inc 5815.79
Increase in amount	5815.79		

SALISBURY MINE.

STATEMENT OF TIMBER USED FOR MINING ORE 1902.

Size	Lineal feet	Avg. per foot	Amount	Amount last year
6 to 8"	2504	.02	50.08	41.00
8 to 10"	50803	.031	1554.81	1111.21
10 to 12"	36423	.051	1841.81	2049.38
12 to 14"	27990	.066	1840.79	1625.96
14 to 16"	6046	.09	544.14	531.64
16 to 18"				
Total	123766	.047	5831.63	5359.19
Total 1901	114574	.0468	5359.19	4507.38 - 1900

LAGGING.

5 foot lagging	235313	.52	1223.62
7 foot lagging	44329	.553	245.06
Poles	66390	.0092	613.07
Total	346032	.601	2081.75
Total 1901	342614	.58	1983.68

Cost for timber and lagging 1902	7913.38	
Cost for timber and lagging 1901	7342.87	
	1902	1901
Total product	178686	182066
Feet of timber per ton of ore	.69	.63
Feet of lagging per ton of ore	1.57	1.88
Feet of lagging per foot of timber	2.80	2.99
Cost per ton for timber and lagging	.044	.040
Equivalent of stull timber to board measure	364589	356441
Feet board measure per ton of ore	2.04	1.96

SALISBURY MINE.

The cost of mining 178686 tons of ore has been as follows:

	1902	1901	Increase	Decrease
Product	178686	180918		2232
General Expense	.023	.023		
Maintenance	.067	.054	.013	
Mining Expense	.866	.819	.047	
Cost of Production	.956	.896	.060	
DEPRECIATION				
Inventory	.001	.003		.002
Improvement		.004		.004
New construction				
Steam shovel	.001	.004		.003
Total	.002	.011		.009
Less credits				
Total Depreciation	.002	.011		.009
Taxes	.029	.025	.004	
Central Office	.033	.035		.002
Cost on stockpile	1.020	.967	.053	
Loading and shipping	.017	.024		.007
Total Cost	1. 037	.991	.046	

Maintenance increase .013	
Hoisting machy (wire rope)	.006
Skips & S R New cage	.008
Mining Expense, Increase,	.047
Drifting (1000 ft over 01)	.025
Breaking ore	.015
Tramming	.008
Timbering	.022
Total	.070
Decrease in sinking acct,	.023
Increase	.047

SALISBURY MINE.

The cost of Production shows an increase of 6 cents over last year. This is principally due to the large amount of drifting done for exploratory purposes, and the increased cost of timbering.

As the mining approaches the main levels the weight on the timbers is very much heavixer, and consequently they require repairing almost continually. In fact at this mine timbering done on one Sunday often gives out before the next, so that men have to be kept constantly at work to keep the drifts open.

The increase cost of breaking was due to the fact that a large amount of the ore mined from the 17th level this year came from the sill floor, which is always more expensive than when it is taken in stopes.

The following is an estimate of the ore in sight on the different levels:

12th level	2,000 tons
14th level	1,000 tons
17th level	30,000 tons
Total	33,000 tons

No estimate is made for the ore between the 17th and 18th levels, as the ore body has not yet been sufficiently developed on the 18th level to warrant doing so. It is safe to say however, that there is at least 300,000 tons, and if the extensions to the West are as large as we anticipate from the showing on the 17th level, this amount will be largely exceeded.

The ore estimated on the 12th level is being scrammed between this and the 10th level, just East of the air shaft. 5929 tons were mined here during the year, showing an overrun over last year's estimate of 1929 tons. No close estimate is possible where ore is being run from between old timbers, as in this case.

On the 14th level a small amount of ore is left on the foot wall East of No.4 shaft. This level produced for the year 13099 tons, as against last year's estimate of 10,000 tons.

Salisbury.

SALISBURY MINE.

17TH LEVEL.

The ore estimated on this level is on the foot wall, on the East and South West of the shaft, and on the West extension of the ore body. 90,000 tons was estimated for this level last year, but 131,818 tons were hoisted during 1902, and we still estimate 30,000 tons in sight, making a total excess over last year's estimate of 71,818 tons or nearly 80%. From this the inference would naturally be that the original estimate was carelessly made, unless it is explained that the increase is practically all due to the extension of the ore body to the West, which was not developed at the time of the last annual report.

The following is a description of the work done during the year, and the present condition of the property.

All the ore above the 12th level is exhausted, except a small amount estimated East of the air shaft, between this and the 10th level.

12th LEVEL.

During the year 5924 tons of ore were mined from the old pillars around No.1 shaft above the 10th level. At present the miners have fallen back almost to the raise, and are taking out what is left of a small shaft pillar. As the estimate indicates this place is nearly exhausted. Only four miners are working at this point, two on a shift. A large amount of exploring has been done on this level West and South of the shaft. A cross cut was driven 300 feet South West across the formation, all in mixed ore and jasper. It did not reach the hanging as the work below had pulled the ground on this level, and it was not considered safe to cross the broken territory. The men were then brought back, and a cross cut drive almost due West 450 feet with the strike of the ore. This drift was continued until the foot and hanging came together. No merchantable ore was found, but for the entire distance the the drift was in a good ore formation. This drift and the one on the 8th level show that the diorite bluff South West of the shaft house is entirely underlaid by the ore measure, and is in fact an immense island.

SALISBURY MINE.

14TH LEVEL.

One gang of six miners is taking out what ore is left on the foot wall East of the shaft. This will be completed by the end of January. It is not likely that any more ore will come from this level when the present contract is finished.

17TH LEVEL.

48 miners are working on this level. 36 taking out the ore on the sill floor, and 12 on the 20 foot sublevel in the West end of the mine. West of the limits of the 16th level above, the ore has been developed on this level for a distance of 240 feet. At the extreme West end the ore is too lean to mine, but on the 18th level, it is expected it will be of good quality.

18TH LEVEL.

The width of the ore on the main cross cut from the shaft was 200 feet corresponding very closely to the level above. To the East the ore has been opened on the foot wall to connect with this drift. Two raises have been put up from the East drift, and five on the South drift, to within two sets of the 16th level, and a sub opened out at this point. On this sublevel 48 men are stoping the ore from the hanging toward the foot. 100 feet West of the main South cross cut a second cross cut is being driven. This is already across the ore 271 feet, and still has ore in the breast. Beyond the limits of the level above the ore is very high in phosphorus, but this can be accounted for on the supposition that the drift is close to the hanging. The iron however has been very high averaging about 66%. The drift is apparently going with the formation, and will probably extend some distance farther. The work at this point is distinctly encouraging, as the greatest width on any of the upper levels is 215 feet. A rock drift is now being driven West from the main cross cut, and a third cross cut will be started 100 feet West of the one just referred to. This rock drift will be continued until the end of the deposit is reached.

Salisbury.

SALISBURY MINE.

Owing to the great difficulty of maintaining the drifts when in ore, it has been found cheaper to have the men drift well back in the foot wall. It is almost impossible however to so locate the drift, as to be sure that the ground will not draw, and it may be that we shall have the same experience here as on the level above, although this drift is fully 100 feet back of the formation. To the East of the main d rift a cross cut is being driven North East to reach the line of the air shaft on the level above. When this connection is completed there will be two outlets for the men to surface.

On November first we started to sink the shaft to the 19th level. During the month of November the shaft was sunk 16 feet. The small footage is accounted for by the fact that it took the men nearly two weeks to clean out and square up the ground below the 18th level.

At no time in the history of the Salisbury has the mine been looking better, and developments during the coming year will doubtless prove up a larger body of ore than has been shown at any one time during the history of the mine.

During the year a new steel cage has been substituted for the old wooden one, which has heretofore been in use. It has been fitted with safety devices, so that in the event of any accident to the rope the lives of the men will not be in danger. Owing to the great depth of this mine, it is necessary to hoist and lower the men, and every precaution has been taken for their safety.

FATAL ACCIDENTS.

There has been one fatal accident during the year. Charles G. Anderson was killed on the morning of March 18th by a fall of ground.

Anderson and his partner had finished work in the stope, and were putting in the lagging and taking out the floors when the timbers came together without any warning. The evidence before the Coroner's Jury shows that the place was Salisbury.

apparently perfectly safe, and that the accident was in no way due to the carelessness of the men or bosses. It was simply one of those occurences, which could not have been foreseen, and which may happen at any time to men engaged in such a hazardous employment.

approximately particular cases, and that the accident [illegible] in the [illegible] of the sun or lunar. It was simply one of those parameters, which [illegible] been dropped, and which an [illegible] that this is not required in [illegible] experiments.

Salisbury.

TILDEN MINE.

AVERAGE ANALYSIS OF MINE SAMPLES FOR 1902.

	Iron	Phos
Tilden Silica	40.15	.031

ORE SHIPMENTS FOR 1902.

	This year	Last year
Tilden Silica	4750	10642
Decrease - 55.4% -	5892	

AVERAGE CARGO ANALYSIS FOR 1902.

	Iron
Tilden Silica	43.00

ORE STATEMENT NOVEMBER 30th, 1902.

	This year	Last Year
Output for year	4621	10642
Loaded from old stockpile	129	
Total	4750	10642
Shipments	4750	10642
Balance in stock	0	0
Decrease in output - 55.4% -		

STATEMENT OF COMPARATIVE WAGES FOR 1902.

	1902	1901	Decrease
Total number of days	$1367\frac{3}{4}$	$1585\frac{1}{4}$	
Average rate per day	1.95	1.95	
Total amount	2665.10	3084.58	419.48

Tilden.

TILDEN MINE.

STATEMENT OF EXPLOSIVES USED FOR BREAKING ORE.

KIND	QUANTITY	PRICE	AMOUNT	AMOUNT 1901
40% Powder	1625	.10½	170.63	341.25
Black Powder				51.30
Battery wire	24#	.30	7.20	6.60
Fuse	200'	.425	.85	3.52
Exploders	200	30.10	6.02	7.30
Caps	100	6.00	.60	2.35
Total			185.30	412.32

	1902	1901
Tons ore produced	4621	10642
Lbs Powder per ton of ore	352	390
Cost per ton for explosives	.041	.039
Inc cost per ton	.002	.010 Dec.

AVERAGE WAGES AND PRODUCT.

Product, 4621 tons, 1902.	TOTAL	
Product, 10642 " 1901	1902	1901
Average number men working	13	12
Average wages per day	1.95	1.95
Average wages per month of 25 days	48.75	48.75
Average product per man per day	3.38	6.71
Labor cost per ton	.576	.290
Difference in labor cost per ton	.286	.115
Average product breaking and tramming,	9.78	10.61

Tilden.

TILDEN MINE.

STATEMENT OF MINING COST.

	1902	1901	Increase	Decrease
Product	4621	10642		
General Expense	.012	.009	.003	
Maintenance	.049	.000	.049	
Mining Expense	.740	.355	.385	
Cost of Production	.801	.364	.437	
Depreciation.				
Closing Mine	.030		.030	
Total Depreciation	.030		.030	
Taxes	.022	.009	.013	
Cost on stockpile	.853	.373	.480	
Total cost	.853	.373	.480	

(Less tonnage)

Maintenance,

Charges to pocket and derrick .030

Closing Mine

Moving machy, supplies etc to Ishpeming, less amount rec'd for supplies sold.

The very high cost of 1902 as compared with 1901, was due to the fact that the mine was practically exhausted, and that instead of having a stope 75 feet high, the average height of the ore taken did not exceed 5 feet. This of course necessitated a very much larger amount of drilling and blasting, and on account of the small product, greatly increased the cost.

In order to secure the amount of ore sold, it was necessary to sink a winze and start a stope below the level of the pit. This was costly, and it was found Tilden.

that the ore did not go to any depth, and was crossed by several soap rock intrusions.

The ore at this point is practically exhausted. Should there be a market for silicious ore during the coming year, it is recommended that the Ogden Mine be opened. The quality of the ore is almost identical with that of the Tilden, and it could be shipped under the same name.

Tilden.

FOSTER MINE.

The balance of the Foster Stock pile was cleaned up during the year, showing a total overrun of 12680 tons.

ORE STATEMENT NOVEMBER 30th, 1902.		
	Foster	Last year
On hand December 1st 1901	1200	2329
Stockpile overrun	810	11870
Total	2010	14199
Shipped during year	2010	12999
Balance in stock	0	1200

ORE SHIPMENTS FOR 1902.

Foster	2010	12999

AVERAGE ANALYSIS OF MINE SAMPLES FOR 1902.

	Iron	Phos
Foster	50.00	.176

LEASES.

The only outstanding lease is on the East $\frac{1}{2}$ of the S W $\frac{1}{4}$ of Section 19, 47-26, held by Jones and O'Brien. No work has been done by them during the past year, but the ground rent has been regularly paid.

This lease has been transferred to the Empire Iron Co. The assignment having been approved by the President of the Iron Cliffs Company.

Respectfully submitted,

M M Duncan

Agent.

