



MINNOVA INC.
MINERAL ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:

705 WEST 15TH STREET
NORTH VANCOUVER, B.C. CANADA V7M 1T2
TELEPHONE (604) 980-5814 OR (604) 988-4524
FAX (604) 980-9821

SMITHERS LAB.:

3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

1V-0850-RA1

Company: MINNOVA INC.
Project: 4/2
Attn: I. PIRIE/C. CLAYTON

Date: AUG-23-91
Copy 1. MINNOVA INC., VANCOUVER, B.C.
2. MINNOVA INC., SEENWOOD, B.C.

We hereby certify the following Assay of 3 ROCK samples submitted AUG-16-91 by C. CLAYTON.

Sample Number	LOI %
10WR1084	3.00
10WR1085	2.80
10WR1086	3.90

Certified by.

MIN-EN LABORATORIES

COMP: MINNOVA INC.
 PROJ: 661-TAN O'SHANTER
 ATTN: I.PIRIE/CAM CLAYTON

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-102Z-SJ
 DATE: 91/09/10
 * SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	M PPM	CR PPM	AU-FIRE PPB
IMTNS177	1.4	23670	88	15	236	.9	11	6390	.1	11	37	21300	1750	22	3740	451	1	1080	13	1090	265	1	38	2	1462	42.3	118	2	3	2	21	8
IMTNS178	.9	20060	36	10	239	.7	12	6220	.1	10	44	21560	1970	18	3710	439	1	1630	19	2720	363	1	47	1	1332	42.3	136	1	3	2	25	2
IMTNS179	1.0	16190	27	5	147	.6	10	5880	.1	10	28	21680	1980	14	3630	524	1	1680	12	820	122	1	31	1	1375	46.1	79	2	2	2	23	43
IMTNS180	.8	15690	11	2	147	.5	9	6220	.1	9	32	22350	2080	12	3560	598	1	1140	9	650	170	1	33	1	1449	48.3	77	2	2	2	22	3
IMTNS181	.8	23550	1	3	185	.6	11	6840	.1	12	244	25450	1800	20	3760	509	1	1010	11	2180	581	1	35	1	1338	45.6	96	2	2	2	20	12
IMTNS182	.6	23470	1	1	174	.5	11	5610	.1	11	180	22640	1100	18	3190	437	1	1010	12	1700	74	1	31	1	1322	41.8	79	1	2	2	18	16
IMTNS183	.8	21700	2	1	142	.4	12	6710	.1	11	151	23420	980	16	3250	346	1	1100	14	1250	176	1	38	1	1334	48.4	74	1	2	2	21	17
IMTNS184	.8	23070	2	1	121	.6	10	5470	.1	9	108	20970	910	13	2910	279	1	1090	12	1790	43	1	29	1	1317	43.5	70	2	2	1	17	3
IMTNS185	.6	16860	3	1	163	.4	9	5610	.1	9	104	19960	1220	15	3020	345	1	980	14	1770	55	1	30	1	1158	40.9	73	3	1	2	19	2
