MARTIN SHEFSKY 416-398 3316

GEOLOGICAL INVESTIGATIONS

Box #122, 38 Alpine Drive
Moonstone, Ontario L0K 1N0
Bus/Fax (705) 835-5636
E mail: wfitzgor@barint.on.ca

Sonic Soil Sampling Inc.
668 Millway Avenue
Unit 15 & 16
Concord, Ontario
L4K 3V2

September 4, 1998

RECEIVED
SEP 25 2000
11:00
GEOSCIENCE ASSESSMENT OFFICE

Att: Frederick T. Archibald B.Sc.
President

Subject: Category 12 - Quarry below water Aggregate Permit, Pt. S ½ Lots 12 & 13, Concession 3, Pt N ½ Lots 12 & 13, Concession 2, Township of Cavendish, County of Peterborough.

Dear Fred

Geological Investigations will prepare and submit an application for a Category 12 - Quarry below water Aggregate Permit under the Aggregate Resources Act to operate a quarry on the subject property.

The total cost to make the application will be $10,0000 + GST and will include:

1/ Application for a Aggregate Permit under the Aggregate Resources Act (ARA) to operate a Category 12 Quarry below water.

2/ Site Plans required by the ARA

3/ Natural Environment Study, Level 1

4/ Cultural Heritage Resource Study, Stage 1

5/ Hydrogeological Study, Level 1

Payment will be in 4 instalments of $2,675.00 (GST included) the 1st due prior to commencement of the project. The 2nd and 3d payments are due 1 month and 2 months after commencement of the project and the last payment when the application is submitted to MNR.

Any additional works required as a result of the public meetings or circulation of the applications, ie Ontario Municipal Board Hearing, are not included in this agreement and will be invoiced as extras.

It is agreed that you will have 3 wells constructed on site to determine the depth to the water table.

Please have your client (Regie Resources Inc.) sign and return the attached agreement along with the deposit as soon as possible.

If you have any questions please give me a call.

Yours

William D. Fitzgerald MSc.

SAAR
Environmental Limited

LEVEL TWO

NATURAL ENVIRONMENT STUDY
AGGREGATE ACT SUBMISSION

PREPARED FOR:

REGIS RESOURCES INC.
VERMICULITE QUARRY PROPOSAL
PART OF LOTS 12 AND 13, CONCESSION II AND III
CAVENDISH TOWNSHIP, PETERBOROUGH COUNTY
ONTARIO

FEBRUARY 1999 SUBMISSION

PREPARED BY:
SAAR ENVIRONMENTAL LIMITED

584 Skyhills Road, R.R. #1
Huntsville, Ontario P1H 2J2
Phone: 705 788 2218 Fax: 705 788 2219
email: SAAR@muskoka.com

TABLE OF CONTENTS

ABSTRACT

Our firm was retained by Geological Investigations to prepare a Level I Natural Environment Study under the Aggregate Resources Act of Ontario. The study assesses whether vermiculite extraction can proceed on part of lots 12 and 13, Concession II and III within Cavendish Township, Peterborough County without significant negative impact to the natural environment.

To determine whether the proposed land use was compatible with the local environment, we conducted a field inspection on and surrounding the proposed extraction area on October the 5th, 1998, and attended the Ontario Ministry of Natural Resources Minden Area Office to review existing environmental information, meeting with the Aggregate Officer, Area Planner and pertinent fish and wildlife staff on November the 27th, 1998.

Field observations revealed that wetland and upland habitat types are supported on the land proposed for extraction. Although all representative of this ecological area, one habitat type was provided conservative mitigation through constraint. This treed bog wetland type, although small in size (less than five hectares), was recommended for conservation and 120 metre setback from extraction because it is a long term accumulation of peatland that cannot be rehabilitated as can the marsh feature. If extraction remains above ground setback distances could be tailored to the site topography and vermiculite feature provided that sound best management practices show how sediment and nutrient would not enter the treed bog. Extraction setbacks from open water were recommended at 30 metres and 50 metres from significant species habitat consistent with the Natural Heritage Training Manual Policy 2.3 of the Provincial Policy Statement.

1.0 CHARACTER OF SITE

The Regis site and surrounding landscape was shaped by past glacial events leaving rock ridges and shallow soils colonized by tree species able to grow on thin glacial tills such as the mixed White Pine-Poplar-White Birch-White Oak and Red Maple Forests. Factors such as historical forest fires, traditional logging and beaver activity further influenced the quality of the vegetation and wildlife. Some remnant White Pine not logged or burned (+120 year old) exists amidst regenerating mixed younger woodlots. Beaver activity helped create some of the ponded and flooded marsh wetland habitats rich in duckweed, pondweed and colonizing wetland sedges and shrubs.

1.1 GEOGRAPHIC LOCATION

Geographically the area is west of Mississagua, Catchacoma and Horseshoe Lake (also known as Horseshoe Lake) on the northern periphery of Peterborough and Haliburton Counties. The legal description of lands proposed for resource extraction is part of Lot 12 and 13, Concession II and III, Cavendish Township, County of Peterborough, Ontario.

2.0 METHODOLOGY

SAAR Environmental Limited conducted a site inspection of the Regis parcel and surrounding wetlands on October the 5th, 1998. Our senior biologist also reviewed existing environmental information available from the Ontario Ministry of Natural Resources by attending their Minden Area Office on November the 27th, 1998.

Since the area proposed for vermiculite extraction was found to support wetland features and functions, we scoped the study to detail an assessment of the potential impact of an aggregate extraction process on the wetland ecology of the Regis parcel and interlinked wetland complexes. Our impact study must address the following questions:

1. Will extraction impede wildlife use of secondary corridors around the marsh?
2. Will excavation remove significant wetland habitat?
3. Will excavation alter the wetland water regime, thus impacting wetland species supported therein?
4. Are the marsh and treed bog wetland habitats at risk of removal considered realistic candidates for restoration to existing levels of biodiversity or ecological integrity?

2.0 METHODOLOGY CONTINUED

Our team surveyed the property and general area for sensitive environmental areas including potential wetlands and significant woodlands, using established provincial criteria including a review of provincial ranking for wetland complexing. Wetland habitat was delineated on site through ground truthing straight line transects and off site wetland complexes through aerial photography interpretation and road checks.

Use of wetland and upland forest cover was investigated for function as a migratory route or local wildlife corridor. This search included evaluation of large mammal activity such as White-tailed deer, moose and coyote, but also observed sign of smaller wildlife corridors which we feel are equally important in a larger ecological sense; wildlife such as ground nesting woodland ruffed grouse, avian flyway thickets of value to breeding and migrating warblers such as the Black-and-White Warbler and grassy swales of Hairgrass (*Deschampsia flexuosa*) Blue-joint reed grass (*Calamagrostis canadensis*) and bladder sedges (*Carex hystericina, C. lupulina*) that function as tertiary wildlife corridors for hares, moles, voles and/or shrews.

Wetland pockets were traversed for an estimation of vegetation community content and wetland limits pertaining to the proposed area of aggregate extraction land use. As well, a landscape view was taken to determine the extent of wetland and woodland as it relates to the vermiculite extraction proposal. This part of the survey was done on foot and photographed from the concession road to adhere to trespass regulations on other private properties. It was supplemented by aerial photography interpretation.

3.0 RESULTS

HABITAT STATUS

Our field observations indicate that vermiculite extraction within the currently proposed boundaries would remove wetland and upland habitat representative of this ecological Site District. Our review of regional scope aerial photography and aerial views of the local Cavendish Township landscape indicate that existing habitat types proposed for extraction are supported in repeated vegetation patterns across this ecological area.

Our ground truthing revealed that wetland habitat on the Regis site functions with off site wetland habitat via surfacewater drainage connections, forming wetland "complexes" where energy flow of water, sediment, nutrient, plant propagules and wildlife is transferred between wetland units.

Although the wetland types found on and near the Regis site are represented well across this shield landscape, their combined complex size coupled with significant flora may be sufficient to attain the minimum 600 of 1000 point score for provincial wetland status ranks of Class 1 through 7, where Class 1 is the highest value attained. Wetlands have not been evaluated under the Northern Wetland Evaluation Manual established by the province. Note that the broader brush provincial evaluations were not designed to supply botanical or habitat detail; rather, they were created so that any relatively untrained evaluator could take the manual format and obtain a general classification of wetland value relative to other existing wetlands based on a four part scoring system of outlined biological, social, hydrological and special feature pre-determined categories.

The Natural Environment Study submitted herein is an impact study that provides site specific botanical detail, and establishes the most restrictive conditions for sensitive wetland conservation available to us through both the Wetland Policy Statement and the Provincial Policy Statement on the Precambrian Shield - regardless of wetland class 1 or class 7 on the provincial rank, since this document under the Aggregate Act is asked to investigate potential impacts.

Conservation standards recommended as a result of this study thus focus on setback distances following current science, responding to site specific land use with site and landscape level answers on potential negative impacts to environmental features. It provides impact assessment and site detail not covered in the provincial wetland evaluation system. We do overlap methodologies, for instance wetland complex assessment follows the same checklist of rules measuring for wetland connection to maximal aerial extent of 750 metres as identified by Dave Euler for OMNR for generally measured distances for a host of wildlife travelling between wetland areas.

WETLAND FUNCTION

Terrain functions for general hydrology were observed to be moderate to high and worthy of specific mitigation to conserve them; headwater wetlands can provide for flood attenuation and moderate storm events, as well as retain moisture during drought events.

The treed bog and fen habitat types wick up moisture in their moss layers particularly when stretching toward Horseshoe Lake. In many instances no direct surfacewater drainage patterns or evidence of drainage is displayed but the gradual seepage of water may be retained below surface in the moist moss found within the treed bog.

3.1 VEGETATION COMMUNITIES

The Regis parcel supports the following vegetation community types:

1. Treed and Shrub Bog Wetland
2. Open Marsh Wetland
3. Mixed Upland Forest (MhBwHeCb)
4. Early Succession Poplar Forest Edge (AtMsHeBw)
5. Wet Graminoid Swales
6. Hemlock Treed Swamp Wetland
7. Open Fen Wetland-Graminoid Meadow Succession

3.2 VEGETATION DETAIL

1. TREED AND SHRUB BOG WETLAND

Our biologist spent considerable time investigating the most sensitive habitat type on the Regis parcel, the bog wetland mapped as Map Unit #1. The potential for rare species support and hydrology function was high, as well as the likelihood of off site wetland complex connections. Bog content is detailed below.

Tamarack-Eastern White Cedar-Black Spruce tree associations (*Larix laricina-Thuja occidentalis-Picea mariana*),with dominant groves of Tamarack are evident in the treed bog, with an understory in light filtered areas of Northern Wild Raisin (*Viburnum cassinoides*), Mountain Holly (*Nemopanthus mucronatus*) and prostrate shrubs including

TREED AND SHRUB BOG WETLAND CONTINUED

Leatherleaf (*Chamaedaphne calyculata*), Bog and Sheep Laurel (*Kalmia polifolia, K. angustifolia*) and a rich forb layer emerging from the rich Sphagnum moss carpets on the forest floor. Virginia Chain Fern (*Woodwardia virginica*) was also present, with errant specimens of the Pitcher Plant (*Sarracenia purpurea*) and abundant Sundews (*Drosera rotundifolia*) supported here.

2. OPEN MARSH WETLAND

This shallow pond recedes into back bays between ridges and forms numerous cattail swamp wetland communities at the pond and upland interface.

2B CATTAIL SWAMP

Bullhead Lily (*Nuphar variagatum*), Joe-Pye Weed (*Eupatorium maculatum*), Blue Flag (*Iris versicolor*), Plantain at waters edge were flanked by a shrub layer of Tag Alder (*Alnus rugosa*), Willow (*Salix spp.*) and Sweetgale (*Myrica gale*). This formed a structure for the rushes (*Scirpus cyperinus, S. rubrotinctus. Cladium mariscoides)*. Steeplebush (*Spirea tomentosa*) and Blue-joint reed grass (*Calamagrostis canadensis*). Marsh St.John's Wort (*Triadenum fraserii*) was also present at the wet edges of these cattail and sedge swamps with fern specimens *(Dryopteris intermedia. Onoclea sensibilis*). The vegetation did not allow for navigability by ducks which had to use the central open water portion of the marsh.

3. MIXED UPLAND FOREST

Sugar Maple (*Acer saccarum*) White Birch (*Betula papyrifera*) and Eastern Hemlock (*Tsuga canadensis* (L.) Carriere) combine to provide the overstory for shorter Ironwood (*Ostrya virginiana* (Miller) K. Koch) and Maple seedlings with a small Black Cherry component. Shrub layers include Opposite-leaved Dogwood (*Cornus alternifolia* L.f.), High Bush Cranberry (*Viburnum trilobum* Marshall), Alternate-leaved Serviceberry (*Amelanchier alternifolia*) and forb clusters of Bluebead Lily (*Clintonia borealis*) and Wild Sarsaparilla (*Aralia nudicaulis*).

Introduced Helleborine orchids (*Epipactis helleborine* (L.) Crantz) and Puffball fungi under Striped Maple saplings and Eastern Hemlock (*Tsuga canadensis* (L.) Carriere) reveal Wood Sorrel (*Oxalis stricta L.)*. Cucumber Root (*Medeola virginiana* L.), and fern assemblages of *Dryopteris* including *D. filix-femina*. This vegetation community differs from Map Unit #6 community due to dry soil and an absence of the club moss ground cover. Long-awned Wood Grass (*Brachyelytrum erectum*) continues to persist here as in the wetter Hemlock swamp. Hemlock bases support the fine Goldthread (*Coptis* *groenlandicus*), Polygala (*Polygala paucifolia*), Creeping Partridge-berry (*Mitchella repens*), Wintergreen (*Gaultheria procumbens*), Bracken (*Pteridium aquilinum*).

4. EARLY SUCCESSION POPLAR EDGE

Sugar Maple-Eastern Hemlock-White Birch-Trembling Aspen (*Acer saccarum, Tsuga canadensis* (L.) Carriere, *Betula papyrifera, Populus tremuloides* Michx.) dominate this tree association. Hepatica continue in the forb layer with Indian Cucumber Root (*Medeola virginiana* L.) and Large-leaved Asters (*Aster macrophyllus* L.).

5. GRAMINOID SWALE

Grass and sedge lined swales often lead to remnant or active beaver activity on and off this site. The back eddie areas may form a connection with the open marsh during flood events, but open water has long been encroached by Blue-joint reed grass (Calamagrostis canadensis), Joe-Pye-Weed (*Eupatorium maculatum*) and Rattlesnake Manna Grass (*Glyceria canadensis*) at the swale edge of White Cedar (*Thuja occidentalis*) and Eastern Hemlock (*Tsuga canadensis* (L.) Carriere). Helleborine Orchid (*Epipactis helleborine* (L.) Crantz), Blackberry (*Rubus allegheniensis* Porter), Water Horehound (*Lycopus europaeus* L.), Rough Golden-rod (*Solidago rugosa*), Cheeses (*Malva neglecta* Wallr.), Water Buttercup (*Ranunculus flabellaris*), Moist Wood Fern (*Dryopteris intermedia, D. marginalis*), Coltsfoot (*Tussilago farfara* L.) Nodding Beggar-ticks (*Bidens cernua*), Shining Clubmosses (*Lycopodium lucidum*), Woolgrass (*Scirpus cyperinus*) in dense clusters with duckweed (*Lemna minor*) in water puddles.
Birds making use of these structural edges included woodpeckers (Downy, Hairy, Flicker), common Chickadees, American Crows and a late in season Black-and-White Warbler in the wet edge Hemlocks.

6. HEMLOCK TREED SWAMP

Eastern Hemlock-Silver Maple (*Tsuga canadensis - Acer saccharinum*) mixed with small Ironwood (*Ostrya virginiana*) formed the upper tree canopy for a mossy forest floor with errant Moist Wood Fern (*Dryopteris marginalis*), Horsetail (*Equisetum fluviatile*), Hay Scented Fern (*Dennstaedtia punctilobula* (Michx.) T. Moore), Wild Raisin (*Viburnum cassinoides)* and Silver Maple (*Acer saccharinum* L.) seedlings under the Hemlock canopy. Opposite-leaved Dogwood (*Cornus alternifolia* L.f.) sheltered Round-lobed Hepatica (*Anemone americana* (DC.) H. Hara) , Club mosses (*Lycopodium clavatum, L. lucidum. L.*) and Long-awned Wood Grass (*Brachyelytrum erectum*).

7. OPEN FEN-GRAMINOID WETLAND SUCCESSION BY LAKE

Often a fen indicator, we collected herbarium specimens of Bog Rosemary (*Andromeda glaucophylla*) at Map Unit #1 Treed Bog limits and 4 metres away in the wet fen-graminoid meadow succession adjacent to Horseshoe Lake. Brown mosses such as

Campylium spp. are supported here; also indicative of fen habitat. Species common to bog or fen habitat included the striking Sundew and Pitcher Plant insectivorous plant species *(Drosera rotundifolia, Sarracenia purpurea)*. Buckbean was not observed although Marsh St. John's Wort (*Triadenum fraserii*) was abundant with Sweet Gale (*Myrica gale*).

8. WET SWALE ADJOINING MARSH

Seasonal inundation, dominant grasses include Blue-joint reed grass (*Calamagrostis canadensis*) (*Phalaris arundinacea L.*), Cutgrass, Rattlesnake Grass (*Glyceria canadensis* (Michx.) Trin.) and a few Yellow Sedge (*Carex flava* L.). Moist ground cover mosses (*Mnium spp.*) support Bitter Nightshade (*Solanum dulcamara* L.), Stick-tight (*Bidens cernua* L.), Water -horehound (*Lycopus europaeus* L.), Joe-pye weed (*Euphatorium maculatum* L. ssp. *maculatum)*, and ferns (*Dryopteris intermedia. Onoclea sensibilis*).

Where the swales grade upland, tree edges of White Cedar - Eastern Hemlock (*Thuja occidentalis- Tsuga canadensis* (L.) Carriere) associations dominate on many north facing slopes. At these interfaces clubmosses appear including Shining Clubmoss (*Huperzia lucidula* (Michx.) Trevis.)

9. SHRUB SWAMP

Red Aeshnia dragonflies flit over Water Plantains (*Alisma plantago-aquatica* L.), Stick tight (*Bidens cernua* L.), Bitter Nightshade (*Solanum dulcamara* L.), and a shrub layer of Willow (*Salix* spp.) and Red-ozier Dogwood (*Cornus stolonifera*). Four associations were dominated by Sensitive Fern (*Onoclea sensibilis* L.*)* and Marginal Wood Fern (*Dryopteris marginalis(*L.) A. Gray*)*.

10. ROAD SWALE - TREED SWAMP

Bunchberry (*Cornus canadensis L.*), Chickweed ( ), abundant quality specimens for Purple-flowering raspberry *(Rubus odoratus*), Goldthread (*Coptus groenlardica)* amidst dead standing Eastern Hemlock (*Tsuga canadensis* (L.) Carriere).

This wetland complex is a treed swamp of White Cedar - Ironwood - Red Maple (*Thuja occidentalis - Ostrya viriginiana* (Miller) K. Koch - *Acer rubrum* L.*)* packed with cattail borders grading to mixed Sugar Maple uplands.

The standing water wicks up sphagnum to provide moist habitat for Lesser Duckweed (*Lemna minor*), emergent wetland plants such as Pickerel weed (*Ponterderia cordata*), Water hore-hound (*Lycopus uniflorus*), Enchanter's Nightshade, Red-ozier Dogwood (*Cornus stolonifera*) and more delicate Lady Fern, False Violets (*Dalibarda repens*) and Bog Rosemary *(Ledum groenlandicum.* Diverse bryophyte and large fungi specimens were observed in this small wetland complex including *Piptoporous betulinus* on edge

White Birch (*Betula papyrifera* Marshall) and *Ganoderma tsugae* on dead standing Eastern Hemlock (*Tsuga canadensis* (L.) Carriere).

11. MIXED EARLY SUCCESSION WOODLOT

An internal access road bisects the previously noted roadside wetland swamp and early succession forest of Trembling Aspen - Large-toothed Aspen - White Pine - White Spruce (*Populus tremuloides* Michx. - *Populus grandidentata* Michx. - *Pinus strobus* L. - *Picea glauca* (Moench) Voss). A well worn large mammal travel corridor at swamp edge leads through the early forest and makes use of the cart trail. White-tailed deer were observed off this trail while sign of moose was recorded by our biologist in the adjacent roadside wetland.

Strong colonizers like Staghorn sumac (*Rhus typhina*), Raspberry (*Rubus*), Strawberry (*Fragaria*), Goldenthread (*Coptis groenlandica*) abound on the clear meadow uplands of the early forest edges.

12. DOGWOOD SWALE

A Woodthrush flushed from this low wetland of Opposite-leaved Dogwood shrubs (*Cornus alternifolia* L.f.) and moist Sphagnum moss ground cover. The main road into the Regis parcel bisects this wetland with two culverts providing the surfacewater connection we investigated as part of our wetland complexing exercise in the field. Surfacewater flows indicates a viable connection for the transfer of plant propagules from one wetland to another.

13. TREED SWAMP - NORTHEAST

White Cedar - Black Ash - Alder (*Thuja occidentalis* L. - *Fraxinus nigra* Marshall - *Alnus*) tree canopy underlaid with Sweetgale (*Myrica gale*) and Willow (*Salix spp.*) shrub wetland. Winterberry (*Ilex verticillata*) and Creeping Snowberry (*Gaultheria hispidula* (L.) Muhlenb. ex Bigelow) grade into swales. Swales provide drainage flow paths for water, nutrient and species transfer. A sampling of wetland plants within 3m^2 included Cucumber Root (*Medeola virginiana* L), Stick tight (*Bidens cernua* L.), Sedges (*Scripus rubrotinctus*, *S. atrovirens*) ferns including Royal Fern (*Osmunda regalis*) and Hay-Scented Fern (*Dennstaedtia punctilobula* (Michx.) T. Moore). A sampling of bog indicator plants spills into this treed and shrub swamp including Virginia Chain Fern (*Woodwardia virginica*). Labrador Tea (*Ledum groenlandicum* Oeder).

