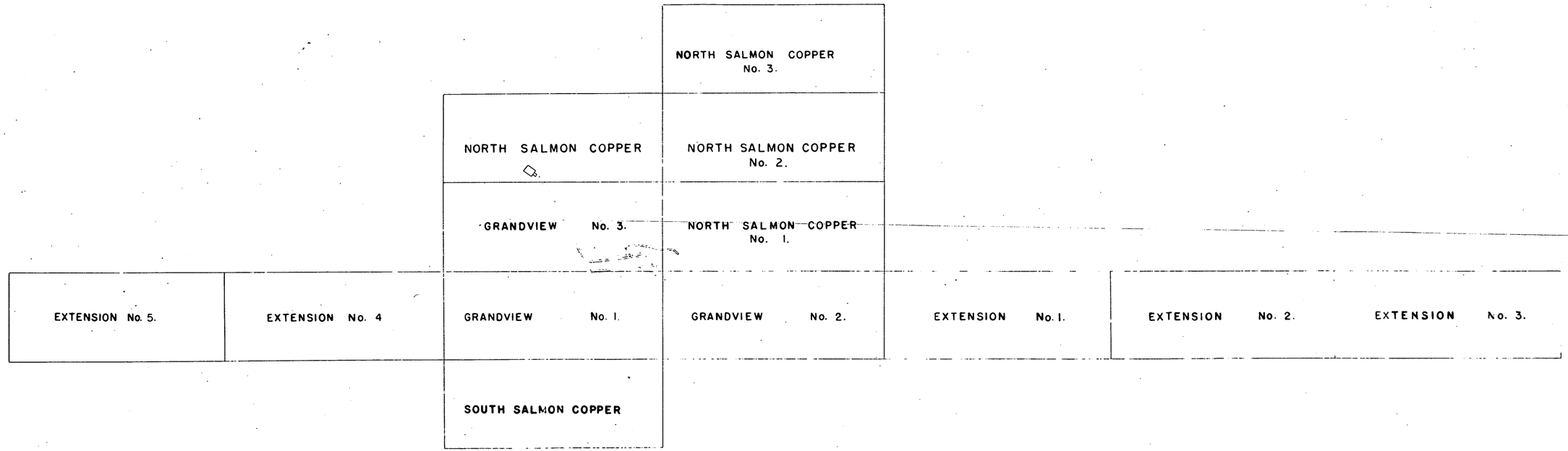


CENTRIDA MINES, INC. (POPE-SHENON)
SALMON, IDAHO
MAP OF SURFACE SHOWING CLAIMS
SCALE 1 in. = [illegible] ft.

CENTRIDA MINES, inc.
P.O. Box 838
KELLOGG, IDAHO

DMEA - 3112

FINAL FIELD TEAM REPORT.

FORM SL-46 REVISED JAN 11-33

AMERICAN SMELTING AND REFINING COMPANY

8-10 WEST FIRST SOUTH
SALT LAKE CITY, UTAH

NOV 14 1958

NAME OF SHIPPER Clifton A. & Otis M. Gunderson — GARFIELD PLANT, GARFIELD, UTAH

ADDRESS Salmon, Idaho — PLANT LOT 3374

SHIPPING POINT Macfay, Idaho — SHIPPERS LOT 600-45-D

MINE NAME Pine Station — COUNTY CLASS Crude — SAMPLED BY GARFIELD

DATE RECEIVED	BILL OF LADING	CAR INITIAL	CAR NUMBER	WEIGHTS GROSS WEIGHT	CONTAINERS	NET WET	MOISTURE %	MOISTURE POUNDS	NET DRY WEIGHT	
11-8	UP	UP	64308			74300	7.7	5722	68578	

NET ... QUOT

GOLD 84.913
SILVER .913
LEAD .16
COPPER .354

BASED ON WEEK ENDING 11-...

ASSAYS

	SMELTER	SHIPPER	UMPIRE	SETTLEMENT
GOLD OZ. PER TON	.01	.02		.015
SILVER OZ. PER TON	.6	.55		.575
LEAD %	—			
COPPER %	.845	.860		.8525
INS. %				
SiO2 %	6.00			6.00
Fe-Mn %				
CaO %				
Zn %				
S %				
Al2O3 %				
As %				
Sb %				
Ni %				
Bi %				

VALUES PER TON

PAY CONTENT	PRICE	CREDIT
.015	31.8428	.48
95% - MIN.		
80%		
DEDUCT 10# 160.5#	.32195	51.67
GROSS VALUE		52.15
DEDUCTIONS	DEBIT	
BASE	5.85	
EXCESS VAL. OVER $22.00	3.62	
BULLION FRT. TAX	.06	
LABOR		
TOTAL DEDUCTIONS	9.53	
NET VALUE PER DRY TON		42.62
FRT. VALUE PER WET TON	XXXXX	XXXXX

The gold acquired in this material was held under Section 19 of the Provisional Gold Regulations of January 30 and 31, 1934, as amended, by the person from whom it was acquired by us.

DISTRIBUTION OF PROCEEDS

		DEBIT
TOTAL VALUE: 34.289 DRY TONS @ 42.62 PER TON		
LESS PLANT SAMPLING		
FREIGHT 37.150 WET TONS @ 4.31 PER TON PLUS TRANSP. TAX		164.92
HAULING, PAY Melvin Parks @ $.00 Howell, Pocatello, Idaho		229.59 PA
SAMPLING, PAY		
ASSAYING, PAY CRISMON & NICHOLS		5.00
UMPIRE, PAY		
REPRESENTATION, PAY		
AMOUNT WITHHELD PENDING RECEIPT OF SILVER AFFIDAVIT		
ROYALTY Fred J. Gough, Salmon, Idaho @ 5% net		53.09 PA
Lenny Lockhart, Magnolia, Montana @ 5% net		53.09 PA
Fred J. Gough & C. Walker Lyon, Salmon, Idaho @ 5% net		53.09 PA
BALANCE PAY, SHIPPER		902.62 PA

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington
October 30, 1961

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: Transmittal of application for assistance
Western Uranium Corp. and Toil Mining Co. (Copper)
Pope-Shenon Mine
Lemhi County, Idaho

Enclosed is one copy of an application from Western Uranium Corporation and Toil Mining Company, a partnership, for OME aid to explore for copper at the Pope-Shenon mine, Lemhi County, Idaho. This property was the subject of a former DMEA contract (Docket DMEA-3112) which was certified as resulting in a discovery. Royalty on past production in the amount of $293.07 remains unpaid according to a Report of Royalty Review dated April 13, 1960.

