## Table 1X

Alphabetical List of the most important Roman Mines in Europe (after O. Davies, Trans. Inst. Min. Met. 1934)

- P = Pre-Roman, of which
  - BA = Bronze Age, which ends at different times in different places, but as a whole in the last thousand years B.C.;
  - IA = Iron Age (pre-Roman).
- R = Roman; in Central Europe this implies the first to fourth centuries A.D., and does not mean Roman occupation.
- M == Post-Roman, normally fourteenth to sixteenth centuries A.D., as little is known of mining in the Dark Ages, and mines whose principal period of working was subsequent to the sixteenth century have been specially noted.

Alderley Edge	Cheshire	P	Copper,
Aljustrel	S. Portugal	BA and R	Copper.
Allendale	Durham	M	Lead.
Aramo	N.W. Spain	P and perhaps R	Copper,
Arksib	Algeria	R or M	Lead.
Astoescoria	Basses Pyrénées,	Very early R	Copper and silver
24.79	France.		
Avala	N. Serbia	P	Cinnabar.
Babe	N. Serbia	R and M	Silver.
Ballycastle	Antrim	M	Coal.
Ballydehob	Cork	Supposed to be	Copper.
		BA, perhaps as late as M.	Copper.
Batignano	Tuscany	IA or M	Copper, silver and lead.
Beauport Park	Sussex	R	Iron.
Beraun	Bohemia	M	Silver.
Bibracre	Nièvre, France	IA	Iron.
Blagaj	N.W. Bosnia	R	iron.
Bleiburg	Carinthia	M	Lead.
	The Commission of the Commissi	<ul> <li>Construction of the control of the con</li></ul>	Gold.
Boicza	Transylvania	R	Lead.
Bottino	Tuscany	IA and M	Copperandsilver
Campiglia Marittima	Tuscany	IA	
Carnon	Cornwall	P	Tin.
Cartagena	S.E. Spain	R and probably IA.	Silver and lead
Cassandra	Greek Macedo- nia	IA and perhaps	Gold and silver.
Centenillo	S. Spain	R	Silver and lead
Cerro Mutiano	S. Spain	R and probably P	Copper.
Charterhouse	Somerset	R	Lead and silver
Chiteomb	Sussex	R	lron.
Chrysokamino	E. Crete	BA	Copper.
Come Chaudron		. IA	lron.
Cornacchino	Tuscany	P	Cinnabar.
Corok Su	W. Armenia	R and M	Gold and silver.
	W. Armenia		Coal.
Craigy Park		M	Gold.
Crvena Zemlja	Bosnia	. K	Ciola,

Cythnos	Acgean	R	Iron.
Czebe-Magura	Transylvania	R	Gold.
Dabern	Pomerania	? IA	Iron.
Darren	Montgomery	?R	Copper.
Denaira	Algeria	R or M	Lead.
Dobrevo	Macedonia	M	Lead and silver.
Domus Novas	Sardinia	? R	Lead and silver.
Drususkippel	Hesse	M	Iron.
Eisenberg	Pfalz	R	Iron.
Sto. Estevão	S. Portugal	P (probably BA)	Copper.
		and R.	
Eule	Bohemia	М	Gold.
Fichtelgebirge	Bayaria	Probably only M	Tin.
Flumini Maggiori	Sardinia	R and M	Perhaps silver or
			gold.
Friedrichssegen	Hesse	R	Silver and lead.
Friesach	Carinthia	M	Silver.
Fucinaia	Tuscany	IA	Copper.
Goellheim	Pfalz	? R	Copper.
Gogofau		Probably R	Gold.
Gran Cava	Tuscany	IA	Copper and Iron.
Great Doward	Monmouth	R	Iron.
Grueben	Silesia	М	Iron.
Hallstatt	Austria	IA	Salt.
Hastenrath	Westphalia	R or M	Lead.
Haya	N. Spain	P and R	Copper.
Iglesias	S.W. Sardinia	М	Silver and lead.
Jebel Scrdj	Tunis	?R	Copper, lead and silver.
Jebel Uenza	Tunis	? M	Copper.
Kalavaso	Cyprus	IA and R	Copper.
Karacs	Transylvania	R and probably	Gold.
	1.00x0000000000000000000000000000000000	IA.	13.00.00
Kayl	Luxemburg	Probably R	Iron.
Kenshala	N. Africa	?R	No or to to to to
Korabia	Transylvania	R	Gold.
Kremnitz	W. Slovakia	M	Gold.
Krinovski Utara	S. Russia	P	Copper.
Krivoj Rog	S. Russia	P	Copper.
St. Laurent le Minier	Gard, France	R or M	Lead and silver.
Laurium	Attica, Greece .	IA and early R	Silver and lead.
Lebertal	H. Rhin, France	М	Silver.
Linares	S. Spain	R	Silver and lead.
Lindale	Lancashire	М	Iron.
Llanymynech	Denbigh	R	Copper.
Ludres	Meurthe, France	Probably R	Iron.
Luttmersen	Harz, Germany.	IA	Iron.
Macot	Savoie, France .	Probably R	Lead and silver.
Majdanpek	N.E. Serbia	R and perhaps IA and M.	Copper.
Markirch	H. Rhin, France.	M and perhaps IA.	Silver.
Massa Marittima	Tuscany	IA and M	Copper and silver.

