

1943

U.S. Bureau of Mines: Cape Rosier Mine

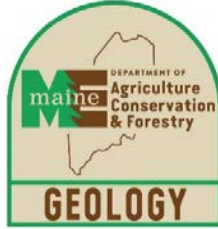
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Maine Geological Survey

Core Repository Data Files

Driller: U.S. Bureau of Mines

Project: Cape Rosier Mine

Town(s): Brooksville

Contents:

1. Drill Hole Log(s)
2. Location Map(s)
3. Cross-section Diagram(s)

R. I. _____

CAPE ROSIER ZINC-COPPER-LEAD MINE

HANCOCK COUNTY, MAINE

GEOLOGIC LOGS

Holes 1 to 13 inclusive logged by W. H. Newhouse,
U.S.G.S., and W. Benedict Levin, U. S.B.M.- Holes
14 to 22 inclusive logged by S. Benedict Levin, U.S.B.M.

Washington Office File No. _____
Branch Office File No. CPM 91.3
Project No. 1596

Note: To be filed in Washington D. C. and College Park, Md. Offices.

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. HOLE 1

Collar: N 4930, E 4895
Elevation: 5'

Course: N 63° W Mag.
Average Angle: 45°
Depth: 400 Ft.

<u>From</u>	<u>To</u>	
0'-0"	30'-0"	Rhyolite agglomerate, fragments up to 1" or less, from 10' to 30' sheared.
30	71	Diorite, fine grained near 30', then coarser, then near 71' fine grained again.
71	81.4	Rhyolite agglomerate, sheared and schistose. Some streaked with dark gray-green fragmental appearing chloritic material.
81.4	92	As above, light gray talcose with many scattered small white feldspar crystals from 84 to the ore at 92.
92	95	Ore: Sphalerite reddish brown, chalcopryrite, galena, and pyrite, fine grained. Most of Zns irreg., but some seen following the well developed schistosity which has an angle 30° to 40° to axis of core. Ore in part hard and silicified. (Sample 1: Zn 7.5%, Cu 0.5%, Pb 0.91%)
95	98	Ore: (Sample 33: Zn 5.7%, Cu 0.5%, Pb 0.6%)
98	120	Talcose, well foliated, (like 84-92) with white feldspar crystals scattered through it. Light gray. Minor diss. pyrite to 120'.
120	131	Carbonates white, replacing chloritic sheared rhyolite agglomerate. (Sample 26: 128'-131' Zn 1.6%, Cu 0.1%, Pb 0.0%)
131	137	Ore: Sphalerite, chalcopryrite, and galena with some white carbonate, all fine grained. Minor pyrite. The ore minerals are in well schisted talcose material probably derived from rhy. Aggl. The angle of schistosity is about 40° to axis of core. (Sample 2: Zn 15.2%, Cu 1.6%, Pb 0.3%)

Cape Rosier Mine, D. D. Hole 1 (Cont'd)

<u>From</u>	<u>To</u>	
137'	140'	Dark green, chloritic, schistose rock with sphalerite stringers along the schistosity at 40° to 50° angle to axis of core.
140	188	Light green talcy mineral with carbonate and sphalerite as follows: white carbonate with generally minor sphalerite present at 140-155, but at places where the carbonate contains considerable dark green chlorite material, the sphalerite is much more abundant. (Sample 3: 154.5-158.5: Zn 4.8%, Cu 1.0%, Pb 0.1%) 158.5-164.8 Several % of sphalerite in dark green talcy schistose rock, with varying amount of white carbonate. 164.8-168.3 (Like just above) (Sample 17: Zn 9.3%, Cu 1.2%, Pb 0.6%) 168.3-171.8 (Like above) Sample 18: Zn 10.8%, Cu 0.9%, Pb 0.0%). 175 6" good ore. 183 4" good ore. 171.8-188 Rock like 158.5-164.8 172 -188 Rock is light green talc - white carbonate. In places one mineral predominates; elsewhere the other. The Zn is concentrated in the dark green chloritic material in 137-188. 81.4-188 Is regarded as sheared, schisted rhyolite agglomerate.
188	205	Gray green chlorite, carbonate veined rock. A sheared rhyolite aggl. at 205' angle of schistosity 60°.
205	216	Rhyolite agglomerate, sheared, schisted dark green chloritic, fragments 1/2" and less. 208' There is 6" ZnS several %. 211' There is 6" ZnS several %. The zinc sulphide at 211 is along the planes of schistosity, these make an angle of 65°-70° with axis of core.
216	338	Light gray green, schistose (angle 65° to axis core) with many residual fragments of rhyolite Agglomerate. Abundant lath shaped white feldspar xyls, developed as metacrysts. These are 1 mm in size. Fragments get coarser and crystals of feldspar less abundant near 240'. From 240' on coarse rhy. Agglomerate fragments 1" and over.

Cape Rosier Mine, D. D. Hole 1 (Cont'd)

<u>From</u>	<u>To</u>
338	400

Rhyolite agglomerate, sheared to fragments 1/4" and less in size. Schistosity not pronounced. Angle of fracture about 70°-80°. This is parallel to the incipient schistosity.

Angle of Hole:
At 0': 45°

GEOLOGIC LOG
CAPT ROSIER MINE
D. D. HOLE 2

Collar: N 4790, E 4778
Elevation: 10'

Course: N 55 W Mag.
Average Angle: 60°
Depth: 300'

<u>From</u>	<u>To</u>	
0'-0"	15'-0"	Unconsolidated.
15	20	Rhyolite agglomerate? silicified, leached to form cavities (broken core).
20	40	Diorite, (at 33' a white carbonate vein 1/2" thick bordered by dark green chlorite) massive medium grained.
40	84	Rhyolite Agglomerate. Sheared, altered 40-46 Silicified in large part with fractures filled by quartz-white carbonate and relic green chlorite with relic white feldspar crystals. 46-53 Talcose, schistose, light grey green, sheared agglomerate fragments with white feldspar crystals within the darker chlorite phases. Small concentration of pyrite crystals. Schistosity 75°-85° to core axis. 53-54 Silicified, light grey. 54-55.5 Ore, very heavy fine grained brown sphalerite, contains white carbonate. In part leached of carbonate having spongy sphalerite. (Est. 20-30 percent Zn). 2" of very dark grey chlorite on contact of ore at 55.5. 55.5-84 Grey sheared, chloritic (with white scattered feldspar crystals to 60') dark green grey and variegated, residual fragments up to 1/2" across, some carbonate veinlets. At 80' schistosity angle 40° to core axis.
84	120	Diorite, medium grained, (compared to diorite seen in outcrops south of Dyer Cove). Vein of carbonate-quartz at 88. Carbonate cream colored. Massive diorite. (117.5' a very thin sphalerite? veinlet). Pyrite crstals fairly coarse 117'-119'). The diorite is fine grained near 120'.

Cape Rosier Mine, D. D. Hole 2 (Cont'd)

<u>From</u>	<u>To</u>	
120	240	Rholite agglomerate? Much sheared, schisted, altered and mineralized. Occasional residual fragments.
	120-131.2	Dark grey-green (black) schistose chlorite-rich, with disseminated sphalerite and in streaks conforming with schistosity. Angle of schistosity 30°-50° to axis of core. (Est. Zn 1-2 percent W.H.N. and S.B.L.) Hales of selvage of white talc in radiating plates around individual sphalerite crystals or masses. (SAMPLE 15: 131.2'-136.2': Zn 5.3%, Cu 0.7%, Pb 0.6%, desc. as above).
	136.2-139.2	Note: Pyrite is very minor in 120-139.2. Minerals present in 120-139.2 are sphalerite, chalcopyrite, galena, pyrite and talc. (SAMPLE 16: Zn 6.6%, Cu 0.6%, Pb 0.0%, desc. like above.)
	139.2-154.2	Dark grey-green (black) schistose chlorite schist with disseminated and patchy sphalerite rimmed by talc. Angle of schistosity 30°-40° to axis of core. This section has 1-2 percent disseminated very small pyrite crystals. (locally up to several percent Zinc. W. H. N.)
	154.2-157.2	Sample 25 contains considerable disseminated pyrite crystals. (SAMPLE 25: Zn 0.6%, Cu 0.0%, Pb 0.0%)
	157.2-161	Description like 139.2-154.2. This ore replaces schistose rock. (SAMPLE 4: Zn 17.8%, Cu 1.5%, Pb 0.1%)
	161.0-164.8	Ore replaces schistose rock, (chlorite). (SAMPLE 5: Zn 29.0%, Cu 1.5%, Pb 0.4%)
	164.8-169.3	Description like above. (SAMPLE 6: Zn 5.1%, Cu 0.4%, Pb 0.0%)
	169.3-174	Description like above. (SAMPLE 7: Zn 10.9%, Cu 1.0%, Pb 0.0%)
	174-177	Silicified, some dark chlorite streaks, schisted where chloritic. Some residual fragments up to over half inch across. Sphalerite, minor disseminated.
	177-185	Dark grey-green chlorite schist with much white carbonate.
	185-187	Diorite, fine grained, fractured and veined by pyrite-talc? veins. No sphalerite in this rock.

Cape Rosier Mine, D. D. Hole 2 (Cont'd)

<u>From</u>	<u>To</u> +	
		187-192 Like 177-185 only more carbonate.
		192-197.8 Ore
		(SAMPLE 20: 192.8'-197.8' : Zn 11.8%, Cu 1.0%, Pb 0.9%)
		(SAMPLE 34: 197.8'-202.8' : Zn 3.7%, Cu 0.2%, Pb 0.1%)
		(SAMPLE 35: 202.8'-207.8' : Zn 2.7%, Cu 0.2%, Pb 0.0%)
		(SAMPLE 36: 207.8'+212.8' : Zn 5.5%, Cu 0.4%, Pb 0.0%)
		(SAMPLE 37: 212.8'-217.8' : Zn 3.9%, Cu 0.2%, Pb 0.0%)
		(SAMPLE 38: 217.8'-220.9' : Zn 6.4%, Cu 0.7%, Pb 0.2%)
		Note: 192-220.9' the sphalerite in part is disseminated, in part follows the schistosity of dark green chlorite and talc. Many 30°-40° angles of schistosity to axis of core. In places much fine veining and repl. of talcy rock by carbonate.
		220.9-240 Dark grey-green chloritic schist, local heavy white carbonate. Disseminated sphalerite and also parallel to schistosity. Talc rims around many dis- seminated sphalerite crystals or masses. Several places are several inches of sphalerite est. at several percent.
240	300	Rhyolite agglomerate, sheared but with many residual fragments near 240', then larger fragments near 265' and on to end of hole at 300'.

Angle of Hole:

At 0': 60°
At 300': 63°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 3

Collar: N 4270, E 4260
Elevation: 10'

Course: N 70 W Mag.
Average Angle: 37°
Depth: 350 Ft.

<u>From</u>	<u>To</u>	
0'-0"	23'-0"	Unconsolidated.
23	46.5	Rhyolite (?), light gray, with small white feldspars, which are not fresh, darker gray where less fractured. Fractured, silicified and bleached along fractures. (Probably diorite, S.B.L. 11-26-42).
46.5	76.5	Rhyolite agglomerate, silicified locally, fractured and sheared. In part the agglomerate fragments are an inch or so across.
76.5	111	Diorite, finer grained near 76.5, (pyrrhotite veinlet near 76.5), coarser grained near center, then finer grained again near 111'. Massive, some irreg. veins of white carbonate in 80'-100'.
111	136	Rhyolite, light gray with small white feldspars that are not fresh. Sheared or flow structure, foliated to some extent.
136	215	Rhyolite agglomerated? sheared, residual fragments several m.m. across. Disseminated pyrite, sparse; considerable light gray - dark gray-green streaked to 161'. 161-166 Dark gray-green chlorite schist with schistosity angle 55°-65° to axis of core. 166-169 Heavy sulphides. The ore is in schisted rock, containing much talc and some white carbonate. More talc and less dark green chlorite than in 161-166. "Ore" - sphalerite, chalcopyrite, pyrite, talc, white carbonate. (SAMPLE 19: Zn 4.4%, Cu 1.5%, Pb 0.9% 169-176 Like above but leaner. Oxidized to limonite and possibly some oxidized Zn mineral. Leached cavities, much broken core. 176-177.2 Rhyolite agglomerate, little sheared, fragments in it.

Cape Rosier Mine, D. D. Hole 3 (Cont'd)

<u>From</u>	<u>To</u>	
	177.2-181	Much broken talcy, and chloritic
	179	Sphalerite, 1", good.
	179.3	Chalcopyrite, over 6", irreg. veining.
	181-183	Diorite, very fine grained massive.
	183-191.3	Talc and chlorite schist, some white carbonate, very minor disseminated sphalerite. (At 190' sphalerite diss. and veining along angle of schistosity, 45° to axis of core.)
	191.3-194.3	Ore, sphalerite, galena, chalcopyrite, some pyrite fine grained massive, mixture, white carbonate and talc. The lower grade ore shows banding with schist (angle 45° to axis of core). (SAMPLE 8: Zn 23.8%, Cu 2.0%, Pb 11.5%).
	194.3-196	Very dark gray-green chlorite schist, becoming lighter gray (talcy) from 195-196 at the ore.
	196.9-201.7	Ore, 196.9-199.5 Zinc ore massive, very rich, in part richer in Zn than Sample 8. Sphalerite very dominant in chalcopyrite. (SAMPLE 9: Zn 5.8%, Cu 8.2%, Pb 2.6%).
	199.5-201.7	Copper ore, chalcopyrite - pyrite in very dark gray-green chlorite schist; sphalerite is very minor. This copper ore is diss. or distributed through the very dark schist. Angle of schistosity (in ore) 70° to axis of core.
	202-203	Diorite, massive, fine grained.
	203-215	Very dark gray-green chlorite schist, with considerable disseminated pyrite, some chalcopyrite and local sphalerite. At 209 sphalerite crystals rimmed by talc (talc blades perpendicular to ZnS) Occasional rhy. aggl. residual fragments begin to appear near 215.
215	320	Rhyolite agglomerate, sheared and somewhat schistose near 215. In general, light gray with darker green wisps or streaks.
	215-230	Original fragments numerous near 220'.

Cape Rosier Mine, D. D. Hole 3 (Cont'd)

<u>From</u>	<u>To</u>	
		Near 235 still sheared some, but fragments numerous and up to several inches and more in size. 6" of very dark gray-green chlorite schist at 279'. Sphalerite, minor chalcopryite, heavily diss. over 3" to 285', in but slightly sheared rhyolite aggl.
320	348	Very dark gray-green chlorite schist, near 320 some bands containing lath shaped white feldspars, at 324-348 the uniform very dark gray-green chlorite schist without sulphide mineralization.

Angle of Hole:

At 0': 35°
At 350': 40°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 4

Collar: N 4450, E 4475
Elevation: 27'

Course: N 50 W Mag.
Average Angle: 45°
Depth: 450 Ft.

<u>From</u>	<u>To</u>	
0'-0"	8'-0"	Overburden
8	29	Rhyolite Agglomerate, fragments up to 1", sheared in part of it and somewhat schistose, with light grey and slightly darker streaking.
29	41	Diorite, fine grained.
41	94	Rhyolite agglomerate, sheared and with thin dark gray-green streaks, many small residual fragments, some up to 1/2".
94	109	Diorite, fine grained near 94, then coarser away from contact.
	104-108	Veins of anhedral pyrite crystals, and of chalcopyrite.
	108-109	Sheared diorite with some platy chloritic mineral developing schistosity. Chalcopyrite and pyrite present in this schist.
109	177.8	Rhyolite aggl., sheared and altered.
	107.2-111.2	One end of this sample is definitely in diorite, the other in chlorite schist. Diss. Pyrite 10% or more and chalcopyrite. Saw no sphalerite - looked closely for it. The chalcopyrite generally distributed irregularly but locally conforms to the schistosity.
		(SAMPLE 10: Zn 0.1%, Cu 1.0%, Pb 0.0%.)
	111.2-114.2	In chlorite schist like 114.2 on.
		(SAMPLE 11: Zn 0.1%, Cu 2.4%, Pb 0.0%.)
	114.2-125	Dark gray-green chlorite schist (dominantly a one-mineral schist). Angle of schistosity 60° to axis of core.
	125	Dark gray-green chlorite schist with light streaks.

Cape Rosier Mine, D. D. Hole 4 (Cont'd)

<u>From</u>	<u>To</u>	
		127' - Sphalerite - concentrated over 3". Talc selvages to ZnS crystals.
		140' - Residual rhyolite fragments of small size begin to appear.
		Rhyolite agglomerate, residual fragments, 1/2" present; at and after 159', some schistosity.
		173.8'-177.8' - Galena is more prominent than the analysis would indicate. This very low grade "ore" is not in schist, but in fractured, relatively unsheared rhyolite agglomerate.
		(SAMPLE 12: Zn 2.2%, Cu 0.3%, Pb 0.9%).
177.8	360	Rhyolite agglomerate, up to 1" fragments. 300-360 Fragments several inches across.
360	434	Rhyolite agglomerate sheared and schisted. Dark gray-green chlorite schist. Schistosity angle 60° to core axis. At 383 the 60° angle of schistosity is transected by fairly closely spaced shearing which bevels the opposite side of the core, with angle of 40° to core axis. These two directions continue to at least 430'.
434	448	Diorite, unusual type contains brown mineral distributed thickly in small grains.
448	450	Dark green chlorite schist.

Angle of Hole:

At 0': 45°

At 210': 46°

At 450': 44°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 5

Collar: N 4550, E 4593
Elevation: 25'

Course: N 50 W Mag.
Average Angle: 45°
Depth: 288 Ft.

<u>From</u>	<u>To</u>	
0'-0"	45'-0"	Rhyolite, black, or black rhyolite agglomerate, much broken, fractured, veined by quartz and carbonate, leached and oxidized, cavities.
45	57	Diorite, much bleached and altered, some oxidation.
57	80	Rhyolite Agglomerate, 1/4" to 1/2" fragments. Some sheared, don't know whether the fragments were originally small or have been reduced in size by shearing. 86.6-89 M Mud reported, Gouge.
80	127.6	Rhyolite agglomerate? Much sheared altered and broken, poor core recovery to 107. Oxidized in part. Sphalerite, heavy (85.5-86.5) spongy with voids estimated 30% Zn. Mud seam (Gouge, in core box) at 86.6-89, 89-91.6 Chloritic or talcose very dark grey-green. 91.6-95 Chloritic (very dark grey-green) streaks 95-127.6 Rhyolite agglomerate, sheared to very small fragments, wisps of dark chloritic.
		121 - White carbonate 6-7" thick. 126 Diorite 1' thick.
127.6	151	
127	151	Diorite, chilled border of 127.6 131 - White carbonate vein several inches thick. The diorite is fine grained. Blotches of disseminated pyrite in the diorite within a few ft. of 151. Some xyls 4 mm. across.
151	174	Rhyolite or Rhyolite Agglomerate, much sheared, dark chloritic material, disseminated pyrite (Drill core much broken 151-162).

