

卷末資料

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APPENDIX 1

Table A-1 List of published geological, economical, and political paper or reports about the central north area

(1/5)

TITLE	DATE	AUTHOR	SOURCE
A molybdenum-copper porphyry of the deposit Erdenetyn Ovoo(Mongolia)	1989	S.P. GAVRILOVA, I.E. MAKSIMUK, D. OROLMAA	Geological Ministry of USSR
Central Asian fold belt: Geodynamic evolution and formation history	1994	A. A. MOSSAKOVSKY, S. V. RUZHENTSEV, S. G. SAMYGIN, and T. N. KHERASKOVA	Geotectonics, English translation, vol.27, no.6
Endogenous rare metal ore formations and rare metal metallogeny of Mongolia	1995	V. I. KOVALENKO and V. V. YARMOLYUK	Economic Geology vol.90, pp.520-529
Erdenet-world's newest porphyry copper-moly mine	1982	George O. ARGALL, Jr.	World Mining (October), p.58-59
Extraction of clay mineral alteration zone in eastern Mongolia using JERS-1 data	1998	Takashi OOKA, Hideya METSUGI, Manabu KAKU, and Kazuhiro ADACHI	Bulletin of the Geological Survey of Japan, vol.49(6), p.275-290
Fluorite deposits in Mongolia: an outline	1998	Jargalyn LKHAMSUREN and Satoshi HAMASAKI	Bulletin of the Geological Survey of Japan, vol.49(6), p.309-318
Geology of northern Eurasia			
Gigantic paleolandslide associated with active faulting along the Boad fault (Gobi-Altay, Mongolia)	1999	Herve PHILIP and Jean-Francois RITZ	Geology, vol.27; No.3, p.211-214
Guide to the geology and mineral resources of Mongolia	1996	D.JARGALSAIHAN, M.KAZMER, Z.BARAS, D.SANJAADORJ (Editor)	Geological Exploration, Consulting and Services Co. Ltd
Heat flow, structure and evolution of the lithosphere of Mongolia	1989	M. D.KHUTORSKOY and V.V. YARMOLYUK	Tectonophysics, 164, p.315-322, Elsevier Science Publishers B.V., Amsterdam-Printed in The Netherlands
K-Ar dating of granitoids and hydrothermal micas from the northern part of Kherlen depression, Mongolia	1998	S. MURAO, D. DORJGOTOV and T. TSEDEN	Bulletin of the Geological Survey of Japan, vol.49(6), pp.249-255
Lake's island arc terrane	1996	G. BAT-ERDENE, YA. BAT-IREEDUI, O. TOMURTOGOO, A.S. GIBSHER, and Y.C. SOVETOV	Gidebook for
Magmatism and metallogenic systematics of the southern Ergun Mo, Cu, Pb, Zn and Ag belt, Inner Mongolia, China	1995	Ke-Zhang QIN, Zhi-Tian WANG and Long-Ju PAN	Resource Geology Special Issue, No.18, p.159-169
Metallogeny of the Mongolian People's Republic(copper, molybdenum)	1985	V.I. SOTNICOV, M. JAMSRAN, A.P. BERZINA, A.E. SHABOLOVSKII, D. GARAMJAV, D. BOLD	The Academy of science of the USSR, The Academy of science of the MPR
Mineral deposits of the world -ores, industrial minerals and rocks-	1994	M. VANECEK	Developments in Economic Geology 28
Mineral resources of the western part of the Mongol-Okhotsk foldbelt	1995	Ochir GEREL	Resource Geology Special Issue No.18
Mongolia -Getting into steppe with natural resources-	1997		Advertisement Supplement to Mining Journal, vol.328, No.8418

Table A-1 List of published geological, economical, and political paper or reports about the central north area

TITLE	DATE	AUTHOR	SOURCE
Mongolia Investor's conference on oil/gas and mining	1997		The World Bank/ The Government of Mongolia
Mongolian geoscientist No.3	1997	Japan International Cooperation Agency	
Mongolia's gold potential	1996	R. H. SILLITOE	Mining Magazine -July, p.12-15
On prospecting for porphyry copper mineralization in intracontinental mobile zones (Mongol-Okhotsk belt, Mongolian People's Republic)	1989	P.V. KOVAL, A. GOTOVSUREN, S. ARIUNBILEG and Yu.I. LIBATOROV	Journal of Geochemical Exploration, 32, p.369-380, Elsevier Science Publishers B.V., Amsterdam- Printed in the Netherlands
Organic geochemistry and palynology of lower Cretaceous Zuunbayan oil shales, Mongolia	1998	Masanobu YAMAMOTO, Delegiin BAT-ERDENE, Pureyii ULZIIKHISHIG, Yoshio WATANABE, Moberu IMAI, Yoshiteru KAJIWARA, Nobuyori TAKEDA and Terumasa NAKAJIMA	Bulletin of Geological Survey of Japan, vol.49(6), p.257-274
Paleozoic sedimentary basins and volcanic-arc systems of southern Mongolia: New stratigraphic and sedimentologic constraints	1997	Melissa A. LAMB and Gombosuren BADARCH	International Geology Review, vol.39, pp.542-576
Phanerozoic felsic magmatism and related mineralization in Mongolia	1998	Ochir GEREL	Bulletin of the Geological Survey of Japan, vol.49(6), pp.239-248
Preliminary study on the characteristics of Tsagaan tsakhir uul gold deposit, Bayankhongor, southern Mongolia	1998	Sereenen JARGALAN and Satoshi MURAO	Bulletin of the Geological Survey of Japan, vol.49(6), p.291-298
Previous studies on the Erdenetiin ovoo porphyry copper-molybdenum deposit, Mongolia	1998	G. DEJIDMAA and K. NAITO	Bulletin of the Geological Survey of Japan, vol.49(6), pp.299-308
Scientific communications, New $^{40}\text{Ar}/^{39}\text{Ar}$ age data and implications for porphyry copper deposits of Mongolia	1998	Melissa A. LAMB and Dennis COX	Economic Geology vol.93, pp.524-529
South China in Rodinia: Part of the missing link between Australia-east Antarctica and Laurentia?	1995	Zheng-Xiang LI, Linghua ZHANG, and Christopher McA. POWELL	Geology, vol.23; No.5, p.407-410
Tectonic framework of the Bayankhongor area, west Mongolia	1996	Yoji TERAOKA, Morihisa SUZUKI, Florigiin TUNGALAG, Niidengiin ICHINNOROV and Yukio SAKAMAKI	Bulletin of the Geological Survey of Japan, vol.47(9)
The central Siberia-Mongolia transect	1993	YU. Z. ZORIN, V. G. BELICHENKO, YE. KH. Turutanov, V. M. KOZHEVNIKOV, S.V. RUZHENTSEV, A.B. DERGUNOV, I.B. FILIPPOVA, O. TOMURTOGOO, N. ARVISBAATOR, TS. BAYASGALIAN, CH. BYAMBA, and P. KHOSBAYAR	Geotectonics, vol.27, no.2, p.103-117
The discovery of late Devonian (Framennian) conodonts in the Bayanhongor area, west Mongolia	1997	Chikao KURIMOTO, Niidengiin ICHINNOROV, Toshio KOIKE, Florigiin TUNGALAG and Lkhamsuren BAYARMANDAL	Bulletin of the Geological Survey of Japan, vol.48(9), p.487-491
The peralkaline granite-related Khaldzan-Buregtey rare metal (Zr, Nb, REE) deposit, western Mongolia	1995	V. I. KOVALENKO, G.M. TSARYEVA, A.V. GOREGLYAD, V.V. YARMOLYUK, V.A. TROITSKY, R.L. HERVIG, and G.L. FARMER	Economic Geology, vol.90, p.530-547

Table A-1 List of published geological, economical, and political paper or reports about the central north area

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TITLE	DATE	AUTHOR	SOURCE
The role of regional litho-geochemistry in mineral exploration	1984	Pavel V. KOVAL	Journal of Geochemical Exploration, 21, pp.201-208, Elsevier Science Publishers B.V., Amsterdam- Printed in the Netherlands
The structure and development of the Baikal rift depression	1993	Victor D. MATS	Earth Science Reviews, 34, p.81-118, Elsevier Science Publishers B.V., Amsterdam
The tectonic evolution of Asia	1996	An YIN, T. Mark HARRISON (Editor)	Cambridge University Press
The use of tourmaline in geochemical prospecting for gold and copper mineralization	1991	P.V. KOVAL, L.D. ZORINA, N.A. KITAJEV, A.M. SPIRIDONOV, and S. ARIUNBILEG	Journal of Geochemical Exploration, vol.40, p.349-360, Elsevier Science Publishers B.V., Amsterdam
Timing of formation of forebergs in the northeastern Gobi Altai, Mongolia: implications for estimation mountain uplift rates and earthquake recurrence intervals	1999	Lewis A. OWEN, Dickson CUNNINGHAM, Benedict W. M. RICHARDES, Edward RHODES, Brian F. WINDLEY, Dorj DORJNAMJAA, and Jalbuugin BADAMGARAV	Journal of the Geological Society, London., vol.156, p.457-464., Printed in Great Britain
Lonely planet -Mongolia- 2nd Edition	1997	P. GREENWAY, R. STOREY, G. LAFITTE	Lonely Planet Publications, pp. 282
Geological ore deposits in Mongolia People's Republic	1991	Mineral Resources Information Center, Metal Mining Agency of Japan	NO.105, pp. 47, 1991
In the earth of Gobi	1984	Fumio Kishimoto	Chishitsu News, Vol.357, p.47-51
Chapter 8 Tectonics outline of the Asiatic Continent Chapter 9 Geological outline of the northeast Asia area	1979	Akiho Miyashiro (Chapter 8) Н.Л.Д о б р е ц о в. Б.М.Ч и к о в (Chapter 9)	Iwanami geoscience course 16, Geology of the world, p.237-299
Project finding report, Mongolia	1999	Japan Mining Engineering Center for International Cooperation	MMAJ-JMEC internal report
Evaluation report of the mine development project, Mongolia	1998	Japan Mining Engineering Center for International Cooperation	MMAJ-JMEC internal report
Visiting Erdenet mine, Mongolia	1999	Kazuki Naito, Sadahisa Sudo	Chishitsu News, Vol.534, p.19-30
Volcanism of Mongolia	1999	Satoshi Kanisawa	Chishitsu News, Vol.534, p.31-40
Mineral resources of Mongolia	1990	Terumasa Nakajima	The new metal industry, summer No., 1990, Vol.35, p.66-69
The recent mining situation, Mongolia -investment environment and development of gold deposit-	1997	Mineral Resources Information Center, Metal Mining Agency of Japan	Mining information of foreign countries, July, p.105-120
Geology and survey research activities of Mongolia	1999	Yuhei Takahashi	Bulltain of geological survey of Japan, Vol.50, No.4, p.279-289
Development of the porphyry copper deposit, Mongolia	1979	Fumio Kishimoto	Chishitsu News, Vol.299, p.49-55

Table A-1 List of published geological, economical, and political paper or reports about the central north area

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TITLE	DATE	AUTHOR	SOURCE
Journey to Mongolia	1991	Takeo, Sato	Chishitsu News, Vol.438, p.39-51
Development of mineral resources, Mongolia -present conditions and problems-	1999	Yukio, Sakamaki	Shigen-to-Sozai, Vol.115, No.12, p.865-870
Economic cooperation series in terms of developing countries, No.18 Asia -Mongolia-	1999	Association for Promotion of International Cooperation	pp.85
Молибден-Медно-Порфирирове Месторождени в Эрдэнэтийн-Овоо (МНР) A Molybdenum-Copper Porphyry Deposit : Erdenetyn Ovoo (Mongolia)	1989	С.П. Гаврилова, И.Е. Максимюк, Д. Ор олмаа S.P. Gavrilova, I.E. Maksimuk, D. Orolmaa	The Academy of science of the USSR Institute of Mineralogy, Geochemistry and Crystallochemistry of Rare Elements pp.39
Металлогения Монгольской Народной Респу блики (Медь, Молибден) Metallogeny of the Mongolian People's Republic (Copper, Molybdenum)	1985	В.И.Сотников, М.Жамсран, А.П.Берзи на, А.Е.Шабаловский, Д.Гарамжав, Д.Болд S.I. Stricov, M. Jamsran, A.P. Berzina, A.E. Shabolovskii, D. Garanjav, D. Bold.	The Academy of science of the USSR and MPR Soviet-Mongolian joint research geological expedition pp.39
Металлогения Монгольской Народной Респу блики (Золото) Metallogeny of the Mongolian People's Republic (Gold)	1986	Ю.Г.Шербарков, Г.Дэжидмаа, Ю.А.Кали нин, С.Р.Осинцев, Н.А.Росляков Yu.G. Sherbakov, G. Dejidmaa, Yu.A. Kalinin, S.R. Osintsev, N.A. Roslyakov	The Academy of science of the USSR and MPR Soviet-Mongolian joint research geological expedition pp.49
Меднорудные Формации МНР Copper-bearing Formation of the MPR	1985	Ответственный Редактор Акаде мик В.А.Кузнецов Reponsible Editor: Academician V.A. Kuznetsov	Nobosibirsk, Edited by "Nauka" Siberian branch p.1-76
СП"Эрдэнэт": 20 Лет Эффективной Деятельнос ти И Постоянного Развития "Erdenet" 20 years of effective activity and stable development	1998	И.Ш.Сатаева, А.Базара I.Sh.Sataev, A.Bazar (Ed.)	г.Эрдэнэт, Монголия Erdenet, Mongolia pp.108
Отличительные Черты Средне-И Позднепале озойских Гранитоидных Комплексов Северн ой Монголии Distinguishing feature-of the middle and late Paleozoic granitoid complexes of North Mongolia	1991	Д. Гарам D. Garam	Soviet-Mongolian science investigation joint expedition, Moscow, Geological Institute of Academy of Science of MPR, Ulaanbaatar, Series of Geology, no. 11, p.77-86
Определяющие Элементы Генетической Моде ли Медно-Молибден-Порфирировой Рудно-Магма тической Системы Defining elements of genetic model for a copper-molybdenum porphyry ore-magmatic system	1991	В.И.Сотников, А.П.Берзина, А.Л.Пав лов, В.А.Пономарчук, А.Н.Берзина, В.О.Гимон, А.В.Травин V.I.Sotnikov, A.P.Berzina, A.L.Pavlov, V.A.Ponomarchuk, A.A.Berzina, V.O.Gimon, A.V.Travin	Institute of geology and geophysics, Siberian section of Academy Science of USSR, Novosibirsk, Geology of ore deposits, May-June, no. 3, p.61-66

Table A-1 List of published geological, economical, and political paper or reports about the central north area

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TITLE	DATE	AUTHOR	SOURCE
Рудно-Магматические Системы Разных Геодинамических Обстановок Ore-magmatic systems of various geo-dynamic situations (in an example of copper-molybdenum deposits of Mongolia)	1991	А.П.Берзина, В.И.Сотников A.P.Berzina, V.I.Sotnikov	Reports of Academy of Science of URRS, vol. 316, no. 4, p.957-961
Этапы Формирования Эрдэнэтского Молибден-Медно-Порфирирового Месторождения (Монголия) Stages of forming of the Erdenet molybdenum-copper porphyry deposit (Mongolia)	1991	С.П.Гаврилова, И.Е.Максимюк S.P.Gavrilova, I.E.Maksimyuk	Soviet-Mongolian joint geological expedition of AS of USSR and AS of MPR, Geology of ore deposits, Nov.-Dec., no. 6, p.3-17
Эволюция Изотопного Составы Водорода В Магматическом Процессе На Месторождении Эрдэнэтуин-Ово The evolution of isotope content of hydrogen in magmatic process at the Erdenetyn Ovoo deposit	1990	А.П.Берзина, Й.Куроода, В.И.Сотников A.I.Berzina, Y.Kuroda, V.I.Sotnikov	Institute geology and geophysics of 60 yr. USSR Siberian section of Academy Science, Novosibirsk, The lectures of Academy Science of USSR, vol. 310, no.4, p.952-954
Этапы Развития Позднепалеозойского Магматизма Северной Монголии И Связанные С Ним Интрузивные Комплексы Development stages of the late Paleozoic magmatism in the Northern Mongolia and intrusive complexes	1985	В.А.Павлов, Р.М.Яшина, Д.Гарам V.A.Pavlov, R.M.Yashina, D.Garam	Soviet-Mongolian geological joint expedition, IGEM of Academy Science of USSR, Moscow, Series of Geology, no. 4, p.49-56
Одоорогеной Металлогении Монголии Pre-orogenic metallogeny of Mongolia	1980	Е.С.Контарь, Л.Е.Либаорова, Т.Ганбаатар E.C.Kontari, L.E.Libarova, T.Ganbaatar	Ministry of geology and mining industry of MPR, Ulaanbaatar Geology of ore deposits, Nov.-Dec., no. 6, p.72-78

