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From: James C. McDougall, P.Eng.
Date: March 2, 1998
Pages: 7 Including this cover page

Subject: Permit N3L-1710 - Abandonment & Restoration Plan

Urgent Information For Review For Comment Please Reply

Comments:

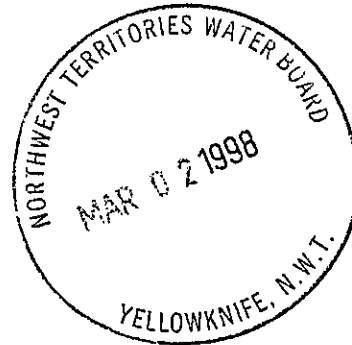
Dear Vicky:

Attached is the Abandonment & Restoration Plan for Water Use Permit N3L-1710. Could you please forward it to the appropriate people for review.

If you have any questions or you require additional information please call me.

Sincerely,

James C. McDougall P.Eng.
President





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February 27, 1998

Northwest Territories Water Board
P.O. Box 1500, Yellowknife
NWT, X1A 2R3

Attention Mr. Gordon Wray, Chairman

Dear Sir:

Subject: Abandonment & Restoration Plan for Water Use Permit N3L-1710

Introduction

The Inuvialuit Petroleum Corporation is in the process of developing the Ikhil Gas reservoir to supply natural gas to the Town of Inuvik. This development plan includes the drilling of two wells, the installation of production facilities and a small diameter pipeline to deliver the gas from Ikhil to Inuvik. The first part of the development plan, which includes the drilling of the two wells and the repair of the existing K35 well, is being carried out this winter. A class B water permit, No. N3L1-1710 has been issued by the Northwest Territories Water Board to support this activity. In accordance with the permit North of 60 Engineering Ltd. is filing this Abandonment and Restoration Plan for the drilling sumps and the camp sewage sump.

Goal of Abandonment and Restoration Plan

The goal of the Abandonment and Restoration Plan is to prevent progressive degradation, and to enhance the natural recovery of the drilling and sewage sump areas.

Objectives of Abandonment and Restoration Plan

Specific objectives of the Abandonment and Restoration program are:

- 1) To ensure that the sumps are abandoned in such a manner that the requirement for long term maintenance and monitoring is minimized.
- 2) To prevent seepage from the sumps to the environment.
- 3) To return the affected areas to a state compatible with the original undisturbed conditions giving due consideration to practical factors including economics, aesthetics and future users.

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Overview of Current Operation

Water to support the current operations has been drawn from three locations, the East Channel of the Mackenzie River, a small lake adjacent to the Ikhil K35 Well location and Peter Lake (see attached map). Water taken from the first two locations was used to ice down the overland access route from the East Channel and to the camp and well sites. Now that construction of the access route is complete, all water is being taken from Peter Lake. A pump with a water intake screen is used to pump water from the lake into a tank truck which is used to haul the water to the camp for camp use and to the drilling rig to be used as boiler makeup water and for drilling fluids to support the drilling of the well.

The potable water for the camp is tested every month. Samples are taken at the lake and from taps within the camp and are then submitted to the Inuvik Regional Health Board for analysis.

Effluent from the camp is discharged to a sump adjacent to the camp. All solid waste associated with the camp and drilling program is either incinerated or hauled to Inuvik for disposal in the town solid waste dump.

Drilling fluids that are associated with the drilling of the two wells will be contained in sump adjacent to each well. A plan view and cross section of the drilling sump is shown in Figure 2. Dimensions of the three sumps are shown in Table 1

Dimension	Camp Sump	K35 Drilling Sump	K28 Drilling Sump
Length (m)	24	24	24
Width (m)	11	16	16
Depth (m)	3.5	4	4

Table 1

Fuel storage is within double wall tanks located adjacent to the camp and each well site. Snow and ice berms surround each of the well sites as an added containment measure. Any fuel spills will be handled as per the Emergency Response Plan that was submitted along with the Water User Permit application.

All drilling mud and cements are contained in pallets. Specialized drilling mud additives are stored in sea can metal shipping containers.

Sump Abandonment & Restoration Plan

Sumps (both drilling and camp) will be covered with native material and then topped with gravel or re-vegetated in a manner acceptable to the Water Board and the Inuvialuit Land Administration. The sumps will be contoured so as to ensure future stability. A plan and cross-section of the restored sump are shown in Figure 3.

