



MEMORANDUM

NOTE DE SERVICE

TO
A → Dr. R.A. Price
Director General

FROM
DE EGM

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE - N / RÉFÉRENCE
YOUR FILE - V / RÉFÉRENCE
DATE September 17, 1984

SUBJECT
OBJET Documentation in support of Merit Award proposal for STAMP
(Sudbury Timmins Algoma Minerals Program) participants (EMR)

1. As per my original memo on this subject (June 20, 1984) and subsequent discussions, I am attaching herewith the rationale and documentation in support of the nomination of the EMR STAMP/STAC (Stamp Advisory Committee) team for the next Award Program. The persons involved are as follows:

- ✓ J.M. Duke (GSC/EGM)
- K.H. Poulsen (GSC/EGM)
- F.W. Chandler (GSC/PC)
- R.I. Thorpe (GSC/EGM)
- W.W. Shilts (GSC/TS)
- C.R. McLeod (GSC/EGM)
- D.F. Garson (GSC/EGM)
- J. Stapledon (GSC/DGO)
- C. Bowstead (ES H.Q.)
- R. Keyes (MPS)

2. The supporting documentation for this nomination includes:

- A. Nomination Statement and Rationale
- B. Appendix I - History and Evaluation of STAMP (draft internal document by J.M. Duke)
- C. Appendix II - List of technical publications resulting from STAMP and example of report cover
- D. Appendix III - Letters in support of STAMP (unsolicited)
- E. Appendix IV - newspaper clippings
- F. Appendix V - Excerpts from Deputy Minister's Briefing Letters
- G. Appendix VI - STAMP videotape (availability of).

3. You will note that two members of the proposed slate are non-GSC (C. Bowstead, R. Keyes). Although we wholeheartedly support their inclusion in the list, from a documentation viewpoint it may be useful to have statements from their respective managers (Drs. Hutchison and Miller) to include in the package.

D.C. Findlay

Nomination of EMR STAMP Team for Group Merit Award

Introduction

The EMR employees involved in the design, planning and implementation of the Sudbury Timmins Algoma Mineral Program are hereby nominated for the Merit Award Program under category 3d, which states:

"The completion, by a group of five or more employees, of an assignment the results of which are of an exceptionally high order of achievement having an impact of regional or national importance."

Description of STAMP

The Sudbury Timmins Algoma Mineral Program (STAMP) was a \$1.56 million federal government job creation initiative which ran from October 3, 1983 through May 25, 1984. The program was designed and implemented by EMR and managed by Laurentian University. The cost of the program was provided by CEIC through Section 38 and the Employment Initiatives Reserve. (See program overview in Appendix 1).

STAMP had two objectives. Firstly, it was to provide short term employment (6-8 mo.) for a significant number of geologists and other technically qualified people from the mining sector – an occupational group particularly hard hit by the recession. Secondly, the program was to generate data which would potentially lead to exploration activity in the private sector and thereby stimulate further and longer term employment.

Chronology of STAMP

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|---------------|--|
| June 15, 1983 | Mrs. Erola (Minister of State for Mines) instructs Department (EMR) to prepare plans for a federal job creation program in the Sudbury, Timmins and Saulte Ste. Marie areas. |
| July 6 | GSC presents outline of Northern Ontario Geological Survey ("NOGS") to Minister Erola. |
| July 12 | Minister Erola instructs Department to proceed with the design and implementation of program (now called "STAMP"). |
| July 15 | GSC team begins to develop details of STAMP project. |
| July 22 | First of weekly meetings of departmental STAMP team, chaired by Dr. W.W. Hutchison, ADM Earth Sciences. |
| July 29 | Laurentian University, through Prof. A. Beswick (Chairman, Department of Geology) indicates initial interest in sponsoring STAMP (in accordance with CEIC "Third Party" sponsor requirements for Section 38 programs). |

- August 3 W.W. Hutchison, J.M. Duke brief Minister Erola on STAMP progress. R. Keyes (MPS) visits CEIC/Toronto to advise of STAMP plans.
- August 4 R. Keyes, J.M. Duke and J. Kurylłowicz (Minister's office) brief regional and district CEIC staff as well as Prof. Beswick and Dean Goldsack (Laurentian University) on STAMP.
- August 12 Laurentian University formally agrees to sponsor STAMP.
- August 19-26 Treasury Board submission prepared and awaiting Minister Chretien's signature.
- August 26 STAC (STAMP Technical Advisory Committee) formalized at GSC.
- August 29 CEIC writes EMR giving authorization to proceed with STAMP planning.
- September 1 STAMP submission to Treasury Board (by hand).
- September 13 Formal application for Section 38 funds submitted to CEIC.
- September 15 T.B. approval received.
- September 16 Section 38 funds approved by CEIC.
- September 17 STAMP formally announced in Sudbury (press conference).
- September 22 GSC staff (D.C Findlay, J.M. Duke, K.H. Poulsen and W.W. Shilts) brief OMNR (Ont. Ministry of Natural Resources) officials on STAMP in Toronto.
- September 22 R.J. Keyes, C.C. Bowstead and D. Janes (CEIC) meet with Laurentian University officials in Sudbury to start preparation of five formal contracts required by CEIC.
- September 26 C.C. Bowstead travels to Sudbury to retrieve signed contracts from University signature by ADM Earth Sciences in Ottawa.
- September 27 R. Keyes takes contracts to Toronto for CEIC signature.
- September 29 Staffing for STAMP projects begins at CEIC offices, Sudbury. STAC team (GSC) conducts interviews for STAMP project leaders.
- October 3 Program officially begins. First STAMP employee begins work.

- October 6 J.M. Duke, C.C. Bowstead and D. Janes (CEIC) to Sudbury to rewrite contracts with Laurentian University (in accordance with changes required by CEIC).
- December 2 Press Conference in Sudbury by Laurentian University to report on progress of STAMP. F.W. Chandler attends for STAC.
- Feb. 15, 1984 STAC meets with Prof. Beswick and Dean Goldsack to review STAMP progress. Eight-week extension of STAMP sought to allow completion of analytical work and reports. T.B. submission prepared for extension. Extension granted to May 25, 1984.
- May 25 STAMP completed.
- July (end) STAMP project report manuscripts received by GSC from Laurentian University.
- Oct.-Nov. STAMP reports to be released by GSC (see Appendix II).

Results of STAMP

STAMP successfully achieved its objectives. The program generated 1792 person weeks of employment over its 35 week duration. This represents about 90% of the objective set in the program proposal. Altogether 82 different people were employed at one time or another during the program. Five technical reports were produced as a result of the program, these are listed in Appendix 2. The reports are of a high quality, and are expected to lead to some exploration work by the private sector. (See also Appendix 3 - Letters in support of STAMP).

Apart from immediate job creation and useful technical results, the program had other benefits.

- (a) The persons employed by the program in many cases received experience and training which left them better equipped to seek permanent employment. Although we have not specifically followed-up this aspect, we do know of several individuals who have subsequently acquired permanent jobs.
- (b) Laurentian University benefitted from its role as program manager through an upgrading of its facilities and the enhancement of its reputation. For example, STAMP was the subject of a one-half hour television program shown on the northern network and produced by the University (see Videotape - Appendix 6).
- (c) STAMP was a high profile program that generated positive publicity for the federal government. See, for example, the numerous press clippings in Appendix 4, the letters in support of STAMP in Appendix 2, and the excerpts from the Deputy Minister's briefing notes in Appendix 5.

The success of STAMP may be attributed to a number of factors, some of which are detailed in Appendix 1. However, these factors fall into four general areas.

1. Anticipation. Although planning for STAMP per se did not begin until July 1983, this sort of program had been discussed within GSC over the preceding 6 months. Therefore the STAMP team had an idea of the types of activities that should be feasible under such a program.
2. Technical Design. The technical design and budget of the program was sound. The objectives set out in the contracts with the sponsor were achievable, notwithstanding the severe constraints of weather, geography and administrative requirements outlined in Appendix 1.
3. Implementation. Once the technical design of the program had been drafted, it was necessary to enlist a non-governmental sponsor for the program, receive CEIC approval, receive Treasury Board approval, negotiate contracts with the sponsor, liaise with the Ontario Ministry of Natural Resources which made some of its facilities available for the program, and revise the technical design almost constantly to accommodate new wrinkles introduced by these other activities.
4. Execution. Successful execution of the program was in part a result of the sound technical and administrative design. However, the major share of the credit for program execution belongs to the Laurentian team, in particular, to Professor A. Beswick, Chairman of the Department of Geology.

Contributions of EMR STAMP team individuals

J.M. Duke (GSC/Economic Geology and Mineralogy Division)

Chairman GSC "STAC" (STAMP Technical Advisory Committee); coordinated GSC technical input in design and planning of STAMP projects. Served as principal liaison between GSC and ADM (Earth Sciences) and Mineral Policy Sector (R. Keyes). Made numerous trips to Sudbury in connection with STAMP planning and negotiations with Laurentian University and CEIC officials. Principal liaison with Prof. A. Beswick, Laurentian University on STAMP technical matters. Much of the credit for the technical success of STAMP is due to Dr. Duke.

K.H. Poulsen (GSC/EGM)

Member, STAC. Active in technical design of STAMP projects and in making arrangements with local (Sudbury) OMNR (Ont. Ministry of Natural Resources) and CEIC officials. Member of GSC interview team that selected key STAMP employees. Because of his extensive geological knowledge of northern Ontario regions and his numerous contacts within OMNR Dr. Poulsen played a key role in the design and start-up phases of STAMP.

F.W. Chandler (GSC/PC)

Member, STAC; principal scientific contact (for GSC) on Project 3 (Huronian Supergroup). Contributed extensively to early design of STAMP projects and to the recruitment of STAMP employees. Consulted extensively with OMNR (Ont. Geol. Survey) staff in the selection of specific work areas under Project 3. Served as editor and critical reader of Project 3 final report. In general, through his enthusiasm and energy contributed significantly to STAMP.

