

Location Oriental Surface; east of Oriental
Direction Down Dip Vertical
Started August 20, 1943 Finished September 23, 1943.

COORDINATES
N 0950 E 15,700
Elevation 717.3
Hole No. 439
Depth 510

DESCRIPTION				CORE							SLUDGE								
GENERAL	Section		Core Rec. %	ECONOMIC	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb.	% Zn.	% Fe.	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb.	% Zn.	% Fe.
	From	To																	
0-75' Overburden																			
75-147' Pale grey and green, fine grained tuff; some are chloritic.	75	78	40	75-147' Barren except for a few traces of pyrite.															
	78	95	55																
Two narrow andesite lava flows at 100-102 and 124-129. Bedding 40° to core at 97', 50° at 115; shearing 50° to core at 137'.	95	115	55																
	115	125	50																
147-242' Andesite lava flow; fairly massive, dark green, fine grained. Amygdular in part. Somewhat sheared and bleached 215-218. Flow banding 55° to core at 147', 45° at 170'.	125	140	45	147-510' Barren except for 1/4" mineralized veinlet at 362', containing Pb-Zn and pyrite, and lightly disseminated pyrite 215-218.															
	140	147	45																
	147	168	50																
	168	188	75																
	188	208	75																
	208	228	55																
	228	249	55																
	249	269	45																
	269	288	70																
	288	300	55																
	300	322	70																
	322	340	50																
340-372' Pale grey-green volcanic tuff bleached and sheared. Bedding 75° to core at 358' and 60° at 371'.	340	340	70																
	340	372	50																
	372	391	65																
372-510' Reddish-grey rhyolite lava agglomerate with coarse reddish-grey "Arkose" gritty tuff; hard and siliceous fairly massive; coarse quartz eye phenocrysts in the fragments.	391	411	70																
	411	450	70																
	450	450	50																
	450	470	55																
	470	491	50																
	491	510	55																
510' End of hole																			

SIZE OF CORE REMARKS 75' of standpipe left in this hole.

From To
11' From To
7' From 75 To 510
From To

Examined by R. J. Mather Engineer

Approved by _____ Manager

LocationSurface east of Oriental

DirectionDown

StartedMay 26, 1944

FinishedAugust 20, 1944

Dip-90° at 0', -81° at 500', -80° at 1000', -72° at 1200', and -70° at 1936'.

N5950

E13,700

Elevation717.5

COORDINATES

Hole No.459

Depth1936

Deepened from 510'.

DESCRIPTION				CORE							SLUDGE								
GENERAL	Section		Core Rec. %	ECONOMIC	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe
	From	To																	
510-520 Massive, reddish "arkose" grit; medium to coarse grained; even textured.	510	514	85																
	514	517	90																
520-562 Bedded, gray and gray-green grits; hard; fine to medium grained; even textured. Some narrow bands of coarser reddish grit. Bedding at angle to core of 80-85° at 530'.	519	527	85																
	527	532	80																
	532	539	60																
	539	546	90																
	546	555	100																
	555	562	80																
562-665 Bedded green and gray sherts with some narrow grit bands. Bedding in general dips at flat angles to core; bedding at angle to core of 80° at 610, 75° at 617, and 60-65° at 637'. Some contorted bedding in the sherts, due to slumping, at 640' and 650'. At 650' is one 2" fragment of amygdal-ar basalt lava.	562	572	60																
	572	580	75																
	580	590	80																
	590	601	60																
	601	612	95																
	612	623	95																
	623	636	90																
	636	647	65																
	647	659	85																
	659	665	80																
665-692 Green volcanic tuffs with some short introduction. Contains amygdal-ar basalt fragments up to 2" in diameter.	665	672	85																
	672	680	70																
	680	685	80																
692-934 Coarse and fine, reddish "arkose" type grits; hard and massive. Some small chips of red rhyolite lava. At 749 is a 6" greenish chloritic tuff band.	685	702	75																
	702	720	90																
	720	730	75																
	730	770	75																
	770	802	90																
	802	832	70																
	832	845	80																
	845	872	60																
	872	902	45																
	902	915	55																
	915	925	40																
	925	931	70																
934-942 Andesite volcanic tuff; dark green 934-938; dark red stained.	931	936	55																
	936	941	10																

SIZE OF CORE

REMARKS

345

FromTo

11' FromTo

4' From 510 To 1936

FromTo

Hole drilled to 510' in September, 1943.

Examined byHgmachean

Engineer

Approved by

Manager

Location Surface east of Oriental
Direction Down Dip Vertical; see Sheet #2.
Started May 26, 1944 Finished August 30, 1944.

COORDINATES
N 5950 E 13,700
Elevation 717.3

Hole No. 459
Depth 1936
Deepened from 510'

