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BEDDED/STRATIFORM BARITE DEPOSITS: GEOLOGIC AND GRADE-TONNAGE DATA INCLUDING A PARTIAL BIBLIOGRAPHY

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INTRODUCTION

The intent of this paper is to release, document and update geologic, grade and tonnage data used in previously built descriptive and grade-tonnage models for bedded barite deposits. The data included in this report summarize and, to a limited extent, interpret information available in the sources listed in the attached bibliography. Beyond comparisons of major bedded barite deposits such as Silvermines, Meggen or the Nevada deposits, little effort has been made in the literature to test the validity of a single deposit classification for all stratiform barite deposits. One way of checking the validity of the classification is the comparison of the geologic features of the known deposits and occurrences. Another is that a lognormal distribution should approximate observed distributions of average grade and tonnage within a given deposit type (Menzie and Singer, 1980). Preliminary work (Orris, 1983a, 1983b) has supported the adequacy of a single bedded barite classification.

Tables I and II contain geologic and grade-tonnage data collected for 93 deposits that have been classified as bedded or stratiform barite deposits. Geographically, 75 percent of the deposits are located in North America; 27 deposits are listed in Canada (largely British Columbia and the Yukon Territory), 25 in Nevada, 9 in Alaska, and 7 deposits are listed in Texas, California, Arkansas, and Washington. The remainder of the bedded barite deposits listed in Tables I and II are from Brazil, India, Ireland, Israel, Mexico, North Korea, Pakistan, South Africa, Thailand, West Germany, and Yugoslavia. "Stratiform" deposits of barite in karsts are not included in the data set. The Yugoslavian barite deposits at Mt. Bobija and Pljevlja and the Canadian Muncho Lake deposit are included in the tables because grade or tonnage information is present and the deposits are in areas known to have bedded barite deposits. It has not been determined if the Muncho Lake deposit (British Columbia, Canada) is actually a separate deposit or if it is composed of one or more deposits listed under other names in the tables.

Published grades and tonnages are available for less than 30 of the deposits and in several cases multiple, non-reconcilable numbers were published for a single deposit necessitating exclusion of the numbers from the data set or a subjective judgement by the author. Further complicating collection of grade-tonnage data is the difficulty ascertaining the level of exploration and geologic knowledge of most barite deposits.

For deposits intimately associated with Zn-Pb deposits, such as Silvermines, Ireland and Meggen and Rammelsberg, West Germany, barite grades and tonnages may be reported as total mixed deposit averages or as the tonnage and grade of the barite-dominated ore. At Rammelsberg, this gives a grade of about 25% in the former case and exceeds 80% in the barite-dominated gray ore. Where this situation occurs, the tonnage and grade of the barite-rich ore is generally used.

GEOLOGIC SUMMARY

Barite deposits have routinely been classified as three major types: veins and cavity fillings, residual deposits, and bedded deposits (Brobst, 1970; Papke, 1984; Harben and Bates, 1984). The bedded deposits have included all those that are stratiform with barite as a principal mineral but that are not residual. These deposits have been described as syngenetic, epigenetic, or both. They occur in diverse host rock sequences that most commonly contain chert, argillite, shale, and/or limestone, but might also be composed of dolomite, slate, tuff and volcanoclastic rocks, sandstone, quartzite, greenstone, phyllite, and/or schist. The host rocks and the contained barite are most commonly gray to black in color (because of included organic matter) but have been reported in colors as diverse as white, cherry red, and green.

Bedded barite deposits may exhibit primary depositional and diagenetic features such as graded- or cross-bedding, rhythmic layering, large scale interbedding of chert or shale and barite, bending of shale layers around barite nodules, and stylolite seams at the base of baritic layers (Zimmerman and Amstutz, 1964b; Zimmerman, 1969a, 1976). Some deposits show replacement features such as baritized fossils, inclusions of host chert or limestone in the barite, transection of host rock texture by blades and rosettes of barite, and similarity of trace element content between host and barite (Ketner, 1965, 1975). Many deposits exhibit evidence of both sedimentary and epigenetic processes that might be explained by a submarine-exhaulative genesis (Papke, 1984; Dawson and Orchard, 1982; Krebs, 1981; Zimmerman and Amstutz, 1964b).

In general, the commercial bedded barite deposits are composed of fetid, gray to black, fine grained barite that occurs in beds that are laminated to over 15 m thick. Conglomeritic beds, barite rosettes or nodules and barite cement are common in some deposits. Most of the economic ore is 50-95% barite and contains quartz, calcite, clay and organic matter as the chief impurities (Brobst, 1975). Pyrite is the most pervasive sulfide, but galena and sphalerite are often reported in trace to economic quantities. Most bedded barite deposits occur in rocks of mid-Paleozoic age, but some deposits have been reported in rocks dated as old as Archaen and as young as Cretaceous.