R.I. Thorpe (GSC/EGM)

Member, STAC. Was extensively involved in the technical design of STAMP projects, in particular in the early efforts to produce quickly a sound project work plan, for Departmental Management. Initiated and carried out the original design work for Project 2 (Swayze Belt).

W.W. Shilts (GSC/TS)

Member, STAC. Was responsible for final design of Project 2 (Swayze Belt Geochemistry) and for setting up field procedures and monitoring initial sampling operations on the project. Acted as Scientific Authority on the project and critical reader of final reports.

C.R. McLeod (GSC/EGM)

Secretary, STAC. From the beginning of STAMP planning Mr. McLeod served as the "glue" and expediter in arranging meetings and schedules, liaison with staff in other Divisions and other agencies in a variety of STAMP administrative chores and in general keeping excellent track and records of STAMP/STAC proceedings from the GSC standpoint.

D.F. Garson (GSC/EGM)

Member, STAC. Responsible for the design and implementation arrangements for Project 1 (Mineral Data Base). Liaised with OMNR and Laurentian personnel in making local arrangements for sites and facilities for Data Base input and compilation facilities. Was responsible for ensuring that quality control on file input was maintained to CANMINDEX standards. With his staff, has prepared output from the project for publication as GSC Open File, a process that required more effort on GSC side (because of the nature of the project) than in the case of other STAMP projects.

J. Stapeldon (GSC/DGO)

Member, STAC. DGO (Director General's Office) representative in GSC/STAMP, particularly on financial administration side. Along with C. Bowstead (see below) worked on ensuring that the somewhat complex financial and administrative arrangements, involving three organizations (EMR, CEIC and Laurentian University) were in place and functioning smoothly.

C. Bowstead (Earth Sciences Sector, EMR)

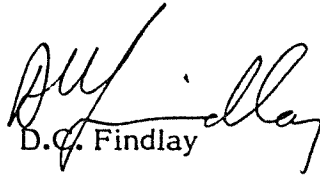
Acted as ADM's (Dr. W.W. Hutchison) representative in tripartite negotiations and discussions with CEIC, Laurentian University and EMR. Worked out contractual and financial arrangements with CEIC and Laurentian officials and established financial accounting and reporting procedures used in ensuring that STAMP records and accounting were in accordance with accepted standards.

R. Keyes (Mineral Policy Sector, EMR)

Acted as principal EMR agent in discussions and planning with CEIC officials to ensure that job creation objectives of STAMP were met. Played large role in local arrangements (Sudbury) with CEIC and Laurentian officials. Liaised with GSC technical staff in project design and in general served as an important and energetic member of EMR/STAMP team.

Summary

In summary the STAMP team is being nominated for the Merit Award Program under the Group category because the staff involved demonstrated, throughout a four-month period of concentrated and hectic effort (the design and preliminary implementation phases of STAMP): (1) a collective will to get the program in place and running, (2) considerable innovative skill and (at times) ad-hoc diplomacy in working with an unfamiliar mix of disparate agencies and officials, and (3) a great deal of hard work and dedicated effort in meeting the various internal deadlines necessary for successful implementation of the program. Particularly in the last category, this translated to many hours of work in addition to normal duty hours. Each participant of the team brought his own special skills and experience to the project and, in the last analysis, it was the blending of these individual skills that allowed the project to proceed successfully.


D.C. Findlay

HISTORY AND EVALUATION
OF THE
SUDBURY TIMMINS ALGOMA MINERAL PROGRAM

INTRODUCTION

The Sudbury Timmins Algoma Mineral Program (STAMP) was a \$1.56 million federal government job creation initiative which was carried out from October 3, 1983 through May 25, 1984. STAMP was intentionally designed to employ a large proportion of geologists, chemists and other technically qualified people. Moreover, it was to produce a body of scientific data of practical as well as academic value which it was hoped would lead to exploration activity on the part of the private sector.

STAMP achieved its objectives. The program generated 1792 person-weeks employment over its 35 week duration: this represented about 90 per cent of the objective set out in the program proposal. Once the program was underway, from 43 to 67 individuals were employed at any given time (Figure 1). Altogether, 82 different people were employed at one time or another during the program, and of these 44 were university graduates and 25 held technical school diplomas (Figure 2). Five technical reports were produced by the program. These reports will be released during October and November of 1984, and it is expected that the data they contain will lead to at least some exploration activity on the part of the private sector.

The program was designed and implemented by EMR in cooperation with CEIC, and managed by Laurentian University. The \$1.56 million cost of the program was provided by CEIC through Section 38 and the Employment Initiatives Reserve.

DESCRIPTION OF PROGRAM

STAMP comprised the following five projects:

Project 1 - Mineral Data Base

The objectives of this project were to collect, code and enter basic information on mineral occurrences in north-central Ontario into the Geological Survey of Canada mineral data bank, specifically the CANMINDEX file; to provide information on these occurrences to the Ontario Geological Survey in their file format, and update information for the EMR National Mineral Inventory (NMI) system; and, finally, to compile available rock geochemical data. As a result of this project, xxxx occurrences were added to the CANMINDEX file and xxxx existing

MANPOWER CHART

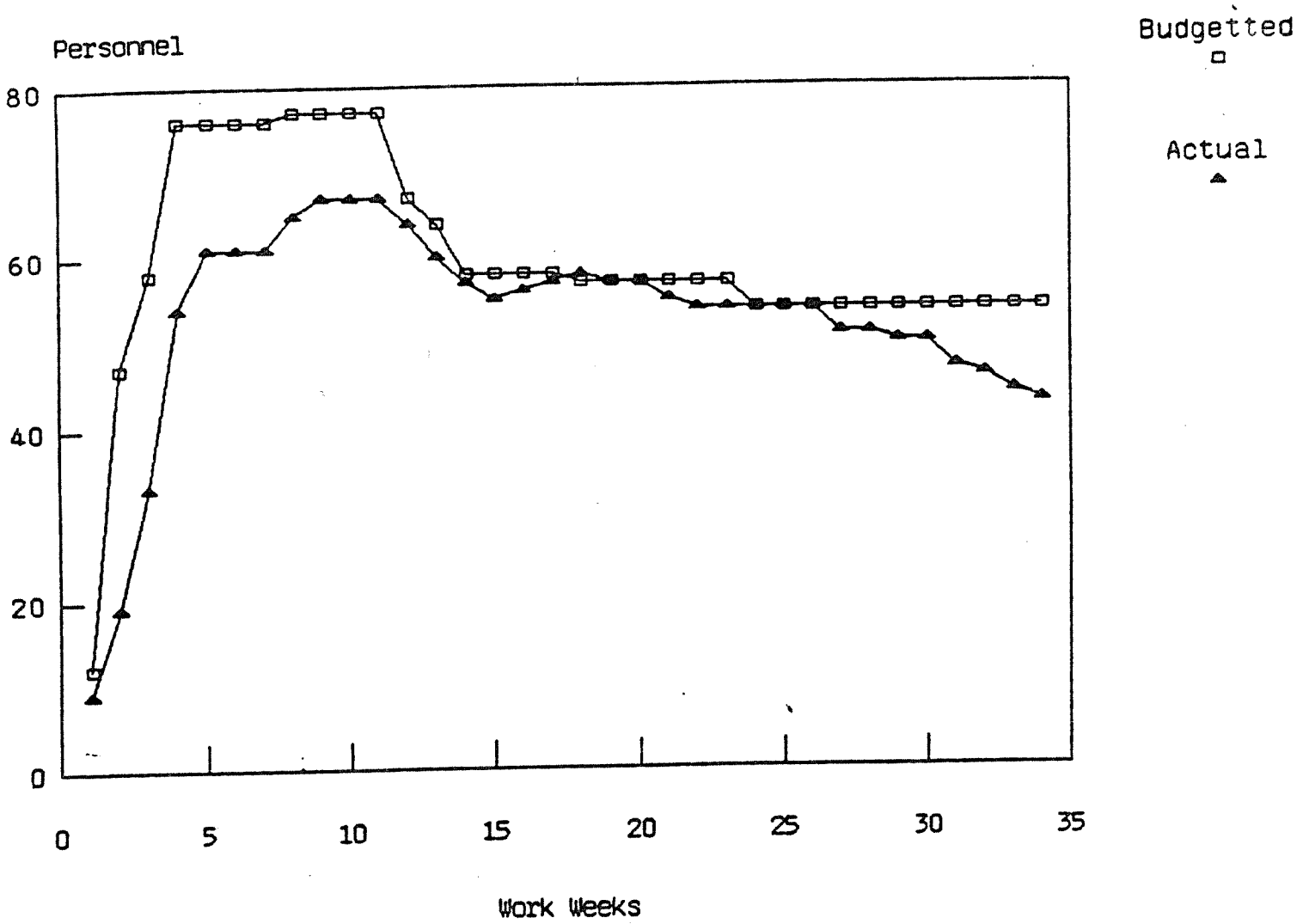


Figure 1. Work Weeks for all Projects versus Personnel

SLEDBURY, TIMMINS, ALGOMA MINERAL PROGRAMME(S.T.A.M.P.)