Cape Rosier Mine, D. D. Hole 5 (Cont'd)

<u>From</u>	<u>To</u>	
	169.6-171	Very dark chloritic rock with several % disseminated pyrite and at 170 some chalcopyrite.
	171-174	Pyrite-Sphalerite-Chalcopyrite in fractured and sheared rhyolite. (SAMPLE 13: Zn 2.2%, Cu 4.2%, Pb 0.1%)
174	288	Rhyolite agglomerate, sheared, locally highly chloritized (black) and with diss. pyrite. Fragments remaining are mm. size.
	186-190	Light gray possibly silicified
	196	Chalcopyrite
	196.10-214	Very dark grey chlorite with disseminated pyrite (sheared and altered)
	214-250	Sheared and altered but not as highly as 196.1-214. Here there are fragments up to several mm. in size. General color grey-green but not dark.
	250-288	Much larger fragments 1/2" to 1", left by shearing - less sheared than is the core 214-250. Fragments? (Checked 250-288 September 26th. The Rhyolite agglomerate contains various types of rhyolite as fragments.)

Angle of Hole:

At 0': 45°
At 288': 46°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 6

Collar: N 4625, E 4685
Elevation: 23 Feet

Course: N 50. W Mag.
Average Angle: 45°
Depth: 300 Feet

<u>From</u>	<u>To</u>	
0'-0"	23'-0"	Rhyolitic agglomerate, ? black rhyolite fragments, greenish gray. This could be black rhyolite. Some dark wisps or streaks with the white rectangular feldspar crystals - i.e., the R. A. has been sheared and metamorphosed. Fractured with quartz and carbonate veinlets in region of 20-23 feet.
23	58.9	Diorite, fine grained to medium (fractured near 23 feet) massive unshered.
58.9	164	Rhyolite (agglomerate?) (65-100 black rhyolite probably) 58.9 - 64.3 much fractured 64.3 - 67 streaked white and dark green, with feldspar crystals in green wisps (See 43-41 ft. hole 7) 83.6 - 94.2 the rhyolite has been sheared somewhat leaving unshered fragments in darker and streaked matrix. 110 - 130 core much broken (some leached and oxidized with open cavities at 110 - 115) 139 - 160 streaked, very dark greenish grey streaks and lighter streaks (sheared and altered R. A.) 149 - 150 diorite intr. fine grained At 150.5 Diorite intr. 4 inches thick 152 - 154 Diorite intr. fine gr.
164	185	Diorite, fine grain at border near 164, then gets coarser. Some $\frac{1}{4}$ inch qtz. veins. Gets fine grained near 185. Massive unshered and non-schistose.
185	206	Rhyolite, light gray no visible crystals. 185 - 186 pyritized sever % pyrite in brecciated rhyolite 188 - 196 talcy sheared zone very dark grey-green. 198 sphalerite veinlet. 200 - 206 pyrite disseminated and in bands in sheared, altered rhyolite.

Cape Rosier Mine, D. D. Hole 8 (Cont'd)

<u>From</u>	<u>To</u>	
	205	possibly diorite much altered.
206	300	Rhyolite agglomerate with various kinds of rhyolite as fragments, sheared and with original fragments broken to $\frac{1}{4}$ inch size, to 233; pyrite widely but sparingly disseminated. Chalcopyrite with pyrite at 247 and 249.5.
	233 - 273	much sheared, and altered with mm. fragments, widely disseminated pyrite.
	264.5	chalcopyrite veinlet.
	273 @ 280	very dark gray-green chlorite with disseminated pyrite laminated.
	280 - 300	rhyolite agglomerate, fragments up to 2 inches across. Local shearing and alteration.

Angle of Hole :

At 0': 45°
 At 288': 46°

GEOLOGIC LOG
 CAPE ROSIER MINE
 D. D. Hole 7

Collar: N 4570, E 4740
 Elevation: 10'

Course: N 50 W Mag.
 Average Angle: 57°
 Depth: 362 Ft.

<u>From</u>	<u>To</u>	
0'-0"	33'-0"	Rhyolite agglomerate, black rhyolite fragments. Many siliceous fragments 1"-3" across. Both fragments and matrix are rhyolite.
33	41	Streaked white and very dark greenish gray rhyolite agglomerate? Fissile probably "schisted" agglomerate. Characteristic white small rectangular crystals in dark layers. Probably albite feldspar. These dark streaks or layers are probably an alteration or metamorphic product.
41	61	Diorite, massive fine even grained grey, occasional $\frac{1}{4}$ " white carbonate veins. Near 41' shows finer grain at contact, (chilling). Near 61' shows finer grain at contact (chilling).
61	124	Like 33-41 in general. 61-89 Also at 123 in a black rhyolite or black rhyolite agglomerate, somewhat bleached. Scattered small pyrrhotite veinlets. Two of them are 70° to schistosity, and at 15° to axis of core. The dark and white streaks make an angle of 60°-70° with axis of core. 120-124 Highly siliceous.
124	126	Bleached, altered friable light colored cavernous rock. Some carbonate (white).
126	132.6	Like 33-41 with the dark and light streaks but no rhyolite agglomerate pebbles.
132.6	136	Rhyolite, bleached black rhyolite, or black rhyolite agglomerate, siliceous with small clear white feldspar crystals (On fresh fracture).
136	154	Rhyolite agglomerate - black rhy. fragments, or black rhy., small white feldspar crystals in fragments and matrix.

Cape Rosier Mine, D. D. Hole 7 (Cont'd)

<u>From</u>	<u>To</u>	
154	172	Schisted rhyolite agglomerate. Talc? plates or xyls parallel to the lamination. Very minor disseminated pyrite crystals.
172	174	Diorite, fine grained.
174	176.9	Rhyolite, disseminated pyrite and pyrite-carbonate veinlets. Becomes talcose near ore.
176.9	186.7	"Ore" - 176.9-181.4 Sphalerite-galena-chalcopryrite replacing brecciated massive rhyolite (SAMPLE 21: Zn 3.2%, Cu 0.1%, Pb 1.1%). 181.4-186.7 Heavy massive sulphide as above shows some lamination. (SAMPLE 22: Zn 10.1%, Cu 0.5%, Pb 2.0%).
186.7	190	Diorite, fine grained. Minor pyrrhotite.
190	191.6	Rhyolite - fractured and veined by white carbonate.
191.6	193.2	Ore, carbonate gangue fine grained sphalerite, some chalcopryrite talc? present. (SAMPLE 23: Zn 9.9%, Cu 0.1%, Pb 2.5%).
193.2	194	Rhyolite? fractured and altered.
194	209	Diorite, fine grained near 194 and coarser grained near 200, then finer grained again near 209.
209	227	Rhyolite, 55°-65° angle of fracture to core axis. (At 227 several inches of rock containing pyrite pyrrhotite and chalcopryrite - sulphides 10%).
227	240	Diorite or rhyolite, fine grained and altered, contains local heavy disseminated pyrite xyls.
240	304	Rhyolite with numerous black or very dark small short streaks and wisps, also "fragments." Altered, very minor diss. Pyrite. From 274-304 small light colored fragments lie in this, dissem., pyrite some chalcopryrite. This is sheared and altered and pyritized, chloritized, rhyolite (or rhy. aggl. Sept. 26, WHN).

Cape Rosier Mine, D. D. Hole 7 (Cont'd)

<u>From</u>	<u>To</u>	
304	307	Same as 240-304 but more heavily mineralized. (SAMPLE 24: Zn 0.8%, Cu 3.0%, Pb 0.0%).
307	362	Rhyolite agglomerate. Fragments numerous and many over 1" across. This agglomerate contains various types of rhyolite as fragments.

Angle of Hole:

At 0': 60°
At 362': 55°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole No. 8

Collar: N 4571, E 4740
Elevation: 10'

Course: N 35 E Mag.
Average Angle: 75°
Depth: 521 Ft.

<u>From</u>	<u>To</u>	
0'-0"	14.8'-0"	Rhyolite agglomerate, 14.8 dark rhyolite fragments that contain white feldspar crystals. Fragments up to several inches.
14.8	80	14.8-53 Small fragments (no black rhyolite with feldspar crystals) up to 28', then coarser 1" fragments to 53. 53-59 Light grey - very dark gray banded with white feldspar metacrysts in the dark bands. 59-80 Light gray, fragments up to several inches probably bleached black rhyolite fragments. White feldspar crystals in many fragments.
80	92.5	Diorite, fine gr. at 80, then medium g., then fine gr. again at 92.5.
92.5	120	Rhyolite Agglomerate, fragments up to several inches. 92.5-107 Like 59-80 107-120 R. A. with no black rhyolite fragments
120	126	Diorite, fine gr. near 120, then coarser toward center, then finer gr. again near 126.
126	192	Rhyolite Agglomerate, 126-143 Light gray, contains fragments 1" and over inch size, many fragments may be bleached black rhyolite - not certain. 143-174 Sheared, faint minor wisps darker, residual fragments mm. size and some over. Schistosity angle 40°-55° to axis of core. Minor pyrite diss. near 169. 174-192 Like above but with some black streaks with white feldspar metacrysts.
192	195	Diorite, fine gr., massive, but core broken.

Cape Rosier Mine, D. D. Hole 8 (Cont'd)

<u>From</u>	<u>To</u>	
195	195.5	Rhyolite agglomerate.
195.5	200.5	Ore. Fine gr., sphalerite, chalcopryrite, pyrite, probably galena. This ore is in a schistose rock. Diorite 6" to 1'. Occurs near the center of the ore, shows sharp contact with ore, but no sphalerite (ore chalcopryrite) in the diorite. The diorite is fairly massive. SAMPLE 27: Zn 15.0%, Cu 1.7%, Pb 0.1%.
200.5	205.5	Diorite, fine gr. at contact with ore. Ore contact sharp.
205.5	218.6	Rhyolite agglomerate, sheared chloritic.
218.6	262	Diorite, somewhat fractured and healed near 218.6, also fine gr. here, then coarse toward center, then fine gr. near 262. Minor $\frac{1}{2}$ " pyrite crystals near 218.6.
262	269	Rhyolite agglomerate.
269	279.5	Diorite, veined by pyrite, pyrite crystals enhedral in part. A few dark inclusions, and fractures healed dark.
279.5	302	Very dark gray-green chlorite schist in part possibly massive serpentine or green talc with sphalerite. 279.5-280.5 Diss. sphalerite with talc rims. Several percent sphalerite. 280.5-282.7 Ore SAMPLE 39: Zn 6.1%, Cu 0.9%, Pb 3.5%. 282.7-288 Contains disseminated sphalerite with talc rims, at 284.5-286 contains several percent Zn. 288-292.4 Contains a thick white carbonate vein. SAMPLE 28: Zn 5.4%, Cu 0.7%, Pb 2.5%. 292.4-293.3 Dissem. sphalerite minor. 293.3-294.6 Est. 5% Zn. 294.6-297.5 Diss. sphalerite very minor. 297.5-298.8 Est. 8% Zn. 298.8-302 Diss. sphalerite very minor.
302	308	Rhyolite Agglomerate gray sheared, crushed silicified, fragments 1 mm. size. Contact with the dark green schist at 302 is very sharp and 90° to core axis.

Cape Rosier Mine, D. D. Hole 8 (Cont'd)

<u>From</u>	<u>To</u>	
308	315	Very dark gray-green chlorite schist (may be in part massive serpentine or talc) with dissem. sphalerite with talc rims. Zn several percent at 308.-308.6.
315	336	Rhyolite Agglomerate, sheared. 315-336 Dissem. pyrite (considerable)
336	344	Very dark grey-green chlorite schist. Diss. pyrite crystals, larger spots of pyrite rimmed by talc. A few spots of chalcopyrite. Schist angle 45°-55° to axis of core.
344	352.6	Rhyolite Agglomerate sheared, with wisps of dark gray in light gray background. Diss. pyrite.
352.6	355.6	Rock-like above. Pyrite diss. thickly, chalcopyrite heavy. Massive over one inch, and elsewhere smaller masses. SAMPLE 29: Zn 0.5%, Cu 1.8%, Pb 0.0%.
355.6	521	Rhyolite Agglomerate gray sheared crushed, mm. fragments at beginning and on to 392. This is the rhyolite agglomerate with various kinds of rhyolite fragments. 392-521 Residual fragments become larger, to 1/4" 392-415, then larger beyond at 435 to 465 to 521. Diss. pyrite 355.6 and decreasing near 385. 360.2-364.2 The sphalerite and chalcopyrite appear to be along irreg. fractures. SAMPLE 30: Zn 1.0%, Cu 0.7%, Pb 0.0%. 409-431 Very dark chlorite wisps. Numerous in gray matrix. 431-434.1 Diss. pyrite 434.1-465. SAMPLE 31: Zn 1.2%, Cu 0.1%, Pb 0.0%. 476 Galena-pyrite veinlet at 45° to axis of core. Several mm. thick pyrite-chalcopyrite veinlets bordered by talc are parallel to the galena vein.

Angle of Hole:
 At 0': 70°
 At 279': 77°
 At 521': 77°

GEOLOGIC LOG
CAPT ROSIER MINE
D. D. Hole 9

Collar: N 4140, E 4340
Elevation: 10'

Course: N 50 W Mag.
Average Angle: 40°
Depth: 331 Ft.

<u>From</u>	<u>To</u>	
0'-0"	58'-0"	Diorite, fine grained near 0 then coarser grained and with lath like feldspars showing clearly near the middle, then fine grained near 58.
58	70	Rhyolite, gray, core much broken. May have been the rhyolite of 70-87 broken silicified and altered to lighter color.
70	87	Rhyolite very dark grey to black contains small feldspar laths or rectangular xyls, also branching (crystallites?). This is like the rhyolite on top of the hill south of No. 4 shaft. Some small parallel quartz veins at 30° to core. Last 2' brecciated and healed in light gray matrix.
87	94	Rhyolite, grey, core much broken. May have been the rhyolite of 70-87 broken silicified and altered to lighter color.
94	99	Diorite (fine gr. 94) then medium grained.
99	100	Sliced on 45° angle to core; veins formed; partly dissolved, cavities, oxidized (iron stain).
100	106.5	Rhyolite agglomerate, silicified?
106.5	138	Diorite.
138	176	Rhyolite agglomerate 138-143 Sheared, silicified light gray. 143-155 Unsheared, fragments "1" 155-176 Sheared light gray, streaked dark and light.
176	188.5	Diorite.
188.5	191	Very dark gray chloritic or talcose well foliated at angle of about 40° to core axis. Probably sheared and altered rhyolite agglomerate.

Cape Rosier Mine, D. D. Hole 9 (Cont'd)

<u>From</u>	<u>To</u>	
191	204	Rhyolite agglomerate, light gray silicified near 191, then sheared near 204 with small fragments up to 1/2" altered. Sphalerite vein at 194 makes 40° angle with core axis.
204	218.5	Sheared very dark chloritic streaks and light streaks. Quartz present over 3' at 218.5 Probably rhyolite agglomerate.
218.5	277	Rhyolite agglomerate, 1/2" fragments. Sheared some. Includes diorite (4 ft.) near 264.
277	331	Strongly sheared and altered. Rhyolite aggl? Occasional fragments rare. 277-287 Grey chloritic 287-301 Very dark gray chlorite or talc Fractures normal to core axis. 301-321 Grey chloritic. 321-331 Like 287-301.

Angle of Hole:

At 0': 38°
At 331': 42°

GEOLOGIC LOG
CAPE ROSTER MINE
D. D. Hole 10

Collar: N 4030, E 4270
Elevation: 13'

Course: N 50 W Mag.
Average Angle: 40°
Depth: 350 Ft.

<u>From</u>	<u>To</u>	
0'-0"	40'-0"	Unconsolidated.
40	48	Diorite, broken core.
48	80	Rhyolite, broken core.
80	105.5	Diorite.
105.5	119	Rhyolite. 105.5-110 Light gray rhyolite veined by white carbonate 110-119 Very dark gray rhyolite with small white feldspar laths (and crystallites?)
119	138	Rhyolite agglomerate, sheared and altered. 128 Several inches of several percent sphalerite and galena, and several inches of fairly heavy pyrite. 129 Dark and light streaked.
138	155	Rhyolite agglomerate.
155	167-	Rhyolite agglomerate, sheared, dark gray.
167	175	Rhyolite agglomerate, fragments an inch or more-light gray.
175	215	Sheared, schistose light gray talcy or chloritic rock, angle of schistosity with core axis 50°. Probably sheared rhyolite agglomerate. 207 - 208 Bands of heavily disseminated pyrite, some minor sphalerite and chalcopyrite with black chloritic material, bands form angle 50° with core. Several percent zinc.
215	225	Rhyolite agglomerate, very dark gray, chloritic or talcose sheared, schistose. Many residual fragments present.

Cape Rosier Mine, D. D. Hole 10 (Cont'd)

<u>From</u>	<u>To</u>	
225	229	Rhyolite agglomerate, light gray, sheared and silicified. Several spots of sphalerite, chalcopyrite for an inch or so to several percent zinc.
229	305	Rhyolite agglomerate with various kinds of rhyolite as fragments, especially certain 255-300. Sheared and schistose, light and dark streaked but not heavily, numerous scattered residual fragments several mm. across to 255', then the fragments become larger (2" etc.) with fragments again becoming smaller toward 305'.
305	350	305-318 Sheared, schistose, light gray streaked chloritic or talcose. The lamination nearly 90° to core axis. 318-350 Chlorite schist, very dark gray-green chloritic, uniformly dark - not streaked - (old log "shaly material"). Very sparse diss. pyrite. Foliation breaks across core at 80° to axis of core. Several spots of pyrrhotite near 350.

Angle of Hole:

At 0': 38°
At 350': 41°

GEOLOGIC LOG
CAPE ROSIER MINE
B. D. Hole 11

Collar: N 4830, E 4910
Elevation: 1'

Course: S 75 W Mag.
Average Angle: 63°
Depth: 764 Ft.

<u>From</u>	<u>To</u>	
0'-0"	27'-0"	Rhyolite agglomerate, with black rhyolite fragments.
27	38	Diorite, fine grained near 27, then coarser, then near 38 finer grained again.
38	58	Rhyolite agglomerate, sheared some and fractured, silicified, mottled in light tones.
58	115	Diorite, fine grained near 58, coarser near center. Some veins of white carbonate.
115	135	Rhyolite, 115-118 Light gray (bleached very dark rhyolite) containing lath shaped white feldspar crystals probably altered. 118-119.6 Light and dark banded - may be flow banding. The chlorite rich bands are schistose however. Thickly scattered white feldspar crystals. 118-123 Like 115-118. 123-133 Very dark grey rhyolite with white feldspar crystals. (like on hills of no. 4 shaft). 133-135 Light gray silicified.
135	184	Rhyolite agglomerate, sheared, crushed to quarter inch and smaller fragments. The more finely crushed matrix contains metacrysts of white feldspar in a dark base. 154' Diorite 8". Massive. 175-177 Diorite. Massive. 177-184 Sheared and schistose, consists of light grey and very dark grey streaks with white (metacrysts) feldspar crystals in the dark streaks. Contains some scattered pyrrhotite. Sheared diorite or rhyolite agglomerate?
184	228.6	Rhyolite agglomerate, sheared, with residual fragments up to 1/4", dominantly gray with a few thin dark wisps or streaks. 222-223 Sphalerite fairly heavy disseminated along shear or schistosity planes. Sphalerite at contact of diorite and in cracks in diorite. NO shearing of the diorite.