Bedded barite deposits may occur as essentially monomineralic deposits, as in Nevada (Papke, 1984), or be peripheral, or laterally gradational, to stratiform Zn-Pb sulfide deposits, manganese deposits, bedded iron deposits, or evaporitic sequences of gypsum, anhydrite or phosphate. Bedded barite is commonly found in environments corresponding to those of major stratiform base metal deposits including Kuroko style (Singer, 1983), sediment-hosted exhalative Zn-Pb deposits (Briskey, 1983a), and stratabound carbonate-hosted Zn-Pb deposits (Briskey, 1983b, 1983c).

OTHER DEPOSITS

Bedded or stratiform barite deposits have been noted in the literature at many other localities that are not listed in Tables I and II

because of a lack of suitable descriptive data or grade-tonnage information. Barite is the commodity of interest at the Pie and Fluke claims in the Akie River area of northwestern Canada (MacIntyre, 1980b). In Canada's Ontario province, stratiform barite of apparent sedimentary origin is associated with the Hemlo gold deposit. These barite-rich horizons have been identified over a distance of 10 km (Industrial Minerals, 1984, p. 87).

Bedded barite is reported at many localities in Central and South America. Most of these deposits receive only passing mention in the literature. However, Hayase and others (1977) have investigated a bedded barite in the Neuquen province of Argentina. They report barite-celestite deposits in sandstone, siltstone, shale, and limestone. In addition, 3 mines (Julio Cesar, San Eduardo and Arroyo Nuevo) are reported in similar host rocks containing barite and sulfide mineralization.

In Africa, a clastic barite deposit similar to Barite Valley, South Africa (Tables I, II) occurs in the Permian(?) Karoo Supergroup of South Africa and Zimbabwe. This deposit probably formed through reworking of barite-rich semi-consolidated clays (Reimer, 1978). In addition, stratiform barites have been mentioned in Precambrian rocks in Zimbabwe and Devonian rocks in Zambia (Brobst, 1970).

Abundant occurrences and deposits of stratiform barite are known in Europe. Many of the Irish base-metal deposits also contain barite. These deposits, including the mines at Navan, Tynagh, and Ballinalack amongst others, generally have not produced barite. However, 50,000 mt/yr of barite is now being recovered from tailings at Tynagh (Williams and McArdle, 1978). Other stratiform deposits are reported at Grube Eisen in West Germany (Brobst, 1970), Montagne Noir in France (Hoffman, 1969), Chaillac in the Massif Central of France (Harben and Bates, 1984), Fleurus in Belgium (Brobst, 1970), Sardinia (Padalino and others, 1980), Strawczynek in Poland, and Wetterslein in Austria (Brobst, 1970). Barite of possible sedimentary origin in the USSR occurs at Kara-gaili in eastern Kazakhstan and in the Kara Kala district in Turkmen (Brobst, 1970).

In Asia, additional stratiform barite deposits are known in Thailand and North Korea. At Ban Tin Pha, Thailand, barite is found in a Devonian-Carboniferous sequence of sandstone and shale. A stratiform Pb-Ba deposit is reported near Song Toh, Thailand (Shawe, 1984). Brobst (1970) reports barite in Cambrian sediments and Cretaceous porphyritic tuff beds in the Chaeryong-gang district in North Korea.

Other stratiform barite occurrences include: 1) a syngenetic barite deposit in siltstone and shale of the Cretaceous Gearle Siltstone in Western Australia; 2) several deposits, in addition to Uribe, occur in Stevens County, Washington, notably O'Toole Mountain (barite beds up to 45 feet thick), Williams Lake, Lotze, and Flaggstaff Mountain; and 3) the Las Belas area in Pakistan (Brobst, 1970).

NOTES ON THE TABLES

Tables I and II list the 93 bedded barite deposits alphabetically by name. Table I also lists a country code, tonnage and grade, other significant minerals in addition to barite, and the age, formation name, and lithology of the host unit(s) for each deposit. Table II includes a

description of the barite mineralization, identification of deposits known to have produced barite, a company name, references, and comments.

Country codes and abbreviations used in Tables I and II can be found in Tables A and B, respectively. Lithologies and minerals present in minor amounts are enclosed in parentheses. For some deposits, space limitation prevented listing all the data or references. Tonnages are in millions of metric tons and grades are in percent barite. Ages listed are those assigned to the host rock and do not necessarily represent the age of mineralization.

