



42A10SW0126 63.3925 STOCK

010

~~4450-01~~  
011 PAIC 80

## ENGINEER'S REPORT

Underground Development Proposal and Cost Estimate  
Stock Township Property

Quebec Sturgeon River Mines Limited has been active in Stock and Taylor Townships, Ontario since July 1972. This activity commenced with the acquisition of mining rights in those townships by the staking of "open" ground and the optioning of patented property. At present the company owns 2,560 acres (equivalent of 64 claims) in the area.

The purpose of the acquisition was to investigate the presence of the Porcupine - Destor Fault, an important geological structure that is associated with gold deposits throughout a distance of eighty miles, extending from west of Timmins, Ontario to Destor, Quebec.

A surface diamond drill programme began in January 1973 using two machines. Early encouragement was received in Stock Township, lot 7 Concession I, and this led to a detailed drilling programme in that location. This programme comprised 49 drill holes totalling approximately 25,000 feet of drilling and it encountered gold-bearing mineralization along an east-west trending strike length of 2,200 feet.

The concentration of drilling was in the central 700 feet of strike length and results indicate the presence of a zone containing 700,000 tons with an average grade of .14 oz. of gold per short ton when all higher assays are "cut" to 1 oz. This indicated tonnage appears to be flat lying and lies between bedrock and 350 feet below surface. Overburden in the area varies from 45 to 180 feet in depth and its existence results in a high drilling cost; for this reason the drilling was confined to the favourable area with the least overburden. In 1974, instead of continuing with more closely spaced, expensive drilling it was judged that an underground development programme was justified in order to correlate the drill results, and to assess the potential of the mineralized zone.

In 1974 and 1975 in order to proceed with this underground programme the following work was done:

- (A) A mine access road, one mile in length, was completed from the main Highway 101 to the shaft site;
- (B) A 2,500 K.V.A. substation was installed at the mine site to receive power and serve the mine facilities;
- (C) A 27.5 K.V. primary power line was installed by Ontario Hydro;
- (D) Steel piling was driven through 48 feet of overburden to bedrock in the form of a 28 ft. by 12 ft. rectangle;
- (E) A 90 foot headframe for a three-compartment shaft has been erected and all foundations for surface ore bins and waste bins poured. The shaft, measuring 23 feet by 10 feet will be sunk within the steel rectangle. The first 12 feet of sinking was completed and concrete ring poured to secure the bottom of the piling and to seal the walls of the shaft;
- (F) Mine buildings were erected while the steel piling for the shaft was being driven. This mining plant consists of (i) a 40 feet by 123 feet steel Armco service building housing the hoist-compressor-heating plant and mine dry facilities; (ii) a second 40 feet by 102 feet steel Armco building housing the main offices, warehouse and machine shop. In addition, an 80 foot water tank was erected and a deep well completed to service the mine and plant with water.

The 1974-75 programme was completed at a cost of \$1,630,000.

Between 1975 and 1980, due to a shortage of funds, and a depressed gold price, the property has been inactive, and held on a care and maintenance basis.

It is now recommended that the underground programme be recommenced and that it consist of:

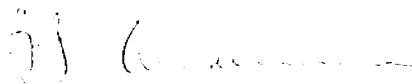
- (1) Deepening the shaft to 230 feet below surface (a further 170 feet below present shaft bottom);
- (2) Cutting out shaft station at 200 feet below collar of shaft;
- (3) Driving a drift (8' X 10') on the 1st (200 foot) level for a length of 1000 feet;
- (4) Completing 7,000 feet of diamond drilling from the drift on the 1st (200 foot) level;

- (5) Providing the remaining surface plant necessary to carry out the preceding recommendations.

The project is estimated to cost \$832,667.00 as per the attached detailed cost estimate.

Respectfully submitted,

J.B. Anderson, B.Sc., P.Eng.



