ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

RECEIVED 1990 JUN 28

Longhorn Soils 825518

Minnova Inc. PROJECT 656 File # 90-1799 Page 1

3rd floor - 311 Water St., Vancouver BC V6B 1B8 Submitted by: M. HOLMES

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLHD 001	1	503	21	380	.6	72	37	1277	4.64	4	6	ND	2	55	2.0	2	2	76	.86	.160	10	78	1.17	225	.16	5	2.25	.02	.34	1	6
ORLHD 002	2	275	66	481	3.5	212	34	1135	3.27	7	5	ND	1	59	3.2	2	3	51	1.02	.100	10	122	1.13	216	.14	6	2.16	.02	.24	1	2
ORLHD 003	2	267	20	324	1.2	47	19	843	3.12	15	5	ND	1	57	2.7	2	3	49	1.22	.091	13	50	.85	156	.12	4	2.26	.02	.19	1	7
ORLHS 001	1	42	11	108	.1	32	13	1454	2.97	11	5	ND	2	56	.7	2	2	45	.58	.114	12	43	.69	337	.15	6	2.50	.02	.26	1	3
ORLHS 002	1	31	9	91	.1	38	13	1384	3.03	3	5	ND	2	47	.4	2	2	43	.52	.077	12	50	.76	303	.17	5	2.30	.02	.36	1	1
ORLHS 003	1	36	12	95	.1	37	14	994	3.22	9	5	ND	2	43	.5	2	3	49	.60	.117	13	49	.77	245	.16	4	2.67	.02	.27	1	3
ORLHS 004	1	40	11	146	.3	40	15	1965	3.35	9	5	ND	2	53	.6	2	4	47	.68	.144	12	56	.86	475	.15	4	2.43	.02	.38	1	1
ORLHS 005	1	44	10	175	.2	47	16	2499	3.51	7	5	ND	2	65	1.0	2	2	49	.75	.122	12	71	1.05	567	.15	7	2.25	.02	.44	1	1
ORLHS 006	1	31	11	133	.1	33	13	1929	2.96	7	5	ND	2	89	.8	2	2	40	.81	.232	11	47	.77	415	.12	3	2.08	.02	.22	1	2
ORLHS 007	1	25	13	74	.1	34	12	829	2.69	10	5	ND	2	82	.4	2	2	40	.67	.133	10	44	.67	248	.14	5	1.94	.02	.22	1	3
ORLHS 008	1	35	9	63	.1	28	10	467	2.43	4	6	ND	2	152	.4	2	2	36	1.21	.059	11	37	.71	169	.13	9	1.78	.05	.27	1	3
ORLHS 009	1	34	6	57	.2	18	6	448	1.13	6	5	ND	1	645	.5	2	2	17	11.89	.062	5	17	.78	143	.05	20	.86	.04	.21	1	1
ORLHS 010	1	67	62	123	.3	26	8	1513	1.76	30	5	ND	1	503	.6	4	3	30	11.08	.382	8	35	.82	993	.09	84	1.68	.08	.52	1	5
ORLHS 011	1	27	9	106	.1	48	13	612	3.19	16	5	ND	3	52	.7	2	2	46	.54	.158	13	64	.89	258	.16	5	2.28	.02	.31	1	1
ORLHS 012	1	29	11	80	.1	39	12	781	2.71	12	5	ND	2	51	.5	2	2	41	.52	.165	12	49	.70	260	.14	3	2.20	.02	.21	1	1
ORLHS 013	1	21	7	74	.1	37	10	761	2.65	8	5	ND	2	43	.4	2	2	39	.48	.087	10	52	.73	233	.15	6	1.94	.02	.25	1	11
ORLHS 014	1	23	8	89	.1	39	11	909	2.70	6	5	ND	2	46	.4	2	2	40	.49	.086	10	54	.74	267	.15	5	1.88	.02	.26	1	1
ORLHS 015	1	23	7	68	.1	38	12	960	2.80	9	6	ND	2	40	.6	2	2	42	.56	.050	11	57	.79	223	.17	4	1.81	.02	.27	1	4
ORLHS 016	1	23	6	83	.1	36	10	920	2.71	8	5	ND	2	38	.4	2	2	42	.40	.069	10	56	.77	232	.17	2	1.59	.02	.29	1	2
ORLHS 017	1	31	10	89	.1	32	12	852	2.78	7	5	ND	3	37	.5	2	2	46	.46	.148	12	42	.69	243	.16	3	2.45	.02	.23	1	4
ORLHS 018	1	31	8	91	.1	38	14	1219	2.97	19	5	ND	2	45	.6	2	2	46	.57	.136	12	49	.78	364	.14	2	2.16	.02	.23	1	2
ORLHS 019	1	33	12	77	.1	27	11	1131	2.48	10	5	ND	2	51	.7	2	2	40	.78	.104	11	36	.64	312	.13	7	2.04	.02	.23	1	5
ORLHS 020	1	38	9	67	.1	29	11	644	2.69	9	5	ND	2	33	.7	2	2	44	.44	.078	12	37	.68	162	.16	2	2.36	.02	.17	1	12
ORLHS 021	1	35	9	69	.2	32	12	697	2.72	11	5	ND	2	38	.5	2	3	45	.66	.069	12	40	.69	161	.15	5	2.19	.02	.20	1	1
ORLHS 022	1	37	11	93	.1	32	13	1124	2.80	11	5	ND	1	45	.5	2	2	46	.66	.117	11	40	.67	252	.14	8	2.18	.02	.23	1	2
ORLHS 023	1	43	6	86	.1	35	13	807	2.76	9	5	ND	1	56	.5	2	2	46	.88	.090	12	46	.77	207	.11	6	2.05	.02	.28	1	1
ORLHS 024	1	111	6	78	.1	41	15	802	2.95	12	5	ND	1	48	.7	2	2	51	.90	.093	12	48	.84	192	.12	4	2.15	.02	.24	1	5
ORLHS 025	1	46	9	75	.1	33	13	885	2.68	10	5	ND	1	61	.5	2	2	46	.86	.098	11	42	.75	226	.09	3	2.12	.02	.25	1	4
ORLHS 026	1	51	6	71	.1	43	14	915	2.91	12	5	ND	1	54	.5	2	2	47	.75	.106	12	54	.87	184	.11	2	1.96	.02	.22	1	2
ORLHS 027	1	43	7	68	.1	45	15	1026	3.12	12	5	ND	1	45	.6	2	2	50	.56	.108	13	57	.89	210	.15	2	1.99	.02	.24	1	5
ORLHS 028	1	29	8	83	.1	33	12	900	2.95	10	5	ND	2	40	.6	2	2	48	.41	.106	12	44	.73	236	.16	2	2.21	.02	.17	1	1
ORLHS 029	1	30	8	71	.1	32	11	1025	2.54	10	5	ND	1	65	.4	2	2	41	.90	.112	11	42	.67	258	.13	2	1.81	.02	.19	1	4
ORLHS 030	1	28	8	78	.1	42	14	876	3.06	13	5	ND	2	35	.5	2	2	49	.39	.109	12	55	.79	250	.17	5	2.29	.02	.19	2	4
ORLHS 031	1	30	5	70	.1	37	12	1031	2.71	11	5	ND	2	46	.5	2	2	42	.53	.114	11	49	.72	266	.14	2	1.99	.02	.22	1	1
ORLHS 032	1	24	7	83	.1	36	12	1161	2.65	7	5	ND	2	38	.4	2	2	39	.38	.148	10	47	.69	299	.13	2	1.96	.02	.18	1	2
ORLHS 033	1	47	4	69	.1	55	18	1020	3.42	14	5	ND	1	55	.4	2	2	54	.64	.070	13	76	1.11	189	.14	2	2.02	.01	.30	2	6
STANDARD C/AU-S	18	59	38	132	7.6	71	31	1032	3.91	40	22	7	37	53	18.6	15	20	57	.50	.088	38	58	.90	181	.09	32	1.87	.05	.14	12	51