Distribution of Employees by Education

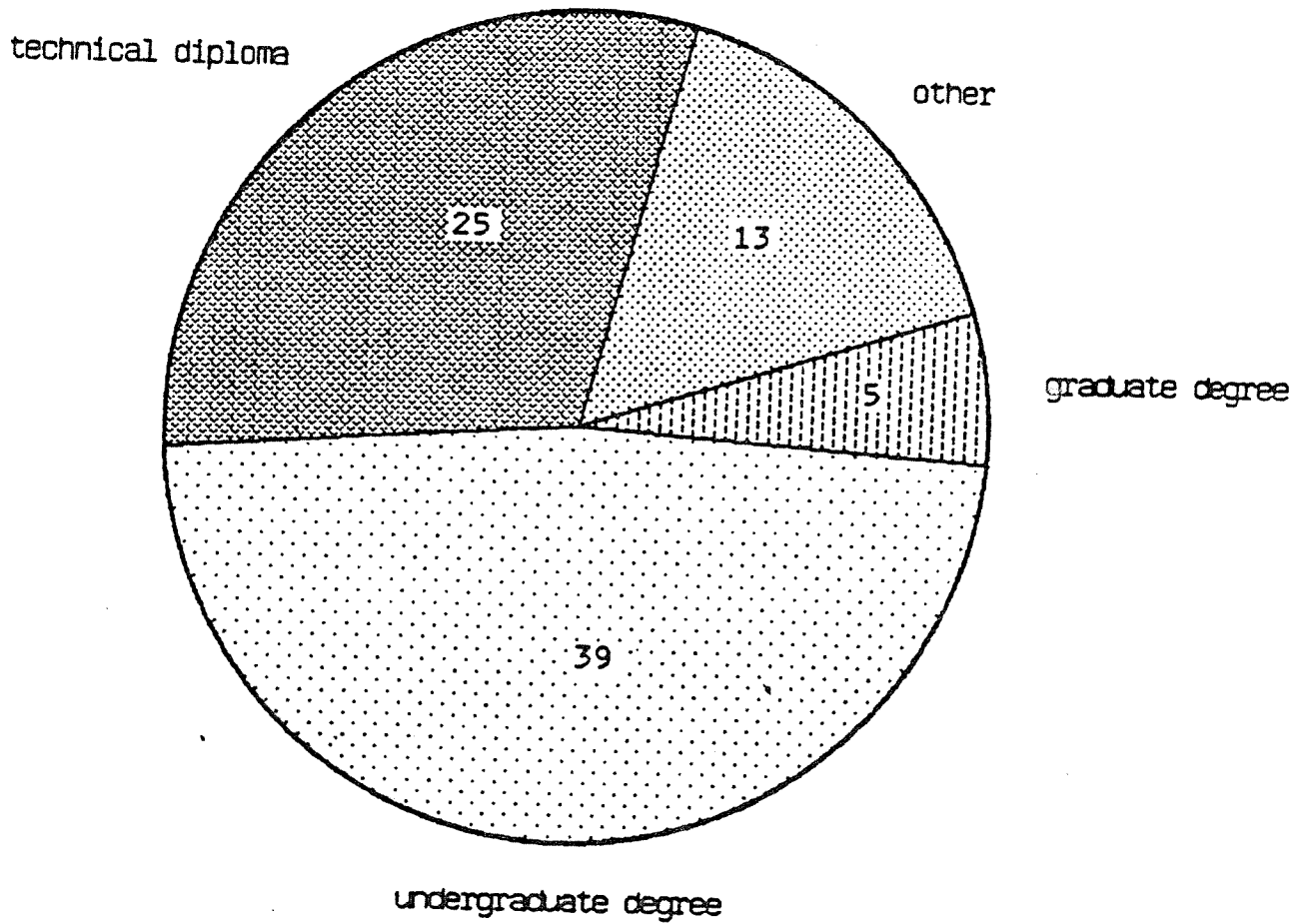


Figure 1 Absolute Distribution of Employees by Education

records were substantially updated. The results of the project are to be released in GSC Open File 1087 entitled "Mineral Inventory of the Sudbury-Timmins-Sault Ste. Marie Region" in November 1984. Project 1 resulted in 675 person weeks employment.

Project 2 - Swayze Belt Overburden Geochemistry

The objective of this project was to identify target areas for mineral exploration by geochemical sampling and analyses of esker material in the Chapleau-Foyleyet-Gogama area. Thirteen eskers in the 2000 sq. km. area were sampled at 0.5 km. intervals yielding about 400 samples for chemical and lithological analysis. The analyses have revealed numerous samples which contain anomalous levels of gold and base metals, and when these results are released as GSC Open File Report 1088 in November, some exploration activity should be generated. This project generated 254 person weeks of employment.

Project 3 - Huronian Supergroup Geochemistry

The objective of this project was to define areas within particular sedimentary formations of the Huronian Supergroup that carry anomalous metal concentrations. About 2000 samples were collected and analysed. Numerous samples having anomalous metal concentrations have been identified. The most significant result of this project, however, is the recognition of certain stratigraphic units which appear to be favourable for the occurrence of mineralization. This project created 380 person weeks of employment.

Project 4 - Rock Chemical Mineral Exploration Criteria

This project comprises two distinct subprojects. The first is a study of base metal concentrations in the Onaping Formation in the Sudbury Basin. More than 600 samples were collected and analysed. Although the results would not appear likely to generate much exploration activity, they will provide useful information on the background concentrations and recommended sampling procedures, and thus form a useful database for future exploration. The results of this project will be released as GSC Open File Report 1090.

The objective of subproject 4b was to determine variations in rock geochemistry and mineralogy in the Temagami greenstone belt and relate these to alteration patterns associated with mineralization. About 900 samples were collected and analysed by chemical and x-ray techniques. The computer programs used to treat the data successfully identified areas of known mineralization and, more importantly from the standpoint of exploration, have indicated several additional areas with a good potential for undiscovered mineralization. The results of

this subproject will be released in October as GSC Open File Report 1091.

Project 4 generated 364 person weeks of employment.

Project 5 - Program Administration

As the title suggests, this objective of this project was to provide administrative support for the four scientific projects. A total of 119 person weeks of employment were created by this project.

A NARRATIVE HISTORY OF STAMP

The seed for STAMP was sown in June 1982 when Roy MacLaren, MP for Etobicoke North, received a suggestion from a constituent that the Federal and Ontario governments jointly implement a "make work" program to employ some of the estimated 400 unemployed geologists in the province. Mr. MacLaren passed on this suggestion to Minister Erola, and discussions were subsequently held among representatives of MPS, GSC, OGS and OMNR on the possibility of initiating a job creation scheme under the Canada/Ontario Special Employment Program (Mining Sector).

In early November 1982, INCO Ltd. submitted a proposal for a mineral exploration job creation program to the federal and provincial governments. Although the proposal had technical merit, it was not taken up because it was viewed as favouring one company to the detriment of many others.

In mid December 1982, D.C. Findlay, Director of the Economic Geology Division, suggested that the GSC renew efforts to mount job creation programs under Section 38 and the NEED program, and called for specific suggestions from division personnel. Six projects were suggested for Ontario and these were forwarded for comment to the Ontario Geological Survey in early February 1983. For its part, the Ontario MNR presented a proposal entitled the "Sudbury Exploration Assistance Program" (SEAP). In mid March GSC and OGS personnel met in Toronto to further explore the possibility of a joint "Sudbury Area Geological Survey" (SAGS) as proposed by OGS/OMNR, as well as SEAP and the GSC proposal from February. In this meeting, the Ontario representatives indicated a reluctance to proceed with "make work" proposals under the NEED program while expressing a willingness to pursue longer term joint geoscientific programs.

Negotiations between the federal and Ontario governments broke down on the political level in mid June 1983, and Minister Erola instructed the Department to prepare plans for a stand-alone federal program in

the Sudbury, Timmins and Sault Ste. Marie areas. An outline of a "Northern Ontario Geological Survey" (NOGS) was prepared by GSC and was presented to the Minister on July 6. NOGS would incorporate 2 projects generating 880 person weeks employment from August 1983 through March 1984. Minister Erola instructed the Department to proceed with design and implementation of the program on July 12 and with this STAMP was born.

The GSC team was put together and began the design phase of STAMP in earnest on July 15, 1983. This was a difficult task given the constraints upon the program (see below), and also because at this time the total funding and areas eligible for the program were not known. Moreover, many of the constraints outlined below were not known to the team at the outset but only became apparent piecemeal over the weeks leading up to the start of the program. The team developed a program comprising three projects that corresponded generally to Projects 1, 2 and 3 above.

The first of the weekly meetings of the departmental STAMP team was held on July 22 under the Chairmanship of W.W. Hutchison, ADM Earth Sciences. The main problem at this point was to identify a sponsor (i.e., manager) for the program in accordance with CEIC regulations. The GSC was charged with this responsibility, with modifying the program design to meet budgetary and CEIC requirements, and with beginning preparation of the required Treasury Board submission. R. Keyes of MPS was given the responsibility of liaison with CEIC.

At the departmental meeting of July 29, J. Kuryllowicz of the Minister's office reported that Laurentian University through Professor A. Beswick had indicated an interest in acting as program sponsor. It was also agreed to incorporate a fourth project in STAMP. This was proposed by Professor Beswick and dealt with Rock Chemical Exploration Methods.

On August 3, W.W. Hutchison and J.M. Duke briefed Minister Erola on the technical content and progress towards implementation. On the same day, R. Keyes visited CEIC in Toronto to advise them of STAMP plans.

J. Kuryllowicz, R. Keyes and J.M. Duke visited Sudbury on August 4 and outlined the planned program for both regional and district CEIC officers as well as for Professor Beswick and Dean Goldsack of Laurentian University. The latter expressed tentative agreement to sponsor the program and promised a final response by August 12.

At the departmental STAMP meeting of August 5, it appeared as though STAMP was well on the road to being put in place. The main concern was

the necessity of achieving rapid Treasury Board and CEIC approval of the program as it was realized that if start-up was delayed much beyond the beginning of October, weather conditions might well force cancellation of much of the program. Another area of concern was the matter of hiring consultants to run some of the projects if suitable leaders were not available. It was subsequently determined that this would be permissible if necessary, but it was agreed that it would be inappropriate for permanent employees of the sponsor to receive consulting fees.

Laurentian University formally agreed to serve as sponsor of STAMP in a conference call with the EMR STAMP team on August 12, 1983. It was agreed after consultation with CEIC that whereas the University would not be allowed to charge an overhead fee against the program, it would be permitted to charge rental for space at rates which did not exceed local commercial rates. In order to reduce the administrative burden on the University, it was agreed to hire a program administrator and clerical staff as part of the program (i.e., from the unemployment roles).

At the departmental STAMP meeting of August 19, a proposal from Laurentian University was discussed. Rather than contract out chemical analytical work to commercial labs as set out in the program design, the University proposed to undertake this work itself. It would have to purchase some equipment but would recover the costs by renting the equipment to the program. This proposal would have the advantage of increasing the number of person weeks of employment generated by the program. It was determined that CEIC had no objections to this proposal and it was adopted at the departmental meeting of August 26. By this time the Treasury Board submission had been completed and was awaiting Minister Chretien's signature.

