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900 VEIN
DEBBIE / YELLOW CLAIMS
PORT ALBERNI MINING DIVISION

BULK SAMPLE MINE PLAN
TO ACCOMPANY NOTICE OF WORK
AND RECLAMATION PROGRAM

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SUBMITTED TO THE MINISTRY
OF ENERGY, MINES, AND PETROLEUM RESOURCES

by: A.J. STEWARD, P.ENG.
&
D.R. LESLIE

SEPTEMBER 23, 1992

900 VEIN
BULK SAMPLE MINE PLAN

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1.0 INTRODUCTION

Allyn J. Steward and Donald R. Leslie have entered into a lease agreement with Westmin Resources Limited to mine a bulk sample from the 900 zone on Westmin's Debbie / Yellow Gold claims.

This report is a description of the planned work as required by sections 6.1.1, 6.1.2, 6.1.3, 6.1.4, 10.1.1, and 10.1.2 of the *Health, Safety, and Reclamation Code for Mines in British Columbia*. Accompanying this report are the completed prescribed application forms for *Notice of Work and Reclamation Program on a Mineral Property* and for *Underground Exploration Work*.

The 900 gold zone is about 11.5 kilometers southeast of Port Alberni, Vancouver Island. Terrain is locally steep.

Climatic conditions are moderate with abundant rainfall and snowfalls that do not require snow ploughing for any extended period of time.

2.0 LAND OWNERSHIP

The 900 zone is located on the Linda 1 and Yellow mineral claims, Port Alberni Mining Division.

The 900 zone is also located within the boundaries of MacMillan Bloedel's tree farm license number 44. The area of the proposed 595 meter level portal is located in an area of replanted forest. At present, forestry is the major land use of the area in which the Linda 1 claim is situated.

Drainage of the area is effected via by Mineral Creek which flows into China Creek about one kilometer south of the 900 zone. China Creek is a municipal water supply for Port Alberni.

Figure 1 is a 1:50,000 map showing location of the 900 zone.

Figure 2 (appendix) is a 1:10,000 map outlining claim lines and topographical features.

3.0 GEOLOGY AND ORE RESERVES

3.1 REGIONAL GEOLOGICAL SETTING

The Debbie / Yellow Gold property is underlain by volcanic, sedimentary, and intrusive rocks of the Sicker Group exposed in the Horn Lake - Cowichan Uplift.

In the Port Alberni area, Sutherland Brown has classified the stratigraphy into four formations. In descending order, Brown's classification consists of the following:

1) the Mount Mark formation - composed of massive and laminated crinoidal calcarenites with interbedded chert and argillite.

2) the Cameron River formation - an epiclastic unit composed of ribbon cherts, laminated cherts, and cherty tuffs.

3) the McLaughlin Ridge formation - composed of thickly bedded, massive and lithic tuffites with interbedded laminated sandstone, siltstone and argillite.

4) the Nitinat formation - composed of basaltic pillows, massive flows, agglomerates, and minor massive to banded tuff.

The strata are cut by several granodiorite and quartz diorite intrusions and some mafic and hornblende- plagioclase porphyry dykes.

Several phases of deformation including large and small scale folding and thrust faulting have occurred.

The metamorphic grade of the rocks of the Sicker Group in the area is generally low greenschist facies.

3.2 900 ZONE GEOLOGY

The 900 zone is within a gently plunging (10 - 15° SE) and gently folded antiform. Bedding and contacts strike northwest-southeast (140° -160°) which is the same as the regional strike.

Crowe (1987) has divided the 900 area into four subdivisions in descending order:

1) a pyroxene porphyry agglomeratic lapilli tuff.
2) a basalt agglomerate lapilli tuff
3) a mixed chert, jasper, and cherty tuff unit
4) a basal pillow basalt

The basalts and cherts are part of the Nitinat formation and the volcaniclastics are part of the McLaughlin Ridge formation of Sutherland Brown's classification.

The 900 zone has been cut by several faults and shear zones. These shear zones are the sites of most of the gold mineralization. High grade gold occurs in quartz stockworks, east-west trending quartz veins, and north-northeast trending quartz veins. Lower grade gold occurs within the laminated cherts. Accessory minerals in the higher grade quartz veins include trace galena, pyrite, arsenopyrite and minor calcite along with native gold. The alteration envelope to the sharply defined quartz veins is a carbonate sericite.

The chert horizon appears to have acted as a barrier for ascending gold bearing fluids.

Approximately 1.3 kilometers north-northeast of the 900 zone is the Linda zone which is underlain by the same stratigraphy and which has similar mineralization to the 900 zone. Westmin has previously undertaken acid generation potential tests at the Linda zone which should fairly represent conditions at the 900 zone.

3.3 ORE RESERVES

Drill indicated uncut reserves for the 900 zone are 16527 tonnes probable grading 17.3 grams per tonne and 4145 tonnes possible at a similar grade. The zone is open at depth with regard to additional reserves.

4.0 MINE PLAN

4.1 MINE PLAN OVERVIEW

A 7500 tonne high grade bulk sample from the 900 zone will be mined to assess economics of any further work. A portal will be collared at the 595 meter elevation to access the ore zone. Ore will be barged to the Premier mill near Stewart, B.C. for beneficiation.

4.2 WORK SCHEDULE AND CREWING REQUIREMENTS

The bulk sample will require a seven to eight month program at the 900 zone site. Figure 3 indicates the anticipated program schedule.

It is planned to work on a two shift per day, six day per week basis until the access crosscut and drifting on the vein is complete. This should require about two months. Following completion of lateral development, all work will be on a one shift per day, six day per week basis.

Throughout the development stage (until the end of month four), it is planned that the work force will consist of two working management and supervisory staff, four miners, and a representative of Westmin Resources Limited. Thereafter, the workforce will be reduced to a maximum of five including the Westmin representative and will likely be less than five.

Surface haulage of ore to a Port Alberni docking facility will be contracted out, and will be a short term job requiring a few days. Schedules for ore haulage will be co-ordinated with MacMillan Bloedel haulage activities.

4.3 SAFETY, FIRST AID AND MINE RESCUE

First aid services, supplies, and equipment in accordance with Industrial First Aid Regulations, section 1.02, Table 1 will be supplied.

A mine rescue plan will be developed suitable to the requirements of the mine inspector.

4.4 EXPLOSIVES STORAGE AND USE

Application for explosive and detonator magazine permits will be made under separate cover following closer on-site scrutiny to determine the optimum locations for such magazines.

It is planned to use a combination of anfo and nitroglycerin based explosives. Detonators will largely consist of standard tape fuse assemblies.

5.0 GENERAL MINE LAYOUT

5.1 ACCESS AND SURFACE FACILITIES

The 900 zone is accessed by MacMillan Bloedel's China Creek logging main to a point approximately 12 road kilometers southeast of Port Alberni, thence by a two kilometer gravel access road to the proposed portal. The two kilometer access road incorporates a 245 meter elevation gain over a fairly constant grade. This access road will be resurfaced and widened as required for use as a haulage road.

The portal will be collared at approximately the 595 meter elevation (See Figure 4.) A natural bench at approximately the 568 meter elevation will be graded and widened to accommodate a 400 cubic meter mine drainage water settling pond and a 5000 tonne ore stockpile.

At the 595 meter elevation, a bench will be created to locate surface trackage, a 50 tonne ore bin, a 30 cu. meter mine drainage water sump, office trailer, compressor, fuel storage depot and waste rock dump.

5.2 UNDERGROUND DEVELOPMENT

The ore zone will be accessed by a 110 meter long 2.15 meter high by 1.85 meter wide crosscut. Following completion of the crosscut, the veins in the ore zone will be further defined by advancing sill drifts and taking down two lifts of backs within the ore zone. A 1.2 meter by 2.75 meter timbered raise will be driven updip in the best mineralization concurrently with taking down backs on the 595 level. It is anticipated that the raise will dip 55 - 60 degrees and will break through on surface about the 650 meter elevation.(see Figure 5). For purposes of mining the bulk sample, the timbered raise will provide a second exit from the mine and a ventilation conduit.

The system of drawing broken ore from the stope(s) will depend on the geometry of the ore bearing veins and will incorporate either 1) timber sill floors and chutes or 2) footwall drives and drawpoint crosscuts.