TABLE A.
COUNTRY CODES

AUNS	Australia, New South Wales
AUSA	Australia, South Australia
AUTS	Australia, Tasmania
AUWA	Australia, Western Australia
BRZL	Brazil
CNBC	Canada, British Columbia
CNNF	Canada, Newfoundland
CNNS	Canada, Nova Scotia
CNYT	Canada, Yukon Territory
INDA	India
IRLD	Ireland
ISRL	Israel
MXCO	Mexico
NKOR	North Korea
PKTN	Pakistan
SAFR	South Africa
THLD	Thailand
USAK	United States, Alaska
USAR	United States, Arkansas
USCA	United States, California
USNV	United States, Nevada
USTX	United States, Texas
USWA	United States, Washington
WGER	West Germany
YUGO	Yugoslavia

TABLE B.
ABBREVIATIONS USED IN TABLES I & II

Minerals/Commodities

Ag	silver
anhy	anhydrite
ank	ankerite
ara	aragonite
argn	argentite
Au	gold
bar	barite
cal	calcite
cel	celestite
ceru	cerussite
cin	cinnabar
cpyr	chalcopyrite
Cu	copper
fl	fluorite
gal	galena
hem	hematite
hydroz	hydrozincite
jar	jarosite
mag	magnetite
org	organic material
Pb	lead
phos	phosphate
pyr	pyrite
qtz	quartz
rho	rhodochrosite
sid	siderite
sph	sphalerite
tet	tetrahedrite
with	witherite
Zn	zinc

Rock Types

arg	argillite
clyst	claystone
cngl	conglomerate
dol	dolomite
lst	limestone
mdst	mudstone
qtzite	quartzite
sh	shale
sl	slate
sltst	siltstone
sst	sandstone

Ages/Modifiers

Prec	Precambrian
Arch	Archaen
Prot	Proterozoic
Pal	Paleozoic
Camb	Cambrian
Ord	Ordivician
Sil	Silurian
Dev	Devonian
Carb	Carboniferous
Miss	Mississippian
Perm	Permian
Jur	Jurassic
Cret	Cretaceous
L	lower
M	middle
U	upper

OTHER

blk	black
br	brown
cm	centimeter
dk	dark
Fe-ox	iron oxide
gen	generally
H_2S	hydrogen sulfide
irreg	irregular
lt	light
m	meter
med	medium
op	operator
pkg	package
st	short tons
v.	very
wht	white
w/	with

TABLE I.
STRATIFORM BARITE DEPOSITS

NAME	COUNTRY CODE	TONNES x10^6	$BaSO_4$ GRADE	OTHER GRADES	ASSOCIATED MINERALS	AGE, FORMATION	HOST UNIT LITHOLOGY
Admiralty Island	USAK				Pb,Zn,Ag, Au	M Pal	volcanic-sedimentary pkg
Antigun Canyon	USAK					Perm Sikaikpuk Fm	blk sideritic sh
Argente	USNV				qtz,org, (with)	Dev Slaven Chert	chert,(arg,sh)
Ban Thimontha	THLD	0.165	97-98%			Ord-Sil	sh,sst
Barite de Cobachi	MXCO					Dev	mdst,sltst,chert,lst, (sst,cngl)
Barita de Mazatan	MXCO					Dev & Carb	siliceous eugeosynclinal rocks,lst
Barite (Moose)	CNYT	2.7	84%		qtz	Dev-Miss	blk carbonsceous srg, blk chert,cngl
Barite Valley	SAFR	22				Arch Fig Tree	chert,sh,tuffites
Bateman Canyon	USNV				(pyr),org, cal,(qtz)	Dev Slaven Chert	chert,(lst,srg)
Baw Hin Khao	THLD	2.5	93%			Dev-Miss	dol,(sh)
Bescon (Peabody Calada)	USNV				(qtz,org)	Ord Vinini Fm	blk radiolarian chert,(blk arg)
Bescon (Dolezol-Layton)	USNV				(qtz,org, mica)	Dev Slaven Chert	chert
Big Stubby	AUWA		40%		sulfides	Arch	rhyolitic tuff,chert, greenstone

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BNOB	CNYT				pyr,gal	Miss	lapilli tuff
Bredehew-White Rock	USNV				qtz	Dev Slaven Chert	chert,arg
Brookfield	CNNS	0.091	74%		sid	Miss Horton Group	furruginous sh,eltet
Camamu Bay	BRZL	>3	89.4%		hem,qtz, (gal)	Cret	erkosic sst & sh (host), cngl,lst
Castle Island	USAK				pyr,gel, sph,mag		siliceous metasedimentary rock, pillow lavas
Cathy (Walt)	CNYT	>0.45	>90.7%		gyp,with, cel	Dev Kern Group	arg,sh,lst,chert,cngl
Chengdo	NKOR	1	97%			Great Limestone Series	magnesian lst
Chitcie Mtn.	USAK				gal,pyr	Miss Totatlanika Schist	sericite-rich metarhyolite tuff & porphyry
Chzerpnough	CNYT				sph,gel fl	Miss	felsic volcanoclastic rocks,lapilli tuff
Cirque	CNBC	33	51-57%	2.3% Pb 7.9% Zn 49 g/t Ag	pyr,gal, sph	Dev Gunsteel Fm	blk carbonaceous sh, siliceous arg and chert
Clipper	USNV				qtz,(pyr)	Dev Slaven Chert	chert,carboniferous arg
Democrat	USCA		96-99%			Carb Calaveras Fm	metasediments

