Appendix

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
1	Argentina Mining Sector Review 1993	English		1993	World Bank	Argentina	Mining activities report
2	Directory of Mining Investment Opportunities in the Argentina Republic	English		1993	Mining Secretary, Ministry of Economy and Public Services	Argentina	Deposits in each province, Geological maps, Climate, Topographical sections
3	Depositos y Manifestaciones Minerales de la Cordillera Patagonica y Fueguina, Republica Argentina	Spanish		1994	Secretaria de Mineria de la Nacion	Argentina	Location map of deposits in Chubut, Santa Cruz, Tierra del Fuego
4	Encuentro Intermacional de Mineria, ACTAS	Spanish		1994	Secretaria de Mineria de la Nacion	Argentina	Technical papers
5	Annual Reort 1995, Eldorado Gold Corpration	English		1995	Erdrado Gold Corporation	Argentina	Andes project in Catamarca
6	Environment for mining development in Argentina	Japanese		1995	MERIC, MMAJ	Argentina	Country report
7	Geologia y Metalogenesis del Orogeno Andino Cenral, Republica Argentino	Spanish	Mendez, V., Zanettini, J.C. and Zappettini, E.O.	1995	SEGEMAR	Argentina	Note on geological map of 32°to 40°Central Andean area (1/400,000).
8	Argentina Mining '96, A New Frontier Opportunity	English		1996	Engineering & Mining Journal, Latinomineria	Argentina	Investment promotion
9	Argentina's Mining Sector 1997	English		1997	Ministry of Economy and Public Works and Services	Argentina	Mining ativities
10	Estadistica de la Produccion Minera de la Republica Argentina	Spanish		1997	Subsecretaria de Mineria	Argentina	Mining production statistics
11	Estadistica Minera de la Republica Argentina, 1994-1996	Spanish		1997	Direccion de Evaluacion Minera	Argentina	Mining statistics
12	Sector Minero Argentina 1977	Spanish		1997	Ministrerio de Economia y Obras y Servicios Publicos	Argentina	Mining activities
13	Argentina's Mining Sector	Spanish/English		1998	Ministrerio de Economia y Obras y Servicios Publicos	Argentina	Outline of mining activities.
14	Argentina's Mining Sector 1998	Spanish		1998	Ministrerio de Economia y Obras y Servicios Publicos	Argentina	Mining activities
15	Mineria Argentina, La Calidad como Filosofia	Spanish		1998	Subsecretaria de Mineria	Argentina	Mning policy
16	Mining Right Information (La Rioja, Mendoza, San Juan)	English	Lavandario, E.	1998	SEGEMAR	Argentina	Letter, Mining Right Information

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No.	Title	Language	Author	Year	Organization	Category	Comments
17	X Congreso Latinoamericano de geologia, VI Congreso Nacionalde Geologia Ecomica	Spanish		1998	Subsecretaria de Mineria de la Nacion, Sevicio Geologico Minero Argentina, Asociacion Argentina de Geologos Economistas	Argentina	Proceeding of the geological conference
18	Compendio 1999/2000 de las Industrias de Base Mineral y de la Mineria Argentina	Spanish		1999	Panorama Minero	Argentina	Mining magazine for mining activities
19	Panorama Minero	Spanish		1999	Panorama Minero	Argentina	Mining magazine in Argentina
20	Geomapa, Republica Argentina, Fisico-Pplitico	Spanish				Argentina	Geographical map of Argentina (1/3,500,000)
21	Legal and Tax Framework	Spanish				Argentina	Mining law and Revenue law
22	Marco Juridico Ambient para la Actividad Minera	Spanish			Unidad de Gestion Ambient Nacional	Argentina	Environmental law
23	Rutas de la Argentina	Spanish			Automapa	Argentina	Road map of Argentina
24	Mapa Metalogenetico de la Republica Arentina (GIS etc)	Spanish/English		1998	SEGEMAR	Argentina (CD-ROM)	GIS of Metallogenic maps of Argentina etc.
25	Caracteristicas y Edad del Plutonismo en los Alrededores del Lago Puelo, Provincia del Chubut	Spanish	Lizuain, A.	1981	Servicio Geologico Nacional	Chubut	Age of plutonic rocks of Cordillera Patagonia.
26	Investigaciones Detalladas del Cateo Huemules, Informe Final: Parte I	Spanish		1983	United Nations Revolving Fund for Natural Resources Exploration	Chubut	Final report of UNRF project (1977-1982)
27	Mineralizacion asociada a diques terciarios de Dacita-Andesita-Basalto en la Cordillera Patagonica Septentrional y Central, Provincias de Rio Negro y Chubut	Spanish	Genini, A.D., Grizinik, M. and Pezzuchi, H.D.	1989	Dir. Nac. Min. y Geol. Centro Explor. Patag. Sur y Dept. Geologia - Univ. Nac. de la Patagonia San Juan Basco	Chubut	Mineralization model.
28	Mapa Geologico Simplificado de la Cordillera de la Provincia del Chubut	Spanish	Marquez, M.J.	1999	Servicio Nacional Minero Geologia	Chubut	Outline geology of cordillera area of Chubut province.
29	Mapa de ubicacion de UNRF project	Spanish				Chubut	Location maps of Gaste, Esquel-Corcovado, Lagos Fontana-La Plata areas
30	Provincia Chubut, Geochemica de Rocas/Sedimentos/Suelo	Spanish				Chubut	Geochemical survey in Chubut province
31	Metalogenesis de la region Apeleg-Alto Rio Sebguerr, Chubut	Spanish	Lanfranchini, M.E., Etcheverry, R.O. and Schlamuk, I.B.	1999	XIV Congreso Geologico Argentino	Chubut (Apeleg)	Aloteration and mineralization in Apeleg-Alt Rio Senguerr district

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
32	Estudio de las Alteraciones en el Cerro Coihue. Provincia del Chubut. Republica Argentina	Spanish	Genini, A. and Nillni, A.	1994	Universidad nacional de la Patagonia San Juan Bosco	Chubut (Cerro Coihue)	Investigation on alteration of Cerro Coihue deposits
33	Informe Preliminar Proyect 04 HA. Epuyen. Area No 8. Cerro Coihue	Spanish	Genini, A. and Grizinic, M.	1999	Delegacion Regional Patagonia, SEGEMAR	Chubut (Cerro Coihue)	Outline of Cerro Coihue deposits, vein-type, pyritization with Cu-Mo mineralization
34	Geologia y Mineralizacion del Sector Suroriental del Cerro Coihue, Provincia del Chubut	Spanish		?	Secretaria de Estado de Mineria y Universidad Nacional de la Patagonia San Juan Basco	Chubut (Cerro Coihue)	Outline of Cerro Coihue deposits.
35	Mapa Geologico Minero del Arroyo de los Alevinos - Lago Fontana, Provincia del Chubut.	Spanish	Marquez, M.J. y Parisi, C.	1995	SEGEMAR	Chubut (Cerro Colorado)	Geological map of the area of Cerro Colorado
36	El prospect aurifero Cerro Colorado, Chubut	Spanish	Perez, H.D. and Sureda, R.J.	1999	XIV Congreso Geologico Argentino	Chubut (Cerro Colorado)	Discovery of high sulfidation gold deposit
37	Proyect 04 HC Area Cordon caquel, Bosquejo Geologico entre Arroyp Luque y Arroyo el Rapid.	Spanish			SEGEMAR	Chubut (Cerro Gonzalo)	Geological map of the area of Arroyo Luque - Cerro Gonzalo
38	Estudio Geologico-Minero del Yacimiento Cuprifero "Condorcanqui"	Spanish	Tabacchi, M.H.	1953		Chubut (Condorcanqui)	Outline of Condorcanqui deposit, Low Cu grades.
39	Reconocimient Geologico Area Epuyen, Prov. Del Chubut	Spanish	Genini, A.	1976	S.N.M., P.P.C.	Chubut (Condorcanqui)	Outline of Condorcanqui deposits, 4,400t reserves by FM's drillings.
40	Mineralizacion de Cobre Asociada al Plutonismo Terciario en la Zona de la Mina Condorcanqui, Provincia de Chubut	Spanish	Silva, A., Beatriz, C., Eva, D. and Norra, P.	1979	Secretaria de Estada de Minelia, Ministerio de Economia	Chubut (Condorcanqui)	Geochemical survey for Condorcanqui deposit area.
41	Geologia y Area de Alteracion en el Cerro Cororado y Alrededores. Chubut Noroccidental	Spanish	Sepulveda, E.G. and Viera, R.M.	1980	Asociacion Geologica Argentina, Revista XXXV (2) 195-202	Chubut (Esquel NW)	Technical paper, alteration with possibility of porphyry copper deposit
42	Informe Preliminar sobre la Prospeccion Reginal del Cordon de Esquel, Proyect 04 HB Esquel	Spanish	Herrero, J.C.	1982	Servicio Nacional Minero Geologia	Chubut (Esquel)	Field survay report, inc. 1/100,000 geological map
43	Informe Proyect Cordon Situacion, Centro de Exploracion Patagonia Sur	Spanish	Marquez, M., Parisi, C. and Butron, F.	1987	Direccion Nacional de Mineria y Geologia, Secretaria de Mineria	Chubut (Esquel)	Field survay report, inc. 1/2,000 route map
44	Informe Proyecto 04, HB, Esquel. Plan Patagonia Comahue Geologico Minero	Spanish		1997	Servicio Nacional Minero Geologico	Chubut (Esquel)	Field survey report with mineral occurrences, inc. 1/100,000 maps
45	Geologia-Reservas y Modelo Teorico de Estructuras Mineralizadas del Yacimiento de Oro Huemules	Spanish	Viera, R., Herrero, J.C. and Hughes, G.E.	1982	Direccion General de Minas y Geologia Provincia Chubut	Chubut (Huemules)	Hemules deposit, 0.02 to 815g/t Au, guide for galleries.
46	Investigaciones Detalladas del Cateo Humules, Informe Final: Parte II	Spanish		1983	Fond Rotatorio de las Naciones Unidas para la Exploracion de Recursos Naturales	Chubut (Huemules)	Final report of UNRF project (1977-1982) for Huemules deposit.
47	Mapas anexas de Informe Final Parte II	Spanish		1983	Fond Rotatorio de las Naciones Unidas para la Exploracion de Recursos Naturales	Chubut (Huemules)	Plans of final report of UNRF project (1977-1982) for Huemules deposit.

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No.	Title	Language	Author	Year	Organization	Category	Comments
48	Proyect Huemules (Provincia de Chubut)	Spanish		1984	Ministrio de Economia, Servicios y Obras Publicas/Subsecretaria de Promocion y Desarollo/Provincia del Chubut	Chubut (Huemules)	Abstract of UNRF project, Huemules deposit, 2,975,000t (10.3g/t Au, <1,000,000t)
49	El Prospecto Huemules, Cordon Oriental del Futalaufquen, Chubut, Argentina	Spanish	Viera, R.L.M. and Hughes, G.	1999	SEGMAR, Direccion de Minas y Geologia del Chubut	Chubut (Huemules)	Huemules deposit, 750,000t, 9g/t Au.
50	Mineralogia del yaimiento polimetarico Huemules, Cordillera Patagonia Septentrional, Chubut	Spanish	Schalamuk, I., Bario, R.E. and Vasconcellos, M.	1999	XIV Congreso Geologico Argentino	Chubut (Huemules)	Mineralogy, fluid inclusion and isotopic data
51	Annual report and Financil Statements for the year ended 31 December 1998	English		1999	Brancote Holding PLC	Chubut (Joya del Sol)	Annual report of 1998
52	Informe Preliminar Proyecto 04 HA "Lago Epuyen"	Spanish	Beltramone, C.A.	1978	Plan Patagonia Comahue, Subseda los Alamos	Chubut (Lago Epuyen)	Five alteration zones, geochemical survey, Cu max 320ppm.
53	Proyecto Lago Fontana, Chubut	Spanish	Silvia Ametrano	1885	Secretaria de Mineria	Chubut (Lago Fontana)	Detailed survey report, 700,000t reserves, 1.63% Pb, 4.49% Zn, 0.61% Cu
54	No Title (Lago Fontana y otros)	Spanish		1951		Chubut (Lago Fontana)	Survey for mineral occurrences of Chubut and Santa Cruz.
55	Genesis y Geoquimica de la Mineralizacion de los Yacimientos "Los Manantiales y Lago Fontana", Provincia del Chubut	Spanish	Dominguez, E.A.	1981	Asociacion Gelogica Argentina, Revista, XXXVI (2) : 123-142.	Chubut (Lago Fontana)	Study on the genesis of Los Manantiales deposit and Lago Fontana deposit
56	Informe de Avance Programa Cordillea Patagonica Area Arroyo Canogas	Spanish	Marquez, M.J. and Parisi, C.	1995	Delegacion Regional Patagonia, Direccion Nacional del Servicio Geologico	Chubut (Lago Fontana)	Geology and mineraliztion of Arroyo Canogas area.
57	Informe de Avance Programa Cordillea Patagonica Area Katterfeld	Spanish	Marquez, M.J.	1995	Delegacion Regional Patagonia, Direccion Nacional del Servicio Geologico	Chubut (Lago Fontana)	Geology and mineraliztion of Katterfeld area.
58	Yacimientos de Oro y Plata de la Patagonia, Republica Argentina, Principales Posibilidades de Inversion	Spanish		1997	SEGEMAR	Chubut (Lago Fontana)	La Ilision Propiedad(Zn,Pb,Ag,Au), Cerro Colorado propiedad (Au 7.95g/t)
59	Informe Preliminar de la Hoja 45a, Lago General Vinter	Spanish	Pesce, A.H.	1976	Servicio Nacional Minero Geologia	Chubut (Lago Grl. Vintter)	Field survey report, inc 1/200,000 geological map
60	Estratigrafia de la Cordillera Patagonica entre los de 43°30' y 44° de latitud sur y sus areas Mineralizadas	Spanish	Pesce, A.H.	1978	Servicio Nacional Minero Geologia	Chubut (Lago Grl. Vintter)	Geology, alteration and mineralization
61	Informe Preliminar Hoja Lago General Vintter (Hoja 45A)	Spanish	Pezzuchi, H.D.	1979		Chubut (Lago Grl. Vintter)	Geological description
62	Informe Proyecto 04, HB, Cerro Rinon y Cerro Steffen. Plan Patagonia Comahue Geologico Minero	Spanish	Parisi, C.	1981	Servicio Nacional Minero Geologia	Chubut (Lago Vintter)	Field survey report, inc. 1/50,000 maps
63	Informe Proyecto 04, HB, Esquel, parque Nacional Los Alerces	Spanish	Viera, R.	1976	Servicio Nacional Minero Geologia	Chubut (Los Alerces)	Field survey report, inc. 1/150,000 geological map

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
64	Informe Geologico Preliminar, Proyecto 04 HB Esquel y 04 HC Trevelin	Spanish	Marquez, M.J.	1980	Servicio Nacional Minero Geologia	Chubut (Los Alerces)	Field survey report, inc. 1/150,000 alteration map
65	Estudio de los Yacimiento de Caolin del Oeste de la Provincia del Chubut, Minas Susana, Gato y Estrella Gaucha	Spanish	Maiza, P.J.	1981	VIII Congreso Geologico Argentino, San Luis, Atas IV : 471-484.	Chubut (Sakmata)	Acid hydrothermal alteration
66	Mapeo de Semidetalle y Muestreo de las Zonas de Alteracion del Cerro Bayo (Cordillera de Sakmata) Apeleg ; Chubut	Spanish	Parisi, C. and Butron, F.	1993		Chubut (Sakmata)	Geochemical exploration by rock samples. No noticeable Au values.
67	Geologia y Mineralizacion de la Cordillera de Sakmata. Aldea Apeleg.	Spanish	Marquez, M. and Pezzuchi, H.	?	Direccion Nacional de Mineria y Geologia	Chubut (Sakmata)	Geology and mineralization of Sakmata (Apeleg). Qz veins with sulfides.
68	Informe sobre las Minas de Caolin, Alunita, y Minerales Metaliferos en la Promincia del Chubut	Spanish	Dr.Hayase, K.	1970	Universidad Nacional del Sur	Chubut (Sakmata, Lago Fontana)	Geological survey for the known deposits. No significant mineralization.
69	Estructura y Mineralizacion en la Cordillera Patagonica, Tesis Doctoral	Spanish	Haller, M.J.	1981	Universidad de Buenos Aires	Chubut (Trevelin~ Lago Grl. Vintter)	Doctoral dissertation, Universidad de Buenos Aires
70	Informe Geologico Preliminar, Proyecto 04 HC Trevelin, Sector Oriental	Spanish	Marquez, M.J.	1979	Servicio Nacional Minero Geologia	Chubut (Trvelin)	Field survey report, inc. 1/100,000 and 1/50,000 maps
71	Informe Proyect 04, HC, Trevelin. Plan Patagonia Comahue Geologico Minero	Spanish	Marquez, M.	1981	Servicio Nacional Minero Geologia	Chubut (Trvelin)	Field survey report, inc. 1/50,000 alteration map
72	Informe sobre la Prospeccion Semidetallada del Cerro Riscoso, Proyecto 04, HB, Esquel.	Spanish	Herrero, J.C. and Parisi, C.	1981	Servicio Nacional Minero Geologia	Chubut (Trvelin)	Field survey report, inc. 1/11,500 and 1/1,000 maps
73	Informe Geologico Preliminar, Lago Fontana Sur	Spanish	Marquez, M.J. and Parisi, C.	1994		Chubut(Lago Fontana)	Survey for mineral occurrences, Arroyo Cangan is thought to be promising.
74	Geologia y Metalogenesis del Orogeno Andino Central; 1:400,000; Direccion Nacional del Servicio Geologico (1) y (2)	Spanish	Mendez, V., Zanettini, J.C. and Zappettini, E.O.	1995	SEGEMAR	Geol. Map (Andino Central)	Geological map (1/400,000) of Andean Central area (S32° to S40°)
75	Mapa Geologico de la Republica Argentina, 1: 5,000,000	Spanish	Caminos, R. and Gonzalez, P.D.	1996	SEGEMAR	Geol. Map (Argentina)	Geological map (1/5,000,000) of Argentina
76	Mapa Geologico de la Republica Argentina, 1:2,500,000; Secretaria de Industria, Comercio y Mineria (1) y (2)	Spanish	Mendia, J.	1997	SEGEMAR	Geol. Map (Argentina)	Geological map (1/2,500,000) of Argentina
77	Mapa Geologico de la Provincia del Chubut, 1:750,000; Direccion Nacional del Servicio Geologico	Spanish	Page, R.	1995	Direccion Nacional del Servicio geologico, Secretaria de Mineria.	Geol. Map (Chubut)	Geological map (1/750,000) of Chubut Province
78	Mapa Geologico y de Recursos Minerales de la Provincia del Neuquen, 1:500,000; Direccion Nacional del Servicio Geologico	Spanish	Delpino, D. and Deza, M.	1995	Direccion Nacional del Servicio geologico, Secretaria de Mineria.	Geol. Map (Neuquen)	Geological map (1/500,000) of Neuquen Province
79	Mapa de Recursos Minerales del Area Fronteriza Argentino-Chilena entre los 34 y 56S. (2 hojas)	Spanish	Zanettini, J.C.M., Marquez, M.J., Gonzalez, R.A., Vivallo, W.P., Gardeweg, M.C. and Tassara, A.H.	1999	SEGEMAR y SERNAGEOMIN	Geol. Map (Patagonia)	Geological maps (1/1,000,000) for the area along the border (S34° to S56°)

