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325 Heard Bldg.
Phoenix, Arizona
December 20, 1943

TULLY - Asst. Chief - Mining Section RFC - Washington

Re: J. L. McIver - Docket No. ND-5289

Enclosed please find my progress report, in duplicate, under the above captioned project.

WM. B. MAITLAND
Supervising Engineer

WBM:MHW
Encs.
Progress Report in duplicate
2c-Diamond Drill Log
Map

RECONSTRUCTION FINANCE CORPORATION

MINING DIVISION

REPORT OF SUPERVISING ENGINEER

Docket No. ND-5289 - J. L. McIver
Date of Report - December 20, 1948

Attached are the diamond drill logs of Holes No. 4, 5, 6 and 7, and a surface drill map of the Irene Mine as furnished this office by the American Zinc Lead and Smelting Company. They have formally relinquished their lease on this property and have abandoned same.

It is my opinion that Hole No. 4 indicates that possibly the vein has been split and may have "fingered out" at this point. Hole No. 5 encountered ore. Hole No. 6 encountered a strongly faulted area so to my mind there is no positive evidence that there could not be a vein at this point. Hole No. 7 evidently hit the same condition as found in No. 4 Hole.

Apparently we have established the fact that there is an ore shoot about 600 feet long since Holes No. 3 and 5 encountered ore and we can assume that the ore extends west to a point half way between Holes 3 and 4, and that the ore extends east to a point half way between Holes 5 and 7.

There has been no drilling done as yet to determine the vertical extent of the ore shoot.

These data complete our information on this docket.

WM. B. MAITLAND
Supervising Engineer

WBM:MHW

## Diamond Drill Hole Number 4

Irene Mine, Globe, Arizona

Location: 460' W, 230' N of portal of No. 1 Tunnel

Direction: S 24° E

Angle of Hole: -55°; -60° at 1000'

Drilled By: Amer. Zinc, Lead, and Smelting Co.

Total Depth: 1210'

Contractor: Sullivan Machinery Co.
E. E. Whinnen, Foreman

Elevation: 4075'

Begun: Sept. 18, 1943
Completed: Oct. 18, 1943

| From | To | Recovery | Description of Core |
|---|---|---|---|
| 0 | 791 | 0 | Plug Bit |
| 791 | 1000 | 150 | Mostly coarse, some fine grained diabase. Largely unaltered but decomposed and soft at 829-832, 863-864, and near small slippage planes. This section is much more fractured and broken than the one immediately below - especially from 947-973. 950- to 953 is soft and much crushed and broken.<br><br>At 794 - 4" quartz stringer with iron oxide and a few crystals of sphalerite; some brecciation<br>815 - 3" of brecciation and quartz<br>860 - 3" of quartz, a little zinc<br>937 - 3" of quartz, a trace of zinc<br>953 - 963 - Broken and seamed<br>972 - 1" quartz vein<br>1000 - 1" Quartz seam, a little jack. |
| 1000 | 1210 | 200 | Medium to coarse grained gray diabase. Firm and unaltered. Little broken, excellent core.<br><br>At 1065 - 1" breccia and recrystallized diabase<br>1076 - ¼" silicified shear zone<br>1083-84 - Breccia and quartz, manganese and copper stain<br>1100 - Thin seam with copper and iron stain<br>1102 & 1120 " " " " " "<br>1175 - ¼" Quartz vein |
| 1210 - | | | Bottom |

Casing Used -
AX - 10
BX - 18
AX - 70

Cemented At -
833 and 994

# Diamond Drill Hole Number 5

Irene Mine, Globe, Arizona

Location:: 540' N, 10' E of portal of No. 1 Tunnel

Drilled By: Amer. Zinc, Lead, and Smelting Company

Contractor: Sullivan Machinery Co. E. J. Hays, Foreman

Begun: Oct. 1, 1943
Completed: Oct. 31, 1943

Direction: S 24° E

Angle of Hole: -49½°

Elevation: 4111'

Total Depth: 998'

Thickness of Vein: (Corrected) - 16½'

Calculated Dip of Vein: 79½°N

| From | To | Recovery | Description of Core |
|---|---|---|---|
| 0 | 674 | 0 | Plug Bit |
| 674 | 842 | 135 | Coarse diabase, largely hard and unaltered, No quartz veins or sulphide mineralization |
| 842 | 950 | 86 | Coarse diabase as above; short sections of fine grained diabase at 891, 903, 897, and 916<br><br>At 842 - 4" quartz vein<br>850 - ½" quartz vein, jack shines<br>865 - 1" sheeted quartz vein; jack shines<br>873 - ¼" quartz vein; jack shines<br>886 - 4" fractured zone with quartz strings<br>893 - 3" diabase breccia with quartz matrix and jack shines<br>897 - ¼" quartz vein, jack shines<br>899 - 2" quartz vein, some breccia, jack shines<br>903 - ½" quartz vein, jack shines<br>907 - ½" " " , " " , iron str.<br>909 - ¼" " " , " "<br>909½ - 2" " " , iron-manganese shines<br>916 - 1" of breccia; quartz matrix<br>920 - ½" quartz vein<br>939 - 1" quartz vein with Mn, Fe, and Zn shines<br>944 - 1" heavy sphalerite |

| | | | Calculated Vein Width | Zinc Sulphide Assay | Description |
|---|---|---|---|---|---|
| 950 | 963 | 18" | 9.75' | 1.55% | Diabase, quartz stringers; disseminated ore |
| 963 | 964 | 11" | .75' | 3.70 | Hanging wall Diabase vein breccia |
| 964 | 966 | 24" | 1.50' | 7.84% | Strongly broken vein breccia, diabase fragments, Quartz, $Fe_2O_3$, and ZnS matrix; some oxidation. |
| 966 | 968 | 24" | 1.50 | 8.10% | " " " " " |
| 968 | 970 | 24" | 1.50 | 8.63% | " " " " " |

| From | To | Recovery | Calc.Vein Width | ZnS Assay | Description |
|---|---|---|---|---|---|
| 970 | 972 | 24" | 1.50 | 4.34% | Tight breccia, dissem. ore; FW of best ore. |
| 972 | 975 | 18" | 2.25 | 1.56% | Good, loose vein breccia with quartz matrix but less ore. More oxidation than the sample immediately above. |
| 975 | 978 | 18" | 2.25 | 0.34% | " " " " " Footwall of vein at 978 |
| 978 | 998 | 20' | Coarse diabase. Loose and decomposed from 977-982 and 996-997. At 988 and 997 - 2" quartz veins with some jack | | |
| 998 | | | Bottom | | |

Casing Used:
BX - 7'
AX - 420'
Cemented at 420, 564, and 840.

(All Gold,Silver,Copper and Lead Assays negligible)

Diamond Drill Hole Number 6

Irene Mine, Globe, Arizona

Location: 610' N, 630' E of portal No. 1 Tunnel

Direction: S 35° E

Angle of Hole: -59°

Drilled By: Amer. Zinc, Lead, and Smelting Company

Elevation: 4261'

Contractor: Sullivan Machinery Co. E. E. Whinnen, Foreman

Total Depth: 1105'

Begun: Oct. 25, 1943
Completed: Nov. 19, 1943

| From | To | Recovery | Description of Core |
|---|---|---|---|
| 0 | 700 | 0 | Plug Bit |
| 700 | 972 | 250 | Coarse and fine grained diabase. Good core. Little broken and altered. Thin quartz veinlets at 701, 707, 708, 709, and 712.<br><br>At 715 - 5" quartz vein, zinc traces<br>721 - thin quartz seam<br>722, 723, 746, 748 - ½" quartz seam<br>751 - 1" quartz vein<br>752 - ½" sheared quartz vein<br>758 - 1" quartz vein<br>763, 773, 781 - ½" quartz vein<br>785 - ½" quartz vein<br>788, 793 - quartz veinlets<br>799-800 - 1' brecciated quartz and diabase vein; iron oxides and jack shines.<br>803 - ½" sinuous quartz veinlet<br>861, 875, 878 - veinlets<br>920 - 1' rather closely fractured ground.<br>967 - ½" vein. |
| 972 | 1004 | 10 | Much broken diabase - Local sections crushed and recemented. A small amount of quartz vein material Drillers cemented this section five times. This section may represent the Irene vein-fault - A very strong break.<br><br>At 988-990 - Very finely ground breccia; diabase fragments and diabase gouge matrix.<br>992-996 - Red oxidized diabase and a little vein quartz. |
| 1004 | 1038 | 17 | Broken diabase. Quartz veinlets @ 1012, 1031, 1034. Occasional small talc slip planes. |
| 1038 | 1105 | 66 | Coarse grained diabase, little broken, quartz veinlets @ 1055, 1057, 1067. 1' breccia with quartz matrix at 1067. |
| 1105 - | | | Bottom |

Casing Used: ~~HX~~ - 8' (lost) - BX 69' - AX - 120' Cemented at: ~~106 - 996 - five times~~

## Diamond Drill Hole Number 7

Irene Mine, Globe, Arizona

Location: 540' N, 10' E of portal of No. 1 Tunnel

Direction: S-49° E

Angle of Hole: -45°

Drilled By: Amer. Zinc, Lead, and Smelting Co.

Total Depth: 1168'

Contractor: Sullivan Machinery Co. E. J. Hays, Foreman

Elevation: 4111'

Begun: November 1, 1943
Completed: Nov. 19, 1943

| From | To | Recovery | Description of Core |
|---|---|---|---|
| 0 | 891 | 0 | Plug Bit |
| 891 | 982 | 75' | Coarse and fine grained diabase. Hard and unaltered. Mostly dark gray and white spotted, some red spots.<br><br>At 891½ - ½" sheared quartz vein<br>892 - ½" quartz vein<br>893 - ½" sheared quartz vein<br>898 - 1" quartz vein, jack shines<br>898½ - 900½ - Intermittend brecciation, quartz veins, jack shines<br>902 - ½" quartz vein<br>903 - 1" quartz vein, jack shines<br>904 - " " " " "<br>904½ - ½" " " " "<br>906½ - 907 - Breccia, quartz vein, fair jack<br>909½ - 2" quartz stringer<br>971 - ½" quartz gash vein |
| 982 | 1060 | 75 | Mostly coarse, some fine grained diabase. Hard, unbroken, unaltered. No quartz veins or mineralization. |
| 1060 | 1168 | 95 | Coarse and fine grained diabase. Mostly unbroken and unaltered,. Good core. Thin quartz stringers at 1070, 1073, 1093, and 1103. 1" quartz vein at 1082. |
| 1168 - | | | Bottom in fine grained gray diabase |

Casing Used:

BX - 13'
AX - 21

Cemented At:
1058'

Progress Report

J. L. Mecker
Docket No ND 5289
Dec 20, 1943

~~Enclosed plse~~
Attached are the diamond drill logs of holes No 4, 5, 6 and 7 and a surface drill map of the Cherne Mine as furnished this office by the American Zinc Lead and Smelting Company. They have formally relinquished their lease on this property and have abandoned same.

It is my opinion that Hole No 4 indicates that possibly the vein has been split and may have "fingered out" at this point. Hole No 5 encountered ore. Hole No 6 encountered a strongly faulted area so ~~the~~ to my mind there is no positive evidence that there could not be a vein at this point. Hole No 7 evidently hit the same condition as found in No 4 Hole.

Apparently we have established the fact that there is an ore shoot about 600 feet long since Holes No 3 and 5 encountered ore and we can assume that the ore extends west to a point half way between Holes 3 and 4, and that the ore extends east to a point half way between Holes 5 and 7.

There has been no drilling done as yet to determine the vertical extent of the ore shoot.

These ~~information~~ data completes our information on this docket

W. B. Smith

RECONSTRUCTION FINANCE CORPORATION

MINING DIVISION

REPORT OF SUPERVISING ENGINEER

Docket No. - J. L. McIver - MD-5289
Date of Report - December 15, 1943

On November 29, I visited the above project and found that the American Zinc Lead & Smelting Co. had quit work on the above project, and the drill crew had already left. They had not notified this office of their intention to quit.

I learned later that they completed four diamond drill holes. I have already informed your office of the results obtained in Holes No. 4 and 5, but as yet I have not obtained the logs of Holes No. 6 and 7, although I understand they were drilled to the east of Hole No. 5, and that they did not encounter ore.

Since the applicant is unable to meet the work requirements of the lease, it will default this month.

Whenever I obtain the rest of the data on the last drill holes, I will forward it to Washington.

WM. B. MAITLAND
Supervising Engineer

WBM:MEW

1+4

# Progress Report

J. L. McCluer
ND 5289.
Dec 15, 1943

On Nov 29th I visited the above project and found that the American Zinc ~~and~~ Lead & Smelting Co had quit work on the above project and the drill crew had already left. They had not ~~fo~~ notified this office of their intention to quit.

I learned later that they completed four ~~three~~ diamond drill holes. I have already informed your office of the results obtained in ~~Holes~~ Holes No 4 and 5 but as yet I have not obtained the logs of Holes No 6 & 7 altho I understand they were drilled to the east of ~~Hole~~ Hole No 5 and that they did not encounter ore.

Since the applicant is unable to meet the work requirements of the lease it will default this month.

Whenever I obtain the rest of the data on the last drill holes I will forward it ~~to~~ Washington

[illegible]

325 Heard Bldg.
Phoenix, Arizona
November 16, 1943

TULLY - Asst. Chief - Mining Section RFC - Washington (25) D. C.

Re: J. L. McIver - Docket No. ND-5289

I have just been informed that the American Zinc Lead and Smelting Company have completed Diamond Drill Hole No. 5, and following is the information that they have submitted to the applicant as to the results obtained in this hole:

Depth of hole 999 feet.

| Distance | | Sulphide | Carbonate | Total Zinc |
|---|---|---|---|---|
| 950 | 963 | 3.05 | 1.5 | 4.55 |
| 963 | 964 | 7.95 | 4.25 | 12.20 |
| 964 | 966 | 11.49 | 3.65 | 15.14 |
| 966 | 968 | 11.70 | 3.60 | 15.30 |
| 968 | 970 | 13.05 | 4.42 | 17.47 |
| 970 | 972 | 6.65 | 2.21 | 8.86 |
| 972 | 975 | 3.11 | 1.55 | 4.66 |
| 975 | 978 | 1.44 | 1.10 | 2.54 |

I have calculated that the vein dips to the North at 80° with the horizontal, and the vein was encountered at a depth of 760 feet vertically below the collar of the hole. I have already submitted to Washington data as to the direction, dip, and location of the collar of the hole. Further more, my calculations indicate that the ore zone has assayed was 21.2 feet wide (950 to 978); sulphide zinc 5.24%, oxide zinc 2.12%, total zinc 7.36%. The high grade section of this vein is calculated to be 6.8 feet wide (963 to 972), and assayed 10.40% sulphide zinc, 3.56% oxide zinc, or a total of 13.96% total zinc. The American ~~Assay~~ Zinc Company is proceeding with the drilling of holes 6 and 7, but it will be necessary for me to inspect the property before I can determine the exact position and direction of these holes, and these data will be forwarded to Washington as soon as available.

WM. B. MAITLAND
Supervising Engineer

WBM:MHV

325 Heard Bldg.
Phoenix, Arizona
October 29, 1943

TULLY - Asst. Chief - Mining Section RFC - Washington

Re: J. L. McIver - Docket No. ND-5289

Enclosed please find my progress report in duplicate on the above captioned docket.

WM. B. MAITLAND
Supervising Engineer

WBM:dem
Encs.
2c-Progress Report

RECONSTRUCTION FINANCE CORPORATION
MINING SECTION
PROGRESS REPORT OF THE SUPERVISING ENGINEER

Re: J. L. McIver
Docket No. ND-5289
October 29, 1943

On October 26, 1943, I visited the above captioned project in order to inspect the progress being made on the diamond drilling campaign.

Hole No. 4 was drilled to a depth of 1210 feet without encountering commercial quantities of ore. Mr. Ohle, the American Lead and Zinc Company's geologist, informed me that between 794 and 1000 feet a few stringers of sphalerite were encountered and between 953 and 960 soft faulted ground was cut. Apparently the vein fissure was cut at 953-960' but the ore had fingered out between hole No. 3 and No. 4. A survey was made of the hole and it was found that the dip of the drill hole was 60° at 1000 feet as compared with 55° at the collar. I calculated that the vein would be cut at 935 feet but the steepening of the dip would place the vein at 953-960 feet as probably found.

Hole No. 5 had reached a depth of 870 feet which is not yet deep enough to hit the ore which should be found between 900 and 950 feet.

About 400 feet of new road was constructed with a bulldozer and a site prepared from which to drill Hole No. 6. At the time of my visit this hole was down 40 feet and has a dip of - 59° and a strike of S 35½° E. Mr. Ohle estimates that the vein will be encountered at 950 feet. Hole No. 6 is located at an elevation of 4265 feet and is N 70½ E, 862 feet from Hole No. 3.

WILLIAM B. MAITLAND
Supervising Engineer

1 X 3 copies

Supervising Engineers
Progress Report

J. L. McIver
MD. 5289
Oct 29, 1943

On Oct 26, 1943 I visited the above captioned project in order to inspect the progress ~~of the d~~ being made on the diamond drilling campaign.

Hole No 4 was drilled to a depth of 1210 feet without encountering commercial quantities of ore. Mr. Ohle, ~~informed me~~ the American Lead & Zinc Companies geologist, informed me that between 794 and 1000 feet a few stringers of sphalerite were encountered and between 953 and 960 soft faulted ground was ~~cut~~ cut. Apparently ~~the~~ the vein fissure was cut at 953-960'. But the ore ~~but~~ had ~~fingered~~ fingered out between hole No 3 and No 4. A survey was made of the hole and it was found that the dip of the drill hole was 60° at 1000 feet as compared with 55° at the collar. I calculated that the vein would be cut at 935 feet but the steepening of the dip would place the vein at 953-960 feet as probably found.

Hole No 5 had reached a depth of 870 feet which is not yet deep enough to hit the ore, which should be found between 900 and 950 feet.

About 400 feet of new road was constructed with a bulldozer and a site

Sullivan - Letter of Transmittal
Enclosure 6 Page 1 of 2

prepared from which to drill Hole No 6. at the time of my visit this hole was down 40 feet and ~~has~~ a dip of -59° and a strike of S 35½° E. Mr. Ohle estimates that the vein will be encountered at 950 feet. Hole No 6 is located at an elevation of 4265 feet and is N 70½ E, 862 feet from Hole No 3.

Wm B Martland
Sup. Eng.

Drill Core

| From | To | Length | Calculated Width of vein | Assay Value | Description |
|---|---|---|---|---|---|
| 849 | 859 | (10 ft)* | (6.0 ft)* | (3.70% zinc)* | Diabase and recemented quartz breccia. Hanging Wall at 859 |
| 859 | 860 | 1 | 0.6 | 15.87% " | Recemented quartz breccia |
| 860 | 861 | 1 | 0.6 | 26.92% " | Mixed breccia and sphalerite |
| 861 | 862 | 1 | 0.6 | 47.80% " | Nearly solid sphalerite |
| 862 | 864 | 2 | 1.2 | 28.20% " | Mixed breccia and sphalerite |
| 864 | 869 | 5 | 3.0 | No core (Included as 0 in average) | Faulted chasm of diabase ~~No~~ core recovery |
| 869 | 875 | 6 | 3.6 | 31.07% " | Brecciated quartz + sphalerite |
| 875 | 879 | 4 | 2.4 | 15.30% " | Ore contains specular hematite + lead carbonate. Footwall at 879 |
| 879 | 883 | (4)* | (2.4)* | (2.05% ")* | Coarse grained ophitic diabase Footwall |
| 849 to | 883 (4 / 49) | 20 ft | 12 ft | 19.73% zinc | Sulfide ore |

* omitted in above averages

The true width of the vein is ~~calc~~ assumed to be from 859 to 879, a core length of 20 feet or a true width of 12 feet. This section averages 19.73% zinc ~~which~~ is assumed to be the true value of the vein. attached to this report is the complete log of this hole (No 3). The logs of the first two holes have previously been reported.