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Drenchwater Creek	USAK				sph,pyr, gal	Perm Siksikpuk Fm	blk chert,sh
Driftpile Creek	CNBC			9.0% Pb 3.5% Zn (test)	sph,pyr, gal	Dev Gunsteel Fm	blk cerbonsceous sh, siliceous arg
East Northumberland	USNV				qtz,org, phos,(mica)	Dev?	blk chert,erg,sltst,sh, clyst
El Portal	USCA		80%		with	Carb Calaveras Fm	lst,metasediments
Elf Claims	CNBC				pyr,sph, gel	Dev Gunsteel Fm	blk sh,pyritic arg
Fancy Hill	USAR				qtz,cal, pyr	Miss Stenley Shale	blk sh,sst
Gams (Gamsberg)	SAFR	>3	91-98%		hem		qtzite,schist
GHMS	CNYT					Dev Earn Group	blk siliceous sh,beritic lst
Graystone	USNV				mica,qtz, org,pyr, cal	Dev Slaven Chert	blk chert,(blk srg,gray sh,lst?)
Gurrunda	AUNS	0.3	74.9%-75.6%		pyr	Sil	tuffeceous sst,sh,blk sh, rhyodacite,volcanics
Hidden Hills	USNV				qtz,pyr org	Ord Valmy Fm	mdst,sh,chert,qtzite

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Homesteke	CNBC	1.45	28%	2.5% Pb 4.0% Zn 7 oz Ag	gal,sph, tet,pyr, cpyr,srgn	Shuswap Complex	strongly sheered sericite & chlorite schists
Jason	CNYT				gal,sph, pyr	U. Dev Canol Fm	blk siliceous srg,sh, chert
Judean Desert	ISRL				cal	U. Cret Mishash Fm	chert,chalk
Jumbo	USNV				qtz,cal	L. Pal	chert,lst,arg
Kempfield	AUNS		84%-99%		sulfides	Sil	altst,sh,volcanics
Khuzdar	PKTN	1.2	75%-85%		qtz,cal, (gal,cin, jar,ceru, rho)	Jur Zidi Fm	bleached & silicified grey lst & sh
Lakes Berite	USNV				qtz,org	Ord Vinini Fm	chert,(mdst,sh)
Lime Point	USAK					Prec? Walsa Group	marble
Magic	CNYT				sph,gal, fl,hydroz		argillaceous lst
Magnet Cove	USAR	>8.5			pyr	Miss Stanley Sh	sh,sst
Mangampeta	INDA	75			pyr	Camb? Pullampet Shale	carboneceous sh,dolo,sh, qtzite
Meggen	WGER	16	96%		pyr,sph, gal	M. Dev Meggen Lager	sl,lst,sh

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MEL	CNYT	4.8	52.1%		sph,gal, (pyr)	Camb-Ord	limey sh,lst,phyllite
Miller (D.A.)	USNV				org,qtz	Dev Slaven Chert	dk gray chert,srg,lst
Mineral King	CNBC	2.3			sph,gal, pyr,qtz	Prot Mt. Nelson Dolomite	dolo
Monitor	USNV				qtz,(pyr)	Dev?	chert,clyst
Mountain Springs	USNV				qtz,mica, cal,(pyr)	Dev Slaven Chert	blk chert,(erg,sh)
Mt. Alcock	CNBC		49.3%-51.8% (samples)		Ag,Cu, gal,sph	Dev Gunsteel Fm	blk sh
Mt. Bobije	YUGO	1.7				Pel	schist,sst,lst
Muncho Lake	CNBC	>100.					
Nimiuktuk	USAK	1.5 (grevity)	96% (grsvity)			U. Miss	blk cerboneceous sh & chert
Oro	CNYT				qtz,snk, pyr	Dev Esrn Group	siliceous sltst,chert
P & S	USNV				qtz,(pyr)	Dev?	chert,qtzite,sh, volcanics
Pete	CNYT				hydrozn, sph,gsl, pyr	Dev Earn Group	siliceous, carbonaceous, & pyritic srg & sltst