Toronto, Ontario  
February 14, 1980

QUEBEC STURGEON RIVER MINES LIMITED

STOCK TOWNSHIP PROJECT

COST ESTIMATE

Preparatory Work

Sinking Preparation	-	\$ 25,000	
Hydro deposit	-	12,000	
Plumbing and Heating	-	15,000	
Substation & Power distribution	-	40,000	
Water supply	-	5,000	
Shaft Signals-telephones	-	<u>2,000</u>	\$ 99,000

Underground Development \*

Mobilization		\$ 11,000.00	
Shaft 170' @ \$472/ft		80,240.00	
Bearing Set		615.00	
Water Ring		615.00	
Station Cutting 9,000 cu. ft. @ \$2.20		19,800.00	
Drift 1000' @ \$198/ft		198,000.00	
Pump installation & Piping		5,000.00	
Rock Bolting (approx.)		2,700.00	
Waste disposal		10,000.00	
Diamond Drilling & Assaying		<u>50,000.00</u>	\$377,970.00
Company expense \$35,000 X 8 months			280,000.00
Total Cost			\$756,970.00
And 10% Contingency			75,697.00
			<u>\$832,667.00</u>

\* Costs Based on Contract Bid Dated Feb. 9, 1980.

Shaft Timber, Hardware, Pipe and Pipe  
Supplies presently available at Site.

Certificate of Qualification

I, J. Burns Anderson residing at 11 Thornbury Crescent, Islington, Ontario do hereby certify that:

1. I am a Consulting Mining Engineer with my office at 11 Thornbury Crescent, Islington, Ontario;
2. I am a graduate of Queen's University, Kingston, Ontario with a B.Sc. degree in Mining Engineering and have been involved in the Mining profession for over 25 years;
3. I am a registered Professional Engineer in the Province of Ontario;
4. This report is based upon examination of all data made available by Quebec Sturgeon River Mines Ltd.;
5. I have no interest, nor do I expect to receive any interest, directly or indirectly in Quebec Sturgeon River Mines Limited.

J.B. Anderson, P.Eng.

Islington, Ontario  
February 14, 1980

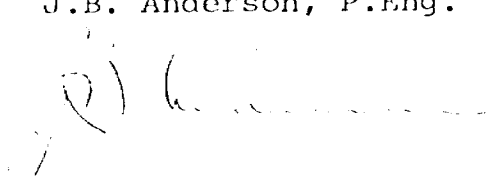
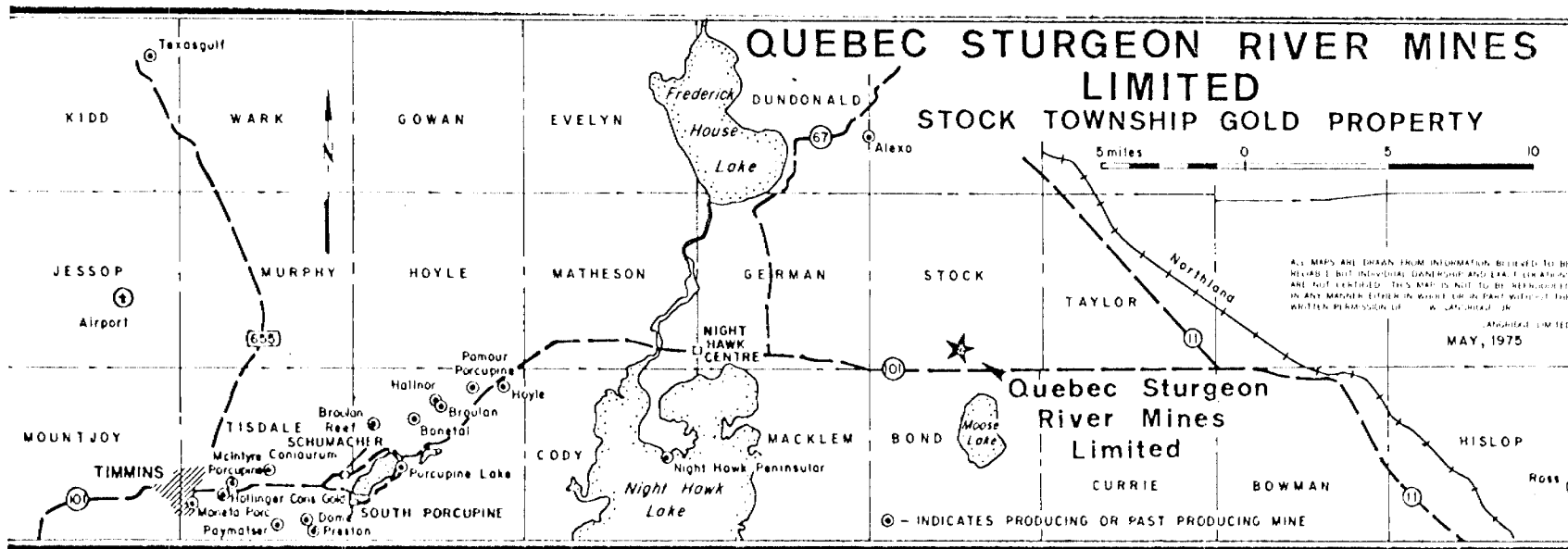