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 18 1990 **DATE REPORT MAILED:** June 21/90 **SIGNED BY** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLHS 034	1	46	6	70	.1	47	17	1084	3.06	11	5	ND	1	59	.2	2	2	54	.98	.100	12	73	.89	203	.08	7	1.90	.01	.24	1	2
ORLHS 035	1	50	12	69	.1	47	17	1096	3.03	10	5	ND	1	61	.5	2	2	53	1.06	.110	13	67	.84	192	.08	6	1.97	.01	.25	1	1
ORLHS 036	1	46	2	63	.1	41	15	1024	2.90	8	5	ND	1	58	.7	2	2	51	.94	.098	13	60	.77	177	.08	6	1.89	.01	.21	1	1
ORLHS 037	1	52	8	65	.3	36	13	867	2.83	9	5	ND	2	55	.9	6	2	44	.81	.085	11	55	.70	185	.08	8	1.69	.01	.25	1	1
ORLHS 038	1	46	15	65	.1	42	17	1232	3.26	6	5	ND	2	49	.2	2	2	54	.79	.105	13	68	.84	205	.11	6	2.03	.01	.29	1	2
ORLHS 039	1	48	3	74	.1	45	16	1208	3.09	11	5	ND	1	60	.2	2	2	53	.97	.131	13	65	.82	228	.08	5	1.94	.01	.25	1	1
ORLHS 040	1	38	18	88	.1	38	15	993	2.63	8	5	ND	1	55	.7	2	2	48	.75	.122	11	52	.68	214	.07	6	1.97	.01	.18	1	1
ORLHS 041	1	53	5	70	.2	48	16	997	2.94	13	5	ND	1	57	.7	5	4	49	.89	.124	13	63	.80	197	.06	9	1.81	.01	.26	1	5
ORLHS 042	3	43	3	87	.1	31	14	886	2.52	6	5	ND	1	57	1.3	2	2	46	.83	.140	11	43	.65	198	.05	9	1.81	.01	.30	1	3
ORLHS 043	1	47	10	78	.1	37	15	1025	2.72	8	5	ND	1	64	.5	2	2	47	.98	.131	12	56	.74	221	.06	7	1.73	.01	.24	1	9
ORLHS 044	1	40	16	74	.1	31	14	1041	2.50	7	5	ND	1	69	.8	2	5	46	.84	.119	12	45	.62	247	.06	5	1.95	.01	.17	1	2
ORLHS 045	1	51	7	67	.1	36	14	955	3.04	3	5	ND	1	55	1.3	2	2	48	.78	.119	12	55	.74	232	.08	4	1.95	.01	.29	1	2
ORLHS 046	1	38	8	71	.1	33	14	1072	2.78	7	5	ND	2	51	1.0	2	2	46	.66	.175	12	54	.70	240	.10	5	1.99	.01	.25	1	1
ORLHS 047	1	44	10	68	.1	43	17	1083	3.21	13	5	ND	3	37	.6	2	2	56	.40	.127	14	66	.80	200	.12	5	2.14	.01	.20	1	3
ORLHS 048	1	42	6	60	.1	35	12	976	3.14	2	5	ND	2	35	1.0	2	2	42	.38	.091	11	50	.73	254	.09	3	1.70	.01	.28	1	2
ORLHS 049	1	29	11	74	.1	39	13	934	2.75	3	5	ND	2	34	.9	2	2	46	.36	.118	11	59	.73	267	.11	6	2.04	.01	.19	1	9
ORLHS 050	1	34	2	76	.1	44	14	687	2.86	8	5	ND	2	31	.3	2	2	47	.32	.127	12	62	.73	202	.12	5	2.21	.01	.19	2	2
ORLHS 051	1	36	3	82	.1	43	15	565	3.02	6	5	ND	3	32	.2	2	2	51	.34	.185	12	58	.72	171	.11	6	2.45	.01	.15	2	3
ORLHS 052	1	41	9	54	.2	39	14	438	3.07	12	5	ND	3	22	1.1	7	2	51	.21	.054	14	64	.86	61	.12	2	1.32	.01	.30	1	4
ORLHS 053	1	22	12	107	.1	31	12	1264	2.41	6	5	ND	2	44	1.0	2	2	41	.41	.127	10	43	.58	271	.11	6	1.77	.01	.16	1	1
ORLHS 054	1	23	11	89	.1	45	13	613	2.93	8	5	ND	2	30	1.1	3	2	49	.35	.094	11	60	.77	214	.13	4	2.11	.01	.20	2	1
ORLHS 055	1	26	6	85	.1	40	12	756	2.77	5	5	ND	2	44	.7	2	2	43	.42	.191	11	55	.66	250	.10	6	2.02	.01	.23	1	1
ORLHS 056	1	27	9	76	.3	33	11	695	2.62	7	5	ND	3	33	1.2	6	2	38	.35	.180	10	46	.56	195	.10	8	1.86	.01	.22	1	2
ORLHS 057	1	27	4	80	.2	31	12	823	2.50	2	5	ND	2	36	.5	2	2	41	.43	.136	10	44	.59	220	.10	7	1.89	.01	.21	1	45
ORLHS 058	1	31	5	167	.3	26	10	1867	2.46	7	5	ND	2	48	1.6	3	2	35	.63	.239	10	35	.48	532	.08	6	1.72	.01	.20	1	5
ORLHS 059	1	37	9	63	.1	40	15	827	3.05	6	5	ND	3	33	1.1	2	2	56	.59	.048	13	57	.79	159	.14	5	2.07	.01	.14	1	2
ORLHS 060	1	49	7	58	.2	34	13	850	2.91	2	5	ND	2	38	1.2	3	2	46	.56	.070	13	48	.69	156	.09	2	1.93	.01	.20	3	5
ORLHS 061	1	60	5	61	.1	40	14	990	3.13	4	5	ND	1	50	2.4	3	2	42	.66	.091	10	52	.76	195	.06	2	1.57	.01	.27	1	1
ORLHS 062	1	43	12	75	.1	31	13	881	2.43	4	5	ND	1	69	1.3	2	2	44	1.09	.124	11	45	.63	214	.06	7	1.76	.01	.23	1	2
ORLHS 063	1	76	13	60	.4	26	9	525	3.07	2	5	ND	1	33	2.9	7	2	28	.36	.079	8	34	.63	149	.04	2	1.28	.03	.56	1	3
ORLHS 064	1	54	11	73	.2	35	17	1213	2.81	3	5	ND	1	59	1.0	2	2	50	.94	.128	10	51	.73	250	.08	6	1.93	.01	.22	1	3
ORLHS 065	1	52	4	56	.8	24	10	632	2.97	2	5	ND	2	26	2.0	6	2	34	.35	.046	10	35	.57	180	.08	2	1.61	.02	.37	1	7
ORLHS 066	1	35	5	53	.1	25	10	993	2.67	2	5	ND	2	28	1.3	2	2	42	.42	.044	10	32	.55	217	.10	2	1.83	.01	.15	1	6
ORLHS 067	1	32	10	64	.1	20	9	906	2.65	2	5	ND	2	25	.5	2	2	41	.31	.104	10	28	.53	289	.10	2	1.91	.01	.25	1	1
ORLHS 068	1	39	2	48	.5	21	7	509	2.67	2	5	ND	2	24	3.0	10	2	22	.18	.043	6	29	.57	173	.06	2	1.19	.04	.92	1	1
STANDARD C/AU-S	19	57	42	131	7.9	73	31	1079	3.84	40	18	8	35	47	18.5	14	21	60	.50	.096	40	60	.83	172	.09	34	1.90	.06	.13	12	49

