

Summary of Changes to 1993 Re-release of Open File 2239 vs. Original GAS File Data

History

Open File 2239 is a more user-friendly, digital version of the complete contents of GAS File 027 (GAS = Geochemical Analysis System, a system for the analysis and archival storage of applied geochemical data). GAS File 027 contains field information and analytical data for lake sediments (near-shore) collected in 1972 in Operation Bear-Slave. The GAS File data are stored in an 80-column width format from the original computer punched cards and are not readily useable. The GAS File data were partially released in Geological Survey of Canada Preliminary Maps 9-1972 to 15-1972 (sample locations, Map 16-1972). These maps plot the element value, as a number, at each site.

The original GAS File was divided up into three parts: introduction, field information and geochemical data. The original Open File was therefore made up of three files: intro.txt, field.txt and chem.txt and was released in 1990. The purpose of releasing the data as an Open File was to provide a user-friendly version of the unpublished GAS File data and to release the data in their entirety.

In 1993, some errors were found in the 1990 release of Open File 2239. This was due to errors in the original 1972 compilation of the data in GAS File 027, from which Open File 2239 was derived. An erratum was issued and the Open File was re-released in 1993. Changes were made to some rock type codes and UTM zones (and therefore NTS map sheets), but not to Easting or Northing values, as summarized in the erratum:

Release of digital file of regional lake sediment geochemical data for the Bear-Slave operation, District of Mackenzie, Northwest Territories; W.A. Spirito, C.C. Durham, E.M. Cameron

Please note that this open file has errors in some rock codes and site coordinates. If you purchased this open file, please return your diskettes with shipping information to the Geological Survey of Canada, Ottawa and you will be sent an updated version.

Prière de noter que ce dossier public contient des erreurs dans les codes d'identification des roches et les coordonnées des sites. Si vous avez fait l'achat de ce dossier, veuillez nous retourner les disquettes avec votre adresse de retour à la Commission géologique du Canada à Ottawa, et nous vous renverrons une version corrigée.

Since 1993, new formats of the files have been created when requested. For example, the analytical data were split into three files based on zone; the field and analytical data were converted to .xls and .dbf files; and, an MS-Access database was created. All of these later formats included the changes to rock type code, UTM zone and NTS map sheet.

Documenting the Changes

The changes to rock type, zone and map sheet that occur between the original GAS file/original release of Open File 2239 and the 1993 re-release of Open File 2339 are documented below. From this point forward, when GAS File 027 is referred to, it is understood to also refer to the 1990 release of Open File 2239, because, as noted in History, the Open File is a replica of the complete contents of the GAS File.

Rock Type Code

Table 1 shows the changes to rock type code between the original GAS file and the 1993 re-release of Open File 2239 in the file “field.txt”. The changes were made for those codes which were not defined in the GAS file. Fifty-six rock type codes were changed. In all but six instances, the necessary change was obvious. There are six codes (near the end of the table) which were changed, but may still not be correct. They are identified with a “?” in the rock code.

Table 1. Changes to Rock Type Code in the 1993 Re-release of Open File 2239 vs. the Original GAS File 027

MapSheet_ GAS	Sample_ Number _GAS	RockType _GAS	MapSheet _OF	Sample_ Number _OF	RockType _OF	Could Also Be...?
76B	4838	AUCC	76B	4838	AVCC	
76B	4839	AUCC	76B	4839	AVCC	
76B	4840	AUCC	76B	4840	AVCC	
76B	4841	AUCC	76B	4841	AVCC	
76B	4842	AUCC	76B	4842	AVCC	
76B	4843	AUCC	76B	4843	AVCC	
76B	4845	AUCC	76B	4845	AVCC	
76B	4878	AUCC	76B	4878	AVCC	
76B	4879	AUCC	76B	4879	AVCC	
76B	4881	AUCC	76B	4881	AVCC	
76C	4856	AUCC	76C	4856	AVCC	
76C	4882	AUCC	76C	4882	AVCC	
76C	4883	AUCC	76C	4883	AVCC	
76C	4884	AUCC	76C	4884	AVCC	
76C	5200	AUCC	76C	5200	AVCC	
76C	5242	AUCC	76C	5242	AVCC	
76D	5005	GDSC	76D	5005	CDSC	
76E	546	CRGS	76E	546	GRGS	
76E	547	CRGS	76E	547	GRGS	
76E	2583	CGIM	76E	2583	CGLM	
76E	4586	GRIR	76E	4586	GRDR	
76E	4681	GBRR	76E	4681	GBBR	
76E	4682	GBRR	76E	4682	GBBR	
76F	3081	AUCC	76F	3081	AVCC	
76F	4885	AUCC	76F	4885	AVCC	
76F	4886	AUCC	76F	4886	AVCC	