14. LAKESHORE

Open water edges of marsh habitat are surrounded by bog, fen and low shrub wetland affinity plant species supported on sphagnum hummocks such as cranberries (*Vaccinium microcarpon*) and insect eating bog plants known as Pitcher Plants (*Sarracenia purpurea*), the Round-leaved and Sundews (*Drosera rotundifolia*). Shrub layers of Red-osier Dogwood - Willow - Sweetgale - (*Cornus stolonifera Michx. - Salix spp. Myrica gale*) are interspesed with tree specimens most often Alder - Tamarack - Spruce Hemlock (*Alnus - Larix - Picea - Tsuga*). Rich forb layers and ericaceous plants thrive. Striking examples include Bog Rosemary (*Ledum groenlandicum*). Leatherleaf (*Chamaedaphne calyculata* (L.) Moench), and Virginia Chain-fern (*Woodwardia virginica*) growing alongside Duckweed (*Lemna turioniflera* Landolt), New York Fern (*Thelypteris noveboracensis* (L.) Nieuwl.), Stick tight (*Bidens cernua* L.), Moss (*Mnium spp*.), Goldthread (*Coptis groenlandicus*), foliose and crustose lichens on bark as well as Poison Ivy (*Rhus radicans* L. ssp. negunda (Greene) McNeill) clusters further inland.

15. TREED BOG INTERIOR

The White Cedar - Tamarack - Spruce Bog (*Thuja occidentalis - Larix laricina - Picea*) supports Sphagnum layers including the Brown and Red Sphagnums that in our experience do not occur in other wetland habitat types. These vast mounds of contiguous moss carpets provide excellent potential habitat for the Four-toed Salamander which congregate their eggs in these moist mosses wicking moisture from the sub-surface waters. This area supports the Long-tailed Weasel and many small mammal travel corridors, with potential for shrews, flying squirrels, owls and accipeters.

Mosses support abundant mounds of small and large Cranberry (*Vaccinium macrocarpon, V. microcarpon*). Bunchberry (*Cornus canadensis*). Corprinus mushroom heads amidst Bog Laurel (*Kalmia polifolia* Wangeth.) and Rosemary (*Andromeda polifolia* L. ssp. *glaucophylla* (Link) Hulten). Horsetail (*Equisetum fluviatile*) is abundant in water, with Blue-bead Lily (*Clinotonia borealis*) and prostrate Orchids including the Lady Slipper. Goldthread (*Coptis groenlandicus*). Wintergreen (*Gaultheria procumbens*). St. John's Wort (*Hypericum canadense L.*) and swirled patches of lichen (Reindeer Lichen - *Cladina rangiferina* (L.) Nyl.) covered Tamarack (*Larix laricina*). Tamarack (*Larix laricina*) edge the bog perimeter where active Nuthatch, Chickadee and Hairy Woodpecker bird guilds dispersed across hedgerows flanking the internal access route into the site.

The following Color Plates 1 - 4 depict various habitat types on the Regis parcel.

4.0 IMPACT ASSESSMENT

4.1 SENSITIVITY TO DEVELOPMENT

Wetland habitat is most sensitive of the habitat types on site to alteration of water table, either through drawdown or flooding and/or nutrient and sediment entry.

Loss of other vegetation types on the parcel such as mixed woodlot, deciduous forest on ridges and grassy meadow could occur and be restored with greater success than wetland hydrology. These habitats are also more frequent and common within the Site District and Site Region.

Although wetland habitat is among the Areas of Natural and Scientific Interest selected for best representation of vegetation landform features in the Site District, our evaluation of off site linkages suggests that the Horseshoe Lake wetlands function with larger wetland complexes situated south of the Regis parcel and would thereby qualify for the recommended setback from aggregate land use of 120 metres guided by the Provincial Wetland Policy Statement.

4.2 WETLAND CONSERVATION STATUS

The area proposed for development is situated west of Horseshoe Lake and the larger Mississagua and Catchacoma Lakes. It is located within ecological Site District 5E-11 in a vicinity with numerous lakes and wetlands. Our team inventoried for alvar habitat due to conservation value and our documentation of this flat limestone pavement and unique vegetation near Buckhorn in the neighboring Victoria County but found none. Alvars become more numerous in Site District 6E-9 located south of the study site..

Conservation targets set for the easterly Site District 5E-8 note that smaller landform types (Clay Plain, Ice Contact Features, Sand Plain and Organic Deposits) representation across 5E-8 was poor, corroborating the value of organic deposits. The Horseshoe Lake wetland complex provides this type of wetland continuum.

The open low shrub and surrounding treed bog falling into and adjacent to proposed resource activity support dense Sphagnum hummocks of *Kalmia angustifolia*, *Chamaedaphne calyculata*, *Eriophorum spissum*, *Viburnum cassinoides*, *Vaccinium macrocarpon*. Bog Rosemary (*Andromeda polifolia* L. ssp. *glaucophylla* (Link) Hulten)

Forested upland ridges of mixed forest surround the bog and marsh habitat types. The peatland continues off site and articulates as a larger wetland complex with open water features. Any wetlands outletting to larger lacustrine habitat may function to varying degrees as a headwater area providing water quality and quantity value.

4.3 VASCULAR PLANT CONSERVATION STATUS

Our vascular plant list was referenced against known status designation authorities for the Peterborough County and the general ecological Site District 5E-11 as listed below.

OMNR Vascular Plant Status (Riley, 1989)

Dryopteris filix-max (L.) Schott	*Male Fern*	*R-1*
Polystichum braunii (Spenner) Fee	*Braun's Holly Fern*	*R-0*
Woodsia Glabella R. Br.	*Smooth Woodsia*	*R-1*
Sagittaria graminea Michx. var. cristata (Engelm.) Bogin	*Grass-leaved Arrowhead*	*R-0*
Panicum perlongum Nash (Dichanthelium p. (Nash) Freckm.)	*Panic Grass*	*R-0*
Carex haydenii Dewey	*Sedge*	*R-1*
Scirpus verecundus Fern.	*Shy Rush*	*R-1*
Disporum lanuginosum (Michx.) Nicholson	*Yellow Mandarin*	*R-2*
Morus rubra L.	*Red Mulberry*	*R-0*
Crataegus hillii Sarg.	*Hawthorn*	*R-1*
Potentilla paradoxa Nutt.	*Lower Great Lakes Cinquefoil*	*R-5*
Lupinus perennis L.	*Wild Lupine*	*R-2*
Linum sulcatum Riddell	*Flax*	*R-2*
Polygala polygama Walter	*Milkwort*	*R-1*
Euonymus atropurpurea Jacq.	*Burning Bush*	*R-1*
Lythrum alatum Pursh	*Loosestrife*	*R-1*
Panax quinquefolius L.	*Ginseng*	*R-5*
Pterospora andromedea Nutt.	*Pinedrops*	*R-0*
Cuscuta campestris Yuncker	*Dodder*	*R-1*
Monarda punctata L.	*Bergamot*	*R-1*
Valeriana uliginosa (T.G.) Rydb.	*Valerian*	*R-1*

Our search for potential habitat of the above species found no specimens on the Regis site. Habitat excellent for fern assemblages was present on and off the site, but did not support the rare status ferns listed above.

Since the status designator (Riley, 1989) grouped Peterborough with Durham and Victoria County, it was not possible to separate out which rarities were recorded in which counties, requiring upgrading with other adjacent lands status lists such as the list below.

Annotated List of Vascular Plants in Haliburton County
R.O.M., Emerson W. Skelton, 1977

Lycopodium inundatum L.	*Bog clubmoss*	*Uncommon*	
Lycopodium sabinifolium Willd.	*Savin-leaved clubmoss*	*Rare-1*	
L. tristachyum Pursh	*Ground cedar*	*Uncommon*	
Isoetes macrospora Durieu	*Quillwort*	" "	
Equisetum scirpoides Michaux.	*Dwarf scouring-rush*	*Rare-2*	
E. variegatum Schleicher	*Variegated horsetail*	*Uncommon*	
Botrychium dissectum Sprengel var. obliquum	*Cut-leaved grape fern*	*Rare-2*	
Botrychium simplex E. Hitchc.	*Dwarf grape fern*	*Rare-2*	
Asplenium trichomanes L.	*Maidenhair spleenwort*	*Rare-1*	
Athyrium pycnocarpon (Spregel)	*Narrow-leaved spleenwort*	*Rare-1*	
Dryopteris fragrans (L.) Schott	*Fragrant wood fern*	*Rare-2*	
D. goldiana (Hook.) A. Gray	*Goldie's Fern*	*Rare-1*	
D. elegans (J.Robins.) F.W. Gray		*Rare-1*	
D. boottii (Tuckerm.) Underw.	*Hybrid fern*	*Rare-1*	
D. triploidea Wherry	*Hybrid fern*	*Uncommon*	
Thelypteris palustris (Salisb.) Schott	***Marsh fern***	***Uncommon***	***Potential***
Woodwardia virginica (L.) Smith	***Virginia chain fern***	***Rare-2***	***X Regis***

The above noted ferns with potential throughout the Haliburton area were also searched for within the Regis parcel as it supports a number of ferns in the Dryopteris family. However, no specimens of the rare Dryopteris were located.

The Virginia chain fern was located within the treed bog sphagnum hummocks. This plant is also considered rare throughout the District of Muskoka, although our field records indicate that the status designation in Muskoka may require downgrading as we are finding this fern in many wetland and wet swale locations on the Precambrian shield habitat.

Many of these good sources of documented flora are considerably outdated now, and as such, botanists at the Ontario Ministry of Natural Resources are actively compiling a current plant status listing for Peterborough (Mr. M.Oldham, NHIC) in 1999. Our team accessed the pertinent web site for any documented floral records and rare plant status within one kilometer of the study site to supplement our wetland and upland field inventory. Our purpose in reviewing all recent data was to attempt to provide some measure of regional assessment for:

- habitat type status across the region
- plant status across the region

In the absence of wetlands that have not been inventoried using the Northern Wetland Evaluation Manual in the vicinity of Horseshoe Lake, this mode of inquiry can benefit our assessment of general abundance to tailor conservation recommendations.

Results of our inquiry show that no candidate conservation areas such as ANSIs, Provincial Parks, Provincial Wetlands or Greenlands Systems were identified on the Regis parcel, within one kilometer or indeed within Cavendish Township (OMNR Web site search, 1999).

Species occurrence data was noted within the Township, and all eleven sitings of species records were searched, to determine that no Threatened or Endangered species were recorded again on the Regis site, within a kilometer, or within the Township. All sites indicated a species of vulnerable status; refined to often indicate a regionally rare or uncommon species. Contact was then made with the OMNR Area office to obtain further detail on buffering requirements and specific locations for the two vulnerable status sitings within a kilometer of the Regis parcel.

Bog wetland habitat types were viewed using Cavendish Township aerial photography and photography specific to the Regis parcel landscape. Precambrian Shield habitat of the Peterborough-Haliburton divide supports abundant wetland habitat types, and appears to support many bog features that still require more regional evaluation and listing for future provincial wetland evaluation - a mandate outlined within the Wetland Policy administered by the Ontario Ministry of Natural Resources.

4.4 POTENTIAL IMPACTS OF VERMICULITE EXTRACTION

Where currently proposed the extraction would remove treed bog and marsh wetland habitat. It is our opinion that this would result in a long term loss of this wetland type as it can not be rehabilitated in the post quarry restoration phase to similar habitat type due to the great amount of time required for peat deposition in this type of wetland habitat.

Excavation would likely alter the local water budget and potentially impact adjacent wetland complexes. Alternate options and mitigation are reviewed for the extraction operation in the following section 5.0 Mitigation.

5.0 MITIGATION

We recommend mitigation through direct constraint and setback of sensitive natural areas including the treed bog wetland habitat and open marsh. Setback dimensions follow provincial policy statement (PPS) guidelines at 120 metres for significant wetland features and 30 metres respectively for open water features such as Horseshoe Lake.

Significant habitat or species support is provided with more detailed mitigation below.

ENVIRONMENTAL FEATURES	ENVIRONMENTAL FUNCTIONS
	TERRAIN FUNCTIONS.
Treed Bog Open Marsh	Groundwater recharge Floodwater attenuation and storage Headwater area for water quality 120 metre setback guided by PPS
Forest linking bog to marsh Valley system is bedrock controlled	**WILDLIFE CORRIDOR**
	STATUS DESIGNATION
Treed Bog	Overlap of values as noted in Feature 1: Groundwater recharge and Flood conveyance, and storage. Further, specialized habitat and significant species support (wetland review, mammal inventory SAAR, 1998)
	THREATENED OR ENDANGERED SPECIES

No species observed on site or with potential to inhabit the site habitats were considered to be endangered or threatened requiring exceptional conservation status measures.

HERPTILES Mink Frog in Treed Bog. Status is Uncommon and local in Central Region using OMNR Distribution and Status of Herpetofauna of Central Ontario (Oldham, 1989). PPS Guidelines state that significant species habitat be setback from land uses of negative impact by 50 metres.

MAMMALS A regionally uncommon small mammal, the Least Shrew, could be supported by the bog wetland forest on the parcel recommended for constraint from resource extraction. A Long-tailed Weasel was observed within this habitat type at close range, indicating high quality habitat within the forested bog. Again, development setbacks guided by the PPS state 50 metres from the significant habitat of the given species.

In this instance, the interior forest of the bog wetland is considered the home range, and as such extraction limits are set at 50 metres from the significant mammal habitat delineated on the aerial photography provided.

TREED BOG WETLAND **SPECIALIZED HABITAT**

Significant bog habitat treated with 120 metre setback dimensions for resource extraction. We recommend water quality and groundwater recharge mitigation to conserve the wetland hydrology supporting sensitive wetland features.

This wetland has not been evaluated by the agency mandated for wetland conservation; the Ontario Ministry of Natural Resources. Our team representative attended the area office in Minden, Ontario on November 27th, 1998, finding no evaluation on file, and no data on regional wetland habitat type abundance, quality or conservation status. An agency printout of evaluated wetlands was provided by the Area Planner showing no wetlands on the list from within Cavendish Township.

Accordingly, our team referred to the existing but outdated Life Science Inventory Parks Reports, local naturalist floral inventories (Skelton) and provincial wetland objectives to base our general status determination on. Following the intent of the Provincial Wetland Evaluation Manual, we found bog wetland scores for biodiversity to be low as the wetland habitat type is a contiguous unit of similar repeated species patterns. It does score well for special features due to species level findings and hydrological values, with social and biological scores respectively lower.

The bog wetland type, however, was ground truthed to have connections and landscape linkages with other potential wetland complexes off the study site. For this reason, we feel it could attain the required 600 score for a larger Provincial Wetland Complex, and respectively recommend the Provincial and Wetland Policy Statement 120 metre setback from adjacent lands use be considered.

Bos are wetlands often hundreds of years to thousands of years in the making. They are generally limited to colder climates such as the shield, are less abundant south of the shield in southern Ontario, and show characteristic peat accumulation. Slow or no drainage help to create the acidic pH regime that supports acid loving Ericacea such as Leatherleaf (*Chamaedaphne calyculata* L.Moench), Large and Small Cranberries (*Vaccinium macrocarpon* Ait., *V. oxycoccus* L.) and Wintergreen (*Gaultheria procumbens* L.).

Mitigation recommended is conservation by avoidance. This would require modification of the presently proposed areas of vermiculite extraction on the Regis parcel to comply with the 120 metre setbacks from the treed bog area.

CRITICAL FACTORS

Water regime maintenance. Acidic range of pH regime maintenance.

All other vegetation communities inventoried by our team are representative and common examples of plant communities within this portion of Peterborough County. The forest is mixed, dominated by White Cedar (*Thuja occidentalis*), Eastern Hemlock (*Tsuga canadensis* (L.) Carriere), White Pine (*Pinus strobus* L.) and subdominant American Beech (*Fagus grandifolia* Ehrh.), Sugar Maple (*Acer saccarum*), Black Cherry (*Prunus serotina* Ehrh.) specimens and a few Ironwood (*Ostrya virginiana* (Miller) K. Koch).

WOODLAND

No woodland no rare tree assemblages or significant old growth forests were observed on the site, measured against known parameters (STTU, 1997:Strobl, 1997:Sober et al., 1997). OMNR guidelines suggest using Township forest coverage values to set woodlot size for significant woodlands. In Cavendish Township,

	SEASONAL WILDLIFE CONCENTRATION
Open Marsh	Waterfowl staging, nesting, stopover
Treed Bog and Oak Stands	Winter deer yarding evidence
Treed Bog, Marsh shrub edge	Herptile hibernaculae

5.1 EXTRACTION PHASE

1. Excavate vermiculite outside of sensitive treed bog wetland and 120 metre setback limits
2. Setback extraction 30 metres from open water features
3. Setback extraction 50 metres from signficant species habitat
   This is covered adequately since the flora are located within the treed bog feature already conserved by recommendation (1) above.
4. Restrict excavation to above water table
5. Restrict heavy machinery from operating at dawn or dusk wildlife sensitive times

If extraction phases propose to remain above the water table, the conservative setback distance of 120 metres from treed bog could be tailored on site provided best management practices including on site silt curtains, berms and monitoring show how no deleterious substances would enter the treed bog due to vermiculite extraction on adjacent lands.

5.2 POST EXTRACTION PHASE

1. Design areas of rehabilitation so they articulate across the landscape, connecting plantings to existing wildlife corridors

2. Rehabilitate open marsh area to same habitat type

3. Keep all vermiculite water discharge activity on site to maximize infiltration of water resources back into the local shallow groundwater aquifer

4. Discourage any fencing of property limits, promoting instead marking the legal survey line by native shrub and tree plantings. Fence, particularly chain link, has been lethal to deer, coyotes and running dogs as they can become entangled during the jump across.

6.0 SUMMARY

We found natural areas to be relatively undisturbed on the Regis site, with few access routes bisecting the site. Extensive natural areas followed lacustrine and bedrock controlled valley systems across the landscape. High points were fringed with deciduous forest, while lake habitat was shallow and of high value for waterfowl production.

Low lying areas of contiguous wetlands represent differing wetland habitat types including Spruce-Larch treed bog, open marsh and shrub bog. The large tracts of treed wetland can function to regulate spring flood events, with organic soils potentially moderating periods of drought; peat depths in the treed bog averaged 70 centimetres.

Based on our field observations and review of environmental parameters, we concluded that significant negative impacts to the wetland habitat type (treed bog) would likely occur if the proposed vermiculite extraction took place using the existing proposed two phase areas of extraction.

Our team would recommend modifying the proposed extraction so that vermiculite is not removed from the treed bog, therefore not resulting in a net loss of this wetland habitat type. Recent discussion with the team geologist indicates that the proponents would comply with this direct and retain the treed bog feature.

Notwithstanding our above recommendations, there is potential for the Aggregate Resources Act to supersede the Wetland Policy Statement due to the unique content and location of the vermiculite aggregate. Since there is a possibility that the aggregate license application may be approved, the reality of potential impacts should be discussed.

The extraction phases proposed would clearly remove a portion of treed bog and cattail marsh. In that scenario it would not be realistic or attainable in our opinion to recommend rehabilitation of a bog wetland habitat type. This is because the peat accumulation has taken place over hundreds and/or thousands of years; periods of time not attainable through conventional wetland rehabilitation techniques spanning only decades. In a post extraction site, the remaining land would consist of an excavated area realistically suited for rehabilitation to a large contiguous open water marsh wetland feature.

Policy 2.3.1 of the Provincial Policy Statement (PPS) states that:

> *"Development and site alteration will not be permitted in...significant wetlands south and east of the Canadian Shied...and that... development and site alteration may be permitted in... significant wetlands in the Canadian Shield... if it has been demonstrated that there will be negative impacts on the natural features or the ecological functions for which the area is identified."*

Please do not hesitate to direct the undersigned at your convenience with any questions or discussion on implementing the mitigation. We can be reached at our phone 705 788 2218, facsimile 705 788 2219 or our email address saar@muskoka.com.

Respectfully submitted,

Linda Liisa Sõber

Linda Liisa Sõber, H.B.Sc.
Biologist
SAAR Environmental Limited
LLS:ki

SPECIES APPENDIX

MAMMALS

White-tailed Deer
Moose
Coyote
Muskrat
Long-tailed Weasel
Snow-shoe Hare
Beaver
Red Squirrel
Eastern Chipmunk
Potential for Least Shrew

FALL AVIAN COMMUNITY

Black duck
Bufflehead
Common Nighthawk
Broad-winged Hawk
American Goldfinch
Common Grackle
American Crow
Cedar Waxwing cluster
Eastern Wood Pee Wee

HERPTILES

Painted Turtle carapace
Red-backed Salamander
Search for Four-toed Salamander no specimens

WETLAND COMPLEXING

Horseshoe Lake

QUARRY EXTRACTION

VEGETATION COMMUNITY TYPES

1 TREED AND SHRUB BOG WETLAND
2 OPEN MARSH WETLAND
3 MIXED UPLAND FOREST
4 EARLY SUCCESSION POPLAR EDGE
5 GRAMINOID SWALE
6 HEMLOCK TREED SWAMP
7 OPEN FEN-GRAMINOID WETLAND SUCCESSION BY LAKE
8 WET SWALE ADJOINING MARSH
9 SHRUB SWAMP
10 ROAD SWALE - TREED SWAMP
11 MIXED EARLY SUCCESSION WOODLOT
12 DOGWOOD SWALE
13 TREED SWAMP-NORTHEAST
14 LAKESHORE
15 TREED BOG INTERIOR

LEGEND

Wetland Complex

Wildlife Corridor

Drainage Course

Bog wetland habitat

0m 200m Scale: 1:15840

TEAM ADVANTAGE

SAAR Environmental Limited is a firm of three individuals. Our goal is to remain small to ensure we are accurate in our research, competitive with each project, and able to personally represent and defend our technical research at the Ontario Municipal Board and the Provincial Court.

When you retain SAAR your project manager is also your lead biologist - eliminating administrative layers. Our fisheries and wildlife staff are positioned in Huntsville, Barrie and Newmarket to monitor your file with local commenting agencies.