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLMD 001	2	339	13	342	.3	52	25	978	4.25	5	5	ND	1	35	.2	2	3	77	.68	.056	11	54	1.06	151	.20	6	2.43	.02	.18	2	5
ORLMD 002	2	602	19	381	.6	62	33	1222	4.47	5	5	ND	1	42	.9	2	2	71	.71	.148	10	58	.99	194	.17	2	2.22	.02	.33	1	1
ORLMS 048	1	125	7	141	.1	47	18	1128	4.33	7	5	ND	1	46	.2	2	3	63	.85	.131	13	57	.96	190	.15	6	1.93	.01	.55	2	5
ORLMS 049	1	78	11	108	.1	44	16	1274	3.82	7	5	ND	1	59	.7	2	2	56	.83	.130	15	52	.94	237	.14	2	2.16	.01	.52	1	1
ORLMS 050	1	73	13	91	.6	41	16	985	3.69	11	5	ND	1	38	.7	2	4	59	.65	.120	13	49	.90	186	.15	2	1.88	.01	.40	1	3
ORLMS 051	1	80	26	102	.5	42	17	1170	3.79	9	5	ND	1	46	.9	5	2	58	.81	.130	13	51	.89	219	.14	7	1.89	.01	.47	1	18
ORLMS 052	1	64	11	107	.2	29	12	855	2.71	6	5	ND	1	65	.3	2	2	43	1.01	.154	11	34	.65	229	.10	8	1.62	.02	.43	2	1
ORLMS 053	1	66	10	113	.1	28	11	973	2.25	5	5	ND	1	73	.6	2	2	35	1.33	.146	10	28	.56	229	.08	9	1.33	.02	.32	1	4
ORLMS 054	1	66	2	72	.1	34	13	741	3.25	6	5	ND	1	39	.4	4	2	46	.50	.095	11	39	.73	162	.12	2	1.51	.02	.39	1	3
ORLMS 055	1	69	7	69	.3	40	15	823	3.23	11	5	ND	1	49	.2	3	2	51	.80	.113	12	47	.88	156	.14	7	1.40	.01	.38	1	7
ORLMS 056	1	66	12	73	.1	38	15	843	3.44	10	5	ND	1	46	.2	3	2	53	.85	.102	13	45	.78	149	.14	8	1.53	.01	.36	2	2
ORLMS 057	1	81	20	88	.1	44	17	1083	3.90	9	5	ND	2	44	.8	2	2	61	.62	.121	14	53	.89	173	.17	2	2.06	.01	.49	2	9
ORLMS 058	1	64	13	85	.1	42	14	985	3.62	10	5	ND	2	39	.3	2	2	57	.53	.103	14	50	.79	186	.16	2	2.00	.02	.42	2	7
ORLMS 059	1	66	15	79	.2	42	14	983	3.29	11	5	ND	1	55	.5	2	2	51	.74	.103	14	50	.84	165	.14	2	1.84	.01	.38	1	3
ORLMS 060	1	68	12	80	.1	44	15	968	3.71	7	5	ND	2	55	.5	2	2	56	.60	.103	14	54	.91	149	.15	6	1.95	.02	.43	2	1
ORLMS 061	1	73	7	79	.1	43	15	961	3.70	5	5	ND	2	46	1.1	2	2	58	.60	.107	14	58	.88	163	.15	4	1.86	.02	.46	2	2
ORLMS 062	1	83	13	76	.1	34	14	877	3.63	4	5	ND	1	40	.8	2	2	56	.62	.108	13	46	.77	156	.15	6	1.75	.02	.53	1	5
ORLMS 063	1	63	16	77	.2	44	15	890	3.36	11	5	ND	1	39	.6	2	3	53	.52	.100	14	52	.83	153	.15	8	1.75	.02	.39	1	10
ORLMS 064	1	63	4	80	.1	46	15	926	3.40	11	5	ND	1	45	1.1	2	2	57	.64	.114	14	55	.86	158	.15	2	1.68	.01	.39	2	4
ORLMS 065	1	77	12	83	.1	58	18	1053	3.79	14	5	ND	2	46	.7	2	5	63	.63	.120	16	72	1.05	167	.16	3	2.09	.01	.46	1	3
ORLMS 066	1	93	11	92	.1	68	21	937	4.48	5	5	ND	2	40	.6	2	2	89	.63	.117	13	92	1.39	192	.20	3	2.29	.02	.74	2	5
ORLMS 067	1	67	11	80	.1	41	15	880	3.53	8	5	ND	2	42	1.6	2	2	53	.56	.104	13	51	.83	183	.15	5	1.90	.02	.43	1	8
ORLMS 068	1	56	24	89	.1	38	15	969	3.29	5	5	ND	1	48	1.1	2	2	55	.65	.100	14	49	.81	202	.15	5	2.12	.02	.37	1	4
ORLMS 069	1	74	2	92	.1	55	18	1064	4.03	11	5	ND	2	44	.6	2	2	63	.68	.112	16	70	1.04	175	.17	4	2.23	.01	.47	1	6
ORLMS 070	1	63	3	85	.1	50	17	1050	3.80	9	5	ND	2	47	.5	2	2	61	.61	.110	16	67	1.00	178	.16	2	2.20	.01	.41	1	6
ORLMS 071	1	56	17	75	.1	48	16	967	3.58	10	5	ND	1	41	.8	2	2	58	.66	.097	13	65	1.00	161	.14	6	1.97	.01	.36	1	4
ORLMS 072	1	51	9	78	.1	39	13	904	3.15	8	5	ND	1	49	.9	2	2	52	.72	.104	14	50	.79	198	.14	7	2.05	.02	.30	1	4
ORLMS 073	1	53	13	76	.1	34	13	924	2.80	4	5	ND	1	58	.7	2	2	46	.84	.127	12	44	.73	223	.12	6	1.94	.02	.29	1	1
ORLMS 074	1	71	9	92	.1	42	19	951	3.75	3	5	ND	1	52	.9	2	2	69	.74	.126	13	51	.89	241	.15	8	2.29	.01	.41	1	12
ORLMS 075	1	46	20	105	.1	31	14	1051	2.97	4	5	ND	1	55	1.0	2	4	56	.85	.130	12	41	.74	229	.13	7	2.13	.02	.20	1	4
ORLMS 076	1	68	10	133	.2	39	20	1431	4.12	2	5	ND	2	43	1.5	2	2	85	.85	.102	10	63	1.09	235	.18	6	2.44	.01	.28	1	1
ORLMS 077	1	41	11	82	.1	31	13	996	2.65	2	5	ND	1	66	.3	2	2	45	.99	.126	11	43	.72	257	.10	6	2.05	.01	.26	1	2
ORLMS 078	1	50	11	73	.1	41	15	996	3.15	5	5	ND	1	50	.6	2	2	52	.78	.115	13	57	.88	201	.12	3	1.92	.01	.27	1	7
ORLMS 079	1	50	16	84	.1	49	15	999	3.43	3	5	ND	1	53	.3	2	2	56	.80	.122	13	66	.96	207	.14	6	2.18	.01	.32	2	9
ORLMS 080	1	45	13	84	.1	39	13	862	2.78	4	5	ND	1	55	1.0	2	2	48	.73	.128	12	48	.76	216	.13	2	2.04	.01	.32	1	1
ORLMS 081	1	44	17	81	.1	33	10	818	2.47	4	5	ND	1	59	.5	2	2	39	.90	.129	10	41	.66	242	.09	2	1.84	.01	.25	1	5
STANDARD C/AU-S	17	58	44	133	8.0	67	29	1044	3.68	38	17	8	36	48	18.1	15	21	55	.47	.095	37	56	.81	172	.09	36	1.83	.06	.14	12	52

