Data Set of World Phosphate Mines, Deposits, and Occurrences—Part B. Location and Mineral Economic Data

By G.J. Orris[1] and Carlotta B. Chernoff[2]

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[1]USGS, Tucson, Arizona
[2]University of Arizona, Tucson, Arizona

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INTRODUCTION

An inventory of more than 1,600 world phosphate mines, deposits, and occurrences was compiled from smaller data sets collected as part of multiple research efforts by Carlotta Chernoff, University of Arizona, and Greta Orris, U.S. Geological Survey. These data have been utilized during studies of black shale depositional environments and to construct phosphate deposit models. The compiled data have been edited for consistency and additional location information has been added where possible. The database of compiled phosphate information is being released in two sections; the geologic data in one section and the location and mineral economic data in the second. This report, U.S. Geological Survey Open-File Report OF02–156–B contains commodity, location, and mineral economic data and is best used with the complimentary geologic data contained in OF02–156–A.

DATA SOURCES, PROCESSING, AND ACCURACY

Data on more than 1,600 phosphate deposits, mines, and occurrences were compiled from a variety of sources, including earlier compilations. Commodity, location, and mineral economic data from the database comprise this report, Open-File Report 02–156–B. Geologic data can be found in Open-File Report 02–156–A. Although more complete than any other phosphate compilation the authors could identify, this phosphate database has all of the standard data compilation problems and compromises. Perhaps the most frustrating problem is that of names. It is commonly unclear in the literature, especially for foreign countries, if a given name refers to a mine or deposit, a nearby location or administrative area, a geologic formation, or a company involved in the exploration/development of a site. Frequently, multiple names may be used to

refer to a single deposit or mine. For large deposits or mineralized areas, a single name might be used to refer to diverse sites or deposits within these areas or to the area as a whole. The authors of this compilation have tried to deal with the naming difficulties as consistently and completely as possible, especially within individual countries; however, naming problems and inconsistencies, as well as duplicate records are still likely to be present in the database.

For many of the sites, the data were compiled from multiple sources. The data from these sources were not always consistent or compatible and the authors have reconciled these differences as best they could based on personal knowledge and available information. For the most part, data were recorded as reported in the original sources and no significant effort was made to verify the information beyond trying to reconcile conflicting information.

DATA

The mineral economic, location, and commodity data from the phosphate database are listed in Appendix A. The data are sorted in the following order: country, state/principal administrative area, third order administrative area, basin/formation/region(area)/deposit, and deposit/site name. Guano and guano-derived deposits are listed at the end of the table, but sorted in the same order.

Data fields in this report include: deposit number, country, state/principal administrative area, third order administrative area, basin/formation/region(area)/ deposit, deposit/site name, deposit type, type of phosphorite, general age of mineralization, specific age of mineralization, magmatic/host rock age, host/associated lithology, host formation, mineralization, geologic comments/deposit description, age references, general comments, and general references. Names used in the country and

state/principal administrative area fields are compliant with Federal Information Processing Standards (National Institute of Standards and Technology, 1995). Third order administrative areas, such as counties in the United States, are listed if specified in the original source materials or if easily determined from other sources considered reliable by the authors.

The information in the next two fields, Basin/Fmt/Region (area)/Deposit and Deposit/Site_Name, is meant to identify the area, deposit, district, mine, or occurrence to which the geologic, economic, and location data apply. While we have tried to avoid duplicates, for some areas we report information for a district or area, as well as for specific deposits or mines within those larger areas. The exact level of information in these 2 fields may very between countries; but we have tried to utilize these fields consistently within a given country.

The country and name data are followed by a commodity field (COMMODS) and an Analytical Data field. The abbreviations used in the commodity field are listed in Table 1. The analyses given in Analytical Data use standard symbols for chemical elements and compounds; except that numbers that are usually shown as subscripts in chemical compounds have no offset in this field; i.e. "SiO_2" is shown as "SiO2".

The next three fields are Latitude, Longitude and Location comments. Latitudes and longitudes are given in digital degrees. Most locations are believed to be within 5 minutes of the true location. However, for some areas of the world, the digital locations represent the nearest town, rather than the mine or deposit, and locations taken from other references have an unknown accuracy. The Location Comments field may contain modifying information related to the digital locations and (or) verbal descriptions of the location of the deposit/site.

The next 6 fields contain mineral economic data. These fields include: Year of Discovery, Production, Annual Production, Cumulative Production, Mining Method, and Resources. These fields are largely self-explanatory. The Production field describes whether a site has produced phosphate that may be

followed by a date that reflects the how current the date that the information was reported. The Mining Method field contains the following abbreviations:

S Surface mine

U Underground mine

B Both surface and underground mining.

The remaining fields are Company, General Comments, Location References, General References, MASMILS No., and MRDS No. General Comments includes information of interest, including economic information that does not fit in other table fields. The Location References field lists references from which locations were taken or that were used to help determine locations. The General References field lists references that were used to compile the geologic and economic data for each site. The MASMILS and MRDS fields list record numbers for records within the USGS national mineral databases that contain information for the given site.

The data in Appendix A may be obtained in digital format in the following ways:

1. Download the digital files from the USGS public access World Wide Web site on the internet: http://geopubs.wr.usgs.gov/open-file/of02-156b/

or

2. Anonymous FTP from geopubs.wr.usgs.gov, in the directory pub/open-file/of02-156b/

The data are also available in Excel 97 (OF02156B.xls).

Table 1. Commodity codes used in phosphate deposits table.

Code	Commodity/Material	Typical Minerals/Materials
AGG	aggregate	
BAUX	bauxite	
Al	aluminum	
As	arsemic	
Au	gold	
Ba	barium	barite
Ca		
CAR	carbonate	calcite, limestone, dolomite
Cd	cadmium	
Ce	cerium	
CEM	cement	
CLY	clay	
COAL	coal	
Cu	copper	
DIT	diatomite	
DOL	dolomite	
F	fluorine	
Fe	iron	hematite, magnetite
FLD	feldspar	
GLA	glauconite	
GYP	gypsum	
I	Iodine	
La	lanthanum	
LIME	lime	
LST	limestone	
Mg	magnesium	
MICA	mica	phlogopite, biotite, muscovite
Mn	manganese	
Mo	molybdenum	molybdenite
N	Nitrogen	guano
Nb	niobium	pyrochlore, columbite
Ni	nickel	
P	phosphate	apatite, fluorapatite
Pb	lead	
PYR	pyrite	
REE	rare earth elements	monazite, bastnäsite
S	sulfur	
Si	silicon	quartz
Sr	strontium	strontianite, celestite
Ta	tantalum	tantalite
Th	thorium	thorite, monazite
Ti	titanium	ilmenite, rutile
U	uranium	
V	vanadium	
VRM	vermiculite	
Y	yttrium	
Zn	zinc	
Zr	zirconium	zircon

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APPENDIX A

World Phosphate Deposits: Location and Mineral Economic Data

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1	Afghanista	Helmand		Khanneshin		REE U P F		30.03333	63.58333		
2	Afghanist an	Herat		Kotalj-I-Sebzak		P	6.2-9.7% P2O5	34.65833	63.15000		
3	Albania			Fush-Bardhe (Fushebardha)		P		40.05000	20.00000		
4	Albania			Nivice (Nivica)		P		40.21667	19.91667		
5	Albania			Plloce		P		40.38333	19.76667		
6	Algeria				Bled Djemidma	P					
7	Algeria				Djebel Dyr	P		35.51667	8.15000		
8	Algeria				Djebel Djerissa	P					
9	Algeria				Dra Abiod	P		35.90000	2.75000		
10	Algeria				Kef Afoul	P		35.90000	3.56667		
11	Algeria				Kef es Sennoun	P					
12	Algeria				Oued Gueddooul	P		35.86667	2.85000		
13	Algeria				Oued Noual	P		35.81667	2.81667		
14	Algeria				Oum El Adame	P		35.90000	3.03333		
15	Algeria				Rass Mergueb	P					
16	Algeria				Tir	P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1								ESCAP, 1995	ESCAP, 1995		
2				Unknown	6.2-9.7% P205			ESCAP, 1995	ESCAP, 1995		
3				Unknown				Commission for Geological Map of the World, 1983	Pumo and others, 1982		
4				Unknown				Commission for Geological Map of the World, 1983	Pumo and others, 1982		
5				Unknown				Commission for Geological Map of the World, 1983	Pumo and others, 1982		
6							Lower grade reserves.		de Kun, 1987		
7								Commission for Geological Map of the World, 1976	Arab Organisation for Mineral Resources, 1987		
8							Strippable beds are 30 m thick.		de Kun, 1987		
9	Occurrence								Arab Organisation for Mineral Resources, 1987		
10	Occurrence								Arab Organisation for Mineral Resources, 1987		
11							Overburden to ore ratio of 2:1		de Kun, 1987		
12	Occurrence								Arab Organisation for Mineral Resources, 1987		
13	Occurrence								Arab Organisation for Mineral Resources, 1987		
14	Occurrence								Arab Organisation for Mineral Resources, 1987		
15							Strippable beds are >30 m thick.		de Kun, 1987		
16							Strippable beds are >30 m thick.		de Kun, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
17	Algeria				Znadia	P		35.85000	4.90000		
18	Algeria	Bedjaia Setif		Bordj Redir		P		35.90806	4.90611		
19	Algeria	Bone		Djebel Onk	Djebel Onk	P	Ave grade of 24% P2O5.	34.71667	8.00000		
20	Algeria	Bone			Djebel Kouif	P		35.49889	8.33000		1873
21	Algeria	Bedjaia Setif		Mzaita		P		35.91000	5.01806		
22	Algeria	Midiya Sour El Ghozl		Bou Saada		P		35.21694	4.16694		
23	Algeria	Tebessa			Tebessa	P		35.40417	8.12417	Lat-long for town of Tebessa.	
24	Angola	Bengo		Sassolemba		P		-8.60000	13.55000		
25	Angola	Bié		Chilesso		U P Ni Ta Ti		########	16.62000		
26	Angola	Cabinda		Cabinda	Cácata	P		-5.25000	12.50000		
27	Angola	Cabinda		Cabinda	Cambota	P		-5.02000	12.45000	59 km inland from Landana.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
17	Occurrence								Arab Organisation for Mineral Resources, 1987		
18				S; U				MASMILS, 2000	Arab Organisation for Mineral Resources, 1987	7.21E+09	
19		Average 0.6754 t phosphate conc @ 28.8-29.7% P2O5; capacity 1.6 Mtpa (2001)	3.84 Mt phosphate conc, 1966-78	S	500 Mt ore @ 24.3-27.5% P2O5 (R1E, 1980); 2400 Mt (1999)	Société du Djebel Onk		MASMILS, 2000	Harben and Kuzvart, 1996; Industrial Minerals, 1999; Commission for Geological Map of the World, 1976; Arab Organisation	7.21E+09	ISM0410
20	Mined out (1999?)	About 0.030 t ore, 1980	No data	U	27 Mt ore @ 29.8% P2O5 (R1M, 1979)	Société du Djebel Onk		MASMILS, 2000	Harben and Kuzvart, 1996; Arab Organisation for Mineral Resources, 1987	7.21E+09	ISM0412
21	Mine not operating in 1987	No data	No data	U	11 Mt ore @ 27% P2O5 (R1E, 1979); 17 Mt ore @ 27% P2O5 (R1M, 1979)			MASMILS, 2000	de Kun, 1987; Commission for Geological Map of the World, 1976; Arab Organisation for Mineral Resources, 1987	7.21E+09	ISM0411
22	None							MASMILS, 2000		7.21E+09	
23								NIMA, 2000	Notholt and others, 1989c		
24								Premoli, 1994	Notholt, 1994		
25								Premoli, 1994	Premoli, 1994		
26	None				0.010 t (1964)			Premoli, 1994	Notholt, 1994; Mew, 1980		
27	None				Proven--0.605 t (1964); Probable--0.811 t (1964)			Premoli, 1994	Notholt, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
28	Angola	Cabinda		Cabinda	Chibuete	P				48 km from Pointe Noire.	
29	Angola	Cabinda		Cabinda	Chivovo (Tchivovo)	P		-4.92000	12.25000		
30	Angola	Cabinda		Cabinda	Mongo Tango (Mongo-Tanda, Mongo Tando, Cacongo)	P		-5.17000	12.90000		
31	Angola	Cabinda		Cabinda	Seva	P		-5.03333	12.51667	Lat-long for town of Seva.	
32	Angola	Cabinda		Cabinda	Ueca	P		-5.05000	12.21667	Lat-long for town of Ueca.	
33	Angola	Huambo		Longonjo (Chibilundo Mountain)		P REE Nb Ba Fe Mn U	P2O5 values up to 8.5% have been reported.	########	15.25000	SW of Huambe.	
34	Angola	Uige		Pedra do Feitico		P		-5.25000	12.92000		
35	Angola	Zaire		Coco Grande		P		-7.02000	12.90000		
36	Angola	Zaire		Coluge; Tando		P		-6.80000	12.90000		
37	Angola	Zaire		Kondonakaski		P U	Average 18.5% P2O5 (40.4% BPL)	-6.98330	13.16670		1951
38	Angola	Zaire		Lacunga River (Lucunga River)		P		-6.95000	12.86667	May be average location for deposits in this region.	
39	Angola	Zaire		Lendiacolo		P		-6.80000	12.90000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
28	None (1980)				Proven-- 2.5 Mt @ 23% P2O5 + 1.2 Mt @ 10.5% P2O5 (1980)				Premoli, 1994; Mew, 1980		
29	None				0.250 t (1964)			Premoli, 1994	Notholt, 1994; British Sulphur Corporation, 1964		
30	None (1987)			S	50 Mt @ 18% P2O5 (1987)			Premoli, 1994	Notholt, 1994; British Sulphur Corporation, 1964; de Kun, 1987		I014002
31	None (1980)							NIMA, 2000	Mew, 1980		
32	None (1980)								Mew, 1980		
33	None							Premoli, 1994; Woolley, 2001	Premoli, 1994; Mew, 1980; Alberti and others, 1999, Woolley, 2001		
34								Premoli, 1994	Notholt, 1994		
35								Premoli, 1994	Notholt, 1994		
36	None				5.2 Mt @ 22% P2O5 (1964)			Premoli, 1994	Notholt, 1994; British Sulphur Corporation, 1964; Mew, 1980		
37	None (2001)	None	None	S	20.3 Mt ore @ 18.5% P2O5 (R1E, 1980)		May be duplicate with Quindonacache.	MASMILS, 2000	Notholt, 1994; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001		ISM0398
38				S				MASMILS, 2000	Mew, 1980; British Sulphur Corporation, 1987	7.621E+09	
39	None				2 Mt @ 20.6-26% P2O5 (1964)			Premoli, 1994	Notholt, 1994; Mew, 1980; British Sulphur Corporation, 1964		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
40	Angola	Zaire		Quindonacache		P		-6.80000	12.90000		
41	Argentina	Chubut		Bajo Hondo		P					
42	Argentina	Chubut		Busnadiego		P					
43	Argentina	Chubut		Cerro Chenque		P					
44	Argentina	Chubut		Golfo de San Jorge Basin/Zanjon de Lema Area		P		########	-65.96667		
45	Argentina	Chubut		Pico Salamanda		P					
46	Argentina	Chubut		Punta Loma		P					
47	Argentina	Jujuy/Salta		Rio Capillas Area		P		########	-65.33000	Location is average of prospected deposits in this area.	
48	Argentina	Mendoza		Cerro Cacheuta (Cerro Cachenta)	Los Apires, El Risco	P	5000 samples ran 6.5-30.6% P2O5	########	-69.00000		
49	Argentina	Neuquen		Bajada del Agrio		P	1.5-10.1% P2O5	########	-70.03333	55 km N of Zapala by National Route 40. Location from atlas for town of Bajada del Agrio.	
50	Argentina	Neuquen		La Porfia (La Purtia)		P	2.1-5.4% P2O5				
51	Argentina	Neuquen		Mallin Quemado (Mollin Quemado)		P	1.8-5.4% p2O5				
52	Argentina	Rio Negro		Sierra Grande		Fe P	Fe ores contain 2-3% P2O5; tailings sands contain 7-8% P2O5.	########	-65.33333		
53	Argentina	San Juan		Quebrada de Talacasto Area		P	Up to 14.4% P2O5.	########	-68.64167	Location taken as average of deposits in this region.	
54	Argentina	Santa Cruz		Bahia Langara		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
40	Small intermittent producer			S	20.3 Mt @ 18.5% P2O5 (1964)	Fosfatos de Angola (Fosfang)	May be duplicate with Kondonakaski.	Premoli, 1994	Premoli, 1994; Notholt, 1994; Mew, 1980; British Sulphur Corporation, 1964		
41									Leanza and others, 1989		
42	None								Leanza and others, 1989		
43	None								Leanza and others, 1989		
44	None							Leanza and others, 1989			
45	None								Leanza and others, 1989		
46	None								Leanza and others, 1989		
47	None- prospect							Leanza and others, 1989	Leanza and others, 1989		
48	None				up to 29.34% P2O5			Leanza and others, 1989	Notholt, 1994; Mew, 1980; Leanza and others, 1989		
49	Not economic				>1 Mt @ 5-6% P2O5			Rand McNally, 1981	Argentina National Mining Secretariat, 1994; Angelelli and others, 1976; Leanza and others, 1989		
50	Not economic								Leanza and others, 1989		
51	Not economic								Leanza and others, 1989		
52	None				2-3% P2O5			Leanza and others, 1989	Leanza and others, 1989		
53	None							Leanza and others, 1989			
54	None								Leanza and others, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
55	Argentina	Santa Cruz		Cabo Blanco		P		########	-65.75000	Lat-long for town of Cabo Blanco.	
56	Argentina	Santa Cruz		Cerro Gruta Lourdes		P					
57	Argentina	Santa Cruz		Gran Bajo de San Julian		P	2 beds- 1 averages 6.47% P2O5, the other 4.02% P2O5	########	-68.50000		
58	Argentina	Santa Cruz		La Aurora		P					
59	Argentina	Santa Cruz		Lago Argentino		P		########	-72.50000		
60	Argentina	Santa Cruz		Monte Entrance		P					
61	Argentina	Santa Cruz		Monte Leon		P		########	-68.91667	Lat-long for town of Monte Leon.	
62	Argentina	Santa Cruz		Rada Tilly		P					
63	Argentina	Santa Cruz		Tres Lagos		P		########	-71.33333		
64	Argentina	Santa Cruz		Valle de Cisma		P					
65	Australia	New South Wales		Batemans Bay		P		########	150.16667		
66	Australia	New South Wales		Continental margin		P		########	153.83333	Location for site G7.	
67	Australia	New South Wales		Continental margin		P		########	153.43333	Location for site G16.	
68	Australia	New South Wales		Continental margin		P		########	153.23167	Location for site 1516.	
69	Australia	New South Wales		Mootwingee		P		########	142.33333		
70	Australia	New South Wales		Offshore Guyots		P		########	153.00000		
71	Australia	New South Wales		Sydney Basin/Mona Vale		P		########	151.33333		
72	Australia	New South Wales		Tasman Basin/Moruya		P		########	150.16667		
73	Australia	Northern Territory		Amadeus Basin/George Gill Range		P		########	133.16667		
74	Australia	Northern Territory		Amadeus Basin/McDonnell Range		P		########	132.00000		
75	Australia	Northern Territory		Amadeus Basin/Ringwood		P		########	135.00000		
76	Australia	Northern Territory		Bathurst Island		P		########	130.33333		
77	Australia	Northern Territory		Fannie Bay		P		########	130.66667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
55	None							NIMA, 2000	Leanza and others, 1989		
56	None								Leanza and others, 1989		
57	None							Leanza and others, 1989; NIMA, 2000	Leanza and others, 1989; NIMA		
58	None								Leanza and others, 1989		
59	None				2.25% P2O5		Previous resource estimates stated 15% P2O5.	Leanza and others, 1989			
60	None								Leanza and others, 1989		
61	None							NIMA, 2000	Leanza and others, 1989		
62	None								Leanza and others, 1989		
63	None							Leanza and others, 1989			
64	None								Leanza and others, 1989		
65	None							Cook, 1980			I005152
66	Not economic							Cook and O'Brien, 1990; NIMA, 2000			
67	Not economic							Cook and O'Brien, 1990; NIMA, 2000			
68	Not economic							Cook and O'Brien, 1990; NIMA, 2000			
69	None							Cook, 1980			I005146
70	None							Cook, 1980			I005165
71	None							Cook, 1980			I005145
72	None							Cook, 1980			I005144
73	None							Cook, 1980			I005131
74	None							Cook, 1980			I005132
75	None							Cook, 1980			I005130
76	None							Cook, 1980			I005129
77	None							Cook, 1980			I005128

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
78	Australia	Northern Territory		Georgina Basin/Alexandria		P	Average content 10-16% P2O5	########	136.33333		
79	Australia	Northern Territory		Georgina Basin/Alroy		P		########	136.08333		
80	Australia	Northern Territory		Georgina Basin/Amaroo (Ammaroo)		P		########	135.16667		
81	Australia	Northern Territory		Georgina Basin/Carrarra Ranch		P		########	138.00000		
82	Australia	Northern Territory		Lee Point		P		########	130.83333		
83	Australia	Northern Territory		Mud Tank		P		########	135.08333		
84	Australia	Northern Territory		Rum Jungle		P	5.8-29.5% P2O5, 8.4-39.1% CaO, 0.53-2.6% F, 1.3-8.7% Fe2O3, 11.4-78.7% SiO2, 0.43-6.1% Al2O3	########	133.50000		
85	Australia	Northern Territory		Georgina Basin/Wonarah		P		########	136.33333		1966-1967
86	Australia	Northern Territory		Wiso Basin/Lady Judith		P		########	131.66667		
87	Australia	Northern Territory/ Queensland		Georgina Basin/Highland Plains		P		########	138.16667		
88	Australia	Queensland		Banana-Cracow		P		########	150.33333		
89	Australia	Queensland		Continental Shelf		P		########	153.00000		
90	Australia	Queensland		Georgina Basin/Ardmore		P		########	139.33333		
91	Australia	Queensland		Georgina Basin/Babbling Brook Hill		P		########	138.41667		
92	Australia	Queensland		Georgina Basin/D-Tree		P		########	138.95000		1966-67

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
78	None							Cook, 1980; Cook and Nicholas, 1980	Cook, 1989; Scott and Duchateau, 1998		I005118
79	None							Cook, 1980; Cook and Nicholas, 1980	Scott and Duchateau, 1998		I005119
80	None							Cook, 1980; Howard, 1990	Howard, 1990		I005134
81	None							Cook, 1980			I005125
82	None							Cook, 1980			I005127
83	None							Cook, 1980			I005133
84	Active Mine (1980)				2.3 Mt @ 5-38% P2O5		Resource estimates from Notholt and others 1989a. Up to 15 different deposits in this area.	Cook, 1980	Mew, 1980		I005126
85	None				606 Mt @ 15.7% P2O5			Howard, 1989; Cook and Nicholas, 1980	Howard and Hough, 1979; Mew, 1980; Scott and Duchateau, 1998		I005109
86								Howard, 1990	Howard, 1990		
87	None				84 Mt @ 13.4% P2O5 (1989)			Cook, 1980	Mew, 1980; Cook, 1989; Scott and Duchateau, 1998		I005117
88	None							Cook, 1980			I005123
89	None							Cook, 1980			I005124
90	None				47 Mt @ 15.6% P2O5 (1989)			Cook, 1980	Mew, 1980; Cook, 1989		I005105
91	None				38 Mt @16.8% P2O5 (1989)			Cook, 1980	Cook, 1989		I005115
92	None			S	220 Mt @ 18.6%P2O5 (1989)			MASMILS, 2000	Howard and Hough, 1979; Mew, 1980; Cook, 1989	6.02E+09	I005108

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
93	Australia	Queensland		Georgina Basin/Duchess	Phosphate Hill	P U		########	139.96667		1966
94	Australia	Queensland		Georgina Basin/Engine Creek		P		########	138.89000	Midway between Sherrin Creek and Lily Creek.	1967
95	Australia	Queensland		Georgina Basin/Lady Anne (Annie)-Lady Jane		P U		########	139.16667		1967
96	Australia	Queensland		Georgina Basin/Lily Creek		P		########	138.73333		1967
97	Australia	Queensland		Georgina Basin/Mt. Jennifer		P		########	138.66667		
98	Australia	Queensland		Georgina Basin/Mt. O'Connor		P		########	138.33333		
99	Australia	Queensland		Georgina Basin/Phantom Hills		P		########	138.50000		
100	Australia	Queensland		Georgina Basin/Quita Creek (Quite Creek)		P		########	139.16667		
101	Australia	Queensland		Georgina Basin/Riversleigh		P		########	138.66667		
102	Australia	Queensland		Georgina Basin/Sherrin Creek		P		########	139.00000		1966-1967
103	Australia	Queensland		St. Ann's		P		########	145.00000		
104	Australia	South Australia		Angaston		P		########	139.00000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
93	Past Producer; Active (2001)	0.2 Mt ore, 30.9% P2O5 (1982-83); capacity 2.2 Mt in 2001	1.3 Mt ore, 30.9% P2O5, 1975-82	S	>1000 Mt @ 17.3% P2O5 (1990); Proven-- 103 Mt @ 23% P2O5 (1999)	WMC Fertilizers Pty Ltd. (1999)	Also called Burke River. Most sources treat Phosphate Hill and Duchess interchangeably, but 2 treat as separate sites.	MASMILS, 2000	Industrial Minerals, 1998b; Jasinski, 2000; Mew, 1980; S. Jasinski, written commun., 2001; Dreissen, 1990	6.02E+09	ISM0474
94	None							Cook, 1989	Mew, 1980		
95	None			S	293 Mt @ 16.6% P2O5 (1989); 486 Mt @ 17% P2O5 (1990)		Lady Anne also called Thorntonia. Lady Jane is a northern extension of Lady Annie.	MASMILS, 2000	Mew, 1980; Cook and Elgueta, 1986; Cook, 1989; Dreissen, 1990	6.02E+09	I005106
96	None				192 Mt @ 13.4% P2O5 (1989)			MASMILS, 2000	Mew, 1980; Cook, 1989	6.02E+09	I005107
97	None				20 Mt @15.3% P2O5 (1989)			Cook, 1980	Cook, 1989		I005114
98	None				Proven-- 15 Mt @17.4% P2O5 and Probable-- 27 Mt @17.4% P2O5 (1989)			Cook, 1980	Mew, 1980; Cook, 1989		I005116
99	None				46 Mt @ 16.0% P2O5 (1989)			Cook, 1980	Mew, 1980; Cook, 1989		I005113
100	None				30 Mt @ 17.0% (1989)			Cook, 1980	Mew, 1980; Cook, 1989		I005111
101	None				11 Mt @14.4% P2O5 (1989)			Cook, 1980	Mew, 1980; Cook, 1989		I005110
102	None				212 Mt @ 16.0% P2O5 (1989)			MASMILS, 2000	Howard and Hough, 1979; Mew, 1980; Cook, 1989	6.02E+09	I005112
103	None							Cook, 1980			I005122
104	None							Cook, 1980	British Sulphur Corporation, 1987		I005155

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
105	Australia	South Australia		Kapunda - Moculta		P		########	138.91667		
106	Australia	South Australia		Orroroo		P		########	138.66667		
107	Australia	Tasmania		Continental Shelf		P		########	144.00000		
108	Australia	Tasmania		Tasman Basin/Mathinna		P		########	147.91667		
109	Australia	Tasmania		Tasman Basin/Railton		P		########	147.00000		
110	Australia	Tasmania		Tasman Basin/Smithton		P		########	145.00000		
111	Australia	Tasmania		Tasman Basin/St. Mary's		P		########	148.16667		
112	Australia	Victoria		Bass Basin (Torquay Embayment)	Geelong	P		########	144.35000	Locations taken from Cook and O'Brien map and NIMA search engine.	
113	Australia	Victoria		Bulumwaal		P		########	146.33333		
114	Australia	Victoria		Gippsland Basin	Beaumaris	P		########	145.05000	Locations taken from Cook and O'Brien map and NIMA search engine.	
115	Australia	Victoria		Gippsland Basin	Lakes Entrance	P		########	147.98333	Locations taken from Cook and O'Brien map and NIMA search engine.	
116	Australia	Victoria		Howquahiver		P		########	146.00000		
117	Australia	Victoria		Killawarra		P		########	146.25000	Lat-long for town of Killawarra.	
118	Australia	Victoria		Murray Basin	Murrayville	P		########	141.18333	Locations taken from Cook and O'Brien map and NIMA search engine.	
119	Australia	Victoria		Otaway Basin	Hamilton	P		########	142.03333	Locations taken from Cook and O'Brien map and NIMA search engine.	
120	Australia	Victoria		Otaway Basin	Mansfield (Phosphate Hill)	P		########	146.00000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
105	Small past producer (1980)		0.0327t (up to 1975) for Kapunda and Moculta	Unknown				Cook, 1980	Mew, 1980		I005154
106	Terminated							Cook, 1980			I005161
107	None							Cook, 1980			I005166
108	None							Cook, 1980	British Sulphur Corporation, 1987		I005138
109	None						Grade is low.	Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987		I005137
110	None							Cook, 1980	British Sulphur Corporation, 1987		I005135
111	None				Large reserves, 5% P2O5		Large reserves of material grading 5% P2O5.	Cook, 1980	Mew, 1980		I005136
112	None							Cook and O'Brien, 1990; NIMA, 2000			I005151
113	None							Cook, 1980			I005149
114				Unknown				Cook and O'Brien, 1990; NIMA, 2000			
115				Unknown				Cook and O'Brien, 1990; NIMA, 2000			
116	Terminated							Cook, 1980			I005148
117	None							NIMA, 2000	Mew, 1980		
118	Occurrence			Unknown				NIMA, 2000			
119				Unknown				Cook and O'Brien, 1990; NIMA, 2000			
120	Small past producer (1980)						Aluminum phosphate with 1-23% P2O5 worked between 1916 and 1926.	Cook and O'Brien, 1990; Cook, 1980	Mew, 1980		I005147

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
121	Australia	Victoria		Otaway Basin	Princetown	P		########	143.15000	Locations taken from Cook and O'Brien map and NIMA search engine.	
122	Australia	Victoria		Waratah Bay		P		########	146.00000		
123	Australia	Western Australia		Little Rocky Inlet		P		########	115.41167		
124	Australia	Western Australia		Mount Weld (Laverton)	includes Swan deposit	P Nb Ta REE (Ce La) Zr	Resource contains 18.1% P2O5, 26.5% Fe2O3, 4.1% Al2O3, 1.6% MgO	########	122.53333	30 km S of Laverton; 230 km NE of Kalgoorlie.	
125	Australia	Western Australia		Murchison River		P		########	115.50000		
126	Australia	Western Australia		Perth Basin/Dandaragan		P		########	115.66667	30 km W of Moora.	
127	Austria			Linz		P					
128	Belgium			Beaudour, Tertre		P		50.48333	3.83333		
129	Belgium			Demer		Fe P		51.20000	4.86667		
130	Belgium			Nethe (Fleuve) Petite et Grande		Fe P		51.28333	5.03333		
131	Belgium	Hainaut		Mons Basin/Baudour area		P U		50.46667	3.83333		
132	Belgium	Hainaut		Mons Basin/Ciply area		P U	phosphatic chalk-- 8-10.5% P2O5, 30-50 ppm U; leached brown sands-- 25-32% P2O5, 130-150 ppm U	50.41667	3.95000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
121				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Mew, 1980		
122	None							Cook, 1980	Mew, 1980		I005150
123				Unknown			Small occurrence may be indicative of now eroded larger deposit	Dix, 1988			
124	Active Prospect (1999)			S	250 Mt @ 18.1% P2O5; Indicated--66 Mt @ 20% P2O5	Phosphate-Wesfarmers CSBP Ltd. (2000)		Jackson and Christiansen, 1993	Western Australia Website, 2000; Harben and Kuzvart, 1996; O'Driscoll, 1988; Duncan and Willet, 1990; Mariano, 1989; Griffiths, 1992; Fetherston and others, 1997; Western Australia Website, 2000; Dreissen, 1990	6.021E+09	I000060
125	None							Cook, 1980			I005169
126	None				1 Mt @ 6% P2O5			Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987		I005168
127	Small past production								British Sulphur Corporation, 1987		
128								Commission for Geological Map of the World, 1968a			
129								Commission for Geological Map of the World, 1968a			
130								Commission for Geological Map of the World, 1968a			
131				U				Robaszynski, 1989			
132	Small past production			U	300-500 Mt @ 8-10% P2O5 (1979)		Production ceased in 1968.	Robaszynski, 1989	British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
133	Belgium	Hainaut		Mons Basin/Saint Symphorien; Spiennes		P U		50.41667	3.96667		
134	Belgium	Hesbaye		Momalle, Rocour		P		50.66667	5.35000		
135	Belgium	Liége		Liége- Meuse Valley		P		50.63333	5.56667	Lat-long is for the town of Liege.	
136	Belarus	Mogilev Oblast		Krichev		P		53.70000	31.71667	Deposit is about 90 km ESE of Mogilev. Lat-long is for the town of Krichev.	
137	Benin	Mono		Athieme		P		6.48333	1.66667	Lat-long is for the town of Athieme.	
138	Benin	Borgou		Mekrou		P		12.06667	2.48333	Along Niger River on border with Niger.	
139	Bhutan, India	Dagana		Mauree-Kalikhola area		P	0.43%-23.9% P2O5, average 13.24%	26.76667	89.90000		
140	Bolivia	Santa Cruz	Velasco	Cerro Manomo		P REE U Th	23.7-25.2% P2O5, 23.3-24.5% Fe2O3, 5.7-8.4% SiO2	########	-60.71667		
141	Bolivia	Cochabamba		Capinota		P		########	-66.25000	100 km ENE of Oruro.	
142	Bolivia	La Paz		Caranavi		P		########	-67.55000		
143	Bolivia	Potosi		Chacarilla		P	24% P2O5	########	-65.45111	45 miles WNW of Oruro.	
144	Bolivia	Potosi		Sud Chichas area		P	9% P2O5	########	-65.28333	Location is 40 km south of Sucre.	1951
145	Brazil			Caiapo		P Ba Nb REE					
146	Brazil			Jaquia		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
133				Unknown				Commission for Geological Map of the World, 1968a			
134				Unknown				Commission for Geological Map of the World, 1968a			
135	Past production	>0.2 Mtpa prior to WWI						NIMA, 2000	Mew, 1980; British Sulphur Corporation, 1987		
136	Producer (1987)	<0.1 Mtpa			7 Mt @14-18% P2O5 (1936)			NIMA, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987		
137	Exhausted							NIMA, 2000	de Kun, 1987		
138					4 Mt strippable reserves			Slansky. 1986; Rand McNally, 1981	de Kun, 1987; Mew, 1980; Slansky, 1986; Lucas and others, 1986		
139				Unknown				ESCAP, 1991	ESCAP, 1991		
140	None						Up to 25% P2O5 locally, up to 0.12% U.	Woolley, 1987	Litherland and others, 1986; Woolley, 1987; British Sulphur Corporation, 1987		BL30242
141	None				Resource--2.8 Mt (1994); 1.2 Mt @ 25.4% P2O5 (in horizon 37)		Only about 20% of resource could be mined by surface methods.	British Sulphur Corporation, 1987	Arduz and others, 1991; Notholt, 1994; Appleton, 1994; British Sulphur Corporation, 1987		
142	None			S				MASMILS, 2000	U.S. Geological Survey Mineral Resources Data System, 2000	3.35E+09	BL20076
143				S				MASMILS, 2000	Notholt, 1994	3.35E+09	
144	Small past producer			S			Very small production in 1952.		Notholt, 1994		
145									USGS files; Woolley, 1987		
146									USGS files		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
147	Brazil	Bahia		Campo Alegre de Lourdes		P				820 km W of Salvador de Bahia.	
148	Brazil	Bahia	Ipirá	Panelas (Ipira)		P		########	-40.00000		
149	Brazil	Bahia		Irece		P Pb Zb		########	-41.85000		
150	Brazil	Bahia	Itambe	Lorena I, II		P		########	-40.56667		
151	Brazil	Ceara		Itataia		P U		-4.50139	-39.30000		
152	Brazil	Goias		Cabeceiras		P	10-15% P2O5	########	-46.98333	Location is for the town of Cabeceiras.	
153	Brazil	Goias		Campos Belos - Monte Alegre		P	Average 15-17% P2O5 (up to 22% P2O5).	########	-46.88333	Location is for the town of Campos Belos.	
154	Brazil	Goias	Ouvidor	Catalao I		P Nb Ti REE VRM U		########	-47.80000	Alternate location from Azevedo Branco (1984) at 18-15-S, 47-47-W.	1968
155	Brazil	Goias	Catalão-Ouvidor	Catalao II		Nb REE P					
156	Brazil	Goias	Catalão-Ouvidor	Chapadao		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
147	Under Development (1988)				Estimated reserves: 20 Mt @ 18% apatite + 50 Mt @ 8% P2O5 (1988)	Companhia Brasileira de Metalurgia e Mineracao (1988)			Industrial Minerals, 1987; Industrial Minerals, 1988		
148	None				0.5 Mt @ 30% P2O5 (1976)			MASMILS, 2000	Lima, 1976; MASMILS, 2000; British Sulphur Corporation, 1964	3.51E+09	
149				U	40 Mt@ 16% P2O5 (1994)			MASMILS, 2000	CPRM, 1999	3.51E+09	I004020
150	None				0.7 Mt @ 17% P2O5 (1984)			Azevedo Branco, 1984	Azevedo Branco, 1984		
151				S	18 Mt P2O5 (1994)			MASMILS, 2000	CPRM, 1999	3.51E+09	TC42778
152	None (1986)						Of probable limited economic interest.	Dardenne and others, 1986; Rand McNalley, 1981	Dardenne and others, 1986		
153	Not economic (1986)						Of probable limited economic interest.	Dardenne and others, 1986; Rand McNalley, 1981	Dardenne and others, 1986		
154	Active producer (2001)	Capacity: GOIASFERTIL- 0.95 Mt phosphate conc (2001); concentrate was 38% P2O5 in 1982	No data	S	FOSFAGO: 80 Mt @ 12% P2O5 (1979, R1E); GOIASFERTIL: 147 Mt @ 8.9% P2O5 (1979, R1E)	Fosfago and Goiasfertil		Carvalho and Bressan, 1989; Azevedo Branco, 1984	Azevedo Branco, 1984; Gierth and Baecker, 1986; Woolley, 1987; Morteani and Preinfalk, 1996; Azevedo Branco, 1984; S. Jasinki, written commun., 2001	3.51E+09	W00141 5
155									USGS files		
156	Past Producer (2001)	capacity 0.63 Mtpa			250 Mt @ 5% P2O5 (1976)	Fosfatos de Goias SA (Fosfago)			Lima, 1976; Russell, 1987; S. Jasinski, written commun., 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
157	Brazil	Goias		Formosa		P		########	-47.33333	Location is for the town of Formosa.	
158	Brazil	Goias		Nova Roma		P	Average 15-17% P2O5 (up to 22% P2O5).	########	-46.95000	Location is for the town of Nova Roma.	
159	Brazil	Goias		Ouvidor		P		########	-47.78333		
160	Brazil	Minas Gerais	Araxa	Araxa	Barreiro	P Nb Ba Ti U Fe REE		########	-46.93333	8 km south of Araxa, Minas Gerais State.	1930's
161	Brazil	Minas Gerais	Abaeté	Cedro do Abaete		P	33.7% P2O5, 44.84% CaO, 11.41% SiO2, 2.75% Al2O3, 2.59% H2O + CO2, 1.7% FeO, 0.97% Cl, 0.96% K2O, 0.34% MnO, 0.22% Na2O, 0.18% SO3, 0.10% MgO, 0.05% TiO2	########	-45.78333		1961
162	Brazil	Minas Gerais	Patos de Minas	Patos de Minas		P	18.1% P2O5, 24.1% CaO, 1.6% F, 3.5% Fe2O3, 29.5% SiO2, 8.4% Al2O3	########	-46.75000		1974

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
157	Not economic (1986)						Of probable limited economic interest.	Dardenne and others, 1986; Rand McNalley, 1981	Dardenne and others, 1986		
158	Not economic (1986)						Of probable limited economic interest.	Dardenne and others, 1986; Rand McNalley, 1981	Dardenne and others, 1986		
159	Active producer (1995)	Capacity 0.7 Mtpa		S		Copebrás SA	Production for fertilizers and STPP for detergents. Mine plus processing plant.	U.S. Geological Survey Mineral Resources Data System, 2000	Griffiths, 1995b; Kendall, 1996		W700659
160	Active producer (1989)	Capacity is 1.2 Mtpa (2001); phosphate conc was 35% P2O5 in 1979-80	No data	S	273 Mt ore @13.1% P2O5 (R1E, 1979); 114 Mt @ 14.94% P2O5 (1994)	Araxa SA Fertilizantes e Productos Quimicos (Arafértil) and CBMM	This is the world's largest Nb reserve. Also produces Nb.	Silva, 1986	Harben and Kuzvart, 1996; Silva, 1986; Woolley, 1987; Castor, 1994; Morteani and Preinfalk, 1996; Azevedo Branco, 1984; S. Jasinski, written commun., 2001; CPRM, 1999	3.51E+09	W001062
161	Not economic (1989)				1 Mt @ 10-34% P2O5 (1969); 0.1 Mt @ 5-12% P2O5 (1984)		Resource estimates from Dardenne and others (1986).	Azevedo Branco, 1984	Azevedo Branco, 1984; Foose, 1993; Notholt and others, 1989b		W002362
162			None	No data	329.3 Mt @12.6% P2O5 (R1E, 1979); 106 Mt @ 8% P2O5 (R2E, 1979); 500 Mt @ 11% P2O5 (1986)	Fertilizantes Fosfatados SA (Fosfértil)		Damasceno, 1989	Notholt, 1994; Dardenne and others, 1986; Cook and O'Brien, 1990	3.51E+09	W700052, ISM0389

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
163	Brazil	Minas Gerais	Patos de Minas	Patos de Minas	Lagamar Mine (Lanamar)	P	27.4% P2O5, 39.6% CaO, 2.6% F, 2.4% Fe2O3, 19.2% SiO2, 4.6% Al2O3	########	-46.90000	Location is estimated; 25 km from Rocinha Mine.	
164	Brazil	Minas Gerais		Patos de Minas	Rocinha Mine	P		########	-46.91667		~ 1967
165	Brazil	Minas Gerais	Patrocino	Patrocino	Salitre I	P Ti Nb		########	-46.75000		
166	Brazil	Minas Gerais	Patrocino	Patrocino	Serra Negra	P Ti		########	-46.75000		
167	Brazil	Minas Gerais		Tapira		P Ti Nb VRM REE		########	-46.83333		
168	Brazil	Para		Itacupim		P BAUX		-1.05000	-46.16667		
169	Brazil	Paraiba		Alhandra-Conde		P		-7.33333	-34.91667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
163	Past producer (2001)	0.2 Mtpa (1986)			Reserves-- 5 Mt @ 35-38% P2O5 (1975)	Adubos Trevo SA	May be an extension of Rocinha mineralization.	Estimated from Dardenne and others, 1986 and Rand McNalley, 1981	Russell, 1987, Mew, 1980; Dardenne and others, 1986; McClellan and Saavedra, 1986; S. Jasinski, written commun., 2001		
164	Past producer (2001)	0.20-0.25 Mtpa concentrate @ 25% P2O5 since 1976			Reserves: >200 Mt @ 11-13% P2O5 (1986)			Azevedo Branco, 1984	Notholt, 1994; Azevedo Branco, 1984; Dardenne and others, 1986; Damasceno, 1989; S. Jasinski, written commun., 2001		TC42679
165	None				200 Mt phosphate (1984)	CVRD		Azevedo Branco, 1984	Azevedo Branco, 1984; CPRM, 1999		ISM0764, ISM0768
166	None							Azevedo Branco, 1984	Azevedo Branco, 1984; CPRM, 1999		
167	Active Producer	12 Mt @ 8.6% P2O5 (1980); 1.45 Mt phosphate conc capacity (2001)	No data	S	603.6 Mt @ 8.6% P2O5 (R1E, 1978); 145.4 Mt @ 8.6% P2O5 (R2E, 1978); 318 Mt @ 8.3% P2O5 (1994)	Fertilizantes Fosfatados SA (Fosfértil)	Concentrate reported as 36% P2O5 (1980).	MASMILS, 2000	Harben and Kuzvart, 1996; Harben and Bates, 1990; Harben, 1984; Woolley, 1987; Azevedo Branco, 1984; S. Jasinski, written commun., 2001; CPRM, 1999	3.51E+09	W001064
168	None							Azevedo Branco, 1984	Azevedo Branco, 1984		TC30236
169	None (1984)			Unknown				Azevedo Branco, 1984	Azevedo Branco, 1984; Foose, 1993; CPRM, 1999		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
170	Brazil	Paraiba		Joao Pessoa - Rio Tinto		P	Albuquerque and Giannerini report average grades in area of 21% P2O5; Azevedo Branco reports 4-10% P2O5.	-6.83333	-34.88333		
171	Brazil	Paraiba	Monteiro	Diversos (Monteiro)		P		-7.85000	-37.08333		
172	Brazil	Paraiba	Sume	Sume	Olho d'Agua	P		-7.71667	-36.91700		
173	Brazil	Paraiba or Pernambuco		Paulista		P U		-7.75000	-34.75000	Near township of Paulista, Pernambuco State.	1951
174	Brazil	Pernambuco		Goiania		P CAL		-7.61667	-34.91667		
175	Brazil	Pernambuco		Olinda		P U		-7.95000	-34.86667		
176	Brazil	Piura		Picos		P U		-7.11667	-41.35000		
177	Brazil	Piura		Pimenteiras		P U		-6.21667	-41.45000		
178	Brazil	Piura	Sao Joao Do Piaui	Sao Joao Do Piaui		P	5.3-7.7% P2O5	-8.25000	-42.03300	Northest of Sao Joao do Piaui.	
179	Brazil	Rio Grande Do Norte		Macau		P		-5.83333	-36.61667		
180	Brazil	Santa Catarina	Anitapolis	Anitapolis		P Fe REE		########	-49.10000		1927
181	Brazil	Sao Paulo		Cajati	Cajati	P		########	-48.11667	Lat-long is for the town of Cajati.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
170	None (1984)			S				Azevedo Branco, 1984	Azevedo Branco, 1984; Foose, 1993; CPRM, 1999		
171				Unknown	0.108 Mt @ 33% P2O5 (1976)			MASMILS, 2000	Lima, 1976; MASMILS, 2000; British Sulphur Corporation, 1964	3.51E+09	
172				Unknown				Azevedo Branco, 1984	Azevedo Branco, 1984		
173		7,959 t ore, 1980; 3,070 t phosphate conc, 1980	No data	S	30.56 Mt @ 21% P2O5 (R1E, 1980); 11.18 Mt (R2S, 1980)			Albuquerque and Giannerini, 1989	Albuquerque and Giannerini, 1989	3.51E+09	ISM0388
174	None (1984)			Unknown	18 Mt @ 8% P2O5 (1984)			Azevedo Branco, 1984	Azevedo Branco, 1984; Foose, 1993; CPRM, 1999		
175				S	96 Mt @ 18% P2O5 (1984)			Azevedo Branco, 1984	Azevedo Branco, 1984; MASMILS	3.51E+09	W002352
176	None			Unknown				Azevedo Branco, 1984	Foose, 1993; Azevedo Branco, 1984		
177	None			Unknown				Azevedo Branco, 1984	Foose, 1993; Azevedo Branco, 1984		
178	None			Unknown				Azevedo Branco, 1984	Foose, 1993; Azevedo Branco, 1984		
179				Unknown				MASMILS, 2000		3.51E+09	
180		Planned capacity (1983) 0.6 Mtpa conc @ 36% P2O5	No data	S	60 Mt @ 8.5% P2O5 (R1E, 1980); 260 Mt @ 6% P2O5 (R1E, 1980)			MASMILS, 2000	Azevedo Branco, 1984; Mariano, 1989	3.51E+09	W001053
181	Active Mine (1995)	5 Mt /yr		S		Serrana SA de Mineraçao	Production used for fertilizers.	NIMA, 2000	Griffiths, 1995b; Kendall, 1996		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
182	Brazil	Sao Paulo	Ipero	Ipanema (Morro de Arocoiba)		P VRM FE Ti		########	-47.58333	Abot 20 miles SW of Sorocoba.	
183	Brazil	Sao Paulo	Registro, Juquia	Morro Do Serrote (Serrote Complex)	Guaviruva Mine	P		########	-47.78000	2 km S of Serrote.	
184	Brazil	Sao Paulo	Registro, Juquia	Morro Do Serrote (Serrote Complex)	Serrote	P Nb Ba Fe LST		########	-47.66700		
185	Brazil	Sao Paulo	Ribeira	Barra de Itapirapuã		P					
186	Brazil	Sao Paulo	Jacupiranga	Jacupiranga Complex		P CAR CLY Fe		########	-48.05000		1940
187	Bulgaria			Tchechliantzi		P		42.58333	22.50000		
188	Bulgaria			Provadija		P		43.18333	27.43333	Lat-long is for the town of Provadija.	
189	Bulgaria			Pleven		P	Beds containing 9-12% P2O5 and 10-15% P2o5 respectively	43.41667	24.61667	Lat-long is for the town of Pleven.	
190	Burkina Faso (Upper Volta)			Aloub Djouana (Abobo-Djuana)		P	28% P2O5 average grade	11.80000	2.13333	Location is best estimate from map and description in Maurin and others, (1989). Deposit is near Alub.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
182	Past producer (1980)			S	120Mt @ 6.7% P2O5; 28 Mt @ 7.5% P2O5 (1994)	Serrana de Mienracao (1980)		Azevedo Branco, 1984	Harben and Kuzvart, 1996; MASMILS; Acevedo Branco, 1984; Mew, 1980; Born, 1989b; CPRM, 1999	3.51E+09	
183	Past producer (1980)			S	5 Mt @ 20% P2O5		Open pit has been flooded.	MASMILS, 2000; British Sulphur Corporation, 1964	Mew, 1980	3.51E+09	
184				Unknown	0.33 Mt@ 16% P2O5 (1984)			Foose, 1993	Harben and Kuzvart, 1996; Mew, 1980; Azevedo Branco, 1984		W001054
185									USGS files		
186	Active producer	ave 5 Mt @ 4.9% P2O5 (1996); 0.5 Mtpa phos conc (2001)	1.5 Mt ore, 1943-64, 0.5 Mt phosphate conc, 1943-64	S	100 Mt @13.1% P2O5 (R1E, 1980); 66 Mt @ 5-34% P2O5 (1994)	Serrana SA de Mineraçào	Complex covers an area of 65 sq km.	MASMILS, 2000	Harben and Kuzvart, 1996; Born, 1989a; Azevedo Branco, 1984; S. Jasinski, written commun., 2001: CPRM, 1999	3.51E+09	W001055
187								Commission for Geological Map of the World, 1983			
188	None							NIMA, 2000			
189	None							NIMA, 2000	Mew, 1980		
190	None			S			Questionable economic potential.	Maurin and others, 1989	de Kun, 1987; Notholt, 1994; Slansky, 1986; Lucas and others, 1986; Trompette, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
191	Burkina Faso (Upper Volta)			Arli (Arly)		P	18 samples: 21.7-29.1% SiO2, 1.06-1.07% Al2O4, 0.13% MgO, 41.6-43.4% CaO, 0.9-1.04% Fe2O3, 28.5-29.6% P2O5	11.58333	1.41667	SW of Kodjari.	
192	Burkina Faso (Upper Volta)			Diapega		P		12.13333	1.75000		
193	Burkina Faso (Upper Volta)	Niamey		Kodjari		P	Surface ore: 29.3% P2O5, 17.6% SiO2. Carbonate ore: 26.2% P2O5, 16.4% SiO2. Intermediate ore: 25.4% P2O5, 25.2% SiO2.	12.01667	1.91667		
194	Burundi			Matongo (Upper Ruvubu complex)		P CAR	Grade is low, about 11% P2O5. Multi-layered phosphate ore bodies lie above the buried surface of the carbonatite.	-2.86667	29.55000		
195	Cambodia	Battambang		Phnom Ban Teay Neang		P	8.72-37.28% P2O5, .102-7.63% Al2O3 + Fe2O3, 31.53-52.22% CaO	13.50000	103.01667		
196											
197	Cambodia	Battambang		Phnom Sampeou		P	37.41% P2O5, botryoidal, also 2.20% al2O3 + Fe2O3, 50.46% CaO; 32.59% P2O5, crustified, also 4.12% Al2O3 + Fe2O3, 46.49% CaO; 26.74% P2O5, conglomeritic, also 15.33% Al2O3 + Fe2O3, 27.77% CaO; 23.17% P2O5, green-yellow phosphorite, also 37.78% Al2O3 + Fe2O3	13.01670	103.10000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
191					2.8 Mt @ 29% P2O5			British Sulphur Corporation, 1964	de Kun, 1987; Notholt, 1994; Slansky, 1986; Lucas and others, 1986; Trompette, 1989		I009125
192					100 Mt @ 27-33% P2O5 (1980)			British Sulphur Corporation, 1964	Mew, 1980		
193	Active (1989)			S	60 Mt @ 25% P2O5 (1989)			British Sulphur Corporation, 1964	de Kun, 1987; Mew, 1980; Notholt, 1994; Slansky, 1986; Lucas and others, 1986; Maurin and others, 1989	7.511E+09	I009124
194	None (1987)				Proven-- 30 Mt @ 11% P2O5 (northern part of orebody)			Woolley, 2001	de Kun, 1987; Woolley, 2001		
195	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
196											
197	None							U.S. Geological Survey Mineral Resources Data System, 2000	ESCAP, 1993a; British Sulphur Corporation, 1987		W007125

