

DENSITY = 2.40 (G/CM\*\*3)

HAUZ AREA

MOROCCO

GRAVITY SURVEY

THE LIST OF GRAVITY SURVEY

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	*	TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
251	8810 5	3121.26	-8 5.89	719.94	0.979229254	0.084	0	0	1.522	222.975	-71.876	0.979431356	22.395	-49.481
252	8810 5	3121.21	-8 5.92	737.61	0.979225139	0.0	0	0	1.330	228.427	-73.627	0.979431289	23.607	-50.020
253	8810 5	3121.17	-8 5.95	736.28	0.979225271	0.036	0	0	1.330	228.014	-73.495	0.979431235	23.380	-50.115
254	8810 5	3121.12	-8 5.98	735.04	0.979225683	0.0	0	0	1.299	227.634	-73.373	0.979431168	23.447	-49.925
255	8810 5	3121.07	-8 6.01	730.63	0.979226540	0.072	0	0	1.395	226.272	-72.935	0.979431101	23.106	-49.830
256	8810 5	3121.03	-8 6.05	733.49	0.979224991	0.0	0	0	1.310	227.155	-73.219	0.979431048	22.408	-50.811
257	8810 5	3120.98	-8 6.08	731.75	0.979224930	0.0	0	0	1.324	226.619	-73.047	0.979430981	21.892	-51.155
258	8810 5	3120.94	-8 6.10	734.28	0.979224049	0.0	0	0	1.324	227.399	-73.298	0.979430927	21.845	-51.452
259	8810 5	3121.13	-8 5.67	745.77	0.979222762	0.036	0	0	1.396	230.943	-74.436	0.979431182	23.920	-50.516
260	8810 5	3120.97	-8 5.67	744.34	0.979222954	0.0	0	0	1.377	230.501	-74.293	0.979430968	23.865	-50.429
261	8810 5	3121.28	-8 5.68	740.91	0.979224348	0.0	0	0	1.324	229.442	-73.954	0.979431382	23.732	-50.231
262	8810 5	3121.33	-8 5.75	733.88	0.979226194	0.0	0	0	1.303	227.273	-73.257	0.979431449	23.322	-49.935
263	8810 5	3121.35	-8 5.61	745.50	0.979223467	0.0	0	0	1.310	230.859	-74.409	0.979431476	24.161	-50.248
264	8810 5	3121.45	-8 5.76	731.38	0.979227017	0.0	0	0	1.267	226.505	-73.010	0.979431610	23.178	-49.832
265	8810 5	3121.50	-8 5.72	730.29	0.979227272	0.0	0	0	1.262	226.168	-72.902	0.979431677	23.025	-49.877
266	8810 5	3121.55	-8 5.69	730.67	0.979227388	0.0	0	0	1.253	226.285	-72.940	0.979431744	23.183	-49.756
267	8810 5	3121.59	-8 5.66	731.59	0.979227402	0.0	0	0	1.249	226.568	-73.030	0.979431797	23.422	-49.609
268	8810 5	3121.64	-8 5.64	730.04	0.979226874	0.0	0	0	1.242	226.091	-72.877	0.979431864	22.343	-50.534
269	8810 5	3121.69	-8 5.61	729.69	0.979228063	0.060	0	0	1.303	225.982	-72.842	0.979431931	23.417	-49.426
270	8810 5	3121.74	-8 5.57	729.95	0.979228221	0.084	0	0	1.324	226.062	-72.868	0.979431998	23.609	-49.259
271	8810 5	3121.78	-8 5.54	733.67	0.979227652	0.0	0	0	1.244	227.209	-73.236	0.979432051	24.054	-49.183
272	8810 5	3121.82	-8 5.51	733.82	0.979227926	0.024	0	0	1.256	227.256	-73.252	0.979432105	24.333	-48.918
273	8810 5	3121.88	-8 5.48	726.71	0.979229804	0.0	0	0	1.253	225.064	-72.547	0.979432185	23.935	-48.612
274	8810 5	3121.53	-8 5.48	738.42	0.979225413	0.0	0	0	1.316	228.676	-73.707	0.979431717	23.688	-50.020
275	8810 5	3121.66	-8 5.46	739.13	0.979225631	0.0	0	0	1.276	228.895	-73.728	0.979431891	23.910	-49.827
276	8810 5	3122.11	-8 5.18	740.16	0.979228981	0.0	0	0	1.264	229.211	-73.879	0.979432493	26.963	-46.917
277	8810 5	3122.25	-8 5.26	728.78	0.979231890	0.072	0	0	1.311	225.701	-72.752	0.979432680	26.222	-46.530
278	8810 5	3122.20	-8 5.40	733.60	0.979231149	0.024	0	0	1.292	227.188	-73.230	0.979432613	27.017	-46.213
279	8810 5	3122.23	-8 5.58	728.45	0.979232211	0.0	0	0	1.249	225.598	-72.719	0.979432653	26.404	-46.315
280	8810 5	3122.07	-8 5.45	740.21	0.979228543	0.0	0	0	1.350	229.227	-73.884	0.979432439	26.680	-47.204
281	8810 5	3122.09	-8 5.59	724.55	0.979231819	0.0	0	0	1.233	224.397	-72.333	0.979432466	24.983	-47.350
282	8810 5	3121.92	-8 5.30	739.59	0.979227268	0.0	0	0	1.252	229.037	-73.823	0.979432239	25.319	-48.504
283	8810 5	3121.98	-8 5.16	742.69	0.979227009	0.0	0	0	1.260	229.993	-74.150	0.979432319	25.942	-48.188
284	8811 7	3123.47	-8 7.59	600.58	0.979264496	0.0	0	0	1.012	186.151	-60.032	0.979434313	17.346	-42.686
285	8811 7	3123.24	-8 7.79	600.16	0.979264063	0.0	0	0	1.056	186.021	-59.990	0.979434005	17.134	-42.855
286	8810 6	3122.14	-8 4.94	769.77	0.979221673	0.0	0	0	1.372	238.347	-76.812	0.979432533	28.860	-47.953
287	8810 6	3122.09	-8 4.97	768.49	0.979221637	0.024	0	0	1.328	237.951	-76.685	0.979432466	28.450	-48.236
288	8810 6	3122.05	-8 5.01	766.82	0.979221917	0.0	0	0	1.359	237.437	-76.520	0.979432413	28.300	-48.220
289	8810 6	3121.99	-8 5.04	751.91	0.979224916	0.0	0	0	1.291	232.837	-75.043	0.979432332	26.711	-48.332
290	8810 6	3121.95	-8 5.07	749.52	0.979225101	0.0	0	0	1.297	232.100	-74.807	0.979432279	26.220	-48.587
291	8810 6	3121.90	-8 5.10	745.22	0.979225747	0.0	0	0	1.302	230.773	-74.381	0.979432212	25.610	-48.771
292	8810 6	3121.86	-8 5.13	744.20	0.979225748	0.0	0	0	1.279	230.460	-74.280	0.979432158	25.328	-48.952
293	8810 6	3121.81	-8 5.17	743.67	0.979225449	0.0	0	0	1.273	230.295	-74.227	0.979432091	24.926	-49.302
294	8810 6	3121.74	-8 5.21	735.04	0.979227068	0.024	0	0	1.394	227.632	-73.372	0.979431998	24.097	-49.275
295	8810 6	3121.69	-8 5.23	745.79	0.979224424	0.0	0	0	1.311	230.949	-74.438	0.979431931	24.754	-49.684
296	8810 6	3121.65	-8 5.27	742.79	0.979224869	0.0	0	0	1.296	230.023	-74.140	0.979431877	24.311	-49.829
297	8810 6	3121.61	-8 5.29	740.64	0.979225103	0.0	0	0	1.306	229.359	-73.927	0.979431824	23.944	-49.983
298	8810 6	3121.52	-8 5.35	741.89	0.979224639	0.0	0	0	1.318	229.745	-74.051	0.979431703	23.998	-50.052
299	8810 6	3121.47	-8 5.38	742.12	0.979224360	0.084	0	0	1.415	229.816	-74.074	0.979431637	23.954	-50.119
300	8810 6	3121.43	-8 5.41	743.61	0.979223902	0.0	0	0	1.438	230.277	-74.221	0.979431583	23.934	-50.288



ST.NO	DBS-DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	HAOUZ AREA	TERR.C	F.E.C	B.G.C	NDRM.G	ANDM.F	ANOM.B
351	8810 7	3121.67	-8 5.03	748.13	0.979223992	0.0	0 0	LG *	1.364	231.672	-74.669	0.979431904	25.123	-49.546
352	8810 7	3121.81	-8 4.99	757.51	0.979222879	0.0	0 0	LG *	1.323	234.564	-75.598	0.979432091	26.673	-48.923
353	8810 7	3121.95	-8 4.94	774.37	0.979219703	0.024	0 0	LG *	1.362	239.767	-77.268	0.979432279	28.575	-48.695
354	8810 7	3121.87	-8 4.75	777.57	0.979218775	0.048	0 0	LG *	1.377	240.754	-77.585	0.979432172	28.734	-48.851
355	881010	3121.95	-8 4.74	776.09	0.979219307	0.0	0 0	LG *	1.336	240.298	-77.438	0.979432278	28.662	-48.776
356	881010	3121.77	-8 4.64	780.40	0.979217320	0.048	0 0	LG *	1.412	241.732	-77.898	0.979432038	28.426	-49.473
357	881010	3121.67	-8 4.50	785.89	0.979215212	0.0	0 0	LG *	1.597	243.319	-78.408	0.979431904	28.024	-50.584
358	881010	3121.55	-8 4.37	798.96	0.979211457	0.072	0 0	LG *	1.555	247.353	-79.702	0.979431744	28.621	-51.081
359	881010	3121.47	-8 4.24	817.22	0.979206691	0.0	0 0	LG *	1.714	252.984	-81.508	0.979431537	29.752	-51.756
360	881010	3121.37	-8 4.08	825.62	0.979204199	0.048	0 0	LG *	1.689	255.575	-82.339	0.979431503	29.961	-52.378
361	881010	3121.31	-8 3.96	828.52	0.979203405	0.024	0 0	LG *	1.615	256.472	-82.626	0.979431422	30.069	-52.557
362	881010	3121.24	-8 3.77	836.37	0.979201818	0.012	0 0	LG *	1.633	258.894	-83.402	0.979431329	31.016	-52.386
363	881010	3121.14	-8 3.62	844.47	0.979199555	0.0	0 0	LG *	1.661	261.393	-84.203	0.979431195	31.414	-52.789
364	881010	3121.28	-8 3.59	843.68	0.979200781	0.0	0 0	LG *	1.629	261.147	-84.124	0.979431382	32.175	-51.949
365	881010	3121.03	-8 3.49	855.90	0.979196432	0.0	0 0	LG *	1.780	264.919	-85.333	0.979431048	32.082	-53.251
366	881010	3120.91	-8 3.36	865.81	0.979193888	0.0	0 0	LG *	1.922	267.975	-86.312	0.979430887	32.898	-53.414
367	881010	3120.82	-8 3.21	875.81	0.979191365	0.012	0 0	LG *	2.199	271.062	-87.301	0.979430767	33.859	-53.441
368	881010	3120.70	-8 3.11	902.67	0.979184577	0.0	0 0	LG *	2.469	279.348	-89.954	0.979430606	35.788	-54.166
369	881010	3120.92	-8 3.08	873.19	0.979192255	0.0	0 0	LG *	2.159	270.253	-87.041	0.979430901	33.766	-53.276
370	881010	3121.01	-8 3.22	860.11	0.979195770	0.0	0 0	LG *	1.985	266.216	-85.748	0.979431021	32.950	-52.799
371	881010	3121.16	-8 3.28	844.66	0.979199700	0.0	0 0	LG *	1.851	261.438	-84.218	0.979431322	31.766	-52.451
372	881010	3121.27	-8 3.31	847.98	0.979196659	0.012	0 0	LG *	1.702	262.476	-84.550	0.979431369	32.468	-52.082
374	881010	3121.33	-8 2.98	856.59	0.979197133	0.024	0 0	LG *	1.823	265.131	-85.401	0.979431449	32.637	-52.764
375	881010	3121.44	-8 3.11	846.08	0.979200355	0.0	0 0	LG *	1.561	261.888	-83.374	0.979431576	32.388	-51.974
376	881010	3121.56	-8 3.22	843.58	0.979202022	0.024	0 0	LG *	1.576	261.116	-84.114	0.979431596	33.117	-50.997
378	881010	3121.58	-8 3.55	835.92	0.979204599	0.0	0 0	LG *	1.524	258.754	-83.357	0.979431784	33.093	-50.264
379	881010	3121.78	-8 3.78	824.33	0.979207506	0.0	0 0	LG *	1.515	255.178	-82.211	0.979432051	32.148	-50.063
380	881010	3121.97	-8 3.92	812.98	0.979210408	0.024	0 0	LG *	1.542	251.677	-81.088	0.979432306	31.321	-49.767
381	881010	3122.10	-8 4.03	805.27	0.979212502	0.0	0 0	LG *	1.594	249.300	-80.326	0.979432480	30.917	-49.409
382	881010	3121.74	-8 4.10	820.22	0.979207647	0.012	0 0	LG *	1.601	253.910	-81.805	0.979431998	31.161	-50.644
383	881010	3122.05	-8 4.19	790.40	0.979215717	0.0	0 0	LG *	1.341	244.713	-78.855	0.979432413	29.358	-49.496
384	881010	3122.13	-8 4.27	780.96	0.979218998	0.0	0 0	LG *	1.274	240.669	-77.557	0.979432520	28.421	-49.136
385	881010	3122.24	-8 4.44	773.04	0.979220470	0.0	0 0	LG *	1.230	239.356	-77.136	0.979432667	28.389	-48.747
386	881010	3122.27	-8 4.42	780.96	0.979218589	0.0	0 0	LG *	1.288	241.800	-77.920	0.979432707	28.969	-48.951
388	881010	3121.85	-8 4.03	816.92	0.979208667	0.012	0 0	LG *	1.615	252.891	-81.478	0.979432145	31.028	-50.450
389	881012	3120.50	-8 5.11	783.91	0.979209615	0.024	0 0	LG *	1.749	242.710	-78.212	0.979430339	23.735	-54.477
390	881012	3120.58	-8 5.04	778.77	0.979210968	0.0	0 0	LG *	1.762	241.125	-77.704	0.979430379	23.476	-54.228
391	881012	3120.58	-8 5.04	785.05	0.979210006	0.036	0 0	LG *	1.707	243.061	-78.325	0.979430446	24.329	-53.996
392	881012	3120.63	-8 5.03	786.70	0.979209995	0.048	0 0	LG *	1.716	243.570	-78.488	0.979430513	24.767	-53.721
393	881012	3120.68	-8 4.98	798.47	0.979207724	0.072	0 0	LG *	1.727	247.200	-79.653	0.979430580	26.072	-53.581
394	881012	3120.73	-8 4.94	775.09	0.979212902	0.072	0 0	LG *	1.932	239.989	-77.339	0.979430647	24.206	-53.133
395	881012	3120.83	-8 4.89	785.79	0.979210976	0.084	0 0	LG *	1.691	243.288	-78.398	0.979430780	25.175	-53.223
396	881012	3120.87	-8 4.85	799.54	0.979208209	0.024	0 0	LG *	1.605	247.530	-79.759	0.979430834	26.509	-53.249
397	881012	3120.92	-8 4.82	803.14	0.979207638	0.0	0 0	LG *	1.579	246.640	-80.115	0.979430901	26.957	-53.158
398	881012	3120.97	-8 4.79	799.64	0.979208630	0.084	0 0	LG *	1.624	247.561	-79.769	0.979430948	26.847	-52.921
399	881012	3121.02	-8 4.75	778.50	0.979213477	0.024	0 0	LG *	1.862	241.041	-77.677	0.979431034	25.345	-52.331
400	881012	3121.06	-8 4.72	782.29	0.979212846	0.036	0 0	LG *	1.717	242.209	-78.052	0.979431088	25.685	-52.367