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLMS 082	1	63	14	90	.1	41	15	968	3.40	4	5	ND	1	49	.7	3	2	52	.77	.134	13	58	.91	198	.13	2	2.00	.01	.40	1	3
ORLMS 083	1	50	17	87	.1	37	13	893	2.98	5	5	ND	1	60	1.0	2	2	47	.86	.153	13	49	.75	216	.11	2	2.03	.01	.32	1	2
ORLMS 084	1	57	4	95	.1	49	15	1014	3.76	11	5	ND	1	58	.9	2	2	57	.84	.150	13	70	1.00	205	.13	2	2.21	.01	.42	1	4
ORLMS 085	1	48	10	108	.1	40	13	952	3.16	3	5	ND	1	59	1.4	2	3	50	.79	.174	12	54	.81	230	.11	2	2.27	.01	.33	1	3
ORLMS 086	1	67	9	92	.2	61	18	1027	4.18	13	5	ND	1	47	1.4	4	2	64	.64	.111	15	76	1.10	166	.16	2	2.22	.01	.42	1	4
ORLMS 087	1	62	11	88	.1	56	17	1009	4.12	11	5	ND	1	44	.9	2	2	63	.58	.113	14	75	1.01	171	.16	2	2.20	.01	.46	1	3
ORLMS 088	1	54	15	85	.1	44	15	957	3.54	6	5	ND	1	43	1.4	3	2	56	.54	.114	14	61	.82	186	.16	2	2.18	.01	.42	1	1
ORLMS 089	1	55	13	85	.1	45	15	968	3.58	8	5	ND	1	40	.8	2	4	54	.57	.126	13	58	.84	174	.15	5	1.96	.01	.39	1	5
ORLMS 090	1	84	11	125	.2	46	17	991	3.40	2	5	ND	1	44	1.0	2	2	55	.84	.129	11	57	.80	194	.13	3	1.91	.01	.31	2	2
ORLMS 091	1	65	8	78	.1	38	15	952	3.24	2	5	ND	1	38	.7	2	2	55	.79	.095	11	50	.82	160	.15	6	2.03	.02	.26	1	4
ORLMS 092	1	38	11	82	.1	29	11	932	2.71	2	5	ND	1	36	.4	2	2	46	.77	.099	11	43	.67	166	.14	2	2.10	.01	.21	1	190
ORLMS 093	1	35	19	127	.2	21	12	1610	2.81	2	5	ND	1	44	.7	2	2	46	.88	.148	10	35	.62	355	.13	2	2.21	.02	.23	1	34
ORLMS 094	1	29	10	88	.1	22	10	1089	2.46	2	5	ND	1	41	.5	2	2	43	.73	.135	11	29	.56	282	.14	6	2.26	.02	.18	1	1
ORLMS 095	1	28	15	93	.1	27	11	1212	2.72	2	5	ND	2	41	.8	2	2	45	.54	.172	11	36	.64	291	.14	11	2.13	.02	.20	1	4
ORLMS 096	1	32	12	125	.1	29	12	1660	2.77	2	5	ND	1	67	.6	2	2	40	.76	.320	11	41	.59	402	.12	2	2.05	.02	.21	1	1
ORLMS 097	1	26	8	81	.1	34	11	1228	2.58	2	5	ND	1	40	.4	2	2	42	.52	.088	11	44	.67	275	.14	5	1.80	.01	.23	1	8
STANDARD C/AU-S	17	58	35	135	7.7	66	30	1056	3.87	39	18	7	36	48	18.3	15	20	57	.50	.099	36	57	.83	170	.09	31	1.88	.06	.14	12	48

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Minnova Inc. PROJECT 656 File # 90-1466 Page 1