Cape Rosier Mine, D. D. Hole 11 (Cont'd)

		223-225 Diorite fine grained.
		225-228 Rhyolite agglomerate sheared.
228.6	304	Diorite, fine grained near 228.6, then coarser near middle, then fine grained again near 304. Massive.
304	406.6	Rhyolite agglomerate. Checked on 368-390, (Sept. 26,) and it is rhyolite agglomerate with various kinds of rhyolite as fragments.
		304-307 Sheared and schistose lighter gray near 304, getting dark gray toward 307 and is more heavily mineralized. Sphalerite with talc rims.
		SAMPLE 40: Zn 1.4%, Cu 0.1%, Pb 0.0%.
		307-319.4 Sheared agglomerates, some chlorite, a few residual fragments.
		319.4-321.9 Like 304-307
		SAMPLE 41: Zn 4.1%, Cu 0.0%, Pb 0.0%.
		321.9-370 Agglomerate sheared and altered, fragments 1/4" - 1/2". Dark wisps of chlorite, in gray background.
		370-406.6 As above, less sheared than 321.9-370.
406.6	435	Diorite (unlike others lithologically). Chilled margin near 406.6, coarse grained near center and chilled again near 435 feet. Two fairly heavy quartz veins at 414 and 419.
435	764	Rhyolite agglomerate, fragments 1/2" and over. Some 2".
		505-525 Sheared some and with white feldspar metacrysts scattered through the rock.
		525-575 Rhyolite agglomerate. Some minor shearing but many large fragments; a normal rhyolite agglomerate. Chalcopyrite streaks at 538'.
		575-764 Rhyolite agglomerate. Darker than usual, a distinct gray-green general color. The change in color is due to the matrix of the fragments being more abundant and darker.
		515-764 The rhyolite agglomerate has various kinds of rhyolite as fragments (Sept. 26)

Angle of Hole:

At 0':	63°
At 345':	65°
At 764':	61°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 12

Collar: N 5000, E 5000
Elevation: 2'

Course: N 15W Mag.
Average Angle: 60°
Depth: 665

<u>FROM</u>	<u>TO</u>	
0'-0"	14'-0"	Sheared, schistose, gray, rhyolite agglomerate a few scattered several mm. residual fragments. Schisting angle is 15°-20° to axis of core. Angle of dark and light streaks in same direction but makes an angle of 30°-35° to axis of core. Two or three inches of quartz at diorite contact.
14	35	Diorite, fine gr. near 14, then coarser near middle, Quartz-white carbonate vein near 28.6 with associated dark grey-green chloritization. Fine grained near 35'.
35	77	Sheared, schistose gray, rhyolite agglomerate, Many mm. residual fragments. Silicified near 55', and near 70'. Schistosity angle 35°-40° to axis of hole near 58'. Straight Qtz-white carbonate veinlets (like an outcrops in this area.) These make an angle of 15°-20° to axis of core near 55'.
77	227	Like 35-77 but residual fragments become larger and more numerous, in region of 112'-227. Fragments very numerous, and 1/2" to 1" across. (112-227 is the aggl. with various kinds of rhyolite as fragments. Checked September 26th.)
227	231	Rhyolite, light gray, fractured and veined by quartz-white carbonate, the fractures form a sort of breccia.
231	234	Rhyolite agglomerate, sheared and schisted. Some residual small fragments.
234	236	Rhyolite, light gray, fractures, et. like footage 227-231.
236	237	Like 231-234
237	248	Rhyolite, light gray, fractured. Like footage 227-231, and 234-236.

Cape Rosier Mine, D. D. Hole 12 (Cont'd)

<u>From</u>	<u>To</u>	
248	272	Rhyolite, very dark gray, (like rhyolite on hill top south of No. 4 Shaft) with small scattered white lath like feldspar crystals. This is fractured to form a breccia and is veined by quartz-carbonate. The fractures look tensional. Many of them. This rhyolite shows no shearing of schistosity.
272	315	Rhyolite agglomerate, sheared and somewhat schistose near 272, schistose angle is 50° to core axis. Fragments large to 292 then of mm. size (292-296 brecciated and healed by quartz-carbonate; Might be rhyolite rather than Rhyolite agglomerate.)
315	351.4	Rhyolite, gray to dark gray like rhyolite on hill south of No. 4 Shaft, with scattered white feldspar crystals. Very indistinct fracturing and healing of the sutured contacts no introduced material.
351.4	390	Rhyolite agglomerate, fragments in places up to 2".
390	667	Rhyolite, very dark gray (like rhyolite on hill south of No. 4 Shaft) with scattered small white feldspar crystals. Three feet (390-393) are bleached to light gray. Trace of sphalerite at 401'. Very weak fracturing and veining by the qtz-carbonate, very much less than in 248-272. Straight thin seams qtz-calcite at 30° to core axis, another set at 30° to core axis, forms inter-section with first set along a line normal to core axis (at 437 feet.). Less fracturing and qtz-white carbonate veinlets in region of 450-518 (practically none). 475-480 much broken ore. Also 498-500. This broken core has a screw or twisted fracture that suggests the drill was at fault rather than the rocks being broken before drilling. Near 575' to 580' the rhyolite breaks readily along fractures at 35° to core axis. None of this very dark rhyolite in this hole shows shearing or schistosity. Hole ends in rhyolite. <u>Note:</u> Looked over 200-300 ft. very carefully for zinc traces, saw one trace.

Angle of Hole:

At 0': 60°

At 300': 62°

At 665': 60°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 13

Collar: N 4400, E 4718
Elevation: 5'

Course: N 56 W Mag.
Average Angle: 72°
Depth: 420 Ft.

<u>From</u>	<u>To</u>	
0'-0"	7'-0"	Evidently unconsolidated, no core.
7	48.6	Rhyolite Agglomerate, fragments inches in size; in this section there are a considerable number of very dark rhyolite (with white feldspar crystals) fragments. Some of these bleached in part.
48.6	71	Diorite, fine gr. border at 48.6, then coarser, then fine grained again at 71. Massive, unsheared.
71	76	Rhyolite aggl. sheared and crushed to very small fragments, somewhat schistose.
76	110	Rhyolite, brecciated and bleached, very dark gray with lath-like white feldspar crystals. It is bleached along the fractures. Siliceous.
110	137.5	Diorite, fine grained near 110, coarser toward center, fine gr. near 137. Massive unsheared.
137.5	139.5	Rhyolite, brecciated, bleached, silicified (was dark, with white feldspar crystals).
139.5	149	Diorite, fine grained near 139.5, then coarser toward center, then fine gr. near 149. Massive unsheared. Some carbonate seams.
149	212	Rhyolite, brecciated, bleached silicified, but with some residual black portions. (Black portions like rhyolite on hill S. of No. 4 shaft.) Contains white feldspar crystals. Possibly some rhyolite agglomerate.
212	244	Diorite, fine gr. at 212, then coarser toward center, remains coarse to 244 there brecciated and healed by white carbonate.

Cape Rosier Mine, D. D. Hole 13 (Cont'd)

<u>From</u>	<u>To</u>	
244	246	Gray sheared material may be either diorite or rhyolite agglomerate. Contains diss. sparse pyrrhotite.
246	247	Quartz.
247	392	Rhyolite Agglomerate sheared with fragments crushed to m. m. size. Schistosity 55°-60° to axis of core at 254.
	257-296	Fine grained, sparse, pyrite crystals dissem.
	285.6	Sphalerite, galena, pyrite along small fracture. Fragments increase to 1" - 2" across near 294' and continue to 392'.
	335-345	Sphalerite very minor scattered.
	338	The sphalerite and some chalcopyrite are along schisting at 40° angle to axis of core.
	340	Chlorite band schists at 50° to core axis. The shearing and schistosity in region of the ore is not very pronounced except in local bands.
392	420	Rhyolite Aggl. Sheares and schisted.
	400-420	Dark gray-green chlorite schist. Angle of schistosity is 45° to axis of core, in part. Part of this does not show good fissility.

Angle of Hole: 0
 At 0': 74
 At 420': 71°

END OF HOLE

Holes 1 to 13 inclusive logged by W. H. Newhouse, U.S.G.S., and W. Benedict Levin, U. S. B. M.

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 14

Collar: N 4980, E 4980
Elevation: 1

Course: N 51 W Mag.
Average Angle: 50°
Depth: 265 Ft.

<u>From</u>	<u>To</u>	
0'-0"	14'-0"	Sheared agglomerate; grey and streaked; grain generally less than 1 mm; few residual $\frac{1}{8}$ " fragments; angle of shearing and break is 40°-50° to core axis; slight silicification.
14	40	Diorite; fine grained at 14; coarser toward 22 and 30; fine again at 40; circa 30 thin calcite seams at 15° with traces of pyrite and chalcopryrite.
40	82	Sheared rhyolite agglomerate; a grey siliceous rock with grey-green patches and some streaking; some feldspar crystals (metacrysts); sulfide traces very scant; distinct shearing especially below 45 with abundant feldspar crystals; 1 mm traces of sphalerite and chalcopryrite around 60-75. At 75: shear angle 70°; fragments 1 mm. At 76-78: darker, more chlorite; some $\frac{1}{4}$ " to $\frac{1}{2}$ " fragments. At 77: suggestion of flow structure.
82	90-8	Very fine-grained agglomerate or black rhyolite. Flow structures; scattered traces of sphalerite and chalcopryrite along flow or shear.
90-8	91-6	Chlorite schist (altered sheared-agglomerate); green-black, soft.
91-6	94	Grey-green, hard, chloritic agglomerate.
94	96-10	Ore: sphalerite; slightly spongy, with talc rims in green-black chlorite schist; angles 30°-40°. Estimate 7% Zn over 2.8 feet. SAMPLE: 9: 90'-10" \sqrt Zn 7.9% Cu 0.4% Pb 0.1%. <u>to 96' 10"</u>

Cape Rosier Mine, D. D. Hole 14 (Cont'd)

<u>From</u>	<u>To</u>	
96'-10"	102'-10"	Green-black chlorite-schist specked with chalcop- rite and pyrite; chalcopyrite conformable. * SAMPLE 31A: 96'-10" - 100' - 10" Zn 1.2 Cu 0.7 Pb 0.0 * SAMPLE 32A: 100'-10" - 102'-10" Zn 3.2% Cu 2.2% Pb 0.0
102-10	111	Agglomerate; grey, very fine grain.
111	120	Agglomerate; dark grey and greenish; abundant $\frac{1}{2}$ to 1 mm feldspar crystals (metacrysts) especially in the dark chloritic area.
120	264-6	Agglomerate, massive; grey with several types of fragments mostly 2-3 mm; some up to 2 cm; rare traces pyrite and chalcopyrite; and sphalerite (240); coarse agglomerate 2-5 cm from 240 to 250. Collar Angle 52° Survey 200' 47°

END OF HOLE

* These two samples computed from composite sample.

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 15

Collar: N 4960, E 4940
Elevation: 1

Course: N 54 W Mag.
Average Angle: 82
Depth: 328

<u>FROM</u>	<u>TO</u>	
0'-0"	12'-0"	Sheared agglomerate - gray, medium grain. Some fragments up to 1 cm; mostly 2 mm. Angle of core break 40° at 4 feet; 20° at 8 feet.
12	20	Silicified agglomerate? Light grey, fine grain, streaked (or flow-lines?); at 17 a 3° seam bearing pyrite.
20	64	Diorite - green-gray, with chill borders both ends; feldspar laths 3-4 mm long near center.
64	69	Silicified agglomerate (or contact-baked?) Brecciated, fine-grain; resembling bleached-brecciated rhyolite of earlier logs.
69	114	Sheared agglomerate 69-75. Gray and dark-green streaked, with fragments 2-10mm. Angle about 10°. 75-114 Massive sheared agglomerate. Some fragments up to 1 cm., but mostly 2 mm grain. Angles about 30°.
114	157	Sheared agglomerate, locally chlorite schist. 114-130 Light gray with dark streaks (chloritic); angle 35° with fragments 2 mm to 3 cm; and with few percent euhedral pyrite in crystals 2-10 mm. 130-131.3 More chloritic and talcy, with sphalerite, pyrite, chalcopyrite in streaks at 20°; few percent metal; some sphalerite with talc rims. 131.3-132.6 For 1.3 feet core consists of one hemi-cylinder of good ore fine grained, streaky chalcopyrite, sphalerite and minor galena; and one hemi-cylinder of chloritic and silicified, fine, grey agglomerate. Hole seems to have followed ore lens wall. SAMPLE 14: 131'-3" to 132'-7": 12.3% Zn 9.3% Cu 9.1% Pb Also Ag 8.3 oz/Ton.

Cape Rosier Mine, D. D. Hole 15 (Cont'd)

<u>From</u>	<u>To</u>	
	132.6-134.7	Chiefly light grey-green talc and creamy carbonate with minor sp.
	134.7-141	Green-black chlorite and creamy carbonate plus talc with disseminated talc-rimmed sphalerite and chalcopyrite. Not ore. Angles 20° and 40°.
	141-156	Grey-light green, silicified (hard to the knife), even-grained. Occasional green-black chlorite patches and streaks with 1-5mm spots of sphalerite; also some pyrite and minor chalcopyrite.
	156-157	Green-black chlorite with disseminated talc-rimmed sphalerite and chalcopyrite.
157	172	Silicified agglomerate; grey crypto crystalline, very siliceous with scattered pyrite, chalcopyrite and minor sphalerite.
172	198	Mineralized chlorite-talc and carbonate; probably low grade ore.
	172-178	Black chlorite-talc with abundant fine chalcopyrite and minor sphalerite, some pyrite. Angle schistosity 20° followed by the chalcopyrite.
	SAMPLE 26: 172-5 to 178:	0.0% Zn 0.5% Cu 0.0% Pb)
	178-183	Black chlorite-talc schist at 20°; much fine chalcopyrite and some fine sphalerite; also much fine crystal pyrite; all streaking with schistosity.
	SAMPLE 27: 178 to 183:	0.0%, Zn 0.5% Cu 0.0% Pb
	183-185	Same gangue; but considerable pyrite and coarser chalcopyrite in streaks 2-4 mm thick; both sphalerite spots and chalcopyrite are talc-rimmed; 35° angles.
	SAMPLE 28: 183 to 188:	0.0% Zn 2.9% Cu 0.0% Pb
	185-188	Same gangue but more 2-3mm sphalerite spots with talc rims; also very fine chalcopyrite and sphalerite.
	188-190'-2"	Same gangue; blebs of chalcopyrite 2-5 mm; fine chalcopyrite and sphalerite angles 30°; some carbonate; minor pyrite.
	SAMPLE 29: 188 to 190'-2";	0% Zn 1.1% Cu 0% Pb.
	190'-2"-191'-6"	Same gangue; barren except for few chalcopyrite blebs.
	191'-6"-193'-8"	Chiefly coarse crystalline carbonate plus chlorite; specks sphalerite.

Cape Rosier Mine, D. D. Hole 15 (Cont'd)

<u>From</u>	<u>To</u>	
		193'-8"-195'8" Black chlorite-talc and some carbonate, with sphalerite patches; one 6" length of about 20% Zn.
		SAMPLE 30: 193-8 to 195-8: 14.0% Zn 2.2% Cu 0.0% Pb.
		195'-8"-198 Some black chlorite plus carbonate; few sphalerite spots.
198	200-5	Chloritized and silicified agglomerate; some fragments 2-12 mm; not much evidence shearing here. 198-199 few sphalerite spots. 199-200.5 Patches sphalerite and chalcoppyrite (Est; 4-1-0)
200-5	328	Agglomerate-mostly massive; fragments 3 mm-2 cm. 203-204 (Est. 2-3% Zn) 205-206 Fragments up to 4"; some down to 241; fragments of many varieties as to color and grain, occasional specks of chalcoppyrite, pyrite and sphalerite; agglomerate is not sheared here; single lengths of core 1 to 10 feet. 241-255 Agglomerate gray-green, somewhat chloritic streaked at 60°. 277 & 290 Large (1ft.) light-colored fragments containing specks sphalerite. 288.5 White carbonate, and a 1 cm patch of sphalerite. 290-328 Coarse agglomerate 1"-3" fragments, many kinds. Some agglomerate gray-green with 2-5 mm fragments. At 321 some silicification and traces fine sphalerite, chalcoppyrite and possibly pyrrhotite. Hole ends in massive agglomerate. Collar Angle 82° Survey 300' 82°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 16

Collar: N 4800, E 4815
Elevation: 8

Course: N 54 W Mag.
Average Angle: 85°
Depth: 343 feet

<u>From</u>	<u>To</u>	
0'-0"	4'-0"	Overburden
4	21-6	Agglomerate (Dyer's Pt.) Coarse (2"-4") Black fragments of sphanitic texture with 1 mm white phenocrysts in a light grey sphanitic matrix; in lower portion the groundmass is greenish (chloritic) and fragments are bleached. Solution cavities at diorite contact.
21.5	52	Diorite; coarse central portion, both borders chilled. 37-42 Altered (weathered); caving badly.
52	117	Agglomerate 52-54 Silicified and bleached (contact Metamorphism?) 54-57 Dark green and gray streaked (sheared); with 1-2 mm white feldspar metacrysts in the green streaks. (Angles 30°) 57-63 Like 52-54 with matrix light green. Hardness exceeds 6. 63-67 Streaked dark green and grey; 20° angles. Chlorite present; also creamy carbonate. Seamed and solution-pitted. 67-70 Mottled green and gray; carbonate and chlorite-talc. 70-111 More normal sheared agglomerate; fragments 3-25 mm; matrix gray-green, somewhat chloritized and carbonatized. Shear angles 30-45°; fragments distinctly of several kinds; at 106.5 a 5 mm grain sphalerite partly replaces fragment, partly matrix, but is itself undeformed. 111-117 Like above but more carbonate and chlorite. Also silicified for 1 foot at diorite contact.
117	158	Diorite--chilled sphanitic at contacts; coarse (20 3 mm feldspar) in the central portion. 151-152 a texture not seen before. Only about 1 foot of core recovered 152-158.