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C-30M	ETC	TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
401	881012	3121.10	-8 4.70	793.92	0.979210478	0.024	0 0 LG *	1.530	245.796	-79.202	0.979431141	26.663	-52.539
402	881012	3121.15	-8 4.66	792.40	0.979211077	0.120	0 0 LG *	1.621	245.327	-79.052	0.979431208	26.817	-52.235
403	881012	3121.24	-8 4.60	792.93	0.979211580	0.048	0 0 LG *	1.516	245.493	-79.105	0.979431329	27.260	-51.845
404	881012	3121.29	-8 4.57	780.72	0.979214459	0.0	0 0 LG *	1.602	241.726	-77.897	0.979431396	26.391	-51.506
405	881012	3121.33	-8 4.54	788.59	0.979213025	0.084	0 0 LG *	1.550	244.154	-78.676	0.979431449	27.280	-51.396
406	881012	3121.38	-8 4.51	791.28	0.979212665	0.072	0 0 LG *	1.524	244.982	-78.941	0.979431516	27.656	-51.286
407	881012	3121.42	-8 4.48	780.47	0.979215162	0.048	0 0 LG *	1.575	241.647	-77.871	0.979431570	26.815	-51.056
408	881012	3121.44	-8 4.57	785.94	0.979214232	0.0	0 0 LG *	1.427	243.334	-78.413	0.979431596	27.397	-51.016
409	881012	3121.56	-8 4.59	781.72	0.979215505	0.0	0 0 LG *	1.434	242.035	-77.996	0.979431757	27.218	-50.778
410	881012	3121.26	-8 4.44	803.30	0.979209493	0.0	0 0 LG *	1.522	248.690	-80.131	0.979431356	28.350	-51.781
411	881013	3121.11	-8 4.48	795.22	0.979210017	0.0	0 0 LG *	1.624	246.199	-79.332	0.979431155	26.686	-52.646
412	881013	3121.06	-8 4.51	795.84	0.979209515	0.024	0 0 LG *	1.614	246.390	-79.393	0.979431088	26.430	-52.963
413	881013	3121.01	-8 4.54	807.44	0.979206729	0.036	0 0 LG *	1.613	249.968	-80.541	0.979431021	27.289	-53.251
414	881013	3120.96	-8 4.57	807.93	0.979208520	0.048	0 0 LG *	1.607	250.119	-80.589	0.979430954	27.293	-53.297
415	881013	3120.91	-8 4.61	796.13	0.979208853	0.072	0 0 LG *	1.795	246.480	-79.422	0.979430887	26.241	-53.181
416	881013	3120.86	-8 4.64	806.35	0.979206404	0.036	0 0 LG *	1.611	249.633	-80.433	0.979430820	26.827	-53.606
417	881013	3120.81	-8 4.68	814.32	0.979204410	0.036	0 0 LG *	1.676	252.092	-81.222	0.979430754	27.425	-53.797
418	881013	3120.76	-8 4.71	803.36	0.979206643	0.072	0 0 LG *	1.700	248.709	-80.137	0.979430687	26.366	-53.814
419	881013	3120.71	-8 4.74	797.02	0.979207879	0.012	0 0 LG *	1.684	246.753	-79.509	0.979430620	25.696	-53.809
420	881013	3120.67	-8 4.77	787.78	0.979209583	0.024	0 0 LG *	1.866	243.902	-78.595	0.979430566	24.786	-53.809
421	881013	3120.58	-8 4.84	788.12	0.979209012	0.024	0 0 LG *	1.874	244.008	-78.629	0.979430446	24.449	-54.180
422	881013	3120.54	-8 4.87	798.55	0.979206608	0.036	0 0 LG *	1.710	247.226	-79.661	0.979430392	25.152	-54.509
423	881013	3120.49	-8 4.91	809.98	0.979203916	0.0	0 0 LG *	1.684	250.751	-80.792	0.979430326	26.025	-54.766
424	881013	3120.57	-8 4.92	809.74	0.979204463	0.0	0 0 LG *	1.752	250.678	-80.768	0.979430433	26.459	-54.309
425	881013	3120.45	-8 4.93	811.31	0.979203833	0.084	0 0 LG *	1.791	251.161	-80.923	0.979430272	26.512	-54.441
426	881013	3120.39	-8 4.95	811.48	0.979203408	0.072	0 0 LG *	1.831	251.213	-80.940	0.979430192	26.261	-54.629
427	881012	3120.53	-8 3.77	868.37	0.979190851	0.012	0 0 LG *	2.036	268.765	-86.565	0.979430379	31.274	-55.291
428	881012	3120.62	-8 3.97	849.85	0.979195053	0.024	0 0 LG *	1.864	263.051	-84.734	0.979430499	29.469	-55.266
429	881012	3120.72	-8 4.11	848.77	0.979195852	0.012	0 0 LG *	1.808	262.719	-84.628	0.979430633	29.745	-54.883
430	881012	3120.81	-8 4.18	843.12	0.979197359	0.0	0 0 LG *	1.834	260.975	-84.069	0.979430754	29.614	-54.455
431	881012	3120.95	-8 4.42	820.98	0.979203072	0.012	0 0 LG *	1.679	254.146	-81.880	0.979430941	27.956	-53.924
432	881012	3120.86	-8 4.36	832.10	0.979200198	0.012	0 0 LG *	1.844	257.577	-82.980	0.979430820	28.798	-54.182
433	881012	3120.75	-8 4.28	833.72	0.979199254	0.012	0 0 LG *	1.738	258.076	-83.140	0.979430673	28.394	-54.746
434	881012	3120.64	-8 4.33	848.74	0.979195951	0.036	0 0 LG *	1.828	262.710	-84.625	0.979430526	29.662	-54.963
435	881012	3120.51	-8 4.16	862.18	0.979192109	0.0	0 0 LG *	1.883	266.855	-85.953	0.979430352	30.495	-55.458
436	881013	3121.08	-8 4.40	820.41	0.979204202	0.012	0 0 LG *	1.773	253.971	-81.824	0.979431115	28.831	-52.993
437	881013	3121.02	-8 4.31	823.55	0.979202848	0.024	0 0 LG *	1.676	254.938	-82.134	0.979431034	28.427	-53.707
438	881013	3120.96	-8 4.13	841.31	0.979198946	0.024	0 0 LG *	1.720	260.418	-83.891	0.979430954	30.130	-53.761
439	881013	3121.13	-8 4.25	828.35	0.979202723	0.048	0 0 LG *	1.739	256.420	-82.609	0.979431182	29.701	-52.908
440	881013	3120.87	-8 4.01	846.78	0.979197316	0.012	0 0 LG *	1.723	262.106	-84.431	0.979430834	30.311	-54.120
441	881013	3120.72	-8 3.88	858.26	0.979194428	0.0	0 0 LG *	1.809	265.647	-85.566	0.979430633	30.950	-54.166
442	881013	3120.63	-8 3.73	869.39	0.979191161	0.0	0 0 LG *	1.949	269.080	-86.666	0.979430513	31.677	-54.989
443	881013	3120.59	-8 3.51	887.60	0.979187164	0.024	0 0 LG *	2.194	274.698	-88.465	0.979430459	33.597	-54.868
444	881013	3120.77	-8 3.71	864.37	0.979193019	0.0	0 0 LG *	1.857	267.531	-86.170	0.979430700	31.706	-54.463
445	881013	3120.94	-8 3.81	851.90	0.979196388	0.024	0 0 LG *	1.887	263.684	-84.937	0.979430927	31.051	-53.906
446	881013	3120.66	-8 3.57	887.52	0.979187735	0.0	0 0 LG *	2.188	274.672	-88.457	0.979430553	34.043	-54.414
447	881013	3120.83	-8 3.46	867.99	0.979192829	0.0	0 0 LG *	1.949	268.647	-86.527	0.979430780	32.645	-53.882
448	881013	3120.95	-8 3.56	859.55	0.979195045	0.0	0 0 LG *	1.864	266.046	-85.694	0.979430941	32.014	-53.680
449	881013	3121.02	-8 3.69	847.22	0.979197979	0.024	0 0 LG *	1.796	262.241	-84.475	0.979431034	30.982	-53.493
450	881013	3121.10	-8 3.85	838.87	0.979200274	0.048	0 0 LG *	1.763	259.663	-83.649	0.979431141	30.559	-53.090

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	* TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
451	881013	3121.16	-8 4.02	826.42	0.979203030	0.024	0 0 LG *	1.664	255.824	-82.418	0.979431222	29.296	-53.122
452	881013	3121.27	-8 4.20	798.78	0.979209337	0.048	0 0 LG *	1.661	247.297	-79.684	0.979431369	27.225	-52.459
453	881013	3121.43	-8 3.87	827.23	0.979204393	0.012	0 0 LG *	1.572	256.074	-82.498	0.979431583	30.456	-52.043
454	881013	3121.57	-8 4.15	802.74	0.979210321	0.024	0 0 LG *	1.545	248.517	-80.075	0.979431770	28.513	-51.563
455	881013	3121.76	-8 4.24	804.58	0.979210981	0.024	0 0 LG *	1.496	249.087	-80.258	0.979432025	29.540	-50.718
456	881013	3121.87	-8 4.35	797.58	0.979213028	0.012	0 0 LG *	1.684	246.926	-79.565	0.979432172	29.466	-50.099
457	881013	3122.00	-8 4.50	779.46	0.979218039	0.0	0 0 LG *	1.351	261.337	-77.772	0.979432346	28.552	-49.220
458	881013	3122.10	-8 4.69	771.08	0.979220883	0.036	0 0 LG *	1.579	238.750	-76.942	0.979432480	28.733	-48.209
459	881013	3121.61	-8 3.94	821.02	0.979206576	0.0	0 0 LG *	1.579	254.158	-81.884	0.979431824	30.488	-51.396
460	881013	3121.54	-8 3.77	830.82	0.979204307	0.0	0 0 LG *	1.542	257.181	-82.853	0.979431730	31.499	-51.354
461	881013	3121.43	-8 3.64	835.77	0.979202543	0.012	0 0 LG *	1.543	258.709	-83.343	0.979431583	31.213	-52.150
462	881014	3123.19	-8 7.64	600.25	0.979263666	0.024	0 0 LG *	1.098	186.050	-59.999	0.979433938	16.875	-43.124
463	881014	3123.09	-8 7.66	605.26	0.979262407	0.012	0 0 LG *	1.070	187.594	-60.496	0.979433805	17.267	-43.229
464	881014	3123.00	-8 7.69	605.99	0.979262185	0.012	0 0 LG *	1.088	187.820	-60.569	0.979433684	17.409	-43.160
465	881014	3122.87	-8 7.72	607.54	0.979261539	0.012	0 0 LG *	1.130	188.299	-60.723	0.979433510	17.457	-43.266
466	881014	3122.76	-8 7.73	609.44	0.979261213	0.108	0 0 LG *	1.290	188.146	-60.674	0.979433363	17.286	-43.388
467	881014	3122.64	-8 7.73	609.44	0.979260412	0.036	0 0 LG *	1.238	188.884	-60.912	0.979433202	17.332	-43.580
468	881014	3122.53	-8 7.72	613.31	0.979258936	0.012	0 0 LG *	1.186	190.078	-61.296	0.979433055	17.205	-44.091
469	881015	3123.41	-8 7.19	616.25	0.979260910	0.0	0 0 LG *	0.994	190.985	-61.588	0.979434233	18.657	-42.931
470	881015	3123.35	-8 7.19	618.69	0.979259726	0.0	0 0 LG *	1.007	191.737	-61.830	0.979434086	18.384	-43.446
471	881015	3123.24	-8 7.19	623.95	0.979258333	0.0	0 0 LG *	1.011	193.362	-62.353	0.979434005	18.750	-43.603
472	881015	3123.19	-8 7.18	624.29	0.979258035	0.036	0 0 LG *	1.054	193.599	-62.429	0.979433938	18.749	-43.681
473	881015	3123.15	-8 7.18	621.29	0.979258548	0.012	0 0 LG *	1.054	192.540	-62.089	0.979433885	18.257	-43.832
474	881015	3123.08	-8 7.18	628.98	0.979256617	0.036	0 0 LG *	1.042	194.914	-62.853	0.979433791	18.802	-44.051
475	881015	3123.03	-8 7.17	636.20	0.979255834	0.0	0 0 LG *	1.058	197.139	-63.569	0.979433724	19.328	-44.241
476	881015	3122.97	-8 7.17	629.74	0.979255882	0.024	0 0 LG *	1.105	195.148	-63.928	0.979433644	18.491	-44.437
477	881015	3122.92	-8 7.16	635.53	0.979254438	0.024	0 0 LG *	1.058	196.932	-63.502	0.979433577	18.902	-44.601
478	881015	3122.86	-8 7.16	644.51	0.979252428	0.012	0 0 LG *	1.064	199.705	-64.393	0.979433497	19.700	-44.694
479	881015	3122.81	-8 7.15	640.67	0.979253010	0.0	0 0 LG *	1.043	198.518	-64.013	0.979433430	19.141	-44.872
480	881015	3122.75	-8 7.16	645.26	0.979251732	0.024	0 0 LG *	1.165	197.294	-63.619	0.979433349	18.667	-44.952
481	881015	3122.70	-8 7.16	650.87	0.979253536	0.024	0 0 LG *	1.077	199.934	-64.468	0.979433283	19.450	-45.018
482	881015	3122.65	-8 7.16	650.87	0.979250395	0.060	0 0 LG *	1.103	201.667	-65.026	0.979433216	19.949	-45.076
483	881015	3122.62	-8 7.12	665.34	0.979246931	0.0	0 0 LG *	1.180	206.131	-66.462	0.979433042	21.220	-45.242
484	881015	3122.52	-8 7.14	666.35	0.979246423	0.012	0 0 LG *	1.186	206.442	-66.562	0.979432961	21.089	-45.473
485	881015	3122.46	-8 7.26	659.02	0.979248187	0.0	0 0 LG *	1.168	204.180	-65.834	0.979432988	20.547	-45.287
486	881015	3122.48	-8 7.26	659.02	0.979253333	0.012	0 0 LG *	1.107	197.970	-63.836	0.979433109	19.321	-44.515
487	881015	3122.57	-8 7.35	638.89	0.979250235	0.012	0 0 LG *	1.124	202.401	-65.262	0.979433242	20.576	-44.684
488	881015	3122.67	-8 7.30	653.25	0.979250235	0.012	0 0 LG *	1.125	196.362	-63.319	0.979433376	18.584	-44.735
489	881015	3122.77	-8 7.25	633.68	0.979254472	0.012	0 0 LG *	1.102	195.684	-63.101	0.979433309	19.233	-43.868
490	881015	3122.72	-8 7.51	631.61	0.979255756	0.024	0 0 LG *	1.100	192.639	-62.121	0.979433390	18.488	-43.633
491	881015	3122.78	-8 7.61	621.61	0.979258138	0.012	0 0 LG *	1.104	192.103	-61.948	0.979433510	18.287	-43.661
492	881015	3122.87	-8 7.56	619.87	0.979258589	0.034	0 0 LG *	1.074	195.700	-63.106	0.979433557	18.765	-44.341
493	881015	3122.83	-8 7.39	631.53	0.979254437	0.036	0 0 LG *	1.234	208.810	-67.323	0.979432854	21.563	-45.1761
494	881015	3122.38	-8 6.91	678.70	0.979243519	0.0	0 0 LG *	1.232	210.251	-67.787	0.979432868	22.135	-45.652
495	881015	3122.39	-8 6.83	679.31	0.979242736	0.024	0 0 LG *	1.165	210.440	-67.847	0.979432707	21.634	-46.213
496	881015	3122.27	-8 6.83	688.80	0.979240692	0.0	0 0 LG *	1.161	213.368	-68.789	0.979432546	22.674	-46.115
497	881015	3122.15	-8 6.76	686.80	0.979238596	0.0	0 0 LG *	1.211	215.813	-69.575	0.979432480	23.140	-46.434
498	881015	3122.10	-8 6.67	696.73	0.979238596	0.0	0 0 LG *	1.211	215.813	-69.575	0.979432480	23.140	-46.434
499	881015	3122.18	-8 6.63	701.59	0.979237511	0.048	0 0 LG *	1.470	217.312	-70.057	0.979432587	23.707	-46.350
500	881015	3122.49	-8 6.92	670.61	0.979245695	0.0	0 0 LG *	1.158	207.756	-66.985	0.979433301	21.608	-45.377