3rd floor-311 water St., Vancouver B.C V6B 1B8

LONGHORN MINI-GRID SOILS

SEE LOTUS DIRECTORY.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W ppm	Au* ppb
ORLMS001	1	47	13	88	.3	30	14	966	2.82	7	5	ND	1	45	.2	2	2	50	.72	.100	11	41	.75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	7
ORLMS002	1	54	15	86	.3	30	15	902	2.76	8	5	ND	1	46	.2	2	2	50	.77	.085	10	42	.78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1
ORLMS003	1	73	18	81	.4	30	15	867	2.73	5	5	ND	1	38	.3	2	2	52	.76	.050	9	40	.76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	7
ORLMS004	1	59	18	90	.6	27	12	767	2.37	5	5	ND	1	48	.3	2	2	42	.91	.090	9	35	.67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	16
ORLMS005	1	79	22	101	.9	40	16	932	3.15	7	5	ND	1	36	.5	2	2	56	.65	.082	12	51	.98	184	.11	9	1.85	.01	.31	1	4
ORLMS006	1	74	23	127	1.1	31	13	827	2.56	3	5	ND	1	41	.4	2	2	45	1.05	.089	10	38	.77	184	.10	3	1.88	.01	.26	1	1
ORLMS007	1	80	15	101	.3	42	17	929	3.31	2	5	ND	1	30	.4	2	2	65	.71	.055	10	58	1.13	163	.16	7	2.33	.01	.28	1	1
ORLMS008	1	234	14	267	.2	39	21	930	3.38	5	5	ND	1	33	.3	2	3	65	.61	.057	10	47	1.02	154	.14	2	2.04	.01	.18	1	3
ORLMS009	1	440	17	338	.5	58	31	996	3.86	6	5	ND	1	39	.7	2	2	66	.66	.101	9	59	1.04	168	.14	5	1.95	.01	.25	1	5
ORLMS010	2	216	67	406	4.1	174	28	1127	2.53	4	5	ND	1	53	2.3	2	2	40	1.09	.084	8	90	.95	223	.10	2	1.75	.01	.19	1	1
ORLMS011	2	229	17	304	1.1	32	14	735	2.43	5	5	ND	1	44	1.5	2	2	40	1.17	.104	9	34	.67	129	.09	2	1.74	.01	.17	1	3
ORLMS012	1	43	15	82	.1	32	13	1081	2.92	11	5	ND	1	41	.2	2	2	51	.61	.090	11	42	.81	226	.12	2	2.07	.01	.23	1	2
ORLMS013	1	42	7	69	.2	36	12	908	2.72	11	5	ND	1	52	.2	2	2	46	.77	.109	11	47	.81	221	.09	4	1.90	.01	.29	1	1
ORLMS014	1	49	8	76	.1	40	14	963	2.80	8	5	ND	1	54	.2	2	2	45	.76	.120	12	54	.86	221	.10	2	1.87	.01	.32	1	1
ORLMS015	1	51	8	80	.1	48	14	964	3.08	14	5	ND	1	55	.2	2	2	50	.67	.117	14	60	.99	203	.10	2	2.01	.01	.39	1	4
ORLMS016	1	43	8	76	.1	35	11	819	2.53	13	5	ND	1	60	.2	2	2	42	.87	.110	12	43	.75	217	.09	2	1.81	.01	.31	1	1
ORLMS017	1	44	11	81	.1	36	13	919	2.70	11	5	ND	1	60	.2	2	2	43	.77	.124	12	47	.79	223	.09	2	1.91	.01	.34	1	2
ORLMS018	1	46	4	77	.1	35	13	903	2.77	13	5	ND	1	51	.2	2	2	45	.71	.125	12	48	.81	216	.10	2	1.84	.01	.35	1	2
ORLMS019	1	41	9	84	.1	36	12	867	2.62	13	5	ND	1	55	.2	2	2	43	.74	.126	12	45	.75	232	.09	2	1.96	.01	.34	1	3
ORLMS020	1	46	14	85	.2	42	13	921	2.91	14	5	ND	1	57	.2	2	2	47	.77	.139	13	55	.89	210	.09	3	1.94	.01	.38	1	2
ORLMS021	1	47	11	91	.1	40	14	952	2.80	12	5	ND	1	59	.2	2	2	45	.78	.121	13	52	.83	240	.09	10	2.10	.01	.32	1	1
ORLMS022	1	49	10	77	.1	46	15	951	3.13	18	5	ND	2	46	.2	2	2	52	.54	.098	14	58	.90	194	.12	2	2.07	.01	.40	1	1
ORLMS023	1	48	12	70	.1	44	15	960	3.17	16	5	ND	1	47	.2	2	2	52	.54	.096	14	58	.90	197	.12	2	2.04	.01	.41	1	1
ORLMS024	1	61	12	74	.2	55	17	1021	3.33	23	5	ND	1	49	.2	2	2	54	.64	.106	13	63	1.08	165	.12	2	1.75	.01	.41	1	3
ORLMS026	1	50	15	81	.1	41	14	993	2.87	13	5	ND	1	51	.2	2	2	45	.75	.112	13	52	.84	209	.10	3	1.87	.01	.34	1	2
ORLMS027	1	62	14	71	.1	43	16	956	3.06	14	5	ND	2	40	.2	2	2	51	.54	.097	13	54	.89	176	.12	2	1.98	.01	.42	1	3
ORLMS028	1	80	11	92	.2	51	19	1045	3.76	12	5	ND	2	46	.3	2	3	64	.54	.103	15	60	1.05	193	.17	2	2.58	.01	.59	2	2
ORLMS029	1	54	10	70	.2	44	14	952	3.10	16	5	ND	2	42	.2	2	2	50	.49	.095	14	55	.88	155	.12	7	1.78	.01	.36	1	4
ORLMS030	1	54	10	86	.2	41	16	993	3.48	16	5	ND	1	44	.2	2	2	50	.58	.121	13	52	.95	165	.14	2	1.94	.01	.45	1	2
ORLMS031	1	61	6	78	.3	53	17	1030	3.33	21	5	ND	1	42	.3	2	2	54	.65	.113	13	62	1.09	176	.12	2	1.76	.01	.41	1	31
ORLMS032	1	47	9	69	.2	43	14	908	2.91	15	5	ND	2	47	.2	2	2	49	.53	.094	14	53	.84	154	.12	2	1.76	.01	.35	1	4
ORLMS033	1	55	10	69	.1	48	16	889	3.13	19	5	ND	1	57	.2	2	2	51	1.23	.113	12	58	1.11	145	.10	2	1.59	.01	.37	1	17
ORLMS034	1	66	12	68	.2	50	16	1017	3.29	21	5	ND	2	40	.2	2	2	56	.61	.105	13	55	1.00	177	.13	7	1.71	.01	.46	1	3
ORLMS035	1	58	9	69	.2	42	15	963	3.10	15	5	ND	2	32	.2	2	2	52	.43	.095	13	50	.83	157	.13	2	1.70	.01	.36	1	3
ORLMS036	1	53	11	70	.2	39	14	922	3.00	14	5	ND	3	31	.2	2	2	51	.43	.095	13	46	.76	158	.12	2	1.60	.01	.35	2	2
STANDARD C/AU-S	17	57	38	133	6.5	67	30	1052	3.75	38	17	6	37	48	17.6	15	18	57	.49	.090	39	56	.88	175	.09	38	1.89	.06	.13	12	48

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

RECEIVED JUN 4 1990 Ans'd

DATE RECEIVED: MAY 25 1990 **DATE REPORT MAILED:** May 31/90 **SIGNED BY** C. Leong .....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Minnova Inc. PROJECT 656 File # 90-1466 Page 1