IRON CLIFFS COMPANY

INDEX

MISCELLANEOUS DATA

MINE DEPARTMENT:

LAND DEPARTMENT:

MISCELLANEOUS=

Form 6. 500. 1-98. 3.

THE CLEVELAND-CLIFFS IRON CO.

Cost of Production for the ~~Month~~ Year of 1902 & 1901.

Salisbury Mine.

	Month of 12 Months, 1902 — 178.686 Tons.						12 Months, 1901 — 180.918 Tons.						Months, 190
	Labor.		Supplies.		Total.		Labor		Supplies		Total		
	Amount.	Cost Per Ton.	Amount.	Cost Per Ton.	Amount.	Cost Per Ton.	Amount.	Cost Per Ton.	Amount.	Cost Per Ton.	Amount.	Cost Per Ton.	
GENERAL EXPENSE.													
Insurance,			25720	001	25720	001			23583	001	23583	001	
Engineering,	24227	001			24227	001	21721	001			21721	001	
Analysis,	28211	001	120201	007	148412	008	29045	002	118188	007	147233	009	
Relief Fund,			76590	004	76590	004			72630	004	72630	004	
Mine Office,	121770	007	27461	002	149231	009	121061	006	31075	002	152136	008	
Total,	174208	009	249972	014	424180	023	171827	009	245476	014	417303	023	
MAINTENANCE—Repairs of													
Tracks and Yards,	83028	005	9808	000	92836	005	86247	005	9593	000	95840	005	
Docks, Trestles and Pockets,	58639	003	22013	001	80652	004	58767	003	32359	002	91126	005	
Buildings,	7992	000	13938	002	21931	002	14607	001	12270	000	26877	001	
Shop Machinery,	201	000	6549	000	6750	000			7382	001	7382	001	
Boilers,	8651	001	5770	000	14421	001	10132	000	13306	001	23438	001	
Hoisting Machinery,	23559	002	226601	013	250160	015	18443	001	142874	008	161317	009	
Compressors and Air Pipes,	2197	000	3982	000	6179	000	4773	000	19434	001	24207	001	
Cornish and Steam Pumps,	46114	002	53869	003	99983	005	57038	003	61263	004	118301	007	
Top Tram Engines and Cars,	4263	000	2907	000	7170	000	5978	000	7026	001	13004	001	
Skips and Skip Roads,	155060	008	178638	011	333698	019	112390	007	86212	004	198602	011	
Underground Tracks and Cars,	170480	010	97245	006	267725	016	153818	009	63275	003	217093	012	
Steam Pumps	230	000	8155	000	8385	000	800	000	4511	000	5311	000	
Total,	560415	031	629475	036	1189890	067	522993	029	459505	025	982498	054	
MINING EXPENSE.													
Air Pipes,	34382	002	15864	000	50246	002	23928	001	10956	001	34884	002	
Compressors,	139710	008	227176	012	366886	020	139082	008	221380	012	360462	020	
Hoisting,	349720	020	576233	032	923953	052	349309	019	548293	031	897338	050	
Pumping,	280510	016	350461	019	630971	035	282541	016	344859	019	627400	035	
Sinking,	111604	007	10166	000	121770	007	428839	024	108931	006	537770	030	
Drifting,	1027671	058	152249	009	1179920	067	675134	037	75915	005	751049	042	
Breaking Ore,	717867	402	366491	021	1545168	423	697100	385	407940	023	1378944	408	
Tramming,	167641	093	41123	002	171764	096	155836	086	43139	002	160075	088	
Filling,													
Timbering,	1273815	090	863316	050	2137131	120	973783	054	790196	044	1763979	098	
Mining Captain and Bosses,	400370	022			400370	022	407725	022			407725	022	
Dry House,	60060	004	6540	000	66600	004	60225	004	5390	000	65615	004	
Top Landing and Tramming,	241382	014	36992	002	278374	016	276673	016	41955	002	318628	018	
Stocking Ore,	33146	002	7320	000	40466	002	34735	002	7320	000	42055	002	
Sorting Ore,							8719	000	391	000	9110	000	
Crushing Ground.							4395	000	2525	000	6920	000	
Steam Pumps.	9657		3574		13231	000							
Total,	1281845	718	2655505	148	1527350	866	1219528	674	2610557	145	1485685	819	
Cost of Production,	1355296	758	3534952	198	1708920	956	1288948	712	3315538	184	1620486	896	
Per Cent,													
EXPLORATORY.													
Exploring in Mines,													
Total,													
DEPRECIATION, ETC.													
Inventory,					22516	001					57052	003	
Improvement,											67352	004	
New Construction, Stm Shovel					23520	001					71858	004	
											196262	011	
Unclaimed Hager Co.											325	000	
Total,					46036	002					196037	011	
Taxes,					498385	029			454721	025	454721	025	
Central Office,	40611 70	023	164648	010	571318	033	484125	027	146324	008	630449	035	
Total Cost on Stock Pile,	1395938	781	3699600	208	1870365 9	1.020	1337397 3	739	3916583	217	1748659 3	967	
LOADING AND SHIPPING.													
Stem Steel, 68.272-1902 70.667-1901 Tons,	12435		14109 0		16352 5	.022	13472		179990		193462	027	
Bi-fuel, 5.227-1902 " -1901 "	9918		369		10287		96032		6707		102739	197	
Al Pocket, 11.697 8-1902 " 10.653 7-1901 "	14628		4078		15080 6	013	133722		6416		140138	013	
Series (L.E. Dock), "													
Shipping Expense,									1605		1605	---	
Total,	16081	009	14553 7	008	31461 8	017	243226	013	194718	011	437944	024	
Total Cost on Cars,	1412871 9	790	3845137	216	1852182 7	1.037	1361719 9	752	4111301	228	1792537	991	
Royalty,													
Comm'n and Expense, Cleveland Office,						150						150	
Total Cost,						1187						1.141	

ACCOUNTS NOT DONE OFF.	Mos. Amount	Mos. Per Ton	Mos. Amount	Mos. Per Ton		Sinking. Feet	Sinking. Cost	Sinking. Per Ft.	Drifting. Feet	Drifting. Cost	Drifting. Per Ft.	Comparative Cost. Year	Mos.	Comparative Cost. Tons	Cost	Comparative Cost. Mos.	Tons	Cost
New Construction,					Correct No.							1898		111.481	14.43			
Improvement,					12 Mos. 1902	16	1217 70	76.10	2240	11799 20	5.27	1899		136.519	1.096			
					12 Mos. 1901	73	5377 70	73.36	1236½	7510 49	6.08	1900		160.635	1.052			
Total,																		

REMARKS.

5277.70	1217.70
7510 49	11799.20
12788 19	13016 90

ANALYSIS OF LABOR.

Labor as per Cost Sheet,
Other Charges,
Total,

As per Labor Statement,
General Pay-Roll,
Total,

LABOR.

Cost,
ment,

Summary of Supplies Used During Years 1902 & 1901

THE CLEVELAND-CLIFFS IRON CO.	COST OF SUPPLIES.		COST PER TON.	
Salisbury MINE.	1902	1901	For 1902	For 1901 Year.
Product.	178.686	180.918		
General Supplies,	3136 52	2147 14	017	012
Iron and Steel,	1168 32	902 11	006	005
Oil, Grease and Candles,	1875 45	1968 79	010	011
Machinery Supplies,	2363 13	1545 07	014	009
Building Material,	997 93	1468 83	006	008
Explosives,	3330 63	3397 79	019	019
Mine Timber,	8083 04	7611 50	046	042
Fuel,	11184 71	11127 21	062	061
Barn,	536 38	449 37	003	002
Sundries,	1139 89	994 40	006	006
Total Supplies,	33816 03	31611 71	189	175
Miscellaneous,	6674 88	10119 80	038	055
Total,	40490 91	41731 51	227	230
SUMMARY.				
As per Cost Sheet,	39501 37	41477 75	222	229
Improvement,				
New Construction,				
Other Charges,	989 54	253 76	005	001
Total,	40490 91	41731 51	227	230

Salisbury Mine.

Cost Sheet for the Month of

1902 & 1901 190

1

Form G. 500—1-03—51.

THE CLEVELAND-CLIFFS IRON CO.

Cost of Production for the ~~Month~~ Year of 1902 & 1901.

Cliffs Shaft Mine.

	Month of 12 months 1902 — Labor Amount	Labor Cost Per Ton	Supplies Amount	Supplies Cost Per Ton	Total Amount	Total Cost Per Ton	12 Months, 1901 — Labor Amount	Labor Cost Per Ton	Supplies Amount	Supplies Cost Per Ton	Total Amount	Total Cost Per Ton
	279.002 Tons.						273.268 Tons					
GENERAL EXPENSE.												
Insurance,			517 72	002	517 72	002			490 60	002	490 60	002
Engineering,	533 95	002	1656	000	550 51	002	492 45	002	10 29	000	502 74	002
Analysis,	285 73	001	906 47	003	1192 20	004	304 76	001	376 41	002	681 17	003
Relief Fund,			1428 00	005	1428 00	005			1365 90	005	1365 90	005
Mine Office,	1534 48	005	349 09	001	1883 57	007	1476 88	005	373 76	002	1850 64	007
Total,	2359 16	008	3217 84	012	5577 00	020	2274 09	008	2616 96	011	4891 05	019
MAINTENANCE—Repairs of												
Tracks and Yards,	407 14	002	29 33	000	436 47	002	398 69	002	63 81	000	410 50	002
Docks, Trestles and Pockets,	531 64	002	441 94	001	973 58	003	604 53	002	1697 83	006	2302 36	008
Buildings,	117 96	000	235 55	001	353 51	001	440 49	002	742 24	002	1182 73	004
Shop Machinery,	78 25	001	76 94	000	155 19	001	37 80	000	39 33	000	77 13	000
Boilers,	290 53	001	587 99	002	878 52	003	147 49	000	300 40	002	447 89	002
Hoisting Machinery,	120 74	000	360 94	001	481 68	002	162 16	001	285 92	001	448 08	002
Compressors and Air Pipes,	93 33	000	52 48	000	144 81	000	188 93	000	212 85	001	401 78	001
Cornish and Steam Pumps,	152 01	001	245 43	001	397 44	002	314 40	001	254 18	001	568 58	002
Top Train Engines and Cars,	135 95	000	137 34	001	273 29	001	173 15	001	115 03	000	288 18	001
Skips and Skip Roads,	143 95	001	83 87	000	227 82	001	147 99	001	87 75	000	235 74	001
Underground Tracks and Cars,	2084 76	007	1429 37	005	3514 13	012	2165 98	007	2211 65	009	4377 63	016
Total,	4155 26	015	3681 18	013	7836 44	028	4719 61	017	5963 49	022	10683 10	039
MINING EXPENSE.												
Air Pipes,	156 15	002	587 19	002	1743 34	006	691 85	003	594 14	002	1285 99	005
Compressors,	1899 32	007	7744 99	027	9644 31	034	1861 48	007	1598 45	006	3459 93	013
Hoisting,	3647 66	013	3906 29	014	7553 94	027	3599 30	013	3499 27	013	7098 57	026
Pumping,	2874 66	010	8005 65	029	10880 31	039	2743 45	010	7190 99	026	9934 44	036
Sinking,	2257 23	008	653 65	002	2906 88	010	922 65	003	288 80	001	1211 45	004
Drifting,	24961 19	089	8715 90	031	33677 09	120	26242 51	096	6706 31	025	32948 82	121
Breaking Ore,	70849 11	254	20047 97	073	91379 08	327	71407 95	261	19876 75	073	91284 70	334
Tramming,	52515 78	188	2459 44	009	54975 22	197	49676 68	182	2500 91	009	52177 49	191
Filling,	1034 29	004	54 03	000	1088 32	004	1097 42	004	81 27	000	1178 69	004
Timbering,	1136 17	004	493 36	002	1629 53	006	1248 23	005	593 45	002	1841 68	007
Mining Captain and Bosses,	4879 06	018			4879 06	018	4987 96	018			4987 96	018
Fire House,	705 12	003	53 74	000	758 86	003	701 11	003	41 63	000	742 74	003
Top Landing and Tramming,	8010 89	029	1226 32	004	9237 21	033	7237 68	027	1144 51	004	8381 19	031
Stocking Ore,	1152 50	004	70 76	000	1223 26	004	1498 10	005	61 87	001	1559 97	006
Sorting Ore,	829 02	030	89 97	000	838 99	030	7330 53	027	65 51	000	7396 04	027
Crushing Ore 1902 29.124 tons	2762 96	027	3602 78	014	11231 74	049	8179 84	030	5600 26	020	13780 10	050
" " 1901 241.33 tons												
Total,	19250 10	690	56100 04	201	24486 14	891	18942 16	694	6523 12	201	24465 76	895
Cost of Production,	19901 52	713	63043 06	226	26205 58	939	19641 53	719	6381 05	234	26022 91	953
Per Cent,												
EXPLORATORY.												
Exploring in Mines,	1996 29		3344 83		5341 12	019	1068 93		2073 75		3142 68	012
Total,	1996 29	007	3344 83	012	5341 12	019	1068 93	004	2073 75	008	3142 68	012
DEPRECIATION, ETC.												
Inventory,					2241 04	008					3391 97	012
Improvement,					465 52	002					3468 58	013
New Construction,					4804 04	017					799 10	003
Royalty					980 —						393 00	001
U. S. Stand					542 70	002						
Credits					45 37 —						69 50	000
Total,					7957 73	029					7983 15	029
Taxes,					17737 62	064			1638 15	057	15638 15	057
General Office,	638 65	023	2183 72	008	8570 37	031	5752 58	021	1694 44	006	7449 97	027
Total Cost on Stock Pile,	20739 86	743	68571 61	246	301644 82	1082	203236 80	744	83219 91	305	294439 86	1078
LOADING AND SHIPPING.												
Rail Road, 20732 82 1902 6203 7 1901 Tons. 1902 11 1901			3824 20		3824 20	018			1643 56		1643 56	024
Dock,												
Boats, 1522 98 1902 1564 80 1901	2162 78		38 80		2201 58	013	1816 51		39 54		1856 05	012
Boats (Lake),			477 30		477 30				494 25		494 25	—
Shipping Expense,	137 92		6 66		144 58		91 56		75		92 31	—
Total,	2300 70	008	4346 96	016	6647 66	024	1908 07	007	2178 10	008	4086 17	015
Total Cost on Cars,	29646 56	751	72918 57	262	308312 28	1106	205144 87	751	85398 01	313	290542 03	1.093
Royalty,												
Profits and Expense, Cleveland Office,						150						.150
Total Cost,						1256						1.243