5.3 STOPING

Stoping will be done by the shrinkage method. Airleg drills will be used to drill 2.4 meter uppers aligned about 70 degrees to the horizontal. Blasting will be done with anfo or nitroglycerin based explosives depending on seepage conditions, and where possible, each lift will be blasted as one shot. Stulls will be placed routinely to reduce wall dilution during final drawdown of broken ore.

Stope access will consist of 1) the central timbered raise, and 2) at least one timbered manway carried up from the bottom of the stope. Ventilating air will be conducted through the stope via the access openings.

During the active mining phase in the stope(s), the personnel doing the mining in the stope will also do the mucking at the drawpoint level to avoid miscommunication regarding muck drawdown. Ore will be transported to surface in rail-borne equipment.

5.4 VENTILATION

An air fan will be installed at the 595 portal. During the development phase, air will be pushed through a 405 mm flexible ventilation tube to the working face. After breakthrough of the service raise, through ventilation (upcast) will be established. The fan will be relocated to the top of the service raise on suction duty. Minimum design airflow will be 65 cubic meters per minute. No heating of mine air is contemplated.

5.5 ROCK CONDITIONS ASSESSMENT

Diamond drilling at the 900 zone indicates that the host rock is a competent massive basalt. Inspection of the same basalts exposed in the Yellow Creek Adit some 2.5 km to the north shows that the formation is very stable over the 4 meter width of the crosscut. Rockbolting and other ground support requirements in the heading were minimal.

The 900 zone consists of quartz veins and quartz stockworks often located in close proximity to faults in the basalts. In general, examination of the core indicates that the fractures have been "healed" by quartz and carbonate veining, and that rock conditions will be competent for mining.

5.6 UNDERGROUND SERVICES

Water for drilling purposes will be obtained from a brook some 100 meters west of the 595 portal and conducted to the portal through a two inch plastic pipe. Two inch steel pipe will be used inside the adit.

Compressed air will be provided by a 600 cfm diesel compressor located a minimum of 30 meters west of the portal and conducted through a two inch steel pipe.

It is not planned to run electrical cables inside the mine during the bulk sampling operation.

5.7 MINING EQUIPMENT

Planned equipment consists of the following:

1) one Atlas 1 1/2 ton battery locomotive (18 inch gauge)
2) one spare battery for the above
3) 4 two ton side dump mine cars
4) one Eimco 12B mucking machine
5) one flatcar
6) six (approximately) jackleg and stoper rockdrills
7) one 20 hp air operated slusher and scraper
8) one 16 inch air fan
9) one 600 cfm diesel compressor
10) one 25 kva generator for surface facilities
11) one surface front end loader
12) one D-7 Caterpillar bulldozer
13) one 5 ton dump truck

5.8 MINE DEWATERING

Seepage and mine process water will be conducted via a ditch on the 595 meter level to a small sump near the portal. This sump will act as a primary settling sump and will be constructed so that settled solids can be removed with a front end loader. These solids will be mixed with wasterock from the mine.

Overflow from the primary sump will be conducted by a surface ditch to a 400 cubic meter settling pond which will be lined with a suitable geotextile filtering fabric similar to that used at Westmin's Yellow Creek portal. Water will filter through the fabric into the indigenous soil.

Previous acid generation tests and water quality monitoring results indicate that removal of suspended solids will be the primary requirement for wastewater treatment. A post exploration water quality assessment by Hallam Knight Piesold Ltd. is included in the appendix.

No groundwater tests have been conducted; the shallow ground cover, relatively dry southwesterly exposure, and Yellow Creek adit experience indicate that seepage should be low.

6.0 WASTE ROCK DISPOSAL

6.1 ACID GENERATION POTENTIAL

Table 1 shows the results of acid generation tests on a variety of rocks representative of ground in the Yellow Creek adit some one to two kilometers north of the 900 zone. The strata present in the Yellow Creek adit continues into the 900 zone.

6.2 WASTE ROCK DISPOSAL

Eight hundred to one thousand tonnes of waste rock will be produced from the access crosscut. Part of this rock will be used to upgrade the two kilometer haulage road from the China Creek Main and to construct a containment dyke around the mine drainage water settling pond. Any remaining waste rock will be used to regrade benches at the 595 and 568 meter elevations at the end of the project.

7. RECLAMATION PLAN

At conclusion of mining, mine waste rock will be placed on benches at 595 level and 568 level and regraded to slopes not exceeding 1 1/2 units horizontally to 1 unit vertically. These areas will be seeded in accordance with Appendix G, *Guidelines for Mineral Exploration: Environmental, Reclamation, and Approval Requirements*.

The 595 portal and raise breakthrough will be bulkheaded to the satisfaction of the mines inspector.

The two kilometer access road will be left intact for possible future use by MacMillan Bloedel, Westmin Resources Limited or others.