76F	4887	AUCC	76F	4887	AVCC	
76F	4888	AUCC	76F	4888	AVCC	
76F	5245	AUCC	76F	5245	AVCC	
76G	2994	GRTZ	76G	2994	QRTZ	
76G	3030	GDSC	76G	3030	CDSC	
76G	4837	AUCC	76G	4837	AVCC	
86A	4501	GRGR	86A	4501	GRDR ?	GRGS
86B	118	ADCS	86B	118	ACSC	
86B	193	ADCS	86B	193	ACSC	
86B	201	ADCS	86B	201	ACSC	
86B	208	ADCS	86B	208	ACSC	
86B	211	ADCS	86B	211	ACSC	
86B	213	ADCS	86B	213	ACSC	
86B	214	ADCS	86B	214	ACSC	
86B	215	ADCS	86B	215	ACSC	
86B	236	ADCS	86B	236	ACSC	
86B	237	ADCS	86B	237	ACSC	
86B	238	ADCS	86B	238	ACSC	
86B	239	ADCS	86B	239	ACSC	
86B	240	ADCS	86B	240	ACSC	
86B	241	ADCS	86B	241	ACSC	
86B	242	ADCS	86B	242	ACSC	
86B	243	ADCS	86B	243	ACSC	
86B	4322	SCST	86B	4322	MGMT ?	??
86G	231	ADCS	86G	231	ACSC	
86G	258	ADCS	86G	258	ACSC	
86G	4275	GBCD	86G	4275	GBBR ?	CDSC or ?
86G	4276	GBCD	86G	4276	GBBR ?	CDSC or ?
86G	4277	GBCD	86G	4277	GBBR ?	CDSC or ?
86G	4278	GBCD	86G	4278	GRGS ?	GBBR or ?

In addition, there are errors in rock type codes referred to in the introduction part of GAS File 027. These have been corrected in the 1993 re-release of Open File 2239 in the file “intro.txt”:

Table 2. Changes to Rock Type Code in the 1993 Re-release of Open File 2239 vs. the Original GAS File 027

Incorrect Rock Type Code	Corrected Rock Type Code	Rock Type
AVCS	ACSC	Andalusite, Cordierite Schist
CDSM	CDSC	Cordierite Schist
CLGM	CGLM	Conglomerate

UTM Zone and Map Sheet

Table 3 lists the changes to zone and map sheet between the original GAS File and the 1993 re-release of Open File 2239 in the files “field.txt” and “chem.txt”. The errors were noticed by a user of the data and passed on to the authors. Thirty-five changes were made, one from Zone 11 to Zone 12 and the rest from Zone 12 to Zone 11. None of the Easting or Northing values were changed.

Table 3. Changes to Zone and Map Sheet in the 1993 Re-release of Open File 2239 vs. the Original GAS File 027