~~From the above data~~

Since only one hole has encountered the sulfide zone we can assume that this hole either contacted the vein at at best point, or the core represents the average value of the whole vein, or that this is the worst section of the ore shoot. Since it will be necessary to either sink the present winze an additional 681 feet or sink a new vertical shaft a distance of 760 feet I do not believe that one core gives us enough information

(3)

| From | To | Footage | Core | |
|---|---|---|---|---|
| 255 | 260 | 5 | 4 | Diabase with qtz bands and dark aphanite band |
| 260 | 270 | 10 | 9 | Grey brown diabase |
| 270 | 280 | 10 | 9 | " " " |
| 280 | 288 | 8 | 7 | " " " some oxidization |
| 288 | 292 1/2 | 4 1/2 | 4 1/2 | Diabase with qtz bands + dark aphanite bands |
| 292 1/2 | 300 | 7 1/2 | 7 1/2 | " " " " " " " " |
| 300 | 310 | 10 | 7 | " " " " " " " |
| 310 | 320 | 10 | 10 | " " " " " " " |
| 320 | 330 | 10 | 8 | " " " " " " " |
| 330 | 340 | 10 | 9 1/2 | " " " " " " " |
| 340 | 350 | 10 | 9 1/2 | " " " " " |
| 350 | 360 | 10 | 9 1/2 | " " " " " |
| 360 | 370 | 10 | 8 | " " " " " |
| 370 | 380 | 10 | 9 | Grey unoxidized diabase |
| 380 | 390 | 10 | 5 | Diabase with qtz bands + dark aphanite bands |
| 390 | 400 | 10 | 5 | " " " " " " " |
| 400 | 410 | 10 | 4 | " " " " |
| 410 | 415 | 5 | 4 | " " " |
| 415 | 424 | 9 | 4 | " |
| 424 | 428 | 4 | 1 | " " " " " " |
| 428 | 435 | 7 | 6 | Grey coarse granid diabase |
| 435 | 440 | 5 | 5 | " " " " |
| 440 | 450 | 10 | 5 | " " " " with black Bands |
| 450 | 460 | 10 | 4 | " " " " with flash bands + qtz |
| 460 | 470 | 10 | 3 | " " " " |
| 470 | 480 | 10 | 3 | " " " " |
| 480 | 490 | 10 | 3 | |
| 490 | 500 | 10 | 4 | " " " " " " " |
| 500 | 510 | 10 | 4 | " " " " " |
| 510 | 520 | 10 | 3 | " " " " |

| | | | | |
|---|---|---|---|---|
| 520 | 530 | 10 | 2 | Fine grained diabase, black bands, qtz stringers + |
| 530 | 535 | 5 | 4 | recemented breccia with Mn stain |
| 535 | 545 | 10 | 7 1/2 | " " " |
| 545 | 555 | 10 | 7 | " " " " " " |
| 555 | 565 | 10 | 9 | " " " " " " |
| 565 | 575 | 10 | 4 | " " " " " " |
| 575 | 585 | 10 | 6 | " " " " " " |
| 585 | 590 | 5 | 3 | " " " " " " |
| 590 | 595 1/2 | 5 1/2 | 5 1/2 | " " " " " " |
| 595 1/2 | 601 | 5 1/2 | 5 1/2 | Coarse grained diabase with discontinuous patches of red-brown oxidized areas and islands of blk oxide containing streaks of metallic sulphides 596' Prob H.W. of vein |
| 601 | 606 | 5 | 5 | Mottled red + black diabase with qtz streaks - low grade ore perhaps some sulphides prob richest part of vein |
| 606 | 611 | 5 | 2 | Coarse grained diabase minor oxidized patches |
| 611 | 612 1/2 | 1 1/2 | 1 | Hard dense diabase - grey - minor specks of red ore |
| 612 1/2 | 614 1/2 | 2 | 2 | Broken core - sludge white - prob fault in diabase |
| 614 1/2 | 620 | 5 1/2 | 5 | Diabase with qtz stringers + some oxide specks Prob low grade footwall part of vein |
| 620 | 632 1/2 | 12 1/2 | 9 1/2 | Grey brown diabase, some red-brown oxides - hard with silicified dark green black breccia towards bottom |
| 632 1/2 | 637 1/2 | 5 | 2 | Silicified dark breccia with heavy mottled ore breccia in bottom |
| 637 1/2 | 638 | 1/2 | 1/2 | Recemented ore fission with specular iron |
| 638 | 643 | 5 | 4 1/2 | Bands of hard grey diabase + red stained breccia - Prob vein specular iron + some gypsum. |
| 643 | 647 1/2 | 4 1/2 | 1 1/2 | Black + red diabase some qtz some minor breccia |

Hole No 2

| From | To | Footage | Core Recovery | |
|---|---|---|---|---|
| 0 | 36 | 36 | 1 | |
| 0 | 36½ | 36 | 1 | Broken grey coarse grained diabase partly oxidized |
| 36 | 37½ | 1½ | ½ | " " " " |
| 37½ | 42 | 4½ | 1½ | " " " " |
| 42 | 51 | 9 | 2 | " " " " |
| 51 | 51½ | ½ | ½ | " " " " |
| 51½ | 61 | 9½ | 1 | " " " " |
| 61 | 62 | 1 | ½ | " " " " |
| 62 | 70 | 8 | 8 | " " " " |
| 70 | 76 | 6 | 1 | " " " " |
| 76 | 85 | 9 | 8 | Hard grey unoxidized diabase, coarse grained |
| 85 | 92 | 7 | 6½ | " " " " |
| 92 | 98 | 6 | 5 | " " |
| 98 | 108 | 10 | 9 | " |
| 108 | 118 | 10 | 10 | " |
| 118 | 128 | 10 | 9 | " " " |
| 128 | 132 | 4 | 4 | " " |
| 132 | 141 | 9 | 9 | " " |
| 141 | 151 | 10 | 10 | " " |
| 151 | 161 | 10 | 10 | " " |
| 161 | 171 | 10 | 10 | " " |
| 171 | 181 | 10 | 8 | " " |
| 181 | 190 | 9 | 3 | " " |
| 190 | 200 | 10 | 5½ | " " " Some streaks of quartz |
| 200 | 210 | 10 | 10 | Diabase with dark aphanitic bands & narrow quartz stringers |
| 210 | 216½ | 6½ | 6 | Diabase with minor qtz stringers |
| 216½ | 226½ | 10 | 9½ | Coarse grained diabase grey |
| 226½ | 236 | 9½ | 9½ | |
| 236 | 245 | 9 | 9 | " " " " one varegated qtz + dark band |
| 245 | 255 | 10 | 9 | " " " " |

Memorandum of Visit of Supervising Engineer
Docket No ND-5289 J. L. McIver, Iver, Applicant

On Feb 10, 1943 this project was granted a $25,000 loan of which $5000 was to be used to repay the original accessibility loan. ~~a condition~~ This loan was granted under the condition that 1500 feet of diamond drilling be done first before underground work is ~~done~~ started.

On March 24, 1943 accompanied by Bryan Frisbie, Supervising Engineer we visited the property under to make a transit survey to locate the position for the first diamond drill hole. a transit survey was made to ~~conform~~ check an earlier ~~Brunton~~ survey. The ~~site for~~ the first drill hole was located at such a point that a hole 460 feet long, ~~striking~~ south 31° East, and dipping 45° with the horizontal would ~~intersect~~ the vein at a a point 200 feet vertically below the bottom of the 116 foot winze.

The applicant is now removing the surface soil and leveling the drill site and he is also constructing the necessary core boxes. Two men are employed.

The following drill contractors were contacted with the results shown:-

[Quote]

The competitive bid of the Sullivan Machinery Co was finally accepted as they guaranteed to start at once and they were the second lowest bidder. Approval for drilling has also been obtained from the War Production Board.

all of the drill cores will be carefully saved and when the drill approaches the vein horizon I intended to be present in order to check the results

Wm B Martland

---

Enclosed please find my Memorandum of Visit to the above captioned docket

Wm B M

| | |
|---|---|
| ~~accepted~~<br>Sullivan Machinery Co<br>Michigan City Indiana | $3.50/ft to 500' hole 1 1/8" core<br>$3.25 500'-1000' hole<br>accepted |
| Mitchell Diamond Drill Co<br>San Francisco Co | $3.25/ft 500' hole 1 1/8" core<br>Too high |
| William E. Paine<br>Phoenix, Ariz | $3.50 to 500' hole 7/8" core<br>Too high |
| Sprague + Henwood, Inc<br>Scranton, Penna | $2.90/ft to 1000' hole 1 1/8" core<br>guarantee to<br>could not, start at once |
| E J. Longyear Co.<br>Minneapolis, Minn | Declined to ~~bid~~ |

Quote

| Footage From | Footage To | Feet | Core Recoveries Feet | Core Recoveries % | Description and Remarks |
|---|---|---|---|---|---|
| 295 | 301 | 6.0 | 5.0 | 83 | Brown oxidized diabase with black fine grained layer |
| 301 | 309 | 8.0 | 6.0 | 78 | Diabase and green quartz breccia |
| 309 | 313 | 4.0 | 3.0 | 75 | Green diabase breccia cemented with quartz |
| 313 | 315 | 2.0 | 2.0 | 100 | Brown diabase with quartz breccia and brown iron streaks |
| 315 | 317 | 2.0 | 1.8 | 90 | Quartz with green diabase breccia fragments |
| 317 | 325 | 8.0 | 4.6 | 57 | Broken and altered brown and green diabase |
| 325 | 328 | 3.0 | 1.1 | 37 | White quartz with fragments of green and black diabase |
| 328 | 340 | 12.0 | 8.7 | 73 | Brown coarse diabase |
| 340 | 350 | 10.0 | 7.3 | 73 | " " " with two minor fault seams |
| 350 | 370 | 20.0 | 16.1 | 81 | Bonded brown and black diabase with minor quartz fragments |
| 370 | 380 | 10.0 | 7.0 | 70 | Brown grey diabase with band of green black fine grained diabase |
| 380 | 420 | 40.0 | 25.3 | 63 | Altered brown grey diabase with quartz seams and layers of dark green rock |
| 420 | 422.5 | 2.5 | 1.1 | 44 | Dark green aphanitic altered diabase with quartz stringers |
| 422.5 | 424. | 1.5 | 1.0 | 67 | Dark green dense diabase |
| 424 | 430.0 | 6.5 | 3.3 | 51 | Black green dense diabase with massive quartz containing specular hematite |
| 430.5 | 440.0 | 9.5 | 2.0 | 21 | Light green quartzite 432.5' probable hanging wall of vein |
| 440.0 | 443 | 3.0 | 0 | 0 | No core - probably in vein |
| 443 | 444.5 | 1.5 | Cavity | 0 | " " " |
| 444.5 | 447.5 | 3.0 | 1.7 | 57 | 2" of Red vein breccia assayed 0.41% Lead, 6.60% Zinc, 4.72% Mn trace copper<br>Also green quartz containing specular hematite 446' probably foot wall of vein |
| 447.5 | 448 | 0.5 | 0.5 | 100 | Light green grey cemented quartz breccia |

| Footage From | Footage To | Feet | Core Recoveries Feet | Core Recoveries % | Description and Remarks |
|---|---|---|---|---|---|
| 448 | 450 | 2.0 | 2.0 | 100 | Quartz with open cavities containing manganese |
| 450 | 453 | 3.0 | 2.3 | 77 | Green quartz with open cavities. Probably foot-wall of low grade section of vein |
| 453 | 461 | 8.0 | 4.5 | 56 | Light green quartz with fragments of diabase |
| 461 | 466.5 | 5.5 | 5.5 | 100 | Un-oxidized massive grey diabase |
| 466.5 | 470 | 3.5 | 3.5 | 100 | Partly altered diabase fragments cemented by quartz |
| 470 | 506 | 36.0 | 35.0 | 97 | Un-oxidized grey green diabase |

Bottom of hole.

# DIAMOND DRILL HOLE LOG

Hole: No.2
Location: S 82½ W, 250' from adit portal
Elevation of Collar:
Depth: 657¼'
Dip: 64½° South
Bearing: S 31° E
Date Begun: May 10,1943
Date Finished May 26,1943
Vein Description: Apparently disseminated and oxidized, lead, zinc, manganese ore at 596'.

Project: J.L.McIver - Docket No. MD-5289
Location: Irene Mine, Globe, Gila County, Arizona.
Size of Big: AX
Calculated dip of vein: 71½° N.
Calculated width of vein: 22'
Depth at which vein was cut: 255' below Hole No.1 Intersection
Sludge Recovery: None
Core Recovery: 68%

| Footage From | Footage To | Core Recoveries Feet | Core Recoveries Feet | % | Description and Remarks |
|---|---|---|---|---|---|
| 0 | 76 | 76 | 16 | 21 | Broken grey coarse grained diabase. partly oxidized |
| 76 | 190 | 114 | 101¼ | 89 | Coarse grained, hard grey unoxidized diabase |
| 190 | 200 | 10 | 5½ | 55 | Coarse grained diabase with quartz streaks |
| 200 | 210 | 10 | 10 | 100 | Diabase with dark green aphanitic bands and narrow quartz stringers |
| 210 | 216½ | 6½ | 6 | 92 | Diabase with minor quartz stringers |
| 126½ | 236 | 19½ | 19 | 97 | Coarse grained grey diabase |
| 236 | 245 | 9 | 9 | 100 | Coarse grained grey diabase with dark bands and quartz stringers |
| 245 | 255 | 10 | 9 | 90 | Coarse grained grey diabase |
| 255 | 260 | 5 | 4 | 80 | Diabase with dark bands and quartz stringers |
| 260 | 288 | 28 | 25 | 89 | Grey brown diabase |
| 288 | 370 | 82 | 73½ | 90 | Diabase with quartz bands and dark aphanitic bands |
| 370 | 380 | 10 | 9 | 90 | Grey, unoxidized diabase |
| 380 | 428 | 48 | 23 | 48 | Diabase with quartz bands and dark aphanitic bands |
| 428 | 440 | 12 | 11 | 92 | Grey coarse grained diabase |
| 440 | 450 | 10 | 5 | 50 | Grey coarse grained diabase with black bands |
| 450 | 520 | 70 | 24 | 34 | Grey coarse grained diabase with black bands and quartz |
| 520 | 595½ | 75½ | 48 | 64 | Fine grained diabase, black bands, quartz stringers and recemented breccia with manganese stains |
| 595½ | 601 | 5½ | 5½ | 100 | Coarse grained diabase with disseminated patches of red-brown to black oxides and streaks of manganese. 595' probably hanging wall of vein; Assay: 0.15% pb., 3.83% Mn, 2.07% Zn. |
| 601 | 606 | 5 | 5 | 100 | Mottled red and black diabase breccia with quartz streaks oxidized disseminated ore; assay: o.20% pb.,4.08% Mn. 2.13% zn. |
| 606 | 611 | 5 | 2 | 40 | Coarse grained diabase with disseminated ore; Assay: 0.30% pb., 3.46% Mn., 2.05% Zn. |

| Footage | | | Core Recovery | | Description and Remarks |
|---|---|---|---|---|---|
| From | To | Feet | Feet | % | |
| 611 | 612½ | 1½ | 1 | 67 | Hard, dense, grey diabase, specks of oxidized ore; Assay: 0.25% Pb., 4.82% Mn, 2.05% Zn. |
| 612½ | 614½ | 2 | 2 | 100 | Broken core, white sludge, probable fault in ore. Assay: Trace Pb., 3.09% Mn., 1.67% Zn. |
| 614½ | 620 | 5½ | 5 | 91 | Diabase with quartz stringers and specks of ore; Assay Tr.pb., 2.83% Mn., 2.30% Zn. |
| 620 | 632½ | 12½ | 9½ | 76 | Grey brown diabase and silicified dark green breccia, probably horse in vein. |
| 632½ | 638 | 5½ | 2½ | 45 | Silicified dark green breccia with specular hematite and fine crystals of hellow sphalerite. Horse. |
| 638 | 643 | 5 | 4½ | 90 | Disseminated ore in diabase-gypsum and specular iron ore. Assay: Tr. Pb., 4.13% Mn., 3.65% Zn. Footwall strand of vein |
| 643 | 647½ | 4½ | 1½ | 33 | Black and red diabase with minor quartz Footwall of vein |
| 647½ | 657½ | 10 | 9 | 90 | Grey diabase in footwall of vein |

# DIAMOND DRILL HOLE LOG

Hole: No.2
Location: S 82½ W, 250' from adit portal
Elevation of Collar:
Depth: 657½'
Dip: 64½° South
Bearing: S 31° E
Date Begun: May 10,1943
Date Finished May 26,1943
Vein Description: Apparently disseminated and oxidized, lead, zinc, manganese ore at 596'.