The application appears to be carefully and very well prepared although the cost estimate appears to be high, particularly in the geologist-engineer-supervisor combination, and some of the items under supplies. The cost of a 14' x 20' compressor-change house is probably not too much out of line if facilities for heat, showers, etc., are included.

Because of the considerable information on this property in Docket DMEA-3112, and the thoroughness of this application, I do not believe that any further information would result from an on-site examination.

The proposed work will be done 250 feet below the 600 level. Referring to plate 3 accompanying the Field Team Final Report, Diamond Drill Hole No. 4 cut 4.5 feet of vein containing chalcopyrite and pyrite assaying 8.1 percent copper about 260 feet below the 600 level; DDH No. 16 cut 2 feet of vein that assayed 4.24 percent copper about 225 feet below the 600 level; DDH No. 15 cut 4 feet of open oxidized seams, probably vein material, but no sample was assayed. No other holes were drilled to this depth, but the showings of 2 of these 3 holes certainly encourage additional work.

The Field Team Final Report on page 9 states: "The fault and dike pattern has created watercourses * * *." Therefore, it appears that the proposed crosscutting and drifting is more feasible than would be winzing and drifting as there would be no pumping problem which could be quite costly; also the cost of acquiring and installing an underground hoist would be avoided.

It is recommended that the applicant's proposal be approved without a field examination.

COSTS

Repair 1,320 feet of road, build 500 feet of new road, and construct portal site:

1. Independent contracts		
48 hours bulldozing at $16/hr	$768.00	
2. through 8.	None	
		$ 768.00

Crosscutting and drifting

2,000 ft, 5' x 7' rock section

Advance 5 ft/shift, 2 shifts/day, 25 days/month, 250 ft/mo, 200 days or 8 mos

1. Independent contracts		None
2. Labor and supervision		
4 miners at $2.75/hr or $22/day	$88.00	
2 helpers at $2.25/hr or $20/day	40.00	
1 geologist-engineer-supervisor 8 mos at $700/mo	28.00	
		156.00
Plus FICA and other ins. at 16.5%		25.74
		$181.74
	at 10 ft per day	$18.17/ft

3. Operating materials and supplies (per 5-foot round)

Dynamite, 40 lbs at $22/100 lbs	$8.80	
Caps, 18 at $0.03/cap	0.54	
Fuse, 144 ft at $0.02/ft	2.88	
Steel, 1 steel replaced/300 ft at $16, 90 ft/round	4.80	
Bits, 300 ft/bit at $20, 90 ft/round	6.00	
Rail, 20# plus fish plates, bolts, spikes at $1/ft (discount 50% - no salvage)	2.50	
Ties, 3-3/4 each at $0.40	1.50	
Gas, oil, diesel fuel, etc.	8.00	
Air pipe and fittings, 2" at $1/ft (discount 50% - no salvage)	2.50	
Water pipe and fittings, 3/4" at $0.21/ft (discount 50% - no salvage)	0.53	
Air hose, 3/4", 100 ft at $0.69/ft	0.17	
Water hose, 1/2", 100 ft at $0.59/ft	0.15	
2 frogs at $35.25 each (discount 50% - no salvage)	0.09	
Repair parts, $1/ft	5.00	
Miscellaneous small tools	0.15	
Total	$43.11 or	$8.62/ft

4. Operating equipment - rented	Rental/mo.	
310 cfm compressor	$440.00	
Electric trammer	440.00	
Mucking machine	320.00	
4 mine cars at $50 each	200.00	
2 rock drills at $94	188.00	
Generator and charger	300.00	
Truck	440.00	
	$2,328.00	
at 250 ft/mo		$9.31/ft
5. Rehabilitation and repairs		None
6. New buildings		
14' x 20' compressor and change house		$600.00
7. Miscellaneous		
Assaying - samples at 10-foot intervals on vein		
100 samples assayed for gold and silver at $2	$200.00	
100 samples assayed for copper at $1.50	150.00	
Total assaying costs		$350.00
Plus 15% for sample sacks, handling, etc.		52.50
8. Contingencies		None
Total for drifting and crosscutting		$36.10/ft

TIMBER

The applicant estimates that timber may be required in the first 100 feet of the crosscut. On the 600 level the crosscut is timbered for about 285 feet. Presumably, some of this was not necessary at time the crosscut was driven. It is also possible that some timber may be required at the intersection of the crosscut and the Pope fault. It is recommended that provision be made for 150 feet of timbering. It is estimated that breaking and mucking a larger cross section, framing, standing, blocking and lagging for 5 sets of timber or 15 feet will require 1 shift. The 100 feet would require 6.66, say 7 days or 1/4 month.

1.	Independent contracts			None
2.	Labor and supervision			
	2 miners, 7 days, at $2.75/hr or $22/day	$308.00		
	FICA and other insurance 16.5%	50.82		
	Total per 100 feet	$358.82	or	$3.59/ft
3.	Operating materials and supplies			
	40 posts 8" x 8" x 7'	1,493 bf		
	20 caps 8" x 8" x 6'4"	676 bf		
	40 girts 4" x 4" x 4'4"	231 bf		
	250 lagging 2" x 12" x 5'	2,500 bf		
		4,900 bf at $80/M $392.00		
	For blocks and wedges plus 5% of $392	19.60		
		$411.60	or	$4.12/ft
	Gas, oil, diesel fuel, etc.			0.20/ft
	Total for timbering			$7.91/ft

SUMMARY OF COSTS

Repairing and constructing new road, preparing portal site	$ 768.00
Crosscutting and drifting, 2,000 ft at $36.10/ft	72,200.00
Timbering, 100 ft at $7.91/ft	791.00
Construct 14' x 20' compressor & change house	600.00
Assaying, sample sack, and hauling costs	402.50
Total cost of project	$74,761.50
Government participation at 50%	$37,380.75