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Phu Mai Tong	THLD	7	90%		pyr	Ord-Dev?	br to red sh
Pleasant View	USNV				pyr,(qtz, org,cal)	Dev Slaven Chert	chert,arg,(lst)
Pljevlja	YUGO		60%				
Quarry Proepect	USAK				sulfides, fl,Au,Ag	Prec Nome Fm	marble,schist
Queen Lode	USNV				(qtz,org)	Ord Vinini Fm	chert,sltst,sh
Rammelsberg	WGER	4.8			sph,gel, pyr,chal	Dev Wissenbecher Schiefer	carboneceous blk sh & sl w/sst,ls,tuff
Red Dog	USAK				sph,gel, (pyr)	Miss	blk carbonaceous bedded chert & volcanoclastic sh
Rein	CNYT					L-M Pal	sh
Rimrock	USNV					Dev Slaven Chert	chert,(mdst)
Roman	CNYT				gal,sph, qtz		pyritic blk sh
Ronan	CNNF	0.15	30%-40%		cel,are, cal	Miss Codroy Group	lst
Rosebery	AUTS		<80%		sph,gal, pyr	Camb Mt. Read Volcanic Group	sh,tuff
Rossi	USNV				(qtz, with)	Ord Vinini Fm	chert

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Sansinena	USNV				(qtz,org)	Ord Vinini Fm	chert,sh,srg
Savercool	USCA	0.035	97.5%			Carb Calaveras Fm	lst,sl,qtzite
Schoonoord	SAFR	0.25	94%				chert
Seven Heart	USTX		27%		cal,anhy, cel,clay	Perm Castile Fm	lst (replaced anhydrite)
Shelton	USNV				qtz,cal	Dev Slaven Chert	blk chert,(sh)
Silver Giant	CNBC				sulfides	Jubilee Fm	lst
Silvermines (Magobar, Ballynoe)	IRLD	2.5	85%		pyr,gal, sph,sid, hem,cpyr	Carb	carbonaceous grean sh, dolo,(chert,lst)
Slaven Canyon	USNV				org,(qtz, cal,pyr)	Dev Slaven Chert	chert,(carbonaceous sh, arg,lst)
Snake Mountains	USNV	4.1			qtz,org, pyr,(mica)	Ord Valmy Fm	chert,sh,arg,chert cngl, lst,greenstone,sltst
Snow Canyon	USNV				qtz,org	Ord Valmy Fm	chert,arg,qtzite
Spanish Mine	USCA		96-99%			Carb Calaveras Fm	metasediments
Sulphur Creek	CNBC						arg,lst
Taylor Canyon	USNV				org,(qtz)	Ord Valmy Fm	blk chert,blk arg,mdst,sh

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Tap	CNYT				hydroz		gossanous lst
Tea	CNYT	0.3	90%		cel,qtz, pyr	L. Miss Earn Group	blk arg,sh,sltst,chert, lst
Tom	CNYT	9	25%		gal,sph, pyr,sid, qtz,cpyr, tet	U. Dev Canol Fm	blk siliceous arg,sh,chert, chert pebble cngl
Uribe (Bruce Creek)	USWA				pyr,(qtz)	Pal	siliceous silst & arg w/ intercalated lst
Walton (Magnet Cove)	CNNS		90%		Pb-Zn sulfides	Miss Pembroke Fm	lst
Weekeroo	AUSA					Arch	
Wulik (Lik)	USAK				sph,gal	Miss	carbonaceous sh,chert, dol

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Admiralty Island	1 bar horizon >20 m thick			Bundtzen & Henning, 1978	
Antigun Canyon	zonee of nodulee & leyered bar that pinch & swell			Bundtzen & Henning, 1978	in Centrel Brooks Range; no base metals.
Argente	to >15 m thick; v. thin to thin bedded,fine grained,fetid,end med dk gray; locally spheroidel	X	Milchem, Inc.	Papke, 1984 Steger, 1977	produced >1,000,000 st to 1979.
Ben Thimongtha				Shawe, 1984 Scholle & Assoc, 1969	originelly described as "veins".
Barita de Cobachi	bar is lt gray,laminated,fine greined;locelly ee roeettee,ce-ment,or conglomeritic			Poole & others, 1983	
Barite de Mazatan	Carb ber is med grey,laminated, fine grained & locslly occurs es roeettee or is conglomeritic;Dev ber ie eeme as Barite de Cobachi			Poole & others, 1983	
Barite (Moose)			Nuspar Resourcee, Ltd	Canada Dept Energy, 1980 Dewson, 1975	in Mayo dietrict.
Barite Velley	leyers & lenses of ber gen <13 cm thick	X		Heinriche & Reimer, 1977 Brebers, 1976	structursl & litho-gic complexities make moet of deposit unec-onomic to mine;40,326 st produced 1942-61.
Betemen Canyon	ber is v. thin bedded,lt to med gray,fine grained and conteins H_2S;thicknese of ore >10 m in places	X	Milchem, Inc.	Papke, 1984 Ketner, 1963 Steger, 1977	hee produced >250,000 st ore.