DESCRIPTION				CORE							SLUDGE								
GENERAL	Section		Core Rec. %	ECONOMIC	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe
	From	To																	
938-942 A few small amygdular lava chips.																			
942-1016 Grey-green cherts and siltstones; a few narrow grit zones.	941	947	50																
Reddish stained 996-1006. Bedding makes angle to core of 65° at 996'. Hard.	947	952	25																
	952	963	20																
	963	971	25																
	971	974	20																
	974	986	60	942-1424 Barren.															
	986	996	15																
	996	1006	20																
	1006	1014	25																
1016-1140 Medium and coarse grained. Fairly even textured, "arkose" type of grit; tiny acid lava chips, feldspar grains, and quartz grains. Massive. From 1138-1139 is a gray-green siltstone band.	1014	1034	40																
	1034	1044	45																
	1044	1055	50																
	1055	1077	80																
	1077	1097	45																
	1097	1107	60																
	1107	1127	65																
	1127	1141	70																
1140-1152 Coarse rhyolite agglomerate; reddish porphyritic rhyolite fragments; Hard.	1141	1151	90																
1152-1156 Green chert. Bedding 70° to core.	1151	1160	80																
1156-1162 Reddish, "arkose" type grit and rhyolite agglomerate.	1160	1165	65																
1162-1225 Greenish-grey grit; both fine and coarse grained; band of green chert	1165	1174	20																
1171-1172; black chert and siltstone	1174	1186	50																
1182-1186. Bedding 65° to core at 1185'.	1186	1198	25																
	1198	1208	45																
	1208	1225	45																
1225-1424 Fine grained, grey-green siltstone and cherty siltstone with about 1/8 by volume of interbedded thin sand layers. Bedding 60° to core at 1305, 70° at 1352, and 80° at 1376'. A minor amount of contortion due to pre solidification slumping in the unconsolidated cherty beds.	1225	1255	50																
	1255	1276	95																
	1276	1300	40																
	1300	1321	20																
	1321	1351	40																
	1351	1376	30																
	1376	1400	95																
	1400	1424	75																

SIZE OF CORE		REMARKS
From	To	
1 1/2"	From To	
2"	510 To 1936	
	From To	

Examined by Hymachean Engineer
Approved by _____ Manager

Location Surface east of Oriental
Direction Down Dip Vertical; see sheet #2
Started May 26, 1944 Finished August 20, 1944.

COORDINATES
N 5950 E 13,700
Elevation 717.3

Hole No. 459
Depth 1926'
Deepened from 510'

DESCRIPTION				CORE							SLUDGE								
GENERAL	Section		Core Rec. %	ECONOMIC	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe
	From	To																	
1424-1440 Fine and coarse grained grey grit. The coarse zones contain small chips of acid lava.	1424	1430	100																
	1430	1441	75																
1440-1536 Ribbon banded, fine grained, grey and black cherty siltstones with narrow grit bands. Bedding at angle to core of 75° at 1446, 45° at 1470, 60° at 1505, 50° at 1529, and 45° at 1550.	1441	1449	95	1454-1750 Barren except for a little disseminated pyrite replacement over 1" at 1530'. Some carbonate introduction 1744-1750.															
	1449	1452	25																
	1452	1476	40																
	1476	1486	50																
	1486	1496	95																
	1496	1506	100																
	1506	1516	95																
	1516	1536	100																
1536-1559 Fairly massive, medium to coarse grained grey-green grit with a few narrow bands of dark grey siltstone.	1536	1542	65																
	1542	1552	70																
	1552	1556	50																
1556-1700 Ribbon banded grey siltstone with narrow grit bands. Bedding makes angle to core of 65° at 1566, 70° at 1575, 75° at 1601, 70° at 1622, 70° at 1642, 65° at 1662, and 65° at 1692. Beds are top side up as determined from grain size variation in the grit bands at 1604, 1622, 1633, 1641, 1650, 1652, 1690, and 1692'.	1556	1567	15																
	1567	1574	70																
	1574	1585	95																
	1585	1596	95																
	1596	1612	80																
	1612	1622	25																
	1622	1642	50																
	1642	1656	65																
	1656	1666	100																
	1666	1688	95																
	1688	1690	100																
1700-1720 Coarse grained, grey-green grit; hard. Chips of acid and acid-intermediate lava up to 1"; plentiful quartz grains. Some narrow, bedded, siltstone bands.	1692	1712	95																
	1712	1722	95																
	1722	1732	55																
1730-1750 Fine grained, pale grey-green cherty siltstone and thin grit bands. Somewhat sheared and altered with introduction of carbonate veins late 1744-1750.	1732	1741	15																
	1741	1751	60																
	1751	1756	70																
	1756	1764	80																
Considerable red hematite staining 1774-1780.	1764	1774	50																
	1774	1779	80																

SIZE OF CORE		REMARKS
From	To	
1 1/2" From	To	
1 1/2" From 510	To 1936	
From	To	

Examined by Hgmaheen Engineer
Approved by _____ Manager

DIAMOND DRILL HOLE RECORD

Location Surface east of Oriental
 Direction Down Dip Vertical See Sketch Page 2
 Started May 26, 1944 Finished August 30, 1944.

COORDINATES
 N 5950 E 13,700
 Elevation 717.5

Hole No. 459
 Depth 1936'
 Deepened from 510'.

DESCRIPTION				CORE														SLUDGE					
GENERAL	Section		Core Rec. %	ECONOMIC	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au	Oz. Ag	% Cu	% Pb	% Zn	% Fe				
	From	To																					
1780-1936 Amygdular andesite-basalt agglomerate and flow breccia; calcite filled amygdules; some calcite veinlets. Most of the lava is stained a dark hematitic red. Solid core with no brecciation.	1779	1788	99	1780-1936 Barren.																			
	1788	1798	100																				
	1798	1809	85																				
	1809	1820	95																				
	1820	1831	95																				
	1831	1842	95																				
	1842	1852	100																				
	1852	1867	100																				
	1867	1867	100																				
	1867	1876	100																				
	1876	1886	100																				
	1886	1895	100																				
	1895	1905	95																				
	1905	1915	100																				
	1915	1926	95																				
1926	1936	100																					
1936' End of hole.																							

SIZE OF CORE		REMARKS
From	To	
1 1/2" From	To	
1" From 510	To 1936	
From	To	

Examined by H. G. Machen
 Approved by _____
 Engineer