The prior contract allowed $43.50 per foot for crosscutting and drifting, but this included sampling, assaying, and road maintenance. In the above estimate it is presumed that the geologist-engineer-supervisor will do the sampling; assay costs per foot of crosscut and drift is only $0.20. There is no provision for road maintenance, but if the cost of road repair, construction and portal preparation is converted to cost per foot of crosscutting and drifting, it is only $0.39 per foot. Including these items the cost per foot for crosscutting and drifting would be raised to $36.68, still somewhat less than the amount previously allowed. The prior cost estimate was prepared by E. G. Erickson of the Bureau of Mines in September 1953 and undoubtedly costs of equipment and labor have increased since that date. I believe my basic figures are fairly correct, but I cannot pinpoint the reason for the difference between them and those of Erickson; possibly, I have inadvertently missed certain vital elements of cost. Therefore, I suggest that a more realistic price per foot for crosscutting and drifting would probably be somewhere between $43.50 and $45.00 per foot, although I do not seem able to account for it other than by accepting Erickson's price and the fact that cost of labor and supplies have since risen.

If a contract is approved, it is suggested, in view of item 11 on page 5 of the purchase contract, either that the applicant be required to pay the $295.07 back royalty before any contract work will be authorized or that he be advised that payment of his first 1 or 2 vouchers, as necessary to make up the amount of back royalty, will be withheld.

Enclosure
Distribution:
GM(3); USGS(SRO)
Sackett; MacLaren

Amount of Contract $62,812.50

Government's contribution $31,306.25

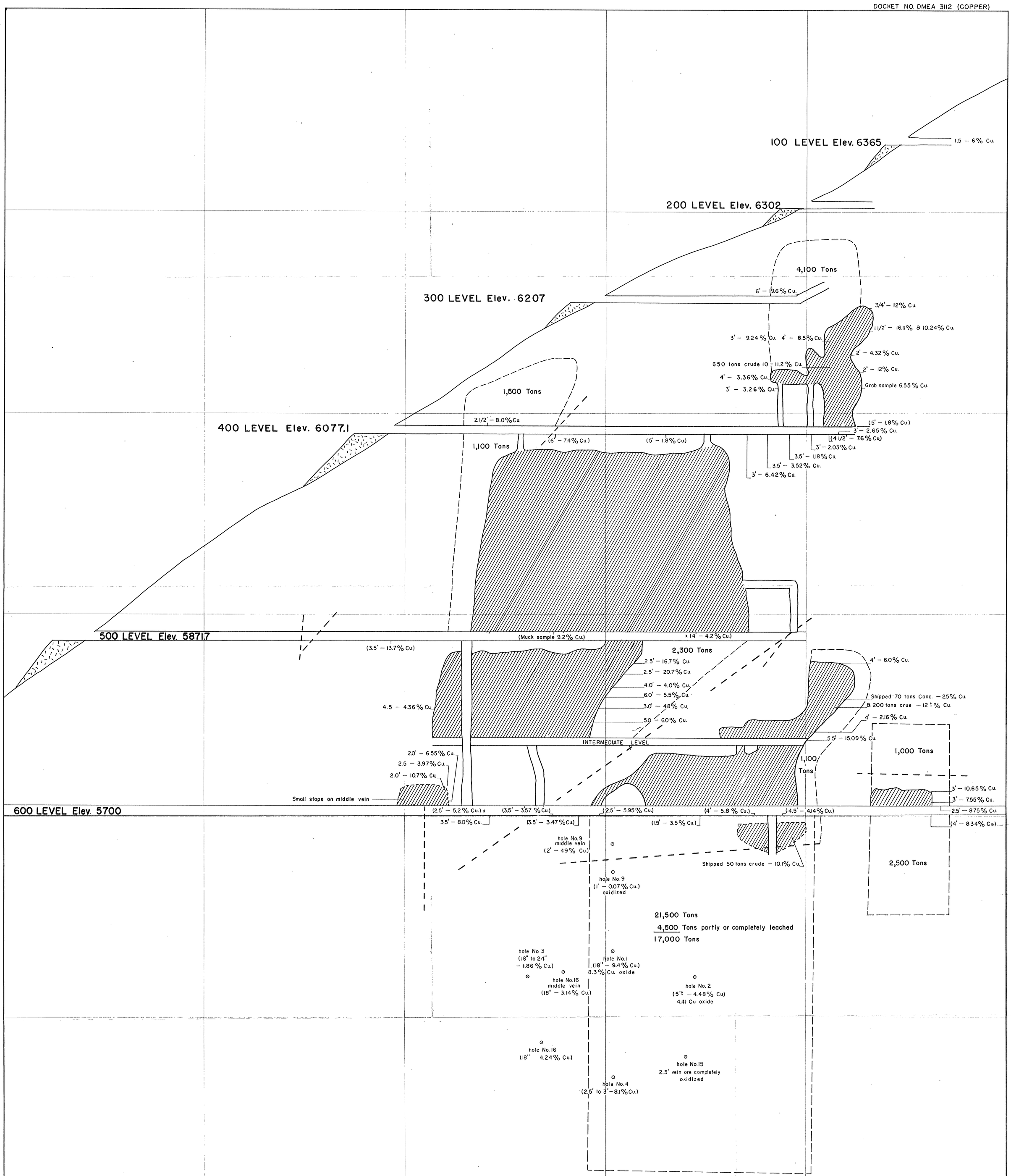
Operator CENTRIDA MINES INC.