Project: J.L.McIver - Docket No. MD-5289
Location: Irene Mine, Globe, Gila County, Arizona.
Size of Big: AX
Calculated dip of vein: 71½° N.
Calculated width of vein: 22'
Depth at which vein was cut: 255' below Hole No.1 Intersection
Sludge Recovery: None
Core Recovery: 68%

| Footage From | Footage To | Core Recoveries Feet | Core Recoveries Feet | % | Description and Remarks |
|---|---|---|---|---|---|
| 0 | 76 | 76 | 16 | 21 | Broken grey coarse grained diabase. partly oxidized |
| 76 | 190 | 114 | 101¼ | 89 | Coarse grained, hard grey unoxidized diabase |
| 190 | 200 | 10 | 5½ | 55 | Coarse grained diabase with quartz streaks |
| 200 | 210 | 10 | 10 | 100 | Diabase with dark green aphanitic bands and narrow quartz stringers |
| 210 | 216½ | 6½ | 6 | 92 | Diabase with minor quartz stringers |
| 126½ | 236 | 19½ | 19 | 97 | Coarse grained grey diabase |
| 236 | 245 | 9 | 9 | 100 | Coarse grained grey diabase with dark bands and quartz stringers |
| 245 | 255 | 10 | 9 | 90 | Coarse grained grey diabase |
| 255 | 260 | 5 | 4 | 80 | Diabase with dark bands and quartz stringers |
| 260 | 288 | 28 | 25 | 89 | Grey brown diabase |
| 288 | 370 | 82 | 73½ | 90 | Diabase with quartz bands and dark aphanitic bands |
| 370 | 380 | 10 | 9 | 90 | Grey, unoxidized diabase |
| 380 | 428 | 48 | 23 | 48 | Diabase with quartz bands and dark aphanitic bands |
| 428 | 440 | 12 | 11 | 92 | Grey coarse grained diabase |
| 440 | 450 | 10 | 5 | 50 | Grey coarse grained diabase with black bands |
| 450 | 520 | 70 | 24 | 34 | Grey coarse grained diabase with black bands and quartz |
| 520 | 595½ | 75½ | 48 | 64 | Fine grained diabase, black bands, quartz stringers and recemented breccia with manganese stains |
| 595½ | 601 | 5½ | 5½ | 100 | Coarse grained diabase with disseminated patches of red-brown to black oxides and streaks of manganese. 595' probably hanging wall of vein; Assay: 0.15% pb., 3.83% Mn, 2.07% Zn. |
| 601 | 606 | 5 | 5 | 100 | Mottled red and black diabase breccia with quartz streaks oxidized disseminated ore; assay: 0.20% pb.,4.08% Mn. 2.13% zn. |
| 606 | 611 | 5 | 2 | 40 | Coarse grained diabase with disseminated ore; Assay: 0.30% pb., 3.46% Mn., 2.05% Zn. |

| Footage | | | Core Recovery | | Description and Remarks |
|---|---|---|---|---|---|
| From | To | Feet | Feet | % | |
| 611 | 612½ | 1½ | 1 | 67 | Hard, dense, grey diabase, specks of oxidized ore; Assay: 0.25% Pb., 4.82% Mn, 2.05% Zn. |
| 612½ | 614½ | 2 | 2 | 100 | Broken core, white sludge, probable fault in ore. Assay: Trace Pb., 3.09% Mn., 1.67% Zn. |
| 614½ | 620 | 5½ | 5 | 91 | Diabase with quartz stringers and specks of ore; Assay Tr.pb., 2.83% Mn., 2.30% Zn. |
| 620 | 632½ | 12½ | 9½ | 76 | Grey brown diabase and silicified dark green breccia, probably horse in vein. |
| 632½ | 638 | 5½ | 2½ | 45 | Silicified dark green breccia with specular hematite and fine crystals of hellow sphalerite. Horse. |
| 638 | 643 | 5 | 4½ | 90 | Disseminated ore in diabase-gypsum and specular iron ore. Assay: Tr. Pb., 4.13% Mn., 3.65% Zn. Footwall strand of vein |
| 643 | 647½ | 4½ | 1½ | 33 | Black and red diabase with minor quartz Footwall of vein |
| 647½ | 657½ | 10 | 9 | 90 | Grey diabase in footwall of vein |

Return to Martin

# DIAMOND DRILL HOLE LOG

Hole No. 1
Location S 96° W 188' from Adit Portal
Elevation of Collar: Adit Level
Depth: 506 feet
Dip 45° South
Berring S 31° E
Date Begun - April 12, 1943
Date Finished - May 7, 1943

Total Core Recovery 76%

Project: J. L. McIver Docket No. ND5289
Location: Irene Mine, Globe, Gila Co., Ariz.
Size of Bit: AX
Calculated dip of vein 76° North
" width of vein 13½ feet
Depth at which vein was cut: 197' below winze bottom
Sludge Recovery - None

| Footage From | Footage To | Feet | Core Recoveries Feet | % | Description and Remarks |
|---|---|---|---|---|---|
| 0 | 29 | 29 | None | 0 | BX Casing |
| 29 | 47.5 | 18.5 | 13.7 | 74 | AX Casing coarse granular grey diabase, oxidized along joints |
| 47.5 | 68.0 | 20.5 | 17.5 | 85 | No casing " " " " " |
| 68 | 72.5 | 4.5 | 3.1 | 69 | AX 72.5' small oxidized fault gouge in diabase |
| 72.5 | 90.5 | 18.0 | 16.4 | 91 | Coarse grey brown diabase |
| 90.5 | 96.0 | 5.5 | 5.5 | 100 | At 94.5' small tight fault gouge |
| 96.0 | 103.5 | 7.5 | 7.3 | 95 | Un-oxidized grey diabase |
| 103.5 | 109 | 5.5 | 5.0 | 91 | Altered diabase with minor brecciation and some lime |
| 109 | 118 | 9.0 | 8.9 | 98 | Partly oxidized diabase |
| 118 | 128 | 10.0 | 9.7 | 97 | Diabase only oxidized at joints |
| 128 | 134 | 6.0 | 6.0 | 100 | Small fault in diabase |
| 134 | 144 | 10.0 | 6.4 | 64 | Grey unaltered diabase |
| 144 | 173 | 29.0 | 28.1 | 97 | Grey brown diabase |
| 173 | 211 | 38.0 | 36.0 | 95 | Grey green diabase |
| 211 | 250 | 39.0 | 38.5 | 99 | Brownish grey diabase |
| 250 | 269 | 19.0 | 10.5 | 55 | Mixed grey and brown diabase |
| 269 | 275 | 6.0 | 4.6 | 77 | Brown diabase |
| 275 | 281 | 6.0 | 6.0 | 100 | Brown and grey diabase |
| 281 | 291 | 10.0 | 7.5 | 75 | Brown diabase |
| 291 | 295 | 4.0 | 3.3 | 82 | Brown diabase fractured and cemented with quartz, also dark green diabase breccia fragments of diabase |

325 Heard Building
Phoenix, Arizona

October 12, 1943

In re: J. L. McIver
Docket No. ND 5289

TULLY, ASST CHIEF, MINING SECTION, RFC, WASHINGTON, D. C.

On October 7th and 8th, I visited the above captioned docket in order to ascertain the progress being made. The American Lead and Zinc Company were drilling two diamond drill holes under contract to the Sullivan Machinery Company.

Hole No. 4, which is located 290' S, 74 deg. W from Hole No. 3 (the last hole drilled with RFC funds and shown on my last map sent to Washington) was down 986' and had not as yet encountered the vein, although the cores indicated wall rock alteration. This Hole No. 4 was started at an elevation of 4088 ft; was drilled in a direction S 24° East, and had a dip of 55°. According to my calculations, the vein should have been encountered at approximately 935', so it is possible that either the vein has changed its strike or dip or it is possible that no mineralization will be found in the vein at this point.

The American Lead and Zinc Company's resident geologist, Mr. Ernest Ohle, informed me that he intended to drill the hole to a depth of at least 1050 ft. unless the vein was encountered sooner.

Hole No. 5, which is located 305' North 44° East from Hole No. 3, was down 340'. This hole has a strike of S-24° E and a dip of 50½°, while the elevation at the collar of the hole is approximately 4129 ft. The vein should be encountered at 900'.

Both drill rigs are operating three shifts per day, seven days per week and they are drilling the first 800' of each hole with a blind bit. So far, they have been very successful in not requiring cement in either of the holes. We will keep you informed as to the progress being made and as to the results obtained.

WM. B. MAITLAND
Supervising Engineer

WBM-b

325 Heard Building
Phoenix, Arizona
September 18,1943

Mr. Ernest Ohle,
c/o Mr. Eugene Whinnen,
Dominion Hotel,
Globe, Arizona.

Dear Mr. Ohle:-

Mr. George Roddewig contacted me here in the office a few days ago in order to obtain the logs of the three diamond drill holes previously drilled at the Irene Mine. I gave him our office copy on the log of Hole No.1 and Hole No.3, and am sending you herewith for your information the log of Hole No.2. This is an extra copy which you may keep, but on the other two logs, I would like to be able to pick them up the next time I visit Globe.

I expect to be in Globe perhaps within the next two weeks, and will contact you then, but in the meantime, if we can be of any assistance to you, please call on us as I will be glad to co-operate with you in any way possible.

Sincerely yours,

WM. B. MAITLAND
Supervising Engineer

WBM:mr

Enclosure
1 Drill Log.

325 Heard Building
Phoenix, Arizona
September 18,1943

TULLY - Ass't. Chief - Mining Section - Washington, D. C.

Re:- J. L. McIver, Docket No. ND-5289.

On September 10th at the request of the applicant and also the American Lead & Zinc Company, I visited the above captioned mine in order to locate the position for additional diamond drill holes at this property. As you have been informed by previous correspondence, the American Lead and Zinc Company have taken over the property and intend to drill six 1000-foot diamond drill holes to intersect the vein at points some 100 to 150 feet deeper than Hole No.3 drilled by this Corporation. The first two holes which are now being drilled will be drilled on both sides of our Hole No. 3, and 300 feet away in each direction. The other four holes to be drilled later, will be spaced at 300-feet intervals along the strike of the vein in order to explore the lateral extension of the ore found in the No. 3 Hole. I believe that it is also their intention to drill additional holes at a greater depth if these first six holes are successful in finding ore.

In addition the American Lead & Zinc Company have two men working at the property, and intend to send a resident geologist to keep track of the cores and sludges from this drilling operation. They have also built additional roads around the property and repairing damage done to the lower tunnel by a recent rain storm. Evidently they mean business and intend to thoroughly prospect this property, and their geologist, Mr. George Roddewig, is quite enthusiastic about the possibilities of making a mine of this property. Personally, I am quite pleased that a competent organization such as the American Lead and Zinc Company have taken over the development of the property as I feel that they have the equipment and the personnel capable of making a success of the project which would have been perhaps too big a job for the applicant.

The Sullivan Machinery Company is doing the drilling on this property under contract, and they anticipate the completion of the six holes by December 15th as they are using two drill crews working six days per week and three shifts per day.

I will keep in touch with the operation whenever convenient, and inform you as to the progress being made. Since the applicant has made a contract with the American Lead and Zinc Company on this property, I have not been informed as to the position and equity of the Reconstruction Finance Corporation under this new contract, but trust that the legal aspects have been discussed by Mr. Howard Young with your office in Washington.

WM. B. MAITLAND
Supervising Engineer

325 Heard Building
Phoenix, Arizona
September 18,1943

TULLY - Ass't. Chief - Mining Section - Washington, D. C.

Re:- J. L. McIver, Docket No. ND-5289.

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I will keep in touch with the operation whenever convenient, and inform you as to the progress being made. Since the applicant has made a contract with the American Lead and Zinc Company on this Property, I have not been informed as to the position and equity of the Reconstruction Finance Corporation under this new contract, but trust that the legal aspects have been discussed by Mr. Howard Young with your office in Washington.

WM. B. MAITLAND
Supervising Engineer

325 Heard Building
Phoenix, Arizona

July 26, 1943

Tully - Ass't Chief - Mining Section - Washington

Re: J. L. McIver - Docket No. ND-5289

Enclosed please find assay on the Drill Core sample taken from the Irene Mine.

This shows the relationship between oxidized zinc and the sulphide zinc contained in the vein at this point. It is indeed remarkable that the oxidized zinc ran so high as visual examination of the core indicated that the vein contained chiefly sphalerite in the form of Rosin-jack. However, this sphalerite must be in large part oxidized along minute seams and cracks to account for the large oxide content.

I am sending this information to you in order that your files may be complete on this docket. The applicant is now negotiating with one of the large lead-zinc companies of the U.S. and it appears likely that this Company will request to take over the property and operate it. I believe they plan to do extensive diamond drilling at first and then if the showings warrant, to sink a shaft and explore the vein at depth.

Meanwhile, the applicant is complying with the work requirements of his lease so that his equity and the equity of the Reconstruction Finance Corporation is being protected during the period of negotiations.

WM. B. MAITLAND
Supervising Engineer

WBM:MJ
Enclosure
Assay Certificate

RECONSTRUCTION FINANCE CORPORATION

MINING SECTION

PROGRESS REPORT

Docket No. ND-5289 . . . J. L. McIver
Date of Visit . . . June 18-19, 1943
Date of Report . . . .July 6, 1943

On June 18 and 19, 1943, I visited the above captioned docket and at that time, the diamond drilling program had been completed. In order to clarify the status of this loan, let us review the progress to date:

The "Irene" Mine (J. L. McIver, Applicant) is located between the Inspiration Copper Mine at Miami and the Old Dominion Copper Mine at Globe, all in Gila County, Arizona. The vein on this project shows a strong outcrop traceable for over a mile along the surface; the footwall of the vein is quartzite and the hanging wall is diabase. All of the workings are in oxidized ore containing lead and zinc carbonates and manganese oxide.

The mine was developed by means of two adits and in the lower of these tunnels is found a 116' winze, and a stope between the tunnel and the surface. This stope produced over 1,500 tons of lead-zinc ore averaging 13.7 oz. Silver, 15.83% Lead and 11.79% Zinc. In both these tunnels 33 samples were taken which averaged 3.31% Lead, 8.28% Zinc and 18.65% Manganese across 41". The average width of the mineralized breccia zone is more than 12', although the high grade section averaged 41". However, since the surface ore is composed of oxidized lead and zinc, no market was available.

In September 1942, a $5,000.00 Loan was granted this project to make the lower tunnel and winze accessible. It was hoped that the bottom of the winze would reach the sulphide zone but such was not the case. Then, in February, 1943, a $25,000.00 Development Loan was granted, $5,000.00 to repay the first loan, $10,000.00 with which to drill three diamond drill holes to locate the depth and value of the sulphide ore and the balance of the loan to be used to sink the winze deeper if good sulphide ore was found.

As shown by the accompanying map these three holes were drilled, the first two holes encountered oxidized ore while the third hole intersected a 12' vein of sphalerite that assayed 19.73% zinc. This hole intersected the vein at a depth of 681' below the bottom of the winze, so it is assumed that the top of the sulphide zone is some 580' down the vein dip from the bottom of the winze.

Following is a log of the drill core No. 3 in the vein:

# Progress Report

Applicant J. L. McIver
Docket No ND 5289

On June 18, 19, 1943 I visited the above captioned docket and, at that time the diamond drilling program had been completed. In order to clarify the status of this loan let us review the progress to date.

The Creme Mine (J. L. McIver, Applicant) is located between the Inspiration Copper Mine at Miami and the Old Dominion Copper Mine at Globe, all in Gila County, Arizona. The vein on this project shows a strong outcrop traceable for over a mile along the surface; the footwall of the vein is quartzite and the hanging wall is diabase. All of the workings are in oxidized ore containing lead and zinc carbonates and manganese oxide

The mine was developed by means of two adits and in the lower of these tunnels is found a 116 foot winze, and a stope between the tunnel and the surface. This stope produced over 1500 tons of lead-zinc ore averaging 13.7 oz Silver, 15.83% lead + 11.79% zinc. In both these tunnels 33 samples were taken which averaged 3.31 % lead 8.28 % zinc and 18.65% manganese across 41 inches. The average width of the mineralized breccia zone

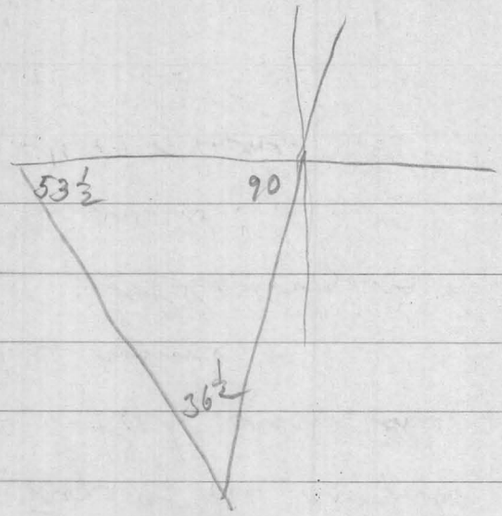
is more than 12 feet altho the high grade section average 41 inches. However since the surface ore is composed of ~~lead~~ oxidized lead and zinc no market was available.

In Sept. 1942 a $5000 loan was granted this project to make the lower tunnel and winze accessible. It was ~~also~~ hoped that the bottom of the winze would reach the sulfide zone but such was not the case. Then in Feb 1943 a $25,000 development loan was granted, $5000 to repay the first loan, $10,000 with which to drill three diamond drill holes to locate the ~~position~~ depth and value of the sulfide ore, and the balance of the loan to be used to sink the winze deeper if good sulfide ore was found.

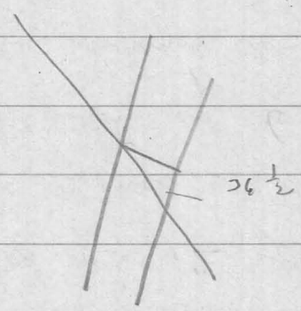
As shown by the accompanying map these three holes were drilled, the first two holes encountered oxidized ore while the third hole intersected a 12 ft vein of sphalerite that assayed 19.73 % zinc. This hole intersected the vein at a depth of 681 feet below the bottom of the winze so it is assumed that the top of the sulfide zone lies ~~somewhere~~ some 580 feet down the vein dip from the bottom of the winze.

(2) The following is a log of the drill core No 3 in the vein:

200
275
206
681




$$\begin{array}{r} 180.0 \\ 143.5 \\ \hline 36.5 \end{array}$$




$\sin 36\frac{1}{2} = \frac{\text{width}}{\text{core}}$

$\text{width} = \text{core} \times .60$

upon which to base such an expensive project. Furthermore it must be remembered that in order to be self liquidating this project will require a mill hence it will either remain just as it is at present - a prospect - or become one of the large zinc mines of the country depending upon whether further exploration work is done and whether this work discloses large bodies of zinc at depth. Since the outcrop is much the same for several thousand feet there is no reason to believe that the vein where cut is the best ore that will be found.

It is my opinion that if further work is desirable on this project due to the critical shortage of zinc then this work should be in the form of three or four more holes along the vein. Also there are apparently three methods by which this additional drilling could be done, namely:

1. Use the balance of the funds ($10,000) remaining in this loan to drill as many holes as possible in order to determine the ~~size~~ value and extent of the ore already cut.

(4)

2. Interest the Bureau of Mines in doing a complete drilling program on this project

3. Allow one of the large private mining companies to thoroughly explore and develop the mine.

Regardless of the method employed I believe that the results obtained in

The results obtained in the No 3 Drill Hole indicate, in my opinion, the presence of a large high grade zinc deposit. Therefor it is my recommendation that this project be thoroughly drilled. I would recommend that at the same depth as Hole No 3, one hole be drilled 250 feet to the east, another hole 250 feet to the west of Hole No 3 and at a greater depth of 250 feet a third hole be drilled directly below the No 3 Drill Hole. Also it would appear advisable if favorable results are obtained from this drilling to drill a fourth hole at the same depth as Hole No 3 but some 900 feet east inorder to explore the vein under the Upper Tunnel as shown on the map. ~~This~~

This program would require over 4000 feet of drilling and would cost about $16,000 so since we do not have sufficient funds remaining under this loan to complete the work I am unable to recommend that this Corporation do this work altho I feel that the mine justifies that expenditure. In addition after the drilling program has been brought to a successful conclusion and a large tonnage of zinc ore is disposed it will then be necessary to sink a deep shaft and install a mill before the loan could be liquidated. Since the applicant does not possess either the equipment or the technically trained organization for such a large program I am not in the position to recommend that the R.F.C. should finance the preliminary drilling for such a project altho remaining loan funds

would allow for the drilling of two more holes which might give enough information to determine the best policy to be follow from that point on.