DENSITY = 2.40 (G/CM\*\*3)

HAQUZ AREA

\*\*\*\*\* THE LIST OF GRAVITY SURVEY ( MOROCCO ) \*\*\*\*\*

88(YEAR)

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
501	881017	3122.59	-8 6.92	655.93	0.979249039	0.0	0 0 LG *	1.076	203.235	-65.527	0.979433135	20.205	-45.322
502	881017	3122.71	-8 6.96	657.57	0.979248844	0.0	0 0 LG *	1.144	203.732	-63.690	0.979433296	20.424	-45.266
503	881017	3122.84	-8 6.99	644.43	0.979252161	0.012	0 0 LG *	1.064	199.679	-64.386	0.979433470	19.434	-44.952
504	881017	3122.94	-8 7.04	645.76	0.979252191	0.012	0 0 LG *	1.122	200.089	-64.518	0.979433604	19.797	-44.721
505	881017	3123.02	-8 7.07	638.06	0.979254234	0.0	0 0 LG *	1.058	197.714	-63.754	0.979433711	19.296	-44.458
506	881017	3123.12	-8 7.10	623.51	0.979257849	0.036	0 0 LG *	1.096	193.227	-62.310	0.979433845	18.326	-43.983
507	881017	3121.96	-8 6.73	685.73	0.979248149	0.084	0 0 LG *	1.337	212.420	-68.484	0.979432292	21.614	-46.870
508	881017	3121.88	-8 6.83	722.10	0.979232794	0.060	0 0 LG *	1.640	223.640	-72.090	0.979432185	25.889	-46.201
509	881017	3121.90	-8 6.94	693.10	0.979238625	0.024	0 0 LG *	1.210	214.693	-69.215	0.979432212	22.316	-46.898
510	881017	3121.80	-8 6.86	699.48	0.979238593	0.012	0 0 LG *	1.183	216.663	-69.848	0.979432078	22.361	-47.487
511	881017	3121.72	-8 6.89	704.59	0.979234840	0.036	0 0 LG *	1.211	218.238	-70.354	0.979431971	22.517	-48.037
512	881017	3122.06	-8 6.93	700.97	0.979237985	0.048	0 0 LG *	1.305	217.122	-69.995	0.979432426	23.986	-46.010
513	881017	3122.19	-8 7.06	669.69	0.979244828	0.024	0 0 LG *	1.180	207.473	-66.893	0.979432600	20.881	-46.012
514	881017	3122.24	-8 7.17	651.00	0.979248903	0.024	0 0 LG *	1.288	201.705	-65.038	0.979432667	19.230	-45.808
515	881017	3122.33	-8 7.27	638.05	0.979251245	0.108	0 0 LG *	1.559	197.712	-63.753	0.979432787	17.729	-46.024
516	881017	3122.34	-8 6.70	680.71	0.979243132	0.0	0 0 LG *	1.253	210.870	-67.986	0.979432801	22.454	-45.531
517	881017	3122.46	-8 6.72	662.26	0.979247136	0.024	0 0 LG *	1.147	205.181	-66.156	0.979432961	20.503	-45.653
518	881017	3122.58	-8 6.73	658.72	0.979247712	0.036	0 0 LG *	1.172	204.396	-65.904	0.979433122	20.159	-45.745
519	881017	3123.18	-8 7.49	613.05	0.979260619	0.012	0 0 LG *	1.043	189.999	-61.493	0.979433925	17.736	-43.535
520	881017	3123.07	-8 7.53	614.21	0.979260203	0.036	0 0 LG *	1.078	190.355	-61.385	0.979433858	17.858	-43.585
521	881017	3123.13	-8 7.38	615.29	0.979260038	0.0	0 0 LG *	1.038	190.690	-61.493	0.979433778	17.908	-43.585
522	881017	3123.28	-8 7.45	615.49	0.979260598	0.0	0 0 LG *	1.007	190.752	-61.513	0.979434059	18.398	-43.115
523	881017	3123.27	-8 7.29	618.27	0.979259838	0.012	0 0 LG *	1.032	191.610	-61.789	0.979434045	18.435	-43.355
524	881017	3123.37	-8 7.12	616.44	0.979260827	0.0	0 0 LG *	1.014	191.044	-61.607	0.979434179	18.706	-42.901
525	881017	3122.09	-8 7.48	637.13	0.979251803	0.0	0 0 LG *	1.351	197.428	-63.662	0.979432466	18.115	-45.547
526	881017	3122.23	-8 7.55	631.16	0.979253564	0.072	0 0 LG *	1.371	195.586	-63.069	0.979432653	17.868	-45.201
527	881018	3122.35	-8 7.39	664.93	0.979246420	0.084	0 0 LG *	1.334	206.005	-66.421	0.979432814	20.945	-45.477
528	881018	3122.44	-8 7.47	664.12	0.979247019	0.0	0 0 LG *	1.434	205.754	-66.341	0.979432935	21.272	-45.068
529	881018	3122.55	-8 7.52	655.22	0.979249444	0.024	0 0 LG *	1.531	203.008	-65.457	0.979433082	20.901	-44.557
530	881018	3122.23	-8 7.41	672.47	0.979244390	0.240	0 0 LG *	1.679	208.330	-67.169	0.979432653	21.645	-44.524
531	881018	3122.14	-8 7.26	682.07	0.979241580	0.024	0 0 LG *	1.415	211.291	-68.121	0.979432533	21.752	-46.369
532	881018	3122.62	-8 6.47	669.03	0.979245119	0.036	0 0 LG *	1.194	207.269	-66.828	0.979433175	21.007	-45.821
533	881018	3122.50	-8 6.44	677.48	0.979244070	0.0	0 0 LG *	1.156	209.876	-67.666	0.979433015	22.088	-45.579
534	881018	3122.41	-8 6.55	666.36	0.979245892	0.0	0 0 LG *	1.174	206.444	-66.563	0.979432894	20.616	-45.946
535	881018	3122.52	-8 6.58	663.35	0.979246591	0.024	0 0 LG *	1.176	205.517	-66.264	0.979433042	20.243	-46.022
536	881018	3122.80	-8 6.80	644.61	0.979250772	0.0	0 0 LG *	1.102	199.735	-64.404	0.979433416	18.193	-46.211
537	881018	3122.80	-8 6.34	676.79	0.979244655	0.024	0 0 LG *	1.256	209.663	-67.598	0.979433416	22.158	-45.440
538	881018	3122.92	-8 6.42	658.57	0.979248344	0.012	0 0 LG *	1.117	204.041	-65.789	0.979433577	19.924	-45.865
539	881018	3122.93	-8 6.61	646.36	0.979251168	0.012	0 0 LG *	1.106	200.276	-64.578	0.979433590	18.960	-45.619
540	881018	3123.10	-8 6.91	630.47	0.979253132	0.0	0 0 LG *	1.071	198.794	-63.101	0.979433818	18.898	-44.102
541	881018	3123.22	-8 6.91	630.47	0.979256469	0.0	0 0 LG *	1.036	195.371	-63.000	0.979433979	19.179	-44.562
542	881018	3123.54	-8 7.19	612.65	0.979262324	0.0	0 0 LG *	0.979	189.875	-61.231	0.979434407	18.771	-42.659
543	881018	3123.67	-8 7.37	607.90	0.979264179	0.012	0 0 LG *	0.998	188.410	-60.759	0.979434581	19.006	-41.753
544	881018	3123.53	-8 7.41	608.96	0.979262906	0.0	0 0 LG *	1.036	188.736	-60.864	0.979434394	18.285	-42.579
545	881018	3123.43	-8 7.51	607.83	0.979263057	0.036	0 0 LG *	1.032	188.388	-60.752	0.979434260	18.217	-42.535
546	881018	3123.47	-8 7.77	595.70	0.979265864	0.120	0 0 LG *	1.195	184.646	-59.545	0.979434313	17.491	-42.056
547	881018	3123.66	-8 7.64	592.06	0.979267082	0.036	0 0 LG *	1.125	183.523	-59.185	0.979434568	17.163	-42.023
548	881018	3123.60	-8 7.76	586.03	0.979268097	0.036	0 0 LG *	1.165	181.663	-58.586	0.979434487	16.437	-42.149
549	881018	3123.39	-8 7.84	595.05	0.979265449	0.060	0 0 LG *	1.184	184.446	-59.482	0.979434206	16.873	-42.609
550	881018	3123.18	-8 7.88	601.11	0.979263893	0.0	0 0 LG *	1.096	186.315	-60.084	0.979433925	17.378	-42.706

DENSITY = 2.40 (G/CM\*\*3)

HAOUZ AREA

MOROCCO ) \*\*\*\*

THE LIST OF GRAVITY SURVEY (

88(YEAR)