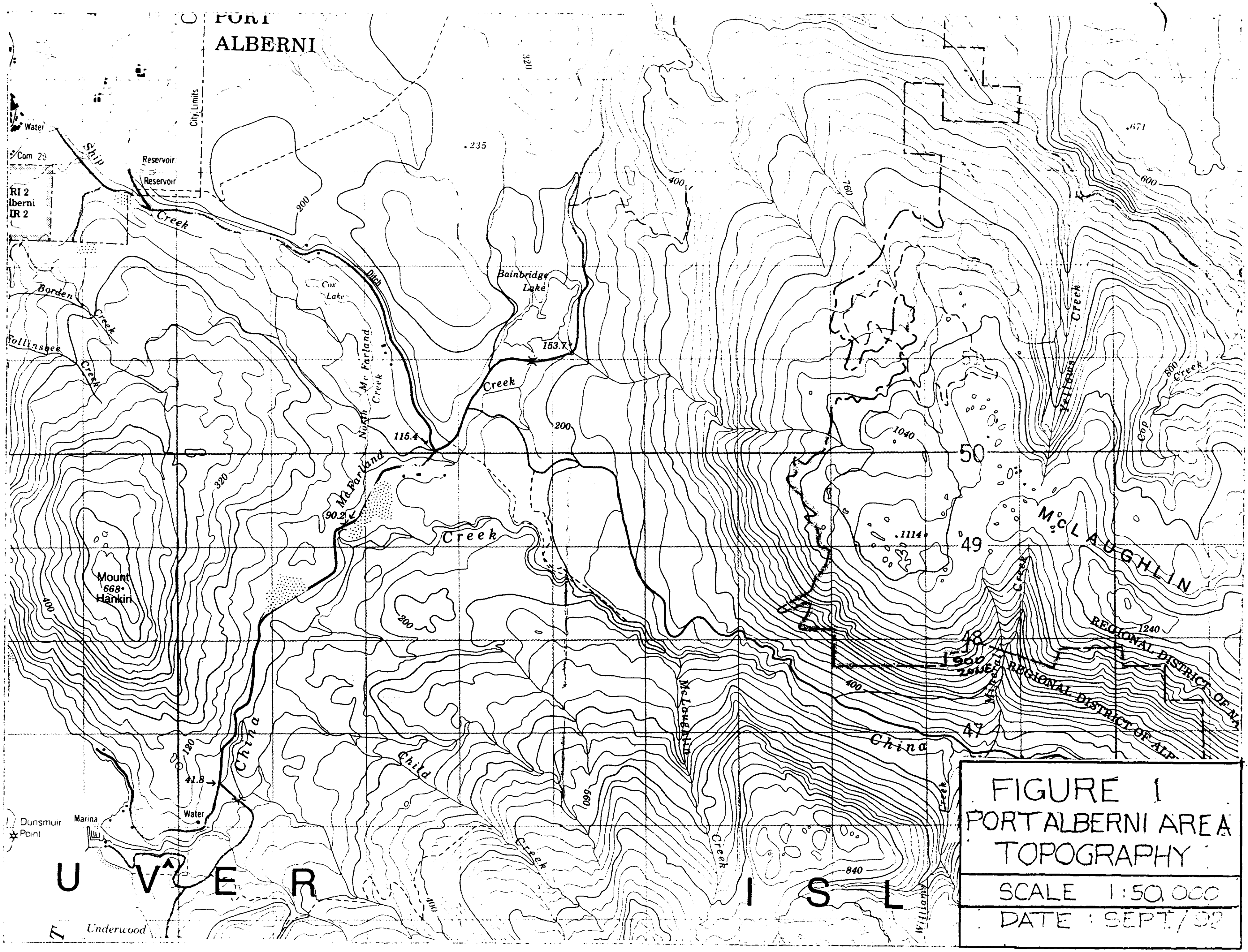
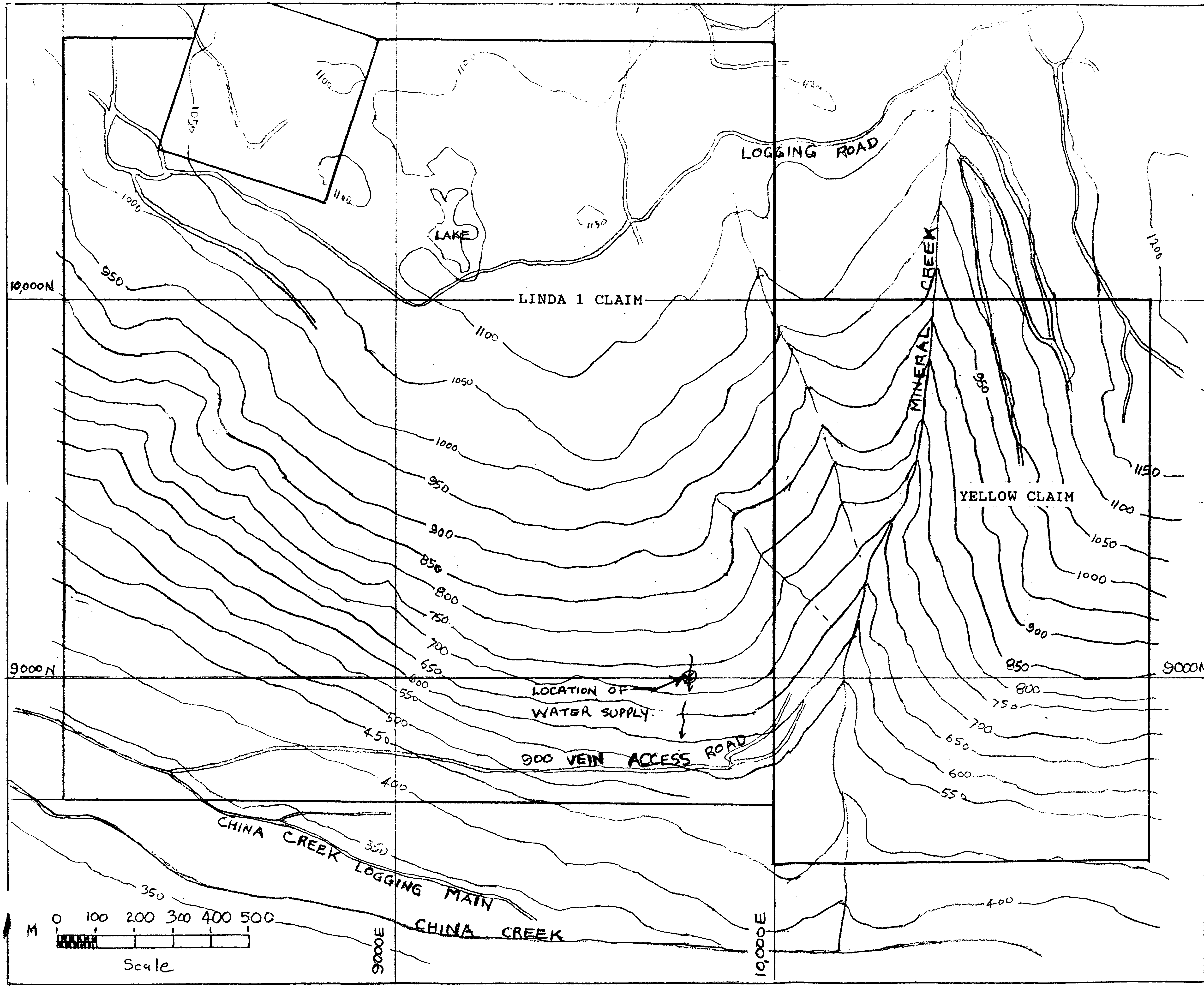