Wm B Mantlow
S. E

# Diamond Drill Hole Log

Hole: No 3
Location: N 29° W 365' from adit portal
Elevation of Hole Collar: 83' below adit level
Depth: 900 ft
Dip: 53½°
Bearing: S 24 E
Date Begun: May 29, 1943
Date Finished: June 22, 1943
Vein Description: Sphalerite ore vein for 20 feet from

Project: J.L. Mellner ND 5289
Location: Chene Mine, Idaho
Shoshone Co. Ariz
Size of Bit: AX
Calculated Dip of Vein: 72°
Calculated Width of Vein: 12'
Depth at which Vein was cut: 859'
Sludge Recovery: None
Core Recovery: 85 %

| Footage From | To | Feet | Core Feet | Recovery | Description |
|---|---|---|---|---|---|
| 0 | 25 | 25 | 10 | 40 | Coarse grey diabase oxidized |
| 25 | 32½ | 7½ | 5½ | 73 | oxidized and recemented crushed diabase |
| 32½ | 439 | 406½ | 377 | 93 | Coarse grained grey diabase |
| 439 | 459 | 20 | 15 | 75 | Porphyritic diabase and recemented breccia |
| 459 | 469 | 10 | 9½ | 95 | ~~Fine~~ Fine grained grey diabase |
| 469 | 500 | 31 | 27½ | 89 | Coarse grained grey diabase |
| | | | | | at 500' hole made water to 10' of surface |
| 500 | 560 | 60 | 47½ | 79 | medium grained grey diabase |
| 560 | 631 | 71 | 48 | 68 | Crushed and faulted, recemented diabase |
| 631 | 800 | 169 | 157 | 93 | Coarse grey diabase |
| 800 | 816 | 16 | 12½ | 78 | Silicified diabase |
| 816 | 849 | 33 | 25½ | 77 | Dark diabase with silicified breccia |
| 849 | 859 | 10 | 4½ | 45 | |
| 859 | 860 | 1 | 1/2 | 50 | |
| 860 | 861 | 1 | 1/2 | 50 | |
| 861 | 862 | 1 | 1/2 | 100 | |
| 862 | 864 | 2 | 2 | 100 | |
| 864 | 869 | 5 | 0 | 0 | |
| 869 | 875 | 6 | 5 | 83 | |
| 875 | 879 | 4 | 3 | 75 | |
| 879 | 883 | 4 | 3 | 75 | |

| Sample No. | Width of Vein | Assay Value | Description |
|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 883 | 890 | 7 | 4 | 57 | Coarse & fine grained diabase |
| 890 | 900 | 10 | $5\frac{1}{2}$ | 55 | Fine grained diabase. |

May 5. 1943

Mr. W. B. Maitland
325 Heard Bldg.
Phoenix.

Dear Bill:

Don't know whether we're going to get any results or not.

Lost Water 441'-6"

Drilled to 442-9

Rods dropped in hole 442-9 to 444-3 Cavity

Drilled Dry 444-3 to 447-3. and brought up 5" of Core with considerable yellow, soft altered zinc. Below that 5" the Core was the original Country rock with lots of Silicification. Still got no water. Grouted last Night. will Drill this morning.

My wife is supposed to go out with Mrs Lane tonight. Will you call her up + tell I suggest she get that girl over to Care for the Children. I may not make it back tonight.

BM

S 78 W
$-5^{\circ}$
60'

RECONSTRUCTION FINANCE CORPORATION

MINING DIVISION

MEMORANDUM REPORT OF SUPERVISING ENGINEER

Docket No. ND-5289 . . . .J. L. Mc Iver
Phoenix, Ariz.
Dates of Inspection Apr.24, May 6,7, 1943
Date of Report . . . . . May 14, 1943

In order to inspect the progress being made on the diamond drilling program, I visited this project on April 24 and May 6 and 7, 1943.

The project was granted a $20,000.00 loan with the provision that three diamond drill holes were first to be drilled and only if these holes indicated the presence of commercial sulphide ore would the balance of the funds be spent on development work. Therefore, on April 12, the first hole was started and after considerable delay, due to break-downs of the drill rig, this hole was completed to a depth of 506' on May 7.

Attached to this report is a copy of the drilling contract and of the log of the hole.

From a study of the drill log, it is apparent that the hanging wall of the vein was encountered at 432-1/2' and the foot-wall was reached at 446'. Since the vein was oxidized at this depth, the core recovery was practically nil, but a few small pieces of the low grade, and therefore harder parts of the vein, were receovered in the core barrel. These pieces assayed 0.41% lead, 6.60% zinc and 4.72% manganese the assayer reported that a small trace of copper was also present.

On May 10, a new hole was started in order to intersect the vein at 250' below the first hole and 60' to the west.

The first hole intersected the vein at a point 200' below the bottom of the winze, thus indicating that the water table on top of the sulphide zone is at least 200' below the deepest workings. The purpose of this drilling campaign is to determine the depth and value of the sulphide section of the vein as oxidized lead and zinc as found in the old workings, is not marketable.

WM. B. MAITLAND
Supervising Engineer

Enclosures
1c - Drilling contract
Log of Drilling

Memorandum of Visit
of Supervising Engineer

Applicant J. L. McCluer
Docket ND 5289

I in order to inspect the progress being made on the diamond drilling program I visited this project on April 24 and May 6, 7, 1943

This project was granted a $20,000 loan with the provision that three diamond drill holes were first to be drilled and ~~if~~ only if these holes indicated the presence of commercial sulfide ore would the balance of the funds be spent on development work. Therefore on April 12th the first hole was started and after considerable delay due to break downs of the drilling rig this hole was completed to a depth of 506 feet on May 7th.

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From a study of the drill log it is apparent that the hanging wall of the vein was encountered at 432½ feet and the foot wall was reached at 446 feet. Since the vein was oxidized at this depth the core recovery was practically nil but a few small pieces of the ~~vein~~ low grade and therefore harder parts of the vein were recovered in the core barrel. These pieces assayed 0.41% lead, 6.60% zinc, and 4.72% manganese.

the assayer reported that a small trace of copper was also present.

On May 10th a new hole was ~~spotted~~ started in order to intersect the vein at 250 feet below the first hole and 60 feet to the west.

The first hole intersected the vein at a point 200 feet below the bottom of the winze thus indicating that the water table or top of the sulfide zone is at least 200 feet below the deepest workings. The purpose of this drilling campaign is to determine the depth and value of the sulfide section of the vein as oxidized lead and zinc as found in the old workings is not marketable.

Wm B Mulford
Supt Eng

Letter of transmittal

J. L. McIver
ND 5289

Memorandum of Visit

On May 21 to 24, 1943 I visited the above captioned docket under to inspect the progress being made on the Diamond drilling of the second hole. Attached hereunto is a log of the hole. Oxidized ore was found across a wide disseminated zone so it was decided to drill a deeper hole to attempt to cut the sulfide zone at a deeper horizon. This third hole will be approximately 850 feet long and will intersect the vein at a point 800 feet below the adit level.

Of the original $20,000 loan granted this project there remains a balance of $17,818.17. Unless very rich ore is encountered in this third hole it is my opinion that future ~~deep~~ development at depth by means of an 800 foot shaft ~~will~~ would not be justified

Wm B M.

Covering Letter

Log

# Diamond Drill Hole Log

Hole No 2

Location S 82½ W, 250 feet from Adit Portal

Elevation of Collar: Adit Level

Depth 657½ feet

446 Dip 64½° South

Bearing S 31° E

Date Begun May 10, 1943

Date Finished May 26, 1943

Vein description:- apparently desseminated + oxidized, lead, zinc manganese ore at 596 feet

Project J. L. McCher NP 5204

Location: Chrome Mine

Globe, Gila Co, Ariz

Size of Bit: a X

Calculated dip of vein 74½° N

Calculated Width of vein 22 feet

Depth at which vein was cut: 255 ft below Hole No 1 intersection

Sludge Recovery: None

Core Recovery: 68%

| Footage From | Footage To | Feet | Core Recovery Feet | Core Recovery % | Description + Remarks |
|---|---|---|---|---|---|
| 0 | 76 | 76 | 16 | 21 | Broken grey coarse grained diabase, partly oxidized |
| 76 | 190 | 114 | 101½ | 89 | Coarse grained, hard grey unoxidized diabase |
| 190 | 200 | 10 | 5½ | 55 | Coarse grained diabase with quartz streaks |
| 200 | 210 | 10 | 10 | 100 | Diabase with dark green aphanitic bands + narrow quartz stringers |
| 210 | 216½ | 6½ | 6 | 92 | Diabase with minor quartz stringers |
| 216½ | 236 | 19½ | 19 | 97 | Coarse grained grey diabase |
| 236 | 245 | 9 | 9 | 100 | " " " " dark bands + qtz stringers |
| 245 | 255 | 10 | 9 | 90 | Coarse grained grey diabase |
| 255 | 260 | 5 | 4 | 80 | Diabase with dark bands + quartz stringers |
| 260 | 288 | 28 | 25 | 89 | Grey brown diabase |
| 288 | 370 | 82 | 73½ | 90 | Diabase with quartz bands and dark aphanitic bands |
| 370 | 380 | 10 | 9 | 90 | Grey unoxidized diabase |
| 380 | 428 | 48 | 23 | 48 | Diabase with quartz bands + dark aphanitic bands |
| 428 | 440 | 12 | 11 | 92 | Grey coarse grained diabase |
| 440 | 450 | 10 | 5 | 50 | " " " " with black bands |
| 450 | 520 | 70 | 24 | 34 | " " " " " " " + quartz |

| From | To | Feet | Feet | % | |
|---|---|---|---|---|---|
| 520 | 595½ | 75½ | 48 | 64 | Fine grained diabase, black bands, quartz stringers and recemented breccia with Manganese stains. |
| 595½ | 601 | 5½ | 5½ | 100 | Coarse grained diabase with disseminated patches of red-brown to black oxides and streaks of manganese. 595' probably hanging wall of vein<br>Assay 0.15% Pb, 3.83% Mn, 2.07% Zn |
| 601 | 606 | 5 | 5 | 100 | Mottled red + black diabase breccia with quartz streaks<br>Oxidized disseminated ore.<br>Assay 0.20% Pb, 4.08% Mn, 2.13% Zn |
| 606 | 611 | 5 | 2 | 40 | Coarse grained diabase with disseminated ore<br>Assay 0.30% Pb, 3.46% Mn, 2.05% Zn |
| 611 | 612½ | 1½ | 1 | 67 | Hard, dense, grey diabase specks of oxidized ore<br>Assay 0.25% Pb, 4.82% Mn, 2.05% Zn |
| 612½ | 614½ | 2 | 2 | 100 | Broken core, white sludge, probable fault in ore.<br>Assay Trace Pb, 3.09% Mn, 1.67% Zn |
| 614½ | 620 | 5½ | 5 | 91 | Diabase with quartz stringers and specks of ore<br>Assay Tr. Pb, 2.83% Mn, 2.30% Zn |
| 620 | 632½ | 12½ | 9½ | 76 | Grey brown diabase + silicified dark green breccia<br>Probably Horse in vein |
| 632½ | 638 | 5½ | 2½ | 45 | Silicified dark green breccia with specular hematite + fine crystals of yellow sphalerite. Horse |
| 638 | 643 | 5 | 4½ | 90 | Disseminated ore in diabase - gypsum + specular iron ore.<br>Assay Tr Pb, 4.13% Mn, 3.65% Zn Footwall stand of vein |
| 643 | 647½ | 4½ | 1½ | 33 | Black + red diabase with minor quartz<br>Footwall of vein |
| 647½ | 657½ | 10 | 9 | 90 | Grey diabase in footwall of vein |

# CORE DRILLING AGREEMENT

1. THIS AGREEMENT, Made and entered into this Sixth day of April, 1943, by and between J. L. McIVER, of 506 Security Building, Phoenix, Arizona, party of the first part and the SULLIVAN MACHINERY COMPANY of Michigan City, party of the second part,

WITNESSETH:

2. In consideration of certain payments hereby agreed to be made by the said first party to the said second party, the said second party hereby agrees to drill, sink or prospect with a diamond core drill from Surface in or near Globe, Arizona, at sites to be selected by the said first party, subject to the conditions hereinafter mentioned. It is further agreed by the said first party that the depth of none of the herein specified drill holes shall exceed a depth of 1,000 feet and the total amound as guaranteed, must be drilled in not more than 3 holes.

3. The said second party agrees to use for the above described work, One Diamond Core Drill, and men skilled in operating same; to operate the drill, both day and night whenever practicable and to furnish only to such person as the said first party may designate by written order, all core taken out of said prospect holes. Size of core to be approximately 1-1/8" (AX) inches in diameter. The said first party shall provide suitable boxes if it desires to save the core and if it also desires may have a man at the drill at all times to remove and take charge of said core. No information whatever regarding the records and results of this drilling is to be given any other party, without the written consent of the said first party.

4. The said first party hereby agrees to pay to said second party the following prices for the herein described drilling:

For all drilling from surface to
a depth of 500' @ . . . . . $3.00 per Ft.

From 500' to 1,000' @ . . . . . 3.25 per Ft.

5. In accordance with this agreement, the said first party hereby guarantees the said second party a minimum total of 1,500' of drilling at the price as herein provided in Clause Four.

The said second party shall have the option of withdrawing from this contract after a total of 2,000' have been drilled under the terms of this agreement.

In the event the said first party should stop the drilling before the guaranteed footage has been drilled, it agrees to pay the said second party half the price per foot for the undrilled balance in addition to payment at full price for the footage actually drilled.

6. The party of the first part hereby agrees to furnish the said second party at each of the hereindescribed prospect holes, free of charge, an ample supply of water for the proper prosecution of the herein-described work.

7. Crossed out.

8. Should the party of the first part fail to perform its part of the contract of furnishing water, or locate sites, as herein agreed, regardless of cause, or should the party of the first part issue instructions that delay operations for any reason or in any other way interrupt the continuous operation of the said diamond drill, it shall pay the second party the labor expense of drilling crew while idle through such delay, at the rate of $15.00 per shift for each shift or part thereof that the operation of the said drill is delayed.

9. It is hereby agreed that should a cavity or loose and caving material be encountered at a depth which should prevent successful drilling, the party of the second part does not guarantee to drill or sink said prospect holes to any specified depth, but will drill or sink as deep as is practicable under the conditions and the party of the first part shall pay for every foot actually sunk or drilled.

It is further agreed by both parties hereto that should cavities, soft, broken or caving material be encountered so that the drill hole will not remain open after being bored and it becomes necessary or advisable to resort to cementing or reaming and casing in order toprotect same until the depth desired by said first party is reached, then the said first party agrees to pay the actual cost of doing such reaming, casing and cementing in addition to the price per foot paid for the drilling.

10. - Out

11. Any failure on the part of the first party to have the money deposited as specified above, shall, at the option of the second party, consitute a cancellation of this contract and the said second party shall, in case of cancellation, be paid in full in accordance with the terms of this agreement for the work actually done if it exceeds the amount guaranteed otherwise, the guaranteed amount shall be paid for.

12. The payments for the herein-described work are to be made on the first of each month for all invoices rendered for work done during the previous month. Payments to be in United States Currency.

13. The party of the second part hereby agrees to ship the outfit for the herein-described work within Ten days from the date of notification of acceptance of this agreement, but the said second party shall not be responsible for delays caused by strikes, railroad accidents or blockades.

This proposition is for immediate acceptance, but although accepted, does not constitute a contract until approved by an officer of the Sullivan Machinery Company at its office in Michigan City, Indiana, U.S.A. and is subject to change or withdrawal until so approved.

It is expressly agreed that there are no promises, agreements or understandings outside of this contract and that no agent or salesman has any authority to obligate the Sullivan Machinery Company, by any terms, stipulations or conditions not herein expressed. This contract may be altered only by written consent of both the parties hereto.

SULLIVAN MACHINERY COMPANY

By W. J. Pilanski (Signed)

IN WITNESS WHEREOF, The parties hereto have set their hands and sales.

(For the Party of the First Party)

| | |
|---|---|
| Accepted by: | Approved by Sullivan Machinery Co. |
| J. L. McIver | By _____ |
| by: Fred J. Elliott | Title _____ |
| Title: Authorized Agent | Date _____ |

ND-5289

| Drill Core From | To | Length | Calculated Width of Vein | Assay Value | Description |
|---|---|---|---|---|---|
| 849 | 859 | (10')* | (6.0')* | (3.70% Zinc)* | Diabase and recemented quartz breccia. Hanging wall at 859'. |
| 859 | 860 | 1 | 0.6 | 15.87% " | Recemented quartz breccia |
| 860 | 861 | 1 | 0.6 | 26.92% " | Mixed breccia and sphalerite |
| 861 | 862 | 1 | 0.6 | 47.80% " | Nearly solid sphalerite |
| 862 | 864 | 2 | 1.2 | 28.20% " | Mixed breccia and sphalerite |
| 864 | 869 | 5 | 3.0 | No Core (Included as 0 in average) | Fault horse of diabase No core recovery |
| 869 | 875 | 6 | 3.6 | 31.07% Zinc | Brecciated quartz and sphalerite |
| 875 | 879 | 4 | 2.4 | 15.30% " | Ore contains specular hematite and lead carbonate. Footwall at 879. |
| 879 | 883 | (4)* | (2.4)* | (2.05% ")* | Coarse grained oxidized diabase footwall. |
| 849 | 883 | 20' | 12' | 19.73% Zinc | Sulphide ore |

* Omitted in above averages

The true width of the vein is assumed to be from 859 to 879, a core length of 20' or a true width of 12'. This section averages 19.73% Zinc which is assumed to be the true value of the vein. Attached to this Report is the complete log of this hole (No. 3). The logs of the first two holes have previously been reported.

Since only one hole has encountered the sulphide zone, we can assume that this hole either contacted the vein at its best point, or the core represents the average value of the whole vein, or that this is the worst section of the ore shoot. Since it will be necessary to either sink the present winze an additional 681' or sink a new vertical shaft a distance of 760', I do not believe that one core gives us enough information upon which to base such an expensive project. Furthermore, it must be remembered that in order to be self-liquidating, this project will require a mill, hence it will either remain just as it is at present - a prospect - or become one of the large zinc mines of the country, depending upon whether further exploration work is done and whether this work discloses large bodies of zinc at depth. Since the outcrop is much the same for several thousand feet, there is no reason to believe that the vein where cut is the best ore that will be found.

The results obtained in the No. 3 Drill Hole indicate in my opinion, the presence of a large high grade zinc deposit. Therefore, it is my recommendation that this project be thoroughly drilled. I would recommend that at the same depth as Hole No. 3, one hole be drilled

250' to the East, another hole 250' to the West of Hole No. 3 and at a greater depth of 250', a third hole be drilled directly below the No. 3 Drill Hole. Also, it would appear advisable if favorable results are obtained from this drilling to drill a fourth hole at the same depth as Hole No. 3, but some 900' East, in order to explore the vein under the upper tunnel as shown on the map.

This program would require over 4,000' of drilling and would cost about $16,000.00, so since we do not have sufficient funds remaining under this loan to complete the work, I am unable to recommend that this Corporation do this work, although I feel that the mine justifies the expenditure. In addition, after the drilling program has been brought to a successful conclusion and a large tonnage of zinc ore is exposed, it will then be necessary to sink a deep shaft and install a mill before the loan could be liquidated. Since the applicant does not possess either the equipment or the technically trained organization for such a large program, I am not in the position to recommend that the Reconstruction Finance Corporation should finance the preliminary drilling for such a project, although remaining loan funds would allow for the drilling of two more holes which might give enough information to determine the best policy to be followed from that point on.