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No.	Title	Language	Author	Year	Organization	Category	Comments
80	Mapa Geologico de la Provincia de Rio Negro, 1:750,000; Direccion Nacional del Servicio Geologico (1) y (2)	Spanish	Page, R.F.N.	1994	Direccion Nacional del Servicio geologico, Secretaria de Mineria.	Geol. Map (Rio Negro)	Geological map (1/750,000) of Rio Negro Province
81	Tehnical Specifications, Airborne Geophysical Survey in Argentina, SEGEMAR PASMA Project 1997-1998	Spanish		1997	SEGEMAR	Geophysics	SEGEMAR's specification for airbone geophysics
82	Simposio Geofisica Aerea y Geoquimica en la Prospeccion Geologica-Minera	Spanish		1998	X Congreso Latinoamaricano de Geologia, VI Congreso Nacional de Geologia Economica	Geophysics	Proceedings of international geophysical conference.
83	Minerals Yearbook Volume III, 1995 International Review	English		1995	U.S. Department of the Interior/U.S. Geological Survey	Latin America	1995 Review, Mineral industries of Latin America and Canada
84	Mapa Geologico y de Recursos Minerales de la Provincia del Neuquen	Spanish		1995	Servicio Geologico Neuquino	Neuquen	Provincial geological map
85	Prospectos Metaliferos, Provincia del Neuquen	Spanish		1998	CORMIN S.E.P.	Neuquen	Information of CORMIN Properties of Butalon Norte, Cajon de los Chenques, Cerro Caicayen, La Voluntad, Cochico.
86	Airbone and Ground Instrumentation	English				Neuquen	Neuquen province, airbone mag. spec.
87	Areas de Reservas Minera, Provincia Neuquen	Spanish			CORMIN S.E.P.	Neuquen	Information of properties of Neuquen Province
88	Investing for Growth, Neuquen	English			Secretaria de Estado del COIPADE y Energia, Provincia del Neuquen	Neuquen	Investiment climate in Neuquen Province.
89	No.2 Campana Mahuida (Cu), No.3 Proyect disrito Aurifero Andacollo (Au)	Spanish				Neuquen	Outline of Campana Mahuida, Andacollo deposits etc.
90	Prospectos y Areas de Alteracion Hidrothermal de la Provincia del Neuquen	Spanish		1996	CORMIN S.E.P.	Neuquen	Information of 23 alteration zones in Neuquen Province.
91	Mapa Official de la Provincia del Neuquen	Spanish		1997	Provincia del Neuquen	Neuquen	Information map of 1/500,000 utilizing TM image
92	Prospecto y Areas de Alteracion Hidrotermal, Entre 36°46′ - 38°12′ L.S. y 70°01′ - 71°30′ L.O.	Spanish			Provincia del Neuquen	Neuquen	Geological map of 1/200,000 with distribution of hydrothermal alteration zones
93	Sector Norte Distrito Minero Andacollo	Spanish/English		1998	Gobierno de la Provincia del Neuquen	Neuquen (Andacollo)	Information of CORMIN property at North Andacollo.
94	Explotacion del distrito aurifero Andacollo en la Provincia del Neuquen	Spanish		1999	Panorama Minero	Neuquen (Andacollo)	Exploitation at the Andacollo gold mine
95	Nuevo Contrato de Exploracion para Andacollo	Spanish		1999	Panorama Minero/No232-Enero de 1999	Neuquen (Andacollo)	New contract between CORMIN and Mineral Andacollo Gold S.A.

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No.	Title	Language	Author	Year	Organization	Category	Comments
96	Longitudinal Mina Sofia	Spanish		2000	Minera Andacollo Gold S.A.	Neuquen (Andacollo)	Section map of the Sofia Mine
97	Estudio Comparativo de los Distritos Mineros "Andacollo" y "Cerro Atravesada", Pcia. Del Neuquen, Argentina.	Spanish	Danieli, J.C. and Ronconi, N.	1979	Direccion General de Mineria de la Pcia. de Neuquen	Neuquen (Andacollo, Carreri)	Geological comparative study for Andacollo and Careri districts. Tertiary age mineralization is supposed for both districts.
98	Geoquimica de los intrusivos hallados entre los arroyos Butalon y Quebrada felix. Departamento Minas, Neuquen	Spanish	Case, A.M., Danieli, J.C. and Schlamuk, I.	1999	XIV Congreso Geologico Argentino	Neuquen (Butalon)	Petrological chemistry of intrusive rocks
99	Geologia de la Comarca de Campana Mahuida (Provincia del Neuquen)	Spanish	Zanettini, J.C.M.	1979	Asociacion Gelogica Argentina, Revista, XXXVI (1) : 61-68.	Neuquen (Campana Mahuida)	Outline geology of Campana Mahuida deposit, Intrusions of Cretacaous to Ologocene.
100	Estudio Minero-Geologico del Yacimiento de Plomo "Carreri", Neuquen, Argentina.	Spanish	Aparicio, E.	1960		Neuquen (Carreri)	Description on the Carreri deposits, including ore grades and reserve (500t).
101	Area la Atravesada, Neuquen, Argentina.	Spanish		1993	Ingeoma S.A.	Neuquen (Carreri)	Geochimical sampling report in La Atravesada area.
102	Fax-Area de Reserva La Atravesada, Neuquen, Argentina.	Spanish		1993	American Resource Corpration	Neuquen (Carreri)	Memoramdum on the information of La Atravesada area.
103	Prospecto "La Atravesada", Muestreo Geoquimico, Pcia. del Neuquen, Argentina.	Spanish	Horacio, G.	1993		Neuquen (Carreri)	Stream-sediments geochemical survey results with Cu anomalies of 50 to 100ppm.
104	Area de Reserva Carreri.	Spanish		1995	Provincia del Neuquen	Neuquen (Carreri)	Information on Careri properties
105	Area de Reserva Cochico-Carreri-Cachil, Neuquen, Argentina.	Spanish	Campbell, J.	1996	RTZ Mining and Exploration Limited	Neuquen (Carreri)	Geochemical survey reports. RTZ withdrew to ontract with CORMINE.
106	Area de Reserva Carreri, Neuquen, Argentina.	Spanish		1998	Direccion Pcial. de Mineria	Neuquen (Carreri)	Description for previous works in the Carreri district.
107	La Formacion Chachil (Liasico) y sus Niveles Manganesiferos en el Area del Cerro Atravesada, Neuquen, Argentina.	Spanish	Leanza, H.A., De Brodtkorb, M.K., Brodtkorb, A. and Danieli, J.C.		Tercer Congreso Nacional de Geologia Economica	Neuquen (Carreri)	Description for Mn mineralization in the Cerro Atravesada district (Carreri-Nireco).
108	Prospect Pino Andino	Spanish/English		1998	Gobierno de la Provincia del Neuquen	Neuquen (Pino Andacollo)	Information of CORMIN property at Pino Andino, drillings, weak Cu mineralization.
109	Programa Nacional de Cartas Geologicas de la Republica Argentina. Hoja Geologica 4169-I, Piedra del Aguila.	Spanish	Cucchi, R., Espejo, P. and Gonzalez, R.	1998	SEGEMAR	Neuquen y Rio Negro	Geological map of 1/250,000 and note
110	Actualizacion Metalogenica de la Region Patagonica al Sur del Paralelo de 42°00′ sur, Republica Argentina	Spanish	Giacosa, R.E., Marquez, M.J. and Pezzuchi, H.D.	1980	Tercer Congreso Nacional de Geologia Economica Tomo III : A1-20.	Patagonia	Mineral deposits of Chubut to Tierra del Fuego
111	Report of mineral exploration in the Patagonia area (phase 2)	Japanese		1983	JICA/MMAJ	Patagonia	Technical cooperation project

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No.	Title	Language	Author	Year	Organization	Category	Comments
112	Report of mineral exploration in the Patagonia area (consolidated)	Japanese		1984	JICA/MMAJ	Patagonia	Technical cooperation project
113	Report of mineral exploration in the Patagonia area (phase 3)	Japanese		1984	JICA/MMAJ	Patagonia	Technical cooperation project
114	Depositos y Manifestaciones Minerales de la Cordillera Patagonica y Fueguina, Republica Argentina	Spanish	Marquez, M.J., Parisi, C., Covaro, M.I.F. and Jones, M.E..	1994	Actas del Encuentro Interncional de Mineria, I : 66-83	Patagonia	Mineral deposits of Chubut to Tierra del Fuego
115	Mapa de recursos minerales del area fronteriza Argentino-Chilena entre los 34 y 56 de latitud sur	Spanish		1998	SEGEMAR and SERNAGEOMIN	Patagonia	Note on geological map (1/1,000,000)
116	Mineral resourves map of the frontier zone between Argentine and Chile, 34-56 south latitude	English		1998	SEGEMAR and SERNAGEOMIN	Patagonia	Note on geological map (1/1,000,000)
117	Mapa de Recursos Minerales del Area Fronteriza Argentino-Chilena entre los 34 y 56S. (2 hojas)	Spanish	Zanettini, J.C.M., Marquez, M.J., Gonzalez, R.A., Vivallo, W.P., Gardeweg, M.C. and Tassara, A.H.	1999	SEGEMAR y SERNAGEOMIN	Patagonia	Note on geological maps (1/1,000,000) for the area along the border
118	Region : Patagonia, Regiones mineras de la Republica Argentina	Spanish		1999	Subsecretaria de Mineria	Patagonia	Data of social, infrastructure and economics
119	Properties map of Chubut Province (4 pc.)	Spanish		1999	Com. Rivadavia, SEGEMAR	Properties (Chubut)	Properties map of Chubut Province.
120	Padron Minero, Provincia de Chubut	Spanish		2000	Provincia de Chubut	Properties (Chubut)	Mining properties of Chubut (Auto-Cad files) without list
121	Expedientes, Provincia del Neuquen.	Spanish		1999	CORMINE	Properties (CORMINE)	Informations on CORMINE's 11properties
122	Property map of Neuquen Province (A3 size)	Spanish		1998		Properties (Neuquen)	Property map
123	Padron Minero, Provincia de Neuquen	Spanish		2000	Provincia de Neuquen	Properties (Neuquen)	Mining properties of Neuquen (map, floppy)
124	Property map of Rio Negro Province (3 pc.)	Spanish		1999		Properties (Rio Negro)	Property map
125	Padron Minero, Provincia de Rio Negro	Spanish		2000	Provincia de Rio Negro	Properties (Rio Negro)	Mining properties of Rio Negro (map, floppy, list)
126	Informe sobre la Prospeccion Geoquimica Realizada en Areas de la Cordillera de Rio Negro	Spanish	Giacosa, R.E..	1981	S.M.N. Plan Patagonia Comahue	Rio Negro	Stream sediments geochemical survey results.
127	Mapa Geologico de la Provincia de Rio Negro	Spanish		1994	Direccion Nacional del Servicio geologico	Rio Negro	Provincial geological map

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
128	Proyecto Rio Negro	Spanish		1996	SEGEMAR	Rio Negro	Project in Rio Negro province
129	Geologia y Recursos Minerales de la Hoja 4169-III, Ingeniero Jarcobacci.	Spanish	Gonzalez, P., Coluccia, A., Franchi, M., Caba, R. and Dalponte, M.	1999	Direccion de Mineria de Rio Negro y SEGEMAR	Rio Negro	Geological map of 1/250,000 and note
130	Geologia y Recursos Minerales del sector rionegrino de las Hojas 4172-IV, San Carlos de Bariloche y 4172-II, San Martin de los Andes.	Spanish	Giacosa, R., Heredia, N.C., Ceari, O., Zubia, M. and Gonzalez, R.	1999	Direccion de Mineria de Rio Negro y SEGEMAR	Rio Negro	Geological maps of 1/250,000 and note
131	Geologia y Recursos Minerales del Sector Rionegrino de las Hojas 4172-IV, San Carlos de Bariloche y 4172-II, San Martin de los Andes. Informacion Geologico Minera de la Provincia de Rio Negro	Spanish	Giacosa R., Heredia N., Cesari O., Zubia M. y Gonzalez R.	1999	Gobierno de la Provincia Rio Negro y SEGEMAR	Rio Negro	Note on geological map (1/250,000) of San Carlos de Baliloche area.
132	San Carlos de Bariloche, Carta Geologica de la Republica Argentina, Escala 1:250,000	Spanish	Giacosa R., Heredia N., Cesari O., Zubia M. y Gonzalez R.	1999	Giacosa R., Heredia N., Cesari O., Zubia M. y Gonzalez R. (1999) ; Gobierno de la Provincia Rio Negro y SEGEMAR	Rio Negro	Geological map (1/250,001) of San Carlos de Baliloche area.
133	Rio Negro, Proyect Minero, Sistema de Informacion Geologico Minera Digital.	Spanish		1998	Direccion de Mineria, Provincia de Rio Negro / SEGEMAR	Rio Negro (CD-ROM)	GIS of vrious kinds of exploration data in Rio Negro Proince
134	Informe Geologico Minero, Proyect 15 AL-Lago Mascardi, Mosaico 4172-IV-B2, Zona del Codon Tres Morros, Provncia de Rio Negro	Spanish	Giacosa, R.E.	1982	S.M.N.-Plan Patagonia Comahue, Saubsede los Alamos-Rio Negro	Rio Negro (Lago Mascardi)	Cordon Tres Morros district, 920ppm Cu, 2,800ppm Zn, stockwork, further survey is required.
135	Prospeccion y Exploracion Minera en el Cordon Tres Morros, Cerro Granito y Cerro del Medio, Cordillera Nord Patagonia, Provincia de Rio Negro, Proyect 15 AL-Lago Mascardi Mosaicos 4172-IV-B1 y B2,	Spanish	Giacosa, R.E.	1986	Dirccion Naional de Mineria y Geologia, Dept. Centro de Exploracion Patagonia Sur	Rio Negro (Lago Mascardi)	Max 88g/t Au in Cerro del medio o Alcorta district, hydrothermal mineralization.
136	Estudio Geologico de la Mina de Plomo, Zinc, Plata y Cobre "MARIA". Dept. Norquinco. Pcia de Rio Negro	Spanish	Greco, E.A. and Bornabo de Greco, E.	1973		Rio Negro (Maria)	Outline of Maria deposits, 11.75% Pb, 12.70% Zn, 1.8% Cu, 45.41g/t Ag.
137	Estudio Geologico de la Mina de Plomo, Zinc, Plata y Cobre "MARIA". Dept. Norquinco. Pcia de Rio Negro	Spanish	Greco E.A. and Bernabo de Greco E.A.	1973		Rio Negro (Maria)	Outline of Maria deposits.
138	No.9 Mina Maria (Pb-Zn-Ag-Au-Cu), Provincia de Rio Negro	Spanish				Rio Negro (Maria)	Outline of Maria deposits, Vein 250m×1.6m, 12% Pb, 13% Zn, 45g/t Ag, 3g/t Au, 2% Cu.
139	Informe Geologico Minero Proyecto 15 AF-Bariloche, Mosaico 4172-IV-10a, Zona: Nacientes del Rio Foyel, Prov. De Rio Negro	Spanish	Giacosa, R.E.	1982	S.M.N. Plan Patagonia Comahue	Rio Negro (Rio Foyel)	Follow-up S.S. geochemistry for Rio Foyel, but no noticeable results.
140	Ubicacion de areas mineralizados a visitar y reconocer en conjunto con la mission tecnica japonesa, en las provincias de Rio Negro y Chubut, desde Norquinco hasta Lago Fontana - La Plata.	Spanish	Viera, R.L.M.	2000	SEGEMAR - Delegacion Regional Patagonia Sur	Rio Negro and Chubut	List of known mineralization to visit in Rio Negro and Chubut Provinces
141	Hoja Geologica 4969-II; Tres Cerros, Provincia de Santa Cruz	Spanish	Panza, J.L., Zubia, M., Genini, A. and Godeas, M.	1995	Direccion de Nacional del Servicio Geologico, Secretaria de Mineria da la Nacion	Santa Cruz	Note on geological map (1/250,000) inc. Cerro Vanguardia deposit.
142	Emprendimiento Minero Cerro Vanguardia	Spanish	Lasanta, M.	1998		Santa Cruz (Cerro Vanguardia)	Development of the Cerro Vanguardia mine

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
143	Catalogo de Publicaciones	Spanish		1998	SEGEMAR	SEGEMAR	Catalogue of SEGEMAR's publications
144	Servicio Geologico Minero Argentina	Spanish/English		1999	SEGEMAR	SEGEMAR	Services of SEGEMAR
145	Index of 1:250,000 topography maps, Argentina	Spanish				Topo. Index (Argentina)	Index map of 1/250,000, Argentina
146	Index of 1:100,000 topography maps, Provincia del Chubut	Spanish				Topo. Index (Chubut)	Index map of 1/100,000, Chubut.
147	Indexof 1:100,000 topography maps, Provincia del Neuquen	Spanish				Topo. Index (Neuquen)	Index map of 1/100,000, Neuquen.
148	Indexof 1:100,000 topography maps, Provincia de Rio Negro	Spanish				Topo. Index (Rio Negro)	Index map of 1/100,000, Rio Negro.
149	Mapa topografica, Escala 1:250,000; Andacollo	Spanish				Topo. Map	Topography map (1/250,000)
150	Mapa topografica, Escala 1:250,000; Barrancas	Spanish				Topo. Map	Topography map (1/250,000)
151	Mapa topografica, Escala 1:250,000; Chos Malal	Spanish				Topo. Map	Topography map (1/250,000)
152	Mapa topografica, Escala 1:250,000; Esquel	Spanish				Topo. Map	Topography map (1/250,000)
153	Mapa topografica, Escala 1:250,000; Gastre	Spanish				Topo. Map	Topography map (1/250,000)
154	Mapa topografica, Escala 1:250,000; Gobernador Costa	Spanish				Topo. Map	Topography map (1/250,000)
155	Mapa topografica, Escala 1:250,000; Ingeniero Jacobacci	Spanish				Topo. Map	Topography map (1/250,000)
156	Mapa topografica, Escala 1:250,000; Jose de San Martin	Spanish				Topo. Map	Topography map (1/250,000)
157	Mapa topografica, Escala 1:250,000; Junin de Los Andes	Spanish				Topo. Map	Topography map (1/250,000)
158	Mapa topografica, Escala 1:250,000; Las Ovejas	Spanish				Topo. Map	Topography map (1/250,000)

Appendix-1 Collected literatures for the existing data analysis, sorted in order of category and year.