CAPABILITIES

SAAR provides Provincial Agencies, Municipal and Regional Governments, Aggregate Operators, Private Developers and Resorts with a range of environmental studies including:

Natural Heritage System Management
Significant Woodland Determination
Lakeshore Capacity Studies
Fisheries Research Experiments
Wildlife Habitat Assessment
Rare Species Mapping
Timber Wildlife Management
Level 1 and 2 Aggregate Act Studies
Pit and Quarry Rehabilitation Plans
Life Science Inventory & GAP Analysis
Peer Review for Municipalities
Stormwater Management for Nutrients
Wetland Design and Creation
Wetland Environmental Impact Studies
Municipal Environmental Policy Review
Forest Management Plans
Statistical Analysis of Field Studies
Fisheries Management Plans

INFORMATION MANAGEMENT

We use Global Positioning Systems (GPS) and Geographic Information Systems (GIS) to collect, store, analyze and map field information, supplying it to clients in popular digital formats. Our mapping staff benefit from a fifteen year technical relationship with our affiliate Mr. Darko Poletto of SKE. Mr. Poletto was instrumental in establishing the ArcInfo environment that the Provincial Ministry of Natural Resources and some area municipalities now use. GIS FieldNotes software allows us to design databases, integrating environmental detail for instance with plan review functions. This assists Planning Departments in being consistent with requirements under Bill 20 Comprehensive Policy Statements.

SENIOR STAFF

NATURAL HERITAGE SYSTEM AND LONG TERM NATURAL AREAS MANAGEMENT. BIOLOGIST. L. L. SOBER, B.SC. (HONORS)

Ms. Sober brings a demonstrated field expertise of 11 years in field and research ranging from academic field posts collecting terrestrial ecology data for Ph.D. candidates in the Arctic, to aquatic ecology field study within intertidal communities near Passamaquody Bay, New Brunswick.

Government posts as a Fisheries Research Biologist and Wildlife Biologist provided early opportunities to design, conduct and statistically analyze the results of her wildlife field experiments. Studies included growth rates of native and stocked Lake Trout back-cross hybrids , population sub-sampling and distribution of fish species including the rare Aurora Trout, through to Lake Trout hooking mortality experiments and Walleye egg bioassays conducted on riverine inlets to Lake Huron.

L.L. Sober obtained Provincial Certification for a wide range of biological skills during her work with the Province (OMNR). This past grounding assists in obtaining approvals for aquatic or terrestrial ecosystem studies prepared for SAAR Environmental Limited. Government Certification is summarized below:

FISHERIES ASSESSMENT

Provincial Aquatic Lake Habitat Inventory Survey Technical Training Manual

Provincial training includes electro-shocking young of the year Walleye on Lake Huron, through to riverine and inland lake trap,seine and gill netting projects either on field crew or survey design.

WETLAND EVALUATION

Provincial Wetland Evaluation Training Manual for Northern Ontario Wetlands
Provincial Upgrade to Version III, Current Manual for Southern Ontario Wetlands

Experience with classifying wetlands within the Province was of value to the Province; one contract at the Central Ontario Midhurst OMNR provided Ms. Sober with opportunity to review 155 evaluated wetlands and determine which wetland scores required upgrading from Version II to III Provincial Scoring Systems based on hydrological, biological and life science scores.

International Wetland Symposiums are attended on a routine basis for transfer of technical data. Monthly "Technical Transfer Meetings" were attended at the Maple Research Station of the OMNR.

SIGNIFICANT WOODLANDS

Significant Woodland Technical Training Manual (Strobl, 1996)
Member of Provincial Pilot Project Team, Principle Author of Significant Woodland Evaluation Document for Halton and Brampton, Ontario.

Provincial skills include prism plots, basal area calculations during woodlot inventories for timber - wildlife value scoring. Wildlife values were input to a then Pilot Project for an Integrated Cruise Data Program, Bracebridge District OMNR Timber Division.

SIGNIFICANT WILDLIFE SPECIES

Author, Red-shouldered Hawk Distribution (1988-90), Bracebridge District OMNR. Critical breeding grounds were inventoried within the Five Year Timber Management Plan allocation of crown land forest cover.

As a Wildlife Biologist, coordination of volunteer census programs was mandatory, including Breeding Bird Atlas census for the Long Poiht Bird Observatory and herptile records for the Herpetofaunal Summary. Natural heritage system paradigms were still developing, so serious time and effort was placed on peer associations including the Ontario Field Botanist Workshops, Federation of Ontario Naturalist and local Muskoka Field Naturalist workshops.

LONG TERM RESOURCE MANAGEMENT PLANS

Author, Long Term Management Plan for White-tailed Deer in a Wildlife Management Unit (WMU).
Ontario Municipal Board Hearing Background Research Team Member; By-Law 87-87 Conifer Shoreland Conservation, included training on Browse Plot Study methods during data collection by Provincial Research Scientist D. Voigt, Ph.D.
Information Transfer, DNR-OMNR Research Seminar, Michigan, USA.

Government training in Northern Ontario included a strong community involvement during Open Houses, Information Meetings, to oft times hostile anglers or hunters. This Provincial forum earned Ms. Sober credibility and respect - traits invaluable when called as an expert witness for Fisheries and Public Lands Act Provincial Court appearances, or during present day cross examination at the Ontario Municipal Board.

SAAR ENVIRONMENTAL LIMITED

At SAAR Environmental Limited, Ms. Sober provides environmental peer review for municipal and Provincial levels, has reviewed municipal environmental policies to ensure they reflect the intent of Environmental Background Studies. Ms. Sober is also requested to conduct workshops for municipal staff on present Plan Review requirements in the Province. A past workshop defined Environmental Impact Studies (EIS), now Impact Assessments (I-A's), available levels of study (Scoped through Comprehensive) and intended types of study areas.

WETLAND AND NATURAL AREAS DELINEATION USING INTEGRATED GIS. E.J. WILLIAMS. B.SC.

Ted Williams graduated in 1984 from the University of Toronto with an honours bachelor of science specializing in survey science and with a minor in computer science. Since that time, Mr. Williams has gained proficiency using various positioning methods, representing the acquired data both conventionally and digitally. Past projects have included photo-control surveying throughout Ontario, conventional and digital mapping of environmental features on numerous sites in central Ontario and digital collection and representation of environmentally sensitive areas using G.P.S. Mr. Williams has demonstrated experience in coordinating data gathering and producing multi-disciplinary map layers. Mr. Williams is able to tailor a cost effictive solution to the positioning/G.I.S. needs of a project.

SAAR
Environmental Limited

L.L. SOBER

B. Sc., (Honours)
Senior Biologist
SAAR Environmental Limited

POSITIONS

1990 - PRESENT	Shareholder and Senior Biologist, SAAR Environmental Limited
1986-1990 Biologist	Ontario Ministry of Natural Resources, Fisheries and Wildlife

ELC Sample Plot Selection for Wetland Habitats, NE Ontario
Statistical wildlife experiments (Lake Trout Mortality, Parry Sound
Authored Long Term Management Plan (Deer; 1989-2001)
Ecology input to Timber Management Plan and Data Program
Ontario Municipal Board Technical Background team: Bracebridge
Editorial Comment for Provincial Policy Background Statements (Ontario Deer Policy)
CPS Significant Woodlands Pilot Projects (Maple OMNR)
Version II to III upgrade (155 Midhurst OMNR Wetlands)
Silvicultural prescriptions for wildlife habitat units, prism plots

EDUCATION

1986	B.Sc. (Honours), York University
1998 projected	Ph.D. candidate to work under Dr. C. Davies, Cochrane OMNR

PROFESSIONAL AFFILIATIONS

Field Botanists of Ontario; University of Guelph Arboretum Workshops participant
Federation of Ontario Naturalists
Past member Environmental Round Table, Muskoka Chapter
Waste Management Public Liaison Committee, District of Muskoka
Rural Planning and Policy Sub-Committee, District of Muskoka

CERTIFICATION

Provincially Certified Wetland Evaluator
Provincial Fur Harvest Management and Conservation
Provincially Certified Aquatic Habitat Inventory Surveyor
Provincial Electro-shocking Certficate

EXPERTISE

Ecosystem Management

Ms. L.L. Sober has contributed a functional framework to delineation and selection of natural heritage systems, created for a Secondary Planning exercise where she identified natural core areas, corridors and linkage nodes based on their internal and external environmental features and functions before direction within Comprehensive Policy Statements was published.

SELECTED LIST OF PUBLICATIONS

Ms. Sober has authored extensive provincial Ontario Ministry of Natural Resources internal technical reports, and environmental documents for the private sector; a complete listing being available in an appendixed form. We have selected key papers Ms. Sober authored on Vegetation Restoration, as well as contracts requiring pure life science inventories to establish her skills in the area of herptile, breeding bird and vegetation inventory required for your naturalization contract.

1995 Natural Heritage Areas Management Plan and Fisheries Resources Management Study. Lot 6, Concession IV, East Gwillimbury, York Region. Private sector management plan involved re-designing a previously submitted Draft Plan of Subdivision to comply with the intent of provincial interest for lands adjacent to the Oak Ridges Moraine Planning Area. Building envelopes were situated outside of protection and enhancement areas such as fisheries resources, wetland core areas and fragmented corridors. Coupled with a Vegetation Plan, the proposed subdivision had the potential to result in a:

- net increase in vegetation structure for the post development environment
- retention and enhancement of a fragmented east-west linkage for wildlifeuse of natural vs. structural design forms; wetland buffers adjacent to storm ponds and tile fields
- a road and drainage system that follows topography and minimized grading activity

biodiversity through retention of wetland, riparian tracts, cold and warm water streams, agmented young exterior woodlot, interior mature forest and early succession meadow

- rural community use while maintaining sustainable ground and surface water resources
- controls for aquatic community health via mitigation for potential entry of sediment, nutrient or increased surface waters from septic effluent, wells or increased overland storm water.

1995 Significant Woodlands within Halton Region: A Pilot Project. Halton Region, OMNR and Secondment of SAAR Biologist. This pilot project of significant woodland identification included integrating current high technology of Geographic Information System data analysis with available digital layers of forest cover and internal features (forest age, tree species composition). A team GIS member relayed discussion from our biologist on relevant natural heritage system criteria required to attribute scores for each woodland landscape unit within Halton.

1995 Determination of Significant Woodlands in the City of Brampton. Secondment onto Provincial OMNR Team. A pilot project was designed to delineate significant woodland areas for conservation and act as potential environmental background data to Brampton's Official Plan update.

Our senior biologist participated in this provincial exercise and brought criteria and methodology to the project used to evaluate woodlands at a local municipal level. Methodology and significance criteria were used to generate two categories of woodlands as defined in the Provincial Comprehensive Set of Policy Statements (CPS): Category 1 and 2 lands.

Evaluation required used of diverse environmental information to create the map layers, including:

- Forest Resource Inventory (FRI) Maps, Scaled 1:10,000 for forest cover (MNR, 1978)
- Ontario Base Maps (OBM) at 1:10,000 (MNR, 1982) updated with Brampton Air Photos (1993)
- Site District Ecological Reports (MNR, 1980's)
- City of Brampton Official Plan (Brampton, 1993)
- MNR Wetland Mapping
- MNR Rare Species Mapping
- MNR Areas of Natural and Scientific Interest (ANSI) Mapping
- Subwatershed Studies including West Humber and Etobicoke Creek

The evaluation of this environmental information followed a form of reasoning known as the "Disjunctive Evaluation Model".

1996 Issue Summary Paper (ISP). Port Stanton, Stanton House Resort, Severn Township.SAAR provided as ISP under the Wetland Policy Statement process whereby we obtain clarity and written direction on key wetland issues to be addressed. This assures the client a view early on of all necessary consultant studies and associated projected costs before submitting a development proposal. Key wetland features and functions centred around maintaining the site hydrological regime. Environmental Issues included water quality parameters for adjacent fisheries functions and waterfowl stopover area. Natural Heritage values on a landscape ecology scale were also assessed, in particular, for landscape linkage. Recommendations included enhancing nature viewing opportunities and wildlife education in this resort landscape. Resultant areas for conservation follow the ranked Category 1 (e.g. Wetlands, ANSI's, significant woodlands) and 2 lands terminology guided by the current provincial environmental Comprehensive Policy Statements (CPS) and their draft updates within April's Bill 20. Differing levels of expected Environmental Impact Studies (EIS) were also recommended for Category 2 lands (land requiring an EIS for expected development.

96 Wetland Environmental Impact Study. Monck Quarry, Conn, Ontario; Wellington ounty. Key environmental issues addressed in our survey include surface and ground water regime maintenance for continued function of an adjacent Provincially Significant Wetland (Luther Marsh). We documented existing environmental features and functions, indicated required buffers for significant flora and fauna, and wildlife corridors inventoried during a three season field inventory. Wetland boundaries on adjacent lands (120 metres from wetland) were delineated in the field to refine landscape level provincial wetland mapping. The extent and use of proposed quarry lands by wildlife were defined and include winter track surveys, spring and seep identification, summer fisheries sampling, plant vouchering and breeding bird surveys. Potential impacts were addressed through mitigation and conservation of habitat units. Mitigation for increased surface water included design of a wetland plant buffer and existing vegetated drainage swale to address potential deleterious impact of sediment and nutrient.

1995 Wetland Hydrology and Nutrient Impact Review. Horodynsky Farms, Churchill Ontario. SAAR Environmental Limited prepared an initial literature review of potential impacts related to proposed short term rotation onion cropping adjacent to a Provincially Significant Wetland (Lovers Creek).A monitoring program was recommended including surface water quality monitoring, habitat restoration and enhancement incentives.

OTHER RELEVANT ENVIRONMENTAL PROJECTS

FOR THE PURPOSE OF DEMONSTRATING BIOLOGICAL EXPERTISE. THIS INFORMATION IS PROHIBITED FROM GENERAL DISTRIBUTION OUTSIDE OF RESOURCE AGENCY AGGREGATE ACT REVIEW.

Snow Valley Secondary Plan Environmental Background Study, Springwater Township, SIMCOE COUNTY. SAAR Environmental Limited defined a Natural Heritage System for a planning area within Springwater Township based on current science, provincial policy development and a three season biological life sciences inventory. The project included data review, analysis and mapping of all wetlands, ANSIs, ESAs, wildlife habitat and woodlands from primary sources. **Reinder's** produced final maps based on our three season field inventory. **1994.**
Approximate Cost of Total Project: $100,000.00 ($13,500.00 SAAR)

Ecological Restoration for Midland Park Lake, Midland. *SAAR Environmental Limited* was part of an innovative project team including Gord Knox of *Reinders and Associates (Barrie) Limited*. We proposed the creation of a linear wetland to remove excess stormwater nutrients currently loading directly to Midland Park Lake with team presentations accepted by Midland Town Planning and Environmental Committees. **1994. Phased Total Project Cost to date approximates: $30,000.00 ($5,000 SAAR)**

Ecological Restoration for Duntroon Quarry, Duntroon. SAAR inventoried existing natural heritage features on adjacent lands to best prescribe endemic species for re-vegetation of talus slopes and limestone cliff walls. Vegetation schedules and species were designed with maximum wildlife value for indicator species in mind. **Seeley & Arnill Ltd. 1995. Ongoing. Total Project Cost: $2400.00**

Urban Wetland Impact Study, City of Barrie, SIMCOE COUNTY.
SAAR Environmental Limited conducted an EIS to address the provincial wetland policy statement (Section 2, Subsection 2.2) for lands adjacent to a large urban wetland. An understanding of wetland hydrology, wetland vegetation and supporting soils was obtained by using our multidisciplinary team approach with **Terraprobe Limited, Bev Agar Agrologist and Reinders & Associates Planners**. **1993. Approximate Cost of Total Project: $3500.00 SAAR**

Ardagh West Secondary Planning Area Environmental Study. The Ardagh Group.
SAAR Environmental Limited defined significant linkages and sensitive areas within a planning area to determine the developable nature of lands situated within and/or adjacent to Environmental Protection zones and the Allendale Lakes Bluff ANSI (Area of Natural and Scientific Interest). SAAR located over 300+ rare species along riverine tracts, providing an update to the existing ANSI inventory.
1994. Approximate Cost of Total Project: $100,000.00 (SAAR $7,000.00).

FURTHER DEFINITION OF ENVIRONMENTAL FEATURES AND FUNCTIONS:

Analysis and Work Plan for Provincially Significant Wetland Update. Ontario Ministry of Natural Resources Midhurst District: Wetland Review. 1993/94 Winter. L.L. Sober reviewed audited and analyzed the provincial status and mapping accuracy for of wetlands within the OMNR Midhurst administrative boundaries. Wetland data was organized, analyzed. Recommendations were provided for short and long term planning based on (1) which sensitive areas were in most need of inventory update and (2) areas under foreseeable development pressure. L.L. Sober was also short-listed as one of three ecologists in the province for an upcoming district ecologist position.

Assessment of Woodland Significance using City of Barrie Tree-Cutting By Law. 1994. SAAR Environmental provided a silvicultural inventory of lands to meet Barrie tree cutting restrictions for Reinder's & Associates (Barrie) Limited clients. We also reviewed the effectiveness of the size criteria for retention within the tree cutting by-law in light of new ecological benefits and values of woodlands.

District of Muskoka Candidate Heritage Areas Program, 1990. We conducted extensive vegetation inventories within candidate areas throughout the District of Muskoka. The candidate areas are to be included within the Official Plan for conservation.

Environmental Impact Study Within Proposed Sudbury-Toronto Transmission Reinforcement Project Preliminary Corridors. Ramara Township. 1991. Biological inventories were conducted for landowners that fell within an extensive tract of potential hydro corridor. Lands for the client group approximated 5 km^2 in and near Cranberry Lake rock barrens.

Fisheries Inventory Lake Couchiching. 1991. Private landowner. Provided a fisheries inventory of shore and backshore coastal habitat. Determined the potential impact of artificial fill on portions of EP Zoned Floodplain. Recommended re-zoning after completion impact study.

Wetland Status Review, Class 2 Atherley Narrows Wetland, Lake Couchiching. Fern Resort, 1991. Status of the wetland and fisheries habitat was reviewed by upgrading vegetation community data for OMNR files and subsequent interpretation of Class using OMNR Wetland Evaluation Manual. We advised the client not to proceed with further action (OMB) against OMNR due to his refined wetland boundary.

Technical Review of "Provincial Wetland Environmental Impact Study Requirements". 1994. First and Second Drafts were prepared by Gartner Lee Limited and Malone Given Parsons. Technical Review prepared by SAAR for Federation of Ontario Naturalists.

Restoration Plan: Native Vegetation Community restoration for major Aggregate Extraction Firm in Central Ontario. 1995. Nottawasaga Township, Duntroon Quarry. Seeley & Arnill Ltd. This restoration plan included novel and unique transplant plans for vegetation on site, to be moved onto proposed new vegetation community areas - all during ongoing extraction of various quarry phases. Techniques recommended are unique to two known quarry locations in Ontario, and a result of in house trial and error establishment of native plants, as well as an international literature review.

Aggregate Inventory. Class B licence Renewal Application. Ramara. Private Pit Operator. 1991. Simcoe County sandy plain lowlands were inventoried for purposes of risk assessment for species located near pit operations. We ranked the ecosystem units including lichen barrens and riparian coldwater stream for representative value and ecological diversity within the ecological site region.
We ensured that current protective zoning including EP floodplain zones met size and integrity data required for the provincially and regionally rare species we located including the Red-shouldered Hawk.

Biological Life Sciences Inventory. Mud Lake Wetland Complex. 1991. Ramara. Client: OMNR. The expansive land base bordering the Mud Lake drainage basin and watershed are target areas for current and future development. As such, OMNR retained us to provide environmental mapping of sensitive area that would guide their land use recommendations for crown lands, and parkland dedication.
SAAR standard methodology included a thorough search and assessment of breeding bird habitat, mammal corridors, aquatic ecosystem health, vegetation community mapping, location of amphibian and reptile breeding habitat.

Breeding Bird Heronry Inventory and Impact Study. Cranberry Lake, Ramara. Doner Developments. 1993. Provided an impact study on the potential risk of impacting breeding schedules of over seventy actively nesting herons by proposed development.
Recommendations for the low impact seasonal use included buffer zone of no development around the heronry, restricted use of low level aircraft and watercraft in the vicinity. The client promoted the natural heritage values of his resort and implemented maintenance by the use of restrictive covenants.

Environmental Impact Study. Lover's Creek Provincially Significant Wetland Infiltration Area. 1994. Town of Innisfil. Client: Mills Plan Consulting.
We determined existing wetland function by first (a) reviewing hydrology and soil reports, (b) delineating wetland complexes of Lover's Creek, (c) assessing existing vegetation communities for value to ground and surface water quality. We provided guidelines for sustainable development of a proposed subdivision. The proponent agreed to including re-alignment of proposed internal road network around sensitive features.

Environmental Constraint Mapping of Wetland Features. Town of Gravenhurst. Muskoka District. Private landowner. 1993. Catchment basins and hydrology of the site were inventoried to determine the feasibility of future proposed residential development.

EIS City of Barrie. Bear Creek Wetland Urban Interface. Client: Reinders and Associates Ltd. 1994. Scoped EIS for lands bordering a Class 2 provincially significant wetland. We determined developable areas for industrial land use within this floodplain fringe. Liaison between OMNR, NVCA, the client group and City of Barrie planners is critical to facilitating interpretation of the recent OMNR/MMA
Wetland Policy Statement (Section 2, Sub-section 2.2) administered under the Planning Act. The constant interpretation of general resource map boundaries for lot specific situations resulted in joint partnership ideas including use of GPS technology where OMNR and SAAR ecologist would refine urban wetland boundaries during joint on-site investigation in future.

Breeding Bird Survey - Canadian Forces Training Area, Meaford Federal Tank Range. 1992. Our firm was suggested for this survey and constraint mapping exercise by Mike Cadman, a federal authority on bird distribution and status.
One of the highlights of this inventory was recording the active Bald Eagle stick nest, and successfully leasing with Pud Hunter (OMNR) who assessed fledgling blood samples for health within a joint Canada-U.S. Bald Eagle monitoring program.