August 26 also saw the birth of the STAMP Technical Advisory Committee (STAC) within GSC which was to provide technical advice to the sponsor on the initiation and execution of the program.

On August 29, CEIC wrote to EMR giving authorization to proceed with program planning. The STAMP submission was forwarded by hand to Treasury Board on September 1, 1983, a formal application for Section 38 funds was submitted to CEIC on September 13, Treasury Board approval was given on September 15, the approval of the CEIC Commissioner was received on September 16, 1983.

At a STAC meeting on September 15, considerable discussion was devoted to the possibility of hiring a private consultant to oversee the start-up of Project 2 (Overburden Geochemistry) since there was no one with the necessary expertise on the staff at Laurentian and no

suitable project leaders had been identified. It was decided to pursue this possibility.

The program was formally announced in Sudbury on September 17 and further described in Minister Erola's speech to the Sudbury Prospector's and Developer's Association on September 20.

D.C. Findlay, K.H. Poulsen, W.W. Shilts and J.M. Duke met with officials of OMNR in Toronto on September 22 to brief them on STAMP details and also to enlist their cooperation in certain areas. In particular, Project 1 (Mineral Data Base) was dependent upon access to mineral deposit files maintained in the OMNR Resident Geologists' offices.

R.J. Keyes and C.C. Bowstead of EMR and D. Janes of CEIC met with officials of Laurentian in Sudbury on September 22 to discuss the content of the five formal contracts required by CEIC. Bowstead returned to Sudbury on September 26 to retrieve the signed contracts, brought them back to Ottawa for signature by the ADM Earth Sciences and then R. Keyes took the contracts to Toronto on September 27 for CEIC signature.

Staffing for the program began on September 29 at the CEIC offices in Sudbury. Three members of STAC (i.e., Chandler, Garson and Poulsen) went to Sudbury on September 29 to take part in the interviewing of potential STAMP Project leaders. The first employees began work on October 3, 1983.

The private consultant approached to oversee Project 2 (Overburden Geochemistry) had declined the job and consideration was given to scrapping the project. However, the project was redesigned on a more modest scale and a qualified project leader was identified on October 6, allowing it to proceed.

Upon review of the contracts, CEIC officials decided a number of changes were required. C.C. Bowstead and J.M. Duke of EMR and D. Janes of CEIC went to Sudbury on October 6 and, in a marathon session with Laurentian officials, rewrote the descriptions and budgets for three of the five projects and prepared new contracts.

At this point, the management of STAMP effectively passed to the Laurentian team. The EMR team provided advice to the project leaders on initiating their projects, assisted with some administrative details and monitored technical progress.

A press conference was called by Laurentian University for December 2, 1983 to publicize the progress to date on STAMP. F.W. Chandler of

STAC attended to provide technical advice to the STAMP project leaders and also to Minister Erola who was in attendance.

On February 15, 1984 the STAC committee met with Professor Beswick and Dean Goldsack in Ottawa to review progress to date. The Laurentian officials noted that an eight week extension to STAMP would be sought to allow completion of the analytical program and reports. A Treasury Board submission was subsequently prepared and approval received for the extension of March 26, 1984.

STAMP was completed on May 25, 1984. The completed reports were received by EMR from Laurentian at the end of July, and were prepared for publication as GSC Open Files to be released in October and November 1984.

FACTORS IN DESIGN OF STAMP

The task facing the STAMP team in designing the program was complicated by numerous factors, including the following

- the program was to be funded by CEIC, designed and implemented by EMR, but sponsored (i.e., executed) by a private, nonprofit organization
- it was the responsibility of EMR to identify and enlist the sponsor
- although the first priority was job creation, the program was not to be a "tombstone painting exercise" but was to have scientific and technical merit
- the program was to employ a significant proportion of geologists and other technically trained individuals
- all those employed by the program were to come off the UIC rolls in the program area: this meant that the program design had to anticipate the quality and numbers of individuals with a variety of technical skills who would be available when the program started several weeks in the future
- given the timing, it was apparent that at least 2/3 of the program would be carried out when weather conditions would make most field operations impossible: this meant that the program had to incorporate components which would keep people employed through the winter months
- a further consequence of the timing factor was that there would be little time for training or orienting the project leaders and field

supervisors

- hiring for the program would be through district CEIC offices
- the monies allotted to the program were to be spent in four federal electoral ridings approximately in proportion to the amounts contributed for each riding
- the team had to design a program to be spread over different geological terranes, different CEIC administrative areas and different electoral ridings none of the boundaries of which coincided
- at least 50% of the program budget was to go to wages
- the budget estimates on which the contracts with the sponsor were based had to be revised almost weekly during the design phase since the part of the operating funds made available by CEIC was tied to the number of person-weeks employment created which, in turn, depended upon the starting date of the program which in turn depended upon the Treasury Board and CEIC activities
- some of these constraints were known to the team from the outset but many others only became apparent with the passage of time, accordingly the program plan was subject to continuous modification right up to and even after program start-up.

RETROSPECTIVE AND EVALUATION

The success of STAMP is attributable to numerous factors most of which fall into five main categories.

1. **Anticipation** Consideration of the types of activities that would be appropriate components of job creation programs began in GSC in late 1982. Thus, when the instructions were given to proceed with the design and implementation of STAMP in July 1983, the GSC team had an idea of the kinds of projects that would have a reasonable chance of success.
2. **Technical Design** The technical design of the program was sound. The objectives set out in the program proposal were achievable, even under the severe constraints on the program outlined above, and the products expected from the program would be of practical as well as scientific use.
3. **Implementation** The implementation of the program was approached in a businesslike manner. The EMR STAMP task group was established at

the outset and included members from GSC with responsibility for program design, MPS which was responsible for liaison with CEIC and Earth Sciences Sector office which provided overall direction. This task group met weekly under the chairmanship of the ADM (Earth Sciences). A critical path for program implementation was established at the outset with target dates set for program design completion, Treasury Board submission, program announcement, etc.

4. Political Priority The program was given a high priority by the Minister of State for Mines and, for this reason, Treasury Board action on the proposal was prompt. Moreover, ministerial intervention helped eliminate bureaucratic roadblocks which sprung up from time to time. A representative of the Minister's office attended a number of the task group meetings and provided advice and assistance in a number of areas.

5. Execution Credit for successful execution of the program belongs mainly to Professor Beswick and his team at Laurentian University, and not the least to the individuals hired to carry out the program. As well as providing technical and administrative direction, Professor Beswick was able to instill an esprit de corps among the STAMP employees and maintain harmonious relations between the STAMP crew and the regular university population with which they shared premises. The beginning of STAMP operations at the university followed closely the beginning of the academic year which is a very hectic time for the faculty even under normal circumstances.

SUDBURY, TIMMINS, ALGOMA MINERALS PROGRAM (STAMP)

Geological Survey of Canada Open File Reports

- O.F. 1087* Mineral inventory of the Sudbury-Timmins-Sault Ste. Marie region; D.G. Rose (Project 1)
- O.F. 1088* Swayze Belt esker geochemistry; J.A. Richard (Project 2)
- O.F. 1089 Huronian Supergroup litho-geochemistry; D. Tortosa (Project 3)
- O.F. 1090 Mineralization in the Onaping Formation, Sudbury Basin, Ontario; N. Bussolaro, D.H. Rousell, A.E. Beswick (Project 4A)
- O.F. 1091 The metamorphic mineralogy and chemical alteration of the Temagami Greenstone Belt; A.E. Beswick, R.S. James (Project 4B)

* To be released in November 1984.



GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA

OPEN FILE 1088

*Royal Blue
handles*

SUDBURY

TIMMINS

ALGOMA

MINERALS

PROGRAM

PROJECT 2

SWAYZE BELT ESKER
GEOCHEMISTRY

J.A. Richard

Appendix 3

D. Rose
194 Powell Ave.
Ottawa, Ontario

July 20, 1984

Dr. A. E. Beswick
Head, Geology Department
Laurentian University
Ramsay Lake Road
Sudbury, Ontario
P3E 2C6

Dear Tony:

As the post-S.T.A.M.P. period moves into its final stages, we are now just weeks away from turning over to the Geological Survey of Canada's Publication Division the volumes of data on mineral occurrences collected during the course of the S.T.A.M.P. project. As you know, my project involved the collection and coding of data on all documented mineral occurrences in the S.T.A.M.P. area, for the national CANMINDEX file of the G.S.C. In addition, we were asked to provide written inventory forms for approximately 400 occurrences not already in the files of the (Federal) Mineral Policy Sector, and to provide more precise location data for the mineral inventory file of the Ontario Geological Survey.

I am happy to report that, with the exception of a small segment south of James Bay, all of the area of interest was covered. Thus, we examined a region comprised of more than 1300 townships.

The magnitude of the project and the demanding nature of computer files - in particular the high standards set for the CANMINDEX file - could have made this at best a very frustrating exercise, and at worst a disaster from the scientific point of view. However, the opposite has been true. There have been some wrinkles to iron out and rough edges to polish, yes, but on the whole the product is of very high quality. Not only did the project provide much-needed employment, then; it will also make a significant contribution to knowledge of the distribution and features of mineral occurrences in north-central Ontario, and I know that GSC officials involved with S.T.A.M.P. are very pleased.

When I think back over the seven and one-half months of the project, I realize that it has been one of the most satisfying periods of my career, and a time that will have good memories for me. My fellow S.T.A.M.P.ers and I owe a great deal to the project. Not just for the chance to work (although thank God for that!) but, in particular, for the opportunity to be part of a unique project and one that gave us all a sense of purpose.

I want to take this opportunity - here I will presume to speak for all of us who were engaged in the project - to thank you most sincerely and to congratulate you on a significant achievement. Without your initiative, your energy and perseverance, and your enthusiasm, this seemingly impossible collaboration of so many diverse elements could never have been made to work.

