

Giant Yellowknife Mines Ltd.
Mine Backfill Sampling Programme

SDS Equipment & Personnel

Truck-mounted Seismic 1700 Rotary Drill, with support truck for carrying pipe, and pick-up truck for transportation.

Drill through overburden with 8-5/8 inch diameter tri-cone bit using mud. Set 7 inch diameter casing to bedrock. Drill 6 inch diameter hole in rock with downhole hammer drill.

Drill mine backfill using 5-1/2 inch O.D. dual tube reverse circulation pipe, with 3-1/4 inch I.D. Obtain bulk samples by this means, and samples for engineering tests using Shelby tube or split spoon samplers.

- mobilisation \$5.00 per mile.
- Rates: - \$150 per productive hour for drill and
 \$140 per standby hour.
- \$50 gallons fuel per 12 hours @ \$1.50 per gallon.
- consumables at \$3.00 per foot in overburden
 and bedrock.
- 3 man crew. Daily transport to and from site
 at \$50 per hour.
- \$18 per day per man plus room and board.

Engineering Supervision

Project management and continuous on-site supervision by Geocon.

Laboratory Testing

Bulk of samples to be forwarded to Falconbridge Metallurgical Laboratories.

Geocon to do soil mechanics tests such as:

- moisture content
- in-place density
- temperatures in-place
- Atterberg Limits (Liquid & Plastic)
- grain size analysis
- specific gravity

Approximate Cost Estimate

6 holes in overburden ranging from 0 to 60 feet thick.
 12 holes through about 120 feet of fill

Say - one day/hole through overburden (in 6 holes only)

- one day/hole to drill bedrock
- one day/hole in backfill
- 1/2 day/hole to move

*likely
less
per hole*

Total time about 36 days.

S.D.S.

Mobilisation of S.D.S. Spread and Crew	\$15,000
Drilling 36 - 12 hour days @ \$160/hr.	\$69,120
Living expenses & travel, say \$100/man/day = 40x3x100	\$12,000
Consumables 1800 feet @ \$3/ft.	<u>\$ 5,400</u>
	<u>\$101,520</u>

Geocon

Mobilisation of Site Engineer and Project Manager and travel time	\$2,000
Project Manager, 5 days @ \$350/day	\$1,750
Site Engineer, 40 days @ \$250/day	\$10,000
Expenses 40 days @ \$100/day	\$4,000
Laboratory Testing @ \$500/hole	\$6,000
Consumables, say	\$1,000
Reporting	<u>\$3,000</u>
	<u>\$27,750</u>

TOTAL

\$129,270

February 17th, 1981.