Mine POPE SHENON MINE

Docket No. DMEA 3112 (copper) Contract No. Idm.E 651

BUYER	LOT No.	SELLER	BUYER	DATE	AMT. ON WHICH Royalty Paid $	ROYALTY %	ROYALTY PAID $	CUMULATIVE AMT. ON WHICH ROYALTY PAID $	CUMULATIVE ROYALTY PAID $	PRODUCT BREAKDOWN IF ANY	ORE CONCENTRATES PRODUCTION SALES	QUANTITY OF PRODUCT	SDT	PORTION OF PRODUCT SUBJECT TO DMEA ROYALTY %	ASSAY OR GRADE Ag	ASSAY OR GRADE Cu	BUYER'S NET VALUE FOR PRODUCT $	PER SDT	SELLER'S NET RETURN for PRODUCT $	PER Lot	REMARKS and/or PRODUCT BALANCE
American Smelting & Refining Co.	100	✓	#	7-19-55	1034.09	5	51.70	1034.09	51.70			58.004	✓	100	.325	6.1	27.79	✓	878.99		Robertson & Steeples
"	102 RS	✓		8-15-55	1514.34	5	75.72	2548.43	127.42			52.51	✓	100	.35	6.58	38.72	✓	1287.18		" "
"	103 RSG	✓		10-13-55	641.98	5	32.10	3190.41	159.52			56.773	✓	100	.30	4.16	21.57	✓	545.68		11.30 " 4½ " Gunderson
"	104 RSG	✓		10-18-55	804.51	5	40.23	3994.92	199.75			52.634	✓	100	.30	4.725	25.41	✓	683.82		" " "
"	105 RSG	✓		10-31-55	1183.67	5	59.18	5178.59	258.93			50.932	✓	100	.35	5.91	33.41	✓	1006.13		" " "
"	106 RSG	✓		11-16-55	1089.83	5	54.49	6268.42	313.42			56.833	✓	100	.375	5.52	30.54	✓	926.36		" " "
"	107 RSG	✓		11-17-55	1301.87	5	65.09	7570.29	378.51			56.407	✓	100	.4	5.90	33.23		1106.60		
"	108 RSG	✓		12-5-55	542.85	5	27.14	8113.14	405.65			54.626	✓	100	.4	4.09	20.54		461.43		9.91 " 3½ "
"	109 RSG	✓		12-5-55	950.14	5	47.51	9063.28	453.16			57.232	✓	100	.325	5.20	28.38		807.61		" "
"	1			12-14-55	1525.99	5	76.30	10589.27	529.46			48.387	✓	100	.675	9.30	41.98		1292.09		Ruben Young
"	110 RSG	✓		12-21-55	1032.85	5	51.64	11622.12	581.10			54.397	✓	100	.425	5.295	29.25		877.93		Robertson & Steeples
"	111 RSG	✓		12-23-55	583.11	5	29.16	12205.23	610.26			54.683	✓	100	.375	4.12	20.85		495.63		10.65 " 4 " " "
"	112 RSG	✓		12-28-55	781.04	5	39.05	12986.27	649.31			51.939	✓	100	.4	4.64	25.25		663.89		" " "
"	113 RSG	✓		1-9-56	503.33	5	25.17	13489.60	674.48			54.244	✓	100	.325	3.92	19.54		427.82		9.30 " 3 "
												759.596			0.354	5.231	Average grade		11,466.16 *		This represents the lessees net return.

Table 2:



EXPLANATION

FAULT OR DIKE

STOPE

INDICATED ORE RESERVE BLOCKS OUTLINED IN HEAVY DASHED LINES

NOTE: Section adapted from stope map by A.L. Anderson and subbmitted with the D.M.E.A. application. Samples indicated by the assay result enclosed by parenthesis, where cut by F. Taft and R. Svendson. All other assays were compiled by A.L. Anderson from company and smelter samples. Diamond drill hole, vein intersections, fault projections and ore reserve blocks by H.B. Nickelson U.S.G.S. 1954.