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(1a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization
22	Tamir gol	Metamorphogenic	Arkhangai	47 35 54	102 07 06	Mongol-Ubur baykal	Khangai	Uplift		meta-shale, shale, quartzite	Paleozoic(PZ)		East Khangai	meta-shale, shale, quartzite		
23	Ikhs zagzag uul	Contact metamorphism	Bulgan	48 16 00	104 12 45	North Mongolia	Tariat-Selenge	Fault	granite	metamorphic rocks	Devonian	Permian	North Mongolia	metamorphic rocks		
24	Erdenetiin ovoo (Central part)	Hydrothermal	Orkhon	49 01 00	104 08 00	North Mongolia	Tariat-Selenge	Dipression	granodiorite, diorite			Permian-Triassic(P2-T1)	North Mongolia	granodiorite, diorite	Oxidation zone	
33	Erdenetiin ovoo (SE) and Oyuit	Stockwork	Orkhon	48 58 00	104 12 00	North Mongolia	Orkhon-selenge	Uplift	intrusion?			Triassic-Jurassic(T1, T-J)	North Mongolia	intrusion?		
34	Erdenetiin ovoo	Stockwork	Orkhon	49 01 02	104 07 08	North Mongolia	Orkhon-selenge	Uplift	intrusion?			Triassic-Jurassic(T1, T-J)	North Mongolia	intrusion?		
81	Khusheet gol	Metasomatic	Bulgan	48 14 00	103 10 00	North Mongolia	Tariat-selenge	Dipression		tuff breccia, porphyrite	Carboniferous(C3)		North Mongolia	tuff breccia, porphyrite?		
82	Zuukhiin gol	Metasomatic	Bulgan	49 14 00	104 14 00	North Mongolia	Orkhon-selenge	Uplift	granite, granodiorite	volcanogenic sedimentary rocks	Permian-Triassic(P2-T1)	Jurassic(J)	North Mongolia	granite, granodiorite		Permian-Triassic(P2-T3)
85	Aguin davaa	Hydrothermal	Bulgan	48 38 00	103 59 00	North Mongolia	Tariat-selenge	Dipression	granite			lower Permian	North Mongolia	granite		
89	Mogoin gol? Megein gol?	Hydrothermal	Bulgan	49 10 00	103 45 00	North Mongolia	Orkhon-selenge	Dipression		volcanogenic sedimentary rocks	Permian(P)		North Mongolia	volcanogenic sedimentary rocks		
108	Bulagt	Metasomatic	Bulgan	49 43 00	103 00 00	North Mongolia	Tariat-selenge	Dipression		trachyandesite, andesite porphyry, tuffaceous sandstone	Triassic-Lower Jurassic		North Mongolia	trachyandesite, andesite porphyry, tuffaceous sandstone	Silicification, Limonitization	
109	Bayanzhurkh	Contact metamorphism	Bulgan	49 45 00	103 06 00	North Mongolia	Tariat-selenge	Dipression	leucocratic granite	volcanic rocks	Upper Permian-Lower Triassic	Upper Paleozoic	North Mongolia	leucocratic granite		
113	Khyasaa bulag	Hydrothermal	Arkhangai	48 20 00	101 06 00	Mongol-Ubur baykal	Khangai	Dipression	granite			Upper Permian-Lower Triassic	North Mongolia	granite		
114	Ider uul	Hydrothermal-metasomatic	Arkhangai	48 13 00	101 37 00	Mongol-Ubur baykal	Khangai	Uplift	granite			Upper Permian-Lower Triassic	North Mongolia	granite		
115	Khuiten nuur	Hydrothermal-metasomatic	Arkhangai	48 06 00	101 56 00	Mongol-Ubur baykal	Khangai	Uplift	granite			Lower Paleozoic	North Mongolia	granite		
149	Dund galt	Sedimentary	Tub	48 12 00	104 26 00	Mongol-Ubur baykal	North Khenty	Uplift		sediment	Quaternary(QIV)		North Khenty	sediment		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(1b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling		
22	Tamir gol	Lenticular body: 200-400m	magnetite	hematite	Fe-42%	Fe-57million ton	Prospecting work						2374, 2626, 3003
23	Ikh zagzag uul	Lenticular body: 65m x 11,8m	magnetite	hematite, limonite	Fe-62%	Fe-1million ton	Prospecting work						1438, 2083, 1814
24	Erdenetiin ovoo (Central part)	Stockwork: 1350m x300m	chalcocite, chalcopyrite	malachite, azurite, covellite	Cu-0,41%, Mo- 0,016%	Cu-598790t; Mo- 21864t	Prospecting work(1988)						
33	Erdenetiin ovoo and SE(Oyuit)	Stockwork: 4km x0,6km	chalcopyrite, pyrite, molybdenite	covellite, chalcocite	Cu-0,33-0,4%	Cu-1086800t	Prospecting work						1961, 3283, 1820, 1813, 3865, 4383
34	Erdenetiin ovoo	Stockwork: 2,8km x1,3km	chalcopyrite, pyrite, covellite, bornite, etc.		Cu-0,9%	Cu-2825000t	Prospecting work						961, 1820, 1813, 1947, 1993, 4069, 4565, 2083, 3283
81	Khusheet gol	Fracture zone: 300m x50m	chalcopyrite	Pyrite	Cu-		Geological mapping(1960)** **	41 samples					1500
82	Zuukhiin gol	Stock, Dykes: 1,2km x3,5km	chalcopyrite, pyrite, molybdenite	galena, sphalerite	Cu-0,006-0,2%; Mo-0,003%		Prospecting work(1965)						1965, 3665
85	Aguin davaa	Quartz vein:	malachite	hematite	Cu-		Geological mapping(1959)** **						1438
89	Mogoin gol	Altered zone: 1500m x1000m			Cu-0,03-0,07%		Prospecting work(1986)						3665
108	Bulagt	Altered zone: 900m x400m			Cu-0,001-0,006%		Geological mapping(1979)**	434 samples		114m.cub			3156
109	Bayanzhurkh	Altered zone: 3- 5sq.m			Cu-0,003-0,005%		Geological mapping(1979)**			465,4m.cub			3156
113	Khyasaa bulag	Altered zone: 50m x0,5m	malachite	lazurite, pyrite	Cu-0,1%		Geological mapping(1980)**						3228
114	Ider uul	Fracture zone: 750m x500m	malachite	sheelite, cassiterite	Cu-0,002-0,02%		Geological mapping(1980)**	47 samples		4digs			3228
115	Khuiten nuur	Quartz vein: 100m x1,5m			Cu-0,001-0,005%; Ag-0,7g/t; Au- 0,3g/t		Geological mapping(1980)**			6digs			3228
149	Dund galt	Bed:	gold		Au-sign		Prospecting work(1984)				2lines		3719

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(2a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
150	Tsagaan galt	sedimentary	Tub	48 14 00	104 28 00	Mongol-Ubur ba ykal	Khenty	Uplift		sediment	Quaternary		North Khenty	sediment		
151	Dund naimgan	Sedimentary	Tub	48 15 30	104 30 00	Mongol-Ubur ba ykal	Khenty	Uplift		sediment	Quaternary		North Khenty	sediment		
152	Baga naimgan	Sedimentary	Tub	48 15 00	104 30 00	Mongol-Ubur ba ykal	Khenty	Uplift		sediment	Quaternary		North Khenty	sediment		
153	Baga khailaast	Sedimentary	Tub	48 17 00	104 31 00	Mongol-Ubur ba ykal	Khenty	Uplift		sediment	Quaternary		North Khenty	sediment		
156	Zuun khavchuu	Sedimentary	Tub	48 32 07	104 38 25	Mongol-Ubur ba ykal	North Khenty	Dipression		clay, pebble	Quaternary(QIV)		North Khenty	clay, pebble		
165	Jasiin buuts	Metasomatic	Bulgan	48 47 00	103 26 00	North Mongolia	Tariat-selenge	Dipression		acidic volcanic rocks	Permian(P1)		North Mongolia	acidic volcanic rocks		
166	Khukh chuluun uul	Hydrothermal	Bulgan	48 45 00	103 25 00	North Mongolia	Tariat-selenge	Dipression	diorite			Lower Permian	North Mongolia	diorite		
167	Zuun turuunii gol	Hydrothermal	Bulgan	48 53 00	103 36 00	North Mongolia	Tariat-selenge	Dipression		andesite-basalt, tuff	Lower Permian		North Mongolia	andesite-basalt, tuff		
171	No5	Hydrothermal Au	Tub	48 21 00	104 32 00	North Mongolia	Khenty	Anticlinal	granite	sandstone	Vendian-Lower Cambrian	Middle Paleozoic	north Khenty	sandstone, granite		
172	No24	Hydrothermal	Tub	48 13 00	104 24 00	North Mongolia	North Khenty	Anticlinal		meta-sandstone	Vendian-Cambrian(V-E1)		North Khenty	meta-sandstone		
173	No22	Hydrothermal Au	Tub	48 14 00	104 27 00	North Mongolia	Khenty	Anticlinal		sandstone	Vendian-Lower Cambrian		North khenty	sandstone		
174	No19	Hydrothermal Au	Tub	48 16 00	104 38 00	North Mongolia	Khenty	Anticlinal	granite	sandstone	Vendian-Cambrian(V-E1)	Middle Paleozoic	North Khenty	granite, sandstone		
188	Shar khundee	Dynamic metamorphism	Bulgan	49 48 00	103 21 00	North Mongolia	Tariat-selenge	Sinclinal	granite	andesite, andesite porphyrite, tuff	Lower Permian	Upper Permian-Lower Triassic	North Mongolia	andesite, andesite porphyrite, tuff		
195	Delger uul	Hydrothermal	Khubsgul	50 02 00	100 21 00	North Mongolia	Near Khubsgul	Sinclinal	granite			Permian(P1)		granite		
232	Occurrence-65	Hydrothermal	Bulgan	50 06 00	102 27 00	North Mongolia	Tariat-selenge	Dipression	diorite			Lower Paleozoic		diorite		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(2b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)				Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit		Drilling
150	Tsagaan galt	Gold bearing bed: 0,2-1,4m	gold		Au-10- 916,0mg/m.cub		Prospecting work(1984)				2lines	3719
151	Dund naimgan	Gold bearing beds: 4,5km long	gold		Lower bed Au- 400-700mg/m.cub; upper bed Au- 316mg/m.cub		Prospecting work(1984)				2lines	3719
152	Baga naimgan	Gold bearing bed: 0,2-1,4m wide	gold		Lower bed Au- 2655mg/m.cub; Upper bed Au- 647mg/m.cub		Prospecting work(1984)				3lines	3719
153	Baga khailaast	Gold bearing beds: Lower bed-1200m x100m; Upper bed-3200m x40m	gold		Au-1500- 5000mg/m.cub	Au-1270 kg	Prospecting work(1984)				2lines	3719
156	Zuun khavchuu	Bed: 0,8m	gold		Au-1172mg/m.cub		Prospecting work(1991)				123m	4676
165	Jasiin buuts	Altered zone: 2000m x500m			Cu-0,002-0,007%		Prospecting work(1981)*	320 samples		1028,9m.cub	334m	3538
166	Khukh chuluun uul	Quartz vein: 13m x0,15m			Cu-0,003-0,009%		Geological mapping(1971)**, prospecting work(1981)*			131,8m.cub	70,8m	3538
167	Zuun turuunii gol	Quartz vein: 1,5m x0,2m			Cu-		Geological mapping(1971)**					3538
171	No5	Quartz vein:	gold		Au-0,2g/t		Geological mapping(1981)*					3600
172	No24	Quartz vein: 0,6m			Au-0,6g/t; Ag- 1,7g/t		Geological mapping(1981)*					3600
173	No22	Quartz vein: 1-2m wide	gold		Au-0,2g/t		Geological mapping(1981)*					3600
174	No19	Quartz vein: 50m x1m			Au-0,2g/t		geological mapping(1981)*					3600
188	Shar khundee	Altered zone			Cu-0,3%		Geological mapping(1979)**					3832
195	Delger uul	Quartz vein: 3m x0,1m			Au-3*10(-7)g/t		Geological mapping(1985)*			182,9m.cub		3976
232	Occurrence-65	Quartz vein: 300m x0,8m	gold	malachite, turquoise, lazurite	Au-0,3-4,0g/t; Cu- 0,5-1,1%		Prospecting work(1984)					4041

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(3a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (I)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
233	Sukhait	Contact metamorphism	Bulgan	50 15 00	104 23 00	North Mongolia	Tariat-selenge	Dipression	granite	carbonite, terrigenous sediments	Lower-Middle Cambrian	Jurassic	North Mongolia	granite		
235	Tarbagatai-76	Hydrothermal	Selenge	50 14 00	104 23 00	North Mongolia	Tariat-selenge	Dipression	granite, granodiorite			Lower Paleozoic, Jurassic		granite, granodiorite		
239	Teshig-1	Contact metamorphism	Bulgan	49 59 00	102 29 00	North Mongolia	Tariat-selenge	Dipression	granite	volcanic rocks, sandstone, limestone	Vendian	Upper Permian-Lower Triassic		granite		
240	Ar shivert	Hydrothermal	Bulgan	49 29 00	103 05 00	North Mongolia	Tariat-selenge	Dipression		andesite porphyrite, plagiophyre, trachyte porphyrytuff	Permian		North Mongolia	andesite porphyrite, plagiophyre, tuff, trachyte porphyry		
257	Bulagt	Hydrothermal	Bulgan	50 16 00	104 22 00	North Mongolia	Tariat-selenge	Dipression	granite			Jurassic	North Mongolia	granite		
301	Ar khundee	Sedimentary	Tub	48 30 50	104 38 10	Mongol-Ubur baykal	North Khenty	Dipression		clay, pebble	Quaternary(QIV)		North Khenty	clay, pebble		
302	The mouth of Tol river	Sedimentary	Tub	48 31 00	104 32 00	Mongol-Ubur baykal	North Khenty	Dipression		sandstone, clay, pebble	Quaternary(QI-IV)		North Khenty	sand, clay, pebble		
306	Jalga-40	Sedimentary	Tub	48 15 00	104 19 50	Mongol-Ubur baykal	North Khenty	Dipression		clay, pebble	Quaternary(QIV)		North Khenty	clay, pebble		
307	Ubur nariin	Sedimentary	Tub	48 07 00	104 21 00	Mongol-Ubur baykal	North Khenty	Uplift		clay, pebble	Quaternary(QIV)		North Khenty	clay, pebble		
309	Nogoon usnii khailaast	Sedimentary	Tub	48 16 00	104 21 00	Mongol-Ubur baykal	North Khenty	Dipression		clay, pebble	Quaternary(QIV)		North Khenty	clay, pebble		
310	Jalga-48	Sedimentary	Tub	48 06 20	104 21 00	Mongol-Ubur baykal	North Khenty	Uplift		sandstone, clay, pebble	Quaternary(QIV)		North Khenty	sand, clay, pebble		
311	Uliin am	Sedimentary	Tub	48 11 00	104 21 30	Mongol-Ubur baykal	North Khenty	Uplift		sand, clay, pebble	Quaternary(QIII)		North Khenty	sand, clay, pebble		
313	Tsagaan chuluut	Sedimentary	Tub	48 10 20	104 36 10	Mongol-Ubur baykal	North Khenty	Uplift		sandstone, clay, pebble	Quaternary(QI-III)		North Khenty	sand, clay, pebble		
314	Ongotsot	Sedimentary	Tub	48 03 00	104 37 30	Mongol-Ubur baykal	North Khenty	Dipression		sandstone, clay, pebble	Neocene, Quaternary(N1-2, QI-III)		North Khenty	sand, clay, pebble		
315	Oortsog	Sedimentary	Tub	48 03 20	104 36 30	Mongol-Ubur baykal	North Khenty	Uplift		sandstone, clay, pebble	Neocene, Quaternary(N1-2, QI-III)		North Khenty	sand, clay, pebble		
316	Jalga-46	Sedimentary	Tub	48 05 00	104 22 20	Mongol-Ubur baykal	North Khenty	Dipression		clay, pebble	Neocene, Quaternary(N2, QIV)		North Khenty	clay, pebble		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(3b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)				Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit		Drilling
233	Sukhait	Greisenized zone: 300m x80m			Mo-0,09-1,28%		Prospecting work(1941, 1985)			7digs(1941)		4041
235	Tarbagatai-76	Quartz vein: 700m x2,1m	gold		Au-0,02-10g/t; Ag-2800g/t		Prospecting work(1985)			8digs		4041
239	Teshig-1	Skarn: 1500m x30m			Cu-0,3%; Au- 3,39g/t;		Prospecting work(1985)					4041
240	Ar shivert	Fracture zone: 3000m x1000m			Mo-0,0003- 0,006%		Prospecting work(1985)					4041
257	Bulagt	Stockwork: 350m	scheelite	pyrite, molybdenite, hubnerite	W-, Mo-		Prospecting work(1985)					4041
301	Ar khundee	Bed:	gold		Au-85- 225mg/m cub		Prospecting work(1991)			70m		4676
302	The mouth of Tol river	Bed: 4610m x0,67m	gold		Au-445- 500mg/m.cub	Au-1679,1kg	Prospecting work(1986)			4588,4m		4676
306	Jalga-40	Bed: 1,8m	gold		Au-173mg/m.cub		Prospecting work(1988)			108,8m		4707
307	Ubur nariin	Bed: 0,4m wide	gold		Au-187- 9099mg/m.cub		Prospecting work(1988)			183,6m		4707
309	Nogoon usnii khailaast	Bed: 0,4-1,2m	gold		Au-124- 1326mg/m.cub		Prospecting work(1987)			766,6m		4707
310	Jalga-48	Bed: 0,4-1,6m	gold		Au-21- 871mg/m.cub		Prospecting work(1989)			304,2m		4707
311	Uliin am	Bed: 0,4-2,0m	gold		Au-134- 706mg/m.cub		Prospecting work(1989)			709,6m		4707
313	Tsagaan chuluut	Bed: 0,4-2,0m	gold		Au-202- 933mg/m.cub		Prospecting work(1990)			923,6m		4707
314	Ongotsot	Bed: 0,8-1,6m	gold		Au-411- 562mg/m.cub		Prospecting work(1990)			467,6m		4707
315	Oortsog	Bed: 0,4-2,0m	gold		Au-8-58mg/m.cub		Prospecting work(1990)			450,8m		4707
316	Jalga-46	Bed: 0,4-1,2m	gold		Au-70- 604mg/m.cub		Prospecting work(1989)			388m		4707

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(4a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization
317	Jalga-47	Sedimentary	Tub	48 05 00	104 20 50	Mongol-Ubur ba ykal	North Khenty	Dipression		sandstone, clay, pebble	Quaternary(QIV)		North Khenty	sand, clay, pebble		
342	Sairiin khundee	Hydrothermal	Arkhangai	48 41 00	102 08 00	North Mongolia	Tariat-selenge	Dipression	granite, syenite porphyry	volcanic rocks	Permian(P1)	Permian-Triassic(P2-T1); Jurassic(J2-3)	North Mongolia	granitoid, syenite porphyry		
343	Amnii bulag	Hydrothermal-metasomatic	Khubsgul	49 15 00	101 34 00	North Mongolia	Tariat-selenge	Dipression	granite	green shale	Lower Riphean	Lower-Middle Devonian	North Mongolia	granite		
344	Zaidangiin davaa	Contact metamorphism	Bulgan	48 42 00	102 26 00	North Mongolia	Orkhon-selenge	Dipression	granite	carbonatized rocks	Lower Proterozoic	Lower Paleozoic	North Mongolia	granite		
358	Baga mich uul	Magmatic, hydrothermal	Bulgan	48 44 00	103 48 00	North Mongolia	Tariat-selenge	Dipression		andesite porphyry	Lower Permian		North Mongolia	andesite porphyry	Epidotization, Chlorinization	
359	Mej uul	Hydrothermal	Bulgan	48 49 00	103 41 00	North Mongolia	Tariat-selenge	Dipression		andesite porphyry	Lower Permian		North Mongolia	andesite porphyry		
360	Davaa	Hydrothermal	Bulgan	49 16 00	103 56 00	North Mongolia	Tariat-selenge	Dipression	granite	volcanic rocks	Permian	Upper Permian-Lower Triassic	North Mongolia	granite		
363	Bayan gol	Metasomatic	Arkhangai	48 45 30	100 40 20	North Mongolia	Tariat-selenge	Dipression		volcanic rocks	Middle Devonian		North Mongolia	volcanic rocks		
369	Baruun khujirt	Hydrothermal	Bulgan	50 18 00	104 25 00	North Mongolia	Tariat-selenge	Dipression	granite			Lower paleozoic	North Mongolia	granite		
370	Ereen	Contact metamorphism	Bulgan	50 06 00	102 26 00	North Mongolia	Tariat-selenge	Dipression	granite			Lower Paleozoic, Permian-Triassic(P2-T1)	North Mongolia	granite		
402	Urgen khajuu	Hydrothermal-metasomatic	Bulgan	48 03 00	102 56 00	North Mongolia	Tariat-selenge	Dipression		trachyandesite-basalt	Upper Jurassic-Lower Triassic			trachyandesite-basalt		
404	Occurrence-9	Hydrothermal	Arkhangai	48 07 00	102 38 00	North Mongolia	Tariat-selenge	Dipression	granite	sandstone	Carboniferous (C1-2)	Mesozoic(MZ1)		Granite		
405	Mogod	Hydrothermal-metasomatic	Bulgan	48 17 00	103 03 00	North Mongolia	Tariat-selenge	Dipression		andesite-basalt, trachyandesite-basalt	Permian(P2), Triassic-Jurassic(T3-J1)			andesite-basalt, trachyandesite-basalt		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(4b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
317	Jalga-47	Bed: 0,8m	gold		Au-310mg/m.cub		Prospecting work(1989)				188,8m	4707
342	Sairiin khundee	Fracture zone:	chalcopyrite	malachite, lazurite	Cu-0,001-0,002%		Geological mapping(1972)**					2043
343	Amnii bulag	Skarn: 500m x100m			Cu-0,02-0,04%; Mo-0,15%; Ag-0,02g/t; W-5,0g/t		Geological mapping(1972)**	1674 samples		484m.cub		2043
344	Zaidangiin davaa	Skarnization zone: 500m x100m			Cu-0,01-0,02%		Geological mapping(1972)**			173m.cub		2043
358	Baga mich uul				Cu-		prospecting work(1973)*					2221
359	Mej uul				Cu-0,008%		Prospecting work(1973)*					2221
360	Davaa	Fracture zone:			Cu-0,003-0,01%		prospecting work(1973)*					2221, 3832
363	Bayan gol	Altered zone: 1800m x400m			Cu-0,05-0,09%		Geological mapping(1974)**			222,7m.cub		2283
369	Baruun khujirt	Quartz vein: 14m x0,5m; Alteration zone: 1700m x2m			W-0,02-1,0%		Aero-geophysical mapping(1983)**					2432
370	Ereen	Fracture zone: 700m x20m	malachite, lazurite	chalcocite, covelline, molybdenite	Cu-3,0%;Au-1g/t; Ag-100-200g/t		Aero-geophysical mapping(1983)**					2432
402	Urgen khajuu	Altered zone: 3400m x500m			Sr-0,03-0,7%; La-0,0007-0,01%; Cu-0,002-0,03%; Ag-0,03-0,22g/t		Aero-geophysical mapping(1988)*	1937 samples	Magnetics, Electrics, Radiometrics			4396
404	Occurrence-9	Quartz vein: 100m x3m			Ag-30g/t		Aero-geophysical mapping(1988)*					4396
405	Mogod	Altered zone: 3-10m			Cu-0,007%; Zr-0,03%; Sr-0,2%		Aero-geophysical mapping(1988)*	1296 samples	Magnetics, Radiometrics			4396