FIGURE 1
PORT ALBERNI AREA
TOPOGRAPHY
SCALE 1:50,000
DATE : SEPT/92



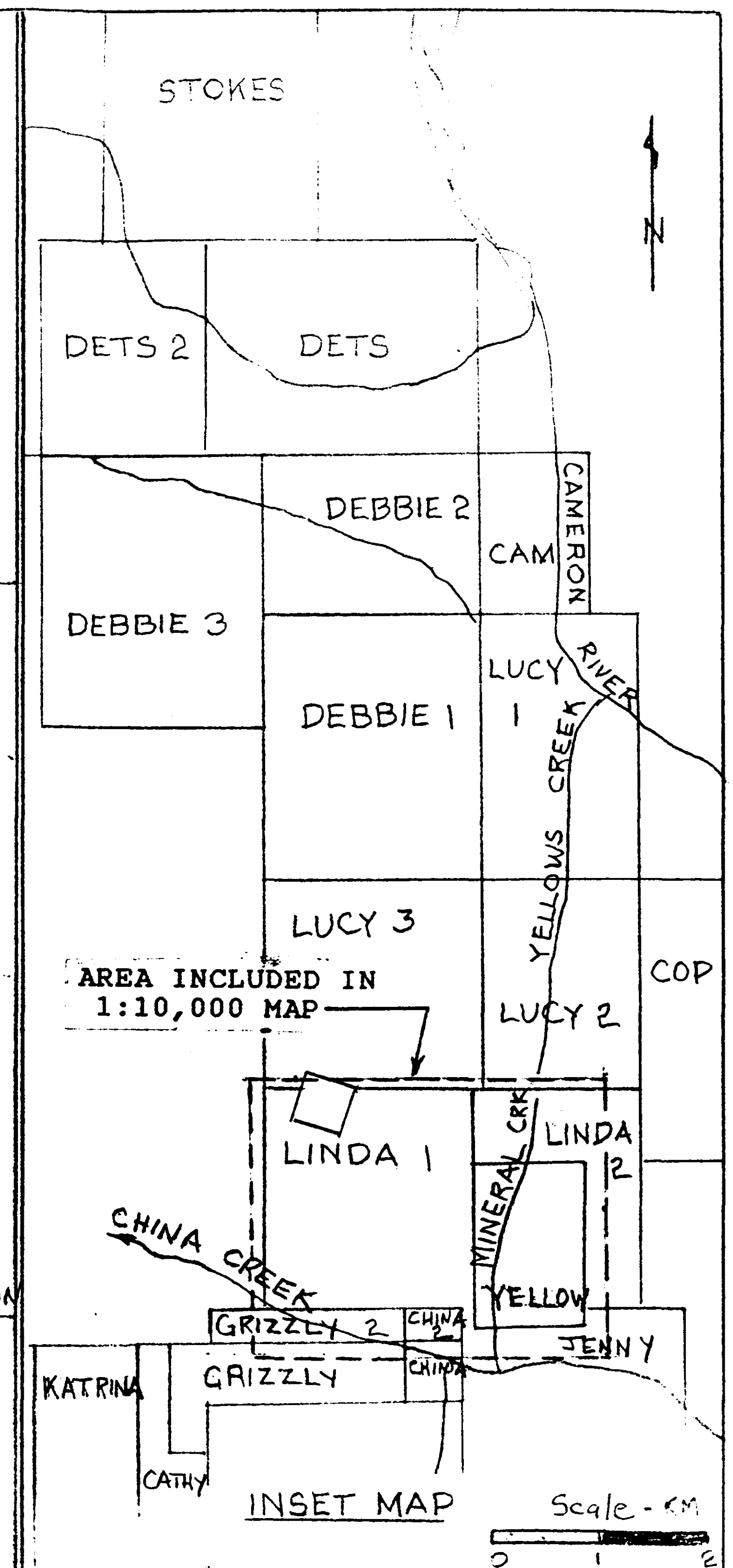


FIGURE 2

LINDA 1 AND YELLOW MINERAL CLAIMS
PORT ALBERNI MINING DIVISION

900 ZONE TOPOGRAPHY

Scale: 1:10,000	Date: Sept. 19/92
Drawn by: A. J. Steward	

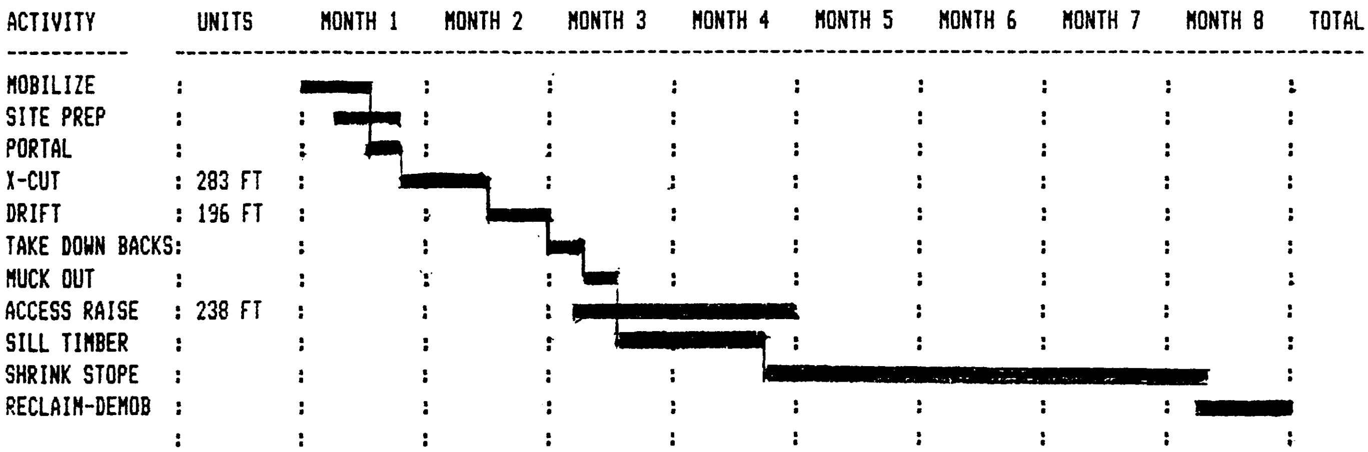


FIGURE 3

FIGURE 3

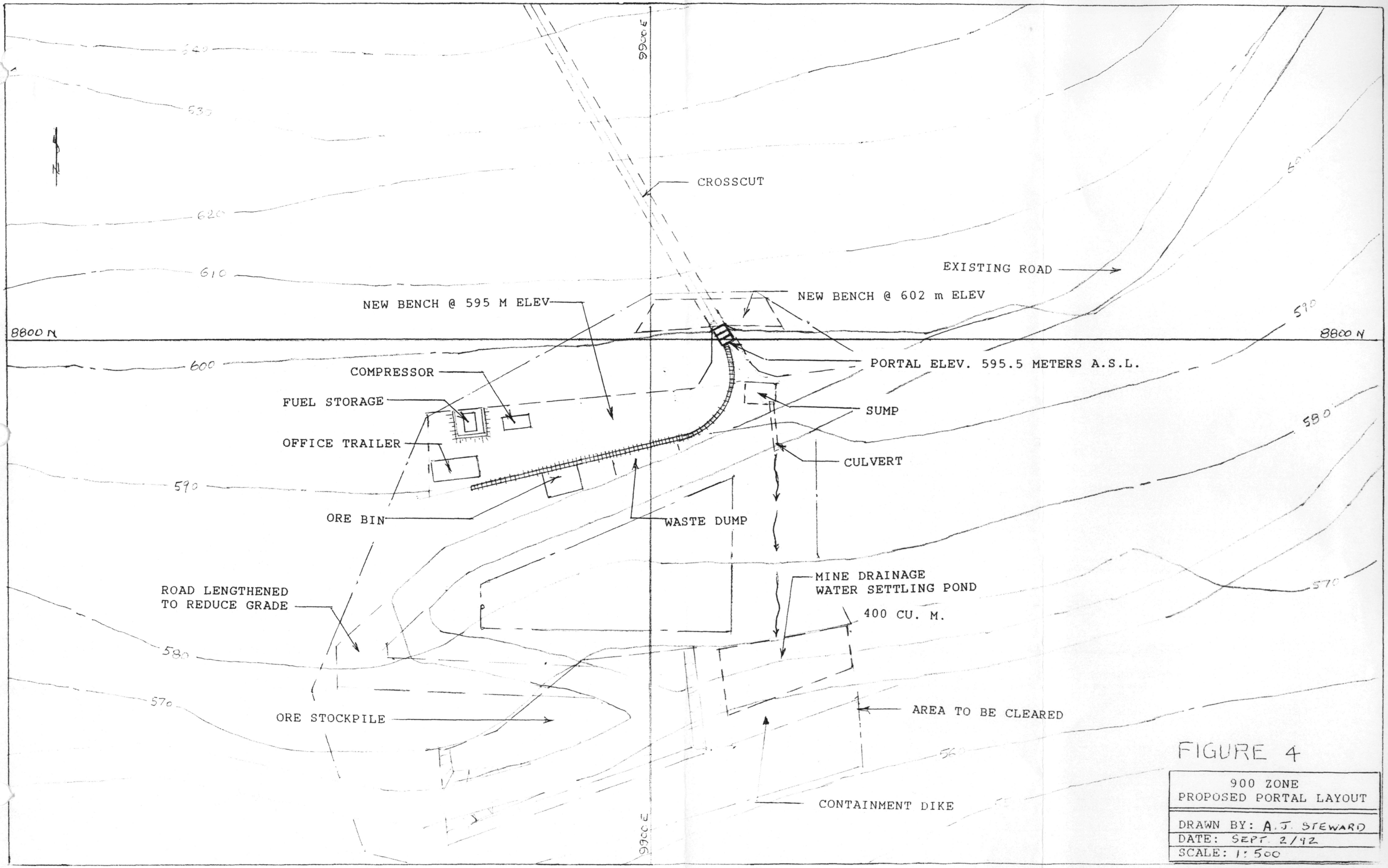


FIGURE 4

900 ZONE
PROPOSED PORTAL LAYOUT

DRAWN BY: A.J. STEWARD
DATE: SEPT. 2/92
SCALE: 1:500

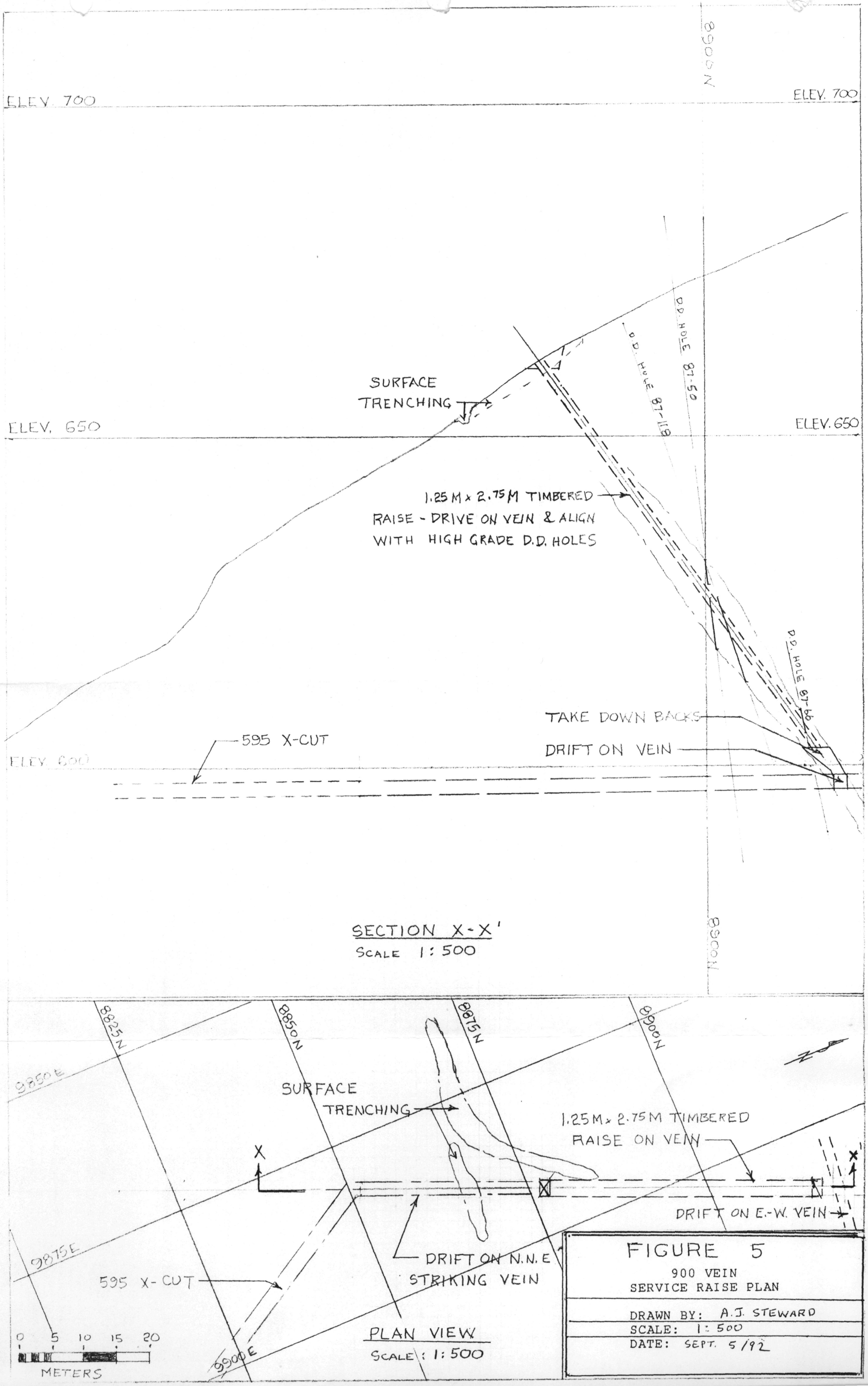


FIGURE 5

900 VEIN

SERVICE RAISE PLAN

DRAWN BY: A.J. STEWARD

SCALE: 1:500

DATE: SEPT. 5/92

1.0 Acid Generation Potential Tests

Nine composite samples, selected by site geologists, representing three each off ore, mineralized waste and barren waste were submitted to Chemex Laboratories for acid-base accounting. All samples examined were found to contain an excess of neutralizing capacity and unlikely to be capable of acid generation. Full test results are presented in Table 1, below.

TABLE 1

ACID GENERATION POTENTIAL TESTS ON WASTE ROCK AND ORE FOR THE PROPOSED UNDERGROUND EXPLORATION PROGRAM

Sample Origin	Paste pH	Total Sulphur (%)	Theoretical Acid Prod. (kg/tonne)	Neutral. Potential (kg/tonne)	Net Neutral. Potential (kg/tonne)
Ore					
Composite 1	8.3	1.64	51.3	216	164.7
Composite 2	8.2	1.55	48.4	287	238.6
Composite 3	8.6	0.87	27.3	263	235.7
mean	8.4	1.35	42.3	255	212.7
Mineralized Waste					
Composite 1	8.7	0.21	6.6	233	226.4
Composite 2	8.5	2.92	91.3	198	106.7
Composite 3	8.7	1.72	53.8	218	164.2
mean	8.6	1.62	50.6	216	165.4
Barren Waste					
Composite 1	8.6	0.21	6.6	133	126.4
Composite 2	8.9	0.05	1.6	72	70.4
Composite 3	9.0	0.14	4.3	104	99.7
mean	8.8	0.13	4.2	103	98.8

Analyses performed by Chemex Labs, EPA Acid-Base Accounting.

TABLE 1

WESTMIN RESOURCES LIMITED
DEBBIE PROJECT

POST EXPLORATION
WATER QUALITY ASSESSMENT

Prepared for:
WESTMIN RESOURCES LIMITED
Suite 904, 1055 Dunsmuir Street
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Vancouver, BC
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August, 1991

WESTMIN RESOURCES LIMITED
DEBBIE PROJECT

POST EXPLORATION
WATER QUALITY ASSESSMENT

The Debbie Property is located on McLaughlin Ridge, the divide between the China Creek and Cameron River watersheds. Portal One is located in the China Creek watershed southeast of Port Alberni on Vancouver Island, British Columbia. This watershed is part of the reservoir and intake works for the municipality of Port Alberni. The second portal leads into Yellows Creek which flows into the Cameron River which discharges to the Strait of Georgia via Cameron Lake and Little Qualicum River.

Sampling stations are indicated in Figure 1 and consist of the following locations:

1 China Creek upstream of Mineral Creek but below former gold mining (Control).

2 Mineral Creek near confluence with China Creek and downstream of exploration activity.

3 China Creek downstream of Mineral Creek but above Williams Creek.

4 China Creek immediately below the City of Port Alberni municipal intake weir.

5 Yellows Creek (western fork) immediately above exploration area (Control).

6 Yellows Creek (centre fork) immediately above exploration area (Control).

7 Yellows Creek (eastern fork) immediately above exploration area (Control).