Mud from the drilling activities and gray water from the camp will be frozen within the sump, thus minimizing potential for seepage. Samples of fluids within the sump will be

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taken prior to backfilling the sumps. The potential for acid generation is low. Based on criteria outlined in Table 1 of the Guidelines for Abandonment and Restoration Planning for Mines in the Northwest Territories, the potential for environmental impact is classified as "Low".

A monitoring program will be implemented to assess the effectiveness of the sump restoration. This program will be carried with Water Board and ILA inspectors.

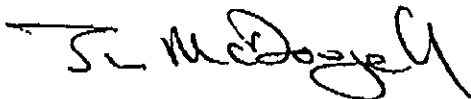
Final Abandonment & Restoration Plans for the Gas Development Project

The final abandonment and restoration plans for the gas development (i.e. when the field is depleted after 15 to 20 years) are contained in the Development Plan Application, which has undergone environmental and technical screening by the National Energy Board. Board approval for these plans has been received.

Closing

Additional information or clarification in regard to the proposed plan may be obtained from the undersigned at (403) 263-2121.

Sincerely,



James C. McDougall P.Eng.
President

Attachments - Figures

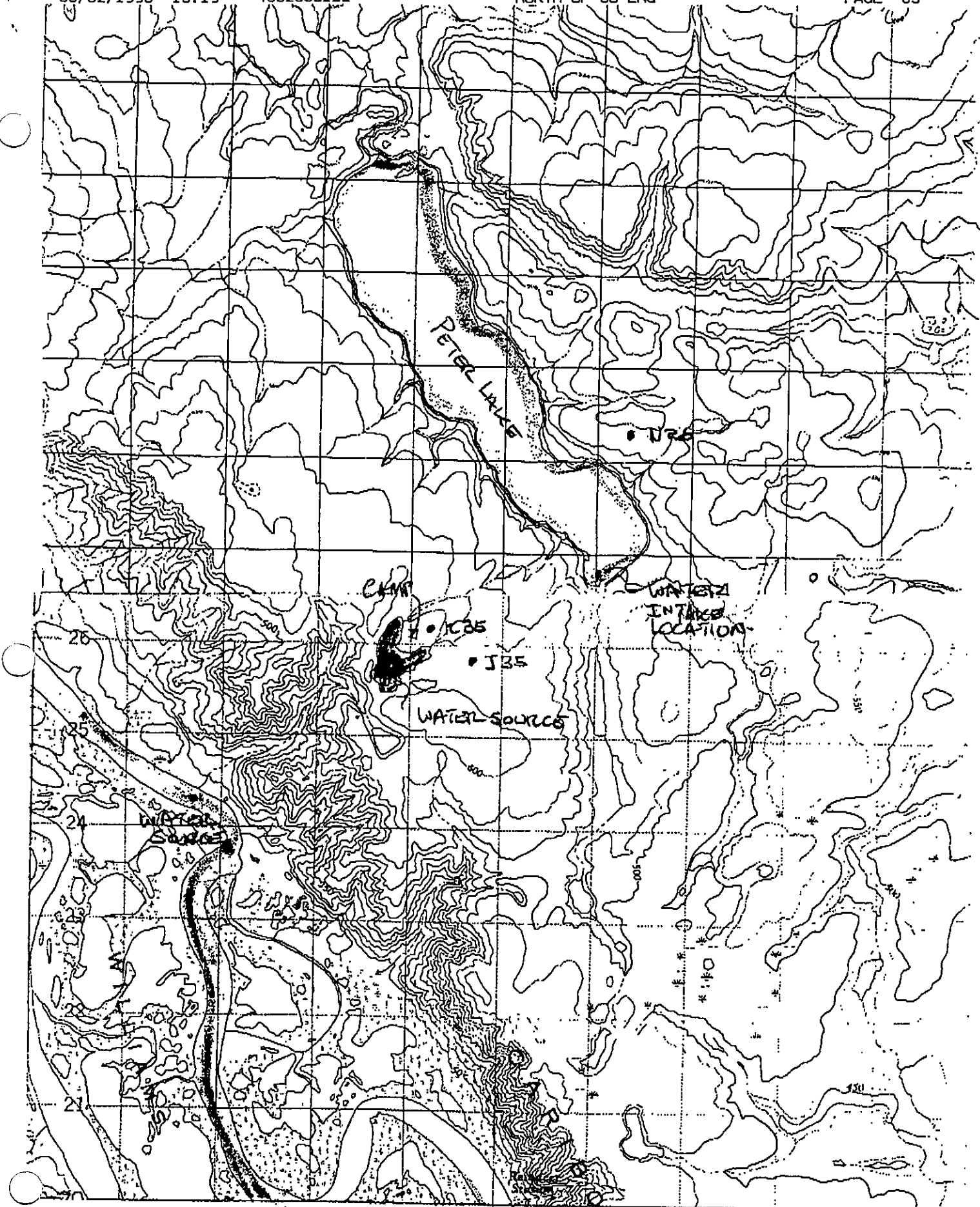


FIGURE 1
LOCATION MAP (1:59000)