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
198	Cambodia	Battambang		Phnom Thoch		P	37.85% P2O5, botryoidal, also 1.32% Al2O3 + Fe2O3, 51.88% CaO; 24.85% P2O5, conglomeritic, also 4.4.5% Al2O3 + Fe2O3, 32.39% CaO; 33.26% P2O5, sponge-like, also 2.06% Al2O3 + Fe2O3, 2.11% CaO	13.40000	103.01667		
199	Cambodia	Battambang		Phnom Thom and Prasat		P	19.82% P2O5 for conglomeritic; 30.13% P2O5 for botryoidal, also 3.3.5% Al2O3 + Fe2O3, 40.34% CaO; 31.22% PeO5 for crustified, also 1.56% Al2O3 + Fe2O3, 43.28% CaO	13.46667	103.01667		
200	Cambodia	Battambang		Sisophon area/Phnom Bak I and II		P	23.34-33.76% P2O5, 6.46-10.22% Al2O3 + Fe2O3, 34.40-41.83% CaO	13.60000	102.95000		
201	Cambodia	Battambang		Sisophon area/Phnom Chung Chiang		P	22.75% P2O5, 5.65 % Al2O3 + Fe2O3, 42.44% CaO	13.60000	102.95000		
202	Cambodia	Kampot		Phnom Bak		P		10.58333	104.46667		
203	Cambodia	Kampot		Phnom Kanlang		P		10.63333	104.56667		
204	Cambodia	Kampot		Phnom Loang		P		10.76667	104.38333		
205	Cambodia	Kampot		Phnom Totung		P	9.26-23.12% P2O5, brecciated and silty phosphorite, also 2.05-22.77% Al2O3 + Fe2O3, 15.45-38.46% CaO; 8.14% P2O5, conglomeritic phosphorite, also 7.79% Al2O3 + Fe2O3, 39.59% CaO.	10.68333	104.53333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
198	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
199	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
200	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
201	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
202	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
203	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
204	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		
205	None			Unknown				ESCAP, 1993a	ESCAP, 1993a		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
206	Cambodia	Kampot		Tuk Meas (Tuk Teas)		P		10.81670	104.53330		
207	Cambodia	Pursat		Phnom Cheam		P		11.68330	103.90000		
208	Canada			Burritt Island		P Nb					
209	Canada			Callender Bay		P Ba Nb Cu Mo					
210	Canada			Clay-Howells		P	1.9-4.8% P2O5				
211	Canada			Crevier		P	4.0% P2O5				
212	Canada			Firesand		P	0.1-7.0% P2O5				
213	Canada			Iron Island		P Ni Cu					
214	Canada			Kirkland Lake		P					
215	Canada			Mercier		P	1.9-5.5% P2O5				
216	Canada			Prairie		P	0.9-9.2% P2O5				
217	Canada			Schryburt Lake		Ti P Nb F	2.5-19.6% P2O5				
218	Canada			Seabrook		P	0.6-7.7% P2O5				
219	Canada			St. Veronique		P	1.2-4.0% P2O5				
220	Canada			Township 107		P REE Nb	1.0-4.9% P2O5				
221	Canada	British Columbia		Fernie Formation		P	10-30.8% P2O5	49.50000	-115.00000		1915
222	Canada	New Brunswick		McKeel Lake		P Sn Zr U REE		45.48417	-66.18194		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
206	Inactive (1988)	12000t/a		Unknown	0.320 Mt @ 11-26% P2O5 (1968)	Société Khmere des Phosphates (1980)	Production in the 1920's and from 1961-1980 or later.	U.S. Geological Survey Mineral Resources Data System, 2000	ESCAP, 1993a; Mew, 1980		W007132
207	None							U.S. Geological Survey Mineral Resources Data System, 2000	ESCAP, 1993a; British Sulphur Corporation, 1987		W007124
208									USGS files		
209									USGS files		
210	None								British Sulphur Corporation, 1987		
211	None								British Sulphur Corporation, 1987		
212	None								British Sulphur Corporation, 1987		
213									USGS files		
214											
215	None								British Sulphur Corporation, 1987		
216	None								British Sulphur Corporation, 1987		
217	None								British Sulphur Corporation, 1987		
218	None								British Sulphur Corporation, 1987		
219	None								British Sulphur Corporation, 1987		
220	None								British Sulphur Corporation, 1987		
221	None				Several million tonnes		Complex geology and beneficiation problems have hindered development.	Foose, 1993	Notholt and others, 1989a		
222	None								New Brunswick Department of Natural Resources and Energy, 2001, accessed at URL http://www.gnb.ca/0078/minerals/index.asp		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
223	Canada	New Brunswick		McQuade Brook		P U		46.23222	-64.78972		
224	Canada	Ontario		Argor (James Bay)		P Nb F	2.7-4.4% P2O5				
225	Canada	Ontario		Big Beaver House		P Cu Ba Nb	1.4-5.3% P2O5				
226	Canada	Ontario		Carb Lake		P REE, Nb, F	2.3-4.8% P2O5				
227	Canada	Ontario		Cargill		P REE VRM Nb Ti Cu	2.0-41.0% P2O5	49.30000	-82.81667		1975
228	Canada	Ontario		Kapuskasing	Kapuskasing Mine	P		49.41667	-82.43333	Described as near Kapuskasing. Lat-long for the town of Kapuskasing.	
229	Canada	Ontario		Lackner Lake/Nemegos (Multi-Minerals)		Fe P Nb REE Ti	9.2% P2O5	47.75000	-83.16667	20 km S of Nemegosenda complex and 11 km from Nemegos.	1959
230	Canada	Ontario		Manitou Islands Complex		P U Nb				On Lake Nipissing, 8 km SW of North Bay.	
231	Canada	Ontario		Martison Lake		Nb P REE		50.31667	-83.40000	75 km N of Hearst.	1980

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
223	None								New Brunswick Department of Natural Resources and Energy, 2001, accessed at URL http://www.gnb.ca/0078/minerals/index.asp		
224	None								USGS files; British Sulphur Corporation, 1987		
225	None								USGS files; British Sulphur Corporation, 1987		
226	None								USGS files; British Sulphur Corporation, 1987		
227	None	None	None		62 Mt @ 19.6% P2O5 (1984)			MASMILS, 2000	Erdosh, 1979; Dawson and Currie, 1984; British Sulphur Corporation, 1987	1.22E+09	ISM0334
228	Active Mine (2001)	Capacity 1.2 Mtpa (2001)		S		Agrium (1998)	Anticipated to come on stream in late 1999. Will supply Redwater, Alberta plant.	NIMA, 2000	Agrium Website; Jasinski, 1998, 2000; S. Jasinski, written commun., 2001		
229	None	None			4.5 Mt ore, 21.9% apatite, 0.173% Nb2O5, 69.6% magnetite (RIM, 1959)	Multi-Minerals Ltd. (1982)		Woolley, 1987	Harben and Kuzvart, 1996; Pell, 1996; British Sulphur Corporation, 1987; Notholt and others, 1989a	1.22E+09	ISM0336
230	None								USGS files; British Sulphur Corporation, 1987		
231	Active Prospect (1999)	None			Resource base (1999): 113 Mt @ 21.4% P2O5	MCK Mining Corp. (1999)	Development hampered by lack of all weather access.	Canada Department of Energy, Mines, and Resources, 1984	Guillet, 1985; Jasinski, 2000; Potapoff, 1989	1.22E+09	ISM0335

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
232	Canada	Ontario		Nemegosenda Complex (Dominion Gulf)		Nb REE P U Th Zr	1.1-11.6% P2O5	48.00000	-83.08333	25 km NE of Chapleau.	
233	Canada	Quebec		Baie-Comeau		P		49.21667	-68.15000	Lat-long for the town of Baie-Comeau	
234	Canada	Quebec		Buckingham Area		P		45.70000	-75.46700		
235	Canada	Quebec		Ile Bizard		P Ti Nb		45.48333	-73.90000		
236	Canada	Quebec		Oka		Nb P REE	1.8-11.6% P2O5	45.50000	-74.00000	On N side of Lake of Two Mountains.	
237	Canada	Quebec		Sept-Iles		P Ti V		50.20000	-66.38333	Lat-long for the town of Sept-Iles.	
238	Canada	Quebec	Simard Township	St. Honoré (Chicoutimi, SOQUEM)		Nb REE P	0.5-6.9% P2O5	48.55000	-71.06667	13 km N of Chicoutimi.	
239	Canada	Quebec	Hull Township		McClelland Mine	P	apatite: 39.6% P2O5, 54.2% CaO, 1.0% Fe2O3 + Al2O3, 0.35% MgO, 0.77% Na2O + K2O, 0.66% CO2, 0.44% Cl, 3.30% F, 0.32% H2O, 0.48% SiO2 + insolubles.				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
232	None					Dominion Gulf		Woolley, 1987	British Sulphur Corporation, 1987		
233								NIMA, 2001	USGS files		
234				Unknown				Foose, 1993			
235								NIMA, 2001	USGS files		
236	None						Past production of Nb.	Woolley, 1987	Notholt and others, 1989a; Woolley, 1987; Pell, 1996; Mariano, 1989; Chakhmouradian, 1996; Moller, 1989; British Sulphur Corporation, 1987		
237	Active Prospect (1997)				Probable: 107.8 Mt @ 6.19% P2O5 and 8.41% TiO2 (1996)	Norsk Hydro & Soquem (1998)		NIMA, 2000	Jasinski, 1998; McCann, 1998; McCann and Cimon, 2001		
238						Soquem	Deposit is mined for Nb.	Woolley, 1987	Notholt and others, 1989a; Harben and Kuzvart, 1996; Singer, 1998; Woolley, 1987; Pell, 1996; USGS files; British Sulphur Corporation, 1987		
239	Past producer								British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
240	Canada	Quebec	Hull Township		Scott Mine	P	apatite: 40.15% P2O5, 53.3% CaO, 1.3% Fe2O3 + Al2O3, 0.25% MgO, 0.64% Na2O + K2O, 0.40% Cl, 3.20% F, 0.36% H2O, 1.8% SiO2 + insolubles.				
241	Canada	Quebec	Templeton Township		Rainville Mine	P	apatite: 37.5% P2O5, 54.4% CaO, 0.72% Fe2O3 + Al2O3, 0.31% MgO, 0.88% Na2O + K2O, 1.75% CO2, 0.67% Cl, 3.30% F, 0.12% H2O, 0.64% SiO2 + insolubles.				
242	Canada	Quebec	Bowman Township		High Falls Mine	P	apatite: 39.4% P2O5, 55.7% CaO, 0.72% Fe2O3 + Al2O3, 0.20% MgO, 0.8% Na2O + K2O, 0.65% Cl, 3.10% F, 0.28% H2O, 0.06% SiO2 + insolubles.				
243	Canada	Quebec	Templeton Township		Blackburn Mine	P	apatite: 39.39% P2O5, 55.64% CaO, 0.72% Fe2O3 + Al2O3, 0.33% MgO, 0.75% Na2O + K2O, 0.5% Cl, 3.05% F, 0.20% H2O, 0.36% SiO2 + insolubles.				
244	Central African Republic			Bakouma		P U					
245	Chile			Bahia Inglesia (Bahia Inglesa)		P	70 ppm U3O8				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
240	Past producer								British Sulphur Corporation, 1987		
241	Past producer								British Sulphur Corporation, 1987		
242	Past producer								British Sulphur Corporation, 1987		
243	Past producer								British Sulphur Corporation, 1987		
244	None (1987)				6.3 Mt @ 14-27% P2O5 (1987)				de Kun, 1987; British Sulphur Corporation, 1987; Slansky, 1986		
245					Resource: 88 Mt @ 7-17% P2O5 (1994)	Corfu (1987)	Reserves are of questionable quality. Site is 70 km N of Copiapo.		Industrial Minerals, 1987b; Notholt, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
246	Chile			Bahia Salado		P					
247	Chile			Bahia Tongoy-Guenaqueros		P					
248	Chile			La Serena		P				South of La Serena.	
249	Chile	Atacama or Antofagasto		Le Soledad		P	As high as 32-36% P2O5.	########	-70.04167		
250	Chile	Atacama		Infiernillo		P					
251	Chile	Atacama		Cielo		P					
252	Chile	Atacama		Arrayan		P					
253	Chile	Atacama		El Pingo		P		########	-70.96670		
254	Chile	Atacama		Pirina		P					
255	Chile	Atacama			Victoria Mine	P				In the Sierra Aspera, about 20 km N of Pueblo Hundido.	
256	Chile	Antofagasta		Mejillones deposit		P DIT		########	-70.40000		
257	Chile	Coquimbo		Escobas		P					
258	Chile	Coquimbo		Fósiles	Reserva, Veta 30, Veta 10	P					
259	Chile	Coquimbo		Hornos		P					
260	Chile	Coquimbo		Lagunillas		P					
261	Chile	Coquimbo		Las Choros	Gilda, California, Berenguela, Zapallo	P					
262	Chile	Coquimbo		Las Lajas		P					
263	Chile	Coquimbo		Mathilde		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
246					Resource: 30 Mt @ 17% P2O5 (1994)				Notholt, 1994		
247					Resource: 100 Mt @ 7% P2O5 (1994)				Notholt, 1994		
248	None				5-6 Mt phosphate rock (1994)				Notholt, 1994		
249	None				0.1 Mt @ 25% P2O5 (1981)			Naranjo and Puig, 1984	Naranjo and Puig, 1984		
250	Small Past Producer						Production was subsidized.		Mew, 1980		
251	Small Past Producer						Production was subsidized.		Mew, 1980		
252	Small Past Producer						Production was subsidized.		Mew, 1980		
253	Small Past Producer						Production was subsidized.	NIMA, 2000	Mew, 1980		
254	Small Past Producer						Production was subsidized.		Mew, 1980		
255	Small Past Producer						Production was subsidized.		Mew, 1980		
256	Not mined (1987)				56 Mt @ 6-7% P2O5 (1989);	Corfu (1987)	Ore is of questionable quality.	Valdebenito M., 1989	Notholt, 1994; Mew, 1980		
257	Small Past Producer						Production was subsidized.		Mew, 1980		
258	Small Past Producer						Production was subsidized.		Mew, 1980		
259	Small Past Producer						Production was subsidized.		Mew, 1980		
260	Small Past Producer						Production was subsidized.		Mew, 1980		
261	Small Past Producer						Production was subsidized.		Mew, 1980		
262	Small Past Producer						Production was subsidized.		Mew, 1980		
263	Small Past Producer						Production was subsidized.		Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
264	China	Anhui		Feng-T'ai (Fengtai)		P	2-5% P2O5 (phosphatic limestone); 25-32% P2O5 (phosphate nodules)	32.66667	116.75000		
265	China	Anhui			Dahengshan Phosphate Mine	P		31.75000	117.70000		
266	China	Anhui			Nanchong Phosphate Mine	P		30.15000	116.11667		
267	China	Guangdong		Chanchiang (Zhanjiang)		P		21.20000	110.35000		
268	China	Guangxi		Balong		P		23.13333	107.10000		
269	China	Guangxi		Du'an	Du'an	P	Average 8-12% P2O5 grades; Ore bed I: 9.80-15.86% P2O5, 39.77-50.14% SiO2, 4.11-5.01% Fe2O3, 7.41-10.35% Al2O3, 14.72-23.73% CaO, 0.35-0.51% MgO, 1.12-1.53% CO2, 0.921-1.33% F, 0.02-0.05% Na2O, 0.009%U, 0.0067-0.047% V2O5; Ore bed II: 9.02-12.06% P2O5, 46.64-53.87% SiO2, 3.06-3.62% Fe2O3, 9.66-11.44% Al2O3, 13.79-16.53% CaO, 0.26-0.51% MgO, 0.38-1.73% CO2, 0.999-1.200% F, 0.01-0.02% Na2O, 0.005-0.0065% U, 0.147-0.165% V2O5	23.33333	106.63333		
270	China	Guangxi	Baise	Yilong		P					
271	China	Guangxi	Wengyuan			P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
264	Past (1974), active?	0.08 Mt @ 20% P2O5 (1974)	No data	No data			Average content of 20% P2O5.	MASMILS, 2000	British Sulphur Corporation, 1987	5.7E+09	ISM0460
265				Unknown				MASMILS, 2000		5.7E+09	
266	Past, active?			Unknown				MASMILS, 2000		5.7E+09	
267	Past, active?	No data	No data	No data				MASMILS, 2000	British Sulphur Corporation, 1987	5.7E+09	ISM0469
268				Unknown				MASMILS, 2000		5.7E+09	
269	Past, active?			Unknown			Chemical composition information from Li and others (1996)	MASMILS, 2000		5.7E+09	
270											
271											

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
272	China	Guizhou		Kaiyang	Kaiyang, Fuchan?	P	32-36% P2O5, 52-53% CaO, 3-4% SiO2, 3-4% F, 2.5-3.5% MgO, 1.5-1.8% Fe2O3, 10-30 ppm Cd	27.05000	106.91667		Mine established 1958
273	China	Guizhou		Xifeng		P		27.25000	106.83333		Mine established 1964
274	China	Guizhou		Zunyi		P		27.68667	106.90722	Location for Zunyi population center.	
275	China	Guizhou	Fuquan	Wengfu/Fuquan/Gaoping	Yingping Mine	P I	24.3-29.4% P2O5	27.00000	107.33333		
276	China	Guizhou	Fuquan	Wengfu/Fuquan/Gaoping	includes Yingping, Lanmaao and Mo Fang Mines	P		26.70000	107.55000	Location for Fuquan population center.	
277	China	Guizhou	Weng'an	Wenfu/Weng'an	Beidoushan (Weng'an Mine)	P		27.07139	107.47917		Mine established 1976
278	China	Guizhou	Weng'an	Wenfu/Weng'an/Baiyan	includes Datang, Chaoyanpo, and Nanpu mines	P		27.25000	106.83333		
279	China	Guizhou	Zhijin	Xinhua	Xinhua	P REE		26.70000	105.75000		
280	China	Hainan			Damao Mine	MN P		18.41667	109.65000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
272	Active Mine (1999)	Capacity > 3 Mtpa ore (actual production is half that)	No data	S	> 320. Mt (1999); 17.6% P2O5, 12.3% MgO	Kaiyang Phosphate Mining Adminstration	Integrated producer. First production in the 1960's.	MASMILS, 2000	Fountain, 1999; Wen Lu, 1998; Griffiths, 1995a; British Sulphur Corporation, 1987; McClellan and Saavedra, 1986	5.7E+09	ISM0458
273	Active Mine (1998)	0.1 Mt phosphate rock; 2000t capacity phosphorous yellow				Guizhou Xifeng Phosphate Mine		NIMA, 2000	Wen Lu, 1998; Griffiths, 1995a		
274	Unknown							NIMA, 2000	British Sulphur Corporation, 1987; Li, 1986		
275	Active Mine (1999)	> 1 Mtpa ore		S			Contains iodine-bearing apatite allowing a 65-70% recovery of iodine	MASMILS, 2000	Fountain, 1999; British Sulphur Corporation, 1987	5.7E+09	
276	Active Mine (1995)	2.5 Mtpa capacity (2001)			1999: 52 Mt (commercial); 815 Mt (total)	Chengda; Wengfu; private companies		NIMA, 2000	..		
277	Active Mine (1995)	0.2 Mt phosphate rock; 0.01 Mt phosphate rock powder				Guizhou Weng'an Phosphate Mine	Record information specific to Yingping mine.	NIMA, 2000	Griffiths, 1995a		
278	Active Mine (1998)	0.2 Mt phosphate rock; 0.01 Mt phosphate rock powder		Unknown	>50 Mt (1998)		Annual production information from Griffiths (1995)	MASMILS, 2000	Wen Lu, 1998; Li and others, 1996	5.7E+09	
279				Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998; Li and others, 1996		
280	Past producer (1979)			Unknown				MASMILS, 2000		5.7E+09	AD00025

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
281	China	Hebei		Chingshan (Jingshan)		P		31.01670	113.08330	Ching Shan Range about 200 km WNW of Wuhan. Wangi mine, being developed at present, is supposed to be situated in the Chungsiang-Chingshan area; Towshanto Suite.	
282	China	Hebei		Heishan		P					
283	China	Hebei		Maying		P					
284	China	Hebei	Chengde	Luoguozigou		P					
285	China	Hebei	Fengning	Zhaobingou		P	32.75% SiO2, 6.57% TiO2, 6.982% Al2O3, 15.77% Fe Total as oxide, 0.08% MnO, 3.48% mgO, 6.29% CaO, 5.25% P2O5, 1.11% na2O, 0.78% K2O				
286	China	Hebei	Yangyuan	Yaojiazhuang		P		40.07556	114.11833	Location for Yaojiazhuang population center and best estimate from map in Lu (1995).	
287	China	Hebei	Zhuolu	Fanshan (Fangshan)	Fanshan	P		40.36667	115.21667		1977
288	China	Henan	Lushan	Xinji		P		33.75000	102.96667	2.5 km north of Xinjizhai; Location for Lushan population center.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
281	Unknown	0.600 Mt ore @ 30% P2O5 (1980)	No data	U				U.S. Geological Survey Mineral Resources Data System, 2000			ISM0462
282	Unknown								Li and others, 1996		
283	Unknown								Li and others, 1996		
284	Unknown				>50 Mt (1998)				Wen Lu, 1998; Li and others, 1996		
285	Unknown				>50 Mt (1998)				Wen Lu, 1998; Li and others, 1996		
286	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
287	Active Mine (1999)	capacity 1.2 Mt phosphate rock; 0.390 Mt phosphate concentrate @ 34% P2O5 (1995)	None	S	>50 Mt (1999)	Hebei Fanshan Phosphate Mine	Produces relatively low grade ore at relatively high cost for Hubei Province fertilizer producers.	MASMILS, 2000	Fountain, 1999; Wen Lu, 1998; Griffiths, 1995a; British Sulphur Corporation, 1987; McClellan and Saavedra, 1986	5.7E+09	ISM0464
288	Unknown							Rand McNally, 1981	Li and others, 1996		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
289	China	Hubei			Dayukou Phosphate Mine	P		31.43333	112.30000		
290	China	Hubei		Chunghsiang		P		31.16667	112.58333		
291	China	Hubei		Hefeng		P		29.90000	110.03333	Location for Hefeng population center and best estimate from map in Lu (1995).	
292	China	Hubei	Baokang	Baizhu		P		31.95000	111.33333	Location for Baokang population center and best estimate from map in Lu (1995).	
293	China	Hubei	Dawu	Huangmailing	Huangmailing Phosphate Mine	P	41.66% SiO2, 7.70% Al2O3, 1.87% MnO, 23.33% CaO, 4.00% MgO, 3.79% K2O, 15.09% P2O5, 8.17% CO2, 0.92% F, 2.51% Fe2O3	31.48333	114.16667		Mine established 1973
294	China	Hubei	Yichang	Huaguoshu	Dianziping + Shukongping	P		30.80000	111.33333	Location for Yichang population center.	
295	China	Hubei	Yichang	Lixi-Dingjiahe		P		30.80000	111.33333	Location for Yichang population center.	
296	China	Hubei	Yichang	Xiaofeng		P		30.80000	111.33333	Location for Yichang population center.	
297	China	Hubei	Yichang	Yichang		P		30.80000	111.33333	Location for Yichang population center.	
298	China	Hubei	Yichang-Yuan'an	Yanchihe		P		30.80000	111.33333	Location for Yichang population center.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
289	Active Mine (2001)	Capacity is 1.5 Mtpa		S				MASMILS, 2000	British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001	5.7E+09	
290	Active?	0.600 Mt	No data	U				NIMA, 2000	ISMI		ISM0462
291	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
292	Unknown			Unknown	>50 Mt (1998)		Large mine in district is Baizhu	NIMA, 2000	Wen Lu, 1998		
293	Active Mine (1999)	1.2 Mtpa; 0.16 Mt Ca superphosphate; 0.040 Mt sulfuric acid		S	Reserves-- 75 Mt @ 24.1% P2O5 (2000)	State-owned; Huangmailing Phosphate Chemical Co.	Chemical composition information from Li and others (1996)	MASMILS, 2000	Fountain, 1999; Wen Lu, 1998; Griffiths, 1995a; British Sulphur Corporation, 1987; McClellan and Saavedra, 1986; Industrial Minerals, 2000b	5.7E+09	
294	Active Mine (1999)	2.5-3.0 Mt		S; U	Proven-- 40 Mt @ 22% P2O5 at Dianziping; + 30 Mt @ 23.5% P2O5 (1999)	Yichang Phosphate Rock Mine (state owned, 1999)	There are 2 large mining areas-- Dianziping and one other not named by Fountain.	MASMILS, 2000; NIMA, 2000	Fountain, 1999	5.7E+09	
295					>50 Mt (1998)			MASMILS, 2000; NIMA, 2000	Wen Lu, 1998		
296					>50 Mt (1998)			MASMILS, 2000; NIMA, 2000	Wen Lu, 1998	s	
297					Proven-- 90 Mt @ 23% P2O5; Probable + possible-- 360 Mt	Spur Ventures Inc. (1999)	Project has received China government approval.	MASMILS, 2000; NIMA, 2000	Jasinski, 2000		
298					>50 Mt (1998)			MASMILS, 2000; NIMA, 2000	Wen Lu, 1998		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
299	China	Hubei	Yuan'an		Wanji Phosphate Mine	P		31.76667	112.35000		
300	China	Hubei	Zhongxiang	Huji	Zhongxiang Phosphate Mine	P DOL		31.18333	112.40000		Mine established after 1963
301	China	Hubei	Zhongxiang	Jingxiang	Jingxiang phosphate Mine	P		31.03333	113.08333		Mine established 1965
302	China	Hunan			Huaquiao	P					
303	China	Hunan			Matian	P					
304	China	Hunan			Pushi	P		28.08333	110.10000	Location for Pushi population center.	
305	China	Hunan			Xixi Phosphate Mine	P	1,500,000t phosphate rock; 1,200t Mn	28.50000	110.18333		Mine established 1965
306	China	Hunan	Liuyang	Chayuanpo (Chayuanpu, Liuyang, Changsha, Yonghe?)	Liuyang Phosphate Mine	P		28.30000	113.85000	Alternate location from MRDS is 28.15, 113.63333.	
307	China	Hunan	Shimen	Dongshanfeng	Dongshanfeng phosphate Mine	P	Grade averages <20% P2O5, but as high as 26% P2O5 locally.				pre-1970
308	China	Hunan	Xiangtan	Huangjingping	Huangjingping	P		27.61667	112.63333	Location for Huangjingping population center.	
309	China	Jiangsu		Lianyungang (Tung-Hai, Lienyunkang, Donghai, Chu Shan)	Lianyungang Mine	P		34.73333	119.50000	Location for Lianyungang population center.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
299	Active Mine (1995)	Capacity is 1.5 Mtpa phosphate conc.		S		Yuan'an Jiunu Phosphate Mining Adminstration		MASMILS, 2000	Griffiths, 1995a; S. Jasinski, written commun., 2001	5.7E+09	
300	Active Mine (1998)	0.5 Mt phosphate rock; 0.050 Mt dolomite; 0.080 Mt fused calcium-magnesium phosphate		U	> 50 Mt; up to 28-35% P2O5	Fangmashan Phosphate Mining Administration	Annual production information from Griffiths (1995); resource information from World Survey of Phosphate Deposits (1987)	MASMILS, 2000	Wen Lu, 1998; Griffiths, 1995a	5.7E+09	
301	Active Mine (1995)	3.1 Mt phosphate rock		S; U		Hubei Jingxiang Phosphate Chemical Corporation		MASMILS, 2000	Griffiths, 1995a; Li and others, 1996	5.7E+09	
302									British Sulphur Corporation, 1987		
303	Past, active?								British Sulphur Corporation, 1987		
304	Past, active?							NIMA, 2000	British Sulphur Corporation, 1987		
305	Active Mine (1995)			Unknown		Hunan Xiangxi Xixi Phosphate Mine		MASMILS, 2000	Griffiths, 1995a	5.7E+09	
306	Active Mine (1999)	0.60 Mtpa ore		S		Changsha Village gov't (1999); Hunan Phosphorous Chemical Works (1995)	Deposit is fairly low grade, commonly <20% P2O5. Mine does not export production.	MASMILS, 2000	Fountain, 1999; Griffiths, 1995a; British Sulphur Corporation, 1987	5.7E+09	
307	Active Mine (1999)			Unknown	>50 Mt (1998)				Wen Lu, 1998; Fountain, 1999		
308	Past, active?			Unknown				NIMA, 2000	British Sulphur Corporation, 1987; Li and others, 1996		
309	Active Mine (1998)							Rand McNally	Wen Lu, 1998		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
310	China	Jiangsu		Lianyungang (Tung-Hai, Lienyunkang, Donghai, Chu Shan)	Jingping Phosphate Mine (Jiansu Haizhou)	P		34.56667	119.18333	Location for Haizhou population center.	Mine established 1970
311	China	Jiangsu		Meishan		P					
312	China	Jiangsu		Nantung (Nantong, Jinsha)		P		32.03333	120.88333		
313	China	Jiangxi	Shangrao	Chaoyang	Chaoyang Mine	P		28.45000	117.96667		Mine established 1966
314	China	Jilin		Shangquinggou		P					
315	China	Jilin		Shuidong		P					
316	China	Liaoning		Tianshui		P					
317	China	Liaoning	Fuxin	Gongguanyingzi		P					
318	China	Liaoning	Jianping	Baojishan		P		41.88333	119.66667	Location for Jianping population center and best estimate from map in Lu (1995).	
319	China	Liaoning	Jianping	Ulanwusu		P					
320	China	Nei Monggol	Darhan Mumingga n Liamheqi	Bulongtu	Bulongtu Phosphate Mine	P		41.50000	109.48333		
321	China	Ningxia		Helanshan		P					
322	China	Shaanxi		Chadian		P Mn		33.19639	106.46139		
323	China	Shaanxi		Hejiayan		P Mn		33.26667	106.31667		
324	China	Shaanxi		Jinjiahe		P		32.33333	106.15000		
325	China	Shaanxi	Fanzhi	Puzigou		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
310	Active Mine (1995)	0.85 Mt rock; 0.23 Mt phosphate concentrate (2001)		U		Lianyungang Jingping Phosphate Mine		MASMILS, 2000	Griffiths, 1995a; Li and others, 1996; S. Jasinski, written commun., 2001	5.7E+09	
311	Unknown								Li and others, 1996		
312	Past (1987), active?	No data	No data	No data	18% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	5.7E+09	ISM0467
313	Active Mine (1995)	0.05 Mt phosphate rock + Ca superphosphate		Unknown	>50 Mt (1998)	Jiangxi Chaoyang Phosphate Mine		MASMILS, 2000	Wen Lu, 1998; Griffiths, 1995a	5.7E+09	
314	Unknown			Unknown					Li and others, 1996		
315	Unknown			Unknown					Li, 1986		
316	Unknown			Unknown					Li and others, 1996		
317	Unknown			Unknown					Li and others, 1996		
318	None			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
319	Unknown			Unknown					Li and others, 1996		
320	Past (1987), active?			Unknown	>50 Mt (1998)			MASMILS, 2000	Wen Lu, 1998; Li and others, 1996	5.7E+09	
321	Past (1978), active?			Unknown					British Sulphur Corporation, 1987		
322	Active Mine (1998)				20 Mt @ 10% P2O5			NIMA, 2000; Liu and others, 1996	Wen Lu, 1998; Liu and others, 1996		
323	Unknown							NIMA, 2000; Liu and others, 1996	Liu and others, 1996		
324	Past (1987), active?			Unknown				MASMILS, 2000; Alt loc from Liu and others, 1996 at lat 33.3333 and long 105.95	Liu and others, 1996	5.7E+09	
325	Unknown				>50 Mt (1998)				Wen Lu, 1998		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
326	China	Shaanxi	Fengxian	Caoliangyi		P		34.08333	106.73333	Location for Caoliangyi population center and best estimate from map in Lu (1995)	
327	China	Shaanxi	Hanzhong	Tiantaishan		MN P		33.08333	107.03333		
328	China	Shaanxi	Laochuan	Qishan		P					
329	China	Shaanxi	Lingqiu	Pingxingguan		P		39.31667	113.90000	Location for Pingxingguan population center and best estimate from map in Lu (1995).	
330	China	Shaanxi	Longxi County	Jingfoshan		P					
331	China	Shandong		Laiwu		P		36.21667	117.65000		
332	China	Shandong		Yexian		P					
333	China	Shandong	Laizhou	Jiangjia	Jiangjia, others	P		37.17167	119.92139	Location for Laizhou population center and best estimate from map in Lu (1995).	
334	China	Shandong	Qixia	Guanli		P		37.18361	120.68889	Location for Guanli population center and best estimate from map in Lu (1995).	
335	China	Shandong	Zaozhuang	Shagou	Shagou, others	P		34.86472	117.55417	Location for Zaozhuang population center and best estimate from map in Lu (1995).	
336	China	Shanxi		Ruicheng		P					
337	China	Sichuan		Emei (Omei)		P		29.60000	103.50000		
338	China	Sichuan		Guanshan		P					
339	China	Sichuan		Jingbing Phosphate Mine		P		28.31667	103.35000		
340	China	Sichuan		Shifang	Chinho (Jin He, Jinhe)	P	28.01% P2O5, 5.46% P2O5, 38.53% CaO, 0.70% Mgo, 1.81% CO2, 3.04% Fe2O3, 4.68% Al2O3, 2.54% F, 1.85% SrO, 2.56% S	29.16670	103.33330	Tatu River area (Dadu He);	Mine established 1961

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
326	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
327	Active Mine (1999)			Unknown	> 50 Mt (1998); 10-25% P2O5	Hanzhong Village gov't (1999)	Mine does not export production.	MASMILS, 2000	Fountain, 1999; Wen Lu, 1998	5.7E+09	AD00086
328	Unknown								Li, 1986		
329	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
330	Unknown								Li, 1986		
331	Unknown			U				MASMILS, 2000		5.7E+09	
332	Unknown			Unknown					Li and others, 1996		
333	Past, active?			Unknown	>50 Mt (1998)		Large mine in district is Jiangjia.	NIMA, 2000	Wen Lu, 1998		
334	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
335	Unknown			Unknown	>50 Mt (1998)		Large mine in district is Shagou.	NIMA, 2000	Wen Lu, 1998		
336	Unknown			Unknown					Li, 1986		
337	Past (1987), active?	No data	No data	No data				MASMILS, 2000	British Sulphur Corporation, 1987	5.701E+09	ISM0459
338	Unknown								Li and others, 1996		
339	Unknown			U				MASMILS, 2000		5.701E+09	
340	Active Mine (1998)	0.8 Mt phosphate rock	No data	No data		Sichuan Jinhe Phosphate Mine		U.S. Geological Survey Mineral Resources Data System, 2000	Wen Lu, 1998; Griffiths, 1995a; British Sulphur Corporation, 1987		ISM0465