Breeding Bird Inventory. Lake Ontario, Westside Marsh, St. Lawrence Cement OMB ke patent claim. Client: B.A.R. Environmental Inc. 1992. The sensitivity of the existing arsh species to development, their abundance and status was determined. The presence or absence of rare species guided future planning recommendations at the OMB for St. Mary's Cement Company during their claim to patent lake bottom rights.

Vegetation Survey and Rare Plant Reconnaissance. Humber River. Town of Vaughan. 1993. Constellation Developments. 1993. Client: LGL Limited Environmental Research Associates. Vegetation was surveyed along a proposed channelization and re-alignment of the Humber River in the town of Vaughan. Rare plants included the sedge *Carex trichocarpa* which required information from our data base on mitigation before the development proposal could be submitted.

Snow Valley Secondary Plan Environmental Study. 1993-1944. We conducted a three season environmental inventory of the Natural Heritage System to identify developable areas from areas environmentally sensitive. We ranked all major environmental features by Development Zones of varying susceptibility to development. We identified wetlands to achieve no loss of significant wetlands due to future residential land uses; **forestry identification** where all significant woodlands were identified, particularly where the provided a linkage to core areas; **ecological units** were included in constraint mapping to show their representative value as unique Boreal or Carolinian vegetative communities.

urther, we submitted goals and objectives to maintain the current level of environmental health. These recommendations will help to guide future development by extending the study findings appropriate short and long term to planning policies for the Snow Valley Secondary Planning Area of Springwater municipality. GPS accurate land positioning was also used to delineate the Class 1 Wetland boundary.

EIS. Sparrow Lake. Severn Township. 1994. A life science inventory of terrestrial and aquatic sensitive areas was conducted during refinement of past OMNR lacustrine and palustrine wetland boundaries.

EIS. North River at Marchmont. Severn Township Subdivision Draft Plan of Approval Stage. Doner Developments. 1994. We were retained by the client to ensure that his sub-consultant panel adequately addressed current and future spirit of environmental policies. We also provided a life science inventory of the subject lands to ensure no rare species buffers were required, and delineate biotic features of the site sensitive to development practices including top of slope, valley systems, drainage routes and aquatic ecosystems.

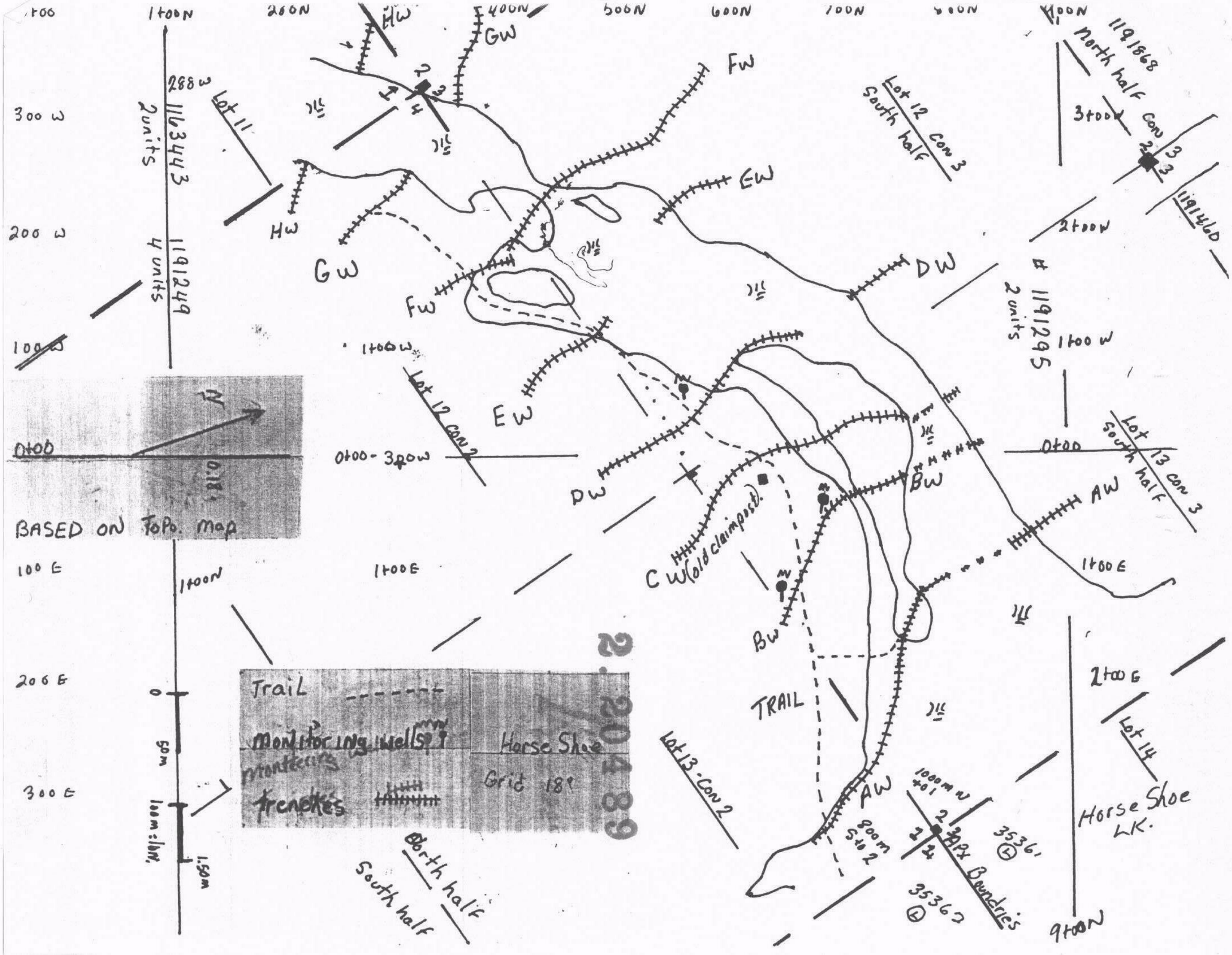
Life Science Inventory. Impact Study along Proposed Ontario Hydro Route. Cranberry ke Retreats. 1992. A comprehensive life science inventory was undertaken for a lake and jacent lands situated in Central Ontario. Portions of the retreat were at risk of potential habitat degradation as a Hydro-electric Transmission Route was proposed to cross the proponent lands. We successfully inventoried the subject lands for sensitive features, potential ANSI and ESA lands, and conducted a rare species search of available habitat on site. Resultant documentation of rare, threatened and endangered species may have contributed to Ontario Hydro's decision not to bisect the proponent property.

Technical comment to Water quality Review: Springwater Township OMB. 1994. Wetland resources and watershed loading of nutrients. Qualified to provide "expert testimony" for clients before the Environmental Assessment Board, the Ontario Municipal Board and the Federal Environmental Assessment Review Panel.

Ecosystem Education Incentives. 1993. Deerhurst Resort, Canadian Pacific Hotels and Resorts, Huntsville, ON. Design and production of nature station interpretive plaques to educate both advanced naturalists and novices attending an internationally ranked woodland. Plaques were linked to native ecosystems highlighting the ecology of a Maple-Beech woodland, songbird spatial and temporal distribution, amphibian calls in breeding habitat and lake ecology. Nature education kits were also produced.

Landscape Ecology and habitat restoration assignment. 1994. Lake Muskoka, District of Muskoka. Private Landowner. This project for a summer resident included assessment of existing habitat, suggested native plantings, and site specific positioning of nest boxes to entice native breeding birds.

National Heritage River System Education Text Review. 1994. Provided scientific review for National Heritage science text on a Natural Heritage River System for a science textbook author. Notes provided from the National Heritage Council of Canada.



1+00N
2+00N
400N
500N
600N
700N
900N
288 W
300 W
200 W
100 W
1163443
2 units
1191249
4 units
Lot 11
Lot 12 Con 3
South half
1191868
North half
Con 3
3+00W
2+00W
1191460
1191295
2 units
1+00 W
HW
GW
FW
EW
DW
CW (old claim post)
BW
AW
1+00W
Lot 12 Con 2
0+00
0+00 - 300W
0+00
Lot 13 Con 3
South half
BASED ON TOPO. Map
100 E
1+00N
1+00E
1+00 E
200 E
2+00 E
300 E
0
50m
100m:1cm.
150m
Trail
Monitoring wells
Trenches
Horse Shoe
Grid
TRAIL
Lot 13 - Con 2
Lot 14
North half
South half
1000m N
800m
S to 2
Approx Boundries
35361
35362
Horse Shoe LK.
9+00N

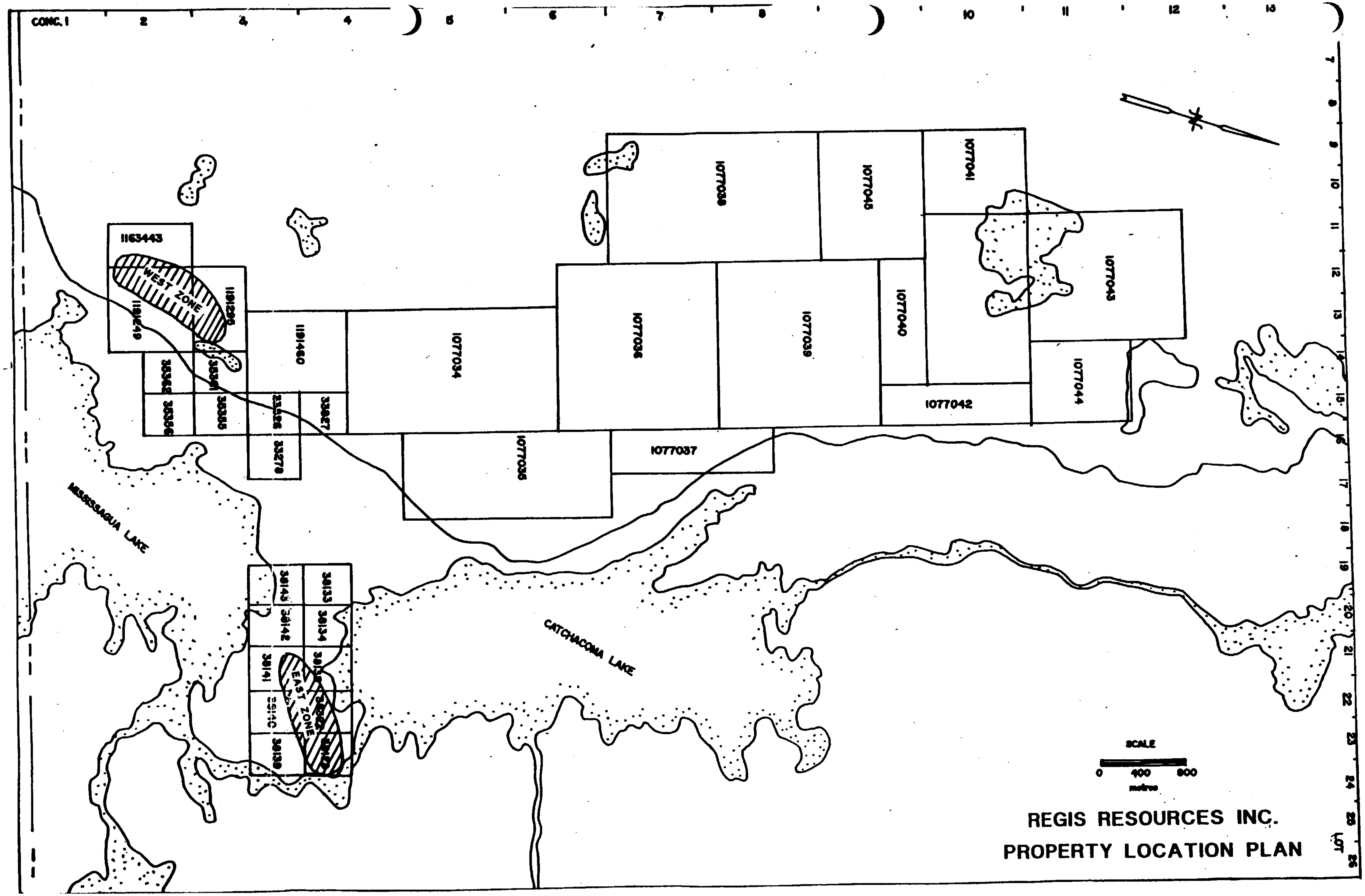
Bulk Sample

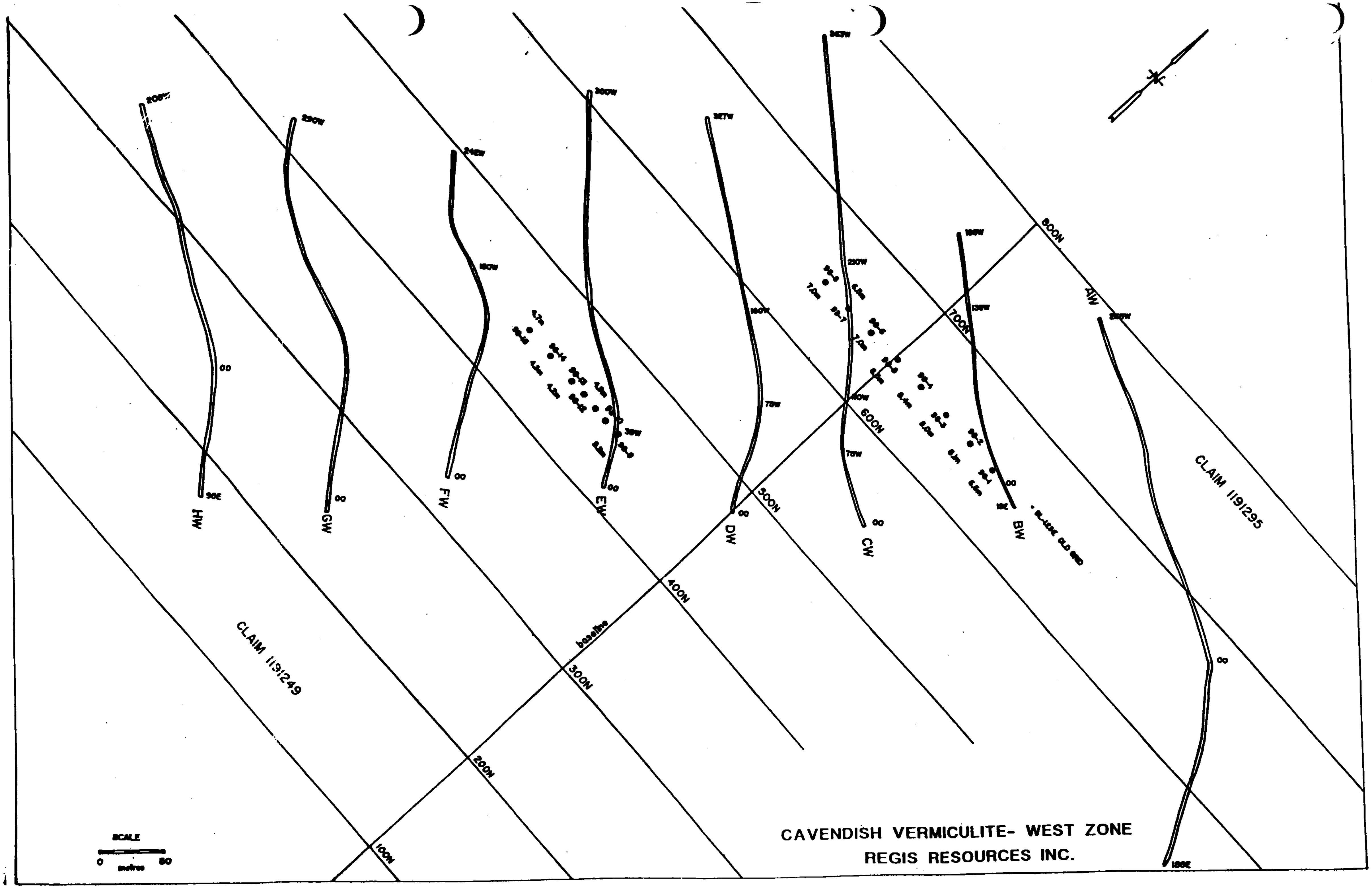
416 398-3318
3316

Larger: #1 Smaller #4

	Total	After ex.	waist	Verm	moist	Verm per.
# 1	200g	188.9	171.9	17.0	5.5	9.0
2	200g	183.1	148.7	34.4	8.4	18.8
3	200g	181.1	119.2	61.9	9.4	34.2
4	200g	170.4	84.2	86.2	14.8	50.6
Total	800 g	723.5	524.0	199.5	9.6	27.6
2nd Run	800 g	727.6	515.6	212.0	9.0	29.1
# 1	200	188.2	168.7	11.9	5.9	10.4
# 2	200	183.1	150.5	32.6	7.8	17.8
# 3	200	180.9	116.1	64.8	9.5	35.8
# 4	200	175.4	80.3	95.1	12.3	54.2

We may of lost some of the fine verm. up the exaust vent. This should add percentages in our favour. Mainly in # 4 which would explain the high moisture content. Initial weight 200 g. after ex. 170.4. We may of lost 5-8 g fine verm, which may add up to 2 percent. Just to be safe will stick with 27 %. This no. is a over all average of bulk sample from each trench, not one area. Our Sampling program gave us simular numbers within the zone. (For further info. come see me. I have no phone). Keith


CONC. 1
1163443
WEST ZONE
1191460
1077034
1077035
1077036
1077037
1077038
1077039
1077040
1077041
1077042
1077043
1077044
1077045
33279
MISSISSAUGA LAKE
CATCHACOMA LAKE
EAST ZONE
38133
38134
38142
38141
38139
SCALE
0
400
800
metres
REGIS RESOURCES INC.
PROPERTY LOCATION PLAN
LOT



CAVENDISH VERMICULITE- WEST ZONE
REGIS RESOURCES INC.
CLAIM 1191249
CLAIM 1191295
baseline
100N
200N
300N
400N
500N
600N
700N
800N
AW
BW
CW
DW
EW
FW
GW
HW
SCALE
0
metres
50

Regis Resources Inc.
Cavendish Trenching Program 1999

TRENCH (7+50N)- **AW** Series

AW1	0	-----	0.80-2.0	0.8m organics
AW230	155.0E	-----	2.0-3.0	2.0m organics
AW229	145.0E	-----	2.0-3.0	
AW228	130.0E	-----	2.0-3.0	
AW227	110.0E	-----	2.0-3.0	
AW226	118.0E	-----	3.8-6.0	
AW225	98.0E	-----	3.0-4.0	
AW224	98.0E	-----	4.0-4.8	
AW223	98.0E	-----	4.8-5.5	
AW222	90.0E	-----	3.0-4.0	
AW221	90.0E	-----	2.0-3.0	
AW220	90.0E	-----	1.0-2.0	
AW219	72.0E	-----	0.10-1.0	
AW218	62.0E	-----	0.20-1.50	
AW217	55.0E	-----	4.5-5.5	
AW216	55.0E	-----	3.0-4.5	
AW215	55.0E	-----	2.0-3.0	
AW214	47.0E	-----	2.8-6.0	
AW213	39.0E	-----	3.0-6.0	
AW212	30.0E	-----	4.0-5.5	
AW211	30.0E	-----	2.5-4.0	
AW210	25.0E	-----	4.0-5.5	
AW209	25.0E	-----	2.5-4.0	
AW208	25.0E	-----	1.0-2.5	
AW207	20.0E	-----	4.0-6.0	
AW206	20.0E	-----	2.5-4.0	
AW205	20.0E	-----	1.5-2.5	
AW203	13.0E	-----	3.0-5.5	
AW202	5.0E	-----	3.8-5.5	
AW201	5.0E	-----	2.3-3.8	
AW200	5.0E	-----	1.3-2.3	
AW2	0	-----	2.0-3.0	
AW3	0	-----	3.0-4.0m	
AW4	8.0W	-----	0.45-2.0	0.45m organics
AW5	8.0	-----	2.0-3.0	
AW6	8.0	-----	3.0-4.0m	pegmatite dyke
AW7	15.0W	-----	0.30-1.30	0.30m organics
AW8	15.0	-----	1.30-2.30	

AW9	15.0	-----	2.30-3.30	
AW10	15.0	-----	3.30-4.30	
AW11	15.0	-----	4.30-5.30m	
AW12	22.0W	-----	0.60-1.20	0.60m organics
AW13	22.0	-----	1.20-2.0	
AW14	22.0	-----	2.0-2.50m	
AW15	29.0W	-----	0.60-1.50	0.60m organics
AW16	29.0	-----	1.50-2.50	
AW17	29.0	-----	2.50-3.50	
AW150	32.5	-----	0-3.0	
AW18	34.0	-----		34.0W edge hill
AW19	34.0	-----		
AW20	34.0	-----		
AW149	35.0W		1.50-4.50	
AW148	35.0W		0.35-1.50	org. to 0.35
AW147	37.5		0.70-3.0	org. to 0.7
AW146	40.0		2.0-4.0	
AW145	40.0		0.70-2.0	org. to 0.7
AW21	42.0	-----	0-2.0	
AW22	42.0	-----	2.0-4.0	
AW23	44.0	-----	0-2.0	1.5m above swamp
AW24	44.0	-----	2.0-4.0	
AW25				
AW26	44.0-46.5	2.50	2.0	
AW27	46.5-49.0	2.50	2.0	
AW28	49.0	-----	0-2.0	
AW29	49.0	-----	2.0-4.5	4.0m above swamp
AW30	49.0	-----	4.5-7.0	
AW31	49.0-51.5	2.50	2.0	
AW32	51.5-54.0	2.50	2.0	
AW33	54.0	-----	0-2.0	4.0m above swamp
AW34	54.0	-----	2.0-3.5	epidote rich marble
AW35	54.0	-----	3.5-7.0	
AW36	54.0-56.5	2.50	2.0	
AW37	56.5-59.0	2.50	2.0	
AW38	59.0	-----	0-2.0	4.0m above swamp
AW39	59.0	-----	2.0-4.0	
AW40	59.0	-----	4.0-6.5	
AW41	59.0-61.5	2.50	4.0	
AW42	61.5-64.0	2.50	2.0	
AW43	61.5-64.0	2.50	4.0	
AW44	64.0W	-----	0-2.0	