8 Yellows Creek below exploration at Cameron Main logging road.

9 Cameron Creek below Yellows Creek at junction with Highway No. 4.

10 Cameron Creek above Yellows Creek (Control), only sampled on June 20, 1991.

A complete set of water quality samples was obtained from the selected locations, filtered, preserved and returned to the laboratory within 24 hours of collection. Analysis of water samples was performed by Analytical Services Laboratories Ltd. of Vancouver in accordance with "Standard methods for the Examination of Water and Wastewater" published by the American Public Health Association, 1985 and the 17th Edition, 1989.

Water quality results for Stations 1 through 10 are presented in Table 1 together with water quality results obtained over the previous three sample periods, February, May and August of 1989, and June 1991 at the time exploration was completed.

Water quality of all sample sites was found to be neutral to slightly basic (pH 6.78 to 8.15), moderately high in conductivity (55 to 191 umhos), clear (suspended solids <1.0 to 3.3 mg/L; turbidity <0.1 to 2 NTU), moderate in dissolved solids (50.4 to 160 mg/L) and moderate hardness (27.4 to 109 mg/L $CaCO_3$). All stations had low sensitivity to acid inputs (alkalinity 26 to 106 mg/L $CaCO_3$). Cyanide and metal levels were generally below detection levels at all stations.

All stations as of the final sampling period (June 20, 1991) were well within government criteria for drinking water and protection of freshwater aquatic life. Water quality for the entire period of study was compared to applicable government standards in Table 2. Stations 7 and 4 were elevated in total cadmium in August, 1989 which are assumed to be due to natural increases in the watershed. Station 3 increased to 0.033 mg/L cyanide in February 1989 which appears as an anomaly and did not show up as elevated concentrations in downstream Station 4. Nitrite at Station 8 in February, 1989 was the only other parameter above government criteria levels. This occurred during a period of high nutrient levels associated with low flow conditions and high decomposition, however, levels returned to normal levels for the May, 1989 sample period.

Particular consideration is given to water quality possibly affected by the exploration site. Although Station 2 on Mineral Creek downstream of Portal 1 has parameters slightly higher than control Station 1 upstream of Mineral Creek, this did not affect water quality at Station 3 downstream of Mineral Creek which is essentially the same if not lower than Station 1, the control above Mineral Creek.

With respect to Portal 2, water quality at Station 8 was slightly elevated for some parameters (conductivity, dissolved solids, nitrate, barium and strontium) compared to control stations 5, 6 and 7. In particular, nutrient levels were elevated at Station 8 in February, 1989 prior to exploration in comparison to control stations as a result of high decomposition and low flow conditions. June, 1991 water quality has returned to background levels.

Water quality at the time of abandonment following closure of the Debbie Project is considered acceptable with respect to government guidelines for reclamation and no further monitoring is required.