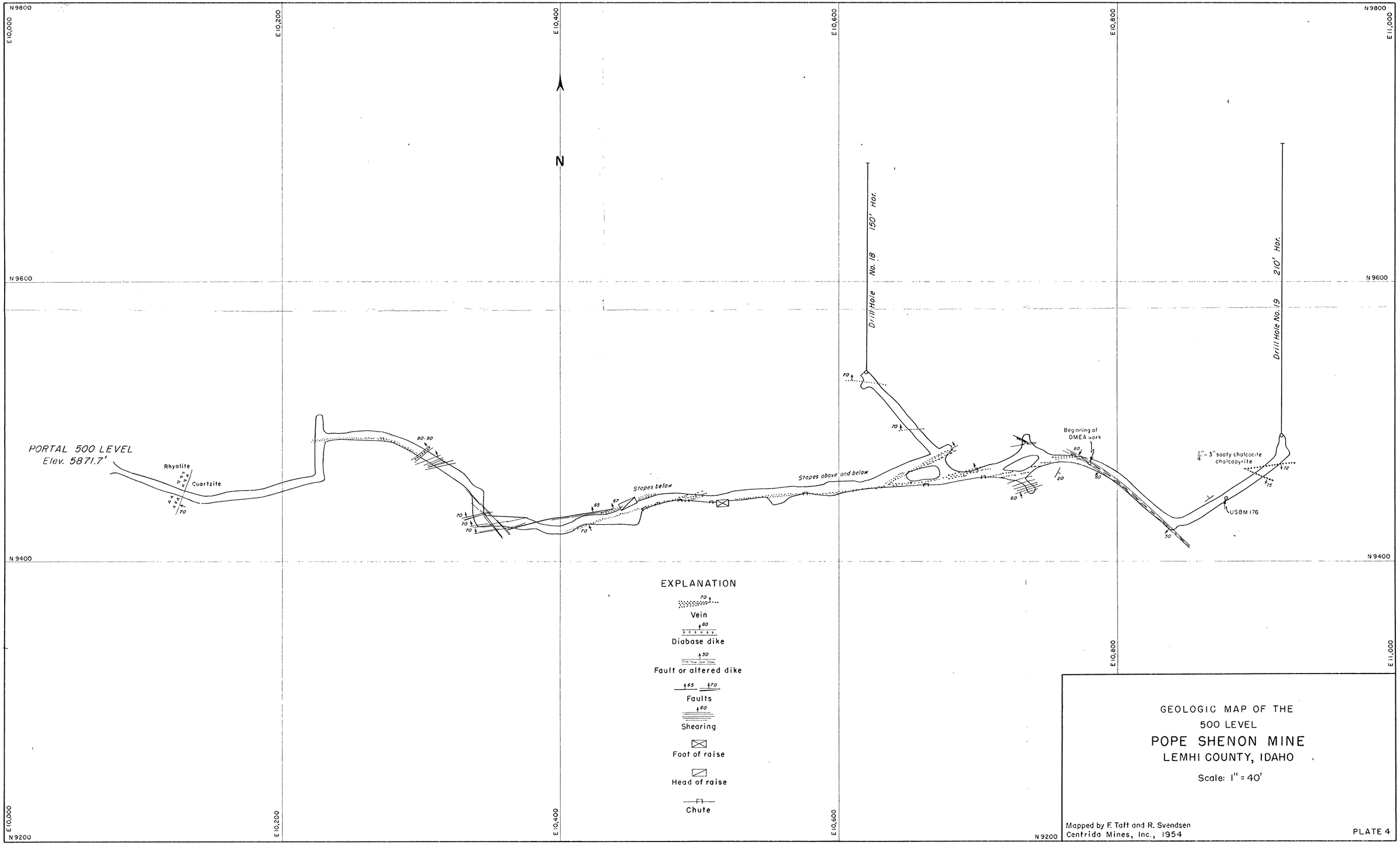
VERTICAL SECTION THROUGH SOUTH VEIN

POPE SHENON MINE

LEMHI COUNTY IDAHO

SCALE 1" = 40'