No.	Title	Language	Author	Year	Organization	Category	Comments
159	Mapa topografica, Escala 1:250,000; Paso de Indios	Spanish				Topo. Map	Topography map (1/250,000)
160	Mapa topografica, Escala 1:250,000; Paso de Pino Hachado	Spanish				Topo. Map	Topography map (1/250,000)
161	Mapa topografica, Escala 1:250,000; Picun Leufu	Spanish				Topo. Map	Topography map (1/250,000)
162	Mapa topografica, Escala 1:250,000; Piedra del Aguila	Spanish				Topo. Map	Topography map (1/250,000)
163	Mapa topografica, Escala 1:250,000; San Carlos de Bariloche	Spanish				Topo. Map	Topography map (1/250,000)
164	Mapa topografica, Escala 1:250,000; San Martin de Los Andes	Spanish				Topo. Map	Topography map (1/250,000)
165	Mapa topografica, Escala 1:250,000; Trevelin	Spanish				Topo. Map	Topography map (1/250,000)
166	Mapa topografica, Escala 1:250,000; Zapala	Spanish				Topo. Map	Topography map (1/250,000)

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
1	A00NK001	37' 14' 51.3'	70' 39' 15.2'	Andacollo	Sur los Maitenez	Intrusive	Andesite	Silicification / sericite /	GC
2	A00NK002	36' 47' 17.3'	70' 36' 33.5'	Varvarco	Varvarco		Qz vein		GC
3	A00NK003	36' 47' 26.8'	70' 36' 34.6'	Varvarco	Varvarco		Silicified rock	Silicification / /	GC
4	A00NK004	36' 47' 32.3'	70' 36' 34.6'	Varvarco	Varvarco	Intrusive	Granite	/ montmorillonite /	XR
5	A00NK005	36' 47' 04.4'	70' 37' 04.4'	Varvarco	Varvarco	Intrusive	Granite	/ kaolinite /	XR
6	A00NK006	36' 47' 16.6'	70' 36' 31.4'	Varvarco	Varvarco		Rhyolite	/ pyrophyllite /	XR
7	A00NK007	37' 26' 58.3'	70' 26' 10.1'	Cerro Caycayen	Cerro Caycayen		Iron ore	Limonitization / /	GC
8	A00NK008	37' 26' 44.4'	70' 26' 03.8'	Cerro Caycayen	Cerro Caycayen	Gr. Lotena?	Sandstone	/ sericite /	
9	A00NK009	37' 26' 57.4'	70' 26' 16.6'	Cerro Caycayen	Cerro Caycayen	Gr. Cuyo	Slate	/ sericite /	
10	A00NK010	37' 27' 01.3'	70' 26' 19.7'	Cerro Caycayen	Cerro Caycayen		Iron ore	Limonitization / /	GC
11	A00NK011	37' 26' 55.7'	70' 26' 21.5'	Cerro Caycayen	Cerro Caycayen	Gr. Lotena?	Sandstone	/ sericite /	
12	A00NK012	38' 13' 07.5'	70' 32' 37.4'	Campana Mahuida	Campana Mahuida	Tordillo Fm.	Sandstone	Phyllic / sericite /	XR
13	A00NK013	38' 13' 07.5'	70' 32' 34.5'	Campana Mahuida	Campana Mahuida		Qz vein		FI
14	A00NK014	39' 13' 09.6'	70' 35' 53.1'	La Voluntad	La Voluntad	Intrusive (La Voluntad Complex)	Biotite granite	Chloritization / / malachite	TS
15	A00NK015	39' 13' 15.1'	70' 35' 58.8'	La Voluntad	La Voluntad		Qz vein		GC
16	A00NK016	39' 03' 02.0'	70' 31' 49.5'	Nireco	ZA027	Campos basalticos de Zapala	Dacite	Silicification, Limonitization / montmorillonite /	GC
17	A00NK017	39' 02' 41.9'	70' 31' 58.1'	Nireco	ZA027	Campos basalticos de Zapala	Dacite	Silicification, Limonitization / montmorillonite /	GC
18	A00NK018	39' 02' 40.1'	70' 32' 11.2'	Nireco	ZA027	Campos basalticos de Zapala	Rhyolite	Phyllic / sericite /	TS
19	A00NK019	41' 40' 02.0'	71' 06' 16.8'	Mina Maria	Mina Maria		Ore	/ / gn, cp, py	PT,OA
20	A00NK020	41' 40' 02.0'	71' 06' 16.8'	Mina Maria	Mina Maria		Qz Vein		
21	A00NK021	42' 08' 43.5'	71' 19' 18.8'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granite	Tourmalinization, Limonitization / / py	GC
22	A00NK022	42' 08' 00.2'	71' 19' 10.3'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granite	Chloritization, Limonitization / /	
23	A00NK023	42' 08' 00.2'	71' 19' 10.3'	Cerro Coihue	Quebrada Ferreyro		Tourmaline breccia		GC
24	A00NK024	42' 08' 00.2'	71' 19' 10.3'	Cerro Coihue	Quebrada Ferreyro		Sulfide vein in granite	Limonitization / /	
25	A00NK025	42' 08' 02.2'	71' 19' 10.3'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granite		TS
26	A00NK026	42' 09' 27.5'	70' 30' 28.5'	Cushamen	Cushamen	Intrusive	Pegmatite	/ kaolinite /	XR
27	A00NK027	42' 09' 30.0'	70' 30' 25.1'	Cushamen	Cushamen		Qz vein		GC
28	A00NK028	42' 09' 31.2'	70' 30' 25.9'	Cushamen	Cushamen		Qz vein		GC
29	A00NK029	42' 09' 31.2'	70' 30' 25.9'	Cushamen	Cushamen	Intrusive	Rhyolite	Silicification / /	GC
30	A00NK030	42' 09' 35.0'	70' 30' 31.3'	Cushamen	Cushamen	Cushamen Fms.	Schist	Silicification / /	XR
31	A00NK031	42' 09' 47.9'	70' 30' 24.4'	Cushamen	Cushamen	Intrusive	Rhyolite	montmorillonite? / /	XR

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
32	A00NK032	42' 09' 43.2'	70' 30' 19.4'	Cushamen	Cushamen		Flaky qz		GC
33	A00NK033	42' 09' 44.4'	70' 30' 17.8'	Cushamen	Cushamen		Qz vein	Tourmalinization / /	XR,GC
34	A00NK034	43' 17' 00.0'	70' 59' 16.8'	Cerro Gonzalo	Cerro Gonzalo	Intrusive	Granodiorite porphyry	K-feld.? / / cp,py,bo	XR,GC
35	A00NK035	43' 18' 46.7'	71' 02' 31.0'	Cerro Gonzalo	Cerro Gonzalo		Qz vein	qz / /	GC
36	A00NK036	43' 18' 46.7'	71' 02' 31.0'	Cerro Gonzalo	Cerro Gonzalo		Qz vein	qz / /	GC
37	A00NK037	43' 17' 19.7'	70' 59' 28.8'	Cerro Gonzalo	Arroyo. Luques	Intrusive (Aleusco Fm.)	Granodiorite	Phyllic / sericite /	XR
38	A00NK038	42' 52' 56.9'	71' 12' 53.2'	Joya del Sol	Brancote-Antonio		Qz vein		FI
39	A00NK039	42' 52' 56.9'	71' 12' 53.2'	Joya del Sol	Brancote-Antonio	Lago La Plata Fm.	Andesite	/ montmorillonite /	XR
40	A00NK039-1	42' 52' 56.9'	71' 12' 53.2'	Joya del Sol	Brancote-Antonio	Lago La Plata Fm.	Andesite		PT
41	A00NK040	43' 37' 55.5'	71' 25' 26.0'	Poncho Moro	Arroyo Pedregoso		Andesite? (Float)	Chloritization, Limonitization / / py	GC
42	A00NK041	43' 41' 45.6'	70' 34' 03.5'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PT,PC
43	A00NK042	43' 41' 59.0'	70' 34' 00.0'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PC
44	A00NK043	43' 42' 34.0'	70' 33' 07.1'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PC
45	A00NK044	44' 50' 20.2'	71' 08' 19.2'	Mina Gato	Mina Gato	Divisadero Fm.	Rhyolite?	Silicification / alunite /	XR
46	A00NK045	44' 50' 18.1'	71' 08' 21.5'	Mina Gato	Mina Gato	Divisadero Fm.	Andesite	Silicification / /	GC
47	A00NK046	44' 50' 26.9'	71' 08' 01.2'	Mina Gato	Mina Gato	Divisadero Fm.	Porphyritic andesite	/ montmorillonite /	XR
48	A00NK047	44' 50' 33.7'	71' 08' 34.3'	Mina Gato	Mina Gato	Divisadero Fm.	Andesite	Silicification / /	XR,GC
49	A00NK048	44' 50' 38.0'	71' 08' 36.2'	Mina Gato	Mina Gato	Divisadero Fm.	Andesite		TS
50	A00NK049	45' 00' 45.8'	71' 27' 22.1'	Cerro Blanco	Cerro Blanco	Lago La Plata Fm.	Dacite	Phyllic / sericite /	XR
51	A00NK050	42' 53' 30.0'	71' 12' 40.7'	Joya del Sol	Brancote-Julia	Lago La Plata Fm.	Andesite		KA
52	A00HH001	37' 15' 03.8'	70' 39' 21.5'	Andacollo	Sur los Maitenez	Intrusive	Altered rh y olite	Limonitization / sericite /	
53	A00HH002	37' 11' 26.9'	70' 37' 51.0'	Andacollo	Mina Sofia		Qz-py-gn ore	/ / qz with py, gn	PT,OA
54	A00HH003	36' 58' 47.1'	70' 38' 49.6'	Butalon Norte	Cerro Panta	Choiyoi Fm.	Tuff breccia	sericite, kaoline ? / not identified /	
55	A00HH004	37' 01' 10.8'	70' 39' 49.3'	Butalon Norte	CM010	Choiyoi Fm.	Altered rock	/ sericite /	XR,GC
56	A00HH005	37' 07' 17.8'	70' 37' 24.8'	Andacollo	CM011	Choiyoi Fm.	Altered rock	/ sericite /	
57	A00HH006	37' 37' 42.5'	70' 26' 02.6'	Cerro del Diablo	Barite mine	Intrusive	Altered granite	White mineral / kaolinite / barite	
58	A00HH007	37' 37' 43.0'	70' 26' 05.0'	Cerro del Diablo	Barite mine		Altered rock	/ montmorillonite(A), sericite(C) /	XR
59	A00HH008	37' 37' 57.8'	70' 26' 21.4'	Cerro del Diablo	Barite mine	Intrusive	Felsic rock	Silicification, qz network / /	
60	A00HH009	37' 37' 57.8'	70' 26' 21.4'	Cerro del Diablo	Barite mine	Intrusive	Granite	Weak / /	
61	A00HH010	37' 38' 14.5'	70' 25' 59.2'	Cerro del Diablo	Cu mine		Cu ore	/ montmorillonite / chrysocolla, iron oxide	
62	A00HH011	37' 38' 19.2'	70' 25' 44.5'	Cerro del Diablo	Cu mine		Altered rock	/ kaolinite /	

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
63	A00HH012	37' 13' 04.9'	70' 40' 32.8'	Andacollo	Cerro Colo	Intrusive	Andesitic porphyry	Weak / /	WR
64	A00HH013	37' 13' 04.9'	70' 40' 32.8'	Andacollo	Cerro Colo	Intrusive	Dacite		TS,XR,GC
65	A00HH014	38' 13' 09.6'	70' 32' 41.3'	Campana Mahuida	Campana Mahuida	Tordillo Fm.	Altered rock	qz, sericite / /	
66	A00HH015	38' 12' 47.4'	70' 32' 37.1'	Campana Mahuida	Campana Mahuida		Cu oxide with diorite (Float)	/ / Cu oxide	
67	A00HH016	38' 12' 37.7'	70' 32' 30.7'	Campana Mahuida	Campana Mahuida		Silicified rock	Silicification / /	GC
68	A00HH017	38' 12' 48.1'	70' 35' 28.8'	Campana Mahuida	Campana Mahuida	Tordillo Fm.	Altered sand stone	qz, white mineral / /	
69	A00HH018	39' 13' 00.8'	70' 36' 01.4'	La Voluntad	La Voluntad	Intrusive (La Voluntad Complex)	Granite		
70	A00HH019	39' 04' 56.0'	70' 31' 56.4'	Nireco	ZA028/029	Campos basalticos de Zapala	Silicified rock	Silicification / kaolinite /	XR,GC
71	A00HH020	39' 05' 47.6'	70' 31' 26.7'	Nireco	ZA028/029	Campos basalticos de Zapala	Green tuff/altered rock	/ chlorite, zeolite, calcite-montmorillonite, sericite /	
72	A00HH021	39' 06' 00.0'	70' 31' 29.8'	Nireco	ZA028/029	Campos basalticos de Zapala	Green tuff/altered rock		
73	A00HH022	38' 57' 56.3'	70' 36' 47.4'	Carreri Malal	Carreri Malal	Intrusive	Granite		XR
74	A00HH023	38' 58' 27.5'	70' 35' 03.7'	Carreri Malal	Carreri Malal		Altered rock	Argillization / /	XR
75	A00HH024	41' 40' 12.0'	71' 06' 43.1'	Mina Maria	Mina Maria		Qz-py-cp-malachite-ga ore	/ / qz, py, cp, malachite, gn	PT,OA
76	A00HH025	42' 08' 40.8'	71' 18' 27.0'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Granite with tourmaline	Weakly whitened / /	
77	A00HH026	42' 08' 40.8'	71' 18' 27.0'	Cerro Coihue	Quebrada Baya	Intrusive	Andesite dyke	Almost fresh / /	
78	A00HH027	42' 08' 35.3'	71' 18' 35.3'	Cerro Coihue	Quebrada Baya		Altered rock	/ laumontite /	XR
79	A00HH028	42' 08' 49.7'	71' 18' 36.0'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Altered granite	/ calcite /	XR,GC
80	A00HH029	42' 08' 49.7'	71' 18' 36.0'	Cerro Coihue	Quebrada Baya		Qz, tourmaline (Float)		
81	A00HH030	42' 08' 42.9'	71' 18' 33.0'	Cerro Coihue	Quebrada Baya	Intrusive	Andesite		
82	A00HH031	42' 09' 07.4'	71' 24' 13.4'	Condorcanqui	Condorcanqui		Altered rock	Argillization, white clay mineral / not identified /	
83	A00HH032	42' 09' 07.4'	71' 24' 13.4'	Condorcanqui	Condorcanqui		Altered rock	Argillization, white clay mineral dot / /	
84	A00HH033	42' 09' 48.0'	71' 24' 03.2'	Condorcanqui	Condorcanqui		Malachite-chrysocolla-py-cp ore	/ / malachite, chrysocolla, py, cp	
85	A00HH034	42' 09' 48.0'	71' 24' 03.2'	Condorcanqui	Condorcanqui	Ventana Fm.	Andesite	Chloritic or fresh (with cp) / /	XR,GC
86	A00HH035	42' 09' 48.0'	71' 24' 03.2'	Condorcanqui	Condorcanqui		Altered rock	qz, K-fel., cp, limonite / / qz with cp	
87	A00HH036	42' 13' 10.3'	71' 25' 17.9'	Epuyen	Arroyo Pedregoso de Epuyen	Ventana Fm.	Zeolite in altered andesite	/ laumontite /	
88	A00HH037	41' 58' 05.9'	71' 34' 30.0'	El Bolson	Rio Lindo		Granite with py (float)		GC
89	A00HH038	41' 58' 05.9'	71' 34' 30.0'	El Bolson	Rio Lindo		Silicified rock with py (float)	Silicification / /	
90	A00HH039	41' 58' 05.9'	71' 34' 30.0'	El Bolson	Rio Lindo		Pyroclastics with py (float)		GC
91	A00HH040	41' 55' 33.0'	71' 33' 28.1'	El Bolson	Rio Azul		Andesite with py, chl (float)	Silicification / /	
92	A00HH041	42' 47' 31.0'	71' 29' 46.3'	Huemules	Huemules Sur		Ore	/ / malachite, cp, py	
93	A00HH042	42' 47' 25.7'	71' 29' 50.4'	Huemules	Huemules Sur		Ore	/ / galena	

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
94	A00HH043	42' 47' 25.7'	71' 29' 50.4'	Huemules	Huemules Sur	Canadon Huemules Fm.	Andesite	Relatively fresh to argillization / sericite /	XR
95	A00HH044	42' 47' 17.1'	71' 29' 58.7'	Huemules	Huemules Sur		Altered rock	Silicification-argillization, py / /	XR,GC
96	A00HH045	42' 47' 17.1'	71' 29' 58.7'	Huemules	Huemules Sur	Intrusive	Micro granodiorite	Fresh / /	
97	A00HH046	42' 47' 28.9'	71' 29' 42.0'	Huemules	Huemules Sur		Ore	Oxidized cp / / qz, cp, py	
98	A00HH047	42' 45' 37.5'	71' 06' 29.3'	Joya del Sol	Arroyo Cancha		Altered rock	Silicification, py / /	GC
99	A00HH048	42' 53' 46.5'	71' 12' 45.8'	Joya del Sol	Brancote-Elena Sur		Qz vein		
100	A00HH049	42' 52' 22.4'	71' 12' 08.8'	Joya del Sol	Brancote-Galadriel		Qz vein		
101	A00HH050	42' 51' 49.3'	71' 11' 08.1'	Joya del Sol	Near LM024	Lago La Plata Fm.	Altered rock	/ sericite /	XR
102	A00HH051	43' 57' 47.7'	71' 34' 09.4'	Cerro Colorado	Near Cerro Riñon		Silicified rock (Float)	Silicification / pyrophyllite /	
103	A00HH052	43' 30' 23.8'	71' 06' 25.6'	Arroyo Cascada	Arroyo Cascada	Lago La Plata Fm.	Qz with white altered mineral	/ montmorillonite /	
104	A00HH053	43' 30' 19.0'	71' 06' 12.1'	Arroyo Cascada	Arroyo Cascada		Altered rock (Float)	/ montmorillonite /	
105	A00HH054	43' 30' 19.0'	71' 06' 12.1'	Arroyo Cascada	Arroyo Cascada	Lago La Plata Fm.	Altered rock	/ montmorillonite /	XR
106	A00HH055	44' 41' 33.1'	71' 07' 07.0'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	/ kaolinite /	
107	A00HH056	44' 41' 33.1'	71' 07' 07.0'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	/ kaolinite /	
108	A00HH057	44' 41' 33.1'	71' 07' 07.0'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	/ kaolinite /	XR
109	A00HH058	44' 41' 18.8'	71' 07' 13.0'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	/ kaolinite /	
110	A00HH059	44' 41' 23.3'	71' 07' 13.4'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Kaoline/dickite/greysh kaoline	/ kaolinite /	
111	A00HH060	44' 41' 25.0'	71' 05' 40.1'	Estrella Gaucha	Estrella Gaucha	Intrusive	Andesite	Propylitic ? / /	TS,GC
112	A00HH061	44' 56' 24.0'	71' 35' 16.1'	Ferrocarrilera	Ferrocarrilera		Galena ore	/ / galena	
113	A00HH062	44' 56' 24.0'	71' 35' 16.1'	Ferrocarrilera	Ferrocarrilera	Lago La Plata Fm.	Andesite		XR
114	A00HH063	44' 56' 19.2'	71' 35' 08.3'	Ferrocarrilera	Ferrocarrilera		Galena-sphalerite-qz ore	/ / galena, sphalerite	PT
115	A00HH064	44' 56' 18.2'	71' 35' 08.4'	Ferrocarrilera	Ferrocarrilera		Qz-py-cp-sphalerite ore	/ / cp, sphalerite	
116	A00HH065	44' 56' 20.3'	71' 35' 11.8'	Ferrocarrilera	Ferrocarrilera		Galena-sphalerite ore	/ / galena, sphalerite	
117	A00MZ001	37' 15' 05.0'	70' 39' 24.2'	Andacollo	Sur los Maitenez	Intrusive	Rhyolite	Silicification / sericite /	GC
118	A00MZ002	37' 14' 29.0'	70' 39' 40.7'	Andacollo	Sur los Maitenez	Intrusive	Volcanic rock	Silicification / sericite / limonite-qz network	GC
119	A00MZ003	37' 11' 32.5'	70' 37' 54.6'	Andacollo	Mina Sofia	Intrusive	Dacite	Argillization / sericite / pyrite diss.	XR,GC
120	A00MZ004	36' 58' 47.3'	70' 38' 49.5'	Butalon Norte	Butalon Norte	Choiyoi Fm.	Pebble dyke	Silicification / / magnetite	XR,GC
121	A00MZ005	36' 58' 47.7'	70' 38' 52.7'	Butalon Norte	Butalon Norte	Choiyoi Fm.	Volcanic rock	Silicification / / magnetite	GC
122	A00MZ006	37' 01' 08.1'	70' 39' 50.5'	Butalon Norte	CM010	Choiyoi Fm.	Volcanic rock	Silicification / kaolinite / limonite	GC
123	A00MZ007	37' 07' 20.2'	70' 37' 23.4'	Andacollo	CM011	Choiyoi Fm.	Volcanic rock	Silicification / sericite / pyrite diss.	GC
124	A00MZ008	37' 26' 39.3'	70' 26' 35.8'	Cerro Caicayen	Quebrada el Bronce	Cuyo Gr.	Mudstone	Silicification / / pyrite diss.-network	GC