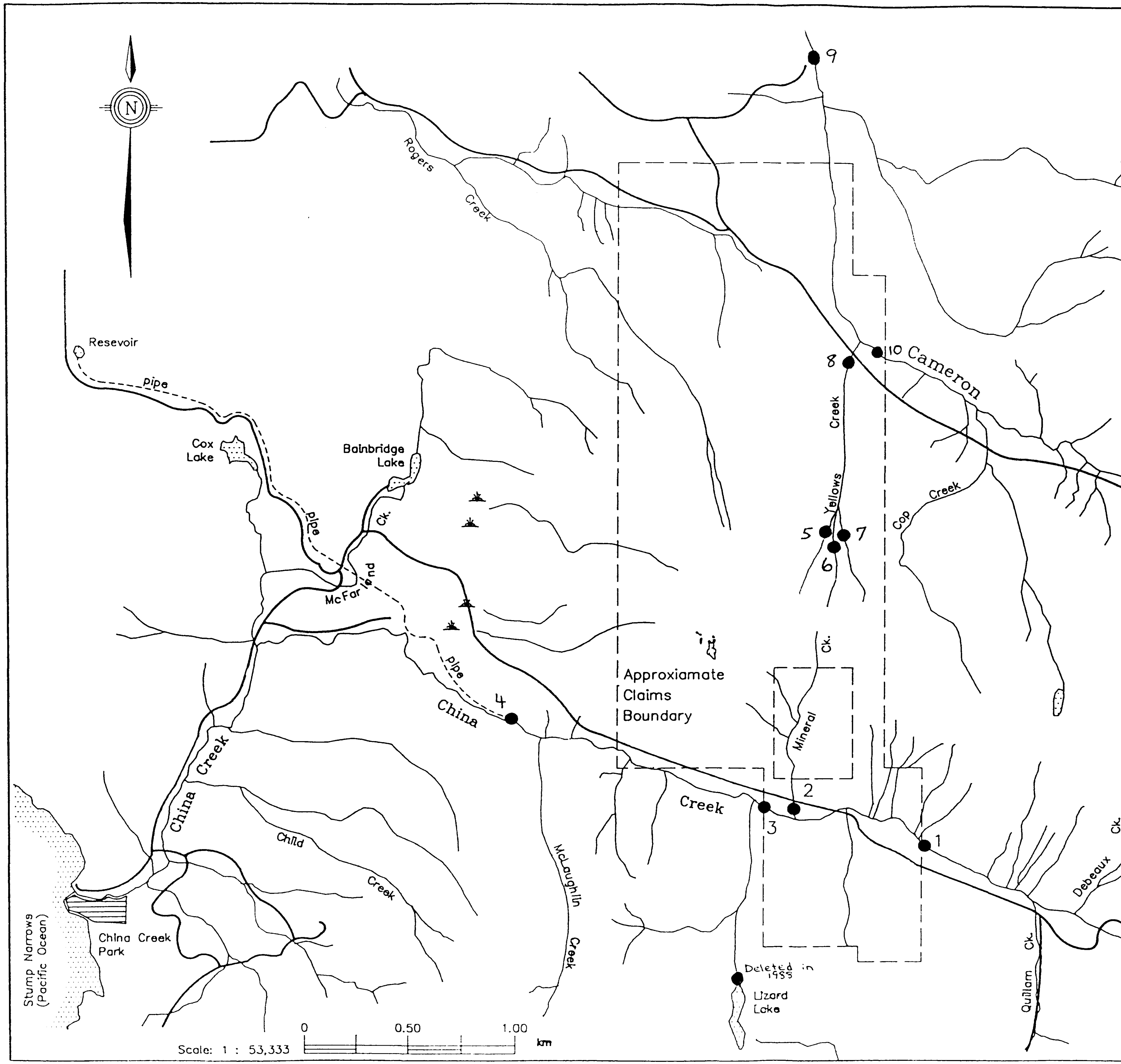

FIGURE 1

WESTMIN RESOURCES LTD.
DEBBIE PROPERTY

WATER QUALITY MONITORING STATIONS

hcl

WESTMIN RESOURCES LTD.
DEBBIE PROJECT

TABLE I.

SURFACE WATER QUALITY
FROM FEBRUARY 1989 TO JUNE 1991

PARAMETER	Station 1				Station 2				Station 3			
	Feb 01/89	May 01/89	Aug 02/89	Jun 20/91	Feb 01/89	May 01/89	Aug 02/89	Jun 20/91	Feb 01/89	May 01/89	Aug 02/89	Jun 20/91
Physical Tests												
pH	7.7	7.5	7.42	7.4	7.86	7.79	7.2	7.92	7.38	7.79	6.97	7.87
Conductivity umhos	191	115	169	109	146	122	225	190	108	87	138	99.3
Turbidity NTU	< 1	< 1	< 1	< 0.1	< 1	< 1	< 1	0.22	< 1	< 1	< 1	< 0.1
Suspended Solids	< 1	< 1	< 1	3	2.7	< 1	< 1	2	1.3	< 1	< 1	< 1
Dissolved Solids	83.5	74.6	107	87	118	91.1	169	152	76.7	77.5	100	79
Hardness CaCO3	39.5	44.7	73.9	49.4	62.7	55.9	109	91.1	39	47	66.9	48.6
Anions												
Alkalinity CaCO3	52.8	38	60	46.1	76.8	53	106	89.1	48	44	63	46.5
Chloride Cl	1.1	4.3	12.9	5.2	2.1	1.8	7.2	5.1	1.6	1.5	4.6	2.1
Fluoride F	-	-	-	0.02	-	-	-	0.03	-	-	-	0.02
Sulphate SO4	1.1	1.6	1.5	4.1	3.2	2.3	5.4	6.2	< 1	1.9	1.7	1.6
Nutrients												
Ammonia N	< 0.005	< 0.008	0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Nitrate N	< 0.005	0.069	0.034	0.026	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29	< 0.013	0.023
Nitrite N	< 0.001	0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	< 0.001	0.001	0.002	0.001
O-Phosphorous P	-	-	-	0.001	-	-	-	0.002	-	-	-	< 0.001
D-Phosphorous P	0.003	0.002	0.046	0.001	0.017	0.003	< 0.001	0.002	0.016	0.002	0.025	< 0.001
T-Phosphorous P	-	-	-	0.001	-	-	-	0.004	-	-	-	< 0.001
Cyanide												
Total Cyanide T CN	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.005	< 0.005	< 0.001	0.033	< 0.005	< 0.005	< 0.001
Total Metals												
Aluminum T Al	0.014	0.021	0.013	0.01	0.013	0.007	0.008	0.006	0.017	0.018	0.01	0.008
Antimony T Sb	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic T As	0.0005	0.0006	0.0007	0.0003	0.0028	0.0032	0.0042	0.0035	0.0016	0.0011	0.0008	0.0001
Barium T Ba	< 0.01	0.019	0.04	0.014	0.022	0.018	0.023	0.026	0.017	0.013	0.01	< 0.01
Beryllium T Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Bismuth T Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Boron T B	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Cadmium T Cd	< 0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium T Ca	-	-	-	18.2	-	-	-	33.8	-	-	-	18.3
Chromium T Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001

TABLE I. (cont'd)

PARAMETER		Station 1 Feb 01/89	Station 1 May 01/89	Station 1 Aug 02/89	Station 1 Jun 20/91	Station 2 Feb 01/89	Station 2 May 01/89	Station 2 Aug 02/89	Station 2 Jun 20/91	Station 3 Feb 01/89	Station 3 May 01/89	Station 3 Aug 02/89	Station 3 Jun 20/91
Cobalt	T Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Copper	T Cu	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
Iron	T Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.015	< 0.03
Lead	T Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	T Mg	-	-	-	0.921	-	-	-	1.93	-	-	-	0.971
Manganese	T Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Mercury	T Hg	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001
Molybdenum	T Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	T Ni	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	T Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	T Si	-	-	-	1.37	-	-	-	2.1	-	-	-	1.38
Silver	T Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Strontium	T Sr	-	-	-	0.058	-	-	-	0.08	-	-	-	0.042
Uranium	T U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005
Vanadium	T V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03
Zinc	T Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dissolved Metals													
Aluminum	D Al	0.014	0.006	0.011	0.006	0.013	0.006	0.008	0.006	0.017	0.013	0.01	0.008
Antimony	D Sb	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic	D As	0.0001	0.0006	0.0007	0.0003	0.0028	0.0032	0.0042	0.0035	0.0008	0.0011	0.0008	0.0001
Barium	D Ba	< 0.01	0.012	0.04	0.014	< 0.01	0.015	0.023	0.026	< 0.01	< 0.01	0.01	< 0.01
Beryllium	D Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Bismuth	D Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Boron	D B	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Cadmium	D Cd	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium	D Ca	14.7	16.6	27.2	18.2	23.1	20.5	39.8	33.2	14.5	17.4	24.8	17.8
Chromium	D Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Cobalt	D Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Copper	D Cu	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
Iron	D Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.015	< 0.03
Lead	D Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	D Mg	0.69	0.76	1.41	0.921	1.22	1.11	2.18	1.92	0.68	0.84	1.17	0.965
Manganese	D Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Molybdenum	D Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	D Ni	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Potassium	D K	0.18	0.17	0.68	0.23	0.23	0.22	0.37	0.31	0.18	0.16	0.25	0.17
Selenium	D Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	D Si	-	-	-	1.37	-	-	-	2.09	-	-	-	1.37
Silver	D Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium	D Na	1.5	3.13	2.39	3.74	2.27	2.21	8.17	3.27	1.71	1.73	4.95	1.61
Strontium	D Sr	-	-	-	0.058	-	-	-	0.079	-	-	-	0.041
Uranium	D U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005
Vanadium	D V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03
Zinc	D Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