I know you will join me in expressing thanks to the other individuals and organizations who were essential to S.T.A.M.P.: to your secretary Sue for her long hours spent in the formative stages of the project, and her patience throughout; to the faculty of the Laurentian Geology Department for their forbearance and support; to Judy Erola, her staff and colleagues for providing much of the impetus for the Program; to the Geological Survey of Canada which provided proposals, technical support and guidance for three of the five projects; to the Ontario Ministry of Natural Resources for their co-operation, and in the case of my project, for providing working space and free access to their Assessment Files.

In particular, I want to single out Maria Bozzo of the Department of Employment and Immigration in Sudbury. As you know, Maria did a fantastic job for us. I hate to think what we'd have done without her competence, patience and sense of humour. She was a pleasure to work with and is a fine public servant in the best sense of the term.

As for the CANMINDEX segment of S.T.A.M.P., let me point out some of the benefits which have flowed from the project, or are likely to:

- We employed 29 individuals in the 25 position during the course of the project (4 moved on to other jobs, and were replaced).
- Several of my people obtained summer employment as a direct result of being "in the right place at the right time" and making contacts during the CANMINDEX project.
- 40% of our coders were Geological Technicians who gained valuable knowledge of mineral deposits through working with experienced field geologists and exposure to volumes of literature and documentation on known occurrences.

- Several of our people acquired valuable knowledge and experience in computer programming in an applied, rather than strictly academic, environment.
- We now have a core of trained individuals who could be called upon for future CANINDEX projects or similar inventory files for other projects.
- The S.T.A.M.P. area will be the first region of Canada for which the CANINDEX file has been made available to the public.
- This mineral inventory file can be used by prospectors and exploration companies as an aid to exploration, particularly for producing quickly and cheaply distribution plots for various criteria.
- The file can be used by planners and policy-makers involved with resource assessments, mineral potential studies, and municipal planning.
- The file should be an invaluable aid to industry and university researchers, such as yourself, where large volumes of data must be examined for testing models and hypotheses.

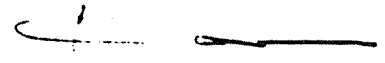
These are the obvious benefits from my point of view, and I'm sure there are, or will be, others.

S.T.A.M.P. has been much more than a "make-work" project and each of us can be proud of having been a part of the program. It should serve as encouragement and as a model for future endeavours of this kind. Indeed it would be a shame if further employment programs did not follow, to build upon the foundation established here.

Since my plans will take me back to the East Coast I will not be able to participate in any projects which may ensue, but I shall follow with great interest your involvement in any similar programs.

It has been a pleasure to work with you.

Sincerely,



D. Rose

209-1720 Paris Street
Sudbury, Ontario
P3E 3C2
Wednesday, July 25, 1984

Dr. Tony Beswick
Department of Geology
Laurentian University
Ramsey Lake Road
Sudbury, Ontario

Dear Dr. Beswick:

As a past member of CANMINDEX Project team of the Sudbury-Timmins-Algoma Mineral Program (STAMP) administered by Laurentian University, I wish to give recognition to the high quality of work destined for the Geological Survey of Canada in Ottawa.


The CANMINDEX project, under the successful co-ordination of Mr. David Rose, was responsible for a needed update of the computerized Canadian Mineral Occurrence Index covering the Sudbury, Timmins and Sault Ste. Marie mining divisions. Qualified teams were established in each of the three communities and completed the compilation on schedule by May 25, 1984.

Although STAMP was a "make-work program", the results will far exceed the expectations of those who endorse such employment incentives in economically depressed regions.

In order to maintain the standards of the Geological Survey of Canada and any work associated with them, qualified individuals were required to participate. In a few situations local recruitment failed to indentify enough qualified persons and therefore qualified, yet unemployed, geologists had to be sought from outside the area that was supposedly to benefit. This flexibility in hiring practice was essential for success.

The professional manner in which individuals approached the task-at-hand ensured the prompt completion of the various projects on schedule and within the standards of the Geological Survey of Canada and Laurentian University.

Respectfully,


Craig McConnell
STAMP-CANMINDEX supervisor/editor



July 13th, 1984

Dr. A. E. Beswick
Department of Geology
Laurentian University
Sudbury, Ontario

Dear Dr. Beswick:

It is my understanding that your S.T.A.M.P. program has been completed and that the results will soon be available, perhaps in "Open File" format. I will be interested in reviewing the data and discussing these results with you at some mutually suitable time.

Broad scale rock geochemistry programs such as you have undertaken, produce a valuable and sound database, which can be utilized by those of us in the mineral exploration industry. I wish you well in your continued efforts on this line of research.

Yours sincerely,

C. J. A. Coats

C. J. A. Coats
Superintendent - Geology

CJAC/jms



*D. G. Innes
and Associates Ltd.*

R.R. 1, WASI ROAD
CALLANDER, ONTARIO
POH 1H0
Tel. (705) 752-1801
Res. (705) 752-3083

Dr. A. E. Beswick
Laurentian University
Sudbury, Ontario

July 23, 1984

RE: STAMP PROGRAM

Dear Dr. Beswick,

It is my understanding that the Stamp Program that you managed is now complete and that an open file report summarizing the findings and documenting the data gathered is to be prepared. Would you please keep me informed as to the progress of this report and is there a date scheduled for its release?

I will take this opportunity to commend you and the various government agencies responsible for this research. Data of this type is absolutely essential to progressive mineral exploration and geological understanding. I sincerely hope that this type of program continues and look forward to your report.

Sincerely Yours,

A handwritten signature in black ink, appearing to be 'D. G. Innes', written over a horizontal line.

D. G. Innes
D. G. Innes and Associates Ltd.

DGI/ci



Ministry of
Natural
Resources

Ontario

Mineral Resources, 10th Floor
Ontario Government Building
199 Larch Street
Sudbury, Ontario
P3E 5P9

July 17, 1984

Dr. Tony Beswick
Chairman, Geology Department
Laurentian University
Sudbury, Ontario
P3E 2C6

Dear Dr. Beswick:

As you know office space and use of office facilities were provided by the Mining Recorder and Mineral Resources sections of the Ministry of Natural Resources here in Sudbury for several people participating in the STAMP Project. We were pleased to be able to assist the project in this way and we would appreciate copies of reports and results. Could you give us an indication of when such final reports might become available?

We in the Ministry feel that such projects as STAMP are worthwhile undertakings which expand the geological database of the province, and provide employment opportunities for qualified local people. Should you require our help in future projects just let us know.

Yours Sincerely,

A handwritten signature in black ink that reads "J. M. Martins".

J. M. Martins
Resident Geologist (A)

JMM/ymp



Natural
Resources

NORTHERN REGION (705-267-1401)
TIMMINS REGIONAL OFFICE
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

July 25, 1984

Mr. Tony Beswick,
Chairman,
Geology Department,
Laurentian University,
SUDBURY, Ont.
P3E 2C6

Dear Tony:

The need for efficient maintenance and dissemination of geological data is obvious. In the first six months of 1984, over one thousand company geologists, prospectors, government personnel and research geologists visited the Timmins Resident Geologist's Office in search of such information. Investigation of previous work, geology and status of a property is a top priority in planning an exploration program. Many programs have been generated by the completion of such research.

The mineral deposit inventory recently completed under STAMP, when it is made available to the public, will expedite the retrieval of this exploration and development data. In particular the references included with this inventory will augment the Ontario Mineral Deposit Circular series and also complement the Ontario Source Mineral Deposit Inventory Records.

Under STAMP we saw a labour intensive program complete in six months a valuable regional compilation which under normal circumstances would have taken much longer.

Yours truly,

A handwritten signature in cursive script, appearing to read "L. E. Luhta".

L. E. Luhta,
Resident Geologist.

LEL/de



Ontario

Natural
Resources

Your file:

Our file:

875 Queen Street East
Sault Ste. Marie
Ontario P6A 2B3

July 20, 1984

Dr. A. E. Beswick
Chairman, Department of Geology
Laurentian University
Sudbury, Ontario
P3E 2C6

RE: Stamp Project 1983-84

Dear Dr. Beswick:

Just a note to say that we are looking forward to the published data from both the Lorraine formation study and the Canminindex compilation. Only a few more encouraging assays from the Lorraine would be enough to increase exploration work along the North Shore area, to everyone's benefit. The mineral occurrence compilation is something that will be of great use to us in our everyday work, as well as to our office clients.

Yours truly,

A handwritten signature in cursive script that reads "Ed Leahy".

Edward J. Leahy
Resource Geologist
Northeastern Region

Telephone (705) 949-1231
Ext. 282

L/f

\$1.4 million fund is allotted for north mineral exploration

By PAUL DERRO
Star Staff Writer

With the hope of finding buried treasure in Ontario's north, the federal government has announced a \$1.4 million mineral exploration program.

The Sudbury, Timmins and Algoma Mineral Program (STAMP) will create about 70 jobs for laid off mineral workers during its six-month duration. The project will consist of four separate divisions to study and record the occurrences of metallic mineral deposits. Results will be made available to prospectors and exploration companies and could lead to new mineral discoveries and new mines.

Nickel Belt MP Judy Erola, minister of consumer and corporate affairs, an-

nounced the program Saturday on behalf of employment minister John Roberts. The program is sponsored by the ministry of energy, mines and resources.

"My colleagues — Maurice Foster, M.P. for Algoma; Ray Chenier, M.P. for Timmins-Chapleau; and Doug Frith, M.P. for Sudbury — and I saw the opportunity for a program to stimulate the regional economic development," said Erola.

"Better knowledge of our mineral resources could lead to discoveries that benefit the whole region. And if we don't stimulate exploration by the private sector immediately, the program will give 70 people with mineral industry experience a chance to use their skills," Erola said.

Laurentian University's department of geology will manage the projects.

Half the funds for salaries will come from Section 38, the unemployment insurance job creation program while the other half will come from the Employment Initiatives Reserve.

The first division of the STAMP project involves collecting, coding and entering basic information into the Geological Survey of Canada database's CAMINDEX file. CAMINDEX is an easily-accessible computer file containing mineral deposit information. Areas covered in the project should contain about 4,000 mineral deposits to be included in the file representing a 200 per cent increase coverage of the Ontario section. A lot of 20 persons, mostly graduate geologists will be used by this division of the project.