FIG I



0571 PA1 < 80



QUEBEC S'



42A10SW0126 63.3925 STOCK

SMI PAI-C80

900

63.3925

166 PEARL STREET TORONTO, ONTARIO M5H 1L3 TELEPHONE: (416) 597-0969

February 27, 1981.

Ministry of Natural Resources  
Whitney Block  
4th Floor, Room 4652  
Toronto, Ontario  
M7A 1W3

Attention: Mr. F.W. Pooley, O.M.E.P. Administrator.

Dear Sir;

Please find enclosed an Application for Grant, form 2, O.M.E.P. Program 1980, for work done by this company in Stock Township, District of Cochrane, Ontario from Sept. 2 to December 31st, 1980. This latter date is the end of this company's financial year.

During the period above 59 feet of shaft were sunk on lot 7, Con I Stock Twp., Ontario. Location of property is shown in Fig. I enclosed, while actual location of shaft on property is shown on Figs. II & III.

The work did not progress as satisfactorily as expected due to the broken nature of the ground; extra support from rock bolts, concrete & re-bars was required adding greatly to the cost. Extremely cold weather in December added to the heating costs.

Among the enclosures with the application form are breakdowns of the costs involved. No receipts are enclosed although where possible the cheque number & the name of the employee, contractor or merchant is listed. The invoices related to this work fill several binders and are available at the company office.

Yours very truly,

Quebec Sturgeon River Mines Limited

H. Michie, P. Eng.

OF  
OMI-PAI-C-80

# STOCK

DISTRICT OF  
COCHRANE

PORCUPINE  
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

## LEGEND

- PATENTED LAND (P)
- CROWN LAND SALE (S) or C.S.
- LEASES (L)
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS [Symbol]
- IMPROVED ROADS [Symbol]
- KING'S HIGHWAYS [Symbol]
- RAILWAYS [Symbol]
- POWER LINES [Symbol]
- MARSH OR MUSKEG [Symbol]
- MINES [Symbol]

## NOTES

400' Surface rights reservation around all lakes and rivers.

RESERVATIONS:  
 (R) - Reserved for recreational purposes under Sec. 3 P.L.A. File 188543.