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
125	A00MZ009	37' 26' 35.5'	70' 26' 59.9'	Cerro Caicayen	Quebrada el Bronce	Intrusive (Grupo Molle)	Granite	Potassic / /	GC
126	A00MZ010	37' 27' 10.8'	70' 26' 48.1'	Cerro Caicayen	Mina Hierro	Ore deposit	Massive ore	/ / pylite-limonite	OA
127	A00MZ011	37' 11' 30.1'	70' 37' 58.5'	Andacollo	Mina Sofia	Intrusive	Qz porphyry	Weak / /	WR
128	A00MZ012	37' 11' 30.1'	70' 37' 58.5'	Andacollo	Mina Sofia, Level1	Ore deposit	Vein ore	/ / qz-calcite-py-gn	OA,DS,DO,FI
129	A00MZ013	37' 11' 25.3'	70' 37' 51.2'	Andacollo	Mina Sofia	Intrusive	Dacite porphyry	Fresh / /	TS,WR
130	A00MZ014	37' 11' 25.3'	70' 37' 51.2'	Andacollo	Mina Sofia	Huaraco Fm. (Andacollo Gr.)	Mudstone	/ / pyrite	DS
131	A00MZ015	37' 13' 15.8'	70' 40' 32.7'	Andacollo	Cerro Colo	Intrusive (Cretaceous)	Tonalite	Fresh / / py-green Cu stain	TS,WR
132	A00MZ016	37' 11' 30.1'	70' 37' 58.5'	Andacollo	Mina Sofia, Level4	Ore deposit	Vein ore	/ / qz-calcite-py-gn	PT,OA,FI
133	A00MZ017	37' 11' 30.1'	70' 37' 58.5'	Andacollo	Mina Sofia, Level4	Ore deposit	Vein ore	/ / qz-calcite-py-gn	FI
134	A00MZ018	38' 12' 48.6'	70' 32' 18.1'	Campana Mahuida	Campana Mahuida	Intrusive (Tres Puntas)	Granodiorite	Fresh / /	TS,WR
135	A00MZ019	38' 12' 47.2'	70' 35' 24.9'	Campana Mahuida	Mina Angelica	Ore deposit	Vein ore	/ / barite-Fe oxides	OA
136	A00MZ020	38' 12' 48.5'	70' 35' 30.5'	Campana Mahuida	Mina Angelica	Ore deposit	Vein ore	/ / barite-galena-Fe oxides	OA
137	A00MZ021	39' 12' 50.2'	70' 36' 22.1'	La Voluntad	La Voluntad	Intrusive	Vein ore	/ / qz-malachite	OA
138	A00MZ022	39' 12' 52.1'	70' 36' 23.1'	La Voluntad	La Voluntad	Intrusive (La Voluntad Complex)	Granite	Potassic / /	TS,GC
139	A00MZ023	39' 02' 59.8'	70' 32' 02.1'	Nireco	ZA027	Campos basalticos de Zapala	Volcanic rock	Silicification / montmorillonite /	GC
140	A00MZ024	39' 02' 22.1'	70' 32' 10.7'	Nireco	ZA027	Campos basalticos de Zapala	Volcanic rock	Silicification / sericite /	XR,GC
141	A00MZ025	39' 01' 53.3'	70' 32' 35.4'	Nireco	ZA026	Campos basalticos de Zapala	Volcanic rock	Silicification / kaolinite /	GC
142	A00MZ026	38' 57' 50.5'	70' 36' 50.9'	Carreri Malal	Carreri Malal	Ore deposit	Vein ore	Argillization / / Fe-Mn oxides (gossan)	GC
143	A00MZ027	38' 57' 48.3'	70' 36' 53.9'	Carreri Malal	Carreri Malal	Ore deposit	Vein ore	Chloritization / / Mn oxide	GC
144	A00MZ028	38' 57' 59.1'	70' 36' 46.3'	Carreri Malal	Carreri Malal	Ore deposit	Vein ore	/ / qz-py-gn-bornite	OA
145	A00MZ029	41' 40' 11.3'	71' 06' 41.0'	Mina Maria	Mina Maria	Ore deposit	Vein ore	/ / galena	DS
146	A00MZ030	41' 40' 11.3'	71' 06' 41.0'	Mina Maria	Mina Maria	Ore deposit	Vein ore	/ / gn-py-cp	PT,OA
147	A00MZ031	42' 08' 39.5'	71' 19' 17.3'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granite (Float)	/ / limonite	GC
148	A00MZ032	42' 08' 29.5'	71' 19' 18.8'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granodiorite (Float)	Fresh / /	TS,WR
149	A00MZ033	42' 08' 05.3'	71' 19' 28.3'	Cerro Coihue	Quebrada Ferreyro	Lago Puelo granitic complex	Granodiorite (Float)	/ / chrysocolla	GC
150	A00MZ034	42' 09' 09.9'	71' 24' 13.9'	Condorcanqui	Condorcanqui	Ventana Fm.	Andesitic tuff	Propylite / / pyrite diss.	GC
151	A00MZ035	42' 09' 09.9'	71' 24' 13.9'	Condorcanqui	Condorcanqui	Zeolite vein	Zeolite	Propylite / laumontite /	GC
152	A00MZ036	42' 09' 46.1'	71' 24' 03.8'	Condorcanqui	Condorcanqui	Ventana Fm.	Andesite	Propylite / / cp diss.-veinlet	OA
153	A00MZ037	42' 09' 46.1'	71' 24' 03.8'	Condorcanqui	Condorcanqui	Ventana Fm.	Andesite	Propylite / / malachite	OA
154	A00MZ038	42' 09' 46.1'	71' 24' 03.8'	Condorcanqui	Condorcanqui	Ventana Fm.	Andesite	Propylite / / pyrite diss.	PT
155	A00MZ039	42' 13' 51.9'	71' 25' 17.7'	Epuyen	Arroyo Pedregoso de Epuyen	Ventana Fm.	Andesite (Float)	Propylite / / pyrite diss.	GC

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
156	A00MZ040	42' 28' 03.8"	71' 35' 53.2"	Lago Chilila	A. Pedregoso de Lago Cholila	Granitodes Cordilleranos	Sil., breccia (Float)	Silicification / / limonite	GC
157	A00MZ041	42' 47' 32.1"	71' 29' 45.9"	Huemules	Huemules Sur	Ore deposit	Veinlet	/ / qz-py-gn	OA
158	A00MZ042	42' 47' 32.1"	71' 29' 45.9"	Huemules	Huemules Sur	Ore deposit	Veinlet	/ / galena mass	PT,OA,DS
159	A00MZ043	42' 47' 32.1"	71' 29' 45.9"	Huemules	Huemules Sur	Ore deposit	Veinlet	/ / qz-py	DO,FI
160	A00MZ044	42' 47' 18.6"	71' 29' 54.8"	Huemules	Huemules Sur	Intrusive	Microdiorite	Propylite / /	TS,WR
161	A00MZ045	42' 47' 32.1"	71' 29' 45.9"	Huemules	Huemules Sur	Ore deposit	Vein Ore	/ / galena mass	
162	A00MZ046	42' 47' 32.6"	71' 29' 43.5"	Huemules	Huemules Sur	Ore deposit	Veinlet	/ / qz-cp-py-gn	OA,DO,FI
163	A00MZ047	42' 45' 39.1"	71' 06' 33.5"	Joya del Sol	Arroyo Cancha	Alluvium	Qz veinlet (Float)		GC
164	A00MZ048	42' 53' 40.9"	71' 12' 32.9"	Joya del Sol	Brancote-Elena Sur	Ore deposit	Qz vein	/ / Aurifeous qz vein	OA,DO,FI
165	A00MZ049	42' 53' 40.9"	71' 12' 32.9"	Joya del Sol	Brancote-Elena Sur	Ore deposit	Qz vein	/ / Aurifeous qz vein	OA
166	A00MZ050	42' 53' 20.7"	71' 12' 45.3"	Joya del Sol	Brancote-Julia	Ore deposit	Hydrothermal breccia	/ / Aurifeous qz vein	
167	A00MZ051	42' 52' 43.0"	71' 12' 19.5"	Joya del Sol	Brancote-Galadriel	Ore deposit	Qz vein	/ / Aurifeous qz vein	DO,FI
168	A00MZ052	43' 10' 38.2"	71' 40' 51.4"	Poz. de Navarro	Poz. de Navarro	Qz vein	Qz vein	/ / pyrite diss.	GC
169	A00MZ053	43' 10' 38.2"	71' 40' 51.4"	Poz. de Navarro	Poz. de Navarro	Lago la Plata Fm.	Andesite	Propylite / / qz-cp veinlets	GC
170	A00MZ054	43' 11' 17.8"	71' 39' 56.7"	Poz. de Navarro	Ea. el Triunfo	Intrusive	Qz porphyry	Silicification / sericite / py-cp? diss.	GC
171	A00MZ055	43' 24' 09.3"	71' 32' 33.1"	Las Mentas	Las Mentas	Qz vein	Qz ein	/ / qz-cp-gn-malachite	OA
172	A00MZ056	43' 37' 55.1"	71' 25' 30.7"	Poncho Moro	Arroyo Pedregoso	Alluvium	Qz vein (Float)	/ / Slight pyrite diss.	GC
173	A00MZ057	43' 30' 22.9"	71' 06' 24.7"	Arroyo Cascada	Arroyo Cascada	Qz vein	Qz vein	/ / pyrite diss.	GC
174	A00MZ058	43' 30' 22.9"	71' 06' 24.7"	Arroyo Cascada	Arroyo Cascada	Lago la Plata Fm.	Silicified rock	Silicification / montmorillonite /	XR
175	A00MZ059	43' 30' 17.0"	71' 06' 10.1"	Arroyo Cascada	Arroyo Cascada	Lago la Plata Fm.	Silicified rock	Silicification / / pyrite diss.	GC
176	A00MZ060	43' 30' 17.0"	71' 06' 10.1"	Arroyo Cascada	Arroyo Cascada	Qz vein (F)	Cubic pyrite	/ / Cubic pyrite in qz vein	DS
177	A00MZ061	44' 50' 13.6"	71' 08' 30.6"	Mina Gato	Mina Gato	Divisadero Fm.	Soft silky rock	Kaolinitization / kaolinite /	GC
178	A00MZ062	44' 50' 05.0"	71' 08' 43.7"	Mina Gato	Mina Gato	Divisadero Fm.	Silicified rock	Silicification / alunite /	GC
179	A00MZ063	44' 50' 10.2"	71' 07' 54.6"	Mina Gato	Mina Gato	Divisadero Fm.	Silicified rock	Silicification / sericite-montmorillonite / pyrite diss.	GC
180	A00MZ064	44' 54' 11.1"	71' 14' 43.6"	Ea. Arroyo Victoria	Arroyo Huemul	Alluvium	Silicified rock	Silicification / alunite / Slight limonitic	GC
181	A00MZ065	44' 56' 21.8"	71' 35' 05.4"	Ferrocarrilera	Ferrocarrilera	Lago la Plata Fm.	Andesite	Propylite / / pyrite diss.	TS,GC
182	A00MZ066	44' 56' 21.8"	71' 35' 05.4"	Ferrocarrilera	Ferrocarrilera		Vein ore	/ / pyrite diss.	DS,DO,FI
183	A00MZ067	44' 56' 21.8"	71' 35' 05.4"	Ferrocarrilera	Ferrocarrilera		Vein ore	/ / gn-sp-py	
184	A00MZ068	44' 56' 21.8"	71' 35' 05.4"	Ferrocarrilera	Ferrocarrilera		Vein ore	/ / gn-sp-py	OA
185	A00TM001	37' 15' 05.6"	70' 39' 16.8"	Andacollo	Sur los Maitenez	Intrusive	Dacite	Silicification / sericite / limonite	GC
186	A00TM002	37' 11' 27.7"	70' 37' 45.8"	Andacollo	Mina Sofia level4	Huaraco Fm. (Andacollo Gr.)	Black shale	Silicification / sericite / gn, sp, cp, py diss.	GC

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
187	A00TM003	36' 47' 16.0'	70' 36' 27.4'	Varvarco	CM005		White altered rock	Weak silicification, argillization / pyrophyllite /	XR,GC
188	A00TM004	36' 47' 08.1'	70' 35' 32.4'	Varvarco	CM006	Choiyoi Fm.	Rhyolitic tuff	Fresh / /	GC
189	A00TM005	36' 50' 54.5'	70' 39' 54.4'	Varvarco	Varvarco	Intrusive	Tonalite	Weak silicification / /	GC
190	A00TM006	36' 50' 54.5'	70' 39' 54.4'	Varvarco	Varvarco	Intrusive	Tonalite	Weak alteration / /	TS
191	A00TM007	37' 37' 43.4'	70' 25' 58.8'	Cerro del Diablo	Cerro del Diablo (Colorado)		Qz vein	/ / qz·barite	GC
192	A00TM008	37' 37' 43.4'	70' 25' 58.8'	Cerro del Diablo	Cerro del Diablo (Colorado)	Vaca Muerta Fm.	Shale	Argillization / /	XR,GC
193	A00TM009	37' 37' 59.0'	70' 26' 25.1'	Cerro del Diablo	Cerro del Diablo (Colorado)	Intrusive	Tonalite	Fresh / /	TS,WR,KA
194	A00TM010	37' 38' 10.3'	70' 26' 20.6'	Cerro del Diablo	Cerro del Diablo	Vaca Muerta Fm.	Shale	Silicification, argillization / sericite / limonite	GC
195	A00TM011	37' 38' 10.3'	70' 26' 20.6'	Cerro del Diablo	Cerro del Diablo	Vaca Muerta Fm.	Shale	Silicification, argillization / sericite, kaolinite / limonite	XR
196	A00TM012	37' 38' 10.3'	70' 26' 20.6'	Cerro del Diablo	Cerro del Diablo		Qz vein	/ / qz·barite	GC
197	A00TM014	37' 38' 21.5'	70' 25' 48.5'	Cerro del Diablo	Cerro del Diablo	Intrusive	Granite?	Silicification, argillization / / malachite, azurite, limonite	GC
198	A00TM015	37' 38' 21.5'	70' 25' 48.5'	Cerro del Diablo	Cerro del Diablo	Intrusive	Granite?	Silicification,argillization/kaolinite,sericite/malachite,azurite,limonite	XR
199	A00TM016	37' 38' 20.3'	70' 25' 37.6'	Cerro del Diablo	Cerro del Diablo	Intrusive	Granite?	Silicification,argillization/kaolinite/malachite·limonite Stain	XR,GC
200	A00TM017	36' 47' 19.1'	70' 37' 31.8'	Varvarco	CM004	Intrusive	Tonalite	Tourmalinization, qz+epidote vein / /	TS,GC
201	A00TM018	36' 47' 19.1'	70' 37' 31.8'	Varvarco	CM004	Intrusive	Tonalite	Weak alteration / /	TS,WR
202	A00TM019	36' 47' 19.1'	70' 37' 31.8'	Varvarco	CM004	Intrusive	Diorite porphyry	Tourmalinization, qz+epidote vein / /	TS,WR
203	A00TM020	36' 49' 51.0'	70' 40' 20.1'	Varvarco	Varvarco	Valvalco granite	Tonalite	Fresh / /	TS,WR,KA
204	A00TM021	39' 12' 50.1'	70' 36' 26.6'	La Voluntad	La Voluntad	Intrusive	Qz vein in granitoid	/ / malachite	GC
205	A00TM022	39' 05' 04.4'	70' 32' 11.5'	Nireco	ZA028	Campos basalticos de Zapala	Lapilli tuff	Silicification / /	GC
206	A00TM023	39' 05' 45.5'	70' 31' 21.5'	Nireco	ZA029	Campos basalticos de Zapala	Andesite?	Fresh / /	TS
207	A00TM026	39' 06' 00.7'	70' 31' 26.8'	Nireco	ZA029	Campos basalticos de Zapala	Tuff	Argillization, weak silicification / / limonite	GC
208	A00TM027	39' 06' 00.7'	70' 31' 26.8'	Nireco	ZA029	Campos basalticos de Zapala	Lapilli tuff	Argillization, weak silicification / montmorillonite / limonite	XR,GC
209	A00TM028	41' 40' 05.2'	71' 06' 16.9'	Mina Maria	Mina Maria	Nahuel Huapi Fm.	Tuff	Silicification / / limonite	GC
210	A00TM029	42' 08' 36.0'	71' 18' 09.4'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Porphyritic Tonalite	Propylitic / / pyrite diss.	GC
211	A00TM030	42' 08' 35.7'	71' 18' 25.1'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Tonalite	Potassic? / / limonite stain	TS,WR
212	A00TM031	42' 08' 38.2'	71' 18' 33.9'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Tonalite	Argillization, weak silicification / / limonite	GC
213	A00TM032	42' 08' 38.2'	71' 18' 33.9'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Tonalite	Argillization / zeolite, loumontite / limonite	XR,GC
214	A00TM033	42' 08' 42.5'	71' 18' 30.4'	Cerro Coihue	Quebrada Baya		Argillic vein	Argillization, weak silicification / sericite, montmorillonite /	XR,GC
215	A00TM034	42' 08' 43.2'	71' 18' 30.4'	Cerro Coihue	Quebrada Baya		Qz vein (Float)	/ / limonite	GC
216	A00TM035	42' 08' 45.6'	71' 18' 27.1'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Granodiorite	Potassic / / pyrite diss, limonite	GC
217	A00TM037	42' 09' 40.7'	70' 30' 33.2'	Cushamen	Cushamen	Intrusive	Rhyolite	Argillization / kaolinite, sericite /	XR