PLATE 6

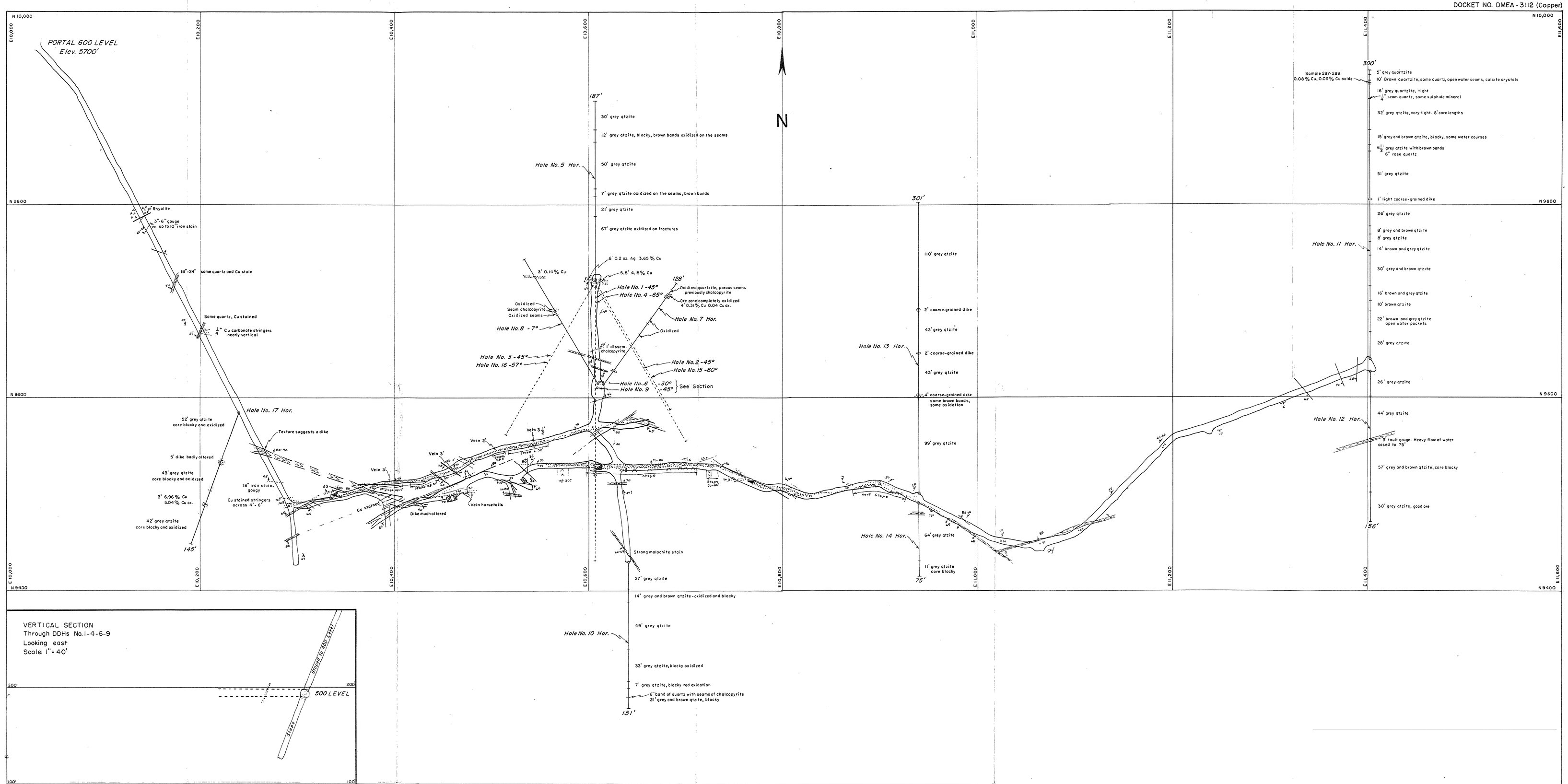


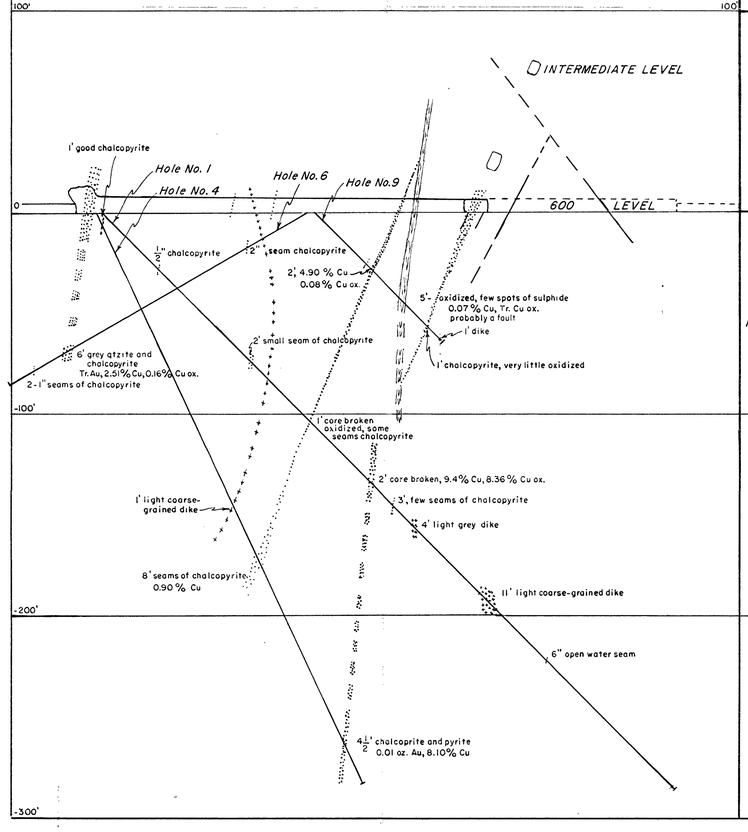
GEOLOGIC MAP OF THE
500 LEVEL
POPE SHENON MINE
LEMHI COUNTY, IDAHO

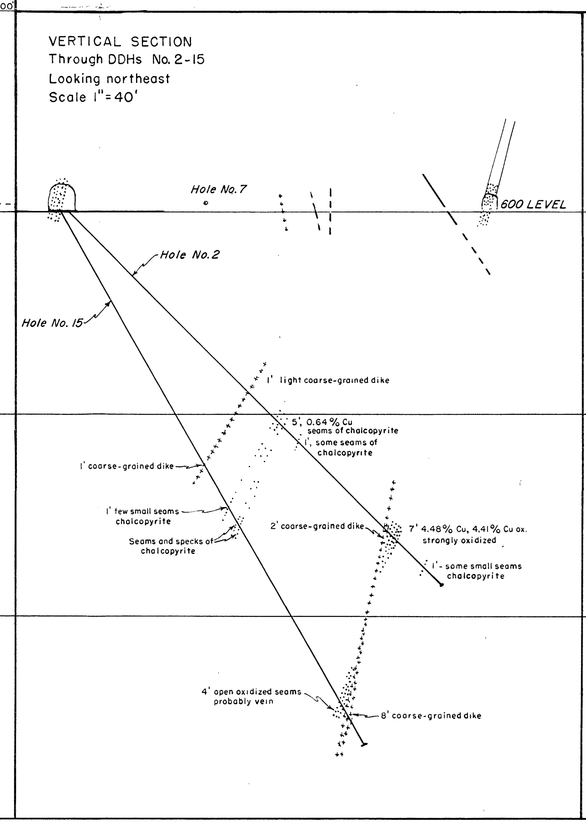
Scale: 1" = 40'

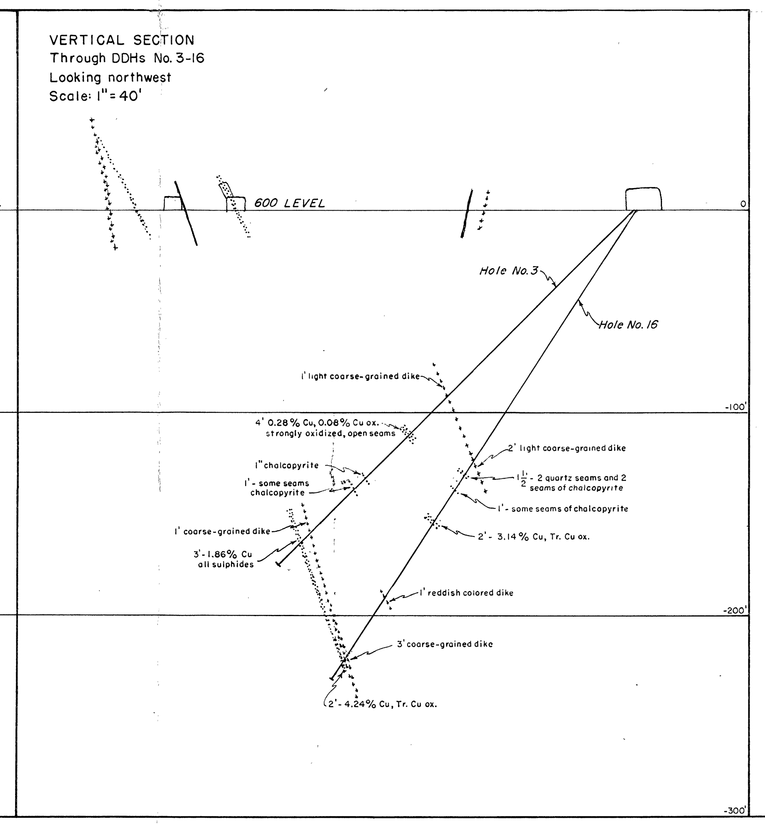
Mapped by F. Taft and R. Svendsen
Centrida Mines, Inc., 1954

PLATE 4









EXPLANATION

- Lamprophyre or diabase dike
- Rhyolite
- Vein
- Fault or badly altered dike
- Bedding in quartzite
- Schistosity
- Joint
- Head of winze
- Foot of raise
- Chute