Cape Rosier Mine, D. D. Hole 16 (Cont'd)

<u>From</u>	<u>To</u>	
158'-0"	170'-0 1/2	Agglomerate probably, chloritized slightly, and silicified, with scattered pyrite, some crystals up to 3 mm.
170-0	186-6	Identification uncertain; resembles fine-grained diorite in part, but is wholly grey, has no greenish cast. Scattered pyrite both very fine crystals up to 4 mm. Some pyrite in 3 mm wide streaks at angles 5° to 10° suggest hole may be nearly parallel to structure here.
186-6	259	Altered agglomerate, including ore in talc-chlorite schist.
	186-6 - 196	Very chloritic; angles 25°-40°; scattered fine chalcopyrite and minor sphalerite; some talc rims; the chalcopyrite streaks are conformable.
	196-200	Chiefly very pale green to cream talc; scattered chalcopyrite and very fine sphalerite; some chlorite.
	200-228	Chiefly white carbonate plus pale green talc. Carbonate appears to be post-talc; minor chalcopyrite. Locally chlorite predominates and larger blebs of chalcopyrite occur.
	228-242	Dark green to light green talc and chlorite schist with ore; core recovery poor here; length uncertain. Spots of sphalerite and chalcopyrite with talc rims.
	SAMPLE 17:	22906 to 232 13.8% Zn 2.5% Cu 0.1% Pb.
	SAMPLE 18:	232 to 232-8 15.8% Zn 0.4% Cu 0.0% Pb.
	242-259	Pale green talc and creamy carbonate; no sulfides; and patchy dark green chlorite; angles uncertain.
259	280	Ore - sphalerite and chalcopyrite in talc chiefly; also chlorite.
	259-262	Ore: spots of sphalerite talc-rimmed, and very minor specks and patches chalcopyrite; in chlorite-talc.
	SAMPLE 19:	258-11 to 262 9.6% Zn 1.0% Cu 0.1% Pb.
	262-267	Ore: 1-3 mm sphalerite spots and 1 cm streaks of sphalerite at 20°-25° all talc rimmed; minor chalcopyrite; in chlorite talc.

Cape Rosier Mine, D. D. Hole 16 (Cont'd)

From

To

SAMPLE 20: 262 to 267 17.5% Zn 1.5% Cu 0.0% Pb.
 267-272 Ore: Very fine grained sphalerite, and
 irregular patchy chalcopryrite in chlorite-
 talc; also some 1 mm pyrite crystals.
 SAMPLE 21: 267 to 272 1.8% Zn 2.8% Cu 0.0% Pb.
 272-274-6 Ore: chiefly massive chalcopryrite and
 minor massive sphalerite in chlorite talc;
 pieces of core 1" long are almost gangue
 free;
 SAMPLE 22: 272 to 274-6 3.3% Zn 15.4% Cu 0.0% Pb.
 274-6-280 Ore: Chalcopryrite in patches, fine-grained
 and massive; sphalerite in minor fine-
 grained, and some 3 mm talc-rimmed spots
 (only in last 6")
 SAMPLE 23: 274-6 to 280 1.3% Zn 7.5% Cu 0.0% Pb.

280

327

Altered agglomerate
 280-282 Black chlorite; some talc; spots of 203 mm
 sphalerite and chalcopryrite talc-rimmed;
 possibly 1% Zn.
 282-290 Light grey, uniformly sphanitic, more
 siliceous, barren.
 290-293 Dark green chlorite; schist angles 40-45°;
 several talc-rimmed spots of sphalerite
 2-12 mm, and some very fine grained chal-
 copyrite and sphalerite (and pyrite)
 (Est. 1-1-0)
 293-323 Green-black chlorite with local clusters
 of 2 mm talc-rimmed sphalerite spots, some
 talc and some carbonate seams; local rimmed
 chalcopryrite; this 30' zone may make into
 ore down pitch or along strike.
 323-325 Grey, sphanitic, siliceous altered agglom-
 erate.
 325-325.8 Chalcopryrite in chlorite (Est. 0-4-0)
 325.8-327 Mostly chlorite with sphalerite spots;
 possibly 2% Zn.

327

343

Agglomerate; greenish chloritic, with fragments 1 mm-
 3 cm; various types.

Collar Angle 85°
 Surveys 300' 85°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 17

Collar: N 4710, E 4740
Elevation: 0

Course: N 55 W Mag.
Average Angle: 62°
Depth: 250 Feet

<u>From</u>	<u>To</u>	
0'-0"	1'-0"	Overburden
1	7	Agglomerate (Dyer's Point?); grey-green mottled matrix. Light grey to white fragments; 1/2 to 5 or more cms.
7	10	Diorite, fine grained.
10	41-6	Dyer's Point agglomerate; fragments many cms; many with black central portion, aphanitic, and white or grey bleached margins; several feet of green-grey streaked with fels-metacrysts; 60°-70°.
41-6	71-6	Diorite; upper margin chilled, center coarse; lower margin medium grained.
71-6	89-6	Agglomerate, probably Dyers Point, grey-green streaked, with feldspar crystals; and some light grey uniform aphanitic, possibly silicified.
89-6	95-0	Ore. Massive sulfide sphalerite and chalcopyrite; considerable pyrite; visible gangue minor, but carbonate in part; talc and chlorite not apparent. SAMPLE 44: 89-6 to 90-6 17.0% Zn 2.8% Cu 0.9% Pb. SAMPLE 45: 90-6 to 93-8 28.8% Zn 1.9% Cu 0.4% Pb. SAMPLE 33: 93-8 to 95-0 22.2% Zn 2.5% Cu 0.1% Pb.
95-0	99	Agglomerate, somewhat altered. 95-96-1 White carbonate, minor chlorite streaks at 35°. 96-1-99 Largely chlorite and talc.
99	140-6	Agglomerate; light grey, rhyolitic, except locally where altered to chlorite for one foot or so. Several thin iron-stained fractures or seams.

Cape Rosier Mine, D. D. Hole 17 (Cont'd)

<u>From</u>	<u>To</u>	
140'-6"	180'-0"	Diorite; light grey in part; elsewhere the normal grey-green; very even grained; some fractures contain pyrite and chalcopyrite; quartz-carbonate veinlets at 20 to 25°. Also tendency of core to break at 20-25°; lower contact sharply chilled.
180	247	Agglomerate, altered.
	180-189	Very mottled, green-grey; chloritic and carbonate.
	189-207-9	Siliceous or possibly primary rhyolitic agglomerate.
	207-9-247	Chiefly green-black chlorite with much fine disseminated pyrite in $\frac{1}{2}$ mm crystals; also disseminated chalcopyrite; no sphalerite; definitely not even low grade ore; less than 1% Cu. No marked schistosity. Angles uncertain.
247	250	Agglomerate; fragments 2mm to 1 cm and over; matrix greenish with chlorite. Hole ends in fairly unsheared agglomerate, with fragments chiefly light grey, aphanitic.
		Collar Angle 61°
		Surveys 200' 64°

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 18

Collar: N 4709, E 4741
Elevation: 0

Course: N 55 W Mag.
Average Angle: 86
Depth: 333 Feet

<u>From</u>	<u>To</u>	
0'-0"	3'-0"	Tidal mud.
3	6-8	Dyers Point agglomerate. Fragments: 1-3 mm. white to colorless, aphanitic. Matrix grey-green; without lineation or foliation; fragments possess good flow structure.
6-8	13-6	Diorite; fine grained; with agglomerate inclusions.
13-6	34	Dyers Point agglomerate like 3 to 6-8, but with larger fragments (up to 6") which contain black, aphanitic, unbleached cores. In lower portion there are also grey fragments and darker green streaked fragments with small 1 mm feldspar crystals.
34	44-6	Agglomerate, sheared. Fragments several inches down to 1 mm; mostly colorless or white aphanitic. Matrix green-grey, well foliated at about 50° to core axis, and where very green containing numerous 1-2 mm white feldspar rectangles.
44-6	69-6	Diorite; green grey, with chilled borders. Note: the diorite contact (lower) is here definitely not accordant with the foliation of the sheared agglomerate; angle between them is about 90°.
69-6	73-6	Sheared agglomerate; strongly foliated at 50-60°, with abundant white 1x2 mm feldspar metacrysts in the dark green streaks or folia.
73-6	91	Agglomerate; evidence of shearing much localized; mostly "bleached" fragments several inches long.
91	101	Agglomerate; green-grey, somewhat sheared; fragments mostly grey, average 5 mm; few 3 mm double wedges of pyrrhotite (?).

Cape Rosier Mine, D. D. Hole 18 (Cont'd)

<u>From</u>	<u>To</u>	
101	105	Diorite; very fine grained, felsitic.
105	131-6	Agglomerate; grey-green mottled, somewhat sheared; fragments up to 1 cm; at 117 solution cavities and MnO coated seam at 10°; angles of shear irregular, around 45°; at 124 a MnO coated seam at 5°; at 131-6 a seam parallel to core axis; coated with MnO and limonite.
131-6	136	Diorite; fine grained.
136	149	Agglomerate like 105 to 131-6; some 40-50° angles.
149	153	Diorite, very fine grained, grey. Contact conformable at about 25°; suggestion of irregularity of contact and approximate parallelism of core and contact.
153	175	Agglomerate, sheared; dark green chloritic streaks in light grey ground; some residual fragments up to 1 cm; at 160' angles are 10-20°; at 172' angles are 70-80°.
175	206	Diorite; strikingly chilled borders, medium grain central zone; 185-187 and at 202 diorite-chlorite contact parallels the core, with some suggestion of slickensides; at 193 a 1" white calcite vein at 15°; lower chill phase contains small pyrite concentrations.
206	220	Agglomerate: light green-grey mottled, altered agglomerate. Few 3-6 mm talc-rimmed sphalerite spots. 213-219 silicified, grey, hard.
220	227	Chlorite schist (altered agglomerate). Dark green chlorite, not well schisted. No regular angles. 221-6 - 222-6 ore: chalcopryite, sphalerite, minor pyrite and galena in chlorite. (Estimate 22% Zn - 5% Cu - 1% Pb) At 220-6" clay gouge.

Cape Rosier Mine, D. D. Hole 18 (Cont'd)

<u>From</u>	<u>To</u>	
227'-0"	240'-0"	Agglomerate, somewhat altered; grey, hard, siliceous, aphanitic; occasional minor, local concentrations of pyrite with and without chalcopyrite patches.
240	251-3	Chlorite, poorly schisted, and chloritic agglomerate. Locally abundant $\frac{1}{2}$ mm pyrite crystals.
251-3	269	Agglomerate, silicified; grey, very hard (over 6); fragments not obvious.
269	271-6	Chlorite; black, not well schisted; considerable disseminated pyrite, and some chalcopyrite in 1 mm spots.
271-6	303	Agglomerate; light green-grey, very minor chlorite; fragments 2mm to 2 cm, chiefly very light gray to white, angular. Fairly normal, somewhat sheared agglomerate, of Goose Falls type. At 300 angles 40°. 296-297 black chlorite. 300-9- 301-6 black chlorite with much pyrite.
303	325	Agglomerate; grey, somewhat sheared at 70-80°; with fragments of several kinds 2 mm up to 7 cm. Several 3 mm sphalerite spots, patches, and streaks (at 306).
325	332-6	Coarse agglomerate; Goose Falls type with several colors and textures of fragments up to 3 or 4 inches long. Hole ends in coarse agglomerate. Surveys 200' 87° 300' 86°

END OF HOLE

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 19

Collar: N 4855, E 4860
Elevation: 8

Course: N 54 W Mag.
Average Angle: 66
Depth: 289 Feet

<u>From</u>	<u>To</u>	
0'-0"	8'-8"	Overburden; boulders, including granite and basalt.
8-8	23	Diorite; upper border eroded, to judge from grain; lower border chilled.
23	93-9	Agglomerate. 23-35 Chiefly light greenish grey; vitreous, very hard; evidence of large bleached fragments. 35-93-9 Matrix increasingly abundant and green, streaked, with numerous white rectangular metacrysts; angles about 50°; this is sheared agglomerate. Fragments chiefly white, angular, 2 mm to 2 cm. Angles: at 70', 35°; at 80', 80°.
93-9	98-9	Diorite; very fine grained throughout.
98-9	102	Agglomerate; blue-green, not distinctly streaked; thin carbonate veinlets; sharp contact with chilled diorite below, at 38°.
102	133	Diorite, chilled borders; central portion 2mm grain.
133	138	Agglomerate; hard, grey at contact; sheared 65°.
138	238-6	Altered sheared agglomerate; talc, chlorite, carbonate and mineral. 138-139 chlorite; green black 139-140 highly chloritic agglomerate. 140-141 ore: massive sphalerite with minor chlorite gangue. Angles 35-40°; minor chalcopryrite. SAMPLE 34: 140 to 141: 19.8% Zn 0.9% Cu 0.4% Pb. 141-143 highly chloritic agglomerate; angles 45°.

Cape Rosier Mine, D. D. Hole 19 (Cont'd)

<u>From</u>	<u>To</u>	
		143-144-8 Chiefly white carbonate, minor talc.
		144-8-145-8 Ore; massive, spongy and disseminated sphalerite; some carbonate, traces chalcopyrite.
		SAMPLE 38: 144-8 to 145-8 12.3% Zn 1.4% Cu 1.7% Pb.
		145-8-195 Pale green talc and white carbonate. The carbonate appears to be later than the brecciated, veined, partly replaced talc. Minor chlorite locally. Angles about 40°. Sporadic fine-grained sphalerite and traces of chalcopyrite in the talc, but not in the carbonate. Few concentrations of sphalerite; as, for example, 154-4 to 185. Est. Zn 10-15%. Sporadic sphalerite throughout; but <u>not ore</u> .
		195-202 Very dark green schistose chlorite with talc and minor carbonate patches. Few talc-rimmed sphalerite spots.
		202-208 Pale green talc, and carbonate.
		208-216 Green talc (and chlorite?); irregular break.
		216-238-6 Pale green talc and white carbonate. As above the angular talc appears as a breccia healed or being replaced by carbonate matrix. Fine grained sphalerite in streaks conformable at 40°-5°, sporadic throughout. Particular concentrations of sphalerite and traces chalcopyrite.
		SAMPLE 39: 223 to 224 11.1% Zn 1.1% Cu 0.0% Pb.
		SAMPLE 40: 228 to 22905 6.7% Zn 0.7% Cu 0.8% Pb.
238-6	239-4	Identification uncertain; grey, fine-grained, hard; may be silicified agglomerate; or a diorite tip.
239-4	241-4	White coarse quartz and calcite. Vein at about 20°.
241-4	258-6	Altered sheared agglomerate, mineralized. Dark green green, pale green and white, mottled and streaked (at about 40°) - talc-chlorite-carbonate; with sporadic fine-grained disseminated sphalerite, in some cases sufficiently concentrated to make ore.

Cape Rosier Mine, D. D. Hole 19 (Cont'd)

<u>From</u>	<u>To</u>	
		SAMPLE 41: 242-2 to 246 5.2% Zn 0.1% Cu 0.3% Pb. SAMPLE 43: 254-6 to 258-6 18.9% Zn 7.7% Cu 0.5% Pb.
258-6	270	Agglomerate, greenish grey, very hard, compact, but sheared, fragments chiefly white angular, up to 2 cm. No trace of sulfides.
270	289	Agglomerate, coarse, massive; fragments up to 2 or 3"; various colors and textures. Collar Angle 66° Survey 200' 68°

END OF HOLE

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 20

Collar: N 4305, E 4550
Elevation: 4

Course: N 54 W Mag.
Average Angle: 75°
Depth: 283 Feet

<u>From</u>	<u>To</u>	
0'-0"	40'-0"	Overburden. Lower few feet probably weathered diorite.
40	50	Diorite, weathered and jointed; core very broken.
50	60	Almost no core. Probably rhyolite.
60	138	Rhyolite. 60-68 Bleached light grey; aphanitic or vitreous uniform; fractured, and fracture filling leached; core much broken. 68-85 Black to dark grey, uniformly aphanitic to vitreous, with white-spot microlites; in part brecciated and bleached light grey. 85-138 Sheared at 40° to 45°; grey; lower part fractured, brecciated, bleached, vitreous.
138	171	Diorite; normal grey-green; chilled margins. At 159-160 Chlorite slickensides at 15-20°. At 163 Carbonate veins at 35°.
171	198	Rhyolite; light grey, mottled and streaked; interpreted as rhyolite brecciated, bleached, and sheared.
198	198-9	Diorite (?); very fine grained, uniform.
198-9	203	Agglomerate; light grey mottled and streaked somewhat with chlorite; this could be sheared agglomerate or sheared, bleached rhyolite.
203	203-9	Chlorite, black, schisted at about 50°.
203-9	206	Agglomerate? At 206 two 2 mm bands of sphalerite conformable at about 55° with schistosity.
206	257	Agglomerate, sheared and altered. 206-217 Considerable white carbonate and green-black chlorite. Core recovery poor.

Cape Rosier Mine, D. D. Hole 20 (Cont'd)

<u>From</u>	<u>To</u>	
	217-257	Grey, mottled and streaked, in part silicified, in part chloritized; some residual fragments; locally highly chloritic, as 247-249 which carried abundant coarse pyrite and much chalcoppyrite; elsewhere disseminated pyrite; at 257 spots of sphalerite and chalcoppyrite.
257	283	Agglomerate, still quite sheared, and chloritic, but increasingly coarse grained.
		Collar Angle 76° Survey 200' 74°

END OF HOLE

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 21.

Collar: N 4460, E 4575
Elevation: 19

Course: N 54 W Mag.
Average Angle: 57
Depth: 288 Feet

<u>From</u>	<u>To</u>	
0'-02	16'-0"	Overburden
16	71-6	Diorite; coarse grained at 16; finer grained 35-40, then coarse again, becoming fine grained near 70. Upper chill border eroded away. Is this a composite sill, or faulted?
71-6	147	Rhyolite. In part grey-black uniformly vitreous with white-spot incipient feldspar crystals. Elsewhere showing flow or shear. Some bleaching to white. Some shearing to grey-green, 90°; or flow? Some fragments. The sheared portion resembles sheared-agglomerate but grades into distinct rhyolite. At 115 sheared and highly chloritic. At 120 numerous 2 mm dark brown sphalerite spots in grey sheared (rhyolite) at approximately 40° to core axis. Around 130 dark grey with considerable chlorite at 80°. 133-138 white 1 cm augen in dark chloritic matrix. 138@147 fragmental matter in shear matrix dark with chlorite; identity uncertain but probably sheared rhyolite.
147	160	Diorite. Fine grained at 147, becoming coarser after 150, but without again becoming chilled at 160 where contact is sharp.
160	165-9	Black chlorite with abundant pyrite cubes 1-2mm; some chalcopyrite at 45°, minor elongate spots of sphalerite. SAMPLE 46: 160-165'-9" Zn 0.1% Cu 1.7% Pb 0.1%.
165-9	192-2	Rhyolite? Light grey, uniform, aphanitic, hard, with fine disseminated pyrite. Does not resemble the black rhyolite or any agglomerate. Does resemble fine chilled diorite in color and uniformity, but is much harder. Iron stained fracture parallels core.

Cape Rosier Mine, D. D. Hole 21 (Cont'd)

<u>From</u>	<u>To</u>	
192-2	288	Agglomerate. 192-2 - 193-6 highly chloritic; with scattered pyrite and chalcopyrite. 193-6 - 288 grey, coarse, fragmental agglomerate with locally chloritic wisps and streaks. Fragments of several types by color and texture, up to 3" size.

Collar Angle	55°	
Survey 200'	60°	(corrected)

GEOLOGIC LOG
CAPE ROSIER MINE
D. D. Hole 22

Collar: N 4825, E 4895
Elevation: -1

Course: S 54E Mag.
Average Angle: 86
Depth: 504 Feet.