Shipped on Stock Pile.	Mos Amount	Mos Per Ton	Mos Amount	Mos Per Ton		Sinking Feet	Sinking Cost	Sinking Per Ft.	Drifting Feet	Drifting Cost	Drifting Per Ft.	Year	Comparative Cost Mos	Comparative Cost Tons	Comparative Cost Cost	Comparative Cost Mos	Comparative Cost Tons	Comparative Cost Cost
New Construction,					Correct Sh.							1898	12	187.844	.972			
Improvement,					12 Mos 1902	50	2905 88	58.11	3809½	31677 09	8.31	1899	12	252.161	1.076			
					12 Mos 1901		1211 45	— — —	3491	32448 82	9.44	1900	12	264.830	1.149			
Total,																		

REMARKS.

Detail of Credits

1902 Unclaimed Wages 38.77
Shop Earnings 6.60
45.37

1901 Unclaimed Wages 56.16
Shop Earnings 13.34
69.50

ANALYSIS OF LABOR.

Labor as per Cost Sheet,
Other Charges,
Total,

As per Labor Statement,
General Pay-Roll,
Total,

Summary of Supplies Used During Years 1900 & 1901.

THE CLEVELAND-CLIFFS IRON CO. Cliffs Shaft MINE.	COST OF SUPPLIES. 1900 Year.	COST OF SUPPLIES. 1901 Year.	COST PER TON. For 1900 Year.	COST PER TON. For 1901 Year.
Product.	279.002	273.268		
General Supplies,	494406	453292	018	017
Iron and Steel,	251207	268876	009	010
Oil, Grease and Candles,	468657	494460	017	018
Machinery Supplies,	659773	655947	024	024
Building Material,	206448	330812	007	012
Explosives,	206589 0	200530	074	073
Mine Timber,	50247	88427	002	003
Fuel,	2273767	2098108	082	077
Barn,	2300	1074	000	000
Sundries,	119347	108321	004	004
Total Supplies,	6592037	6504619	237	238
Miscellaneous,	1334310	2312194	048	085
Total,	7926347	8816813	285	323
SUMMARY.				
As per Cost Sheet,	7704323	8816564	276	323
Improvement,				
New Construction,	220024		009	
Other Charges,		249		000
Total,	7926347	8816813	285	323

2

Cliffs Shaft Mine.

Cost Sheet for the Month of

1900 & 1901.

Form 6. 500—4-02-3.

THE CLEVELAND-CLIFFS IRON CO.

Cost of Production for the Month of November 1902

Foster Mine.	Month of November, 1902 Tons.								12 Months, 1902			12 Months, 1901 No. Tons.		
	Labor.			Supplies.			Total.							
	Amount.		Cost Per Ton.	Amount.		Cost Per Ton.	Amount.		Cost Per Ton.	Amount.		Cost Per Ton.	Amount.		Cost Per Ton.
GENERAL EXPENSE.														
Insurance,				60	95		60	95		60	95		57	26
Engineering,														
Analysis,											51		5	84
Relief Fund,														
Mine Office,													8	75
Total,				60	95		60	95		61	46		71	85
MAINTENANCE—Repairs of														
Tracks and Yards,														
Docks, Trestles and Pockets,														
Buildings,														
Shop Machinery,														
Boilers,														
Hoisting Machinery,														
Compressors and Air Pipes,														
Cornish and Steam Pumps,														
Top Tram Engines and Cars,														
Skips and Skip Roads,														
Underground Tracks and Cars,														
Total,														
MINING EXPENSE.														
Air Pipes,														
Compressors,														
Hoisting,														
Pumping,														
Sinking,														
Drifting,														
Breaking Ore,														
Tramming,														
Filling,														
Timbering,														
Mining Captain and Bosses,														
Dry House,														
Top Landing and Tramming,														
Stocking Ore,														
Sorting Ore,														
Total,														
Cost of Production,				60	95		60	95		61	46		71	85
Per Cent,														
EXPLORATORY.														
Exploring in Mines,														
Total,														
DEPRECIATION.														
Inventory,														
Improvement,														
New Construction,														
Total,														
Taxes,							211	89		211	89		[illegible]	76
Central Office,														
Total Cost on Stock Pile,				60	95		272	84		273	35		215	81
LOADING AND SHIPPING.														
Steam Shovel, Tons,														
By Hand, "													355	67
At Pocket, "														
Sorters (L.E. Dock), "														
Shipping Expense,														
Total,														
Total Cost on Cars,													671	48
Royalty,														
Comm'n and Expense, Cleveland Office,														
Total Cost,														

ACCOUNTS NOT SUNK OFF.	Mos. Amount	Mos. Per Ton	Mos. Amount	Mos. Per Ton		Sinking. Feet	Sinking. Cost	Sinking. Per Ft.	Drifting. Feet	Drifting. Cost	Drifting. Per Ft.	Comparative Cost. Year	Mos.	Tons	Cost
New Construction,					Current Mo.										
Improvement,					Mos.										
					Mos.										
Total,															

REMARKS.

ANALYSIS OF LABOR.

Labor as per Cost Sheet,

Other Charges,

As per Labor Statement,

General Pay Roll,

Total,

Summary of Supplies Used During _____ 190__

THE CLEVELAND-CLIFFS IRON CO.	COST OF SUPPLIES.		COST PER TON.	
_____ MINE.	Month.	Year.	For	For
Product.			Mo.	Year.
General Supplies,				
Iron and Steel,				
Oil, Grease and Candles,				
Machinery Supplies,				
Building Material,				
Explosives,				
Mine Timber,				
Fuel,				
Barn,				
Sundries,				
Total Supplies,				
Miscellaneous,			3	
Total,				
SUMMARY.				
As per Cost Sheet,				
Improvement,				
New Construction,				
Other Charges,				
Total,				

Cost Sheet for the Month of

November 1902

Mine.

IRON CLIFFS COMPANY

COST OF DIAMOND DRILLING, CLIFFS SHAFT MINE YEAR ENDING NOVEMBER 30TH.1902

LABOR	DAYS	AMOUNT		COST PER FT.
Foreman & Setter	89 1/2	435	11	.224
Operating	723 3/4	1537	37	.790
Shop Labor & Repairing		23	81	.012
TOTAL	813 1/4	1996	29	1.026
SUPPLIES				
Fuel & Light		176	81	.091
Oil & Waste		29	79	.015
Bitts & Tools		49	87	.026
Repairs etc.		184	54	.095
Carbon $55\frac{62}{64}$		2520	67	1.296
General Supplies		31	40	.016
TOTAL		2993	08	1.539
Additions to Equipment, Rental etc.		351	75	.181
TOTAL COST		5341	12	2.746

		1902	1901
Total Feet Drilled		1945	1203
Average ft.per day of 10 hrs.	285	6.82	6.66
" " " man per day	813 1/4	2.39	2.66
Feet per karat of Carbon		34.73	34.04
Average cost of carbon per karat		45.00	46.23
" " per foot		2.746	2.612

Iron Cliffs Co.

Cost of Diamond Drill Work
Cliff Shaft Mine.

" " " "				
" " " "				
				540
Feet per Metal of Carbon				8.875
Average cost of carbon per Metal				45.00
				48.33
Feet per man per day			314	24.75
" " " "				2.50
Average ft. feet per day of 10 hrs.		885		8.85
				1545
Total feet drilled				1502
				1501
Total cost				5547.5
				1442 15
Additions to Equipment, Rental etc.				521 72
				2885 08
Total				7427.23
General Supplies			314 40	.076
Coal	2 84			2880 67
Blacksmith's etc.				1.2
Repairs & Tools				1.4 24
Oil & Waste				.022
Light & Fuel				48 87
Supplies				.0287
				52 72
				.012
				178 81
				.021
Total			314 1	2888
Operating Labor & Repairing				1.08
				24 81
				.012
Foreman & Setter		88 1/2	4	1.2
				.084
Labor		DAYS	AMOUNT	
				14 PER DAY

MONTHLY REPORT OF DIAMOND DRILLING, CLIFFS SHAFT MINE, NEAR NEGAUNEE
COST.1902
IRON CLIFFS COMPANY

IRON CLIFFS COMPANY

ANALYSIS OF IMPROVEMENT AND NEW CONSTRUCTION

NOVEMBER 30TH.,1902.

CLIFFS SHAFT MINE	INVENTY NOV.30 1901		EXPEN. FOR YEAR		TOTAL		DEPREC'N FOR YEAR		INVENTY NOV.30 1902	CHGD TO OTHER ACCTS		
NEW CONSTRUCTION												
Dry House			6867	03	6867	03	4804	04		2060	99	A
IMPROVEMENT												
New Heating System			170	88	170	88	170	88				
General Office Vault			104	64	104	64	104	64				
General Office Painting			130	00	130	00	130	00				
TOTAL			405	52	405	52	405	52				
STEAM SHOVEL NO.3	1233	90					777	90		456	00	B
Cliff Shaft Dep. 542.70 Salisbuty Dep. 235.20 Pioneer Iron Co. 456.00 Total 1233.90												
TOTAL IRON CLIFFS CO	1233	90	7272	55	7272	55	5987	46		2518	99	
DIVIDED AS FOLLOWS												
Cliffs Shaft Mine							7815	25				
Salisbury Mine							235	20				
Pioneer Iron Co.							456	00				
TOTAL							8506	45				

(Does not include)
(Inventory Depreciation)

A- Charges to "Fire Loss" Accts. Against Excess on other losses paid.

B- Earnings for rent of Shovel to Pioneer Iron Co. 1902

Iron Cliffs Co.

Analysis of improvements & New Construction

IRON CLIFFS COMPANY

ANALYSIS OF IMPROVEMENT AND NEW CONSTRUCTION

NOVEMBER 30TH, 1905.