STAMP's second section will be involved in detecting metal concentrations in the Chapleau, Foley, Gogama, Wawa and Gamitagam areas which contain a significant number of gold prospects. Sampling teams will methodically collect materials to be processed in town for geochemical analysis. Backhoes will be used in favorable areas. About 29 persons, mostly graduate geologists will be employed for this section of the program for about 25 weeks.

About 17 sample collectors and analysts will be involved in defining target areas in the Soo-Sudbury region. Several workers are already testing the gold possibilities in Elliot Lake and Hough Lake areas so gold investigation will be confined to Lorrain and Gordie Lake areas.

Sampling will be done by five teams of two men travelling by truck, boat and foot as necessary from operation basis in Bruce Mines, Elliot Lake or Whitefish Falls areas. The bulk analytical work will be done at Laurentian University.

The fourth division of STAMP will employ four people in identifying large exploration horizons within the Onaping Formation of the Sudbury basin and possible gold deposits elsewhere in the region.



JUDY EROLA
Announces program



JOHN ROBERTS
Under his ministry

Positive signs for upturn in mining

It's a pretty safe bet that no sector of the Canadian economy has been more severely affected by the world recession than the mining industry. And that's just another way of saying that no area of the country could have been hit harder by the slump than Northern Ontario.

But although 1982 was surely a bleak year, things are slowly starting to pick up. 1983 has so far seen some real improvement, and I believe we can even begin to think ahead to 1984 with a substantial degree of confidence.

The people of Northern Ontario, especially in our mining communities, have shown a characteristic toughness during this difficult time. The federal and provincial governments, for their part, have moved quickly and cooperatively to match this courage with some tangible forms of practical assistance, such as the New Employment Expansion and Development Program. At the federal level, we also expanded the unemployment insurance job creation program to include non-production work on mining properties.

These measures have enabled companies to prepare their facilities and equipment for a return to higher levels of production, but, above all, they have helped reduce the extent of layoffs, helped keep the mining work force in the community, and helped the workers maintain their skills.

If it has done nothing else, this lean period has underscored the importance of cooperation, and I also want to touch briefly here on the beneficial impact of cooperation in a different but equally meaningful context - health and safety in the mine workplace.

Mine and smelter work exposes workers to a wide variety of occupational hazards, and a very significant portion of the federal government's mining technology research program is aimed at improving this situation.

Currently, the federal government and Inco Limited are working on a cooperative research project to make many aspects of mine and smelter work safer. With federal support, Inco is developing highly specialized mechanical equipment for punching tuyeres by remote control at the Copper Cliff smelter. This difficult and sometimes hazardous job is now done manually, with workers wearing an array of protective equipment. The new machinery may also be adapted to perform other manual "bar and hammer" tasks in the mining industry - scaling roofs in underground workings, for example.

In another field of research, CANMET - the Canada Centre for Mineral and Energy Technology - is working with the Ontario Ministry of Labour and the United States Bureau of Mines to reduce the level of toxic emissions from diesel-powered mining equipment. Since 75 per cent of all underground diesel equipment used in Canada is operated in Ontario mines, this work has great significance for the mine workers of this area. And the potential for improving the mine environment is impressive - CANMET's research alone has demonstrated a possible reduction in toxic emissions of about 70 per cent.

At the beginning of this brief message I referred to signs of an upturn in the mining industry, and there is indeed a general trend emerging in which companies that have suffered losses are now moving slowly back towards profitable operations. We also have new production coming onstream; the Detour Lake gold mine, scheduled to start production in the fall, is right on schedule. On top of this we have considerable exploration activity, particularly in the Hemlo area east of Marathon and in the Cameron Lake area.

I think the signs are positive, and that with continued fortitude and perseverance - and cooper-



The Hon. Judy Erola, former Minister of State for Mines and recently appointed Minister of Consumer and Corporate Affairs.

ation - we will soon see Northern Ontario's vital mining industry restored to its full vigor.

Employment survey ✓ shows mining down

Sudburians may have a longer wait than the rest of Canada for the much-touted economic recovery to arrive.

A survey of 1,314 Canadian companies indicates a small increase in employment opportunities during the next three months — but of the ten major industry sectors polled, six are expecting staff decreases with the largest in mining and construction.

The mining sector anticipates a net decrease of 19.2 per cent while construction anticipates a decrease of 11.5 per cent.

The survey was conducted by Manpower Temporary Services a Toronto-based employment agency. The study showed 16.1 per cent of the companies responding showed staff increases while 13.9 per cent expect decreases in staff.

Manpower Temporary Services president William J. Coke attributed the low figure to traditional fourth quarter seasonal factors.

"Much of the optimism of the second and third quarters, when net increases of 9.6 per cent and 15.3 per cent respectively were indicated, has been replaced by an attitude of uncertainty concerning the continuing economic recovery," Coke said.

"It is nonetheless a considerable improvement over the 11.3 per cent net decrease projected a year ago," he add-

ed

And despite the unfavorable outlook for mining and construction, Coke said the significant decreases "represent an improvement over 1982 fourth quarter results when mining expected a net hiring decrease of 25 per cent and construction expected a net decrease of 28.3 per cent."

Figures for Sudbury indicate 3.1 per cent of the businesses responding plan substantial staff increases for the fourth quarter, 9.4 per cent plan moderate and 15.6 plan slight staff increases.

The same survey shows substantial staff decreases of 3.1 per cent, moderate decreases of 12.5 per cent and slight decreases at 12.5 per cent in the city.

Sudbury Star
September 23, 1983

Mineral scheme greeted warmly

The federal government's recent allocation of \$1.4 million for a northern mineral exploration program has been well received by Local 6500 President Ron MacDonald.

It is not news that MacDonald has been advocating the study for some time now. "I'm pleased that that's there from the federal government because it's going to create some jobs," he said last week. "There may be some untapped resources out there that we don't know about."

Labelled the Sudbury, Timmins and Algoma Mineral Program (STAMP), the scheme involves hiring approximately 70 people in an attempt to reveal hitherto undiscovered resources. STAMP was recently announced by former Mines Minister, Judy Erola, now minister of consumer and corporate affairs.

Erola's assistant, Peter Black, says STAMP involves four projects. The first will attempt to determine a mineral data base by making possible the production of mineral distribution maps and listings of mineral occurrences in the Timmins, Sudbury and Algoma regions. Information on the occurrences will be collected, coded and entered into the Geological Survey of Canada data bank CANMIDEX file. It will also provide information to the Ontario Geological

Though generally pleased with the \$1.4 million mineral exploration program, Local 6500 president Ron MacDonald is disappointed that it is not as extensive as it could be.

Survey and update data for Energy, Mines and Resources' National Mineral Inventory System.

The proposed coverage area of the project is estimated to contain some 6,000 mineral occurrences and deposits. This project will provide 21 jobs for a period of 29 work weeks.

Overburden geochemistry is the topic of the second project, expected to employ 29 people. Its objective is "to aid and stimulate mineral exploration by detecting anomalous metal concentrations in overburden samples from greenstone terrains in the Swayze (Chapleau, Foleyet, Gogama) Wawa and Gamitagama belts," explains Black. A significant number of gold prospects have been uncovered in the Swayze and Wawa belts.

Project to stimulate exploration

Some 17 people will be hired under the third project called Huronian supergroup litho-geochemistry. Black says its aim is "to aid and stimulate mineral exploration by defining target areas with anomalous metal concentrations in Huronian sedimentary rocks in the Sault Ste. Marie and Sudbury region."

The final project, entitled "rock chemical mineral exploration crit-

eria," was proposed by Tony Beswick, chairman of the geology department at Laurentian University. Its objective is "to identify target exploration horizons within the Onaping formation, Sudbury basin and litho-geochemical criteria useful for exploration for massive base-metal sulphide deposits here and for gold deposits in greenstone belt terrains elsewhere in the region." In addition to these, four

clerical and administrative positions will be available.

Management of the projects will be undertaken by Laurentian University's department of geology. Beswick says people are presently being hired to fill the positions under the Canada Employment Centre. Project leaders will oversee the operations.

"The major benefit to us (Laurentian University) is going to come

through money that is generated by us here doing the chemical analysis of the rock and mineral samples," explains Beswick. Laurentian will be able to undertake the analytical work on its existing equipment. As well, the university will obtain "atomic absorption" machine worth approximately \$18,000 for chemical analysis. Beswick says this machine will remain in the geology department once

the program is complete next spring.

Though Ron MacDonald is enthused about the project, he is disappointed about one aspect. When the idea was originally talked about, it was going to be a million project extending over a couple of years.

"I'm disappointed the fact that it isn't as extensive as it should be," he said. "I think the province should be participating," he added.

Area included in program to create jobs

TIMMINS, Ont.(CP) — A joint provincial-federal job creation program, announced Friday by Ontario Natural Resources Minister Alan Pope, should provide a \$2-million boost for mineral exploration in northeastern Ontario.

Pope said the province will contribute an additional \$1 million to the program to initiate geological and mining assessment work in the Sudbury, Temiskaming, Nipissing districts.

The federal government is expected to match that figure for the program, which will provide 116 jobs.

Pope said he is confident the private sector will participate in the program to augment the government funding.

"The project will be undertaken on a 50-50 cost-sharing basis and each company that agrees to sponsor a project will be eligible for a government contribution of up to 50 per cent of the approved project cost," said Pope.

Pope added the funding is aimed at the rich mineral area known as the Cobalt Plain which he described as as underdeveloped, "because of the lack of funding for geological assessment work."

Sudbury Star
October 8, 1983

STAMP program is clarified

To The Editors

Regarding the letter of Mr. Ron Addlington published in your October 5th issue, we would like to clarify the nature of the first project in the STAMP program - namely the mineral data base project otherwise called CANMINDEX (The Canadian Mineral Occurrence Index).

Mr. Addlington is quite correct when he says that there is already a good mineral inventory data base for Northern Ontario. The Resident Geologist's files in the province are a tremendous source of data for the exploration industry. The inventory project under STAMP will be incorporating this information in an effort to augment and verify the computer files of the Ontario Geological Survey (OGS) and Energy Mines and Resources Canada (EMR).