3rd floor-311 water St., Vancouver B.C V6B 1B8

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLMS001	1	47	13	88	.3	30	14	966	2.82	7	5	ND	1	45	.2	2	2	50	.72	.100	11	41	.75	202	.10	2	1.92	.01	.26	1	7
ORLMS002	1	54	15	86	.3	30	15	902	2.76	8	5	ND	1	46	.2	2	2	50	.77	.085	10	42	.78	222	.10	2	1.84	.01	.26	1	1
ORLMS003	1	73	18	81	.4	30	15	867	2.73	5	5	ND	1	38	.3	2	2	52	.76	.050	9	40	.76	164	.11	11	1.81	.01	.22	1	7
ORLMS004	1	59	18	90	.6	27	12	767	2.37	5	5	ND	1	48	.3	2	2	42	.91	.090	9	35	.67	183	.08	13	1.73	.01	.22	1	16
ORLMS005	1	79	22	101	.9	40	16	932	3.15	7	5	ND	1	36	.5	2	2	56	.65	.082	12	51	.98	184	.11	9	1.85	.01	.31	1	4
ORLMS006	1	74	23	127	1.1	31	13	827	2.56	3	5	ND	1	41	.4	2	2	45	1.05	.089	10	38	.77	184	.10	3	1.88	.01	.26	1	1
ORLMS007	1	80	15	101	.3	42	17	929	3.31	2	5	ND	1	30	.4	2	2	65	.71	.055	10	58	1.13	163	.16	7	2.33	.01	.28	1	1
ORLMS008	1	234	14	267	.2	39	21	930	3.38	5	5	ND	1	33	.3	2	3	65	.61	.057	10	47	1.02	154	.14	2	2.04	.01	.18	1	3
ORLMS009	1	440	17	338	.5	58	31	996	3.86	6	5	ND	1	39	.7	2	2	66	.66	.101	9	59	1.04	168	.14	5	1.95	.01	.25	1	5
ORLMS010	2	216	67	406	4.1	174	28	1127	2.53	4	5	ND	1	53	2.3	2	2	40	1.09	.084	8	90	.95	223	.10	2	1.75	.01	.19	1	1
ORLMS011	2	229	17	304	1.1	32	14	735	2.43	5	5	ND	1	44	1.5	2	2	40	1.17	.104	9	34	.67	129	.09	2	1.74	.01	.17	1	3
ORLMS012	1	43	15	82	.1	32	13	1081	2.92	11	5	ND	1	41	.2	2	2	51	.61	.090	11	42	.81	226	.12	2	2.07	.01	.23	1	2
ORLMS013	1	42	7	69	.2	36	12	908	2.72	11	5	ND	1	52	.2	2	2	46	.77	.109	11	47	.81	221	.09	4	1.90	.01	.29	1	1
ORLMS014	1	49	8	76	.1	40	14	963	2.80	8	5	ND	1	54	.2	2	2	45	.76	.120	12	54	.86	221	.10	2	1.87	.01	.32	1	1
ORLMS015	1	51	8	80	.1	48	14	964	3.08	14	5	ND	1	55	.2	2	2	50	.67	.117	14	60	.99	203	.10	2	2.01	.01	.39	1	4
ORLMS016	1	43	8	76	.1	35	11	819	2.53	13	5	ND	1	60	.2	2	2	42	.87	.110	12	43	.75	217	.09	2	1.81	.01	.31	1	1
ORLMS017	1	44	11	81	.1	36	13	919	2.70	11	5	ND	1	60	.2	2	2	43	.77	.124	12	47	.79	223	.09	2	1.91	.01	.34	1	2
ORLMS018	1	46	4	77	.1	35	13	903	2.77	13	5	ND	1	51	.2	2	2	45	.71	.125	12	48	.81	216	.10	2	1.84	.01	.35	1	2
ORLMS019	1	41	9	84	.1	36	12	867	2.62	13	5	ND	1	55	.2	2	2	43	.74	.126	12	45	.75	232	.09	2	1.96	.01	.34	1	3
ORLMS020	1	46	14	85	.2	42	13	921	2.91	14	5	ND	1	57	.2	2	2	47	.77	.139	13	55	.89	210	.09	3	1.94	.01	.38	1	2
ORLMS021	1	47	11	91	.1	40	14	952	2.80	12	5	ND	1	59	.2	2	2	45	.78	.121	13	52	.83	240	.09	10	2.10	.01	.32	1	1
ORLMS022	1	49	10	77	.1	46	15	951	3.13	18	5	ND	2	46	.2	2	2	52	.54	.098	14	58	.90	194	.12	2	2.07	.01	.40	1	1
ORLMS023	1	48	12	70	.1	44	15	960	3.17	16	5	ND	1	47	.2	2	2	52	.54	.096	14	58	.90	197	.12	2	2.04	.01	.41	1	1
ORLMS024	1	61	12	74	.2	55	17	1021	3.33	23	5	ND	1	49	.2	2	2	54	.64	.106	13	63	1.08	165	.12	2	1.75	.01	.41	1	3
ORLMS026	1	50	15	81	.1	41	14	993	2.87	13	5	ND	1	51	.2	2	2	45	.75	.112	13	52	.84	209	.10	3	1.87	.01	.34	1	2
ORLMS027	1	62	14	71	.1	43	16	956	3.06	14	5	ND	2	40	.2	2	2	51	.54	.097	13	54	.89	176	.12	2	1.98	.01	.42	1	3
ORLMS028	1	80	11	92	.2	51	19	1045	3.76	12	5	ND	2	46	.3	2	3	64	.54	.103	15	60	1.05	193	.17	2	2.58	.01	.59	2	2
ORLMS029	1	54	10	70	.2	44	14	952	3.10	16	5	ND	2	42	.2	2	2	50	.49	.095	14	55	.88	155	.12	7	1.78	.01	.36	1	4
ORLMS030	1	54	10	86	.2	41	16	993	3.48	16	5	ND	1	44	.2	2	2	50	.58	.121	13	52	.95	165	.14	2	1.94	.01	.45	1	2
ORLMS031	1	61	6	78	.3	53	17	1030	3.33	21	5	ND	1	42	.3	2	2	54	.65	.113	13	62	1.09	176	.12	2	1.76	.01	.41	1	31
ORLMS032	1	47	9	69	.2	43	14	908	2.91	15	5	ND	2	47	.2	2	2	49	.53	.094	14	53	.84	154	.12	2	1.76	.01	.35	1	4
ORLMS033	1	55	10	69	.1	48	16	889	3.13	19	5	ND	1	57	.2	2	2	51	1.23	.113	12	58	1.11	145	.10	2	1.59	.01	.37	1	17
ORLMS034	1	66	12	68	.2	50	16	1017	3.29	21	5	ND	2	40	.2	2	2	56	.61	.105	13	55	1.00	177	.13	7	1.71	.01	.46	1	3
ORLMS035	1	58	9	69	.2	42	15	963	3.10	15	5	ND	2	32	.2	2	2	52	.43	.095	13	50	.83	157	.13	2	1.70	.01	.36	1	3
ORLMS036	1	53	11	70	.2	39	14	922	3.00	14	5	ND	3	31	.2	2	2	51	.43	.095	13	46	.76	158	.12	2	1.60	.01	.35	2	2
STANDARD C/AU-S	17	57	38	133	6.5	67	30	1052	3.75	38	17	6	37	48	17.6	15	18	57	.49	.090	39	56	.88	175	.09	38	1.89	.06	.13	12	48

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAY 25 1990 **DATE REPORT MAILED:** May 31/90 **SIGNED BY** C. Leong .....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

RECEIVED
JUN 4 1990
Ans'd .....