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
218	A00TM038	42' 09' 40.7'	70' 30' 33.2'	Cushamen	Cushamen		Qz vein	/ / limonite	GC
219	A00TM039	42' 09' 43.5'	70' 30' 38.4'	Cushamen	Cushamen		Qz vein	/ / limonite	GC,DO,FI
220	A00TM040	43' 17' 05.5'	70' 59' 06.6'	Cerro Gonzalo	Arroyo Luques	Aleusco Fm.	Granodiorite	Silicification, agillization / /	GC
221	A00TM041	43' 17' 02.2'	70' 59' 17.6'	Cerro Gonzalo	Arroyo Luques	Intrusive	Granodiorite	Potassic, silicification, argillization/ /cp vein, diss.	GC
222	A00TM042	43' 18' 54.4'	71' 02' 22.8'	Cerro Gonzalo	Cerro Gonzalo		Qz vein	/ / limonite	DO,FI
223	A00TM043	43' 18' 54.4'	71' 02' 22.8'	Cerro Gonzalo	Cerro Gonzalo	Aleusco Fm.	Granodiorite	Silicification, argillization / / malachite, limonite stain	XR
224	A00TM044	43' 18' 25.0'	71' 01' 29.4'	Cerro Gonzalo	Cerro Gonzalo		Hydrothermal breccia	Weak silicification / / malachite stain	GC
225	A00TM045	42' 53' 42.0'	71' 12' 30.6'	Joya del Sol	Brancote-Galadriel	Lago la Plata Fm.	Andesite	Argillization, weak silicfication / sericite, montmorillonite /	
226	A00TM046	42' 53' 42.0'	71' 12' 30.6'	Joya del Sol	Brancote-Galadriel	Lago la Plata Fm.	Andesite	Argillization, weak silicfication / sericite, montmorillonite /	XR
227	A00TM047	42' 53' 42.0'	71' 12' 30.6'	Joya del Sol	Brancote-Galadriel	Lago la Plata Fm.	Andesite	Argillization / montmorillonite /	XR
228	A00TM049	42' 53' 12.9'	71' 12' 47.8'	Joya del Sol	Brancote-Galadriel		Qz vein		OA
229	A00TM050	42' 53' 12.9'	71' 12' 47.8'	Joya del Sol	Brancote-Galadriel	Lago la Plata Fm.?	Andesite?	Argillization / sericite /	XR
230	A00TM051	42' 53' 12.9'	71' 12' 47.8'	Joya del Sol	Brancote-Galadriel		Qz vein		OA
231	A00TM053	43' 57' 47.1'	71' 34' 13.6'	Cerro Colorado	Near Cerro Riñon		Granite (Float)	Silicification, argillization / montmorillonite, sericite/ py diss.	GC
232	A00TM054	43' 57' 52.6'	71' 33' 50.8'	Cerro Colorado	Near Cerro Riñon		Granite? (Float)	Silicification / / pyrite diss.	GC
233	A00TM055	44' 41' 25.0'	71' 06' 47.2'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Silicification, argillization / kaolinite / limonite	XR,GC
234	A00TM056	44' 41' 26.0'	71' 07' 00.9'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Silicification / / limonite stain	GC
235	A00TM057	44' 41' 23.7'	71' 07' 05.9'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Argillization / kaolinite /	XR
236	A00TM058	44' 41' 21.5'	71' 07' 10.9'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Argillization / kaolinite / limonite stain	XR,GC
237	A00TM059	44' 41' 31.1'	71' 05' 47.3'	Estrella Gaucha	Estrella Gaucha		Qz vein		GC,DO,FI
238	A00TM060	44' 41' 31.1'	71' 05' 47.3'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Silicification, argillization / sericite, montmorillonite / limonite stain	XR,GC
239	A00TM061	44' 41' 36.8'	71' 05' 44.5'	Estrella Gaucha	Estrella Gaucha		Hydrothurmal breccia	Silicification / / limonite stain	GC
240	A00TM062	44' 41' 20.9'	71' 05' 32.2'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Altered rock	Argillization / sericite, montmorillonite/ cubic py(limonite) diss.	XR,GC
241	A00TM065	45' 00' 13.7'	71' 27' 28.2'	Cerro Blanco	Cerro Blanco		Qz vein	/ / limonite	GC
242	A00TM066	45' 00' 24.7'	71' 27' 31.8'	Cerro Blanco	Cerro Blanco		Qz vein	/ / pyrite (limonite)	GC
243	A00TM067	45' 00' 24.7'	71' 27' 31.8'	Cerro Blanco	Cerro Blanco	Lago la Plata Fm.?	Altered rock	Argillization / sericite, montmorillonite / limonite stain	XR
244	A00TM068	45' 00' 32.7'	71' 27' 25.3'	Cerro Blanco	Cerro Blanco		Qz vein	/ / limonite	GC
245	A00RM001	37' 15' 06.9'	70' 39' 18.1'	Andacollo	Sur los Maitenez	Intrusive	Volcanic rock	Silicification / sericite / limonite, hematite	
246	A00RM002	37' 14' 30.4'	70' 39' 37.5'	Andacollo	Sur los Maitenez	Intrusive	Volcanic rock	Silicification / kaolinite / limonite·qz network	
247	A00RM003	37' 11' 27.0'	70' 37' 45.4'	Andacollo	Mina Sofia nivel4	Huaraco Fm. (Andacollo Gr.)	Mudstone(ore)	Phyllic / / py·cp·gn·sp diss.	
248	A00RM004	37' 11' 27.0'	70' 37' 45.4'	Andacollo	Mina Sofia nivel4	Huaraco Fm. (Andacollo Gr.)	Mudstone(ore)	Phyllic / / py·cp·gn·sp diss.	

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
249	A00RM005	36' 58' 50.2'	70' 38' 45.3'	Butalon Norte	Butalon Norte	Coiyoi Fm.	Volcaniclastic rock	Silicification / / magnetite	XR
250	A00RM006	36' 58' 49.0'	70' 38' 45.0'	Butalon Norte	Butalon Norte	Coiyoi Fm.	Pebble dyke	Silicification / / magnetite	
251	A00RM007	37' 01' 08.5'	70' 39' 48.2'	Butalon Norte	CM010	Coiyoi Fm.	Volcanic rock	Silicification / / limonite	XR
252	A00RM008	37' 01' 03.1'	70' 39' 54.8'	Butalon Norte	CM010	Coiyoi Fm.	Volcanic rock	Silicification / sericite / limonite	
253	A00RM009	37' 07' 21.2'	70' 37' 19.9'	Andacollo	CM011	Coiyoi Fm.	Volcanic rock	Silicification / sericite / pyrite diss.	GC
254	A00RM010	37' 26' 41.3'	70' 26' 45.1'	Cerro Caicayen	Cerro Caicayen	Cuyo Gr.	Mudstone	Silicification / montmorillonite, kaolinite / limonite	
255	A00RM011	37' 27' 11.8'	70' 26' 44.1'	Cerro Caicayen	Cerro Caicayen	Intrusive (Grupo Molle)	Dacite porphyry	Phyllic / sericite / pyrite-limonite	GC
256	A00RM012	37' 11' 29.8'	70' 37' 47.0'	Andacollo	Mina Sofia nivel4	Intrusive	Dacite porphyry	Weak / /	GC
257	A00RM013	37' 11' 59.0'	70' 35' 59.2'	Andacollo	Arroyo Huaraco	Permian Intrusive	Granite	Weak / / qz vein-py diss.	TS,WR
258	A00RM014	37' 13' 08.1'	70' 40' 31.2'	Andacollo	Cerro Colo	Intrusive	Granite		
259	A00RM015	37' 13' 08.7'	70' 40' 32.0'	Andacollo	Cerro Colo	Intrusive	Dacite porphyry	Potassic? / / qz vein	
260	A00RM016	38' 12' 59.2'	70' 32' 22.8'	Campana Mahuida	Campana Mahuida	Tordillo Fm.	Sed. Rock	Phyllic / /	GC
261	A00RM017	38' 12' 46.4'	70' 32' 25.6'	Campana Mahuida	Campana Mahuida	Tordillo Fm.	Sed. Rock	Phyllic / / limonite	GC
262	A00RM018	38' 12' 49.7'	70' 35' 25.2'	Campana Mahuida	Mina Angelica	Ore deposit	Barite vein	/ / barite-gn-sp-mo	
263	A00RM019	38' 11' 50.1'	70' 35' 50.2'	Campana Mahuida	Mina Angelica	Ore deposit	Barite vein	/ / barite-Fe oxides	
264	A00RM020	39' 12' 49.5'	70' 36' 25.3'	La Voluntad	La Voluntad	Intrusive	Qz. vein in Granodiorite	Potassic / / Fe oxides, muscovite	GC
265	A00RM021	39' 12' 50.8'	70' 36' 24.2'	La Voluntad	La Voluntad	Intrusive (La Voluntad Complex)	Granodiorite	Potassic / / Fe oxide, green Cu	GC
266	A00RM022	39' 03' 01.9'	70' 31' 51.3'	Nireco	Near ZA027	Campos basalticos de Zapala	Volcaniclastic rock	Silicification / sericite /	XR
267	A00RM023	39' 02' 51.2'	70' 31' 58.5'	Nireco	Near ZA027	Campos basalticos de Zapala	Volcaniclastic rock	Silicification / montmorillonite, sericite /	XR,GC
268	A00RM024	39' 01' 54.5'	70' 32' 28.9'	Nireco	ZA026	Campos basalticos de Zapala	Volcaniclastic rock	Silicification / kaolinite, pyrophyllite /	XR
269	A00RM025	39' 03' 06.5'	70' 32' 07.7'	Nireco	Near ZA027	Campos basalticos de Zapala	Volcaniclastic rock	/ sericite /	TS
270	A00RM026	38' 57' 58.0'	70' 36' 47.5'	Carreri Malal	Carreri Malal	Intrusive	Granite	Weak / /	
271	A00RM027	38' 58' 37.0'	70' 35' 02.0'	Carreri Malal	Near Carreri Malal	Campos basalticos de Zapala	Basalt		
272	A00RM028	41' 40' 02.3'	71' 06' 15.6'	Mina Maria	Mina Maria	Nahuel Huapi Fm. (Fuapi?)	Andesite?	Propyritic / /	XR,GC
273	A00RM029	41' 40' 10.0'	71' 06' 43.0'	Mina Maria	Mina Maria		Qz vein (ore)	Silicification / / gn-py-cp-green Cu	PT,OA
274	A00RM030	42' 08' 36.4'	71' 18' 27.6'	Cerro Coihue	Quebrada Baya	Lago Puelo granitic complex	Tonalite	Silicification / zeolite /	XR,GC
275	A00RM031	42' 08' 37.7'	71' 18' 29.0'	Cerro Coihue	Quebrada Baya		Tourmaline vein		TS
276	A00RM032	42' 08' 45.4'	71' 18' 33.0'	Cerro Coihue	Quebrada Baya	Intrusive (Tertiary?)	Andesitic dyke	Propyritic / montmorillonite / K-feldspar,calcite vein	TS
277	A00RM033	42' 08' 44.9'	71' 18' 27.3'	Cerro Coihue	Quebrada Baya	Intrusive (Tertiary?)	Andesitic dyke	Propyritic / chlorite,epidote,calcite / limonite-pyrite	PT,XR,GC
278	A00RM034	42' 09' 38.7'	70' 30' 32.1'	Cushamen	Cushamen	Intrusive (Tertiary?)	Rhyolite	Argillization / sericite, kaolinite /	XR
279	A00RM035	42' 09' 36.1'	70' 30' 30.6'	Cushamen	Cushamen	Intrusive (Tertiary?)	Rhyolite	Argillization / gypsum, sericite /	XR

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
280	A00RM036	42' 09' 43.7'	70' 30' 35.9'	Cushamen	Cushamen	Intrusive (Tertiary?)	Rhyolite	Silicification / sericite /	GC
281	A00RM037	42' 09' 47.2'	70' 30' 31.6'	Cushamen	Cushamen		Qz vein	Silicification / gypsum, sericite, montmorillonite / py-limonite	GC
282	A00RM038	42' 09' 42.9'	70' 30' 17.3'	Cushamen	Cushamen	Intrusive (Tertiary?)	Rhyolite	Silicification/sericite,montmorillonite/qz vein network, tourmaline veinlet	TS
283	A00RM039	43' 17' 03.0'	70' 59' 11.0'	Cerro Gonzalo	Arroyo Luques	Intrusive (Aleusco Fm.)	Granodiorite	Silicification, potassic?/ sericite/ qz vein, hematite	
284	A00RM040	43' 17' 01.0'	70' 59' 16.0'	Cerro Gonzalo	Arroyo Luques	Intrusive	Granodiorite/Porphyry	Silicification, potassic?/ / qz vein, cp-py-limonite	PT,XR,GC
285	A00RM041	43' 18' 53.2'	71' 02' 24.5'	Cerro Gonzalo	Cerro Gonzalo	Intrusive	Breccia pipe	Silicification, phyllic / / qz vein,limonite-green Cu, tourmaline	XR,GC
286	A00RM042	43' 18' 25.2'	71' 01' 26.2'	Cerro Gonzalo	Arroyo Luques	Intrusive	Hydrothermal breccia	Silicification / / qz, geen Cu, cp, tourmaline	PT,GC
287	A00RM043	43' 17' 35.0'	71' 00' 25.0'	Cerro Gonzalo	Arroyo Luques		Altered rock	Limonitization / / limonite, hematite, green Cu	GC
288	A00RM044	43' 17' 06.3'	71' 00' 24.9'	Cerro Gonzalo	Arroyo Luques		Altered rock	Limonitization / / limonite, hematite, green Cu	
289	A00RM045	43' 17' 28.7'	70' 59' 37.1'	Cerro Gonzalo	Arroyo Luques	Intrusive (Aleusco Fm.)	Granodiorite	Phyllic / sericite / py-cp-mo-biotite	GC
290	A00RM046	42' 52' 22.1'	71' 12' 09.6'	Joya del Sol	Brancote-Galadriel Norte		Banded Qz vein	Silicification / / qz-white chalcedony	OA
291	A00RM047	42' 53' 28.3'	71' 12' 30.4'	Joya del Sol	Brancote-Elena Sur		Banded Qz vein	Silicification / / qz-black chalcedony	
292	A00RM048	42' 53' 38.7'	71' 12' 30.4'	Joya del Sol	Brancote-Elena Sur	Lago la Plata Fm.	Andesitic rock	Argillization / /	TS
293	A00RM049	42' 53' 24.0'	71' 12' 44.0'	Joya del Sol	Brancote-Julia	Intrusive	Hydrothermal breccia	Silicification / / Vuggy silica	TS
294	A00RM050	42' 51' 51.0'	71' 11' 19.5'	Joya del Sol	Brancote-North of Galadriel		Qz vein	Silicification / / Massive white qz	
295	A00RM051	42' 51' 51.6'	71' 11' 15.5'	Joya del Sol	Brancote-North of Galadriel	Lago la Plata Fm.	Altered rock	Silicification, argillization / sericite / py-limonite	
296	A00RM052	42' 51' 50.1'	71' 11' 15.0'	Joya del Sol	Brancote-North of Galadriel	Lago la Plata Fm.	Altered rock	Argillization / sericite / limonite	
297	A00RM053	43' 57' 42.0'	71' 34' 33.0'	Cerro colorado	Near Cerro Riñon		Float	Silicification / pyrophyllite / py-limonite	
298	A00RM054	43' 41' 49.0'	70' 33' 58.0'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PC
299	A00RM055	43' 41' 58.0'	70' 34' 12.0'	Gabros de Tecka	Gabros de Tecka	Osta Arena Fm. (Liasic)	Hornfels	Contact metamorphism/ /clinopyroxene, diopside	
300	A00RM056	43' 42' 33.0'	70' 33' 56.0'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		
301	A00RM057	43' 43' 15.1'	70' 33' 32.8'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PT,PC
302	A00RM058	43' 43' 12.1'	70' 37' 12.7'	Gabros de Tecka	Gabros de Tecka	Intrusive (Tecka Fm.)	Gabbro		PT
303	A00RM059	44' 41' 23.9'	71' 06' 47.4'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Sed. Rock	Silicification, argillization / kaolinite /	XR
304	A00RM060	44' 41' 24.0'	71' 06' 49.3'	Estrella Gaucha	Estrella Gaucha	Divisadero Fm.	Ignimbrite (welded tuff)	Silicification, argillization / kaolinite /	TS
305	A00RM061	44' 41' 20.7'	71' 07' 06.8'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Sed. Rock	Silicification, argillization / kaolinite /	
306	A00RM062	44' 41' 21.7'	71' 07' 07.7'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Sed. Rock (Float)	Argillization / /	XR
307	A00RM063	44' 41' 23.0'	71' 07' 12.5'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.	Sed. Rock	Argillization / kaolinite / dickite	XR
308	A00RM064	44' 41' 36.5'	71' 05' 45.2'	Estrella Gaucha	Estrella Gaucha	in Apeleg Fm.	Brecciated qz vein	Silicification / /	GC
309	A00RM065	44' 41' 19.3'	70' 05' 29.4'	Estrella Gaucha	Estrella Gaucha	Apeleg Fm.?	white altered rock	Silicification, argillization / montmorillonite-sericite /	XR
310	A00RM066	45' 00' 13.7'	71' 27' 25.2'	Cerro Blanco	Cerro Blanco	in Lago La Plata Fm.	Brecciated qz vein (Float)	Silicification / / py-limonite-hematite	GC

Appendix-2 Samples taken for the phase-1 survey.

No.	Sample No.	Latitude(S)	Longitude(W)	District	Locality	Geological unit, Stratigraphy	Rock type	Alteration / POSAM / Mineralization	Analysis type
311	A00RM067	45' 00' 12.9'	71' 27' 28.2'	Cerro Blanco	Cerro Blanco	Lago la Plata Fm.?	white altered rock	Silicification, argillization / sericite /	XR
312	A00RM068	45' 00' 21.4'	71' 27' 33.6'	Cerro Blanco	Cerro Blanco	Lago la Plata Fm.	white altered rock with qz pheno.	Silicification, argillization/ sericite,montmorillonite /qz phenocrystal	XR
313	A00RM069	45' 00' 24.9'	71' 27' 30.9'	Cerro Blanco	Cerro Blanco	in Lago La Plata Fm.	Qz vein (Float)	Silicification / / qz-limonite	GC
314	A00RM070	45' 01' 00.2'	71' 27' 06.8'	Cerro Blanco	Cerro Blanco	Tres Lagunas Fm.?	Laminated Sed. Rock	Silicification / / qz-chalcedony-calcite-limonite-sulfide	GC

Abbreviations

Analysis type

TS : Observation of thin sections → Appendix-3
PT : Observation of polished thin sections → Appendix-4
XR : Powdery X-ray diffraction → Appendix-5
GC : Geochemical grade analyses 27elements+Au (codeT27+494) → Appendix-6
PC : Geochemical grade analyses 27elements+PGE (codeT27+G15) → Appendix-7
OA : Ore grade assay 24elements+Au (code A22+999) → Appendix-9
WR : Whole rock analyses major & trace elements (codeA413+A390) → Appendix-8
DS : Sulfer isotope composition → Appendix-11
DO : Oxygen isotope composition → Appendix-12
FI : Homogenization temperatures and salinities of fluid inclusions → Appendix-10
KA : K-Ar radiometric dating → Appendix-13

Geological unit, Stratigraphy

Fm. : Formation
Gr. : Group

Mineralizations

qz : quartz
py : pyrite
cp : chalcopyrite
gn : galena
sp : sphalerite
bo : bornite
diss. : dissemination