		\$580	TENNE STORY
Maubach	Westphalia	R	? Zinc or lead.
Melle	Deux Sèvres, France	Rand M	Silver and lead.
Minas de Mouros	Portugal	R	Gold.
Mitsero	Cyprus	IA and perhaps R	Copper.
Mitterberg	Austria	BA	Copper.
Moenchmotschelnitz.	Silesia	M	Iron.
Monte Catini	Tuscany	M	Copper.
Monte Rombolo	Tuscany	P	Tin.
Mraçaj	Bosnia	IA and possibly also M.	Gold.
Muchlhausen	Harz, Germany.	IA	Iron.
Nantyrarian	Montgomery	?R	Copper.
Neu-Moldova	Banat	R	Copper and per- haps lead.
Nointel	Oise, France	P	Flint.
Ocha	Euboca, Aegean	At least mainly M.	Iron, copper and
Palazuelos	S. Spain	R	Silver and lead.
H. Petros	Andros, Aegean	iA	Iron and per-
5762 - 56355 C	Megroos sugar	10000	haps copper.
Pimolisa	N. Anatolia	R	Arsenic.
Ploermel	Morbihan, France	P, probably BA	Tin.
Pongau	Salzkammergut.	M and possibly R	Gold.
Posadas	S. Spain	R	Silver.
Postenje	W. Šerbia	M	Lead.
Reichenhall	Bavaria	M	Salt.
Ruda	Transylvania	R	Gold.
Rudic	Moravia	IA	Iron.
Rudnice	S. Serbia	M	Silver and lead.
Rudnik	C. Serbia	R and M	Silver.
Sana	N. Bosnia	IA, R and M	Iron.
Schemnitz	W. Slovakia	M	Silver.
Scuriotissa	Cyprus	IA and R	Copper and prob- ably precious metals.
Serra da Vallongo	N. Portugal	Probably R	Gold or silver.
Siedlemin	Posen	IA or early R	Iron.
Siedlikowo	Posen	R	Iron.
Siphnos		ia	Lead, silver and
Soli	Cyprus	IA and R	Copper and cop- per salts.
Sotiel Coronada	S. Spain	R	Copperandsilver,
Srebrenica	E. Bosnia	R and M	Silver and lead.
Tarxdorf	Silesia	IA	Iron.
Rio Tinto	S. Spain	IA and R	Precious metals
roten-put over t	NEW YORK NO. 10	*	and copper.
Tireboli	N.E. Anatolia	R and M	Copperandsilver.
Trepça	S. Serbia	M and perhaps R	Silver and lead.
Tuklat	Bohemia	R	Iron.

Urville	Lorraine	M	Iron.
Vaulry	H. Vienne,	P and perhaps R	Tin.
need 2 <sup>th</sup> and	France		Commission
Verespatak	Transylvania	Perhaps IA, R,	Gold.
174	S. C.	very probably	
		M.	S
Vulkoj	Transylvania		Gold.
Zsil	Transylvania	R	Gold.
		k - 3	

The Romans were not very deeply interested in mining and metallurgy. Many believed it fit for slaves, prisoners or "damnati" only. Tacitus and Varro argue that it had bad effects on agriculture, the backbone of Italian society and Pliny (71) agrees with these words: "We penetrate into Earth's bowels, and we seek wealth in the abode of the Dead, as though she were not sufficiently kind and fertile, wherever the foot of man is set. But least of all do we search for means of healing, for how few in their digging are inspired by the desire to cure! And yet these she furnished on the surface in the shape of fruits, for she is a bounteous and willing giver of all things that are for our good."

On the other hand copper mines were still being worked between Populonia and Volterra, as well as tin, lead and zinc ores, so that the Etruscan bronze was to some extent a home product. Then "off the city of Tyrrhenia known as Populonium there is an island which men call Aethaleia (Elba). It is about a hundred stades from the coast and received the name it bears from the smoke (aithalos) which lies so thick about it. For the island possesses a great amount of iron-rock, which they quarry in order to smelt and cast and thus secure the iron" (72). Indeed the slag-heaps of Populonia belong to the last four centuries of the Roman Republic, an average of 10.000.000 Tons of iron ore being treated per year.

Mining in Italy was prohibited by a Senatus consultum, Pliny tells us (73) that it is certainly not due to a lack of ores for "she (Italy) is inferior to no country in abundance of mineral products". This bit of national pride cannot hide the poverty of the Italian ore deposits, mines had already given out in Etruscan days. Probably the Senatus consultum was imposed at the request of the equestrian contractors who took over the Spanish mines. The Senate may also have wished to preserve the Italian supplies in case Spain were ever cut off and the competitive circumstances in Italy must have been bad after the conquest of so