<u>From</u>	<u>To</u>	
0'-0"	8'-0"	Agglomerate, Dyers Point type; black, uniform, aphanitic rhyolite fragments over 3", in a light grey fine-grained, uniform matrix; some fragments bleached colorless.
8	15	Diorite; normal greenish grey; chilled margins top and bottom; coarse center.
15	30	Agglomerate, Dyer's Point; like above; matrix made of fragments of smaller magnitude, and definitely green.
30	72	Diorite; normal; extensive (4') chill margin at top; around 32-50 white calcite veins 4 mm to 2 cm thick at 0-25° angles; also quartz veins; lower margin chilled; central part coarser, 2 mm laths.
72	75	Agglomerate; recognizably Dyers Point, having large (3") bleached fragments.
75	153	Agglomerate: sheared; locally exhibiting foliation by chlorite streaks, alignment of white, rectangular, 2mm metacrysts of feldspar, or parallelism of elongate fragments; general color grey; fragments 2 mm to 2 cm, chiefly the smaller; few 3-4 cm bleached fragments suggest this is sheared Dyers Point. At 150-6 to 152 diorite (?) or fragments? Angles not distinct; shear angle 60° at 152.
153	164-6	Agglomerate; Dyers Point? Predominantly the uniform, almost vitreous, colorless or grey, bleached rhyolite (fragments?). Sharp contact against diorite.
164-6	247	Diorite; uniform grey, but texturally somewhat different from other diorite logged, in that long feldspar laths are not so prominent; top margin chilled; diorite traversed locally by thin seams.

Cape Rosier Mine, D. D. Hole 22 (Cont'd)

<u>From</u>	<u>To</u>	
		(now chloritized) at angles 15, 30, 40, 60°. Lower margin chilled for 2'.
247	331	Mineralized altered agglomerate and ore. 247-259 Agglomerate? Sheared, silicified, and chloritized; angles 45°, range 40° to 50°. 259-260 Black chlorite with sphalerite spots. 260-263-10 Chiefly white calcite, minor pale green talc. (Note: 259 and 260 are estimates; core recovery 257-7 to 262-10 only 10" in small pieces. Recovery 262-10 to 267-10 is 100%.) 263-10-264 Ore; massive sphalerite minor chalcoppyrite, contact about 45°. 264-265-6 White, coarse, crystalline calcite chiefly; minor talc 265-6 -268-2 Ore: massive sphalerite and chalcoppyrites. Some white calcite gangue, but mostly solid sulfide. SAMPLE 50: 262'-10" - 267'-10" Zn 8.5% Cu 1.0% Pb 3.6%. 268-2-271-6 Calcite, white, with minor talc. 271-6-284 Sheared agglomerate; fragments 1 mm to 1 cm; silicified and chloritized, at 273' sphalerite and chalcoppyrite spots several percent over 4". 284-289 Identity uncertain. May be sheared agglomerate or may be fine-grained diorite with sissps of included sheared agglomerate. Green-gray uniform, very fine grained, with occasional dark streaks at 45°. 289-301-6 Carbonate (white calcite) - talc zone; same as hole 19 around 152' except that talc is minor here. 301-6-331 Black chlorite; not well schisted; considerable disseminated pyrite; very minor chalcoppyrite locally, angles uncertain-one direction of shear parallels core axis. Particular concentrations of spot sphalerite and chalcoppyrite 303-5, 305-5. SAMPLE 48: 303'-5" - 305'-5" Zn 1.0% Cu 3.0% Pb 0.0%. Also considerable spot chalcoppyrite 314-315. At 324 few percent Cu (chalcoppyrite and pyrite) for 6". One or two percent Cu 327-329-6 in disseminated chalcoppyrite.
331	351-6	Agglomerate, sheared, chloritized, with whitish residual fragments 2 mm to 1 cm, and a grey-green

Cape Rosier Mine, D. D. Hole 22 (Cont'd)

<u>From</u>	<u>To</u>	
		matrix streaked; angles variable 30-90°; chiefly 40°.
351-6	394-6	Silicified agglomerate; mottled grey, very dense, uniformly aphanitic; very hard, siliceous, with a ring. Contains some very fine grained pyrite, and traces chalcopyrite. 358-365 Much disseminated pyrite and chalcopyrite, traces sphalerite. Est. 1-2% Cu. Particular concentrations of sulfides locally at 370 chalcopyrite; 374 and 379 sphalerite; 384 chalcopyrite; 386 sphalerite *. Angles quite variable 80° to 20°. Some milky quartz. Small 2-5 mm. whitish residual fragments become increasingly visible around 387. (Note: the sphalerite is more markedly conformable to the shear than is the chalcopyrite.) 389-389-6 Massive sphalerite (Est. 25-1-0.) Core is broken here; core less uncertain since core-lifter failure left some core in hole at end of previous run and at end of this run. Ore length could be as much as 1 foot.
394-6	404	Agglomerate, highly chloritized matrix, locally wholly chlorite, with many 1 cm fragments. Clay gouge at 397.
404	504	Agglomerate; first 10 or 12 feet very light grey, fine-grained, dense, very hard, with a ring, probably silicified sheared-agglomerate. Below about 415 more normal grey, dense, fine-grained agglomerate, to 424. From 424 coarse grained; massive agglomerate, fragments of various color and texture, 1" to 8" in size, dominantly 1" to 2". Matrix grey to dark grey, locally sheared and considerably chloritized (as at 454) and bearing sphalerite spots. This is footwall agglomerate.

Collar angle	85°	
Surveys 200'	86°	
300'	87°	(all corrected)
400'	87°	
500'	87°	

Note: Holes 14 to 22 inclusive logged by S. Benedict Levin, U.S.B.M.

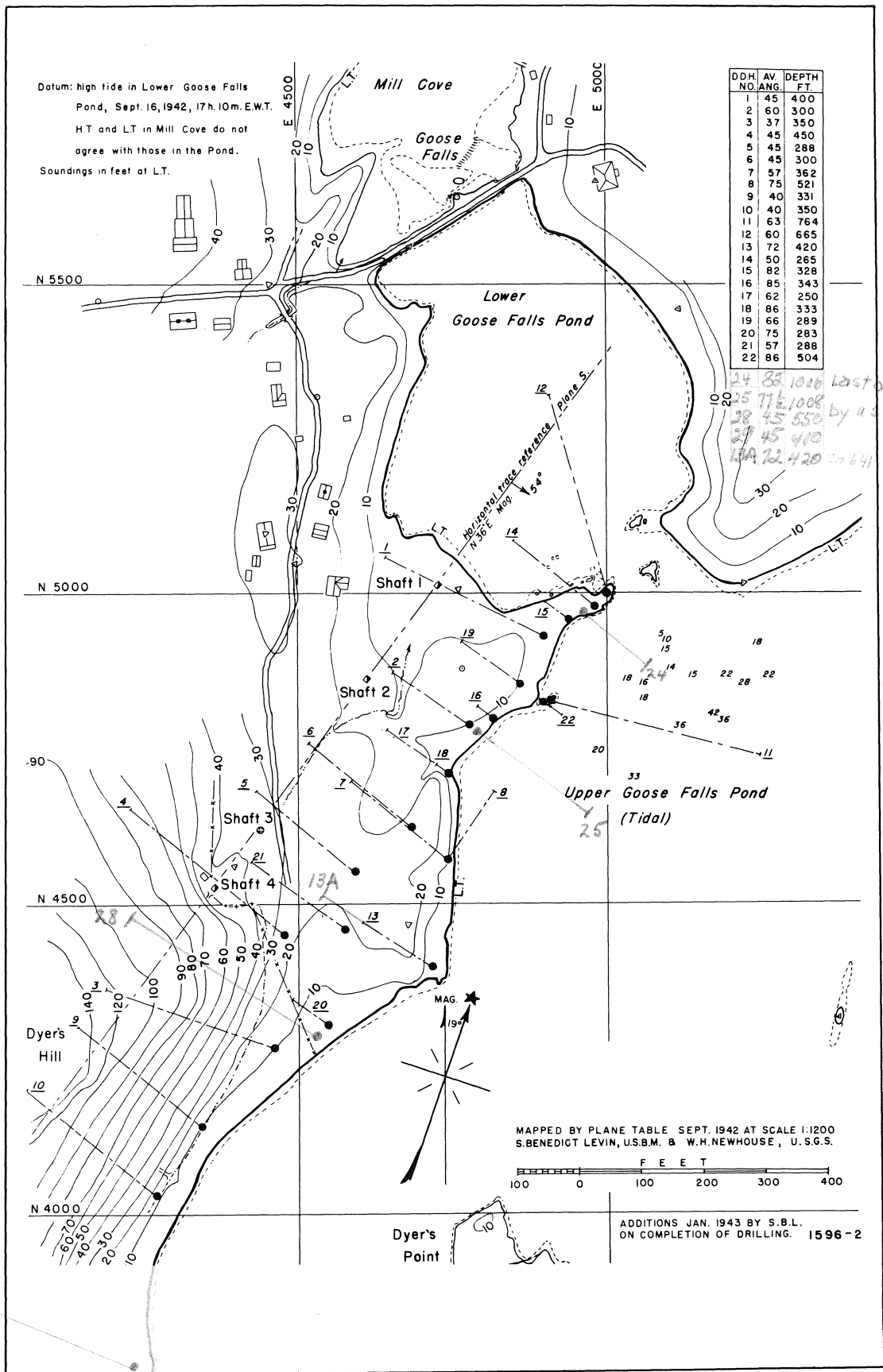


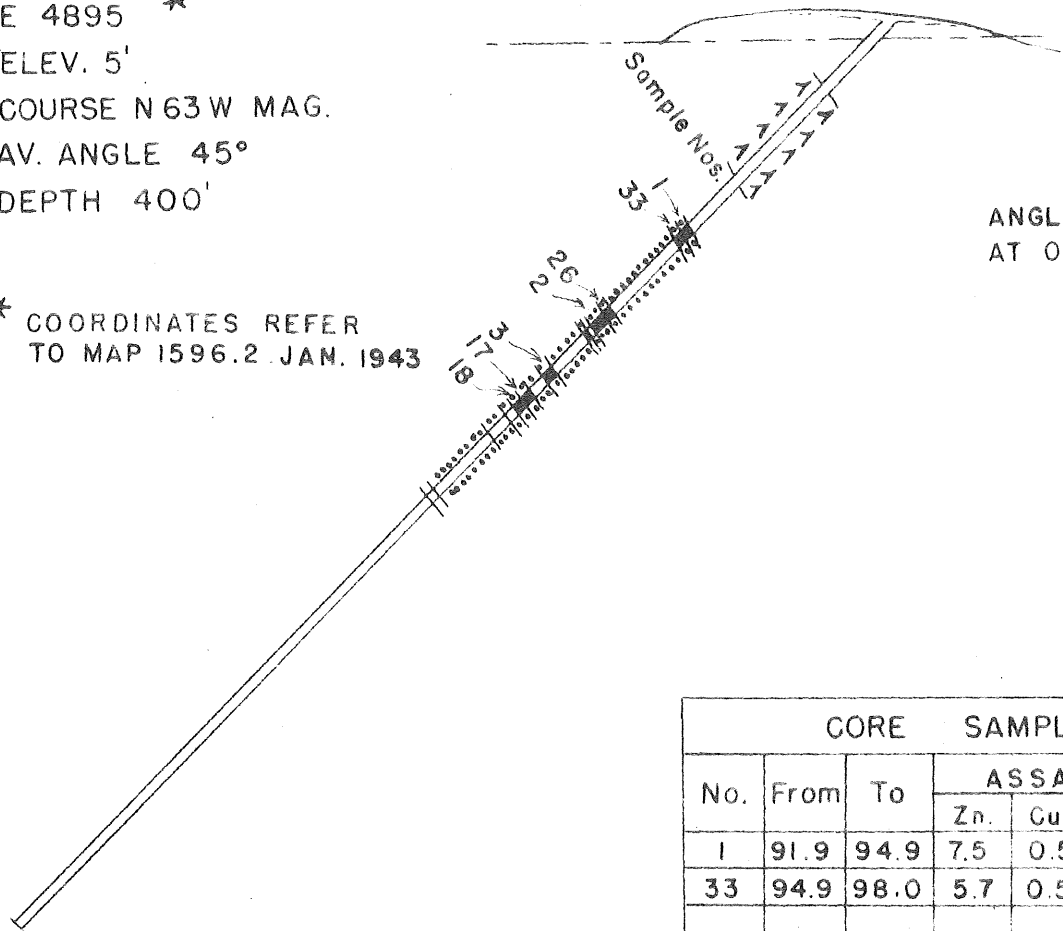
FIGURE 2 CAPE ROSIER MINE HANCOCK CO., MAINE

29

N 4930
 E 4895 *
 ELEV. 5'
 COURSE N 63 W MAG.
 AV. ANGLE 45°
 DEPTH 400'

D. H. I

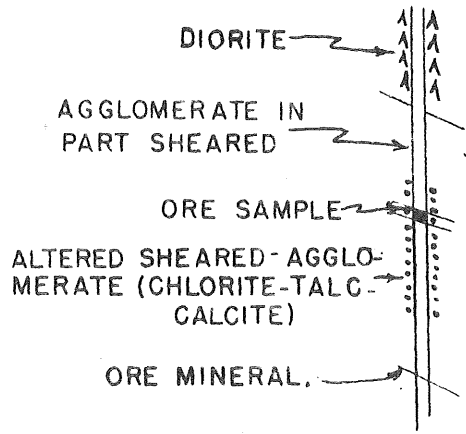
* COORDINATES REFER TO MAP 1596.2 JAN. 1943



ANGLE OF HOLE AT 0' 45°

CORE SAMPLES						
No.	From	To	ASSAY %			Rec.
			Zn.	Cu.	Pb.	
1	91.9	94.9	7.5	0.5	0.9	
33	94.9	98.0	5.7	0.5	0.6	
26	128.0	131.0	1.6	0.1	0.0	
2	131.0	137.0	15.2	1.6	0.3	
3	154.6	158.7	4.8	1.0	0.1	
17	164.8	168.3	9.3	1.2	0.0	
18	168.3	171.8	10.8	0.9	0.0	

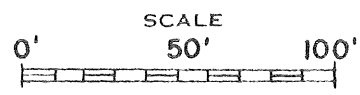
LEGEND



LOGGED BY: W.H. NEWHOUSE U.S.G.S.
 S.B. LEVIN U.S.B.M.

U. S. DEPARTMENT OF THE INTERIOR
 BUREAU OF MINES

CAPE ROSIER MINE
 HARBORSIDE, MAINE

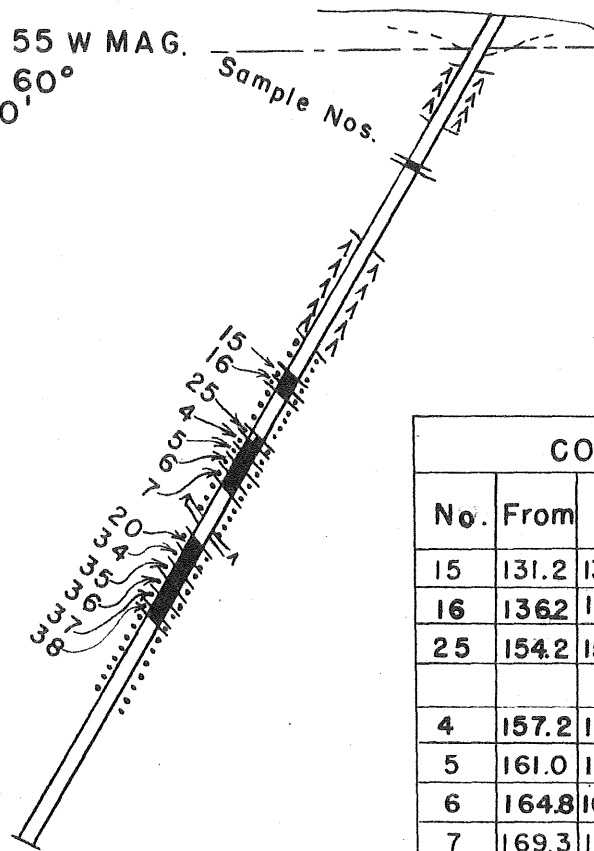


DRILLED OCT. 26 - NOV. 4, 1940
 ST. JOSEPH LEAD CO.

PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H I

N 4790
 E 4778
 ELEV. 10'
 COURSE N 55 W MAG.
 AV. ANGLE 60°
 DEPTH 300'

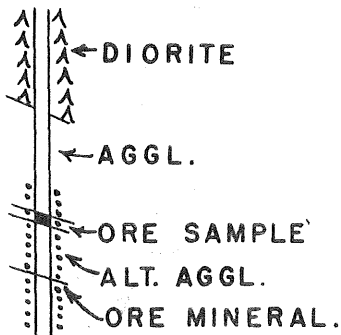
D.D.H. 2



ANGLE OF HOLE
 AT 0' 60°
 AT 300' 63°

CORE SAMPLES						
No.	From	To	ASSAY%			REC.
			Zn.	Cu.	Pb.	
15	131.2	136.2	5.3	0.7	0.6	
16	136.2	139.2	6.6	0.6	0.0	
25	154.2	157.2	0.6	0.0	0.0	
4	157.2	161.0	17.8	1.5	0.1	
5	161.0	164.8	29.0	1.5	0.4	
6	164.8	169.3	5.1	0.4	0.0	
7	169.3	174.0	10.9	1.1	0.0	
20	192.8	197.8	11.8	1.0	0.9	
34	197.8	202.8	3.7	0.2	0.1	
35	202.8	207.8	2.7	0.2	0.0	
36	207.8	212.8	5.5	0.4	0.0	
37	212.8	217.8	3.9	0.2	0.0	
38	217.8	220.9	6.4	0.7	0.2	

LEGEND



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 CAPE ROSIER MINE
 HARBORSIDE, MAINE

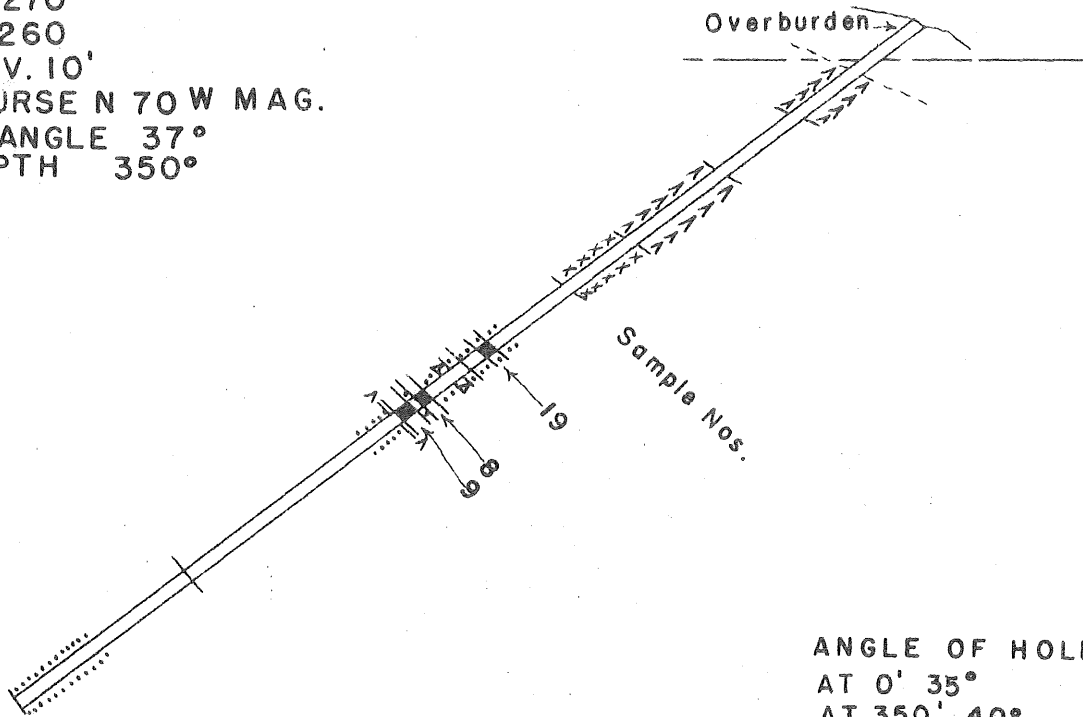


DRILLED
 NOV. 5 - 11, 1940
 ST. JOSEPH LEAD CO.

PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP. No. H 2

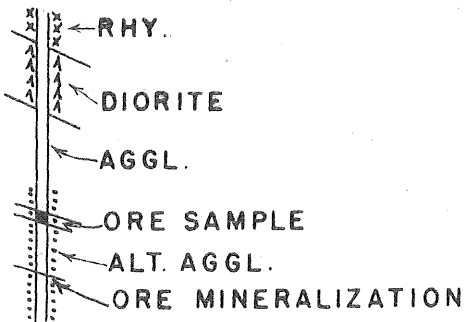
N 4270
 E 4260
 ELEV. 10'
 COURSE N 70 W MAG.
 AV. ANGLE 37°
 DEPTH 350°

D.J.H. 3



ANGLE OF HOLE
 AT 0' 35°
 AT 350' 40°

LEGEND



CORE SAMPLES						
No.	From	To	ASSAY %			Rec.
			Zn.	Cu.	Pb.	
19	166	169	4.4	1.5	0.9	
8	191.3	194.3	23.8	2.0	11.5	
9	196.9	201.7	5.8	8.2	2.6	

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 CAPE ROSIER MINE
 HARBORSIDE, MAINE



DRILLED NOV. 13-21, 1940
 ST. JOSEPH LEAD CO.

PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP NO. 113

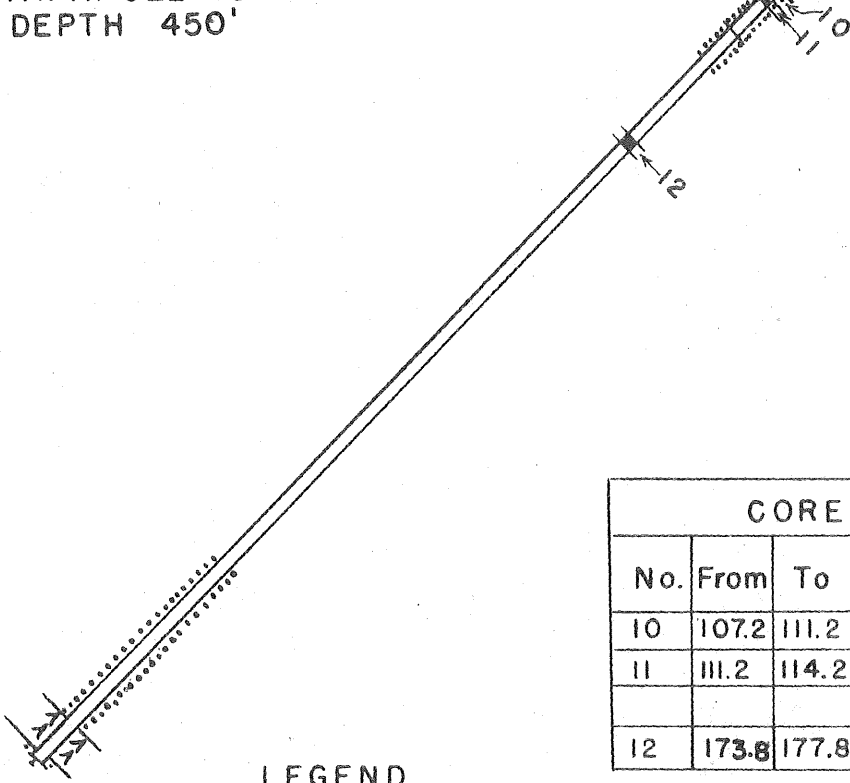
D.D.H. 4

OVERBURDEN

Sample nos.

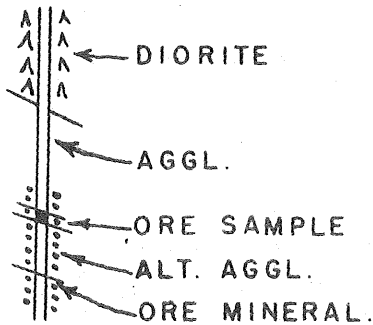
ANGLE OF HOLE
AT 0' 45°
AT 210' 46°
AT 450' 44°

N 4450
E 4475
ELEV. 27'
COURSE N 50 W MAG.
AV. ANGLE 45°
DEPTH 450'



CORE SAMPLES						
No.	From	To	ASSAY %			Rec
			Zn	Cu	Pb	
10	107.2	111.2	0.1	1.0	0.0	
11	111.2	114.2	0.1	2.4	0.0	
12	173.8	177.8	2.2	0.3	0.9	

LEGEND



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S. B. LEVIN U.S.B.M.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
CAPE ROSIER MINE
HARBORSIDE, MAINE

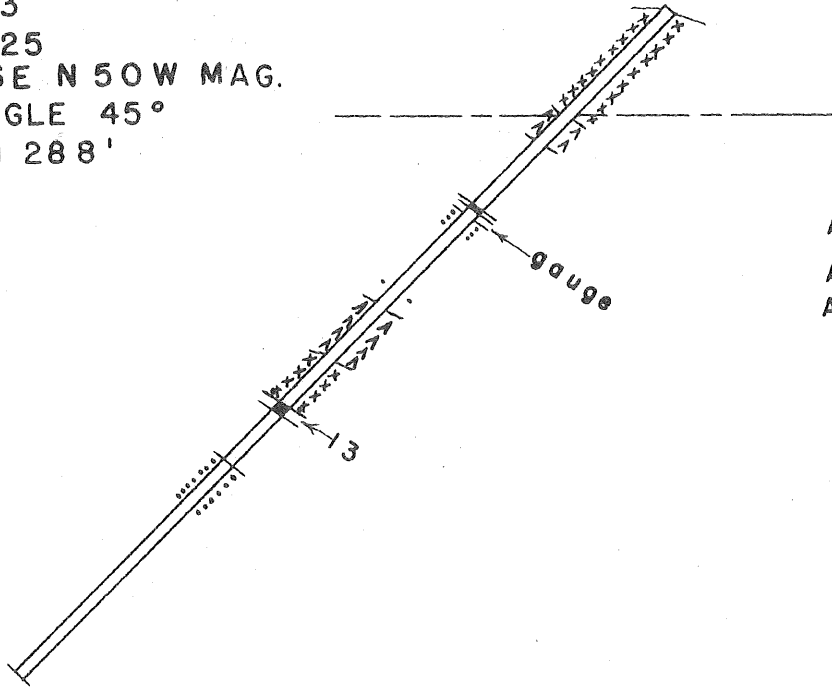
DRILLED NOV. 23 - DEC. 2, 1940
ST. JOSEPH LEAD CO.



PROJ. ENG. _____ DISTRICT ENG. _____
DATE _____ PROJECT 1598 MAP No. H. 4

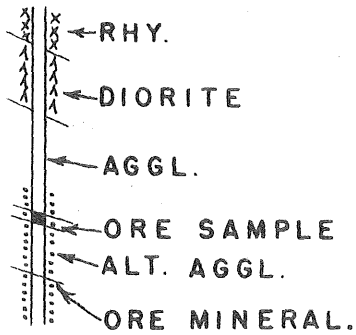
N 4550
 E 4593
 ELEV. 25
 COURSE N 50 W MAG.
 AV. ANGLE 45°
 DEPTH 288'

D.D.H. 5



ANGLE OF HOLE
 AT 0' 45°
 AT 288' 46°

LEGEND



CORE SAMPLES						
No.	From	To	ASSAY %			Rec.
			Zn.	Cu.	Pb.	
13	171.0	174.0	2.2	4.2	0.1	

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 S.B. LEVIN U.S.B.M.

DRILLED
 DEC. 2-11, 1940.
 ST. JOSEPH LEAD CO.

U. S. DEPARTMENT OF THE INTERIOR
 BUREAU OF MINES

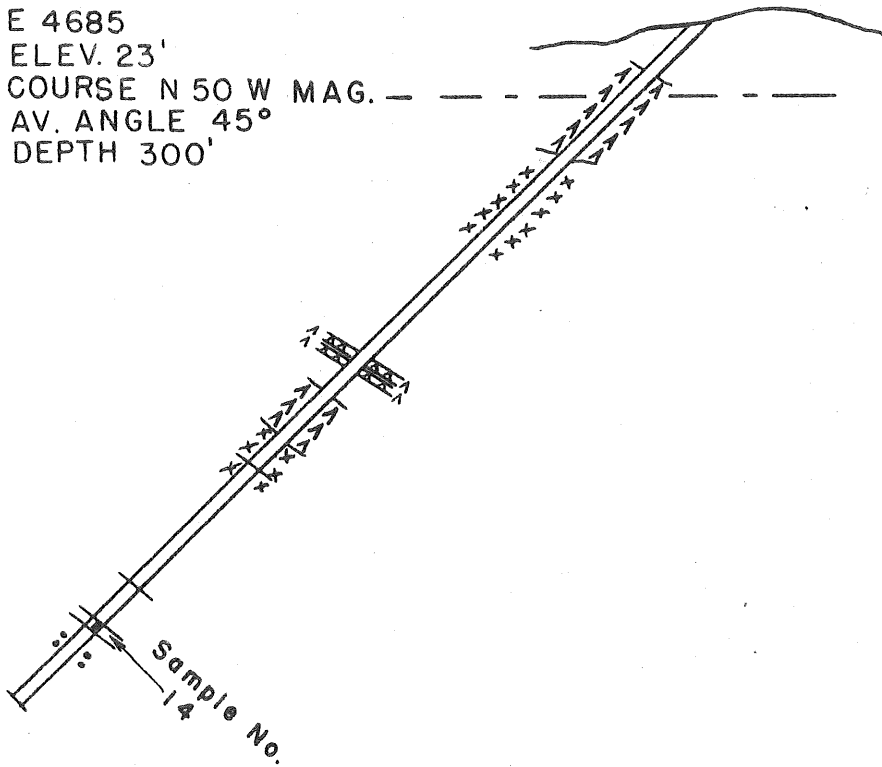
CAPE ROSIER MINE
 HARBORSIDE, MAINE



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 5

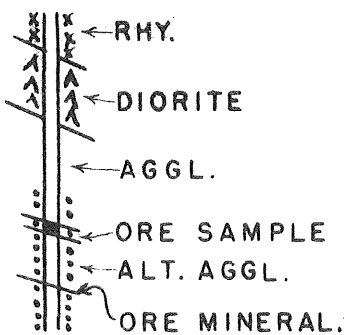
N 4625
 E 4685
 ELEV. 23'
 COURSE N 50 W MAG.
 AV. ANGLE 45°
 DEPTH 300'

D.D.H. 6



ANGLE OF HOLE
 AT 0' 45°
 AT 288' 46°

LEGEND



CORE SAMPLES						
No.	From	To	ASSAY %			Rec.
			Zn	Cu	Pb	
14	264.5	267.5	0.0	0.6	0.0	

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 HARBORSIDE, MAINE

DRILLED
 DEC. 11-20, 1940
 ST. JOSEPH LEAD CO.

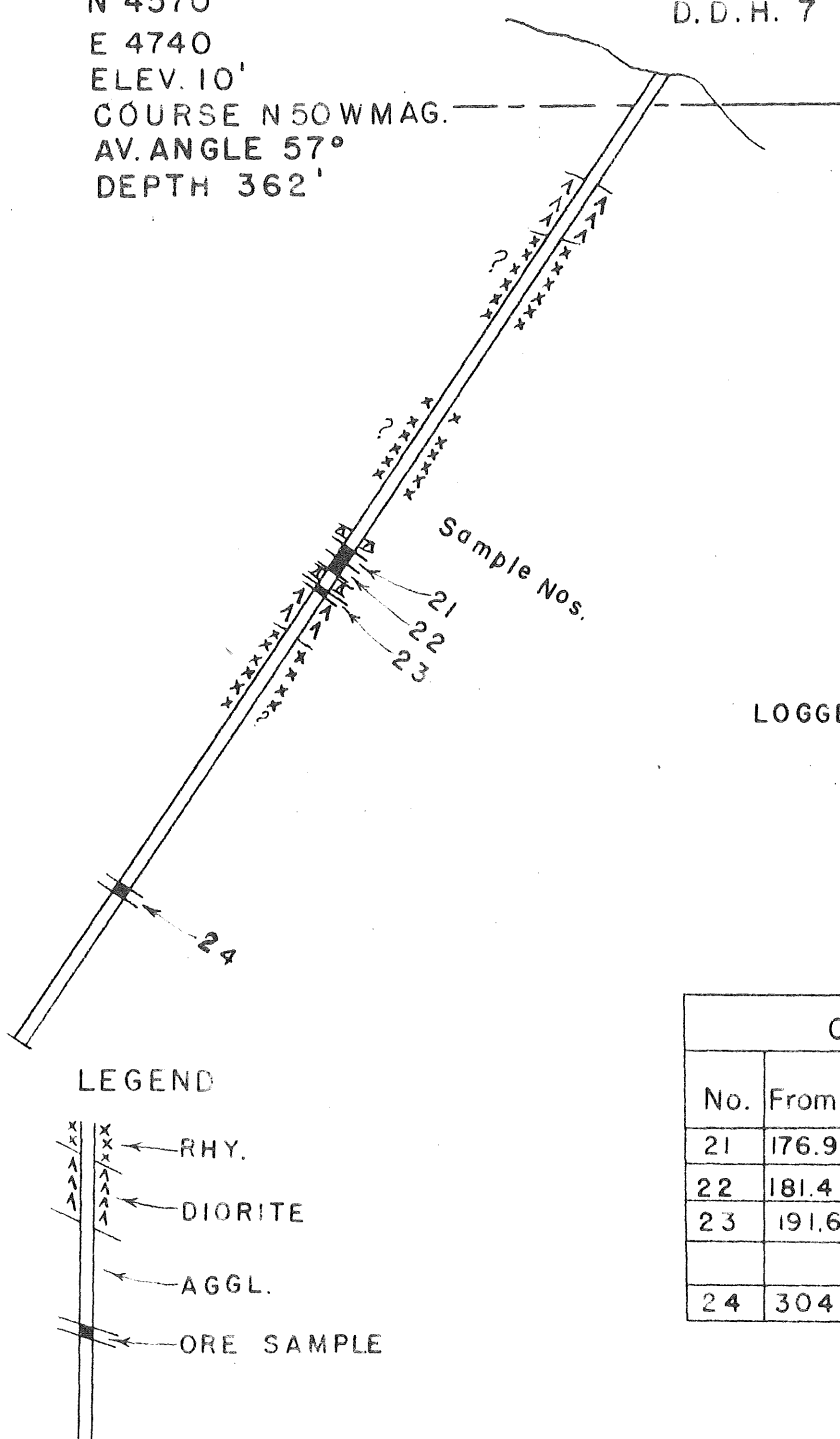


..... PROJ. ENG. DISTRICT ENG
 DATE PROJECT 1596 MAP No. H. 6

N 4570
 E 4740
 ELEV. 10'
 COURSE N 50 W MAG.
 AV. ANGLE 57°
 DEPTH 362'

D.D.H. 7

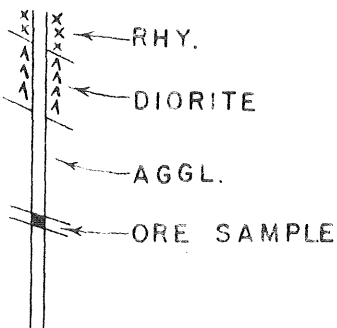
ANGLE OF HOLE
 AT 0' 60°
 AT 362' 53°



LOGGED BY: W. H. NEWHOUSE U.S.G.S.
 S. B. LEVIN U.S.B.M.

CORE SAMPLES						
No.	From	To	ASSAY%			REC.
			Zn.	Cu.	Pb.	
21	176.9	181.4	3.2	0.1	1.1	
22	181.4	186.7	10.1	0.5	2.0	
23	191.6	193.2	9.9	0.1	2.5	
24	304	307	0.8	3.0	0.0	

LEGEND



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 HARBORSIDE, ME.

DRILLED
 DEC. 20-30, 1940
 ST. JOSEPH LEAD CO.



..... PROJ. ENG. DISTRICT ENG.
 DATE PROJECT 1596 MAP No. H 7

D.D.H. 8

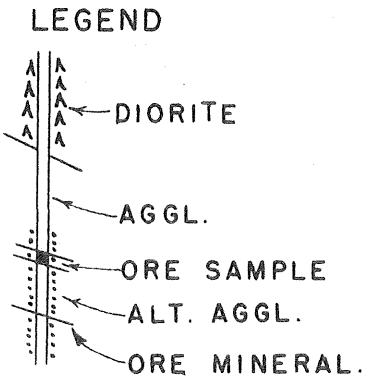
N 4571
 E 4740
 ELEV. 10'
 COURSE N35E MAG.
 AV. ANGLE 75°
 DEPTH 521

Sample Nos.

ANGLE OF HOLE
 AT 0' 70°
 AT 279' 77°
 AT 521' 77°

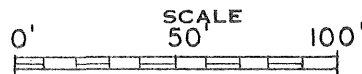
LOGGED BY:
 W.H. NEWHOUSE U.S.G.S.
 S.B. LEVIN U.S.B.M.

CORE SAMPLES						
No.	From	To	ASSAY			Rec.
			Zn	Cu	Pb	
27	195.4	200.5	15.0	1.7	0.1	
39	280.5	282.7	6.1	0.9	3.5	
28	288.0	292.4	5.4	0.7	2.5	
29	352.6	355.6	0.5	1.8	0.0	
30	360.2	364.2	1.0	0.7	0.0	
31	431.0	434.1	1.2	0.1	0.0	
32	435.4	437.4	1.2	0.1	0.6	



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 JAN. 2-15, 1940
 ST. JOSEPH LEAD CO.