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLMS037	1	57	12	69	.2	38	14	904	2.74	14	5	ND	2	38	.2	2	2	46	.49	.092	12	44	.76	148	.08	2	1.45	.01	.34	1	2
ORLMS039	1	60	15	76	.1	35	15	949	2.92	12	5	ND	3	36	.2	2	3	51	.48	.098	12	46	.77	175	.09	3	1.60	.01	.39	1	1
ORLMS040	1	62	8	75	.1	34	14	845	2.84	10	5	ND	2	36	.3	2	2	48	.44	.086	13	42	.71	157	.09	2	1.61	.01	.36	1	5
ORLMS041	1	63	10	71	.2	40	15	969	2.92	14	5	ND	2	40	.2	2	2	48	.53	.093	12	49	.81	163	.09	2	1.59	.01	.39	1	4
ORLMS042	1	60	11	72	.1	38	15	927	2.92	13	5	ND	2	34	.4	2	2	50	.42	.094	13	48	.77	160	.09	2	1.61	.01	.38	1	5
ORLMS043	1	66	7	79	.1	41	16	946	2.99	18	5	ND	2	35	.2	2	2	52	.49	.102	13	47	.80	168	.10	2	1.65	.01	.42	1	7
ORLMS044	1	65	10	78	.2	41	15	964	2.95	9	5	ND	2	40	.2	2	2	50	.52	.111	13	51	.85	179	.09	2	1.71	.01	.38	1	2
ORLMS045	1	65	12	73	.2	45	16	929	3.07	14	5	ND	2	46	.2	2	2	51	.45	.095	13	54	.90	139	.09	2	1.64	.01	.37	1	2
ORLMS046	1	50	10	71	.1	32	14	851	2.88	9	5	ND	2	32	.2	2	2	48	.47	.102	12	41	.73	164	.09	4	1.53	.01	.37	1	6
ORLMS047	1	63	9	68	.2	41	15	907	2.98	11	5	ND	1	57	.3	2	2	50	.93	.095	11	49	.96	158	.09	2	1.40	.01	.40	1	5
ORLGS001	1	56	11	75	.2	36	14	917	2.79	11	5	ND	2	38	.2	2	2	48	.52	.093	12	46	.75	165	.09	11	1.60	.01	.38	1	3
ORLGS002	1	56	15	72	.1	38	14	894	2.72	14	5	ND	2	42	.2	2	2	45	.59	.101	12	47	.77	160	.08	4	1.50	.01	.37	1	2
ORLGS003	1	53	13	66	.1	38	14	906	2.65	14	5	ND	2	45	.2	2	2	43	.63	.095	12	46	.75	172	.08	2	1.48	.01	.37	1	2
ORLGS004	1	51	5	69	.1	38	13	885	2.78	14	5	ND	2	37	.2	2	2	47	.53	.100	13	47	.76	160	.09	3	1.51	.01	.36	1	3
ORLGS005	1	48	10	65	.1	36	13	849	2.59	13	5	ND	1	49	.2	2	2	43	.70	.101	11	43	.74	150	.07	3	1.35	.01	.32	1	1
ORLGS006	1	45	11	76	.1	34	12	852	2.47	13	5	ND	2	44	.2	2	2	41	.61	.107	11	40	.68	173	.08	2	1.47	.01	.31	1	1
ORLGS007	1	50	11	76	.3	35	14	916	2.70	14	5	ND	2	35	.2	2	2	47	.46	.094	13	44	.73	174	.09	2	1.60	.01	.32	1	2
ORLGS008	1	54	12	73	.1	37	14	877	2.49	15	5	ND	1	40	.2	2	2	43	.63	.098	11	43	.72	177	.07	2	1.45	.01	.33	1	3
ORLGS009	1	48	17	65	.1	34	13	839	2.48	12	5	ND	1	55	.2	2	2	42	.86	.104	12	42	.70	170	.07	2	1.52	.01	.30	1	2
ORLGS010	1	47	12	56	.1	33	13	808	2.52	13	5	ND	2	42	.2	2	2	42	.53	.099	11	41	.68	157	.08	2	1.42	.01	.32	1	18
ORLGS011	1	46	10	67	.1	30	13	857	2.41	13	5	ND	1	46	.2	2	2	40	.58	.099	11	38	.65	190	.07	3	1.56	.01	.29	1	5
ORLGS012	1	57	10	66	.1	38	15	905	2.68	13	5	ND	1	45	.2	2	2	46	.66	.093	12	46	.82	174	.08	2	1.58	.01	.37	1	4
ORLGS013	1	76	14	131	.2	41	18	1264	3.50	10	5	ND	2	38	.2	2	2	73	.61	.105	11	60	1.33	222	.13	2	2.01	.01	.68	1	124
ORLGS014	2	54	13	79	.2	35	15	1057	2.97	10	5	ND	2	37	.2	2	2	51	.57	.106	10	51	.96	172	.09	2	1.66	.01	.35	1	37
ORLGS015	2	46	15	79	.2	32	14	990	2.82	13	5	ND	2	39	.2	2	2	48	.54	.094	12	42	.73	207	.09	2	1.78	.01	.35	1	22
ORLGS016	1	60	10	78	.1	33	17	967	2.89	11	5	ND	2	37	.2	2	3	53	.45	.093	12	46	.84	164	.10	3	1.81	.01	.36	1	8
ORLGS017	1	70	14	97	.1	35	21	1132	3.33	10	5	ND	1	33	.2	2	2	56	.55	.133	11	54	1.14	148	.09	2	1.91	.01	.48	1	4
ORLGS018	2	66	11	100	.3	40	18	1195	3.40	8	5	ND	2	37	.2	2	2	69	.50	.084	11	61	1.15	198	.14	2	2.01	.01	.51	2	50
ORLGS019	1	59	13	89	.1	38	17	1052	3.15	10	5	ND	2	42	.2	2	3	59	.50	.095	12	56	.99	216	.11	3	1.98	.01	.49	1	10
ORLGS020	1	59	12	97	.1	38	16	1138	3.24	12	5	ND	2	48	.2	2	5	62	.55	.101	13	56	1.00	211	.12	2	2.04	.01	.49	1	2
ORLGS021	3	64	17	100	.2	35	17	1213	3.29	11	5	ND	3	44	.2	2	3	55	.51	.110	14	49	.91	230	.12	3	2.10	.01	.45	1	129
ORLGS022	1	55	13	112	.1	22	17	1022	3.18	8	5	ND	2	38	.2	2	3	66	.52	.099	11	32	.99	210	.12	3	2.43	.01	.48	1	4
ORLGS023	1	53	8	89	.1	27	14	834	2.30	11	5	ND	1	54	.2	3	2	42	1.04	.116	9	31	.74	197	.06	2	1.64	.01	.37	1	2
ORLGS024	1	56	12	73	.1	35	15	841	2.57	12	5	ND	1	45	.2	2	2	45	.80	.102	10	42	.79	189	.07	2	1.49	.01	.31	1	1
ORLGS025	1	66	12	89	.1	31	16	803	2.54	10	5	ND	1	47	.2	2	3	44	.70	.102	10	37	.69	208	.07	3	1.61	.01	.30	1	3
STANDARD C/AU-S	17	57	43	133	7.1	67	29	1052	3.61	40	20	7	36	47	16.6	15	22	56	.49	.088	37	56	.87	175	.09	34	1.78	.06	.13	11	48

