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AMERICAN SMELTING AND REFINING COMPANY SILVER BELL UNIT

Silver Bell,

Arizona

April 20, 1965

J. H. C. APR 2.9 1965

MEMORANDUM TO: Mr. D. R. Jameson, Superintendent

Subject: MONTHLY REPORT ON OXIDE AREA DRILLING.

The following report briefly summarizes the results of the diamond drilling done in the Oxide area during March, 1965.

Hole F-71 started the month at 198.5 feet and bottomed at 704.4 feet. The advance was mainly in monzonite with one small body of syenodiorite porphyry. Chalcocite was generally weak from 131 to 255, 370 to 396, 509 to 536, and 550 to 626. Although ore grade sulfides were first hit at 125, leached rock was found intermediately down to 361. This hole was drilled at a -65 degrees on a Due South bearing from the same location as vertical hole F-64.

Hole F-72 started the month at 184.7 and bottomed at 301.1. The advance was in sparsely mineralized sympositie porphyry.

Hole F-73 was collared and drilled dacite porphyry (?) to 40.9 and then syenodiorite porphyry to the bottom at 190.7. The sulfide contact was at 36, but mineralization was sparse throughout. A re-check has been made of the drill logs and in the field, of the holes that showed dacite at the surface above the syenodiorite. It is now felt that <u>all</u> holes showing this sequence do not have dacite. The effect of weathering and alteration change the syenodiorite to appear dacitic. The contact in the core was always gradational. Therefore, all logs, sections, etc., should be changed and the dacite porphyry changed to syenodiorite porphyry.

Hole F-74 was drilled in the Northwest Oxide area. It rock-bitted through stream gravels to 38.0. From there to the bottom altered sediments (hornfels and tactites) were drilled, with the bottom in a possible quartzite. A post-mineral andesite dike was penetrated many times also. Unfortunately much of it was in the ore zone. Chalcopyrite was the main copper sulfide and this occurred in the altered sediments similarly to that found in the Imperial area (east of El Tiro). The dike, being waste, lowered the overall grade to 1.06/0 .04% Copper. Adjusting the values just to the mineralized sediments shows a grade of about 1.42/0.07% copper. The sulfide contact was at 121, and the mineralized zone was from 135 to 232.

Hole F-75 is on Portland Ridge at the same site as F-64 and F-71. It is an angle hole at a -49° and on a Due South bearing. It drilled monzonite to about 329 and then aplite to the end of the month at 372.3. Although most of the rock was leached capping, numerous small fingers of sulfide were encountered. One of them, from 266 to 284, showed weak chalcocite. The above mentioned aplite was formerly thought to occur only with the alaskite. Recent work has shown it to also be found with monzonite and syenodiorite porphyry. The latest find showed it to be pre-mineral as both chalcocite and chalcopyrite were found in it. Hole F-76 is in the Northwest Oxide area. It penetrated alaskite from the collar to the end of the month at 288.9. Chalcocite was found from 76 to 160, mixed sulfides and non-sulfides to 195, and the essentially clean sulfides thereafter. The ore run was strong from 67 to 225.

See accompanying sections and plans at end of report.

C. W. Haynes

Resident Geologist

CWH:jca

DIAMOND DRILLING IN THE OXIDE AREA

Hole No.	Ground <u>Elevation</u>	<u>Coordin</u> North	<u>ates</u> <u>East</u>	+0.40% Copper I Interval	Lenses Thickness	<u>Average</u> Total	<u>% Copper</u> <u>N.S.Cu</u>	Feet Drilled During Month		Final <u>Depth</u>
F-71*	3243.0	28,715	28,855	131.0 - 255.1 370.3 - 396.4 508.5 - 536.1 549.6 - 625.9	124.1 26.1 27.6 76.3	0.55 0.75 0.55 0.57	0.02 0.02 0.02 0.02	505.9	704.4	704.4
F- 72	3068.8	29,083	28,917	No ore runs thi	ls interval.			116.3	301.0	301.0
F-73	3020.1	30,207	29,149	No ore runs thi	is interval.			190.7	190.7	190.7
F-7 4	2921.3	30,336	25,529	134.9 - 232.0	97.1	1.06	0.04	412.9	412.9	412.9
F-75**	3243.0	28,715	28,855	266.2 - 284.3	18.1	0.44	0.02	372.3	372.3	
F-76	3130.9	29,785	24,667	67.1 - 223.5	156.4	0.86	0.19	288,9	288.9	
					· .		TOTAL	<u>1,887.0</u>		

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* An angle hole. Declination is -65 degrees. Bearing is Due South.
** An angle hole. Declination is -49 degrees. Bearing is Due South.