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
341	China	Sichuan		Shifang	Chingping (Zingping, Qingping)	P		28.31670	103.35000	Tatu River area (Dadu He);	Mine established 1964
342	China	Sichuan		Shuitonggou Phosphate Mine		P		29.35000	102.70000		
343	China	Sichuan		Yangjiaba		P					
344	China	Sichuan	Hanyuan	Fuquan		P		29.35000	102.71667	Location for Hanyuan population center and best estimate from map in Lu (1995).	
345	China	Sichuan	Huidong	Tangfang		P		26.65000	102.58333	Location for Huidong population center and best estimate from map in Lu (1995).	
346	China	Sichuan	Leibo	Majingzi		P		28.25000	103.56667	Location for Leibo population center and best estimate from map in Lu (1995).	
347	China	Sichuan	Leibo	Niuniuzhai		P		28.25000	103.56667	Location for Leibo population center and best estimate from map in Lu (1995).	
348	China	Sichuan	Mabian	Laoheba		P		28.84028	103.54278	Location for Mabian population center and best estimate from map in Lu (1995).	
349	China	Sichuan	Mianzhu	Macaotan		P	23.52% P2O5, 18.61% CaO, 27.77% Al2O3, 2.05% Fe2O3, 4.05% SiO2, 0.15% MgO, 41% CO2, 5.49% SrO, 0.264% TR2O3, 0.70% F, 10 ppm I, 0.009% V, 34.01% Hp	31.33333	104.20000	Location for Mianzhu population center and best estimate from map in Wen Lu (1995).	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
341	Active Mine (1998)	0.8 Mt phosphate rock; 0.05 mt svanbergite; 0.050 Mt phosphate rock powder	No data	No data		Sichuan Qingping Phosphate Mine		U.S. Geological Survey Mineral Resources Data System, 2000	Wen Lu, 1998; Griffiths, 1995a; British Sulphur Corporation, 1987; Li and others, 1996		ISM0471
342	Unknown			Unknown				MASMILS, 2000		5.701E+09	
343	Unknown								Li and others, 1996		
344	Active Mine (1998)			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
345	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
346	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998; British Sulphur Corporation, 1987		
347	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998; British Sulphur Corporation, 1987		
348	Unknown			Unknown	>50 Mt (1998)	Chengda Minerals and Chemicals (1999, state-owned)	Deposit is high grade.	NIMA, 2000	Wen Lu, 1998; Fountain, 1999		
349	Past, active?				>50 Mt (1998)		Chemical data from Li and others (1996)	NIMA, 2000	Wen Lu, 1998		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
350	China	Sichuan	Mianzhu	Wangjiaping		P	17.07% P2O5, 7.01% CaO, 25.88% Al2O3, 8.40% Fe2O3, 5.66% SiO2, 0.53% MgO, 0.81% CO2, 5.79% SrO, 0.215% TR2O3, 0.27% F, 7.96% S, 5 ppm I, 0.006% V, 40.59% Hp	31.33333	104.20000	Location for Mianzhu population center and best estimate from map in Wen Lu (1995).	
351	China	Xinjiang	Yuli	Qieganblak		P					
352	China	Yunnan		Anning		P		24.90583	102.49167	Location for Anning population center and best estimate from map in Lu (1995)	
353	China	Yunnan		Jianshan Phosphate Mine		P		25.03333	102.90000		
354	China	Yunnan		Jingning Phosphate Mine		P					
355	China	Yunnan		Xianfeng		P				Located 52 km northeast from Kunming.	
356	China	Yunnan	Huaning	Huote		P		24.19444	102.92806	Location for Huaning popoulation center and best estimate from map in Wen Lu, 1998.	
357	China	Yunnan	Huize	Wuxing		P		26.35000	103.41667	Location for Huize population center and best estimate from map in Wen Lu, 1998.	
358	China	Yunnan	Jinning	Jinning Erjie Phosphate Mine		P		24.75000	102.51667	or Jinning population center and best estimate from a map in Wen Lu, 1998.	
359	China	Yunnan	Jinning	Jinning Huale Town Phosphate Mine		P		24.75000	102.51667	Location for Jinning population center and best estimate from a map in Wen Lu, 1998.	
360	China	Yunnan	Jinning	Jinning Liujie Phosphate Mine		P		24.75000	102.51667	Location for Jinning population center and best estimate from a map in Wen Lu, 1998.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
350	Past, active?			Unknown	>50 Mt (1998)		Chemical data from Li and others (1996).	NIMA, 2000	Wen Lu, 1998		
351					>50 Mt (1998)				Wen Lu, 1998		
352	Active Mine (1998)			Unknown				NIMA, 2000	Wen Lu, 1998		
353	Past, active?			S				MASMILS, 2000		5.701E+09	
354	Active Mine (1998)								Wen Lu, 1998		
355	Past (1982), active?	capacity- 0.06 Mtpa					Major ore bed averages greater than 30% P2O5.		British Sulphur Corporation, 1987		
356					>50 Mt (1998)			NIMA, 2000; Rand McNally, 1981	Wen Lu, 1998		
357					>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998		
358	Active Mine (1998)							Rand McNally, 1981; NIMA, 2000	Wen Lu, 1998		
359	Active Mine (1998)							Rand McNally, 1981; NIMA, 2000	Wen Lu, 1998		
360	Active Mine (1998)							Rand McNally, 1981; NIMA, 2000	Wen Lu, 1998		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
361	China	Yunnan	Jinning	Jinning Shangsuan Phosphate Mine		P		24.75000	102.51667	Location for Jinning population center and best estimate from a map in Wen Lu, 1998.	
362	China	Yunnan	Jinning	Kunming		P		25.06667	102.68333		
363	China	Yunnan	Jinning	Kunming	Jinning Phosphate Mine	P	Typically 31-32% P2O5, 0.6-0.7% MgO.	24.75000	102.51667		
364	China	Yunnan	Jinning	Kunyang	Kunyang Mine	P	Lower strata- 25-26% P2O5; upper strata - 28-29% P2O5	24.70000	102.55000	Location for Jinning population center and best estimate from a map in Wen Lu, 1998	1934
365	China	Yunnan	Kunming	Haikou	Haikou	P	Low Cd, Mg, and other heavy metals	24.76667	102.58333		
366	China	Yunnan	Kunming	Haikou	Pointed Peak	P	Low Cd, Mg, and other heavy metals			13 km from Haikou mine.	
367	China	Yunnan	Kunming	Xishan		P					
368	China	Yunnan	Qujing	Deze		P		25.48333	103.78333	Location for Qujing population center and best estimate from map in Wen Lu, 1998.	
369	Colombia	Boyaca	Boyaca Nuevo Colon	Mesa Alta		P					
370	Colombia	Boyaca	Iza Cuitiva Tota	Iza		P				Extends from 8 km south of Alto del Picacho to the southwest of the town of Tota and is bordered.	
371	Colombia	Boyaca		Pesca/Iza Deposits		P					
372	Colombia	Boyaca	Mongua	Cuchilla de Balcones		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
361	Active Mine (1998)							Rand McNally, 1981; NIMA, 2000	Wen Lu, 1998		
362	Active Mine (1998)	1 Mt ore, 1979	No data	No data	400 Mt @30% P2O5 (1978)			MASMILS, 2000	Wen Lu, 1998	5.701E+09	ISM0463
363	Active Mine (1995)	Capacity >1Mtpa		S	>250. Mt (1999)	Yunnan Phosphorous Chemical Industry (Group) Corp.		MASMILS, 2000	Fountain, 1999; Griffiths, 1995a	5.701E+09	
364	Past (1987), active?	2 Mt @ 28% P2O5 (1980)	No data	S	> 70 Mt		Deposit is high grade.	Rand McNally, 1981; NIMA, 2000	Wen Lu, 1998; Fountain, 1999; Yeh Lientsun and others, 1986	5.701E+09	ISM0468
365	Active?	Designed capacity-- 3 Mt ore	No data	S	60 Mt, 1980; 150 Mt (1999)		Ore typically runs 24-25% P2O5.	MASMILS, 2000	Fountain, 1999	5.701E+09	ISM0470
366	Active Mine (1999)			S	>50 Mt (1999)	Chengda Minerals & Chemicals (1999)	Ore typically runs 30-31% P2O5.		Fountain, 1999		
367					>50 Mt (1998)				Wen Lu, 1998		
368	Unknown			Unknown	>50 Mt (1998)			NIMA, 2000	Wen Lu, 1998; Li and others, 1996		
369					8 Mt				Mutis Jurado, 1982		
370					Possible-- 11 Mt @ 21% P2O5 (1982)				Mutis Jurado, 1982		
371	Intermittent producers								Appleton, 1994		
372					Possible: 16 Mt @ 18% P2O5 (1982)				Mutis Jurado, 1982		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
373	Colombia	Boyaca	Mongua	El Pico de Tijeras-La Pena de Los Viles		P				Midway between El Pico de Tijeras and La Pena de Los Viles.	
374	Colombia	Boyaca	Mongua	Loma de Cruz Alta		P					
375	Colombia	Boyaca	Mongui	Cuchilla Pena Negra-Oseta		P					
376	Colombia	Boyaca	Mongui	Cuchilla Tembladar-La Sarna		P					
377	Colombia	Boyaca	Mongui	El Cerro Diagua		P					
378	Colombia	Boyaca	Pesca	La Conejera area		P	20-25% P2O5.			South of Pesca.	
379	Colombia	Boyaca	Samaca	La Parroquia		P					
380	Colombia	Boyaca		La Cascajera (Pesca)		P		5.63333	-73.08333	Near Turmeque, 130 km from Bogota. Southwest of Pesca.	
381	Colombia	Boyaca	Tumeque Ventaquemada	La Cascajera (Turmeque)		P	20% P2O5 (1982)	5.30000	-73.50000	4 km from Ventaquemada.	
382	Colombia	Boyaca	Tunja	Tunja		P	21% P2O5	5.45000	-73.38300	North of the town of Tunja.	
383	Colombia	Boyaca		Pesca Sogamoso		P	5-31% P2O5	5.66700	-72.83300		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
373					Possible-- 20 Mt (1982)				Mutis Jurado, 1982		
374					Possible-- 1.2 Mt @ 15% P2O5 (1982)				Mutis Jurado, 1982		
375					Possible-- 12.5 Mt @ 28% P2O5 (1982)				Mutis Jurado, 1982		
376									Mutis Jurado, 1982		
377					Possible-- 20 Mt @ 20% P2O5 (1982)				Mutis Jurado, 1982		
378	Active (1982)				Measured-- 10.8 Mt; Inferred-- 40 Mt; 50 Mt @ 23.8% P2O5 (1982)				Mew, 1980; Ministerio de Minas y Petroleos de Colombia and others, 1968; British Sulphur Corporation, 1987; Mutis Jurado, 1982		
379					Possible-- 4 Mt @ 16% P2O5 (1982)				Mutis Jurado, 1982		
380	Active (1987)			U	3 Mt @ >20% P2O5 (1980)	Empresa Fostatos de Boyaca (1987)	For production of direct application phosphate fertilizer.	MASMILS, 2000	Mew, 1980; British Sulphur Corporation, 1987	3.01E+09	
381	Active Mine (1982)			S		Colminas Ltda (1968)		MASMILS, 2000	Ministerio de Minas y Petroleos de Colombia and others, 1968; Mutis Jurado, 1982	3.01E+09	
382				Unknown				Foose, 1993	Mutis Jurado, 1982		
383	Active Mine (1987)			Unknown		Empressa Fosfatos de Boyaca		Foose, 1993	Russell, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
384	Colombia	Boyaca	Sogamosa	Ombachita-El Pilar		P					
385	Colombia	Boyaca	Sogamosa	Sogamoso area		P Si		5.55000	-73.35000		
386	Colombia	Boyaca	Ventaque mada	Pirachon		P					
387	Colombia	Cundinamarca		Alto De Mesa		P		5.20000	-73.90000		
388	Colombia	Cundinamarca		Nueva Vizcaya		Fe Si P S Mn		4.75000	-73.55000		
389	Colombia	Cundinamarca		Serrania De Perico		P		4.85000	-73.90000		
390	Colombia	Cundinamarca		Sueva		P		4.90000	-73.75000		
391	Colombia	Cundinamarca	Caparappi	Caparappi (La Palma)		P		5.35000	-74.50000	Lat-long is for the town of Caparappi.	
392	Colombia	Cundinamarca	Macheta	Macheta (Guateque)		P		5.07000	-73.60000		
393	Colombia	Cundinamarca	Pandi	Rio Sumapaz area (Pandi-Cunday- Icononzo)		P					
394	Colombia	Cundinamarca	Quipile	Alto del Triga - La Sierra		P	Up to 17.6% P2O5.				
395	Colombia	Cundinamarca	Ubate	Ubate		P		5.40000	-73.91000		
396	Colombia	Huila	Aipe	La Canada		P					
397	Colombia	Huila	Aipe, Praga	Aipe - Mapata		P		2.90000	-75.50000		
398	Colombia	Huila	Baraya	La Troja		P				In the Los Pinos region hacienda Los Andes.	
399	Colombia	Huila	Baraya, Tello	Baraya - Tello		P		3.13300	-75.01700		
400	Colombia	Huila	Elias, Timana	Elias-Timana		P	9-22.4% P2O5	2.15000	-75.75000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
384					Possible-- 27 Mt @ 17-26% P2O5 (1982)				Mutis Jurado, 1982		
385				S	144 Mt @ 20% P2O5 (1982)			MASMILS, 2000	Mutis Jurado, 1982	3.01E+09	
386					Probable-- 10 Mt @ 17-22% P2O5 (1982)				Mutis Jurado, 1982		
387				S				MASMILS, 2000		3.01E+09	
388				S				MASMILS, 2000		3.01E+09	
389				S				MASMILS, 2000		3.01E+09	
390				S				MASMILS, 2000		3.01E+09	
391								NIMA, 2000	Mew, 1980; Mutis Jurado, 1982		
392				S				MASMILS, 2000	Mutis Jurado, 1982	3.01E+09	
393									Mew, 1980; Mutis Jurado, 1982		
394									Mew, 1980; Mutis Jurado, 1982		
395				S	15.3% P2O5			MASMILS, 2000	Mutis Jurado, 1982	3.01E+09	
396					Possible-- 8 Mt @ 18.31% P2O5 (1982)				Mutis Jurado, 1982		
397	None (1982)			Unknown	Possible-- 17 Mt @ up to 25% P2O5 (1982)			Foose, 1993	Mutis Jurado, 1982		
398					Possible-- 2 Mt @ 22% P2O5 (1982)				Mutis Jurado, 1982		
399	None (1982)			Unknown				Foose, 1993			
400				S				MASMILS, 2000	Mew, 1980; Mutis Jurado, 1982	3.01E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
401	Colombia	Huila	Palermo	Buenos Aires area		P					
402	Colombia	Huila	Palermo	Llano Verde		P					
403	Colombia	Huila	Tesalia	La Juanita	La Juanita	P	5-31% P2O5 (18% typical)	2.96667	-75.25000	75 km southwest of Neiva, a few kilmeters west of the Magdalena River. At Mal Paso on the road to La Plata.	
404	Colombia	Huila	Tesalia	Pacarni-Iquira		P					
405	Colombia	Huila	Yaguara	El Cucharon		P				Outcrops northwest in the Loma Chile and Volcancillos and southwest of the village of El Cusharon.	
406	Colombia	Huila	Yaguara	Yaguara-Llanoverde		P	Phosphate bed contains 24% P2O5.	2.66667	-75.51667		
407	Colombia	Magdalena	Cienaga	Quebrada del Hierro area		Ti P Fe	19.7-35.69% TiO2, approx. 34% Fe2O3, approx. 21% P2O5	11.01667	-73.75000	Lat-long is very approximate.	
408	Colombia	Norte de Santander		Bachalema		P		7.78300	-72.73300		
409	Colombia	Norte de Santander		Pamplona		P		7.41667	-72.66667		
410	Colombia	Norte de Santander	Gramalote, Arboledas	Gramalote-Arboledas area		P		7.88333	-72.80000		
411	Colombia	Norte de Santander	Lourdes	Rio Riecitos-Lourdes		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
401	None (1982)				Possible-- 20 Mt @ 17% P2O5 (1982)				Mutis Jurado, 1982		
402	None (1982)				Possible-- 35 Mt @ 18% P2O5 (1982)				Mutis Jurado, 1982		
403	Active Mine (1989)	80 tpd (1980)		S	Proven-- 1.4 Mt	Cia. Fosfatos de Colombia (1987)	Used as direct application fertilizer.	MASMILS, 2000	Appleton, 1994; Mew, 1980; Notholt and others, 1989b; Ministerio de Minas y Petroleos de Colombia and others, 1968;	3.01E+09	
404					Possible-- 6 Mt (1982)				Mutis Jurado, 1982		
405					Possible-- 15 Mt @ up to 31% P2O5 (1982)				Mutis Jurado, 1982		
406					Estimated-- 30 Mt		Resource estimate is for 15 sq km area.		Mew, 1980		
407	None							Rand McNally, 1981	Ministerio de Minas y Petroleos de Colombia and others, 1968; Mutis Jurado, 1982		
408				Unknown				Foose, 1993			
409				S				MASMILS, 2000		3.01E+09	
410	None (1982)				Possible-- 7 Mt (1982)			NIMA, 2000	Ministerio de Minas y Petroleos de Colombia and others, 1968; Mutis Jurado, 1982		
411					Possible-- 12 Mt @22% P2O5 (1982)				Mutis Jurado, 1982		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
412	Colombia	Norte de Santander	San Calixto	Oru		P		8.33333	-72.66667		
413	Colombia	Norte de Santander	Sardinata	Sardinata	Sardinata, La Leche, San Miguel, Lourdes	P	The phosphate bed averages 28% P2O5; with a range of 18-37% P2O5.			Astilleros area.	
414	Colombia	Santander		Palmira		P		6.91556	-73.44250		
415	Colombia	Santander	California	California		P	17-18% P2O5.			West of the town of California.	
416	Colombia	Santander	Lebrija	La Azufrada (Quebrada la Sorda)		P	20-25% P2O5.	7.21944	-73.31556	Along Quebrada La Sorda.	
417	Colombia	Santander	Lebrija	Vanegas		P		7.35278	-73.31556	45 km from Bucaramanga, off the orad to Purto Wilches.	
418	Colombia	Santander	San Andres	Hato Caballero (San Andres)		P		6.80972	-72.86889		
419	Colombia	Santander	San Vicente	San Vicente		P	Phosphate horizon has up to 18% P2O5.	7.50000	-73.25000	About 5 km west of the village of San Vicente.	
420	Colombia	Santander	Surata	Surata		P					
421	Colombia	Tolima		Girardot (Ortega-Girardot)		P	Phosphorite bed with up to 26% P2O5.	3.90000	-75.15000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
412				S	Possible--140 Mt (1968)			MASMILS, 2000	Ministerio de Minas y Petroleos de Colombia and others, 1968	3.01E+09	
413	Active Mine (1989)				Proven--4.9Mt w/ <12 m overburden + 4.4 Mt at greater depth	Empressa Fosfatos de Norte de Santander			Russell, 1987; Appleton, 1994; Notholt, 1994; Mew, 1980; Ministerio de Minas y Petroleos de Colombia and others, 1968		
414				S				MASMILS, 2000		3.01E+09	
415									Mew, 1980; Mutis Jurado, 1982		
416	None (1982)			S	Possible-- 5 Mt @ 21% P2O5 (1982)		Upper bed contains 24% P2O5 over 1.4 m.	MASMILS, 2000	Mew, 1980; Ministerio de Minas y Petroleos de Colombia and others, 1968; Mutis Jurado, 1982	3.01E+09	
417				S			Phosphate horizon has up to 13.6-29.9% P2O5.	MASMILS, 2000	Notholt, 1994; Mutis Jurado, 1982	3.01E+09	
418				S	Possible-- 7 Mt (1968)			MASMILS, 2000	Ministerio de Minas y Petroleos de Colombia and others, 1968; Mutis Jurado, 1982	3.01E+09	
419				S	Inferred--18.75 Mt (1968)			MASMILS, 2000	Notholt, 1994; Mew, 1980; Ministerio de Minas y Petroleos de Colombia and others, 1968	3.01E+09	
420							Probably not economic beyond direct application use.		Mew, 1980; Mutis Jurado, 1982		
421				S				MASMILS, 2000	Mew, 1980	3.01E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
422	Colombia	Tolima		Pandi		P	Up to 27.9 % P2O5	4.06667	-74.66667		
423	Colombia	Tolima	Icononzo, Pandi	Icononzo, Pandi		P					
424	Congo	Kivu		Bingo (Bingu)		P Nb		0.60000	29.28333	More than 80 km N of Lake Edward.	
425	Congo (Zaire)			Holle	Tchivoula	P	High silica content; 16-25% P2O5	-4.68333	12.15000		1945
426	Congo (Zaire)			Kitanzi		P		-4.91472	12.10389		
427	Congo (Zaire)			Loufika		P	16-25% P2O5	-4.67639	12.16944		1945
428	Congo (Zaire)	Kivu		Lueshe		Nb P REE		-0.98333	29.15000	In the Ruinde Mountains of North Kivu.	
429	Congo (Zaire)			Sintou-Kola		P		-4.08333	11.70000		1936
430	Cuba	Havana		Guines Pipian District	Biyakhaka	P					
431	Cuba	Havana		Guines Pipian District	Katalina	P					
432	Cuba	Havana		Guines Pipian District	Loma Candela	P					
433	Cuba	Havana		Guines Pipian District	Meseta Rokha	P					
434	Cuba	Havana		Guines Pipian District	Pipian	P					
435	Denmark	Bornhom		Arnager		P	Nodules contain 16.5% P2O5.			About 8 km SE of Ronne.	
436	Ecuador			Lumbaqui		P		-0.16700	-77.58300	105 km NNE of Quito.	
437	Ecuador			Rio Chingual		P U	21% P2O5	0.05000	-77.16667	North of Puerto Libre.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
422				S				MASMILS, 2000		3.01E+09	
423					Measured--0.55 Mt; Indicated- 2.5 Mt (1982)				Mutis Jurado, 1982		
424	None				"Very large reserves"			Woolley, 2001	Woolley, 2001; Mew, 1980	7.66E+09	
425	None (1990)				1 Mt @ 20-25% P2O5 (1980); 18 Mt @ 25% P2O5 (1990)			NIMA, 2000	de Kun, 1987; Mew, 1980; Nguelongo, 1990; British Sulphur Corporation, 1987		I000111
426	None (1990)								Nguelongo, 1990		I000112
427	None							NIMA, 2000	British Sulphur Corporation, 1987		
428	None			S; U			Past producer of Nb.	Woolley, 2001	MASMILS, 2000; Mew, 1980; Woolley, 2001	7.66E+09	
429	None				0.3 Mt @ 20% P2O5 (1936)			NIMA, 2000	Mew, 1980; British Sulphur Corporation, 1987		
430							Deposit is small.		Ilyin and Ratnikova, 1990		
431							Deposit is small.		Ilyin and Ratnikova, 1990		
432							Deposit is small.		Ilyin and Ratnikova, 1990; Notholt, 1994		
433							Deposit is small.		Ilyin and Ratnikova, 1990; Notholt, 1994		
434							Deposit is small and grade is poor.		Ilyin and Ratnikova, 1990; Notholt, 1994		
435	Small Past Producer		2000 t (1918-1920)						Sorensen and others, 1978		
436				Unknown	Possible--200 Mt @ 8-36% P2O5 (1986)			Foose, 1993; Notholt, 1994	Insituto Ecuatoriano de Mineria, 1986		TC37053
437	None							CIMRI, 1993	Vera, 1980		TC38331

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
438	Egypt				El-Eweniya	P		25.18333	32.73333		
439	Egypt				Nag' Selim	P		25.20000	32.71667		
440	Egypt				Naser	P		28.08333	35.40000		
441	Egypt				Sabona	P		25.18333	32.76667		
442	Egypt				Wadi Helal	P		25.20000	32.85000		
443	Egypt			Abu Bayan Area/Dungul and Kurkur		P		28.00000	30.00000		
444	Egypt			Aswan		P					
445	Egypt			Nile Valley (Idfu-Qena district)		P	Average: 23.42% P2O5, 36.29% CaO, 2.69% F32O3, 0.44% MgO, 6.55% CO2, 2.56% F, 0.89% F 14.17% insoluble residue, 0.14% organic C, 58 ppm U, 5 ppm Cd, 177 ppm Zn 94 ppm V, 86 ppm Cr	25.75000	33.00000	Location from MRDS which is average of a large area.	About 1900
446	Egypt			Nile Valley (Idfu-Qena district)	El Rukhamiya	P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
438								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
439								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
440								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
441								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
442								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
443	Not Economic				18% P2O5			U.S. Geological Survey Mineral Resources Data System, 2000			W02913 2
444	Active Mine (1995)	0.5 Mt/yr		S		Abu-Zaabal Fertilizer & Chemical Co.			Griffiths, 1995b		
445		Capacity about 0.450 Mt ore	6.7 Mt ore, 1908-73	S; U	216 Mt (R1E, 1974); 1.483 Mt@ 21.6% P2O5 (R2S, 1974)			U.S. Geological Survey Mineral Resources Data System, 2000	de Kun, 1987; British Sulphur Corporation, 1987; Issawi, 1989	7.29E+09	ISM0426
446									Issawi, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
447	Egypt			Nile Valley (Idfu-Qena district)	El Mahamid (El Mahamid East, El Mohammed, Sabayia East)	P	P2O5 22.48%; CAO 34.16%; SIO2 28.80%;CO25.9%; AL2O3 1.92%; FE2O3 3.29%; SO3 1.03%.	25.16667	32.68333	North of Idfu. On east bank of Nile River.	
448	Egypt			Nile Valley (Idfu-Qena district)	El Sebaiya (West Sebaiya, El Mahamid West, Sibaeya, Sebaya)	P	P2O5 28.99%;CAO 45.81%; MGO 0.22%; SIO2 11.82%; CO2 4.62%; AL2O3 0.47%; FE2O3 2.21%; SO3 0.16%	25.16667	32.66667	NW of Idfu. On west bank of Nile River.	
449	Egypt			Nile Valley (Idfu-Qena district)	Gebel Abu Had	P		26.60000	32.95000		
450	Egypt			Nile Valley (Idfu-Qena district)	Gebel El Gir	P		25.10000	33.03333		
451	Egypt			Nile Valley (Idfu-Qena district)	Gebel El Shaghab	P		25.33333	33.46667		
452	Egypt			Nile Valley (Idfu-Qena district)	Gebel Nezzi	P		25.53333	32.93333		
453	Egypt			Nile Valley (Idfu-Qena district)	Gebel Qurn	P					
454	Egypt			Nile Valley (Idfu-Qena district)	Higazi	P					
455	Egypt			Nile Valley (Idfu-Qena district)	Kom-Mir	P		25.18333	32.63333	Lat-long for the town of Kom-Mir.	
456	Egypt			Nile Valley (Idfu-Qena district)	Wadi El Batur	P		25.26667	33.13333		
457	Egypt			Nile Valley (Idfu-Qena district)	Wadi El Mashash	P		25.43333	33.23333		
458	Egypt			Nile Valley (Idfu-Qena district)	Wadi El Serei (El Sarai)	P		26.20000	33.03333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
447	Active Mine (1987)	Capacity: 0.5 Mtpa		U	27-30% P2O5	El Nasr Phosphate Co. (1987)	Bed No. 2 contains an average 29% P2O5.	MASMILS, 2000	Harben and Kuzvart, 1996; de Kun, 1987; British Sulphur Corporation, 1987; Issawi, 1989	7.29E+09	DE00011
448	Active Mine (1995)	0.5 Mt/yr		S		Abu Zaabel Fertiliser and Chemical Co.		MASMILS, 2000	Harben and Kuzvart, 1996; de Kun, 1987; Griffiths, 1995b; British Sulphur Corporation, 1987; Issawi, 1989	7.29E+09	DE00011
449	Potential resource (1989)							Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Arab Organisation for Mineral Resources, 1987		
450								Arab Organisation for Mineral Resources, 1987	Issawi, 1989		
451								Arab Organisation for Mineral Resources, 1987	Issawi, 1989		
452								NIMA, 2001	Issawi, 1989		
453								NIMA, 2000			
454									Issawi, 1989		
455	Past Producer (2001)			S		Abu Zaabel Fertiliser and Chemical Co. (1987)		NIMA, 2000	de Kun, 1987; S. Jasinski, written commun., 2001		
456	Potential resource (1989)							Arab Organisation for Mineral Resources, 1987	Issawi, 1989		
457								Arab Organisation for Mineral Resources, 1987	Issawi, 1989		
458								Arab Organisation for Mineral Resources, 1987	Issawi, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
459	Egypt			Nile Valley (Idfu-Qena district)	Wadi El Shaghab	P		25.06667	33.10000		
460	Egypt			Nile Valley (Idfu-Qena district)	Wadi Hamama	P		26.30000	33.00000		
461	Egypt			Nile Valley (Idfu-Qena district)/	Wadi Qena-Wadi Araba	P	Gabel Abu Had Area, 20.70% P2O5; Gabel Elgir Area, 21.07% P2O5	27.16664	32.66667		
462	Egypt			Red Sea Coastal Region		P		26.30000	34.10000	Location is an average of locations of deposits in Red Sea district.	
463	Egypt			Red Sea Coastal Region/Quseir area	Quseir Qadim (Quseir)	P					
464	Egypt			Red Sea Coastal Region/Quseir area	Abu Shigeila (Abu Shegeila)	P		26.20000	34.21667		
465	Egypt			Red Sea Coastal Region/Quseir area	Abu Tundub	P					
466	Egypt			Red Sea Coastal Region/Quseir area	Anz	P		25.50000	34.63333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
459								NIMA, 2001	Issawi, 1989		
460								Arab Organisation for Mineral Resources, 1987	Issawi, 1989		
461	Not Economic							Arab Organisation for Mineral Resources, 1987	British Sulphur Corporation, 1987		W029133
462		0.258 Mt phosphate conc (1980); 0.229 Mt phosphate conc (1981)	No data	U	70 Mt @ 9.2-12.8% P2O5 (R1E, 1974); 302 Mt ore (R2E1974, R2E)	Red Sea Phosphate Co.		MASMILS, 2000	Hussein and El Sharkawi, 1990; British Sulphur Corporation, 1987		ISM0422
463	Active (2001)	Capacity is 0.12 Mtpa				Red Sea Phosphate Co.			Issawi, 1989; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001		
464	Inactive (2001)			Underground	Potential reserve-- 48.4 Mt @25.4-28% P2O5 (Issawi, 1989)	Red Sea Phosphate Co.	Development of additional reserves at this deposit started in 1977 as replacement capacity for mines in the Safaga-Quseir area that are approaching exhaustion.	Arab Organisation for Mineral Resources, 1987	Issawi, 1989; British Sulphur Corporation, 1987; de Kun, 1987; S. Jasinski, written commun., 2001; Arab Organisation for Mineral Resources, 1987		
465				Underground		Red Sea Phosphate Co.			Hussein and El Sharkawi, 1990		
466				Underground		Red Sea Phosphate Co.		Arab Organisation for Mineral Resources, 1987	Hussein and El Sharkawi, 1990; Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
467	Egypt			Red Sea Coastal Region/Quseir area	Atshan	P		24.21667	32.20000		
468	Egypt			Red Sea Coastal Region/Quseir area	Duwi (Gebel Duwi)	P	32.65% P2O5, 13.00% CaCO3, 1.45% Fe2O3, 0.47% MgO, 4.20% SiO2, 5.72% CO2, 0.30% Cl, 2.94% F	26.23333	33.95000		
469	Egypt			Red Sea Coastal Region/Quseir area	Hamadat	P	26.60% P2O5, 13.05% CaCO3, 1.33% Fe2O3, 0.77% MgO, 4.14% SiO2, 5.74% CO2, 0.47% Cl, 2.82% F	25.98333	34.16667		
470	Egypt			Red Sea Coastal Region/Quseir area/Hamrawein (El Hamrawein)	El Hamra, Kueik	P	24.97% P2O5, 2.04% SiO2, 0.08% Al2O3, 1.59% Fe2O3, 5.17% MgO, 44.75% CaO, 3.05% F, 17.85% CO2, 1.52% SO3	26.28333	34.16667	20 Km south of Huetat and 40 km south of Safaga.	1964
471	Egypt			Red Sea Coastal Region/Quseir area	Nakheil	P	29.08% P2O5, 18.54% CaCO3, 0.66% Fe2O3, 0.30% MgO, 5.30% SiO2, 8.15% CO2, 0.04% Cl, 2.96% F	26.18333	34.05000		
472	Egypt			Red Sea Coastal Region/Quseir area	Zug El Bahar	P					
473	Egypt			Red Sea Coastal Region/Safaga area	Gasus	P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
467	Past Producer (2001)			Underground		Red Sea Phosphate Co.	Reserves nearing exhaustion in 1989.	Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Hussein and El Sharkawi, 1990; S. Jasinski, written commun., 2001		
468				Underground		Red Sea Phosphate Co.	Reserves nearing exhaustion in 1989.	Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Hussein and El Sharkawi, 1990; British Sulphur Corporation, 1987		
469	Past Producer (2001)			Underground		Red Sea Phosphate Co.		Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Hussein and El Sharkawi, 1990; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001		
470	Past Producer (2001)		None	Underground	Potential reserve-- 42.6 Mt @ 23.5% P2O5 (Issawi, 1989)	Red Sea Phosphate Co.	Ore is mined from 2 sites in the Hamrawein deposit.	Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Hussein and El Sharkawi, 1990; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001	7.29E+09	ISM0425
471				Underground		Red Sea Phosphate Co.		Arab Organisation for Mineral Resources, 1987	British Sulphur Corporation, 1987; Issawi, 1989; Hussein and El Sharkawi, 1990		
472						Red Sea Phosphate Co.			Issawi, 1989; British Sulphur Corporation, 1987		
473	Past Producer (2001)			Underground		Red Sea Phosphate Co.	May be combined with Um El Howeitat operations, i.e. a single mine.		Harben and Kuzvart, 1996; Hussein and El Sharkawi, 1990; S. Jasinski, written commun., 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
474	Egypt			Red Sea Coastal Region/Safaga area	Mohamed Rabah	P					
475	Egypt			Red Sea Coastal Region/Safaga area	Wassif (Safaga)	P		26.46667	33.66667		
476	Egypt			Red Sea Coastal Region/Safaga area	Um El Howeitat (Umel Huetat)	P		26.50000	33.93333	400 km SE of Suez.	
477	Egypt			Western Desert/Abu Tartur plateau	Abu Tartur (Abu Tartour, Maghrabi-Liffiya)	P Fe REE	Relatively high REE content- averages 2034 ppm (about 0.2%).	25.43333	30.03333	Between Kharga and Dakhla Oases.	1898
478	Egypt			Western Desert/Gebel Hafhuf/Bahariya Oasis		P	10-12% P2O5, average	28.50000	29.00000		
479	Egypt			Western Desert/Gebel Tarawan		P	Ore graded 28% P2O5.			In foothills of the Gebel Tarawan.	
480	Estonia			Baltic Basin/Kingisepp		P	6-7% P2O5 (1990)	59.16667	29.00000	112 km southwest of Leningrad.	
481	Estonia			Baltic Basin/Maardu		P	9-12% P2O5 (1990)	59.36667	28.16667	16 km east of Tallinn.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
474				Underground		Red Sea Phosphate Co.			Issawi, 1989; Hussein and El Sharkawi, 1990		
475	Active Mine (2001)	Capacity of 0.10 Mtpa rock		Underground		Red Sea Phosphate Co.		Arab Organisation for Mineral Resources, 1987	Issawi, 1989; Hussein and El Sharkawi, 1990; S. Jasinski, written commun., 2001		
476	Past Producer (2001)			Underground		Red Sea Phosphate Co.	May be combined with Gasus operations, i.e. a single mine.	Arab Organisation for Mineral Resources, 1987	Hussein and El Sharkawi, 1990; Harben and Kuzvart, 1996; S. Jasinski, written commun., 2001		
477	Active Mine (1995)	Rated capacity of 2 Mtpa; actual production of 0.6 Mtpa (2001)	None	S	3000 Mt @ 28.7% P2O5 (1987)		Scattered iron sulfides affects workability of these reserves.	MASMILS, 2000	Hussein and El Sharkawi, 1990; de Kun, 1987; Industrial Minerals, 1995; British Sulphur Corporation, 1987; Schroter, 1989; S. Jasinski, written commun., 2001	7.29E+09	ISM0427, W029138
478	Not Economic			Not economic				U.S. Geological Survey Mineral Resources Data System, 2000			W029134
479	Small Past Producer						Deposit worked 1908-1910.		British Sulphur Corporation, 1987		
480	Producer (1990)							Ilyin and Heinsalu, 1990	Ilyin and Heinsalu, 1990		
481	Past Producer (1994)	Capacity 0.250 Mt phosphate conc	No data	S			Closed due to depletion of ore and environmental effects of mining. Obolus and Maardu may be same. Obolus conglomerate is mined at Maardu.	MASMILS, 2000	Levine, 1994; British Sulphur Corporation, 1987; Commission for Geological Map of the World, 1972; Ilyin and Heinsalu, 1990	4.47E+09	ISM0443

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
482	Estonia			Baltic Basin/Rakvere		P					
483	Estonia			Baltic Basin/Rakvere	Assamala	P	Average grade - 9.6% P2O5 (1990)			In Rakvere area.	
484	Estonia			Baltic Basin/Rakvere	Kabala (Kabala)	P	Average grade - 13.4% P2O5 (1990)			In Rakvere area.	
485	Estonia			Baltic Basin/Rakvere	Ryagavere (Ragavere)	P	Average grade - 9.4% P2O5 (1990)			In Rakvere area.	
486	Estonia			Obolus		P					
487	Estonia			Toolse		P				In Rakuere area.	
488	Estonia?			Azeri		P		59.36667	26.70000		
489	Estonia?			Saka-Ontika		P		59.30000	27.16667		
490	Ethiopia			Bale		P Fe Ti					
491	Ethiopia			Borena		P Fe Ti		10.75000	38.76667	Lat-long is for the town of Borena.	
492	Ethiopia			Ogaden Desert		P		6.96670	45.35000		
493	Ethiopia	Wellega		Wellega (Bikilal)		P Fe Ti		9.25000	35.70000		
494	Finland	Kuopio		Siilinjarvi		P LIME MICA AGG	Carbonatite runs 24.8% P2O5, 36.65% CaO, 14.97% SiO2, 5.84% MgO, 3.61% K2O	63.08333	27.66667		1950

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
482	None (1990)				700 Mt of P2O5 (1982)		Mining of this deposit would have a large adverse environmental impact in an area that is relatively prosperous.		Ilyin and Heinsalu, 1990		
483									Ilyin and Heinsalu, 1990		
484	None								Levine, 1994; Ilyin and Heinsalu, 1990		
485									Ilyin and Heinsalu, 1990		
486							Obolus and Maardu may be same. Obolus conglomerate is mined at Maardu.		British Sulphur Corporation, 1987; Levine, 1994		
487									Levine, 1994; British Sulphur Corporation, 1987		
488								Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972		
489								Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972		
490	None								Abera, 1994		
491	None							NIMA, 2000	Abera, 1994		
492	None							U.S. Geological Survey Mineral Resources Data System, 2000	British Sulphur Corporation, 1987		I005009
493	Active prospect (1994)							est by Go from Abera, 1994	Abera, 1994		
494	Active Mine (1999)	0.125 Mt apatite conc (1979); 8-10 Mt/yr ore	No data	S	465 Mt, 10 vol.% apatite (4% P2O5), 1980 (R1E)	Kemira Group		MASMILS, 2000	Harben and Kuzvart, 1996; Griffiths, 1995b; Notholt, 1994; Notholt, 1979; British Sulphur Corporation, 1987; Commission for Geological Map of the World, 1972	4.05E+09	ISM0440, W700057, W700857