AW45	64.0	-----	2.0-4.0	
AW46	64.0	-----	4.0-6.5	
AW47	64.0-66.5	2.50	2.0	
AW48	66.5-69.0	2.50	2.0	
AW49	69.0	-----	0-1.30	
AW50	69.0W	-----	1.30-2.50	2.0m above swamp
AW141	72.5		0-1.0	
AW142	72.5		1.0-2.0	
AW143	72.5		2.0-3.0	
AW144	72.5		3.0-4.0	
AW138	76.0		0.7-3.50	org to 0.7
AW139	76.0		3.50-5.50	
AW140	76.0		5.50-7.0	
AW134	80.0W	-----	0.3-1.70	
AW135	82.0		1.30-2.50	1.3m org.
AW136	82.0		2.50-4.50	
AW137	82.0		4.50-7.0+	
AW133	93.0W	-----	2.0-3.0	2.0m organics
AW132	100.0W	-----	2.10-4.0	2.10m organics
AW131	110.0	-----	2.20-4.0	2.2m organics
AW130	120.0	-----	3.0-3.50	
AW129	120.0	-----	2.0-3.0	2.0m.organics
AW128	125.0-127.5	2.5	1.50	0.6m.ovbn. (H2O@1.0)
AW127	127.5-130.0	2.5	1.50	
AW126	130.0-132.0	2.0	1.50	
AW125	132.0-134.0	2.0	1.50	
AW124	134.0-136.0	2.0	1.30	edge swamp
AW123	136.0-138.0	2.0	1.0	
AW122	138.0-140.0	2.0	1.30	
AW121	140.0-142.0	2.0	1.0	
AW120	142.0-144.5	2.5	1.0	
AW119	144.5-147.0	2.5	1.30	2.0m above swamp
AW118	147.0-149.0	2.0	1.50	
AW117	149.0-151.5	2.5	1.50	
AW116	151.5-154.5	3.0	1.0	
AW115	154.5-157.5	3.0	1.0	
AW114	157.5-160.0	2.5	1.50	
AW113	160.0-162.5	2.5	1.80	
AW112	162.5-165.0	2.5	2.20	
AW111	165.0	-----	1.60-2.60	organics to 1.60m
AW110	171.0	-----	0.60-1.60	organics to 0.6m
AW109	179.0	-----	2.0-3.0	

AW108	179.0	-----	1.0-2.0	organics to 1.0m
AW107	187.0	-----	2.0-3.0	organics to 2.0m
AW106	195.0	-----	2.20-3.20	organics to 2.2m
	no sample from 200.0-237.0 (peat cave-in, basement @ 4.0m)			
AW105	242.0W	-----	3.70-5.0	organics to 3.70m
AW104	250.0W	-----	3.40-4.40	
AW103	250.0W	-----	2.40-3.40	organics to 2.4m
AW102	256.0	-----	3.60-4.50	
AW101	256.0	-----	2.60-3.60	
AW100	256.0	-----	1.60-2.60	organics to 1.60m
	swamp edge @ 264.0m			

770N-087E @ 140W
775N-115E @ 117W
770N-087E @140W
767N-150E @ 045W
New grid 650N-150E @ Old Grid BL-125E

746N-180E
746N-150E
746N-120E

700N-325E@62E
650N-375E@145E

TRENCH **BW** (L6+50N) (5W-130W zone)

BL@600N----550N@0+75E----trench-650N-125E

650N-121E @ 0m 680N-040E

675N-050E @ 70mW 700N-017E

725N-014E 715N-016E

Sample #	Coordinate(m)	Width(m)	Depth(m)	Description
BW1	0	-----	0-1.20	
BW2	0-2.50 W	1.50	1.0	
BW3	2.50-5.0	2.50	3.70	
BW4	2.50	-----	0-1.30	
BW5	5.0-7.50	2.50	1.50	
BW6	7.50-10.0	2.50	1.70	coarse green flakes (HG)
BW7	10.0	-----	0-1.70	
BW8	10.0	-----	1.70-3.40	
BW9	10.0-12.5W	2.50	3.40	
BW10	12.50	-----	0-2.40	
BW11	12.50-15.0	2.50	2.40	
BW12	15.0	-----	0-1.35	
BW13	15.0	-----	1.35-2.70	
BW14	15.0-17.50	2.50	2.70	
BW15	17.50	-----	0-2.15	
BW16	17.50-20.0	2.50	2.70	
BW17	20.0	-----	0-3.20	
BW18	20.0-22.50	2.50	3.20	
BW19	22.50W		-----	0-3.10
BW20	22.50-25.0	2.50	3.10	
BW21	25.0	-----	0-1.40	
BW22	25.0	-----	1.40-2.80	
BW23	25.0-27.0	2.50	2.80	
BW24	27.50W		-----	0-1.60
BW25	27.50	-----	1.60-3.20	
BW26	27.5-30.0	2.50	3.20	
BW27	30.0-32.5	2.50	3.40	
BW28	32.50	-----	0-3.60	
BW29	32.50-35.0	2.50	3.70	
BW30	35.0 W	-----	0-3.80	
BW31	35.0-37.50	2.50	3.80	
BW32	37.50	-----	0-2.0	
BW33	37.50	-----	2.0-4.0	
BW34	37.50-40.0	2.50	4.0	
BW35	40.0	-----	0-1.10	
BW36	40.0W	-----	1.10-2.20	

BW37	40.0-42.5	2.50	2.20
BW38	42.5	-----	0-2.30
BW39	42.5-45.0	2.50	2.30
BW40	45.0	-----	0-0.90
BW41	45.0-47.5	2.50	1.0
BW42	47.5	-----	0-1.0
BW44	50.0	-----	0-1.50
BW46	52.5	-----	0-1.60
BW60	52.5-55.0		
BW61	55.0-57.5		
BW62	57.5-60.0		
BW63	60.0-62.5		2.0
BW48	55.0	-----	0-1.20
BW49	55.0-57.5	2.50	1.15
BW50	57.5	-----	0-1.10
BW51	57.5-60.0	2.50	1.10
BW52	60.0	-----	0-2.0
BW53	60.0	-----	2.0-4.0
BW54	60.0-62.5	2.50	4.0
BW55	62.5-65.0	2.50	4.10
BW56	62.5W	-----	2.10-4.20
BW57	62.5	-----	0-2.10
BW58	65.0W	-----	2.70-5.40
BW59	65.0	-----	0-2.70
BW64	62.5-65.0		1.50
BW65	62.5-65.0		3.60
BW66	65.0-67.5		2.0
BW67	65.0-67.5		3.60
BW68	67.5		1.90-3.60
BW69	67.5-70.0		1.5
BW104	67.5-70.0		3.0
BW70	70.0		1.60-3.20
BW71	70.0-72.5		
BW72	72.5		1.40-3.0
BW73	72.5-75.0		1.50
BW105	72.5-75.0		3.0
BW74	75.0		1.0-1.40
BW106	75.0		1.40-3.20
BW76	75.0-77.50		
BW77	77.50		0-2.0
BW78	77.5-80.0		
BW80	80.0		0-1.0

BW81	80.0-82.5		
BW82	82.5		0-1.30
BW83	82.5-85.0		
BW84	85.0		0-1.0
BW85	85.0-87.5		1.50
BW86	87.5-90.0		1.50
BW87	90.0		0-1.70
BW88	90.0-92.5		2.10
BW89	92.5		0-2.60
BW90	92.5-95.0		
BW91	95.0		0-2.50
BW92	95.0-97.5		
BW93	97.5		0-2.50
BW94	97.5-100.0		
BW95	100.0		0-2.50
BW96	100.0-102.5		
BW97	102.5-105.0		
BW98	102.5-105.0		
BW99	105.0		0-2.50
BW100	105.0-110.0		
BW101	110.0		0-3.0
BW102	110.0-112.5		
BW103	112.5-117.5		
BW134	115.0		
BW135	117.5		
BW109	120.0		
BW110	135.0		
BW111	137.5-140.0		
BW112	140.0-142.5		
BW113	142.5-145.0		
BW114	145.0-147.5	-----	1.5
BW115	145.0-147.5	-----	3.0
BW116	147.5-150.0		
BW117	150.0-152.5		1.5
BW118	150.0-152.5		3.0
BW119	152.5-155.0		
BW133	155.0-157.5		
BW120	157.5-160.0		
BW121	160.0-162.5		1.50
BW122	160.0-162.5		3.0
BW123	162.5-165.0		
BW124	165.0-167.5		

BW125	167.5-170.0
BW126	170.0-172.5
BW127	172.5-175.0
BW128	175.0-177.5
BW129	177.5-180.0
BW130	180.0-182.5
BW131	182.5-185.0W
BW132	185.0-187.5W
BW133	187.5-190.0W
BW134	190.0-192.5W
BW135	192.5-195.0W

725N-015E @135W
775N-010E @ 185W

<u>**CW** TRENCH Series</u>	Zone 75W-145W
(650N@0+25W- DDH#6)	730N-043W
550N-075E @ 0m	700N-043W
605N-00 @ 110m	650N-015W
650N-015W @ 163m	605N-00
#CW225-700N-042W	550N-075E

CW0	0-2.50	2.50		0.6mdepth
CW1	2.50-5.0	2.50		0.6m depth
CW2	5.0-7.50	2.50		
CW3	7.50-10.0	2.50		0.6m depth
CW4	10.0-12.50	2.50		
CW5	12.50-15.0	2.50		0.8m depth
CW6	15.0-17.5	2.50		
CW7	17.50-20.0	2.50		1.20 m depth
CW8	20.0-22.5W	2.50		
CW9	22.50-25.0W	2.50		
CW10	25.0-27.50	2.50		
CW11	27.50	-----		
V1	27.50	-----	2.10	
CW12	27.50-30.0	2.50		
CW32	30.0	-----	2.60	
CW13	30.0-32.5	2.50		
CW14	32.50	-----	0-3.0	
V3	3250	-----	2.50	
CW15	32.50-35.0	2.50		
CW16	35.0	-----	2.60	
V4	35.0	-----	2.50	
CW17	35.0-37.50	2.50		
CW18	37.50	-----	1.40	
CW19	37.50-40.0	2.50		1.40m depth
CW20	40.0-42.50	2.50		
CW21	42.50-45.0	2.50		
CW22	45.0-47.50	2.50		1.0m depth
CW23	47.50-50.0	2.50		
CW24	50.0-52.50	2.50		
CW25	52.50-55.0	2.50		
CW26	52.50-55.0	2.50		
CW27	55.0-57.50	2.50		1.30m.depth
CW28	57.50-60.0	2.50		
CW29	60.0-62.50	2.50		
CW30	62.50-65.0	2.50		
CW31	66.50	------	1.50	

CW58	150.0-152.5	2.50		
CW66	152.5	-----	0-2.0	
CW59	152.50-155.0	2.50		
CW60	155.0-157.50	2.50		
CW67	157.5	-----	0-2.0	
CW61	157.50	-----	2.0-3.0	lense coarse grn.verm
CW103	165.0W	-----	0.30-1.20	
CW104	165.0W	-----	1.20-2.20	
CW106	170.0W	-----	0.20-1.0	
CW107	170.0W	-----	0.30-1.0	
CW108	170.0W	-----	1.0-3.0	
CW100	176.0W	-----	1.0-2.0	organics to 1.0m
CW101	176.0W	-----	2.0-3.50	
CW99	185.0W	-----	3.50-4.50	
CW98	185.0W	----	2.50-3.50	organics to 2.5m
CW97	192.5W	-----	1.50-3.0	
CW96	192.5W	-----	0-1.50	
CW95	192.5-195.0	2.50	1.50	
CW94	195.0-200.0	5.0	1.30	
CW93	200.0-202.50	2.50	1.20	
CW92	202.5-205.0	2.50	1.20	
CW91	205.0-210.0	5.0	1.20	
CW90	210.0-215.0	5.0	1.20	
CW89	215.0-220.0	5.0	0.50	
CW88	220.0-225.0	5.0	2.0	
CW87	225.0-230.0	5.0	2.0	
CW86	230.0-232.5	2.50	2.0	
CW85	230.0	-----	1.20-2.40	
CW84	230.0	-----	0.20-1.20	
CW83	233.5-235.0	2.50	0-3.0	amphib.dyke
CW82	235.0	-----	1.50-3.0	
CW81	235.0	-----	0-1.50	
CW80	235.0-240.0	5.0	2.0	
CW79	240.0-242.5	2.50	1.50	
CW78	242.5-237.5	5.0	2.0	
CW77	240.0	-----	1.20-2.20	
CW76	240.0	-----	0-1.20	(242-280W-swamp)
CW75	245.0W	-----	0-2.20	
CW74	247.5W	-----	1.0-2.0	edge of swamp
CW73	247.5W	-----	0-1.0	
CW72	250.0W	-----	3.0-4.0	
CW71	250.0W	-----	2.0-3.0	

CW113	67.50-75.0	7.50	1.0-2.0	1.0m.organic
CW114	67.50-75.0	7.50	2.0-3.50	
CW33	75.0	-----	3.0	
CW115	75.0-85.0	10.0	0-1.50	
CW116	75.0-85.0	10.0	1.50-4.0	green verm.layers
CW34	85.0	-----	3.50	
CW117	85.0-95.0	10.0	1.0-2.0	1.0m.organics
CW118	85.0-95.0	10.0	2.0-3.50	
CW122	85.0-95.0	10.0	3.50-5.0	
CW35	95.0	-----	3.0	
CW119	95.0-105.0	10.0	1.0-2.50	1.0m. organics
CW120	95.0-102.5	7.50	2.50-5.0	
CW36	102.50	-----	2.50	
CW121	102.50-107.50	5.0	0.50-3.0	
CW37	107.50-110.0	2.50		
CW38	110.0-112.5	2.50		1.20m depth
CW39	112.5-115.0	2.50		
CW40	115.0-117.5	2.50		1.20m depth
CW41	117.50-120.0	2.50		1.30 m depth
CW45	120.0	-----	2.30	
CW42	120.0-122.50	2.50		
CW43	122.50	-----	2.20	
CW44	122.50-125.0	2.50		
CW46	125.0-127.50	2.50		1.60m depth
CW47	127.50-130.0	2.50		
CW48	130.0-132.50	2.50		
CW49	130.0-132.50	2.50		1.0m depth
CW50	132.50-135.0	2.50		
CW51	135.0	-----		
CW52	135.0-137.5	2.50		2.30m depth
CW53	137.50-140.0	2.50		2.30m depth
CW111	140.0	-----	0-1.50	
CW112	140.0	-----	1.50-3.50	
CW54	140.0-142.50	2.50		
CW109	142.5W	-----	0-1.30	
CW110	142.5W	-----	1.30-3.50	
CW55	142.50-145.0	2.50		dip 70 deg.east,coar V
CW63	145.0	-----	0-2.80	coarse vermiculite
CW64	147.5	-----	0-2.80	
CW56	147.5-150.0	2.50		
CW57	147.50-150.0	2.50		
CW65	150.0	-----	0.20-2.0	0.2m organics

CW70	260.0W	-----	2.0-3.0	2.0m organics
	west side of swamp @ 275W (280-355W-edge swamp)			
CW210	260.0-268.0W	-----	1.0-2.0	
CW209	268.0-276.0	-----	1.0-2.0	
CW208	276.0-282.0	-----	1.0-1.80	
CW207	282.0-288.0	-----	1.0-1.80	
CW206	288.0-296.0	-----	0.40-4.0	
CW205	332.5-337.5	-----	0.20-1.60	
CW204	337.5-342.5	-----	0.20-1.0	
CW203	342.5-347.5	-----	1.0-2.0	
CW202	347.5-352.5	-----	1.0-2.0	
CW201	352.5-357.5	-----	0.1-0.50	
CW200	357.5-362.5W	-----	0.10-0.90	

575N-025E @ 75W

DW Series Trench (45W-165W good streak)

BL-480N @ 0m

040W-550N @ 75m	480N-00	650N-110W
093W-600N @ 180m	500N-012W	700N-150W
650N-100W @ 145W	550N-008W	590N-260W
580N-260W @ 325W	600N-093W	565N-250W

600N-250W- yellow flag to west

DW1	0-2.50W	2.50	BL@ 4+75N yellow flags
DW2	2.50-5.0W	2.50`	marble lacking verm. to west
DW3	5.0-7.5W	2.50	6.0m above grade
DW4	7.50-10.0	2.50	
DW5	10.0-12.50	2.50	
DW6	12.50-15.0	2.50	dip 45 deg E
DW7	15.0-17.50	2.50	
DW8	17.50-20.0	2.50	
DW9	20.0-22.50	2.50	
DW10	22.50-25.0	2.50	5.0m above grade
DW11	25.0-27.50	2.50	0.2-1.0
DW12	27.50-30.0	2.50	0.10-1.0
DW13	30.0-32.50	2.50	0.10-1.0
DW14	32.50-35.0	2.50	0.20-1.0
DW15	35.0-37.50	2.50	0.2-1.0
DW16	37.50-40.0	2.50	0.20-1.20
DW17	40.0-42.50	2.50	0.10-1.30
DW18	42.5-45.0	2.50	0.20-1.50 verm. start
DW19	45.0-47.50	2.50	0.20-1.0
DW20	47.50-50.0	2.50	0.20-2.60
DW21	50.0-52.50	2.50	0.20-2.60
DW23	52.5-55.0	2.50	0.20-1.80 coarseverm. increasing to W.
DW24	55.0-57.50	2.50	0.20-2.20 verm. rich
DW25	57.50-60.0	2.50	0.20-1.60
DW26	60.0-62.50	2.50	0.20-1.70
DW27	62.50-65.0	2.50	0.20-1.80
DW28	65.0-67.50	2.50	0.20-1.80
DW29	67.50-70.0	2.50	0.20-1.40
DW30	70.0-72.50	2.50	0.20-1.40
DW31	67.50-70.0	2.50	0.20-1.40 verm.rich to west
DW32	70.0-72.50	2.50	0.20-1.40
DW33	72.50-75.0	2.50	0.20-1.50
DW34	75.0-77.50	2.50	0.20-1.50
DW35	77.50-80.0	2.50	0.20-1.30
DW36	80.0-82.50	2.50	0.20-3.0

DW37	82.50-85.0	2.50	0.20-3.0
DW38	85.0-87.50	2.50	0.20-3.0
DW39	87.5-90.0	2.50	0.20-3.0
DW40	90.0-92.5	2.50	0.20-2.5
DW41	92.5-95.0	-----	0.20-2.5
DW42	95.0	-----	0.20-2.50
DW43	95.0-97.5	2.50	0.20-2.40
DW44	97.50-100.0	2.50	0.20-2.30 amphib.dyke
DW45	100.0-105.0	5.0	0.20-3.0 amph.dyke
DW46	105.0-110.0	5.0	0.20-2.60 dip 80 deg.east
DW48	105.0	-----	0.2-3.0
DW47	110.0-115.0	5.0	0.20-3.0
DW49	110.0	-----	0.4-2.30
DW50	115.0	-----	0.4-1.90
DW51	115.0-117.5	2.50	
DW52	117.50	-----	
DW53	117.50-120.0	2.50	
DW54	120.0	-----	0.20-1.2.0
DW55	120.0-122.50	2.50	
DW56	122.50	-----	
DW57	122.50-125.0	2.50	
DW58	125.0	-----	0.20-1.20
DW59	125.0-127.50	2.50	
DW60	127.50	-----	0.20-1.60 good verm.
DW61	127.50-130.0	2.50	
DW62	130.0	-----	0.20-1.40
DW63	130.0-132.50	2.50	
DW64	132.5	-----	0.20-1.30
DW65	132.50-135.0	2.50	
DW66	135.0	-----	0.20-2.40
DW67	135.0-137.50	2.50	
DW68	137.50	-----	0.20-2.20
DW69	137.50-140.0	2.50	marble dyke
DW70	140.0	-----	0.2-2.0
DW71	140.0-142.5	2.50	swamp to west
DW72	142.50	-----	0-2.0
DW73	142.50-145.0	2.50	
DW74	145.0	-----	0-1.90
DW75A	145.0-150.0	5.0	
DW60	150.0-155.0	5.0	1.20-2.40 edge swamp (to W)
DW61	155.0-162.50	7.5	0.30-3.80
DW62	162.50-167.50	5.0	0.50-1.0

DW63	167.50-172.50W	5.0	0.40-1.0	
DW64	172.50-177.50	5.0	0.4-1.0	
DW65	177.50-182.50	5.0	0.40-1.0	
DW66	182.50-187.50	5.0	1.0-1.70	
DW67	187.50-192.50	5.0	1.0-2.0	
DW69	192.50-197.50	5.0	1.20-2.40	
DW70	197.50-202.50	5.0	1.40-2.80	
DW72	202.50-207.50	5.0	1.0-2.40	
DW73	207.50-212.50	5.0	1.0-2.40	
DW74	212.50-217.50	5.0	1.0-2.40	
DW75	217.50-222.50	5.0	0.30-2.80	
DW68	222.50-227.50	5.0	0.30-3.0	
DW71	227.50-232.50	5.0	1.0-3.50	
@240-peg dyke				
DW76	282.50-287.50W	5.0		
DW96	287.50-290.0	2.50		
DW77	290.0-292.50	2.50		
DW78	292.50-297.50	5.0		
DW79	297.50-302.50	5.0		
DW80	302.50-305.0	2.50		
DW81	305.0-307.50	2.50		
DW82	307.50-310.0	2.50		
DW83	310.0-312.50	2.50		0-1.0
DW84	312.5-315.0	2.50		0-1.80
DW85	315.0	-----	0-2.0	
DW86	315.0-317.50	2.50		0-1.0
DW87	317.50-320.0	2.50		0-1.0
DW88	320.0-322.50	2.50		0-1.0
DW89	322.50-325.0	2.50		0-1.0
DW90	325.0-327.50W	2.50		0.60-1.0

EW Series Trenching (0W-115W main streak)