WM. B. MAITLAND
Supervising Engineer

# DIAMOND DRILL HOLE LOG

| | | | |
|---|---|---|---|
| Hole: | No. 3 | Project: | J. L. McIver ND 5289 |
| Location: | N 29° W 365' from adit portal | Location: | Irene Mine, Globe, Gila County, Arizona |
| Elevation of Hole Collar: | 83' below adit level | Size of Bit: | AX |
| Depth: | 900' | Calculated Dip of Vein: | 72° |
| Dip: | 53½° | Calculated width of Vein: | 12' |
| Bearing: | S 24 E | Depth at which Vein was cut: | 859' |
| Date Begun: | May 29, 1943 | Sludge Recovery: | None |
| Date Finished: | June 22, 1943 | Core Recovery: | 85% |
| Vein Description: | Sphalerite ore vein for 20 feet from | | |

| Footage From | Footage To | Core Feet | Core Feet | % Recovery | Description |
|---|---|---|---|---|---|
| 0 | 25 | 25 | 10 | 40 | Coarse grey diabase oxidized |
| 25 | 32½ | 7½ | 5½ | 73 | Oxidized and recemented crushed diabase |
| 32½ | 439 | 406½ | 377 | 93 | Coarse grained grey diabase |
| 439 | 459 | 20 | 15 | 75 | Porphyritic diabase and recemented breccia |
| 459 | 469 | 10 | 9½ | 95 | Fine grained grey diabase |
| 469 | 500 | 31 | 27½ | 89 | Coarse grained diabase at 500' hole |
| 500 | 560 | 60 | 47½ | 79 | At 500' hole made water to 10' of surface. Medium grained grey diabase |
| 560 | 631 | 71 | 48 | 68 | Crushed and faulted, recemented diabase |
| 631 | 800 | 169 | 157 | 93 | Coarse grey diabase |
| 800 | 816 | 16 | 12½ | 78 | Silicified diabase |
| 816 | 849 | 33 | 25½ | 77 | Dark diabase with silicified breccia |
| ~~849~~ | ~~859~~ | ~~10~~ | ~~4½~~ | ~~45~~ | |
| 849 | 859 | Length (10 ft) | * Calculated width of vein (6.0 ft)* | Assay Value (3.70% zinc)* | Diabase and recemented quartz breccia Hanging wall at 859' |
| 859 | 860 | 1 | 0.6 | 15.87% zn | Recemented quartz breccia |
| 860 | 861 | 1 | 0.6 | 26.92% " | Mixed breccia & sphalerite |
| 861 | 862 | 1 | 0.6 | 47.80% zn | Nearly solid sphalerite |
| 862 | 864 | 2 | 1.2 | 28.20% zn | Mixed breccia and sphalerite |
| 864 | 869 | 5 | 3.0 | No core Included as 0 in average) | Fault - horse of diabase No core recovery |
| 869 | 875 | 6 | 3.6 | 31.07% zn | Brecciated quartz & sphalerite |
| 875 | 879 | 4 | 2.4 | 15.30% zn | Ore contains specular hematite & lead carbonate. Footwall at 879 |

| Footage | Core Feet | Core Feet | Calculated width of Vein | Assay Value | Description |
|---|---|---|---|---|---|
| From | To | | | | |
| 879 | 883 | 4 | 2.4 | (2.05% zn) | Coarse grained oxidized diabase footwall |
| 883 | 890 | 7 | 4 | 57 | Coarse and fine grained diabase |
| 890 | 900 | 10 | 5½ | 55 | Fine grained diabase |

# Report of Supervising Engineer

Docket No C-ND-7751

~~Date and~~

Date of Examination, inclusive

Dec 29, 30, 1942

Date of Report

1. Name + Address of Applicant

Name: J. L. McIver

Address: 9840 Olympic Blvd

City + State: Beverly Hills, Cal.

Correspondent: Same.

2. Character of Project

To develope a lead-zinc mine

3. Location of Mine - Irene Mine

Township, range, section - T 1 N, R 15 E, G + S R. B + M.

County and State - Gila Co, Ariz

Name and distance by road nearest railway station -

The mine is 5 ½ miles from Globe the nearest station on the Southern Pacific Railroad.

Conditions and seasonal accessability of road, mine to railway - The first 3.5 miles of the road from the mine is down a sandy wash and will need to be repaired in places after heavy rain storms but the balance of the ~~distance~~ road to Globe (2 miles) is paved highway.

1

4 Applicant

The applicant, Mr. J. L. McCluer is an experienced, practical mining man who has made considerable money in gold mining. He has had little technical training but is apparently an honest and competent mine operator with about 40 years of practical experience in mining. His superintendent, Tom Hodges, is also an ex-gold mine operator of many years experience. The first class miner like condition of the underground workings they have re-habilitated is the best evidence of their ability. It is my opinion that the applicant and his superintendent are fully capable of doing the necessary development work on this project

5. Loan Requested

The applicant requests a loan of $20,000 to develope the chene lead-zinc mine.

6. Description of Project

A. General Features.

1. The applicant and his superintendent own considerable mining and milling equipment now located on

(2)

their gold mines in Arizona and California. ~~Much~~ Some of this equipment could be used in future development of the property.

2. The proposed project should comply with State compensation and safety-first statutes

3. Apparently there are no legal discrepancies in this project although I have not ~~see~~ examined the applicants lease on the property

4. No apparent impeded right-of-way

5. No likelihood of surface or sub-surface trespass.

B. Existing Development

1. The vein is developed by two main tunnels cutting the vein at nearly the same ~~altitude~~ elevation. The No 2 or easternmost tunnel exposes the vein with raises and crosscuts but does not expose an ore shoot ~~on the vein~~ so will not be discussed at length in this report. The Main tunnel (No 1) consists of a 310 foot crosscut from the surface to the vein and then 315 feet of drifts along the vein. Above this drift we find one ore shoot that has been stoped nearly to the surface

Work Done Under C Loan

In 1942 a $500 preliminary development loan was granted the applicant to make accessible the No 1 tunnel and winze.

The following work was done under the loan.

1. The portal of the tunnel was cleaned out and retimbered
2. The main crosscut of the No 1 tunnel was cleaned out and one foot of muck removed from the old floors, and this was cleaned out.
3. Track was then laid in this tunnel
4. The station was cut in the drift above the winze and a small headframe and dump was constructed.
5. The winze was equipped with ladders, pipes & running timber
6. The bottom of the winze for 45 feet was filled with muck and this was removed

The following equipment was used for this work and this equipment will be available for future development of the mine:-

1 - 210 cu ft portable compressor - rented
2 - Jackhammers, mountings, hose, pipe, track, fittings, 2 tram cars
3 One drill pneumatic drill sharpener
4 One drill hammer
5 One air hoist with cable + bucket

insert here

and below this drift there is a 116 foot winze on the vein but not in the ore shoot. The accompanying plan and section maps of the vein show all of the above described workings as well as assays and geology of the ore deposit.

In order to properly discuss the geology and ore distribution of this deposit I am summarizing the reports of engineers who have examined this mine.

Report by F.E. Calkins and G.W. Botsford (1925)

1. Nine unpatented claims covering 4000' along vein.
2. Stope 100' long, average 6' wide made produced, nearly ~~2000 tons averaging 10% lead, 10% zinc, 6 oz silver~~
3. Chief vein traceable on surface for 2½ miles, nearly vertical, north wall of vein diabase and south wall of Cambrian quartzite
4. Vein of recrystallized brecciated wall rock and oxidized ~~at last~~ to bottom of workings 275' below surface.

(4)

5 Formation here same as in nearby Old Dominion mine

6. At depth copper will replace lead and zinc

7. Oxidized zone will probably terminate at depth of 500 or 600 feet

8. Large amounts of water will not be found at depth

9. Good chance to develope large ore bodies

10. Deep + extensive exploration warranted.

29
4
1160

Report by R. J. Leonard 1935

1. Ore occurs in fault contact between diabase and granite which is favorable for ore in this district

5

2. Large part of Old Dominion production came from similar parallel mineralized fissure.

3. Copper should be found at depth

4. Present oxidized zone will extend downward several hundred feet

5. Property warrants extensive development.

6 Record of 29 car loads (at least about 1260 tons) averaged 13.7 oz Silver, 15.80 % lead, and 11.79 % zinc.

U.S.G.S Professional Paper #12 by F. L. Ransome 1903 Geology of Globe Dist.

1. Ore Types of the Globe District
   A. Free gold ores
   B. Native silver or silver-lead ores
   C. Cupriferous Ores.
      1. Oxidized - cuprite, malachite, gold, and galena
      2. Chalcocite
      3. Sulfide - pyrite, chalcopyrite, sphalerite, galena, hübnerite in altered country rock or quartz

6

2. Mineralization occurs as:-
   A. Lodes - fissure veins and mineralized post diabase fault breccias
   B. Masses in limestone
   C. Irregular mineralizations of shattered rock
3. Quartzite shows greater mineralization than diabase
4. Bulk of oxidized ores occupy the places of formerly existant sulfides
5. In Old Dominion Mine the oxidized ore extends to a depth of 600 feet

Little can be added to the above ~~deposits~~ on the geology of the Chene Mine and the adjacent ~~Old~~ famous Old Dominion Mine. From the accompanying plan map of the workings it ~~will~~ should be noted that the vein in places consists of a wide (20'-30') low grade mineralized ~~zone~~ zone containing a narrower (6') high grade section. Also it is apparent that the high grade section of the vein which was stoped ~~below~~ above the adit level had quartzite on both walls of the vein.

It is impossible to predict at what ~~point~~ depth the sulfide zone will be encountered as we have no definite knowledge of the position of the water table in this area. But since the bottom of the mine which is still in the oxidized section of the vein is actually below the level of the adjoining creek bed it is logical to expect to encounter the top of the sulfide zone at not too great a distance below the present ~~bottom of the mine~~ workings.

(7)

C. Proposed Development

Before ~~[illegible]~~ outlining the proposed development program, the ore distribution along this vein should be ~~dis~~ considered. The samples taken indicate a vertical zonal distribution of the different ore minerals with manganese ore found on the outcrop and close to the surface, below the surface manganese zone we find a galena zone which was mined in the stopes above the No 1 Tunnel, while below this tunnel level we find a preponderance of ~~zinc~~ oxidized zinc ore. These zones overlap so that we find minor amounts of manganese, lead and zinc in all three zones. All work to date has been in the superficial oxidized part of the vein. As was found in the adjoining Old Dominion Mine and which is customary in deposits of this type we would expect to find zinc sulfide ore (sphalerite) when the permanent water table is reached. ~~The depth of the top of the sulfide zone can not be accurately determined by inspection of the present workings but since the present bottom of the stope is now 25 feet below the adjoining creek bed the sulfide zone could be reasonably expected~~

(8)

310

a ~~so~~ great depth below the ~~wings bottom~~. Present workings have exposed the vein for 310 feet vertically below the outcrop. No water has yet been found encountered in the wings.

The manganese ore found at the surface contains too much zinc to be marketable. The lead ore shipped from the stope above the No 1. Tunnel also was penalized for its zinc content but was rich enough in silver (13.7 oz) and lead (15.83%) to still be good ore. Below the tunnel level the lead is in the oxidized form ~~and~~ is of course the zinc but since the combined lead and zinc content does not amount to over 20% this ore cannot be shipped for pigment manufacture.

From the above data it can ~~be~~ plainly seen that the future of this property will depend upon producing ore from the deeper sulfide zone. Hence there is no ore ~~exposed in the~~ mine at the present time altho it appears ~~more than~~ likely that a large body of sulfide ~~zinc~~ ore will be found at depth.

For the above reasons I recommend ~~that~~ the following development program for this deposit:

1. Drill three diamond drill holes each 500 feet deep and pointed to cut the vein at least 200 feet below the bottom of the workings as shown in the attached section map. Diamond drilling is the cheapest, quickest, and to my mind the most logical method of proving the presence of a sulfide ore body at depth. ~~It is my belief that it would be advantageous to have the Bureau of Mines drill this property and thoroughly map the geology of the deposit.~~ Drilling would be easy on this property as the necessary roads are present, an ample supply of water is available, living quarters are present on the property, & the country rock is medium soft and homogeneous, ~~and the vein is large enough and so that~~ Core recovery should be very good in this formation.

I have obtained no estimates on the cost of diamond drilling but believe it should not cost more than $3.00 per foot or a total of $4500 for 3-500 foot holes. This drilling

1500
25
75
30
3750

(10)

should definitely prove up the value of the mine. ~~If the first holes~~ If these holes do not disclose sulfide ore at depths the project would be abandoned. This work may be considered technically as prospecting but to me it is the best ~~exact logical~~ way to prove this property.

2. If commercial sulfide ore is found in the drill cores the winze should be sunk an additional 200 feet. This would cost approximately $35 per foot or $7000

3. From the bottom of this winze ~~shaft~~ it would be necessary to drift on the vein for at least 200 feet at a cost of $15 per foot or a total of $3000. All of the above work would be in the vein and a considerable tonnage of ore could be obtained from this work

4 The next step would be to stope ore developed by the above program and at this point the property should be self supporting.

(11)

D. Equipment.

The only additional equipment necessary for this project would be a larger air hoist for sinking the winze. Diamond

drilling would be done by contract so ~~no~~ equipment for this work would be purchased.

At the present time the applicant is renting a portable compressor and this procedure could be continued for the sinking of the ~~winze~~ winze.

Since the mine is located near the town of Globe no camp buildings are necessary even if the mine becomes a large producer.

F. Ore Reserves

At the present time there is no ore blocked out in the mine. ~~If one ass~~ From a study of the assay maps we see that the zinc values are increasing at depth and the lead values are decreasing. Hence for the ~~sake of~~ this analysis we can assume that ~~future~~ the sulfide ore developed at depth will contain as much zinc as the ore found in the oxidized zone. The average of all assays taken in the ore shoot exposed in the drift off of the winze is 13.31 % zinc across 5' or 266 lbs of zinc per ton. It must be remembered that this ore cannot be marketed because of the fact it is oxidized. According to J. L. Ransome (~~Bull~~ U.S.G.S. ~~Bull~~ Prof. Paper #12) there is no decrease in metal content when the ore changes from the oxidized to the sulfide state so we can expect a zinc sulfide

(12)

ore containing 13% zinc at depths. This ore is readily marketable and at 11¢ per ~~lb~~ unit ~~ton~~ gives $28.60 befor any deductions. ~~In addition~~ The ore shoot above the tunnel level reached a stope length of 110 feet ~~long~~ and ~~[illegible] feet wide~~ a stope width of 6 feet. The drive vein which contains some zinc at all points sampled was traced on the surface for over 2000 feet and reached a maximum width of 22 feet. The lowest zinc assay ran 1.11%, the highest ran 22.62%, and a numerical average of all zinc assays taken was 8.28%.

2.60
26
$28.60

~~7. Employment~~

~~This~~

8. Objections to Project

The chief objection to this project is the fact that developement work can not be started on marketable ore and there is no ore now exposed in the mine that can be shipped at a profit: In addition we have no concrete evidence as to the depth of oxidation on this vein.

(13)

9. Time Schedule

The diamond drilling program should not take longer ~~than~~ three months

9.80
16.39
29.77
3)35.96
18.65

to complete. Then after the drilling program had been completed it will take ~~approximately~~ not longer than 6 months to do the projected underground development work. Thus the whole program should be completed in at least 9 months time

50

10 Estimated Cost of Project

| | |
|---|---|
| Diamond drilling 1500 feet @ $3/ft | $4500 |
| Sinking raise 200 ft @ $35/ft | 7000 |
| Drifting 200 feet @ $15/ft | 3000 |
| Purchase of equipment - air hoist | 1000 |
| 6 months rental of ~~equipment~~ compressor | 1800 |
| Reserve for contingencies | 2700 |
| Total for project | $20,000 |

In the above estimate only the item of $4500 for diamond drilling would be risked on this project for if the sulphide ore was not encountered in these drill holes no further expenditures would be made, ~~on the project~~

(14)

11 Comments of Supervising Engineer

I recommend that a loan as above outlined should be granted for this project, for the following reasons:-

1. The geology is favorable for the occurrence of a large sulphide zinc deposit at depth.
2. The property can be exploited

and the presence of commercial zinc ore can be determined by the expenditure of $4500

3. The mine is located in a well mineralized district.

4. Present personnel is competent to operate the project

5. Only a small amount of equipment will be purchased for this project

6. Mining costs should be low as the walls of the vein stand well and the ore breaks easily.

7. This is not a marginal deposit as samples taken to date indicate a high zinc content in the exploited zone of the vein



Wm B Muttrell
Cons. Eng.