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
495	Finland	Lappi		Sokli Complex		P Fe Nb		67.75000	29.25000	Deposit is in remote location about 50 km NNW of Kovdor in Russia.	1967
496	Finland			Kainuu Area/Paltamo/Nuottijärvi		P U		64.41667	27.83333		
497	Finland			Peräpohja Area/Mustamaa		P U		63.50000	24.00000		
498	Finland			Pohjanmaa Area/Vihanti/Lampinsaari		P U		64.41667	25.15000		
499	Finland			Savo Area/Temo		P U	1.5-4% P2O5 and 0.01-0.015% U	61.71667	24.05000		
500	France			Lorraine District/Longwy, L'orne		P		49.41667	5.78333		
501	France			Mondalazac		P		44.48333	2.53333		
502	France			Montebras		P		46.15000	2.30000		
503	France			Pisseloup les Suancourt, Vitrey		P		47.68333	5.65000		
504	France			Verpillere, La		P		45.60000	5.18333		
505	France	Aisne		Paris Basin/Bohain		P					
506	France	Aisne		Paris Basin/Harglcourt		P					
507	France	Aisne		Paris Basin/Vendhuile		P					
508	France	Ardennes		Paris Basin/Apremont		P					
509	France	Ardennes		Paris Basin/Saulces-Monclin		P					
510	France	Ardennes or Meuse		Dombasle		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
495	None			S? (Prob not mined)	110Mt @ 16.5% P2O5 + (weathered crust) 200 Mt @ 4.5% P2O5			MASMILS, 2000	Notholt, 1994; Notholt, 1979; Isokangas, 1978; Commission for Geological Map of the World, 1972	4.05E+09	
496	None				2.5 Mt @ ave. 4% P2O5 (as much as 9.5% P2O5) and 0.04% U			Äikäs, 1989; NIMA, 2000			
497	None				2.5Mt @ 0.9-3.4% P2O5 and 0.01-0.03% U			Äikäs, 1989; NIMA, 2000			
498	None				2.5 Mt @ 3.24% P2O5 and 0.03% U			Äikäs, 1989; NIMA, 2000			
499	None							Äikäs, 1989; NIMA, 2000			
500								Commission for Geological Map of the World, 1968a			
501								Commission for Geological Map of the World, 1968a			
502								Commission for Geological Map of the World, 1968a			
503								Commission for Geological Map of the World, 1968a			
504								Commission for Geological Map of the World, 1968a			
505									Mew, 1980		
506									Mew, 1980		
507									Mew, 1980		
508									Mew, 1980		
509									Mew, 1980		
510	Small past producer			S			Mined in 19th century.		Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
511	France	Ardennes or Meuse		Grandpre		P					
512	France	Ardennes or Meuse		Monclin		P					
513	France	Ardennes or Meuse		Neuvilly		P					
514	France	Ariege		Castelnau-Durban		P					
515	France	Aude		Alet		P		43.00000	2.26667		
516	France	Cote D'Or		Arnay Le Duc		P		47.21667	4.56667		
517	France	Cote D'Or		Semur en Auxois		P		47.50000	4.18333		
518	France	Drome		Saint Paul Clansayes		P		44.38333	4.78333		
519	France	Gard		Saint Maximin		P		44.01667	4.46667		
520	France	Haut-Garonne		Saint-Beat		P					
521	France	Haut Pyrenees?		Cierp		P	7-8% P2O5 in nodule horizon	42.91667	0.63333		
522	France	Haut Pyrenees		Vieille Aure, etc.		Mn P		42.83333	0.30000		
523	France	Lot		Quercy, Saint Jean de Laur, etc.		P		44.41667	1.83333		
524	France	Manche		Paris Basin/Brevands		P					
525	France	Manche		Paris Basin/Granville		P					
526	France	Meurth-et-Moselle		Paris Basin/Homecourt		P					
527	France	Meuse		Paris Basin/Lavoy		P					
528	France	Nord		Paris Basin/Briastre		P					
529	France	Nord		Paris Basin/Forest		P					
530	France	Nord		Paris Basin/Montay		P					
531	France	Oise		Paris Basin/Bray (Pays de)		P		49.55000	1.86667		
532	France	Oise		Paris Basin/Breteuil		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
511	Small past producer			S			Mined in 19th century.		Mew, 1980		
512	Small past producer			S			Mined in 19th century.		Mew, 1980		
513	Small past producer			S			Mined in 19th century.		Mew, 1980		
514	Small past producer								Mew, 1980		
515	Not economic						Not produced as an economic resource.	Slansky, 1989; NIMA, 2000			
516								Commission for Geological Map of the World, 1968a			
517								Commission for Geological Map of the World, 1968a			
518								Commission for Geological Map of the World, 1968a			
519								Commission for Geological Map of the World, 1968a			
520	Small past producer								Mew, 1980		
521	Past producer	0.028 Mt (1928)	0.14 Mt ore 1900-1930	U			Most important of the phosphate areas in the Pyrenees.	Slansky, 1989; NIMA, 2000	British Sulphur Corporation, 1987		
522								Commission for Geological Map of the World, 1968a			
523	Past production							Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987		
524									Mew, 1980		
525									Mew, 1980		
526									Mew, 1980		
527									Mew, 1980		
528									Mew, 1980		
529									Mew, 1980		
530									Mew, 1980		
531								Commission for Geological Map of the World, 1968a			
532									Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
533	France	Oise		Paris Basin/Hardivillers		P	5-20% P2O5 in chalk; 12-30% in phosphate channel infills; 24-39% in decalcified phosphate	49.58333	2.23333		
534	France	Oise		Paris Basin/Pierrefitte		P					
535	France	Pas-de-Calais		Paris Basin/Boulonnais (Pas de Calais)		P		50.50000	2.33333	Lat-long is for Pas-de-Calais Department.	
536	France	Pas-de-Calais		Marquise		P		50.81667	1.70000	Artois region.	
537	France	Pyrenees Atlantiques		La Bastide de Serou; Castelnau Durban		P		43.00000	1.40000		
538	France	Sarthe		Paris Basin/Chateau du Loir		P					
539	France	Sarthe		Paris Basin/Indre-et-Loir		P					
540	France	Sarthe		Paris Basin/St. Peterne		P					
541	France	Seine-et-Marne		Paris Basin/Ferte-sous-Kiyarre		P					
542	France	Somme		Paris Basin/Airaines		P					
543	France	Somme		Paris Basin/Beauval; Orville		P	5-20% P2O5 in chalk; 12-30% in phosphate channel infills; 24-39% in decalcified phosphate	50.08333	2.31667		
544	France	Somme		Paris Basin/Hallencourt		P	5-20% P2O5 in chalk; 12-30% in phosphate channel infills; 24-39% in decalcified phosphate	50.00000	1.88333	In Picardie region, 16 km SSE of Abbeville.	
545	France	Somme		Paris Basin/Nurlu (Curlu)		P	5-20% P2O5 in chalk; 12-30% in phosphate channel infills; 24-39% in decalcified phosphate; about 10% P2O5 (1980)			In Picardie region.	
546	France	Somme		Paris Basin/Peronne		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
533	None			S			Many small deposits in this region.	Commission for Geological Map of the World, 1968a	Mew, 1980		
534									Mew, 1980		
535									British Sulphur Corporation, 1987		
536								Commission for Geological Map of the World, 1968a			
537				U			Not produced as an economic resource.	Slansky, 1989; NIMA, 2000	British Sulphur Corporation, 1987; Commission for Geological Map of the World, 1968a		
538									Mew, 1980		
539									Mew, 1980		
540									Mew, 1980		
541									Mew, 1980		
542									Mew, 1980		
543	Past producer/ Active (1980)		2.2 Mt to 1912	S			Many small deposits in this region. Production ceased in this area in 1963.	Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987; Mew, 1980		
544	Past producer (1987)	0.020-0.025 Mtpa		U		Compagnie Francaise de l'Azote (COFAZ)	Many small deposits in this region. Production believed to have ceased in early 1980's.	Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987; Mew, 1980		
545	Past producer (1987)	10000-14000 tpa		S		Compagnie Francaise de l'Azote (COFAZ)	Many small deposits in this region. Production believed to have ceased in early 1980's.	Commission for Geological Map of the World, 1968a	Mew, 1980; British Sulfur Corp. , 1987		
546									Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
547	France	Yonne		Paris Basin/Saint Martin Du Tertre (Sens)		P	5-20% P2O5 in chalk; 12-30% in phosphate channel infills; 24-39% in decalcified phosphate	48.21667	3.21667	Deposit is near Sens. **Bad Location**	
548	Gabon	Ogooue-Ivindo		Mabounie		P REE Nb		-0.70000	11.70000	40 km ESE of Lamberene.	
549	Gabon	Haut-Ogooue		Moanda		Mn P Fe Si		-1.57000	13.18389		
550	Germany			Brandenburg		P					
551	Germany	Lower Saxony		Broistedt-Lengede area	Includes Broistedt Mine	Fe P				About 16 km SW of Braunschweig.	
552	Germany			Kaiserstuhl		P Nb Ba					
553	Germany			Laacher See		P Zr Nb		50.41667	7.26667		
554	Germany			Lahn Valley deposits		P	24-30% P2O5, up to 18% iron oxide + alumina				
555	Germany			Mecklenburg		P	Nodules- 26-29% Fe and 1.4-1.5% P (3.2-3.4% P2O5)				
556	Greece			Ioannina		P		39.66667	20.08333		
557	Greece			Ktismata Epire		P		39.73333	20.46667		
558	Greece			Xerovounai Arta		P		39.40000	20.91667		
559	Greece			Zantes		P		37.78333	20.80000		
560	Greece	Epirus (Epiros, Ipiros)		Delvinakion area	Drimos deposit	P		39.95000	20.46667	Close to Albanian border, about 48 km northwest of Ioannina (Yanina).	1976
561	Greece	Epirus		Ipiros Province/Drymona		P		39.66667	20.83333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
547				S			Mined from 1912-1934.	Commission for Geological Map of the World, 1968a	Mew, 1980		
548					360 Mt @ 24% P2O5 and 1.02% Nb (1998)	Reunion Mining (42%)		Jackson and Christiansen, 1993	Notholt, 1994; Woolley, 2001; Industrial Minerals, 1998d		I000108
549				S				MASMILS, 2000		7.55E+09	
550									British Sulphur Corporation, 1987		
551	Past byproduct producer		0.85 Mt phosphate rock, total				Production ceased in 1977.		British Sulphur Corporation, 1987		
552									USGS files		
553								NIMA, 2000	USGS files		
554	Past producer						Mining ceased in 1945.		British Sulphur Corporation, 1987		
555									British Sulphur Corporation, 1987		
556								Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
557								Commission for Geological Map of the World, 1983			
558								Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
559								Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
560	In development (1987)			Unknown	Area: 10 Mt @ 15% P2O5 (1987); Drimos: 6 Mt @ 17% P2O5 (1987)	CERMI (1987)		Papastavrou, 1989	Marinos, 1982; British Sulphur Corporation, 1987; Commission for Geological Map of the World, 1983		
561				S				MASMILS, 2000		4.84E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
562	Greece	Epirus		Ipiros Province/Kourenta		P		39.65000	20.65000		
563	Greece	Epirus		Ipiros Province/Mitsikeli		P		39.73333	20.85000		
564	Greece	Ionian Islands		Cephalinia (Cephalonie)		P		38.23333	20.40000		
565	Greece	Ionian Islands		Corfu		P		39.66667	19.75000		
566	Greece	Ionian Islands		Zakinthos		P		37.78333	20.78333		
567	Greece	Ionian Islands		Epiros		P					
568	Greece	Peloponnese		Mount Parnon		P		37.20000	22.63333	General location for Mt. Parnon.	
569	Greenland			Gardiner Complex		P					
570	Greenland			Gronnededal-Ika		Ba P F Zn Pb					
571	Greenland			Qaqarssuk carbonatite cmplx		P Fe Nb REE	Apatite-magnetite rock averages 8.59% P2O5	65.38333	-51.66667		1962
572	Greenland			Sarfartoq carbonatite complex		P Sr U Fe Nb REE		66.50000	-51.25000		1975
573	Guinea Bissau			Farim-Saliquinhe		P	CaO/P2O5 2.5-3.5	12.50000	-15.25000		1950
574	Hungary			Bakony Mountains		P		47.25000	17.83333	General location for Bakony Mountains.	
575	Hungary			Balaton Highlands/Pecs		P	21-28% P2O5, 0.36% V2O5				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
562				Unknown				Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
563				Unknown				Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
564				Unknown				Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
565	None			Unknown				NIMA, 2000			
566	None			Unknown				NIMA, 2000			
567	None			Unknown							
568	None							NIMA, 2000			
569	None								Notholt and others, 1989a; Campbell and others, 1997		
570									USGS files		
571	None				4.5 Mt @ 4.4% P2O5 (1989)			Knudsen, 1989	Notholt and others, 1989a; Woolley, 1987		
572	None				1000 Mt @ 3.5% P2O5		Environmental restraints hinder commercial interest.	Secher, 1989	Notholt and others, 1989a; Moller, 1989		
573	Under Development (1999)				450 Mt @ 10-15% P2O5; mineable reserve (1999)-- 105 Mt @ 29.8% P2O5	Champion Resources Inc. (1999)		Prian, 1989	Jasinski, 2000; de Kun, 1987; Notholt, 1994		
574	None				3-4 Mt @12-18% P2O5			NIMA, 2000	British Sulphur Corporation, 1987		
575	None								British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
576	Hungary			Carpathian Basin/ Balaton Highlands/Pécsely		P U	21.00-27.8% P2O5; 5.28-19.28% SiO2; 0.29-0.67% F2O3; 32.52-46.54% CaO, 1.80-18.40% MgO, 0.02-0.35% V2O5, 0.72-3.49% K2O, 0.53-1.07% Na2O, 4.78-15.12% CO2, 0-2.38% F, 0.002-0.22% organic C	46.95000	17.78333	Lat-long is for the town of Pecsely.	
577	India			Offshore		P		-8.95000	76.00000	Opposite Quilon.	1967
578	India	Andhra Pradesh	Kurnool District	Chelima-Pachcherla Area		P		15.50000	78.30000		
579	India	Andhra Pradesh	Vishakhapatman District	Kasitpatnam		P VRM Fe	Ore has high chlorine content.	18.20000	83.11667	Location is for nearby Kasipatnam population center.	
580	India	Chattisgarh	Durg District	Chattisgarh Basin/Lohara Area		P	15-30% P205	20.79306	81.05833	Some references list in State of Madhya Pradesh.	
581	India	Gujarat		Amba Dongar		F P				In Berbada Valley.	
582	India	Gujarat	Kutch District	Godpar-Gadhsisa, Sadanbari-Jhura areas		P					
583	India	Gujarat	Panchmahal District	Gandhra		P	10-20% P2O5, 12% P2O5 average	22.45000	73.69167		
584	India	Himachal Pradesh	Sirmaur District	Nigalidhar		P					
585	India	Himachal Pradesh	Shimla District	Korgai		P					
586	India	Himachal Pradesh	Solan District	Solan area		P					
587	India	Jharkhand	Palamau District	Bhawnathpur area		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
576	None						Phosphate rock with 21-28% P2O5.	NIMA, 2000	Morvai, 1982		
577								British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
578				Unknown				Banerjee and Saigal, 1988; NIMA, 2000	Banerjee, 1986; Sant and Pant, 1980		
579	Small scale active mining (1987)			Both	2.6 Mt @ 33% P2O5 (1994)			NIMA, 2000	Sant and Pant, 1980; Notholt and others, 1989d; British Sulphur Corporation, 1987; Notholt, 1994		
580				Unknown				Mukherjee and Khan, 1989; Khan and Mukherjee, 1993			
581	Not Economic								British Sulphur Corporation, 1987; Lee, 1980		
582									Sant and Pant, 1980		
583				Unknown				Dwivedi, 1984			
584									Sant and Pant, 1980		
585									Sant and Pant, 1980		
586									Sant and Pant, 1980		
587					Possibly 88 Mt @ 2.5% P2O5 (1987)		Ore is suitable for direct application on acid soils. Ore estimate is very uncertain.		British Sulphur Corporation, 1987; Sant and Pant, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
588	India	Jharkhand	West Singhbum ?	Khadandungri		P		22.43333	86.53333	Jharkhand was previously part of State of Bihar.	
589	India	Jharkhand	West Singhbum ?	Khejurdari		P		22.40000	86.56667	Jharkhand was previously part of State of Bihar.	
590	India	Jharkhand	West Singhbum ?	Parthargora; Nandup; Sunrgi; Kulamara		P	10-30% P2O5.	22.50000	85.50000	Location for Singhbhum administrative district. Jharkhand was previously part of State of Bihar.	
591	India	Jharkhand	West Singhbum ?	Tamajuri		P		22.53333	86.43333	Jharkhand was previously part of State of Bihar.	
592	India	Kashmir	Punch District	Poonch (Punch)		P					
593	India	Kashmir	Riasi District	Riasi		P					
594	India	Kashmir	Udhampur District	Udhampur		P					
595	India	Madhya Pradesh		Barwaha		P		22.28333	76.11667		
596	India	Madhya Pradesh	Chhatarpur District	Bassia		P					
597	India	Madhya Pradesh	Chhatarpur and Sagar Districts	Hirapur Basin/Sagar deposits		P		24.36667	79.50000		
598	India	Madhya Pradesh	Chhatarpur District	Kachhar		P					
599	India	Madhya Pradesh	Chhatarpur District	Mardeora		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
588				Unknown	No data			Basu, 1984			
589				Unknown	No data			Basu, 1984			
590	Active small scale production (1987)			S	Pathargara Resources- 10 Mt @>15% P2O5 (1994)	Mapco		NIMA, 2000	British Sulphur Corporation, 1987; Sant and Pant, 1980; Notholt, 1994		
591				Unknown	No data			Basu, 1984			
592									Lee, 1980		
593									Lee, 1980		
594									Lee, 1980		
595				Unknown				Director of Geology and Mining, 1989			
596					3.4 Mt @ <25% P2O5 (1987)				British Sulphur Corporation, 1987		
597	Active Mine (1991)	Approx. 0.022 Mtpa		S	20 Mt @ 24% P2O5	Madhya Pradesh Mining Corp. (1991)	Resource estimates from Director of Geology and Mining (1989) for Hirapur Basin.	Banerjee and others, 1982; Pant and others, 1989; Director of Geology and Mining, 1989	Pant, 1980; Russell, 1991; Choudhuri, 1990		
598									British Sulphur Corporation, 1987		
599	Active Mine (1991)			S	1.0 Mt @ 7-30% P2O5 (1987)	Madhya Pradesh Mining Corp. (1991)			Russell, 1991; Pant, 1980; British Sulphur Corp., 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
600	India	Madhya Pradesh	Jhabua district	Jhabua District deposit(s)		P		22.95833	74.42500		1973
601	India	Madhya Pradesh	Jhabua District	Amalamal		P		23.00000	74.41667		
602	India	Madhya Pradesh	Jhabua District	Kalikhet		P		22.96667	74.41667		
603	India	Madhya Pradesh	Jhabua District	Kelkua Nala; Kelkua		P		22.95000	74.41667		
604	India	Madhya Pradesh	Jhabua District	Keluka		P					
605	India	Madhya Pradesh	Jhabua District	Khatamba North and South		P		22.96667	74.43333		
606	India	Madhya Pradesh	Jhabua District	Piploda		P	<25% P2O5	22.93333	74.46667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
600				Unknown	14 Mt cherty phosphorite (4.5 Mt @ 28% P2O5); 12 Mt carbonate phosphorite		Resources estimates from Director of Geology and Mining (1989).	Banerjee and others, 1980; Khan and others, 1989	Pant, 1980; McClellan and Saavedra, 1986		
601				Unknown			Resource estimates for combined Kelkua Nala and Amalamal blocks.	Director of Geology and Mining, 1989; Banerjee and others, 1980	Pant, 1980; British Sulphur Corp., 1987; Sant and Pant, 1980		
602				Unknown				Director of Geology and Mining, 1989			
603				Unknown	Cherty phosphorite: Proven-- 2.9 Mt @12% P2O5; Probable-- 0.4 Mt @12.63% P2O5; Possible-- 5 Mt @ 8% P2O5 . Carbonate phosphorite: 0.8 Mt @ 8% P2O5		Resource estimates for combined Kelkua Nala and Amalamal blocks.	Director of Geology and Mining, 1989; Banerjee and others, 1980	Pant, 1980; Sant and Pant, 1980		
604	Small trial production (1987)								British Sulphur Corporation, 1987		
605				S	Proven-- 4.7 Mt @12% P2O5; Probable-- 2.1 Mt; Possible-- 3.8 Mt	Madhya Pradesh Mining Corp. (1991)		Director of Geology and Mining, 1989; Banerjee and others, 1980	Pant, 1980; Russell, 1991; British Sulphur Corp., 1987; Sant and Pant, 1980		
606	Small trial production (1987)			Unknown				Director of Geology and Mining, 1989	Pant, 1980; British Sulphur Corp., 1987; Sant and Pant, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
607	India	Madhya Pradesh	Jhabua District	Rassori		P		22.95000	74.46667		
608	India	Meghalaya	East Khasi and Jaintia Hills Districts	East Khasi and Jaintia Hills Districts		P					
609	India	Mysore		Channapatna- Arsikere-Hole Narsipur		P					
610	India	Rajasthan	Dungarpur District	Dungarpur		P					
611	India	Rajasthan		Kerpura		P				In Sikar district.	
612	India	Rajasthan		Mandai		P	5-10% P2O5	26.20000	71.10000		
613	India	Rajasthan	Chittaurgarh District	Vindhyan/Chittaurgarh		P	5-8% P2O5	24.88333	74.91667		
614	India	Rajasthan	Alwar District	Advka-Andwara		P					
615	India	Rajasthan	Banswara District	Jhermoti (Jher Moti)		P	15-30% P205	23.20000	74.21667		
616	India	Rajasthan	Banswara District	Ram-ka-Munna		P	15-30% P205	25.25000	74.13333		
617	India	Rajasthan	Banswara District	Sallopat (Sallapat)		P	Phosphate contents have been reported as 15-30% P205 and 10-12% P2O5.	23.18333	74.15000		
618	India	Rajasthan	Jaipur District	Achraul (Achrol)		P	laminated phosphorite 12.5-31.3% P2O5; surface encrustations 5-25% P2O5	27.30000	76.60000		
619	India	Rajasthan	Jaipur District	Baraud		P	surface encrustations 5-25% P2O5, up to 20 cm thick	27.88333	76.36667	Location best estimate from NIMA location for Baraud population center and map in Dayal and others (1984).	
620	India	Rajasthan	Jaipur District	Siriska		P		27.40000	77.00000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
607				Unknown				Director of Geology and Mining, 1989			
608	None			NA	Estimated reserves--1.68 Mt @ 10% P2O5 (1987)				British Sulphur Corporation, 1987; Sant and Pant, 1980		
609									Lee, 1980		
610									Lee, 1980		
611	None			NA	0.03 Mt @ 32-35% P2O5			British Sulphur Corp., 1987			
612				Unknown				Chauhan and Sisodia, 1989			
613				Unknown				Chauhan and Sisodia, 1989; NIMA, 2000			
614									British Sulphur Corporation, 1987		
615				Unknown				Banerjee and Sood, 1989	Sant and Pant, 1980		
616				Unknown				Banerjee and Sood, 1989	Sant and Pant, 1980		
617				Unknown	0.05Mt @ 20-25% P2O5 (1990)		Reserves are small.	Chauhan and Sisodia, 1989; NIMA, 2000	British Sulphur Corporation, 1987; Sant and Pant, 1980; Choudhuri, 1990		
618				Unknown	1.0 Mt @ 15-20% P2O5 (1990)			Chuahan and Sisodia, 1989	British Sulphur Corporation, 1987; Choudhuri, 1990		
619				Unknown				NIMA, 2000; Dayal and others, 1984			
620				Unknown				Chuahan and Sisodia, 1989			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
621	India	Rajasthan	Jaisalmer District	Birmania		P		26.30000	70.80000	120 km north of Barmer.	
622	India	Rajasthan	Jaisalmer and Barmer Districts	Fatehgarh		P	5-15% P2O5	26.40000	71.25000		
623	India	Rajasthan	Jhunjhunun District	Chapoli area		P					
624	India	Rajasthan	Udaipur District	Badgaon		P	2 surface samples ran 22.96% P2O5 and 31.44% P2O5.				
625	India	Rajasthan	Udaipur District	Bagdara		P	15-20% P2O5				
626	India	Rajasthan	Udaipur District	Dakan Kotra (Dakankotra)		P		24.50000	73.73333		
627	India	Rajasthan	Udaipur District	Jhamarkotra		P	Phosphorite has excess silica and fluorine.	24.46667	73.83333	24 km SE of Udaipur.	1968
628	India	Rajasthan	Udaipur District	Jameshwer		P					
629	India	Rajasthan	Udaipur District	Kanpur		P		24.56667	73.76667		
630	India	Rajasthan	Udaipur District	Karbaria-ka-Gurha (Ka-Guda)		P		24.55000	73.78333		
631	India	Rajasthan	Udaipur District	Lakhawas		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
621	None			Unknown	4.34 Mt @8-13 % P2O5 (other estimates 4.9 Mt @10-15% P2O5)		Lack of water and labor together with other logistical problems and low grade makes development of the deposit unlikely.	Chauhan and Sisodia, 1989	Pant, 1980; British Sulphur Corp., 1987; Sant and Pant, 1980		
622	None			Unknown			Large, low-grade reserves; not likely to be developed.	Chauhan and Sisodia, 1989	Chauhan and Sisodia, 1989; British Sulphur Corp., 1987; Sant and Pant, 1980		
623					0.037 Mt @ 15% P2O5 (1980)				Sant and Pant, 1980		
624	None				16.8 Mt @ >30% P2O5 (1987)				British Sulphur Corp., 1987; Sant and Pant, 1980		
625	None								British Sulphur Corp., 1987		
626	None			Unknown	1.4 Mt @12-20% P2O5 (1980)			Director General Geological Survey of India, 1977	Pant, 1980; British Sulphur Corp., 1987; Sant and Pant, 1980		
627	Active Mine (1994)	0.5 Mtpa at average of 17% P2O5 (1991)	No data	S	Estimated reserves--57.26 Mt (1987)	Rajasthan State Mines and Minerals (RSMM) Ltd. (1991)	Average feed grade is 17% P2O5.	MASMILS, 2000	Pant, 1980; Russell, 1991; Choudhuri and Roy, 1986; British Sulphur Corp., 1987; Sant and Pant, 1980; Notholt, 1994	5.33E+09	ISM0456, W700060
628	None								British Sulphur Corp., 1987		
629				Unknown	3.93 Mt, 10-13% P2O5 (1987); 1Mt @ 30% P2O5 (1991)	Rajasthan State Mineral Development Corporation Ltd. (1991)		Director General Geological Survey of India, 1977	Pant, 1980; Russell, 1991; British Sulphur Corp., 1987; Sant and Pant, 1980		
630				Unknown	1.34 Mt, 22-25% P2O5 (1987)			Director General Geological Survey of India, 1977	Pant, 1980; British Sulphur Corp., 1987; Sant and Pant, 1980		
631									British Sulphur Corp., 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
632	India	Rajasthan	Udaipur District	Maton		P	25.73% P2O5, 38.15% CaO, max. 1% MgO, 26.29% SiO2, 3.6% R2O3, max 2% F., 1.63% LOI	24.55000	73.79667	15 km SE of Udaipur.	1967
633	India	Rajasthan	Udaipur District	Nimachmata (Neemach Mata)		P				NNW of Udaipur.	
634	India	Rajasthan	Udaipur District	Niwania (Newania) Sedimentary Phosphate		P					
635	India	Rajasthan	Udaipur District	Niwania (Newania)		P	Bulk samples run 6-10% P2O5.			45 km east of Udaipur.	
636	India	Rajasthan	Udaipur District	Pichola		P				South of town of Pichola.	
637	India	Rajasthan	Udaipur District	Sameta		P				Est of town of Sameta	
638	India	Rajasthan	Udaipur District	Sisarma		P				SSW of Udaipur.	
639	India	Rajasthan	Udaipur and Banswara Districts	Tambesra		Mn Fe Si P Ba		23.50000	74.25000		
640	India	Tamil Nadu		Kottagudie area		P					
641	India	Tamil Nadu		Pondicherry		P					
642	India	Tamil Nadu		S. Arcot		P					
643	India	Tamil Nadu		Valdavur		P				13 km north of Pondicherry.	
644	India	Tamil Nadu	Cuddalore District	Cuddalore		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
632	Active Mine (1994)			S	9.2 Mt @ 26.16% P2O5	Hindustan Zinc Ltd. (1991)		MASMILS, 2000	Pant, 1980; Russell, 1991; British Sulphur Corp., 1987; Sant and Pant, 1980; Notholt, 1994	5.33E+09	DE00109
633	None				1.04 Mt @ 5-10% P2O5 (1987)				Choudhuri and Roy, 1986; British Sulphur Corp., 1987; Sant and Pant, 1980		
634					1.0 Mt @ 6-9% P2O5 (1987)				British Sulphur Corp., 1987		
635	None			NA	0.03 Mt @ 32-35% P2O5 + 1.09 Mt @ 6-10% P2O5 (1987)			British Sulphur Corp., 1987	British Sulphur Corp., 1987; Sant and Pant, 1980		
636	None								British Sulphur Corp., 1987		
637	None								British Sulphur Corp., 1987		
638	None				1.4 Mt @ 5-10% P2O5 (1987)				Choudhuri and Roy, 1986; British Sulphur Corp., 1987; Sant and Pant, 1980		
639				Unknown				MASMILS, 2000		5.33E+09	
640	None								Lee, 1980		
641	Active Mine (1991)					Trichinoploy Mining Works Ltd. (1991)			Russell, 1991		
642	Active Mine (1991)					Trichinoploy Mining Works Ltd. (1991)			Russell, 1991		
643	Not economic								Lee, 1980; British Sulphur Corp., 1987		
644	None								Lee, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
645	India	Tamil Nadu	Dharmapuri Distict?	Hungenekal area		P					
646	India	Tamil Nadu	North Arcot District?	Sevathur Complex		P	Soils run 4-11% P2O5; carbonatite contains up to 14.2% P2O5.			200 km southwest of Madras.	
647	India	Tamil Nadu	Tiruchrapelli District	Nambakhurichi-Varagupadi area		P					
648	India	Uttar Pradesh		Jagadhri (Tehri Garhwal)		P					
649	India	Uttar Pradesh		Kumaun Himalaya/Doggada Area		P		29.81222	78.59667		
650	India	Uttar Pradesh		Kumaun Himalaya/Pithoragarh District/Dhaigaon		P		29.59167	80.17222		
651	India	Uttar Pradesh	Almora District?	Pithorgarh		P					
652	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Baghi-Mathiangaon		P					
653	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Bemunda		P					
654	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Busti (Bhusti, Bhasti)		P U					
655	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Chamasari		P					
656	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Chavnpa-Kumali		P					
657	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Chipalda		P	Ave 21.0% P2O5.			26 km from Dehradun by road.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
645					0.05 Mt @ 36% P2O5 (1980)				Sant and Pant, 1980		
646	None			NA	0.19 Mt @ 10-30% P2O5 (1980)	Tamil Nadu Mineral Development Corp. (1987)			British Sulphur Corporation, 1987; Sant and Pant, 1980		
647	Active Mine (1991)					Trichinoploy Mining Works Ltd. (1991)			Russell, 1991; Sant and Pant, 1980		
648									Lee, 1980		
649				Unknown				Bagati and Mundepi, 1984	Mazumdar and Banerjee, 1998		
650				Unknown				Bhattacharya and Sengupta, 1984	Valdiya, 1972		
651									Sant and Pant, 1980		
652					2.0 Mt @ 15.35% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Sant and Pant, 1980		
653					0.09 Mt @ 3-21% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
654	None			NA	2.0 Mt @ 21.5% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Pant, 1980; Russell, 1991; Slansky, 1986; Sant and Pant, 1980		
655	None			NA	4.49 Mt (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Sant and Pant, 1980		
656					0.63 Mt @ 25.0% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
657	None			NA					British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
658	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Durmala		P U				20 km from Mussoorie by road in rugged terrain.	
659	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Jalikhal		P U					
660	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Kappu Window		P					
661	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Kimoi		P					
662	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Maldeota Block		P U				18 km from Dehradun by road.	
663	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Maldeota East		P					
664	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Masrana		P				12 km from Mussoorie by road.	
665	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Mussoorie		P U					
666	India	Uttar Pradesh/Uttaranchal	Dehradun and Tehri Districts	Mussoorie Syncline/Paritibba		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
658	Active (1994)				9.14 Mt @ 19.9% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Pant, 1980; Russell, 1991; Slansky, 1986; Sant and Pant, 1980; Notholt, 1994		
659	None			NA	5.36 Mt @ 26.3% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Pant, 1980; Russell, 1991; Slansky, 1986; Sant and Pant, 1980		
660					1.18 Mt @ 16.49% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
661					1.01 Mt @ 15.31% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
662	Active producer (1990)			U	10.64 Mt @ 18.7% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Pant, 1980; Russell, 1991; Slansky, 1986; Sant and Pant, 1980; Choudhuri, 1990		
663					1.50 Mt (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
664					4.5 Mt @ 14.19% P2O5 (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987		
665									Pant, 1980; Russell, 1991; Slansky, 1986		
666	None			NA	3.69 Mt (1987)		Resources are proven + probable + possible.		British Sulphur Corporation, 1987; Sant and Pant, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
667	India	Uttar Pradesh	Lalitpur District	Jalandhar		P					
668	India	Uttar Pradesh	Lalitpur District	Pishari-Tari-Barwar		P					
669	India	West Bengal	Purulya District	Beldih		P	Ore has high Fe content.				
670	India	West Bengal	Purulya District	Kutui (Kutni)		P	Ore has high Fe content.				
671	India	West Bengal	Purulya District	Mednitarn		P	Ore has high Fe content.				
672	India	West Bengal	Purulya District	Chirugora		P	Ore has high Fe content.				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
667	None			NA	0.4 Mt @ 12.4% P2O5 + 2.0 Mt @ 12% P2O5 (1987)				British Sulphur Corporation, 1987		
668	None			NA	1.8 Mt @ 13.5% P2O5 + 4.0 Mt @ 5.15% P2O5 + 3.5 Mt @10-13% P2O5 (1987)				British Sulphur Corporation, 1987		
669					0.059 Mt @ 14-30% P2O5 (1980); 1.5 Mt @ 15-30% P2O5 (1990)	West Bengal Mineral Industries Development Corporation (1991)	Ore is suitable only for direct application because of high iron content.	NIMA, 2000; Bhattacharyya and Bhattacharya, 1989; Lee, 1980; British Sulphur Corporation, 1987	Russell, 1991; Krishnaswamy, 1982; Roy, 1982; Sant and Pant, 1980; Choudhuri, 1990		
670					0.046 Mt @ 10.52% P2O5 (1980)	West Bengal Mineral Industries Development Corporation (1991)	Ore is suitable only for direct application because of high iron content.	NIMA, 2000; Bhattacharyya and Bhattacharya, 1989; Lee, 1980; British Sulphur Corporation, 1987	Russell, 1991; Krishnaswamy, 1982; Roy, 1982; Sant and Pant, 1980		
671						West Bengal Mineral Industries Development Corporation (1991)	Ore is suitable only for direct application because of high iron content.	NIMA, 2000; Bhattacharyya and Bhattacharya, 1989; Lee, 1980; British Sulphur Corporation, 1987	Russell, 1991; Krishnaswamy, 1982; Roy, 1982; Sant and Pant, 1980		
672					0.04 Mt @ 6.72% P2O5 at Chirugora + 0.02 Mt @16.16% P2O5 at Chirugora (1980)	West Bengal Mineral Industries Development Corporation (1991)	Ore is suitable only for direct application because of high iron content.	NIMA, 2000; Bhattacharyya and Bhattacharya, 1989; Lee, 1980; British Sulphur Corporation, 1987	Russell, 1991; Krishnaswamy, 1982; Roy, 1982; Sant and Pant, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
673	India	West Bengal	Purulya District	Panrkidih		P	Ore has high Fe content.				
674	Indonesia	East Java			Tubon	P				About 900 km East of Jakarta.	
675	Indonesia	West Java	Ciamis	Sidumulin		P	Generally low in F and Cd.				
676	Iran			Hassu Kuchak		P		39.33333	44.83333		
677	Iran			Esfordi		P FE		31.80500	55.58500	Near Bafq.	
678	Iran	Mazandaran		Geirud (Jeirud)		COAL P		36.00000	51.50000	Location for Shemsek area.	
679	Iran	Mazandaran		Shemsek (Shemshak)		COAL P		36.00000	51.50000	Location for Shemsek area.	
680	Iran			Kuh-E-Pabdeh (Pabdeh)		P	8.25% P2O5	32.46667	49.80000		
681	Iran			Dalir Valley/Soltanieh		P		36.40000	48.83333		
682	Iran			Zagros Mountains/Behbehan area		P		30.56667	50.30000	Location for Behbehan.	
683	Iran			Zagros Mountains/Sheikhabil		P		30.83333	51.06667		
684	Iran			Zanjan		P		36.66667	48.48333		
685	Iraq				Marbat	P		33.66667	40.28333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
673						West Bengal Mineral Industries Development Corporation (1991)	Ore is suitable only for direct application because of high iron content.	NIMA, 2000; Bhattacharyya and Bhattacharya, 1989; Lee, 1980; British Sulphur Corporation, 1987	Russell, 1991; Krishnaswamy, 1982; Roy, 1982; Sant and Pant, 1980		
674	None					PT Kresna Duta Satria (1995)	Area is heavily farmed which may preclude development.		Industrial Minerals, 1997		I011301
675	Active Mine (1995)				Proven-- 40 Mt (1997)	PT Istana Kanematsu Indonesia (IKI, 1995)	Average grade is reported as 33% P2O5.		Industrial Minerals, 1997; Kuo, 1994		I011300
676				S				MASMILS, 2000	Commission for Geological Map of the World, 1982b	5.07E+09	
677				S	5.6 Mt, 14.5% P2O5 (1987)			Salehi, 1989a	British Sulphur Corp., 1987; Notholt, 1994		
678				S	12 Mt @ 22.5% P2O5			MASMILS, 2000	Commission for Geological Map of the World, 1982b; Notholt, 1994	5.071E+09	
679				S	34 Mt @ 11.4% P2O5			MASMILS, 2000	Commission for Geological Map of the World, 1982b; Notholt, 1994	5.071E+09	
680				Unknown				Commission for Geological Map of the World, 1982b	Notholt, 1994		
681				Unknown	Resources-- 30 Mt @ 12% P2O5 (1994)		Resources are for Dalir Valley.	Salehi, 1989a	Notholt, 1994		
682				Unknown	Resource-- 165 Mt @ 20% P2O5 (1994)			Salehi, 1989a	Notholt, 1994		
683				Unknown				Commission for Geological Map of the World, 1982b	British Sulphur Corporation, 1987		
684				S				MASMILS, 2000		5.071E+09	
685				S				MASMILS, 2000		5.05E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
686	Iraq				Traibeel	P		32.41667	39.06667		
687	Iraq			Western Desert	Akashat	P		33.80000	40.11667	120 km NW of Rutba.	1960
688	Iraq			Western Desert	Ga'ara Area	P		33.75000	40.00000	Location average of phosphorite distribution.	
689	Iraq			Western Desert	Sawab	P				N of Akashat.	
690	Ireland	County Clare		Lisdonvarna		P	High contents of SiO2, also moderate contents of Fe2O3 and Al2O3.	53.05000	-9.28333		1925
691	Israel			Arava		P					
692	Israel			Beersheva (Zohar)		P U		31.21667	35.05000		1980
693	Israel			Ein Jahav (1)		P		30.86667	34.98333		
694	Israel			Ein Jahav (2)		P		30.63333	35.11668		
695	Israel			Ein Yahav		P		30.61667	35.18333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
686								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
687	Active mine (1987)	Rated capacity 3.4 Mtpa, phosphate conc	No data	S	57.8 Mt @ 21% P205 (R1E, 1982); 432 Mt @ 17.5-22.5% P205 (R1M, 1981); 430 Mt @ 22% P2O5 (1994)	State Organisation for Minerals	2 quarries.	Arab Organisation for Mineral Resources, 1987	Russell, 1987; Commission for Geological Map of the World, 1982b; Notholt, 1994	5.05E+09	ISM0438
688				Unknown				Al-Bassam and others, 1983			
689					3500 Mt @ 22% P2O5 (1994)				Notholt, 1994		
690	Past production		1500000t by 1947, 100000-120000t (1940-1947)	S	3 Mt @ 22-25% P2O5 in calcium phosphate nodules		Mines closed since 1947.	Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987; Mew, 1980		
691					Resource--150 Mt @ 25-27% P2O5 (1994)				Notholt, 1994		
692		None	None	No data	200 Mt@ 31.1-33.9% P2O5 (R1E, 1982); Resource--250 Mt @ 25-29% P2O5 (1994)			Arab Organisation for Mineral Resources, 1987	MASMILS, 2000; Notholt, 1994	5.08E+09	ISM0429
693								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
694								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
695				S				MASMILS, 2000		5.08E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
696	Israel			Giv'at Mador		P					
697	Israel			Hameshar		P		30.43333	34.90000		
698	Israel			Har Teref		P					
699	Israel			Har Zin		P					
700	Israel			Hiyyon Valley		P		30.18333	34.96667		
701	Israel			Ho Hahar		P		30.83333	35.05000		
702	Israel			Jebel Katan		P		30.95000	35.25000		
703	Israel			Nahal Arod		P					
704	Israel			Nahal Zinam		P					
705	Israel			Negev Desert/Nahil Zin area	Makhtesh Mine	P U F		30.55000	34.85000		
706	Israel			Negev Desert	Makhtesh Qatan	P		30.86667	35.25000		
707	Israel				Nahal Zin	P U		30.95000	35.31667		1930

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
696									Lewy, 1990		
697								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
698									Lewy, 1990		
699									Lewy, 1990		
700								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
701								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
702								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
703									Lewy, 1990		
704									Lewy, 1990		
705	Past Producer (2001)	0.562 Mt ore, 1978; 0.350 Mt ore, 1980; capacity: 2Mt/yr	No data	S	3 Mt @ 30-32% P2O5 (R1E, 1980)	Rotem Amfert-Negev Group		MASMILS, 2000	Harben and Kuzvart, 1996; S. Jasinski, written commun., 2001	5.08E+09	ISM0430
706	Past producer (1994)			S		Rotem Amfert-Negev Group		MASMILS, 2000	Harben and Kuzvart, 1996; Commission for Geological Map of the World, 1982b; Notholt, 1994	5.08E+09	
707	Active mine (1998)	0.91 Mt ore, 1979; 1.236 t ore, 1980; Capacity: 1.5 Mtpa	2.397 Mt ore, 1978-80	S	130 Mt ore (R1E, 1980); Resource--150 Mt @ 26-30% P2O5 (1994)	Rotem Amfert-Negev Group		Arab Organisation for Mineral Resources, 1987	Notholt, 1994; Harben and Minster, 1998; MASMILS, 2000	5.08E+09	ISM0431

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
708	Israel			Negev Desert	Oron	P U		30.86667	35.98333		1950
709	Israel			Negev Desert/Zefa-Ef'e deposit	Arad Mine	P U		31.11667	35.18333		
710	Italy			Capo Santo Maria di Leuca		P					
711	Italy	Lecce Province		Salentino Peninsula		P					1869
712	Italy	Sicily		Donnafugata (Donnalucata) region		P		36.80000	14.70000		
713	Jordan			Al Inab		P		29.96667	37.01667		
714	Jordan			Batn El Ghol (Batn El Ghul)		P		29.75000	35.90000		
715	Jordan			Deir Abu Said area		P					
716	Jordan			El Abyad (Wadi El Abayad, El Abiad, Al Abayad)	El Abyad	P		30.90000	36.00000	Location estimated from map in Jallad and others (1989) and known location of nearby Al Hassa.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
708	Active mine (1998)	Capacity 1.2 Mt ore	No data	S	55 Mt @ 22-28% P2O5 (1981, R1E); 85 Mt@ 20-26% P2O5 (1980, R1M); 150 Mt @ 20-26% P2O5 (1994)	Rotem Amfert-Negev Group		MASMILS, 2000	Harben and Kuzvart, 1996; Slansky, 1986; Commission for Geological Map of the World, 1982b; Notholt, 1994; Harben and Minster, 1998	5.08E+09	ISM0432
709	Active (1998)	0.350-0.400 Mtpa @ 33% P2O5; Capacity of 1 Mtpa		S	50 Mt proven	Rotem Amfert-Negev Group		Commission for Geological Map of the World, 1982b	Harben and Kuzvart, 1996; Notholt, 1994; S. Jasinski, written commun., 2001; Harben and Minster, 1998	5.08E+09	ISM0428
710	None				Est: 10 Mt @ 10.5-20.5% P2O5 (1987)				British Sulphur Corp., 1987		
711	None				>60 Mt "piromafo"				British Sulphur Corp., 1987		
712	None			Unknown	7 Mt @ 15% P2O5			NIMA, 2000			
713								Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b; Arab Organisation for Mineral Resources, 1987		
714								Abed and Amireh, 1999	Commission for Geological Map of the World, 1982b		
715					300 Mt @ 19% P2O5 (1994)				Notholt, 1994		
716	Active mine (1995)	Ore production capacity 1.9 Mtpa (2001)		S	Estimated reserves-- 150 Mt @ 28-32% P2O5 (1994)	Jordan Phosphate Mines Co. Ltd. (1996)		Jallad and others, 1989	Abed and Omari, 1994; Griffiths, 1995b; British Sulphur Corp., 1987; Notholt, 1984; S. Jasinski, written commun., 2001		DE00130

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
717	Jordan			El Hassa (Zgaimat El Hasah, Al Hasa, Wadi El Hasa)	El Hassa	P	upper horizon average 30% P2O5 for ore, 23% P2O5 protore	30.83333	36.00000		1908
718	Jordan			Esh Shidiya (Es Shidiya, Esh Shidiya, Al Shidiyah, Shediyah)	Esh Shidiya	P	13-36% P2O5	29.80000	36.20000		1976
719	Jordan			Naqb Etaiyg		P		29.75000	36.45000		
720	Jordan			Ruseifa (Er Ruseifa)	Ruseifa (Rusayfah)	P U		32.00000	36.03333	About 24 km NE of Amman.	1903
721	Jordan			Suweilih		P		32.01667	35.76667		
722	Jordan			Wadi Arfa		P		30.10000	36.80000		
723	Kazakhstan			Aktyubinsk		P		50.28333	57.16667		1929
724	Kazakhstan			Aktyubinsk Basin/Bogdanov		P		50.28333	57.16667		
725	Kazakhstan			Aktyubinsk/Chilisai		P		50.28333	57.16667		
726	Kazakhstan			Aktyubinsk Basin/Kandagatch		P		49.46667	57.41667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
717	Active mine (1996)	Capacity 1.5 Mtpa (2001)		S		Jordan Phosphate Mines Co. Ltd. (1996)	3 open-pit mines exploit 2 beds.	Commission for Geological Map of the World, 1982b	Griffiths, 1995b; British Sulphur Corp., 1987; Harben and Kuzvart, 1996; Abed and Omari, 1994; Notholt, 1994; S. Jasinski, written commun., 2001	5.11E+09	W032779; ISM0435
718	Active mine (1995)	Capacity 3.25 Mtpa (2001)		S	1186 Mt (1987); 838 Mt @ 26.5% P2O5 (1980)	Jordan Phosphate Mines Co. Ltd. (1996)	First prod in 1989.	Abed and Amireh, 1999	MASMILS; Bartels and Gurr, 1994; Abed and Omari, 1994; British Sulphur Corp., 1987; Notholt, 1994; S. Jasinski, written commun., 2001	5110000002; 5110000007	ISM0434
719								Abed and Amireh, 1999			
720	Past producer (1994)	Capacity 0.8 Mt phosphate conc, 1980	No data	S; U	71.4 Mt @ 28.3-33% P2O5 (R1E, 1980); 147 Mt (R1M, 1982)	Jordan Phosphate Mines Co. Ltd. (1996)	2 underground and 3 open-pit mines were in operation.	MASMILS, 2000	Bartels and Gurr, 1994; Abed and Omari, 1994; British Sulphur Corp., 1987; Notholt, 1994	5.11E+09	ISM0433
721								Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b		
722								Abed and Amireh, 1999			
723		No data	No data	S; U	800 Mt @ 6-14% P205 (1980)			Ilyin and Krasilnikova, 1989b			ISM0453
724				S	Reserves-- 71 Mt @9-12% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
725		5.9 Mt @ 14.7% P205 (1980)	No data	S	Reserves-- 269 Mt @ 14.7% P205 (1979)			MASMILS, 2000		4.59E+09	ISM0446
726				S	Reserves-- 22 Mt @ 12% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
727	Kazakhstan			Aktyubinsk Basin/Karaganda		P		48.36667	59.16667		
728	Kazakhstan			Aktyubinsk Basin/Koktiubinsk		P		50.28333	57.16667		
729	Kazakhstan			Aktyubinsk Basin/Novo-Ukraina		P		50.28333	57.16667		
730	Kazakhstan			Aktyubinsk Basin/Sarblak		P		50.28333	57.16667		
731	Kazakhstan			Aktyubinsk Basin/Utebies		P		50.28333	57.16667		
732	Kazakhstan			Aktyubinsk Basin/Verkhna-Kara		P		50.28333	57.16667		
733	Kazakhstan	Zhambyl Oblast		Karatau District/Aksai (Ak Say) deposit	Aksai (Ak Say) Mine	P	Beds 20-27% P2O5; Phosphatic shale 20-22% P2O5. Average ore has 23.7-23.21% P2O5, 0-3.82% MgO, 9.0-9.65% CO2, 13.24-15.2% insoluble residue.	43.40000	70.15000		
734	Kazakhstan	Zhambyl Oblast		Karatau District/Aktugay deposit		P		43.30000	70.06000	Deposit location estimated from map in World Survey of Phosphate Deposits (1987) and locations of nearby deposits.	
735	Kazakhstan	Zhambyl Oblast		Karatau District/Dzhanatas (Zhanatas) deposit	Dzhanatas Mine	P	Average composition: 25.6% P2O5, 7.1% CO2, and 15.9% insoluble residue.	43.64972	69.96944	Near town of Dzambul.	
736	Kazakhstan	Zhambyl Oblast		Karatau District/Chulak-Tau (Chulak Tau) deposit	Chulak Tau Mine	P	Lower bed 26-29% P2O5; Upper bed 36% P2O5. Average ore contains 25.9% P2O5, 7.5% CO2, and 16.5% insoluble residue.	43.16667	70.46667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
727				S	Reserves-- 69 Mt @ 12.3% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
728				S	Reserves-- 250 Mt @ 8-10% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
729				S	Reserves-- 3.5 Mt @ 10-15.5% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
730				S	Reserves-- 17 Mt @ 12.5% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
731				S	Reserves-- 18 Mt @ 9-16% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
732				S	Reserves-- 122 Mt @ 12.5% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
733	Active Mine (1996)			S; U		JSC Karatau		MASMILS, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987	4.59E+09	
734								British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
735	Active Mine (1996)	capacity: 5 Mtpa ore		S	Deposit reserves-- 367-500 Mt @ 22-30% P2O5 (1998)	JSC Karatau		MASMILS, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987; Troitsky and others, 1998	4.59E+09	
736	Active Mine (1996)			S				MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
737	Kazakhstan	Zhambyl Oblast		Karatau District/Chulak-Tau (Chulak Tau) deposit	Molodezniy Mine	P		43.16667	70.46667		
738	Kazakhstan	Zhambyl Oblast		Karatau District/Karatau		P		43.15000	70.50000		1936
739	Kazakhstan	Zhambyl Oblast		Karatau District/Kokdzhon (Kok Dzhon, Kokzhon)	Kokdhzon (Kok Dzhon, Kokzhon) Mine	P	Beds up to 30% P2O5; Phosphatic shale 20% P2O5	43.51694	69.74722	Near town of Dzambul.	
740	Kazakhstan	Zhambyl Oblast		Karatau District/Kok Su deposit		P	4-31% P2O5.				
741	Kazakhstan	Zhambyl Oblast		Karatau District/Tje Say (Tjesay) deposit	Tje Say (Tjesay) Mine	P		43.60000	70.16667	Mine location modified after map in World Survey of Phosphate Deposits (1987).	
742	Kenya			Homa Complex (Ndiru Hill)		P		-0.38333	34.41667	Lat-long is for Homa Hill.	
743	Kenya			Rangwa Complex (Kisingiri volcano)		P Nb		-0.56667	34.16667	Lat-long is for Rangwa Hill.	
744	Kenya			Ruri Complex		P REE Nb		-0.54000	34.33333		
745	Kenya			Tinderet		P Nb		-0.06667	35.33333		
746	Korea (North)			Sinpung deposits	South Hamyong	P				Near Tanchon.	
747	Korea (North)			Songjin		P					
748	Lebanon				Amioun	P		34.35000	35.81667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
737	Active Mine (1987)			S; U				MASMILS, 2000	British Sulphur Corporation, 1987	4.59E+09	
738		13 Mt @ 23-29% P205 (1980)	No data	S; U	1.7 Mt @ 20-25% P205 (1975)	JSC Karatau		MASMILS, 2000		4.59E+09	ISM0445
739	Active Mine (1996)			S	Deposit reserves--241 Mt @ 27% P2O5 (1998)	JSC Karatau		MASMILS, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987; Troitsky and others, 1998	4.59E+09	
740	Active Mine (1987)								British Sulphur Corporation, 1987		
741	Past, active?			S				MASMILS, 2000; British Sulphur Corporation, 1987	British Sulphur Corporation, 1987	4.59E+09	
742	None, not economic (1991)							NIMA, 2000; Idman and Mulaha, 1991	de Kun, 1987; Idman and Mulaha, 1991; Woolley, 2001		
743	None, not economic (2001)							NIMA, 2000; Idman and Mulaha, 1991	de Kun, 1987; Idman and Mulaha, 1991; USGS files; Woolley, 2001		
744	None, not economic (1991)							Idman and Mulaha, 1991	de Kun, 1987; Idman and Mulaha, 1991; Woolley, 2001		
745								Woolley, 2001	USGS files; Woolley, 2001		
746									Lee, 1980		
747									Lee, 1980		
748								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
749	Lebanon				Hasbaya	P		33.40000	35.70000		
750	Lebanon				Machnhara	P		33.51667	35.65000		
751	Lebanon				Nahr Litani (I)	P		33.71667	35.80000		
752	Lebanon				Nahr Litani (II)	P		33.66667	35.76667		
753	Lebanon				Nahr Litani (III)	P		33.58333	35.70000		
754	Lebanon				Saida	P		33.63333	35.46667		
755	Lebanon				Sour	P		33.33333	35.30000		
756	Lebanon				Sour South	P		33.21667	35.25000		
757	Lebanon				Tripoli	P		34.45000	35.91667		
758	Lebanon				Zahle South	P		33.85000	35.85000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
749								Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b; Arab Organisation for Mineral Resources, 1987		
750								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
751								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
752								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
753								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
754								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
755								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
756								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
757								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
758								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
759	Lebanon			Beq'a (Bekaa) Depression	Jebel Bir ed Dahr	P				90 km from Beirut.	
760	Libya				Gharyan (Jebal Ghariane)	P		32.26667	12.86667		
761	Luxembourg			Musson, Differdange, Esch		Fe P		49.51667	5.91667		
762	Malawi			Chilwa Island		P Nb REE	Soils contain >5% apatite.	########	35.63333		
763	Malawi			Kalambo Stream area		P REE		########	34.98333		
764	Malawi			Kangankunde		REE P Sr		########	34.91667		
765	Malawi			Kapiri		P Ba Ti F Sr REE		########	34.91667		
766	Malawi			Mtsimukwe		P					
767	Malawi			Nailuwa		P		########	35.06667		
768	Malawi			Palula		F P Ti		########	34.08333	3 km NNW of Kapiri Hill.	
769	Malawi			Songwe Syenite	includes Ilomba and Ulindi intrusions	Nb P Ba		-9.55000	33.26667	Central location for large outcrop area.	
770	Malawi			Tundulu complex		P REE Nb Ba Mn Fe		########	35.80000	At south end of Lake Chilwa.	
771	Mali			Adrar Tadhak (Tadhak)		P F Fe		20.50000	0.00000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
759					Resources--4 Mt @ 23-25% P2O5 (1994)				Notholt, 1994		
760								Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1983; Woolley, 2001; Arab Organisation for Mineral Resources, 1987		
761								Commission for Geological Map of the World, 1968a			
762								NIMA, 2000	USGS files; Woolley, 2001		
763								NIMA, 2000	USGS files		
764								Jackson and Christiansen, 1993	Anstett, 1986; Castor, 1994; Notholt, 1990; de Kun, 1987; Neary and Highley, 1984; Mariano, 1989; Pell, 1996; USGS files; Woolley, 2001		
765								Woolley, 2001	Woolley, 2001		
766									USGS files		
767								Woolley, 2001	USGS files; Woolley, 2001		
768								Woolley, 2001	USGS files; Woolley, 2001		
769								Woolley, 2001	USGS files; Woolley, 2001		
770				S; No production	Proven--more than 0.8 Mt @ >20% P2O5 (2001)			Woolley, 2001	USGS files; Woolley, 2001		I000116
771	Occurrence						Commodities probably not present in economic amounts.	Woolley, 2001	Woolley, 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
772	Mali			Tilemsi		P		17.58333	0.25417		
773	Mali			Tilemsi Valley/Ganchirin		P	High Mn content.	17.50000	0.28333	MASMILS gives location as 17.41667N, 0.33333E.	
774	Mali			Tilemsi Valley/Tin Edam		P	High Mn content.	16.83333	0.83333		
775	Mali			Tilemsi Valley/Tamaguil (Tamaguilel, Tamaguelelt)		P		17.13333	0.25000		1935
776	Malta			Malta		P					
777	Mauritania				Akkadenach	P		19.55000	-12.66667		
778	Mauritania				Aouala	P		19.20000	-13.86667		
779	Mauritania				Batha Ergil	P		20.61667	-12.76667		
780	Mauritania				Bofal	P U Y Cd	Ave: 20.05% P2O5, 30.07% CaO, 35.80% SiO2, 2.36% Fe2O3, 3.28% Al2O3, 0.98% MgO; also about 80 ppm U, 80 ppm Y, some Cd	16.41667	-13.75000	Bofal is W of Wadi Guellouar.	
781	Mauritania				Bogue	P		16.58333	-14.18333		
782	Mauritania				Civé	P		15.75000	-13.21667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
772				Unknown	Resource--20 Mt @ 15-32% P2O5 (1994); 12 Mt @ 18-30% P2O5		Stripping ratios are relatively high, grades are variable, feral contents are high, and deposits are scattered.	MASMILS, 2000	de Kun, 1987; Notholt, 1994	7.45E+09	
773								British Sulphur Corporation, 1987	British Sulphur Corporation, 1987	7.45E+09	
774								British Sulphur Corporation, 1987			
775					12 Mt @ 25% P2O5 (1989)			British Sulphur Corporation, 1987	de Kun, 1987		
776	None								British Sulphur Corporation, 1987		
777								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
778								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
779								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
780	Active (1989)			S	Probable--70 Mt (1989)			Boujo and El Houssein Ould Jiddou, 1989	de Kun, 1987; Arab Organisation for Mineral Resources, 1987		
781								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
782								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
783	Mauritania				Kaedi (Mboto)	P		16.23333	-13.83333		
784	Mauritania				Loubboira (Louberra)	P U Y Cd	Ave: 19.05% P2O5, 26.72% CaO, 36.80% SiO2, 2.86% Fe2O3, 4.03% Al2O3, 0.51% MgO; also about 80 ppm U, 80 ppm Y, some Cd	16.43333	-13.71667	Loubboira is E of Wadi Guellouar.	
785	Mauritania				Naniouat Koueriat	P		16.23333	-13.83333		
786	Mauritania				Nouedgui-Bou Naga area	P		19.08333	-12.98333	D'Ijibiten region. Lat-long for a general location in Bou Naga Hills.	
787	Mauritania				Oued Chig	P		19.78333	-12.11667	D'Ijibiten region. Lat-long for a general location in Bou Naga Hills.	
788	Mauritania				Tamoust, Beira	P					
789	Mexico	Baja California		Continental Shelf		P		26.25000	-113.50000	Deposit on the W coast of Baja and extends from Isla Cedros in the north to just S of Cabo San Lazaro in the south.	
790	Mexico	Baja California Sur		Bahia Magdalena		P	3-5% P2O5	24.63333	-112.15000	Lat-long for the town of Bahia Magdalena.	1956?
791	Mexico	Baja California Sur		La Purisima		P					
792	Mexico	Baja California Sur		San Hilario Norte		P DIT	Main seam contains 40-60% SiO2 and 9-12% P2O5. Lower seam hs lower silica and higher phosphate content (15-16% P2O5).	24.46700	-111.15000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
783								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
784	Unclear			S	Probable--24 Mt (1989)			Arab Organisation for Mineral Resources, 1987	de Kun, 1987; Arab Organisation for Mineral Resources, 1987		
785								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
786	None (1986)							NIMA, 2000	McClellan and Saavedra, 1986		
787	None (1986)							NIMA, 2000	McClellan and Saavedra, 1986		
788	None (1987)								de Kun, 1987		
789								D'Anglejan, 1967	D'Anglejan, 1967; Blatt, 1992		
790								NIMA, 2000	Galli-Olivier and others, 1990		
791									Galli-Olivier and others, 1990		MX00615
792				Unknown				Foose, 1993	Notholt and others, 1989a; Salas, 1991; British Sulphur Corporation, 1987; Ojedo, 1991		MX00136