ST. NO	OBS. DAY	LAT.	LONG.	LEVEL	ABS. G	C. 30M	ETC	*	TERR. C	F. E. C	B. G. C	NORM. G	ANDM. F	ANDM. B
551	881018	3123.02	-8 7.86	601.14	0.979263655	0.0	0	0	1.107	186.323	-60.087	0.979433711	17.375	-42.712
552	881018	3122.85	-8 7.84	607.08	0.979262017	0.0	0	0	1.143	188.157	-60.677	0.979433483	17.833	-42.845
553	881018	3122.61	-8 7.94	589.86	0.979264485	0.048	0	0	1.548	182.843	-58.966	0.979433162	15.714	-43.253
554	881018	3122.51	-8 8.01	604.22	0.979261424	0.144	0	0	1.543	187.273	-60.393	0.979433028	17.212	-43.181
555	881019	3124.08	-8 8.25	638.10	0.979259218	0.036	0	0	0.938	197.728	-63.758	0.979435130	22.753	-41.005
556	881019	3124.04	-8 8.35	642.75	0.979258264	0.048	0	0	0.909	199.162	-64.220	0.979435076	23.259	-40.961
557	881019	3123.94	-8 8.44	646.19	0.979257368	0.036	0	0	0.860	200.223	-64.561	0.979434943	23.510	-41.052
558	881019	3123.84	-8 8.50	648.59	0.979256613	0.0	0	0	0.822	201.073	-64.835	0.979434809	23.699	-41.135
559	881019	3123.76	-8 8.57	652.65	0.979255637	0.024	0	0	0.914	202.216	-65.202	0.979434701	24.066	-41.137
560	881019	3123.70	-8 8.64	651.43	0.979255994	0.0	0	0	0.815	201.838	-65.081	0.979434621	24.026	-41.055
561	881019	3123.87	-8 8.67	635.22	0.979260064	0.024	0	0	0.803	196.837	-63.472	0.979434849	22.856	-40.616
562	881019	3123.69	-8 8.48	635.73	0.979259140	0.0	0	0	0.822	196.996	-63.523	0.979434608	22.350	-41.173
563	881019	3123.69	-8 8.36	631.34	0.979259966	0.024	0	0	0.853	192.970	-63.087	0.979434608	21.855	-41.231
564	881019	3123.80	-8 8.14	622.68	0.979261703	0.0	0	0	0.853	192.970	-62.227	0.979434735	20.771	-41.456
565	881019	3123.87	-8 8.03	602.74	0.979265833	0.072	0	0	1.252	186.817	-60.246	0.979434849	19.053	-41.193
566	881019	3123.71	-8 8.14	630.46	0.979259702	0.036	0	0	0.916	195.369	-62.999	0.979434835	21.352	-41.647
567	881019	3123.75	-8 8.02	638.39	0.979257712	0.024	0	0	1.247	197.817	-63.787	0.979434888	22.088	-41.699
568	881019	3123.83	-8 7.85	621.03	0.979261621	0.0	0	0	1.184	192.461	-62.063	0.979434608	20.471	-41.593
569	881019	3123.69	-8 7.90	625.08	0.979260340	0.012	0	0	1.191	193.711	-62.466	0.979434608	20.634	-41.832
570	881019	3123.57	-8 7.99	634.93	0.979257722	0.012	0	0	1.187	195.225	-62.953	0.979434447	21.466	-41.977
571	881019	3123.89	-8 8.12	629.55	0.979259211	0.0	0	0	0.870	196.115	-63.239	0.979434514	21.836	-41.403
572	881019	3123.62	-8 8.32	632.88	0.979259366	0.012	0	0	0.870	196.115	-63.239	0.979434514	21.836	-41.403
573	881019	3123.53	-8 8.37	634.89	0.979258635	0.084	0	0	1.094	196.736	-63.439	0.979434394	22.072	-41.367
574	881019	3123.61	-8 8.75	651.31	0.979256062	0.036	0	0	0.827	201.801	-65.069	0.979434501	24.189	-40.880
575	881019	3123.53	-8 8.88	651.61	0.979255948	0.0	0	0	0.791	201.895	-65.099	0.979434594	24.239	-40.860
576	881019	3123.66	-8 8.88	650.79	0.979256687	0.036	0	0	0.823	201.642	-65.018	0.979434568	24.584	-40.434
577	881019	3123.80	-8 8.87	648.11	0.979257411	0.0	0	0	0.760	200.814	-64.751	0.979434755	24.229	-40.522
578	881019	3123.89	-8 8.92	655.13	0.979256164	0.0	0	0	0.924	202.980	-65.448	0.979434876	25.193	-40.256
579	881019	3124.04	-8 8.89	650.80	0.979257483	0.012	0	0	0.809	201.644	-65.019	0.979435076	24.860	-40.158
580	881019	3124.09	-8 8.78	648.83	0.979257951	0.0	0	0	0.823	201.035	-64.823	0.979435143	24.666	-40.157
581	881019	3124.20	-8 8.81	641.93	0.979259648	0.012	0	0	0.890	198.908	-64.138	0.979435291	24.156	-39.982
582	881019	3124.29	-8 8.80	619.50	0.979264914	0.024	0	0	0.835	191.988	-61.911	0.979435411	22.325	-39.586
583	881019	3124.39	-8 8.80	611.52	0.979266956	0.012	0	0	0.801	189.526	-61.719	0.979435545	21.738	-39.381
584	881019	3124.47	-8 8.80	607.74	0.979268090	0.0	0	0	0.786	188.360	-60.743	0.979435652	21.583	-39.160
585	881019	3124.58	-8 8.79	599.03	0.979270312	0.0	0	0	0.800	185.674	-59.678	0.979435800	20.986	-38.892
586	881019	3124.20	-8 8.72	635.36	0.979260894	0.036	0	0	0.875	196.880	-63.486	0.979435291	23.359	-40.127
587	881019	3124.29	-8 8.63	613.00	0.979265989	0.048	0	0	0.866	189.984	-61.266	0.979435411	21.428	-39.838
588	881019	3124.40	-8 8.57	612.31	0.979266415	0.012	0	0	0.785	189.770	-61.197	0.979435558	21.412	-39.785
589	881019	3124.51	-8 8.57	621.33	0.979264765	0.012	0	0	0.835	192.554	-62.093	0.979435706	22.449	-39.644
590	881019	3124.28	-8 8.46	629.88	0.979262027	0.060	0	0	0.862	195.142	-62.942	0.979435358	22.681	-40.261
591	881019	3124.17	-8 8.54	629.72	0.979261957	0.060	0	0	0.869	195.142	-62.942	0.979435250	22.717	-40.209
592	881019	3123.43	-8 8.91	653.99	0.979255224	0.0	0	0	0.823	202.629	-65.335	0.979434260	24.415	-40.920
593	881019	3123.34	-8 8.95	657.86	0.979254225	0.036	0	0	0.888	203.822	-65.719	0.979434139	24.796	-40.923
594	881020	3123.90	-8 9.05	637.32	0.979260337	0.0	0	0	0.765	197.485	-63.680	0.979434889	23.697	-39.983
595	881020	3123.93	-8 9.17	636.00	0.979260722	0.024	0	0	0.835	197.078	-63.549	0.979434929	23.707	-39.843
596	881020	3124.01	-8 9.29	622.06	0.979264256	0.0	0	0	0.811	192.777	-62.165	0.979435036	22.808	-39.357
597	881020	3123.79	-8 8.99	643.35	0.979258836	0.0	0	0	0.758	199.347	-64.279	0.979434742	24.199	-40.080
598	881020	3123.75	-8 9.10	639.57	0.979259755	0.0	0	0	0.771	198.181	-63.904	0.979434658	24.019	-39.886
599	881020	3123.84	-8 9.19	634.84	0.979260889	0.048	0	0	0.838	196.720	-63.434	0.979434809	23.629	-39.806
600	881020	3123.83	-8 9.33	618.37	0.979264522	0.0	0	0	0.918	191.640	-61.799	0.979434795	22.285	-39.514

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	* LG *	TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
601	881020	3123.52	-8 8.69	646.65	0.979256583	0.012	0	0	0.948	200.363	-64.606	0.979434380	23.513	-41.093
602	881020	3123.53	-8 8.57	639.97	0.979258051	0.0	0	0	0.860	198.303	-63.944	0.979434394	22.820	-41.123
603	881020	3123.44	-8 8.43	637.95	0.979257998	0.024	0	0	1.241	197.679	-63.743	0.979434273	22.645	-41.098
604	881020	3123.48	-8 9.01	654.05	0.979255477	0.024	0	0	0.821	202.648	-65.341	0.979434327	24.619	-40.722
605	881020	3123.60	-8 9.02	649.39	0.979256663	0.024	0	0	0.895	191.210	-64.879	0.979434487	24.281	-40.598
606	881020	3123.70	-8 9.21	643.93	0.979258273	0.012	0	0	0.843	199.524	-64.337	0.979434621	24.019	-40.317
607	881020	3123.49	-8 9.19	659.23	0.979254573	0.036	0	0	0.912	204.544	-65.853	0.979434340	25.389	-40.466
608	881020	3123.57	-8 9.27	650.37	0.979256738	0.012	0	0	0.826	201.511	-64.976	0.979434447	24.628	-40.348
609	881020	3123.66	-8 9.33	646.53	0.979258034	0.012	0	0	0.908	200.327	-64.595	0.979434568	24.702	-39.893
610	881020	3123.69	-8 9.54	627.44	0.979262611	0.0	0	0	0.829	194.425	-62.696	0.979434608	23.258	-39.437
611	881020	3123.53	-8 9.51	632.74	0.979260668	0.0	0	0	0.833	196.074	-63.226	0.979434394	23.181	-40.045
612	881020	3123.47	-8 9.37	657.25	0.979254947	0.0	0	0	0.921	203.634	-65.659	0.979434313	25.189	-40.470
613	881020	3123.37	-8 9.27	658.62	0.979254369	0.0	0	0	0.826	204.056	-65.794	0.979434179	25.071	-40.723
614	881020	3123.32	-8 9.09	678.86	0.979269627	0.036	0	0	1.067	210.299	-67.802	0.979434112	26.881	-40.921
615	881020	3124.13	-8 8.26	631.97	0.979260799	0.0	0	0	0.840	195.835	-63.149	0.979435197	22.277	-40.872
616	881020	3124.19	-8 8.27	621.15	0.979263404	0.036	0	0	0.850	192.496	-62.074	0.979435277	21.672	-40.602
617	881020	3124.24	-8 8.27	614.22	0.979265112	0.012	0	0	0.926	190.358	-61.386	0.979435344	21.052	-40.334
618	881020	3124.30	-8 8.27	626.22	0.979262659	0.048	0	0	0.849	194.061	-62.578	0.979435425	22.146	-40.433
619	881020	3124.35	-8 8.27	627.66	0.979262655	0.024	0	0	0.835	194.505	-62.721	0.979435492	22.503	-40.218
620	881020	3124.40	-8 8.28	620.83	0.979264307	0.0	0	0	0.790	192.450	-62.044	0.979435558	21.939	-40.105
621	881020	3124.45	-8 8.27	622.13	0.979264139	0.240	0	0	1.082	192.800	-62.172	0.979435625	22.395	-39.777
622	881020	3124.21	-8 8.34	617.44	0.979264334	0.012	0	0	0.893	191.354	-61.707	0.979435304	20.657	-40.431
623	881020	3124.52	-8 8.39	601.83	0.979268908	0.024	0	0	0.932	186.536	-60.156	0.979435719	20.257	-39.498
624	881020	3124.42	-8 8.11	611.81	0.979265808	0.012	0	0	0.868	189.616	-61.148	0.979435585	20.708	-40.440
625	881020	3124.34	-8 8.10	618.32	0.979264243	0.0	0	0	0.821	191.625	-61.794	0.979435478	21.211	-40.583
626	881020	3124.18	-8 7.88	611.08	0.979265093	0.012	0	0	0.901	189.389	-61.074	0.979435398	19.986	-41.088
627	881020	3124.28	-8 7.83	612.80	0.979264281	0.0	0	0	0.938	189.920	-61.245	0.979435264	19.875	-41.370
628	881020	3124.12	-8 7.96	620.45	0.979262632	0.0	0	0	0.884	192.282	-62.006	0.979435184	20.613	-41.392
629	881020	3124.08	-8 8.11	633.52	0.979269910	0.060	0	0	0.996	196.314	-63.303	0.979435130	22.090	-41.214
630	881020	3123.98	-8 8.10	624.05	0.979261838	0.036	0	0	0.881	193.391	-62.363	0.979434996	21.114	-41.249
631	881020	3123.95	-8 7.95	626.96	0.979262499	0.0	0	0	1.033	194.291	-62.652	0.979434956	21.216	-41.436
632	881020	3124.02	-8 7.77	618.51	0.979263499	0.0	0	0	1.184	201.877	-65.094	0.979435050	23.725	-41.368
633	881021	3124.03	-8 8.26	651.56	0.979255727	0.144	0	0	1.203	200.203	-64.555	0.979434983	23.183	-41.361
634	881021	3123.97	-8 8.25	646.13	0.979266760	0.192	0	0	0.936	194.232	-62.630	0.979434983	21.269	-41.356
635	881021	3123.92	-8 8.25	626.74	0.979261027	0.048	0	0	0.863	192.937	-62.217	0.979434849	20.861	-41.356
636	881021	3123.87	-8 8.25	622.58	0.979261910	0.0	0	0	1.287	190.450	-61.416	0.979434768	20.359	-41.157
637	881021	3123.81	-8 8.24	614.51	0.979263290	0.240	0	0	0.831	193.916	-62.532	0.979434688	21.013	-41.519
638	881021	3123.75	-8 8.25	625.75	0.979260954	0.0	0	0	0.874	194.859	-62.829	0.979434621	21.417	-41.412
639	881021	3123.70	-8 8.25	628.74	0.979260324	0.024	0	0	0.913	194.558	-62.738	0.979434554	21.250	-41.488
640	881021	3123.65	-8 8.24	627.83	0.979260334	0.060	0	0	1.369	191.487	-61.750	0.979434487	20.691	-41.259
641	881021	3123.60	-8 8.24	617.87	0.979263123	0.372	0	0	1.121	195.829	-63.147	0.979434420	21.501	-41.647
642	881021	3123.55	-8 8.23	631.95	0.979255971	0.060	0	0	1.179	192.963	-62.225	0.979434353	20.438	-41.787
643	881021	3123.50	-8 8.24	622.66	0.979260649	0.192	0	0	1.550	185.512	-59.826	0.979434260	18.481	-41.345
644	881021	3123.43	-8 8.25	598.51	0.979265678	0.192	0	0	0.816	208.007	-67.065	0.979433938	26.176	-40.889
645	881021	3123.19	-8 9.08	671.42	0.979251291	0.012	0	0	0.987	201.893	-66.224	0.979433965	25.137	-41.086
646	881021	3123.21	-8 8.89	662.95	0.979252874	0.012	0	0	0.987	201.893	-65.098	0.979434179	24.012	-41.086
647	881021	3123.37	-8 8.73	651.60	0.979255313	0.012	0	0	0.913	202.890	-65.419	0.979434045	24.188	-41.231
648	881021	3123.27	-8 8.69	654.84	0.979254430	0.0	0	0	1.145	200.982	-64.805	0.979434045	23.405	-41.401
649	881021	3123.27	-8 8.54	648.65	0.979255323	0.060	0	0	1.038	196.000	-63.202	0.979434126	22.075	-41.127
650	881021	3123.33	-8 8.40	632.50	0.979255163	0.0	0	0						



ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	* LG *	TERR.C	F.E.C	B.G.C	NDRM.G	ANOM.F	ANOM.B
651	881021	3123.10	-8 8.80	664.74	0.979252123	0.0	0	0	0.857	205.945	-66.402	0.979433818	25.107	-41.295
652	881021	3123.08	-8 8.59	649.30	0.979255049	0.0	0	0	0.952	201.182	-64.870	0.979433791	23.391	-41.478
653	881021	3123.07	-8 9.13	672.42	0.979250878	0.072	0	0	0.892	208.314	-67.164	0.979433778	26.305	-40.858
654	881021	3123.24	-8 9.37	668.51	0.97925161	0.0	0	0	0.976	207.107	-66.776	0.979434005	26.238	-40.537
655	881021	3123.05	-8 8.98	674.35	0.979250222	0.0	0	0	0.880	208.909	-67.355	0.979433751	26.260	-41.095
656	881021	3123.94	-8 8.87	658.38	0.979253534	0.0	0	0	0.866	203.984	-65.771	0.979433604	24.780	-40.991
657	881021	3122.72	-8 8.88	690.55	0.979246136	0.0	0	0	1.001	213.909	-68.963	0.979433309	27.737	-41.226
658	881021	3122.80	-8 8.79	682.16	0.979247895	0.084	0	0	1.152	211.320	-68.130	0.979433416	26.950	-41.180
659	881021	3122.65	-8 8.69	670.97	0.979249516	0.0	0	0	0.905	207.866	-67.020	0.979433216	25.072	-41.948
660	881021	3122.72	-8 8.59	675.31	0.979248951	0.0	0	0	1.028	209.206	-67.451	0.979433309	25.877	-41.574
661	881021	3122.87	-8 8.49	665.70	0.979251281	0.0	0	0	1.018	206.242	-66.498	0.979433510	25.300	-41.467
662	881021	3123.95	-8 8.39	661.17	0.979251933	0.0	0	0	1.080	204.843	-66.047	0.979433617	24.238	-41.809
663	881021	3123.09	-8 8.32	648.23	0.979254580	0.048	0	0	1.123	200.852	-64.764	0.979433805	22.751	-42.013
664	881021	3123.16	-8 8.21	646.32	0.979255048	0.060	0	0	1.110	200.263	-64.574	0.979433898	22.523	-42.051
665	881021	3123.24	-8 8.21	645.54	0.979255325	0.060	0	0	1.276	200.021	-64.496	0.979434005	22.617	-41.880
666	881021	3123.27	-8 8.21	641.86	0.979255378	0.156	0	0	1.331	198.885	-64.131	0.979434045	22.549	-41.582
667	881021	3123.34	-8 8.21	637.79	0.979257385	0.168	0	0	1.469	197.630	-63.727	0.979434139	22.345	-41.382
668	881021	3123.39	-8 8.22	634.13	0.979258136	0.204	0	0	1.596	196.502	-63.364	0.979434206	22.028	-41.336
669	881022	3123.11	-8 8.20	633.20	0.979257772	0.036	0	0	1.009	196.215	-63.272	0.979433831	21.166	-42.106
670	881022	3123.06	-8 8.20	630.48	0.979258170	0.084	0	0	1.072	195.375	-62.772	0.979433764	20.853	-42.148
671	881022	3123.01	-8 8.20	628.17	0.979258661	0.024	0	0	1.041	194.663	-62.772	0.979433697	20.668	-42.104
672	881022	3122.95	-8 8.20	625.48	0.979259148	0.072	0	0	1.112	193.834	-62.505	0.979433617	20.477	-42.029
673	881022	3122.88	-8 8.19	641.45	0.979255899	0.048	0	0	1.135	198.760	-64.090	0.979433523	20.385	-42.020
674	881022	3122.91	-8 8.07	625.86	0.979258906	0.024	0	0	1.092	193.951	-64.543	0.979433564	20.385	-42.158
675	881022	3122.83	-8 8.22	654.73	0.979252973	0.012	0	0	1.248	202.857	-65.409	0.979433457	23.621	-41.788
676	881022	3123.22	-8 8.13	651.17	0.979255010	0.060	0	0	1.353	201.757	-65.055	0.979433979	24.141	-40.914
677	881022	3123.05	-8 8.05	653.55	0.979252630	0.0	0	0	1.833	202.493	-65.292	0.979433751	23.206	-42.086
678	881022	3123.12	-8 8.09	661.60	0.979250990	0.108	0	0	1.773	204.976	-66.090	0.979433845	23.894	-42.196
679	881022	3123.30	-8 8.08	645.61	0.979255226	0.0	0	0	1.387	200.043	-64.504	0.979434086	22.571	-41.933
680	881022	3123.38	-8 8.03	640.79	0.979256007	0.0	0	0	1.866	198.556	-64.025	0.979434193	22.237	-41.788
681	881022	3122.58	-8 8.39	664.66	0.979248827	0.0	0	0	1.012	205.921	-64.394	0.979433122	23.639	-42.755
682	881022	3122.62	-8 8.18	645.81	0.979254173	0.024	0	0	1.202	200.105	-64.523	0.979433175	22.505	-42.218
683	881022	3122.44	-8 8.11	638.41	0.979254337	0.0	0	0	1.232	197.821	-63.788	0.979432935	20.455	-43.333
684	881022	3122.47	-8 8.26	660.31	0.979250311	0.096	0	0	1.394	204.578	-65.962	0.979432975	23.308	-42.654
685	881022	3122.48	-8 8.52	669.31	0.979248912	0.0	0	0	0.952	207.354	-66.855	0.979432988	24.230	-42.625
686	881022	3122.38	-8 8.43	700.91	0.979241275	0.012	0	0	1.899	217.105	-69.990	0.979432854	27.624	-42.566
687	881026	3124.09	-8 9.03	636.06	0.979261249	0.024	0	0	0.817	197.098	-63.556	0.979435143	24.021	-39.535
688	881026	3124.16	-8 9.22	622.75	0.979264500	0.024	0	0	0.842	192.990	-62.234	0.979435237	23.094	-39.139
689	881026	3124.26	-8 9.11	611.69	0.979266092	0.0	0	0	0.827	191.009	-61.596	0.979435371	22.557	-39.039
690	881026	3124.38	-8 8.99	611.69	0.979267102	0.024	0	0	0.885	189.578	-61.135	0.979435532	22.033	-39.102
691	881026	3124.53	-8 8.98	601.29	0.979270082	0.0	0	0	0.816	186.369	-60.102	0.979435733	21.535	-38.567
692	881026	3124.48	-8 9.19	615.69	0.979266995	0.0	0	0	0.792	190.814	-61.533	0.979435666	22.936	-38.597
693	881026	3124.51	-8 9.49	619.07	0.979266645	0.012	0	0	0.941	191.855	-61.868	0.979435706	23.735	-38.133
694	881026	3124.41	-8 9.63	637.03	0.979262780	0.0	0	0	0.803	191.311	-63.652	0.979435572	25.333	-38.319
695	881026	3124.34	-8 9.32	617.31	0.979266320	0.024	0	0	0.730	197.396	-63.652	0.979435478	22.956	-38.737
696	881026	3124.17	-8 9.45	626.44	0.979264074	0.0	0	0	0.803	191.311	-61.693	0.979435478	23.715	-38.886
697	881026	3124.23	-8 9.60	633.06	0.979263120	0.0	0	0	0.734	196.172	-63.258	0.979435331	24.694	-38.564
698	881026	3124.26	-8 9.41	626.52	0.979264182	0.0	0	0	0.769	194.155	-62.609	0.979435371	23.736	-38.873
699	881026	3124.20	-8 9.84	645.32	0.979260616	0.012	0	0	0.741	200.015	-64.495	0.979435291	26.082	-38.413
700	881026	3124.09	-8 9.74	642.52	0.979260904	0.012	0	0	0.744	199.091	-64.197	0.979435143	25.596	-38.601

ST.NO	OBS.DAY	LAT.	LONG.	LEVEL	ABS.G	C.30M	ETC	TERR.C	F.E.C	B.G.C	NORM.G	ANOM.F	ANOM.B
701	881026	3124.03	-8 9.54	635.61	0.979261648	0.0	0 0 LG *	0.870	196.957	-63.510	0.979435063	24.412	-39.028
702	881026	3124.13	-810.16	660.15	0.979258008	0.0	0 0 LG *	0.682	204.529	-65.946	0.979435197	28.022	-37.924
703	881026	3124.07	-810.01	651.48	0.979259361	0.024	0 0 LG *	0.735	201.855	-65.087	0.979435117	26.834	-38.252
704	881026	3123.96	-8 9.81	652.91	0.979258235	0.0	0 0 LG *	0.763	202.297	-65.228	0.979434969	26.325	-38.903
705	881026	3123.84	-8 9.69	651.39	0.979258158	0.0	0 0 LG *	0.931	201.827	-65.077	0.979434809	26.107	-38.971
706	881026	3123.90	-8 9.54	643.76	0.979259456	0.012	0 0 LG *	0.907	199.474	-64.320	0.979434889	26.947	-39.373
707	881026	3123.89	-8 9.99	657.49	0.979257370	0.012	0 0 LG *	0.759	203.709	-65.683	0.979434876	26.962	-38.721
708	881026	3123.70	-8 9.82	658.42	0.979256211	0.024	0 0 LG *	1.004	203.995	-66.775	0.979434621	26.589	-39.186
709	881027	3124.17	-810.12	663.52	0.979257292	0.0	0 0 LG *	0.705	205.568	-66.281	0.979435250	28.314	-37.966
710	881027	3124.22	-810.08	667.38	0.979256338	0.0	0 0 LG *	0.745	206.760	-66.664	0.979435317	28.525	-38.139
711	881027	3124.26	-810.05	663.00	0.979257383	0.0	0 0 LG *	0.718	205.407	-66.229	0.979435371	28.136	-38.092
712	881027	3124.31	-810.01	649.30	0.979260303	0.288	0 0 LG *	1.111	201.181	-64.870	0.979435438	27.157	-37.713
713	881027	3124.36	-8 9.98	657.24	0.979258748	0.012	0 0 LG *	0.715	203.630	-65.657	0.979435505	27.588	-38.070
714	881027	3124.40	-8 9.94	657.56	0.979258670	0.0	0 0 LG *	0.709	203.730	-65.690	0.979435558	27.551	-38.139
715	881027	3124.45	-8 9.91	655.94	0.979259245	0.0	0 0 LG *	0.682	203.230	-65.529	0.979435625	27.532	-37.997
716	881027	3124.49	-8 9.87	657.71	0.979258931	0.0	0 0 LG *	0.695	203.776	-65.705	0.979435679	27.724	-37.980
717	881027	3124.53	-8 9.83	655.03	0.979259661	0.012	0 0 LG *	0.712	202.949	-65.438	0.979435733	27.589	-37.849
718	881027	3124.57	-8 9.80	654.99	0.979259652	0.012	0 0 LG *	0.738	202.935	-65.434	0.979435786	27.539	-37.895
719	881027	3124.62	-8 9.75	651.12	0.979260631	0.024	0 0 LG *	0.783	201.743	-65.051	0.979435853	27.304	-37.746
720	881027	3124.67	-8 9.72	658.43	0.979259002	0.036	0 0 LG *	0.797	203.997	-65.775	0.979435920	27.876	-37.900
721	881027	3124.70	-8 9.67	662.20	0.979258299	0.072	0 0 LG *	0.855	205.160	-66.149	0.979435960	28.353	-37.797
722	881027	3124.75	-8 9.62	685.01	0.979252943	0.036	0 0 LG *	1.558	212.198	-68.413	0.979436027	30.672	-37.741
723	881027	3124.80	-8 9.60	664.91	0.979257997	0.276	0 0 LG *	1.077	205.998	-66.419	0.979436094	28.978	-37.441
724	881027	3124.85	-8 9.77	672.61	0.979253553	0.180	0 0 LG *	1.836	209.916	-67.679	0.979435625	29.679	-38.000
725	881027	3124.57	-8 9.96	652.17	0.979260589	0.0	0 0 LG *	0.679	202.066	-65.154	0.979435786	27.548	-37.666
726	881027	3124.50	-8 9.99	651.57	0.979259285	0.0	0 0 LG *	0.676	201.881	-65.095	0.979435692	27.432	-37.663
727	881027	3124.32	-8 9.86	645.65	0.979260933	0.012	0 0 LG *	0.720	200.054	-64.507	0.979435651	26.255	-38.252
728	881027	3124.21	-8 9.90	652.27	0.979259285	0.024	0 0 LG *	0.775	202.099	-65.165	0.979435237	26.855	-38.310
729	881027	3124.16	-8 9.96	655.47	0.979258584	0.0	0 0 LG *	0.718	203.085	-65.482	0.979435304	27.150	-38.332
730	881027	3124.32	-810.11	657.07	0.979259054	0.0	0 0 LG *	0.701	203.579	-65.641	0.979435451	27.883	-37.758
731	881027	3124.46	-810.17	644.34	0.979262335	0.024	0 0 LG *	0.703	199.650	-64.377	0.979435639	27.049	-37.328
732	881027	3124.22	-810.24	654.58	0.979259640	0.096	0 0 LG *	0.781	202.810	-65.394	0.979435317	27.914	-37.480
733	881027	3124.35	-810.30	650.01	0.979260988	0.0	0 0 LG *	0.700	201.400	-64.940	0.979435492	27.597	-37.343
734	881027	3124.43	-810.44	650.60	0.979261276	0.0	0 0 LG *	0.679	201.583	-64.999	0.979435599	27.938	-37.060
735	881029	3122.11	-8 8.20	634.77	0.979253854	0.060	0 0 LG *	1.243	196.698	-63.427	0.979432493	19.302	-44.125
736	881029	3122.16	-8 8.37	645.00	0.979252375	0.084	0 0 LG *	1.335	199.855	-64.443	0.979432560	21.005	-43.438
737	881029	3122.29	-8 8.22	640.22	0.979253598	0.0	0 0 LG *	1.154	198.381	-63.969	0.979432734	20.400	-43.569
738	881029	3122.18	-8 8.08	631.52	0.979254686	0.060	0 0 LG *	1.318	195.696	-63.105	0.979432587	19.114	-43.991
739	881029	3122.33	-8 8.01	612.22	0.979259119	0.180	0 0 LG *	1.496	189.742	-61.188	0.979432787	17.569	-43.618
740	881029	3122.01	-8 8.08	636.55	0.979252913	0.036	0 0 LG *	1.311	197.248	-63.604	0.979432359	19.114	-44.490
741	881029	3120.60	-8 6.41	752.76	0.979217804	0.0	0 0 LG *	1.460	233.098	-75.128	0.979430473	21.889	-53.238
742	881029	3120.53	-8 6.28	753.90	0.979217116	0.024	0 0 LG *	1.491	233.450	-75.241	0.979430379	21.678	-53.563
743	881029	3120.50	-8 6.15	754.85	0.979216368	0.0	0 0 LG *	1.356	233.744	-75.335	0.979430339	21.129	-54.206
744	8811 7	3123.28	-8 7.63	601.47	0.979263759	0.012	0 0 LG *	1.051	186.424	-60.120	0.979434059	17.175	-42.945
745	8811 7	3123.37	-8 7.62	601.32	0.979264135	0.0	0 0 LG *	1.023	186.380	-60.105	0.979434179	17.359	-42.746