GEOLOGIC MAP OF THE 600 LEVEL POPE SHENON MINE

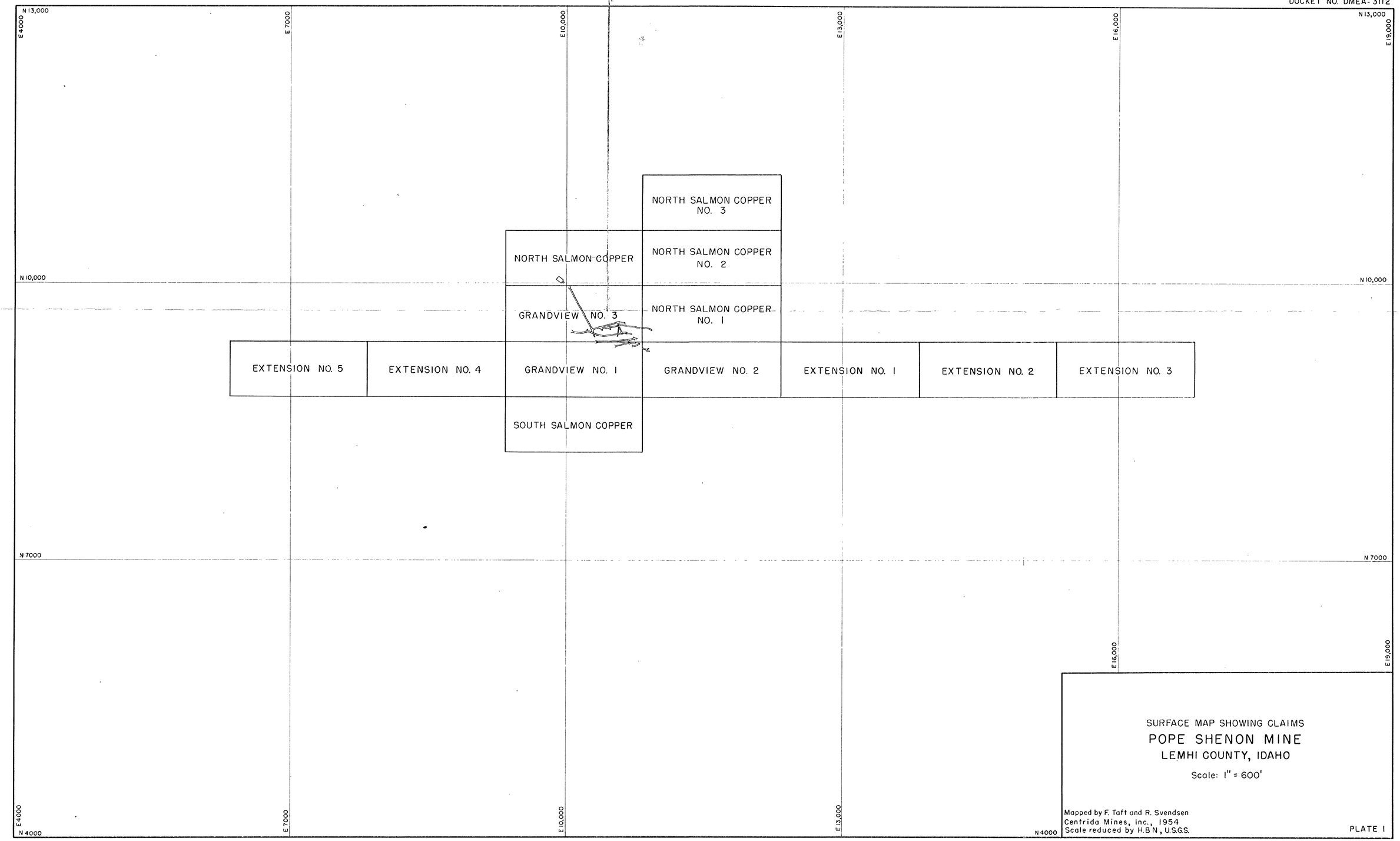
LEMHI COUNTY, IDAHO

Scale: 1" = 40'

Mapped by F. Taft and R. Svendsen
Centrida Mines, Inc.
Revisions by H. B. Nickelson and
D. Kellum, USGS, 1954 - 1955