Class C Work

Remember portal

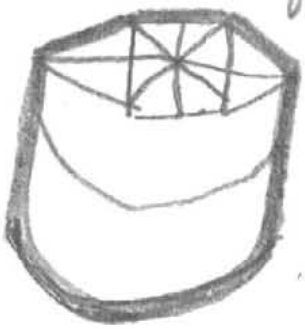
Clean main crosscut

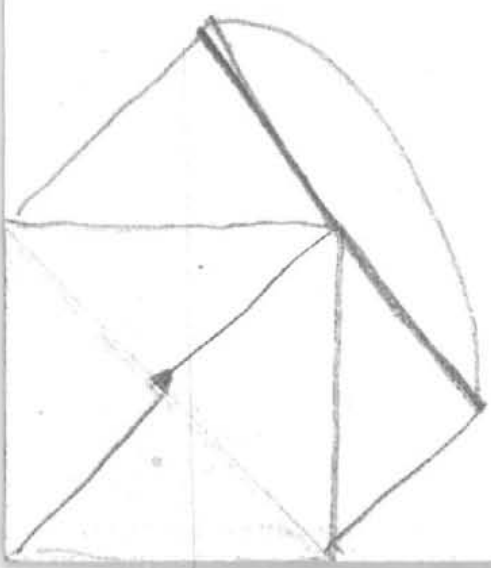
Timber hoisting station at head of mung

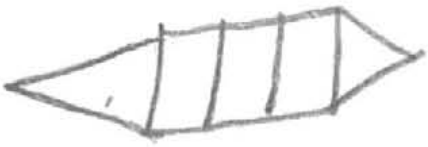
Remember wedge

Mark out 45' of wedge

Enlarged bottom of wedge







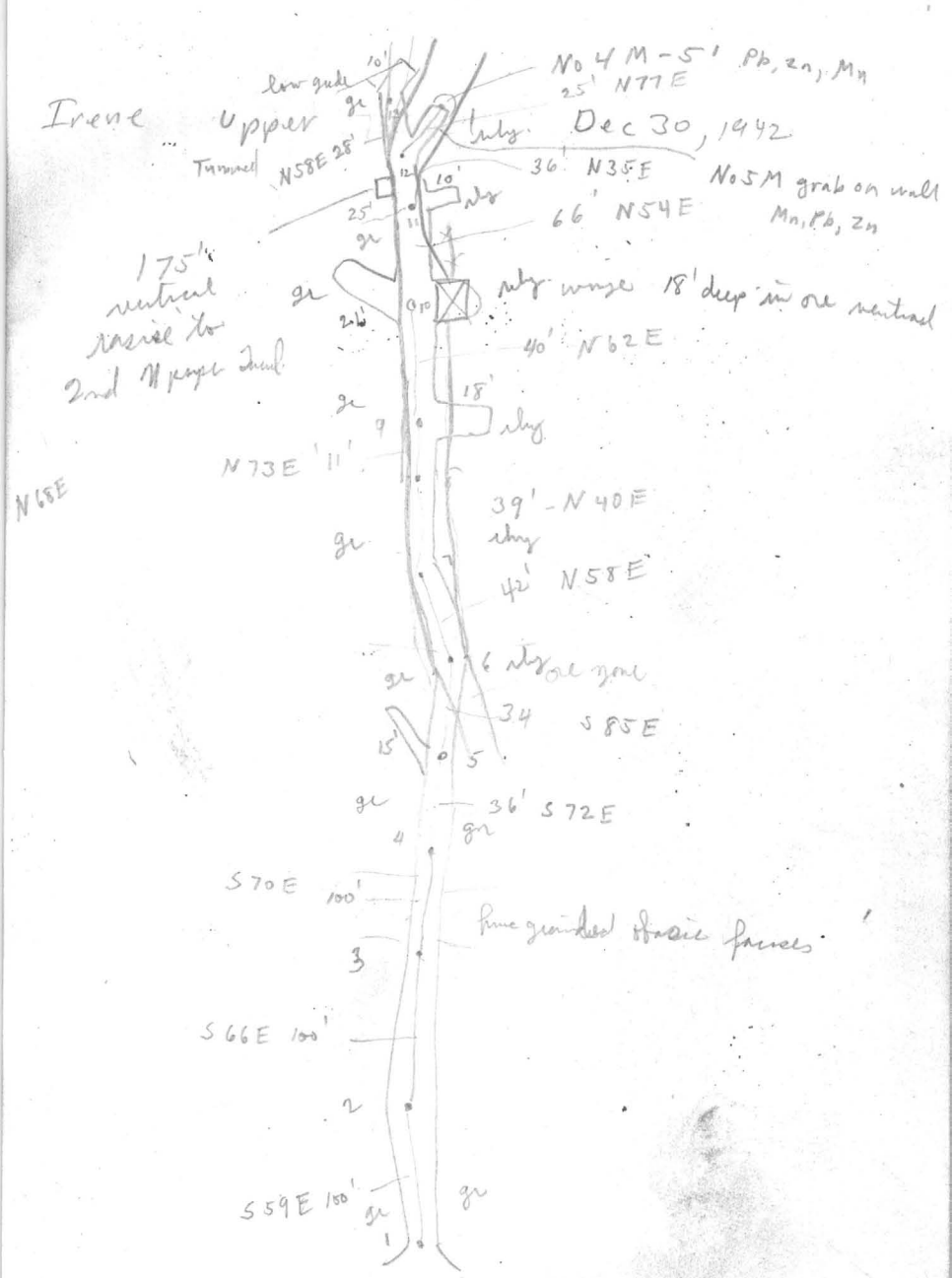
| | | |
|---|---|---|
| D. D. | 4500 | |
| Wing 200' | 7000 | 200 |
| Duff 200' | 3000 | 4 ft/day |
| air hoist | 1000 | 50 |
| | 15,500 | |
| Rieum. | ~~4500~~ | |
| 6 mo rental Comp | 1800 | |
| | 17,300 | |

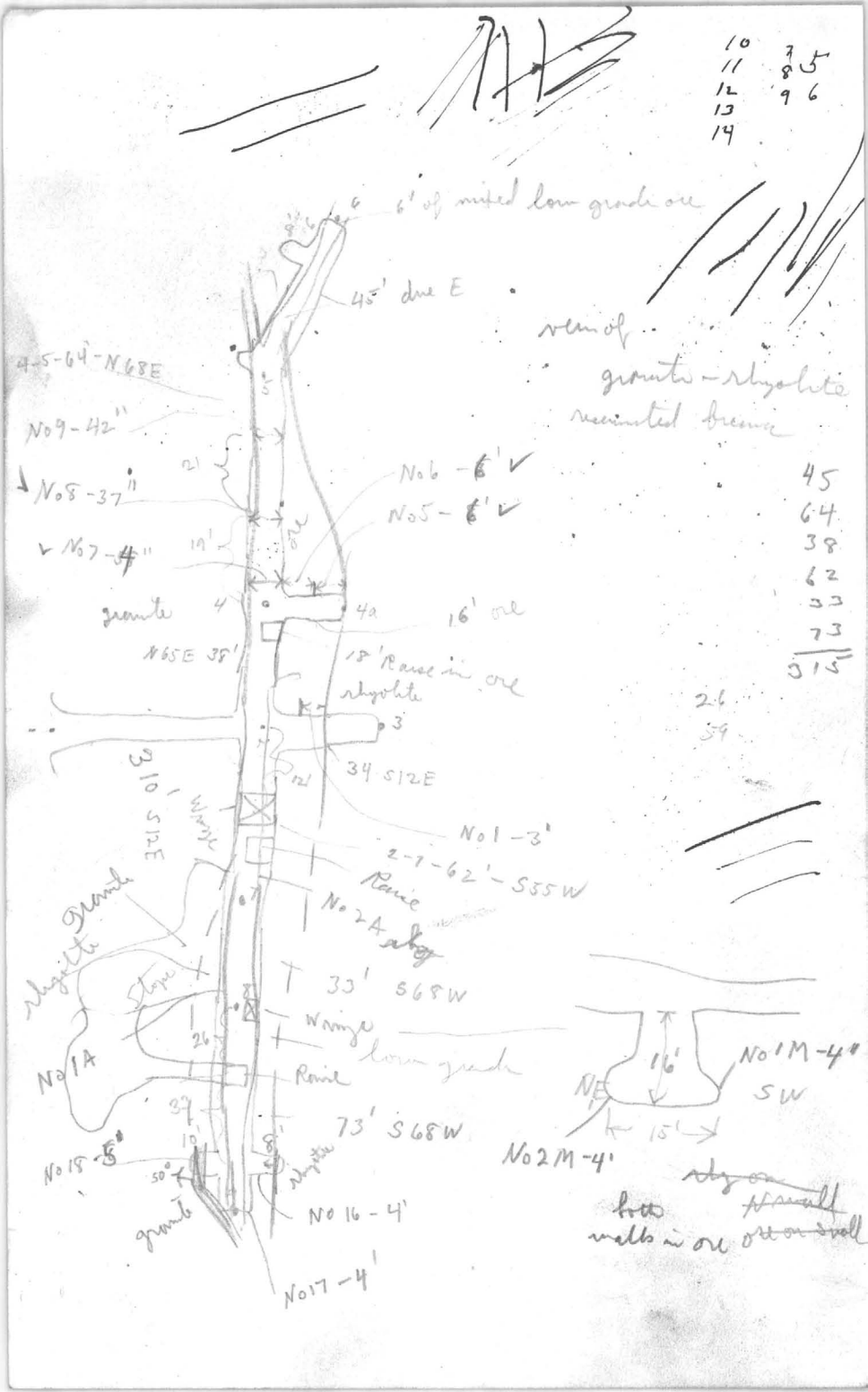
Rieum for coring 2700

13.73 - .54
22.62 - 12
8.98 - 54
9.19 - 12
12.62
9.79
15.70
8.28
15.95
16.36
13.23

13.31

1.11 least 24
8.28 average

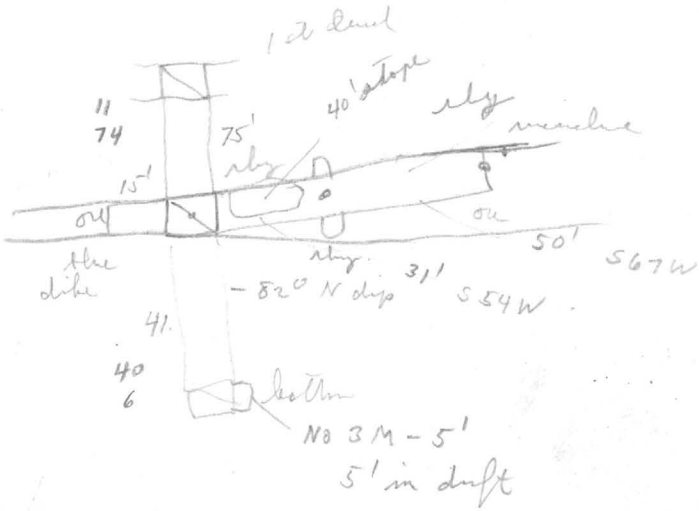

Irene ... Upper
Dec 30, 1942
No 4 M - 5' Pb, Zn, Mn
25' N77E
low grade
gr
10'
Tunnel
N58E 28'
12
10'
36' N35E
No 5 M grab on wall
Mn, Pb, Zn
25'
11
66' N54E
175' vertical raise to 2nd level
gr
18' deep in ore vertical
2.6'
10
40' N62E
18'
9
N73E 11'
N68E
39' - N40E
42' N58E
6
34 S85E
15'
5
36' S72E
4
S70E 100'
fine grained schistose facies
3
S66E 100'
2
S59E 100'
1


10
11
12
13
14
7
8
9
5
6
6' of mixed low grade ore
45' due E
vein of granite-rhyolite recrystallized breccia
4-5-64'-N68E
No9-42"
No8-37"
No7-4"
No6-6'
No5-6'
ore
19'
21
granite
4
42
16' ore
N65E 38'
18' Raise in ore
rhyolite
3
34 S12E
12
W10' S12E
Winze
No1-3'
2-7-62'-S55W
Raise
No2A
rhyolite
granite
Stope
33' S68W
Winze
26
No1A
Raise
low grade
37
73' S68W
No1B-5'
10
8
50°
rhyolite
granite
No16-4'
No17-4'
45
64
38
62
33
73
315
26
59
16'
NE
No1M-4"
SW
15'
No2M-4'
~~stg on~~
~~N wall~~
~~hole~~
walls in ore
~~off on wall~~

Dec 29, 1942 Cliene Mine

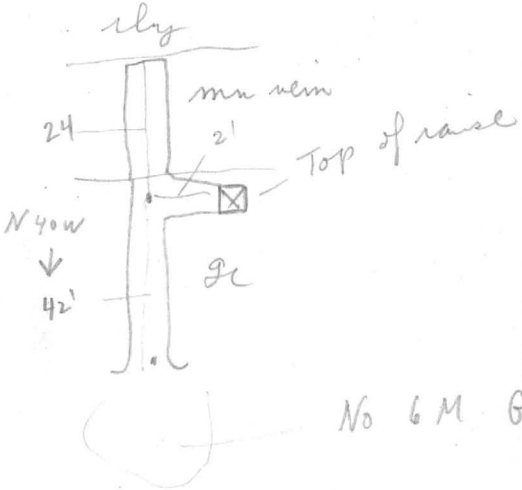
| Sta. | Vert L | Bearing | Slope Dist | Remarks |
|---|---|---|---|---|
| 1-2 | 0 0 | N 40 W | 78 78 | ① Portal Main tunnel ② On end of dump |
| 2-3 | 0 0 | N 44 E | 93 93 | ③ On Road to upper tunnel |
| 3-4 | 88 -17 -10 | N 29 W | 100 98 | ④ Down old road to stream bed |
| 4-5 | 71 -21 -13 | N 13 W | 100 98 | ⑤ On new road to mine |
| 5-6 | 50 -10 -6 | N 25 E | 100 99 | ⑥ Along new road |
| 6-7 | 40 -3 -2 | N 35 E | 100 100 | " " " Straight pipe line from spring to tunnel |
| 7-8 | 37 -5 -4 | N 35 E | 100 100 | " " " Another larger spring about 3000' up wash |
| 8-9 | 32 -17 -10 | N 30 W | 100 98 | ⑨ In creek bed ↑ on road 60' N 58 W to spring tunnel in opp bank Spring 7' above No 9 spring 5 gal/min |
| 9-10 | 15 -5 -3 | S 45 W | 100 100 | Down wash |
| 10-11 | 10 -5 -3 | S 45 W | 100 100 | " " |
| 11-12 | 5 -5 -3 | S 45 W | 100 100 | " " |
| 12-13 | +7 +4 | N 47 E | 100 100 | Along branch road to upper tunnel |
| 13-14 | +12 +7 | N 76 E | 100 99 | " " " " " " |
| 14-15 | +6 +10 | N 87 E | 100 99 | " " " " " " |
| 15-16 | 0 0 | S 62 E | 46 46 | To portal up. tun |
| | 1-12 = | 29' | | |

a sight from to W 20 between No 1 & 2 to top of Raise on surface 25




2nd Upper Tunnel

116



Adit Level

No 1 A - 36" Pillar 20' above level 80' SW of Winze
No 2A - 32" Back of tunnel 15' SW of Winze
No 3A - 54" across face of Winze level (2nd level
No 4A - Face of winze level White + red splotches (2nd level
No 5A - 3' up + down face 2nd level
No 6A - 20" gray material on left wall 2nd level
No 7A - 18" at Jacks # 13 against SE Wall 2nd
No 8A - 21" " " " " " NW " 2nd level

Tunnel up hill
No 1B - Inside tunnel 9' vein
2B - Dump

No 1-3
2 E
3 Tl
4 - 3F
5 - 6c
6 - 6c
7 - 4c
8 - 3d
9 - 3½
10 -
11 - Wm
12 M
13
14
15
16
17
18

Doughboy Group + Irene Group file

Granted

IRENE

Globe Mining District

Reconstruction Finance Corporation
Preliminary Development Loan

September 9, 1942

Earl F. Hastings

| | |
|---|---|
| Docket No. | B-ND-36 |
| Date Application Received | September 9, 1942 |
| Date of Field Examination | None |
| Date of Report | September 10, 1942 |

1. Name and address of applicant (correspondent):
   J. L. McIver, 507 Security Building, Phoenix, Arizona.

2. Character of project and estimated cost thereof:
   Purchase equipment and supply labor to clean out and repair winze on lead-zinc ore shoot.

3. Location of property:
   Globe Mining District, about 3 miles north of Globe, Gila County, Arizona.

4. Applicant's interest in or ownership of property:
   Applicant leases from owner.

5. Loan requested:
   $5,000.

6. Loan recommended:
   $5,000.

7. Comments:
   (A) The property is well situated geologically and in accessibility.

   (B) The vein shows evidence of strength laterally and to depth so far exposed, and can reasonably be expected to continue downward for a considerable distance.

   (C) Some marketing problem would be expected, but the anticipated extent and grade of ore would warrant treatment.

   (D) The amount of loan exceeds the immediate capital requirement for unwatering and repairing, but any balance could be well utilized in development.

   (E) The applicant is well known for efficient operation and would utilize the loan to the best possible advantage.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings, Assistant Director
and Projects Engineer

Reviewed and Approved by:

J. S. Coupal, Director

325 Heard Building
Phoenix, Arizona
July 15, 1944

TULLY, - Ass't Chief - Mining Division, RFC - Washington, D. C.

Re: J. L. McIver
Docket No. ND-5289

While on a trip to Globe for another examination I stopped by the Irene mine upon which we had granted a loan but which is now under the control of the American Smelting & Refining Company. I talked with a Mr. Amos, engineer for the ASAR Co, and while he would give me no information on the results of their exploration program now in force on the property, he informed me that they had drilled a number of diamond drill holes some of which disclosed a considerable amount of ore. They had resurveyed the claims and were apparently going ahead with their exploration of the mine. He was slightly mad at the R.F.C. because we did not turn over our drill records to him as he considered our records public property, but when I suggested that I thought our Corporation would be glad to turn over our records to him if his Company would assume the loan, he immediately cooled off and became disinterested in discussing the matter further.

It is indeed unfortunate that the R.F.C. was not able to retain their interest in the mine as apparently there is a good prospect of this property becoming a large producer of zinc.

Wm. B. Maitland
Supervising Engineer

WBM/b

RECONSTRUCTION FINANCE CORPORATION

MINING DIVISION

LIQUIDATION REPORT OF SUPERVISING ENGINEER

---

Re: J. L. McIver
Docket No. ND-5289

March 23, 1944

1. Name and Address of Applicant

J. L. McIver
9840 Olympic Blvd
Beverly Hills, California

2. Location of Project:

In Twp. 1 N, Range 15 E, G&SRB&M, Globe Mining District, Gila County, Arizona. About 5½ miles from Globe.

3. Amount of Loan and Date of Authorization:

A preliminary development loan of $5,000 was granted September 12, 1942.

On February 10, 1943, a $25,000 loan was granted to repay the prior $5000 and do additional work on the property. Of this amount $10,000 has not been used so the total loan for this project was $15,000.

4. Purposes for which Loan was Expended:

To rehabilitate the underground workings and do 2063 feet of diamond drilling.

5. Equipment:

a. No equipment purchased
b. No equipment on hand
c. No equipment sold

6. Property:

Property was held under lease which has now been forfeited due to non-performance of work so that applicant now has no interest in the mine.

7. Comments:

Operations ceased in September, 1943.

The diamond drilling indicated the presence of high grade zinc ore at depth.

Date of my last visit to the property was Nov. 19, 1943.

8. Conclusions:

The proposed project failed to develop any readily accessible ore and the property is believed to be of no immediate value unless a large amount of deep development work is done. Consequently the loan should be considered a loss.

9. Recommendations:

It is recommended that this account be closed as there is no equipment to be liquidated.

WILLIAM B. MAITLAND
Supervising Engineer

March 23, 1944

6.60 Zn

0.41 Pb

4.72 Mn

Tr. Cu — 0.01

Carbonates High

Drill Core.

No. 354 Ma

Phoenix, Arizona,

May 8, 1943.

CHAS. A. DIEHL

# ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies That samples submitted for assay by Mr. Wm. B. Maitland. contain as follows per ton of 2000 lbs. Avoir.

| MARKS | SILVER Ounces | SILVER Tenths | VALUE (Oz.) | GOLD Ounces | GOLD Hundths | VALUE (Oz.) | TOTAL VALUE Of Gold and Silver | % PERCENTAGE LEAD | % ZINC | % MANGANESE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| McIver | | | | | | | | | | | |
| Diamond Drill Core | | | | | | | | .41 | 6.60 | 4.72 | |

Charges $ 5.00

Assayer ARIZONA ASSAY OFFICE

No. 374 Ma

Phoenix, Arizona,

July 24, 1943.

CHAS. A. DIEHL

# ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies That samples submitted for assay by Mr. Wm. B. Maitland. contain as follows per ton of 2000 lbs. Avoir.

| MARKS McIver | SILVER Ounces | SILVER Tenths | VALUE (Oz.) | GOLD Ounces | GOLD Hundths | VALUE (Oz.) | TOTAL VALUE Of Gold and Silver | % PERCENTAGE % Oxydized Zinc | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 859-860 | | | | | | | | 14.59 | |
| 860-861 | | | | | | | | 17.22 | |
| 861-862 | | | | | | | | 16.50 | |
| 862-864 | | | | | | | | 16.10 | |
| 869-875 | | | | | | | | 14.21 | |

N.B.-THE ZINC REPORTED HEREWITH INCLUDES SULPHATES, OXIDES SILICATES AND CARBONATES OF ZINC I.E. THE NON SULPHIDE ZINC

Charges $ 10.00

Assayer ARIZONA ASSAY OFFICE

No. 371 Ma.

Phoenix, Arizona,
JUNE 23 1943.