	INVENTY NOV.30 1904	EXPEN. FOR YEAR	TOTAL	DEPREC'N FOR YEAR	INVENTY NOV.30 1905	CHGD TO OTHER ACCTS
CLIFFS SHAFT MINE						
A-						
CHARGED TO "LIFE LOSS" ACCTS.						
ADDITIONAL EXCESS ON OFFSET LOSSES PAID.						
B-						
ESTIMATED FOR RENT OF SHOVEL TO PIONEER IRON CO. 1905						
(INVENTORY DEPRECIATION)						
(DOES NOT INCLUDE)						
TOTAL				$ 8208 42		
PIONEER IRON CO.				429 00		
SOUTHERN MINE				322 30		
CLIFFS SHAFT MINE				7572 32		
DIVIDED AS FOLLOWS						
TOTAL IRON CLIFFS CO	1322 30	2347 22	2347 22	8884 42		322 30
TOTAL 1322.30						
PIONEER IRON CO. 429.00						
SOUTHERN DEP. 322.30						
CLIFFS SHAFT DEP. 571.00						
B						
CLIFFS SHOVEL NO.2	1322 30			777 30		429 00
TOTAL		404 25	404 25	404 25		
GENERAL OFFICE FURNITURE		120 00	120 00	120 00		
GENERAL OFFICE AGENT		104 64	104 64	104 64		
NEW HOISTING SYSTEM		179 88	179 88	179 88		
IMPROVEMENT						
A						
DEL HOUSE		2389 02	2389 02	4804 04		3000 00
NEW CONSTRUCTION						
CLIFFS SHAFT MINE						

IRON CLIFFS COMPANY

CLIFFS SHAFT MINE

STATEMENT OF RENTED HOUSES, SHOWING RENTS RECEIVED
COST OF REPAIRS ETC. FOR THE YEAR ENDING
NOVEMBER 30TH., 1902

HOUSE NO.	PRESENT OCCUPANT	LOT NO.	RENT RECD.		RE-PAIRS		INS-UR-ANCE		TAXES		TOTAL EXPENSE	
A	A.J.Yungbluth		132	00	272	77	10	00	61	02	345	79
B	Duncan Campbell)		72	00	80	03	6	00	40	05	126	08
B	Harry Whittington)		72	00								
C	C.J.Shaddick		120	00	165	72	5	00	36	24	206	96
1	Terry Dougherty		54	00	19	94	2	00			21	94
2	Mike Collins)		60	00	15	02						
2	Geo. Oatman)		60	00	9	63	3	00			27	65
3	D.J.Campbell		60	00	5	03	1	50			6	53
4	John Beale)		78	00	17	42						
5	Otto Schodt)		60	00	9	64	4	00			31	06
5	And. Deuette)		60	00	11	87						
5	John Sandell)		35	00	30	41	3	00			45	28
75	David Powers		57	50	34	97	2	50			37	47
76	D.E.Maloney		60	00	21	77	2	50			24	27
	Herman Elson		360	00	21	33	25	15			46	48
	TOTAL		1340	50	717	55	64	65	137	31	919	51
	TOTAL 1901		1344	50	513	51	72	75	127	33	713	59

	1902	1901
Net Earnings for year	420 99	630 91
Per cent earnings on Insurance Valuation	% 4.02	7 %
Insurance Valuation	10400 00	10300 00

NOTE:- Ledger Balance 1352.50
Amt.in Oct.1902 credited to Cliffs Shaft Rents instead of Salisbury Rents in error 12.00

TOTAL CLIFFS SHAFT 1340.50

IRON CLIFFS COMPANY

SALISBURY MINE

STATEMENT OF RENTED HOUSES, SHOWING RENTS RECEIVED
COST OF REPAIRS ETC. FOR THE YEAR ENDING
NOVEMBER 30TH.,1902

HOUSE NO.	PRESENT OCCUPANT	RENTS RECD.		REPAIRS		INSURANCE		TAXES	TOTAL EXPENSE	
1	Thoamas Buzzo	144	00	18	29	10	25		28	54
2	W.M.Sterling	96	00	21	70	5	00		26	70
3	Jos. Mathews	104	00	39	65	4	00		43	65
4	W.C.Quayle	24	00	3	92		25		4	17
5	Benjamin Lessee)	48	00							
5	John Christian)	42	00	21	01	5	00		26	01
6	Phil. Christian	72	00	15	13	3	00		18	13
7	F. Collett	36	00	8	85		75		9	60
9	Robt. Morris	36	00	7	88		50		8	38
10							75			75
14	Jos. Graham	42	00	6	69		38		7	07
15	Wm. Gauthier	30	00	3	87		38		4	25
16	Mrs.A.Williams	42	00	9	33	2	00		11	33
17	Geo. Kermode	72	00	7	25	1	50		8	75
18	Ras. Anderson)	27	50							
18	Mrs.Wm.Conibear)	10	00	24	86	1	00		25	86
19	Chris Hanson	42	00	13	37	1	00		14	37
20	John Larson	12	00	32	12	1	00		33	12
22	Walter Vicary	96	00	23	20	5	00		28	20
23	Albert Barton)	42	00							
23	Wm.Cowley)	54	00	7	74	5	00		12	74
24	Wm. Pemberthy)	54	00							
24	John Kermode)	42	00	18	65	5	00		23	65
25	Thos. Creer	96	00	10	25	5	00		15	25
26	John Cain)	54	00							
26	Thos. Cloque)	42	00	16	80	5	00		21	80
27	O.B.Wills	96	00	8	19	5	00		13	19
28	John Lawrence	60	00	10	74	2	50		13	24
29	Ant. Forget	60	00	13	63	2	50		16	13
30	John Stephens	60	00	15	17	2	50		17	67
31	Robt. Corkin	60	00	15	05	2	50		17	55
32	Thos. Perkins	60	00	28	08	2	50		30	58
33	John Jenkins	59	00	9	45	2	50		11	95
Office	Thos. Garrett)	48	00							
"	Chas.Kenword)	48	00	14	72	2	50		17	22
	TOTAL	1910	50	425	59	84	26		519	85
	TOTAL 1901	1906	75	94	68	83	49		178	17

Net Earnings	1902		1901	
	1390	65	1728	58
Per cent earnings on insurance Valuation	8.33	%	10.35	%
Insurance Valuation	16700	00	16700	00

NOTE:-	Ledger Balance	1898 50
	Amt.In Oct.1902 credited to Cliff Shaft Rent instead of Salisbury Rents through error	12 00
	TOTAL Salisbury	1910 50

IRON CLIFFS COMPANY

FOSTER MINE

STATEMENT OF RENTED HOUSES, SHOWING RENT RECEIVED
COST OF REPAIRS ETC. FOR THE YEAR ENDING
NOVEMBER 30TH.,1902

HOUSE NO.	PRESENT OCCUPANT	LOT NO.	RENT RECD.		RE-PAIRS	INS-UR-ANCE		TAXES	TOTAL EXPENSE	
1										
2										
3										
4										
5										
6										
7										
8										
9	Chas. Cox		9	00						
10										
11	Mrs.H.S.Dahl		5	00						
12										
13										
14										
15										
16										
	TOTAL		14	00		18	45		18	45
Net Loss			1902 4	45		1901 12	50			
Insurance Valuation			2550	00		2550	00			

Iron Cliffs Co.

Statement of Rented Houses etc

Cliff Dept. Salisbury & Foster

IRON CLIFFS COMPANY

FOSTER MINE

STATEMENT OF RENTED HOUSES, SHOWING RENT RECEIVED

COST OF REPAIRS ETC. FOR THE YEAR ENDING

NOVEMBER 30TH, 1905.

HOUSE NO.	OCCUPANT	NO. FOR RENT	RECD. RENT	REPAIRS RE-	VANCE UN- INS-	TAXES	TOTAL EXPENSE
1							
2							
3							
4							
5							
6							
7							
8							
9	CHAS. COX		6 00				
10							
11	MRS. H.S. DAUT		2 00				
12							
13							
14							
15							
16							
17							
18							
	TOTAL		14 00	18 42			18 42
Net Loss			5061	1061			
			24 4	72 20			
	INSURANCE ADJUSTMENT		3220 00	3220 00			

IRON CLIFFS COMPANY.

RECORD OF COST FOR SHOP WORK AT CLIFFS SHAFT SHOP FOR YEAR ENDING NOVEMBER 30TH.,1902

	1901	1902	1901	1902	1901	1902
	Machine Shop		Blacksmith Shop		Carpenter Shop	
Average Number of men	3	3	10	10	2	2
Total No. hrs. worked	8762.5	8862.5	29282.5	28922.5	5945	5705
Hours on Shop Tools etc	226	326	385.5	519	62	139
" " Various persons	16	23.5	20	61	25	11
" " Mine Accounts	8520.5	8513	28877	28342.5	5860	5555
Total cost per hour	.253	.250	.237	.239	.219	.211
Cost per hr.on shop tools	.253	.250	.237	.239	.219	.211
" " " Various Accts.	.260	.259	.240	.239	.221	.216
Cost " " Mine "	.260	.259	.240	.239	.221	.216
Total Labor Cost	1826.03	1816.10	5964.52	5886.58	1285.53	1193.13
Cost per hour	.208	.205	.204	.204	.216	.209
Total Supply Cost	392.36	396.49	989.25	896.11	15.46	10.81
Cost per hour	.045	.045	.033	.031	.003	.002
Total Labor & Sup.Cost	2218.39	2212.59	6953.77	6782.69	1300.99	1203.94
Profit on work Done for Various persons & Mines Other then cliff Shaft	2.26		1.62	(Dec.01) (only) .19	2.76	
Average Chgs.per hr.to Var.persons & Mines	.394	.251	.310	.233	.329	.205
Profit or Loss per hour var.persons & Mines	P .134	L .008	P .070	L .006	P .108	L .011
SUPPLIES USED AS FOLLOWS						
General Supplies	39.31	32.00	731.43	617.62	11.22	6.33
Iron & Steel	2.83	1.32	4.39	1.75		.39
Oil Grease & Candles	32.04	23.07	4.51	6.71	.12	
Machinery Supplies	1.40	23.62	12.68	25.98		
Building Material		.51	.64	1.02		
Fuel	297.70	303.99	148.84	164.18		1.46
Sundries	19.08	11.98	86.76	78.85	4.12	2.63
TOTAL	392.36	396.49	989.25	896.11	15.46	10.81

Iron Cliffs Co.

Statement of Cost of Goods Work at Cliffs Shaft Machine Shop Month ending Nov. 30th 1907

IRON CLIFFS COMPANY.

CLIFFS SHAFT MINE.
RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH.1902.

	Hours Delay	Tons Lost	Percent of time Lost 1902	Percent of time Lost 1901
Fatal Accidents	30	1500	.091	.074
Skips, Skip Roads & Bell Lines	4	200	.012	.004
Hoisting Machinery	1	50	.003	.074
Top Tram Engines & Cars	1	50	.003	.019
Crusher Repairs	14		.042	.204
Fire In Mine & Plant		50		.120
Rain & Snow				.004
TOTAL	50	1850	.151	.429
Holidays	280	13160	.849	.501
TOTAL INCLUDING HOLIDAYS	330	15010	1.000	1.000
No. Days 20 Hrs per Day	16 1/2			
Actual Product for Year		279002		
Average Product pr Day for Yr.		939		
No. Full Days Mine Worked for Yr.		295 1/2		
Number Days Idle		16 1/2		
Lost Product (Excluding Holidays)		1850		

FIXED CHARGES Amts. Not Effected When Mines Are Idle	Tons	Cost	Amount	
General Expense (Exc. Analysis & (Relief Fund		.011	2956	80
Taxes		.064	17737	62
Maintenance		.028	7836	44
Air Pipes		.004	1243	34
Pumping		.039	10880	31
Mining Captain		.009	2500	00
Exploring		.019	5341	12
Depreciation		.029	7957	73
TOTAL		.203	56453	36
Total Cost on Stock Pile for (year Actual	279002	1.082	301664	82
Less Fixed Chgs. Cost pr Ton		.203		
Cost of Lost Product	1850	.879	1626	15
Possible Product & Cost	280852	1.080	303290	97
Loss or the Difference Between Actual & Possible Cost and the Amt.	280852	.002	561	70
Ditto for 1901	284268	.009	2558	41

Cliffs Shaft Mine
Record of Delays

IRON CLIFFS COMPANY .

CLIFFS SHAFT MINE.

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH.1902.

	Hours Delay	Tons Lost	Percent of time lost 1902	Percent of time lost 1901
Fatal Accidents	30	1500	.091	.074
Skips,Skip Roads & Bell Lines	4	200	.012	.004
Hoisting Machinery	1	50	.003	.074
Top Tram Engines & Cars	1	50	.003	.012
Crusher Repairs	14		.042	.204
Fire In Mine & Plant		50		.120
Rain & Snow				.004
TOTAL	50	1850	.151	.489
Holidays	280	13160	.849	.501
TOTAL INCLUDING HOLIDAYS	330	15010	1.000	1.000
No.Days 20 Hrs per Day	16½			
Actual Product for Year		279002		
Average Product pr Day for Yr.		939		
No.Full Days Mine Worked for Yr.		295 1/2		
Number Days Idle		16 1/2		
Lost Product (Excluding Holidays)		1850		

FIXED CHARGES Accts.Not Effected When Mines Are Idle	Tons	Cost	Amount
General Expense (Exc.Analysis & Relief Fund)		.011	2956 80
Taxes		.064	17757 63
Maintenance		.028	7856 44
Air Pipes		.004	1243 34
Pumping		.039	10880 31
Mining Captain		.009	2500 00
Exploring		.019	5441 12
Depreciation		.029	7957 73
TOTAL		.203	56453 36
Total Cost on Book File for (Year Actual)	279002	1.082	301664 82
Less Fixed Chge.Cost pr Ton		.203	
Cost of Lost Product	1850	.879	1626 15
Possible Product & Cost	280852	1.080	303290 97
Loss or the Difference Between Actual & Possible Cost and the Amt.	280852	.002	561 70
Ditto for 1901	284268	.009	2558 41

IRON CLIFFS COMPANY

SALISBURY MINE

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH.1902

	Hours Delay	Tons Lost	Percent of time lost 1902	1901
Fatal Accidents	52	1300	.098	
Skips,Skip Roads & Bell Lines	104	2615	.195	.116
Hoisting Machinery	7	85	.013	.060
Shaft & Shaft House Repairs	6	65	.011	
Miscellaneous	3		.006	
TOTAL	172	4065	.323	.176
Holidays	360	9060	.677	.824
TOTAL INCLUDING HOLIDAYS	532	13125	1.000	1.000
No.Days - 24 Hrs Pr.Day	22			
Actual Product for Year		178686		
Average Product Pr.Day for Yr		603		
No.Full Days Mine Worked for Yr		290		
Number of Days Idle		22		
Lost Product (Exc.Holidays)		4065		