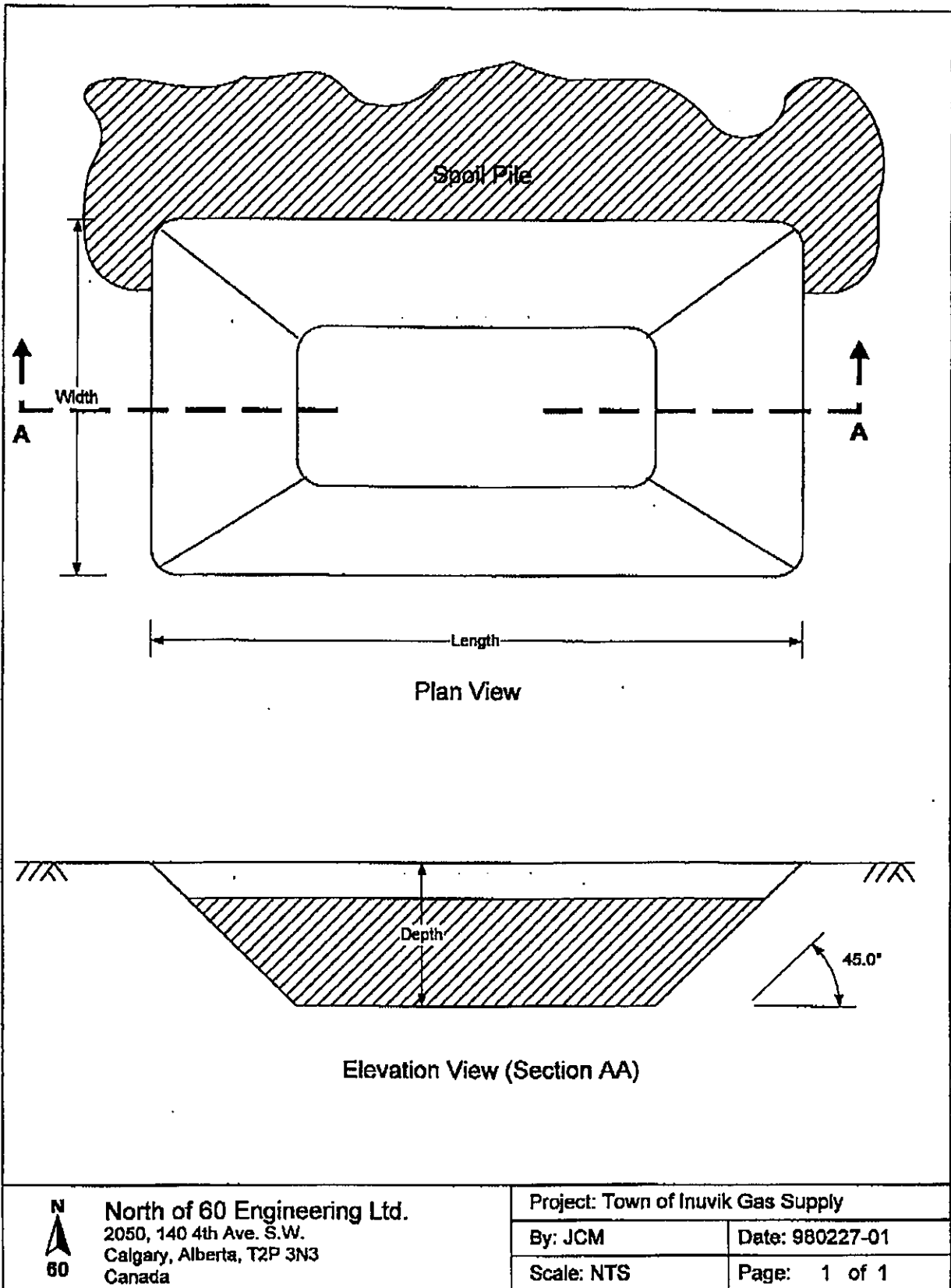


Figure 2 - Sump Profile