Sample Number _GAS	MapSheet _GAS	Zone _GAS	Easting _GAS	Northing _GAS	Sample Number _OF	MapSheet _OF	Zone _OF	Easting _OF	Northing _OF
2471	86G	11	363900	7308200	2471	86H	12	363900	7308200
433	86A	12	641700	7171000	433	86B	11	641700	7171000
434	86A	12	637600	7171600	434	86B	11	637600	7171600
435	86A	12	631400	7170800	435	86B	11	631400	7170800
436	86A	12	628300	7170500	436	86B	11	628300	7170500
437	86A	12	622500	7170600	437	86B	11	622500	7170600
438	86A	12	622500	7167900	438	86B	11	622500	7167900
439	86A	12	621700	7162300	439	86B	11	621700	7162300
440	86A	12	621900	7159300	440	86B	11	621900	7159300
441	86A	12	628600	7158100	441	86B	11	628600	7158100
442	86A	12	631900	7158400	442	86B	11	631900	7158400
443	86A	12	632600	7161000	443	86B	11	632600	7161000
444	86A	12	628700	7162000	444	86B	11	628700	7162000
445	86A	12	629100	7166900	445	86B	11	629100	7166900
446	86A	12	632500	7166600	446	86B	11	632500	7166600
447	86A	12	637400	7168300	447	86B	11	637400	7168300
448	86A	12	637300	7163500	448	86B	11	637300	7163500
449	86A	12	637900	7158700	449	86B	11	637900	7158700
450	86A	12	643100	7157300	450	86B	11	643100	7157300
2399	86H	12	639600	7218000	2399	86G	11	639600	7218000
2400	86H	12	638900	7213500	2400	86G	11	638900	7213500
2401	86H	12	632300	7212600	2401	86G	11	632300	7212600
2402	86H	12	631400	7218800	2402	86G	11	631400	7218800
2403	86H	12	631300	7222100	2403	86G	11	631300	7222100
2404	86H	12	628900	7227700	2404	86G	11	628900	7227700
2405	86H	12	628400	7221200	2405	86G	11	628400	7221200
2406	86H	12	629100	7219200	2406	86G	11	629100	7219200
2407	86H	12	628100	7213900	2407	86G	11	628100	7213900
2408	86H	12	622000	7214300	2408	86G	11	622000	7214300
2409	86H	12	623200	7216600	2409	86G	11	623200	7216600
2410	86H	12	623200	7216600	2410	86G	11	623200	7216600
2411	86H	12	621500	7222100	2411	86G	11	621500	7222100
2412	86H	12	622800	7228900	2412	86G	11	622800	7228900

Sample Number _GAS	MapSheet _GAS	Zone GAS	Easting GAS	Northing GAS	Sample Number _OF	MapSheet _OF	Zone _OF	Easting OF	Northing _OF
2413	86H	12	622900	7232400	2413	86G	11	622900	7232400
2414	86H	12	627000	7232000	2414	86G	11	627000	7232000

Disclaimer

The changes noted in Tables 1, 2 and 3 were made to the 1993 re-release of Open File 2239 because of known errors. It is possible that other errors still exist.

Other Known Issues

Open File 2578 (Kjarsgaard et al., 1992) is a release of new analytical data for samples from the Bear-Slave Operation. The open file contains a subset of samples from GAS File 027/Open File 2239 from NTS map sheets 76B, C, D. None of the samples in OF 2278 had known errors in their zone or map sheet, as noted in Table 3.

However, the samples in OF 2578 do not plot in exactly the same places as on the original maps published in 1972. The locations are shifted slightly by differing amounts and in different directions, depending on the location in the study area. The shift seems variable, but not random. We have determined that it is not a NAD 27/NAD 83 issue.

It is possible that there is a slight difference in the base maps used in 1972 (they were created from base maps published in the mid 1960s) and 1992. We compared the same lat/long point on the OF 2578 base map and the original 1972 map and there does seem to be a slight offset. There are no UTM's on the original 1972 map, which would have made it easier to compare specific points. We hope to visit National Archives to find the original base maps and compare them with the base maps used for Open File 2578.

References

Kjarsgaard, B., Friske, P.W.B., McCurdy, M.W., Lynch, J.J., Gross, H, Durham, C.C., Day, S.J. (1992).

Reanalysis of selected lake sediment samples from the Bear-Slave operation, Northwest Territories (parts of 76B and 76D). Geological Survey of Canada, Open File 2578.

Spirito, W.A., Durham, C.C., Cameron, E.M. (1990).

Digital file of regional lake sediment geochemical data for the Bear-Slave Operation, District of Mackenzie, Northwest Territories. Geological Survey of Canada, Open File 2239.