Computerized files allow rapid retrieval and formatting of data to produce mineral deposit maps (at any scale) as well as geostatistical studies to mention only two of their advantages. More exotic applications include correlation with LANDSAT images, geochemical data plots and geophysics. The manual files will, of course, remain as useful and important as they are now - it will be years before all that data could possibly be computerized. But the least that can be done is to use the computer to record and process the index-level

data and this is what will be done under STAMP.

Hank Groen's Toronto office of the Ontario ministry of natural resources has recently completed the initial entry of index-level data on mineral deposits and prospects (showings not included) into their computerized file. The next stage is in-the-field testing and verification. Geological Survey of Canada's (GSC's) CAN-

MINDEX file is a mineral occurrence computer file used by the research geologists of the Economic Geology Division. Data for Ontario deposits, prospects and occurrences is required for current research activities.

The National Mineral Inventory file of EMR provides extensive data on mineral deposits, prospects and showings in standardized format to

clients interested in a national perspective. With budget restraint being in vogue these days, keeping these files up-to-date has been difficult. STAMP will provide the opportunity to firm-up the existing data bases, and hopefully provide some long-term benefits to the exploration industry in this part of Ontario.

We hope this information will clarify the

nature of the CANMINDEX project and STAMP for Mr. Addlington and your readers.

Yours truly
A.E. Beswick
Chairman, Department
of Geology
Laurentian University
as

D. Garson
Operations Manager
Mineral Data Base
Section, Geological
Survey of Canada

Northern Life
Wed. Oct. 19, 1983
Vol. 12 No. 14
Page 4

Around the North ✓

Employment picture clouded

SAULT STE. MARIE—Sault Ste. Marie's unemployment rate will hover at 16 or 17 per cent in 1986, according to a report prepared as part of the city's Official Plan update. More than 3,000 Algoma Steel employees are currently laid off and the report, prepared by the Sault's planning department, says some of these jobs will be permanently lost. This, coupled with a spin-off effect in other employment sectors, will result in a total net loss of approximately 2,000 jobs between 1981 and 1986. An upturn in the country's economy from 1986 to 1991 will result in major capital expenditures and an increase in demand for steel, thus helping to reduce the city's unemployment rate, according to the report. However, unemployment may remain above the national average. The report also projects an increase in population from 82,675 in 1981 to 84,600 in 1986 and 92,000 by 2001.

Northern Ont. Business
October 1983
Vol. 4 No. 1
Page 27



Alan Pope ✓

\$2 million for mining exploration

Natural Resources Minister Alan Pope recently announced a joint government job creation program for \$2 million. The money will be contributed to the Mining Sector Work Program and is expected to provide 116 jobs for a total of 1,833 work weeks. The project will initiate geological and mining assessment work in the Sudbury, Timiskaming and Nipissing districts - particularly in the rich mineral area known as the Cobalt Plain.

First phase of STAMP project completed

An information meeting was held on Friday, December 2 when STAMP project leaders gave the status of the STAMP project to the Honourable Judy Erola, other government representatives and members of the geological industry.

"There are 3,500 rock and soil samples that have been shipped to Laurentian University for analysis with another 400 samples to come," stated STAMP coordinator Fred Lowes. "The boys have sent in some interesting samples but the analyses have not been completed yet."

In September the Federal government awarded Laurentian's Department of Geology \$1.4 million to manage a mineral exploration programme. The Sudbury, Timmins and Algoma Mineral Programme (STAMP) is developing geochemical and geological projects in the regions.

"At the moment we have hired 66 people and they were out in the bushes in the Gogama area, Whitefish Falls, and Temagami," said the coordinator. "Some of the samples are presently being analysed by the Department of Geology".

There are four different projects in STAMP. The first is the CANMINDEX project which is updating the Geological Survey at Canada's computer filing system for mineral occurrences in north central Ontario (the general Timmins, Sudbury, and Algoma regions). This project will also provide information for the EMR (Mineral Policy Sector) National Minerals Inventory. "At the moment we have people working on the files in Sault Ste. Marie, Sudbury, and Timmins," said Mr. Lowes.

The second project is the Swayze Belt Sampling programme. There are ten people working out of the Timmins area collecting samples from the Esker systems which are glacial deposits of overburden over the bed rock and which were deposited during the Ice Age.

The Huronian Supergroup project has eleven people working on it in the Killarney and Bruce Mines areas where they are collecting rock samples. To date they have come up

with very good samples. "This is where I think they may find the gold and the copper mines," said the coordinator of STAMP. "It would be nice but I think it may be wishful thinking at this point."

The fourth project has two parts, one for Onaping formation of the Sudbury basin, where there was a crew of four working in the Sudbury basin and in the Levack area. The second part of the project is in the Temagami area where there was a crew of six collecting rock samples. Again, interesting samples are coming out of these areas. "A long range interest has been generated by the Helmo area discoveries where they found gold particles disseminated through the rock formation in areas where they had been looking for a long time and hadn't been able to find anything," said Mr. Lowes. "One of the things we are doing at Laurentian is chemical analyses for the gold which cannot be seen by the naked eye. With all the sampling we are doing it is hoped that we will be able to pin-point zones that look encouraging and might be worth going back to for a more detailed examination and sampling." "The people we have managed to hire for these projects are doing an excellent job and all seem to be very enthusiastic about the work they're doing," said Dr. Tony Beswick, Chairman of the Department of Geology.

Laurentian University
Gazette
December 14, 1983
Vol. 12 No. 8
Page 6

Rock samples rolling in for STAMP program

Laurentian University has received more than 3,500 rock and soil samples, some of which could contain gold and copper deposits, for analysis through the federally-funded STAMP program.

In a recent meeting with Nickel Belt MP Judy Erola and other government and geology representatives, the university's geology department reported on progress being made on the programs' four projects now under way.

"The boys have sent in some interesting samples but the analyses have not been completed," said Fred Lowes, STAMP co-ordinator.

Lowes said chemical analyses for gold which cannot be seen with the naked eye will be used to help officials pinpoint zones that look encouraging — encouraging enough to make it worth going back for a more detailed examination.

STAMP which stands for Sudbury, Timmins and Algoma Mineral Program, was awarded to the universi-

ty's geology department in September, along with \$1.4 million to carry out the operation.

"At the moment, we have hired 66 people and they were out in the bush in the Gogama, Whitefish Falls and Temagami areas," Lowes said.

The four projects include updating the Geological Survey at Canada computer filing system for mineral occurrences in the areas, collecting samples of glacial deposits in Timmins and collecting rock samples in the Killarney and Bruce Mines areas, the Sudbury Basin and Temagami area.

Lowes said some "very good samples" have been forwarded from the Killarney project. "This is where I think they may find gold and the copper mines," he said.

"It would be nice, but I think it may be wishful thinking at this point," he added.

Interesting samples are also coming out of the Sudbury and Timagami areas, he said.

UIC exhaustees are worrisome

Every 55 minutes or so in 1984 someone in the Sudbury area is expected to exhaust their unemployment insurance.

That frightening statistic surfaced at last week's meeting of the District of Sudbury Social Services Administration Board. According to a projection by the Sudbury Employment Centre a staggering 8,826 unemployment insurance exhaustees are expected by the end of October, the last month for which the branch of Employment and Immigration Canada will hazard a guess.

March can perhaps be considered the best month according to the projections - only 474 people will run out of benefits. July is the worst for an estimated 1,700 people will no longer be able to reach into their mail boxes for their cheque stamped "Government of Canada."

As Mark Mieto, director of the Regional Municipality's health and social services department, noted last week, reality will most likely not be as harsh as the projections would have one believe. After all, there are a couple of reasons why some people's brush with subsistence-level living will simply not come about. For one thing, they could find a job.

Though how likely such a prospect is is not readily apparent, it is logical to assume that as Canada recovers from its struggle with economic

stagnation there will be some spin-offs in Sudbury. Undoubtedly, some Sudburians will secure employment - even if they have to move out of town to do so.

More likely, however, is that a good number of potential exhaustees will requalify for unemployment insurance benefits thanks to make work projects devised by all three levels of government.

Regional officials are crossing their fingers that the federal and provincial governments will pump more money into short-term job creation. If not, it is feared the welfare rolls will swell to unprecedented levels. Surprisingly enough, Mark Mieto noted last week that the real crunch is expected to come in 1985. While the budget for the welfare department is expected to increase only marginally this year, expenditures on general welfare assistance could possibly jump as much as 20 per cent in 1985, he said.

As it is, welfare payments are expected to burst through the \$1 million a month level in December of this year. In that month some 3,300 people are expected to be receiving assistance compared to the only 2,544 welfare recipients registered in December of 1983. During this year the month expected to see the fewest

number of welfare recipients is June with 2,600. In 1983 the minimum monthly total was 2,181 recorded in October.