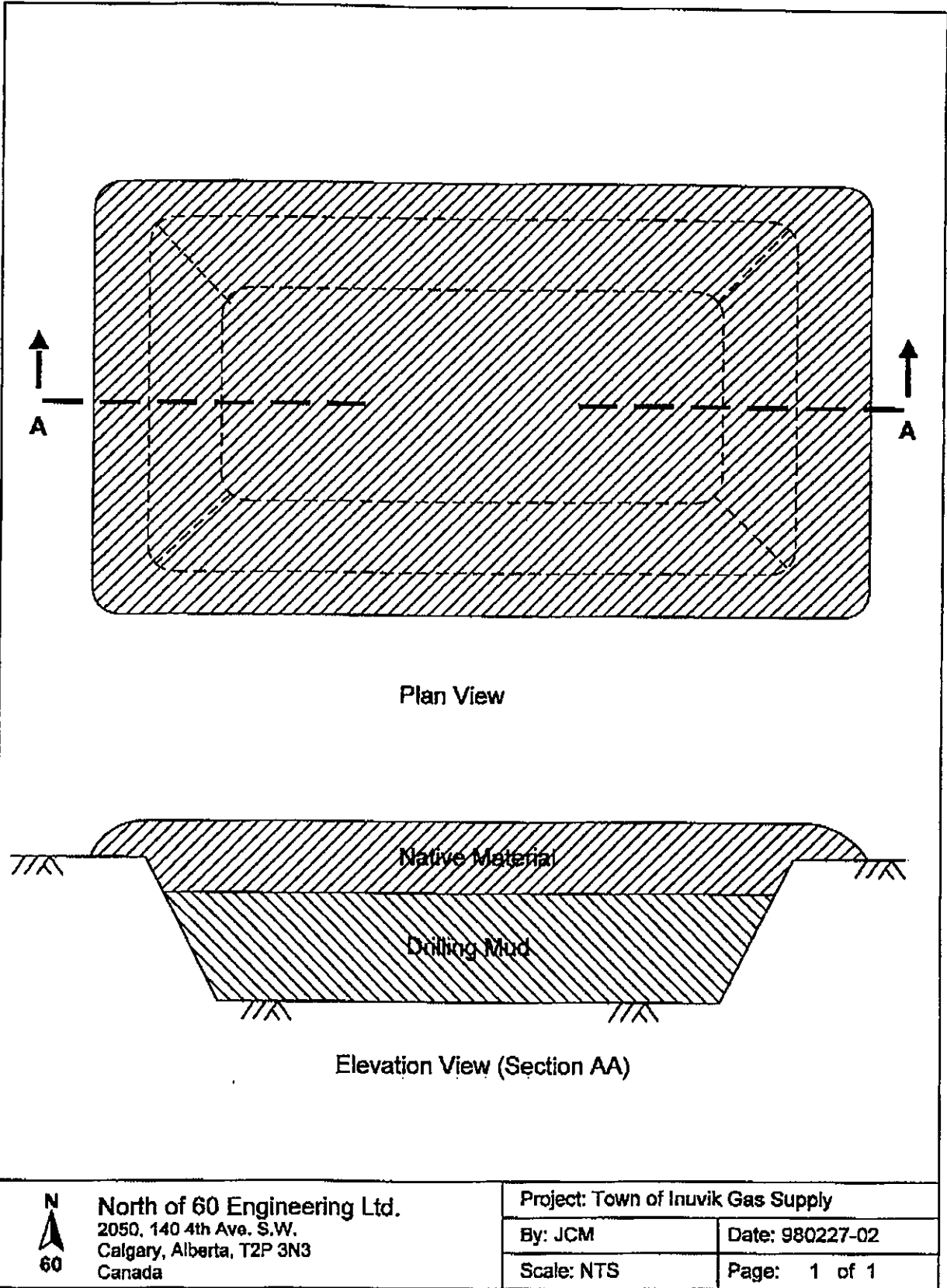


Figure 3 - Sump Restoration Plan