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# APPENDICES



Ap. I-1-1 List of Analyzed Samples

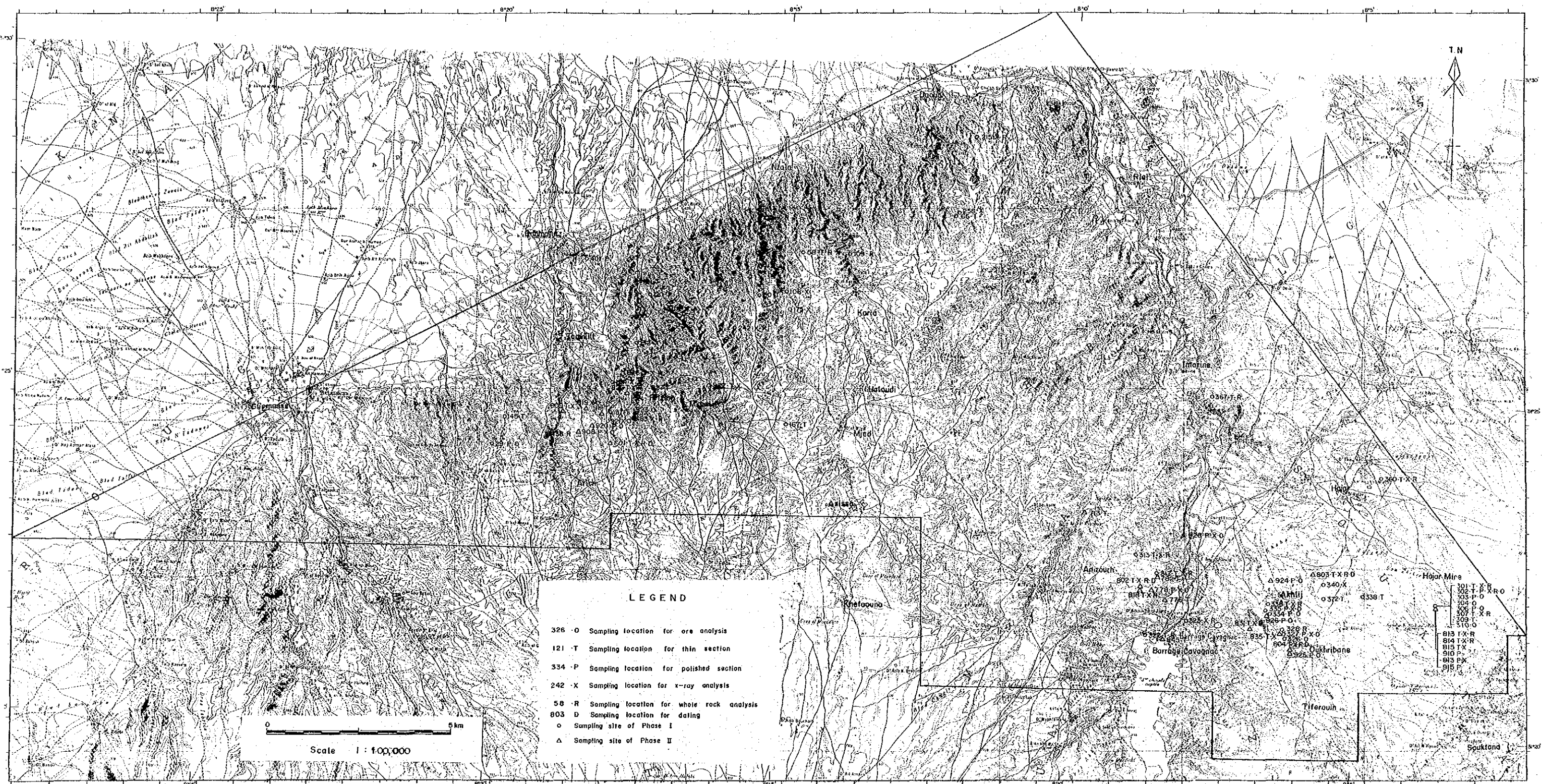
ser. No.	Samp. No.	Rock Name	Geol. Unit*	Loc.	Kind of Analysis					
					TS	PS	XR	WA	OA	DT
1	713	pelitic schist	IIal	Amz.	T					
2	776	sandstone	IIas	Amz.	T					
3	778	Fe gossan	gos	Amz.		P	X		0	
4	782	tuffaceous ss	IIas	Amz.	T					
5	801	rhyolitic rock	Ivv	Fri.	T		X	W		D
6	802	rhyolitic rock	IIav	Amz.	T		X	W		D
7	803	rhyolite	Dk	Akh.	T		X	W		D
8	804	pyroclastic rock	IIat	Ouk.	T		X	W		D
9	813	green rock	IIat	Hja.	T		X	W		
10	814	green rock	IIat	Hja.	T		X	W		
11	815	silicified rock	IIap	Hja.	T		X			
12	818	silty slate	IIav	Amz.	T		X	W		
13	825	dolerite	Dk	Fri.	T		x	W		
14	826	marl	Ic	Fri.	T		X	W		
15	827	siltstone	Ipm	Fri.	T					
16	831	green rock	IIaa	Ouk.	T		X	W		
17	835	slaty rock	IIat	Ouk.	T		X			
18	845	rhyolite	IIav	Amz.	T					
19	908	Cu-Fe oxide vein	gos	Fri.		P	X		0	
20	909	green schist	Ips	Fri.	T		X			
21	910	Cu-Pb-Zn massive ore	ore	Hja.		P				
22	913	Pb-Zn banded ore	ore	Hja.		P	X			
23	915	Pb-Zn banded ore	ore	Hja.		P				
24	918	silicified schist	Ips	Fri.	T					
25	919	Cu-Fe-Qz vein	gos	Fri.			X		0	
26	920	Fe oxide vein	gos	Fri.		P			0	
27	921	Fe oxide massive ore	gos	Fri.			X		0	
28	922	banded calcarenite	Iml	Fri.	T		X			
29	923	malachite ore	gos	Fri.					0	
30	924	Fe oxide vein	gos	Akh.		P			0	
31	925	Cu-Fe oxide vein	gos	Ouk.		P			0	
32	926	Cu-Fe oxide vein	gos	Ouk.		P			0	
33	928	Cu-Fe oxide vein	gos	Amz.		P	X		0	
		Total			20	10	20	10	10	4

Akh.:Akhlij, Fri.:Frizem, Amz.:Amzourh, Hja.:Hajar mine,  
 Ouk.:Oukhribane,  
 TS:thin section, PS:polished section, XR:X-ray diffraction,  
 WA:whole rock analysis, OA:ore analysis, DT:dating

\* See Fig. I - 6.







AP. I-1-2 Location Map of Rock and Ore Samples



Ap. I-2 Assay Results of Ore Samples

No.	Samp. No.	Type of Sample	Grade			
			Cu(%)	Pb(%)	Zn(%)	Ag(g/t)
1	778	Gossan	0.31	1.04	1.37	20
2	908	Oxide Vein	0.21	1.12	0.28	1
3	919	Quartz Vein	0.20	0.12	0.21	3
4	920	Oxide Vein	6.06	0.17	0.44	3
5	921	Gossan	0.29	0.67	0.57	2
6	923	Dissemination	5.48	0.03	0.82	5
7	924	Oxide Vein	0.02	0.15	0.02	2
8	925	Oxide Vein	0.16	0.01	0.01	4
9	926	Oxide Vein	0.04	<0.01	<0.01	7
10	928	Oxide Vein	0.50	0.30	0.77	4

(Sampling location and geological unit are shown in AP.1-1-1)

Ap. I-3 Whole Rock Analysis and Molal Ratio

sample No. rock type (weight %)	801 rhyo	802 rhyo	803 rhyo	804 pyro	813 green	814 green	818 silt	825 dole	826 marl	831 green
SiO2	76.34	62.24	80.28	60.55	54.53	58.63	70.28	52.87	57.80	50.42
Al2O3	12.60	15.53	11.98	16.49	16.99	15.80	13.53	13.40	6.45	15.34
Fe2O3	0.89	0.85	0.22	2.36	1.88	1.68	0.81	3.72	0.92	3.86
FeO	2.21	5.32	0.73	7.14	12.10	4.54	3.60	7.46	1.01	10.70
MgO	2.01	0.86	0.34	2.18	4.01	7.71	1.28	3.03	0.85	3.17
CaO	0.34	3.28	0.89	0.24	0.20	0.89	1.94	5.31	16.68	3.98
Na2O	0.16	4.57	4.50	0.22	0.16	0.59	1.73	3.50	0.98	0.20
K2O	3.50	2.96	0.92	3.19	2.81	4.51	3.49	0.01	0.91	1.93
TiO2	0.19	0.69	0.08	0.96	0.79	0.77	0.72	2.61	0.49	0.85
P2O5	0.27	0.41	0.16	0.13	0.16	0.12	0.14	0.47	0.06	0.15
MnO	0.07	0.23	0.01	0.17	0.22	0.33	0.10	0.22	0.07	0.16
BaO	0.03	0.08	0.01	0.09	0.11	0.04	0.07	0.01	0.01	0.08
LOI	2.77	2.67	1.34	3.56	4.36	4.40	2.55	6.13	14.23	6.86
TOTAL	101.38	99.69	101.46	97.28	98.32	100.01	100.24	98.74	100.46	97.70
+H2O	2.64	1.20	0.83	4.20	5.05	3.51	1.44	3.63	1.18	5.14
(molal ratio)										
SiO2	1.2706	1.0360	1.3362	1.0078	0.9076	0.9759	1.1698	0.8800	0.9621	0.8392
Al2O3	0.1236	0.1523	0.1175	0.1617	0.1666	0.1550	0.1327	0.1314	0.0633	0.1505
Fe2O3	0.0056	0.0053	0.0014	0.0148	0.0118	0.0106	0.0051	0.0233	0.0057	0.0242
FeO	0.0308	0.0740	0.0102	0.0994	0.1684	0.0632	0.0501	0.1038	0.0141	0.1489
MgO	0.0499	0.0213	0.0084	0.0541	0.0995	0.1913	0.0318	0.0752	0.0211	0.0787
CaO	0.0061	0.0585	0.0159	0.0043	0.0036	0.0159	0.0346	0.0947	0.2974	0.0710
Na2O	0.0026	0.0737	0.0726	0.0035	0.0026	0.0095	0.0279	0.0565	0.0158	0.0032
K2O	0.0372	0.0314	0.0098	0.0339	0.0298	0.0479	0.0370	0.0001	0.0097	0.0205
TiO2	0.0024	0.0086	0.0010	0.0120	0.0099	0.0096	0.0090	0.0327	0.0061	0.0106
P2O5	0.0019	0.0029	0.0011	0.0009	0.0011	0.0008	0.0010	0.0033	0.0004	0.0011
MnO	0.0010	0.0032	0.0001	0.0024	0.0031	0.0047	0.0014	0.0031	0.0010	0.0023
BaO	0.0002	0.0005	0.0001	0.0006	0.0007	0.0003	0.0005	0.0001	0.0001	0.0005
A1	0.0894	0.0525	0.0365	0.1391	0.1460	0.1081	0.0728	0.0981	0.0495	0.1509
C	0.0061	0.0585	0.0159	0.0043	0.0036	0.0159	0.0346	0.0947	0.2974	0.0710
F1	0.0816	0.0986	0.0187	0.1559	0.2710	0.2592	0.0833	0.1821	0.0361	0.2298
A2	0.0834	-0.0060	0.0206	0.1348	0.1425	0.0922	0.0382	0.0035	-0.2539	0.0799
K	0.0372	0.0314	0.0098	0.0339	0.0298	0.0479	0.0370	0.0001	0.0097	0.0205
F1	0.0816	0.0986	0.0187	0.1559	0.2710	0.2592	0.0833	0.1821	0.0361	0.2298
A3	0.0121	0.0580	0.0882	0.0601	0.0771	0.0113	0.0216	0.1311	0.0343	0.0890
P2	0.0308	0.0740	0.0102	0.0994	0.1684	0.0632	0.0501	0.1038	0.0141	0.1489
M	0.0499	0.0213	0.0084	0.0541	0.0995	0.1913	0.0318	0.0752	0.0211	0.0787

rhyo:rhyolite, pyro: pyroclastic rock, green:green rock, silt:siltstone, dole:dolerite  
 A1=Al2O3+Fe2O3-(Na2O+K2O), C=CaO, F1=FeO+MgO+MnO, A2=Al2O3+Fe2O3-(Na2O+K2O+CaO),  
 A3=Al2O3-3K2O, F2=FeO, M=MgO

# Ap. I -4-1 Microscopic Observation of Thin Sections

(1)

No. Samp No.	Rock Name	Field Name	Texture	Loc.	Primary Minerals										Secondary Minerals													
					Quartz	Plagioclase	Muscovite	Apatite	Zircon	Tourmaline	Opaque minerals	Xenolith	Rock fragments	Fossil	Quartz	Carbonate	Calcite	Chlorite	Sericite	Biotite	Muscovite	Aldite	Leucokene	Ti-mineral	Fe-oxide	Rutile	Carbonaceous matter	Opaque minerals
1	Bi-Chl schist	Pelitic schist	schistose	Amz.	1	1										4	2											1
2	Meta sandstone	Tuff breccia	weak schistose	Amz.	4		1	1	2							2							1					1
3	Meta sandstone	Tuffaceous sandstone	weak schistose	Amz.	4		1	1	2																			
4	Rhyolitic rock	Rhyolitic rock	porphyritic	Fri.	4	2																		1				1
5	Meta dacite	Rhyolitic rock	porphyritic	Amz.	3				1	2																		1
6	Meta rhyolite	Rhyolite	porphyritic	Akh.	4	3			1							2												
7	Meta siltstone	Pyroclastic rock	weak schistose	Ouk.	4				2																			2
8	Meta sandstone	Green rock	banding	Hja.	4				2																			2
9	Meta sandstone	Green rock	weak schistose	Hja.	4				2							4												3
10	Meta sandstone	Silicified rock	banding	Hja.	4				2	1	1	2																1
11	Meta sandstone	Silty slate	weak schistose	Amz.	4	3			1	2						1												3
12	Altered porphyrite	Dolerite	porphyritic	Fri.	4				2							3												2
13	Meta sandstone	Marl	weak banding	Fri.	4	2			1	1	2																	2
14	Meta sandstone	Siltstone	mosaic	Fri.	4	2			1	1	2																	1
15	Chl-Ms schist	Green rock	schistose	Ouk	4	2										3												3
16	Chl-Ms schist	Slaty rock	schistose	Ouk												3												2
17	Meta porphyrite	Rhyolite	porphyritic	Amz.	3	3			1																			2
18	Chl-Ms schist	Green schist	schistose, banding	Fri.	3											2												2
19	Meta siltstone	Silicified schist	weak schistose	Fri.	4																							2
20	Calcareous schist	Banded calcarenite	schistose, banding	Fri.					1							3												2

A : abundant, 3 : common, 2 : poor, 1 : rare

Akh. : Akhlif, Fri. : Frizem, Amz. : Amzourh, Hja. : Hajar mine, Ouk. : Oukhribane

Bi : Biotite  
Chl : Chlorite  
Ms : Muscovite

Sample No. : 713  
Rock Name : Biotite-chlorite schist

This rock shows schistose texture. Schistosity is constructed by chlorite and biotite arranged in definite orientation. The other components of the rock are quartz, albite, muscovite and carbonate minerals.