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
ORLGS026	2	179	3	121	.2	48	42	1085	3.44	6	5	ND	1	52	.7	2	2	64	.89	.139	6	57	1.27	146	.10	2	2.00	.01	.50	1	4
ORLGS027	1	74	24	102	1.0	34	18	910	2.94	11	5	ND	2	42	.5	2	2	56	.54	.092	11	41	.81	192	.10	6	1.90	.01	.31	2	6
ORLGS028	1	63	23	113	.8	30	15	830	2.63	10	5	ND	1	44	.4	2	3	50	.63	.093	10	38	.76	192	.08	6	1.71	.01	.29	1	2
ORLGS030	1	45	9	100	.3	28	13	974	2.38	9	5	ND	1	47	.4	2	2	45	.76	.089	10	34	.68	235	.07	2	1.69	.01	.19	1	1
ORLGS031	1	61	6	74	.2	34	17	967	2.90	8	5	ND	1	38	.5	2	2	55	.62	.102	11	45	.86	191	.08	2	1.73	.01	.31	1	17
ORLGS032	1	45	2	75	.2	29	15	820	2.33	7	5	ND	1	62	.4	2	2	41	.74	.094	10	36	.69	223	.07	7	1.73	.01	.25	1	3
ORLGS033	1	49	5	75	.2	36	13	835	2.48	13	5	ND	1	51	.2	2	2	42	.77	.103	11	43	.75	193	.07	2	1.56	.01	.32	1	2
ORLGS034	1	45	9	73	.2	34	12	852	2.46	14	5	ND	1	51	.6	3	2	41	.77	.101	10	41	.71	205	.07	2	1.65	.01	.30	1	4
ORLGS035	1	41	9	70	.1	36	12	926	2.56	10	5	ND	1	55	.2	2	2	42	.76	.099	11	45	.75	230	.07	2	1.90	.01	.30	1	1
ORLGS036	1	45	7	74	.1	43	13	944	2.73	15	5	ND	1	53	.3	2	2	46	.68	.103	12	51	.83	218	.08	2	1.96	.01	.33	1	1
ORLGS037	1	45	8	89	.1	40	14	1003	2.98	10	5	ND	2	42	.3	2	2	53	.54	.089	13	54	.95	269	.11	3	2.23	.01	.40	1	3
ORLGS038	1	47	8	80	.1	33	13	872	2.62	10	5	ND	1	42	.4	2	3	44	.58	.102	11	43	.75	200	.08	2	1.70	.01	.33	1	1
ORLGS039	1	62	6	95	.2	50	17	928	2.98	9	5	ND	1	44	.2	2	2	64	.60	.107	10	60	1.15	235	.09	2	1.93	.01	.55	2	6
ORLGS040	1	57	9	80	.1	45	16	969	3.13	15	5	ND	2	33	.2	3	2	55	.41	.100	13	59	.95	178	.10	2	1.76	.01	.41	1	1
ORLGS041	1	62	9	81	.2	52	17	930	3.12	15	5	ND	2	40	.4	2	2	54	.55	.103	12	66	1.04	177	.09	4	1.78	.01	.45	1	2
ORLGS042	1	52	7	74	.1	41	14	887	2.72	20	5	ND	1	37	.3	3	2	45	.57	.102	12	47	.78	161	.08	2	1.46	.01	.36	1	1
ORLGS043	1	56	7	75	.2	40	14	925	2.82	12	5	ND	2	47	.2	2	2	48	.60	.097	12	50	.84	149	.08	2	1.54	.01	.41	1	3
ORLGS044	1	63	8	71	.1	42	14	889	2.85	19	5	ND	1	60	.3	2	2	47	.84	.110	11	50	.94	144	.07	8	1.48	.01	.36	1	4
ORLGS045	1	52	6	70	.2	36	13	895	2.62	20	5	ND	1	44	.2	2	2	43	.71	.088	12	43	.74	157	.08	2	1.47	.01	.33	1	3
ORLGS046	1	53	9	73	.1	39	14	918	2.84	14	5	ND	1	35	.2	2	2	47	.55	.098	12	47	.79	170	.09	2	1.56	.01	.35	1	10
ORLGS047	1	48	7	77	.1	39	14	963	2.78	16	5	ND	1	43	.2	2	2	47	.59	.107	12	44	.77	200	.08	2	1.79	.01	.31	1	1
ORLGS048	1	69	8	79	.3	44	17	906	3.20	17	5	ND	1	42	.2	2	3	54	1.03	.116	10	55	1.08	179	.09	2	1.54	.01	.47	1	5
ORLGS049	1	59	12	71	.1	36	14	908	2.70	14	5	ND	1	45	.2	2	2	44	.73	.110	11	42	.80	180	.08	2	1.47	.01	.35	1	1
ORLGS050	1	60	7	75	.2	30	14	954	2.40	8	5	ND	1	60	.5	3	2	38	1.04	.111	10	35	.67	200	.06	7	1.36	.01	.32	2	1
ORLGS051	1	58	9	103	.1	31	12	940	2.22	9	5	ND	1	65	.5	3	2	34	1.21	.137	9	32	.65	212	.05	5	1.24	.01	.32	1	1
ORLGS052	1	59	12	115	.1	30	12	1016	2.20	9	5	ND	1	73	.2	2	2	34	1.28	.140	9	34	.67	253	.05	2	1.35	.01	.33	2	1
ORLGS053	1	62	13	97	.2	31	14	1057	2.61	9	5	ND	1	57	.2	2	2	43	1.01	.132	11	38	.76	260	.07	2	1.69	.01	.34	1	2
ORLGS054	1	57	9	71	.2	32	14	918	2.71	10	5	ND	1	38	.2	2	2	44	.68	.096	10	40	.81	157	.07	7	1.39	.01	.31	1	4
ORLGS055	1	67	12	121	.1	41	15	1230	2.94	10	5	ND	1	65	.2	2	3	47	1.35	.132	10	47	.92	226	.07	2	1.62	.01	.46	1	1
ORLGS056	1	58	4	74	.1	31	12	895	2.47	6	5	ND	1	72	.3	2	2	37	2.92	.153	10	42	.78	179	.05	6	1.46	.01	.40	1	1
ORLGS057	1	78	8	90	.1	43	18	1187	3.51	9	5	ND	1	41	.2	3	3	59	.88	.096	12	53	1.08	217	.10	2	1.91	.01	.52	1	2
ORLGS058	1	52	11	82	.2	35	14	972	2.71	11	5	ND	1	47	.2	2	2	47	.77	.101	11	40	.76	215	.08	2	1.69	.01	.33	1	1
ORLGS059	1	46	9	84	.2	29	12	831	2.26	8	5	ND	1	56	.5	2	2	40	.98	.108	10	33	.63	210	.06	2	1.61	.01	.25	2	4
STANDARD C/AU-S	17	57	36	135	7.1	68	29	1054	3.59	39	18	6	36	47	17.2	15	21	57	.49	.089	38	55	.87	175	.09	40	1.83	.06	.13	12	51