FIXED CHARGES Accts. Not Effected When Mines Are Idle	Tons	Cost	Amount	
Gen.Expense,(Except Analysis & (Relief Fund		.011	1991	78
Taxes		.029	4983	85
Maintenance		.067	11898	90
Air Pipes		.002	502	46
Pumping		.035	6309	71
Mining Captain		.010	1800	00
Depreciation		.002	460	36
TOTAL		.156	27947	06
Total Cost on Stock Pile For Yr (Actual	178686	1.020	182036	59
Less Fixed Chgs.Cost Per Ton		.156		
Cost of Lost Product	4065	.864	3528	16
Possible Product & Cost	182751	1.015	185564	75
Loss or the Difference Between Actual & Possible Cost and the Amt.	182751	.005	913	76
Ditto 1901	181918	.002	363	84

Salisbury Mine
Record of Delays

IRON CLIFFS COMPANY

SALISBURY MINE

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH.1902

	Hours Delay	Tons Lost	Percent of time lost 1902	Percent of time lost 1901
Fatal Accidents	52	1300	.098	
Skips,Skip Roads & Bell Lines	104	2615	.195	.116
Hoisting Machinery	7	85	.015	.060
Shaft & Shaft House Repairs	6	65	.011	
Miscellaneous	3		.006	
TOTAL	172	4065	.323	[illegible]
Holidays	360	9060	.677	[illegible]
TOTAL INCLUDING HOLIDAYS	532	13125	1.000	1.000
No.Days - 24 Hrs Pr.Day	22			
Actual Product for Year		17868		
Average Product Pr.Day for Yr		603		
No.Full Days Mine Worked for Yr		290		
Number of Days Idle		22		
Lost Product (Exc.Holidays)		4065		

FIXED CHARGES

Accts. Not Effected When Mines Are Idle	Tons	Cost	Amount
Gen.Expense,(Except Analysis & Relief Fund)		.011	1991 78
Taxes		.029	4983 85
Maintenance		.067	11898 90
Air Pipes		.002	502 46
Pumping		.035	6309 71
Mining Captain		.010	1800 00
Depreciation		.002	460 36
TOTAL		.155	27947 06
Total Cost on Stock Pile For Yr (Actual)	17868	1.020	182056 59
Less Fixed Chgs.Cost Per Ton		.156	
Cost of Lost Product	4065	.864	3528 16
Possible Product & Cost	18271	1.015	185564 75
Loss or the Difference Between Actual & Possible Cost and the Amt.	18271	.005	913 76
Ditto 1901	18318	.002	563 84

IRON CLIFFS COMPANY

TILDEN MINE
RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH,1902

	Hours Delay	Tons Lost	Percent of Time Lost 1902	Percent of Time Lost 1901
Compressor & Air Pipes				
Hoisting Machinery	20		.189	
Top Tram Engines & Cars				.025
Car Shortage	36		.339	.250
Rain & Snow	20	100	.189	.225
Miscellaneous	10	50	.094	.125
TOTAL	86	150	.811	.625
Holidays	20	104	.189	.375
TOTAL INCLUDING HOLIDAYS	106	254	1.000	1.000
No.Days 10 Hrs.Pr. Day	10 1/2			
Actual Product for Year	4621			
Average Product Pr.Day For Yr.	52			
No.Full Days Worked for Yr.	83 1/2			
Number Days Idle	10 1/2			
Lost Product (Exc.Holidays)	150			

FIXED CHARGES Accounts Not Effected When Mines Are Idle	Tons	Cost	Amount	
General Expense (Except Analysis & (Relief Fund		.005	22	37
Taxes		.022	100	65
Maintenance		.049	226	01
Mining Captain		.085	392	31
Depreciation		.030	137	63
TOTAL		.191	878	97
Total Cost on Stock Pile for Yr. (Actual	4621	.853	3943	61
Less Fixed Chge. Cost Pr.Ton		.191		
Cost of Lost Product	150	.662	99	30
Possible Product & Cost	4771	.847	4042	91
Loss or the Difference Between Actual & Possible Cost & The Amt.	4771	.006	28	63
Ditto 1901	11442	.003	34	33

12

IRON CLIFFS COMPANY

TILDEN MINE

RECORD OF DELAYS FROM VARIOUS CAUSES, YEAR ENDING NOV.30TH,1903

	Hours	Total	Percent of Time Lost	
	Delay	Lost	1903	1901
Compressor & Air Pipes				
Hoisting Machinery	30		.181	
Top Item Engines & Cars				.032
Car Shortage	26		.223	.320
Rain & Snow	30	100	.183	.332
Miscellaneous	10	20	.034	.132
	86	120	.718	.852
TOTAL				
Holidays	30	104	.188	.242
TOTAL INCLUDING HOLIDAYS	106	224	1.000	1.000
No. Days to Hrs. Pr. Day	10 3/4			
Actual Product for Year	4232			
Average Product Pr. Day for Yr.	23			
No. Full Days Worked for Yr.	22 1/4			
Number Days Idle	10 1/2			
Lost Product (Exc. Holidays)	120			

Tilden Mine
Record of Delays

FIXED CHARGES			
Accounts not Entered When Mines Are Idle	Tons	Cost	Amount
General Expense (Except Auditors & Hotel Fund)		.002	23 23
Taxes		.053	100 23
Maintenance		.043	332 10
Mining Capital		.082	283 12
Depreciation		.020	121 23
TOTAL		.181	876 16
Total Cost on Stock Pile for Yr. (Actual)	4232	.322	2362 13
Less Fixed Chge. Cost Pr. Ton		.181	
Cost of Lost Product	120	.323	38 20
Lost Product & Cost	4232	.504	2400 15
Lost Product & Cost & The Amt. Actual Loss of the Difference Between	4232	.000	38 23
Diffo Lost	4232	.002	24 22

IRON CLIFFS COMPANY

RECORD OF FIRE INSURANCE ON MINE BUILDINGS YEAR ENDING NOVEMBER 30TH,1902.

	AMT. OF INSURANCE CARRIED		PREMIUM ACCRUING FOR 1902		FIRE LOSS PAID 1902	
CLIFFS SHAFT MINE						
Mine Buildings	18500	00	457	19	1250	00
Dwellings	7800	00	60	53		
TOTAL	26300	00	517	12	1250	00
SALISBURY MINE						
Mine Buildings	6850	00	177	68		
Dwellings	17350	00	79	50		
TOTAL	24200	00	257	20		
FOSTER MINE						
Mine Buildings	1750	00	42	50		
Dwellings	2550	00	18	45		
TOTAL	4300	00	60	95		
TOTAL IRON CLIFFS CO.	54800	00	835	27	1250	00

DETAIL OF LOSS

CLIFFS SHAFT						
Dec.1st.1901 Dry house Estimated loss on bldg.			1713	18		
Amt.paid men on loss of Clothing			863	77		
TOTAL LOSS			2576	95		
INSURANCE POLICIES PAID IN FULL						
On Buildings	500	00				
On Men's Clothing	750	00	1250	00		
Estimated Net Loss			1326	95		

IRON CLIFFS COMPANY

RECORD OF FIRE INSURANCE ON MINE BUILDINGS YEAR ENDING NOVEMBER 30TH,1902.

	AMT. OF INSURANCE CARRIED		PREMIUM ACCRUING FOR 1902		FIRE LOSS PAID 1902	
CLIFFS SHAFT MINE						
Mine Buildings	18500	00	457	19	1250	00
Dwellings	7800	00	60	53		
TOTAL	26300	00	517	12	1250	00
SALISBURY MINE						
Mine Buildings	6850	00	177	68		
Dwellings	17350	00	79	50		
TOTAL	24200	00	257	20		
FOSTER MINE						
Mine Buildings	1750	00	42	50		
Dwellings	2550	00	18	45		
TOTAL	4300	00	60	95		
TOTAL IRON CLIFFS CO.	54800	00	835	27	1250	00

DETAIL OF LOSS

CLIFFS SHAFT						
Dec.1st.1901 Dry house Estimated loss on bldg.			1713	18		
Amt.paid men on loss of Clothing			863	77		
TOTAL LOSS			2576	95		
INSURANCE POLICIES PAID IN FULL						
On Buildings	500	00				
On Men's Clothing	750	00	1250	00		
Estimated Net Loss			1326	95		

Iron Cliffs Co.

Record of Fire Insurance

IRON CLIFFS COMPANY

RECORD OF FIRE INSURANCE ON MINE BUILDINGS YEAR

ENDING NOVEMBER 30TH,1905.

	AMT. OF INSURANCE	PREMIUM ACCRUING	FIRE LOSS PAID 1905	
			CARRIED INSURANCE	FOR 1905
CLIFFS SHAFT MINE				
Mine Buildings	18200 00	425 19	1520 00	
Dwellings	4800 00	60 22		
TOTAL	23000 00	571 13	1520 00	
SAULSBURY MINE				
Mine Buildings	6820 00	144 68		
Dwellings	16220 00	84 20		
TOTAL	24800 00	528 88		
FOSTER MINE				
Mine Buildings	1420 00	43 20		
Dwellings	3220 00	18 42		
TOTAL	4800 00	61 62		
TOTAL IRON CLIFFS CO.	24800 00	522 54	1520 00	

DETAIL OF LOSS

CLIFFS SHAFT

Dec.1st.1905 DTA house
Estimated loss on bldg. 1412 18
Amt.paid men on loss
of clothing 88 44

TOTAL LOSS 2528 62

INSURANCE POLICIES PAID IN FULL

on Buildings 200 00
on Men's clothing 1520 00

Estimated net loss 1528 62

49. 3M. 1 1373.

THE CLEVELAND-CLIFFS IRON CO.

CLEVELAND IRON MINING CO.
IRON CLIFFS CO.

M. M. DUNCAN, AGENT.

ISHPEMING, MICH., Feby, 14th.1903.

IN YOUR REPLY PLEASE REFER TO FILE

I.C.CO. TAXES.

Mr.R.C.Mann,

Auditor,

Cleveland, Ohio.

Dear Sir:-

Replying to your favor of 11th, in regard to difference in figures on tax statement and cost sheet for the Cliffs Shaft Mine. Amt. $2.27, This is made up in the following manner:-

Amount as per tax statement	17735.35
" " " cost sheet	17737.62
Difference	2.27

as follows:-

Taxes for 1901 on Lot 5 Block 12, Ex I.Co. addition, paid in 1902, charged on cost sheet to Cliffs Shaft Mine for 1902, not entered on tax Statement	6.21
Adjusting error in collection fees of 4.38 instead of 44 cents on tax sheets of 1901 deducted from cost sheet of 1902, not entered on tax statement	3.94
	2.27

Yours truly,

A J Yungbluth

Local Auditor.

AJY-CWL

Feb. 11th, 1903.

Mr. A. J. Yungbluth, Local Auditor,

Ishpeming, Mich.

Dear Sir:-

Your Iron Cliffs Co. Comparative Tax Statement shows total taxes to Cliffs Shaft Mine $17,735.35 for 1902, while Cost Statement, as sent down by you, shows $17,737.62, andifference of $2.27. Kindly explain.

Yours truly,

HCS-H

Auditor.