450N-103W @ 39mW	412N-075W	550N-245W
412N-079W @ 0mW	495N-175W	565N-260W
450N-BL @ 100W	530N-225W	590N-260W

EW1	0-2.50W	2.50	0.20-1.0
EW2	2.50-5.0	2.50	0.20-1.0
EW3	5.0-7.50	2.50	0.30-1.0
EW4	7.50-10.0	2.50	0.20-1.0
EW5	10.0-12.50	2.50	0.10-1.0
EW6	12.50-15.0	2.50	0.30-1.0
EW7	15.0-17.50	2.50	0.30-1.0
EW8	17.50-20.0	2.50	0.30-1.0
EW9	200-22.50	2.50	0.10-1.0
EW10	22.50-25.0	2.50	010-1.50
EW11	25.0-27.50	2.50	0.20-2.0
EW12	25.50	-----	0.30-2.0
EW13	27.50-30.0	2.50	0.20-1.0
EW14	30.0-32.50	2.50	0.30-1.0
EW15	32.50-35.0	2.50	0.30-1.0
EW16	35.0-37.50	2.50	0.30-1.20
EW17	37.50-40.0	2.50	0.40-1.30
EW18	40.0-42.50	2.50	0.40-1.30
EW19	42.50-45.0	2.50	0.20-1.30
EW20	45.0-47.50W	2.50	0.30-2.20
EW21	47.50	-----	0.30-2.20
EW22	47.50-50.0	2.50	0.20-1.40
EW24	50.0	-----	0.20-2.0
EW23	50.0-52.50	2.50	0.20-2.0
EW25	52.50-55.0	2.50	0.20-1.0
EW26	55.0-57.50	2.50	0.20-1.0
EW27	57.50-60.0	2.50	0.20-1.0
EW28	60.0-62.50	2.50	0.20-1.0
EW29	62.50-65.0	2.50	0.20-1.40
EW31	65.0	-----	0-2.20
EW30	65.0-67.50	2.50	0.20-1.80
EW32	67.50-70.0	2.50	0-1.0
EW33	70.0-72.50	2.50	0-2.50
EW34	72.50-75.0	2.50	0-1.0
EW35	75.0-80.0	5.0	0-2.0
EW53	202.50	0-1.0	
EW54	202.50	1.0-2.0	
EW55	205.0-207.50W	2.50	

EW56	207.50-210.0W	2.50	
EW36	210.0-212.5W	2.50	
EW57	212.50	----	
EW37	212.50-215.0	2.50	
EW38	215.0	-----	
EW39	215.0-217.5	2.50	
EW40	217.50-220.0	2.50	
EW41	220.0-222.50	2.50	
EW42	222.50-225.0	2.50	
EW43	225.0-227.50	2.50	
EW44	227.50-230.0	2.50	
EW45	230.0-232.50W	2.50	
EW46	232.50-235.0	2.50	
EW47	235.0-242.50	7.50	
EW48	242.50-250.0	7.50	0-1.50
EW49	250.0-257.50	5.0	0-1.80
EW50	257.50-265.0	7.50	0-2.80
EW51	265.0-270.0	5.0	0-3.30
EW52	270.0-275.0	5.0	0-1.0
EW58	275.0-280.0	5.0	0-1.0
EW59	280.0-285.0	5.0	0-1.0
EW60	285.0-290.0	10.0	0-1.0
EW61	290.0-295.0	5.0	0-1.0
EW62	295.0-300.0W	5.0	0-1.0

FW Trench (Zone 5mE-90W main streak)

400N-175W @ 25mW   330N-163W   460N-360W
450N-267W @ 150mW   425N-190W   425N-220W

FW93	10.0-15.0 E	5.0	0.10-1.0	marble- barren
FW92	5.0-10.0E	5.0	0.10-1.0	marble - barren
FW91	0-5.0E	5.0	0.20-1.40	green verm.layers
FW1	0-2.50W	2.50	0.30-1.0	
FW2	2.50-5.0W		2.50	0.30-1.0
FW3	5.0	-----	0-2.0	
FW4	5.0-7.50	2.50	0.30-1.80	
FW5	7.50	-----	0.30-3.0	
FW6	7.50-12.50	5.0	0.10-1.0	
FW7	7.50-12.50	5.0	1.0-2.0	
FW8	7.50-12.50	5.0	1.0-3.0	
FW9	12.50-17.50	5.0	0-1.0	
FW10	17.50-22.50	5.0	0-1.0	
FW11	22.50	5.0	0.1-2.0	
FW12	22.50-27.50W	5.0	0.10-1.80	
FW13	27.50-32.50	5.0	0-2.0	
FW14	32.50-37.50	5.0	0-2.0	
FW15	37.50-42.50	5.0	0-2.0	
FW16	42.50-47.50	5.0	0-2.0	
FW89	47.50-52.50	5.0	0.20-1.50	
FW90	47.50-52.50	5.0	1.50-3.0	
FW86	52.50-57.50	5.0	0-1.50	
FW84	57.50-65.0	7.50	0.30-1.50	
FW85	57.50-65.0	7.50	1.50-3.0	
FW82	65.0-70.0 W	5.0	1.0-2.0	1.0m organics
FW83	65.0-70.0	5.0	2.0-3.0	
FW80	70.0-75.0	5.0	0.10-2.0	
FW79	75.0-80.0	5.0	0.10-1.20	
FW78	80.0-85.0	5.0	0.10-1.0	
FW81	85.0-90.0	5.0	0.10-0.70	
FW77	90.0-95.0	5.0	0.10-0.70	
FW76	95.0-102.50	7.50	1.0-2.0	
FW75	102.50-107.50	5.0	2.0-4.5	2.0m organics
FW73	107.50-112.50	5.0	2.0-3.50	2.0m organics
FW74	107.50-112.50	5.0	3.50-5.0	
FW95	115.0			
FW72	112.50-117.50	5.0	1.50-2.50	1.5m organics
FW71	117.50-122.50	5.0	1.20-2.0	
FW70	122.50-127.50	5.0	0.50-1.30	
FW68	127.50-132.50W	5.0	0.30-1.0	

FW69	127.50-132.50	5.0	1.0-1.50 swamp 90W-140W
FW67	132.50-135.0	2.50	0.20-1.80
FW94	135.0	-----	2.0
FW65	135.0-137.50	2.50	0.20-1.80
FW66	137.50	-----	0.20-2.50
FW64	137.50-140.0	2.50	0.20-2.50
FW63	140.0-142.50	2.50	0.10-1.0
FW62	142.50-145.0	2.50	0.10-1.0
FW61	145.0-147.50	2.50	0.10-3.50
FW60	147.50-150.0	2.50	0.10-3.0
FW59	150.0-152.50	2.50	0.10-2.0
FW58	152.50-155.0	2.50	0.10-2.0
FW57	155.0-157.50	2.50	0.10-3.50
FW56	157.50-160.0	2.50	0.10-3.50
FW55	160.0-162.50	2.50	0.20-3.50
FW54	162.50-165.0	2.50	0.20-3.50
FW53	165.0-167.50	2.50	0.20-3.50
FW52	167.50-170.0	2.50	0.20-3.50
FW51	170.0-172.50	2.50	0.10-2.0
FW50	172.50-175.0	2.50	0.50-2.0
FW49	175.0-177.50	2.50	0.20-2.50
FW48	177.50-180.0	2.50	0.20-2.50
FW46	180.0-182.50	2.50	0.10-1.0
FW45	182.50-185.0	2.50	0.10-1.20
FW47	185.0	-----	0.10-2.0
FW44	185.0-187.50	2.50	0.20-1.0
FW43	187.50-190.0	2.50	0.20-1.0
FW42	190.0-192.50	2.50	0.20-1.0
FW41	192.50-195.0	2.50	0.20-1.0
FW40	195.0-197.50	2.50	0-1.50
FW39	197.50	-----	0-1.40
FW38	197.50-200.0	2.50	0-2.0
FW37	200.0-202.50	2.50	0.10-1.0
FW36	202.50-205.0	2.50	0.4-1.0
FW35	205.0-207.50	2.50	0.50-1.40
FW33	207.50-210.0	2.50	0.50-4.0
FW32	210.0-212.5	2.50	0.50-5.0
FW31	212.50-215.0	2.50	0.50-2.0
FW30	215.0-217.50	2.50	0.50-2.50
FW27	217.50	-----	0-1.50
FW26	217.50-220.0	2.50	0.30-1.50

FW25	220.0-222.50W	2.50	0.20-1.50	
FW24	222.50-225.0	2.50	0.30-4.0	
FW28	225.0	-----	0.20-1.30	
FW23	225.0-227.50	2.50	0.20-2.0	
FW22	227.50-230.0	2.50	0.10-2.0	
FW21	230.0-232.50W	2.50	0.20-2.0	
FW20	232.50-235.0	2.50	0.3-2.0	
FW19	235.0-237.50	2.50	0.20-2.0	
FW29	237.50	-----	0.20-1.70	
FW18	237.50-240.0	2.50	0.20-2.0	
FW17	240.0-242.50W	2.50	0.20-2.0	dip 80 deg.east

GW <u>Series Trenching (200.0-255.0: 25-90W+ good streak)</u>

250N-210W
300N-250W
318N-270W
350N-325W
358N-358W
380N-400W

GW100	30.0-32.50W	2.50	0.10-1.20	
GW101	32.50-35.0	2.50	0.10-1.20	
GW102	35.0-37.50	2.50	0.20-2.0grn. verm.stringers	
GW103	37.50-40.0		2.50	0.20-1.50
GW105	40.0-42.50	2.50	0.20-1.50	
GW106	40.0-42.50	2.50	1.50-3.0	
GW107	42.50-45.0	2.50	0.10-1.0	
GW108	42.50-45.0	2.50	1.0-2.50	
GW104	45.0-47.50	2.50	0.20-2.0	
GW109	47.50-50.0	2.50	0.20-1.50	
GW110	50.0-62.50	2.50	0.20-1.0	
GW111	52.50-65.0	2.50	0.20-1.0	
GW112	55.0-67.50	2.50	0.10-1.50	
GW113	57.50-60.0W	2.50	0.10-2.20	amph.dyke
GW114	60.0-62.50	2.50	0.10-2.50	
GW115	62.50-65.0	2.50	0.10-2.80	2.0m amph.dyke
GW116	65.0-67.50	2.50	0.10-2.0	
GW117	67.50-70.0	2.50	0.10-2.0	grn.vermic.
GW118	70.0-72.50	2.50	0.10-3.0	
GW119	72.50-75.0	2.50	0.10-3.0	
GW120	75.0-77.0	2.0	0.10-3.50	
GW121	770-79.0	2.0	0.10-6.0	2.0m.above grade
GW122	79.0-81.0	2.0	0.10-6.0	
GW123	81.0-83.0	2.0	0.10-6.0	
GW124	83.0-85.0	2.0	0.10-2.0	
GW125	85.0-87.0	2.0	0.10-3.50	
GW126	87.0-89.0W		2.0	0.10-4.0
GW127	89.0-91.0	2.0	0-2.30	
GW128	91.0-93.0	2.0	0-2.0	
GW129	93.0-95.0W		2.0	0-1.20
	swamp 95W-180W			
GW1	180.0-182.50W	2.50	0.30-1.50	
GW2	182.50-185.0	2.50	0.20-1.30	
GW3	185.0-187.50	2.50	0.20-1.30	
GW4	187.50-190.0	2.50	0.20-1.0	

GW5	190.0-192.50	2.50	0.20-0.70	
GW6	192.50-195.0	2.50	0.10-0.50	2.0m above grade
GW7	195.0-197.50	2.50	0.10-1.0	
GW8	197.50-200.0	2.50	0.10-1.30	
GW9	200.0-202.50	2.50	0.10-1.40	
GW10	202.50-205.0W	2.50	0.10-1.40	
GW11	205.0-207.50W	2.50	0.10-2.20	
GW12	207.50	-----	0.10-2.20	
GW13	207.50-210.0	2.50	0.10-2.0	
GW14	210.0-212.50	2.50	0.10-1.0	
GW15	212.50-215.0	2.50	0.10-1.0	
GW16	215.0-217.50	2.50	0.10-1.0	
GW17	217.50-220.0	2.50	0.10-0.70	
GW18	220.0	-----	0.10-2.30	
GW19	220.0-225.0	5.0	0.10-1.50	
GW20	225.0-230.0	5.0	0.10-1.50	
GW21	230.0-235.0W	5.0	0.30-2.0	
GW22	235.0-237.50	2.50	0.20-3.0	
GW23	237.50-242.50	5.0	0.10-2.20	
GW31	242.50-247.50	5.0	0.10-1.80	
GW24	245.0-250.0	5.0	0.30-1.50	
GW25	250.0-255.0	5.0	0.30-1.50	
GW26	255.0-260.0	5.0	0.30-2.50	
GW27	260.0-265.0	5.0	0.30-2.50	amphibolite to west
GW28	265.0-272.50	7.50	0.10-2.0	
GW29	272.50-280.0	7.50	0-1.40	
GW30	280.0-290.0W	10.0	0-1.20	
yellow ribbon @ 340W				
GW32	173.5-180.0W	6.5	0.40-1.20	
GW33	167.5-173.5W	5.0	1.20-2.50	
GW34	162.5-167.5W	5.0	1.30-2.0	
GW35	162.5-167.5	5.0	2.0-3.20	
GW36	147.5-162.5	15.0	0.60-1.50	
GW37	147.5-162.5	15.0	1.50-3.70	
GW38	27.5-30.0	2.50	0-1.5	
GW39	25.0-27.5	2.50	0-1.5	
GW40	22.5-25.0W	2.50	0-1.5	
GW41	20.0-22.5W	2.50	0-1.5	
GW42	17.5-20.0	2.50	0-1.5	
GW43	15.0-17.5	2.50	0-2.0	
GW44	12.5-15.0	2.50	0-2.0	
GW45	10.0-12.5W	2.50	0-2.0	

GW46	7.5-10.0W	2.50	0-2.0
GW54	5.0-7.5W	2.50	0-2.0
GW55	2.50-5.0W	2.50	0-2.0
GW56	0-2.50W	2.50	0-2.50
GW57	0-2.50E	2.50	0-2.50
GW58	2.50-5.0E	2.50	0-2.50
GW59	5.0-7.5E	2.50	0-2.50
GW60	7.5-10.0E	2.50	0-2.50
GW61	10.0-12.5E	2.50	0-2.50
GW62	12.5-15.0E	2.50	0-2.50

HW Series Trenching (250N-300W@7.5E, 200N-242W@96E)

HW1	00	15.0	2.0-5.5	
HW2	5.0E	5.0	1.0-2.5	
HW3	5.0E	7.5	2.5-5.5	
HW4	12.5E	5.0	0-1.0	swamp to w (100m)
HW5	17.5	5.0	0-1.0	
HW6	21.5	3.0	0-1.5	
HW7	24.5E	3.0	0-1.8	
HW8	28.0	4.0	0-3.5	
HW9	32.0	4.0	0-3.5	
HW10	36.0	4.0	0-3.0	
HW11	40.0E	4.0	0-2.0	
HW12	44.0	4.0	0-1.5	
HW13	48.0	4.0	0-1.0	
HW14	52.0	4.0	0-2.5	
HW15	56.0	4.0	0-2.2	
HW16	60.0E	4.0	0-2.2	
HW17	64.0	4.0	0-2.0	
HW18	68.0	4.0	0-3.5	
HW19	72.0	4.0	0-2.0	
HW20	76.0E	4.0	0-3.5	
HW21	80.0E	4.0	0-4.0	
HW22	84.0	4.0	0-1.5	
HW23	88.0	4.0	0-2.0	
HW24	92.5E	5.0	0-1.5	
HW25	100E	10.0	0-1.5	
HW30	95.0W	15.0	0.3-3.0	
HW31	100.0-102.5W	2.5	0-1.2	
HW32	102.5-105.0W	2.5	0-1.0	
HW33	105.0-107.5	2.5	0-1.0	
HW34	107.5-110.0W	2.5	0-1.0	
HW35	110.0-112.5	2.5	0-0.5	
HW36	112.5-115.0W	2.5	0-0.5	
HW37	115.0-117.5	2.5	0-0.8	
HW38	117.5-120.0	2.5	0.1-1.0	
HW39	120.0-122.5	2.5	0-1.20	
HW40	122.5-125.0	2.5	0-1.3	
HW41	125.0-127.5W	2.5	0-1.7	
HW42	127.5-130.0	2.5	0-1.7	
HW43	130.0-132.5	2.5	0-1.0	
HW44	132.5-135.0W	2.5	0-1.0	
HW45	135.0-140.0	5.0	0-1.0	
HW46	140.0-142.5W	2.5	0-1.7	

HW47	142.5-145.0	2.5	0.2-2.0	
HW48	145.0-152.5	7.5	0-3.0	
HW49	155.0W		5.0	0-2.5
HW50	160.0	5.0	1.5-3.0	
HW51	160.0W	5.0	0.3-1.5	
HW52	165.0	6.5	1.50-2.5	
HW53	165.0	6.5	0.3-1.5	
HW54	173.0	7.5	0.3-1.50	
HW55	180.0W	6.0	0-1.50	
HW56	185.0	7.5	2.0-3.0	
HW58	190.0W	5.0	0-1.5	
HW59	195.0W	5.0	0-1.0	
HW60	200.0W	5.0	0-1.0	
HW61	205.0W	5.0	0-1.0	C.B. 40' to West

Regis Resources Inc.
Cavendish Backhoe Trenching Program
AW Trench

Sample #	Vermiculite %	Description of Sample
AW1	13.0	brn marble-peg.dyke, +20% green mica*
AW2	43.6	brn marble-crse sand, +20% green mica*
AW3	54.1	beige marble-peg.dyke,fine silv.mica
AW4	17.2	brn.marble-coarse sand,+10% grn.mica*
AW5	22.6	crse marble, fine green mica
AW6	20.0	brn-sand marble with green flakes verm*
AW7	22.6	beige marble-decomp,+15% silver mica
AW8	33.0	beige marble (decomp),+20% mica
AW9	42.8	buff marble+peg.fine silver mica
AW10	45.0	buff marble,+40% fine silver mica
AW11	40.2	beige sand-decom.marble, green mica flke
AW12	37.9	bge marble-decomp, cse green mica+35%
AW13	21.5	bge. marble, cse green mica flakes
AW14	24.7	brn marble-coarse snd,+20%crs.gn.mica*
AW15	34.4	brn mrble-decomp, cse green mica +50%*
AW16	39.8	brown marble-green mica(Cse)+40%
AW17	54.2	brn.marble-decomp, cse.green mica+505
AW21	21.7	brn-beige marble-decomp +20%grn.mica
AW22	25.6	fine verm.beige marble
AW26	26.5	beige marble-decomp sand,cse grn mica
AW27	30.7	decomp marble-pegmatite,fine silver mica
AW28	28.2	brown marble-crs sand, +20% silver mica
AW29	29.6	beige sand-marble, +15% silver mica
AW29A	15.3	beige marble-decomp, +-10% silver mica
AW30	35.1	beige sand-marble with peg.dyke,silv.mica
AW31	28.3	beige marble-decomp, silver mica (+20%)
AW32	19.4	beige decom.marble, finesilve mica(+20%)
AW33	29.2	bige marble-fine snd, +25% fine silv mica
AW34	26.5	beige decomp marble, silver mica
AW35	48.2	beige dcomp marble, +35% silver mica
AW36	28.8	coar sand-decomp marble,25% silver mica
AW37	33.6	buff marble(decomp), fine silvr mica
AW38	26.9	fine beige marble, 25% fine silver mica
AW39	18.1	bge marble-coarse sand, +10% grn.mica*
AW40	49.4	buff marble-peg.dyke decp, +35% silv mica
AW40A	59.7	buff marble, 50-60% silver mica flake
AW41	21.5	beige marble-decomp, +10% silver mica
AW42	16.1	beige marble-fine snd, fine mica +15%
AW43	28.1	buff marble(decomp), silver mica (fine)

AW44	39.1	buff marble-decomp,fine silver mica
AW45	33.1	buff marble-peg,dyke, +30% fn silv.mica
AW46	45.9	buff marble decomp with silver mica
AW47	33.7	beige mica-fine sand ,silver mica (fine)
AW49	34.9	fine decomp marble-beige fine silver mica
AW50	35.4	buff marble-peg. +-40% silver mica
AW100	25.7	mble+org-dk.brown,cse silver mica +25%
AW101	15.1	brown marble+organic, +20% mica
AW102	6.9	fine silt,dk.brown fine silver mica
AW103	2.8	brown sand (marble (fine)
AW104	11.2	organics + silt, fine mica (silver)
AW105	20.8	brown silt with organics (fine) green mica
AW106	1.3	dark brown-mainly organics
AW107	3.0	brown silt-organics,+10% silver mica
AW108	16.7	brown marble sand,+20% green mica*
AW109	11.1	fine marble-organic,fine silver marble
AW110	6.7	beige marble,+40% green mica**
AW111	20.0+	beige marble, green mica +40%*
AW114	42.9	amphib.dyke, rusty,fine silver mica
AW115	7.9	amphib. dyke-rusty silver mica
AW116	4.1	amphibolite dyke-rusty
AW117	6.6	beige,coarse sand-marble decomp
AW118	1.6	beige marble-coarse sand, little mica
AW119	1.8	beige marble-cse sand, little mica
AW120	2.7	amphib.dyke-rusty silver mica
AW121	1.6	brown marble-coarse sand-little mica
AW122	0.8	brown marble-coarse sand-little mica
AW123	3.5	brown marble-coarse sand, little mica
AW124	1.9	brown marble-coarse sand, little mica
AW125	0.7	coarsesand- marble,little mica, slight rusty
AW126	Lost	cse. sand marble
AW127	Lost	cse. sand- marble
AW128	16.4	rusty marble-coarse snd, +20% silver mic
AW129	10.0	brown marble-fine sand,fine mica
AW130	2.6	brown silt-organics, little mica
AW131	7.1	brn. silt-organic, +20% grn.mica
AW132	8.6	brn.marble+orgnic +20% grn. mica flakes
AW133	14.3	brown marble + organics, +15% grn mica*
AW135	12.3	brn marble+organic, +15% fine silv mica
AW136	39.1	bge-gritty marble-granite dyke,silver mica
AW137	51.8	buff marble-decomp, fine mica
AW138	25.6	marble-peg. +20% green mica*