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(5a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenetic province	Country rock	Alteration	Age of mineralization
406	Kholboo ovoo	Contact metamorphism	Arkhangai	48 38 00	102 07 00	North Mongolia	Tariat-selenge	Dipression	granite, diorite	andesite, dacite	Permian(P2)	Devonian(D1-2)	North Mongolia	granite, diorite		
407	Tsagaan gozgor	Hydrothermal-metasomatic	Arkhangai	48 39 00	102 12 00	North Mongolia	Tariat-selenge	Dipression	granite, granodiorite			Permian-Triassic(P2-T1)	North Mongolia	granite, granodiorite		
408	Shar khad	Hydrothermal	Bulgan	48 49 00	102 34 00	North Mongolia	Tariat-selenge	Dipression		rhyolite, volcanogenic sedimentary rocks	Devonian		North Mongolia	rhyolite, volcanogenic sedimentary rock		
410	North Oortsog	Hydrothermal-Metasomatic	Arkhangai	48 48 00	102 04 00	North Mongolia	Tariat-Selenge	Dipression		tuff-chonglomerat, tuff-sandstone, tuff-aleurolite	Permian		North Mongolia	tufficious conglomerate, tufficious sandstone, tufficious aleurolite	Silicification?	
411	Barchgar	Hydrothermal-metasomatic	Bulgan	48 36 00	102 39 00	North Mongolia	Tariat-selenge	Dipression	granite, granodiorite			Lower-Middle Devonian	North Mongolia	granite, granodiorite		
416	Tsookhor morit	Hydrothermal-metasomatic	Bulgan	48 45 00	103 16 00	North Mongolia	Tariat-selenge	Dipression	granite, syenite porphyry			Permian-Triassic(P2-T1)		granite, syenite porphyry		
417	Khar uul	Hydrothermal	Bulgan	48 42 00	103 19 00	North Mongolia	Tariat-selenge	Dipression		volcanogenic sedimentary rocks	Triassic-Jurassic(T3-J1)		North Mongolia	volcanogenic sedimentary rocks		
418	Nomgon	Dynamic metamorphism	Bulgan	48 49 00	102 27 00	North Mongolia	Tariat-selenge	Dipression	syenite-diorite			Permian-Triassic(P2-T1)	North Mongolia	syenite-diorite		
419	Ereen ikher	Dynamic metamorphism	Bulgan	48 49 00	102 35 00	North Mongolia	Tariat-selenge	Dipression		acidic volcanic rocks	Devonian(D2)		North Mongolia	acidic volcanic rocks		
420	Undrakh	Hydrothermal-metasomatic	Bulgan	48 42 00	102 46 00	North Mongolia	Tariat-selenge	Dipression	diorite	subvolcanic rocks		Paleozoic, Permian-Triassic(PZ1, P2-T1)	North Mongolia	diorite, subvolcanic rocks		
421	Aguit	Hydrothermal-metasomatic	Bulgan	48 47 00	102 57 00	North Mongolia	Tariat-selenge	Dipression	granite	acidic volcanic rocks	Devonian(D2)	Permian-Triassic(P2-T1)	North Mongolia	acidic volcanic rocks		
422	Geseg	Metasomatic	Bulgan	48 51 00	102 44 00	North Mongolia	Tariat-selenge	Dipression	granite	volcanogenic sedimentary rocks	Lower Permian	Middle Jurassic	North Mongolia	granite		
423	Zairan	Hydrothermal-metasomatic	Bulgan	48 49 00	102 42 00	North Mongolia	Tariat-selenge	Dipression	granite, diorite	conglomerate, andesite porphyry, subvolcanic rocks	Permian, Jurassic(P1, J2)	Permian-Triassic(P2-T1)	North Mongolia	granite, diorite, subvolcanic rocks		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(5b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)				Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit		Drilling
406	Kholboo ovoo	Skarn:			Cu-0,03-0,05%		Aero-geophysical mapping(1988)*	1554 samples	Magnetics, Electrics, Radiometrics			4396
407	Tsagaan gozgor	Dykes: 1-5m wide			Cu-0,01-1%; Ag-0,1-50g/t		Aero-geophysical mapping(1988)*	461 samples	Magnetics, Electrics, Radiometrics	176m.cub		4396
408	Shar khad	Altered zone			Mo-0,0007-0,07%; Cu-0,001-0,002%		Aerogeophysical mapping(1988)*	732 samples	Magnetics, Electrics, Radiometrics			4396
410	North Oortsog	Altered zone: 900m x250m	molybdenite		Cu-0,003%; Mo-0,001%; Ag-1,0 g/t		Aero-geophysical mapping(1988)*	449 samples	Magnetics, electrics			4396
411	Barchgar	Altered zone: 1500m x100m			Cu-		Geophysical mapping(1988)*	771 samples	Magnetics, Spectrometrics			4396
416	Tsookhor morit	Quartz vein: 700m x2m			Au-3-10g/t; Ag-20-500g/t; Cu-0,02-0,3%	Au-4,1t; Ag-18,4t	Geological mapping(1986)*	3160 samples	Magnetics, Electrics	278,9m.cub		4403
417	Khar uul	Diorite dykes: 200-300m	chalcopyrite	bornite, gold	Cu-0,2-0,5%, Au-215-300mg/t		Geological mapping(1986)*	1000 samples	Magnetics, Electrics			4403
418	Nomgon	Altered zone			Cu-0,001%		Geological mapping(1986)*					4403
419	Ereen ikher	Altered zone: 200m	molybdenite		Cu-0,007%; Ag-0,5g/t		Geological mapping(1986)*					4403
420	Undrakh	Vein(phenocrystal ?): 300m x150m			Cu-0,5-0,7%; Ag-1-5g/t		Geological mapping(1986)*		Magnetics, Electrics	176,6m.cub	100m	4403
421	Aguit	Altered zone: 1000m x15m	chalcopyrite	malachite, lazurite	Cu-0,001-0,005%; Au-0,1g/t		Geological mapping(1986)*	650 samples	Magnetics, Electrics			4403
422	Geseg	Fracture zone:			Mo-0,0001-0,0003%; Cu-0,003-0,01%		Geological mapping(1986)*		Electrics	230,9m.cub	206,6m	4403
423	Zairan	Vein:	chalcopyrite	turquoise, lazurite, malachite, bornite	Cu-0,1-3%		Geological mapping(1986)*		Electrics	495,8m.cub	253,7m	4403

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(6a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenetic province	Country rock	Alteration	Age of mineralization
424	Burged khyar	Hydrothermal-metasomatic	Bulgan	48 52 00	102 49 00	North Mongolia	Tariat-selenge	Dipression	granite, diorite	conglomerate, basalt, andesite porphyry	Permian, Jurassic, Quaternary(P1, J2, QII)	Permian-Triassic(P2-T1)	North Mongolia	granite, diorite		
427	Nergui (III-4-29)	Hydrothermal Au	Tub	48 24 00	104 44 00	Mongol-Ubur baykal	North Khenty	Anticlinal	granite		Middle Paleozoic		North Khenty	granite		
428	Nergui (III-4-27)	Hydrothermal Au	Tub	48 25 00	104 44 00	Mongol-Ubur baykal	North Khenty	Anticlinal	granite		Middle Paleozoic		North Khenty	granite		
430	Berkh	Hydrothermal Au	Tub	48 33 00	104 37 00	North Mongolia	Tariat-selenge	Dipression	diorite, granodiorite		Middle-Upper Ordovician		North Khenty	diorite, granodiorite		
461	Khuljiin gol	Hydrothermal-metasomatic	Bulgan	48 41 00	102 12 00	North Mongolia	Tariat-Selenge	Dipression	granitoid			Permian-Triassic(P2-T1)	North Mongolia	granitoid		
462	Oshgiin uul	Metasomatic	Arkhangai	48 44 00	102 04 00	North Mongolia	Tariat-selenge	Dipression	granite			Upper Permian-Lower Triassic		granite		
463	Mogoin gol	Magmatic	Arkhangai	48 45 00	102 04 00	North Mongolia	Tariat-selenge	Dipression	granitoid			Permian-Triassic(P2-T1)	North Mongolia	granitoid		
612	Naran	Metasomatic	Selenge	49 15 00	104 43 00	North Mongolia	Tariat-selenge	Dipression	diorite, granodiorite, gabbro-diorite, microdiorite			Upper Permian-Lower Triassic	North Mongolia	diorite, granodiorite, gabbro-diorite, microdiorite		
613	Myangan lant	Metasomatic	Selenge	49 14 00	104 48 00	North Mongolia	Tariat-selenge	Dipression	diorite, granite			Upper Permian-Lower Triassic	North Mongolia	diorite, granite		
679	Ulziit ovoo	Skarn-metasomatic	Bulgan	48 16 00	104 10 00	Mongol-Ubur baykal	North Khenty	Uplift	granite	metamorphic rocks	Proterozoic-Cambrian(PR-E1)	Triassic(T1-2)	North Khenty	Granite		
680	Oyuuit Khonkhor	Hydrothermal	Bulgan	48 10 00	102 57 00	North Mongolia	Tariat-selenge	Dipression	granite	andesite, dacite, rhyolite, tuff	Triassic-Jueassic(T2-J)		Orkhon-Selenge ore zone	andesite, dacite, rhyolite, tuff		
858	Vein-422 (Ule ore zone)	Hydrothermal	Tub	48 06 21	104 22 20	Mongol-Ubur baykal	North Khenty	Fault		green shale	Cambrian-Ordovician(E2-O1)		North Khenty	green shale		Mesozoic(MZ1)
859	Vein No41	Hydrothermal Au	Tub	48 05 55	104 30 10	Mongol-Ubur baykal	North Khenty	Fault		green schist, sandstone, siltstone	Middle Cambrian-Lower Ordovician	Ordovician	North Khenty	green schist, sandstone, siltstone		Lower Mesozoic
860	Vein-177 (Ule ore zone)	Hydrothermal	Tub	48 06 15	104 22 24	Mongol-Ubur baykal	North Khenty	Fault		green shale, sandstone, aleurolite	Cambrian-Ordovician(E2-O1)		North Khenty	green shale, sandstone, aleurolite		Mesozoic(MZ1)
874	Vein-146 (Bichigt zone)	Hydrothermal	Tub	48 06 30	104 19 25	Mongol-Ubur baykal	North Khenty	Fault	granite			Ordovician(O2-3)	North Khenty	Granite		Mesozoic(MZ1)
881	Vein-148 (Ulaan enger zone)	Hydrothermal	Tub	48 06 20	104 20 15	Mongol-Ubur baykal	North Khenty	Fault	granite	shale, sandstone	Cambrian-Ordovician(E2-O1)	Ordovician(O2-3)	north Khenty	granite		Mesozoic(MZ1)

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
424	Burged khyar	Stock: 20m x600m			Cu-0,36%; Mo-0,02%	Cu-163000; Mo-1500t	Geological mapping(1986)*	4440 samples	Magnetics, Electrics	530m.cub	319,6m	4403
427	Nergui (III-4-29)	Quartz vein: 1100m x1m			Au-0,03-4g/t	Au-1,0t	Geological mapping(1986)*					4408
428	Nergui (III-4-27)	Quartz vein: 1100m x1m			Au-0,7-4g/t	Au-1,0t	Geological mapping(1986)*			14m(1986)		4408
430	Berkh	Quartz vein: 240m x25m			Au-7,5g/t		Geological mapping(1986)*	1600 samples(1986)		252m.cub(1986)		4408
461	Khuljiin gol	Greisenized zone: 350m x100m	tin stone		Sn-0,03%; Mo-0,0006%		Prospecting work(1977)	213 samples		56m.cub		2924
462	Oshgiin uul	Greisenized zone: 250m x50m			Pb-0,03%; Zn-0,06%; Mo-0,02%		Prospecting work(1977)	419 samples	Geophysical complex work	90m.cub		2924
463	Mogoin gol	Diorite dyke: 700m x50m			Cu-0,003-0,01%		Prospecting work(1977)	213 samples		21m.cub	45m	2924
612	Naran	Altered zone			Cu-0,01-0,05%		Geological mapping(1988)*	276 samples		828,2m.cub	525,6m	4420
613	Myangan Iant	Altered zone	chalcopyrite	molybdenite, arsenopyrite, galena	Cu-		Geological mapping(1988)*					4420
679	Ulziit ovoo	Lenticular skarn:	sphalerite	chalcopyrite, magnetite, gold	Au-0,2g/t; Cu-0,07%	Cu-45000t	Prospecting work(1987)*	566 samples	Electrics	104m.cub	2100m	4084
680	Oyuut Khonkhor	Metasomatic?	pyrite, chalcopyrite, malachite		Cu-0,01%; Ag-0,2g/t; Au-4,4g/t		Geological mapping(1977, 1987)*, **	4993 samples(1987)	Magnetics, Electrics(1977,1987)	457,8m(1977); 265,3m(1977)	525m(1977); 516,3(1987)	2765, 4084
858	Vein-422 (Ule ore zone)	Quartz vein: 400m x1,4m			Au-9,25g/t	Au-3,8t	Prospecting work(1993)		Magnetics, Electrics	5digs	214,9m	4785
859	Vein No41	Quartz vein: 800m x1,2m		pyrite?(py), chalcopyrite? (cc)	Au-11,06g/t	Au-2,0t	Geological mapping(1991)		Electrics, Magnetics (1992)	6digs(1991)	174m(1992)	4785
860	Vein-177 (Ule ore zone)	Quartz vein: 100m x0,29m			Au-0,2g/t		Prospecting work(1993)		Magnetics, Electrics	4digs	216,3m	4785
874	Vein-146 (Bichigt zone)	Quartz vein: 300m x1m			Au-0,1-14,61g/t		Prospecting work(1993)			7digs	110m	4785
881	Vein-148 (Ulaan enger zone)	Quartz vein: 1000m x11,46m			Au-0,5-6,0g/t		Geological mapping(1991)			4digs(1991, 1992)	291m(1993)	4785

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(7a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization
886	Vein-163 (Ulaan enger zone)	Hydrothermal	Tub	48 06 12	104 19 55	Mongol-Ubur baykal	North Khenty	Fault	granite			Ordovician(O2-3)	North Khenty	granite		Mesozoic(MZ1)
897	Vein-164 (Ulaan enger zone)	Hydrothermal	Tub	48 06 14	104 20 08	Mongol-Ubur baykal	North Khenty	Fault	leucocratic granite			Ordovician(O2-3)	North Khenty	leucocratic granite		Mesozoic(MZ1)
911	Ore bearing dyke series zone	Hydrothermal	Tub	48 06 45	104 24 00	Mongol-Ubur baykal	North Khenty	Fault		meta-shale, metasomatic rocks?	Cambrian-Ordovician(E2-O1)		North Khenty	meta-shale, metasomatic rocks?		Mesozoic(MZ1)
935	Tsagaan chuluut zone	Hydrothermal	Tub	48 05 00	104 26 00	Mongol-Ubur baykal	North Khenty	Fault		meta-shale, meta-sandstone	Cambrian-Ordovician(E2-O1)		North Khenty	meta-shale, sandstone		Mesozoic(MZ1)
1435	Nergui-2	Hydrothermal	Khubsgul	50 33 00	100 13 00	North Mongolia	Near Khubsgul	Dipression		acidic volcanic rocks	Middle Cambrian			acidic volcanic rocks		
1436	Ust gol	Hydrothermal	Khubsgul	50 28 00	100 05 00	North Mongolia	Near Khubsgul	Dipression	microsyenite porphyry	limestone	Lower Cambrian	Jurassic		microsyenite porphyry		
1437	Egiin gol	Metasomatic	Khubsgul	50 23 00	100 12 00	North Mongolia	Near Khubsgul	Dipression	granodiorite	limestone	Lower Cambrian	Lower-Middle Devonian		granodiorite, limestone		
1439	Aduun gol	Hydrothermal	Khubsgul	50 19 00	100 13 00	North Mongolia	Near khubsgul	Dipression	syenite porphyry	sandstone	Middle Cambrian	Jurassic	Khubsgul	sandstone		Middle Cambrian
1440	Yarkhis gol	Hydrothermal	Khubsgul	50 17 00	100 23 00	North Mongolia	Near Khubsgul	Dipression	syenite porphyry			Jurassic	Khubsgul	syenite porphyry		Jurassic
1442	Quartz	Hydrothermal	Khubsgul	50 14 00	100 17 00	North Mongolia	Near Khubsgul	Dipression		aleurolite, shale, sandstone	R3			aleurolite, shale, sandstone		Riphean(R3)
1449	Tsagaan burgas	Magmatic	Khubsgul	49 56 00	100 21 00	North Mongolia	Near Khubsgul	Dipression		serpentinite, carbonite	Paleozoic(PZ2)			serpentinite, carbonite		Paleozoic(PZ2)
1488	Egiin gol	Hydrothermal	Khubsgul	49 56 00	100 23 00	North Mongolia	Near Khubsgul	Dipression		serpentinite	Paleozoic(PZ1)		North Mongolia	serpentinite	Carbonitization	Paleozoic(PZ1)