IRON CLIFFS COMPANY - DEPARTMENT OF MINES

COMPARATIVE STATEMENT OF TAXES FOR YEARS 1902 AND 1901

DESCRIPTION	1902				1901			
CITY OF ISHPEMING	VALUATION		TAXES		VALUATION		TAXES	
Lots 4-5-&-6 Block 3	3200	00	60	42	3200	00	56	01
Lot 14 Block 5	2100	00	39	65	2100	00	36	78
West part of Lot 1 of (NW 1/4 of NW 1/4) Sec.10-47-27 which lies North & West of the C&NWRy Co's Right of Way, except that part of same which is included in the Excelsior Iron Co's addition to the City of Ishpeming, and except the rights of way of the DSS&ARy, the C&NWRy and the LS&IRy across said land in an easterly and westerly direction about 30 acres. NE 1/4 of NE 1/4 Sec.9-47-27 except the Right of Way of the LS&I Ry. across said land, about 37 acres	510000	00	9628	33	544000	00	9517	81
SE 1/4 of NE 1/4 Sec.9-47-27 except the right of way of the C&NWRy, the DSS&ARy and the LS&IRy across said land in a northeasterly & southwesterly direction about 35 acres.	3600	00	67	97	3600	00	62	92
SW 1/4 of NE 1/4 Sec.15-47-27 40 acres.	250	00	4	72	250	00	4	40
S.1/2 of NW 1/4 Sec 15-47-27 80 acres	125000	00	2359	89	87500	00	1529	43
Personal Cliff Shaft	408004	00	7709	74	329340	00	5762	10
Personal Salisbury	136496	00	2569	91	169660	00	2968	36
Excelsior Iron Co. 1st addition lots 4 & 5 Block 4	1900	00	35	88	1900	00	33	28
Excelsior Iron Co. " Lot 7 Block 4	600	00	11	33	600	00	10	51
Excelsior Iron Co. " Lot 5 Block 12	340		6	42				
Total City Taxes	1191490	00	22494	26	1142150	00	19981	60
Collection Fees 1%			224	94			199	82
Grand Total	1191490	00	22719	20	1142150	00	20181	42
Rate (Not including fees)			1.89				1.75	
Increase over last year	49340	00	2537	78				
TILDEN TOWNSHIP								
SE 1/4 Sec.22-47-27 160 acres	800	00	19	00	800	00	17	68
SW 1/4 Sec.23-47-27 160 acres	8640	00	205	00	8640	00	190	72
NW 1/4 Sec.26-47-27 160 acres	640	00	15	20	480	00	10	60
NE 1/4 Sec.27-47-27 160 acres	640	00	15	20	480	00	10	60
SW 1/4 of SE 1/4 Sec.23-47-27 40 acres	320	00	7	60	320	00	7	07
Personal property	2000	00	47	45	4690	00	103	52
Total Township Taxes	13040	00	309	45	15410	00	340	19
Collection fees 1%			3	09			3	40
Grand Total	13040	00	312	54	15410	00	343	59
Rate (not including fees)			2.37				2.21	
Total City & Township	1204530	00	23031	74	1157560	00	20525	01
Rate (not including fees)			1.89				1.756	
Amount of taxes as per Statement, Charged as follows:								
Cliff Shaft	929744	00	17735	35	884740	00	15634	21
Salisbury	261746	00	4983	85	257410	00	4547	21
Foster	8840	00	211	89	10941	00	243	96
Tilden	4200	00	100	65	4469	00	99	63
Total	1204530	00	23031	74	1157560	00	20525	01
Increase over 1901	46970	00	2506	73				
Percent of " " "	.0406		.109					

IRON CLIFFS COMPANY - DEPARTMENT OF MINES

COMPARATIVE STATEMENT OF TAXES FOR YEARS 1908 AND 1907

DESCRIPTION	1908		1907	
CITY OF ISHPEMING	AVAILAY	TAXES	AVAILAY	TAXES
Lots 4-5-8-9 Block 2	2800.00	49.03	2800.00	50.82
Lots 14 Block 2	100.00	2.82	100.00	2.84
West half of Lot 1 to (NW 1/4 of NW 1/4) Sec.10-47-25 Marion Iron Co's North & West of the CENTRAL Co's Lands, except first half of Lot 1 (NW 1/4 of NW 1/4) Section 11 is included in the Excelsior Iron Co's addition of the City of Ishpeming and except the City of Ishpeming and the Right of Way of the DESAINA and the LAKEVIEW and the LAKEVIEW Lands and the Right of Way of the LAKE Sect. the Right of Way of the DESAINA and the LAKEVIEW and the LAKEVIEW Lands and the Right of Way of the LAKE Sect. the Right of Way of the Excelsior Iron Co's addition of the City of Ishpeming and except the Right of Way of the DESAINA and the LAKEVIEW and the LAKEVIEW Lands in an easterly and westerly direction upon 20 acres. Ex-NW 1/4 of NW 1/4 Sec.6-47-24 Ex-SE 1/4 of NW 1/4 Sec.6-47-24 Ex-Right of Way of the LAKE Sect. the Right of Way of the DESAINA and the LAKEVIEW and the LAKEVIEW Lands in a northwesterly direction Ex-SW 1/4 of NW 1/4 Sec.12-47-25 Ex-SE 1/4 of NW 1/4 Sec.12-47-25 Ex-40 acres.	2600.00	36.36	2600.00	36.36
Lots 4 & 5 Block 4	320.00	4.48	320.00	4.40
S.1/2 of NW 1/4 Sec 12-47-25 40 acres	2000.00	28.00	2000.00	27.50
Personal Property	2400.00	33.60	2400.00	33.00
Personal City Staff	4000.00	56.00	4000.00	55.00
Personal Settlers	2400.00	33.60	2400.00	33.00
Excelsior Iron Co. Tax addition				
Lots 4 & 5 Block 4	1300.00	18.20	1300.00	17.88
Excelsior Iron Co. "				
Lot 7 Block 4	100.00	1.40	100.00	1.37
Excelsior Iron Co. "				
Lot 2 Block 13	240	3.36		
Total City Taxes	14,664.00	205.24	14,664.00	201.61
Collection Fees 1%		2.54		2.01
Grand Total	14,664.00	207.78	14,664.00	203.62
Base (Not including fees)		1.88		1.82
Increase over last year	2240.00	32.24		
IRON GILES TOWNSHIP				
SE 1/4 Sec.33-47-25.38 acres	800.00	11.20	800.00	11.20
SW 1/4 Sec.32-47-25 160 acres	2240.00	32.00	2240.00	31.36
NW 1/4 Sec.35-47-25 160 acres	640.00	8.96	640.00	8.96
NE 1/4 Sec.34-47-25 160 acres	640.00	8.96	640.00	8.96
SW 1/4 of SE 1/4 Sec.22-47-25 40 acres	280.00	3.92	280.00	3.92
Personal Property	3000.00	42.00	2600.00	36.40
Total Township Taxes	7040.00	98.56	7040.00	98.56
Collection Fees 1%		2.36		2.40
Grand Total	7040.00	100.92	7040.00	101.96
Base (Not including fees)		1.43		1.44
Total City & Township	21704.00	308.70	21704.00	305.58
Base (Not including fees)		3.26		3.26
Amount of taxes as per State-ment, charged as follows:				
CITY STAFF	3000.00	42.00	3000.00	42.00
Lands	100.00	1.40	100.00	1.40
Total	21804.00	305.30	21804.00	304.18
Increase over last	2240.00	32.24		
Percent of " " "	.0920	.106		

IRON CLIFFS COMPANY

Detail of Accounts Receivable, November 30th,1902.

REPRESENTATIVE ACCOUNTS RECEIVABLE

Unearned Premiums, Boiler Insurance	183.33	
Unearned Premiums, Fire Insurance	516.70	
Total		700.03

ACCOUNTS RECEIVABLE

Paymasters Account	82.54	
Cleveland Cliffs Iron Co.	813.73	
Cleveland Iron Mining Co.	1311.13	
Pioneer Iron Co.	456.00	
R.W.Clason	31.78	
Superior Posten	100.00	
Ishpeming Floral Co.	37.50	
Standard Oil Co.	89.50	
John T.Burke	18.88	
Herman Ketto	8.00	
James Mathews	2.32	
Lake Superior & Ishpeming Ry.	390.42	
Revenue Tax	28.40	
Total		3370.20
Grand Total		4070.23

IRON CLIFFS COMPANY

Detail of Accounts Receivable, November 30th,1902.

REPRESENTATIVE ACCOUNTS RECEIVABLE

Unearned Premiums, Boiler Insurance	183.33	
Unearned Premiums, Fire Insurance	516.70	
Total		700.03

ACCOUNTS RECEIVABLE

Paymasters Account	82.54	
Cleveland Cliffs Iron Co.	813.73	
Cleveland Iron Mining Co.	1311.13	
Pioneer Iron Co.	456.00	
R.W.Clason	31.78	
Superior Posten	100.00	
Ishpeming Floral Co.	37.50	
Standard Oil Co.	89.50	
John T.Burke	18.88	
Herman Ketto	8.00	
James Mathews	2.32	
Lake Superior & Ishpeming Ry.	390.42	
Revenue Tax	28.40	
Total		3370.20
Grand Total		4070.23

Iron Cliffs Co.
Accounts Receivable
Nov 30th 1902
Dept MXM

IRON CLIFFS COMPANY

Detail of Accounts Receivable, November 30th, 1902.

REPRESENTATIVE ACCOUNTS RECEIVABLE

Unearned Premiums, Boiler Insurance	183.33
Unearned Premiums, Fire Insurance	516.70
Total	700.03

ACCOUNTS RECEIVABLE

Paymaster's Account	82.54
Cleveland Cliffs Iron Co.	813.73
Cleveland Iron Mining Co.	1311.13
Pioneer Iron Co.	456.00
R.W.Gibson	31.78
Superior Poaten	100.00
Lakeshore Floral Co.	37.50
Standard Oil Co.	89.50
John T.Burke	18.88
Herman Ketto	8.00
James Mathews	2.32
Lake Superior & Lakeshore Ry.	390.42
Revenue Tax	28.40
Total	3370.20

Grand Total 4070.23

IRON CLIFFS COMPANY

Detail Of Accounts Payable, November 30th, 1902.

REPRESENTATIVE ACCOUNTS PAYABLE

Vou.No.				
	Cliffs Shaft Benefit	2255.23		
	Cliffs Shaft Suspense	2255.23		
	Salisbury Benefit	3598.17		
	Salisbury Suspense	2040.75		
	Foster Benefit	438.95		
	Foster Suspense	219.61		
	Cliff Shaft Brass Checks	357.25		
	Salisbury Brass Checks	231.25		
	Foster Brass Checks	5.25		
	Fire Loss (Salisbury)	670.76		
	Total			12072.45

ACCOUNTS PAYABLE

	Accured Taxes Unpaid		23031.74	
	Pay Rolls		26866.32	
	Bills Audited		1945.94	
4597	Mrs.H.Mackenzie	17.62		
4598	Negaunee Land Department	24.00		
4600	Chicago & Northwestern Ry	44.27		
4601	James B.Clow & Sons	.90		
4602	Lake Superior & Ishpg.Ry.	10.00		
4603	Swanson,Wainberg & Co.	2.65		
4604	James Andrews	1.00		
4605	J.Sellwood & Co.	.20		
4606	Jones & Laughlin Steel Co.	15.97		
4607	The Garlock Packing Co.	11.54		
4608	T.H.Dawson	1.60		
4609	Fred J.Eggan	.60		
4611	James B. Clow & Sons	35.80		
4612	Mrs. A.Williams	1.00		
4623	Fred P Tillson	.50		
4625	Negaunee & Ishpg.St.Ry.& EL.Co	46.85		
4624	Marquette County Telep.Co.	1.75		
4626	Trembath Bros.	.39		
4627	Consolidated Fuel & Lbr.Co.	38.96		
4628	Lake Shore Engine Works	37.11		
4629	I.E.Swift & Co.	19.37		
4630	Rand Drill Co.	11.20		
4631	Wm.T. Cole	25.00		
4632	Ishpeming Steam Laundry	.63		
4633	Jabez Stephens	33.00		
4634	August Yarkie	44.00		
4635	Frech & Vandeventer	572.00		
4636	A.B.Miner, Cashier	26.00		
4637	Cleveland Iron Mining Co.	91.50		
4638	Cleveland Cliffs Iron Co. Land Department	6.00		
4639	Cleveland Iron Mining Co.	824.53		
	Ishpeming Water Works		55.25	
	Estate of James Collins		500.00	
	Total			52399.25
	Grand Total			64471.70

16

Iron Cliffs Co.
Accounts Payable
Nov 30/1907
Depr Mgr

IRON CLIFFS COMPANY

Detail Of Accounts Payable, November 30th, 1907.

REPRESENTATIVE ACCOUNTS PAYABLE

Vou.No.		
	Cliffs Shaft Benefit	2265.23
	Cliffs Shaft Suspense	2265.23
	Saliabury Benefit	3598.17
	Saliabury Suspense	2040.75
	Foster Benefit	438.95
	Foster Suspense	219.61
	Cliff Shaft Press Checks	357.25
	Saliabury Press Checks	231.25
	Foster Press Checks	5.25
	Fire Loss (Saliabury)	670.75
	Total	
12072.		