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
793	Mexico	Baja California Sur		San Hilario Sur		P DIT	Main seam contains 40-60% SiO2 and 9-12% P2O5. Lower seam hs lower silica and higher phosphate content.	24.28300	-111.00000		
794	Mexico	Baja California Sur		San Jose de Castro		P					
795	Mexico	Baja California Sur	La Paz	San Juan de la Costa		P		24.38250	-110.70222		1976
796	Mexico	Baja California Sur		San Roque		P					
797	Mexico	Baja California Sur		Santa Rita		P	4-19% P2O5 (average about 10%)			157 km NW of La Paz, in Arroyo del Salado.	
798	Mexico	Baja California Sur		Santo Domingo		P	Deposit has an apparent average grade of 4.6% P2O5.	24.29000	-111.00000		1950
799	Mexico	Baja California Sur		Tembabiche		P		25.26667	-110.96667	Lat-long is for the town of Tembabiche.	
800	Mexico	Coahuila		Astillero		P		25.08500	-101.45111		
801	Mexico	Coahuila		Banuelos (Bunuelos)		P		25.06667	-101.13333		
802	Mexico	Coahuila		Garambullo		P		25.02500	-101.49889		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
793				Unknown				Foose, 1993	Notholt and others, 1989a; Salas, 1991; British Sulphur Corporation, 1987; Ojedo, 1991		MX00137
794									Galli-Olivier and others, 1990		
795	Active Producer (2001)	1.5 Mtpa capacity (2001)	No data	U	Proven-- 34 Mt @ 20.0% P2O5 (1990)	Grupo Fertinal SA de CV		MASMILS, 2000	Harben and Kuzvart, 1996; Salas, 1991; Galli-Olivier and others, 1990; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001	2.01E+09	MX00151
796									Galli-Olivier and others, 1990		MX00603
797									Notholt and others, 1989a; Salas, 1991; British Sulphur Corporation, 1987		
798	None	Initial capacity (1982) will be 1.5 Mt phosphate conc with 32% P2O5	No data	S	Minimum resource-- 434 Mt @ 4.29% P2O5 + 643 Mt @ 4.56% P2O5 (1980)	Roca Fosforica Mexicana SA de DV (Rofomex)	Efforts to mine deposit were put into abeyance in 1985 after problems developed when hard beds were encountered during dredging.	MASMILS, 2000	Harben and Kuzvart, 1996; Notholt and others, 1989a; Salas, 1991; British Sulphur Corporation, 1987	2.01E+09	
799								NIMA, 2000	Galli-Olivier and others, 1990; Salas, 1991		
800				U	18.1 Mt @ 14% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.01E+09	
801				Unknown				Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993		MX06243
802				U	25.3 Mt @ 12% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.01E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
803	Mexico	Coahuila		Mina Honda		P		27.68333	-101.98333		
804	Mexico	Coahuila		San Francisco North		P		25.17194	-102.16111		
805	Mexico	Coahuila		San Francisco South		P		25.15000	-102.19194		
806	Mexico	Coahuila		San Juan		P		27.25000	-101.10000		
807	Mexico	Coahuila		Sierras Gomez Farias-La Carbonera		P		24.95000	-100.96667		
808	Mexico	Coahuila		Sierras Gomez Farias-La Carbonera/ Canelito		P		24.95000	-100.96667		
809	Mexico	Coahuila		Sierras Gomez Farias-La Carbonera/ Carbonera	Saltillo	P		24.95000	-100.96667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
803				Unknown				Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993		
804				U	14 Mt 13.5% P2O5 combined with San Francisco South			MASMILS, 2000	British Sulphur Corporation, 1964	2.01E+09	
805				U	14 Mt 13.5% P2O5 combined with San Francisco North		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.01E+09	
806				Unknown				Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993		
807				U	6.1 Mt 19.8% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993; British Sulphur Corporation, 1964; Salas, 1975		
808					3.7 Mt @ 19% P2O5 (1987)			Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993; British Sulphur Corporation, 1967; Salas, 1975		
809	Past producer				7.8 Mt @ 19.9% P2O5 (1987)	Fosforitas Mexicanas SA (1968)	Reserve estimates from World Survey of Phosphate Deposits.	Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993; British Sulphur Corporation, 1964; Salas, 1975		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
810	Mexico	Coahuila		Sierras Gomez Farias-La Carbonera/ San Javier		P		24.95000	-100.96667		
811	Mexico	Coahuila		Sierra La Catana		P		25.18300	-101.31700		
812	Mexico	Estado de Mexico		Naucalpan de Juárez		P					
813	Mexico	Guanajuato		Los Pozos District	La Laja, Angelina, El Paseo, La Dura, La Prieta, El Duraznillo	P		21.16667	-100.51667		
814	Mexico	Hildalgo		San Francisco		P		20.98300	-99.33300		
815	Mexico	Hildalgo			Mina La Negra	P				At Zimapan.	
816	Mexico	Nuevo Leon		Canon de las Encias		P	17.79% P2O5, 42.39% CaO, 1.36% Fe2O3, 8.76% Al2O3, 1.89% MgO, 0.32% MnO, 6.86% SiO2, 19.17% CO3	26.75000	-100.56667	40 kms northeast of Sabinas Hidalgo.	
817	Mexico	Nuevo Leon		Dulces Nombres		P	21-35% P2O5; up to 37% P2O5 in places	23.50000	-100.50000		
818	Mexico	Nuevo Leon		Iturbide		P					
819	Mexico	Nuevo Leon		Linares		P Ba					
820	Mexico	Nuevo Leon		Mitra y Arteaga		P		24.83300	-100.80000		
821	Mexico	Nuevo Leon		Monterrey		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
810					3.9 Mt @ 19% P2O5 (1987)			Consejo de Recursos Minerales, 1993	Consejo de Recursos Minerales, 1993; British Sulphur Corporation, 1964; Salas, 1975		
811				Unknown				Foose, 1993	Salas, 1975		
812	Past Producer (2001)	approx. 0.06 Mtpa				Fosforo Industrial SA de CV (subsidiary of Minerales No Metalicos SA)			Griffiths, 1988; S. Jasinski, written commun., 2001		
813	Small scale 1950's; intermittent since						Grades are highly variable (2.1-43% P2O5).	Consejo de Recursos Minerales, 1992c	Consejo de Recursos Minerales, 1992c		MX10052?
814				Unknown			`	Foose, 1993			
815	Past Producer (2001)								Harben and Kuzvart, 1996; S. Jasinski, written commun., 2001		
816	Past Producer			Unknown				British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
817	Small Past Producer			Unknown				British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
818	Past Producer (2001)					Corporación Minera del Golfo SA de CV			Griffiths, 1988; S. Jasinski, written commun., 2001		
819	Past Producer (2001)								Griffiths, 1988; S. Jasinski, written commun., 2001		
820				Unknown				Foose, 1993			
821	Past Producer (2001)	approx. 35,000 tpa				Fosfo Rey SA (subsidiary of Minerales No Metalicos SA)			Griffiths, 1988; S. Jasinski, written commun., 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
822	Mexico	Nuevo Leon		Rincon de Arizmendi		P	7-34% P2O5	26.88333	-100.68333		
823	Mexico	Nuevo Leon		Topo Chico		P		26.00000	-100.36667		
824	Mexico	Queretaro			Chavarria	P		20.81667	-99.61667	In Cadereyta municipality.	
825	Mexico	Queretaro			La Ventana	P		20.85000	-99.63333	In Cadereyta municipality.	
826	Mexico	Queretaro			Tancamá	P				In Jalpan municipality.	
827	Mexico	Queretaro		Queretaro Municipality P concession		P					
828	Mexico	Queretaro		Peña Miller Municipality P concession		P					
829	Mexico	Queretaro		Landa de Matamoros Municipality P concession		P					
830	Mexico	Quintana Roo?		Landa de Matamoros		P					
831	Mexico	San Luis Potosi		Ciudad Valles Region		P					
832	Mexico	Zacatecas			El Buen Suceso	P		22.88333	-101.91667		
833	Mexico	Zacatecas			El Cerrito	P		24.13333	-103.26667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
822				Unknown				British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
823								British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
824								Consejo de Recursos Minerales, 1992a	Consejo de Recursos Minerales, 1992a		
825								Consejo de Recursos Minerales, 1992a	Consejo de Recursos Minerales, 1992a		
826									Consejo de Recursos Minerales, 1992a		
827									Consejo de Recursos Minerales, 1992a		
828									Consejo de Recursos Minerales, 1992a		
829									Consejo de Recursos Minerales, 1992a		
830	Past Producer (2001)					Corporación Minera del Golfo SA de CV			Griffiths, 1988; S. Jasinski, written commun., 2001		
831	Past Producer (2001)	approx. 0.06 Mtpa				Fos-Mex SA (subsidiary of Minerales No Metalicos SA)			Griffiths, 1988; S. Jasinski, written commun., 2001		
832	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
833	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
834	Mexico	Zacatecas			El Papanton	P		22.56667	-102.21667		
835	Mexico	Zacatecas			La Campesina	P		22.55000	-101.93333		
836	Mexico	Zacatecas			La Continental	P		22.56667	-101.91667		
837	Mexico	Zacatecas			La Guadalupe	P		22.48333	-102.18333		
838	Mexico	Zacatecas			Las Auras	P		24.11667	-101.43333		
839	Mexico	Zacatecas			Palmas	P		23.80000	-101.98333		
840	Mexico	Zacatecas			Palmillas	P		22.65000	-102.36667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
834	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
835	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
836	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
837	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
838	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
839	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
840	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
841	Mexico	Zacatecas			Palmira	P		22.60000	-102.40000		
842	Mexico	Zacatecas			Santo Niño	P		23.68333	-101.71667		
843	Mexico	Zacatecas			Tetillas	P		23.66667	-102.83333		
844	Mexico	Zacatecas		Colorada		P		24.80306	-101.23889		
845	Mexico	Zacatecas		Conception del Oro District/Santa Rosa		P		24.61306	-101.58306		
846	Mexico	Zacatecas		Fosforita		P		23.90000	-101.98300		
847	Mexico	Zacatecas		Lorenzena		P		25.01889	-102.03694		
848	Mexico	Zacatecas		P.V. 13		P		23.68300	-102.83300		
849	Mexico	Zacatecas		P.V. 26 (2)		P		22.76700	-102.15000		
850	Mexico	Zacatecas		Panfilo Natera Mining District	Cerro El Aguila, Cerro Colorado, El Moro	P					
851	Mexico	Zacatecas		Panfilo Natera Mining District	La Esperanza	P		22.58333	-102.11667		
852	Mexico	Zacatecas		Potrerillos		P		24.45889	-101.11806		
853	Mexico	Zacatecas		Rocamonte (Sierra Rocamontes)		P		24.54389	-100.96000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
841	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
842	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
843	Past small producer (2001)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b; S. Jasinski, written commun., 2001		
844				U	11.9 Mt @ 12.8% P2O5			MASMILS, 2000	British Sulphur Corporation, 1964	2.011E+09	
845				U	13.5 Mt @ 16.4% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.011E+09	
846				Unknown				Foose, 1993			
847				U	8.16 Mt @ 15.6%P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.011E+09	
848								Foose, 1993			
849								Foose, 1993			
850	Intermittent (1992)								Consejo de Recursos Minerales, 1992b		
851	Intermittent (1992)							Consejo de Recursos Minerales, 1992b	Consejo de Recursos Minerales, 1992b		
852				U	3.5 Mt @ 12.8% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.011E+09	
853				U	10.6 Mt @ 20.4% P2O5; 50 Mt @ 14% P2O5 (1976)		Reserve estimates from World Survey of Phosphate Deposits & CRM.	MASMILS, 2000	Consejo de Recursos Minerales, 1992b	2.011E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
854	Mexico	Zacatecas		San Julian		P		24.63889	-101.95889		
855	Mexico	Zacatecas		Sierra El Canutillo		P					
856	Mexico	Zacatecas		Sierra El Trébol		P					
857	Mexico	Zacatecas		Sierra La Caja		P					
858	Mexico	Zacatecas		Sierra Santa Rita		P					
859	Mexico	Zacatecas		Sierra Santa Rosa		P					
860	Mexico	Zacatecas		Sierra Zuloaga		P					
861	Mongolia	Hovsgol		Burenkhan field (Burin-Khan)		P		49.80000	99.96667		1967?
862	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul, Khubsugul, Hubsugul)		P Mn		50.66667	100.16667		1960
863	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Arasan group (Kharus Gol)		P		50.86667	100.20000		
864	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Baga-Tsagaan Gol		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
854				U	3.6 Mt @ 14.2% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	MASMILS, 2000	British Sulphur Corporation, 1964	2.011E+09	
855									Consejo de Recursos Minerales, 1992b		
856									Consejo de Recursos Minerales, 1992b		
857									Consejo de Recursos Minerales, 1992b		
858									Consejo de Recursos Minerales, 1992b		
859					13.5 Mt @ 16.2% P2O5 or 11.04 Mt @ 18.3% P2O5 or 5.04 Mt @ 21.1% P2O5 (1987)				Consejo de Recursos Minerales, 1992b; British Sulphur Corporation, 1987		
860									Consejo de Recursos Minerales, 1992b		
861					175 Mt @ 21% P2O5 (open-pittable resource)		Lies outside of Lake Hovsgol drainage basin. Extension of deposit in Russia.	ESCAP, 1999	ESCAP, 1999; McClellan and Saavedra, 1986		
862		None	None	No data	1000 Mt @ 20-22% P2O5 (1987); Possible (to water table)--420 Mt @ 21.7% P2O5	; ESCAP, 1999	In Lake Hovsgol drainage basin.	Ilyin and others, 1989b	Ilyin and others, 1986; British Sulphur Corporation, 1987; ESCAP, 19999		ISM0455
863							In Lake Hovsgol drainage basin.	ESCAP, 1999	ESCAP, 1999		
864							In Lake Hovsgol drainage basin.		ESCAP, 1999		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
865	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Bayan Gol		P					
866	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Berhimuulin		P					
867	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Chzhiglig		P					
868	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Darhan group		P					
869	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Dertrug		P					
870	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/East Doodnuur		P					
871	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Habhain		P					
872	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Harmain		P					
873	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Hitaingol		P					
874	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Hogorgain		P					
875	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Holigtsatuin 1		P					
876	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Holigtsatuin 2		P					
877	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Hubsgul		P		50.68333	100.16667		
878	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Huren-Nurin		P					
879	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Kharausugol		P					
880	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Khavagol		P					
881	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Khuikhen Gol		P					
882	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Khunkh		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
865							In Lake Hovsgol drainage basin.		ESCAP, 1999		
866							In Lake Hovsgol drainage basin.		ESCAP, 1999		
867							In Lake Hovsgol drainage basin.		ESCAP, 1999		
868							In Lake Hovsgol drainage basin.		ESCAP, 1999		
869							In Lake Hovsgol drainage basin.		ESCAP, 1999		
870							In Lake Hovsgol drainage basin.		ESCAP, 1999		
871							In Lake Hovsgol drainage basin.		ESCAP, 1999		
872							In Lake Hovsgol drainage basin.		ESCAP, 1999		
873							In Lake Hovsgol drainage basin.		ESCAP, 1999		
874							In Lake Hovsgol drainage basin.		ESCAP, 1999		
875							In Lake Hovsgol drainage basin.		ESCAP, 1999		
876							In Lake Hovsgol drainage basin.		ESCAP, 1999		
877							In Lake Hovsgol drainage basin.	ESCAP, 1999	ESCAP, 1999		
878							In Lake Hovsgol drainage basin.		ESCAP, 1999		
879							In Lake Hovsgol drainage basin.		ESCAP, 1999		
880							In Lake Hovsgol drainage basin.		ESCAP, 1999		
881							In Lake Hovsgol drainage basin.		ESCAP, 1999		
882							In Lake Hovsgol drainage basin.		ESCAP, 1999		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
883	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Mankhan Uul (Manhanulin, Mankhan-ula)		P		50.31667	100.13333		
884	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Maratuinnulin		P					
885	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Middle Tengesin		P					
886	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Targalulin		P					
887	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Temensultin		P					
888	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Tsagaan Uul		P		51.21667	99.38333		
889	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Ukhaa Gol		P	About 15% SiO2 and 20-25% P2O5.	51.70000	100.03333	NW of Lake Khubsugul; Deposit lies partly in Russia.	
890	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/ Ulaniduruldzhin		P					
891	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Uleindaban (Uliin Davaa)		P		51.20000	100.15000		
892	Mongolia	Hovsgol		Hubsgul Basin (Khubsugul)/Utszegin		P					
893	Mongolia			Khubsugul/Tsagan-nur (Tshagan-mur)		P Sr	Calcareous phosphates with 6-8% SiO2, 25-27% P2O5. Low U content.	51.35639	99.34444	Lat-long is for a town called Tsagan-nur in the vicinity of other deposits.	
894	Morocco				Ben Ider	P		32.83333	-6.71667		
895	Morocco				Chichaoua	P		31.51667	-8.78333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
883							In Lake Hovsgol drainage basin.		Ilyin and others, 1986; ESCAP, 1999		
884							In Lake Hovsgol drainage basin.		ESCAP, 1999		
885							In Lake Hovsgol drainage basin.		ESCAP, 1999		
886							In Lake Hovsgol drainage basin.		ESCAP, 1999		
887							In Lake Hovsgol drainage basin.		ESCAP, 1999		
888							In Lake Hovsgol drainage basin.	ESCAP, 1999	ESCAP, 1999		
889							In Lake Hovsgol drainage basin.	ESCAP, 1999	Ilyin and others, 1986; ESCAP, 1999		
890							In Lake Hovsgol drainage basin.		ESCAP, 1999		
891							In Lake Hovsgol drainage basin.	ESCAP, 1999	Ilyin and others, 1986; ESCAP, 1999		
892							In Lake Hovsgol drainage basin.		ESCAP, 1999		
893					300 Mt @ 25-27% P2O5 (1987)		Extension of deposit in Russia.		Ilyin and others, 1986; McClellan and Saavedra, 1986; British Sulphur Corporation, 1987		
894								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
895								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
896	Morocco	Marrakech			Imin Tanoute (Imi-N-Tanoute)	P		31.16667	-8.83333		
897	Morocco				Kasba Tadla	P		32.61667	-6.23333		
898	Morocco	Marrakech			Meskala	P U		31.38333	-9.41667	Deposit is South of Youssoufia deposit.	1920's
899	Morocco				Nzalet El Hararcha	P		32.23333	-7.66667		
900	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)		P U		32.75000	-6.70000	Location is an average of locations of deposits in Oulad-Abdoun.	1920's
901	Morocco	Khouribga		Oulad Abdoun Plateau	Al Borouj (Al Broujj, El Borouj) area	P U		32.58333	-7.20000		
902	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Daoui (Grand Daoui)	P					
903	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Daoui Nord	P		32.76667	-6.55000		
904	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Khouribga Underground	P U (Al Fe Mg?)		32.80000	-7.90000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
896				S				MASMILS, 2000	Arab Organisation for Mineral Resources, 1987	7.14E+09	
897								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
898	Active Producer	None	None	No data	5000 Mt ore @ 32% P2O5 (R2E, 1980); 2000 Mt (1994)		Currently being mined south of Essaouira area.	Arab Organisation for Mineral Resources, 1987	Bartels and Gurr, 1994; Power, 1986a	7.14E+09	ISM0403
899								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
900	Active production (2001)	About 18 Mt ore (1982); Capacity is 19 Mtpa (2001)	About 290 Mt ore, 1921-81	S	9.7 Mt @ 31.6% P2O5 (R1E, 1980); 4700 Mt @ 24.7% P2O5 (R1M, 1982); 24 Mt @ 31.6% P2O5 (R2E,1982); 22 Mt @ 24.7% P2O5 (R2S, 1982)			MASMILS, 2000	S. Jasinski, written commun., 2001		ISM0404
901				S				MASMILS, 2000	de Kun, 1987; Arab Organisation for Mineral Resources, 1987	7.14E+09	
902	Active Producer (2001)	Capacity is 3.5 Mpta		S		Office Chérifien des Phosphates	Works bed 2. Ore has high clay content and requires washing.		Power, 1986a; Gharbi, 1998; Industrial Minerals, 1993; S. Jasinski, written commun., 2001		
903				S				MASMILS, 2000		7.14E+09	
904				U				MASMILS, 2000	de Kun, 1987	7.14E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
905	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Mrzig (Mrizig) area	P		32.86667	-7.08333		
906	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Meraa-El-Arech (Mera El Arech)	P		32.66667	-6.79167		1920's
907	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Sidi-Daoui (Sid Daoui)	P U		32.78333	-6.66667		1920's
908	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Sidi Hajjaj	P		32.66667	-6.96667		
909	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Ouled Fares area	P		32.63333	-7.13333		
910	Morocco	Khouribga		Oulad Abdoun Plateau (Khouribga)	Oued Zem	P		32.81667	-6.71667		
911	Morocco	Khouribga		Oulad-Abdoun Plateau (Khouribga)	Recette 4 (Khouribga Area)	P		32.75000	-6.78333		
912	Morocco	Khouribga		Oulad-Abdoun Plateau (Khouribga)	Sidi Chennane	P		32.71667	-6.90000		
913	Morocco	Khouribga		Southern Khouribga Region		P U CAR (F Si?)		32.66667	-7.08333		
914	Morocco	Marrakech		Ganntour	El Outa	P U Mg		32.31667	-7.98333		
915	Morocco	Marrakech		Ganntour	N'zala	P U Mg		32.11667	-8.25000		
916	Morocco	Marrakech		Ganntour	Tessaout	P Ba		31.63333	-7.16667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
905				S				MASMILS, 2000	de Kun, 1987	7.14E+09	
906	Active Producer (1998)	3 Mt ore (1982)	No data	S		Office Chérifien des Phosphates	Works bed 2.	MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986a; de Kun, 1987	7.14E+09	ISM0406
907	Mined out	About 9 Mt phosphate conc @ 32.9-34.3% P2O5, 1980's	No data	U	160 Mt, phosphate conc @ 32.9-34.3% P2O5 (R1E, 1982); 130 Mt ore @ 24.7% P2O5 (R1M, 1982)			MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986a; de Kun, 1987; Commission for Geological Map of the World, 1976	7.14E+09	ISM0405
908	Not mined in 1986, expected in 1990			S				Arab Organisation for Mineral Resources, 1987	Power, 1986a; de Kun, 1987	7.14E+09	
909				S				MASMILS, 2000	de Kun, 1987	7.14E+09	
910	Past Producer (2001)			Unknown			Ore production capacity greater than 3,000,000 t/a. It is possible that there is only a processing plant at this site.	Arab Organisation for Mineral Resources, 1987	de Kun, 1987; S. Jasinski, written commun., 2001		DE00025
911	Past Producer (2001)			U S?			This mine may have merged with Daoui.	MASMILS, 2000	Gharbi, 1998; de Kun, 1987; S. Jasinski, written commun., 2001	7.14E+09	
912	Active Producer (1998)			S		Office Chérifien des Phosphates of Moroccan	Grade decreases in lower beds. 6-20 m of overburden is stripped here.	Arab Organisation for Mineral Resources, 1987	Harben and Kuzvart, 1996; de Kun, 1987; Industrial Minerals, 1993	7.14E+09	
913				S				MASMILS, 2000		7.14E+09	
914				S				MASMILS, 2000		7.14E+09	
915				S				MASMILS, 2000		7.14E+09	
916				S				Arab Organisation for Mineral Resources, 1987	MASMILS, 2000; Arab Organisation for Mineral Resources, 1987	7.14E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
917	Morocco	Safi		Ganntour Plateau		P U Mg CAR (Al Fe Si?)		32.25000	-8.20000	Location is an average of locations of deposits in Gantour Basin.	1970's
918	Morocco	Safi		Ganntour	Youssoufia	P		32.25000	-8.45000		1873
919	Morocco	Safi		Ganntour	Youssoufia Black Rock	P		32.25000	-8.45000		
920	Morocco	Safi		Ganntour	Youssoufia Open Cast Mines	P		32.25000	-8.53333		
921	Morocco	Marrakech?		Ganntour	Benguérir (Ben-Guerir)	P U Mg		32.28333	-7.83333	70 km N of Marrakesh.	
922	Morocco	Safi		Ganntour	Youssoufia White Rock	P		32.28333	-8.33333		
923	Morocco	Western Sahara		Aaiun Basin/Oued Eddahab deps/Bou Craa (Bu-Craa, Wadi Bu Craa) Deposit	Bou Craa (Bu-Craa, Wadi Bu Craa)	P		26.36667	-12.91667	Mine is 100 km SSE of El Aaiun.	1947
924	Mozambique			Cone Negosa (Negoza cone Negose)		P Nb Ba REE Ti Fe		########	31.27444		
925	Mozambique	Nampula		Evate		P Fe				About 100 km NE of town of Nampula and close to port of Nacala.	1975

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
917		7.61 Mt phosphate conc, 1981	13.7 Mt phosphate conc, 1980-81	S; U	3490 Mt ore @29.7% P2O5 (R1E, 1982); 4180 Mt ore @ 29.7% P2O5 (R1M, 1982); 16000 Mt ore (R2E, 1982)			MASMILS, 2000			ISM0402
918	Active Producer (2001)	5.0 Mtpa (2001)	About 95 Mt ore (1931-81)	S; U	10000 M cu m ore (R2E, 1980)	Office Chérifien des Phosphates of Moroccan		MASMILS, 2000	S. Jasinski, written commun., 2001	7.14E+09	ISM0409
919				U				MASMILS, 2000		7.14E+09	
920				S				MASMILS, 2000	Power, 1986a	7.14E+09	
921	Active Mine (1998)	1.588 Mt ore @27.5-27.9% P2O5 (1981); planned production 3 Mt ore, 1982	2.186 Mt ore @ 27.5-27.9% P2O5 (1980-81)	S	35 Mt ore @27.9% P2O5 (R1E, 1982); 1.3 Mt ore (R2, 1982)	Office Chérifien des Phosphates	First production about 1980. Benguerir works 6 phosphate beds (C1-6).	Arab Organisation for Mineral Resources, 1987	Harben and Kuzvart, 1996; Power, 1986a; Gharbi, 1998	7.14E+09	ISM0408
922				U				MASMILS, 2000		7.14E+09	
923	Active Producer (2001)	Capacity-- 2.5 Mtpa	6.246 Mt phosphate conc @ 36.6% P2O5 (1970-77)	S	416 Mt ore @ 33% P2O5 (R1E, 1980); 496 Mt ore @31-32.9% P2O5 (R1E, 1980); 688 Mt ore @ 31% P2O5 (R1M, 1980); 950 Mt (1986)	Phosphate de Bu-Craa (PHOSBUCRAA, part of Office Chérifien des Phosphates)		Arab Organisation for Mineral Resources, 1987	Power, 1986a; S. Jasinski, written commun., 2001	7.15E+09	ISM0407, I009114
924	Occurrence							NIMA, 2000	Premoli, 1994; Woolley, 2001		
925	Not mined				155.4 Mt @ 9.32% P2O5		Largest P deposit in Mozambique.		Premoli, 1994; Notholt, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
926	Mozambique			Luicuisse		REE P U	P2O5 concentrations range from 2.34% to 6.77%.	########	36.18333		
927	Mozambique	Tete		Monte Muande		Fe P				30 km N of Tete.	
928	Namibia	Namibian continental shelf		Orange River		P		########	16.00000		
929	Namibia	Namibian continental shelf		Rocky Point		P		########	12.00000		
930	Namibia	Namibian continental shelf		Walvis Bay; Sylvia Hill		P		########	14.00000		
931	Namibia			Epembe (Otjitanga-Epembe)		P	0.1-6.3% P2O5	########	13.50000		
932	Namibia			Kalkfeld Complex (Etaneno)		Fe P REE	Chem. Analyses indicate an average of 6.7% P2O5	########	16.11667		
933	Namibia			Otjisazu		P Cu	Some area of >3% P2O5.	########	17.10000		
934	Namibia			Okorusu		F P REE		########	16.76667		
935	Namibia			Ondurakorume Complex (Kameelberg)		P Nb REE Sr Th	Chem. Analyses indicate an average of 10.1% P2O5	########	16.25000		
936	Namibia			Osongombe Complex		P Ba Nb	Chem. Analyses indicate an average of 6.5% P2O5	########	16.51667		
937	Namibia			Swartbooisdrif		P		########	13.81667	Immediately south of the Kunene River.	
938	Nepal					P		28.01667	82.51667	No deposit name given, problaby Dang-Pyuthan area.	
939	Nepal			Baitadi area	Dhaubisaune	P	11-22% P2O5				
940	Nepal			Baitadi area	Dhik Gad	P	17-18% P2O5				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
926	Occurrence							Woolley, 2001	Premoli, 1994; Woolley, 2001		
927	Not mined				~20 Mt @ 5% P2O5 to depth of 140 m				Premoli, 1994; Notholt, 1994		
928	Not economic				2499t, 7.4% P2O5; 969t, 10.8% P2O5		Resources taken from Bremner and Rogers (1990).	Bremner and Rogers, 1990; Watkins and others, 1995			
929	Not economic				1858t, 9.1% P2O5; 2192t,14.4% P2O5		Resources taken from Bremner and Rogers (1990).	Bremner and Rogers, 1990; Watkins and others, 1995			
930	Not economic				9259t, 21.6% P2O5; 2655t, 9.5% P2O5		Resources taken from Bremner and Rogers (1990).	Bremner and Rogers, 1990; Watkins and others, 1995			
931	Not economic							Woolley, 2001	USGS files; Woolley, 2001		
932	Not mined							Woolley, 2001	McManus and Schneider, 1994; Woolley, 2001		
933	Not mined							Woolley, 2001	Woolley, 2001		
934	Mined for F				8-10 Mt with 35-50% fluorite, 7-15% apatite			Woolley, 2001	de Kun, 1987; Woolley, 2001		
935	Not mined							Woolley, 2001	McManus and Schneider, 1994; Woolley, 2001		
936	Not mined							Woolley, 2001	McManus and Schneider, 1994; USGS files; Woolley, 2001		
937								Woolley, 2001	USGS files; Woolley, 2001		
938	No production							ESCAP, 1993b	ESCAP, 1993b		
939	None								ESCAP, 1993b		
940	None								ESCAP, 1993b		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
941	Nepal			Baitadi area	Junkuna	P	10-18% P2O5				
942	Nepal			Baitadi area	Parchuni	P	Resources (Pradhananga, 1986): average 17.7% P2O5, 18.2% MgO; Dhik Gad-- 17-18% P2O5; Junkuna-- 10-18% P2O5; Dhaubisaune-- 11-22% P2O5; Sanagaon-- 12-32% P2O5	29.60000	80.50000		
943	Nepal			Baitadi area	Sanagaon	P	12-32% P2O5				
944	Nepal			Baitadi area	Sorar	P		29.56667	80.75000		
945	Nepal			Bajhang area	Goichan-Kandachaur	P	5-15% P2O5				
946	Nepal			Bajhang area	Juilgad	P	5-20% P2O5				
947	Nepal			Bajhang zone	Kodachaur	P	8-15% P205 (4 m thick bed); 1-5% P2O5 (2.6 m bed)	29.56667	80.93333		
948	Nepal			Bajhang area	Tarugad	P	1-5% P2O5	29.48333	81.03333		
949	Nepal			Bajura		P Mg	4% P2O5, some samples up to 10% P2O5	29.41667	81.25000		
950	Nepal			Barahakshetra (Barahkshetra)		P	Grade rarely exceeds 5% P2O5.	26.83333	87.20000	30 km from Takure on the Sun Kosi River.	
951	Nepal			Dang Pyuthan		P	5-10% P2O5	28.26667	82.00000		
952	Netherlands			Ootmarsum		P		52.40000	6.88333		
953	Netherlands			Winterswijk		P		51.91667	6.70000		
954	New Zealand	Chatham Rise		Chatham Rise Phosphorites		P U		########	177.30000	Location is a centroid of the area of phosphate distribution.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
941	None								ESCAP, 1993b		
942	None							ESCAP, 1993b	ESCAP, 1993b		
943	None								ESCAP, 1993b		
944	Not economic						Resource estimates from Pradhananga (1986).	ESCAP, 1993b	ESCAP, 1993b		
945	None								ESCAP, 1993b		
946	None								ESCAP, 1993b		
947	Not economic						Resource estimates from Pradhananga (1986).	ESCAP, 1993b	ESCAP, 1993b		
948	Not economic						Resource estimates from Pradhananga (1986).	ESCAP, 1993b	ESCAP, 1993b		
949	Not economic						Resource estimates from Pradhananga (1986).	ESCAP, 1993b	ESCAP, 1993b		
950	None			Unknown				ESCAP, 1993b; Notholt, 1994	ESCAP, 1993b; Tater, 1980; British Sulphur Corporation, 1987		
951	None						Sewar Khola section in Dang District; Mari Khola section in Pyuthan district.	ESCAP, 1993b	ESCAP, 1993b		
952				Unknown				Commission for Geological Map of the World, 1982a			
953				Unknown				Commission for Geological Map of the World, 1982a			
954	None				100 Mt			Cullen, 1989	Thompson, 1983		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
955	New Zealand			Clarendon		P GLA		########	170.03333	South of Dunedin; location for Clarendon population center.	
956	Niger			Tapoa		P	8.6-31.3% P2O5, 20.1-61.1% SiO2, 12.1-44.4% CaO, 0.1-1.7 % MgO, 0.4-3.2% Fe2O3, 0.8-3.1% organic C	12.41667	2.33333	This deposit is along the Niger River and extends into Benin. Lat-long for location along Tapoa River.	
957	Niger			Tapoa/Park W		P	18-35% P2O5.				
958	Nigeria			Kaffo Valley		P					
959	Norway			Andorja		Fe P		68.88333	17.31667		
960	Norway			Fen Complex		FE P Nb REE Th Ca					
961	Norway			Fen Complex	Sove (Cappelon, Hydro, Tufte)	Nb P		59.28333	9.28333		
962	Norway	Vestfold		Kodal		P Fe Ti REE	Compact jacupirangite: 7.98% P2O5, 11.57% SiO2, 14.12% CaO, 8.48% TiO2, 3.46% Al2O3, 28.48% Fe2O3, 17.45% FeO,1.49% MgO, 1.20% MnO	59.25000	10.16667	18 km N of Larvik.	
963	Norway				Odegarden, others	P Ti REE		58.95000	9.63333	At Bamble.	
964	Norway			Seiland Complex		Ti P				In northern Norway.	
965	Norway			Sofestad	Sofestad	FE P		59.15000	8.51667	On the eastern side of Lake Nisser.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
955	Past, potential for future mining				5 Mt @11% P2O5 (2000)			NIMA, 2000	Christie and others, 2000		
956	Small Producer? (1987)				Reserves-- 200 Mt @ 23% P2O5 (1994); Resources-- 1255 Mt @ 23% P2O5 (1994)		Sources differ as to whether part of this deposit occurs in Burkina Faso; Most of dep is in Niger and forms a series of deposits that extends to Mekrou in Benin.	Lucas and others, 1986	de Kun, 1987; British Sulphur Corporation, 1964; Notholt, 1994; Slansky, 1986; Lucas and others, 1986		
957									McClellan and Saavedra, 1986		
958									USGS files		
959								Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972		
960				Both					USGS files, Bugge, 1978		
961	Past producer of Nb			Both		A/S Norsk Bergverk (1965)		Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972; USGS files; Bugge, 1978		
962				S	30 Mt @ 8% P2O5 (1987); Proven-- 30 Mt proven + Probable-- 40 Mt containing up to 17% apatite (1979)	Norsk Hydro (1979)	Resources estimates are minimums.	MASMILS, 2000; Notholt and others, 1989f	Notholt, 1979; British Sulphur Corporation, 1987; Bugge, 1978	4.03E+09	W029787
963			0.160 Mt apatite from 0.525 Mt ore, 1872-1918	Unknown	0.150 Mt apatite (1978)			Commission for Geological Map of the World, 1972	British Sulphur Corporation, 1987; Bugge, 1978		
964	None								Karlsen, 1998		
965	Past producer of Fe	0.0350.05 Mtpa		Unknown	0.5 Mt @ 55% Fe and 1.7% P			Commission for Geological Map of the World, 1972	British Sulphur Corporation, 1987; Bugge, 1978		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
966	Norway			Soroy		P Ba Sr REE					
967	Norway			Stjernoy		P Ba Sr REE					
968	Oman			Al Hasikiyah		P		17.46667	55.60000		
969	Oman			Al Qibliyah		P		17.50000	56.33333		
970	Pakistan	Baluchistan		Lasbela		P	5-15% P2O5.	26.23333	66.31667	Lat-long is for the town of Lasbela.	
971	Pakistan	Baluchistan		Loralai		P	Up to 5% P2O5.	30.36667	68.60000	Lat-long is for the town of Lorelai.	
972	Pakistan	North West Frontier		Baska		P		31.49194	70.14194		
973	Pakistan	North West Frontier		Domanda Post		P		31.55389	70.19194		
974	Pakistan	North West Frontier		Drazinda		P		31.71500	70.13889		
975	Pakistan	North West Frontier		Hazara	Dalola	P		34.41667	73.36667		
976	Pakistan	North West Frontier		Hazara/Kakul-Mirpur	Kakul	P		34.21944	73.20000	9.6 km from city of Abbottabad.	mid-1960's
977	Pakistan	North West Frontier		Hazara/ Kaludi-Banda (Langarban South)		P		34.21333	73.20000	Location estimated from Hasan, 1986.	
978	Pakistan	North West Frontier		Hazara/Langarban	Lagarban	P		34.21667	73.20000		
979	Pakistan	North West Frontier		Hazara	Sirbun Hill	P		34.11667	73.20000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
966									USGS files		
967									USGS files		
968	Occurrence							Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
969	Occurrence							Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
970	None							NIMA, 2000	Asrarullah, 1980		
971	None							NIMA, 2000	Asrarullah, 1980		
972								MASMILS, 2000		5.35E+09	
973								MASMILS, 2000		5.35E+09	
974								MASMILS, 2000		5.35E+09	
975				Unknown	Proven-- 2.3 Mt @15-18% P2O5; Probable-- 6.9 Mt @ 9-25% P2O5		Reserve estimates from Hasan (1989).	Hasan, 1989	Asrarullah, 1980; Hasan, 1986		I005315
976	Active mine (1987)			U	Proven-- 0.4 Mt @ 24% P2O5; Probable-- 0.68 Mt @ 24%	Sarhad Development Authority	Several deposits are found in his area. Reserve estimates from Hasan, 1989.	MASMILS, 2000	Asrarullah, 1980	5.35E+09	I005312
977					1.9 Mt, 25-34% P2O5 + 6.4 Mt, <25% P2O5		Reserve estimates from Asrarullah, 1980.	Hasan, 1986	Asrarullah, 1980; Hasan, 1986		
978				U	Proven-- 0.8 Mt @ 30% P2O5; Probable--1.1 Mt @ 1.5-27% P2O5		Reserve estimates from Hasan, 1989.	MASMILS, 2000	Asrarullah, 1980; Hasan, 1986	5.35E+09	I005313
979				Unknown	Probable-- 1.9 Mt 10-25% P2O5		Reserve estimates from Hasan, 1989.	Hasan, 1989	Asrarullah, 1980		I005316

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
980	Pakistan	North West Frontier		Loe Shilman		P Sr Ca		34.22083	71.14111		
981	Pakistan	North West Frontier		Mushal Khot		P		31.44194	70.04194		
982	Pakistan	North West Frontier		Zam Tower		P		31.74194	70.20000		
983	Pakistan	Punjab		Dera Ghazi Khan		P	5-20% P2O5	30.05000	70.63333	Lat-long is for the town of Dera Ghazi Khan.	
984	Pakistan	Sind		Dadu		P	10-15% P2O5				
985	Panama			David area		P DIT					
986	Peru	Junin		Ichpachi Mine		P		########	-75.38300	Location for nearby Sincos population center.	
987	Peru	Junin		Mantaro (La Oroya Phosphorite)		P		########	-75.75000	Location is a centroid of the region of deposits.	
988	Peru	Offshore		Peru continental shelf/ ODP site 680		P		########	-78.10000		
989	Peru	Offshore		Peru continental shelf/ ODP site 684		P		-9.00000	-78.80000		
990	Peru	Offshore		Peru continental shelf/ODP site 686		P		########	-76.80000		
991	Peru	Piura		Probayovar		P		-5.83750	-81.03750		
992	Peru	Piura		Sechura Desert	Bayovar	P DIT	Low fluorine, high carbonate. Analysis: 31.92% P2O5, 0.1% K2O, 47.80% CaO, 2.55% SiO2, 0.85% Al2O3, 0.63% Fe2O3, 1.74% Na2O, 0.76% MgO, 2.11% F, 4.02% SO3, 3.25% CO2	-5.15000	-81.05000	120 km from town of Piura.	
993	Peru	Piura		Sechura Desert		P DIT	Low fluorine, high carbonate	-5.80000	-80.75000	Location is centroid of region defined by McClellan (1989).	1951
994	Philippines	Cebu	Ronda	Batong-Langub; Talayong		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
980	None			NA	59 Mt containing 2.6 Mt P2O5 at surface; 142 Mt containing 7.8 Mt P2O5 subsurface			Hasan and Asrarullah, 1989	Asrarullah, 1980; Notholt, 1994		I005311
981				Unknown				MASMILS, 2000		5.35E+09	
982				Unknown				MASMILS, 2000		5.35E+09	
983	None							NIMA, 2000	Asrarullah, 1980		
984	None								Asrarullah, 1980		
985									Notholt, 1994		
986				Unknown				Loughman, 1984; NIMA, 2000			
987	None				No economic estimates			Grose, 1989			I009116
988				Unknown			No economic resource evaluations.	Garrison and others, 1990			
989				Unknown			No economic resource evaluations.	Garrison and others, 1990			
990				Unknown			No economic resource evaluations.	Garrison and others, 1990			
991				S				MASMILS, 2000		3.33E+09	
992	Intermittant Producer (1994)				Reserves--816 Mt (2001)	Empressa Minera del Peru SA	Property for sale in 2001.		Harben and Kuzvart, 1996; Cheney and others, 1979; Industrial Minerals, 2001		I001038, PIU0015
993	None (2001)		No data	S	560 Mt @ 30.5% P2O5 (R1E, 1980)			McClellan, 1989	Harben and Kuzvart, 1996; Cheney and others, 1979; S. Jasinski, written commun., 2001		I000316
994					2 Mt				Vargas and Escalada, 1986		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
995	Philippines	Cebu	Alcantara	Kabadiangan; Lagnasan-Iba		P	6-9% P2O5, 1-2% Al2O3, 9-12% Fe2O3				
996	Philippines	Cebu	Argao	Mabasa prospect		P	2-11% P2O5, 1-65 Al2O3, 2-8% Fe2O3				
997	Philippines	Cebu	Dumanjug	Doldol-Kanhumaud		P					
998	Philippines	Cebu	Barili	Supo; Minolos		P					
999	Philippines	Leyte		Bantigue		P				About 3 km from the fertilizer plants at Ormoc City.	
1000	Philippines	Negros Oriental	Guilagen (Guihulngan)	Imelda		P					
1001	Philippines	Siquijor	San Juan	Candura prospect		P	25-39% P2O5, 0.9-2.9% Al2O3				
1002	Poland			Annopol		P		50.88333	21.86667		
1003	Poland			Branica		P		51.73333	22.88333		
1004	Poland			Burzenin		P		51.40000	18.93333		
1005	Poland			Chalupki		P		50.93333	21.75000		
1006	Poland			Glimny Stok		P		51.70000	22.90000		
1007	Poland			Michow		P		51.53333	22.28333		
1008	Poland			Radom		P	up to 21% P2O5	51.25000	21.00000		
1009	Portugal			Carvide		P					
1010	Portugal			Monte Real		P					
1011	Portugal			Vizon		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
995					2-4 Mt				Vargas and Escalada, 1986		
996					0.150 Mt				Vargas and Escalada, 1986		
997									Vargas and Escalada, 1986		
998									Vargas and Escalada, 1986		
999									Notholt, 1994		
1000	Past (late 1960s)				0.050 Mt @ 32.5-35% P2O5				British Sulphur Corporation, 1987; Vargas and Escalada, 1986		
1001					0.020 Mt high grade; 0.5 Mt low grade				Vargas and Escalada, 1986		
1002			0.214 Mt @ 16-18% P2O5					Commission for Geological Map of the World, 1982a	British Sulphur Corporation, 1987		
1003								Commission for Geological Map of the World, 1982a	Osika, 1986		
1004								Commission for Geological Map of the World, 1982a	Osika, 1986		
1005								Commission for Geological Map of the World, 1982a			
1006								Commission for Geological Map of the World, 1982a	Osika, 1986		
1007								Commission for Geological Map of the World, 1982a	Osika, 1986		
1008								Commission for Geological Map of the World, 1982a	British Sulphur Corporation, 1987		
1009	None								Mew, 1980		
1010	None								Mew, 1980		
1011	None								Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1012	Portugal	Castelo Branco		Medelim		P		40.06667	-7.21667		
1013	Portugal	Portalegre		Castelo de Vide (Marvao)		P		39.45000	-7.46667		
1014	Portugal	Sagres?		Beleira		P					
1015	Puerto Rico	Isla Mona				P		18.11000	-67.93472		
1016	Puerto Rico	Isla Mona				P		18.09472	-67.93694		
1017	Puerto Rico	Isla Mona				P		18.08972	-67.84639		
1018	Puerto Rico	Isla Mona				P		18.05889	-67.87833		
1019	Romania			Cuza Voda region		P	Up to 11% P2O5. Mean composition of deposit: 3.87% P2O5, 24.98% CaO, trace MgO, 3.29% Fe2O3, 2.58% Al2O3, 49-57% SiO2, LOI 15.5%.				
1020	Russia?			Aley		Nb P REE		56.45000	123.73333		
1021	Russia			Bol'shoy Dzhebart Deposit		P		54.35000	93.43333		
1022	Russia			Egorievsk deposit	Lopatinsky, Egorievsk mines	P					
1023	Russia			Kaivomaki		P FLD REE				1-8 km from Elisenvaara.	
1024	Russia			Khalkol		P		53.44611	41.81000		
1025	Russia			Kovdozero		P Ti		66.75000	31.91667		
1026	Russia			Kruchininskoe		P Ti Fe	3-5% P2O5				
1027	Russia			Kurgusul		P Ti		55.26670	88.75000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1012				Unknown				Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987; Mew, 1980		
1013				Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		
1014	None								Mew, 1980		
1015	unknown							Cox and Briggs, 1973	CIMRI, 1992		
1016	unknown							Cox and Briggs, 1973	CIMRI, 1992		
1017	unknown							Cox and Briggs, 1973	CIMRI, 1992		
1018	unknown							Cox and Briggs, 1973	CIMRI, 1992		
1019	Past(?) production								Ianovici and Borcos, 1982		
1020								Nokleberg and others, 1987	Nokleberg and others, 1987; Pell, 1996		
1021	Unknown			Unknown				MASMILS, 2000		4.52E+09	
1022	Active Mine (1998)			S		JSC Fosfaty Bryansk (1998)			Troitsky and others, 1998		
1023									Shchiptsov, 1993		
1024	Past (pre-WWII), active?			No data					British Sulphur Corporation, 1987		
1025								Kogarko and others, 1995	USGS files; Kogarko and others, 1995		
1026									Troitsky and others, 1998		
1027	Occurrence							Kogarko and others, 1995	USGS files; Kogarko and others, 1995		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1028	Russia			Lesnaya Varaka		P Nb REE Ti		67.38333	33.06667		
1029	Russia			Maimecha-Kotui	Changit	P Nb Zr		70.20000	100.10000		
1030	Russia			Maimecha-Kotui	Gulinski	P Zr Ti		70.95000	101.43333		
1031	Russia			Ozernaya Varaka		P		67.43330	32.95000		
1032	Russia			Salanlatvinsky (Salanlatva)		Nb P Ba REE Ti		66.95000	29.16667		
1033	Russia			Volkovskoe		P Ti Fe					
1034	Russia	Bashkortostan		Abdullino		P	16% P2O5	56.08333	58.00000	Location is approximate.	
1035	Russia	Bashkortostan		Chusovaya (Verkhne-Chusovaya)		P		58.25000	57.16667	Location is approximate.	
1036	Russia	Bashkortostan		Ishimbaevo		P		53.41667	56.08333	Location is approximate.	
1037	Russia	Bashkortostan		Kush-Tau, Yurak-Tau-Tau		P		53.66667	56.16667	Location is approximate.	
1038	Russia	Bashkortostan		Seleuk		P	6-12% P2O5; weathering produces enrichments of up to 30% P2O5	53.30000	56.41667	Location is approximate.	
1039	Russia	Bashkortostan		Shak-Tau		P		53.63333	56.13333	Location is approximate.	
1040	Russia	Bashkortostan		Tra-Tau, Shiknanchik, Novii Shikhan		P		53.58333	56.08333	Location is approximate.	
1041	Russia	Bashkortostan		Usolie		P		53.83333	56.58333	Location is approximate.	
1042	Russia	Bashkortostan		Voskresensk		P		53.91667	56.50000	Location is approximate.	
1043	Russia	Bryanskaya Oblast'		Polpinsk (Polpinskaya)		P	16% P2O5	53.90833	35.12500		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1028								Kogarko and others, 1995	USGS files; Kogarko and others, 1995		
1029								Kogarko and others, 1995	USGS files; Kogarko and others, 1995		
1030								Kogarko and others, 1995	USGS files; Kogarko and others, 1995		
1031								Kograko and others, 1995	USGS files; Kograko and others, 1995		
1032								Kogarko and others, 1995	USGS files; Kogarko and others, 1995		
1033									Troitsky and others, 1998		
1034	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1035	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1036	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1037	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1038	Not economic							Ilyin, 1989b			
1039	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1040	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1041	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1042	Not economic							Ilyin, 1989b	Ilyin, 1989b		
1043	Past Producer (2001)	0.500 Mt (1989)		S		Bryansk Phsophorites Plant	There are 2 mines.	MASMILS, 2000	Kendall and Keegan, 1998; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001; Troitsky and others, 1998	4.52E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1044	Russia	Bryanskaya Oblast'			Schchigry	P		51.86667	36.90000		
1045	Russia	Buryatiya		Khubsugul Basin/Eastern Sayan area/Boxon		P	7-8% P2O5	52.16667	100.33333	Continues into Mongolia.	
1046	Russia	Buryatiya		Khubsugul Basin/Eastern Sayan area/Kharanur		P		51.75000	101.58333	Continues into Mongolia.	
1047	Russia	Buryatiya		Khubsugul Basin/Eastern Sayan area/Ukhagol		P		51.50000	100.08333		
1048	Russia	Buryatiya		Oshurkov Complex		P Fe?	Metasomatized diorites with 3.3-9.53% P2O5.	51.96667	107.46667	Location is for Zaybakal Apatite Complex; near southern end of Lake Baikal.	1962
1049	Russia	Buryatiya		Synnyr Complex		P REE	Rich zones 15-18% P2O5, 20% magnetite	56.83333	111.16667	At N end of Lake Baikal.	
1050	Russia	Chitinskaya Oblast'		Kruchinskoye		Ti P		52.00000	114.66667		
1051	Russia	Chuvashiya		Vurnary		P		55.48778	46.96389		1930
1052	Russia	Kaluzhskaya Oblast		Volga Basin	Duminichi	P		53.92917	35.10583		
1053	Russia	Kareliya		Elisenvaara		P REE FLD Mica	Average 3.63% P2O5.	61-25N	29-46E	Location is for town of Elisenvaara.	
1054	Russia	Kareliya		Raivimaki		P FLD REE				1-8 km from Elisenvaara.	
1055	Russia	Kareliya		Tikshozero		P CAR FE MICA	Average 4.3% P2O5 in carbonatite.	66- 11N	032-02E	40 km N of the town of Kestenga. Latitude-longitude is for the town of Tikshozero.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1044	Past Producer (2001)	No data	No data	S				MASMILS, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001	4.52E+09	ISM0450
1045				Unknown				Ilyin and others, 1989b			
1046				Unknown	300-400 Mt @ 20% P2O5			Ilyin and others, 1989b			
1047				Unknown	483 Mt @ 7-14.7% P2O5		Deposits extend across border into Mongolia.	Ilyin and others, 1989b			
1048	Active (1998)	None, planned output of 19 Mt crude ore	None	No data	870 Mt ore @ 4-5% P205 (1979); 1000 Mt ore with 500 Mt @ 4-4.5% P2O5 (1987); 850 Mt ore @ 4% P2O5 (1998)			MASMILS, 2000	Notholt, 1979; British Sulphur Corporation, 1987; Kendall and Keegan, 1998; Troitsky and others, 1998	4.52E+09	ISM0447
1049	Prospect							Rand McNally, 1981	Notholt, 1979		
1050				Unknown				MASMILS, 2000		4.52E+09	
1051	Past	…	No data	S				NIMA, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987		
1052	Past, active?			No data				NIMA, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987		
1053	Active Mine (1994)							NIMA, 2002	Shchiptsov, 1994		
1054									Shchiptsov, 1993		
1055	Active Mine (1993)				Probable-- 40 Mt P2O5 (1993)		Total apatite and calcite concentrate yield from the carbonatite is no less than 65%.		Shchiptsov, 1993; Shchiptsov, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1056	Russia	Kemerovskaya Oblast		Gornay Shoriya/Belka		P		52.88333	87.88333		
1057	Russia	Khabarovskiy Kray		Khubsugul Basin/Uda-Shantary region/Shantary Islands		P	6-8.5% P2O5	55.16667	137.33333		
1058	Russia	Khabarovskiy Kray		Khubsugul Basin/Uda-Shantary region/Shantary Islands	Nelkanskoe	P	4-30% P2O5 (ave. 7-11%)	54.30000	134.98333	In Uda-Shantary area.	
1059	Russia	Khabarovskiy Kray		Khubsugul Basin/Uda-Shantary region/Shantary Islands	North Shantarskoe	P	Average grade is less than 6-8% P2O5.	55.15000	137.58333	In Uda-Shantary area. At northeast end of Bolshoi Shantar Island.	
1060	Russia	Khabarovskiy Kray		Lagapskoe		P	4-30% anhydrous phosphorous, ave. 5-7%	53.90000	134.26667		
1061	Russia	Kirovskaya Oblast'		Vyatka-Kama (Verkhnekamsk, Vyatsko-Kamskoe)	Rudnichnyy Mine	P	Bed with 10-20% P2O5. Phosphorite flour after grinding is 22.5% P2O5 (1987)	59.63333	52.43333		1888, mining began 1917
1062	Russia	Kransnodarskiy Kray		Eastern Sayan Basin/Telek		P		54.28333	92.05000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1056	Prospect (1987)			S	170 Mt @ 6-11% P2O5 with 50 Mt @ 7-8% P2O5, 40 Mt @ 6% P2O5 (1987); 22 Mt @ 21% P2O5 residual karst			MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	
1057				Unknown				Ilyin and others, 1989b			
1058	Prospect?						Deposit has been drilled to almost 300 m depth. Deposit is reported to be "small".	Nokleberg and others, 1987	Nokleberg and others, 1987		
1059	Occurrence?							Nokleberg and others, 1987	Nokleberg and others, 1987		
1060							Reported as a "medium" sized deposit.	Nokleberg and others, 1987	Nokleberg and others, 1987		
1061	Past, active?	Capacity about 200,000t ground rock		S	865 Mt @ 23-26% P2O5 (1936); up to 5000 Mt @ 12-26% P2O5 (1936); total dep. reserves-- 411-777 Mt P2O5 @ 9-17% P2O5 (1998)	JSC Verkhnekamsky Phosphorites Mine	1 mine.	MASMILS, 2000; NIMA, 2000	Kendall and Keegan, 1998; Troitsky and others, 1998	4.52E+09	
1062	Prospect (1987)			Unknown	180 Mt @ 14.2% P2O5 (1986); 80 Mt @ 11.9% P2O5 (1968)			MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1063	Russia	Leningradskaya Oblast'		Kingisepp (Kingisepskoe)		P		59.36667	28.60000	Commission for Geological Map of the World (1972) gives location as 59.28333N, 28.56667 E.	mid-1950s
1064	Russia	Moskovskaya Oblast'		Volga Basin	Lepatinsk (Lopatinsk)	P		55.31667	38.71667		Mining began in 1932
1065	Russia	Moskovskaya Oblast'		Volga Basin	Voskresensk	P		55.31667	38.70000		Mining began in 1929
1066	Russia	Moskovskaya Oblast'		Volga Basin/Yegor'yevsk deposit (Egorjevsk, Yegorievsk))		P	12.83% P2O5	55.38333	39.03333		Mining began in 1922
1067	Russia	Murmanskaya Oblast'		Gremyakha-Vyrmes Alkaline Complex		P Fe Ti		68.91667	32.50000		
1068	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny		P REE (Al?)		67.66667	33.21667		1923
1069	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/Apatitovy Tsirk (Apatite Circus) deposit		P		67.75000	33.73333		1923