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Baw Hin Khao	massivs ber to 20 m thick (ave 5.2 m);also as scattsred nodules			Jacobson & others, 1969 Scholla Assoc, 1969 Scholla Assoc, 1981	
Beacon (Peabody Calads)	bar occurs in 2 units;bar is laminated to thin bedded,med lt gray, fine grainsd & fetid; locally sphsroidal	X		Papke, 1984	>25,000 st production.
Bescon (Dolesol-Leyton)	bar units to 3.5 m thick & may contain up to 40% chart layers; bar thin bedded, med dk gray & fine grsined	X	Milchem, Inc.	Papke, 1984	has produced >25,000 st ore.
Big Stubby				Stevens, 1976	
BNOB			Cyprus Anvil	Marchand & others, 1978	barite interlayered with tuff;Watson Lake district
Bredshaw-White Rock	irreg bar units;Bradshaw- bar is gsn poorly bedded,lt gray,& fine grained,some nodules;White Rock-bar is bleached,orgs destroyed, fine grsinsd to sugary	X	IMCO Services, Inc.	Papke, 1984 Stager, 1977	has producsd >50,000 st of ors.
Brookfisld			Cspe Chemical Corp.	Canads Dept Energy, 1980	
Camamu Bey	fibrous,spherulitic,laminar, & nodular aggregates.	X		Bodenlos, 1948 Brobst, 1970	crystalline bar veining present.
Castle Island	ellipticsl masses to 25 m thick	X	Chromalloy Corp	Bundtzsn & Hsnning, 1978	production offshore since 1967.
Cathy (Walt)	at least 5 bar beds		Baroid of Canads	Dawson & Orchard, 1982	

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Changdo				Brobst, 1970	described as replece-ment deposit.
Chitsia Mtn.	ber-sulfide lenses to 3 m thick & 100 m long			Bundtzen & Henning, 1978	secondary ber veins in neerby phyllite.
Chzerpnough			Cyprus Anvil	Merchand & others, 1978	
Cirque	nodular to massive bar		Hudson Bay Cyprus Anvil	MacIntyre, 1980a Canada Dept Energy, 1980	
Clipper	et leest 3 orebodies;bar is poorly bedded,conformable,med-dk gray,& fine greined	X	IMCO Services, Inc.	Papke, 1984	hes produced >250,000 st ore.
Democret	ber is granular & dk gray	X		Kundert, 1957	origiually described as bedding plane veins; over 35,000 st bar produced.
Drenchwater Creek	ber is lt to med gray,massive & med coarse grained			Bundtzen & Henning, 1978 Nokleberg & Winkler, 1978	
Driftpile Creek	dk gray finely laminated bar bends contain discrete irregular greins of gal & sph		Getanga Joint Venture	MecIntyre, 1980b	
East Northumberlend	bar rich units to 10 m thick; bar is med gray to blk,fine grained, laminated to indistinctly bedded, fetid & uniform in appearance; locally spheroidal	X	All Minerals IMCO Services, Inc.	Papke, 1984 Shawe & others, 1967 Shawe & others, 1969	hes produced >1,000,000 st ore.

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
El Portal	ore bodies to 20 ft thick & traceable up to 3 miles;conformable to hoat; 3 bodies	X		Kundert, 1957	haa produced >400,000 st barite to 1948.
Elf Claims	dk gray bedded barite 10-20 cm thick w/diffuse bands of gal		Cyprus Anvil	MacIntyre, 1980b	total mineralized zone at least 5 m thick.
Fancy Hill	bar units are 10-40 ft thick, lenticular & continuous for >9000 ft; bar nodular or fine grained		Milchem, Inc.	Harben & Bates, 1984	probably syngentic w/ replacement texture due to diagenetic alteration.
Gams	conformable bar & iron ore			de Kun, 1965	size estimate is minimum to 100 ft depth.
GEMS	main bed of thin bedded gray bar 8-12 m thick w/bar lamellae in under- and overlying sltst		Placer Development Ltd.	Dawson & Orchard, 1982	
Greyatone	bar is lt to med gray,v. thin bedded,fine grained,fetid; locally laminated; composes up to 70 m of 90 m stratigraphic interval	X	Dresser Minerals	Papke, 1984 Stager, 1977	had produced >4,000,000 st by 1983.
Gurrunda	bar is gray,fine grained; occurs in 2 lens-shaped bodies w/interbanded pyr		Lamadec Expl. Ltd.	Stevens, 1976 Holmes & other, 1978	
Hidden Hills	1 unit 0.9-6 m thick; bar is fetid,med dk gray,fine grained	X	Chromalloy Am. Corp (op)	Papke, 1984	white bar veining; inactive.
Homestake	bar conformable to schistosity		Kamad Silver Co. Ltd.	Canada Dept Energy, 1980 Dawson, 1975	