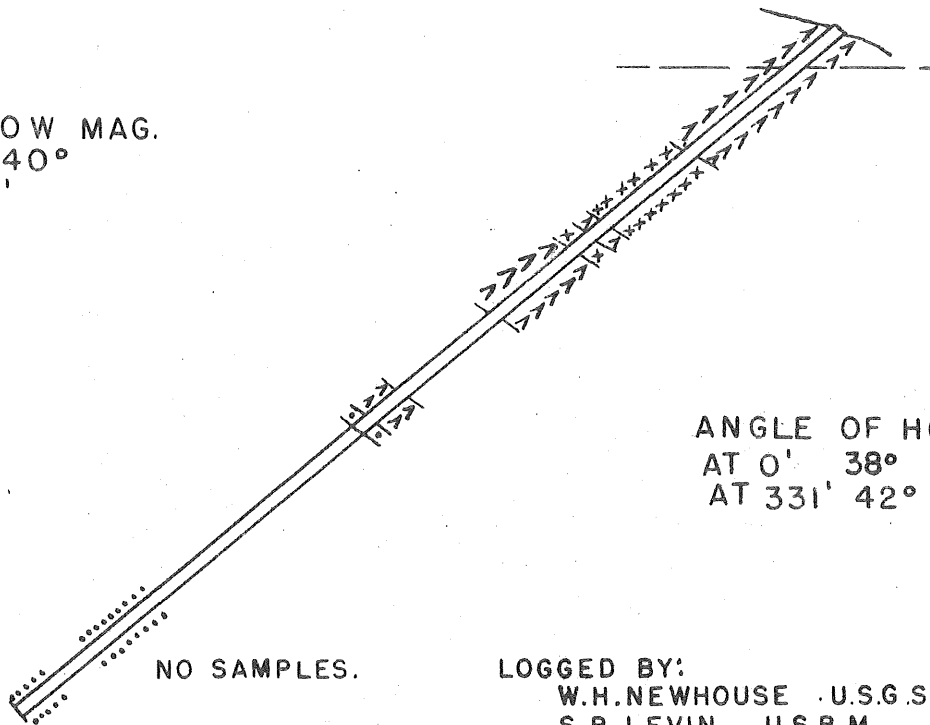
U. S. DEPARTMENT OF THE INTERIOR
 BUREAU OF MINES
 CAPE ROSIER MINE
 HARBORSIDE, MAINE



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 8

D.D.H. 9

N 4140
E 4340
ELEV. 10°
COURSE N 50 W MAG.
AV. ANGLE 40°
DEPTH 331'

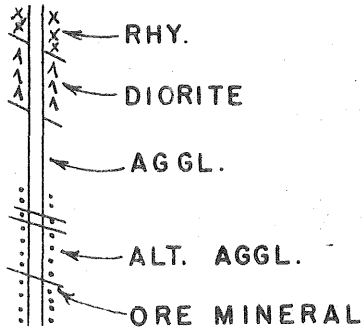


ANGLE OF HOLE
AT 0' 38°
AT 331' 42°

NO SAMPLES.

LOGGED BY:
W.H. NEWHOUSE U.S.G.S.
S.B. LEVIN U.S.B.M.

LEGEND



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CAPE ROSIER MINE
HARBORSIDE, ME.

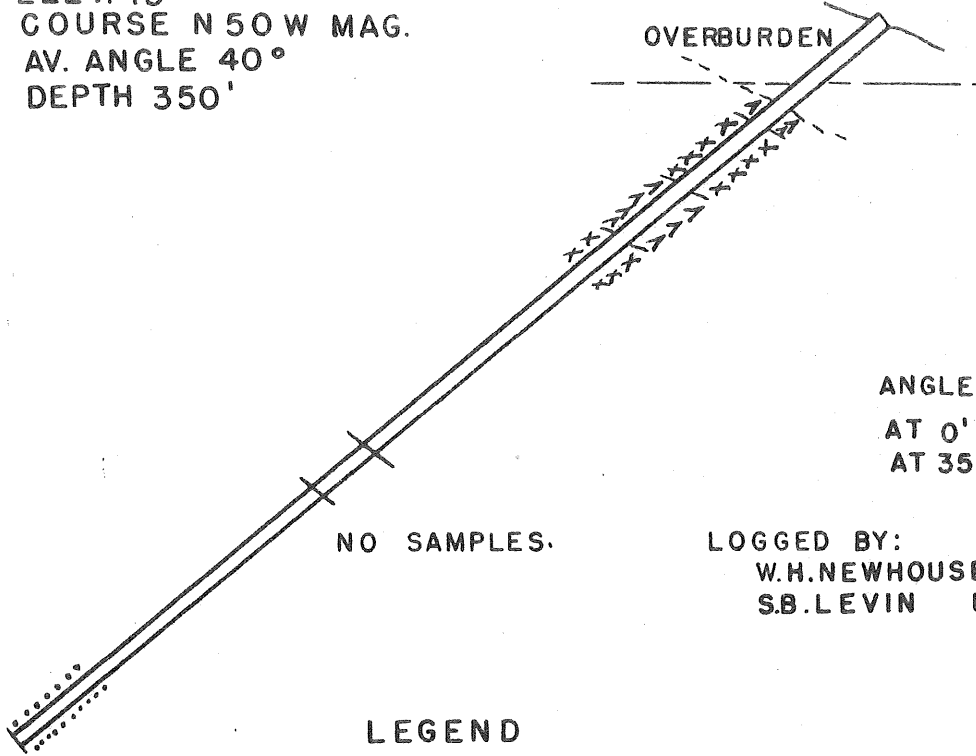
DRILLED
JAN. 1-25, 1941
ST. JOSEPH LEAD CO.



..... PROJ. ENG. DISTRICT ENG.
 DATE PROJECT 1596 MAP No. H 9

N 4030
 E 4270
 ELEV. 13'
 COURSE N 50 W MAG.
 AV. ANGLE 40°
 DEPTH 350'

D.D.H. 10



ANGLE OF HOLE
 AT 0' 38°
 AT 350' 41°

LOGGED BY:
 W.H. NEWHOUSE U.S.G.S.
 S.B. LEVIN U.S.B.M.

NO SAMPLES.

LEGEND

- X X ← RHY.
- ▲ ▲ ← DIORITE
- — ← AGGL.
- • ← ALT. AGGL.
- • ← ORE MINERAL.

U. S. DEPARTMENT OF THE INTERIOR
 BUREAU OF MINES
 CAPE ROSIER MINE
 HARBORSIDE, MAINE



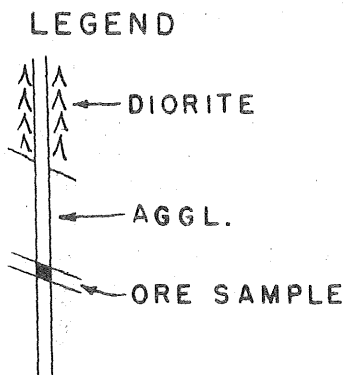
DRILLED
 JAN. 27; FEB. 5, 1941
 ST. JOSEPH LEAD CO.

..... PROJ. ENG. DISTRICT ENI
 DATE PROJECT 1596 MAP No. H 10

D.D.H. II

N 4830
E 4910
ELEV. 1'
COURSE S 75 W MAG.
AV. ANGLE 63°
DEPTH 764'

CORE SAMPLES						
No.	From	To	ASSAY %			Rec.
			Zn.	Cu.	Pb.	
40	304	307	1.4	0.1	0.0	
41	319.4	321.9	4.1	0.0	0.0	



Sample Nos.

40
41

ANGLE OF HOLE
AT 0' 63°
AT 345' 65°
AT 764' 61°

250' OF AGGL. OMITTED

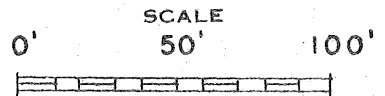
DRILLED FEB. 7-22, 1941

ST. JOSEPH LEAD CO.

LOGGED BY: W.H. NEWHOUSE U.S.G.S.
S.B. LEVIN U.S.B.M.

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HARBORSIDE, ME.

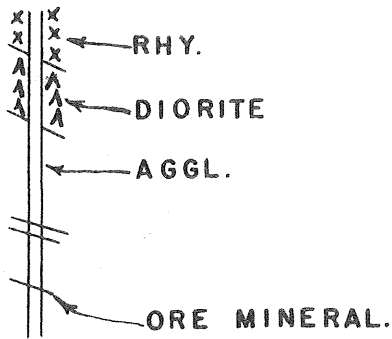


..... PROJ. ENG. DISTRICT ENG.
 DATE PROJECT 1596 MAP No. H II

D. D. H. 12

N 5000
E 5000,
ELEV. 2'
COURSE N 15 W MAG.
AV. ANGLE 60°
DEPTH 665°

LEGEND

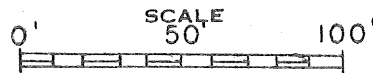


ANGLE OF HOLE
AT 0' 60°
AT 300' 62°
AT 665' 60°

LOGGED BY
W.H. NEWHOUSE, U.S.G.S.
S.B. LEVIN U.S.B.M.

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CAPE ROSIER MINE
HARBORSIDE, MAINE.



DRILLED
FEB. 24- MARCH 8
1941

ST. JOSEPH LEAD CO.

..... PROJ. ENG. DISTRICT ENG.
DATE PROJECT 1596 MAP No. H12

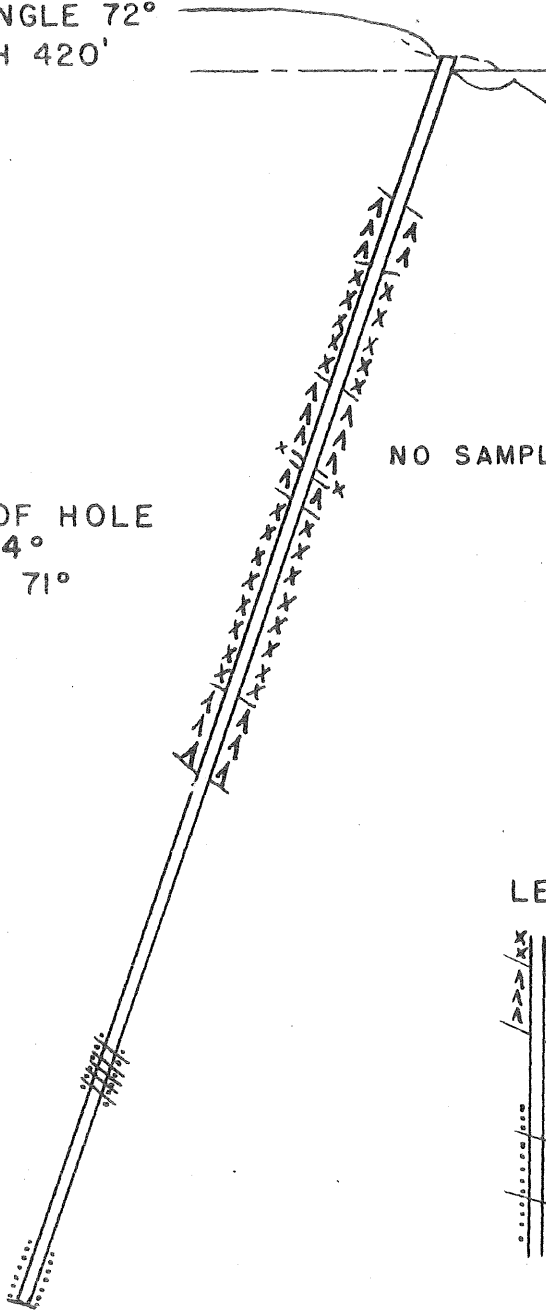
N 4400
 E 4718
 ELEV. 5'
 COURSE N 56 W MAG.
 AV. ANGLE 72°
 DEPTH 420'

D.D.H. 13

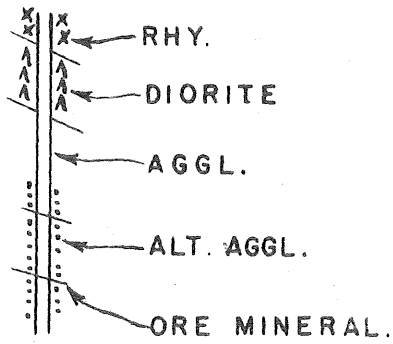
ANGLE OF HOLE
 AT 0' 74°
 AT 420' 71°

NO SAMPLES.

LOGGED BY:
 W.H. NEWHOUSE U.S.G.S.
 S.B. LEVIN U.S.B.M.



LEGEND



U. S. DEPARTMENT OF THE INTERIOR
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 CAPE ROSIER MINE
 HARBORSIDE, ME.

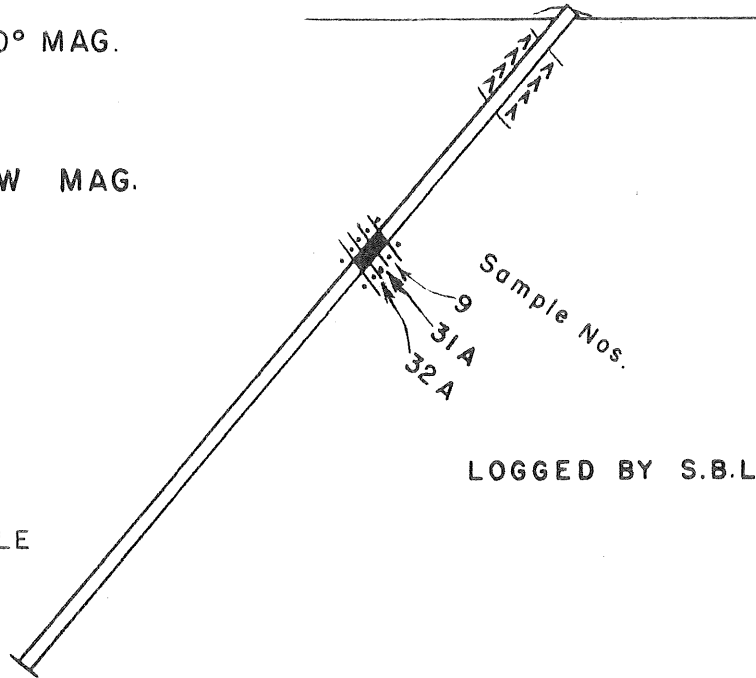
DRILLED
 MARCH 8-14, 1941
 ST. JOSEPH LEAD CO.



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 13

D. D. H. 14

N 4980
 E 4980
 AV. ANGLE 50° MAG.
 DEPTH 265'
 ELEV. 1'
 COURSE N51 W MAG.

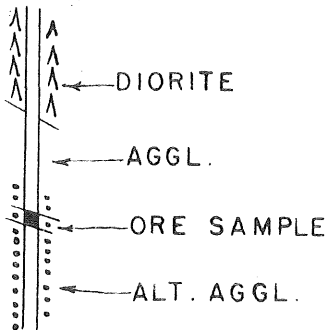


LOGGED BY S.B.LEVIN, U.S.B.M.

ANGLE OF HOLE
 AT 0' 52°
 AT 200' 47°

CORE SAMPLES						
No.	From	To	ASSAY %			% Rec.
			Zn.	Cu	Pb.	
9	90.8	96.8	7.9	0.4	0.1	48.3
31 A	96.8	100.8	1.2	0.7	0.0	55.5
32 A	100.8	102.8	3.2	2.2	0.0	100

LEGEND



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 CAPE ROSIER MINE
 HARBORSIDE, ME.

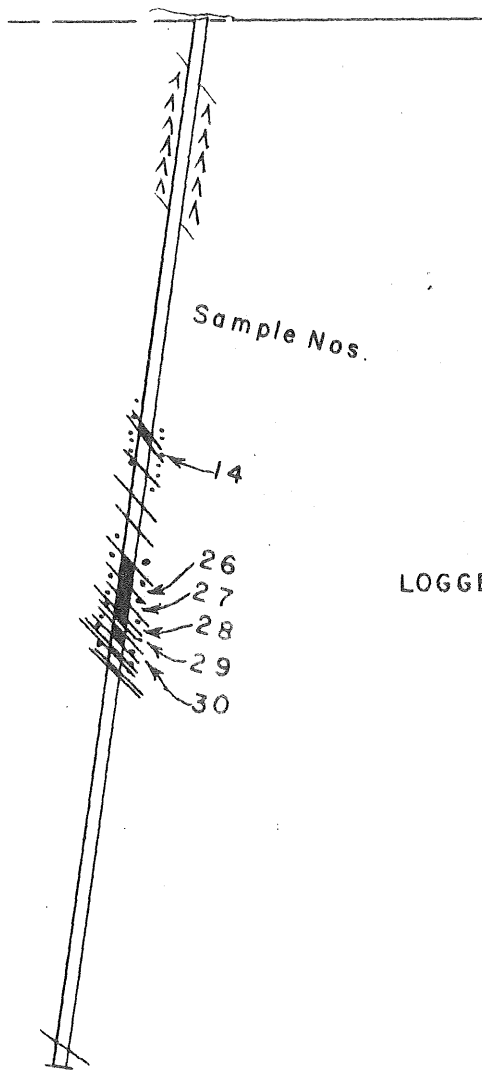
DRILLED
 OCT. 15-23, 1942
 U.S.B.M.



..... PROJ. ENG. DISTRICT ENG.
 DATE PROJECT **1596** MAP No. **H 14**

D. 1. 15

N 4960
 E 40
 ELEV. 1'
 COURSE N 54 W MAG.
 AV. ANGLE 82°
 DEPTH 328'



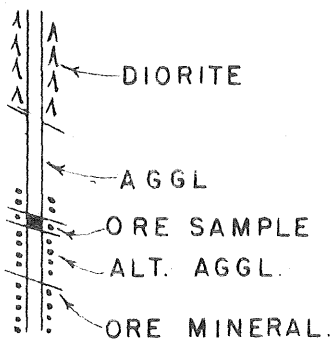
ANGLE OF HOLE
 AT 0' 82°
 AT 300' 82°

LOGGED BY S.B. LEVIN, U.S.B.M.

CORE SAMPLES						
No.	From	To	ASSAY%			% Rec.
			Zn	Cu	Pb.	
14	131.3	132.6	12.3	93	9.1	
26	172.4	178	0.0	1.1	0.0	80
27	178	183	0.0	0.5	0.0	100
28	183	188	6.0*	3.0	0.0	100
29	188	190.2	0.0	1.1	0.0	100
30	193.7	195.7	14.0	2.2	0.0	100

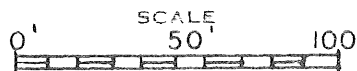
* EST.

LEGEND



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 CAPE ROSIER MINE
 HARBORSIDE, ME.