Appendix-3 Observation results of thin sections

No.	Sample No.	Rock Type	primary minerals															secondary minerals												Note
			qz	pl	kf	bt	mu	ho	opx	cpx	ol	ga	sph	zi	ap	op	gl	qz	chl	seri	serp	tc	ep	ca	op	saus	cly	mp	smec	(others)
1	A00NK014	Muscovite bearing biotite granite	◎	◎	◎	○	△												△						△	△				Coarse-grained and heterogeneous
2	A00NK018	Aphyric rhyolite?		△													◎	○							△		△			Strongly silicified
3	A00NK025	Biotite hornblende granite(Quartz monzonite or adamellite)	◎	◎	◎	○		○							△	△			△				△			△				
4	A00NK048	Rhyolitic tuff	○	○	△	△										△	◎	○						△	△	△	△			Air fall deposit, lithic of rhyolite(△)
5	A00HH013	Granite porphyry	◎	○	△	△										△		○	△						△					Dyke
6	A00HH060	Aphyric basalt	○	◎	△					◎					△	◎	△		△											Small dyke or sill
7	A00MZ013	Hornblende dacite	◎	◎				◎							△	△		○	○					△	△					Dyke?
8	A00MZ015	Biotite hornblende granodiorite porphyry	◎	◎	△	○		○					△		△	△			○				△							Dyke or small intrusion
9	A00MZ018	Hornblende granodiorite porphyry	◎	◎	△	○		○					△		△	○			○				△							Dyke or small intrusion
10	A00MZ022	Biotite granite(quartz monzonite or adamellite)	◎	◎	◎	○							△	△	△	△		△	◎	△				○	◎					
11	A00MZ032	Biotite hornblende granodiorite	◎	◎	○	○		◎					△	△	△	○		△	○				○			◎				
12	A00MZ044	Olivine augite basalt	○	◎	△					◎	△				△	○	△	△	◎					◎					◎	Dyke or sill
13	A00MZ065	Basaltic lapilli tuff		○													◎	◎	◎	◎					○				○	lithic of basalt (◎)
14	A00TM006	Granophyre	◎	○	◎	△										△									△	△				Dyke
15	A00TM009	Biotite hornblende granodiorite porphyry	◎	◎	○	○		◎					△		△	○			○											Dyke or small intrusion
16	A00TM017	Porphyritic andesite	◎	◎																			◎					◎		Dyke, strong metasomatic replacement
17	A00TM018	Hornblende biotite granite (quartz monzonite or adamellite)	◎	◎	◎	◎		○					△		△	△		○	◎				○		○	◎				
18	A00TM019	Hornblende andesite	◎	◎				○											◎				◎		△			◎		Highly porphyritic,30 40% phenocryst
19	A00TM020	Hyperthene biotite hornblende tonalite(quartz diorite)	◎	◎	○	○			◎					△	△	○			○											
20	A00TM023	Olivine basalt		◎	△					◎	○					◎														
21	A00TM030	Hornblende biotite tonalite(quartz diorite)	◎	◎	△	○		○					△		△	○			◎				△			◎				
22	A00RM013	Hornblende biotite tonalite(quartz diorite)	◎	◎	○	◎		◎					△	△	△	△			◎				○		△	◎				
23	A00RM025	Porphyritic andesite		◎						△						△	○	○	◎						○	◎	◎			
24	A00RM031	Thermally metamorphosed sandstone	◎			◎																								
25	A00RM032	Biotite hornblende dacite	◎	◎	△	○		○								○		◎	◎				◎		◎					Dyke or small intrusion
26	A00RM038	Granite porphyry	◎		◎													◎							△					Dyke, strong silicification
27	A00RM048	Hornblende andesite		◎				◎									○	◎							◎	◎				
28	A00RM049	Aphyric rhyolite?															◎	◎												strong silicification
29	A00RM060	Lapilli tuff	△														◎	○												strong silicification, lithic of silicified rock(○)

Legend; ◎,abundant; ○, common; △, minor; ・rare

qz:quartz, pl:plagioclase, kf:k-feldspar, bt:biotite, mu:muscovite, ho:hornblende, ol:olivine, opx:ortho pyroxene, cpx:clino pyroxene, ga:garnet, sph:sphene, zi:zircon, ap:apatite
op:opaque minerals (mainly iron oxide), chl:chlorite, seri:sericite, serp:serpentine, tc:talc, ep:epidote, ca:carbonate mineral (mainly calcite), saus:saussnite, cly:clay mineral
amph:amphibole, smec:smectite

Appendix-4 Observation results of polished-thin sections.

No.	Sample No.	Rock Type	primary minerals														secondary minerals										ore minerals					Note
			qz	pl	kf	bt	mu	ho	opx	cpx	ol	ga	sph	zi	ap	op	gl	qz	chl	seri	serp	tc	ep	ca	op	cly	smec	spha	gal	py	c-py	mt	(others)
1	A00NK019	Porhyritic andesite(dacite)	◎	◎	△													◎					○		◎			◎	◎	○	△		ga=spha>py>c-py
2	A00NK039-1	Silicified rock																◎							○	△				△		·	py>mt
3	A00NK041	Olivine dolerite		◎	△	△				◎	○					△									○					△	·		py>c-py
4	A00HH002	Carbonate mineral-quartz-ore mineral rock																◎						△	◎			○	◎	◎	△		py>gal>spha>c-py
5	A00HH024	Porphyritic andesite(dacite)	◎	◎														◎					○		◎			○	◎	◎	△		py>gal>spha>c-py
6	A00HH063	Chlorite-ore minerals-quartz rock																◎	◎						◎			◎	○	△			spha>ga>py
7	A00MZ016	Carbonate mineral-ore minerals-quartz rock																○						○	○				○	◎	△		py>ga>c-py
8	A00MZ030	Ore minerals-quartz rock																◎					△		◎			◎	○	○	△		spha>py>ga>c-py
9	A00MZ038	Andestic lapilli tuff	△	◎												△		◎	◎				◎	◎	·					·			lithic of andesite(◎)
10	A00MZ042	Ore minerals-quartz rock																◎							◎			◎	○	△			spha>ga>py
11	A00RM029	Nearly aphyric andesite	◎	◎														◎					○		◎			◎	◎	△			spha=ga>py
12	A00RM033	Biotite hornblende dacite	◎	◎		△		○								△			○	△			◎		◎					○	△		Dyke or small intrusion, similar to A00RM032
13	A00RM040	Ore minerals-quartz rock																◎					△	△	◎			△		·	○		c-py>spha
14	A00RM042	Pebble conglomerate																◎	◎	◎					·							·	intensely altered, clast of tonalite(◎)
		Tonalite	◎	◎	△	△							△					○	◎	◎													Pebble in conglomerate
15	A00RM057	Olivine dolerite		◎	△	△				○	○					△				○	○				○		○				·	△	sill
16	A00RM058	Inverted pigeonite/augite dolerite	△	◎	△	△				◎									△						△							△	sill

Legend; ◎,abundant; ○, common; △, minor; · rare; ●, unknown

qz:quartz, pl:plagioclase, kf:k-feldspar, bt:biotite, mu:muscovite, ho:hornblende, ol:olivine, opx:ortho pyroxene, cpx:clino pyroxene, ga:garnet, sph:sphene, zi:zircon, ap:apatite
op:opaque minerals (mainly iron oxide), chl:chlorite, seri:sericite, serp:serpentine, tc:talc, ep:epidote, ca:carbonate mineral (mainly calcite), saus:saussnite, cly:clay mineral
amph:amphibole, smec:smectite, spha: sphalerite, gal: galena, py: pyrite, c-py: chalcopyrite, mt: magnetite

Appendix-5 Powdery X-ray diffraction results.

No.	Sample	Rock	Silicas			Silicates												Carbonates		Sulfides			Sulfates		Others		Note
			Quartz	Cristobalite	Tridymite	Plagioclase	Albite	K-feldspar	Hornblende	Biotite	Sericite	Pyrophylite	Chlorite	Chlorite/Montmorillonite	Montmorillonite(Smectite)	Kaolin	Andalusite	Calcite	Dolomite	Pyrite	Galena	Sphalerite	Gypsum	Barite	Diaspore	Laumontite	
1	A00NK004	Granite	29				33				1				1												
2	A00NK005	Granite	15					5	1		1				2												
3	A00NK006	Rhyolite	33									16															
4	A00NK012	Sandstone	48								13																
5	A00NK026	Pegmatite	38					7			7					2											
6	A00NK030	Schist	25								6																
7	A00NK031	Rhyolite	50								3																
8	A00NK033	Qz vein	28				19	5			1																
9	A00NK034	Granodiorite porphyry	22				23	3			6					2											
10	A00NK037	Granodiorite	33								20																
11	A00NK039	Andesite	26					5			2																
12	A00NK044	Rhyolite?	37													2											Alunite 13
13	A00NK046	Porphyritic andesite	13				19				< 1				1												
14	A00NK047	Andesite	64					1																			Anatase 4
15	A00NK049	Dacite	29					6			2																
16	A00HH004	Altered rock	32								5																
17	A00HH007	Altered rock	10			17																					? 1
18	A00HH013	Dacite	27				30	6					1														
19	A00HH019	Silicified rock	24					10								1											
20	A00HH022	Granite	26				26	15			1		3														
21	A00HH023	Altered rock	37					3																			Ser/Mon 2
22	A00HH027	Altered rock	10				31		1		2		1														
23	A00HH028	Altered granite	31				2						< 1													6	Prehnite 6
24	A00HH034	Andesite	3				14						5														
25	A00HH043	Andesite	34								2									1							
26	A00HH044	Altered rock	76								1									1							
27	A00HH050	Altered rock	5				12				2															3	
28	A00HH054	Altered rock	30								6																
29	A00HH057	Altered rock	43													17											
30	A00HH062	Andesite	10					8					5														
31	A00MZ003	Dacite	23								8		3					5		1							

Appendix-5 Powdery X-ray diffraction results.

No.	Sample	Rock	Silicas			Silicates												Carbonates		Sulfides			Sulfates		Others		Note
			Quartz	Cristobalite	Tridymite	Plagioclase	Albite	K-feldspar	Hornblende	Biotite	Sericite	Pyrophylite	Chlorite	Chlorite/Montmorillonite	Montmorillonite(Smectite)	Kaolin	Andalusite	Calcite	Dolomite	Pyrite	Galena	Sphalerite	Gypsum	Barite	Diaspore	Laumontite	
32	A00MZ004	Pebble dyke	18				10	14																			
33	A00MZ024	Volcanic rock	28					10																			
34	A00MZ058	Silicified rock	36								5																
35	A00TM003	White altered rock	28									12															
36	A00TM008	Shale	29					4								2							2				
37	A00TM011	Shale	25								1					13											
38	A00TM015	Granite?	24				7				1					2				1							
39	A00TM016	Granite?	33				6																				
40	A00TM027	Lapilli tuff	45				6	3																			
41	A00TM032	Tonalite	28				24						2														
42	A00TM033	Argillic vein	21				1				2		1					16								5	
43	A00TM037	Rhyolite	50					2			6					2											
44	A00TM043	Granodiorite	60								4																
45	A00TM046	Andesite	27					1																			Ser/Mon 3
46	A00TM047	Andesite	12					3					2														
47	A00TM050	Andesite?	15					6			1																
48	A00TM055	Altered rock	40													17											
49	A00TM057	Altered rock	53													5											Anatase 1 Alunite 1
50	A00TM058	Altered rock	49													10											
51	A00TM060	Altered rock	42					4					1														
52	A00TM062	Altered rock	29				14				2																
53	A00TM067	Altered rock	49								3					1											
54	A00RM005	Volcaniclastic rock	14				22	6																			
55	A00RM007	Volcanic rock	31					4			3					1											
56	A00RM022	Volcaniclastic rock	20					3			1																
57	A00RM023	Volcaniclastic rock	32					6			1																
58	A00RM024	Volcaniclastic rock	20				35	5								1											
59	A00RM028	Andesite?	21				16	4					1														
60	A00RM030	Tonalite	10			12			3				3														
61	A00RM033	Andesitic dyke	25			12							4														
62	A00RM034	Rhyolite	32				3	4			2					2											

Appendix-5 Powdery X-ray diffraction results.

No.	Sample	Rock	Silicas			Silicates											Carbonates		Sulfides			Sulfates		Others		Note
			Quartz	Cristobalite	Tridymite	Plagioclase	Albite	K-feldspar	Hornblende	Biotite	Sericite	Pyrophylite	Chlorite	Chlorite/Montmorillonite	Montmorillonite(Smectite)	Kaolin	Andalusite	Calcite	Dolomite	Pyrite	Galena	Sphalerite	Gypsum	Barite	Diaspore	Laumontite	
63	A00RM035	Rhyolite	31					6			4					1											
64	A00RM040	Granodiorite/Porphyry	43								15					1											
65	A00RM041	Breccia pipe	82																								
66	A00RM059	Sed. Rock	22													19											
67	A00RM062	Sed. Rock (Float)	3													40											
68	A00RM063	Sed. Rock	9													68											
69	A00RM065	white altered rock	26				16				1																
70	A00RM067	white altered rock	58																								
71	A00RM068	white altered rock with qz pheno.	32								2		5														

numerical data is quartz index which is relative strength against the standard quartz sample.

Appendix-6 Bulk chemical analysis results for the geochemical survey.

No.	Sample	Rock	Au (g/t)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (g/t)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
1	A00NK001	Andesite	0.035	6	4.4	50	<0.2	8.9	630	0.5	<2	0.08	<0.5	3	22	270	4.47	3.19	0.38	20	8	0.4	6	120	14	32	0.08	106	30	50
2	A00NK002	Qz vein	<0.005	<1	0.2	<10	<0.2	0.54	130	<0.5	<2	0.03	<0.5	1	13	6	0.25	0.09	0.04	665	1	0.03	1	50	2	11	0.01	9	<10	18
3	A00NK003	Silicified rock	<0.005	<1	0.2	<10	<0.2	0.54	70	<0.5	<2	0.01	<0.5	<1	33	1	0.06	0.15	0.01	10	8	0.03	<1	10	2	6	0.08	3	<10	8
4	A00NK007	Iron ore	<0.005	27	0.8	60	<0.2	1.51	200	<0.5	<2	0.37	15	26	11	77	>25.0	0.26	0.44	3350	1	0.23	25	460	26	27	0.04	51	<10	1670
5	A00NK010	Iron ore	0.01	42	0.4	30	<0.2	0.79	50	<0.5	<2	0.19	<0.5	<1	9	20	>25.0	0.08	0.09	150	15	0.05	7	760	6	21	0.01	88	<10	94
6	A00NK015	Qz vein	<0.005	6	0.2	10	0.2	0.27	10	<0.5	<2	0.02	<0.5	<1	18	11	0.27	0.12	0.01	15	<1	0.03	<1	40	2	7	<0.01	3	<10	12
7	A00NK016	Dacite	<0.005	12	1.4	<10	<0.2	1.45	70	<0.5	2	0.03	<0.5	<1	16	18	0.96	0.64	0.04	60	48	0.04	<1	80	6	15	0.02	7	<10	14
8	A00NK017	Dacite	<0.005	10	0.2	<10	<0.2	5.27	640	0.5	<2	0.03	<0.5	1	9	5	0.26	6	0.01	15	<1	0.18	<1	80	8	54	0.04	3	<10	8
9	A00NK020	Qz Vein	0.075	<1	<0.2	10	1.4	0.82	70	<0.5	<2	0.28	2.5	5	17	83	0.4	0.26	0.12	1495	<1	0.04	3	50	508	31	0.01	16	<10	224
10	A00NK021	Granite	<0.005	13	0.6	<10	0.2	7.53	70	0.5	<2	4.52	<0.5	19	13	3	4.63	0.42	1.48	540	1	2.21	6	850	16	364	0.36	150	<10	40
11	A00NK023	Tourmaline breccia	<0.005	5	0.2	<10	0.2	8.32	210	1.5	<2	1.35	<0.5	4	9	21	1.3	0.98	0.38	280	<1	3.93	<1	570	20	246	0.16	13	<10	44
12	A00NK027	Qz vein	<0.005	8	0.8	<10	<0.2	0.15	130	0.5	<2	0.04	<0.5	1	18	5	0.36	0.07	0.01	55	709	0.04	<1	30	2	21	<0.01	8	<10	8
13	A00NK028	Qz vein	<0.005	2	<0.2	<10	<0.2	0.44	30	0.5	<2	0.04	<0.5	<1	20	<1	0.2	0.18	0.03	40	138	0.03	3	60	2	9	<0.01	9	<10	8
14	A00NK029	Rhyolite	<0.005	<1	<0.2	<10	<0.2	<0.01	550	1.5	<2	4.89	2	8	15	364	9.59	3.51	0.8	<5	3	<0.01	9	730	<2	679	0.36	153	10	32
15	A00NK032	Flaky qz	<0.005	22	1.2	<10	<0.2	2	50	1.5	<2	0.04	<0.5	2	12	37	2.99	0.77	0.16	145	54	0.06	<1	250	2	47	0.01	50	<10	8
16	A00NK033	Qz vein	<0.005	<1	<0.2	<10	<0.2	0.61	10	0.5	<2	0.02	<0.5	<1	15	<1	0.06	0.17	0.03	15	194	0.19	<1	<10	<2	15	<0.01	1	<10	4
17	A00NK034	Granodiorite porphyry	0.015	<1	0.2	<10	0.8	8.02	490	1.5	<2	0.66	<0.5	8	15	1635	1.46	2.86	0.34	300	13	2.32	10	560	16	187	0.09	46	<10	28
18	A00NK035	Qz vein	<0.005	1	<0.2	<10	2	0.17	30	<0.5	<2	0.01	<0.5	<1	10	15	0.09	0.1	<0.01	5	1	0.03	<1	10	<2	9	<0.01	1	<10	2
19	A00NK036	Qz vein	<0.005	18	0.2	<10	1.2	0.15	10	<0.5	<2	0.01	<0.5	1	18	115	2.86	0.04	<0.01	10	41	0.03	<1	80	2	15	<0.01	24	10	2
20	A00NK040	Andesite? (Float)	<0.005	4	<0.2	<10	0.2	9.36	150	<0.5	<2	0.44	<0.5	19	124	149	6.91	0.67	3.45	805	4	4.54	32	620	10	72	0.13	220	<10	74
21	A00NK045	Andesite	<0.005	<1	<0.2	30	<0.2	0.09	3490	<0.5	<2	<0.01	<0.5	1	41	4	0.06	0.03	0.01	5	<1	<0.01	<1	30	<2	19	0.48	14	<10	2
22	A00NK047	Andesite	<0.005	3	<0.2	20	<0.2	0.24	70	<0.5	<2	0.01	<0.5	1	22	5	0.05	0.04	0.01	<5	<1	<0.01	<1	10	2	14	0.71	3	<10	2
23	A00HH004	Altered rock	0.01	13	<0.2	10	0.2	5.87	450	1	<2	0.01	<0.5	3	10	38	2.7	2.68	0.3	150	56	0.23	<1	90	10	26	0.09	17	10	22
24	A00HH013	Dacite	0.015	3	0.2	40	0.2	7.02	320	1.5	<2	0.27	<0.5	6	10	239	0.9	2.38	0.39	110	3	3.84	1	130	10	76	0.09	29	<10	16
25	A00HH016	Silicified rock	<0.005	13	0.6	<10	<0.2	6.84	340	0.5	<2	0.49	<0.5	5	15	1	0.46	1.7	0.16	130	<1	2.94	<1	320	16	91	0.15	50	<10	74
26	A00HH019	Silicified rock	<0.005	203	3.4	<10	0.2	6.49	810	0.5	<2	0.03	<0.5	2	8	3	1.51	6.73	0.02	35	<1	0.17	<1	160	10	68	0.15	17	<10	10
27	A00HH028	Altered granite	<0.005	6	<0.2	<10	<0.2	7.68	10	2	<2	4.4	<0.5	3	17	1	0.63	0.29	0.49	215	<1	3.38	1	530	8	101	0.31	58	<10	22
28	A00HH034	Andesite	<0.005	10	<0.2	<10	<0.2	8.34	480	0.5	<2	2.71	<0.5	23	28	1175	5.36	1.33	2.48	1075	<1	3.69	5	1100	2	261	0.67	235	<10	86
29	A00HH037	Granite with py (float)	0.005	7	<0.2	<10	0.2	8.53	440	0.5	<2	3.14	<0.5	20	7	355	2.77	1.09	1.05	285	<1	2.88	<1	890	2	351	0.27	76	<10	22
30	A00HH039	Pyroclastics with py (float	<0.005	13	<0.2	<10	0.2	9.33	150	1.5	<2	2.56	<0.5	9	20	41	3.25	0.63	0.19	250	<1	5.03	3	670	18	426	0.49	128	<10	38
31	A00HH044	Altered rock	0.59	9	<0.2	<10	2.6	3.49	70	<0.5	8	0.07	<0.5	28	11	594	5.85	1.44	0.18	150	13	0.07	2	320	78	16	0.13	67	70	26
32	A00HH047	Altered rock	<0.005	20	3	340	<0.2	7.8	670	<0.5	<2	0.28	<0.5	6	16	13	2.87	0.63	0.14	95	<1	1.61	<1	990	10	488	0.52	128	<10	16
33	A00HH060	Andesite	<0.005	19	0.8	<10	<0.2	8.02	340	0.5	2	4.93	<0.5	23	3	35	6.44	1.06	2.17	1195	<1	2.67	<1	2830	6	786	0.96	319	<10	82
34	A00MZ001	Rhyolite	0.02	23	1	190	0.2	6.56	450	0.5	<2	0.34	<0.5	2	9	74	3.48	2.87	0.49	35	1	0.18	<1	360	4	31	0.12	88	20	2
35	A00MZ002	Volcanic rock	0.01	35	0.4	120	<0.2	10.2	900	1	<2	0.22	<0.5	3	3	117	4.17	3.4	0.34	30	<1	0.39	<1	310	14	160	0.2	182	10	2
36	A00MZ003	Dacite	0.52	82	<0.2	<10	0.8	8.06	360	0.5	<2	3.21	<0.5	5	1	1	1.5	3.4	0.65	4190	<1	0.22	<1	510	52	56	0.13	42	<10	30
37	A00MZ004	Pebble dyke	<0.005	18	0.2	10	0.2	6.68	890	2	<2	0.48	<0.5	4	7	83	1.91	4.33	0.07	235	<1	1.8	<1	150	20	56	0.14	34	<10	30
38	A00MZ005	Volcanic rock	<0.005	119	1.2	30	0.4	6.23	370	0.5	2	3.35	<0.5	7	6	110	4.05	2.16	0.07	630	<1	2.73	<1	1550	10	32	0.95	105	<10	28
39	A00MZ006	Volcanic rock	<0.005	9	<0.2	<10	0.4	7.71	930	1.5	<2	0.04	<0.5	2	3	29	0.82	4.98	0.43	125	<1	0.34	<1	220	32	20	0.05	12	<10	20
40	A00MZ007	Volcanic rock	0.165	44	4.4	4480	71.8	4.25	480	0.5	<2	0.01	<0.5	2	6	23	3.53	2.56	0.15	20	1	0.12	<1	20	88	20	0.03	3	<10	6
41	A00MZ008	Mudstone	<0.005	3	<0.2	<10	0.8	7.03	70	1	6	1.82	<0.5	18	26	362	5.21	0.48	0.49	85	1	3.2	35	1030	8	294	0.31	76	<10	14
42	A00MZ009	Granite	<0.005	8	0.2	10	0.4	10.9	120	1	<2	2.56	1.5	5	5	41	0.56	1.99	0.18	235	<1	3.76	<1	620	32	307	0.07	41	<10	100
43	A00MZ022	Granite	<0.005	30	0.2	<10	1.8	7.24	310	3.5	<2	0.5	<0.5	6	10	210	1.96	3.16	0.38	500	<1	2.32	1	580	52	158	0.23	28	<10	128
44	A00MZ023	Volcanic rock	<0.005	26	0.2	10	0.4	7.05	470	0.5	<2	0.15	<0.5	3	10	7	1.72	3.15	0.33	70	<1	1.46	<1	370	36	41	0.34	53	<10	12
45	A00MZ024	Volcanic rock	<0.005	1030	0.8	<10	<0.2	7.04	1460	1	<2	0.03	<0.5	1	5	<1	0.22	6.63	0.03	5	<1	0.7	<1	180	34	56	0.07	9	<10	2
46	A00MZ025	Volcanic rock	<0.005	3	<0.2	<10	0.2	7.8	690	0.5	<2	0.08	<0.5	2	4	<1	0.18	4.62	<0.01	75	<1	2.12	<1	310	12	40	0.08	17	<10	2
47	A00MZ026	Vein ore	<0.005	55	8.6	<10	7.6	5.77	100	1.5	<2	0.07	2	4	7	4	1.66	2.26	0.25	4250	<1	0.12	<1	220	1795	4	0.16	20	<10	652
48	A00MZ027	Vein ore	<0.005	<1	<0.2	<10	0.2	7.41	580	1.5	<2	0.16	<0.5	4	2	<1	1.12	3.04	0.24	2010	1	2.54	<1	330	52	67	0.15	14	<10	52
49	A00MZ031	Granite (Float)	<0.005	14	<0.2	<10	0.2	10	110	1	<2	3.9	<0.5	13	11	1	2.75	0.62	1.84	325	<1	4.13	9	1060	16	434	0.49	153	<10	18
50	A00MZ033	Granodiorite (Float)	<0.005	4	<0.2	<10	1	8.05	270	1	<2	1.8	<0.5	35	27	2620	1.69	1.4	1.08	810	<1	3.55	6	530	162	122	0.29	80	<10	142
51	A00MZ034	Andesitic tuff	0.015	16	0.2	<10	1	6.85	10	<0.5	<2	9.5	<0.5	75	38	1125	7.69	0.13	0.82	1010	<1	0.18	22	530	14	1115	0.39	197	<10	28
52	A00MZ035	Zeolite	<0.005	<1	<0.2	<10	<0.2	9.2	180	0.5	<2	9.87	<0.5	9	21	11	1.76	1.33	0.7	345	<1	0.48	3	180	10	221	0.13	59	<10	30
53	A00MZ039	Andesite (Float)	0.01	48	3.2	<10	0.4	8.4	610	0.5	<2	3.4	<0.5	21	73	54	4.85	2.02	1.49	1005	1	1.67	19	590	32	254	0.41	128	<10	118
54	A00MZ040	Sil., breccia (Float)	0.005	2	0.8	<10	<0.2	8.38	2700	7	<2	4.64	8.5	62	58	2490	7.89	3.45	3.69	1200	<1	2.75	38	3290	10	1410	0.38	613	30	182
55	A00MZ047	Qz veinlet (Float)	<0.005	6	0.2	<10	0.2	2.17	160	<0.5	<2	0.07	<0.5	1	13	5	0.41	0.67	0.06	50	1	0.71	1	50	4	28	0.06	11	<10	8
56	A00MZ052	Qz vein	0.17	6	<0.2	<10	0.8	1.35	190	<0.5	6	0.03	<0.5	120	10	76	2.99	0.58	0.05	15	<1	0.04	5	10	10	7	0.03	21	<10	2
57	A00MZ053	Andesite	0.43	6	<0.2	<10	5.6	6.41	390	0.5	Intf*	0.85	<0.5	15	9	16800	5.46	2.2	0.65	720	<1	0.64	6	Intf*	74	51	0.23	78	<10	14