AW139	15.5	beige marble-peg., +15% silver mica*
AW140	10.7	marble-pegmatite, fine green mica
AW141	47.8	beige marble-peg.,green mica
AW142	13.4	beige marble-peg.+10%silver mica
AW143	23.4	brown marble, green mica +15%
AW144	27.2	brn.marble-peg.,+30% green mica*
AW145	17.3	bge marble (decomp), +30% green mica*
AW146	24.1	beige marble-peg.+15% green mica
AW147	10.6	decomp.marble-brn-beige, +35%grn.mica*
AW148	30.0	decomp marble, cse.mica flake +40%
AW149	25.4	decomp marble-peg. +10% silver mica
AW150	9.3	decomp marble-brn,+organic, +20% mica
AW200	23.2	cse.grn mica in marb,pink peg.,50%mica
AW201	44.0	cse.beige-buff , marble,+40%blk. mica
AW202	54.0	cse.grn.mica in marble
AW203	39.8	cse.green mica in marble,40-50%mica,silt
AW205	62.0	grn-silvmica buff marble,swirls,peg.seams
AW206	24.4	buff-grn.marble,+20% grn.mica
AW207	40.9	buff marble-fine sand with fine mica cont.
AW208	43.0	cse.grn.mica in marble,40-50%, pink peg.
AW209	29.8	fine sand-buff marble+peg,+25% micasilv.
AW210	49.2	cse.grn.mica in beige marble,swirls
AW211	56.0	cse.grn.mica(40-60%)marble(buff),mottled
AW212	68.6	beige-grn marble,+60% grn.mica
AW213	63.6	cse.grnmica(50%)buff marble,mottled
AW214	66.1	fne.grn.mica+50%,bge.marble,mottled
AW215	19.2	cs.grn.mica(50-70%),marble,swirls,pk.peg
AW216	32.4	cse.grn.mica, marble, swirls
AW217	51.2	cse.marble-peg.,cse.grn.mica +50%
AW218	8.8	bge.marb.10-15%silv.mica.cse.sand,-10%
AW219	5.4	bge,marb,red.verm.lens10%mica,cs.sand
AW220	39.0	cse.grn.mica(40-60%),bge.marble,swirls
AW221	40.7	beige marble-cse.sand,+30% fine mica
AW222	35.9	beige marble-fine sand ,+35% grn.mica
AW223	66.7	md.-cse.mica(50-70%)bge.marb,mottled
AW224	39.4	md-cse.grn.mica(50%)mottled,bge.marb
AW225	34.9	cse.grn-blk.mica, beige marble,+50%mica
AW226	28.7	beige marble-peg.,+30% grn.mica flake
AW227	3.3	cse.marble (sand), low mica (E.edge dep)
AW228	2.1	cse.sand-beige marble, low silv.mica
AW229	4.1	cse.sand-marble, low mica content
AW230	4.8	cse.sand marble, buff-white,low mica cont

Regis Resources Inc.
Cavendish Backhoe Trenching Program
BW Trench

Sample #	Vermiculite %	Description of Sample
BW1	6.2	brn.marble-cse.sand, little mica(+-5%)
BW2	32.5	dk.brn.rusty marble, low mica
BW3	23.2	darkbrn.amphibolite,+-20% mica
BW4	31.0	dk.brn.amphibolite,20-25% mica content
BW5	25.2	dk.brn.amphib. +25% fine mica
BW6	62.9	dk.brown amphibolite, +-20% mica
BW7	56.9	dark brn.amphib.+-20% fine mica
BW8	39.7	dark brown amphibolite, fine grn.mica 40%
BW9	15.7	amphibolite-orange/rusty, +10%fine mica
BW10	31.9	beige-orange-amphibolite,+10%fine mica
BW11	18.0	brn-beige marble, +15% fine silve mica
BW12	9.9	beige amphibolite sand-low mica content
BW13	27.4	beige marble(fine sand), +-30% grn.flake
BW14	20.8	beige marb, med.sand, +20%fine grn.mica
BW15	23.0	Beige marble, +15% fine silver mica
BW16	19.9	beige marble,med..sand, 5-10% mica
BW17	11.3	beige marble, +10% mica(fine)
BW18	40.3	beige marble(ont.),+30% fine grn.mica
BW19	30.5	beige marb (fine decomp),+30% fine mica
BW20	11.1	brn-orange amphibol, low mica (fine sand)
BW21	4.7	brown-orange amphib.low mica content
BW22	14.8	brown-orange amphib.low mica content
BW23	17.2	brown-orange-amphibolite, low mica
BW24	12.5	red-orange amphibol,fine sand, low mica
BW25	17.9	brn-orange amphibolite,+-10% mica(fine)
BW26	12.8	orange-amphibolite, fine sand, low mica
BW27	22.9	orange amphib.(fine sand), +10% mica
BW28	15.4	orange sand-amphib.,low mica cont.
BW29	17.0	fine sand, amphib.low mica content
BW30	26.5	beige-orange marble, +20% grn.mica(fine)
BW31	11.7	amphibolite,contact with cse grn.flk +12%
BW32	24.8	amphibolite,+10%silver mica flk
BW33	32.2	beige marble, med.sand, +40% grn.mica
BW34	32.7	beige marble,cse.grn.flk.+50% content
BW35	29.0	beige marb,fine sand, +35% fine grn.mica
BW36	19.2	beige marble,grn.mica(cse)+30%*
BW37	17.3	beige marble,fine sand, +35% fine grn.mic
BW38	23.4	beige marble, +20% fine silver mica
BW39	28.7	beige marble-cse.grained, +20% grn.mica

BW40	29.2	beige marble, -amphib., +20% fine mica
BW42	13.4	dk.brn.marb-rusty,cse sand, +30% grn.mic
BW44	25.4	brn. maarble decomp, +30% mica flk
BW46	27.8	beige marb,fine sand, +25% fine silv.mica
BW47	31.4	beige marble-fnedecomp,+30% fn.gn.mica
BW48	32.7	beige marb(fne decom), +30% fn.grn.mica
BW50	40.3	beige marble-pegmte,+20% fine grn.mica
BW53	22.8	beige marb,coar sand, +40% grn.mica cse
BW56	31.0	beige marble,cse.sand,+40%cse grn.mica
BW59	24.2	brn.decomp.marble +50% grn mica flk
BW60	40.2	beige marble,fine decomp, +40% grn.mica
BW61	43.8	beige marble-decomp, +40% grn mica flk
BW62	40.7	fine sand-marble(bge),+30%fnegrn.flk.
BW63	32.5	beige marble-decomp, +40% grn mica flk
BW64	48.4	beige marb-decomp, +50% silver-grn mica
BW65	38.5	beige marble, fine, +50% grn.mica*
BW66	30.5	marble+peg,fine, cse grn.mic (+60%)
BW67	47.0	beige-grn.marble-decom, +50% grn mica
BW68	32.8	beige mrble, +60% grn.mica (cse flk)
BW69	39.3	beige marble-decomp, +35% fine grn.mica
BW70	60.8	brn.decomp.marble, fine grn.mica+50%
BW71	34.3	beige marble, +40% fine grn.mica flk
BW72	49.0	beige marble(fine sand, +40% grn.mica
BW73	28.3	fine decomp marble(bge), +30% grn mica
BW74	50.8	beige decomp. mica +50% green mica flk
BW76	27.3	beige marble, grn.mica +30% coarse flk*
BW77	17.4	beige marble,fine sand, +40% grn mica flk
BW78	21.0	beige marble, +30%,fine grn.flk*
BW80	30.4	beige marble, +40% fine silver mica flk
BW81	42.3	beige marble-med. sand,+35% silv.mica
BW82	23.7	beige marble-decomp.-+25% grn.mica
BW83	27.6	beige marble decomp, +30% silver mica
BW84	19.7	beige marble-cse.sand, +35% fine mica flk
BW85	21.7	beige marble,fine sand,+30%grn mica flk
BW86	20.8	beige marb,cse.sand,+20% fine silver mica
BW87	18.7	beige marble-cse sand, +30% mica*
BW88	15.0	beige mrble-coarse sand, +25% grn.mica
BW89	20.4	marble+pegmte, +10% fine silv.mica
BW90	36.6	beige marble,+25% fine grn.mica
BW91	49.9	beige marble-decomp, +40% fine grn.mica
BW92	27.3	beige marb-decomp, +30% grn.(fine)mica
BW93	21.1	brown marble,coarse sand,silver mica flk

BW94	14.7	beige decomp marble, +20% finegrn.marbl
BW95	17.3	beige marble-peg., +25% grn.mica
BW96	19.9	beige marble-pegmte,+25%cse grn.mica
BW97	12.9	bge marble-coare sand, +25% grn.marble
BW98	15.0	beige marble-pegmatite,grn.mica flk +15%
BW99	16.1	amphib.-peg.,green mica flk
BW100	22.3	beige marble-pegmte, +20% grn.mica
BW101	8.0	dk.brn..marble,cse snd silver mica flake
BW102	25.1	fine decomp.marble-brown, +30% fine mic
BW103	18.8	brn marb-decomp, +25% finefinegrn.marb
BW104	36.0	marble-fine sand, +35% grn.mica flk
BW105	51.7	amphib.-rusty, +20% fine mica
BW106	34.6	beige marble, +35% fine grn. mica
BW107	22.5	beige marble,30-35% mica content
BW108	30.1	beige marble-fn.sand,+30% grn.mica cont.
BW109	23.4	marble + dk. brown organics, low mica
BW110	22.5	beige marble-fine sand, +20% fine sil mica
BW111	10.3	amphib.+marble,rusty,+30%fine silv.mica
BW112	30.1	amphibolite, dk.brn. +15% mica
BW113	23.4	amphibolite dyke,orange,low mica
BW115	10.3	amphibolite-rusty, fine sand, +-20% mica
BW116	6.1	amphib.dyke-low mica(blk colour)
BW118	27.1	amphib.-dk.brown,fine sand,low mica(fine)
BW119	25.9	amphib.-dk.brown,fine sand,low mica(fine)
BW120	32.7	dk.brn.marble, +30% fine green mica
BW123	15.4	beige marb-fine sand,+-10% fn. silv mica
BW124	23.0	brn.marble,fine sand, +20% fine silver mica
BW125	16.5	rusty amphibolite, little mica
BW126	31.6	rusty amphib.,+10% fin mica,orange-red
BW127	2.8	coarse snd-mrble-little mica
BW128	7.4	cse sand-decomp marble, low silver mica
BW129	15.9	coarse sand-beige marble, low mica cont
BW130	14.8	fine sand-beige marble,+10%fine silv mica
BW131	12.1	beige marble-peg., +20% fine silv.mica
BW132	53.2	beige marble,cse.grn.mica +60%
BW133	20.4	amphibolite(dk.brn),+10%fine mica
BW134	22.7	beige marble+organics, +20% silv.mica
BW135	25.6	beige marble,decomp,+40% fine grn.mica

Regis Resources Inc.
Cavendish Backhoe Trenching Program
CW Trench

Sample #	Vermiculite %	Description of Sample
CW0	1.0	beige marble-cse.sand, -10% mica
CW1	4.2	rusty marble,cse.sand, 10-20% fine mica
CW2	3.0	rusty marble,cse.sand, 10-20% mica
CW3	2.4	rusty marble,cse.sand, 15-20% mica
CW4	14.2	rusty marble,10-20% fine mica
CW5	10.8	rusty marble, 15-25% fine mica
CW6	4.6	rusty marble, 10-15% mica cse.green
CW7	16.4	rusty marble,cse.sand, 20-30% mica
CW8	10.2	rustymarble,med.sand, 15-25% mica
CW9	11.9	rusty marble-cse sand, 10-15% mica
CW10	4.8	rusty marble, cs.sand, 15-20% mica
CW11	16.7	rusty marble-amph.contact, 30-40%mica
CW12	16.2	amphibolite-fine sand, 20-25% mica
CW13	6.8	
CW14	3.2	amphibolite, low mica
CW15	10.0	amphibolite,fine sand, low mica
CW16	10.2	fine sand-amphibolite, low mica
CW17	11.9	beige marble-fine sand, fine mica+-10%
CW18	27.5	beige marble-pegmte, 30-40% grn.mica
CW19	10.5	beige marble, fine sand, 10-15% mica
CW20	12.3	red-orange amphibolite, low mica
CW21	4.8	rusty marble, -15% mica
CW22	6.6	red-orange amphibolite-fine sand,low mica
CW23	8.3	orange-red amphib.-fine sand, low mica
CW24	21.0	rusty marble-cse sand, 10-20% mica
CW25	5.8	rusty marble-cse.sand, 10-15% mica
CW26	26.2	beige marble-cse.grn.mica 20-30%
CW27	30.7	rusty marble rock, 10-15% fine mica
CW28	6.4	rusty marble, 10-15% mica
CW29	12.0	rusty marble,med.sand, 20-30% mica
CW30	6.8	rusty marble,cse.sand, 20-30%mica
CW31	14.0	rusty marble, cse. sand,20% mica
CW32	9.0	amphibolite-fine grained, 10-20%mica
CW33	1.7	beige marble rock, low mica
CW34	19.9	beige marble rock, low mica
CW35	22.6	beige marble, low mica
CW36	23.9	beige marble, 25% mica content
CW37	55.9	beige marb-50-60% cse.grn.mica,blk.dyke

CW38	33.6	beige marble,40-50% silver mica
CW39	16.0	rusty amphibolite, 30-40% dk.mica
CW40	33.1	rusty marble,cse.sand, 30-40% grn. mica
CW41	35.8	beige marble-decomp, 35-45%grn.mica
CW42	34.6	beige marble-decomp, grn.mica 40-60%
CW43	34.0	beige marble-decomp, 40-50% grn.mica
CW44	31.9	beige marble-decomp-40-50% grn.mica
CW45	33.5	beige marble, 45-50% green.mica
CW46	33.5	beige marble, 40% fine grn.mica content
CW47	35.1	beige marble-decomp. 40-60% grn.mica
CW48	21.0	bg. marble,fine sand, 20-30% fine grn.mica
CW49	29.4	beige marble, 30% silver mica (fine)
CW50	41.5	bg. marble,fine decomp. 30-40% grn.mica
CW51	32.6	beige marble,30-40% fine grn.mica
CW52	34.7	beige marble, 30-40% grn. mica
CW53	30.7	beige marble, 30-35% grn.mica
CW54	23.0	bg. marb, cse sand, cse.grn.mica 30-35%
CW55	32.6	beige marble,35-40% grn.mica
CW56	26.1	bg. marble, med.sand-rock, 35-40%mica
CW57	24.5	beige marble-cse.snd-25-30%silver sand
CW58	28.0	beige marble,cse. sand, 30-35% mica
CW59	9.2	beige marble,cse.sand, 40-50% mica
CW60	26.0	beige marble, cse. grn.mica 50-60% cont.
CW61	43.3	beige mrble,vy.cse.grn.mica-60% content
CW62	-----	beige marble, 50-60% grn.mica flakes
CW63	26.1	beige marble, 45-55% grn.mica flakes
CW64	23.7	beige marble-pegmt, cse.green mica(45%)
CW65	30.5	beige marble, 50-55% grn.mica flakes
CW66	22.3	beige marble, 30-40% grn.mica flakes
CW67	25.3	beige marble, 40% grn.micaflakes
CW68	-----	beige marble, 30-40% grn.mica flakes
CW69	-----	beige marble, 30-40% grn.mica flakes
CW70	13.3	beige marble, 30-40% grn.mica flakes
CW71	25.2	beige marble, 30-40% grn.mica flakes
CW72	24.2	beig-gn.marble, 20-25%fine grn.mica
CW73	27.0	beige marble, 25-30% grn.mica flake
CW74	5.2	beige marble-dcomp-30-35% fine grn.mica
CW75	32.5	beige marble-decomp-30-40% grn.mica
CW76	15.5	beige marble, 40% grn.mica(cse)
CW77	17.8	beige marble-peg., 25-35% fine grn.mica
CW78	25.0	beige marble, 40-45%grn.mica flakes
CW79	25.5	beige marble-peg., 50-60% grn.mica flake

CW80	36.0	beige marble, 40% fine gn. mica flakes
CW81	40.6	orange amphibolite, fine sand, 20-25%mic
CW82	47.5	brn.amphibolite cont.,45-50% fine blk.mica
CW83	35.7	brn.amphibolite,40-45% fine blk.mica
CW84	49.3	orge.amphib.,fine sand, 40-50% fine mica
CW85	8.9	orange amphibol., fne. sand, 20-25% mica
CW86	25.3	orange amphib,fine sand, 20-30% mica
CW87	27.6	beig-brn.marble,med.sand,40-50%grn.mic
CW88	26.5	rusty marble, 30-40%mica,(amph.contact)
CW89	9.2	rusty marble, 25-30% mica
CW90	38.4	rusty marble,20-30% fine mica
CW91	9.4	rusty marble,cse.sand, 20-30%fine mica
CW92	20.8	rusty marble,cse.sand, 25-30%mica
CW93	18.4	rusty marble, cse.sand,15-20% mica flake
CW94	16.0	rusty marble,10-15% mica flakes
CW95	17.2	beige marble,50-60% grn.mica flakes
CW96	6.6	beige marb, fine sand, 15-25% fn silv mica
CW97	27.5	beige marble, 40-45% grn.mica flake
CW98	35.0	beige marble-decomp-25-35% grn.mica
CW99	48.0	beige marble-silt- 45% grn.mica flake
CW100	15.8	beige marble, 40-50%grn.mica flakes
CW101	22.3	beige mrble, 40-50% grn. mica flake
CW102	-----	beige marble, 35-40% green mica flakes
CW103	14.7	beige marble-finesilt,25-30% grn.mica
CW104	41.0	beige marble-silt-40-45% grn.mica(fine)
CW105	36.7	beige marble, cse.grn.mica 30-35% cont.
CW106	-----	beige marble,35-45% green mica flake
CW107	30.9	beige marble,30-40% silver mica
CW108	24.0	beige marble, 50-60% silver mica
CW109	26.9	beige marble,grn.mica 55-65% content
CW110	26.1	beige marble,grn.mica 50-60% content
CW111	32.8	beige marble, 15-25% grn. mica
CW112	26.6	beige marble, 30-35% fine grn.mica
CW113	21.1	beige marble, 40-50% grn.mica flkes
CW114	12.3	beige marble, 40-50% grn.mica flkes
CW115	19.4	beige marble, 40-50% grn.mica flkes
CW116	12.2	beige marble, 40-50% grn.mica
CW117	30.9	beige marble, 40-50% grn.mica flkes
CW118	18.4	beige marble, 60-65% grn.mica
CW119	23.9	beige marble-fine sand, 15-20% grn.mica
CW120	21.2	beige marble-fine sand, 15-20% grn.mica
CW121	31.9	beige marble-fine sand, 15-20% grn.mica

CW122	5.9	beige marble-silt, 15-20% fine mica
CW200	16.5	beige marble ,+-10% silver mica
CW201	11.7	beige marble with brn.org., 10% mica
CW202	44.0	beige marbwith organ., 30-40% silver mica
CW203	18.0	beige marble with org., 30-40% silver mica
CW204	10.7	beige marble-coarse sand,10-15%sil.mica
CW205	36.6	beige marble-decom. 40-50% silvr mica
CW206	11.0	dark brn. organics, 10% fine mica
CW207	10.9	dk.brn.org.,-10% silver mica
CW208	10.1	beige marble-silt, 10-15% fine mica
CW209	5.9	beige marble,crse.snd, 10% silver mica

Regis Resources Inc.
Cavendish Backhoe Trenching Program
DW Trench (315W-crs.mica)

Sample #	Vermiculite %	Description of Sample
DW1	6.9	rusty orange sand (fine,amphibolite
DW2	10.6	rusty orge.amphib.,silty,low mica
DW3	13.3	rusty orange amphib.fine sand,low mica
DW4	11.6	rusty amphibolite,fine sand, low mica
DW5	35.6	rusty amphib.fine grn.,30-35% mica cont
DW6	6.2	rusty-dk.brn.marble,10-15% mica
DW7	12.3	rusty amphib.,20-30% mica
DW8	5.1	rusty amphibolite- 30-40% dk.mica
DW9	4.2	rusty dk.brn.marble, 10%mica
DW10	6.4	cse.rusty marble,20-25% mica
DW11	1.6	cse.sand-marble, 10% mica
DW12	2.8	crse marble sand, -10% mica,dk.brn.
DW13	4.5	crse.marble, rusty, low mica content
DW14	18.3	rusty crse marble, -20% mica content
DW15	15.1	rusty dk.brn.marble, low mica content
DW16	6.4	rusty marbl,cse.sand,-10% mica
DW17	4.9	rusty,dk.brn.marble, 10-15% mica
DW18	10.8	beige marble(rusty)low mica
DW19	8.7	beige marble, dk.grn.mica 20-30%
DW20	11.1	beige marble, 20-25% mica
DW21	9.8	beige marble,crse sand. low mica
DW22	7.3	orange-rusty marble, low mica
DW23	14.4	beige marble, 30-35% crse.grn.mica
DW24	14.4	beige marble-crse sand, 20-25% grn.mica
DW25	11.6	beige marble-10-20% mica
DW26	12.6	beig marble, 20-25% grn.mica
DW27	11.9	beige marble-decomp,20% fine mica
DW28	29.2	beige marble-decomp, 35% grn.mica
DW29	19.7	beige marble-decomp, 30%grn.mica
DW30	25.3	beige marble-decomp,30-35% grn.mica
DW31	14.4	beige marble-pegmt,60-65% grn.mica
DW32	20.9	beige marble,rse.grn.mica 50-60%
DW33	32.3	beige marble, 40-50% cse.grn.mica
DW34	31.3	beige marble,grn.mica 40-50% cont.
DW35	30.8	beige marble, decomp.40-50% grn.mica
DW36	23.1	beige marble, cse.grn.mica,45% content
DW37	27.1	beige marble, 50-60% crs.grn.mica
DW38	33.0	beige marble-pegmte, 40% grn.mica (crse)