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1063	Active Mine (2001)	Capacity-- 0.290 Mt phosphate conc (2001); concentrate was 28.5% P205 (1976)	No data	S	320 Mt @ 6.5% P205 (1979?)	JSC Fosforit (Kingisepp Fosforit Association)		MASMILS, 2000	Harben and Kuzvart, 1996; Kendall and Keegan, 1998; Commission for Geological Map of the World, 1972; S. Jasinski, written commun., 2001; Troitsky and others, 1998	4.52E+09	ISM0444
1064	Past, active?	Benefication capacity (1970) 0.950 Mt	No data	S				MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	ISM0449
1065	Past (ended 1970s)	2 Mt ground phosphate (1980)	No data	S				MASMILS, 2000		4.52E+09	ISM0452
1066	Past, active?	1 Mt		S; U	87 Mt @ 18-25% P2O5 (1989)	JSC Fosfaty		MASMILS, 2000	Harben and Kuzvart, 1996; Kendall and Keegan, 1998; British Sulphur Corporation, 1987	4.52E+09	
1067	Under development (2000)			S	3000 Mt @ 3.5% P205	JSC Apatit (2000)		MASMILS, 2000	British Sulphur Corporation, 1987; Industrial Minerals, 2000	4.52E+09	
1068	Active mine(s)	46.4 Mt ore @ 15-18% P205 (1981); 16.7 Mt phosphate conc @ 39.4% P205 (1981)	95.1 Mt phosphate conc @ 39.4% P205 (1976-81)	S; U	2700 Mt @ 18% P205 (1970?); 4000 Mt @ 15% P2O5 (1989)	JSC Apatit		MASMILS, 2000	Notholt, 1979; British Sulphur Corporation, 1987; Kendall and Keegan, 1998	4.52E+09	ISM0451
1069	Active Mine (1998)	capacity: 17-20 Mtpa		S	Reserves for all of Rasvumchorr deposit-- 75 Mt P2O5, ore averages 18% P2O5	JSC Apatit	Ore averages 14.3% P2O5. Nepheline extracted to produce alumina.	MASMILS, 2000	Harben and Kuzvart, 1996; Notholt, 1979; British Sulphur Corporation, 1987; Kendall and Keegan, 1998	4.52E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1070	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/ Kukisvumchorr deposit	Kirov (Kirovsk) Mine Complex	P		67.75000	33.70000	Location best estimate from map in World Survey of Phosphate Deposits (1987).	1923
1071	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/ Kukisvumchorr deposit	Kukisvumchorr Mine Complex	P		67.75000	33.70000	Location best estimate from map in World Survey of Phosphate Deposits (1987).	1923
1072	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/Rasvumchorr deposit	Razvumchorr (Rasvumchorr) Mine	P		67.63333	33.80000		1923
1073	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/Tsentralny deposit	Tsentralny (Central) Mine	P		67.60000	33.98000	Location is best estimate from map in World Survey of Phosphate Deposits (1987).	
1074	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/Vostochny (Eastern Mines)	Koashva, Nyorkpakhk (Niorpakh)	P		67.66667	34.16667		1923

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1070	Active Mine (1996)	capacity: 14 Mtpa		U	Reserves for all of Kukisvumchorr deposit-- 411 Mt @ 17% P2O5 (1998)	JSC Apatit (2000)	Yukspor and Kukisvumchorr Mines combined to form Kirovsk mine. Nepheline extracted to produce alumina.		Harben and Kuzvart, 1996; British Sulphur Corporation, 1987; Kendall and Keegan, 1998; Troitsky and others, 1998		
1071	Active Mine (1998)			S; U	Reserves for all of Kukisvumchorr deposit-- 411 Mt @ 17% P2O5 (1998)	JSC Apatit	Yukspor and Kukisvumchorr Mines combined to form Kirovsk mine. Nepheline extracted to produce alumina.		Harben and Kuzvart, 1996; Notholt, 1979; Kendall and Keegan, 1998; Troitsky and others, 1998		
1072	Active Mine (1998)	approx. 4.5 Mtpa		U	Reserves for all of Rasvumchorr deposit-- 417 Mt @ 18% P2O5 (1998)	JSC Apatit	Nepheline extracted to produce alumina.	MASMILS, 2000	Harben and Kuzvart, 1996; Notholt, 1979; British Sulphur Corporation, 1987; Kendall and Keegan, 1998; Troitsky and others, 1998	4.52E+09	
1073	Active Mine (2001)			S		JSC Apatit			Ilyin, 1989a;British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001		
1074	Active Mine (1998)			U	Reserves-- 395 Mt@ 19% P2O5 at Koashva, 1998.	JSC Apatit	2 open-pit mines grading 12.4% P2O5 (Koashva) and 13.6-14.2% P2O5 (Nyorkpakhk). Reserves are limited at Nyorkpakhk.	MASMILS, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987; Kendall and Keegan, 1998; Troitsky and others, 1998	4.52E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1075	Russia	Murmanskaya Oblast'/Kola Pennisula		Khibiny Complex/ Yukspor deposit	Yukspor Mine	P (Al?)	10.6-31.0% P2O5	67.63333	33.75000		1923
1076	Russia	Murmanskaya Oblast'/Kola Pennisula		Kovdor Complex (Kovdorskoe)		Fe P Zr VRM		67.56667	30.40000		
1077	Russia	Murmanskaya Oblast'		Sebl'yavr Carbonatite Complex		P Fe REE		68.96667	33.08333		1948
1078	Russia	Murmanskaya Oblast'		Vuoriyarvi (Vuori-Yarvi, Vuorijarbi)		P Fe Ti Ba Nb Zr		66.78333	30.13333		
1079	Russia	Orlovskaya Oblast'		Volga Basin/Dimitrovsk		P		52.08330	35.03330	350 km S of Moscow.	1959
1080	Russia	Primorskiy Kray		Koksharovskoe		Ti Fe P VRM PGE	Average 1.0-10% P2O5.	44.46667	134.13333		
1081	Russia	Saratovskaya Oblast'		Saratovskoe		P		51.33333	45.41667		
1082	Russia	Siberia?		Bogidenskoe		Ti P	Apatite contains up to 2.4% F. Ore is 3-15% apatite and averages 5.7% P2O5.	55.63333	133.70000	Deposit is in the upper basins of the Bogide and Soroga Rivers.	
1083	Russia	Siberia?		Dzhaninskoe		Ti P	Low grade of up to 4% P2O5. Apatite contains up to 1.14% F.	55.51667	134.15000	On the right bank of the Dzhana River near the mouth of the Kurung River.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1075	Active Mine (1998)	13 Mtpa		U	Deposit-- 382 Mt @ 17% P2O5 (1998)	JSC Apatit	Yukspor and Kukisvumchorr Mines combined to form Kirovsk mine. Nepheline extracted to produce alumina.	MASMILS, 2000	Harben and Kuzvart, 1996; Notholt, 1979; British Sulphur Corporation, 1987; Troitsky and others, 1998	4.52E+09	
1076	Active (2000)	Concentration output: 3.22 Mt Fe ore, 1.606 Mt apatite, 6160t baddeleyite (2000)	3.82 Mt phosphate conc @ 35% P205 (1976-82)	S	Reserves-- 50 Mt @ >16% P2O5, francolite ores; 1000 Mt @ 4-5% P2O5, apatite-calcite ores (2000)	JSC Kodorsky GOK (AO Kovdorsky GOK)	1 mine.	MASMILS, 2000	Harben and Kuzvart, 1996; Notholt, 1979; British Sulphur Corporation, 1987; Lyachov, 2000; Troitsky and others, 1998	4.52E+09	ISM0441
1077	Prospect (1987)			Unknown	igneous resources-- 600 Mt @ 4% P2O5; Residual deposits-- 50 Mt @ 5-24% P2O5		Reserve estimates from World Survey of Phosphate Deposits (1987).	MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	
1078	Prospect							NIMA	British Sulphur Corporation, 1987; USGS files		
1079	Past, active?			S				U.S. Geological Survey Mineral Resources Data System, 2000	Harben and Kuzvart, 1996; British Sulphur Corporation, 1987		ISM0454
1080							Reported as a "large" sized deposit.	Nokleberg and others, 1997	Nokleberg and others, 1997		
1081	Past			Unknown				Commission for Geological Map of the World, 1968b	British Sulphur Corporation, 1987		
1082					Estimated-- 34.3 Mt P2O5 to 400 m depth		Deposit is reported as "large".	Nokleberg and others, 1987	Nokleberg and others, 1987		
1083					Estimated-- 78 Mt P2O5 to 400 m depth		Reported as a "large" sized, but low-grade deposit.	Nokleberg and others, 1987	Nokleberg and others, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1084	Russia	Siberia?		Gayumskoe		Ti P	average grade of 8.7% P2O5; but locally contains up to 31.6% P2O5.	55.71667	**14.25000**	Deposit is in the upper reaches of the Gayum River.	
1085	Russia	Siberia?		Ir-Nimiiskoe-2		P	3-12% anhydrous phosphorus (ave. 7-8%)	54.13333	134.63333		
1086	Russia	Siberia		Kuznetsk Alatau/Talmalyk		P	10-20% P2O5	53.35000	89.60000		
1087	Russia	Siberia?		Maimakanskoe		Ti P	Apatite contains fluorine. Apatite averages 15-20% of rock.	55.61667	134.50000	In upper reaches of the Maimakan River near Kendeke Spring.	
1088	Russia	Siberia		Zaybakal Apatite Complex		P Ti Fe		51.96667	107.46667		
1089	Russia	Tambovskaya Oblast		Morshansk		P		53-27N	41-49E	Location is for the town of Morshansk.	
1090	Russia	Tul'skaya Oblast'		Kimovsk (Combine)		P		53.96667	38.53333		1960
1091	Russia	Tul'skaya Oblast'			Kimovsk	P		53.97306	38.53361		
1092	Russia	Volgogradskaya Oblast'		Kamyshin Deposit		P		50.10000	45.40000		
1093	Russia	Volgogradskaya Oblast'		Trioko Deposit		P		51.20000	43.71667		
1094	Russia	Voronezhskaya Oblast'		Kalatch Station		P	38% P2O5				
1095	Russia	Sakha (Yakutiya)		Seligdar		P Fe		58.38333	125.03333		1974
1096	Russia?			Krasnosel'skoe		P		59.61667	30.25000		
1097	Saudia Arabia			Al Amud		P		30.50000	38.50000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1084					Estimated--40 Mt P2O5.		Deposit is reported as "large".	Nokleberg and others, 1987	Nokleberg and others, 1987		
1085							Reported as a "medium" sized deposit.	Nokleberg and others, 1997	Nokleberg and others, 1997		
1086				Unknown				MASMILS, 2000		4.52E+09	
1087					Estimated--63 Mt P2O5 to 400 m depth		Reported as a "large" sized deposit.	Nokleberg and others, 1987	Nokleberg and others, 1987		
1088				S			Same as Oshurkov.	MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	
1089	Past (pre-WWII), active?			No data				NIMA, 2000	British Sulphur Corporation, 1987		
1090	Past, active?			S				MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	TC00008
1091	Past, active?			No data				NIMA, 2000	British Sulphur Corporation, 1987		
1092	Prospect?			Unknown	9 Mt @ 10% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	
1093	Prospect?			Unknown	11.5 Mt @ 18.7% P2O5			MASMILS, 2000	British Sulphur Corporation, 1987	4.52E+09	
1094	Prospect			No data					British Sulphur Corporation, 1987		
1095	Prospect, plans to bring on in 1980s	None	None	No data	300 Mt @ 6-8% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).	MASMILS, 2000		4.52E+09	ISM0448
1096								Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972		
1097					Resource--800 Mt @ <20% P2O5 (1994)			Arab Organisation for Mineral Resources, 1987	Notholt, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1098	Saudia Arabia			Al Jalamid		P		31.33333	39.93333	120 km east of Turayf. Lat-long is for the town of Al Jalamid.	
1099	Saudia Arabia			Al Jawf		P		29.90000	39.53333		
1100	Saudia Arabia			Azlam Trough		P		26.81667	36.36667		
1101	Saudia Arabia			Jabal Juraymiz		P		29.93333	39.46667		
1102	Saudia Arabia			Jabal Kharis North		P		28.28333	35.45000		
1103	Saudia Arabia			Sirhan-Turayf		P U		31.67750	38.65306		
1104	Saudia Arabia			Thaniyat		P		29.73333	38.02000		
1105	Saudia Arabia			Umm Wu'al Area (Um Wa'ul)		P		31.61667	38.86667		
1106	Saudia Arabia			Umm Wu'al North		P					
1107	Saudia Arabia			Wadi Al Ghinah		P		30.16667	38.21667		
1108	Saudia Arabia			West Thaniyat		P		29.75000	38.04583		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1098	Active Mine (2001)			S	1000 Mt @ 20% P2O5 (1989); 500 Mt (2001)	Saudi Arabian Miing Co. (Ma'aden)			Industrial Minerals, 1996: Bartels and Gurr, 1994; Riddler and others, 1989; Notholt, 1994; S. Jasinski, written commun., 2001		I000123
1099				Unknown				Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b		
1100								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1101								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1102								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1103				Unknown				Berge and Jack, 1989	Commission for Geological Map of the World, 1982b		
1104					Resource--160 Mt @ 21% P2O5 (1994)			Commission for Geological Map of the World, 1982b	Notholt, 1994		
1105				Unknown	Resource--722 Mt @18% P2O5 (1989)			Arab Organisation for Mineral Resources, 1987	Notholt, 1994; Riddler and others, 1989		
1106					Resource--220 Mt @ 21% P2O5 (1989)				Notholt, 1994; Riddler and others, 1989		
1107								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1108				U	160 Mt @ 21.5% P2O5			MASMILS, 2000	Riddler and others, 1989	5.17E+09	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1109	Senegal			Casamance/Kolda area		P		13.00000	-14.50000	Location centroid for a large prospecting area east of Kolda.	
1110	Senegal			Casamance/Ziguinchor		P	0.5-1.8% P2O5 throughout Miocene clay and clayey sandstone	12.58333	-16.25000	Location for Ziguinchor population center.	
1111	Senegal			Kedogou/Namel		P	8 m thickness of 22-32% P2O5, also 12-45% SiO2, 0.5-1.6% Al2O3, 0.5-1.8% Fe2O3, 30-47% CaO, 0.8-5.2% MgO; radioactivity 2-6 times above local background	12.55000	-12.46667	Location for Namel population center.	
1112	Senegal			Matam (N'Diendouri and Ouali Diala)		P Al Fe Cd U		15.33333	-13.05000	50 km SE of Matam; 450 km from Atlantic; 125 km from Dakar-Bamako railway.	1966
1113	Senegal	Thies?		Taiba Plateau		P		15.00000	-16.80000		1948
1114	Senegal	Thies?		Taiba Plateau	Keur Mor Fall Mine (Keur Morfal)	P		15.08333	-16.83333	Lat-long is for the town of Keur Morfal.	pre-1952
1115	Senegal	Thies?		Taiba Plateau	Ndomor Diop	P		15.05000	-16.86667	Lat-long for town of Ndomor Diop.	pre-1952
1116	Senegal	Thies?		Taiba Plateau	Tobene	P		15.03333	-16.78333	4 km from Keur Mor Fell Mine. Lat-long for town of Tob'ne.	
1117	Senegal	Thies		Thies Plateau		P Al U	Phosphate ore averages 28-29% P2O5, 27-32% Al2O3 8-11% CaO, and 6-10% Fe2O3.	14.80000	-17.08333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1109	None							Sustrac and others, 1990; Pascal and others, 1989	de Kun, 1987		
1110	None						Deposit discovered by drillhole.	NIMA, 2000; Sustrac and others, 1990			
1111	None						Two other prospects in this region are Gambia and Sanigourou; base of the Faleme series of lower Paleozoic age.	NIMA, 2000; Sustrac and others, 1990	Slansky, 1986; McClellan and Saavedra, 1986		
1112				S	40.5 Mt @ 28.7% P2O5			NIMA, 2000			
1113		Average about 1.4 Mt phosphate conc @ 37% P2O5 (1975-80)	About 35.4 Mt phosphate conc @ 37% P2O5 (1961-78)	S	25 Mt ore @ 30.9% P2O5 (R1E, 1980); 50 Mt ore (R2E, 1980)	Compagnie Senégalaise des Phosphates de Taiba	Keur Mor Fall Mine is open pit extension of the Taiba deposit; also N'Domor Diop and Tobene deposits in this area.	Estimated.	de Kun, 1987; Slansky, 1986; Sustrac and others, 1990	7.44E+09	ISM0401
1114	Active Mine (1998)				30 Mt (1987)	Industries Chimiques du Senegal (1998)	Mine will be depleted by 2003. Ore runs 35-37% P2O5.	NIMA, 2000	de Kun, 1987; Jasinski, 1999		
1115	Active (?) Producer (1989)							NIMA, 2000	Pascal and others, 1989		
1116	Under Development (1998)				>27 Mt (1987)	Industries Chimiques du Senegal (1998)	Ore runs 35-37% P2O5.	NIMA, 2000	de Kun, 1987		
1117		Average about 0.097 Mt phosphate conc (1976-80)	About 3.4 Mt ore (1970-81)	S	50 Mt ore @ 30% P2O5 (R1E, 1976); 100 Mt ore @ 28-29.5% P2O5 (R1E, 1980)	Compagnie Sénégalaise des Phosphates de Thiès	This is one of rare mines that exploits aluminum phosphates (wavellite).	MASMILS, 2000	Harben and Kuzvart, 1996; de Kun, 1987	7.44E+09	ISM0400

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1118	Senegal			Thies Plateau	Lam Lam	P	29-34% P2O5;	14.90000	-16.88333		
1119	Senegal			Thies Plateau	Pallo	P	29% P2O5	14.80000	-17.08333		
1120	Senegal			Thies Plateau	Pire Goureye	P		15.01667	-16.70000	Lat-long is for the town of Pire Goureye.	pre-1948
1121	Senegal			Pout region		P					
1122	Senegal			Yen		P		14.63333	-17.18333	Lat-long is for the town of Yen.	
1123	Somalia			Modu Mode		P	24% P2O5	3.05000	43.86670		
1124	South Africa			Bulhoekkop		P	Samples from an apatite-rich beforsite dike assayed 4.1-24% P2O5.	########	27.46667		
1125	South Africa			Derdepoort		P		########	28.28333		
1126	South Africa			Kruidfontein		F P Ti		########	27.50000		
1127	South Africa			Nooitgedacht (Gelukshoek, Nooitgedagt)		P Nb REE		########	27.50000		
1128	South Africa			Pretoria Sault Pan (Soutpan, Zoutpan)		P		########	28.08333		
1129	South Africa			Roodeplaat		F P		########	28.38333		
1130	South Africa			Schiel		P		########	30.33333	Estimated center of large area.	
1131	South Africa			Spitskop		P LST DOL		########	29.81667		
1132	South Africa			Tweerivier		P Zr		########	27.51667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1118			1.1 Mt calcium phosphate, 1951-1987; 5.9 Mt aluminium phosphate, 1950-1987		Aluminium phosphate ore 100 Mt @ 27.5% P2O5 (1989)			Pascal and others, 1989; NIMA, 2000	de Kun, 1987; Sustrac and others, 1990; Flicoteaux and Hameh (1989)		DE00034
1119				S			Resource information from Flicoteaux and Hameh (1989).	MASMILS, 2000	de Kun, 1987; Sustrac and others, 1990	7.44E+09	
1120	None				25 Mt concentrates @ 34% P2O5 (1990)			Pascal and others, 1989; NIMA, 2000	Sustrac and others, 1990; Pascal and others, 1989		
1121									de Kun, 1987		
1122								NIMA, 2000	de Kun, 1987		
1123								U.S. Geological Survey Mineral Resources Data System, 2000	British Sulphur Corporation, 1987		D007075
1124								Woolley, 2001	Woolley, 2001		
1125								Woolley, 2001	USGS files; Woolley, 2001		
1126								Woolley, 2001	USGS files; Woolley, 2001		
1127	Occurrence							Woolley, 2001	USGS files; Woolley, 2001		
1128								Woolley, 2001	USGS files; Woolley, 2001		
1129								Woolley, 2001	USGS files; Woolley, 2001		
1130								Woolley, 2001	Woolley, 2001		
1131	Potential resources							Woolley, 2001	Woolley, 2001		
1132	Probably not economic							Woolley, 2001	USGS files; Woolley, 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1133	South Africa	Cape Province		Langebaan		P		########	17.98000		1897
1134	South Africa	Cape Province		Saldanha Embayment/Constable Hill		P Al	phosphatised porphyry: 62.30% SiO2, 7.55% Al2O3, 4.6% Fe2O3, 0.05% CaO, 0.54% K2O, 11.91% P2O5, trace F	########	18.01667	On Pospberg Peninsula, west of Saldanha Bay.	
1135	South Africa	Cape Province		Saldanha Embayment/Duyker Eiland		P		########	17.95000	West of St. Helena Bay.	
1136	South Africa	Cape Province		Saldanha Embayment/Elandsfontyn		P		########	24.91667		
1137	South Africa	Cape Province		Saldanha Embayment/ Hoedjiespunt		P	microsphorite: 3.60% SiO2, 1.83% Al2O3, 0.27% Fe2O3, 2.32% MgO, 46.04% CaO, 1.27% Na2O, 0.06% K2O, 33.97% P2O5, 0.57% F, 0.44% SO3, 3.28% CO2, 2.55% H2O	########	17.95000		
1138	South Africa	Cape Province		Saldanha Embayment/Langebaan (Varswater)	Old Varswater Quarry	P	Pelletal phosphorite sand: 54.57% SiO2, 1.99% Al2O3, 1.33% Fe2O3, 1.45% MgO, 20.40% CaO, 0.43% Na2O, 0.73% K2O, 14.66% P2O5, 1.21% F, 0.19% SO3, 0.19% CO2, 0.59% H2O	########	18.15000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1133	Closed (1993)	0.028761 Mt phosphate conc@ 19.5% P2O5 (1981)	12.798 Mt phosphate conc 1943-82	S	60.7 Mt ore @ 8.6% P2O5 (1976, R1E); 73.0 Mt ore@ 5.8% P2O5 (1976, R1M)	Samancor (1993)		MASMILS, 2000	Hendey and Dingle, 1989	7.91E+09	ISM0393
1134	Past producer	0.01 Mt (1969)			0.27 Mt @ 27.5% P2O3; also several million tonnes low-grade ore		Resource estimates from Hendey and Dingle (1989).	NIMA, 2000	Hendey and Dingle, 1989		
1135	None				3.55 Mt @ 9.5-10% P2O5		Resource estimates from Hendey and Dingle (1989).	NIMA, 2000	Hendey and Dingle, 1989		
1136	None							NIMA, 2000	Hendey and Dingle, 1989		
1137	None						Probably not economic.	NIMA, 2000	Hendey and Dingle, 1989		
1138	Closed in 1965			S	5. Mt @ 8.0% P2O5 (1973)	Samancor (1989)	Quarry mined the Gravel Member of the Varswater formation and operated from 1948-1965. Hendley and Dingle (1989) report both that the quarry is mined out and that there are reserves in the vicinity of the old quarry.	Watkins and others, 1996	Hendey and Dingle, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1139	South Africa	Cape Province		Saldanha Embayment/Langebaan (Varswater)	New Varswater Quarry	P	Pelletal phosphorite sand: 54.57% SiO2, 1.99% Al2O3, 1.33% Fe2O3, 1.45% MgO, 20.40% CaO, 0.43% Na2O, 0.73% K2O, 14.66% P2O5, 1.21% F, 0.19% SO3, 0.19% CO2, 0.59% H2O	########	18.15000		1965
1140	South Africa	Cape Province		Saldanha Embayment/Langebaan (Varswater)	Baad's Quarry	P	Pelletal phosphorite sand: 54.57% SiO2, 1.99% Al2O3, 1.33% Fe2O3, 1.45% MgO, 20.40% CaO, 0.43% Na2O, 0.73% K2O, 14.66% P2O5, 1.21% F, 0.19% SO3, 0.19% CO2, 0.59% H2O	########	18.15000		
1141	South Africa	Cape Province		Saldanha Embayment/Paternoster	Includes Pelgrimsrust and Noodhulp properties	P	Phosphatic nodules contain up to 23.7% P2O5.	########	17.86667		
1142	South Africa	Cape Province		Saldanha Embayment/Sandheuwel	Includes Sandheuwel, Langlaagte, Witteklip properties	P		########	20.80000	Lat-long is for the town of Sandheuwel.	
1143	South Africa	South African continental shelf		Agulhas Bank		P		########	23.30000	Location is centroid of large area.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1139	Active (1989)	capacity: 0.250 Mtpa (1989)		S	Identified--37.5 Mt @ 3% P2O5; Indicated--20 Mt @10% P2O5	Samancor (1989)	Resource estimates from Hendey and Dingle (1989).	Watkins and others, 1996	Hendey and Dingle, 1989		
1140	Closed in 1963			S	0.907 Mt @ 12.8% P2O5 (1973)	Samancor (1989)	Quarry mined phosphate-rich duracrust from 1943-1963. Hendley and Dingle (1989) report both that the quarry is mined out and that there are reserves just to the north of the old quarry.	Watkins and others, 1996	Hendey and Dingle, 1989		
1141	None				10 Mt @ 5% P2O5 (Pelgrimsrust); 2.7 Mt @ 4% P2O5 (Noodhulp)		Resource estimates from Hendey and Dingle (1989).	NIMA, 2000			
1142	None				23.6 Mt @ 6% P2O5 (Sandheuwel); 2.7 Mt @ 4% P2O5 (Langlaagte); 3.9 Mt @ 5% P2O5 (Witteklip)		Resource estimates from Hendey and Dingle (1989).	NIMA, 2000	Hendey and Dingle, 1989		
1143					16% P2O5 average; Estimate--5500 Mt P2O5		Resource estimates from Birch (1990).	Watkins and others, 1996			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1144	South Africa	Transvaal		Glenover		P Nb REE U Zr		########	27.35000		1953
1145	South Africa	Transvaal		Phalaborwa		P Cu VRM Fe REE Zr U Au Th		########	31.13333		1906
1146	South Africa	Transvaal		Foskor Mine (Phalabora)		P Cu Zr VRM Fe		########	31.13330		
1147	Spain	Almeria		Sierra Alhamilla		P					
1148	Spain	Caceres		Aldea Moret		P		39.41667	-6.41667		
1149	Spain	Caceres		Caleruela		P		39.83333	-5.25000		
1150	Spain	Caceres		Costanza vein		P		39.33333	-5.51667	Just swoutheast of Logrosan.	
1151	Spain	Caceres		Logrosan vein		P PYR F		39.33333	-5.51667		
1152	Spain	Caceres		Malpartida de Caceras		P		39.45000	-6.46667		
1153	Spain	Caceres		Montanchez		P		39.45000	-5.86667		
1154	Spain	Caceres		Trujillo		P		39.45000	-5.86667		
1155	Spain	Caceres		Valencia de Alcantara		P		39.36667	-7.25000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1144	Past producer (2001)	0.028751 Mt phosphate conc@ 30% P2O5 (1980); 0.020009 Mt phosphate conc @ 30% P2O5 (1982)	0.926 Mt phosphate conc @ 30% P2O5 (1961-82); 1.445 Mt ore, 1962-1983	S	0.250 Mt ore @ 28% P2O5 (R1E, 1982); 18 Mt ore @ 4.5% P2O5 (R1M, 1982)			MASMILS, 2000	Woolley, 2001	7.91E+09	ISM0396, W028278
1145	Active Mine (1999)	2.996 Mt phosphate conc @ 37% P2O5 (1980); 2.726 Mt phosphate conc @ 37% P2O5 (1982)	17.274 Mt phosphate conc @ 37% P2O5 (1953-82)	S	2210 Mt ore@ 7% P2O5 (R1E); 18370 Mt ore @ 7% P2O5 (R2E)	Foskor Ltd. (1995)		MASMILS, 2000	Woolley, 2001	7.91E+09	ISM0394
1146	Active Mine (1999)			S				U.S. Geological Survey Mineral Resources Data System, 2000	Sims, 1999		W028277
1147									Mew, 1980		
1148	Small intermittent producer			Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		
1149				Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987		
1150	Small intermittent producer			Unknown	1.5 Mt @ <18% P2O5 to depth of 160 m.				British Sulphur Corporation, 1987		
1151	Small intermittent producer			Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		
1152				Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987		
1153									Mew, 1980		
1154								Commission for Geological Map of the World, 1976	Commission for Geological Map of the World, 1976, Mew, 1980		
1155				Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1156	Spain	Caceres		Zarza la Major, Ceclavin		P U		39.83333	-6.83333		
1157	Spain	Cordoba		Belmez		P					
1158	Spain	Cordoba		Espiel		P					
1159	Spain	Cordoba		Santa Eufemia		P					
1160	Spain	Cuidad Real		Fontanarejo/Horcajo de los Montes		P		39.31667	-4.65000		
1161	Spain	Murcia		Jumilla		P					
1162	Spain	Murcia		Sierra Espuna		P	8-14% P2O5	37.86667	-1.61667		
1163	Spain	Toledo		Val de Verdeja		P					
1164	Sri Lanka	Anuradhapura		Eppawella	Eppawella	P	36.60% P2O5, 52.30% CaO, 3.72% Fe2O3, 0.95% Al2O3, 0.70% FeO, 0.50% SiO2, 2.20% MgO, 2.40% F, 0.88% Cl, 0.78% TiO2, 0.66% SrO, 0.13% BaO, 1.46% H2O; commonly >1% Cl	8.16667	80.66667		1971
1165	Sri Lanka			Seruwila		Cu Fe P					
1166	Surinam			Bakhuis Mountains - K/3 Deposit		P REE?	Phosphatic horizon with grades as high as 14% P2O5, 0.4% Ba, 0.2-0.3% Ce, 0.5%Sr; 57% of samples contain 2% P2O5	4.43333	-57.06667		
1167	Sweden			Nakerivaara		Fe P		68.20000	19.70000		
1168	Sweden			Påläng		P U		62.38333	17.15000		
1169	Sweden			Skellefte District/Boliden		Cu Au PYR As P	0.39-1.21% P2O5 (up to 2.7% P2O5 in apatite ores, 33.15% P2O5 apatite rocks)	64.86667	20.38333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1156				Unknown				Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		
1157									Mew, 1980		
1158									Mew, 1980		
1159									Mew, 1980		
1160	None (1986)				2 Mt (1986)			Gabaldon and others, 1989; NIMA, 2000	Perconig and others, 1986		
1161									Mew, 1980		
1162							Thickness up to 20 m; 8-14% P2O5.	Commission for Geological Map of the World, 1976	British Sulphur Corporation, 1987; Mew, 1980		
1163									Mew, 1980		
1164	Active Mine (1987)	Small-scale production only	None	S	Proven + Probable -- 50 Mt @ 33% P2O5 (1987); >60 Mt @ 34% P2O5 (1998)	State Mining and Mineral Development Corp.	Chloride content (>1%) and high Fe2O3 + Al2O3 (ave. 10%) is a problem for potential fertilizer production.	MASMILS, 2000	Jayawardena, 1989; Jaywardena, 1986a, b; ESCAP, 1989; Jayawardena, 1998	5.42E+09	ISM0457, I000104
1165	None								Jayawardena, 1980; Lee, 1980		
1166	None							Dahlberg, 1989			
1167								Commission for Geological Map of the World, 1972	Commission for Geological Map of the World, 1972		
1168				Unknown	6 Mt @ 2% P2O5 and 0.03% U			Äikäs, 1989; NIMA, 2000			
1169				Unknown				Commission for Geological Map of the World, 1972			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1170	Sweden	Kopparberg		Grängesberg District	Includes Export field, Strandberg field, Timmer miner, Risberg field, Ormberg field, Lomberg field	Fe P	1.2-3% P2O5 (early production up to 13% P)	60.08000	14.98000		
1171	Sweden	Norrbotten		Ekströmsberg		Fe P	59% Fe, 1% P	67.78333	19.51667		
1172	Sweden	Norrbotten		Kirunavaara	Kiruna	Fe P	0.2-4.6% P2O5 avg. (up to 5.7-11.5% P2O5)	67.83333	20.28333		
1173	Sweden	Norrbotten		Malmberget/Gallivare		Fe P	3-4% P2O5	67.20000	20.66667		
1174	Sweden	Norrbotten		Pattok		Fe P		67.56667	19.70000		
1175	Sweden	Norrbotten		Svappavaara Area		Fe P	0.6-3% P	67.63333	21.00000		
1176	Sweden	Norrbotten		Tuolluvaara		Fe P	2.25% P	67.85139	20.33000		
1177	Sweden	Väsernorrland		Alnö (Alno Island)		P Ba Sr F Ti U Nb	1-13% P2O5	62.45000	17.18333		
1178	Switzerland			Corandoni Mountain		P	6.5-12.2% P2O5 in 3 samples.				
1179	Syria			Ain Layloun		P					
1180	Syria			Bardeh		P		34.20000	37.85000		
1181	Syria			Bir Sejeri		P		33.90000	39.36667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1170				U		Svenskt Stäl AB (1987)	P production is as byproduct of Fe production.	MASMILS, 2000	Russell, 1987; Commission for Geological Map of the World, 1972; Grip, 1978	4.01E+09	
1171				Unknown				Commission for Geological Map of the World, 1972			
1172				U		Luossavaara Kiirunavaara (1987)	P production is as byproduct of Fe production.	MASMILS, 2000	Russell, 1987; Commission for Geological Map of the World, 1972	4.01E+09	W700322
1173				U				MASMILS, 2000	Commission for Geological Map of the World, 1972	4.01E+09	
1174				Unknown	40000 sq m ore body, 44% Fe, 2% P			Commission for Geological Map of the World, 1972			
1175								Grip, 1989	Commission for Geological Map of the World, 1972		
1176				U				MASMILS, 2000		4.01E+09	
1177	Small past producer			Unknown	60 Mt ore with 0.5 Mt P2O5		Attempts to exploit in the 1940's failed due to high production costs.	Grip, 1989	Grip, 1978		
1178	None				Estimated--0.44 Mt @ 9% P2O5 (1947)				British Sulphur Corporation, 1987		
1179	None				Resources--6.5 Mt @ 18.3% P2O5 + 3.5 Mt @ 10.5% P2O5 (1994)				Notholt, 1994		
1180								Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b		
1181								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1182	Syria			Bir Setri		P		33.86667	39.23333		
1183	Syria			Charkiet		P U		34.23333	38.00000		
1184	Syria			Dumeir		P		33.78333	36.88333		
1185	Syria			Eastern A and B (Sawwaneh)		P	Average 24%P2O5.	34.71667	36.70000		1958
1186	Syria			Gadir Al Hamal		P		34.20000	38.18333		
1187	Syria			Hibari		P		34.11667	39.21667		
1188	Syria			Hiffe		P		35.56667	36.10000		
1189	Syria			Khneifiss area		P	Maastrichtian phosphate beds contain 18-22% P2O5.	34.18333	37.66667		1958
1190	Syria			Tarag El Hbari (El Hagbari)		P	16-24.8% P2O5	34.16667	38.83333	100 km SE of Palmyra.	
1191	Syria			Wadi El Rachim (Wadi Erkheime; Er Rakheime)		P		34.78333	37.56667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1182								Commission for Geological Map of the World, 1982b	Commission for Geological Map of the World, 1982b		
1183								Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1982b		
1184								Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1982b		
1185	Active Producer (1987)	Capacity 1 Mt phosphate conc	No data	S	573 Mt @ 23-25% P2O5 (1994)	General Company for Phosphate and Mines (Gecopham)		MASMILS, 2000	Harben and Kuzvart, 1996; Notholt, 1994; Arab Organisation for Mineral Resources, 1987	5.02E+09	ISM0436
1186								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1187								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1188								Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1982b		
1189	Active Producer (1987)	0.230 Mt, average production (1971-74)	1.464 Mt, 1971-July 1975;1.025 Mt phosphate conc, 1971-July 1975	S	39 Mt @ 28% P2O5 (1994)	General Company for Phosphate and Mines (Gecopham)		Arab Organisation for Mineral Resources, 1987	MASMILS, 2000; Harben and Kuzvart, 1996; Commission for Geological Map of the World, 1982b; Notholt, 1994	5.02E+09	ISM0437
1190				Unknown				MASMILS, 2000	Commission for Geological Map of the World, 1982b; Notholt, 1994	5.02E+09	
1191	None (1994)				Estimated Resources--70 Mt @ 23% P2O5 (1994)			Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1982b; Notholt, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1192	Tadzikistan			Khodzha Achkan (Khodzhaachkan)		P		39.61667	71.23330		
1193	Tanzania	Arusha		Minjingu		P	Bedded phosphorite: 29.69% P2O5, 44.30% CaO, 4.19% SiO2, 1.40% Al2O3, 0.91% Fe2O3, 2.13% MgO, 0.52% Na2O, 6.37% H2O-, 4.87 CO2, 0.31% SO3, 0.21% Cl, 2.85% F, 2.51% H2O+ and organic matter.	-3.66667	35.78333		1956
1194	Tanzania			Chali		P					
1195	Tanzania			Chamoto		P					
1196	Tanzania			Kerimasi (Kerimasio)		Ti P Zr		-2.86667	35.95000		
1197	Tanzania			Kwahera (Ufiome, Kawaraa, Kwaramu, Kwaraha, Galappo)		Nb P		-4.21667	35.81667		
1198	Tanzania			Luhombero - Pangani Gorge		Nb P		-7.83333	38.06667		
1199	Tanzania			Makonde		P REE	Magnesiocarbonatite ran 1500 ppm REE.	########	34.51667		
1200	Tanzania			Mbalizi		P		-8.91667	33.36667		
1201	Tanzania			Mbeya (Panda Hills)		Nb P	Up to 20% P2O5 in residual soils.	-9.00000	33.23333		
1202	Tanzania			Minjingu		P	Up to 20% P2O5.				
1203	Tanzania			Nachendazawaya		P Nb		-9.50000	33.20000		
1204	Tanzania			Ngualla		P		-7.70000	32.83333		
1205	Tanzania			Oldoinyo Dili		P Nb		-3.41667	35.71667		
1206	Tanzania			Sangu Carbonatite Group, Karema Depression (includes Ikola, Ikambwa, Middle carbonatites)		P Ti Zr Nb Sr REE		-6.80000	30.51667		
1207	Tanzania			**Zizi**		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1192									USGS files; Kogarko and others, 1995		
1193	Active Producer (2001)			S	10 Mt @ <20% P2O5	Stamico (1990)	There is an overburden ratio of 1:6 at this site. Resource information from World Survey of Phosphate Deposits (1987).	MASMILS, 2000	British Sulphur Corporation, 1964, 1987; Notholt, 1990; de Kun, 1987; Notholt and others, 1989c; S. Jasinski, written commun., 2001	7.83E+09	I000107
1194									de Kun, 1987		
1195									de Kun, 1987		
1196								Woolley, 2001	USGS files; Woolley, 2001		
1197	Occurrence							Woolley, 2001	USGS files; Woolley, 2001		
1198								Woolley, 2001	USGS files; Woolley, 2001		
1199								Woolley, 2001	Woolley, 2001		
1200	Occurrence							Woolley, 2001	Woolley, 2001		
1201	Not mined.						Nb reserve.	Woolley, 2001	de Kun, 1987; Bartels & Gurr, 1994; Woolley, 2001		
1202	Active (1987)	Capacity: 0.17 tpa (1987)			10 Mt @ up to 20% P2O5	Stamico (1987)	Overburden ratio 1:6.		de Kun, 1987		
1203	Occurrence							Woolley, 2001	USGS files; Woolley, 2001		
1204	Occurrence							Woolley, 2001	Woolley, 2001		
1205	Occurrence							Woolley, 2001	USGS files; Woolley, 2001		
1206	Occurrence							Woolley, 2001	USGS files; Woolley, 2001		
1207									de Kun, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1208	Thailand			Fang-Chiang Dao		P	14% P2O5 in phopsphatic beds; 29% P2O5 in nodules	19.36667	98.96667	Deposit location corresponds with NIMA location for the Chiang Dao population center.	1986
1209	Thailand	Ratchaburi		Khao Phak Mah		P					
1210	Thailand	Roi Et		Ban Lao Kham		P Al		16.10000	103.55000	Location based on best estimate from Map in Lee (1980) and NIMA location for population center.	
1211	Togo			Dagbati		P CLY U		6.08333	1.50000		
1212	Togo	Region Maritime		Hahotoe-Kpogame		P	Bed I: 30.4% P2O5, 40.6% CaO, 9.4% SiO2, 10.2% Al2O3, 2.1% Fe2O3	6.36667	1.38333		1952
1213	Togo			Adete (Avete?)		P CLY LST U					
1214	Togo			Hahotoe-Akoumape Deposit		P CLY U	Average grade of phosphates is 30% P2O5.	6.38722	1.44972	Lat-long is for the town of Akoumape.	
1215	Togo			Kpomé (Kpogame?)		P LST U	Bed 1 samples average 26.1% P2O5 (1990)	7.25000	1.58333		
1216	Togo			Momé		P		6.46667	1.56667	Location is approximate.	
1217	Tunisia				Chaketma	P	18-25% P2O5, 17% average	35.61667	9.01667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1208					Possible--2.23 Mt P2O5 (1986)			NIMA, 2000	British Sulphur Corporation, 1987; Bunopas and others, 1986; Notholt, 1994		
1209					a few thousand tons at about 20% P2O5				Thailand Department of Mineral Resources, 1997		
1210					0.07 Mt @ 22% P2O5			NIMA, 2000	British Sulphur Corporation, 1987; Thailand Department of Mineral Resources, 1997		
1211	None (1987)			S				MASMILS, 2000	de Kun, 1987	7.52E+09	
1212		Average about 4.5 Mt ore @30% P2O5 (1974-78)	37.5 Mt ore @30% P2O5 (1970-78); 26.28 Mt phosphate conc @36.2% P2O5 (1963-78)	S	91 Mt ore @ 29.7% P2O5 (R1E, 1981)			MASMILS, 2000		7.52E+09	ISM0399
1213	None (1987)								de Kun, 1987		
1214	Active Producer (1987)			S		Office Togolaise des Phosphates		NIMA, 2000	Harben and Kuzvart, 1996; de Kun, 1987; Notholt, 1994; Van Kauwenbergh and McClellan, 1990		
1215	Active Mine? (1987)							NIMA, 2000	de Kun, 1987; Van Kauwenbergh and McClellan, 1990		
1216	None (1987)							Estimated from NIMA, 2000	de Kun, 1987		
1217								Arab Organisation for Mineral Resources, 1987	de Kun, 1987; Commission for Geological Map of the World, 19		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1218	Tunisia				Kalaa Djerda	P		35.68333	8.60000		
1219	Tunisia				Kalaet Es Senam	P		35.76667	8.43333		
1220	Tunisia	El Kef		Djebel Gouraya		P		35.78333	8.77083		
1221	Tunisia	El Kef		El Kef Basin/Tebessa-Thala mining area/Kalaâ-Khasba Deposit	Kalaâ- Khasba Mine	P Ca Fe Al Mg		35.66667	8.66667		
1222	Tunisia	El Kef		Sra Ouertane (Stra Ouertane)	Sra Ouertane	P		36.21667	8.75000	In remote area, but near RR.	
1223	Tunisia	Gafsa		Gafsa Basin	Kef Eddour (Kef ed Dour)	P		34.15000	8.41667		
1224	Tunisia	Gafsa		Gafsa Basin	Djellabia (Jellabia)	P		34.15000	8.41667		
1225	Tunisia	Gafsa		Gafsa Basin	Kef es Schfair (Kef Eschaier) Mine	P	Average grade is 17% P2O5.	34.38333	8.46667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1218								Arab Organisation for Mineral Resources, 1987	Commission for Geological Map of the World, 1983; Commission for Geological Map of the World, 1976		
1219								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1220				S	Limited reserves at 34-35% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).	MASMILS, 2000	British Sulphur Corporation, 1964, 1987	7.23E+09	
1221	Past Producer (2001)	Capacity 2.0Mt/yr (1986)	No data	U	12 Mt @ 27% P2O5 (1987)	Compagnie des Phosphates du Gafsa	Ore grades run 25-29% P2O5. This mine works an extension of an Algerian deposit. Average grade is 18% P2O5 (1986).	MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986b; S. Jasinski, written commun., 2001	7.23E+09	ISM0413
1222	None		None	S	3000 Mt @ 12-15% P2O5 (R2E + R2S, 1981); 11-13% P2O5 (1986)	Compagnie des Phosphates du Gafsa	Although development was started with a planned mine opening in 1987, the mine never opened.	Arab Organisation for Mineral Resources, 1987	Power, 1986b; de Kun, 1987; S. Jasinski, written commun., 2001; MASMILS, 2000	7.23E+09	ISM0421
1223	Active Producer (2001)	Capacity-- 2.5 Mtpa		S	46 Mt	Compagnie des Phosphates du Gafsa	Resource estimates from World Survey of Phosphate Deposits (1987).	MASMILS, 2000	Power, 1986b; de Kun, 1987; British Sulphur Corporation, 1964, 1987; S. Jasinski, written commun., 2001	7.23E+09	
1224	Active Producer (2001)	Capacity-- 2.0 Mtpa		S	100 Mt	Compagnie des Phosphates du Gafsa	Resource estimates from World Survey of Phosphate Deposits (1987)	MASMILS, 2000	Power, 1986b; British Sulphur Corporation, 1964, 1987; S. Jasinski, written commun., 2001	7.23E+09	
1225	Active producer	About 0.536 Mt ore, 1976; Capacity is about 3.6 Mtpa (1986)	No data	S	90 Mt (R1E, 1981)	Compagnie des Phosphates du Gafsa	Production from 8 of the 9 phosphate beds of the Metlaoui Formation.	Arab Organisation for Mineral Resources, 1987	Harben and Kuzvart, 1996; Power, 1986b; de Kun, 1987; MASMILS, 2000	7.23E+09	ISM0414