Appendix-6 Bulk chemical analysis results for the geochemical survey.

No.	Sample	Rock	Au (g/t)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (g/t)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
58	A00MZ054	Qz porphyry	<0.005	5	<0.2	<10	<0.2	7.31	1260	1	<2	1.41	<0.5	4	5	92	1.29	2.56	0.29	210	1	2.49	<1	240	8	168	0.13	28	<10	10
59	A00MZ056	Qz vein (Float)	0.02	84	1.6	<10	0.2	4.18	170	<0.5	<2	1.64	<0.5	5	10	7	1.54	1.56	0.19	630	<1	0.29	1	290	12	22	0.14	44	<10	26
60	A00MZ057	Qz vein	4.07	6640	6.4	10	0.8	1.22	60	<0.5	14	0.02	<0.5	21	23	34	7.6	0.42	0.03	15	<1	0.04	3	160	10	6	0.02	5	<10	2
61	A00MZ059	Silicified rock	13.87	>10000	25	30	5.8	2.69	90	<0.5	20	0.02	0.5	10	15	1525	8.94	0.95	0.05	15	<1	0.08	2	130	10	9	0.09	36	<10	6
62	A00MZ061	Soft silky rock	0.045	77	0.8	280	1.6	9.53	410	<0.5	<2	0.06	<0.5	3	25	14	0.88	0.05	<0.01	5	19	0.13	2	1110	20	1040	0.16	141	<10	8
63	A00MZ062	Silicified rock	0.015	27	0.2	40	0.2	8.01	510	<0.5	<2	0.09	<0.5	2	41	6	0.2	1.62	<0.01	<5	<1	0.82	<1	1130	56	617	0.41	174	<10	<2
64	A00MZ063	Silicified rock	0.01	23	<0.2	20	<0.2	8.63	810	1	<2	0.98	<0.5	6	4	5	2.09	2.54	0.68	370	<1	3.92	<1	590	6	341	0.46	76	<10	14
65	A00MZ064	Silicified rock	<0.005	5	<0.2	10	<0.2	4.72	430	<0.5	<2	0.09	<0.5	1	35	<1	0.07	1.32	<0.01	10	<1	0.23	<1	1090	16	569	0.32	88	<10	<2
66	A00MZ065	Andesite	0.045	17	0.4	30	1	7.46	2160	<0.5	<2	0.21	<0.5	8	5	4	8.66	4.73	0.89	2500	<1	0.09	<1	1250	62	37	0.42	110	20	186
67	A00TM001	Dacite	0.005	13	0.6	10	<0.2	4.86	320	<0.5	<2	0.02	<0.5	1	8	12	0.81	2.14	0.13	60	2	0.13	<1	120	4	7	0.05	20	20	6
68	A00TM002	Black shale	1.18	356	3.8	270	19.6	0.69	70	<0.5	<2	19.35	14.5	13	3	137	4.63	0.32	3	>10000	<1	<0.01	9	130	736	223	0.04	16	<10	1870
69	A00TM003	White altered rock	0.02	11	<0.2	<10	0.2	2.52	130	<0.5	<2	0.3	<0.5	<1	5	4	0.24	0.04	0.03	185	1	0.03	<1	110	8	34	0.08	6	<10	12
70	A00TM004	Rhyolitic tuff	0.005	7	<0.2	<10	0.2	6.45	1410	<0.5	<2	0.17	<0.5	1	7	1	0.47	8.1	0.01	65	1	0.14	<1	30	4	26	0.07	4	<10	10
71	A00TM005	Tonalite	<0.005	5	<0.2	20	0.6	4.25	230	1	<2	0.47	<0.5	2	8	4	0.95	0.64	0.04	390	1	2.44	<1	70	2	68	0.07	3	<10	10
72	A00TM007	Qz vein	<0.005	14	0.2	10	<0.2	2.09	5030	<0.5	<2	0.08	<0.5	3	6	8	0.55	1.77	0.02	25	<1	0.06	3	300	<2	636	0.07	17	<10	6
73	A00TM008	Shale	0.01	62	1.8	30	0.8	7.16	690	0.5	<2	0.59	<0.5	4	24	17	3.06	3.12	0.69	55	4	1.54	1	700	4	154	0.28	72	<10	2
74	A00TM010	Shale	0.545	>10000	320	20600	46	1.43	590	<0.5	30	0.08	118	15	13	1010	12.75	0.31	0.05	90	71	0.05	5	840	71400	46	0.02	30	<10	3170
75	A00TM012	Qz vein	0.005	273	21	7270	9.8	0.09	1860	<0.5	<2	0.04	20.5	<1	11	32	0.86	0.01	0.01	90	2	0.03	1	30	916	34	<0.01	5	<10	1430
76	A00TM014	Granite?	0.11	50	1.6	240	3.8	5.42	110	0.5	Intf*	0.22	2	40	19	32400	1.27	0.38	0.1	240	14	3.2	6	Intf*	40	112	0.06	50	<10	150
77	A00TM016	Granite?	0.035	51	2.2	81200	22.2	7.86	160	0.5	Intf*	0.15	<0.5	3	8	25400	0.21	0.33	0.07	15	<1	1.09	2	Intf*	176	59	0.04	25	<10	168
78	A00TM017	Tonalite	<0.005	11	0.2	540	0.2	10.3	1630	1	<2	5	<0.5	10	9	262	4.38	5.75	1.19	1590	<1	1.34	3	630	36	261	0.48	174	<10	116
79	A00TM021	Qz vein in granitoid	1.95	48	1.2	6820	15.2	1	60	2	Intf*	0.05	<0.5	<1	7	24400	11.85	0.43	0.03	55	60	0.03	1	Intf*	28	15	0.02	33	50	30
80	A00TM022	Lapilli tuff	0.01	<1	<0.2	30	<0.2	4.7	600	0.5	<2	0.05	<0.5	1	13	95	0.12	4.53	0.04	10	<1	0.45	<1	190	8	26	0.07	21	<10	2
81	A00TM026	Tuff	<0.005	<1	<0.2	<10	<0.2	7.55	1020	2	<2	0.09	<0.5	3	2	7	0.93	4.13	0.48	25	<1	1.76	<1	80	6	219	0.05	6	<10	18
82	A00TM027	Lapilli tuff	<0.005	1	<0.2	<10	<0.2	5.01	1560	0.5	<2	0.04	<0.5	1	7	10	0.61	3.63	0.02	20	<1	1.16	<1	130	8	145	0.03	3	<10	18
83	A00TM028	Tuff	0.005	1	0.2	<10	13.4	2.26	550	<0.5	<2	0.16	0.5	<1	9	333	1.22	1.88	0.09	440	<1	0.19	<1	140	6420	67	0.06	12	<10	120
84	A00TM029	Porphyritic Tonalite	<0.005	7	<0.2	<10	<0.2	7.32	50	1.5	<2	8.47	<0.5	11	36	80	2.85	0.27	0.55	660	<1	0.43	9	620	52	335	0.39	103	<10	64
85	A00TM031	Tonalite	0.005	16	0.2	<10	0.2	7.08	40	0.5	<2	1.37	<0.5	15	45	6	4.63	0.22	1.29	440	2	3.41	12	610	20	165	0.42	118	<10	42
86	A00TM032	Tonalite	<0.005	5	<0.2	<10	<0.2	7.75	40	0.5	<2	1.5	<0.5	12	46	5	3.7	0.26	1.58	585	<1	3.62	12	610	16	191	0.42	123	<10	50
87	A00TM033	Argillic vein	<0.005	6	<0.2	<10	0.2	7.74	190	1	<2	9.28	<0.5	7	13	40	1.29	2.1	0.63	440	<1	0.56	4	230	14	128	0.15	42	<10	32
88	A00TM034	Qz vein (Float)	<0.005	<1	<0.2	<10	0.4	11	<10	3	<2	14.8	<0.5	3	9	13	0.61	0.05	0.16	515	<1	0.13	<1	40	10	31	0.06	78	<10	10
89	A00TM035	Granodiorite	<0.005	32	0.6	<10	0.4	8.34	200	0.5	<2	4.25	<0.5	17	48	235	3.55	0.53	1.92	690	<1	3.18	15	890	24	275	0.58	169	<10	52
90	A00TM038	Qz vein	0.01	11	0.6	<10	<0.2	0.36	80	0.5	2	0.05	<0.5	3	12	3	0.68	0.13	0.02	25	209	0.03	3	80	2	14	<0.01	9	30	12
91	A00TM039	Qz vein	0.01	9	0.2	<10	0.4	0.06	230	<0.5	8	0.01	<0.5	2	24	7	0.75	0.03	<0.01	40	562	0.04	<1	10	2	8	<0.01	6	<10	18
92	A00TM040	Granodiorite	0.005	<1	<0.2	<10	<0.2	7.3	560	1.5	<2	0.13	<0.5	3	8	83	1.13	3.9	0.1	50	20	2.3	<1	160	14	99	0.08	20	<10	10
93	A00TM041	Granodiorite	<0.005	<1	<0.2	<10	0.4	8.24	330	1.5	<2	0.24	<0.5	9	14	340	1.41	2.4	0.24	280	1	2.21	6	600	14	116	0.1	51	<10	24
94	A00TM044	Hydrothermal breccia	<0.005	4	<0.2	<10	0.6	7.87	290	1	Intf*	0.18	<0.5	12	16	15400	2.48	2.63	0.91	525	1	1.59	10	Intf*	6	66	0.19	61	<10	168
95	A00TM053	Granite (Float)	<0.005	<1	<0.2	<10	0.2	7.14	160	1	<2	0.03	<0.5	5	5	57	2.08	2.26	1.08	595	9	0.22	<1	270	36	36	0.06	26	<10	110
96	A00TM054	Granite? (Float)	<0.005	6	<0.2	<10	0.2	9.07	770	1	<2	4.22	<0.5	6	5	21	1.59	1.6	0.65	490	1	2.83	<1	990	16	470	0.3	32	<10	40
97	A00TM055	Altered rock	<0.005	<1	<0.2	<10	<0.2	8.48	1100	<0.5	<2	0.04	<0.5	2	9	8	0.04	0.07	<0.01	<5	<1	0.13	<1	420	8	525	0.15	44	<10	<2
98	A00TM056	Altered rock	0.075	5	1.6	30	<0.2	5.5	980	1.5	<2	0.1	<0.5	6	23	147	6.01	0.08	0.03	15	5	0.05	7	2340	18	540	0.27	243	<10	138
99	A00TM058	Altered rock	<0.005	12	46	110	0.2	12.1	390	<0.5	<2	0.04	<0.5	3	36	8	0.21	0.07	0.01	5	21	0.17	<1	600	26	997	0.45	260	30	18
100	A00TM059	Qz vein	0.01	8	0.6	<10	0.2	1.14	70	<0.5	<2	0.04	<0.5	1	11	3	0.14	0.56	0.08	105	<1	0.03	<1	40	8	21	<0.01	6	<10	12
101	A00TM060	Altered rock	0.005	292	3.6	<10	0.2	4.6	650	0.5	<2	0.22	<0.5	3	14	4	1.72	3.29	0.74	700	1	0.51	1	520	8	61	0.21	31	<10	30
102	A00TM061	Hydrothurmal breccia	0.06	204	1	<10	3.8	1.58	200	<0.5	<2	0.04	<0.5	1	16	33	0.43	1.38	0.13	195	<1	0.11	<1	80	98	23	0.04	8	<10	28
103	A00TM062	Altered rock	0.01	116	0.6	<10	<0.2	7.5	280	1.5	<2	0.07	<0.5	1	2	<1	1.47	1.39	0.06	260	<1	3.42	<1	70	14	97	0.1	2	<10	38
104	A00TM065	Qz vein	1.575	3660	76	2670	26	0.86	90	<0.5	46	0.03	20	4	16	243	2.66	0.16	0.02	35	6	0.03	1	250	1485	23	0.01	12	<10	596
105	A00TM066	Qz vein	0.795	5710	64	950	40	1.58	140	<0.5	16	0.04	1.5	2	14	244	2.51	0.49	0.04	35	1	0.04	<1	140	1230	27	0.06	22	<10	50
106	A00TM068	Qz vein	0.02	185	16.5	130	3.8	1.4	80	<0.5	2	0.08	<0.5	6	28	115	4.89	0.26	0.12	55	1	0.35	4	370	1685	26	0.12	84	<10	344
107	A00RM009	Volcanic rock	0.02	61	1.8	80	2.4	6.47	870	0.5	<2	0.12	<0.5	1	10	6	0.31	6.05	0.08	140	<1	0.23	<1	40	42	84	0.04	1	<10	16
108	A00RM011	Dacite porphyry	<0.005	10	0.2	<10	<0.2	12.1	250	1	<2	0.33	<0.5	8	4	35	1.55	1.27	1.75	530	<1	5.93	<1	570	26	214	0.11	43	<10	144
109	A00RM012	Dacite porphyry	<0.005	8	0.4	<10	1	9.19	680	0.5	<2	2.83	<0.5	11	9	9	3.15	1.51	1.92	945	<1	3.12	2	600	14	404	0.3	110	<10	46
110	A00RM016	Sed. Rock	<0.005	6	<0.2	<10	<0.2	7.7	520	2	<2	0.13	<0.5	2	18	31	0.55	2.53	0.51	20	1	1.31	<1	310	10	62	0.11	60	<10	8
111	A00RM017	Sed. Rock	0.025	23	1.6	<10	0.6	4.73	160	0.5	<2	0.07	<0.5	1	20	64	4.52	1.89	0.27	15	20	0.23	<1	420	56	30	0.09	288	<10	2
112	A00RM020	Qz. vein in Granodiorite	0.025	37	0.8	150	0.8	3.89	180	1.5	10	0.11	<0.5	3	9	68	2.29	1.7	0.1	145	22	0.09	<1	580	8	10	0.07	12	10	50
113	A00RM021	Granodiorite	0.01	9	0.4	2830	1.2	6.68	200	3	4	0.18	<0.5	8	9	3090	2.73	2.21	0.33	530	13	1.23	2	770	10	69	0.16	26	<10	152
114	A00RM023	Volcaniclastic rock	<0.005	35	3	10	<0.2	5.85	920	0.5	<2	0.04	<0.5	1	6	12	0.3	6.29	0.07	15	<1	0.15	<1	40	8	60	0.07	11	<10	4

Appendix-6 Bulk chemical analysis results for the geochemical survey.