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
886	Vein-163 (Ulaanenger zone)	Quartz vein: 60m x0,3m			Au-2,43g/t		Geological mapping(1991)					4785
897	Vein-164 (Ulaanenger zone)	Quartz vein: 20m x0,5m			Au-20g/t, Ag-30g/t		Geological mapping(1991)					4785
911	Ore bearing dyke series zone	Quartz vein: 1000m x2m			Au-0,02-0,5g/t		Geological mapping(1991)			13digs		4785
935	Tsagaan chuluut zone	Quartz vein: 500m x0,57m			Au-0,5g/t		Geological mapping(1991)			12digs		4785
1435	Nergui-2	Quartz vein: 60m x0,5m	galena	limonite, sphalerite, sericite	Pb-0,08-0,1%		Geological mapping(1966)**					1725
1436	Ust gol	Syenite porphyry dyke: 600m x3,0m	columbite, apatite	cerussite, galena, monazite, fluorite, zircon, pyrite, titanite	Yb-0,01%; Ba-0,02%; Be-0,01%; Sr-0,04%; Ga-0,01%; Y-0,05%; Ce-0,3%; La-0,2%; Nb-0,006%		Geological mapping(1966)**			8m.cub		1725
1437	Egiin gol	Altered zone: 6m x1,5m	cyrtolite	fluorite, limonite, martite, magnetite, ilmenite	REE, Zn-0,003%; La-0,01%; Sr-0,09%; Y-0,003%; Ba-0,08%; Pb-0,008%		Geological mapping(1966)**			19,43m.cub		1725
1439	Aduun gol	Syenite porphyry dyke: 80m x2,5m	cyrtolite	apatite, titanite, zircon, ilmenite	La-0,1%; Nb-0,006%; Sr-0,02%; Y-0,02%; Ga-0,008%		Geological mapping(1966)**					1725
1440	Yarkhis gol	Stock: 150m x150m			Nb-0,01%; La-0,002%; Ce-0,55; Y-0,05%; Ga-0,002%		Geological mapping(1966)**					1725
1442	Quartz	Quartz vein: 50m x1,5m	gold	silver	Au-7,6g/t; Ag-0,4-3,2g/t		Geological mapping(1982)*			105m.cub		3649
1449	Tsagaan burgas	Metasomatic vein: 1200m x500m	(torite)	fluorite	Ni-0,3-0,6%; Cr-0,4-1%		Prospecting work(1989)	500 samples				4379
1488	Egiin gol	Altered serpentinite	chalcopyrite, malachite, azurite	magnetic pyrite	Cu-0,01-0,1%		Prospecting work(1965)					1812

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(8a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
1491	Altgana gol	Hydrothermal	Khubs gul	49 51 00	100 25 00	North Mongolia	Near Khubs gul	Dipression	leucocratic granite, granite	basalt	Upper Paleogene-Lower Quaternary	Permian, Jurassic(P1, J3)	North Mongolia	leucocratic granite, granite	Silicification	Jurassic(J3)
1492	Khan jargalant uul	Metasomatic	Khubs gul	49 02 00	100 00 00	North Mongolia	Near Khubs gul	Dipression	granite, granosyenite, syenite	limestone, sandstone, conglomerate	Lower-Upper Cambrian	Lower Triassic	North Mongolia	granite, granosyenite, syenite		
1493	Alag tolgoi	Metasomatic	Khubs gul	49 40 00	100 45 00	North Mongolia	Zed	Dipression	Granite			Middle Devonian, Jurassic	North Mongolia	Granite		
1494	Donkhor bulag	Metasomatic	Khubs gul	49 22 00	100 10 00	North Mongolia	Ider	Dipression		trachryholite porphyry, acidic tuff	Permian(P1)		North Mongolia	acid tuff, trachryholite porphyry	Silicification, Kaolinization, Pyritization	
1495	Nergui	Hydrothermal	Khubs gul	49 22 00	100 03 00	North Mongolia	Near Khubs gul	Dipression		acidic volcanic rocks, tuff	Upper Permian			acidic volcanic rocks, tuff		
1500	Nergui	Metasomatic	Khubs gul	49 47 00	101 52 00	North Mongolia	Zed	Dipression	granite	limestone	Lower-Middle Cambrian	Lower-Middle Cambrian	North Mongolia	granite, limestone		
1525	Khomonii gol	Hydrothermal	Khubs gul	51 15 00	100 12 00	North Mongolia	Near Khubs gul	Dipression		meta-sandstone, schist	Upper Proterozoic		North Mongolia	meta-sandstone, schist		
1529	Nergui (No74)	Metamorphogenic	Khubs gul	51 03 00	100 08 00	North Mongolia	Tuba-mongol	Uplift		crystalline shale	Upper Proterozoic			crystalline shale		
1530	Saikhan gol	Sedimentary	Khubs gul	50 52 00	100 08 00	North Mongolia	Near Khubs gul	Dipression		limestone	Lower Cambrian		North Mongolia	limestone		
1531	Baga tsagaan gol	Sedimentary	Khubs gul	50 51 00	100 04 00	North Mongolia	Near Khubs gul	Dipression		limestone, dolomite	Lower Cambrian		North Mongolia	limestone, dolomite		
1567	Khurilt gol	Hydrothermal	Khubs gul	50 39 00	100 46 00	North Mongolia	Near Khubs gul	Dipression	diorite	crystalline shale		Paleozoic(PZ1)		diorite, crystalline shale		
1568	Ult gol	Hydrothermal	Khubs gul	50 36 00	100 02 00	North Mongolia	Near Khubs gul	Dipression		limestone	Vendian		North Mongolia	limestone		
1581	Ubur teeliin gol	Hydrothermal	Khubs gul	49 18 00	100 41 00	North Mongolia	Zed	Dipression	granite			Lower-Middle Devonian		granite		
1583	Ikh khujirtiin khuree	Hydrothermal	Khubs gul	48 43 00	100 18 00	North Mongolia	Ider	Uplift	granodiorite, syenite, diorite			Lower-Middle Devonian	North Mongolia	granodiorite, syenite, diorite		
1585	Gua ulaan uul	Metasomatic	Bulgan	48 55 00	101 53 00	North Mongolia	Ider	Dipression	syenite porphyry, granosyenite	volcanogenic sedimentary rocks	Triassic(T1-2)	Triassic(T1-2)	North Mongolia	volcanogenic sedimentary rocks		
1586	Zost tolgoi	Metasomatic	Arkhangai	48 43 00	101 25 00	North Mongolia	Ider	Dipression	leucocratic granite, granite porphyry	andesite, andesite porphyry, tuff	Permian(P1)	Permian-Triassic(P2-T1)	North Mongolia	andesite, andesite porphyry, tuff		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
1491	Altgana gol	Stockwork: 850m x 550m	molybdenite		Mo-0,006-0,035%; Ag-1,5g/t	Mo-14700t	Geological mapping(1965*, 1985*)	920 samples(1985)		1269m.cub(1985)	40,8m(1985)	1812, 3976, 5000
1492	Khan jargalant uul	Skarnization zone: 90m x 10m	malachite, azurite, chrysocolla	magnetite	Cu-0,01-1,0%		Geological mapping(1975)**	475 samples		507,6m.cub		2660
1493	Alag tolgoi	Stock: 0,78sq km	scheelite		Mo-0,01%; Cu-0,01%; Sn-0,005%		Geological mapping(1975)**			400m cub		2660, 3832
1494	Donkhor bulag	Altered zone	magnetite	Pyrite	Cu-0,003%		Geological mapping(1975)**	62 samples		295,6m.cub		2660
1495	Nergui	Quartz vein: 0,7-2,0m	gold	martite, galena, magnetite	Au-0,2g/t; Ag-6,8g/t		Prospecting work(1963)	1300 samples		16digs		1812
1500	Nergui	Skarn: 50m	chalcopryrite, malachite, azurite		Cu-		Geological mapping(1964)**					1828
1525	Khornonii gol	Quartz vein: 0,05-0,1m			Mo-0,05-1,5%		Geological mapping(1968)**					1827
1529	Nergui (No74)	Thin vein.	andalusite, cyanite		Al-30-40%		Geological mapping(1967)**					1756
1530	Saikhan gol	Lenticular body: 9000m x 16m	pyrolusite	hematite	Fe-12,11%; Mn-19,6%	Fe-42,9million ton, Mn-65,5million ton	Geological mapping(1958)**,(1987)*			344m.cub(1987)		486, 938, 4286
1531	Baga tsagaan gol	Lenticular body: 7000m x 23,2m	pyrolusite, hematite		Mn-23,63%; Fe-15,75%	Mn-48million ton; Fe-32million ton	Geological mapping(1987)*,(1958)**			102,3m.cub		938, 4286
1567	Khurilt gol	Quartz-carbonate vein: 80m x 0,35m	galena	chalcopryrite, pyrite, chalcocite	Cu-0,16-0,72%		Prospecting work(1941)			150m.cub		370
1568	Ult gol	Quartz vein: 70m x 0,5m	galena	chalcopryrite, malachite, azurite	Pb-0,001-0,01%		Geological mapping(1958)**					938
1581	Ubur teeliin gol	Altered zone: 4000m x 300m			Pb-0,09%		Geological mapping(1974)**	287 samples		150m.cub		2256
1582	Ilkh khujirtiin khuree	Fracture zone: 200m x 50m	chalcopryrite, malachite, cuprite	pyrite, covillite, tenorite	Cu-2,1%		Prospecting work(1966)	709 samples		177m.cub		1812, 1814
1585	Gua ulaan uul	Altered zone: 4500m x 200m			Cu-0,12-0,25%; Au-0,1g/t		Geological mapping(1973)**; geophysical survey(1976)*	724 samples(1973)	Complex work(1976)	255,7m.cub(1973)		2043, 2676
1586	Zost tolgoi	Altered zone: 2,5km x 1km	malachite, chalcopryrite	galena, sphalerite	Cu-0,01-0,02%; Ag-0,1g/t		Prospecting work(1981, 1983)*, *	6 sq.km field	Magnetics, Electrics		408,6m	2283, 3703, 2924

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(9a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)				
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization	
1587	Yargait	Hydrothermal	Arkhangai	48 47 00	101 19 00	North Mongolia	Ider	Uplift	leucocratic granite porphyry				Permian(P2)	North Mongolia	leucocratic granite porphyry		
1608	Usnii gasar	Hydrothermal	Arkhangai	48 19 30	101 02 30	North Mongolia	Tariat-selenge	Dipression	granite				Lower Triassic		granite		
1609	Buriigin gorkhi	Hydrothermal	Arkhangai	48 37 15	101 07 10	North Mongolia	Ider	Uplift	granite, granosyenite, syenite	dacite, andesite-dacite, porphyrite, rhyolite porphyrite	Lower Devonian	Upper Permian-Lower Triassic		granite, granosyenite, syenite			
1611	Khavtgai mod	Hydrothermal	Arkhangai	48 09 00	101 55 00	North Mongolia	Tariat-selenge	Dipression	granite				Lower paleozoic		granite		
1612	Khuiten nuur		Arkhangai	48 05 00	101 56 00				granite	acidic volcanic rocks	Lower-Upper Permian	Lower Paleozoic		acidic volcanic rocks			
1802	Eren gol	Sedimentary	Bulgan	50 05 00	102 28 00	North Mongolia	Zed	Dipression		sediment		Quaternary(QIII-IV)		Zed	sediment		
1803	Tsagaan chuluutiin bulag	Sedimentary	Bulgan	50 07 00	103 44 00	North Mongolia	Zed	Dipression		sand, pebble		Quaternary(QIV)		North Mongolia	sand, pebble		
1865	Zaamar nuruu	Hydrothermal Au	Tub	48 32 00	104 36 00	Mongol-Ubur baykal	North Khenty	Uplift	gabbro-diorite			Upper Triassic-Jurassic		North Khenty	gabbro-diorite		Upper Triassic-Jurassic
1918	Urmen tsagaan nuur	Hydrothermal	Bulgan	48 48 00	102 55 00	North Mongolia	Tariat-selenge	Dipression		trachyte porphyry, trachyandesite porphyry		Triassic(T)			trachyte porphyry, trachyandesite porphyry		
1922	Khudag	Sedimentary	Tub	48 25 00	104 42 00	Mongol-Ubur baykal	North Khenty	Uplift		sand, pebble, clay		Quaternary(QII-III)		North Khenty	sand, pebble, clay		
1923	Uguumeriin am	Sedimentary	Tub	48 26 00	104 34 00	Mongol-Ubur baykal	North Khenty	Uplift		sediment		Quaternary		North Khenty	sediment		
1924	Ailt khundee	Sedimentary	Tub	48 23 00	104 33 00	Mongol-Ubur baykal	North Khenty	Uplift		clay, pebble, sediment		Quaternary		North Khenty	clay, pebble, sediment		
1926	Ar tamsag	Sedimentary	Tub	48 20 00	104 31 00	Mongol-Ubur baykal	North Khenty	Dipression		clay, sand, pebble		Quaternary		North Khenty	clay, sand, pebble		
1928	Ubur urt	Sedimentary	Tub	48 17 00	104 46 00	Mongol-Ubur baykal	North Khenty	Dipression		sandstone, conglomerate, clay, sand, pebble		K1, N2		North Khenty	clay, sand, pebble		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(9b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
1587	Yargait	Lenticular? stockwork: 200m x40m	cuprite, molybdenite		Cu-0,007-0,3%		Prospecting work(1984)	270 samples	Electrics	2m cub		3703
1608	Usnii gasar	Altered zone: 2,3sq km	pyrite		Cu-0,001-0,03%; Au-0,1-0,2g/t		Geological mapping(1980)**			31digs	4holes	3228
1609	Burigiin gorkhi	Fracture zone:	malachite		Cu-0,005-0,01%		Geological mapping(1975)**			122,3m cub		2283
1611	Khavtgai mod	Fracture zone:	malachite		Cu-0,04%		Geological mapping(1980)**					3228
1612	Khuiten nuur	Quartz vein: 100m x1,5m	gold		Au-0,1-0,3g/t; Ag- 0,2-0,7g/t		Geological mapping(1980)**					3228
1802	Eren gol	Bed: 0,6m	gold		Au-5g/t		Prospecting work(1942), geological mapping(1994)**			36,7m pits(1942), 30 pits (1994)		372, 4862
1803	Tsagaan chuluutiin bulag	Valley: 2500m x50m	gold		Au-sign		Prospecting work(1942)			30,4m pits		372
1865	Zaamar nuruu	Quartz vein: 80m x1,5m	gold	malachite, limonite	Au-45g/t		Geological mapping(1972)**					2097, 1960
1918	Urmen tsagaan nuur	Altered zone: 5km x2km	chalcopyrite	malachite	Cu-0,008-0,01%; Au-0,1g/t; Ag- 2,3-6,6g/t		Geological mapping(1973)**	1007 samples		283,4m.cub		2043
1922	Khudag	Gold bearing bed: 0,4m wide	gold		Au-14154 mg/m.cub		Prospecting work(1981)				1798m	4304
1923	Uguumeriin am	Gold bearing bed: 2000m x6m	gold		Au-100- 367mg/m.cub		Geological mapping(1971)**, prospecting work(1981)			6pits		1960
1924	Ailt khundee	Gold bearing bed: 1m wide	gold		Au-0,282 mg/m.cub		Geological mapping(1979)*			28m pits		3600
1926	Ar tamsag	Gold bearing bed: 100-340m	gold		Au-668- 1702mg/m.cub	Au-424,1kg	Prospecting work(1981)			7018m pits	1528m	4304
1928	Ubur urt	Gold bearing flow: 400m	gold		Au(II, III)-16-69- 8, 0mg/m.cub, Au(I)-8-276, 0mg/m.cub		Prospecting work(1981)				369,6m	4304