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STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Jeson	bedded & spotty ber		Ogilvie Joint Venture	Cenada Dept Energy, 1980 Carne, 1979	
Judean Desert	wht grenular bar w/ 2-30% cal interlayered w/host rocks	X		Bogoch & Shirav, 1978	produces >2000 t/yr.
Jumbo	bar in pod-like body;ber is lt gray,fine greined & altered (org destroyed)	X	Chemicel & Pigment Co.	Papke, 1984	has produced >25,000 st of ore.
Kempfield	bar is gray & fine greined & forms small lenticular beds w/ lenses of chert	X		Stevens, 1976 Raggatt, 1925	host rocks have undergone u. green-schist fecies meta-morphism.
Khuzdar	thin bedded, fine to medium greined,gray to wht bar;locally noduler			Klinger & Ahmad, 1975	stretiform bar cut by irreg. veins of coarse bar.
Lakes Barite	bar is lt to dk gray,fine to v. fine grained,v. thin bedded; breccieted in places	X		Papke, 1984	bar veining & vug-linings ere common in aree.
Lime Point	massive bar-dolo lenses & nodules	X (minor)		Bundtzen & Henning, 1978	
Magic			Dynasty	Sinclair & others, 1974	in Mayo District.
Magnet Cove	grey to blk bar to 45 ft thick	X	National Lead, Magnet Cove Bar.	Brobst, 1975 Harben & Bates, 1984 Scull, 1958	
Mengsmpeta	ber is dk grsy w/ fetid odor; beds to 40 cm thick			Oldham, 1982 Kurien, 1980 Coulson, 1933	2 v. lsrge lenses in adjacent synclines.

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Meggen	generally dk gray,fine grained bar w/minor sh interbeds	X		Gustafson & Williams, 1981 Mining Magazine, 1979 Krebs, 1981 Carne, 1979	lower to middle greenschist facies metamorphism;Mn halo;sulfide ore contains about 16% bar.
Mel			Sovereign Metals Corp	Canada Dept Energy, 1980 Sinclair & others, 1976	
Miller	at least 3 bodies 3-10 m thick; ber is laminated to v. thin bedded,med dk gray to br gray,& fine grained	X	Milchem, Inc.	Papke, 1984 Stager, 1977	has produced >250,000 st of ore.
Mineral King		X		Canada Dept Energy, 1980	mined originally for sulfides, bar later recovered from dumps; depleted.
Monitor	bar to 9 m thick;ber is med gray to blk,fine grained,& rich in orgs & H_2S;locally spheroidal	X	Hodges & Assoc	Papke, 1984	has produced >25,000 st of ore.
Mountain Springs	bar is med grsy,fine grained, v. thin bedded to massive,& fetid; minor sandy & spheroidal bar	X	FMC	Papke, 1984 Steger, 1977 Valcarce, 1978	used entirely for chemicals.
Mt. Alcock	bar unit 25-30 m thick w/ diffuse sulfide bodies			MacIntyre, 1980b	in Kwadecha Wilderness.
Mt. Bobija				Mining Magazine, 1983	near Ljubovije.
Muncho Lake					

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Nimiuktuk	dk grsy bar;massive & es thin lenses			Bernes & others, 1982 Mayfield & others, 1979	
Oro	gray thinly-bedded ber		Norande Mines Ltd.	Dawson & Orcherd, 1982	
P & S	bar is lt gray,fine grained & bended to recrystallized,white, sugary & friable	X	Standard Slag Co.	Pepke, 1984	has produced >25,000 st of ore.
Pete	e 2 m wht bar bed is over- end underlain by lamellar ber in srg & siltst		Ogilvie Joint Venture	Morin & Marchand, 1979 Dewson & Orchard, 1982	sediments have been gredetionally metamorphosed by a nearby pluton.
Phu Mai Tong	ber is laminated to thinly bedded w/fine layers of pyr;3 major layers 75-150 ft thick;bar is wht to lt grsy or brownish	X		Harben & Betes, 1984 Scholls & Assoc, 1981	probably of sedimentary origin.
Pleasant View	main unit is about 6 m thick w/ irreguler interbedded chert layers; ber is laminated to thin bedded,lt to dk gray, & fine grained	X	IMCO Services, Inc.	Papke, 1984 Stager, 1977	has produced >100,000 st ore.
Pljevlje				Eng. Min J., 1983	about 25 km SE of Sarajevo.
Querry	generally wht sugery bar at least partially recrystallized			Bundtzen & Henning, 1978 Brobst & others, 1971 Herreid, 1966	Sinuk River area.
Queen Lode	bar is med gray,fetid & varies fine grained & massive to spheroidal; in places contains friable masses of Fe-ox rich qtz & bar	X	NL Industries	Papke, 1984	