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1226	Tunisia	Gafsa		Gafsa Basin	Mdilla (M'dilla) Mine	P	Average grade is 19% P2O5.	34.30000	8.76667		1893
1227	Tunisia	Gafsa		Gafsa Basin	Metlauoi Mine	P Al Fe Mg Ca	Average grade is 18% P2O5 (1986).	34.31667	8.41667		1895
1228	Tunisia	Gafsa		Gafsa Basin	Moularès Mine	P	Average grade is 18% P2O5 (1986).	34.48333	8.26667		1895
1229	Tunisia	Gafsa		Gafsa Basin	Mrata (M'rata, Sehib M'Rata) Mine	P	Average grade is 21% P2O5 (1986).	34.48333	8.26667		1890's
1230	Tunisia	Gafsa		Gafsa Basin	Oum el-Kecheb (Oum El Kecheb)	P		34.15000	8.41667		
1231	Tunisia	Gafsa		Gafsa Basin	Redeyef Mine	P		34.40000	8.15000		1899

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1226	Past Producer (2001)	0.815 Mt phosphate conc, 1971; capacity of 0.93 Mtpa in 1986	No data	S; U	80 Mt ore (R1E, 1979)	Compagnie des Phosphates du Gafsa	Production from Beds V and VI of the Metlaoui Fmt.	Arab Organisation for Mineral Resources, 1987	Harben and Kuzvart, 1996; Power, 1986b; de Kun, 1987; S. Jasinski, written commun., 2001; MASMILS, 2000	7.23E+09	ISM0415
1227	Past Producer (2001)	About 0.700 Mt ore, 1977; capacity of 1.06 Mtpa (1986)	No data	U	9.5 Mt ore @26% P2O5 (R1E); 4.2 Mt ore @ 26% P2O5 (R1M); 40.9 Mt ore @ 26% P2O5 (R2E)	Compagnie des Phosphates du Gafsa	Production from 3 m thick Bed II.	MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986b; Commission for Geological Map of the World, 1976; S. Jasinski, written commun., 2001	7.23E+09	ISM0416
1228	Active producer	Capacity of 1.1 Mtpa (1986)	No data	S	25 Mt ore (R1E)	Compagnie des Phosphates du Gafsa	Production from Beds I and II which are mined as a unit.	MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986b; de Kun, 1987	7.23E+09	ISM0417
1229	Past Producer (2001)	Capacity of 0.5Mt/yr (1986)	No data	U	23 Mt ore (R1E, 1981); 24.8 Mt ore (R1M, 1981)	Compagnie des Phosphates du Gafsa	Production from Bed I of the Metlaoui Fmt only.	MASMILS, 2000	Harben and Kuzvart, 1996; Power, 1986b; de Kun, 1987; S. Jasinski, written commun., 2001	7.23E+09	ISM0418
1230	None ; Potential mine (1986)			S				MASMILS, 2000	Power, 1986b; de Kun, 1987; British Sulphur Corporation, 1964, 1987	7.23E+09	
1231	Active Producer (2001)	Capacity 0.95 Mt ore (2001)	No data	S	27 Mt ore @26% P2O5 (R1E, 1982); 35.3 Mt ore @ 26% P2O5 (R1M, 1982); 137.7 Mt ore (R2S, 1981)	Compagnie des Phosphates du Gafsa	Production from Beds I and II which are mined as a unit. Underground mining ended in 2000.	Arab Organisation for Mineral Resources, 1987	Harben and Kuzvart, 1996; de Kun, 1987; Notholt, 1994; Van Kauwenbergh and McClellan, 1990; S. Jasinski, written commun., 2001; MASMILS, 2000	7.23E+09	ISM0419

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1232	Tunisia	Gafsa		Gafsa Basin	Sehib Sud	P					
1233	Tunisia	Gafsa		Sehib		P		34.25000	8.20000		
1234	Tunisia			Djebel Mechaib	Djebel Mechaib, Mezzoura, Maknassy, Meheri Zebbeus	P		35.00000	9.66667	Between Sfax and Djerissa.	
1235	Tunisia				Djebel Mechaib	P		35.00000	9.66667		
1236	Tunisia				Maknassy	P		34.71667	9.68333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1232	None (1986)	Design capacity 0.38 Mt/yr (1986)							Power, 1986b		
1233		Planned capacity 1.8 Mt ore and about 1.3 Mt phosphate conc	No data	U	40 Mt ore @29% P2O5 (R1E, v); 14.43 Mt ore (R2E, 1974)			Arab Organisation for Mineral Resources, 1987	de Kun, 1987; MASMILS, 2000	7.23E+09	ISM0420
1234				U				Commission for Geological Map of the World, 1983	Commission for Geological Map of the World, 1983		
1235								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1236								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1237	Turkey			Bingöl Area/Miskel; Gonac; Haylandere; Kavakli; Murderesi; Arduvan; Hamek; Avnik; Kavakli		P Fe		38.75000	40.50000	Location approximate centroid of district.	
1238	Turkey			Derik		P		37.36667	40.11667		
1239	Turkey			Kilis		P		36.81667	37.03333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1237				Unknown	Total reserves in Bingol and Bitlis areas-- >180 Mt, up to 58% Fe, 0.45-5.5% P2O5; Hamek-- 100 Mt with less than 10% Fe, 2% P2O5; Avnik-- 45% Fe; Avnik-Miskel-- 39 Mt @ 1.2% P2O5; Kavakli-- 1.2 Mt @12% P2O5 , 1-5% Fe; Haylan-- 5 Mt @ 1.2% P2O5; Gonac and others-- 15 Mt @ 1.2% P2O5			Seyhan, 1989; NIMA, 2000			
1238									Commission for Geological Map of the World, 1982b		
1239									Commission for Geological Map of the World, 1982b		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1240	Turkey	Anatolia?		Bitlis Area/Sürüm; Mese; Sirti; Yaku (Unaldi); Simek; Setek; Mesclik		P Fe		38.36667	42.10000	Location approximate centroid of district.	
1241	Turkey	Mardin		Mazidagi		P U Al Fe CAR		37.51667	40.50000		1960
1242	Uganda			Budeda		P		1.16667	34.36667		
1243	Uganda			Bukusu Complex/Busumbu (Busuku)		P Fe F Nb Sr V CEM Ba REE VRM Zr	Francolite-rich phoscrete averages 30% P2O5.	0.87500	34.26667	Between Tororo and Mbale. Location estimated from Mathers, 1994.	
1244	Uganda			Sekululu (Butiriku)		P CARB		1.03333	34.35000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1240				S; U	Total reserves in Bingol and Bitlis areas- ->180 Mt, up to 58% Fe, 0.45-5.5% P2O5; Surum-- 12 Mt @ 9% P2O5; Mesclik-- 5 Mt @ 3% P2O5; other deposits-- 3 Mt @ 4% P2O5			Seyhan, 1989; NIMA, 2000			
1241	Past Producer (2001)	Capacity 250,000t, 1978	No data	S	258 Mt average 10% P205 (R1M, 1978)	Etibank (1987)		MASMILS, 2000	Russell, 1987; Commission for Geological Map of the World, 1982b	4.89E+09	ISM0439
1242								Woolley, 2001	USGS files; Woolley, 2001		
1243	Producer (past)				1 Mt "soft rock" ore @ 15% P2O5 (1992); Busumbu resources (residual + igneous)-- 50 Mt @ 8-35% P2O5 (1994)	Busumbu Mining Co. (1987)	Secondary phoscrete averages 30% P2O5.	Mathers, 1994	Mathers, 1994; de Kun, 1987; Mew, 1980; Notholt, 1994; Woolley, 2001		
1244	Occurrence							Woolley, 2001	Woolley, 2001		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1245	Uganda	Bukedi		Sukulu Complex		P Zr Nb CEM Fe Ba VRM REE	Primary apatite contains 39.85% P2O5, 53.82% CaO, 0.49% Fe2O3, 1.65% Al2O3, 1.37% SiO2, 0.14% H2O, 3.08% F. Apatite soil averages 20-25% apatite, 20-25% crandallite, 15-20% quartz, 20% magnetite, 10% hematite.	0.65000	34.15000	10 km SW of Tororo. Location estimated from Mathers (1994) is 0.65N, 34.15E.	
1246	Uganda			Tororo (Tororo Hill)		P CEM		0.68472	34.56972	Deposit underlies town of Tororo.	
1247	Ukraine			Stremygoroske		Ti P					
1248	Ukraine			Fedorivske		Ti P					
1249	Ukraine			Vydyborzke		Ti P					
1250	Ukraine	Chernigov		Krolevets		P				On right bank of Desna River.	1912
1251	Ukraine	Kharkov		Sinichemo-Yeremov		P				On the right bank of the Don River, 12 km from Izyum station.	1896
1252	Ukraine	Kharkov		Kremenesk (Izyum)		P					
1253	Ukraine	Ivano-Frankov		Nezvis		P					late 1800's
1254	Ukraine	Vinnitsa		Shvan		P					
1255	United Arab Emirates			Arsana		P		24.80000	52.56667		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1245	Past Producer (late 1960's - early 1970's)		2.16Mt of soil containing 160,000 t apatite (1962-78)	Unknown	Estimated Reserves-- 230.7Mt @ 12.8% P2O5, 0.24% Nb2O5, 42.7% Fe2O3, 0.07% Zr02, 0.3% Zn, 5.8% BaO.	Tororo Industrial Chemicals and Fertilizers (1962-1978)		Woolley, 2001	Mathers, 1994; de Kun, 1987; Mew, 1980; Notholt, 1994; Woolley, 2001	7.781E+09	
1246	None								Mew, 1980		
1247	None						Deposit has been earmarked for development.		O'Driscoll, 1998		
1248	None						Deposit has been earmarked for development.		O'Driscoll, 1998		
1249	None						Deposit has been earmarked for development.		O'Driscoll, 1998		
1250	Small past production				Proven + probable + possible-- 2.4 Mt		Small scale production 1929-1932.		British Sulphur Corporation, 1987		
1251					Deposit-- 2.4 @ 16.6% P2O5				British Sulphur Corporation, 1987		
1252							Small scale production WWII.		British Sulphur Corporation, 1987		
1253	Small past production				Possible-- 3.4 Mt @ 18-20% P2O5		At times, worked by hand.		British Sulphur Corporation, 1987		
1254					Possible-- 5.376 Mt @ 14.5% P2O5				British Sulphur Corporation, 1987		
1255								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1256	United Arab Emirates			Qarnain		P		24.93333	52.85000		
1257	United Kingdom	England		Cambridge Greensand		P		52.18333	0.15000		
1258	United Kingdom	England		Potton		P		52.11667	-0.21667		
1259	United Kingdom	England		Red Crag Deposits/Ipswich		P		52.08333	1.16667	Location for nearby Ipswich population center.	
1260	United Kingdom	England		Spilsby		P		53.16667	0.08333		
1261	United Kingdom	England		Taplow		P		51.51667	-0.68333		
1262	United Kingdom	England		Woburn-Ampthill		P		52.01667	-0.56667		
1263	United Kingdom	Scotland		Loch Borralan		Fe P V	Garnet in biotite- and garnet-rich pyroxenites contain up to 1% ZrO2 and 0.5% V2O5	58.00000	-4.90000	Location best estimate from map in Notholt (1989) and NIMA locations of neighboring towns.	1892
1264	United Kingdom	Wales		Nod Glas Formation/ Llangynog		P		52.83333	-3.40000	Location for Llangynog population center.	1863
1265	United States			Bearpaw Mountains		P Zr U Nb REE					
1266	United States			Deep Creek		Nb REE P F Sr					
1267	United States			Monte Largo area		P Nb					
1268	United States			Westcriffe		P Ba F REE					
1269	United States	Alabama		Gilbert Quarries		P		34.97167	-87.04167		
1270	United States	Alaska		Salmon Bay		REE P F Zr		56.32000	-133.16733		
1271	United States	Alaska		Shublik Formation/Sadlerochit River deposit		P V REE	4.8% P2O5 average, as high as 19.2 % P2O5	69.45000	-145.23333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1256								Arab Organisation for Mineral Resources, 1987	Arab Organisation for Mineral Resources, 1987		
1257				Unknown			Productive bed less than 0.3 m thick with nodules containing 25-27% P2O5.	Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987		
1258								Commission for Geological Map of the World, 1968a			
1259				S			Nodules contain on average 24% P2O5.	NIMA, 2000	British Sulphur Corporation, 1987		
1260								Commission for Geological Map of the World, 1968a			
1261				S	Probable--0.5 Mt			NIMA, 2000			
1262				S				Commission for Geological Map of the World, 1968a	British Sulphur Corporation, 1987		
1263				Unknown	100 Mt, 2% P2O5 apatite-bearing pyroxenite			Notholt, 1979	Notholt, 1979		
1264	Small past production		1150 t, 1874-1884	Unknown				NIMA, 2000	British Sulphur Corporation, 1987		
1265									USGS files		
1266									USGS files		
1267									USGS files		
1268									USGS files		
1269	Small past production			S				MRDS, 2000	MRDS, 2000		
1270											A010333
1271				Unknown				MASMILS, 2000		20150002	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1272	United States	Arkansas		Magnet Cove		P Mo Ti REE F					
1273	United States	California		Coast Range Phosphate Area		P		34.91700	-120.00000		
1274	United States	California		Salinas Basin/Carmel Valley area		P		36.52667	-121.78778		
1275	United States	California		Continental Borderland/outer continental shelf deposits		P		33.00000	-119.00000	Location is centroid of a large area based on map by Roberts (1989).	
1276	United States	California	Kern	Chico Martinez		P	Composition of pellet concentrate: 8.73% SiO2, 0.94% Al2O3, 1.29% Fe2O3, 0.38% SO3, 0.66% MgO, 47.06% CaO, 0.305 Na2O, 0.02% K2O, 3.74% H2O, 32.71% P2O5, 2.22% CO2, 0.02% Cl, 3.23% F. Elevated Th and U contnets but not in commerical concentrations.	35.41667	-119.63333	Location 45 miles west of Bakersfield in Temblor Range.	
1277	United States	California	San Luis Obispo	Wilson Corner (Indian Creek)		P	Composition of pellet concentrate:1.3% SiO2, 1.0% Al2O3, 0.28% Fe2O3, 0.08% FeO, 0.19% MgO, 51.8% CaO, 0.43% Na2O, 0.07% K2O, 3.7% H2O, 0.10% TiO2, 35.7% P2O5, 0.0% MnO, 2.5% CO2, 4.0% F	35.46667	-120.41667	Location 35 miles NE of San Luis Obispo near N end of La Panza Range.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1272									USGS files		
1273				Unknown				Foose, 1993	British Sulphur Corporation, 1964		
1274				S				MASMILS, 2000	Kastner and others, 1990	60530271	
1275	None				900 Mt phosphatic nodules, 65 Mt potentially recoverable; also 52 Mt phosphatic sand; nodules 19-38.6% P2O5, average 27%		Pellets are 1.04-9.68% P2O5.	Roberts, 1989			
1276	None (1989)			S	0.454 Mt @ 5.4% P2O5 (1989)			Roberts, 1989	Roberts, 1989		
1277	None (1989)			Unknown	13.61 Mt @ 6.5% P2O5 average + 58.97 Mt @ >4.5% P2O5 (1989)			Roberts, 1989	Roberts, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1278	United States	California	Santa Barbara	Cuyama Basin/Cuyama		P GYP	Composition of pellet concentrate: 6.51% SiO2, 1.91% Al2O3, 0.74% Fe2O3, 0.52% MgO, 46.54% CaO, 0.94% Na2O, 0.31% K2O, 4.22% H2O-, 0.09% TiO2, 30.52% P2O5, 0.24% SrO, 0.03% BaO, 0.02% Cr2O3, 0.01% MnO, 3.33% F, 3.67% CO2	34.87500	-119.70333		
1279	United States	California		Cuyama Basin/Indian Creek		P					
1280	United States	California	Ventura	Pine Mountain (Sespe Creek)		P GYP	Composition of pellet concentrate: 10.90% SiO2, 2.23% Al2O3, 1.20% Fe2O3, O.34% MgO, 44.17% CaO, 0.73% Na2O, 0.39% K2O, 1.54% H2O-, 0.12% TiO2, 30.53% P2O5, 0.02% MnO, 0.01% ZrO2, 2.48% acid sol. CO2, 0.8% total S as SO3, 3.19% F, 0.03% BaO, 0.24% SrO, O.02% Cr2O3, 0.26% total REE oxides, 2.01% LOI	34.61972	-119.32917		
1281	United States	Colorado		Gem Park		P Nb VRM REE		38.26667	-105.55000		
1282	United States	Colorado		Iron Hill (Powderhorn, Cebolla Creek)		Nb REE Ba F P		38.25000	-107.05000		
1283	United States	Florida		Bronson (East Ocala Hard Rock) District		P		29.33300	-82.50000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1278	Small past producer (1989)		several thousands st of 4% P2O5 ore (1968-1979)	S	35 Mt@ 5% P2O5 (1987); 126 Mt @ >8% P2O5 and 367.6 Mt @ >5% P2O5 (1989)			MASMILS, 2000	Roberts, 1989; British Sulphur Corporation, 1987; Kastner and others, 1990	60830160	
1279									Kastner and others, 1990		
1280	None (1989)			S	Proven--22.68 Mt @ 8.3% P2O5 (1989); Probable--68.04 Mt @ 8.3% P2O5 (1989)	U.S. Gypsum (1972)	Resource estimates from Roberts (1989).	MASMILS, 2000	Lowe, 1972; Roberts, 1989	61110115	
1281							Past producer of vermiculite.		USGS files; Woolley, 1987		
1282						Teck Resources Corp.	Has been Ti prospect.		USGS files; Anstett, 1986; Castor, 1984; Woolley, 1987; Pell, 1996; Moller, 1989; Thompson, 1990		ISM0585, M045346
1283				Unknown				Foose, 1993	British Sulphur Corporation, 1964		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1284	United States	Florida		East Florida phosphate district							1970's
1285	United States	Florida		Land Pebble phosphate district	Hopewell	P				About 10 miles south of Plant City on State Route 39.	
1286	United States	Florida	DeSoto, Manatee	Land Pebble phosphate district	Pine Level	P					
1287	United States	Florida	Hardee	Land Pebble phosphate district	Ona	P					
1288	United States	Florida	Hardee	Land Pebble phosphate district	Stuart Tract	P F U Fe		27.92500	-81.85806		1975
1289	United States	Florida	Hillsborough	Land Pebble phosphate district	Big Four Mine	P		27.74389	-82.07806		1910
1290	United States	Florida	Hillsborough	Land Pebble phosphate district/Central Florida district	Lonesome Mine	P		27.74111	-82.12306		
1291	United States	Florida	Hillsborough	Land Pebble phosphate district/Central Florida district	Noranda	P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1284		None	None	No data	1000 Mt phosphate concentrate @ 30% P2O5 (R1E, 1982)						ISM0354
1285	Active Producer (2001)			S		IMC Phosphates (2001)			IMC-Agrico Website, 2000; S. Jasinski, written commun., 2001		
1286	None					IMC Phosphates (2001)	In permitting stage.		Jasinski, 2000; S. Jasinski, written commun., 2001		
1287	None					IMC Phosphates (2001)	In permitting stage.		Jasinski, 2000; S. Jasinski, written commun., 2001		
1288		No data	No data	S	88 Mt ore (R1E)			MASMILS, 2000	British Sulphur Corporation, 1987		W700617, ISM0375
1289	Past Producer (2001)	2.5 Mst/yr	No data	S	20 Mt phosphate conc, 1980 (R1E); Reserves exhausted (2001)	Mobil Mining & Minerals Co.	Reserves exhausted.	MASMILS, 2000	Griffiths, 1995b; S. Jasinski, written commun., 2001		W031393, ISM0357
1290	Inactive (2001)	Capacity 2.5 Mt phosphate conc, 1983	No data	S	45 Mt conc (R1E)	IMC Phosphates (2001)	Temporarily shutdown in 2001.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990; Van Kauwenbergh and McClellan, 1990; S. Jasinski, written commun., 2001		W031386, ISM0366
1291									Van Kauwenbergh and McClellan, 1990		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1292	United States	Florida	Manatee	Land Pebble phosphate district/Central Florida district	Beker (Wingate Creek)	P					
1293	United States	Florida	Manatee	Land Pebble phosphate district	Duette	P F U Fe Al		27.55306	-82.12306		1900
1294	United States	Florida	Manatee, Hillsborough	Land Pebble phosphate district/Central Florida district	Four Corners Mine	P		27.66389	-82.09111	20 miles south of Mulberry off State Route 37.	1920
1295	United States	Florida	Polk	Land Pebble phosphate district	Bonny Lake	P		27.90611	-81.92000		
1296	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Clear Springs Mine	P		27.86528	-81.81389		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1292	Inactive (2001)	Capacity-- 1.5 Mtpa		S - dredge	49 Mt (2001)	Nu-Gulf Industries, Inc. (2001)	Mining is under water. Mined by dredge.		Van Kauwenbergh and others, 1990; Van Kauwenbergh and McClellan, 1990; Jasinski, 2000; S. Jasinski, written commun., 2001		
1293		None, designed capacity 2.7 Mt phosphate conc	None	No data	Reserves exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987		ISM0377
1294	Active Producer (2001)	Designed capacity-- 3.4 Mt phosphate conc	None	No data		IMC Phosphates (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; IMC-Agrico Website, 2000; Van Kauwenbergh and others, 1990; Industrial Minerals, 1998a; S. Jasinski, written commun., 2001		ISM0378
1295	Past Producer (2001)	Capacity 2.9 Mt phophate conc, 1983	No data	S	Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; S. Jasinski, written commun., 2001		ISM0358
1296	Past Producer (2001)	Capacity 2.7 Mt phosphate conc, 1983	No data	S	31 Mt phosphate conc (R1E); Reserves exhausted (1999)		Reserves exhausted. Land sold for development.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990; Industrial Minerals, 1998a		W03139 2, ISM0359

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1297	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Fort Green	P		27.66806	-82.00694	About 15 miles south of Mulberry off State Route 37.	
1298	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Fort Meade Mine (Mobil)	P F U Fe		27.76611	-81.80722		
1299	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district/ Ft. Meade	Gardinier Mine (Cargill Mine)	P F U Fe		27.66667	-81.76333		
1300	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Haynsworth Mine	P		27.75806	-82.01389		
1301	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Hookers Prairie	P		27.78111	-81.93889		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1297	Active Producer (2001)	Capacity 2.6 Mt phosphate conc, 1983	No data	S	100 Mt phosphate conc, average 31% P2O5 (R1E)	IMC Phosphates (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; IMC-Agrico Website, 2000; Van Kauwenbergh and others, 1990; S. Jasinski, written commun., 2001		W03139 1, ISM0360
1298	Active Producer (2001)	Capacity 3.2 Mt phosphate conc, 1983	No data	S		Cargill Fertilizer (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990; S. Jasinski, written commun., 2001		W03139 0
1299		Capacity 1.8 Mt phosphate conc, 1983	No data	S		Cargill Fertilizer (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W03137 7
1300	Past Producer (2001)	Capacity 3.0 Mt phosphate conc, 1983	No data	S	Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W03138 9, ISM0363
1301	Active Producer (2001)	Capacity 2.3 Mt phosphate conc, 2000	No data	S	131 Mt conc (R1E)	Cargill Fertilizer (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990; S. Jasinski, written commun., 2001		W03138 8, ISM0364

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1302	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Kingsford Mine	P		27.80000	-82.03472	About 8 miles South of Mulberry, off State Route 37 on Doc Durrance Road.	1920
1303	United States	Florida	Polk	Land Pebble phosphate district/Fort Meade (Mobil)	South Fort Meade	P					
1304	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Nichols Mine	P		27.88750	-82.03639		
1305	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Noralyn Mine	P		27.84306	-81.86250	About 10 miles southeast of Mulberry on State Route 640.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1302	Active Producer (2001)	Capacity 4.0 Mt phosphate conc, 1983	No data	S	50 Mt conc (R1E)	IMC Phosphates (2001)		MASMILS, 2000	British Sulphur Corporation, 1987; IMC-Agrico Website, 2000; Van Kauwenbergh and others, 1990; S. Jasinski, written commun., 2001		W03138 7, ISM0365
1303	Active Producer (2001)	5.0 Mt/yr		S		Cargill Fertilizer (2001)			Griffiths, 1995b; S. Jasinski, written commun., 2001		
1304	Inactive (2001)	1.0 Mst/yr	No data	S	7.5 Mt (2001)	Agrifos (1998)		MASMILS, 2000	Griffiths, 1995b; Jasinski, 1999; British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990; S. Jasinski, written commun., 2001		ISM0367 , W03138 5
1305	Past Producer (2001)	Capacity 4.9 Mt phosphate conc, 1983 (For Noralyn + Phosphoria mines)	No data	S	Reserves are exhausted (1999)	IMC-Agrico (2000)	Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; IMC-Agrico Website, 2000; Van Kauwenbergh and others, 1990; Industrial Minerals, 1998a		ISM0368 , W03138 3

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1306	United States	Florida	Polk	Land Pebble phosphate district	Payne Creek	P F U Fe		27.69000	-81.94111	In the rural southeast corner of Polk County.	
1307	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Phosphoria	P		27.84306	-81.86250		
1308	United States	Florida	Polk	Land Pebble phosphate district	Polk County mine	P F U Fe Al		27.85611	-81.97694		1974
1309	United States	Florida	Polk	Land Pebble phosphate district	Rockland	P		27.75389	-81.86694		1920
1310	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Saddle Creek	P		28.03306	-81.83389		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1306	Past Producer (2001)	Capacity 2.7 Mt phosphate conc, 1983	No data	S	100 Mt phosphate conc, average 31% P2O5 (R1E) (Resources of Payne Creek + Saddle Creek + Fort Green mines)	IMC-Agrico (2000)	Closed due to market conditions; will not reopen.	MASMILS, 2000	Jasinski, 1998; IMC-Agrico Website, 2000; S. Jasinski, written commun., 2001		W03138 4
1307	Past Producer (2001)	See Noralyn mine	No data	S	32 Mt phosphate conc, about 32% P2O5 (R1E); Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	Jasinski, 1998; Van Kauwenbergh and others, 1990		ISM0370
1308		No data	No data	S	Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987		ISM0371
1309	Past Producer (2001)	Capacity 1.8 Mt phosphate conc, 1983	No data	S	140 Mt phosphate conc, about 25% P2O5 (R1E); Reserves are exhausted (2001)	USSAL	Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W03138 2, ISM0372
1310	Past Producer (2001)	Capacity 0.9 Mt phosphate conc, 1983	No data	S	100 Mt phosphate conc, average 31% P2O5 (R1E); Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W03138 1

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1311	United States	Florida	Polk	Land Pebble phosphate district	Silver City	P F U Fe		27.80000	-81.90306		1906
1312	United States	Florida	Polk	Land Pebble phosphate district/Central Florida district	Watson	P		27.72500	-81.81111		
1313	United States	Florida	Polk, Hardee	Land Pebble phosphate district/Central Florida district	C.F. - Hardee complex	P				SE of NW, sec. 5, T33S, R24E	
1314	United States	Florida	Polk, Hillsboro, Manatee	Land Pebble phosphate district		P F U Fe		27.80000	-82.00000	Location is an average of mines in this region	1888
1315	United States	Florida	Desoto,	South Florida phosphate district		P F U Fe		27.51944	-82.20833	Location based on Manatee North deposit.	1950's
1316	United States	Florida		Steinhatchee (N. Ocala Hard Rock) District		P		29.90000	-83.31700		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1311	Past Producer (2001)	Capacity 1.6 Mt phosphate conc, 1983	No data	S	Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987		W031380
1312	Past Producer (2001)	Capacity 0.9 Mt phosphate conc, 1983	No data	S	Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W031376
1313	Active Producer (2001)	Capacity-- 3.2 Mtpa (2001)		S	100 Mt	CF Industries			Van Kauwenbergh and others, 1990; Van Kauwenbergh and McClellan, 1990; S. Jasinski, written commun., 2001		
1314		40 to 45 Mt phosphate conc, 32% P2O5, 1975-80; 31 Mt, phosphate conc, 32% P2O5, 1982	>900 Mt phosphate conc, 32-35% P2O5, 1890-1982	S	800 Mt phosphate conc, 32% P2O5, 1982 (R1E); 30 Mt phosphate conc, 30% P2O5, 1982 (R1M)			MASMILS, 2000	British Sulphur Corporation, 1987		
1315		None	None	No data	1000 Mt phosphate conc. @ 30% P2O5, 1982 (R2E)			MASMILS, 2000			ISM0355
1316				Unknown			Land used for other purposes.	Foose, 1993	British Sulphur Corporation, 1964		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1317	United States	Florida; Georgia		North Florida-South Georgia district		P F U Fe		30.45000	-82.80000		1930's
1318	United States	Florida; Georgia	Hamilton	North Florida-South Georgia district	Suwanee River Mine	P F U Fe		30.43694	-82.77694		1960
1319	United States	Florida; Georgia	Hamilton	North Florida-South Georgia district	Swift Creek Mine	P F U Fe		30.45194	-82.85722		1960
1320	United States	Georgia		Savannah District		P		32.05000	-81.08300		
1321	United States	Idaho		Deseret Basin/Bear River		P		42.42444	-111.38083		
1322	United States	Idaho		Deseret Basin/North Georgetown Canyon		P F U V REE		42.67639	-111.25389		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1317		No data	35 Mt phosphate conc, 1964-82	S	300 to 400 Mt concentrate at about 32% P2O5, Suwannee River + Swift Creek mines + Deep Creek prospect (R1E, 1983); 300 Mt concentrate at 30-32% P2O5, North Lake City + Brooker-Dukes deposits (R2E, 1983)			MASMILS, 2000	British Sulphur Corporation, 1987		
1318		Capacity 2.5 Mt phosphate conc, 1983	No data	S	See North Florida-South Georgia district	PCS Phosphates (Potash Corp. of Saskatchewan Inc.)		MASMILS, 2000	British Sulphur Corporation, 1987; Van Kauwenbergh and others, 1990		W03137 9, ISM0380
1319		Capacity 1.8 Mt phosphate conc, 1983	No data	S	See North Florida-South Georgia district	PCS Phosphates (Potash Corp. of Saskatchewan Inc.)		MASMILS, 2000	British Sulphur Corporation, 1987; IMC-Agrico Website, 2000; Van Kauwenbergh and others, 1990		W03137 8, ISM0381
1320					No data			Foose, 1993	British Sulphur Corporation, 1964		
1321	None				2.35-24.71% P2O5, 0.02-0.1% V2O5, 0.01-0.1% Cr2O3			MASMILS, 2000		160070039	
1322	None				No data			MASMILS, 2000		160070087	

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1323	United States	Idaho		SE Idaho phosphate district		P U V F REE		42.80000	-111.40000	Location is average of mines in SE Idaho.	1906
1324	United States	Idaho	Caribou	SE Idaho phosphate district/Conda	Conda	P U V F REE		42.72833	-111.52667		
1325	United States	Idaho	Caribou	SE Idaho phosphate district	Dry Valley	P					
1326	United States	Idaho		SE Idaho phosphate district	Enoch Valley	P					
1327	United States	Idaho	Bingham	SE Idaho phosphate district/Gay	Gay	P U V F REE		43.04917	-112.12222		
1328	United States	Idaho	Caribou	SE Idaho phosphate district/Henry	Henry	P		42.78667	-111.46333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1323		Production data combined with Montana and Utah; see Utah		S	1038 Mt ore @ 24.5% P2O5 (R1S, 1983); 9800 Mt ore @ 27% P2O5 (R2S, 1983)			MASMILS, 2000		NONE	
1324	Past Producer (2001)	Production data combined with Montana and Utah; see Utah		S	65.3 Mt ore @ 26.5% P2O5 (R1E, 1975); 10.4 Mt ore @ 16.6% P2O5 (R1M, 1975); 73.7 Mt ore @ 26.5% P2O5 (R2E, 1975); Reserves are exhausted (2001)	Agrium Inc. (1998)	Reserves exhausted.	MASMILS, 2000		160290004	W026092, ISM0340
1325	Active (1999)					FMC Inc. (1998)			Jasinski, 1998, 2000		W026127
1326	Active (1999)					P4 Production, L.L.C. (Solutia and Monsanto J.V.)			Jasinski, 1998, 2000		
1327	Past Producer (2001)	1.63 Mt phosphate conc	No data	S	Reserves are exhausted (2001)	Simplot	Reserves exhausted.	MASMILS, 2000		160110035	W015655, ISM0341
1328	Past Producer (2001)	680,000 t, 1979	No data	S	29 Mt ore @ 28.4% P2O5, 1975 (R1E); Reserves are exhausted (2001)	Monsanto	Reserves exhausted.	MASMILS, 2000	S. Jasinski, written commun., 2001	160290018	ISM0342, W026182

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1329	United States	Idaho	Caribou	SE Idaho phosphate district/Maybie Canyon	Maybie Canyon	P U V F REE		42.74778	-111.29694		
1330	United States	Idaho	Caribou	SE Idaho phosphate district	Rasmussen Ridge	P					
1331	United States	Idaho		SE Idaho phosphate district	Smoky Canyon	P					
1332	United States	Idaho	Caribou	SE Idaho phosphate district	Wooley Valley	P		42.87167	-111.31778		1955
1333	United States	Kentucky		Central Kentucky Brown Rock District		P		38.10000	-84.71700		1877
1334	United States	Michigan		Dead River Basin		P	12.6% P2O5, 16.6% CaO, 1.1% F, 2.8% Fe2O3, 58.3% SiO2, 1.6% Al2O3					
1335	United States	Michigan		Huron River Basin		P	11.1% P2O5, 24.2% CaO, 1.0% F, 9.3% Fe2O3, 25.2% SiO2, 1.4% Al2O3					
1336	United States	Michigan		Section 15		P					
1337	United States	Michigan		Slate River		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1329	Past Producer (2001)	Output about 2.5 Mt	No data	S	23.5 Mt ore @ 28.4% P2O5 (R1E, 1975); 9.9 M t ore @ 18% P2O5 (R1S, 1975); 40.6 Mt ore @ 25% P2O5 (R2E, 1975); Reserves are exhausted (2001)		Reserves exhausted.	MASMILS, 2000		160290034	W026183
1330	Active (1999)					Agrium Inc. (1998)			Jasinski, 1998		W026181
1331	Active (1999)					J.R. Simplot (1998)			Jasinski, 1998		W700616
1332	Past Producer (2001)	Capacity 0.8 Mt	No data	S	16 Mt @ 27% P2O5 (R1E, 1975); 1 Mt @ 17% P2O5 (R1M, 1975); 11 Mt @ 27% P2O55 (R2E, 1975)	Rhodia		MASMILS, 2000		160290015	ISM0344, W026179
1333			93000 short tons (1919-1926)	Unknown	0.80 st, with up to 36% P2O5			Foose, 1993	British Sulphur Corporation, 1964, 1987		
1334									McClellan and Saavedra, 1986		
1335	None								McClellan and Saavedra, 1986; British Sulphur Corporation, 1987		
1336	None								British Sulphur Corporation, 1987		
1337	None								British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1338	United States	Minnesota		Carleton County		P	13.4-16.9% P2O5, 17.5-22.4% CaO, 1.1-1.4% F, 0.69-2.0% Fe2O3, 53-59.4% SiO2, 0.79-1.0% Al2O3				
1339	United States	Montana		Montana phosphate district (2)		P U F Cr Ni		46.60833	-112.74083	Location based on Garrison anticline locality.	1921
1340	United States	Montana		Montana phosphate district	Warm Springs Creek (2)	P U F Cr Ni		45.04056	-111.95722		1912
1341	United States	North Carolina		Onslow Embayment/Frying Pan Phosphate District		P		33.75000	-77.50000	Location centroid of large area estimated from map in Riggs (1989).	
1342	United States	North Carolina		Onslow Embayment/Northeast Onslow Bay District		P		34.50000	-76.75000	Location centroid of large area estimated from map in Riggs (1989).	
1343	United States	North Carolina		Aurora Embayment/Aurora District		P		35.50000	-76.50000	Location is an average of mine locations in this region.	
1344	United States	North Carolina	Beaufort	Aurora Embayment/Aurora District	Aurora	P					
1345	United States	North Carolina		North Carolina phosphate district/Aurora area	Lee Creek Mine	P		35.38417	-76.79361	On west shore of Pamlico River in Aurora area.	1951
1346	United States	North Carolina		North Carolina phosphate district/North Carolina Phosphate Corp.		P		35.33333	-76.77139		1951
1347	United States	Pennsylvnia	Juanita	Oriskany Fm-Ridgeley Sandstone	Newman Mine	P				Near East Waterford.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1338									McClellan and Saavedra, 1986		
1339		68,000 t, 24% P2O5	8.7*106 t ore, 24% P2O5, 1929-62; 20*106 t ore, 24%P2O5,1963-84	S; U	608 Mt ore, 24% P2O5 (R1E, 1983)			MASMILS, 2000		NONE	
1340	Past Producer (2001)	Capacity about 160,000 t	No data	No data	6.5 Mst @ 30% P2O5 (1989)	Cominco, Ltd.		MASMILS, 2000	Canadian Mines Handbook 1989-90	300570842	
1341				Unknown	Probable--780 Mt over 614 sq km		Resource information from Riggs (1989).	Riggs, 1989	Riggs, 1989		
1342				Unknown	Probable--3750 Mt over 722 sq km		Resource information from Riggs (1989).	Riggs, 1989	Riggs, 1989		
1343	Active (1995)	3 Mt phosphate conc, 30% P2O5, 1982	30 to 40 Mt phosphate conc. 1965-82	S				MASMILS, 2000	Riggs, 1989		
1344	Active Mine (1999)			S		PCS Phosphates (Potash Corp. of Saskatchewan Inc.)			Griffiths, 1995b; Riggs, 1989; Jasinski, 2000		
1345	Active Mine?	4.2 Mt, 1979	No data	S	2 Mt ore (R1E)			MASMILS, 2000	Van Kauwenbergh and McClellan, 1990		
1346		Expected capacity 3.4 Mt	No data	S	300 Mt (R1E)			MASMILS, 2000			
1347	Small past producer (1968)		4000 st 1899-1902 with up to 12% P2O5	S			Probably not economic.		USGS and USBM, 1968		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1348	United States	South Carolina		Blake Plateau/Charleston Bump		P		31.50000	-79.00000	Location centroid of large area based on estimation from map in Popenoe (1990).	
1349	United States	South Carolina		Charleston-Beaufort District		P		32.75000	-80.00000		
1350	United States	South Carolina		Ridgeland Basin-Beaufort District		P		32.58300	-80.91700		
1351	United States	Tennessee		Blue-rock phosphate district		P		35.75000	-87.75000		
1352	United States	Tennessee	Maury, Williamson, Hickman	Brown-rock phosphate district		P		35.50000	-51.75000		1894
1353	United States	Tennessee		Brown-rock phosphate district/Hooker Chemical		P		35.72333	-87.24972		1893
1354	United States	Tennessee	Giles, Hickman	Brown-rock phosphate district/Monsanto		P		35.65917	-87.18889		1935
1355	United States	Tennessee	Giles, Maury	Brown-rock phosphate district/ Mount Pleasant		P		35.52611	-87.18472		1893
1356	United States	Tennessee	Johnson	Mountain City-Roan Creek Valley-Doe Creek Valley		P	hand-cobbed phosphate average 20-30% P2O5, up to 35% P2O5.				
1357	United States	Tennessee		Eastern pelletal phosphorite		P		35.80000	-82.38333		
1358	United States	Tennessee	Sevier	East Fork District		Mn P	25-35% P2O5 in a high-grade sample	35.80000	-82.38333		
1359	United States	Tennessee	Smith	Mine Lick Creek		P	Nodules probably contained 29-33% P2O5.				
1360	United States	Tennessee		Eastern white-rock phosphate district		P		36.50000	-81.75000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1348	Past Producer (2001)			Unknown	Inferred-->2000 Mt phosphate nodules that average 22% P2O5			Popenoe, 1990	Riggs, 1989		
1349	Past Producer (2001)			Unknown				Foose, 1993	British Sulphur Corporation, 1964		
1350	Past Producer (2001)			Unknown				Foose, 1993	British Sulphur Corporation, 1964		
1351			2 Mt	Unknown	80 Mt @ 20% P2O5		Resource estimates from Notholt and others, 1989a.	Cathcart, 1989b	Notholt and others, 1989a		
1352	Past Producer (2001)	2.5 Mt phosphate conc, 26% P2O5, 1975; 1.4 Mt phosphate conc, 25% P2O5, 1981	100 Mt phosphate conc., about 25% P2O5, 1896-1982	S	15 Mt, 20-22% P2O5 (R1E)			MASMILS, 2000			ISM0347
1353	Past Producer (2001)	680,000 t, 19-23% P2O5, 1978	No data	S		Hooker Chemical		MASMILS, 2000			ISM0348
1354	Past Producer (2001)	1.99 Mt, 1979	No data	S		Monsanto		MASMILS, 2000			ISM0349
1355	Past Producer (2001)	Plant capacity 550,000 t	No data	S				MASMILS, 2000			ISM0350, W022835
1356			Several thousand short tons (1915-1918, 1930's)				For direct fertilizer use.	USGS and USBM, 1968	USGS and USBM, 1968		
1357				Unknown				Cathcart, 1989b			
1358	None							Cathcart, 1989b	McClellan and Saavedra, 1986		
1359	Very small past producer		Several hundred short tons (early 1900's)					USGS and USBM, 1968	USGS and USBM, 1968		
1360				Unknown				Cathcart, 1989b			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1361	United States	Tennessee		White-rock phosphate district		P		35.61667	-88.00000		
1362	United States	Utah	Rich	Deseret Basin/Laketown		P		41.82694	-111.29028		
1363	United States	Utah		Uinta Mountains; Crawford Mountains; Wasatch Range		P U		40.16667	-111.43333		1889
1364	United States	Utah	Uinta	Uinta Mountains; Crawford Mountains; Wasatch Range/Vernal	Vernal	P U		40.60667	-109.49056		1915
1365	United States	Virginia		Piney River		P					
1366	United States	Wyoming		Beckwith Hills	Leefe Mine	P		41.88300	-110.96700		
1367	United States	Wyoming		Salt River Range (combined)		P U		42.71667	-110.81667		
1368	United States	Wyoming		SE Wind River Range (combined)		P		42.66667	-108.75000		
1369	United States	Wyoming		Snake River Range (combined)		P U		43.45000	-110.96667		
1370	United States	Wyoming		Sublette Range (combined)		V P		42.20000	-110.98333		
1371	Venezuela			El Pilar		P		10.56700	-63.15000		
1372	Venezuela	Falcon		Lizardo		P		10.80000	-68.26700		
1373	Venezuela	Falcon		Reicito		P		10.83300	-68.95000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1361			20000t	Unknown	15 Mt		Resource estimates from Cathcart (1989).	Cathcart, 1989b			
1362				Unknown				MASMILS, 2000		490330019	M057493
1363		No data	No data	S	854 Mt @ 25% P2O5 and 640 Mt @ 20% P2O5 (R1E, 1983)			MASMILS, 2000		490490073	
1364	Active Mine (2000)	Capacity 272,000 t phosphate conc	No data	S	640 Mt @ 20% P2O5 (R1E)	SF Phosphates Ltd. (Simplot Co. and Farmland Industries J.V.)		MASMILS, 2000	Jasinski, 2000	490470028	ISM0346
1365									USGS files		
1366	Past Producer (2001)			Unknown				Foose, 1993	British Sulphur Corporation, 1964		
1367				S; U	268 Mt		Resources estimates from World Survey of Phosphate Resources (1964).	MASMILS, 2000	British Sulphur Corporation, 1987	560230030	
1368				S	at least 15 Mt		Phosphoria Formation.	MASMILS, 2000	British Sulphur Corporation, 1987	560130879	
1369				S; U	181 Mt		Resources estimates from World Survey of Phosphate Resources (1964).	MASMILS, 2000	British Sulphur Corporation, 1987	560230029	
1370				S; U	45 Mt		Resources estimates from World Survey of Phosphate Resources (1964).	MASMILS, 2000	British Sulphur Corporation, 1987	560230102	
1371				Unknown				Foose, 1993			
1372				Unknown	20 Mt @ 25.3% P2O5 (Rodriguez, 1989)			Foose, 1993			
1373	Active Producer (1987)			Surface	25 Mt @ 21.6% P2O5 (Rodriguez, 1989)	Petroquimica de Venezuela SA (Pequirem)		Foose, 1993	Russell, 1987; Slansky, 1986		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1374	Venezuela	Falcon		Sanare		P		9.75139	-69.65194	Lat-long is for the town of Sanare.	
1375	Venezuela	Falcon		Yaracuybare		P					
1376	Venezuela	Merida		Chigura area		P					
1377	Venezuela	Merida		Jaji area		P		8.58333	-71.34433	Lat-long is for the town of Jaji.	
1378	Venezuela	Tachira		Berlin- El Pueblecite area		P	13.45% P2O5; 33.57% SiO2; 1.3% Al2O3; 3.78% CaO; 0.1% SO3; 15.66% LOI				
1379	Venezuela	Tachira		El Corozo		P		7.70000	-72.20000		
1380	Venezuela	Tachira		La Blanca - Palo Grande areas		P	14.57% P2O5; 15.41% SiO2; 3.35% Al2O3; 42.83% CaO; 26.1% LOI				
1381	Venezuela	Tachira		La Molina		P	22% P2O5; 13.8% SiO2; 1.23% Al2O3; 46.3% CaO; 0.14% SO3; 14.34% LOI; 80 ppm U	7.88300	-72.21700		
1382	Venezuela	Tachira		Las Adjuntas - San Jacinto		P	15.37% P2O5; 24.96% SiO2; 1.53% Al2O3; 39.62% CaO; 19.33% LOI				
1383	Venezuela	Tachira		Las Hernandez		P					
1384	Venezuela	Tachira		Lobatera	Lobatera Mine	P		7.93333	-72.24667	Lat-long is for the town of Lobatera.	
1385	Venezuela	Tachira		Los Cedros		P		7.96806	-72.09917	072° 14' 48" W	
1386	Venezuela	Tachira		Los Monos		P	16% P2O5; 47% SiO2; 0.7% Fe2O3; 22% CaO; 5% LOI	7.63333	-71.60000	Location for Los Monos population center.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1374	Smll scale intermittent (1989)			Surface				NIMA, 2000	Rodriguez, 1989		
1375	None								Rodriguez, 1989		
1376	None								Rodriguez, 1989		
1377								NIMA, 2000	Rodriguez, 1989		
1378	None								Rodriguez, 1989		
1379				Unknown				MASMILS, 2000		3.07E+09	
1380	None								Rodriguez, 1989		
1381	Active Producer (1989)			S	0.6 Mt @ 22% P2O5 (Rodriguez, 1989)			Foose, 1993			I009118
1382	None								Rodriguez, 1989		
1383									Rodriguez, 1989		
1384	Active small producer (1989)						For direct application fertilizer.	NIMA, 2000	Notholt and others, 1989b; Rodriguez, 1989; Notholt, 1994		
1385								NIMA, 2000	Rodriguez, 1989		I009120
1386	None			Unknown	80 Mt @ 16% P2O5 (Rodriguez, 1989)			NIMA, 2000; British Sulphur Corporation, 1987	British Sulphur Corporation, 1987; Rodriguez, 1989		I009121