Quartz occurs as anhedral grain up to 0.2 mm across. Muscovite is up to 0.05 mm in size and closely coexists with carbonate mineral in subhedral to anhedral crystal.

Sample No. : 776  
Rock Name : Meta sandstone

The rock forming minerals are fine-grained and the rock shows weak schistose texture. It consists mainly of quartz and chlorite. Quartz is smaller than 0.15 mm in size and shows distinct wavy extinction.

The other components are muscovite and opaque minerals.

Muscovite occurs in foliated crystal, up to 0.1 mm in size. Zircon and rutile are present sporadically.

Sample No. : 782  
Rock Name : Meta sandstone

This rock is similar to sample No.776 in mode of mineral occurrence.

It is composed mainly of quartz, with subordinate amounts of chlorite, sericite, biotite and muscovite.

Schistose texture is not so clear comparing with the sample No.776.

Sample No. : 801  
Rock Name : Rhyolitic rock

This rock is strongly altered, but porphyritic texture is slightly observed.

Phenocrysts are plagioclase and quartz.

Plagioclase phenocrysts occur as coarse and tabular crystals, up to 1.5 mm long, and are completely replaced by sericite.

The groundmass is holocrystalline and consists of quartz with wavy extinction.

Secondary minerals are chlorite, biotite, sericite and quartz.

Sample No. : 802  
Rock Name : Meta dacite

This rock shows porphyritic texture with weak foliation.

Plagioclase phenocrysts are smaller than 1.5 mm in size and are partly decomposed to calcite, biotite and quartz.

The groundmass is made up from plagioclase laths, smaller than 0.1 mm across, accompanied with accessory minerals of biotite and sericite.

A small amount of xenolith like porphyrite in round form is seen.

Sample No. : 803  
Rock Name : Meta rhyolite

This rock has porphyritic texture with quartz and plagioclase phenocrysts. Quartz phenocrysts are up to 1.1 mm in size and are characterized by the distinct wavy extinction. Plagioclase phenocrysts, smaller than 0.3 mm in size, are tabular with albite twin.

The groundmass consists mainly of quartz, with subordinate amount of plagioclase. It is recrystallized and shows mosaic texture.

Secondary chlorite and sericite are commonly present in the groundmass.

Sample No. : 804  
Rock Name : Meta siltstone

The rock forming minerals are fine-grained and the rock has weak schistose texture. Clastic grains are quartz and opaque minerals. Quartz is smaller than 0.05 mm in size and is weakly recrystallized with mosaic texture.

Secondary minerals are chlorite, sericite, biotite and Fe-oxide mineral. Chlorite is abundant in anhedral form.

Sample No. : 813  
Rock Name : Meta sandstone

This rock shows weak banding texture. It is composed mainly of quartz and chlorite, with subordinate amounts of sericite and biotite.

Quartz and biotite occur as euhedral crystal, smaller than 0.2 mm in size, respectively.

Chlorite and sericite fill interstices between quartz and chlorite.

(4)

Sample No. : 814  
Rock Name : Meta sandstone

This rock has weak schistose texture. Clastic grains are quartz, muscovite and opaque minerals.

Quartz occurs as euhedral crystal, smaller than 0.1 mm and shows wavy extinction.

The matrix consists mainly of sericite and chlorite, with accessory zircon.

Biotite is tabular crystal, smaller than 0.05 mm in size and is ubiquitous as alteration product.

Sample No. : 815  
Rock Name : Meta sandstone

This rock is very similar to that of sample No.814 in the mode of mineral occurrence, in spite of lacking biotite.

Main constituents are quartz, sericite, muscovite and opaque minerals.

A trace amount of zircon, tourmaline and rutile are seen sporadically as accessory minerals.

Sample No. : 818  
Rock Name : Meta sandstone

This rock is characterized by including a lot of rock fragments and a little of micro fossils.

It shows weak schistose texture.

Clastic materials are quartz, plagioclase, rock fragments, fossils and opaque minerals.

Quartz occurs subrounded to subangular form, smaller than 0.1 mm in size. Rock fragments are subangular form, up to 6 mm long and are composed mainly of shale or pelitic rock.

Sample No. : 825  
Rock Name : Altered porphirite

This rock is strongly chloritized and carbonitized, but it remains porphiritic texture slightly. The rock forming minerals are medium-grained.

Most of phenocrysts are altered to secondary minerals such as chlorite, carbonate and quartz.

The groundmass is made up of plagioclase laths, smaller than 0.6 mm in size.

Sample No. : 826  
Rock Name : Meta sandstone

This rock has weak banding texture with carbonaceous matter in shoestring form. It is fine grained and is composed mainly of quartz and carbonate mineral.

Quartz occurs as anhedral crystals, up to 0.1 mm in size and weakly recrystallized with mosaic texture.

Carbonate mineral is arranged traverse the banding texture. A small amount of sericite in flaky form fills interstices of quartz and carbonate mineral.

Sample No. : 827  
Rock Name : Meta sandstone

The rock forming minerals are fine-grained and the rock shows mosaic texture consisting of abundant quartz.

The other components of the rock are plagioclase, opaque mineral, carbonate, sericite and accessory tourmaline.

Carbonate mineral and sericite fill interstices of quartz.

Sample No. : 831  
Rock Name : Chlorite-muscovite schist

This rock has well-developed schistose texture. Schistosity is constructed by muscovite and chlorite in definite orientation.

The other components of rock are quartz and calcite. Quartz is fine-grained and smaller than 0.05 mm in size.

A carbonate veinlet traverse the schistosity.

Sample No. : 835  
Rock Name : Chlorite-muscovite schist

This rock shows conspicuous schistose texture in the same way as sample No.831.

Main constituent minerals are quartz, muscovite and chlorite. They are fine-grained and smaller than 0.05 mm in size.

A little of biotite in tabular form is also seen as secondary mineral.



Sample No. : 845  
Rock Name : Meta porphyrite

This rock is strongly altered, but porphyritic texture is occasionally observed.

Phenocrysts, turbid in the interior owing to alteration, are plagioclase. It is up to 1.5 mm in size and shows albite twin.

The groundmass is composed mainly of plagioclase. Quartz in anhedral form fills interstices of plagioclase.

Secondary flaky biotite, smaller than 0.05 mm in size, are ubiquitous.

Sample No. : 909  
Rock Name : Chlorite-muscovite schist

This rock has conspicuous schistose and banding texture. Schistosity is formed by quartz, muscovite and chlorite.

Quartz shows distinct wavy extinction and partly occurs in veinlet.

A little carbonaceous matter is seen in a parallel direction to the schistose texture.

Sample No. : 918  
Rock Name : Meta siltstone

The rock forming minerals are very fine-grained and the rock shows weak schistose texture.

The main constituent is quartz, next in abundance is muscovite, then Fe-oxide mineral.

Fe-oxide mineral forms aggregation and is arranged in narrow bands. Muscovite traverses these bands and constructs the schistosity.

Sample No. : 922  
Rock Name : Calcareous schist

This rock shows distinct banding texture and well-developed schistose texture. It is composed mainly of calcite, quartz, with subordinate amounts of plagioclase, biotite, chlorite and muscovite.

Quartz is smaller than 0.08 mm in mosaic texture and shows wavy extinction.

Rare zircon is present sporadically.

Ap. I-4-2 Microphotograph of Thin Sections

(1)

No.	Sample No.	Rock Name
(1) (2)	713	Bi-Chl schist
(3) (4)	776	Meta sandstone
(5) (6)	801	Rhyolitic rock
(7) (8)	802	Meta dacite
(9) (10)	803	Meta rhyolite
(11) (12)	804	Meta siltstone
(13) (14)	813	Meta sandstone
(15) (16)	909	Chl-Ms schist

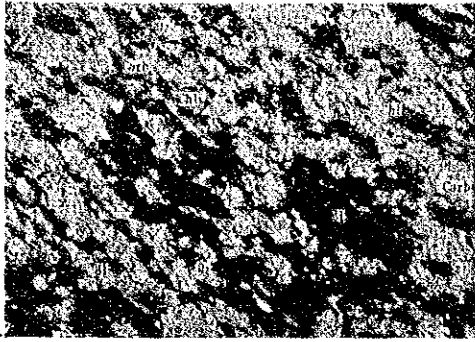
(Abbreviation)

Bi : biotite  
 Cal : calcite  
 Carb : carbonate minerals  
 Chl : chlorite  
 Fe : Fe oxide minerals  
 Ms : muscovite  
 Opq : opaque minerals  
 Pl : plagioclase  
 Qz : quartz  
 Rf : rock fragments  
 Rt : rutile  
 Ser : sericite  
 Tl : tourmaline

(2)

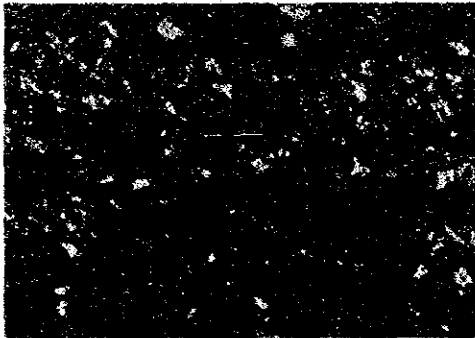
(1) 713

The rock has schistose texture with a compositional banding. Muscovite coexists with carbonate mineral and chlorite.



Plain polarized light 0 0.5mm

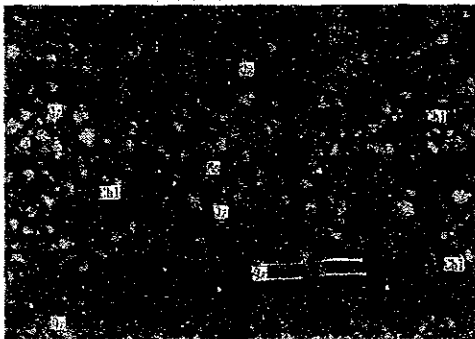
(2) 713



Crossed polarized light 0 0.5mm

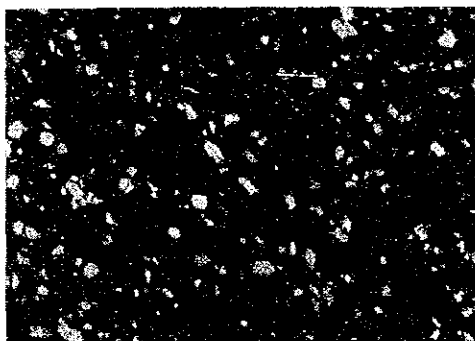
(3) 776

The rock is fine-grained and has weak schistose texture, consisting of abundant quartz grains.



Plain polarized light 0 0.5mm

(4) 776

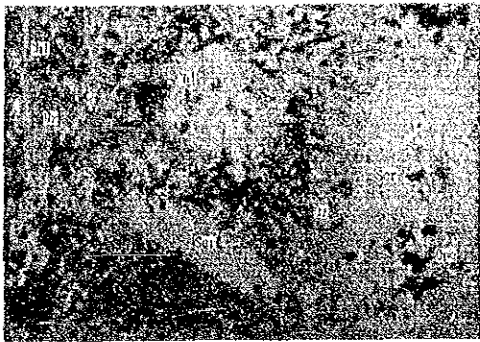


Crossed polarized light 0 0.5mm

(3)

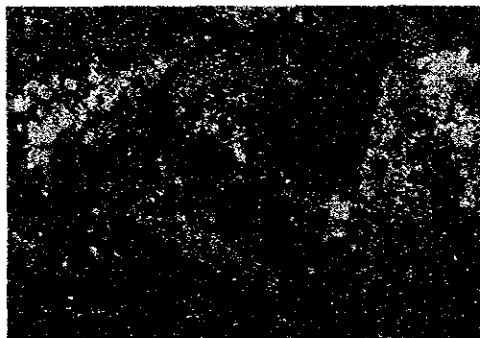
(5) 801

The rock shows faint porphyritic texture. Plagioclase phenocrysts are totally replaced by sericite.



Plain polarized light 0 0.5mm

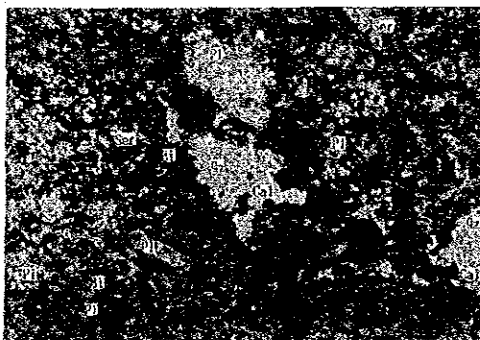
(6) 801



Crossed polarized light 0 0.5mm

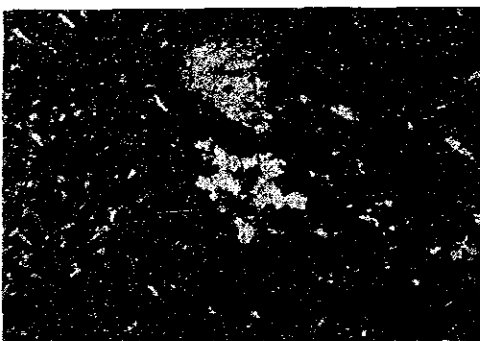
(7) 802

The rock shows porphyritic texture with weak foliation. a lot of minute biotite are shown.