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(10a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization
1929	Baruun chingelt	Sedimentary	Tub	48 14 00	104 41 00	Mongol-Ubur baykal	North Khenty	Dipression	granite	sandstone, clay, pebble	Carboniferous(C1, N2)	Paleozoic(PZ2)	North Khenty	clay, pebble		
1930	Shar borjin uul	Hydrothermal Au	Tub	48 03 00	104 41 00	Mongol-Ubur baykal	North Khenty	Dipression	granite		Middle Paleozoic		North Khenty	granite	Berizitization, Limonitization	Upper Paleozoic
1931	Dulaan	Sedimentary	Tub	48 12 00	104 40 00	Mongol-Ubur baykal	North Khenty	Dipression	granite	sandstone, shale, clay, pebble	Lower Carboniferous, N2	Middle Paleozoic	North Khenty	clay, pebble		
1933	Boodog	Sedimentary	Tub	48 09 00	104 55 00	Mongol-Ubur baykal	North Khenty	Dipression		Sand, pebble, clay	Quaternary		North Khenty	Sand, pebble, clay		
1934	Badarkh	Hydrothermal Au	Tub	48 08 00	104 56 00	Mongol-Ubur baykal	North Khenty	Dipression	granite	sandstone, siltstone	Lower-Middle Paleozoic		North Khenty	sandstone, siltstone	Berizitization, Silicification	Middle Paleozoic
1935	Tsogt	Hydrothermal	Tub	48 06 00	104 20 00	Mongol-Ubur baykal	North Khenty	Dipression		meta-sandstone	Paleozoic(PZ1)		North Khenty	meta-sandstone		Permian
1936	Tsagaan chuluut	Hydrothermal, placer	Tub	48 04 00	104 55 00	Mongol-Ubur baykal	North Khenty	Uplift	granite	sandstone	Lower Paleozoic	Middle Paleozoic	North Khenty	granite, sandstone		
2756	Yashilt-II (N4)	Magmatic	Selenge	48 56 00	104 50 00	North Mongolia	Tariat-selenge	Dipression		siltstone	Lower Carboniferous		North Mongolia	siltstone		
2757	Zuslan tolgoi-18	Magmatic, metasomatic	Selenge	48 54 00	104 48 00	North Mongolia	Tariat-selenge	Graben	diorite	siltstone	Lower Carboniferous	Upper Permian-Lower Triassic	North Mongolia	diorite		
2760	Shar us gol	Sedimentary	Selenge	48 51 00	104 58 00	North Mongolia	Tariat-selenge	Horst		sand, pebble	Quaternary(QIII)		North Khenty	sand, pebble		
2761	Bayantsogt	Metamorph	Selenge	48 51 00	104 48 00	North Mongolia	Tariat-selenge	Graben		aleurolite, claystone	Lower Carboniferous			aleurolite, claystone	Silicification(aleurolite-ornamental rock)	
2763	Khoshuu tolgoi	Hydrothermal-metasomatic	Selenge	48 49 00	104 47 00	North Mongolia	Tariat-selenge	Graben	granite	sandstone, siltstone, conglomerate	Lower Carboniferous	Upper Permian-Lower Triassic	North Mongolia	granite		
2767	Tol river's bank	Sedimentary	Selenge	48 44 00	104 44 00	North Mongolia	Tariat-selenge	Horst		sandstone, clay, pebble	Quaternary(QII-III)		North Khenty	sand, clay, pebble		
2770	Tol river	Sedimentary	Selenge	48 42 00	104 45 00	North Mongolia	Tariat-selenge	Horst		sandstone, clay, pebble	Quaternary(QIV)		North Khenty	sand, clay, pebble		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(10b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)				Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit		Drilling
1929	Baruun chingelt	Gold bearing bed: 0,4-1m wide	gold		Au-177-1169 mg/m.cub		Prospecting work(1981)				1027,4m	4304
1930	Shar borjin uul	Altered zone: 900m x100m	gold	galena, chalcopyrite, sphalerite, malachite	Au-0,006-88,64g/t		Geophysical mapping(1984)	3725 samples(1984)	Magnetics (1984)			3801
1931	Dulaan	Gold bearing flow	gold		Au-43- 160mg/m.cub		Prospecting work(1981)				419,2m	4304
1933	Boodog	Gold bearing bed: 0,4m wide	gold		Au-100- 420mg/m.cub		Prospecting work(1988)				784,4m	4304
1934	Badarkh	Sulfied zone: 3500m x220m	gold	chalcopyrite, pyrite, galena, sphalerite	Au-1-3g/t		Geological mapping(1984)*			713m.cub	1325m(1984)	3979
1935	Tsogt	Quartz vein:	gold		Au-0,1-0,2g/t		Geological mapping(1985)*	1600 samples				3979
1936	Tsagaan chuluut	Gold bearing bed- 3,5m; Quartz vein- 70m x2,0m; Alteration zone- 150m x20m	gold		Au(quartz vein) - 0,01-3,0g/t; Au(alt zone)- 0,3g/t; Au- 0,02 mg/m.cub		Geological mapping(1985)*		Magnetics	3616,9m.cub	610,4m	3988, 3979
2756	Yashilt-II (N4)	Diorite stock: 100m x50m			Mo-0,02%	Mo-135t	Geological mapping(1991)*					4548
2757	Zuslan tolgoi-18	Altered zone: 500m x500m			Cu-0,01%	Cu-10,125t	Geological mapping(1991)*					4548
2760	Shar us gol	Bed(1): 440m x1,2m; Bed(2): 220m	gold		Au-20mg/m.cub	Au-270kg	Geological mapping(1991)*				50m	4548
2761	Bayantsogt	Aleurolite bed: 100m x100m				P2=8000m.cub	Geological mapping(1991)*					4548
2763	Khoshuu tolgoi	Quartz vein: 100m x0,2m	chalcopyrite	malachite, pyrite	Cu-0,05-1,0%	Cu-11,4t	Geological mapping(1991)*		Electrics			4548
2767	Tol river's bank	Bed(1): 25000m x180m; Bed(2): 5000m x60m	gold		Au(I)- 580mg/m.cub; Au(II)- 1660mg/m.cub	Au(I)-1461kg, Au(II)-398kg	Geological mapping(1991)*			208m pits		4548
2770	Tol river	Bed: 5000m x150m	gold		Au-1080mg/m.cub	Au-648kg	Geological mapping(1991)*				1500m	4548

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(11a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
2772	Bulgiin sair	Sedimentary	Selenge	48 42 00	104 44 00	North Mongolia	Tariat-selenge	Horst		aleurolite, clay	Quaternary			aleurolitized clay		
2774	Anand (No109)	Metasomatic Au occurrence	Selenge	48 41 00	104 59 00	North Mongolia	Tariat-selenge	Graben	granodiorite, granite		Middle-Upper Ordovician	Lower Jurassic	North Khenty	granodiorite, granite	Silicification, Beresitization	Lower Jurassic
3356	Jargalant	Hydrothermal-metasomatic	Bulgan	50 15 00	102 45 00	North Mongolia	Zed	Dipression	leucocratic granite	schist	Vendian-Lower Cambrian	Middle-Upper Devonian		leucocratic granite		
3511	Ar zorlogo	Sedimentary	Bulgan	50 02 00	102 10 00	North Mongolia	Zed	Dipression		sediment	Quaternary(QIII-IV)		Zed	sediment		
3743	118 vein	Hydrothermal Au	Tub	48 16 40	104 33 45	North Mongolia	Tariat-selenge	Dipression		clay schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		clay schist, sandstone		
3744	117 vein	Hydrothermal Au	Tub	48 16 35	104 33 20	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3745	194c vein	Hydrothermal Au	Tub	48 15 25	104 33 05	North Mongolia	Tariat-selenge	Dipression		clay schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		clay schist, sandstone		
3746	188 vein	Hydrothermal Au	Tub	48 16 35	104 31 35	North Mongolia	Tariat-selenge	Dipression		schist, sandstone				schist, sandstone		
3747	188-1 vein	Hydrothermal Au	Tub	48 16 35	104 31 40	Central Mongolia	Tariat-selenge	Dipression		clay schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		clay schist, sandstone		
3748	191 vein	Hydrothermal-metasomatic	Tub	48 16 35	104 31 27	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3749	260, 194, 194a, 194b veins	Hydrothermal Au	Tub	48 15 44	104 35 05	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3750	197 vein	Hydrothermal Au	Tub	48 18 03	104 35 07	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3751	56 vein	Hydrothermal Au	Tub	48 16 36	104 34 50	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3752	56a vein	Hydrothermal Au	Tub	48 16 54	104 34 49	North Mongolia	Tariat-selenge	Dipression		sandstone, schist	Middle Cambrian-Lower Ordovician	Ordovician		sandstone, schist		
3753	55 vein	Hydrothermal Au	Tub	48 16 45	104 35 03	North Mongolia	Tariat-selenge	Dipression		sandstone, schist	Middle Cambrian-Lower Ordovician	Ordovician		sandstone, schist		
3754	115 vein	Hydrothermal-metasomatic	Tub	48 16 11	104 31 38	North Mongolia	Tariat-selenge	Dipression		sandstone, schist	Middle Cambrian-Lower Ordovician	Ordovician		sandstone, schist		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(11b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
2772	Bulgiin sair	Clay bed: 2,0m (wide)				Clay-P2=500000m.cub	Geological mapping(1991)*			40m pits		4548
2774	Anand (No109)	Altered zone: 600m x5,0m			Au-0,1-1,0g/t	Au-0,54t	Geological mapping(1991)*		Magnetics, Electrics(1991)	254,7m.long		4548
3356	Jargalant	Fracture zone: 80m x2m			Cu-0,72%		Prospecting work(1988)					4552
3511	Ar zorlogo	Bed: 1350m x216m	gold		Au-3,77mg/m.cub	Au-2,03kg	Geological mapping(1997)*			18pits		5170
3743	118 vein	Altered zone: 30m	pyrite, chalcopyrite	malachite, azurite	Au-0,1-192g/t	Au-6,6t	Prospecting work(1989)			Mining work 157m (1989)		4706
3744	117 vein	Quartz vein: 300mx 1,6m			Au-0,1-50,9g/t	Au-1,7t	Prospecting work(1989)			2digs(1989)	1hole(1989)	4706
3745	194c vein	Quartz vein:	pyrite, chalcopyrite		Au-0,5-60,2g/t	Au-2,1t	Prospecting work(1989)			13287m.cub (1989)	3holes(1989)	4706
3746	188 vein	Quartz vein:	pyrite, magnetic pyrite		Au-		Prospecting work(1989)					4706
3747	188-1 vein	Hydro-metasomatic: 40m	pyrite, chalcopyrite		Au-0,1-66,0g/t	Au-1,6t	Prospecting work(1989)			2digs(1989)		4706
3748	191 vein	Hydro-metasomatic? (Hydro-meta alteration): 10m wide	pyrite, chalcopyrite, galena		Au-0,1-72,4g/t	Au-1,1t	Prospecting work(1989)				2holes(1989)	4706
3749	260, 194, 194a, 194b veins	Quartz vein: 600m	pyrite, chalcopyrite				Prospecting work(1989)				2holes(1989)	4706
3750	197 vein	Hydro-metasomatic: 15-30m	pyrite, chalcopyrite, magnetic pyrite		Au-0,1-21,01g/t	Au-0,68t	Prospecting work(1989)				909,6m(1989)	4706
3751	56 vein	Quartz vein: 1000m x7,8m	pyrite, chalcopyrite		Au-0,1-89,5g/t	Au-2,3t	Prospecting work(1989)				909,6m(1989)	4706
3752	56a vein	Quartz vein: 500m x1,7m	chalcopyrite, pyrite		Au-6,35g/t	Au-0,24t	Prospecting work(1989)					4706
3753	55 vein	Quartz vein: 1300m x 7m	pyrite, magnetic pyrite		Au-1,8g/t	Au-1,1t	Prospecting work(1989)				1716,1m(1989)	4706
3754	115 vein	Quartz vein: 300m x3m	pyrite, galena		Au-0,1-130g/t	Au-3,2t	Prospecting work(1989)				1225m(1989)	4706

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(12a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
3755	188-2 vein	Hydrothermal Au	Tub	48 16 32	104 31 20	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3756	188-3 vein	Hydrothermal Au	Tub	48 16 35	104 31 25	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3757	189 vein	Hydrothermal Au	Tub	48 16 14	104 32 20	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
3758	Vein-107	Hydrothermal	Tub	48 17 04	104 29 32	North Mongolia	Tariat-selenge	Dipression		sandstone, shale	Cambrian-Ordovician(E2-O1)			sandstone, shale		Mesozoic(MZ1)
3759	198, 181, 182, 183 veins	Hydrothermal Au	Tub	48 14 15	104 30 45	North Mongolia	Tariat-selenge	Dipression		schist, sandstone	Middle Cambrian-Lower Ordovician	Ordovician		schist, sandstone		
4023	Occurrence-16	Hydrothermal Au occurrence	Bulgan	50 15 15	104 28 30	North Mongolia	Zelter	Dome/cupola	granite				Zelter	granite	Silicification, Sulphidization	
4024	Occurrence-14	Hydrothermal Au	Bulgan	50 15 40	104 27 35	North Mongolia	Zelter	Dome/cupola	granite				Zelter	granite	Sulfidization	
4025	Occurrence-7	Hydrothermal Au	Bulgan	50 17 05	104 31 03	North Mongolia	Zelter	Dome/cupola	granite		Middle Jurassic		Zelter	granite		
4026	Occurrence-15	Hydrothermal Au	Bulgan	50 15 30	104 27 48	North Mongolia	Zelter	Dome/cupola	granite		Middle Jurassic		Zelter	granite	Pyritization, Limonitization	
4027	Occurrence-8	Hydrothermal Au	Bulgan	50 16 27	104 29 46	North Mongolia	Zelter	Dome/cupola		sandstone	Lower-Middle Cambrian		Zelter	sandstone		
4028	Occurrence-4	Hydrothermal Au	Bulgan	50 17 45	104 30 40	North Mongolia	Zelter	Dome/cupola	granite		Middle Jurassic		Zelter	granite	Pyritization, Silicification	
4029	Occurrence-5	Hydrothermal Au	Bulgan	50 17 50	104 31 30	North Mongolia	Zelter	Dome/cupola	granite		Middle Jurassic		Zelter	granite	Pyritization, Limonitization	
4030	Occurrence-6	Skarn	Bulgan	50 17 20	104 34 10	North Mongolia	Zelter	Dome/cupola		meta-sandstone	Lower-Middle Cambrian		Zelter	Meta-sandstone		
4031	Occurrence-24	Hydrothermal	Bulgan	50 13 10	104 28 08	North Mongolia	Zelter	Dome/cupola	granosyenite	sandstone	Lower-Middle Cambrian	Middle Jurassic	Zelter	granosyenite		
4032	Gatsuurkhan	Hydrothermal Au	Bulgan	50 10 02	104 25 00	North Mongolia	Zelter	Dome/cupola	granite	limestone, sandstone	Lower-Middle Cambrian	Middle Jurassic	Zelter	granite	Pyritization	
4033	Occurrence-30	Hydrothermal Au	Bulgan	50 17 23	104 33 28	North Mongolia	Zelter		leucocratic granite	sandstone	Lower-Middle Cambrian	Middle Jurassic	Zelter	leucocratic granite		
4034	Baiv-44	Hydrothermal	Selenge	50 22 58	104 56 00	North Mongolia	Zelter	Deep fault	amazonite granite	andesite	Lower Permian		Zelter	amazonite granite		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(12b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
3755	188-2 vein	Quartz vein: 300m x 2,5m	pyrite, magnetic pyrite		Au-0,5-16,3g/t		Prospecting work(1989)				2holes	4706
3756	188-3 vein	Hydrothermal alteration			Au-0,5-10,0g/t	Au-0,35t	Prospecting work(1989)				2holes	4706
3757	189 vein	Hydrothermal metasomatic	pyrite, chalcopyrite		Au-0,1-50g/t	Au-0,84t	Prospecting work(1989)				1882,5m(1989)	4706
3758	Vein-107	Quartz vein: 200m x2m	pyrite, chalcopyrite		Au-30g/t	Au-0,7t	Prospecting work(1989)					4706
3759	198, 181, 182, 183 veins	Hydrothermal metasomatic	Pyrite, magnetic pyrite		Au-6,8g/t	Au-2,4t	Prospecting work(1989)					4706
4023	Occurrence-16	Stockwork: 500m x 10m	gold	molybdenite, galena	Au-0,03g/t; Ag-70g/t	Au-40,5kg; Ag-67,5kg	Geological mapping(1995)*				3digs	5031
4024	Occurrence-14	Stockwork	gold		Au-0,2g/t	Au-1,6kg	geological mapping(1995)*				3digs	5031
4025	Occurrence-7	Stockwork: 50m x50m	gold	pyrite	Au-0,2g/t	Au-67,5kg	Geological mapping(1996)*					5031
4026	Occurrence-15	Stockwork: 700m x0,2m			Au-0,2g/t; Ag-30,0g/t	Au-3,7kg; Ag-567kg	Geological mapping(1995)*				2digs	5031
4027	Occurrence-8	Stockwork	gold		Au-0,2g/t	Au-34kg	Geological mapping(1994)*					5031
4028	Occurrence-4	Altered zone: 50m x50m	gold		Au-0,01g/t	Au-3,3kg	Geological mapping(1996)*					5031
4029	Occurrence-5	Altered zone: 100m x50m	gold		Au-0,02g/t	Au-21,6kg	Geological mapping(1996)*					5031
4030	Occurrence-6	Lenticular body: 60m x20m	gold		Au-0,01g/t	Au-3,2kg	Geological mapping(1996)*					5031
4031	Occurrence-24	Quartz vein: 200m x200m	gold		Au-0,01g/t	Au-108kg	Geological mapping(1996)*					5031
4032	Gatsuurkhan	Altered zone: 400m x150m	gold		Au-0,02g/t	Au-324kg	Geological mapping(1994)*	44m ² fields				5031
4033	Occurrence-30	Stockwork: 200m x150m	gold		Au-0,02g/t	Au-81kg	Geological mapping(1996)*					5031
4034	Baiv-44	Quartz vein: 250m x100m	gold	limonite, hydrogeotite, pyrite	Au-0,02-0,2g/t	Au-540kg	Geological mapping(1996)*				3digs	5031

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(13a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (I)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
4035	Baiv-45	Hydrothermal	Selenge	50 23 20	104 56 25	North Mongolia	Zelter	Deep fault	granite	andesite	Lower Permian		Zelter	granite		
4041	Nomt uul	Skarn	Bulgan	50 12 57	104 36 20	North Mongolia	Zelter, Buteeliin nuruu	Deep fault	leucocratic granite	meta-andesite, meta-aleurolite	Lower Permian	Middle Jurassic	zelter	leicogranite		
4042	Khuut	Skarn	Bulgan	50 13 35	104 37 02	North Mongolia	Zelter, Buteeliin nuruu	Deep fault	leucocratic granite	meta-andesite, meta-aleurolite	Lower Permian	Middle Jurassic	Zelter	Leicogranite		
4043	Baiv-152	Sedimentary	Selenge	50 22 00	104 54 00	North Mongolia	Zelter, Buteeliin nuruu	Dipression		sand, pebble	Quaternary(QIV)		Zelter	sand, pebble		
4044	Baiv-153	Sedimentary	Selenge	50 22 30	104 56 00	North Mongolia	Zelter, Buteeliin nuruu	Dipression		sand, pebble	Quaternary		Zelter	sand, pebble		
4045	Mukhar baiv-155	Sedimentary	Selenge	50 22 30	104 58 45	North Mongolia	Zelter, Buteeliin nuruu	Dipression		sand, pebble, clay	Quaternary		Zelter	sand, pebble, clay		
4046	Monostei-154	Sedimentary	Selenge	50 24 58	104 14 15	North Mongolia	Zelter-Buteeliin nuruu	Dipression		sand and clay	Quaternary(QIV)		North Mongolia	sand and clay		
4049	Baruun khujir-151	Sedimentary	Bulgan	50 13 00	104 34 00	North Mongolia	Zelter, Buteeliin nuruu	Dipression		sandstone, clay, pebble	Quaternary(QIV)		Zelter	sand, clay, pebble		
4287	Bismuth occur-99		Selenge	50 14 40	104 53 20	North Mongolia	Zelter, Zed	Fault	alkaline granite			Middle Proterozoic	Buteeliin nuruu, Egiin gol	alkaline granite		
4288	Bismuth occur-100		Selenge	50 14 40	104 53 20	North Mongolia	Zelter, Zed	Fault	granite-gneiss			Middle Proterozoic	Buteeliin nuruu, Egiin gol	granite-gneiss		
4290	Maikhan uul		Selenge	50 15 57	104 54 37	North Mongolia	Zelter, Zed	Fault	granite-gneiss			Middle Proterozoic	Buteeliin nuruu, Egiin gol	granite-gneiss		
4291	Kheregch		Selenge	50 15 57	104 54 37	North Mongolia	Zelter, Zed	Fault	gneissose granite			Middle Proterozoic	Buteeliin nuruu, Egiin gol	gneissose granite		
4302	Ulent		Selenge	50 14 50	104 52 55	North Mongolia	Zelter, Zed	Fault	granite			Middle Proterozoic	Buteeliin nuruu, Egiin gol	granite		
4372	Khirbes uul	Hydrothermal	Khubsgul	50 26 10	102 00 30	North Mongolia	Tariat-selenge	Dipression		oligomict-flishoid sediments	Cambrian(E1)			oligomict-flishoid sediments		
4379	Subarga uul	Hydrothermal	Khubsgul	50 23 00	102 04 40	North Mongolia	Tariat-selenge	Dipression		limestone, aleurolite, sandstone, shale	Cambrian(E1)			limestone, aleurolite, sandstone, shale		
4380	Lusiin ovoo tolgoi	Contact metamorphism	Bulgan	50 09 15	102 44 30	North Mongolia	Tariat-selenge	Dipression	granite			Upper Permian-Lower Triassic		granite		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(13b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling		
4035	Baiv-45	Quartz vein: 250m x80m	gold	limonite, goethite?, pyrite	Au-0,02-0,2g/t	Au-540kg	Geological mapping(1996)*				3digs		5031
4041	Nomt uul	Lenticular body: 200m x80m	gold		Au-0,03g/t, Mo-0,001%	Au-43kg	Geological mapping(1994)*						5031
4042	Khuut	Lenticular body: 400m x300m	gold		Au-0,01g/t; Cu-0,01%	Au-162kg	Geological mapping(1994)*						5031
4043	Baiv-152	Bed: 2km x0,4km	gold		Au-580mg/m.cub	Au-18kg	Geological mapping(1996)*				2line pits		5031
4044	Baiv-153	Placer:	gold		Au-		Geological mapping(1996)*				1line pits		5031
4045	Mukhar baiv-155	Placer:	gold		Au-		Geological mapping(1996)*				1line pits		5031
4046	Monostei-154	Placer: 0,4m deep	gold		Au-30,0mg/m.cub		Geological mapping(1995)*				1line pits		5031
4049	Baruun khujir-151	Bed	gold		Au-sign		geological mapping(1995)*				2pits		5031
4287	Bismuth occur-99	Quartz vein: 20m x0,5m			Bi-0,01%; W-0,002%	Bi-0,054t; W-0,01t	Geological mapping(1996)*						5031
4288	Bismuth occur-100	Quartz veins:600m x7m			Bi-0,01%; W-0,001%	Bi-2,26t; W-0,22t	Geological mapping(1996)*						5031
4290	Maikhan uul	Quartz vein: 10m x0,4m	bismuth		Bi-0,07%; Au-0,01g/t	Bi-0,15t	Geological mapping(1996)*						5031
4291	Kheregch	Quartz vein: 25m x1,5m			Bi-0,03%; W-0,005; Ag-1g/t	Bi-0,6t	Geological mapping(1996)*						5031
4302	Ulent	Quartz vein: 50m x1,2m	bismuth	tungstenite	Bi-0,05-0,1%; W-0,01%; Ag-1-20g/t; Au-0,01g/t	Bi-10,0t; W-5,0t; Ag-0,1t	Geological mapping(1996)*						5031
4372	Khirbes uul	Altered zone: 120m x850m	malachite	azurite	Cu-0,002-0,03%		Geological mapping(1992)**						4862
4379	Subarga uul	Altered zone: 100m x800m	malachite	azurite	Cu-0,002-0,03%; Mo-0,00015-0,0002%		Geological mapping(1992)**						4862
4380	Lusiin ovoo tolgoi	Skarn: 180m x20m			Cu-0,07-1%; Ag-0,00005%		Geological mapping(1992)*	45 samples			35,53m.cub		4862, 5170