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1387	Venezuela	Zulia		La Villa del Rosaria area		P				Western Zulia- on eastern Perija Ridge, between El Tapara Creek and Tocuco River.	
1388	Vietnam			Lao Cai Basin	Mau Kok (Mo Coc)	P				Near Kam Dueng.	
1389	Vietnam			Lao Cai Basin		P		22.50000	103.95000		1924
1390	Vietnam	Northern Provinces		Thanh Hoa and other provinces (Lang Son, Nghe Tinh, Bac Thai & others)		P		20.00000	105.33000		1913
1391	Yugoslavia			Bosiljgrad		P		42.60000	22.40000		
1392	Yugoslavia			Strana		P	26-39% P2O5.			In Dalmatia, near Drnis.	1926
1393	Yugoslavia			Zezelj		P	26-39% P2O5.	43.74278	21.76889	In Dalmatia, near Ervenik. Lat-long is for Zezelj hill.	1926
1394	Zambia			Keshya		P Ti REE		########	28.45000		
1395	Zambia			Mkwisi		P		########	28.58333		
1396	Zambia	Central		Mumbwa North (Sugar Loaf, NW Mumbwa)		P Cu Fe Y		########	26.83333	North of Mumbwa.	1958

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1387	None				17 Mt @ 3-16% P2O5 (rodriguez, 1989)				Rodriguez, 1989		
1388	Active Mine (1996)			S					Harben and Kuzvart, 1996; ESCAP, 1990		
1389	Active (1987)	1.6e6t ore, 22% P2O5, 1977	9.2 Mt 1956-1983	S	Proven + probable--811 Mt , including 26 Mt @ 36-41% P2O5 and 125 Mt @ 22.4-31.3% P2O5 (1996)	Lao Cai	Resources in region may be as much as 1400 Mt.	Rand McNally, 19	ESCAP, 1990; Lee, 1980; Tran Quoc An and Nguyen Dang Khoa, 1986; O'Driscoll, 1996; Mining Journal, 1990	5.5E+09	ISM0472 , I000103
1390	Many small active producers	200000t/a	408,722 t; 1921-1944	S	6.9 Mt @ 39% P2O5		Reserves from several mines; Lang Son, Nghe Tinh, Thanh Hoa, Bac Thai and other provinces.	ESCAP, 1990	ESCAP, 1990		
1391	None				Combined resources in Lisina and Bosiljgrad 40 Mt @ 10-13% P2O5;			Commission for Geological Map of the World, 1983	British Sulphur Corporation, 1987		
1392	Very small past producer						Deposits worked from 1932-1941.		Jankovic, 1982		
1393	Very small past producer						Deposits worked from 1932-1941.	NIMA, 2000	Jankovic, 1982		
1394								Woolley, 2001	USGS files; Woolley, 2001		
1395								Woolley, 2001	Woolley, 2001		
1396	None (1994)				Apatite pegmatites--0.22 Mt @ 12% P2O5		Too small and comparatively low grade for development.	NIMA, 2000	Simukanga and others, 1994; Turner and others, 1989		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1397	Zambia	Eastern		Chilembwe (Petauke)		P REE Th Nb		########	31.68333	North of Sinda. Lat-long is for approximate center of the area.	1978
1398	Zambia	Lusaka		Kaluwe		P REE Th Nb		########	30.01667	200 km east of Lusaka.	
1399	Zambia	Northern		Nkombwa Hill (Nkumbwa, Nkumba)		P REE Nb DOL Sr Th		########	32.85000	25 km east of Isoka.	1952
1400	Zimbabwe			Chishanya (Cheshanya, Cheshanyi)		P		########	32.30000	Near confluence of Sabi and Odzi Rivers. Lat-long is for Chishanya Hill.	
1401	Zimbabwe			Kapfrugwa (Gungwa)		P	Apatite-magnetite rocks contain up to 11% P2O5, 600 ppm Th, and several thousand ppm Ce + La.	########	32.15000		
1402	Zimbabwe			Shawa		VRM P MICA Ba		########	31.71667	16 km SSW of Dorowa; Lat-long is for the Shawa Hills.	
1403	Zimbabwe	Midlands		Dorowa		P Fe VRM		########	31.76667		1938

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1397	None (1994)				No. 2 + No. 4 orebodies-- 1.64 Mt @ 11.8% P2O5 (1994)		Occurrence; too small and comparatively low grade for development.	Turner and others, 1989	de Kun, 1987; Simukanga and others, 1994; Turner and others, 1989		
1398	Not economic (1994)				Total reserves-- 207 Mt @ 2.5% P2O5 at 0.5% cutoff (1994)		Occurrence; grade is too low for development.	Turner and others, 1989	de Kun, 1987; Simukanga and others, 1994; Turner and others, 1989; Woolley, 2001		
1399	None (1994)				Resource-- 200 Mt @ 7-8% P2O5 (1994)		Complex composition (isokite) poses technical problems for development.	Turner and others, 1989	Neary and Highley, 1984; Overstreet, 1967; de Kun, 1987; Simukanga and others, 1994; Notholt, 1994; Turner and others, 1989		
1400	None (1980)							NIMA, 2000	Mew, 1980; de Kun, 1987; Woolley, 2001		
1401								Woolley, 2001	Woolley, 2001		
1402	None (1980)				Proven-- 25 Mt @ 10.8% P2O5 (Woolley, 2001)		Past production of vermiculite from Shawa Mine.	NIMA, 2000; Fernandes, 1989	Fernandes, 1989; Mew, 1980; de Kun, 1987; Pell, 1996; USGS files; Woolley, 2001		
1403	Active (1989)	Average 0.12e6 phosphate conc, 36.6% P2O5	>2.6Mt concentrate to 1989	S	Estimated total resource-- 73 Mt; Proven-- 3 Mt @ 6.5% P2O5 (Fernandes,1989)	Dorowa Mines Ltd.	Production is from weathered ore only.	Fernandes, 1989	Harben and Kuzvart, 1996; Fernandes, 1989; Mew, 1980; de Kun, 1987; Notholt, 1994; Woolley, 2001	7.96E+09	ISM0397

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1404	ex-USSR			Toisuk - Bol'shaya Zhidaya		P Nb REE					
Guano/Guano-Related											
1405	Afghanistan			Gerishk		P					
1406	Argentina			Tova Island		P					
1407	Argentina	Chubut		Leones Island		P	Guano contains 17% P2O5.	########	-65.66667		
1408	Argentina	Santa Cruz		Penguin Island		P		########	-65.71667		
1409	Australia			Barrow Island		P					
1410	Australia			Brothers Islands		P					
1411	Australia	New South Wales		Ashford Caves		P		########	151.16667		
1412	Australia	New South Wales		Canowindra		P		########	148.66667		
1413	Australia	New South Wales		Molong District	Gamboola, Nandillyan, Larras Lee, Vale Head, Borenore	P		########	148.83333		
1414	Australia	New South Wales		Wellington Caves		P		########	149.00000		
1415	Australia	New South Wales		Willi Willi Caves		P		########	152.66667		
1416	Australia	Queensland		Bramble Cay		P		########	143.86667	Locations taken from Cook and O'Brien map and NIMA search engine.	
1417	Australia	Queensland		Holbourne Island		P		########	148.36667	Locations taken from Cook and O'Brien map and NIMA search engine.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1404									USGS files		
Guano/Guanc											
1405									Lee, 1980		
1406									Leanza and others, 1989		
1407	Small intermittent producer							Leanza and others, 1989	Leanza and others, 1989		
1408	None							Leanza and others, 1989	Leanza and others, 1989		
1409									Lee, 1980		
1410									Lee, 1980		
1411	Terminated			S				Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987; Lee, 1980		I005141
1412	Exhausted in 1920 (1980)			S	None			Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987		I005140
1413	Terminated			Unknown				Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987		I005139
1414	Terminated			S				Cook, 1980	Mew, 1980; Lee, 1980		I005143
1415	Terminated			S				Cook, 1980	Mew, 1980; British Sulphur Corporation, 1987; Lee, 1980		I005142
1416	Terminated			S				Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		I005121
1417	Terminated			S				Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		I005120

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1418	Australia	Queensland		Lady Elliot Island		P		########	152.70000	Locations taken from Cook and O'Brien map and NIMA search engine.	
1419	Australia	Queensland		Raine Island		P		########	144.03333	Locations taken from Cook and O'Brien map and NIMA search engine.	
1420	Australia	South Australia		Bickers Islets		P		########	134.00000		
1421	Australia	South Australia		Clinton		P		########	138.00000		
1422	Australia	South Australia		Lower Hermitage		P		########	138.75000		
1423	Australia	South Australia		Marum Island		P		########	136.25000	Locations taken from Cook and O'Brien map and NIMA search engine.	
1424	Australia	South Australia		Oroparinna		P		########	138.83333		
1425	Australia	South Australia		Wooltana Caves		P		########	139.33330		
1426	Australia	Tasmania		Slopen Island		P		########	142.65000	Locations taken from Cook and O'Brien map and NIMA search engine.	
1427	Australia	Victoria		Bellarine Peninsula		P		########	144.58333		
1428	Australia	Victoria		Sea Elephant Island		P		########	144.16667	Locations taken from Cook and O'Brien map and NIMA search engine.	
1429	Australia	Western Australia		Adele Island		P		########	123.15000	Locations taken from Cook and O'Brien map and NIMA search engine.	
1430	Australia	Western Australia		Ashmore Reef		P		########	122.00000		
1431	Australia	Western Australia		Browse Island		P		########	123.55000	Locations taken from Cook and O'Brien map and NIMA search engine.	
1432	Australia	Western Australia		Houtman Abrolhos		P		########	113.80000	Locations taken from Cook and O'Brien map and NIMA search engine.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1418								Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		
1419								Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		
1420	Terminated							Cook, 1980; Lee, 1980			I005157
1421	Terminated							Cook, 1980			I005162
1422	Terminated							Cook, 1980			I005160
1423	Terminated			S				Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		I005156
1424	Terminated							Cook, 1980	Lee, 1980		I005159
1425	Terminated							Cook, 1980	Lee, 1980		I005158
1426				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Lee, 1980		
1427	??			Unknown					Lee, 1980		I005153
1428				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Cook and O'Brien, 1990; Lee, 1980		
1429				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Cook and O'Brien, 1990; Lee, 1980		
1430	Terminated			S				Cook, 1980	Cook and O'Brien, 1990; Lee, 1980		I005164
1431				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Cook and O'Brien, 1990; Lee, 1980		
1432				Unknown				Cook and O'Brien, 1990; NIMA, 2000	Cook and O'Brien, 1990; Lee, 1980		I005163

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1433	Australia	Western Australia		Lacepede Island		P		########	122.00000	Location estimated from Cook and O'Brien map.	
1434	Australia	Western Australia		Perth Area		P		########	116.00000		
1435	Australia	Western Australia		Recherche Archipelago		P		########	122.75000		
1436	Baker Island			Baker Island		P		0.25000	-176.45000	Pacific Ocean - Oceania.	
1437	Brazil			Itacupin, Ilha		P				Off northeast coast of Brazil.	
1438	Brazil	Bahia		Arq. Abrolhos		P					
1439	Brazil	Maranhão	Godofredo Viana	Piracahua, Ilha (Pirocaua)		P BAUX		-1.26667	-45.63333		
1440	Brazil	Maranhão	Candido Mendes	Trauira, Ilha		P BAUX		-1.23333	-45.63333		
1441	Brazil	Mato Grosso	Corumbá	Mandioré		P					
1442	Brazil	Pernambuco		Ilha Rata		P					
1443	Brazil	Rio de Janeiro		Ilha Ancoras		P					
1444	Brazil	Rio de Janeiro		Ilha Cagarras		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1433				Unknown				Cook and O'Brien, 1990; Rand McNally, 1981	Cook and O'Brien, 1990; Lee, 1980		
1434	None							Cook, 1980			I005167
1435				Unknown					Cook and O'Brien, 1990; Lee, 1980		
1436	Past producer							Rand McNally, 1981	Piper and others, 1990; Rossfelder, 1990		
1437									Cathcart, 1980		
1438					0.05 Mt @9.2% P2O5 (1976)				Lima, 1976		
1439	None			S	10 Mt @ 27% P2O5, 3% Fe2O3, 40% Al2O3		Reserve estimates from World Survey of Phosphate Deposits.	Azevedo Branco, 1984	Lima, 1976; Azevedo Branco, 1984; MASMILS; British Sulphur Corporation, 1964	3.51E+09	TC30239
1440		None	None		15.5 Mt @ 26% P2O5 (1976); 17.9 Mt @ 7.3% P2O5 (R1M, 1980)			U.S. Geological Survey Mineral Resources Data System, 2000	Lima, 1976; Azevedo Branco, 1984; British Sulphur Corporation, 1987; U.S. Geological Survey Mineral Resources Data System, 2000		ISM0390
1441					2.8 Mt @ 15% P2O5 (1976)				Lima, 1976		
1442	Small past producer				0.5Mt @ 12.5% P2O5 (1976); 0.5 Mt @ 20% P2O5 (1980)				Mew, 1980; Lima, 1976		
1443					0.1 Mt @ 9.2% P2O5 (1976)				Lima, 1976		
1444					0.01 Mt @ 5.5% P2O5 (1976)				Lima, 1976		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1445	Brazil	Sao Paolo		Ilho do Castillo (Ilha de Castilhos)		P		########	-47.91667	Opposite the port of Cananeia.	
1446	Brazil	Sao Paolo		Islas dos Alcatrazes (Ilha de Alcatraz)		P	28.29% P2O5.	########	-45.30000	East of Santos and S. of Ilha Sao Sebastiao.	
1447	Chile	Antofagasto		Islote Algodones		P		########	-70.20000		
1448	Chile	Antofagasto		Punta Ala		P		########	-70.25000	Longitude estimated.	
1449	Chile	Antofagasto		Islote Guanillo de Batuco		P		########	-70.25000		
1450	Chile	Antofagasto		Islote Cobija		P		########	-70.26667		
1451	Chile	Antofagasto		Islote Huesilla		P		########	-70.26667	Longitude estimated.	
1452	Chile	Antofagasto		Guanillito Boliviano		P		########	-70.26667	Longitude estimated.	
1453	Chile	Antofagasto		Punta Tames		P		########	-70.28333		
1454	Chile	Antofagasto		Islote Huaqui		P		########	-70.27500	Longitude estimated.	
1455	Chile	Antofagasto		Islote itata		P		########	-70.30000	Longitude estimated.	
1456	Chile	Atacama or Antofagasto		Quebrada San Ramon		P		########	-70.46667	At or very near the coast.	
1457	China	Guangdong	Wengyuan					24.30000	114.00000	Location rough estimate from NIMA.	
1458	China	Guangxi	Zhuang					22.59778	107.56667		
1459	China	Hainan	Xisha Islands	Xisha Islands		P					
1460	Christmas Island			Christmas Island		P	"A" grade guano analysis: 34.8-35.7% P2O5, 46-48% CaO, 0.35% SiO2, 2.0% CO2, 1.8% F, 6.0% mixed Al/Fe oxides, 1.0% MgO, 0.06% K2O, 0.23% Na2O	########	105.71583		1887

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1445					20 Mt @ 12% P2O5 (1976); 0.02 Mt @ 12.3% P2O5 (1980)				Mew, 1980; Lima, 1976		
1446									Mew, 1980; Lima, 1976		
1447											
1448											
1449											
1450											
1451											
1452											
1453											
1454											
1455											
1456					0.01 Mt (1984)				Naranjo and Puig, 1984		
1457								NIMA, 2000	Li and others, 1996		
1458							There is also another deposit located in Yilong, Baise District with unknown latitude-long location.	NIMA, 2000	Li and others, 1996		
1459	Unknown			Unknown			Largest deposit on Yongxing Island.		Li and others, 1996		
1460	Active Producer (1999)	1.3 Mt phosphate conc, 1981	No data	S	A-grade ore--13.5 Mt (R1E, 1982); B-grade ore--14.3Mt (R1E, 1982); C-grade ore--140 Mt (R1S, 1978); Originally >100 Mt @ 23-27% P2O5 (Slansky, 1986)	Christmas Island Phosphates (since 1990)		MASMILS, 2000	Russell, 1987; Slansky, 1986; Bingham, 1990	6.02E+09	ISM0473

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1461	Colombia	Valle	Buenaventura	Malpelo Island		P				400 km west of Buenaventura.	
1462	Colombia	Cundinamarca	Gachala	Puente Murca		P				Near Puente Murca.	
1463	Ecuador			El Pelado Island		P		-1.90000	-80.83333		
1464	Ecuador			La Pata Island		P					
1465	Ecuador			Los Fallarones Islands		P					
1466	Ecuador			Santa Clara Island		P					
1467	Fiji			Lau Island/Tuvutha		P		########	-178.81667	Pacific Ocean.	
1468	French Polynesia			Makatea		P		########	-148.25000	In Tuamotu Archipelago.	
1469	French Polynesia	Clipperton Islands		Mataiva Atoll		P		########	-148.70917	170 nautical miles north of Tahiti in Pacific Ocean. French Polynesia.	1976
1470	Guinea			Corail Island		P		9.43750	-13.81917		
1471	India			Laccadive Islands		P		10.50000	72.50000		
1472	Indonesia	Central Java	Grobogan	Karangrayung		P		-7.11667	110.76667	Location for Karangrayung.	
1473	Indonesia	Central Java	Pati	Sukolilo; Brati		P		-6.75000	111.00000	Location for Brati.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1461					0.453 Mt @ 25% P2O5				Mew, 1980; British Sulphur Corporation, 1987; Mutis Jurado, 1982		
1462									Mutis Jurado, 1982		
1463							Typically 20% P2O5.		Mew, 1980		
1464									Mew, 1980		
1465							Typically 17% P2O5.		Mew, 1980		
1466							Typically 14% P2O5.		Mew, 1980		
1467				Unknown	Proven--0.430 t phosphatic clay @16.7% P2O5; Probable--1.2 Mt @ 8.8% P2O5 and 0.213 t @ 4.5% P2O5				Notholt, 1994		
1468	Past producer, exhausted				24 Mt @ 38% P2O5 (1994)			NIMA, 2000	Piper and others, 1990; Notholt, 1994		
1469	None (1989)			S	20 Mt @ 37.5% P2O5 (1989)	Australmin (1989)		MASMILS, 2000	Industrial Minerals, 1989; Industrial Minerals, 1987c; Piper and others, 1990	6.41E+09	I000102
1470	None						Ore grades 33% P2O5.	NIMA, 2000	de Kun, 1987		
1471					Estimated reserves--0.12 Mt @ 13.45% P2O5 (1987)			NIMA, 2000; Rand McNally, 1981	British Sulphur Corporation, 1987; Sant and Pant, 1980		
1472	Past (probable, but not confirmed)				0.0545 Mt@ 25.99% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1473	Past (probable, but not confirmed)				0.119 Mt @ 10-38% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1474	Indonesia	East Java		Tuban		P		-6.90000	112.05000		
1475	Indonesia	East Java		Lamongan		P		-7.11667	112.41667		
1476	Indonesia	East Java		Gresik		P		-7.15000	112.63333		
1477	Indonesia	East Java		Madura Island		P		-7.00000	113.33333		
1478	Indonesia	East Java		Kangean Island		P		-6.90000	122.21667		
1479	Indonesia	East Timor		Quelicai		P		-8.75000	126.00000		
1480	Indonesia	Irian Jaya		Misool Island		P		-1.86667	130.16667		
1481	Indonesia	Irian Jaya		Anjawi Island		P		-1.25000	129.80000		
1482	Indonesia	Irian Jaya		Ayamaru		P		-1.23333	132.20000		
1483	Indonesia	South Kalimantan		Kandangan		P		-2.78333	115.26667		
1484	Indonesia	Southeast Sulawesi		Kakabiya Island		P		-6.90000	122.21667		
1485	Indonesia	West Java	Ciamis	Cigur; Cijulang; Parigi; Pangandaran; Kalipucang; Padherang		P		-7.33333	108.35000	Location for Ciamis.	
1486	Indonesia	West Java		Lebak; Rankasbitung		P		-6.53333	106.20000	Specific location for Lebak, but Rangkasbitung very close geographically.	
1487	Indonesia	West Java		Cibinong; Leuwiliang		P		-6.56667	106.61667	Specific location for Leuwiliang.	
1488	Jamaica			Cousin's Cave		P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1474	Past (probable, but not confirmed)				0.0258 Mt @ 28% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		I011301
1475	Past (probable, but not confirmed)				0.187 Mt @ 31% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1476	Past (probable, but not confirmed)				0.0255 Mt @ 29.5% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1477	Past (probable, but not confirmed)				0.0745 Mt @ 28% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1478	Past (probable, but not confirmed)							Rand McNally, 1981	Harjanto, 1986		
1479	Past (probable, but not confirmed)				9-21.3% P2O5 (1986)			Rand McNally, 1981	Harjanto, 1986		
1480	Past (probable, but not confirmed)				3-8% P2O5 (1986)			Rand McNally, 1981	Harjanto, 1986		
1481	Past (probable, but not confirmed)				0.0025 Mt @ 3% P2O5 (1986)			Rand McNally, 1981	Harjanto, 1986		
1482	Past (probable, but not confirmed)				28% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1483	Past (probable, but not confirmed)				0.0752 Mt @ 12.48-37% P2O5 (1986)			Rand McNally, 1981	Harjanto, 1986		
1484	Past (probable, but not confirmed)				0.045 Mt @ 0.37-25.12% P2O5 (1986)			Rand McNally, 1981	Harjanto, 1986		
1485	Past (probable, but not confirmed)				0.099 Mt @ 1-38% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1486	Past (probable, but not confirmed)				0.004 Mt @ 23-30% P2O5 (1986)			NIMA, 2000	Harjanto, 1986		
1487	Past (probable, but not confirmed)							NIMA, 2000	Harjanto, 1986		
1488	Small past producer								Briish Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1489	Jamaica			Mosely Hall Cave		P					
1490	Jamaica			Windsor Cave		P					
1491	Japan			Kita Daito Jima		P		25.95000	131.30000		
1492	Jarvis Island			Jarvis Island		P		-0.38333	-160.03333	Pacific Ocean.	
1493	Kiribati	Gilbert Islands		Ocean Island (Banaba)		P		-0.86700	169.58300	Pacific Ocean.	
1494	Kiribati	Line Islands		Malden Island		P		-4.01667	-155.01667	Pacific Ocean.	
1495	Kiribati	Line Islands		Starbuck Island		P		-5.61667	-155.88333		
1496	Kiribati	Phoenix Islands		Enderbury Island		P		-3.10000	-171.08333	Pacific Ocean.	
1497	Korea (South)			Nan-do Island		P					
1498	Malaysia			Bt. Baling		P		5.67500	100.91667	In Peninsular Malaysia.	
1499	Malaysia			Chuping		P		5.93333	100.21667	In Peninsular Malaysia.	
1500	Malaysia			Dalam Wang		P		5.20000	101.88333	In Peninsular Malaysia.	
1501	Malaysia			Gua Musang		P		4.88333	101.90833	In Peninsular Malaysia.	
1502	Malaysia			Gua Setir		P		5.66667	101.92500	In Peninsular Malaysia.	
1503	Malaysia			Gunong Keriang		P		6.20000	100.34167	In Peninsular Malaysia.	
1504	Malaysia			Kota Jin		P		3.88333	102.48333	In Peninsular Malaysia.	
1505	Malaysia	Sabah		Batu Sapad		P		4.70833	118.16667		
1506	Malaysia	Sabah		Baturong		P		4.71667	118.00000		
1507	Malaysia	Sabah		Gomantong		P		5.51667	118.06667		
1508	Malaysia	Sabah		Lian		P		5.48333	116.18333		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1489	Small past producer								Briish Sulphur Corporation, 1987		
1490	Small past producer								Briish Sulphur Corporation, 1987		
1491	Past producer							NIMA, 2000	Piper and others, 1990		
1492	Past producer							Rand McNally, 1981	Piper and others, 1990; Rossfelder, 1990		
1493	Past producer			S				MASMILS, 2000	Piper and others, 1990	6.22E+09	
1494	Past producer		worked 1860-1924	S	0.4 Mt			Tracey, 1979	Piper and others, 1990; Rossfelder, 1990		
1495	Past producer								Rossfelder, 1990		
1496			worked 1884-1891	S	0.10 Mt			Tracey, 1979	Piper and others, 1990		
1497	Past producer								Yoo, 1986		
1498				S				Peck Chin Aw, 1980			
1499				S	10-30% P2O5		Guano collected from cave floors by hand.	Peck Chin Aw, 1980			
1500				S				Peck Chin Aw, 1980			
1501				S				Peck Chin Aw, 1980			
1502				S				Peck Chin Aw, 1980			
1503				S				Peck Chin Aw, 1980			
1504				S				Peck Chin Aw, 1980			
1505	None							Peck Chin Aw, 1980			
1506	None							Peck Chin Aw, 1980			
1507	None				0.0205 M long t in Madai and Gomantong caves		Resource information from Peck Chin (1980).	Peck Chin Aw, 1980			
1508	None							Peck Chin Aw, 1980			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1509	Malaysia	Sabah		Madai		P		4.72500	118.15000		
1510	Malaysia	Sabah		Punan Batu		P		4.80000	116.20000		
1511	Malaysia	Sabah		Siput		P		4.58333	118.33333		
1512	Malaysia	Sabah		Tempadong		P		5.09167	118.15000		
1513	Malaysia	Sarawak		Bidi		P		1.35000	110.08333		
1514	Malaysia	Sarawak		Melinau		P		4.03333	114.77500		
1515	Malaysia	Sarawak		Niah		P		3.80000	113.81667		1928
1516	Malaysia	Sarawak		Selabor		P		0.91667	110.45833		
1517	Malaysia	Sarawak		Sta'at		P		1.41667	110.16667		
1518	Marshall Islands			Ebon Island		P		4.58333	168.73333		
1519	Mexico	Nuevo Leon		El Chapote - La Casualidad (Chapopote 1 y 2)		P		26.41667	-100.75000	5 km from village of San Isidro.	
1520	Mexico	Nuevo Leon		Mercedes y Herminia (Sabinas Hgo.)		P		26.53300	-100.23300		
1521	Mexico	Queretaro			La Ventana	P	Good quality: 33.4% P2O5, 44.8% CaO, 0.6% Fe2O3, 0.20% Al2O3, 1.6% SiO2, 0.0% F			100 km NE of Queretaro, in caves near the village of El Doctor.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1509	None				0.0205 M long t in Madai and Gomantong caves		Resource information from Peck Chin (1980).	Peck Chin Aw, 1980			
1510	None							Peck Chin Aw, 1980			
1511	None							Peck Chin Aw, 1980			
1512	None							Peck Chin Aw, 1980			
1513				Unknown				Peck Chin Aw, 1980			
1514				Unknown				Peck Chin Aw, 1980			
1515	Small producer			S	28200 long t; cave guano 5% N, 4.5% P2O5; fossil guano averages 23% P2O5		Resource information from Peck Chin (1980).	Peck Chin Aw, 1980			
1516				Unknown	0.009 Mt @ 2-4% P2O5		Resource information from World Survey of Phosphate Deposits (1987).	Peck Chin Aw, 1980			
1517				Unknown				Peck Chin Aw, 1980			
1518			31000t, up to 38.5% P2O5 (1940-1942)	S	Total resources--0.060 Mt			NIMA, 2000	British Sulphur Corporation, 1987		
1519				Unknown	0.115 Mt @ 20% P2O5; 0.004 Mt @ 15% P2O5		Reserve estimates from World Survey of Phosphate Deposits.	British Sulphur Corporation, 1987	British Sulphur Corporation, 1964		
1520	Small Past Producer			Unknown	0.164 Mt @ 28-30% P2O5			Foose, 1993; British Sulphur Corporation, 1964	British Sulphur Corporation, 1987		
1521	Small Past Producer								British Sulphur Corporation, 1987		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1522	Micronesia, Federated States of	Caroline Islands		Fais Island		P		9.75000	140.51666		
1523	Namibia			Albatros Island		P		########	15.21667		
1524	Namibia			Cape Cross		P		########	13.96667		
1525	Namibia			Halifax Island		P		########	15.08333		
1526	Namibia			Hollandsbird Island		P		########	14.53333		
1527	Namibia			Ichaboe Island and others		P		########	14.95000	Lat-long is for Ichaboe Island.	
1528	Namibia			Kalk Mountains		P					
1529	Namibia			Mercury Island		P		########	14.66667		
1530	Namibia			North Long Island		P		########	15.13333		
1531	Namibia			Panther Beacon Salt Pan		P					
1532	Namibia			Penguin Island		P		########	15.15000		
1533	Namibia			Plumpudding Island		P		########	15.53333		
1534	Namibia			Pomona Island		P		########	15.25000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1522	Past producer		283000t before 1944	S	30% P2O5			British Sulphur Corporation, 1987	British Sulphur Corporation, 1987; Rossfelder, 1990		
1523	Small intermittent producer (1994)								McManus and Schneider, 1994		
1524	Past intermittent producer (1994)		1542 t, 1939-1943			Damaraland Guano Company	Mined before WWI and 1939-1943.		McManus and Schneider, 1994		
1525	Small intermittent producer (1994)								McManus and Schneider, 1994		
1526	Small intermittent producer (1994)								McManus and Schneider, 1994		
1527	Mined out						Ichaboe Island deposit contained 250,000 t guano.	NIMA, 2000	McManus and Schneider, 1994		
1528	Past small production (1994)						Bat guano in caves has been expoited on a small scale in the past.		McManus and Schneider, 1994		
1529	Small intermittent producer (1994)								McManus and Schneider, 1994		
1530	Small intermittent producer (1994)								McManus and Schneider, 1994		
1531	Active small Producer (1994)						Artificial platforms for the roosting and breeding of sea birds have been built here. Guano is recovered annually.		McManus and Schneider, 1994		
1532	Small intermittent producer (1994)								McManus and Schneider, 1994		
1533	Small intermittent producer (1994)								McManus and Schneider, 1994		
1534	Small intermittent producer (1994)								McManus and Schneider, 1994		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1535	Namibia			Possession Island		P		########	15.20000		
1536	Namibia			Seal Island		P		########	15.15000		
1537	Namibia			Sinclair's Island		P		########	15.53333		
1538	Namibia			South Long Island		P		########	15.13333		
1539	Namibia			Walvis Bay Harbour		P		########	14.46667		
1540	Nauru			Nauru Island		P		-0.53333	166.93333		About 1900
1541	Navassa Island			Navassa Island		P		18.38333	-74.93333	In Windward Passage, 25 miles off west coast of Haiti.	
1542	Netherlands Antilles			Curacao Island	Curacao phosphate Mine	P		12.16000	-68.93000		
1543	Pacific Islands Trust Territory	Mariana Islands		Rota		P		14.16667	145.25000		
1544	Pacific Islands Trust Territory	Mariana Islands		Saipan		P		7.00000	145.71667		
1545	Peru			Chincha Islands		P		########	-76.41667	In Bay of Pisco.	

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1535	Past intermittent producer (1994)								McManus and Schneider, 1994		
1536	Small intermittent producer (1994)								McManus and Schneider, 1994		
1537	Small intermittent producer (1994)								McManus and Schneider, 1994		
1538	Small intermittent producer (1994)								McManus and Schneider, 1994		
1539	Active small Producer (1994)						Artificial platforms for the roosting and breeding of sea birds have been built here. Guano is recovered annually.		McManus and Schneider, 1994		
1540	Active Producer (2001)	Average 1.5 Mt phosphate conc, 39.9% P205, 1980-81	About 50 Mt ore, 1900-74; about 20.76 Mt phosphate conc, 1900-82	S	23 Mt ore @ about 36.6% P205 (R1E, 1982); Original deposit size 90 Mt @ 39% P2O5 (Slansky, 1986)	Nauru Phosphate Co.		MASMILS, 2000	Slansky, 1986; Piper and others, 1990; Bingham, 1990	6.86E+09	ISM0475
1541	Past producer							Gugliotta, 1996; NIMA, 2000	Gugliotta, 1996		
1542				S	Resources variable: 1-30 Mt, 1-23% P2O5			MASMILS, 2000	Slansky, 1986	2.77E+09	
1543			236000t (1932-1944)	S	25% P2O5			British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
1544			88000t (1932-1944)	S	20-25% P2O5			British Sulphur Corporation, 1987	British Sulphur Corporation, 1987		
1545	Past Producer							NIMA, 2000	Piper and others, 1990; Cathcart, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1546	Philippines	Bohol		Cave 7		P		9.73000	124.02000		
1547	Philippines	Bohol		Cuimba cave		P		9.65000	124.00000		
1548	Philippines	Bohol		Huyophuyop cave		P		9.70000	124.07000		
1549	Philippines	Camerines Sur		Abayala cave		P		13.70000	123.98000		
1550	Philippines	Camerines Sur		Colapnitan I		P		13.70000	123.97000		
1551	Philippines	Camerines Sur		Copapnitan cave		P		13.75000	122.95000		
1552	Philippines	Camerines Sur		Dragon cave II		P		13.70000	122.97000		
1553	Philippines	Camerines Sur		Haga cave		P		13.50000	123.13000		
1554	Philippines	Camerines Sur		Malangog cave		P		13.48000	123.13000		
1555	Philippines	Catanduanes		Lictin cave		P		13.60000	124.13000		
1556	Philippines	Catanduanes		Marapad cave		P		13.95000	124.28000		
1557	Philippines	Catanduanes		Marilima cave		P		13.55000	124.17000		
1558	Philippines	Catanduanes		Talisoy cave		P		13.52000	124.18000		
1559	Philippines	Cebu		Cave No. 2		P		10.30000	123.73000		
1560	Philippines	Cebu		Cave No. 3		P		10.28000	123.73000		
1561	Philippines	Cebu		Collapsed cave		P		10.00000	123.70000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1546					200 t @ 37.56% P2O5		0.27 m thick, 720 sq m.	Jagolino,1976			
1547					500 t @ 38.60% P2O5		0.36 m thick, 880 sq m.	Jagolino,1976			
1548					600 t @ 30.27% P2O5			Jagolino,1976			
1549					0.0239 Mt @ 39.20% P2O5		0.30 m thick with area of 1,333 sq m.	Jagolino,1976			
1550					0.0478 Mt @ 39.21% P2O5		0.50 m thick with area of 625 sq m.	Jagolino,1976			
1551					540 t @ 20.32% P2O5		0.45 m thick with area of 197 sq m.	Jagolino,1976			
1552					170 t @ 27.22% P2O5		0.30 m thick with area of 4,844 sq m.	Jagolino,1976			
1553					740 t @ 39.70% P2O5		3.20 m thick with area of 10,203 sq m.	Jagolino,1976			
1554					556 t @ 32.24% P2O5		0.23 m thick with area of 700 sq m.	Jagolino,1976			
1555					305.95 t @ 36.36% P2O5		0.78 m thick with area of 937 sq m.	Jagolino,1976			
1556					1396 t		0.37 m thick, 2012 sq m.	Jagolino,1976			
1557					1424 t @ 24.56% P2O5		0.64 m thick, 370 sq m.	Jagolino,1976	Lee, 1980		
1558					451.80 t @ 29.11% P2O5		0.26 m thick, 714 sq m.	Jagolino,1976			
1559					1000 t		0.65 m thick, 807 sq m.	Jagolino,1976			
1560					1000 t		5 m thick, 5026 sq m.	Jagolino,1976			
1561					0.048 Mt		1.79 m thick, 1825 sq m.	Jagolino,1976			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1562	Philippines	Cebu		Lanigpa cave		P		10.47000	123.73000		
1563	Philippines	Cebu		Libo Hills cave		P		10.63000	123.67000		
1564	Philippines	Ilocos Norte		Baconay cave		P		18.35000	120.67000		
1565	Philippines	Ilocos Norte		Beth cave		P		18.43000	120.70000		
1566	Philippines	Ilocos Norte		Lapa-Lapa cave		P		18.48000	120.72000		
1567	Philippines	Ilocos Norte		McLintok cave		P		18.48000	120.70000		
1568	Philippines	Ilocos Norte		Ruby cave		P		18.45000	120.68000		
1569	Philippines	Iloilo		Gegante cave		P		10.62000	122.53000		
1570	Philippines	Iloilo		Kapitungan cave		P		10.60000	122.55000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1562					6210 t		5.50 m thick, 1608 sq m.	Jagolino,1976			
1563					0.0168 Mt		1.05 m thick, 100 sq m.	Jagolino,1976			
1564					9000 t @ 6.34% P2O5; 8862 t of guano,1225 t of phosphate rock		0.14 m thick, 462 sq m.	Jagolino,1976			
1565					345 t @ 1.24% P2O5; 220 t of guano, 125 t of phosphate rock		0.33 m thick, 1767 sq m.	Jagolino,1976			
1566					4806 t @ 19.17% P2O5;3695 t of guano, 1111 t of phosphate rock		0.17 m thick, 346 sq m.	Jagolino,1976			
1567					481 t @ 0.33% P2O5; 367 t of guano, 114 t of phosphate rock		0.37 m thick, 321 sq m.	Jagolino,1976			
1568					649 t @ 9.85% P2O5; 421 t of guano, 228 t of phospate rock		0.60 m thick, 23 sq m.	Jagolino,1976			
1569					350 t		0.24 m thick, 886 sq m.	Jagolino,1976			
1570					400 t, unknown; 010 m thick, 631 sq m			Jagolino,1976			

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1571	Philippines	Iloilo		Liti-Liti cave		P		10.72000	122.67000		
1572	Philippines	Leyete		Batingue deposit		P					1982
1573	Philippines	Nebros Occidental		Fourteen cave		P		10.78000	123.45000		
1574	Philippines	Negros Occidental		Bano cave		P		10.80000	123.43000		
1575	Philippines	Negros Occidental		GE-3 cave		P		9.93000	122.53000		
1576	Philippines	Negros Occidental		No. two cave		P		10.77000	123.43000		
1577	Philippines	Negros Ocidental		G-19 cave		P		10.00000	122.53000		
1578	Philippines	Negros Oriental		Baliw cave		P		9.75000	122.98000		
1579	Philippines	Negros Oriental		Baliw cave II		P		9.70000	122.95000		
1580	Philippines	Negros Oriental		Botokon cave		P		9.72000	122.97000		
1581	Philippines	Zambales		Bayabas cave		P		15.73000	119.95000		
1582	Philippines	Zambales		Kawyan cave		P		15.63000	119.97000		
1583	Philippines	Zambales		Luhok cave		P		15.63000	119.97000		
1584	Philippines	Zambales		Sinimbahan cave		P		15.65000	119.97000		
1585	Puerto Rico				Cerro de las Cuevas	P		18.08667	-66.47555		
1586	Puerto Rico	Isla Mona			Cueva al Lado del Faro	P		18.08722	-67.84472		
1587	Puerto Rico	Isla Mona			Cueva Caigo O No Caigo	P		18.05555	-67.89222		
1588	Puerto Rico	Isla Mona			Cueva de Dona Gena Arriba	P		18.06194	-67.90333		
1589	Puerto Rico	Isla Mona			Cueva de Espinal	P		18.11750	-67.92167		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1571					120 t		2.50 m thick, 4000 sq m.	Jagolino,1976			
1572	Scheduled to start 1986				1 Mt @ 15% P2O5				British Sulphur Corporation, 1987		
1573					40,300 t		1.68 m thick, 300 sq m.	Jagolino,1976			
1574					2000 t		1 m thick, 421 sq m.	Jagolino,1976			
1575					960 t @ 34.52% P2O5		4.21 m thick, 250 sq m.	Jagolino,1976			
1576					0.032 Mt		5.90 m thick, 3600 sq m.	Jagolino,1976			
1577					0.019 Mt @ 0.25% P2O5		0.42 m thick, 400 sq m.	Jagolino,1976			
1578					800 t @ 38.8% P2O5		0.75 m thick, 125 sq m.	Jagolino,1976			
1579					653 t @ 30.94% P2O5		0.60 m thick, 350 sq m.	Jagolino,1976			
1580					400 t @ 38% P2O5		0.72 m thick, 723 sq m.	Jagolino,1976			
1581					8 t @ 12.51% P2O5		0.25 m thick, 43 sq m.	Jagolino,1976			
1582					20.6 t @ 16.40% P2O5		0.42 m thick, 150 sq m.	Jagolino,1976			
1583					29.8 t @ 13.88% P2O5		0.13 m thick, 92 sq m.	Jagolino,1976			
1584					120 t @ 29.61% P2O5		0.15 m thick with area of 695 sq m.	Jagolino,1976			
1585	Small Past Producer							Glover and Matson, 1973	CIMRI, 1992		
1586	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1587	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1588	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1589	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1590	Puerto Rico	Isla Mona			Cueva de La Casa de Erickson	P		18.06444	-67.86833		
1591	Puerto Rico	Isla Mona			Cueva de La Cucaracha	P		18.08944	-67.93861		
1592	Puerto Rico	Isla Mona			Cueva de La Esperanza	P		18.11278	-67.93472		
1593	Puerto Rico	Isla Mona			Cueva de La Playa Brava	P		18.05889	-67.87583		
1594	Puerto Rico	Isla Mona			Cueva de Las Losetas	P		18.09333	-67.84444		
1595	Puerto Rico	Isla Mona			Cueva de Los Pajaros	P		18.06778	-67.85056		
1596	Puerto Rico	Isla Mona			Cueva de Pajaros	P		18.06944	-67.86556		
1597	Puerto Rico	Isla Mona			Cueva del Basurero	P		18.08306	-67.85056		
1598	Puerto Rico	Isla Mona			Cueva del Capitan	P		18.10556	-67.93500		
1599	Puerto Rico	Isla Mona			Cueva del Diamante	P		18.09639	-67.93722		
1600	Puerto Rico	Isla Mona			Cueva del Esquelito	P		18.10000	-67.93611		
1601	Puerto Rico	Isla Mona			Cueva del Gato	P		18.11472	-67.93167		
1602	Puerto Rico	Isla Mona			Cueva del Limon	P		18.06389	-67.90583		
1603	Puerto Rico	Isla Mona			Cueva del Lirio	P		18.08444	-67.85028		
1604	Puerto Rico	Isla Mona			Cueva del Mangle	P		18.08278	-67.93861		
1605	Puerto Rico	Isla Mona			Cueva del Norte	P		18.12139	-67.85972		
1606	Puerto Rico	Isla Mona			Cueva del Rifle	P		18.11389	-67.88694		
1607	Puerto Rico	Isla Mona			Cueva del Toro	P		18.11583	-67.87861		
1608	Puerto Rico	Isla Mona			Cueva Negra	P		18.08750	-67.93944		
1609	Puerto Rico	Isla Mona			Cueva de Frio	P		18.11333	-67.85111		
1610	Romania				Cioclovina	P					
1611	Romania				Ampoita	P					

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1590	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1591	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1592	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1593	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1594	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1595	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992; Kaye, 1959		
1596	Small Past Producer							Cox and Briggs, 1973	CIMRI, 1992		
1597	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1598	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1599	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1600	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1601	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992; Kaye, 1959		
1602	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1603	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992; Kaye, 1959		
1604	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1605	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1606	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1607	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1608	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992; Kaye, 1959		
1609	Small Past Producer							Briggs and Seiders, 1972	CIMRI, 1992		
1610									Ianovici and Borcos, 1982		
1611									Ianovici and Borcos, 1982		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1612	Romania				Cheia-Hateg	P					
1613	Romania				Meristi-Harghita	P					
1614	Romania				Huda lui Papara-Cluj	P					
1615	Romania				Baia de fier-Oltenia	P					
1616	Romania				Ivrinezu-Dobrogea	P					
1617	Seychelles			Aldabra Island		P		-9.41667	46.36667		
1618	Solomon Islands			Bellona Island		Al P		########	159.78333		
1619	Solomon Islands			Rennell Island		Al P		########	60.41667		
1620	Somalia			Mait Island		P		11.21670	47.25000	Near Cape Humbeis.	
1621	Thailand	Kanchanaburi		Ban Na Kan		P					
1622	Thailand	Lamphun		Mae Tha (Mae Ta, Maeta)		P		18.38250	98.97780		
1623	Thailand	Phattalung		Khao Phanom Wang		P					
1624	Thailand	Phetchabun		Chon Daen		P		16.18333	100.85000		

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1612									Ianovici and Borcos, 1982		
1613									Ianovici and Borcos, 1982		
1614									Ianovici and Borcos, 1982		
1615									Ianovici and Borcos, 1982		
1616									Ianovici and Borcos, 1982		
1617	Past producer							NIMA, 2000	Piper and others, 1990		
1618	Not Mined				Resource-- 6 Mt @ 22% P2O5 + 0.6 Mt @ 30% P2O5 (1994)				Rossfelder, 1990; Notholt, 1994		
1619				S	Resource-- 6 Mt @ 22% P2O5 + 0.6 Mt @ 30% P2O5 (1994)			MASMILS, 2000		6.22E+09	
1620	Small past and (or) intermittent producer				10-28% P2O5			U.S. Geological Survey Mineral Resources Data System, 2000	de Kun, 1987; British Sulphur Corporation, 1987		D006946
1621					0.10-0.15 Mt @ 12-34% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).		British Sulphur Corporation, 1987		
1622	Small producer (1980)	2000-7500 tpa (1980)			0.05 Mt @ 36% P2O5; average grades 13-14% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987); Rat Buri limestone.	U.S. Geological Survey Mineral Resources Data System, 2000	Slansky, 1986; Japakasetr, 1980		W007090
1623					0.02 Mt @ 25-35% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).		British Sulphur Corporation, 1987		
1624	Small producer (1980)				0.015 Mt @ 20-25% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).	NIMA, 2000	Japakasetr, 1980		

Deposit No.	Country/ Ocean	State/ Principal Administrative Area	3rd order political	Basin/Fmt/Region (area)/Deposit	Deposit or Site_Name	Commods	Analytical Data	Latitude	Longitude	Location Comments	Year of discovery
1625	Thailand	Phetchabun		Wichianburi		P		15.65000	101.11667		
1626	United States	Texas	Edwards	Devil's Sinkhole		P					
1627	United States	Texas	Kinney	Webb Cave		P				7 miles north of Brackettville.	
1628	United States	Texas	Real	Celestite Cave		P					
1629	United States	Texas	Uvalde	Frio Cave		P N					
1630	United States	Texas	Uvalde	Parker Cave		P				12 miles north of Sabinal.	
1631	United States	Texas	Val Verde	Murrah Cave		P				In east wall of Pecos River Canyon, about 15 air miles from the Rio Grande.	
1632	Vietnam			Hoang Sa Island		P	18-28% P2O5				
1633	Vietnam			Lam Tuyen Island		P	18-28% P2O5				
1634	Vietnam			Truong Sa Island		P	18-28% P2O5				
1635	Vietnam			Vinh Lac Island		P	18-28% P2O5				

Deposit No.	Production	Annual production	Cumulative production	Mining method	Resources	Company	General Comments	Location references	General References	MASMILS Ref No.	MRDS Ref No.
1625					0.12 Mt @ 20-35% P2O5		Resource estimates from World Survey of Phosphate Deposits (1987).	NIMA, 2000	British Sulphur Corporation, 1987		
1626	Past small producer						Cave has not been thoroughly explored.		Maxwell, 1962		
1627	Past small producer?						Only small quantities of guano are still present in the cave.		Maxwell, 1962		
1628	None								Maxwell, 1962		
1629	Past producer						The guano was mined during the 1920's. It is also reported that it was mined for nitrate (for gun powder) by the Confederate Army in the 1860's.		Maxwell, 1962		
1630	Past small producer								Maxwell, 1962		
1631	None								Maxwell, 1962		
1632	Inactive		Prob. < 5000 t total				Coral isle. Small production 1957-1961.		ESCAP, 1990; O'Driscoll, 1996		
1633	Inactive		Prob. < 5000 t total				Small production 1957-1961.		ESCAP, 1990		
1634	None						Coral isle.		ESCAP, 1990; O'Driscoll, 1996		
1635	Inactive		Prob. < 5000 t total				Small production 1957-1961.		ESCAP, 1990		