ACCOUNTS PAYABLE

	Accured Taxes Unpaid		23031.74
	Pay Rolls		26866.32
	Bills Audited		1946.94
4597	Mrs.H.Mackenzie	17.62	
4598	Negaunee Land Department	24.00	
4600	Chicago & Northwestern Ry	44.27	
4601	James B.Clow & Sons	.90	
4602	Lake Superior & Lahpe.Ry.	10.00	
4603	Swanson,Weinberg & Co.	2.65	
4604	James Andrews	1.00	
4605	J.Sellwood & Co.	.20	
4606	Jones & Laughlin Steel Co.	15.97	
4607	The Garlock Packing Co.	11.54	
4608	T.H.Dawson	1.60	
4609	Fred J.Regan	.60	
4611	James B. Clow & Sons	35.80	
4612	Mrs. A.Williams	1.00	
4623	Fred P Tillson	.50	
4625	Negaunee & Lahpe.St.Ry.& Ill.Co	46.85	
4624	Marquette County Telep.Co.	1.75	
4626	Trembath Bros.	.39	
4627	Consolidated Fuel & Ltr.Co.	38.98	
4628	Lake Shore Engine Works	37.11	
4629	I.E.Swift & Co.	19.37	
4630	Rand Drill Co.	11.20	
4631	Wm.T. Cole	25.00	
4632	Lahpeming Steam Laundry	.65	
4633	Jaber Stephens	33.00	
4634	August Yarkie	44.00	
4635	Frech & Vandeventer	572.00	
4636	A.B.Miner, Cashier	26.00	
4637	Cleveland Iron Mining Co.	91.50	
4638	Cleveland Cliffs Iron Co.		
	Land Department	6.00	
4639	Cleveland Iron Mining Co.	824.53	
	Lahpeming Water Works		55.25
	Estate of James Collins		500.00
	Total		52399.25
	Grand Total		64471.70

IRON CLIFFS COMPANY

COMPARATIVE STATEMENT OF GENERAL EXPENSE ACCOUNTS FOR FIVE YEARS ENDING NOVEMBER 30TH,1902

GENERAL & MINE OFFICE	1902		1901		1900		1899		1898	
Superintendent)			4285	59	4655	53	4609	53	3936	03
)	9710	36								
Clerks)			5510	89	5997	06	5419	56	5027	67
Master Mechanic	1925	52	1953	74	1905	93	1293	74	654	75
Watchman	459	80	458	10	456	45	472	15	154	41
Choreman	168	85	168	01	171	60	157	92	117	79
Stationery & Printing	386	72	384	61	378	76	325	20	350	40
Telephone & Telegraph	358	34	402	86	318	02	364	40	307	60
Traveling	97	24	229	86	39	69	243	86	166	29
Fuel & Light	293	52	372	50	407	11	254	32	197	58
Water & Ice	6	12	46	23	72	81	46	25	49	72
Livery & Stable Exp.	697	89	632	25	554	34	503	21	494	96
Postage & Box Rent	97	79	114	42	139	60	81	80	84	57
Papers & Periodicals	9	00	13	67	13	15	14	00	12	25
Freight & Express	19	73	17	37	19	15	20	71	15	67
Donations	748	75	480	78	892	36	97	03	576	67
Petty Office Expense	61	67	71	78	73	76	87	45	48	19
Exchange	322	00	316	00	307	00	261	00	222	00
Revenue Tax			5	25	204	37	152	99	141	52
Rent							185	00	330	00
Furniture & Fixtures	169	80	51	98	93	50	141	59	118	90
Legal	7	50	322	96	332	17	437	97	300	00
Advertising	10	00			15	00	15	00	27	50
Miscellaneous	92	38	100	18	161	55	23	80		
Janitor	107	88	104	90	96	54				
Consulting Geologist	853	71								
TOTAL	16604	57	6043	93	17305	45	15208	48	13324	47
GENERAL EXPENSE ACCTS										
Fire Insurance	748	89	709	05	657	44	587	11	550	89
Boiler Insurance	86	98	83	97	83	97	68	42	64	52
Taxes	23034	01	20528	95	13212	95	13298	90	13485	78
Engineering	1875	41	1841	00	2110	95	1387	04	2104	60
Analysis	2680	08	2164	71	2100	12	2004	72	3557	90
Relief Fund	2210	10	2142	60	2174	10	2102	10	2022	60
TOTAL	30635	47	27470	28	20339	53	19448	29	21786	29
GRAND TOTAL	47240	04	43514	21	37644	98	34656	77	35110	76

IRON CLIFFS COMPANY

COMPARATIVE STATEMENT OF GENERAL EXPENSE ACCOUNTS FOR FIVE YEARS ENDING NOVEMBER 30TH, 1908

	1908	1909	1910	1911	1912
GENERAL & MINE OFFICE					
Superintendent	2,328 03	4,322 25	4,622 22	4,609 23	3,015 20
Clerks	2,034 05	2,347 18	2,663 30	2,572 10	3,010 28
Assist. Accounts	1,352 25	1,362 47	1,302 32	1,382 47	1,352 25
Messrs.	424 12	428 10	428 42	428 12	424 12
Clerks	1,117 48	1,321 36	1,347 65	1,321 36	1,117 48
Stationery & Printing	220 40	312 30	318 49	312 30	220 40
Telephone & Telegraph	207 60	304 40	318 03	304 40	228 24
Insurance	188 50	342 38	318 63	338 38	324 54
Rent & Taxes	187 25	324 24	317 11	324 25	232 25
Insurance & Safety Exp.	464 36	502 37	524 24	523 32	323 33
Rent & Box Rent	84 25	81 30	320 60	314 44	325 35
Postage & Periodicals	13 32	14 00	12 12	12 60	9 00
Express & Freight	12 50	17 32	18 07	17 25	12 50
Donations	52 30	46 02	388 26	380 08	452 15
Petty Office Expense	15 45	32 46	32 46	37 18	15 45
Exchange	333 00	387 00	302 00	318 00	233 00
Revenue Tax	141 25	125 88	304 25	2 32	
Rent	220 00	182 00			
Furniture & Fixtures	118 30	141 25	32 20	12 88	160 08
Repairs	200 00	425 16	223 17	328 36	4 20
Advertising	12 00	12 00	12 00		10 00
Miscellaneous	32 20	32	181 22	100 18	36 28
Janitor			36 24	104 30	104 38
Consulting Geologist					122 17
TOTAL	7,232 47	7,322 48	7,322 42	6,342 32	4,034 42
GENERAL EXPENSE ACCTS					
Fire Insurance	220 33	311 44	324 77	287 11	347 33
Boiler Insurance	64 25	54 38	82 36	82 36	38 38
Taxes	1,342 32	1,332 30	1,323 32	1,328 30	1,324 10
Engineering	310 4	287 40	310 32	347 00	324 11
Auditors	322 20	300 4	310 00	324 17	320 80
Bellet Land	312 20	318 30	314 10	318 30	312 10
TOTAL	3,232 20	3,322 48	3,322 22	3,328 32	3,322 47
GRAND TOTAL	10,464 42	10,644 32	10,644 32	9,670 64	7,356 40

Iron Cliffs Co.

Additional General expense for five years

IRON CLIFFS COMPANY

REPORT OF OPERATING STEAM SHOVEL NO.3, SEASON 1902

	1902		1901	
Number of days Shovel worked	110		94	
Average no.of hours worked per day	5	38	4	36
Total number tons loaded	142826		104905	
Number of Men working with Shovel	11		10	
Average tons per day loading	1298		1116	
Average tons per man per day	118		111	6
Average wages per day for Runners	2	50	2	50
" " " " " Laborers	1	73	1	75
Labor Cost per Ton Operating		021		020
Supply " " " "		003		003
TOTAL		024		023

	1902 Tons	1901 Tons	1902 Amount		Cost	1901 Amount		Cost
Lake	71107	17948	2036	44	.028	601	02	.033
Hard Ore								
Cliffs Shaft	34725	42106	723	40	.020	1015	83	.024
Salisbury	15045	37867	401	38	.026	979	47	.026
Volunteer	11518		435	28	.037			
Michigamme	10431	6984	290	90	.028	152	55	.022
Foster								
TOTAL	142826	104905	3887	40	.027	2748	87	.026
OPERATING SHOVEL								
Labor			2932	99	.021	2146	94	.020
Supplies			486	22	.003	303	19	.003
TOTAL			3419	21	.024	2450	13	.023
REPAIRS TO SHOVEL								
Labor & Supplies			468	19	.003	298	74	.003
TOTAL Operating & Repair Cost			3887	40	.027	2748	87	.026

Iron Cliffs Co.

Report of Operating Steam Shovel #3

TOTAL Operating & Repair Cost

	2882	40.034	2842	18.0
		48.12	.002	88.14

Report of Operating Steam Shovels

TRAVOIS OF SHOVEL

			2142	12.034
		884	.002	88.14
		2882	.00	00.12
			1780	04.034

TRAVOIS DRIVEN

	2882	40.034	2842	18.0
	10420	00.034	2842	22.034
		884	00.034	22.034
			1720	88.034
	1240	00.034	2842	22.034
	10420	88.034	1024	14.034
	2842	04.034	2842	18.034
	2842	04.034	10120	18.034
	10120	04.034	2842	18.034
	2842	04.034	10120	18.034

Repairs

	10114	8848	10120	80.034
	Tons	Tons	Amount	Cost
	Tons		Amount	Cost

Repairs not charged to Shovels

" " " "		
" " " "	Repairs	
statement for day ending at 6 o'clock		
day feed pump worked 10.00 equivalent		
day feed pump worked		

TOTAL

		034
" " " "		000
		000
		000
	24 1	24 1
	00 2	00 2
	8 111	8 111
	8881	8111
Travois with Stripping men to Tendum	11	01
Repairs and for Tendum Tipples	2882	10420
day feed pump worked 10.00 equivalent	2 28	2 4
Number travois shovel to day feed pump worked	111	48
	1001	1001
	2001	2001

Iron Cliffs Co.

Report of Operating Steam Shovels No. 2 Mason Tipples

Iron Cliffs Company

Mr. A. J. Yungbluth #2

paid during the year. Kindly let us have this as early as possible so that we may have the figures ready in case of need.

See 1907 Jan statements in C&NW Co Annual Rpt

Iron Cliffs Co.

Figures not correct per Rogers letter 8/24/03

Comparative Tax Statement

Townships	Acres		Valuations		Amount of Tax		Distribution					
	1901	1902	1901	1902	1901	1902						
Baldwin	459	417	25.10	19.10	85.66	63.68						
Maple Ridge	2656.09	2415.49	93.40	86.50	309.40	300.70						
Ford River	600	480	48.80	47.80	148.15	153.45						
Wells	80	40	2.85	1.75	5.46	3.88						
Spalding	1391.80	1313.76	77.90	73.90	253.14	224.69						
Sands	5360.04	5376.32	220.80	218.80	1103.55	1181.62						
Marquette	2467.15	2427.03	124.80	124.40	256.79	246.79						
Forsythe	879.20	879.18	9.00	9.00	16.99	18.58						
Richmond	6865.60	6745.60	269.30	264.90	687.91	735.50						
Negaunee	4750.60	4390.60	122.40	113.20	278.14	236.66						
Tilden	7738.18	7300.46	272.80	284.60	608.85	687.68						
Ishpeming	2340.51	2057.87	144.90	127.40	457.76	357.04						
Ely	1600	1600	22.50	22.60	75.44	63.17						
Lake	1120	1120	35.00	35.00	103.22	87.99						
Marquette City	800	800	160.75	160.75	280.59	301.95						
Negaunee "			807.38	363.05	1722.90	1871.93						
Ishpeming "			228.00	227.00	402.91	438.67						
Total	39108.17	37363.31	2665.18	2178.75	6791.86	6990.98						

Feb. 11th, 1903.

Mr. Samuel Redfern, Land Agent,

Negaunee, Mich.

Dear Sir:-

On your Annual Report on page #29, you give Comprative Tax Statement showing 1901 and 1902 taxes as per enclosed statement, and on your General Balance Sheets, as sent down from month to month we have taken into our accounts for these years as follows:

LAND DEPARTMENT (PROPER)

	1901	1902
	$4,831.76	$10,272.09
Green House.	19.63	68.59
Bellevue Farm.	61.11	260.13
	$4,912.50	$10,600.81

You will notice there is a large variation in the amounts, as given above and as per the statement enclosed, and we have appended to the enclosed statement additional columns, in which we would ask that you kindly make out a distribution of the taxes as charged, if possible.

We understand that you have this year taken into account the 1901 and 1902 taxes on account of a change in plan in taking up the taxes during the year for which they are charged. However, the total of the two years should, we think, tally out. We should in some way be able to check your Comparative Tax Statement with the taxes as actually

The Cleveland-Cliffs Iron Co.

MUNISING RAILWAY, MARQUETTE & SOUTHEASTERN RAILWAY, LAKE SUPERIOR & ISHPEMING RAILWAY.

LAND DEPARTMENT.

FACTS ABOUT MUNISING
AND VICINITY:

MUNISING, FINEST HARBOR ON THE LAKES.
FREE MANUFACTURING SITES AT MUNISING.
HARDWOOD TIMBER FOR SALE.
FARM LAND FOR SALE ON EASY TERMS.
THE SOIL WONDERFULLY PRODUCTIVE.
AN UNSURPASSED HOME MARKET.
CITY LOTS FOR SALE.

SAMUEL REDFERN,
LAND AGENT.

INCLUDING LANDS OF
THE CLEVELAND-CLIFFS IRON CO.
CLEVELAND IRON MINING CO.
IRON CLIFFS CO.
PIONEER IRON CO.
EXCELSIOR IRON CO.
AMERICAN IRON MINING CO.
MICHIGAMME CO.
MUNISING CO.
MUNISING R'Y CO.

NEGAUNEE, Mich., March 24th, 1903

Mr. R. C. Mann, Auditor,

Cleveland, Ohio,

Dear Sir:-

We have your letter regarding comparative tax statement of annual report, will say the figures as given were not correct, that is, the Iron Cliffs Company included the Pioneer and Arctic Iron Companies, and for 1902 only 1902 taxes were taken into account, instead of taking 1901 also, as per change in plan. Enclosed you have statement of distribution of the Iron Cliffs Company's taxes. You show $10.12 more than I do for taxes of 1901, the rest being correct. On your statement, which I have enclosed, you will find distribution of Cleveland Iron Mine Co. taxes; for 1902 you show $162.34, while I have $1628.34, which I believe is correct.

Yours truly,

Samuel Redfern

Land Agent,

H.S.N.