CHAS. A. DIEHL

# ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies That samples submitted for assay by Mr. Wm. B. MAITLAND. contain as follows per ton of 2000 lbs. Avoir.

| McLVER MARKS | SILVER Ounces | SILVER Tenths | VALUE (Oz.) | GOLD Ounces | GOLD Hundths | VALUE (Oz.) | TOTAL VALUE Of Gold and Silver | PERCENTAGE Copper | PERCENTAGE LEAD | PERCENTAGE Zinc | PERCENTAGE Manganese | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 859-860 | | | | | | | | | | 15.87 | | |
| 860-861 | | | | | | | | | | 26.92 | | |
| 861-862 | | | | | | | | | | 47.80 | | |
| 862-864 | | | | | | | | | | 28.20 | | |
| 869-875 | | | | | | | | | | 31.07 | | |
| 859-860 Comso. | 2.4 | | | .05 | | $ 1.75 | | TRACE | 0.20 | | 1.29 | |

Charges $ 21.75

Assayer ARIZONA ASSAY OFFICE.

No. 372 Ma.

Phoenix, Arizona,
JUNE 28 1943.

CHAS. A. DIEHL

# ARIZONA ASSAY OFFICE

Phone 3-4001 — 815 North First Street — P. O. Box 1148

This Certifies *That samples submitted for assay by* MR. Wm. B. MAITLAND. *contain as follows per ton of 2000 lbs. Avoir.*

| McIVER MARKS IRENE | SILVER Ounces | SILVER Tenths | VALUE (Oz.) | GOLD Ounces | GOLD Hundths | VALUE (Oz.) | TOTAL VALUE Of Gold and Silver | % PERCENTAGE % ZINC | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 869-879 | | | | | | | | 10.85 | |
| 879-883 | | | | | | | | 3.62 | |
| 883-890 | | | | | | | | 2.90 | |
| 890-900'6" | | | | | | | | 2.73 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Charges $ 8.00 — Sludge — Assayer ARIZONA ASSAY OFFICE.

EAD

No. 372 Ma.

Phoenix, Arizona,

JUNE 28 1943.

CHAS. A. DIEHL

# ARIZONA ASSAY OFFICE

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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

*Charges $* 8.00

*Assayer* ARIZONA ASSAY OFFICE.

C. A. D

No. 372 Ma.

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| 879-883 | | | | | | | | 3.62 | |
| 883-890 | | | | | | | | 2.90 | |
| 890-900'6" | | | | | | | | 2.73 | |

Charges $ 8.00

Assayer ARIZONA ASSAY OFFICE.

B.A.D.

12000
9.600

00

| | | | | | | |
|---|---|---|---|---|---|---|
| 1-2 | S85W | 99.1 / 100 | -8½° | -15 | (1) | Hole No 3 |
| | | | | | (2) | Down wash Shank |
| 2-3 | S80W | 100 / 100 | -4° | -7 | (3) | " " " " |
| 3-4 | S76W | 100 / 100 | -3° | -5 | (4) | " " " " |
| ~~4~~-~~4~~A | S22E | 34 / 34.7 | +8 | +5 | (3A) | Hole No 4 945' to very S24E -55° |
| 4-5 | S79W | 100 / 100 | -4° | -7 | (5) | Down wash 5 Back |
| 5-6 | N89W | 100 / 100 | -4° | -7 | (6) | " " " |
| 6-7 | N86W | 100 / 100 | -4° | -7 | (7) | " " " |
| 7-7A | | | | | (7A) | Hole No 7 |
| 1-8 | N29E | 100 / 100 | 0 | 0 | (8) | Up " " |
| 8-9 | N38E | 100 / 100 | +4 | +7 | (9) | " " " |
| 9-10 | N40E | 100 / 100 | +4 | +7 | | |
| 10-10A | S58E | 45 / 46 | +6 | ~~+15~~ | (10A) | Hole No 5 55½° S24E 980' to very |
| 10-11 | N51E | 100 / 100 | +5 | +9 | (11) | Up center of road |
| 11-12 | N54E | 100 / 100 | +3 | +5 | (12) | " " " |
| 12-13 | N84E | 100 / 100 | +3 | +5 | (13) | on road Hole No 6 |

4110
22
4088

780.0
189.5

780.
195
785

189.5
5.5
195.0

FRENE

| | | |
|---|---|---|
| 450 at 3.00 | — | 1350.00 |
| 12 hours at | — | 25.00 |
| | | 1375.00 |
| 500 | — | 150.00 |
| | | 1525.00 |
| | | 1700.00 |

25.00.00

98
91
91
43.5
30
353

DDH — 100' at - 13°.98

100' - 43.5 at - 00.

143.5 — 100.0 at - 21 - 91

243.5 - 100.0 at - 21 - 91

343.5 — 32 at - 21 - 30

Collar of hole 12' lower

S 29 W.

IRENE Mine: April 4, 1943.

#1 D.D. Hole.

Lost water 441'-6"

Cavity Rods Drop: 443 - 444'-6"

10' before lost water bodly broken Sanded

1 foot core from 10 ft Run.

| FROM | to | |
|---|---|---|
| 0 | 30' | altered Diabase Cored |
| 30' | 68 | Fresh diabase (63' Core) |
| 68 | 106 | " " (101' Core) |

1/2" gl at 92

106 - 141 — Fresh Diabase (35' Core)

1/4" mud seam 20° to Core at 133.5

141 -

# Diamond Drill Hole Log.

Hole No 1
Location S 96° W 188' from adit portal
Elevation of Collar: adit level.
Depth:
Dip: 45°
Bearing
Date Begun
Date Finished

Project: J. L. McClure Docket No
Location: Globe, Gila Co Ariz
Size of Bit: AX

| Footage | | | Proveniss | | assay | | | | Description + Remarks: |
|---|---|---|---|---|---|---|---|---|---|
| From | To | Feet | Core Feet | Core % | Zn | Lead | Manganese | Copper | |
| | | | | | | | | | |

| Ins | to | Core | |
|---|---|---|---|
| 466½ | 470 | 55' | Partly altered diabase with qtz cemented breccia Sample No 15 at 468 |
| 470 | 476 | 60" | Same as below |
| 476 | 486 | 120" | Unaltered green grey diabase 486 Sample No 16 |
| 486 | 496 | 120 | " " " " |
| 496 | 506 | 120 | " " " |

Hole No 1

| From | to | Length of Core | Description |
|---|---|---|---|
| 0 | 29' | None | |
| 29 | 33 | 2½' | 1 3/4" core coarse grannular grey dia. oxidized along joints good core. |
| 33 | 36 | 22" | Same |
| 36 | 37½ | 23" | " |
| 37½ | 42½ | 56" | " |
| 42½ | 47½ | 36" | " |
| 47½ | 51½ | 42" | " 51½' Sample Not |
| 51½ | 59½ | 87" | " |
| 59½ | 62 | 20 | " |
| 62 | 63 | 5" | " |
| 63 | 68 | 55" | " |
| 68 | 72½ | 37 | 72½ small fault gouge in Dia. |
| 72½ | 76 | 42" | " |
| 76 | 82½ | 62" | " |
| 82½ | 85½ | 30 | " |
| 85½ | 90½ | 63 | |
| 90½ | 96 | 66 | 94½' small tight fault gouge |

| From | To | Core | |
|---|---|---|---|
| 96 | 103½ | 88 | unaltered gray diabase. 103½ Sample No 2 |
| 103½ | 109 | 60 | 105½ altered diabase, minor brecciation & lime |
| 109 | 118 | 106" | dia. some ~~alteration~~ oxidization |
| 118 | 123 | 56" | dia. with oxid. at joints |
| 123 | 128 | 60" | " " " " " |
| 128 | 134 | 79 | " " " " " small Fault at 133' |
| 134 | 144 | 77 | " " " " |

E E Whinnen

| From | To | Core | |
|---|---|---|---|
| 144 | 154 | 118" | Grey Brown diabase Sample 3 154 |
| 154 | 164 | 112 | " " " |
| 164 | 173 | 108 | " " " Sample No 4 173 |
| 173 | 183 | 108 | Grey green diabase |
| 183 | 193 | 108 | " " |
| 193 | 199 | 66" | " " |
| 199 | 201 | 33" | " " " |
| 201 | 211 | 120 | " " " |
| 211 | 221 | 120 | Same as below |
| 221 | 229 | 90" | Brownish grey diabase |
| 224 | 233 | 55' | " " " |
| 233 | 235 | 32 | Sample No 5 at 235 |
| 235 | 245 | 120" | " " " |
| 245 | 250 | 60" | " " " |
| 250 | 260 | 70" | Grey + brown dia |
| 260 | 269 | 56" | " " " |

16.4

1.82

17.3

| From | To | Core | |
|---|---|---|---|
| 269 | 275 | 55. | Brown diabase |
| 275 | 281 | 76 | Br. + grey diabase |
| 281 | 291 | 90" | Br. diabase |
| 291 | 295 | 39" | Brown dia fractured + cemented with qtz some darker green breccia fragments |
| 295 | 301 | 60" | Brown oxidized dia Black layer Sample No 6 |
| 301 | 309 | 72" | Diabase + green breccia |
| 309 | 313 | 35 | ~~Brown~~ Green breccia fragments cemented by qtz |
| 313 | 315 | 25" | Brown dia with qtz breccia and brown iron streaks |
| 315 | 317 | 21" | qtzite with green breccia fragments |
| 317 | 325 | 55 | Broken + altered brown + green diabase |
| 325 | 328 | 14 | White qtzite with fragments of green diabase + some black rock |
| 328 | 333 | 56 | Same as below |
| 333 | 340 | 47 | Brown coarse diabase |
| 340 | 350 | 88 | Brown dia - two minor slips at 45° to hole |
| 350 | 360 | 120 | Same as below |
| 360 | 370 | 74 | Br Dia. + 1/2 BIK rock with minor qtz |
| 370 | 380 | 84" | Brown grey diabase with aphanitic green black layer at bottom |

$12 \overline{)303}$ = 25.2
24
60
60
30
24
6

| From | To | core | |
|---|---|---|---|
| 380 | 390 | 105 | Alt. dia brown-grey, qtz seams + layers of dark green rock. structure dips about 50° with hole 383' Sample No 7 |
| 390 | 400 | 90 | " " " |
| 400 | 410 | 60 | " " " |
| 410 | 420 | 48 | " " " |
| 420 | 422½ | 14 | No granular brown diabase left core all dark green aphanitic rock with many irregular qtz stringers |
| 422½ | 424 | 12 | qtz stringers absent |
| 424 | 430½ | 40 | Black green aphanitic rock with some massive qtz-stringers containing specular hematite Sample No 8 |
| 430½ | 440 | 24 | Sample No 9 at 433½ H.W " " " core recovery poor " " Prob H.W of vein at 433½' |
| 440 | 443 | No core | 432½ prob H W of Vein<br>446 " F W " " |
| 443 | 444½ | Cavity | |
| 444½ | 447¼ | 21" | 6" of Red Vein Breccia Qtz + Hematite Sample No 10 Sample #11 |
| 447¼ | 448 | 10" | Light green qtzy cemented Breccia Sample No 12 |
| 448 | 450⅓ | 29" | Qtzite with open cavities with black stain No 13 at 450 |
| 450⅓ | 453 | 28" | Lt green white qtzite with minor open cavities |
| 453 | 458 | 42 | " " " " with small pieces of diabase breccia |
| 458 | 461 | 12 | " " " " |
| 461 | 466½ | 77 | Diabase massive not oxidized sample No 14 |

869 - 879

879 - 883

883 - 890

890 - 900'-6"

Four sludge samples delivered by J L McIver

Instructions

ad

Nos

4210
760
3350

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9.8 | 13 | 3.05 | 29.89 | 1.5 | 14.7 | 4.55 | 44.59 |
| 0.8 (0.8) | 1 | 7.95 | 6.36 | 4.25 | 3.40 | 12.20 | 9.76 |
| 1.5 | 2 | 11.49 | 17.24 | 3.65 | 5.48 | 15.14 | 22.71 |
| 1.5 | 2 | 11.70 | 17.55 | 3.60 | 5.40 | 15.30 | 22.95 |
| 1.5 | 2 | 13.05 | 19.58 | 4.42 | 6.63 | 17.47 | 26.21 |
| 1.5 | 2 | 6.65 | 9.98 | 2.21 | 3.32 | 8.86 | 13.29 |
| 2.3 | 3 | 3.44 | 7.15 | 1.53 | 3.52 | 4.66 | 10.72 |
| 2.3 | 3 | 1.44 | 3.31 | 1.12 | 2.53 | 2.54 | 5.84 |
| 21.2 | 28 | 5.24 | 111.06 | 2.12 | 44.98 | 7.36 | 156.07 |

| | | sulf | oxide | Total |
|---|---|---|---|---|
| 950 - 978 – | 21.2' | 5.24 % | 2.12 % | 7.36 % |
| 963 - 972 – | 6.8' | 10.40 | 3.56 | 13.96 |

74% 26% 90

100
5.00
200
10.00

760
10° dip
3
120
970
959

978
950.
28

4.5 @ 7.29

No 3

12'

| | | | | |
|---|---|---|---|---|
| 6' | 3,70 | 22.20 | OX | |
| 0.6 | 15,87 | 9,52 | 14,59 | 8.75 |
| 0.6 | 26,92 | 16.15 | 17.22 | 10.33 |
| 0.6 | 47,80 | 28.68 | 16.50 | 9,90 |
| 1.2 | 28.20 | 33,84 | 16,10 | 19,32 |
| 3,0 | 0 | 0 | 0 | 0 |
| 3.6 | 31.07 | 111,85 | 14.21 | 51,15 |
| 2.4 | 15.30 | 36.72 | 9,0 | 21.60 |
| 2,4 | 2,05 | 4,92 | | |
| 20.4 | 12,93 | 263,88 | 10.08 | 121,05 |

19.73
10.08
9.65

Mr Chney

Portal of adit to No 1 Hole $-1^\circ$

No 1 hole to No 2 Hole $-5\frac{1}{2}^\circ$

△ Point to Smoke Stake S 26 W $-6^\circ$ 71'

" " to Station in Wash S 76 E $-1^\circ$ 100'

Station in wash to No 3 D.D.H. S 71 E $+11^\circ 44'$

Stat in Wash to Spring N 38 E

5 4
80
4.00

Chene oxidized ore

2 oz Ag.
15 % Zn.
5 % Pb.

| | |
|---|---|
| Silver | $1.00 |
| Smelter payment on Zn | 4.08 |
| " " on Lead | 3.02 |
| Total smelter payment | $8.10 |

| | | | |
|---|---|---|---|
| Bonus | Zn | A | 6.68 |
| | Zn | B | 6.68 |
| | | C | 6.68 |
| Bonus | Pb | A | 2.61 |
| | | B | 2.61 |
| Total bonus | | | 25.26 |
| Total for ore | | | 33.36 |

Charges

| | |
|---|---|
| Base smelter | 3.60 |
| Zn penalty | 2.25 |
| Pb " | 2.50 |
| Freight | 13.50 |
| Trucking | 1.00 |
| Total charges | 22.85 |
| Net before mining cost | $10.51 |

1

| | Zn |
|---|---|
| 849-59 | 3.70 |
| 875-879 | 15.30 % |
| 879-883 | 2.05 |

69-79 10' 15.30

69-75 6' 31.07

31.07 6

5.18/ft

10

15.30

1.53/ft

x 4

x/ft

186.42

153.00

186.42

4 ) 33.42

8.35

5.18 + x = 1.53

186.42 8

31.07 - 6

10

18.64

6 ) 310.7

5

10' 15.30 153.00

6 31.07 186.42

4 8.35 33.42

4x + 186.42 = 153.00

15.30
15
7650
1530
229.50

37.00
147.00
229.50
8.20
0

12.40
34 ) 421.70
34
81
68
137
~~102~~
35
136
10

9 spaces

849 - 859

879 - 883

| | | |
|---|---|---|
| 849-59 | 10' | 3.70% Zn |
| 859-64 | 5' | 29.40 |
| 864-879 | 15' | 15.30 |
| 879-883 | 4' | 2.05 |
| | 34' | |

28' thickness 12.4% Zn.

15.87
26.92
47.80
56.40
~~186.42~~

9'

11) 333.41 30.31 %
186.42
5) 147 200
29.4

| | Pb | | Zn | | Mn | |
|---|---|---|---|---|---|---|
| 5.5 | .15 | .83 | 2.07 | 11.39 | 3.83 | 21.07 |
| 5 | 0.20 | 1.00 | 2.13 | 10.65 | 4.08 | 20.40 |
| 2 | 0.30 | 0.60 | 2.05 | 4.10 | 3.46 | 6.92 |
| 1 | 0.25 | .25 | 2.05 | 2.05 | 4.82 | 4.82 |
| 2 | 0.10 | .20 | 1.67 | 3.34 | 3.09 | 6.18 |
| 5 | 0.10 | .50 | 2.38 | 11.50 | 2.83 | 14.15 |
| 20.5 | 0.16 | 3.38 | 2.09 | 43.03 | 3.59 | |

clean

Sampled 849-59

869-79

879-883

Sin 46 $\frac{4}{16}$

883.
17

883
849
34'
29'