IMTNS186	.6	20090	1	1	123	.5	8	5770	.1	9	211	19850	910	21	2910	258	1	1100	9	400	56	1	24	1	1026	34.2	62	2	1	2	15	19
IMTNS187	.6	23680	1	1	145	.5	9	5450	.1	9	234	21680	1340	18	3430	227	1	1160	10	580	37	1	26	1	1095	37.9	83	3	1	2	16	2
IMTNS188	1.0	26530	1	7	184	.6	10	5200	.1	10	145	21150	1310	14	3270	358	1	1160	13	1470	35	1	27	1	1407	40.8	85	4	2	2	17	16
IMTNS189	.7	25560	5	1	286	.4	9	4970	.1	10	99	21690	1260	13	2940	388	1	1140	5	1090	43	1	22	1	1045	36.1	87	3	2	1	9	18
IMTNS190	.3	19560	1	1	195	.3	7	4660	.1	10	68	22600	1400	13	3300	422	1	1130	3	380	27	1	18	1	754	38.2	78	2	1	1	9	2
IMTNS191	.4	29060	4	1	292	.8	10	6220	.1	15	50	29370	1580	19	5230	762	1	1300	28	1560	63	1	28	1	1265	54.1	182	3	2	3	41	16
IMTNS192	.6	27950	4	1	318	.9	7	7170	.1	17	62	28610	2370	25	7270	314	1	930	37	1500	74	1	37	1	836	61.5	355	5	1	4	83	8
IMTNS193	.4	17410	6	1	487	.5	9	6170	.6	12	48	21680	1500	15	3110	1384	1	1330	28	2330	57	1	26	1	911	37.5	337	1	1	2	24	1
IMTNS194	.6	28330	13	1	201	.5	11	5560	.1	15	54	28720	1240	16	5570	552	1	1050	26	1550	51	1	24	1	1267	55.1	134	4	1	2	33	12
IMTNS195	.5	27270	24	1	237	.7	8	5660	.1	15	72	27260	1350	16	6170	590	1	1040	28	1360	42	1	30	1	1002	50.4	147	4	1	2	35	19
IMTNS196	.4	25810	3	1	170	.8	9	3620	.1	15	58	28050	1060	15	5820	547	1	900	29	870	52	1	18	1	1105	52.3	141	4	1	2	34	11
IMTNS198	.5	24450	8	1	346	.5	9	6420	.1	11	46	21610	920	14	3570	721	1	1540	25	1370	36	1	29	1	1054	37.9	108	2	1	2	21	13
IMTNS199	.4	24150	15	1	258	.6	8	5750	.1	15	59	27510	750	19	4850	530	1	1010	35	1080	45	1	23	1	955	47.8	140	3	2	2	30	21
IMTNS200	.3	22140	12	1	329	.6	8	5180	.1	12	47	23870	1360	15	5670	651	1	1040	38	970	39	1	21	1	750	40.0	137	4	1	2	35	7
IMTNS201	.4	21260	6	1	406	.5	8	5690	.1	14	46	25510	1310	16	5360	762	1	960	42	2060	43	1	27	1	764	42.9	211	4	1	2	34	18
IMTNS202	.3	21040	3	1	704	.9	6	9200	.1	9	36	21550	2440	21	6330	963	1	960	20	1100	32	1	43	1	307	38.0	111	3	1	2	28	4
IMTNS203	.5	25000	1	1	347	.8	7	5650	.1	7	17	18260	1530	19	4180	219	1	1520	14	340	35	1	28	1	629	29.9	72	4	1	1	21	6