Encl.

IRON CLIFFS COMPANY.

DISTRIBUTION OF TAXES 1901 and 1902.

Townships	Lands 1901	Lands 1902	Timbered Lands 1901	Timbered Lands 1902	Delinquent Taxes 1901	Delinquent Taxes 1902	Rented Houses 1901	Rented Houses 1902	Vacant Lots 1901	Vacant Lots 1902	Greenhouse 1901	Greenhouse 1902	Bellevue Farm 1901	Bellevue Farm 1902	C.C.I.Co. Furnace Dept. 1901	C.C.I.Co. Furnace Dept. 1902	Total Taxes 1901	Total Taxes 1902	Total Taxes Taken into Acct. 1901	Total Taxes Taken into Acct. 1902
Baldwin	33 53	75 00	45 00	74 34													78 53	149 34	78 53	149 34
Maple Ridge	159 58	610 10	53 20	19 89													212 78	629 99	212 78	629 99
Ford River	26 99	113 75	54 00	25 45											32 37		113 36	139 20	80 99	139 20
Wells	3 66	9 34															3 66	9 34	3 66	9 34
Spaulding	59 82	141 11	119 65	262 63											20 36		199 83	403 74	179 47	403 74
Sands	106 48	851 80	673 61	1400 20													780 09	2252 00	780 09	2252 00
Marquette	57 34	148 04	229 35	355 54													286 69	503 58	286 69	503 58
Forsythe	17 81	35 57															17 81	35 57	17 81	35 57
Richmond	498 14	899 55	139 96	499 35									61 11	19 51			699 21	1418 41	699 21	1418 41
Negaunee	208 19	425 12															208 19	425 12	208 19	425 12
Tilden	489 84	1203 60	54 84		22 69	90 61											567 37	1294 21	544 68	1203 60
Ishpeming	490 38	567 79			28 99	226 85											519 37	794 64	490 38	567 79
Ely	88 62	142 51															88 62	142 51	88 62	142 51
L'Anse		75 14	88 23	116 07													88 23	191 21	88 23	191 21
Marquette City	37 35	308 08	336 11	274 46													373 46	582 54	373 46	582 54
Negaunee Ci ty	412 36	694 21					181 68	451 46	90 84	18 10	19 63	68 59		240 62			704 51	1472 98	704 51	1472 98
Ishpeming City	65 08	471 02		2 87	57 18	367 69											122 26	841 58	65 08	473 89
	2755 17	6771 73	1793 95	3030 80	108 86	685 15	181 68	451 46	90 84	18 10	19 63	68 59	61 11	260 13	52 73		5063 97	11285 96	4902 38	10600 81

Deduct C.C.I.Co. Fur. Dept. 52.73
Delinquent taxes 108.86 161.59 685.15

Iron Cliffs Co.

Tax Statements
Land Department
Nov 30 - 1901

DISTRIBUTION OF TAXES 1901

Township	Lands 1901	Lands 1902	Timbered Lands 1901	Timbered Lands 1902	Delinq Tax 1901
Baldwin	33 53	75 00	45 00	74 34	
Maple Ridge	159 38	610 10	53 20	19 89	
Ford River	26 99	113 75	54 00	25 45	
Wells	3 66	9 34			
Spaulding	59 82	141 11	119 65	262 63	
Sands	106 48	851 80	673 61	1400 20	
Marquette	57 34	148 04	229 35	355 54	
Forsythe	17 81	35 57			
Richmond	498 14	899 55	139 96	499 35	
Menominee	208 19	425 12			
Tilden	489 84	1203 60	54 84		22 6
Lampsing	490 38	567 79			22 99
Ely	88 62	142 31			
L'Anse		75 14	88 23	116 07	
Marquette City	37 35	308 08	336 11	274 46	
Menominee City	412 36	694 21			
Lampsing City	65 08	471 02		2 87	57 18
	2755 17	6771 73	1793 95	3030 80	108 86

Memorandum reconciling taxes, as per approximate analysis of Profit & Loss of all companies, for year $110,723.54

with

Tax Statement, 1902 . . . . . 120,932.29

Difference, $ 10,208.75

PIONEER FURNACE DEPT.: Tax Stmt. $10,726.79

As charged out, per books:

Cost Sheet, Pig Iron	$4,461.00	
" " Alcohol,	2,232.55	
Gladstone City Lots	349.11	
		7,042.66
		$ 3,684.13

Difference probably taken up on charcoal and other Cost Sheets, and represented by stocks of wood and supplies on hand.

OPERATING MAAS MINE:

Not charged out, 6,524.62

$10,208.75

Iron Cliffs Co

Reconciliation for State

Statement ~~for~~ of Salisbury Ore for year ending Nov. 30,1902.

			Tons	Tons
	In stock at Mine Dec. 1st. 1901		21904	
	Produced during year		89074	
	Total Salisbury Ore			110978
	Other Ore transferrd to Salisbury.			
Aug. 19	Kaliyuga	Lake	115	
24	Colonial	"	539	
25	Paisley	"	465	
26	Pioneer	"	538	
27	Pontiac	"	574	
28	Andaste	"	696	
30	Osborne	"	921	
Sept. 2.	Choctau	"	399	
2	Cadillac	"	552	
8	Marquette	"	198	
8	Andaste	"	96	
9	Pioneer	"	177	
12	Kaliyuga	"	519	
12	Cadillac	"	244	
13	Choctau	"	1777	
20	J. W. Moore	"	1910	
20	Maythem	"	1333	
25	Choctau	"	772	
26	H. H. Brown	"	2507	
Oct. 1	Grampion	"	1210	
3	Pioneer	"	1023	
5	Cadillac	"	1581	
5	Frontenac	"	2231	
6	A. P. Wright	"	2022	
7	Kaliyuga	"	1747	
10	Falcon	"	708	
11	Pontiac	"	2446	
16	Andaste	"	2121	
	26 Forward		29421 -	110978

Other Ores transferred to Salisbury. (Continued).

			Tons	Tons
		Total Salisbury Ore Brot. forward	29421	110978
Oct. 20	Choctau	Lake	2017	
21	Kaliyuga	"	1620	
22	Pontiac	"	2219	
23	Spokane	"	2254	
24	Andaste	"	1623	
29	Frontenac	"	2134	
30	Chattanooga	"	2770	
31	Grampion	"	1231	
31	Paisley	"	1177	
Nov. 4	Andaste	"	2183	
Nov.		Forward	48848	110978
6	Nicaragua	Lake	1643	
7	A. Cobb	"	778	
8	B. W. Parker	"	1293	
9	Pontiac	"	1912	
10	Frontenac	"	1917	
15	Pioneer	"	715	
16	Centurion	"	774	
18	H. H. Brown	"	399	
19	Choctau	"	1007	
27	Frontenac	"	1681	
29	Cadillac	"	715	
		Total Lake as Salisbury		61482
	Buffalo Ore Shipped as Salisbury			86709
	Cameo Ore	" "		38930
	Bedford Ore	" "		64078
		Total Carried forward		362177

Statement Salisbury Ore (Continued).

	Tons	Tons
Amount brought forward		362177
Shipped:		
Pioneer Furnace	11900	
Carp Furnace	10447	
Northwestern Iron Co	15588	
Antrim Iron Co	18816	
Spring Lake Iron Co	15019	
Pen Iron Mfg. Co. Ltd	11535	
Toledo	24553	
Sandusky	6314	
Cleveland	19909	
Ashtabula	30028	
Buffalo	187288	
Total Shipped as Salisbury		351397
Salisbury shipped as Bedford (See Bedford Statement)		884
In stock at Mine Nov. 30, 1902.		9896
ToTal		362177

Statement of Foster Ore for year ending Nov. 30, 1902.

	Tons	Tons
In stock Mine Dec.1st 1901.	1200	
Over run on Stock pile	810	
Total Foster		2010

Shipped:

Pioneer Furnace		2010

Statement of Tilden Silica for year ending Nov. 30, 1902.

	Tons	Tons
Produced during year	4621	
Shipped from old stock pile	129	
Total Tilden Silica		4750

Shipped:

Pioneer Furnace	102	
Antrim Iron Co.	304	
Cleveland	3072	
Deseronto Iron Co.	1272	
		4750

Statement of Michigamme Ore for year ending Nov. 30, 1902.

	Tons	Tons
In stock at Mine Dec. 1st. 1902.		11078
In dock at Escanaba Dec. 1st 1901.		252
Total		11330

Shipped: Buffalo	10684	
In stock Mine Nov. 30, 646		
Total		11330

Statement of Cliffs Shaft Ore for year ending Nov. 30th 1902.

			Tons	Tons
In stock at Mine Dec. 1st, 1901			124445	
Produced during year			279002	
		Total Cliffs Shaft		403447

Other Ores transferred to Cliffs Shaft

Aug. 4,	Louisiana,	Coarse Scotch	1023
8	Naples	"	1282
13	Pioneer	"	1138
16	Spokane	"	1477
26	Choctaw	"	1256
28	Nicaragua	"	36
29	Vega	"	1452
Sept 6	Angeline	"	316
7	Frontenac	"	1593
13	Pontiac	"	1822
20	Chattanooga	"	1648
29	Kailyuga	"	1178
Oct. 1	Centurion	"	174
2	Massachusetts	"	415
2	P. P. Pratt	"	1326
10	Eddy	"	607
11	Tacoma	"	1138
17	Cadillac	"	1096
22	Hiawatha	"	962
30	Venezuela	"	860
30	Pioneer	"	737
Nov. 8	Spokane	"	2069
12	Massachusetts	"	477
16	Centurion	"	273
17	P. P. Pratt	"	1319
20	Pontiac	"	240
		Total Coarse Scotch Cliffs Shaft.	25914

429.361

Statement of Cliffs Shaft Ore - (Continued)

			Tons	Tons
		Amount Brought Ford.	[illegible]	[illegible] 429,361
Aug. 17,	Jupiter	Scotch	251	
25	Angeline	"	386	
26	Spokane	"	363	
28	Frontenac	"	658	
Sept. 5	P. P. Pratt	"	284	
6	Angeline	"	785	
7	Spokane	"	572	
9	Champ	"	179	
10	Falcon	"	227	
15	Spokane	"	1012	
17	Angeline	"	406	
22	Centurion	"	989	
		[illegible]	[illegible]	[illegible]

[illegible] AS TRANSFERRED TO OTHER SHAFT. [illegible]

Sept. 26	Angeline.	Scotch as crushed Cliffs Shaft	793	
29	India	" " " "	145	
Oct. 1	S. J. Macy	"	72	
1	Centurion	"	921	
2	Ahtens	"	210	
5	Olympia	"	483	
7	Angeline	"	552	11/15
14	Spokane	"	1284	
18	H. H. Brown	"	1433	
23	Centurion	"	841	
23	Falcon	"	147	
29	Choctaw	"	714	
Nov. 4	Centurion	"	1681	
9	Kaliyuga	"	691	
16	Centurion	"	857	
17	Angeline	"	429	
		Total Scotch	17365	17365
		Beresford as crushed Cliffs Shaft		22109
				468835

Cliffs Shaft transferred to other ores

July 24	Falcon	Castleford		34
	Shipped	Coarse Cliffs Shaft		
		Inland Steel Co.	996	
		Toledo	1640	
		Cleveland	8730	
		Ashtabula	21033	
		Erie	33769	
		Buffalo	7589	77961
		Granite City Steel Works	1004	
		De Camp Bros. & Yule Granite City	214	
		Do E. St. Louis	817	
		Total Coarse Cliffs Shaft		75792

Crushed Cliffs Shaft

Crushed Cliffs Pioneer Furnace	4 573	
Northwestern Iron Co.	10037	
Antrim Iron Co	4155	
Elk Rapids Iron Co	8644	
Spring Lake Iron Co	7525	53959
Manistique Iron Co	1025	
Toledo	28077	
Sandusky	974	85624
Cleveland	56583	
Forward	121.593	75826

Crushed Cliffs Shaft. (Continued)	Tons	Tons
Brot forward	121,593	75826
Ashtabula	72963	
Erie	16505	145423
Buffalo	155955	
Deseronto Iron Co	4698	
De Camp Bros. & Yule	61	4759
Total Crushed Cliffs Shaft		371775
In stock at mine Nov. 30/02.		21234
		468835

Statement of Lake Bessemer Ore for year ending November 30, 1902.

	Tons	Tons
In stock at Mine Dec. 1st 190 1	2274	
Produced during year	165480	
Total Lake Bessemer		167754
Other Ores transferred to Lake Bessemer		
Salisbury Bessemer	84212	
Note: Salisbury Bessemer was all shipped from from docks as Lake Bessemer		
Alford	62598	
Total of Other Ores		146810
Total		314564

Shipped:

Pioneer Furnace	857	
Antrim Iron Co	6049	
Toledo	3540	
Lorain	24962	
Cleveland	75479	
Fairport	13989	
Ashtabula	127674	
Buffalo	62014	
Total Shipped		314564
In Stock at Mine Nov.30. 1902.		0
Total		314564