(H1123\WQ90-1-3.WK3)

WESTMIN RESOURCES LTD.
DEBBIE PROJECT

TABLE I. (cont'd)

SURFACE WATER QUALITY
FROM FEBRUARY 1989 TO JUNE 1991

PARAMETER		Station 4				Station 5				Station 6			
		Feb 01/89	May 01/89	Aug 02/89	Jun 20/91	Feb 01/89	May 01/89	Aug 02/89	Jun 20/91	Feb 01/89	May 01/89	Aug 02/89	Jun 20/91
Physical Tests													
pH		7.75	7.77	6.78	7.81	7.62	7.52	7.01	8.01	7.69	7.58	7.88	8.15
Conductivity	umhos	86.5	93.2	136	105	91.9	99.7	148	115	91.9	78	170	154
Turbidity	NTU	< 1	< 1	< 1	0.17	< 1	< 1	< 1	0.2	< 1	< 1	< 1	0.22
Suspended Solids		< 1	< 1	< 1	3	< 1	< 1	< 1	2	< 1	2	< 1	2
Dissolved Solids		68.5	66.6	102	84	72.5	64	112	92	75.9	61	134	123
Hardness CaCO3		30.9	42.2	67.4	49.9	34.3	39.2	75.8	58.1	34.3	37	91.4	79.8
Anions													
Alkalinity CaCO3		50.4	36	62.5	48.3	48	36	78	56.4	50.4	34	94	82.6
Chloride	Cl	0.7	1	4.7	2.5	< 0.5	0.6	1	0.6	< 0.5	0.6	1	0.8
Fluoride	F	-	-	-	0.02	-	-	-	< 0.02	-	-	-	0.03
Sulphate	SO4	< 1	1.4	2.2	2.6	< 1	< 1	1.4	4.1	< 1	< 1	1.6	1.8
Nutrients													
Ammonia	N	< 0.005	0.008	0.011	< 0.005	< 0.005	0.011	< 0.005	< 0.005	< 0.005	0.008	< 0.005	< 0.005
Nitrate	N	< 0.005	0.031	0.012	0.025	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005
Nitrite	N	0.002	0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
O-Phosphorous	P	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	0.001
D-Phosphorous	P	0.015	0.002	< 0.001	< 0.001	< 0.001	0.002	0.007	0.002	0.001	0.002	0.002	0.003
T-Phosphorous	P	-	-	-	0.001	-	-	-	0.003	-	-	-	0.003
Cyanide													
Total Cyanide	T CN	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.005	< 0.005	< 0.001
Total Metals													
Aluminum	T Al	0.026	0.02	0.011	0.01	0.007	0.008	0.007	0.015	0.015	0.022	0.009	0.008
Antimony	T Sb	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic	T As	0.0009	0.0008	0.0011	0.0005	< 0.0001	0.0002	0.0002	0.0005	< 0.0001	0.0003	0.0003	< 0.0001
Barium	T Ba	< 0.01	0.013	< 0.01	< 0.01	0.016	0.012	0.017	0.013	0.02	0.015	0.026	0.028
Beryllium	T Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Bismuth	T Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Boron	T B	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Cadmium	T Cd	< 0.0002	< 0.0002	0.0009	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium	T Ca	-	-	-	18.7	-	-	-	22.3	-	-	-	29.6
Chromium	T Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001

TABLE I. (cont'd)

PARAMETER		Station 4 Feb 01/89	Station 4 May 01/89	Station 4 Aug 02/89	Station 4 Jun 20/91	Station 5 Feb 01/89	Station 5 May 01/89	Station 5 Aug 02/89	Station 5 Jun 20/91	Station 6 Feb 01/89	Station 6 May 01/89	Station 6 Aug 02/89	Station 6 Jun 20/91
Cobalt	T Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Copper	T Cu	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
Iron	T Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03
Lead	T Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	T Mg	-	-	-	1.06	-	-	-	0.859	-	-	-	2.02
Manganese	T Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Mercury	T Hg	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00005	< 0.00005	< 0.00005	0.00002	< 0.00005	< 0.00005	< 0.00005	< 0.00001
Molybdenum	T Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	T Ni	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.08	< 0.001	< 0.001
Selenium	T Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	T Si	-	-	-	1.57	-	-	-	1.08	-	-	-	1.76
Silver	T Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Strontium	T Sr	-	-	-	0.042	-	-	-	0.038	-	-	-	0.052
Uranium	T U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005
Vanadium	T V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03
Zinc	T Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dissolved Metals													
Aluminum	D Al	0.026	0.014	0.011	0.008	0.007	0.007	0.007	0.015	0.015	0.013	0.009	0.008
Antimony	D Sb	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic	D As	0.0004	0.0008	0.0011	0.0004	< 0.0001	0.0002	0.0001	0.0004	< 0.0001	0.0003	0.0003	< 0.0001
Barium	D Ba	< 0.01	< 0.01	< 0.01	< 0.01	0.015	0.012	0.017	0.013	< 0.01	0.015	0.026	0.028
Beryllium	D Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Bismuth	D Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Boron	D B	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1
Cadmium	D Cd	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium	D Ca	11.3	15.4	24.6	18.2	12.8	14.6	28	21.8	15.1	13.4	33	28.6
Chromium	D Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Cobalt	D Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001
Copper	D Cu	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
Iron	D Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03
Lead	D Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	D Mg	0.64	0.89	1.4	1.05	0.57	0.64	1.37	0.853	0.95	0.84	2.12	1.98
Manganese	D Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005
Molybdenum	D Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	D Ni	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Potassium	D K	0.16	0.13	0.24	0.22	0.12	0.07	0.14	0.15	0.11	0.1	0.12	0.2
Selenium	D Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	D Si	-	-	-	1.54	-	-	-	1.07	-	-	-	1.71
Silver	D Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium	D Na	1.26	1.74	6.52	1.79	0.97	1.05	2.21	1.05	0.94	1.1	1.99	1.25
Strontium	D Sr	-	-	-	0.041	-	-	-	0.038	-	-	-	0.051
Uranium	D U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005
Vanadium	D V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03
Zinc	D Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

(H1123\WQ91-4-6.WK3)

WESTMIN RESOURCES LTD.
DEBBIE PROJECT

TABLE I. (cont'd)

SURFACE WATER QUALITY
FROM FEBRUARY 1989 TO JUNE 1991

PARAMETER	Station 7 Feb 01/89	Station 7 May 01/89	Station 7 Aug 02/89	Station 7 Jun 20/91	Station 8 Feb 01/89	Station 8 May 01/89	Station 8 Aug 02/89	Station 8 Jun 20/91	Station 9 Feb 01/89	Station 9 May 01/89	Station 9 Aug 02/89	Station 9 Jun 20/91	Station10 Jun 20/91
Physical Tests													
pH	7.2	7.42	7.35	7.86	7.76	7.63	7.75	8.16	7.49	7.41	7.1	7.94	7.61
Conductivity umhos	75.7	63.9	107	128	103	89.8	215	183	90.3	55	95.3	82.8	71.3
Turbidity NTU	< 1	< 1	< 1	0.19	< 1	< 1	< 1	0.24	2	< 1	< 1	0.32	0.24
Suspended Solids	2	< 1	< 1	3	2.7	< 1	< 1	3	3.3	< 1	< 1	1	< 1
Dissolved Solids	59.8	50.4	83	102	85.6	68.8	160	146	55.3	52.8	67.9	66	57
Hardness CaCO3	32.2	30.2	56.9	65.4	40.5	40.8	86.4	73.3	27.4	26.1	47.5	40.5	34
Anions													
Alkalinity CaCO3	36	26	56	65.5	52.8	36	91	71.3	36	30	44	39	32.8
Chloride Cl	< 0.5	0.6	1	0.9	1.6	1.5	8.6	14.1	0.6	0.7	2.5	2.2	2.1
Fluoride F	-	-	-	0.02	-	-	-	0.03	-	-	-	0.02	< 0.02
Sulphate SO4	< 1	< 1	2.2	1.1	1.9	2.4	8.6	4.9	< 1	< 1	< 1	1.1	< 1
Nutrients													
Ammonia N	< 0.005	0.005	< 0.005	< 0.005	0.023	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Nitrate N	0.4	< 0.005	< 0.005	< 0.005	0.79	0.36	0.15	0.013	0.028	0.19	< 0.005	< 0.005	< 0.005
Nitrite N	< 0.001	0.001	0.001	< 0.001	0.045	0.001	0.001	< 0.001	0.002	0.001	0.001	< 0.001	< 0.001
O-Phosphorous P	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001	< 0.001
D-Phosphorous P	0.01	0.002	0.007	< 0.001	0.009	0.003	< 0.001	0.001	0.012	0.005	< 0.001	< 0.001	< 0.001
T-Phosphorous P	-	-	-	< 0.001	-	-	-	0.001	-	-	-	< 0.001	< 0.001
Cyanide													
Total Cyanide T CN	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.005	< 0.005	< 0.001	< 0.001
Total Metals													
Aluminum T Al	0.061	0.038	0.018	< 0.005	0.036	0.023	0.013	0.009	0.083	0.083	0.021	0.017	0.012
Antimony T Sb	< 0.0001	0.0002	< 0.0001	< 0.0001	< 0.0001	0.0001	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic T As	0.0003	0.0005	0.0009	< 0.0001	0.0008	0.0005	0.0008	0.0005	< 0.0001	0.0002	0.0002	< 0.0001	< 0.0001
Barium T Ba	< 0.01	< 0.01	< 0.01	0.021	0.018	0.014	0.02	0.023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Beryllium T Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005	< 0.005
Bismuth T Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1	< 0.1
Boron T B	-	-	-	< 0.1	-	-	-	0.12	-	-	-	< 0.1	< 0.1
Cadmium T Cd	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium T Ca	-	-	-	24.7	-	-	-	27	-	-	-	13.9	11.9
Chromium T Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001	< 0.001