No.	Sample	Rock	Au (g/t)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (g/t)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
115	A00RM028	Andesite?	<0.005	7	<0.2	<10	0.2	7.83	600	1.5	<2	1.53	4.5	6	1	18	1.48	1.8	0.5	990	<1	3.8	1	300	36	297	0.2	33	<10	1410
116	A00RM030	Tonalite	<0.005	42	0.2	<10	<0.2	8.57	400	0.5	<2	3.3	<0.5	14	68	44	3.85	0.78	2.61	755	<1	2.72	18	410	10	310	0.43	166	<10	58
117	A00RM033	Andesitic dyke	<0.005	34	0.2	<10	0.6	8.12	300	1	<2	3.07	<0.5	10	10	43	2.19	0.3	0.77	315	<1	2.85	1	370	24	403	0.24	54	<10	40
118	A00RM036	Rhyolite	<0.005	4	<0.2	<10	2.2	7.26	80	3.5	<2	0.03	<0.5	1	2	<1	0.53	3.56	0.39	40	<1	0.21	<1	80	2	13	0.04	16	110	4
119	A00RM037	Qz vein	<0.005	28	1.4	<10	0.4	0.36	110	0.5	8	0.05	<0.5	1	17	30	1.86	0.14	0.03	100	164	0.05	2	100	10	33	<0.01	19	70	32
120	A00RM040	Granodiorite/Porphyry	0.02	6	<0.2	<10	1.8	5.52	460	0.5	<2	0.44	<0.5	8	13	1655	1.6	2.38	0.44	485	11	0.48	5	400	2	27	0.06	29	<10	32
121	A00RM041	Breccia pipe	0.01	57	1	<10	9.2	0.65	90	<0.5	Intf*	0.01	<0.5	4	10	17200	1.98	0.24	0.02	10	14	0.03	5	Intf*	8	7	<0.01	21	90	<2
122	A00RM042	Hydrothermal breccia	<0.005	<1	<0.2	<10	1.2	8.42	330	1	<2	0.22	<0.5	15	28	666	3.51	2.8	1.05	640	25	1.83	12	710	6	75	0.27	72	10	142
123	A00RM043	Altered rock	0.29	18	0.2	130	2	2.26	160	0.5	Intf*	0.04	<0.5	20	26	25700	10.9	0.62	0.09	80	28	0.05	12	Intf*	88	17	0.05	127	10	30
124	A00RM045	Granodiorite	0.005	1	0.8	<10	0.6	9.37	550	0.5	<2	0.04	<0.5	2	8	75	1.91	4.01	0.36	30	44	0.52	<1	120	50	46	0.12	124	<10	6
125	A00RM064	Brecciated qz vein	0.015	43	0.2	<10	0.8	0.67	70	<0.5	<2	0.01	<0.5	1	14	86	0.15	0.49	0.04	165	<1	0.05	<1	20	56	10	0.01	3	<10	8
126	A00RM066	Brecciated qz vein (Float)	0.135	3880	18	520	39.2	0.66	30	<0.5	42	0.04	43.5	216	13	775	20.3	0.09	0.03	30	18	0.02	10	780	2770	16	0.01	18	<10	2170
127	A00RM069	Qz vein (Float)	0.17	2150	19	670	56.2	0.66	60	<0.5	52	0.03	0.5	1	17	102	0.94	0.14	0.01	85	5	0.03	<1	70	1740	15	0.01	10	<10	74
128	A00RM070	Laminated Sed. Rock	0.03	192	9	460	8.8	0.27	70	<0.5	<2	0.12	0.5	2	33	9	0.68	0.04	<0.01	650	9	0.02	1	60	158	15	0.01	6	<10	164

"Intf*" stands for interference. When a sample has high Cu, their is often interference on the Bi and P.
The instrument can't get a good reading of the Bi and P because the Cu "interferes" with the reading.

Appendix-7 Bulk chemical analysis results including PGM elements for the geochemical survey.

No.	Sample	Rock	Au (g/t)	Pt (g/t)	Pd (g/t)	Rh (g/t)	As (ppm)	Sb (ppm)	Hg (ppb)	Ag (ppm)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sr (ppm)	Ti (%)	V (ppm)	W (ppm)	Zn (ppm)
1	A00NK041	Gabbro	0.03	<0.07	<0.07	<0.03	2	<0.2	<10	0.2	10.35	80	<0.5	<2	7.18	6.5	43	271	79	3.67	0.23	8.26	715	<1	1.05	403	100	318	87	0.12	102	<10	1615
2	A00NK042	Gabbro	<0.03	<0.07	<0.07	<0.03	3	<0.2	<10	<0.2	10.55	60	<0.5	<2	7.25	<0.5	45	278	40	3.65	0.37	8.57	715	<1	1.09	398	80	54	91	0.11	97	<10	94
3	A00NK043	Gabbro	<0.03	<0.07	<0.07	<0.03	2	<0.2	<10	<0.2	8.25	400	1.5	<2	4.22	<0.5	24	21	21	5.69	1.89	1.23	885	<1	2.05	6	640	70	132	0.57	117	<10	102
4	A00RM054	Gabbro	<0.03	<0.07	<0.07	<0.03	6	<0.2	<10	0.2	10.7	70	<0.5	<2	7.38	<0.5	47	239	34	3.86	0.39	8.62	760	<1	1.18	417	120	8	94	0.13	101	<10	48
5	A00RM057	Gabbro	<0.03	<0.07	<0.07	<0.03	7	<0.2	10	<0.2	10.3	80	<0.5	<2	7.27	<0.5	47	215	39	4.09	0.48	7.99	800	<1	1.16	376	130	6	98	0.16	124	<10	44

Appendix-8 Bulk chemical analysis results for the petrochemical study.

No.	Sample	Rock	Alteration	SiO_2 (%)	TiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	MnO (%)	MgO (%)	CaO (%)	Na_2O (%)	K_2O (%)	P_2O_5 (%)	Cr_2O_3 (%)	LOI (%)	Total (%)
1	A00HH012	Andesitic porphyry	Weak	63.1	0.45	17.7	5.14	0.06	1.87	4.22	3.79	1.29	0.15	<0.01	1.64	99.4
2	A00MZ011	Qz porphyry	Weak	63.2	0.31	16.5	2.89	0.15	1.71	4.11	3.14	1.9	0.15	<0.01	4.61	98.7
3	A00MZ013	Dacite porphyry	Fresh	57.4	0.52	17.2	5.16	0.14	3.32	4.61	3.76	1.62	0.16	<0.01	4.66	98.6
4	A00MZ015	Tonalite	Fresh with green Cu stain	62.6	0.46	17.7	4.01	0.11	2.02	5.44	3.52	1.53	0.12	<0.01	1.46	99
5	A00MZ018	Granodiorite	Fresh	61.6	0.62	16	4.96	0.1	2.41	4.51	3.3	3.26	0.17	<0.01	1.68	98.6
6	A00MZ032	Granodiorite (Float	Fresh	67.3	0.47	15.3	3.8	0.06	1.46	3.51	3.44	2.73	0.11	<0.01	1.16	99.3
7	A00MZ044	Microdiorite	Propylite	51.4	0.9	17.4	8.58	0.18	3.79	8.03	2.53	1.74	0.25	<0.01	4.19	99
8	A00TM009	Tonalite	Fresh	63.7	0.34	18.6	3.23	0.04	1.51	5.09	4.19	1.24	0.22	<0.01	0.98	99.1
9	A00TM018	Tonalite	Weak	62.5	0.69	16.1	4.92	0.14	2.52	4.75	2.69	2.81	0.17	<0.01	1.33	98.6
10	A00TM019	Diorite porphyry	Tourmalinization with qz-epidote vein	52.7	0.92	20.8	6.31	0.21	2.45	5.57	3.33	5.17	0.19	<0.01	1.14	98.8
11	A00TM020	Tonalite	Fresh	61.1	0.55	17.5	5.59	0.14	2.39	6.45	3.17	1.56	0.13	<0.01	0.34	98.8
12	A00TM030	Tonalite	Potassic? with limonite stain	59.2	0.97	15.7	5.96	0.14	4.16	6.35	3.78	1.02	0.19	<0.01	1.77	99.2
13	A00RM013	Granite	Weak, qz vein with py diss.	63.7	0.64	15.4	4.84	0.09	2.78	2.43	2.29	3.87	0.12	<0.01	3.11	99.3

No.	Sample	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Co (ppm)	Ni (ppm)	Ba (ppm)	Rb (ppm)	Sr (ppm)	Sn (ppm)	W (ppm)	U (ppm)	Th (ppm)	Cs (ppm)	Ga (ppm)	Hf (ppm)	Nb (ppm)	Ta (ppm)	Tl (ppm)	V (ppm)	La (ppm)	Ce (ppm)	Pr (ppm)	Nd (ppm)	Sm (ppm)	Eu (ppm)	Gd (ppm)	Tb (ppm)	Dy (ppm)	Ho (ppm)	Er (ppm)	Tm (ppm)	Yb (ppm)	Lu (ppm)	Y (ppm)	Zr (ppm)
1	A00HH012	<1	12	75	225	5	<5	250	53.4	392	1	1	1	5	3.7	18	5	5	<0.5	<0.5	75	13	26	3.1	12.5	2.7	0.7	2.6	0.4	2.7	0.6	1.8	0.3	2	0.4	16	192
2	A00MZ011	<1	10	80	135	4	<5	727	77.2	432	<1	3	0.5	4	10.6	16	5	5	<0.5	<0.5	50	18	35.5	4.2	16	3.5	0.9	3	0.5	2.7	0.5	1.6	0.2	1.9	0.3	14	175
3	A00MZ013	<1	20	10	50	11	<5	735	62.8	414	<1	<1	1	3	19.1	18	4	3	1	<0.5	115	14	30	3.9	15	3	0.9	3	0.5	2.8	0.6	2	0.3	2.1	0.3	16	127
4	A00MZ015	<1	485	90	165	6	<5	489	55.8	431	1	3	1.5	4	5.5	18	5	3	<0.5	<0.5	80	15	31.5	3.8	15	2.8	0.9	3	0.5	2.3	0.6	1.9	0.3	1.9	0.3	14.5	172
5	A00MZ018	<1	70	10	45	9	5	524	93.6	404	1	<1	5	16	2.2	18	10	6	<0.5	<0.5	95	33.5	71	8.3	33.5	5.7	1.2	5.5	0.8	4.2	0.8	2.4	0.4	2.3	0.4	21.5	324
6	A00MZ032	<1	5	5	25	5.5	<5	528	85.4	193	4	1	2.5	12	3.4	18	8	4	<0.5	<0.5	65	26.5	50	5.5	20.5	3.6	1.1	3.6	0.6	3.8	0.7	2.1	0.3	2	0.4	18.5	277
7	A00MZ044	<1	40	5	65	23.5	10	500	50.2	471	<1	<1	1.5	6	2	18	4	1	<0.5	<0.5	230	17.5	37	4.7	20	4.2	1.3	4.4	0.7	3.9	0.8	2.5	0.3	2.3	0.4	20.5	116
8	A00TM009	<1	10	10	20	3.5	<5	1295	38	737	1	<1	2	10	5.5	20	6	4	0.5	<0.5	45	25.5	48	5.3	17	3.4	1	2.6	0.4	1.8	0.4	1	0.1	1.3	0.2	10.5	200
9	A00TM018	<1	5	50	130	11	5	330	148	306	2	1	5.5	18	7	21	8	5	0.5	<0.5	110	25.5	52	6.1	24	4.6	1.2	3.9	0.5	2.7	0.5	1.6	0.2	1.3	0.3	14	260
10	A00TM019	<1	10	25	140	18	10	694	267	165	1	6	0.5	4	10.1	23	5	4	1	1	190	19.5	41	5.4	23.5	5.3	1.6	5.3	0.8	4.7	0.9	2.8	0.4	2.4	0.3	24	172
11	A00TM020	<1	30	15	70	10.5	<5	367	53.2	393	1	1	1.5	4	4.7	19	7	3	<0.5	<0.5	110	14.5	30	3.7	15	3.3	1	3.3	0.6	3.5	0.6	2.1	0.3	1.9	0.3	17.5	229
12	A00TM030	<1	45	15	85	14.5	35	299	32.8	305	4	1	2	8	4.5	18	8	4	<0.5	<0.5	160	23	51	6.2	24.5	6	1.5	6.2	1	6.7	1.4	4	0.5	3.5	0.5	33	276
13	A00RM013	<1	40	15	65	13	15	545	181	196	4	6	6	22	6.3	18	9	6	0.5	0.5	115	33	66	7.7	30.5	5.9	1.2	5.7	0.9	4.9	1.1	3.1	0.4	2.3	0.4	26.5	307

Appendix-9 Ore grade assey result

No.	Sample	Mineralization	Au (g/t)	Ag (g/t)	Al (%)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	K (%)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	Pb (%)	Sr (ppm)	Ti (%)	V (ppm)	Zn (ppm)
1	A00NK019	gn-cp-py vein	0.24	118	0.9	100	<10	<20	0.25	880	30	<10	8080	5.55	0.4	0.05	670	<10	0.15	<10	4.29	50	<0.05	<10	148500
2	A00HH002	qz-py-gn vein	1.71	18	0.45	<100	<10	20	3.05	10	30	<10	150	7.55	0.1	0.15	1720	<10	<0.05	<10	0.7	20	<0.05	10	1900
3	A00HH024	qz-py-cp-malachite-gn vein	0.24	123	2.5	400	<10	<20	0.45	750	30	<10	15720	6.7	1.6	0.2	1840	<10	0.35	<10	5.91	90	<0.05	10	142000
4	A00MZ010	massive pyrite-limonite	<0.03	11	0.05	<100	<10	40	0.35	<10	10	<10	1420	>30.0	<0.1	<0.05	80	<10	<0.05	<10	0.044	20	<0.05	<10	1240
5	A00MZ012	qz-cal-py-gn vein	152.9	91	1.1	<100	<10	<20	2.35	10	10	<10	1660	13.4	0.5	0.8	750	<10	<0.05	<10	2.18	50	0.05	40	3900
6	A00MZ016	qz-cal-py-gn vein	5.49	14	1.8	<100	<10	<20	5.6	70	10	10	320	6.95	0.7	1.75	5200	<10	<0.05	<10	1.15	80	0.05	40	9120
7	A00MZ019	barite-Fe oxides vein	0.03	31	1.05	7400	<10	<20	0.65	100	10	<10	220	8.55	0.4	0.05	36400	10	<0.05	<10	2.01	2480	<0.05	750	7200
8	A00MZ020	barite-galena-Fe oxides vein	<0.03	912	<0.05	2100	<10	<20	<0.05	30	<10	<10	700	0.2	<0.1	<0.05	1710	<10	<0.05	<10	15.1	910	<0.05	1440	540
9	A00MZ021	qz-malachite veinlet	0.45	15	5	2000	<10	80	0.15	<10	<10	<10	9000	4.2	2.5	0.15	230	140	0.6	<10	0.054	80	0.1	40	100
10	A00MZ028	qz-py-gn-bornite vein	0.18	321	0.9	200	<10	<20	<0.05	90	<10	10	50	15.35	0.3	<0.05	360	<10	<0.05	<10	9.92	10	<0.05	<10	24300
11	A00MZ030	gn-py-cp vein	0.09	74	1.35	400	<10	<20	0.15	1650	50	<10	7270	5.4	1.3	0.05	1360	<10	<0.05	<10	15.4	80	<0.05	<10	263000
12	A00MZ036	cp veinlets and cp diss. in andesite	<0.03	13	8.4	500	<10	20	4.4	<10	50	50	36900	6.3	1.3	2.9	1070	<10	2	60	0.059	290	0.65	270	640
13	A00MZ037	malachite with brecciated andesite	<0.03	22	8.6	100	<10	<20	9.95	<10	20	50	47200	6.95	0.2	1.25	1040	<10	1.1	20	0.021	620	0.7	330	120
14	A00MZ041	qz-py-gn vein	0.12	3	0.9	300	<10	<20	24.2	30	<10	<10	310	1.55	0.1	0.15	25900	<10	<0.05	<10	0.398	120	<0.05	40	6500
15	A00MZ042	galena vein	3.09	17	0.85	300	<10	<20	0.05	930	<10	<10	7390	2.65	0.1	0.3	1470	<10	<0.05	<10	3.82	50	<0.05	20	199500
16	A00MZ046	qz-cp-py-gn vein	4.11	6	1.25	200	<10	20	0.55	<10	<10	<10	4070	3.9	0.4	0.2	750	10	<0.05	<10	0.059	40	0.05	30	1060
17	A00MZ048	white and massive qz vein	2.94	5	0.4	200	<10	<20	0.05	<10	<10	20	30	0.05	<0.1	<0.05	40	<10	<0.05	<10	0.012	30	<0.05	<10	120
18	A00MZ049	black and white banding qz vein	14.4	3	0.5	<100	<10	<20	0.05	<10	<10	20	40	0.05	0.1	<0.05	20	<10	<0.05	<10	0.003	50	<0.05	<10	60
19	A00MZ055	qz-cp-gn-malachite vein	0.54	18	1.75	<100	<10	<20	<0.05	160	<10	<10	6330	0.5	0.7	0.05	70	200	<0.05	<10	10.9	40	<0.05	10	12940
20	A00MZ068	gn-sp-py vein	0.93	14	0.65	<100	<10	20	<0.05	1310	<10	<10	1150	3.65	<0.1	0.25	370	10	<0.05	<10	3.56	<10	<0.05	<10	134000
21	A00TM049	black qz vein	0.12	<1	3.3	100	<10	<20	0.35	<10	<10	10	10	0.85	2.6	0.05	80	<10	<0.05	<10	0.014	50	0.2	70	280
22	A00TM051	black and white qz vein	0.12	<1	0.45	<100	<10	<20	0.05	<10	<10	10	<10	0.35	0.1	<0.05	10	<10	<0.05	<10	0.004	20	<0.05	<10	60
23	A00RM029	gn-py-cp-green Cu vein	0.06	27	0.6	100	<10	<20	0.05	880	40	<10	3510	6.75	0.4	0.05	1000	<10	<0.05	<10	6.3	30	<0.05	<10	130000
24	A00RM046	white chalcedonic qz vein	42.72	41	0.55	<100	<10	<20	0.05	<10	<10	20	10	0.05	0.1	<0.05	30	<10	<0.05	<10	0.023	20	<0.05	<10	300