DATE OF ISSUE  
 SEP 11 1979  
 SURVEYS AND MAPPING  
 BRANCH

OMI PAI C

PLAN NO.- M. 388

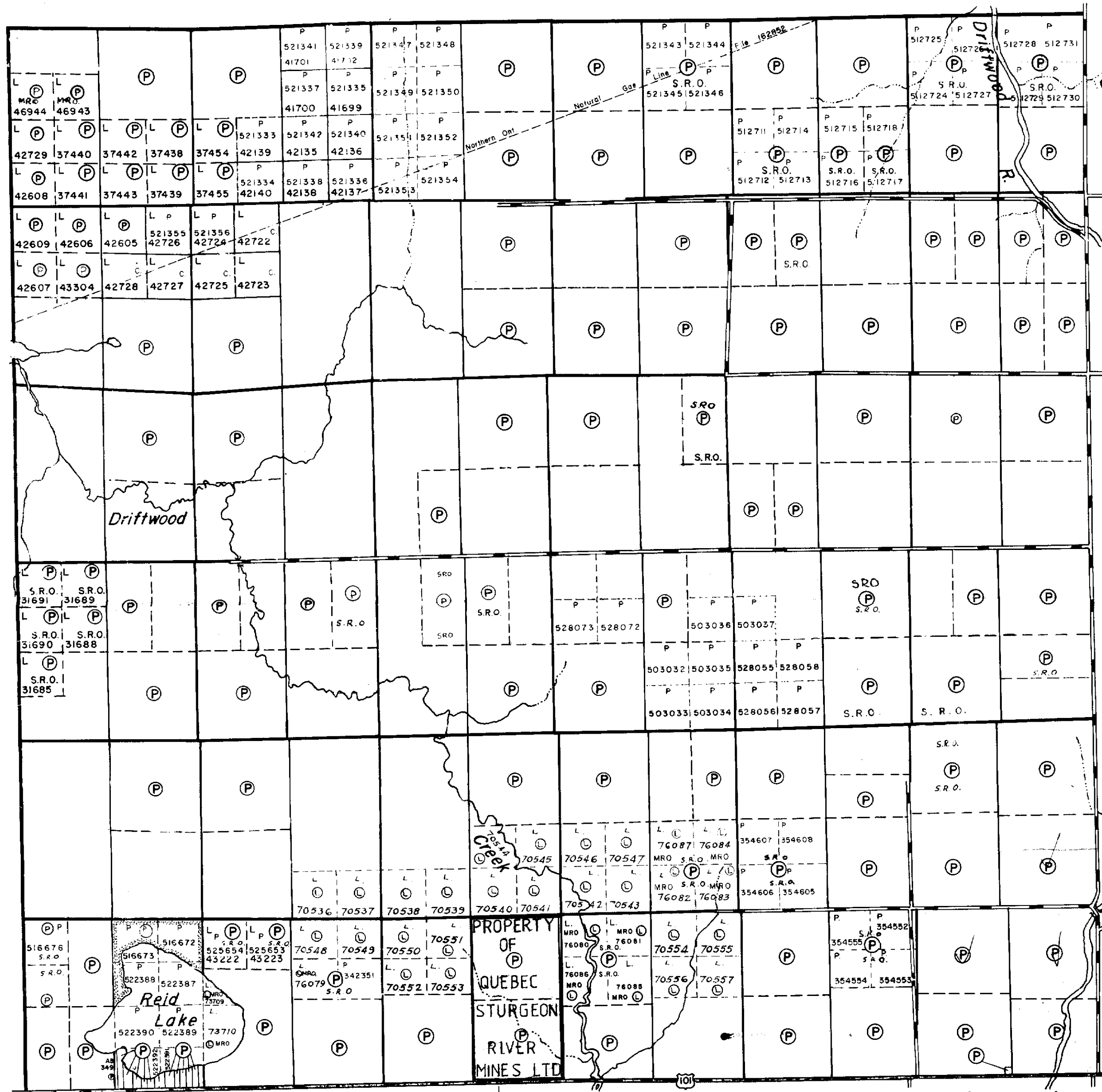
ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

Clergue Twp.