TABLE I. (cont'd)

PARAMETER		Station 7 Feb 01/89	Station 7 May 01/89	Station 7 Aug 02/89	Station 7 Jun 20/91	Station 8 Feb 01/89	Station 8 May 01/89	Station 8 Aug 02/89	Station 8 Jun 20/91	Station 9 Feb 01/89	Station 9 May 01/89	Station 9 Aug 02/89	Station 9 Jun 20/91	Station10 Jun 20/91
Cobalt	T Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001	< 0.001
Copper	T Cu	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
Iron	T Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	0.017	< 0.03	< 0.03	0.038	0.055	< 0.03	< 0.03	< 0.03
Lead	T Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	T Mg	-	-	-	1.26	-	-	-	1.44	-	-	-	1.44	1.3
Manganese	T Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005	< 0.005
Mercury	T Hg	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.00001
Molybdenum	T Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	T Ni	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Selenium	T Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	T Si	-	-	-	1.57	-	-	-	1.67	-	-	-	2.22	2.27
Silver	T Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Strontium	T Sr	-	-	-	0.038	-	-	-	0.077	-	-	-	0.034	0.029
Uranium	T U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005	< 0.00005
Vanadium	T V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03	< 0.03
Zinc	T Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dissolved Metals														
Aluminum	D Al	0.061	0.032	0.018	< 0.005	0.028	0.015	0.011	0.009	0.043	0.046	0.02	0.017	0.012
Antimony	D Sb	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic	D As	0.0002	0.0005	0.0008	< 0.0001	0.0004	0.0005	0.0008	0.0004	< 0.0001	0.0002	0.0002	< 0.0001	< 0.0001
Barium	D Ba	< 0.01	< 0.01	< 0.01	0.02	0.011	0.014	0.02	0.023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Beryllium	D Be	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005	< 0.005
Bismuth	D Bi	-	-	-	< 0.1	-	-	-	< 0.1	-	-	-	< 0.1	< 0.1
Boron	D B	-	-	-	< 0.1	-	-	-	0.12	-	-	-	< 0.1	< 0.1
Cadmium	D Cd	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Calcium	D Ca	12.1	11.3	21.3	24.1	15	15.1	31.9	26.9	0.46	9.17	16.2	13.8	11.5
Chromium	D Cr	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001	< 0.001
Cobalt	D Co	-	-	-	< 0.001	-	-	-	< 0.001	-	-	-	< 0.001	< 0.001
Copper	D Cu	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
Iron	D Fe	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	0.015	< 0.03	< 0.03	< 0.03
Lead	D Pb	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	D Mg	0.49	0.47	0.87	1.23	0.75	0.72	1.59	1.43	0.91	0.76	1.67	1.43	1.25
Manganese	D Mn	-	-	-	< 0.005	-	-	-	< 0.005	-	-	-	< 0.005	< 0.005
Molybdenum	D Mo	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	D Ni	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Potassium	D K	0.23	0.15	0.14	0.15	0.28	0.17	0.43	0.3	0.11	0.09	0.14	0.22	0.13
Selenium	D Se	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Silicon	D Si	-	-	-	1.54	-	-	-	1.67	-	-	-	2.2	2.17
Silver	D Ag	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium	D Na	0.92	0.92	1.52	1.15	3.25	2.88	18.4	10	1.26	1.12	3.34	1.74	1.48
Strontium	D Sr	-	-	-	0.038	-	-	-	0.077	-	-	-	0.033	0.028
Uranium	D U	-	-	-	< 0.00005	-	-	-	< 0.00005	-	-	-	< 0.00005	< 0.00005
Vanadium	D V	-	-	-	< 0.03	-	-	-	< 0.03	-	-	-	< 0.03	< 0.03
Zinc	D Zn	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

(H1123\WQ91-7-9.WK3)

TABLE 2
WESTMIN RESOURCES LTD.
DEBBIE PROJECT
WATER QUALITY CRITERIA

Parameter	Criteria	Stations Above Criteria
Alkalinity ($CaCO_3$)	>20 mg/L, low sensitivity	All station; low sensitivity
Aluminum, Dissolved	0.1 mg/L, maximum	None
	0.05 mg/L, 30-day average	None
Antimony, Total	0.050 mg/L, maximum	None
Arsenic, Total	0.050 mg/L, maximum	None
Barium, Total	1 mg/L, maximum	None
Beryllium, Total	0.011 - 0.015 mg/L, hardness <75 mg/L $CaCO_3$	None
	1.1 - 1.5 mg/L, hardness >75 mg/L $CaCO_3$	None
Boron, Total	5 mg/L, maximum	None
Cadmium, Total	0.0002 mg/L, maximum, hardness 0 - 60 mg/L $CaCO_3$	7 (Aug/89)
	0.0008 mg/L, maximum, hardness 60 - 120 mg/L $CaCO_3$	4 (Aug/89)
Chloride	250 mg/L, maximum	None
Chromium, Total	0.002 mg/L, maximum for plankton	None
	0.020 mg/L, maximum for fish	None
Cobalt, Total	0.050 mg/L	None
Copper, Total	$\leq$0.002 mg/L, 30-day average, hardness $\leq$50 mg/L	None
	$\leq$(0.04 (hardness) ug/L), 30-day average, hardness >50 mg/L	None
Cyanide	0.010 mg/L, maximum	3 (Feb/89)
	$\leq$0.005, 30-day average	3 (Feb/89)
Fluoride, Total	0.2 mg/L, maximum	None

Hardness	80 - 100, acceptable	All station within limits
Iron, Total	0.3 mg/L, maximum	None
Lead, Total	$\leq$3.31+exp(1.273*ln(hardness)-4.705), μg/L, 30-day average	None
Magnesium, Dissolved	100, taste threshold	None
Manganese, Total	0.05 mg/L, maximum	None
Mercury, Total	0.0001 mg/L, maximum 0.00002 mg/L, 30-day average	None None
Molybdenum, Total	0.25 mg/L, maximum	None
Nickel, Total	0.025 mg/L, hardness 0 - 60 mg/L 0.065 mg/L, hardness 60 - 120 mg/L	None None
Nitrate	10 mg/L, maximum	None
Nitrite	0.06 mg/L, maximum $\leq$0.02 mg/L, average	None 8 (Feb/89)
Ammonia	0.131 mg/L, worst case for pH 7	None
pH	6.5 - 8.5	All stations within limits
Phosphorus, Total	0.01 mg/L, maximum	None
Selenium, Total	0.001 mg/L, maximum	None
Silver, Total	0.0001 mg/L, maximum	None
Sodium, Dissolved	20 mg/L, for very restricted Na diets	None
Sulphate, Dissolved	100 mg/L	None
Turbidity	1 NTU	None
Uranium, Total	0.1 mg/L, maximum	None
Vanadium, Total	0.1 mg/L, maximum	None
Zinc, Total	0.03 mg/L, maximum	None

Criteria levels are for either drinking or aquatic life whichever was lower in order to comply with the most conservative levels.