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(14a/17)

Eastern part of the survey area

No	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
4381	Ovoonii bulan	Contact metamorphism	Bulgan	50 10 00	102 41 30	North Mongolia		Dipression		andesite-rhyolite	Vendian-Lower Cambrian			andesite-rhyolite		
4407	Baruun khujir		Bulgan	50 16 38	104 26 00	North Mongolia	Zelter	Fault		Sandstone			Buteeliin nuruu	Sandstone		
4625	Serkh tsakhir uul	Hydrothermal-metasomatic	Khubsgul	50 11 15	102 16 10	North Mongolia	Zed			andesite, tuff, limestone	Vendian-Cambrian(V-E1, E1)		Zed	andesite, tuff, limestone	Epidotization, Brecciation	Cambrian(E)
4626	Salkhiitiin ekh	Hydrothermal	Bulgan	50 10 40	102 20 50	North Mongolia	Zed		syenite	meta-volcanic rocks	Vendian-Cambrian(V-E1)	Triassic-Jurassic(T3-J1)	Zed	meta-volcanic rocks	Epidotization, Limonitization, Brecciation	
4627	Khust	Contact metamorphism	Bulgan	50 11 30	102 28 50	North Mongolia	Zed		granite	acidic and alkaline metaeffusive rocks	Vendian-Cambrian	Cambrian, Jurassic(E2-3, J2-3)	Zed	granite	Hornfelsization, Silicification	Lower Cambrian
4628	Jargalant	Hydrothermal	Bulgan	50 14 44	102 42 54	North Mongolia	Zed		granite, granodiorite, leucocratic granite	meta-andesite,	Vendian-Cambrian(V-E1)	Cambrian, Permian-Triassic(E2-3, P2-T1)	Zed	granite, granodiorite, leucocratic granite	Silicification, Epidotization, Carbonitization, Chloritization	Cambrian
4629	Salkhiitiin gol	Contact metamorphism	Khubsgul	50 07 30	102 11 50	North Mongolia	Zed		granite, syenite, quartz-syenite	andesite-basalt, limestone, andesite, tuffaceous aleurolite	Cambrian(E1-2, E1, V-O1)	Devonian, Permian-Triassic(D2, P2-T1)	Zed	andesite-basalt, limestone, andesite, tuff-aleurolite	Skarnization, Epidotization, Sulphidization, Silicification, Marlization, limonitization	Cambrian(E)
4630	Ar zorlogo	Hydrothermal	Bulgan	50 05 30	102 10 00	North Mongolia	Zed		alkaline syenite, leucocratic granite	andesite, limestone, siltstone, conglomerate	Lower Cambrian	Devonian, Permian-Triassic(D2, P2-T1)	Zed	alkaline syenite, leucocratic granite	Silicification?, Limonitization, Epidotization, Feldspartization	Middle Devonian
4631	Khets uul	Epithermal	Bulgan	50 05 30	102 43 00	North Mongolia	Zed			limestone, andesite, rhyolite	Cambrian(E1-V, P1)		Zed	limestone, andesite, rhyolite		Lower Permian
4632	Bulagt am	Hydrothermal Au	Bulgan	50 01 20	102 37 40	North Mongolia	Zed	Deep fault	syenite, quartz-syenite, diorite	meta-andesite	Vendian-Lower Cambrian	Cambrian, Permian-Triassic(E2-3, P2-T1)	Zed	syenite, quartz-syenite, diorite	Silicification?, Skarnization, Sencitization	
4633	Khonit uul		Khubsgul	50 14 38	102 03 30	North Mongolia	Zed			basalt, crystalline limestone, andesite, tuff, limestone	Riphean, Vendian(R1, V-E1)		Zed	basalt, crystalline limestone, andesite, tuff, limestone		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(14b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling		
4381	Ovoonii bulan	Skarn: 140m x4,0m	malachite, azurite		Cu-0,001-0,007%		Geological mapping(1992)*				4digs		4862, 5170
4407	Baruun khujir	Microgranite dyke: 500m x20m			Nb-0,01%; Ag-1g/t; Be-0,001%	Nb-135t	Geological mapping(1996)*						5031
4625	Serkh tsakhir uul	Quartz-epidote vein: 550m x0,17m	gold		Au-278,0g/t; Cu-0,01%	Au-1036,9kg	Geological mapping(1997)*	10 samples			9,4m cub		5170
4626	Salkhitiin ekh	Altered zone: 100m x50m, Automagmatic breccia: 700m x0,7m	gold		Au-0,00002g/t	Au-6,6kg	Geological mapping(1997)*	13 samples					5170
4627	Khust	Crystallin shale: 15m x4,1m; Skarn: 70m x37m; Stock: 300m x150m	gold	malachite	Au-0,01-20,0g/t; Cu-0,001-0,002%		Geological mapping(1997)*	574 samples			218,8m cub		5170
4628	Jargalant	Altered zone: 100m x4,3m	gold	malachite, azurite	Au-0,05g/t; Cu-0,02%	Cu-10,6t	Geological mapping(1997)*	17 samples			370m.cub		5170
4629	Salkhitiin gol	Ore body1-700m x20m; Ore body2-110m x50m; Ore body3-60m; Ore body4-80m x30m	gold	malachite, magnetite, hematite	Au-53,52g/t; Cu-0,01%; Ag-0,5g/t	Au-24325,0kg	Geological mapping(1997)*	103 samples					5170
4630	Ar zorlogo	Altered zone: 2500m x2000m	gold		Au-0,03g/t	Au-6747,06kg	Geological mapping(1997)*				104m.cub		5170
4631	Khets uul	Altered zone: 1200m x80m	gold	malachite, magnetite	Au-0,2g/t	Au-146kg	Geological mapping(1997)*	19 samples			344m.cub		5170
4632	Bulagt am	Skarn: 800m x 44m	gold	malachite	Au-1,5g/t		Geological mapping(1997)*	74 samples			227m.cub		5170
4633	Khonit uul	Serpentinite body: 20-40m wide		serpentine	(Facing rock-)		Geological mapping(1997)*				1dig		5170

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(15a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology								Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization	
4636	Bayan ovoo uul	Contact metamorphism	Khubsugul	51 20 30	100 55 00	North Mongolia	Zed	Outcrop	granite, diorite, gabbro-diorite	metamorphic rocks	Middle Riphean	Middle-Upper Cambrian	North Mongolia	granite, diorite, gabbro-diorite	Hornfelsization, Marbleization, Skarnization		
4637	Uran zhurkh uul	Contact metamorphism	Khubsugul	51 34 30	100 50 40	North Mongolia	Zed	Outcrop	granite, plagiogranite	limestone, marble, crystalline shale, quartzite	Lower-Middle Riphean	Middle-Upper Cambrian	North Mongolia	limestone, marble, crystalline shale, quartzite	Epidotization, Feldspartization		
4638	Arvan gurvan ovoot uul	Hydrothermal	Khubsugul	51 27 30	100 43 00	North Mongolia	Zed		syenite	carbonite, basalt	Vendian-Cambrian(V-E1); Neocene(N1)	Devonian(D2)	North Mongolia	syenite	Silicification?, Greisenization, Limonitization	Middle Devonian	
4639	Shignuul gol	Hydrothermal-metasomatic	Khubsugul	51 16 30	100 52 58	North Mongolia	Zed	Outcrop	syenite, quartz-syenite	basalt	Lower Neogene	Middle-Upper Devonian	North Mongolia	syenite, quartz-syenite	Silicification?, Feldspartization	Middle Devonian	
4641	Tsagaangol	Hydrothermal	Khubsugul	50 55 20	101 43 50	North Mongolia	Zed	Outcrop	plagiogranite	gneiss, basalt	Riphean(R2); Neocene(N2)	Cambrian(E1-2)	North Mongolia	plagiogranite	Hornfelsization, Ironization		
4690	Darkhit uul	Plutonogenic-hydrothermal	Arkhangai	48 58 30	101 11 30	North Mongolia	Khangai-Khenty	Dipression	alkaline granite	andesite, rhyolite	Lower-Middle Jurassic	Lower-Middle Jurassic	Central Mongolia	alkaline granite	Limonitization, Silicification?, Feldspartization, Epidotization		
4692	Tosongiin khooloi	Sedimentary	Arkhangai	48 13 00	102 25 00	North Mongolia	Khangai-khenty	Dipression		sediment	Quaternary(QIV)		Central Mongolia	sediment			
4693	Ikh elgediin gol	Sedimentary	Arkhangai	48 54 50	100 34 40	North Mongolia	Khangai-Khenty	Dipression		sandstone, clay, pebble	Quaternary(QIV)		Central Mongolia	sand, clay, pebble			
5141	Khavchuugiin gun jalga	Sedimentary	Selenge	49 15 00	100 40 00	Mongol-Ubur baykal	North Khenty	Dipression		sandstone, clay, pebble	Quaternary(QIII-IV)		North Khenty	sand, clay, pebble			
5323	Dalkh ovoo-12	Metasomatic	Selenge	49 28 00	104 56 00	North Mongolia	Tariat-selenge	Dipression		andesite, dacite, rhyolite	Upper Permian			andesite, dacite, rhyolite			
5343	Alingyr	Hydrothermal	Arkhangai	48 25 27	100 24 00	North Mongolia	Ider	Uplift	granite			Middle Paleozoic		granite			
5344	Khunuin	Metamorph	Arkhangai	48 01 00	101 25 00	North Mongolia	Orkhon-selenge	Dipression	granite	rhyolite and felsite porphyry	Lower Permian	Permian-Triassic		rhyolite, rhyolite and felsite porphyry			
5354	Ar khahant	Hydrothermal	Bulgan	49 30 00	103 39 00	North Mongolia	Zed	Uplift		gneiss	Riphean			gneiss			

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(15b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
4636	Bayan ovoo uul	Skarn: 60m x5,0m			Mo-0,0005%; Cu-0,003%		Geological mapping(1997)**			162,1m.cub		5171
4637	Uran zhurkh uul	Altered zone: 1600m x450m			Mo-0,005%; Cu-0,01%		Geological mapping(1997)**			392m.cub		5171
4638	Arvan gurvan oovoo uul	Skarn: 2-5,0m	magnetic pyrite, hematite? (heotite)	chalcopyrite, galena	Cu-0,002%; Pb-0,001%; Zn-0,003%; Sn-0,0002%		Geological mapping(1997)**	18 samples		69,8m.cub		5171
4639	Shignuul gol	Altered zone: 250m x1,0m			Mo-0,002%; Cu-0,005%		Geological mapping(1997)**			141,2m.cub		5171
4641	Tsagaangol	Skarn: 850m x110m	gold	malachite	Au-0,005g/t; Cu-0,02%		Geological mapping(1997)**	536 samples		309,8m.cub		5171
4690	Darkhit uul	Quartz-tourmaline vein: 200m x1m		limonite, arsenopyrite, covellite, bormite	W-0,001-0,01%; Cu-0,005%; Ag-0,5-20g/t		Geological mapping(1991)*					
4692	Tosongiin khooloi	Gold field: 6000m x500m	gold		Au-79,4mg/m.cub	Au-21,6kg	Prospecting work(1994)			11pits		4874
4693	Ikh elgediin gol	Gold field: 14000m x150m	gold		Au-100mg/m.cub	Au-67kg	Prospecting work(1993)			15m pits		4874
5141	Khavchuugiin gun jalga	Lenticular bed: 300m x50m	gold		Au-293mg/m.cub	Au-7,5kg	Prospecting work(1991)			284,4m pits		4634
5323	Dalkh ovoo-12	Dyke: 300m x10m	pyrite, chalcopyrite		Cu-		Geological mapping(1988)*			3digs		4553
5343	Alingyr	Quartz vein: 1000m x500m			Cu-0,1%		Geological mapping(1980)**			116,1m.cub		3228
5344	Khunuin	Altered zone: 1500m x800m			Cu-0,008-0,01%; Mo-0,0003-0,001%		Geological mapping(1980)**			366m.cub		3228
5354	Ar khahant	Pegmatite: 300m x2,0m	titanomagnetite, zircon		Ta-0,064%; Nb-0,072%		Geological mapping(1976)					2593

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(16a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
5362	Nergui	Hydrothermal	Selenge	49 57 00	104 41 00	North Mongolia	Tariat-selenge	Dipression	granite, pegmatite			Cambrian		granite, pegmatite	Gneissization?	
5366	Khoshuu ovoo	Hydrothermal	Selenge	50 16 00	104 52 00	North Mongolia	Orkhon-selenge	Dipression		green shale		Cambrian		green shale		
5385	Nergui	Hydrothermal	Bulgan	50 07 00	102 28 00	North Mongolia	Zed	Dipression	granite			Jurassic	North Mongolia	granite		
5386	Nergui	Hydrothermal	Bulgan	49 59 00	102 25 00	North Mongolia	Tariat-selenge	Dipression		quartzite, andesite porphyry?		Upper Permian	North Mongolia	andesite porphyry?, quartzite		
5387	Bayasgalan-6	Metasomatic	Bulgan	49 58 00	102 30 00	North Mongolia	Tariat-selenge	Dipression	granite	rhyolite, rhyolite prophyry		Upper Permian	Lower-Middle Devonian	rhyolite, rhyolite porphyry		
5388	Tsakhir uul	Skarn	Bulgan	49 58 00	102 39 00	North Mongolia	Tariat-selenge	Dipression	granitoid	limestone, andesite		Vendian-Lower Cambrian	Lower-Middle Devonian	granitoid		
5389	Khuruut	Skarn	Khubs gul	49 50 00	102 03 00	North Mongolia	Zed	Dipression		serpentine		Middle Cambrian		serpentine		
5390	Khushuut	hydrothermal-metasomatic	Khubs gul	49 37 00	102 14 00	North Mongolia	Zed	Dipression		brecciated porphyry?		Upper Carboniferous		brecciated porphyry?		
5391	Khavchirga	Skarn	Bulgan	49 50 00	103 29 00	North Mongolia	orkhon-selenge		leucocratic granite	trachyandesite-basalt, trachybasalt		Permian	Lower Jurassic	trachyandesite-basalt, trachybasalt		
5392	Ubgen sant uul	Skarn	Selenge	49 42 00	104 56 00	North Mongolia	orkhon-selenge	Uplift		andesite, andesite-basalt, andesite porphyry		Permian		andesite, andesite porphyry, andesite-basalt		
5394	Zuun chingelt-21	hydrothermal-metasomatic	Tub	48 15 00	104 41 00	North Mongolia	Tariat-selenge	Dipression	granite				Middle Paleozoic	granite		
5398	Tsagaan jalgin bulag	Metasomatic	Bulgan	50 08 00	103 43 00	North Mongolia	Zed	Uplift		limestone, shale		Lower Cambrian		limestone, shale		
5400	Khujirin gol	Hydrothermal	Bulgan	49 08 00	103 39 00	North Mongolia	Tariat-selenge	Dipression	granodiorite, granosyenite				Jurassic(J1)	granodiorite, granosyenite		
5403	Urmiin tsagaan nuur	Metasomatic	Bulgan	48 48 00	102 55 00	North Mongolia	Orkhon-Selenge	Dipression		rhyolite-dacite, rhyolite porphyry		Lower Permian	North Mongolia	rhyolite-dacite, rhyolite porphyry		
5404	Mogoin gol	Metasomatic	Bulgan	49 15 00	103 45 00	North Mongolia	Orkhon-selenge	Dipression		andesite-basalt porphyry?		Permian(P2)		andesite-basalt porphyry?		
5405	Gangat	Hydrothermal-metasomatic	Bulgan	48 50 00	103 18 00	North Mongolia	Orkhon-selenge	Dipression		rhyolite, felsite, andesite porphyrite		Permian		andesite porphyrite, rhyolite, felsite		
5410	Dashilung(56)	Metasomatic	Bulgan	49 46 00	104 41 00	North Mongolia	Orkhon-selenge	Dipression		andesite, andesite porphyry		Lower Permian		andesite, andesite porphyry		