PLATE 3

DOCKET NO. DMEA-3112



SURFACE MAP SHOWING CLAIMS

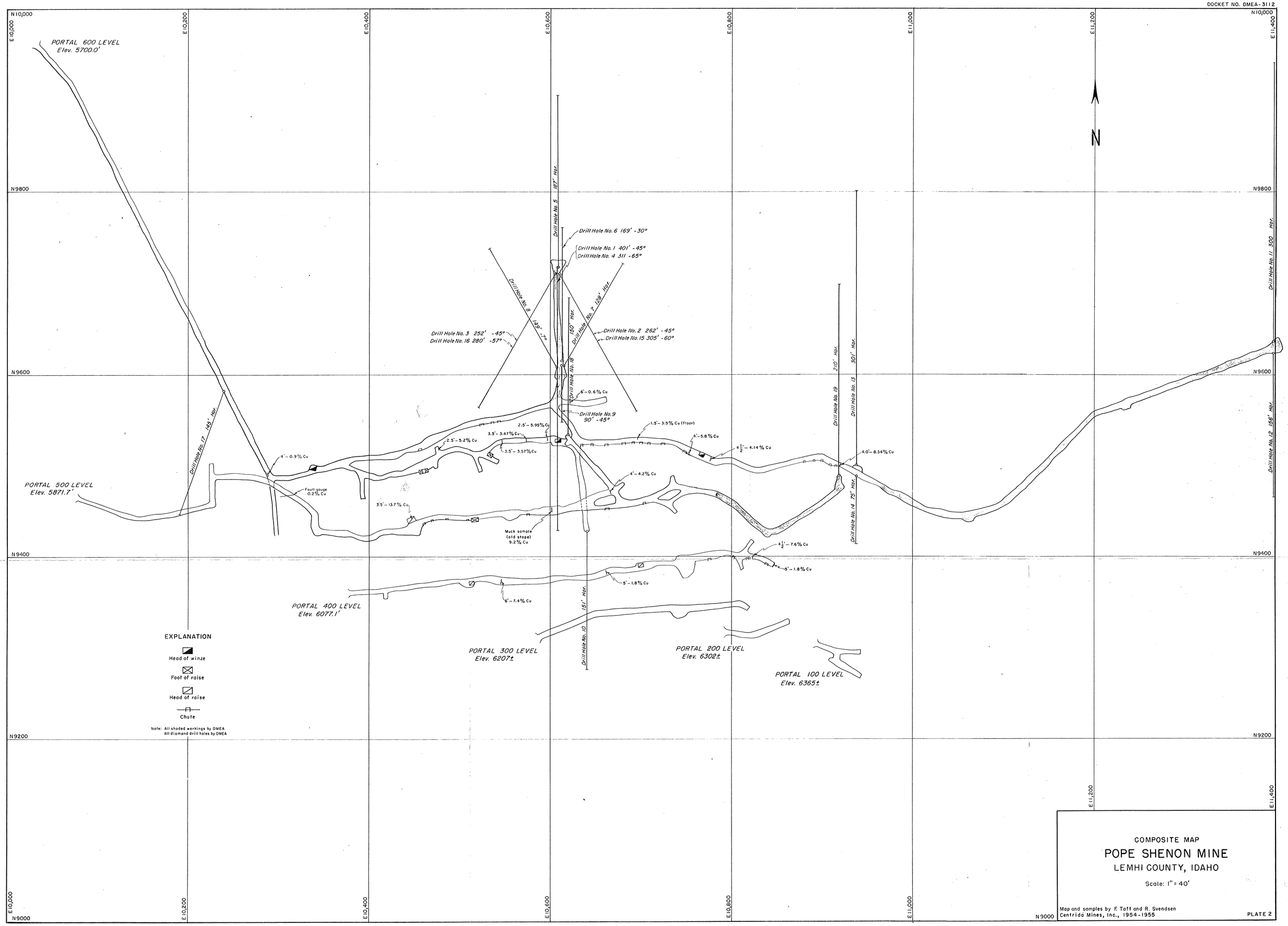
POPE SHENON MINE

LEMHI COUNTY, IDAHO

Scale: 1" = 600'

Mapped by F. Taft and R. Svendsen
Centrida Mines, Inc., 1954
Scale reduced by H.B.N., U.S.G.S.

PLATE I



COMPOSITE MAP

POPE SHENON MINE

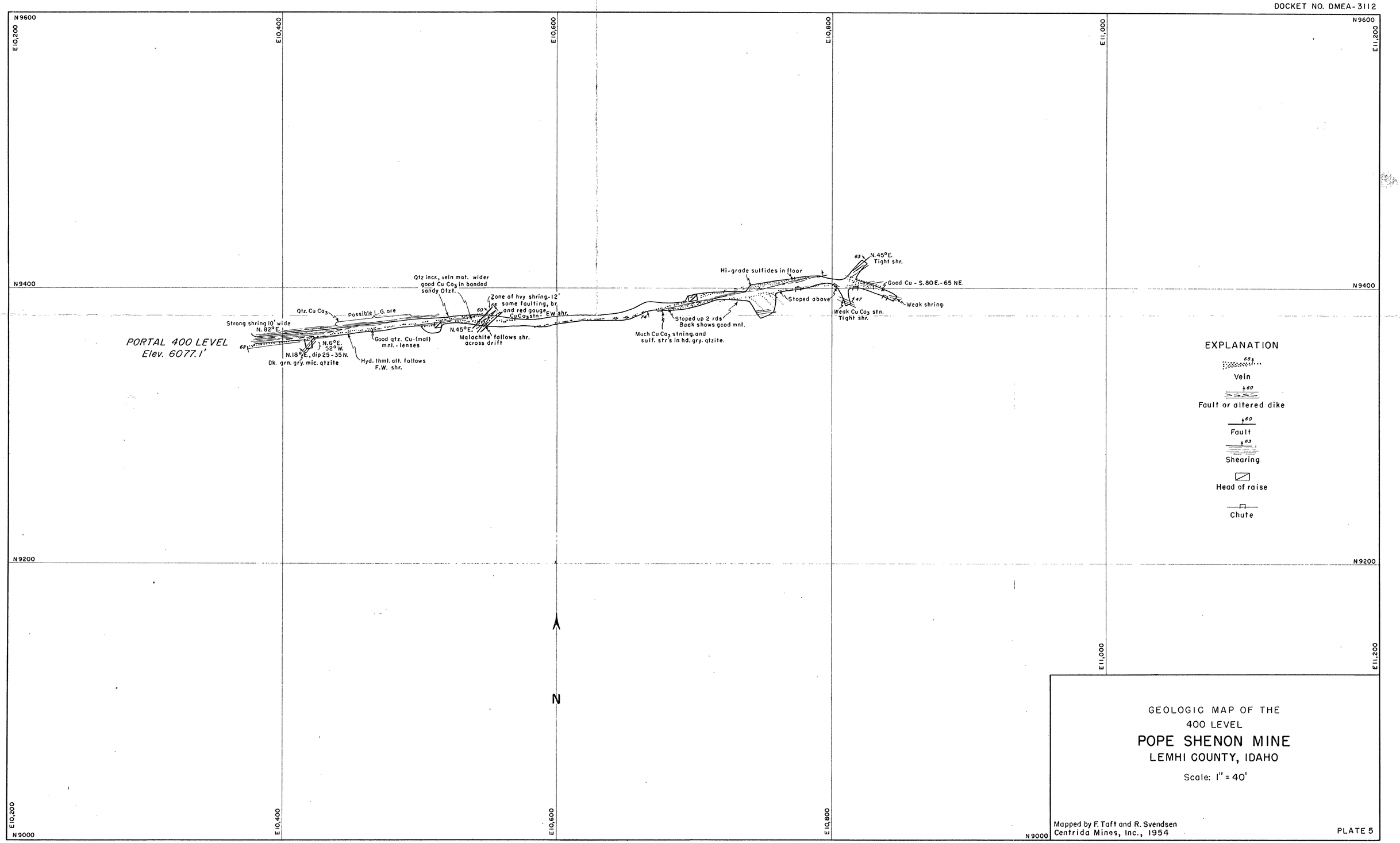
LEMHI COUNTY, IDAHO

Scale: 1" = 40'

Map and samples by F. Taft and R. Svendsen
Centrida Mines, Inc., 1954-1955

PLATE 2

DOCKET NO. DMEA-3112



GEOLOGIC MAP OF THE
400 LEVEL
POPE SHENON MINE
LEMHI COUNTY, IDAHO

Scale: 1" = 40'

Mapped by F. Taft and R. Svendsen
Centrida Mines, Inc., 1954

PLATE 5