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Rammelsberg	2 lenses	X		Gustafson & Williams, 1981 Krebs, 1981 Hannek, 1981	tonnage for massive bar ore only;greenschist facies metamorphism.
Red Dog	bar leyer to 50 ft thick			Bundtzen & Henning, 1978 Barnes & others, 1982	aecondary bar veining is common.
Rein			Union Miniare Exploration	Morin, 1979	
Rimrock	2 main ber units; bar is v. thin bedded,med gray, fine grained, fetid & frequently brecciated	X	Milchem, Inc. (op)	Papke, 1984	hae produced >25,000 st ore.
Roman			Sulpetro	Morin, 1979	
Ronan	wedge-shaped body		Fee Simple	Canede Dept Energy, 1980	
Rosebery	lenticular bodies that grade into massive sulfides;bar is fine grained & massive w/minor sulfides	X		Brethwaite, 1974	directly overlain by pyr-hem bodies.
Rossi	bar to 12 m thick, med dk grey, v. fine grained,& fetid w/ little viseble bedding	X	NL Industries	Papke, 1984	has produced >1,000,000 at ore.
Sansinena	bar as 2 units separated by chert; bar is lamineted to thin bedded, lt gray,fine grained; locally recrystallized,brecciated or spheroidal	X	Zane Hunt Mining Co.	Papke, 1984	has produced >25,000 st ore; deposit overlein by Tert andesite & sediments.
Savercool	2 lenticular bodies;wht granular bar w/host rock inclusions	X		Kundert, 1957	includes Synthetic Iron Color Mine.

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Schoonoord	greyish-wht bar	X		De Kun, 1965	bar "replaces" chert.
Seven Heart Gap		X		Price & others, 1983	abandoned; replacement of anhydrite.
Shelton	bar is laminated to thin bedded, med dk grey,& fine grained; locally bleached or brecciated; interbedded w/chert	X		Papke, 1984	>100,000 st ore produced; deposit partially overlain by Tert basalt & seds.
Silver Giant		X		Dawson, 1975	bar recovered from base metal mining tailings pond.
Silvermines	irregularly shaped body 0-15 m thick	X	Macobar (Dresser subsidiary)	Taylor & Andrew, 1978 Gustafson & Williams, 1981 Mining Magazine, 1983	Tonnage, grade for massive bar ore only.
Slaven Canyon	ber about 3.5 m thick; bodies are irregular;bar is thin bedded, dk gray, v. fine to fine grained,& contains org & H_2S	X	Milchem, Inc. (Barse) Dresser Minerals & Southern Pacific (Slaven)	Papke, 1984	includes Barse Mine; over 50,000 st ore have baen prodnced; reserves of "large low grade tonnage" at Slaven.
Sneke Mountains	bar is dk grey, laminated to thin bedded,v. fine grained or composed of small spheroids,& fetid	X	Chromalloy Corp Decker Expl.	Papke, 1984	includes Snoose,Easy Miner,Jungle,Loomis Creek,& Stormy Creek Mines.
Snow Canyon	bar is thin to indistinctly bedded,med dk gray,fine grained & fetid.	X		Papke, 1984	has produced >25,000 st of ore.
Spanish Mine	2 units join at depth	X		Kundert, 1957	has produced >35,000 st bar.

TABLE II.
STRATIFORM BARITE DEPOSITS

NAME	BARITE DESCRIPTION	PRODUCER?	COMPANY	REFERENCE(S)	COMMENTS
Sulphur Creek	bar-rich section to 50 ft thick; wht bar repeats w/gray arg or lst			Dawson, 1975	
Taylor Canyon	bar unit contains abundant layers of host rocks;bar is thin bedded, fine grained,& med dk gray;some beds rich in org & H_2S	X		Papke, 1984	has produced >25,000 st ore.
Tap			Dynasty	Sinclair & others, 1974	
Tea	bar zone to 90 m thick;bar is gray to blk,fine grained to nodular & generally low in silica	X	Yukon Barite	Dawson & Orchard, 1982 Canada Dept Energy, 1980	
Tom	2 tabular bodies		Hudson Bay	Morin, 1979 Carne, 1979 Dawson, 1980	
Uribe (Bruce Creek)	bar is wht to gray & fine grained with pyr	X		Moen, 1964 Mills & others, 1971	5,500 st production reported 1962.
Welton (Magnet Cove)	lense shaped mass	X	Dresser Minerals	Canada Dept Euergy, 1980 Brobst, 1970	sulfide deposit below bar.
Weekeroo	8 main bodies			McLeod, 1966	in Olery District.
Wulik	lenses & pods			Bundtzen & Henning, 1978 Barnes & others,1982 Mayfield & others, 1979	in westeru Brooks Range.

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