Cm?: MJNNOVA INC.
 PROJr 661 TAH O'SHAHTER
 ATTN: I.PIRIE/CAH CURTGH

MIK-EN LABS — ICP REPORT
 705 WEST 151H ST., WORTH VANCOUVER, B.C. V7H 1T2
 {604>980*5-814 OR (604)988-4524

FILE NO: 1V-1027-SJ1+2
 DATE: 91/09/10
 * SOIL * flteBU

SAMPLE NUMBER	AQ PPM	AL PPH	AS PPH	B PPH	8A PPM	BE PPM	61 PPM	CA PPM	CO PPM	CO PPH	CU PPH	FE PPH	K PPH	LI PPH	MG PPH	MM PPH	KO PPH	HA PPH	HI PPM	P PPH	PB PPH	SB PPH	SR PPM	TH PPM	n PPH	v PPH	ZH PPM	OA PPM	SW PPH	w PPH	CR PPH	AU-FIRE PPB
IHTHS117	.7	18790	77	18	87	.4	2G 6060	.1	9	32	18680	970	18	2890	596	3	320	16	1880	21	3	24	1	1097	35.2	116	4	5	4	18	3	
IHTMST18	.7	21310	42	13	123	.3	20 6830	.1	10	46	20430	1020	18	3520	625	3	370	19	1670	26	1	26	1	1239	36.9	129	4	5	4	21	2	
IKTMS119	1.0	21110	45	10	80	.4	21 8820	.1	8	91	18850	830	43	3750	234	4	500	13	650	25	3	27	1	1295	36.9	77	5	5	4	23	2	
IMTHS120	.7	12270	25	6	120	.1	20 6570	.1	3	21	20M0	1790	10	2620	548	2	370	3	980	17	1	28	1	1310	45.3	60	4	3	4	18	3	
IMTMS121	.3	14950	23	6	107	.1	20 6790	.1	5	28	20030	1670	10	2680	292	2	380	8	930	22	1	29	1	1267	42.2	65	4	4	4	18	15	
IMTHS122	.6	13420	21	4	73	.1	20 6030	.1	8	15	30210	1520	10	2660	206	2	400	7	270	18	1	23	1	1404	45.7	51	4	4	3	18	9	
IMTMS123	.5	17740	27	4	124	.1	17 5280	.1	7	17	17370	750	10	2190	427	2	300	8	2010	20	1	26	1	1093	31.7	77	4	4	3	14	6	
INTMS124	.6	19060	29	4	82	.1	18 5420	.1	7	26	19030	960	10	2630	302	2	350	9	1330	24	1	24	1	1197	38.4	71	3	4	4	16	2	
IHTMS125	.3	15080	23	3	125	.1	17 4980	.1	7	25	18540	960	10	2640	447	1	250	10	1340	23	1	24	1	1043	38.8	74	4	3	3	17	5	
IHTMS126	.6	13170	27	2	186	.1	16 5170	.1	7	36	18930	1010	10	2350	536	3	260	10	2110	21	1	31	1	979	39.0	74	5	3	3	16	a	
IMTMS127	.6	15580	32	3	122	.1	19 5820	.1	8	58	20900	1440	16	3420	286	2	310	11	700	26	2	25	1	1175	41.9	56	5	3	4	20	17	
IMTMS12B	.8	16140	36	3	128	.1	19 5350	.1	e	64	20010	1210	9	2730	376	2	290	11	1510	22	2	27	1	1131	40.6	66	5	4	4	15	3	
IHTKS129	.7	16390	31	2	128	.1	19 5810	.1	a	67	20320	1230	10	2960	383	2	320	9	1220	18	2	26	1	1129	41.3	60	5	4	4	13	2	
IHTHS130	.6	15080	29	2	137	.1	20 5720	.1	8	48	20400	1230	10	3070	363	2	270	9	960	23	1	26	1	1162	42.0	65	5	3	4	18	6	
IMTMS131	.6	11230	20	1	89	.1	16 5510	.1	7	27	19280	1290	8	2340	300	1	250	11	1060	18	1	25	1	1000	42.5	54	4	3	3	17	16	
INTMS132	.3	12980	21	1	104	.1	14 5310	.1	6	21	17770	1340	8	2580	295	2	230	a	1680	18	1	30	1	921	37.5	53	4	2	3	16	1	
IHTMS133	.5	14180	24	1	124	.1	14 4760	.1	6	19	16690	1600	9	2810	322	2	180	10	1120	20	1	27	1	872	32.9	60	5	3	3	16	19	
IMTMS134	.7	18910	32	3	187	.1	23 6090	.1	9	34	21830	1700	16	5000	374	2	430	13	1510	28	2	36	1	1511	48.0	136	7	4	4	24	1	
EMTHS135	.8	17710	30	2	117	.1	17 4730	.1	7	21	15800	920	10	2620	225	1	350	9	1560	20	2	29	1	1099	30.9	69	4	4	4	14	2	
IMTHS136	.7	20430	31	3	150	.1	21 5180	.1	8	24	19570	1390	12	3210	418	2	370	11	1470	24	1	29	1	1340	40.2	89	6	4	4	17	2	
IMTHS137	.9	18490	34	3	225	.1	20 5850	.1	a	22	18770	1490	14	3480	305	2	360	12	1900	28	2	42	1	1291	38.2	118	6	4	4	18	5	
IMTMS133	.9	220D0	39	2	146	.1	21 48B0	.1	8	29	19750	1210	11	3210	321	2	330	10	1380	24	4	23	1	1323	40.3	69	6	5	4	18	3	