Plain polarized light 0 0.5mm

(8) 802

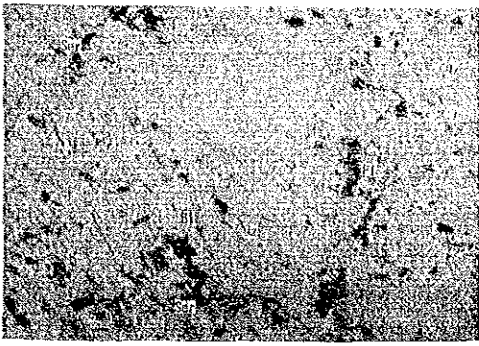


Crossed polarized light 0 0.5mm

(4)

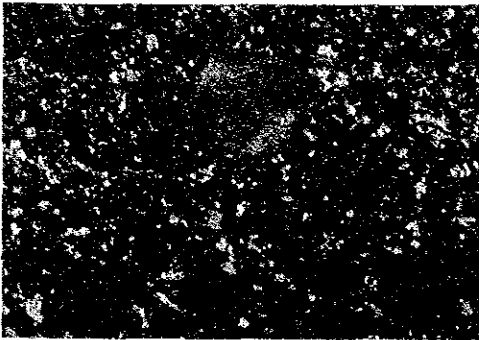
(9) 803

The rock, having porphyritic texture, is weakly recrystallized. Quartz phenocryst shows wavy extinction.



Plain polarized light 0 0.5mm

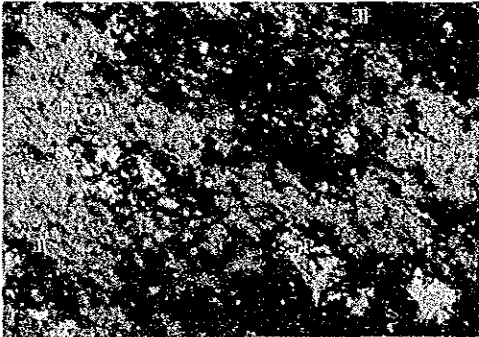
(10) 803



Crossed polarized light 0 0.5mm

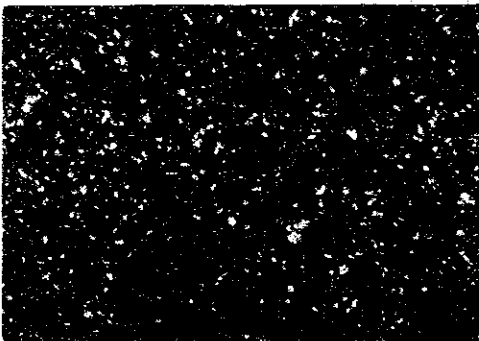
(11) 804

Biotite and sericite show shistose texture with quartz and calcite.



Plain polarized light 0 0.5mm

(12) 804

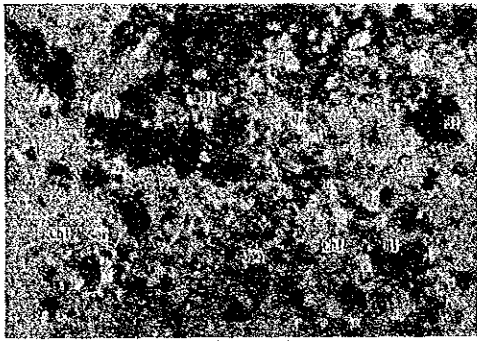


Crossed polarized light 0 0.5mm

(5)

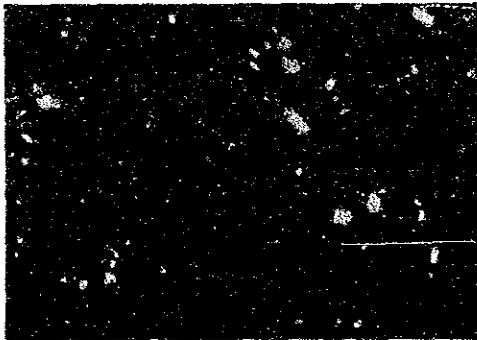
(13) 813

Biotite occurs in euhedral crystal, less than 0.2mm in diameter. Matrix is composed mainly of chlorite and sericite.



Plain polarized light 0 0.2mm

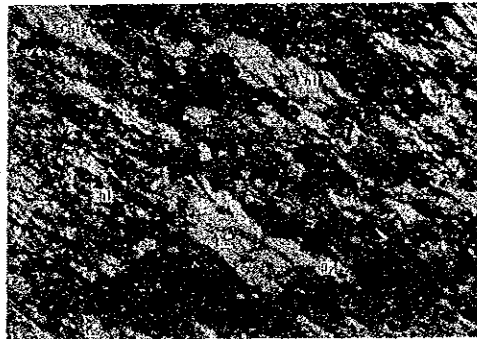
(14) 813



Crossed polarized light 0 0.2mm

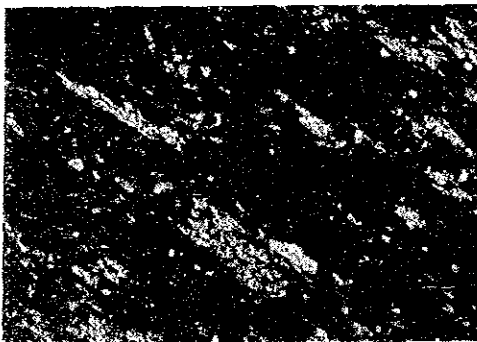
(15) 909

The rock has conspicuous schistose texture, consisting of quartz, muscovite and chlorite.



Plain polarized light 0 0.5mm

(16) 909



Crossed polarized light 0 0.5mm

Ap. I -5-1 Microscopic Observation of Polished Sections

(1)

No. Samp. No.	Rock Type	Location	Sphalerite	Galena	Chalcopyrite	Pyrite	Marcasite	Pyrrhotite	Arsenopyrite	Hematite	Goethite	Manganese Oxide
1	778 Oxidized Fe Vein	Amzourh			1					4	4	
2	908 Oxidized Fe Vein	Frizem				1				4	4	
3	910 Massive Ore	Hajar Mine	4	4	2	1		4				
4	913 Banded Ore	Hajar Mine	4	2	2	4	4					
5	915 Banded Ore	Hajar Mine	4	3	2	1	1	4	1			
6	920 Oxidized Fe Vein	Frizem								4	2	
7	924 Oxidized Fe Vein	Akhlij								4	3	
8	925 Oxidized Fe Vein	Oukhribane								4	4	
9	926 Oxidized Fe Vein	Oukhribane								4	3	2
10	928 Oxidized Fe Vein	Amzourh			1					3	3	

4:abundant, 3:common, 2:poor, 1:rare

Sample No. : 778  
Rock Name : Porous oxidized Fe ore

(2)

This specimen is strongly oxidized with many cavities and cracks. It consists mainly of hematite and goethite.

Hematite and goethite, showing the botryoidal aggregate, are closely associated with each other and sometimes form concentric zonal texture.

Only one grain of chalcopyrite, considered to be primary mineral, is found in this specimen, less than 0.01 mm in diameter.

Sample No. : 908  
Rock Name : Oxidized Fe ore

The mode of occurrence of hematite and goethite are the same as those of sample No. 778.

Hematite closely coexists with goethite in the botryoidal aggregate.

Pyrite occurs as minute, euhedral grain less than 0.02 mm in diameter.

Sample No. : 910  
Rock Name : Cu-Pb-Zn ore

This specimen is massive sulfide ore composed mainly of sphalerite, pyrrhotite, galena and chalcopyrite with a minute pyrite.

Sphalerite and pyrrhotite occur as euhedral grains and show simple intergrowth texture, respectively.

Galena occurs as subhedral to anhedral grain and fills interstices between sphalerite and pyrrhotite.

Chalcopyrite is often observed in the coarse grain of sphalerite as minute euhedral to subhedral grains.

Sample No. : 913  
Rock Name : Cu-Pb-Zn ore

This specimen is massive sulfide ore with distinct banding structure. It consists mainly of pyrite, marcasite and sphalerite, with subordinate amounts of chalcopyrite and galena.

Pyrite occurs as euhedral to subhedral grain filling interstices among sphalerite, and often shows "bird's eye" structure.

Marcasite occurs in the margin of pyrite and looks like decomposed crystal from pyrite.

Partly, crushed structure, composed of small pyrite and sphalerite crystal fragment, is also observed.



Sample No. : 915  
Rock Name : Cu-Pb-Zn ore

This specimen is similar to that of sample No.910 in mineralogy and the mode of occurrence of ore minerals. It shows banding structure.

Sphalerite and pyrrhotite widely and abundantly occurs as coarse euhedral grains, associated with small amount of inclusions.

Galena and chalcopyrite show subhedral to anhedral crystals and occupy interstices between sphalerite and pyrrhotite.

Minute arsenopyrite grains are rarely observed as inclusions in coarse pyrrhotite.

Sample No. : 920  
Rock Name : Oxidized Fe ore

The ore mineral assemblage is very simple in this specimen. It is composed mainly of hematite, with subordinate amount of goethite.

It shows dendritic and partly botryoidal texture with many cavities. Lattice-shape replacement texture is occasionally observed in the porous mass.

Hematite fills cracks and cavities of gangue minerals as anhedral grain and coexist with goethite in the aggregate mass.

Sample No. : 924  
Rock Name : Oxidized Fe ore

The ore minerals shows fine-grained and this specimen has dendritic texture with small gangue minerals.

Ore minerals replace compact original rock and partly penetrate gangue minerals in forming the botryoidal texture. This specimen consists mainly of hematite, closely coexisting with goethite-like minerals.

In this specimen, there is a mineral that forms finely crystalline aggregate and has the optical properties as follows, color:bluish white~ light gray, birefractance:distinct, anisotropy:distinct~ strong. So, there is a possibility that it may be Mn-oxide mineral.

Sample No. : 925  
Rock Name : Oxidized Fe ore

This specimen shows dendritic texture and partly botryoidal one. It consists mainly of hematite and goethite.

Hematite, showing a lattice-shaped replacement texture, closely coexists with goethite.

Occasionally goethite occurs as anhedral crystal in cubic form grain. It suggests that goethite is the product of pyrite.

There is no sulfide mineral observed in this specimen.

Sample No. : 926  
Rock Name : Oxidized Fe ore

This specimen shows banding and replacement structure in reddish, massive matrix.

The main ore mineral is hematite, next in abundance is goethite. A lot of hematite are concordantly arranged and fill the cracks in gangue minerals.

Mn-oxide mineral, in sheaf-like aggregates, coexists with hematite and goethite. It is also conformably arranged to the above mentioned structure.

Sample No. : 928  
Rock Name : Oxidized Fe ore

This specimen is similar to the sample No.926 in mineral assemblage. It consists mainly of hematite and goethite.

Hematite coexists with goethite in showing concentric zonal texture and fills interstices and cracks in the country rock.

Goethite is observed as anhedral crystals and pseudomorphs after pyrite.

Chalcopyrite rarely occurs as euhedral crystal dispersed in gangue mineral.

Ap. I-5-2 Microphotograph of Polished Sections

(1)

No.	Sample No.	Rock Name
(1)	778	Oxidized Fe vein
(2)	910	Massive ore
(3)	913	Banded ore
(4)	925	Oxidized Fe vein

(Abbreviation)

Cp : chalcopyrite  
 G : gangue minerals  
 Gn : galena  
 Goe : goethite  
 Hm : hematite  
 Lim : limonite  
 Ms : marcasite  
 Po : pyrrhotite  
 Py : pyrite  
 Sp : sphalerite

(2)

(1) 778

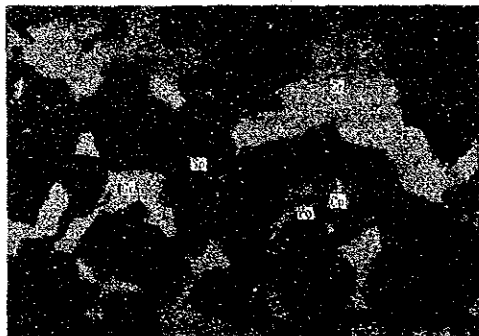
Oxidation-ore with rhythmic colloform textures, which consist of alternating goethite and hematite.



Plain polarized light 0 0.1mm

(2) 910

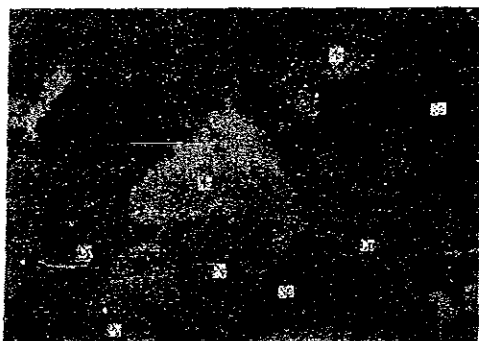
Galena occurs filling interstices among euhedral sphalerite. Chalcopyrite and pyrrhotite also closely associate with sphalerites.



Plain polarized light 0 0.02mm

(3) 913

Marcasite and pyrite displaying "bird's eye" texture. Marcasite shows a strong anisotropy.



Plain polarized light 0 0.1mm

(4) 925

Hematite filling cracks or cavities in compact mass, forms colloform texture.



Plain polarized light 0 0.2mm

Ap. I -6 Results and Charts of X-Ray Diffractive Analysis

(1)

No. Samp No.	Rock Type	Location	Quartz	Plagioclase	Calcite	Sericite	Biotite	Chlorite	Sphalerite	Galena	Chalcopyrite	Pyrite	Marcasite	Hematite	Goethite	Pyrolusite	Todorokite	Alunite
1	778 Gossan	Amzourh																
2	801 Rhyolite	Frizem	4			3		3				1		3	4			
3	802 Rhyolite	Amzourh	4	4	3	3	4	1				1						
4	803 Rhyolite	Akhlij	4	4	1	2	1	2										
5	804 Green Rock	Akhlij	4	4		4	2	4										
6	813 Green Rock	Hajar	4			3	3	4										
7	814 Green Rock	Hajar	4	2		3	4	4				2						
8	815 Sil Rock	Hajar	4			4		2										
9	818 Silty Sl	Amzourh	4	4		3	4	4										
10	825 Dolerite	Frizem	4	4	2	1		4							2			
11	826 Marl	Frizem	4		4	3		2										
12	831 Green Rock	Oukhrifane	4		4	2		4										
13	835 Slaty Rock	Akhlij	4		4	3		4										
14	908 Gossan	Frizem			4										3			2
15	909 Green Sch	Frizem	4			3		4										
16	913 Banded Ore	Hajar			2				4	2	2	3	2					
17	919 Gossan	Frizem												4	2	4		1
18	921 Gossan	Frizem	4		4									2	2	2		2
19	922 Calcarenite	Frizem	4	2	4	1									1			
20	928 Gossan	Amzourh	3					1						4	4			

Sil Rock: Silicified Rock, Sl: Slate, Sch: Schist,  
 4: abundant, 3: common, 2: poor, 1: rare