.72
.16
432
72
11.52

Hole No 3

| From | To | Distance | Core | |
|---|---|---|---|---|
| 0 | 16 | 16 | 2 | coarse grey diabase |
| 16 | 18½ | 2½ | 2½ | " " " |
| 18½ | 21 | 2½ | 2½ | " " " |
| 21 | 25 | 4 | 3 | " " " |
| 25 | 32½ | 7½ | 5½ | oxidized + recemented crushed diabase |
| 32½ | 41 | 8½ | 8 | coarse grained diabase |
| 41 | 50 | 9 | 9 | " " " |
| 50 | 60 | 10 | 9½ | " " " trap |
| 60 | 67 | 7 | 6 | " " " " |
| 67 | 77 | 10 | 9 | " " " " |
| 77 | 82 | 5 | 4 | " " " " minor fault |
| 82 | 90 | 8 | 7 | " " " grey |
| 90 | 100 | 10 | 9 | " " " " |
| 100 | 110 | 10 | 8 | " " " " |
| 110 | 120 | 10 | 9 | " " " " |
| 120 | 130 | 10 | 9 | " " " |
| 130 | 140 | 10 | 10 | " " " " |
| 140 | 150 | 10 | 10 | " " " " |
| 150 | 160 | 10 | 9½ | " " " " |
| 160 | 170 | 10 | 9 | " " " " |
| 170 | 180 | 10 | 9 | " " " " |
| 180 | 190 | 10 | 9 | " " " " |
| 190 | 200 | 10 | 9 | " " " " |
| 200 | 208 | 8 | 7 | " " " " partly oxidized |
| 208 | 218 | 10 | 10 | " " " " " " |
| 218 | 228 | 10 | 10 | " " " " " " |
| 228 | 238 | 10 | 10 | " " " |
| 238 | 248 | 10 | 9½ | " " " " grey |
| 248 | 258 | 10 | 9½ | " " " " " |
| 258 | 265 | 7 | 6 | " " " |

| | | | | |
|---|---|---|---|---|
| 265 | 270 | 5 | 5 | Coarse grey diabase |
| 270 | 279 | 9 | 8 | " " " |
| 279 | 289 | 10 | 10 | " " |
| 289 | 299 | 10 | 8½ | " " " |
| 299 | 308 | 9 | 9 | " " " faulted |
| 308 | 318 | 10 | 9½ | " " " |
| 318 | 328½ | 10½ | 10 | " " " |
| 328½ | 338 | 9½ | 8½ | " " |
| 338 | 348 | 10 | 6½ | " " " |
| 348 | 358 | 10 | 9½ | " " " |
| 358 | 368 | 10 | 10 | " |
| 368 | 378 | 10 | 9 | " |
| 378 | 388 | 10 | 10 | " |
| 388 | 398 | 10 | 10 | " |
| 398 | 403 | 5 | 4½ | fine |
| 403 | 409 | 6 | 5½ | " |
| 409 | 419 | 10 | 9½ | " |
| 419 | 429 | 10 | 10 | " |
| 429 | 439 | 10 | 9 | |
| 439 | 449 | 10 | 9 | " porphyritic " " in part + part recrystallized aphanite breccia |
| 449 | 459 | 10 | 6 | " " " " " " " " |
| 459 | 469 | 10 | 9½ | fine ~~coarse~~ grey diabase |
| 469 | 479 | 10 | 8½ | coarse " " |
| 479 | 485 | 6 | 5 | " " " |
| 485 | 490 | 5 | 4½ | " " " |
| 490 | 500 | 10 | 9½ | " " " |
| 500 | 510 | 10 | 9 | fine + coarse " " hole made water to 10' of surface. |
| 510 | 520 | 10 | 10 | " " " |
| 520 | 530 | 10 | 10 | " " " " |
| 530 | 540 | 10 | 9 | " " " |
| 540 | 550 | 10 | 10 | " " " |

| | | | | |
|---|---|---|---|---|
| 350 | 560 | 10 | 9½ | coarse grey diabase |
| 560 | 570 | 10 | 5 | crushed + faulted diabase + recrystd breccia |
| 570 | 580 | 10 | 9 | " " " " aphanite |
| 580 | 590 | 10 | 9½ | " " " " " " |
| 590 | 599 | 9 | 7 | " " " " " |
| 599 | 606 | 7 | 4½ | " " " " " " |
| 606 | 611 | 5 | 2 | " " " " " |
| 611 | 621 | 10 | 6 | " " " " |
| 621 | 631 | 10 | 5 | " " " |
| 631 | 641 | 10 | 9 | coarse grey diabase |
| 641 | 651 | 10 | 9½ | " " " |
| 651 | 660½ | 9½ | 9½ | " " |
| 660½ | 670 | 9½ | 9½ | " " " |
| 670 | 680 | 10 | 10 | " " " |
| 680 | 690 | 10 | 9 | " " " |
| 690 | 700 | 10 | 10 | " " " |
| 700 | 710 | 10 | 9½ | " " " |
| 710 | 720 | 10 | 10 | " " |
| 720 | 730 | 10 | 5 | " " " |
| 730 | 740 | 10 | 9½ | " " |
| 740 | 750 | 10 | 9½ | " " |
| 750 | 760 | 10 | 9 | " " " + some qtz slivers |
| 760 | 770 | 10 | 9 | " " " |
| 770 | 780 | 10 | 10 | " " |
| 780 | 790 | 10 | 9½ | " " |
| 790 | 800 | 10 | 9½ | " " " ~~lost~~ |

Hole No 3

44
63

| From | to | Dist | Core | |
|---|---|---|---|---|
| 800 | 806 | 6 | 2½ | coarse grained diabase some silicification lost water + then water returned |
| 806 | 816 | 10 | 10 | solid coarse grey diabase with fine grey silicified diabase in bottom 2' |
| 816 | 821 | 5 | 4 | fine grained silicified breccia dark |
| 821 | 829 | 8 | 2½ | " " " " " |
| 829 | 839 | 10 | 9 | " " " " " |
| 839 | 849 | 10 | 10 | " " dark diabase minor silicified breccia |
| 849 | 859 | 10 | 4½ | Fine grained grey diabase + part recemented qtz breccia Typical H.W formation HW at 859 |
| 859 | 869 | 10 | 4 | 1st foot of recemented breccia, then ft of low grade ore (breccia) then 1½" of solid vein jack then ½ foot low grade breccia lost water Vein |
| 869 | 879 | 10 | 8 | fault zone then low grade breccia containing honeycomb with specular Hematite then also lead carbonate, in veins fault zone? FW at 879 lost water |
| 879 | 883 | 4 | 3 | coarse grained ophitic red diabase. |
| 883 | 890 | 7 | 4 | coarse grained grey diabase then fine grained grey diabase |

# IRENE

636
153
480

Irene Ore

13 – 3½ 15% Zn 5% Pb

3½

300#

70 × 90 × 4.80 = 3.02
300 × 75 × 22 × 8.25 = 4.08
7.10 7.10

Brass 100 × .95 × 2.75 = 2.61
300 × .81 × 2.75 = 6.68
2.61 9.29 9.29
6.68 16.39
6.68

Brass. 25.26
Smelter 7.10
Total 32.36

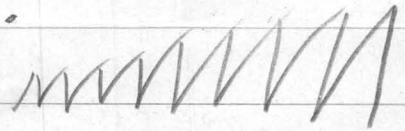
225
49.5

8'3
2'43

W'B brass ad 9.29
W'C Zn ad 6.68
15.97
16.39
32.36
.70
33.06

32.36

Base Charge 3.60
Freight 13.50
Brass charge 2.25
Lead Penalty 2.50
22.85
Truck 1.00
22.85

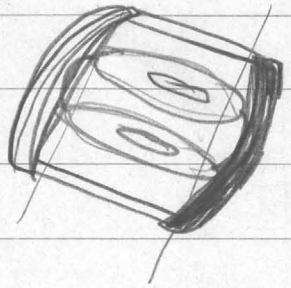


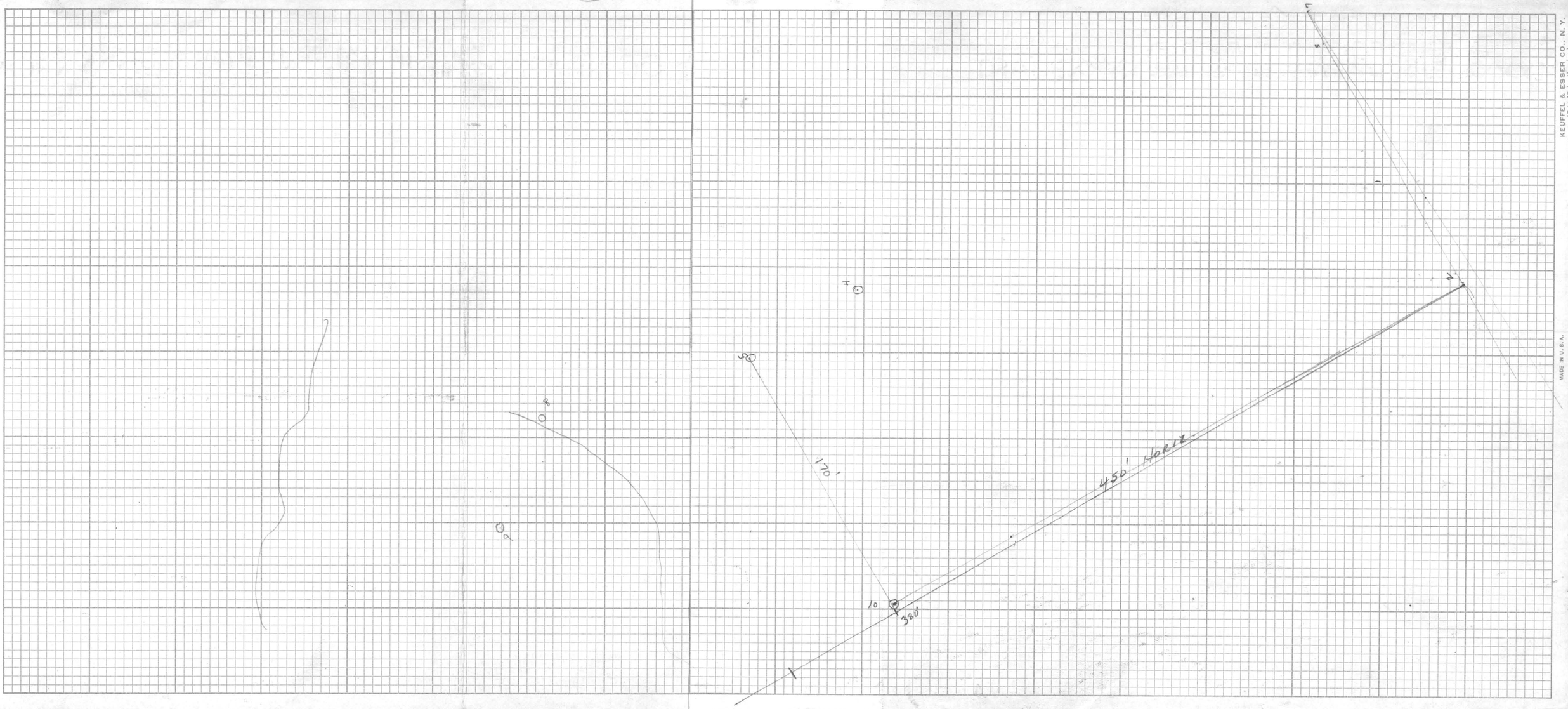
4

3

1/4

| | | | | | | |
|---|---|---|---|---|---|---|
| 845' Hor | 845' vert | from No 5 s.l.4 | #6 (7) | 45° | 1200' | Nothing. |
| 570' Hor. | 940' vert. | East | #7 (a) | 59° | 1100' | Fault. |






KEUFFEL & ESSER CO., N. Y.
10 X 10 to the inch.
MADE IN U.S.A.

595½ - 601 4

612½ 614½ -1

614½ 620 2

638 - 643 3

601 - 606 5-2

606 - 611 6

611 - 612½ 7

# Diamond Drill Hole Log

Hole No 1
Location S 96° W 185' from adit Portal
Elevation of Collar: adit level
Depth: 506 feet
Dip 45° South
Bearing S 31° E
Date Begun – April 12, 1943
Date Finished – May 7, 1943

Total Core Recovery 76 %

Project: J. L. McAlver Docket No. ND 5289
Location: Chene Mine Globe, Gila Co, Ariz
Size of Bit: AX
Calculated dip of vein 76° North
" width of vein 13½ feet
Depth at which vein was cut ± 197' below surface bottom
Sludge Recovery – None

| Footage From | Footage To | Footage Feet | Core Recovery Feet | Core Recovery % | Assay Core Width | Assay % Lead | Assay % Zinc | Assay % Mn | Assay % Copper | Description + Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29 | 29 | None | 0 | | | | | | BX Casing |
| 29 | 47.5 | 18.5 | 13.7 | 74 | | | | | | AX Casing Coarse granular grey diabase, oxidized along joints |
| ~~33~~ | ~~36~~ | ~~3~~ | ~~1.0~~ | | | | | | | " " " " " " " " |
| ~~36~~ | ~~37.5~~ | ~~1.5~~ | ~~1.5~~ | ~~100~~ | | | | | | " " " " " " " " |
| ~~37.5~~ | ~~42.5~~ | ~~5~~ | ~~4.8~~ | | | | | | | " " " " " " " " |
| ~~42.5~~ | ~~47.5~~ | ~~5~~ | ~~3.0~~ | ~~60~~ | | | | | | " " " " " " " " |
| 47.5 | 68.0 | 20.5 | 17.5 | 85 | | | | | | No casing " " " " " " " |
| ~~51.5~~ | ~~59.5~~ | ~~8~~ | ~~7.3~~ | | | | | | | " " " " " " " " |
| ~~59.5~~ | ~~62~~ | ~~2.5~~ | ~~1.7~~ | | | | | | | " " " " " " " " |
| ~~62~~ | ~~62~~ | ~~1.0~~ | ~~0.4~~ | | | | | | | " " " " " " " " |
| ~~63~~ | ~~68~~ | ~~5.0~~ | ~~4.6~~ | | | | | | | " " " " " " " " |
| 65 | 72.5 | 4.5 | 3.1 | 69 | | | | | | At 72.5' small oxidized fault gouge in diabase |
| 72.5 | 90.5 | 18.0 | 16.4 | 91 | | | | | | Coarse grey brown diabase |
| ~~76~~ | ~~82.5~~ | ~~6.5~~ | ~~5.1~~ | | | | | | | " " " " |
| ~~82.5~~ | ~~85.5~~ | ~~3.0~~ | ~~2.5~~ | | | | | | | " " " " |
| ~~85.5~~ | ~~90.5~~ | ~~4.5~~ | ~~5.3~~ | | | | | | | " " " " |
| 90.5 | 96.0 | 5.5 | 5.5 | 100 | | | | | | At 94.5' small tight fault gouge |
| 96.0 | 103.5 | 7.5 | 7.3 | 95 | | | | | | Un-oxidized grey diabase |
| 103.5 | 109 | 5.5 | 5.0 | 91 | | | | | | Altered diabase with minor brecciation + some lime |
| 109 | 118 | 9.0 | 8.7 | 95 | | | | | | Partly oxidized diabase |
| 118 | 128 | 10.0 | 9.7 | 97 | | | | | | Diabase only oxidized at joints |
| ~~123~~ | ~~128~~ | ~~5.0~~ | ~~5.0~~ | ~~100~~ | | | | | | " " " " |
| 128 | 134 | 6.0 | 6.0 | 100 | | | | | | Small fault in diabase |
| 134 | 144 | 10.0 | 6.4 | 64 | | | | | | Grey unaltered diabase |
| 144 | 173 | 29.0 | 28.1 | 97 | | | | | | Grey brown diabase |
| ~~154~~ | ~~164~~ | ~~10.0~~ | ~~9.5~~ | ~~95~~ | | | | | | " " " |
| ~~164~~ | ~~170~~ | ~~9.0~~ | ~~9.0~~ | ~~100~~ | | | | | | " " " |
| 173 | 211 | 38.0 | 36.0 | 95 | | | | | | Grey green diabase |
| ~~183~~ | ~~193~~ | ~~10.0~~ | ~~9.0~~ | ~~90~~ | | | | | | " " " |
| 193 | 199 | 6.0 | 5.0 | 100 | | | | | | " " " |
| ~~199~~ | ~~201~~ | ~~2.0~~ | ~~2.0~~ | ~~100~~ | | | | | | " " " |
| ~~201~~ | ~~211~~ | ~~10.0~~ | ~~10.0~~ | ~~100~~ | | | | | | " " " |
| 211 | 250 | 39.0 | 38.5 | 99 | | | | | | Brownish grey diabase |
| ~~221~~ | ~~229~~ | ~~8.0~~ | ~~7.5~~ | | | | | | | " " " |
| ~~229~~ | ~~233~~ | ~~4.0~~ | ~~4.2~~ | ~~100~~ | | | | | | " " " |
| ~~233~~ | ~~235~~ | ~~2.0~~ | ~~2.0~~ | ~~100~~ | | | | | | " " " |
| ~~235~~ | ~~245~~ | ~~10.0~~ | ~~10.0~~ | ~~100~~ | | | | | | " " " |
| ~~245~~ | ~~250~~ | ~~5.0~~ | ~~5.0~~ | ~~100~~ | | | | | | " " " |
| 250 | 269 | 19.0 | 10.5 | 55 | | | | | | Mixed grey and brown diabase |
| ~~260~~ | ~~269~~ | ~~9.0~~ | ~~4.7~~ | | | | | | | " " " " " |
| 269 | 275 | 6.0 | 4.6½ | 77 | | | | | | Brown diabase |
| 275 | 281 | 6.0 | 6.0 | 100 | | | | | | Brown and grey diabase |
| 281 | 291 | 10.0 | 7.5 | 75 | | | | | | Brown diabase |
| 291 | 295 | 4.0 | 3.3 | 82 | | | | | | Brown diabase fractured + cemented with quartz, also diabase green diabase breccia fragments of diabase |
| 295 | 301 | 6.0 | 5.0 | 83 | | | | | | Brown oxidized diabase with black fine grained layer |
| 301 | 309 | 8.0 | 6.0 | 78 | | | | | | Diabase and green quartz breccia |
| 309 | 313 | 4.0 | 3.0 | 75 | | | | | | Green diabase breccia cemented with quartz |
| 313 | 315 | 2.0 | 2.0 | 100 | | | | | | Brown diabase with quartz breccia and brown iron slicks |
| 315 | 317 | 2.0 | 1.8 | 90 | | | | | | Quartz with green diabase breccia fragments |
| 317 | 325 | 8.0 | 4.6 | 57 | | | | | | Broken and altered brown + green diabase |
| 325 | 328 | 3.0 | 1.1 | 37 | | | | | | White quartz with fragments of green and black diabase |
| 328 | 340 | 12.0 | 8.7 | 73 | | | | | | Brown Coarse diabase |
| 340 | 350 | 10.0 | 7.3 | 73 | | | | | | " " " with two minor fault zones |
| 350 | 370 | 20.0 | 16.1 | 81 | | | | | | Banded brown + black diabase with minor quartz fragments |
| 370 | 380 | 10.0 | 7.0 | 70 | | | | | | Brown grey diabase with band of green black fine grained diabase |
| 380 | 420 | 40.0 | 25.3 | 63 | | | | | | altered brown grey diabase with quartz seams and layers of dark green rock |
| 420 | 422.5 | 2.5 | 1.1 | 44 | | | | | | Dark green aphanitic altered diabase with quartz stringers |
| 422.5 | 424 | 1.5 | 1.0 | 67 | | | | | | Dark green dense diabase |
| 424 | 430.5 | 6.5 | 3.3 | 51 | | | | | | Black green dense diabase with massive quartz containing specular hematite |
| 430.5 | 440.0 | 9.5 | 2.0 | 21 | | | | | | Light green quartzite 432.5' probable Hanging wall of vein |
| 440.0 | 443 | 3.0 | 0 | 0 | | | | | | No core – Probably in vein |
| 443 | 444.5 | 1.5 | Cavity | 0 | | | | | | " " " |
| 444.5 | 447.5 | 3.0 | 1.7 | 57 | 2" | 0.41 | 6.60 | 4.72 | Trace | 2" of Red vein breccia assayed 0.41% Lead; 6.60% Zinc; 4.72% Mn Trace Copper. Also green quartz containing specular hematite |
| 447.5 | 448 | 0.5 | 0.5 | 100 | | | | | | 446' probably footwall of vein |
| 448 | 450 | 2.0 | 2.0 | 100 | | | | | | Light green grey cemented quartz breccia |
| 450 | 453 | 3.0 | 2.3 | 77 | | | | | | Quartz with open cavities containing manganese |
| 453 | 461 | 8.0 | 4.5 | 56 | | | | | | Green " " " " Probably footwall of low grade section of vein |
| 461 | 466.5 | 5.5 | 5.5 | 100 | | | | | | Light green quartz with fragments of diabase |
| 466.5 | 470 | 3.5 | 3.5 | 100 | | | | | | Unoxidized massive grey diabase |
| 470 | 506 | 36.0 | 35.0 | 97 | | | | | | Partly altered diabase fragments cemented by quartz |
| | Bottom of hole | | | | | | | | | Un-oxidized grey green diabase |