JHTHST39	.6	15090	28	1	211	.1	17 5620	.1	8	40	18340	1580	11	3290	533	2	320	17	1940	24	2	31	1	1015	33.9	114	5	3	4	22	18	
IHTHS140	.6	22070	33	3	143	.1	19 5310	.1	7	25	17120	1340	9	2690	342	3	360	11	1520	25	3	31	1	1225	31.4	71	5	4	4	15	9	
IHTHS141	.6	19040	28	1	174	.1	19 5130	.1	7	22	15200	1270	11	3000	302	2	340	10	1260	24	1	30	1	1266	36.7	80	4	4	4	17	2	
IHTHS142	.6	20360	28	2	167	.1	20 5170	.1	6	22	19740	1340	12	3340	361	2	340	12	870	25	1	30	1	1329	41.1	74	5	4	4	18	3	
IMTH&143	1.0	25520	35	4	162	.1	25 6640	.1	11	49	27300	2150	17	5690	269	3	450	16	1020	31	4	39	3	1716	60.7	80	7	5	6	28	2	
IMIHS144	.5	15100	29	1	164	.1	17 5190	.1	7	22	17650	1050	12	3220	622	2	340	10	1120	23	1	29	1	1075	36.4	78	5	3	3	15	2	
IHTMS145	.1	15280	31	1	143	.1	16 5220	.1	7	38	16800	1400	11	2700	353	2	310	9	1530	18	1	31	1	1040	32.6	68	4	4	3	15	8	
IHTMS146	.5	12950	35	1	165	.1	14 5300	.1	6	36	16050	1260	10	2360	395	1	260	8	1740	13	1	29	1	858	31.8	69	4	3	3	14	4	
IHTMS147	.8	11210	70	23	129	.8	12 5130	.1	7	26	13190	950	16	1940	350	1	890	7	1490	15	1	27	2	767	27.8	66	1	2	2	10	4	
IKTMS148	.6	12620	25	17	171	.8	12 5080	.1	7	31	16270	990	16	2420	368	1	1030	7	2290	12	1	30	1	931	33.3	71	1	2	2	13	36	
IHTMS149	.6	12140	19	12	150	.8	10 5800	.1	6	37	14820	860	13	2030	555	1	750	7	1580	13	1	35	1	865	30.3	68	1	2	1	12	3	
IMTHS15Q	.7	16900	15	9	152	.7	12 5210	.1	6	48	20550	1110	15	2920	338	1	830	10	2230	9	1	24	2	1226	41.7	65	1	2	2	17	15	
IMTHS151	.6	14720	6	8	157	.6	11 6270	.1	8	30	2Q690	1540	13	2900	445	1	840	6	1940	9	1	34	1	1283	43.9	66	1	2	2	16	12	
IMTHS152	.3	14580	28	5	96	.4	11 5150	.1	7	31	16710	870	13	1970	415	1	910	7	1320	12	1	27	1	1037	31.4	50	1	2	1	11	9	
IMTHS153	.4	14760	1	3	97	.5	10 7520	.1	6	49	17060	950	18	2340	188	1	1220	6	230	11	1	60	1	1036	32.6	40	1	1	1	13	7	
IMTMS154	.5	15530	3	2	167	.6	11 5790	.1	6	26	16060	870	12	2000	522	1	1060	S	2310	f1	1	43	1	994	31.0	149	1	1	1	12	4	
IMFMS155	.5	16070	2		133	.6	12 5390	.1	8	54	19840	850	16	2730	335	1	790	9	1830	7	1	30	1	1159	41.1	70	1		2	17	19	
1KTHST56	.4	14920	7	1	156	.5	11 5950	.1	7	51	19020	1110	11	2770	427	1	770	8	1680	11	1	35	1	1062	40.0	64	1	t	1	15	8	
IHTHS157	.3	17100		113	.6	11 5230				36	21170	1020	10	3090	352	1	880	9	1630	12		27		1173	47.6	75		2	18	13		
IMTHS158	.3	15740		155	.5	10 4940				40	18180	1040	14	2720	528	1	770	8	1720	12		29		1067	35.2	113		1	15	2		
IMTHS159	.3	15820		240	.6	9 4590				41	17260	1160	11	2580	629	1	890	9	3090	10		39		938	32.6	127		1	14	6		
IHTKS160	.6	16710		123	.6	10 6020				45	18090	1080	11	2590	287	1	900	11	3000	11		53		1053	34.7	101		1	14	17		
IMTHS161	.2	13060		180	.4	9 5000				40	16830	1110	12	227Q	479	1	1090	10	3450	11		36		954	29.0	126		1	12	3		
IMIM3162	.4	15370		13S	.4	11 5050				57		1400	11	2370	46S	1	1200	9	1600	14		27		1158	39.7	95		2	16	102		
IMTMS163	.3	18300		196		10 4660				50	22000	990	15	3870	690	1	870	14	2440	16		36		1132	45.0	147		2	20	16		
IMTHS164	.4	19420		144	.5	9 5490				57	21250	1300	13	3540	313	1	1000	11	1830	13		33		1150	42.9	110		2	18	11		
IMTHS165	.4	18090		145	.5	11 5530				39	21980	1840	11	3440	331	1	1010	10	1320	12		31		1276	44.5	88		2	19	19		
IMTHS166	.3																															