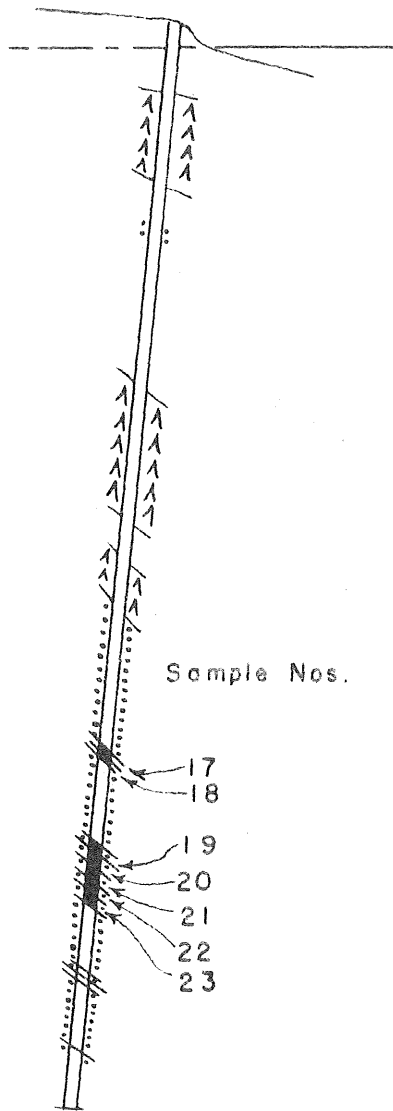
DRILLED
 OCT. 23-28, 1942
 U.S.B.M.



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 15

J.D.H. 16

N 4800
E 4815
ELEV. 8'
COURSE N54W MAG
AV. ANGLE 85°
DEPTH 343'



Sample Nos.

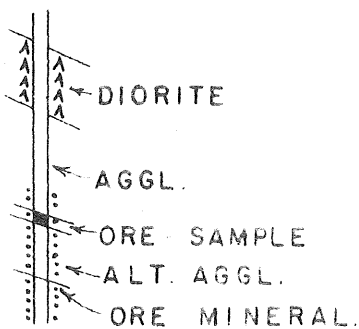
LOGGED BY S.B. LEVIN, U.S.B.M.

ANGLE OF HOLE
AT 0' 85°
AT 300' 85°

CORE SAMPLES

No.	From	To	ASSAY %			% Rec.
			Zn.	Cu.	Pb.	
17	229.5	232.0	13.8	2.5	0.1	43.5
18	232.0	232.7	15.8	0.4	0.0	82
19	258.9	262.0	9.6	1.0	0.1	100
20	262	267	17.5	1.5	0.0	99
21	267	272	1.8	2.8	0.0	54
22	272	274.5	3.3	15.4	0.0	86
23	274.5	280	1.3	7.5	0.0	81

LEGEND

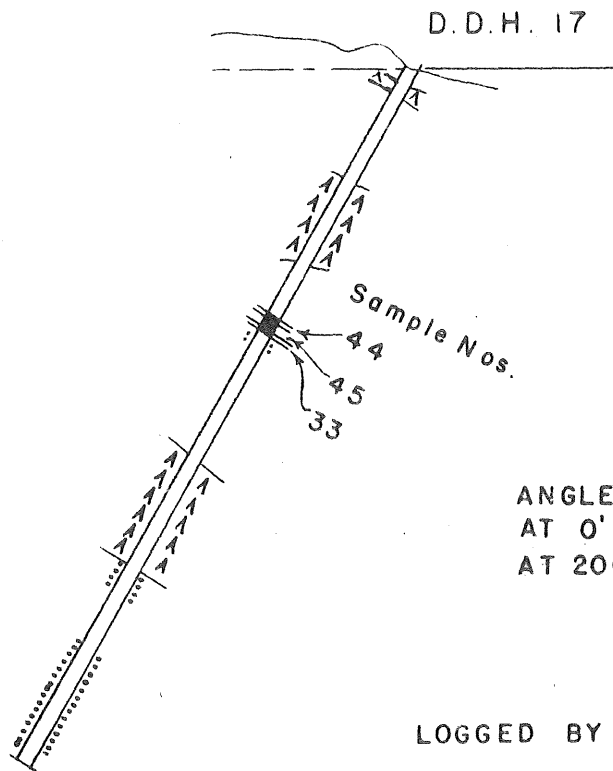


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BUREAU OF MINES
CAPE ROSIER MINE
HARBORSIDE, ME.

DRILLED
OCT. 29- NOV. 6, 1942
U. S. B. M.



PROJ. ENG. _____ DISTRICT ENG. _____
DATE _____ PROJECT 1596 MAP No. H16

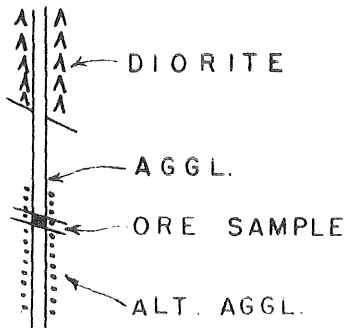


N 4710
 E 4740
 ELEV. 0'
 COURSE N 55 W MAG
 AV. ANGLE 62°
 DEPTH 250'

ANGLE OF HOLE
 AT 0' 61°
 AT 200' 64°

LOGGED BY S.B. LEVIN, U.S.B.M.

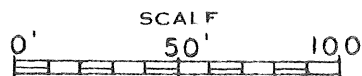
LEGEND



CORE SAMPLES						
No.	From	To	ASSAY %			% Rec.
			Zn.	Cu.	Pb.	
44	89.5	90.5	17.0	2.8	0.9	70
45	90.5	93.7	28.8	1.9	0.4	92
33	93.7	95.0	22.2	2.5	0.1	84

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 CAPE ROSIER MINE
 HARBORSIDE, ME.

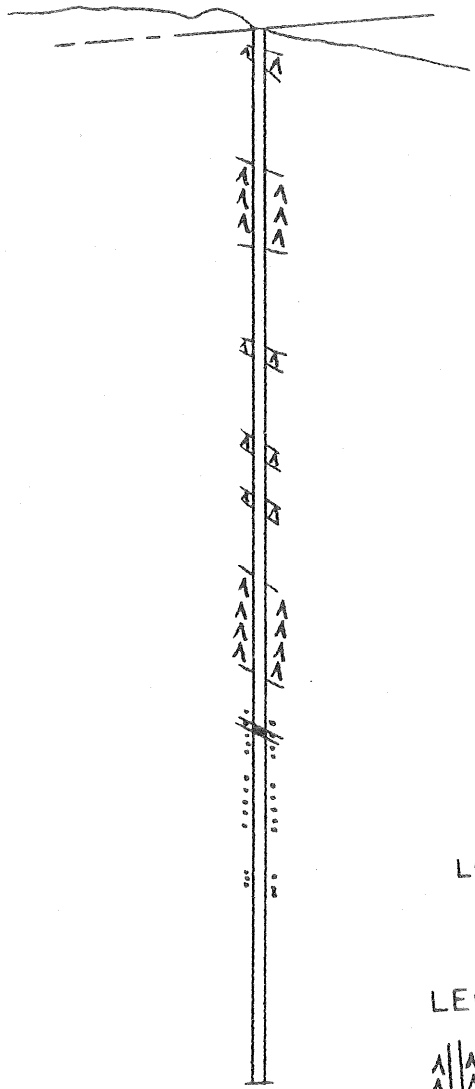
DRILLED
 NOV. 6-15 1942
 U. S. B. M.



..... PROJ. ENG. DISTRICT ENG.
 DATE..... PROJECT 1596 MAP No H J 7.....

D.D.H. 18

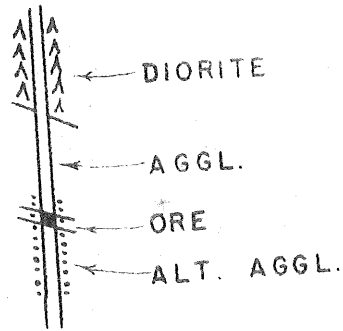
N 4709
E 4741
ELEV. 0'
COURSE N55W MAG.
AV. ANGLE 86°
DEPTH 333'



ANGLE OF HOLE
AT 0' 86°
AT 200' 87°
AT 300' 86°

LOGGED BY S. B. LEVIN, U.S. B. M.

LEGEND



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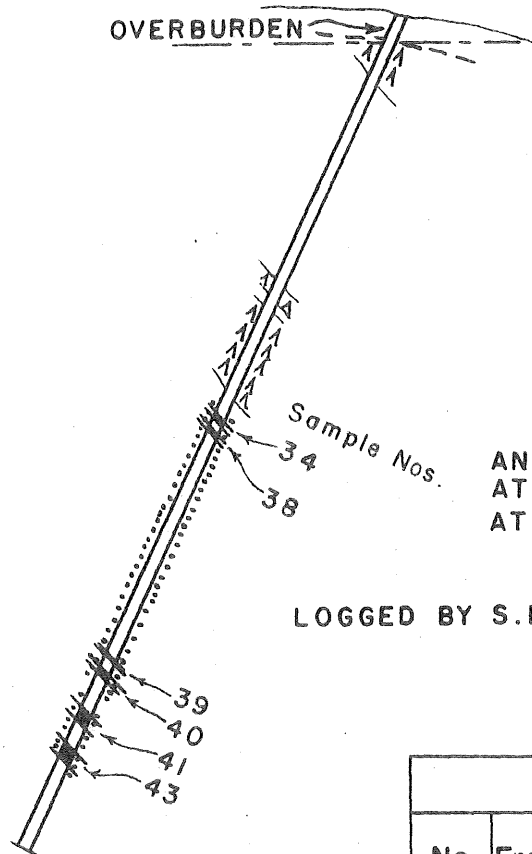
DRILLED
NOV. 16-21, 1942
U. S. B. M.



PROJ. ENG. _____ DISTRICT ENG.
DATE _____ PROJECT 1596 MAP No. H18

D.D.H. 19

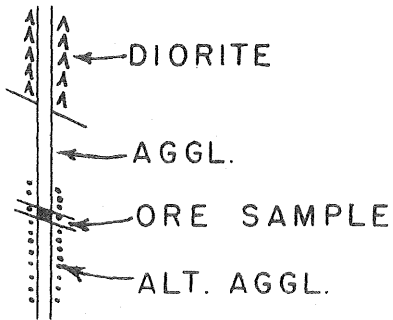
N 4855
 E 4860
 ELEV. 8'
 COURSE. N 54W MAG.
 AV. ANGLE 66°
 DEPTH 289'



ANGLE OF HOLE
 AT 0' 66°
 AT 200' 68°

LOGGED BY S.B.LEVIN, U.S.B.M.

LEGEND



CORE SAMPLES						
No.	From	To	ASSAY %			% Rec.
			Zn.	Cu.	Pb.	
34	140	141	19.8	0.9	0.4	80
38	144.7	145.7	12.3	1.4	1.7	77
39	223	224	11.1	1.1	0.0	100
40	228	229.4	6.7	0.7	0.8	97
41	242.2	246	5.2	0.1	0.3	97
43	254.5	258.5	18.9	7.7	0.5	87

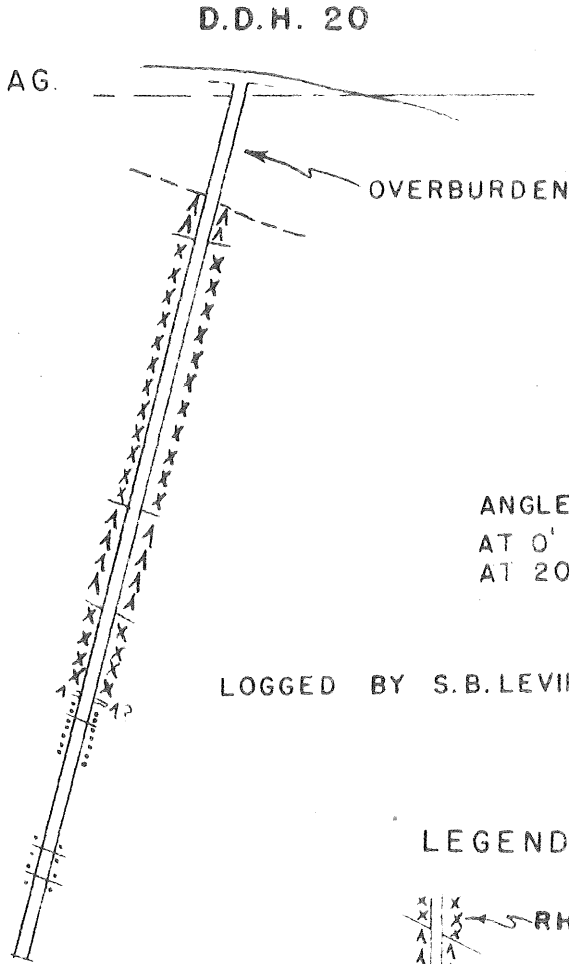
DRILLED
 NOV. 21-30, 1942
 U.S.B.M.

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 CAPE ROSIER MINE
 HARBORSIDE, MAINE



..... PROJ. ENG. DISTRICT ENG.
 DATE PROJECT 1596 MAP. No. H 19

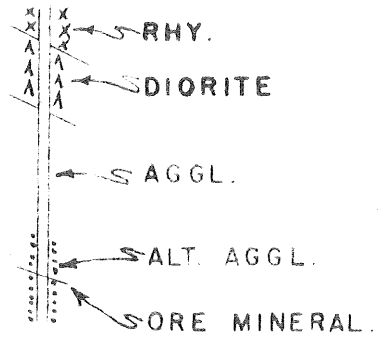
N 4305
 E 4550
 ELEV. 4'
 COURSE N 54 W MAG.
 AV. ANGLE 75°
 DEPTH 283'



ANGLE OF HOLE
 AT 0' 76°
 AT 200' 74°

LOGGED BY S.B.LEVIN, U.S.B.M.

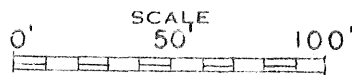
LEGEND



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 CAPE ROSIER MINE
 HARBORSIDE, MAINE.

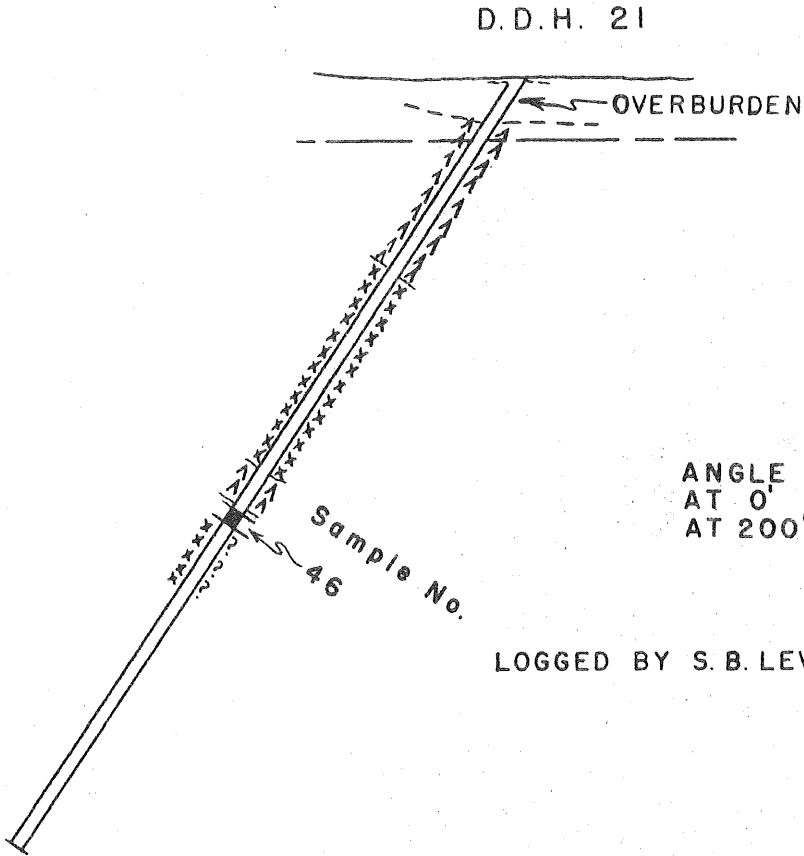
DRILLED
 DEC. 2-8, 1942

U. S. B. M.



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 20

N 4460
 E 4460
 ELEV. 19'
 COURSE N 54 W MAG.
 AVERAGE ANGLE 57°
 DEPTH 288'



ANGLE OF HOLE
 AT 0' 55°
 AT 200' 60°

LOGGED BY S. B. LEVIN, U.S.B.M.

LEGEND

- ← RHY.
- ← DIORITE
- ← AGGL.
- ← ORE SAMPLE
- ← ALT. AGGL.
- ← ORE MINERAL.

CORE SAMPLES						
No.	From	To	ASSAY %			% Rec.
			Zn	Cu	Pb	
46	160	165.8	0.1	1.7	0.1	97

DRILLED
 DEC. 9-DEC. 14, 1942
 U. S. B. M.

U. S. DEPARTMENT OF THE INTERIOR
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 CAPE ROSIER MINE
 HARBORSIDE, ME.



PROJ. ENG. _____ DISTRICT ENG. _____
 DATE _____ PROJECT 1596 MAP No. H 21






D.D.H. 22

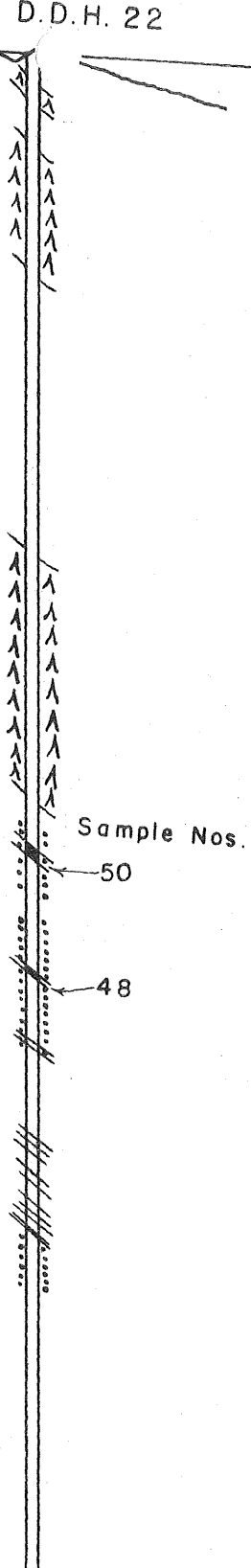
4825
E 4895
ELEV. -1'
COURSE S 54 E MAG.
AV. ANGLE 86°
DEPTH 504'

ANGLE OF HOLE
AT 0' 85°
AT 200' 86°
AT 300' 87°
AT 400' 87°
AT 500' 87°

LOGGED BY S. B. LEVIN, U. S. B. M.

LEGEND

-  DIORITE
-  AGGL.
-  ORE SAMPLE
-  ALT. AGGL.
-  ORE MINERAL.



CORE SAMPLES						
No.	From	To	ASSAY %			% Rec.
			Zn.	Cu.	Pb.	
50	262.8	267.8	8.5	1.0	3.6	100
48	303.4	305.4	1.0	3.0	0.0	100

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BUREAU OF MINES
CAPE ROSIER MINE
HARBORSIDE, MAINE



DRILLED
DEC. 15-30, 1942
U. S. B. M.

..... PROJ. ENG. DISTRICT ENG.
DATE PROJECT 1596 MAP. No. H 22