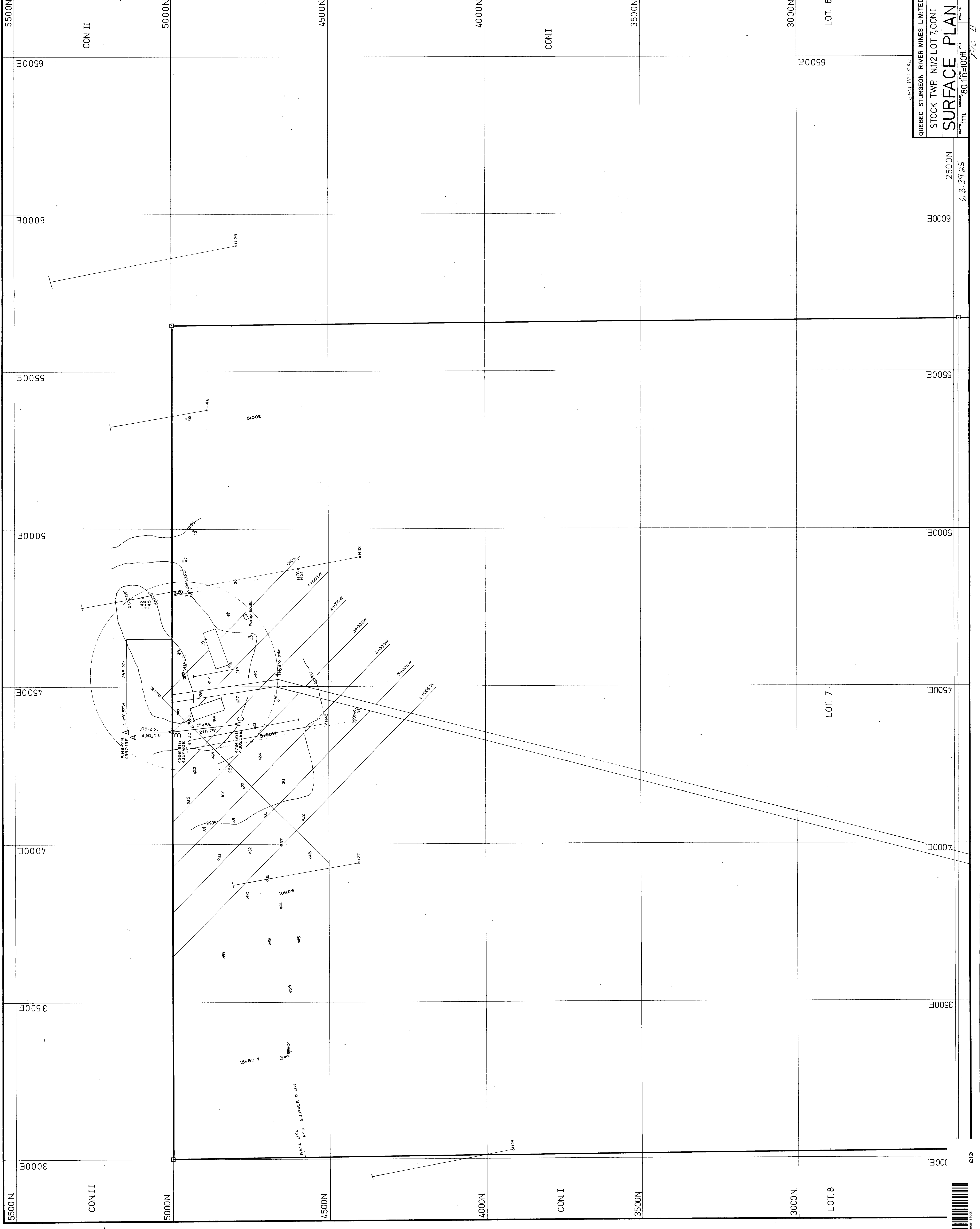
German Twp.

Taylor Twp.

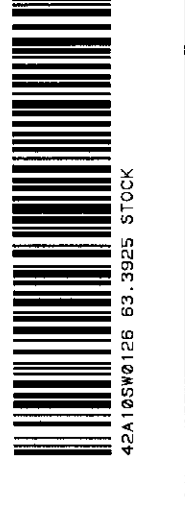
Bond Twp.