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(16b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	
5362	Nergui	Fracture zone:			W-		Geological mapping(1946)**					473
5366	Khoshuu ovoo	Quartz vein: 70m x0,6m			Bi-0,19-5,75%		Geological mapping(1943)					402
5385	Nergui	Quartz vein: 45m x0,3m	pyrite, chalcocopyrite		Cu-		Prospecting work(1941)					400
5386	Nergui	Silicified zone: 200m x50m	malachite		Cu-0,17-0,41		Prospecting work(1971)*					1965
5387	Bayasgalan-6	Altered zone: 300m x100m	chalcocopyrite, bornite		Cu-0,2-0,4%		Prospecting work(1978)			425m.cub	55,8m	2982
5388	Tsakhir uul	Skarn: 800m x130m			Cu-2,35%; Ag-3g/t		Prospecting work(1977)			32,2m.cub		2982
5389	Khuruut	Altered zone: 70m x30m			Cu-3-10%; Ag-0,001g/t		Geological mapping(1960)**					1500
5390	Khushuut	Altered zone: 300-350m	malachite, azurite		Cu-3-10,0%		Geological mapping(1960)**					1500
5391	Khavchirga	Ore body: 70sq.km	chalcocopyrite		Cu-0,05-0,5%; Ag-0,0005%		Geological mapping(1977)**					3832
5392	Ubgen sant uul	Quartz vein: 2m x0,2m	chalcocine, malachite, azurite		Cu-0,1-0,5%		Geological mapping(1982)**			64m.cub		3624
5394	Zuun chingelt-21	Quartz-tourmaline vein: 15 x1,5m	malachite, azurite		Cu-0,003-0,5%		Geological mapping(1979)*					3600
5398	Tsagaan jalgin bulag	Dispersed frame: 1200m x5000m			Cr-0,5-2,0g/m.cub		Geological mapping(1977)**					3156
5400	Khujiriu gol	Quartz vein: 6000m x2000m	chalcocopyrite, malachite		Cu-0,28-0,74%		Geological mapping(1967)**			24digs		1965
5403	Urmiin tsagaan nuur	Quartz vien: 11m x0,4m	malachite, azurite		Cu-		Geological mapping(1972)**	1122 samples		283,4m.cub		3538
5404	Mogoin gol	Altered zone: 5000m x3500m	malachite		Cu-0,11%		Prospecting work(1971)*			2digs	2holes	3209
5405	Gangat	Quartz-epidote vein: 0,1-0,2m	malachite		Cu-0,001-0,009%		Prospecting work(1979)*			3318m.cub	199m	3538
5410	Dashilung(56)	Altered zone: 60m x30m			Mo-0,03%; Cu-0,01%		Geological mapping(1982)**			1208m.cub		3624

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(17a/17)

Eastern part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization
5411	Zuun tarbagatai	Hydrothermal	Bulgan	50 14 00	104 25 00	North Mongolia	Orkhon-selenge	Dipression	granite, granodiorite	sandstone	Cambrian	Lower Paleozoic		granite, granodiorite		
5418	Asgat uul	Hydrothermal	Selenge	49 06 00	104 42 00	North Mongolia	Tariat-selenge	Dipression	granite			Upper Permian		granite		
5437	Nariinii am	Hydrothermal	Bulgan	50 12 05	102 11 20	North Mongolia	Zed			conglomerate, siltstone, limestone	Lower Cambrian		Zed	conglomerate, siltstone, limestone	Marblization, Silicification?	Lower Cambrian
3-2	Saikhan gol		Khubsgul	50 52 00	100 08 00	North Mongolia	Near Khubsgul	Graben						silicified rocks	Silicification zone	

Table A-2 List of ore deposits, mineral occurrences, and geochemical anomalies in the central north area

(17b/17)

Eastern part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference Report number	
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling		
5411	Zuun tarbagatai	Quartz vein: 30m x0,7m	galena		Pb-0,05%; Au-1,0g/t; Ag-45g/t		Geological mapping(1982)**				123m.cub		3624
5418	Asgat uul	Quartz vein:	pyrite, chalcopyrite		Cu-		Geological mapping(1979)						3558
5437	Nariniin am	Ore body: 1-50m x7,6m; Ore body: 150m x1,5m	gold	malachite, azurite	Au-ore body 1-1284g/t; ore body 2-38,5g/t; Cu-0,2%	orebody1- Au-366,8kg; ore body2- Au-45,3kg	Geological mapping(1997)*	12 samples			35,6m.cub		5170
3-2	Saikhan gol	Lenticular body: 1,5-2m; 20m	manganite?		MnO-16,68%	MnO-157000m.cub	Geological mapping(1946)** **, (1958)**				344m.cub (1958)		938

Previous survey (geology)

~1:10 000 scale prospecting work; *-1:50 000 scale geological mapping; **-1:200 000 scale geological mapping;

-1:500 000 scale geological mapping; *-1:1 000 000 scale geological mapping

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(1a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
1543	Berkhemesh	Contact metamorphism	Khubs gul	50 26 00	99 49 00	North Mongolia	Near khubs gul	Dipression		Limestone	E1 -khordel series		North Mongolia	Limestone		Lower Cambrian
1594	Zagastai	Contact metasomatic	Zavkhan	48 16 00	97 15 00	North Mongolia	Ider	Uplift		Dolomite	Lower Cambrian		North Mongolia	Dolomite		Lower Cambrian
143	Occur-124-B-4,5	Hydrothermal	Zavkhan	48 24 00	97 38 00	North Mongolia	Ider	Uplift	Gabbroids			P2 -Uliastai series	North Mongolia	Gabbroids		
583	Deed ulaan tolgoi	Hydrothermal-metasomatic	Khubs gul	49 32 00	98 41 00	North Mongolia	Tuva-Mongol	Uplift	Granite, leucocratic granite			D1-2 -Tes complex; C3	North Mongolia	Granite, leucocratic granite		
1572	Zost uul	Hydrothermal	Zavkhan	48 42 00	98 20 00	North Mongolia	Ider	Uplift	Granite porphyry, syenite porphyry	Crystallin shale, gneiss, limestone	PR3 -Khangai series	P2 -Selenge complex	North Mongolia	Granite porphyry, syenite porphyry		Upper Permian-Lower Triassic
107	Quartzite	Secondary alteration	Zavkhan	48 57 00	97 50 00	North Mongolia	Ider	Dipression		Rhyolite porphyry, tuff	Permian		North Mongolia	Rhyolite porphyry, tuff		
103	Under ulaan	Secondary alteration	Zavkhan	48 53 00	97 08 00	North Mongolia	Ider	Dipression		Rhyolite porphyry, tuff	Permian		North Mongolia	Rhyolite porphyry, tuff		
3808	Ulaannuur	Greisen	Khubs gul	49 38 50	99 19 40	North Mongolia	Khubs gul	Dipression	Granite			D2 -Telmen complex	North Mongolia	Granite		
93	Bugsein gol	Hydrothermal-metasomatic	Khubs gul	49 11 00	99 42 00	North Mongolia	Near Khubs gul	Dipression	Granite	Volcanogenic sedimentary rocks	Permian	P2-T1 -Selenge complex, delin nuur massive	North Mongolia	Volcanogenic sedimentary rocks		
3991	Jimbe tolgoi	Hydrothermal-metasomatic	Khubs gul	49 20 50	99 30 05	North Mongolia	Ider	Dipression	Granite	Acid volcanic rocks, rhyolite	P2 -Khanui series upper suite	P2 -Selenge complex	North Mongolia	Acid volcanic rocks, rhyolite	Silicification, albitization	
5004	Jinsen tolgoi	Metasomatic	Zavkhan	49 16 00	96 48 00	North Mongolia	Ider	Uplift	Granite, granosyenite porphyry	Rhyolite porphyry, tuff	D1 -Bor nuur series	Lower- Middle Devonian	North Mongolia	Rhyolite porphyry, tuff		

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(1b/15)

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
1543	Berkhemesh	Skarn: 1600m x400m	Chalcopyrite, copper	Pyrite, magnetite	Cu-0,2%; Zn-0,005%		Geological mapping(1984)*	332 samples		31,2m cub		3977
1594	Zagastai	Skarn: 150m x15m	Magnetite		Cu-1,0%; Ag-50-60g/t		Geological mapping(1965)*****					1755, 3576
143	Occur-124-B-4,5	Alteration zone: 700m x700m	Chalcopyrite, malachite	Pyrite, lazurite	Cu-1,0%; Au-0,02g/t; Ag-8,0g/t		Geological mapping(1981)**					3576
583	Deed ulaan tolgoi	Quartz-greisen veins: 90m x10m			Cu-0,01%; Ag-39g/t; Au-0,1g/t	Cu-57000t; Ag-800t	Geological mapping(1987)*	385 samples		1192,4m cub		4428
1572	Zost uul	Stockwork: 1400m x380m	Molybdenite	Pyrite, chalcopyrite	Mo-0,01-0,25%	Mo-101961t	Prospecting work(1979)*; geological mapping(1977)**	5348 samples(1979)		2270,5m cub trenches; 132m pits(1979)	1268m (1979)	3122, 2982, 2981
107	Quartzite	Alteration zone: 800m x57m	Pyrite		Cu-0,008-0,01%; Mo-0,006%		Prospecting work(1979)			452,2m cub	65m	3122
103	Under ulaan	Alteration zone: 800m x30m	Molybdenite	Chalcopyrite, pyrite, hematite, magnetite, malachite?, covellite	Cu-0,001-0,004%; Mo-0,001%		Prospecting work(1979)	766 samples				3122
3808	Ulaannuur	Greisen zone: 250x 150m			Cu-0,15%; Mo-0,02%	Mo-5400t	Prospecting work(1972)					4715
93	Bugsein gol	Alteration zone: 3km			Cu-0,07%; Mo-0,01%		Geological mapping(1965)*****					1828, 1814
3991	Jimbe tolgoi	Alteration zone: 120m x2,3m	Copper		Cu-0,03%; Mo-0,0002%		Geological mapping(1993)*			87,7m cub		4839
5004	Jinsen tolgoi	Alteration zone: 0,7 sq.km		Pyrite, limonite	Cu		Geological mapping(1977)**					2723

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(2a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology								Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization	
481	Tagiin nuur	Hydrothermal	Zavkhan	48 58 00	97 15 00	North Mongolia	Ider	Dipression		Rhyolite, dacite porphyry, tuff	Lower Devonian		North Mongolia	Rhyolite, dacite porphyry, tuff			
1484	South Chuluut	Hydrothermal	Khubsgul	49 26 00	99 51 00	North Mongolia	Near khubsgul	Dipression	Granite	Rhyolite porphyry, tuff, andesite porphyry	E2 -Bugsein gol suite	J1-2 -Bugsein gol complex	North Mongolia	Rhyolite porphyry, tuff, andesite porphyry		Lower-Middle Jurassic	
1596	Khuurai sair	Hydrothermal	Zavkhan	48 39 00	98 13 00	North Mongolia	Ider	Uplift	Granite	Andesite porphyrite, tuff	Lower-Middle Devonian	Lower-Middle Devonian	North Mongolia	Andesite porphyrite, tuff		Middle Devonian	
1472	Erkhil nuur	Metasomatic	Khubsgul	49 51 00	99 48 00	North Mongolia	Near Khubsgul	Dipression	Granodiorite			Middle Paleozoic	North Mongolia	Granodiorite		Middle Paleozoic	
573	Khunkh tsakhir	Hydrothermal	Khubsgul	49 36 00	98 23 00	North Mongolia	Tuva-Mongol	Uplift	Granite	Acid volcanic rocks, shale, limestone	Lower-Middle Paleozoic	Upper Carboniferous	North Mongolia	Acid volcanic rocks, shale, limestone			
581	Gurvan buudal uul	Hydrothermal	Khubsgul	49 45 00	98 33 00	North Mongolia	Tuva-Mongol	Uplift	Leucocratic granite	shale with sandstone beds	Upper Riphean	Upper Carboniferous	North Mongolia	Leucocratic granite			
3474	Nariin azarga	Hydrothermal	Khubsgul	50 01 40	98 29 00	North Mongolia	Khubsgul	Uplift		Crystallin shale	R1-2 -Khug series		North Mongolia	Crystallin shale			
3475	Khaisiin belchir	Hydrothermal	Khubsgul	50 10 35	98 44 58	North Mongolia	Khubsgul	Uplift		Crystallin shale	R1-2 -khug series		North Mongolia	Crystallin shale			
1481	Naranbulag	Hydrothermal	Zavkhan	48 34 00	97 47 00	North Mongolia	Ider	Dipression	Granite porphyry, leucocratic granite			Upper Permian	North Mongolia	Granite porphyry, leucocratic granite		Upper Permian	
2399	Solongot	Hydrothermal-metasomatic	Arkhangai	48 09 51	99 00 50	North Mongolia	Tariat-selenge	Uplift	Granite	Limestone, gneiss	Lower Proterozoic	Middle Riphian	North Mongolia	Limestone, gneiss	Skarnization, hornfelsization, silicification		
4617	Tavan tolgoi	Hydrothermal	Khubsgul	50 09 00	98 37 00	North Mongolia	Near Khubsgul	Uplift		Limestone, clay, shale	R1 -Muren suite, MZ2		North Mongolia	Limestone, clay, shale			

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(2b/15)

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
481	Tagiin nuur	Stockwork: 6000m x1000m			Cu-0,006%; Mo-0,003%		Geological mapping(1976)**	1203 samples		277,9m.cub		2986
1484	South Chuluut	Alteration zone: 750m x100m	Chalcopyrite, malachite	Galena, molybdenite, anglesite, spharelite	Cu-0,06%; Ag-0,02g/t		Geological mapping(1972)**					2256
1596	Khuurai sair	Alteration zone: 500m x5m	Chalcopyrite, malachite		Cu-0,09%; Mo-0,02%		Prospecting work(1979)*	56 samples		364m.cub		3569
1472	Erkhil nuur	Skarn: 17m x 7m	Malachite, azurite	Spharelite, molybdenite	Cu-0,38-3,85%; Zn-0,06-1,48%		Geological mapping(1969)**			11 digs		1279, 1914
573	Khunkh tsakhir	Mineralization zone: 800m x150m			Cu-0,02%; Ag-2,0g/t	Ag-20t	Geological mapping(1987)*	1560 samples		222,2 m.cub	140m	4428
581	Gurvan buudal uul	Alteration zone: 5200m x1000m			Au-0,1-1,2g/t; Ag-1,2g/t;		Geological mapping(1987)*			80m pits		4428
3474	Nariin azarga	Alteration zone: 2000m x400m	Pyrite	Hematite	Au-0,05-0,2g/t		Geological mapping(1992)*					4863
3475	Khaisiin belchir	Alteration zone: 3400m x1200m	pyrite	Magnetite	Au-0,07g/t; Cu-0,003%		Geological mapping(1992)*					4863
1481	Naranbulag	Stockwork: 900m x400m	Malachite, azurite, chalcopyrite	Molybdenite, pyrite, limonite	Cu-0,015-0,8%; Ag-10,2g/t		Geological mapping(1965)****; (1976)**	0,8 sq.km field(1976)	Electric (1976)	1 pits(1976)		2581, 3576
2399	Solongot	Alteration zone: 1700m x170m	Lazurite, malachite	Chalcopyrite, pyrite, magnetite, hematite	Cu-0,1%; Au-0,1g/t; Ag-4,0g/t		Geological mapping(1982)**	165 samples		295,7 m.cub		3684
4617	Tavan tolgoi	Dykes: 150m x1,7m	Pyrite	Chalcopyrite, galena	Cu-0,01%;		Geological mapping(1992)*					4863

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(3a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization
1456	Sharain khudag	Contact metasomatic	Zavkhan	49 27 00	96 48 00	North Mongolia	Ider	Uplift	Granite	Rhyolite, trachyrhyolite	Upper Permian	PZ1 -Telmen complex	North Mongolia	Granite		Upper Permian
1457	Askhat uul	Hydrothermal	Zavkhan	49 22 00	96 36 00	North Mongolia	Ider	Uplift	Granite			PZ3 -Selenge complex	North Mongolia	Granite		Upper Paleozoic
106	Davaa	Hydrothermal-metasomatic	Zavkhan	48 56 00	97 44 00	North Mongolia	Ider	Dipression	Granite	Alkaline volcanic rocks	Permian	P2-T1 -Selenge complex	North Mongolia	Alkaline volcanic rocks		
1471	Arshaan	Metasomatic	Khubsgul	49 53 00	99 49 00	North Mongolia	Khubsgul	Dipression	Syenite, granosyenite	Carbonate rocks	V-E1 -Khesen suite	PZ3 -Selenge complex	North Mongolia	Carbonate rocks		PZ3-T1
1453	Menget uul	Skarn	Zavkhan	49 33 00	96 56 00	North Mongolia	Ider	Uplift		Limestone	Proterozoic		North Mongolia	Limestone		
574	Ulaan zavsar	Hydrothermal	Khubsgul	49 30 00	98 40 00	North Mongolia	Tuva-Mongol	Uplift	Dykes?	Terrane?	R3 -Darkhad series	D1-2 -Tes complex	North Mongolia	Terrane?		
2236	Tariatiiin gol	Hydrothermal	Arkhangai	48 12 50	99 26 35	North Mongolia	Ider	Uplift	Granite, gabbroic diorite			PZ2 -Tarbagatai complex	North Mongolia	Granite, gabbroic diorite		Middle Paleozoic
4699	Solongot gol	Hydrothermal	Arkhangai	48 09 15	99 00 32	North Mongolia	Khangai	Outcrow	Granite	Limestone	lower Proterozoic	Upper Riphean	North Mongolia	Granite		Upper Riphean
3892	Altargana	Placer	Khubsgul	50 10 06	98 58 10	North Mongolia	Khubsgul	Dipression		Sediment	Quaternary		North Mongolia	Sediment		
3996	Buyantiin bulag	Placer	Khubsgul	49 46 50	99 24 10	North Mongolia	Khubsgul	Dipression		Sediment	QII		North Mongolia	Sediment		
4156	Dood tsetsuukh	Placer	Khubsgul	48 31 00	99 10 10	North Mongolia	Tarbagatai outcrow	Anticinal		Sediment	QIV		North Mongolia	Sediment		

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
1456	Sharain khudag	Skarn: 220m x22m	Spharelite	Malachite, chalcopryrite, pyrite	Cu-4,18%; Ag-0,1g/t		Geological mapping(1980)**	124 samples			268m	3593
1457	Askhat uul	Alteration zone: 530m x6m	Spharelite	Hematite	Cu-0,02%		Geological mapping(1979)**	45 samples		175,7m.cub		3592
106	Davaa	Alteration zone: 500m x100m			Cu-0,05%		Prospecting work(1979)	32 samples		313,2m.cub	142,8m	3122
1471	Arshaan	Skarn:	Tungstenite	Chalcopryrite, malachite,	Au-0,25g/t; Ag-30g/t; Cu-0,12%		Prospecting work(1990)	50x25m field		8600m.cub	1309m	4379
1453	Menget uul	Skarn: 250m x350m	Magnetite	Malachite, azurite	Cu-1,05%		Geological mapping(1976)**	12 samples				822, 2218
574	Ulaan zavsar	Quartz veins: 250m x0,15m			Au-0,1g/t; Ag-2,0g/t		Geological mapping(1987)*	350 samples		215,3m.cub		4428
2236	Tariitiin gol	Quartz vein: 50m x5m			Au-0,1g/t; Ag-10g/t		Geological mapping(1982)**			213m.cub		3684
4699	Solongot gol	Quartz vein: 50m x5m	Gold	Silver	Au-0,1g/t; Ag-4,0g/t		Geological mapping(1981)**					3684
3892	Altargana	Gold bearing bed: 1200m x52m	Gold		Au-549mg/m.cub	Au-26kg	Prospecting work(1991)					4746
3996	Buyantiin bulag	Gold bearing bed: 1000m x160m	Gold	Pyrite	Au-400mg/m.cub	Au-128kg	Geological mapping(1992)*			8 pits		4839
4156	Dood tsetsuukh	Gold bearing bed: 36sq.km	Gold		Au-16-80mg/m.cub		Geological mapping(1995)*	20 samples		213,7m pits	65,5m	5035