While for the short term regional officials

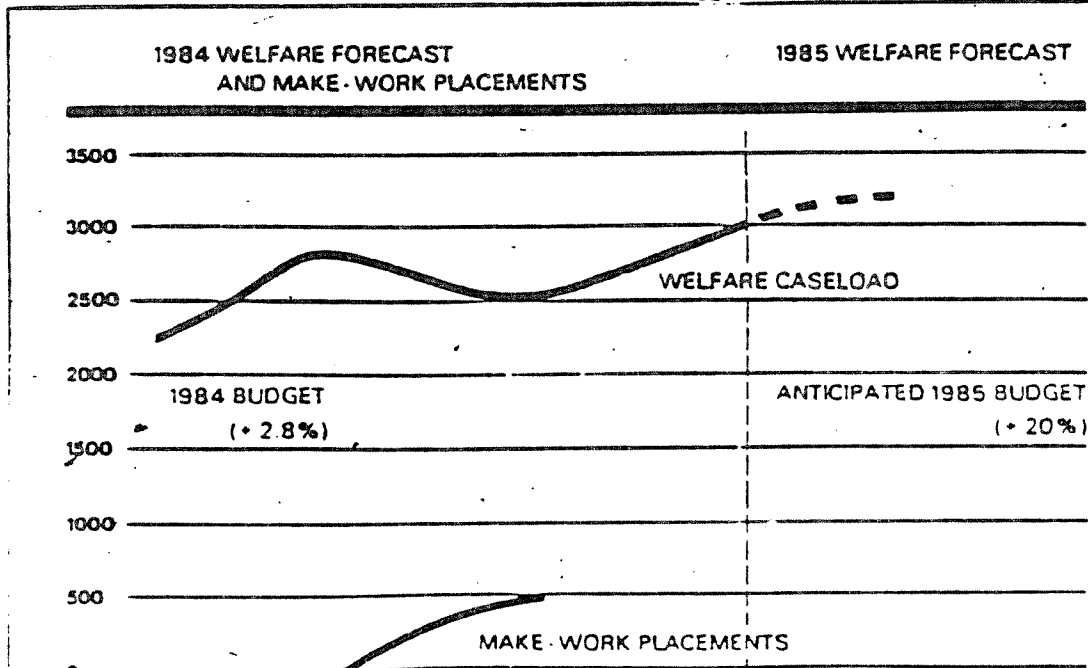
are hoping the area will receive a good number of

make-work projects, the wish for the long-term is

that the economy will recover strongly enough

to create meaningful jobs.

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Work programs vital in region

It is easy to share the opinion of Provincial Treasurer Larry Grossman, that "make-work projects, such as painting a fence . . . only retrain the workers for more UIC."

Make-work projects are not the answer to the Sudbury area's economic needs.

But they are necessary, as Mr. Grossman was told on his visit to Sudbury by Deputy-Mayor Bob Fera who presented a pre-budget brief to the minister on behalf of the city and the region.

Economic recovery is already under way in Ontario and the treasurer can afford an optimistic view of the ensuing year in over-all terms.

In Sudbury, however, as Mr. Fera pointed out, the mining industry will lag. Free market nickel prices and marginal increases in nickel production demand will constrain any real output growth.

This area's problem is deeper than that of temporary recession. The main economic base, employment in the mining and ore processing industry, will remain restricted. It will not grow again in the terms of the 1960s and early 1970s.

New industrial opportunities and retraining of workers to fit into jobs which do not now exist in the community are long-term projects. The necessary investment

must be found, the enterprises created, the retraining needs clarified. It won't all be done this year or next.

Therefore the despised make-work program is essential. Federal and provincial funds channelled into all manner of tasks that provide temporary employment and re-qualification for regular benefits are "band aid" solutions but the band-aid is necessary.

The alternative, as Mr. Grossman will readily recognize, is a massive increase in welfare costs locally. That is unacceptable.

Last year's program was remarkably well co-ordinated by the regional administration to sustain unemployed workers as they reached the limit of benefits. Not every "exhaustee" was served, of course, now could they be but the plan was effective and welfare costs were lower than anticipated.

We share Mr. Grossman's rejection of temporary employment created by government hand-outs to be followed by "insurance" benefits. The alternatives, however, are non-existent in sufficient volume at this time.

Employment in the Sudbury area needs all the help it can get from senior governments as a bridge to the more stable economy of the future.

STAMP program extended by eight weeks

Some four thousand rock samples sitting at Laurentian University will be subject to greater scrutiny thanks to an extension of STAMP.

Standing for the Sudbury, Timmins, Algoma Mineral Program, STAMP received an extra \$159,300 in federal job creation funds last week.

The extra money will extend the life of the geological survey project by eight weeks. 60 persons are employed under the project which was launched in September of last year.

Managed by Lauren-

tian University's department of geology, the project has been endeavoring to identify mineral deposits in the areas which give STAMP its name.

"This is one of the most successful job creation projects we've developed, I think, in the last two years," said Nickel Belt MP Judy Erola last week in announcing the extra funding.

The funding will allow for a more detailed analysis of the data collected during the program's rock-collecting

Stamp is rated as one of the most successful job creation projects the area has seen in two years.

phase.

According to Dr. Tony Beswick, chairman of the department of Geology at Laurentian, there is an "enormous amount of information coming out of the project." This information "will allow any company to go and follow-up on these target areas in more detail," said Beswick of the type

of information the analysis of the rock samples is providing. The extended life of the project will allow for "a much more thorough job in evaluating the results."

In addition to the benefits the information could have for the private sector, Erola noted that STAMP also provided

work for geologists and geochemists who were on UIC. "Some of them had never had an opportunity to apply the knowledge they had learned in the classroom," said Erola of the project's workers. "We were anxious to give them some hands-on experience."

Laurentian University also has benefited from the project as the result of receiving almost \$300,000 worth of scientific equipment. Said Doug Goldsack, dean of Science and Engineering at Laurentian, "One of the major benefits of this particular project is that we have now been able to set up a top-notch geochemical laboratory that we didn't have before...That's useful not only for graduate training but for undergraduates - when they come out they know that they've been trained on the best."

APPENDIX 5

ECONOMIC GEOLOGY AND MINERALOGY DIVISION SUBMISSIONS TO BRANCH FOR DEPUTY MINISTER'S BRIEFING NOTES

Week of:

Aug. 5, 1983

Plans are proceeding for "STAMP" (Sudbury-Timmins-Algoma Mineral Program), designed to aid unemployment in these three northern Ontario regions and to acquire information useful to mineral exploration. The original two-part program (CANMINDEX mineral deposit file; esker sampling program) has been expanded to include a rock geochemistry sampling project in Huronian strata in Algoma and Sudbury regions and investigation of economic mineral-related features in sedimentary rocks (Onaping Series) within the Sudbury Basin. GSC and MPS staff briefed Minister Erola today and will visit Sudbury this week for discussions with CEIC and Ontario officials in connection with the program.

Aug. 12, 1983

J.M. Duke accompanied F. Keyes (MPS) and J. Kurylłowicz (Minister's office) to Sudbury, Ontario, to meet with individuals at Laurentian University and CEIC who may be involved in the proposed STAMP program. At this time, Laurentian University agreed to act as sponsor for the program. The CEIC officers indicated that there would be no overwhelming problems to initiating the program and also that there would appear to be a sufficient pool of labour in the area to allow the program to proceed.

Sept. 23, 1983

A Geological Survey team comprising J.G. Fyles, D.C. Findlay, J.M. Duke, W.W. Shilts and K.H. Poulsen is meeting with Ontario Geological Survey representatives in Toronto on September 22 to discuss scientific aspects of the STAMP program, and the planning of individual projects to benefit from the expertise available in both organizations.

Sept. 30, 1983

Members of the G.S.C.'s STAMP Technical Advisory Committee (STAC) are to visit Sudbury, September 29-30, for discussions with the sponsor, Laurentian University, and to assist in the interview and selection of personnel for the positions of project leaders and general program administrator.

Oct. 7, 1983

After some initial complications with start-up arrangements, the STAMP (Sudbury-Timmins-Algoma Mineral Program) has begun. GSC Technical Advisors were in Sudbury last week aiding CEIC and Laurentian University Staff with initial hiring of project workers. Project leaders for 3 of the 5 projects are now in place and operations in two projects have started. Bureaucratic procedures have certainly slowed up implementation of STAMP.

Oct. 14, 1983

J.M. Duke and C.C. Bowstead attended a meeting in Sudbury with officials of CEIC and Laurentian University at which the various STAMP contracts were amended to the satisfaction of all parties. The stamp program is now underway with the four project leaders, program coordinator and some other personnel in place.

Dec. 2, 1983

STAMP PROGRAM: Progress reported to date by the sponsors (Laurentian University) is most satisfactory. Field operations have been substantially completed. Laurentian University will hold a technical briefing on Friday, December 2nd which will be attended by Hon. J. Erola and representatives of the press. G.S.C. (EMR) will be represented by Dr. F.W. Chandler.

Feb. 17, 1984

Dr. Tony Beswick and Dr. Doug Goldsack (Dean of Science), Laurentian University met with GSC members of STAC (STAMP Technical Advisory Committee) February 15 to review progress of STAMP (Sudbury-Timmins-Algoma Minerals Program) and to discuss methods of publication of STAMP project data. Some discussion also took place on the possibility of extension of STAMP (Son of STAMP); at the moment the situation is uncertain in this regard. Drs. Beswick and Goldsack are extremely enthusiastic about STAMP and there seems general agreement that it has been a solid, well-managed program that will achieve its dual objectives of providing useful employment to unemployed geologists and technicians in the STAMP regions as well as yielding valuable scientific results useful for the exploration industry. Drs. Beswick and Goldsack also wished to emphasize that one of the useful longer term benefits was the training of a cache of personnel who were already beginning to find full-time employment with local mining and exploration companies, and in at least one case, with the university.

Aug. 10, 1984

Dr. A.E. Beswick, Department of Geology, Laurentian University, Sudbury, delivered draft reports and maps to the Geological Survey on August 2, 1984 that present the results of three of the four STAMP (Sudbury-Timmins-Algoma Minerals Program) projects conducted in 1983-1984. Titles of the reports are: Swayze Belt esker geochemistry (J.A. Richard); Huronian Supergroup lithogeochemistry (D. Tortosa); Mineralization in the Onaping Formation, Sudbury Basin, Ontario (N. Bussolaro, D.H. Rousell and A.E. Beswick); and the metamorphic mineralogy and chemical alteration of the Temagami Greenstone Belt (A.E. Beswick and R.S. James). These reports are being readied for release as G.S.C. Open Files with a target date of late September for at least three of the above-mentioned reports. Mineral occurrence data, collected under the CANMINDEX-related project, and the esker geochemistry report (above) which requires more preparatory work than the others are expected to be ready for release late in October. In general the reports appear to be of high quality and they contain results of both scientific and practical interest.

STAMP VIDEOTAPE

A 20-minute videotape on STAMP was filmed by Laurentian University staff and students. It describes individual STAMP projects, narrated in interview format by Project Leaders. The videotape was shown on a local Northern Affairs program in Sudbury.

Copies of the tapes (both Beta and VHS formats) are on deposit with Economic Geology and Mineralogy Division, Geological Survey of Canada.