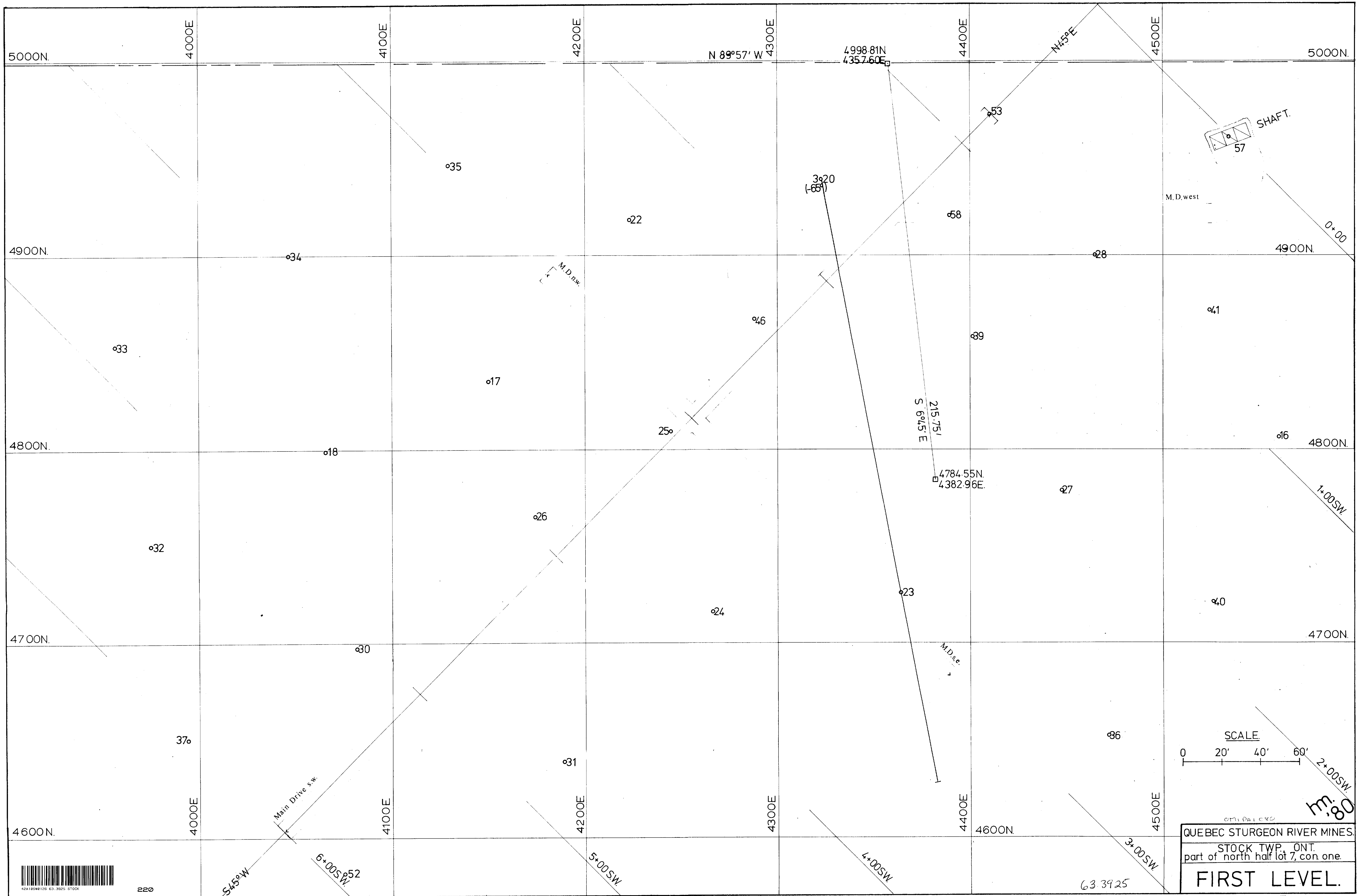




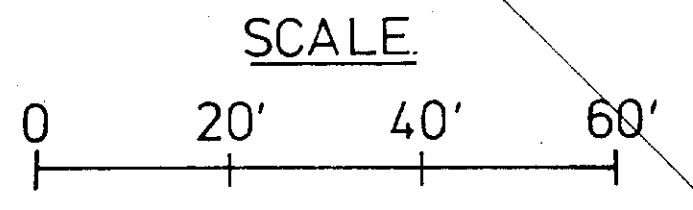


QUEBEC STURGEON RIVER MINES LIMITED  
 STOCK TWP. N1/2 LOT 7, CONI.  
**SURFACE PLAN**  
 80' = 1" = 100ft  
 2500N  
 63.39.25





220



QUEBEC STURGEON RIVER MINES.  
 STOCK TWP. ONT.  
 part of north half lot 7, con. one.  
**FIRST LEVEL.**

m:80

FIG. III