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(4a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)				
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metagenic province	Country rock	Alteration	Age of mineralization	
3942	Jignii gol's field (18-B-VII-1)	Placer	Khubs gul	50 45 30	99 31 00	North Mongolia	Khubs gul	Dipression		Sediment	QIV			North Mongolia	Sediment		
4155	lkh baits	Placer	Arkhangai	48 27 20	99 50 20	North Mongolia	Tarbagatai outcrow	Horst-anticlinal		Sediment	QIV			North Mongolia	Sediment		
3477	Oglogiin gol	Placer	Khubs gul	50 00 00	98 39 00	North Mongolia	Khubs gul	Uplift		Sediment	QIII-IV			North Mongolia	Sediment		
3879	Suurtiin bulan	placer	Khubs gul	50 09 00	98 51 20	North Mongolia	Khubs gul	Uplift		Sediment	QIV			North Mongolia	Sediment		
3934	Ukhaa khem Burgaltai field	Placer	Khubs gul	51 46 00	99 36 00	North Mongolia	Khubs gul	Dipression		Sediment	QIV			North Mongolia	Sediment		
3476	Khaisiin gol	Placer	Khubs gul	50 10 00	98 40 00	North Mongolia	Khubs gul	Uplift		Sediment	QIV			North Mongolia	Sediment		
3893	Khiasiin gol (24-1-4)	Placer	Khubs gul	50 11 00	98 43 00	North Mongolia	Khubs gul	Dipression		Sediment	Q			North Mongolia	Sediment		
1518	Khoton gol	Placer	Khubs gul	51 14 00	99 56 00	North Mongolia	Near Khubs gul	Dipression		Sediment	N-QIV			North Mongolia	Sediment		
3880	Tsagaan bulan (27-1-5)	Placer	Khubs gul	50 08 00	98 52 40	North Mongolia	Khubs gul	Uplift		Sediment	QIV			North Mongolia	Sediment		
3933	Shar belchir	Placer	Khubs gul	51 30 00	99 31 20	North Mongolia	Khubs gul	Dipression	Granite	Sediment	QIV	D2		North Mongolia	Sediment		
1512	Shergis	Placer	Khubs gul	51 51 00	99 47 00	North Mongolia	Tuva-Mongol	Uplift		Sediment	QIV			North Mongolia	Sediment		

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
3942	Jignii gol's field (18-B-VII-1)	Gold bearing bed: 1,5x0,3km	Gold		Au- gold signs		Prospecting work(1993)			4m pits		4770
4155	Ikh baits	River's valley: 140m	Gold		Au-33-450mg/m.cub	Au-160,4kg	Geological mapping(1996)*			57m pits	210,8m	5035
3477	Oglogiin gol	Gold bearing bed: 1-2m wide	Gold		Au-0,01g/t		Geological mapping(1992)*					4863
3879	Suurtiin bulan	Gold bearing bed: 0,5-1,0m wide	Gold		Au-0,03-0,07g/t		Prospecting work(1990)					4746
3934	Ukhaa khem Burgaltai field	River's valley: 30-50m wide	Gold		Au-gold signs		Prospecting work(1993)					4770
3476	Khaisiin gol	Gold bearing bed:	Scheelite	Chalcopyrite	Au-gold signs		Geological mapping(1992)*			82m pits		4863
3893	Khiasiin gol (24-1-4)	Gold bearing bed:			Au-signs		Geological mapping(1990)*			13,95m pits		4746
1518	Khoton gol	Quartz vein: 60m x20m	Gold	Chalcopyrite, malachite, pyrite, arsenopyrite	Au(ore)-1,2g/t; Au(placer)- 1,0g/m.cub		Prospecting work(1965)			32 pits		486, 1812
3880	Tsagaan bulan (27-1-5)	Gold bearing bed:			Au-signs		Prospecting work(1988)					4746
3933	Shar belchir	Gold bearing bed: 2-3,5m wide	Gold		Au-10-100mg/m.cub	Au-40,5kg	Prospecting work(1993)					4770
1512	Shergis	Bed:	Gold		Au-signs		Geological mapping(1941)					346

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(5a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology								Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization	
455	lkh bulag (No37)	Hydrothermal	Zavkhan	48 47 00	96 37 00	North Mongolia	Khan khukhii	Uplift	Granite				Upper Proterozoic	North Mongolia	Granite		
1492	Khan jargalant uul	Metasomatic	Khubsgul	49 02 00	100 00 00	North Mongolia	Near Khubsgul	Dipression	Granite, granosyenite, syenite	Limestone, sandstone, conglomerate	E1 -khordul suite; E3 -Arsai suite	T1 -Selenge complex	North Mongolia	Granite, granosyenite, syenite			
3903	(71-1-5)	Hydrothermal	Khubsgul	50 09 00	98 51 00	North Mongolia	Khubsgul	Uplift		Dolomite, quartzite, limestone, shale	R -Darkhad series		North Mongolia	Dolomite, quartzite, limestone, shale			
181	Scarn	Metasomatic	Khubsgul	50 11 00	100 00 00	North Mongolia	Near Khubsgul	Sinclinal	Granodiorite	Limestone	V-E1	Devonian	North Mongolia	Granodiorite			
168	Chargat	Magmatic	Zavkhan	48 35 00	98 08 00	North Mongolia	Ider	Uplift	Granodiorite, gabbro, gabbroic diorite			Lower Paleozoic	North Mongolia	Granodiorite, gabbro, gabbroic diorite			
1598	Tsetsuukh	Hydrothermal	Zavkhan	48 36 00	98 57 00	North Mongolia	Ider	Uplift	Granodiorite			PZ1 -Telmen complex	North Mongolia	Granodiorite			
1597	Tsart	Hydrothermal	Zavkhan	48 39 00	98 45 00	North Mongolia	Ider	Uplift	Granite			Middle Paleozoic	North Mongolia	Granite			
1590	Khindiin davaa	Hydrothermal	Zavkhan	48 07 00	96 00 00	North Mongolia	Ider	Uplift		Porphyrite		Lower Devonian	North Mongolia	Porphyrite			
104	Khurai nuur	Hydrothermal	Zavkhan	48 55 00	97 43 00	North Mongolia	Ider	Dipression	Granosyenite porphyry, granite porphyry			P2-T1 -Selenge complex	North Mongolia	Granosyenite porphyry, granite porphyry			
1553	Kharaat uul	Contact metasomatic	Zavkhan	49 14 00	96 42 00	North Mongolia	Ider	Uplift	Granite	Marble	Proterozoic	Upper Proterozoic	North Mongolia	Marble			
1556	Takhilt nuur	Hydrothermal	Zavkhan	48 46 00	96 45 00	North Mongolia	Ider	Uplift	Gabbroic diorite, diorite			PR3 -Tes complex	North Mongolia	Gabbroic diorite, diorite			

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Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(5b/15)

Western part of the survey area

No	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
455	lkh bulag (No37)	Quartz vein: 650m x180m			Ag-0,2-0,5g/t		Geological mapping(1976)**					2723
1492	Khan jargalant uul	Skarn: 90m x10m	Malachite, azurite	Magnetite	Cu-1,0%		Geological mapping(1975)**	475 samples		507,6m.cub		2660
3903	(71-1-5)	Shale bed:60-120m wide			Cu-		Geological mapping(1989)*				147,8m	4746
181	Scarn	Skarn: 1,5-8m wide			Cu-0,015-1,0%; Ag-5-10g/t		Geological mapping(1982)*			59,6m.cub		3649
168	Chargat	Alteration zone:			Cu-0,02%		Geological mapping(1979)*	159 samples		1247m.cub		3569
1598	Tsetsuukh	Quartz vein: 40m x0,1m	Malachite, chalcopyrite	pyrite	Cu-0,3-1%; Ag-0,03g/t		Geological mapping(1966)*****					3711, 1760
1597	Tsart	Quartz vein: 50m x5m	Chalcopyrite, malachite, azurite		Cu-0,42%		Geological mapping(1966)*****; (1981)**			42m.cub(1981)		3711, 1760
1590	Khindiin davaa	Magnetite vein: 40m x0,5m	Magnetite, malachite	Chalcopyrite, pyrite	Cu-		Geological mapping(1959)*****					1420
104	Khuurai nuur	Alteration zone: 150m x35m; quartz vien: 90m x0,35m			Cu-0,03-0,08%		Prospecting work(1978)			2 digs		3122
1553	Kharaat uul	Skarn: 1500m	Malachite, chalcopyrite	Magnetite	Cu-0,001-0,006%		Geological mapping(1977)**	30 samples		1 dig		2723
1556	Takhilt nuur	Mineralization zone: 150m x80m	Malachite, azurite, chalcopyrite	Pyrite, magnetite, hematite	Cu-0,24%		Geological mapping(1977)**	280 samples		209,1m.cub		2723

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(6a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology							Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metallogenic province	Country rock	Alteration	Age of mineralization
4697	Solongotiin gol	Contact metasomatic	Arkhangai	48 07 32	99 05 26	North Mongolia	Khangai	Outcrop	Granite	Limestone	lower Proterozoic	Middle Riphian	North Mongolia	Limestone		
1559	Scarn	Contact metasomatic	Khubsgul	49 12 00	97 41 00	North Mongolia	Ider	Dipression	Granite	Limestone	Lower Cambrian	Middle Paleozoic	North Mongolia	Limestone		
454	Sangiin dalai No2	Hydrothermal-metasomatic	Khubsgul	49 12 00	99 15 00	North Mongolia	Ider	Uplift	Granite	Volcanic rocks	P -Zuun nuur series	P2-T1 -Selenge complex II phase	North Mongolia	Granite		
460	South part	Magmatic	Zavkhan	49 13 00	96 01 00	North Mongolia	Khan khukhii	Uplift	Granite, gabbro			PZ, MZ	North Mongolia	Granite, gabbro		
1554	Onts uul	Hydrothermal	Zavkhan	49 10 00	96 18 00	North Mongolia	Ider	Uplift	Leucocratic granite			Upper Proterozoic	North Mongolia	Leucocratic granite		Upper Proterozoic
1580	No23	Hydrothermal	Khubsgul	48 42 00	99 13 00	North Mongolia	Ider	Uplift		Metamorphic rocks	Proterozoic		North Mongolia	Metamorphic rocks		
1578	No14	Hydrothermal	Khubsgul	48 53 00	99 31 00	North Mongolia	Ider	Uplift		Crystallin shale, marble	Upper Proterozoic		North Mongolia	Crystallin shale, marble		Upper Proterozoic
3993	Minjuur tolgoi	Skarn	Khubsgul	49 32 00	99 32 00	North Mongolia	Ider	Uplift	Granite	Limestone, metamorphic rocks	R3 -Darkhad series lower bed	D2 -Tes complex	North Mongolia	Limestone, metamorphic rocks		
5332	Minjuurt	Skarn	Khubsgul	49 32 00	99 00 00	North Mongolia	Ider	Uplift	Granite	Shale, limestone	PR3 -Khar sair series	D1-2 -Numreg complex	North Mongolia	Shale, limestone		
5228	Ikh uul	Hydrothermal	Zavkhan	48 32 00	98 42 00	North Mongolia	Ider	Uplift	Granite			PZ1 -Telmen complex	North Mongolia	Granite		
3931	Occur-9	Hydrothermal	Khubsgul	51 44 50	99 46 50	North Mongolia	Khubsgul	Dipression		Green shale	Lower-Middle Riphian		North Mongolia	Green shale		

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(6b/15)

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
4697	Solongotiin gol	Skarn: 10m x3,5m	Chalcopyrite	Magnetite	Cu-0,02%		Geological mapping(1981)**					3684
1559	Scarn	Skarn: 1000m x150m	Malachite	Epidote, garnet	Cu-0,001-0,02%		Geological mapping(1977)**			315m.cub		1719, 2986
454	Sangiin dalai No2	Quartz vein: 1-25cm			Cu-0,008-0,04%		Geological mapping(1977)**	1521 samples		421,8m.cub	303,8m	2651
460	South part				Cu-0,003-0,01%		Prospecting work(1976)			1109m.cub	287m	2975
1554	Onts uul	Mineralization zone: 220m x15m	Malachite	Pyrite	Cu-0,04-0,1%		Geological mapping(1977)**	127 samples		303,6m.cub	16m	2723
1580	No23	Quartz vein: 15m x0,2m	Malachite		Cu-0,03%		Geological mapping(1977)**					2651
1578	No14	Quartz vein: 40m x0,5m	Malachite, azurite	Galena	Cu-0,003-0,05%		Geological mapping(1977)**					2651
3993	Minjuur tolgoi	Skarn: 160m x13m	Copper	malachite, azurite	Cu-0,07%		Geological mapping(1993)*					4839
5332	Minjuurt	Skarn: 650m x20m	Malachite, azurite		Cu-0,05-1,61%		Geological mapping(1972)**			65m.cub		2256
5228	Ikh uul	Quartz vein: 10m x0,3m	Chalcopyrite	pyrite	Cu-0,05-0,3%		Geological mapping(1966)****, (1981)**					3711, 1760
3931	Occur-9	Quartz vein: 20m x0,8m	Malachite, azurite, chalcopyrite		Cu-0,3%		Prospecting work(1993)					4770

Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(7a/15)

Western part of the survey area

No.	Deposit name	Deposit type	Location			Geology								Deposit (1)			
			Province	Latitude	Longitude	Tectonic zone	Formation	Structure	Igneous (plutonic) rocks	Sedimentary and volcanic rocks	Age of sedimentary rocks	Age of igneous rocks	Metalogenic province	Country rock	Alteration	Age of mineralization	
486	Occur-3	Hydrothermal	Khubs gul	49 53 00	98 16 00	North Mongolia	Tuva-Mongol	Outcrow		Limestone		Lower Cambrian		North Mongolia	Limestone		
1475	Burenkhaan	Metasomatic	Khubs gul	49 49 00	99 55 00	North Mongolia	Near Khubs gul	Dipression	Granosyenite	Marblized limestone		Lower Cambrian	Middle Devonian	North Mongolia	Marblized limestone		
1589	khuren asga uul	Hydrothermal	Zavkhan	48 08 00	96 23 00	North Mongolia	Ider	Dipression	Granite				Lower Permian	North Mongolia	Granite		
1569	khojuulin gol	Hydrothermal	Zavkhan	48 43 00	98 16 00	North Mongolia	Ider	Uplift	Gneissose granite				Upper Proterozoic	North Mongolia	Gneissose granite		
452	Occur-7	Hydrothermal	Khubs gul	48 57 00	99 07 00	North Mongolia	Ider	Uplift	Granite	Tufficious sediments		P -Zuun nuur series	P2-T1 -Selenge complex	North Mongolia	Granite		
453	Occur-1	Hydrothermal	Khubs gul	49 16 00	99 15 00	North Mongolia	Ider	Uplift	Granite				Lower Paleozoic	North Mongolia	Granite		
1588	Burgast	Contact metasomatic	Zavkhan	48 18 00	95 05 00	North Mongolia	Tsagaan olom	Dipression	Granosyenite	Dolomite		PR3 -Tsagaan olom suite	Lower Permian	North Mongolia	Dolomite		
1462	Agar	Hydrothermal	Khubs gul	49 42 00	98 07 00	North Mongolia	Near Khubs gul	Uplift	Granite				Middle Paleozoic	North Mongolia	Granite		
1545	Bulagiin uber	Metasomatic	Khubs gul	50 16 00	99 32 00	North Mongolia	Near Khubs gul	Dipression	Granite	Limestone with aleurolite bed		V3-E1 -Bayanzurkh suite	D2 -Tes complex	North Mongolia	Granite		
571	Dargia uul	Metasomatic	Khubs gul	49 33 00	98 41 00	North Mongolia	Tuva-Mongol	Uplift	Granite	Shale		R3 -Darkhad series lower and upper beds	Upper Carboniferous	North Mongolia	Granite		
1516	Uringimii	Magmatic	Khubs gul	50 56 00	98 21 00	North Mongolia	Tuva-Mongol	Anticlinorium	Granite, granite porphyry	Limestone, green shale, marble		PR3 -Muren and Okin suites	Lower-Middle Devonian	North Mongolia	Granite, granite porphyry		

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Table A-3 List of mineral occurrences, and geochemical anomalies in the central north area

(7b/15)

Western part of the survey area

No.	Deposit name	Deposit (2)					Previous survey					Reference
		Morphology	Ore mineral	Gangue mineral	Grade	Ore reserve	Geology	Geochemistry	Geophysics	Trench and pit	Drilling	Report number
486	Occur-3	Quartz-carbonate vein: 2m x0,15m	Bornite	Chalcopyrite, malachite, lazurite	Cu-0,6%; Ag-60g/t		Geological mapping(1977)**					3045
1475	Burenkhaan	Skarn:	Chalcopyrite	Magnetite, hematite, malachite	Cu-0,5-0,64%		Regional survey(1979)					3146
1589	khuren asga uul	Quartz vein:	Galena	pyrite	Ag-100g/t; Au-0,2g/t		Geological mapping(1981)**			219m.cub	103m	3576
1569	khojuuliin gol	Quartz vein: 60m x5m	Galena	Fluorite	Cu-0,006%; Ag-5g/t		Geological mapping(1979)*			95m.cub		2989
452	Occur-7	Quartz vein: 120m x0,3m			Cu-0,002%; Ag-0,0001%		Geological mapping(1977)**					2651
453	Occur-1	Quartz vein: 60m x0,5m	Galena		Cu-0,01%; Pb-0,04%		Geological mapping(1977)**					2651
1588	Burgast	Skarn: 6000m x0,2m	Galena	Arsenopyrite, pyrite	Pb-0,5%; Zn-0,04%		Geological mapping(1979)**					3576
1462	Agar	Greisen zone:	Galena	Spharelite, hematite, pyrite, chalcopyrite	Cu-0,002%; Pb-0,002-1,0%		Geological mapping(1978)**					3045
1545	Bulagiin uber	Quartz vein: 70m x5m		Hematite, malachite, Magnetite, Pyrite	Zn-0,02%; Mo-0,0003%		Geological mapping(1984)*	841 samples		492,3m.cub	435,5m	3977
571	Dargia uul	Greisen zone: 800m x350m			Nb-0,0375; Zn-0,035%; Pb-0,03%; Ag-0,025%	Nb-5800t; Zn-160200t; Pb-4050t; Ag-800t	Geological mapping(1987)*	290 samples		1449,6m.cub		4428
1516	Uringimiin	Pegmatite: 19m x19m	Fergusonite, monazite, pyrochlore	Fluorite, galena, spharelite, chalcopyrite	Tb-0,1-0,2%; Nb-18,4%		Geological mapping(1964)****					1750