DW39	21.2	beige marble, 50-60% crse.grn.mica
DW40	20.9	beige marble-decomp,40-50% grn.mica
DW41	23.3	beige marble-pegmte, grn.mica 30-40%
DW42	17.8	beige marble, grn.mica(cse)30-40%
DW43	20.7(14.5V)	beige marble(cse),40-50%rn.mica
DW44	13.5	beige marbl,crse grn.mica 35-45%
DW45	15.7	dk.amphibolite, 50-60%dk.mica
DW46	20.9	dk.amphib.dyke, 50-60% dk.mica
DW47	25.6	dk.amphib.dyke,50-60%dk.mica
DW48	17.1	silt-beige marble, 20-25% fine grn.mica
DW49	18.9	beige marble,decomp.,20-30%silver mica
DW50	26.2	beige marble, 50-60% silver mica
DW51	28.3	beige marble, 30-40% crse,grn.mica
DW52	24.6	beige marble, 40-50% crs.grn.mica
DW53	21.4	beige marble, 50-60% crs,grn.mica
DW54	24.8	beige marble, 30-40% grn.mica
DW55	25.0	beige marble, 50-60% crse grn.mica
DW56	37.1	beige marble, crse. grn.mica60-65%
DW57	32.3	beige marble, crse.green mica 70-80%
DW58	53.9	beige marble, 60-70% grn.mica
DW59	43.5	beige marble, grn.mica(crse)-50-60%
DW60	45.3	beige marble rock, 50-60% mica(crse)
DW61	24.2	beige marble.,60% crse.grn.mica
DW62	17.2	beige marble,40-50%grn.mica
DW63	20.4	beige marble, 40-50%fine grn. mica
DW64	27.0	beige marble, 30-40% fine silver mica
DW65	19.1	beige marble,crse sand, 30-40% mica
DW66	18.5	beige marble, fine sand, 30-40% grn mica
DW67	15.6	beige marble, 25-35% crse. grn.mica
DW68	26.0	beige marble, fine grain,25-35% grn.mica
DW69	21.0	beige marble+pegmte, 15-20% grn.mica
DW70	31.8	beige marble, low mica(-10%)
DW71	25.2(13.3V)	beige marble, 30-40% crse.grn.mica
DW72	23.3(17.0V)	beige mable,30-40%grn.mica
DW73	7.7	dk.brn. marble, crse grn. mica 70%
DW74	29.6(36.6V)	beige marble, 35-40% dk.brn.mica
DW75	32.5(17.9V)	beige marble, cse grn.mica,50-60%
DW76	10.7	beige marble, 20-30% grn.mica (fine)
DW77	7.1	beige marble, crse mica (grn) 35-45%
DW78	19.0	organics dk.brn.-amphibolite- low mica
DW79	22.7	red-orang. amphibolite, fine sand,low mica
DW80	17.8	red-orang.amphibolite,fine,20-25%mica

DW81	17.1	red orange marble, 25-35% fine mica
DW82	32.4	beige marble, 50-60% fine grn.mica
DW83	22.7	dk. brn.marble, 30-40% grn.mica
DW84	21.4	beige marble, 10-15% mica
DW85	23.5	beige marble, fine sand, 20-30% mica
DW86	20.0	beige marble-cse.sand, 15-25% mica
DW87	21.1	beige marble,crse, low mica
DW88	18.8	beige marble, fine sand, 20-30% mica
DW89	19.0	beige marble, coarse sand, 20-30% mica
DW90	13.7	biege marble-crse sand,20-30% mica
DW91	-----	beige marble, crse sand, 20-30% mica
DW96	21.6	beige marble,cse. sand, 15-20% silv.mica

Regis Resources Inc.
Cavendish Backhoe Trenching Program
EW Trench

Sample #	Vermiculite %	Description of Sample
EW1	8.2	amphibolite red-orange fine sand-10%mic
EW2	9.3	amphib. fine sand, low mica
EW3	13.8	rusty marble, 10-20% mica
EW4	10.9	rusty marble, 10-20% mica(coarse.verm)
EW5	8.9	rusty marble, 10-20% mica(coarse verm)
EW6	2.1	rusty marble-crse sand -10% mica
EW7	28.1	rusty marble-fine decomp, low mica
EW8	17.7	rusty marble-crse sand,10% mica
EW9	6.3	rusty marble-cse sand, low mica
EW10	0.4	rusty marble rock , low mica content
EW11	11.7	rusty marble rock , low mica content
EW12	8.4	rusty marble-rock, low mica
EW13	8.4	rusty marble-crse sand,10% mica
EW14	10.8	rusty marble-cse sand, low mica
EW15	28.0	rusty marble-crse sand,20-30% mica
EW16	32.0	rusty marble rock, low mica content
EW17	13.9	rusty marble rock, 20-30% fine mica
EW18	8.7	pegmatite dyke, pink colour
EW19	14.7	pegmatite dyke, pink colour
EW20	16.0	rusty marble, coars sand, low mica
EW21	14.1	rusty marble, coars sand, low mica
EW22	18.2	marble rock dyke-low mica
EW23	44.5	dk.brn.amphib. 20-30% dk. mica
EW24	-----	red-brn.amphib.-10% mica
EW25	33.4	red-brn.amphib.-10% mica
EW26	23.2	amphib.-fine sand, low mica
EW27	19.9	beige marble rok 15-25% silver mica
EW28	39.0	beige marble rock dyke, low mica
EW29	15.2	beige marble, fine decomp,low mica
EW30	26.9	beige marble, 20-30% silver mica
EW31	31.9	orange-red fine sand-amphibolite,30%mic
EW32	45.4	beige marble,20-30% grn.mica
EW33	31.0	beige marble decomp, 30-40%silv.mica
EW34	23.6	beige marble-decomp. 20% silver mica (fn)
EW35	23.6	dk.brn.organic,10-15% fine silver mica
EW36	23.7	beige marble,45-55% grn.mica flake
EW37	21.0	beige marble-pegmte, 20-30%silver mica
EW38	17.7	beige marble-pegmt,20-30% mica

EW39	23.2	rusty marble, fine sand, 35-40% mica
EW40	10.8	rusty marble, cse.sand,25-30% mica
EW41	17.9	orange amphibolite, fine sand, 20% mica
EW42	10.9	orange amphibolite15-20% mica
EW43	6.7	amphibolite-beige-fine sand, low mica
EW44	13.9	amphibolite-brn.sand,low mica content
EW45	3.6	amphibolite-fine sand(orange), low mica
EW46	3.3	amphibolite-yellow sand low mica
EW47	4.2	amphibolite-yellow sand, low mica cont.
EW48	8.1	dk.brn.org.+marble(decomp),20-25%mica
EW53	34.2	beige marble, 50-60% grn.mica(fine)
EW54	21.1	beige marble,30-40% fine grn.mica
EW55	9.9	beige marble,15-20% silver mica
EW56	15.7	beige marble, 20-25% silver mica
EW57	25.8	beige marble, 45-55% ssilver mica
EW58	7.0	beige marble, 25% fine silver mica
EW59	3.0	amphibolite sand, fine, 10-20% mica
EW60	12.8	beige marble-silt, low mica
EW61	26.4	beige marble, 35-45% mica
EW62	9.7	beige marble,cse.sand, 15-20% mica
EW63	-----	beige marble, 40% fine grn.mica
EW64	-----	beige marble, 50-60% grn.mica

Regis Resources Inc.
Cavendish Backhoe Trenching Program
FW Trench

Sample #	Vermiculite %	Description of Sample
FW1	13.8	beige marble-decomp-30-40%fine mica
FW2	9.6	beige marble,fine silt, 30% silver mica
FW3	12.6	beige marble, 50-60% grn.mica flake
FW4	13.0	beige marble, 40-50% mica flake
FW5	25.2	beige marble-pegt.,30-40% silv.mica
FW6	31.1	beige marble,fine sand, 25% silver mica
FW7	47.5	beige marble-pegmt.,40%cse.grn.mica
FW8	18.9	beige marble-pegt.,30% mica flake
FW9	19.1	beige marble rock, 20% fine mica
FW10	18.2	beige marble rock, 10-15% silver mica flk.
FW11	18.6	beige marble-decom, cse.grn.mica30-40%
FW12	28.5	bg. marb,fine sand-silt, 30-40% silv mica
FW13	17.6	beige marble, 40-50% grn.mica flake
FW14	22.2	beige marble-decomp-40-50% grn.mica flk
FW15	19.2	beige marble-fine sand, 25-35% fine mica
FW17	15.0	beige marble, fine sand, 25%fine mica
FW18	28.6	brn.marble, brown mica (+-40%)
FW19	11.8	beige marble-cse.sand,15-25% fine mica
FW20	16.7	beige marble, med.sand, 15-25% mica
FW21	11.6	beige marble,med.sand, 15-25% fine mica
FW22	13.6	beige marble, med.sand, 15-25% fine mica
FW23	8.6	beige marble, 15-20% silver mica
FW24	16.3	beige marble-pegt, 25% fine silver mica
FW25	17.8	beig marble,+-40% fine silver mica
FW26	23.4	beige marble-cse.snd,15-25% mica flk
FW27	17.8	beige marble,med.sand, 25-35% grn.mica
FW28	12.4	beige marble-pegt.,40-50% green mica
FW29	-----	beige marble,med.sand, 20-30% mica
FW30	5.6	beige marble, med.sand, 10-15% fine mica
FW31	3.3	beige marble, cse.sand, 10-15% mica
FW32	6.2	beige marble,cse.sand, 15-20% silv.mica
FW33	8.0	beige marble, cse.sand, 10-20% mica
FW34	-----	bige marble, cse,sand, +-15% mica
FW35	5.5	beige marble-peg., 15-20% silv.mica
FW36	7.4	beige marble,cse.sand,20-25% mica flk.
FW37	10.1	beige marble, cse.grn.mica (50-60% cont)
FW38	7.3	beige marble,cse.sand, 20-25% fine mica
FW39	7.3	brn.marble, cse.grn.mica flake (40%)

FW40	13.8	beige marble,20-25% fine mica
FW41	7.7	beige marble, cse.sand, 20-25% marble
FW42	5.6	beige marble,med.sand, 10-15% mica
FW43	13.4	beige marble,cse.sand 25-35% mica cont.
FW44	14.4	beige marble,fine sand,10-20%mica
FW45	16.5	beige marble, cse.sand, 30-35% silv mica
FW46	13.6	beige marble, med.sand, 15-20% fine mica
FW47	12.2	beige marble, fine sand, 15-25% mica
FW48	15.2	beige marble, fine sand, 20-25%fine mica
FW49	20.6	beige-brn.marble, 20-25% mica
FW50	10.7	beige marble,fine sand,20-30%fine mica
FW51	24.3	brn.marble,fine sand, 25-30% mica
FW52	17.5	rusty marble,med. sand, 25-30%mica
FW53	9.0	rusty marble, fine sand,20-25% fine mica
FW54	13.4	rusty marble,fine sand, +-20% fine mica
FW55	10.4	rusty marble, fine sand,25-30% fine mica
FW56	12.3	rusty marble,fine sand, 30-40% mica
FW57	11.4	rusty marble, 30-35% mica content
FW58	11.9	rusty marble, 30-35% mica flake
FW59	12.5	brown.marble, 30% mica flake
FW60	10.2	brown.marble, 30% mica flake
FW61	14.7	beige marble,fine sand, 25-30% silv. mica
FW62	5.7	rusty marble,cse.sand, 10% mica
FW63	11.1	amphibolite dyke,rusty, low mica
FW64	18.8	rusty marble, 20-30% mica flake
FW65	11.3	beige sand,deomp,20-25%fine mca
FW66	8.6	oran.amphibolite, fine sand, 20-30%mica
FW67	20.8	amph+marble, 40% mica content
FW68	11.4	amph+marble, 40% mica content
FW69	1.8	amph+marble, 40% mica content
FW70	1.9	amphibolite,fne sand, 20-25%fine mica
FW71	4.4	dk.brn.organics-marble with mica (-10%)
FW72	21.0	dk.brn.organics-marble with mica (-10%)
FW73	21.0	dk.brn.organics-marble with mica (-10%)
FW74	-----	dk.brn.organics-marble with mica (-10%)
FW75	22.9	dk.brn.organics-marble with mica (-10%)
FW76	15.4	black dyke(amphib), 70-80% mica
FW77	21.4	beige marble-fine sand, 30-40% silv. mica
FW78	6.5	amphibolite, fine sand, 20% mica content
FW79	2.4	beige marble,med.sand,10-20% fine mica
FW80	19.5	amphib.+marble, 10-15% mica
FW81	4.4	amphibolite-marble, +-10% mica content

FW82	21.5	amphib.+marble,+-10%mica
FW83	17.3	black amphibolite 50-60% blk.mica
FW84	24.5	blk.amphibolite, 50-60%blk.mica
FW85	15.5	grn.marble-silt, 20-30% fine mica
FW86	17.8	marble-peg., 30-40% grn.mica cse. flake
FW87	17.8	marble-peg., 30-40% grn.mica cse. flake
FW88	31.0	beige marble, 30-40% grn.mica flake
FW89	11.9	beige marble, 30-40% grn.mica flake
FW90	16.4	beige marble, 30-40% grn.mica flake
FW91	10.2	rusty amphibolite, fine sand, 15-20%mica
FW93	5.4	dk.brn.marble,rusty, +-10%mica
FW94	12.0	orge.amphibolite, 10-15% mica
FW95	21.0	black dyke(amphib), 70-80% mica

Regis Resources Inc.
Cavendish Backhoe Trenching Program
GW Trench

Sample #	Vermiculite %	Description of Sample
GW1	12.2	beige marble,med.sand, 10-20%fine mica
GW2	29.5	orange amphibolite-marble, 40-50% mica
GW3	19.8	rusty marble,30-40%mica content
GW4	9.0	rusty marble,20-30% fine mica
GW5	8.6	brn.marble, fine sand, 20-25% fine mica
GW6	7.8	beige marble, fine sand,20-30% mica
GW7	20.1	beige marble, fine sand,20-30% mica
GW8	14.1	beige marble, 30-35% fine green.mica
GW9	10.5	brown marble, 20-30% fine mica content
GW10	23.1	brown.marble,fine sand, 15-20%fine mica
GW11	5.8	beige marble, fine sand, 25-30% fine mica
GW12	10.8	brown marble,fine sand, +-30%mica cont.
GW13	14.0	brn.marble, fine snd, 30-40% fine mica
GW14	25.9	brn.marble,fine sand, 35-40% fine mica
GW15	5.9	brn.mrble, 25-30% fine mica flake
GW16	23.2	brn.marble,fine sand 30-40% mica flake
GW17	10.1	beige marble,fine sand, 15-25% fine mica
GW18	50.0	beige marble,fine sand, 50-60%grn.mica
GW19	13.2	beige marble,35-45% mica content
GW20	15.5	beige marble, 30-35% fine grn.mica flake
GW21	17.0	beige marble, 30-35% fine grn.mica flake
GW22	50.4	beige marble, 30-35% fine grn.mica flake
GW23	64.7	beige marble, 30-35% fine grn.mica flake
GW24	37.1	black amphibolite, 60-70%blk.mica
GW25	53.0	black amphibolite, 60-70%blk.mica
GW26	29.9	black amphibolite, 50% fine blk.mica
GW27	29.8	black.amphibolite, 50-60%blk.mica
GW28	8.8	amphibolite-silt, low mica content
GW29	7.5	amphibolite-silt, low mica content
GW30	20.3	beige marble, grn. mica to 20%
GW31	62.0	beige marble with grn. mica to 60% cont
GW32	4.8	amphibolite
GW33	9.4	beige marble-decomp, +-30% grn.mica flk
GW34	9.6	amphibolite
GW35	1.3	amphibolite
GW36	15.3	beige marble
GW37	21.0	beige marble
GW38	17.7	beige marble

GW39	14.7	beige marble
GW40	11.6	beige marble
GW41	17.9	beige marble
GW42	10.9	beige marble
GW43	6.7	beige marble
GW44	13.9	beige marble
GW45	6.0	beige marble
GW46	8.4	beige marble
GW54	10.9	beige marble
GW55	13.3	beige marble
GW56	15.7	beige marble
GW57	25.8	beige marble
GW58	7.0	beige marble
GW59	9.9	beige marble
GW60	12.8	beige marble
GW61	10.9	beige marble
GW62	9.7	beige marble
GW100	4.3	brn.marble, cse.sand, 10-15% mica
GW101	6.9	brn.amphibolit, fine grain.rock,low mica
GW102	3.5	brn.amphibolite, low mica cont.,fine sand
GW103	24.5	beige-rusty marble, fine snd, 20-30% mica
GW104	28.6	bg marble,decomp, 50-60%cse.greenmica
GW105	4.3	beige marble,fin sand, 15-20%silv.mica
GW106	6.3	beige marb, fine sand +-10% fine grn.mica
GW107	10.2	bg. marb,decomp., 20-30% fine silver mica
GW108	14.3	beige marble, 50-60% grn.mica flake
GW109	29.9	beige marble, 50-60% silver mica
GW110	14.0	beige marble, cse.grn.mica(+-60% flake)
GW111	16.1	brn.marble,fine sand,cse.grn.mica(50%)
GW112	20.7	brn.marble,fine sand,cse.grn.mica(50%)
GW113	14.7	brn.marble, +-50% fine mica
GW114	10.3	beige-ornge.marbl, fine sand,40-50%mica
GW115	15.0	bg. marb-decomp.,40-50% cse.silver mica
GW116	12.7	bg. marb-decomp.,40-45% cse.silver mica
GW117	23.0	bg. marb-decomp.,45-50% cse.silver mica
GW118	4.2	beige marble-decomp, 50-55% fine mica
GW119	41.8	beige marb,decomp, 50-60% cse.grn.mica
GW120	17.1	beige marble-peg., 50-55% grn.mica flake
GW121	26.4	buff marble-peg, 30-40% fine mica flake
GW122	32.0	buff marble, 25-30%fine silver mica
GW123	19.3	buff marble, fine sand, 15-20%silver mica
GW124	10.6	beige marble,silt-sand, 20-25%silv.mica

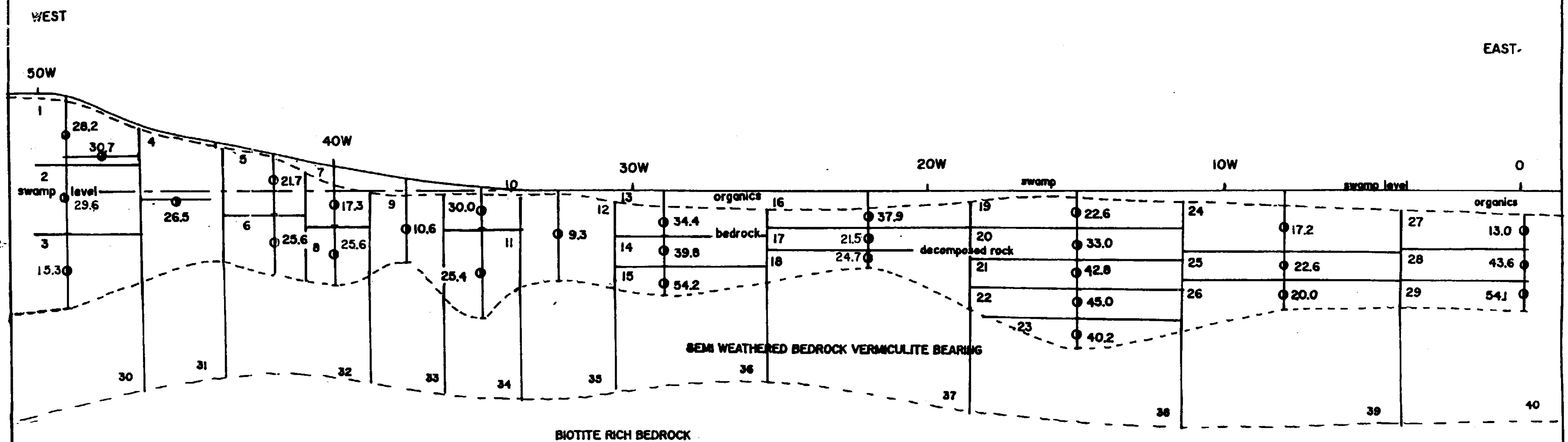
GW125	19.0	buff mrble-20-30% fine grn.mica
GW126	52.5	buff marble-peg, 40-50% grn.mica flake
GW127	30.5	beige marble, +-40% green mica flake
GW128	20.3	beige marble, +-40% green mica flake
GW129	8.9	amphibolite-marble, 20-30% fine mica,

Regis Resources Inc.
Cavendish Backhoe Trenching Program
HW Trench

Sample #	Vermiculite %	Description of Sample
HW1	39.5	cse.grn.mica(30-50%) in marble-swirls
HW2	44.0	beige marble,cse.grn.mica40-50%
HW3	34.2	buff marble, fine sand L250N-300W
HW4	31.3	beige marble, +30% fine green mica cont
HW5	31.6	beige marble,cse. sand, fine silvmica,-30%
HW6	28.9	beige marble, +25% green mica flake
HW7	38.0	beige marble, fine sand, +30% grn.mica
HW8	28.6	beige marble, fine sand
HW9	42.4	beige marble,peg.seams,+40% grn.mica
HW10	33.3	beige marble, fine sand, +30% grn.mica
HW11	41.9	beige marble, fine sand
HW12	32.0	Fault @46m-change dip
HW13	37.6	beige marble, fine silt-sand,+25%cont.
HW14	44.6	beige marble,fine sand,+40% silv.mica
HW15	33.4	beige marble with 30-40% grn.mica flake
HW16	23.8	amphibolite -peg.-marble, fine sand
HW17	7.8	amphibolite with beige mica, fine sand
HW18	22.7	beige marble,fine sand +20% mica(green)
HW19	15.1	beige marble, fine sand, -20% mica cont
HW20	33.5	beige marble med. sand
HW21	27.4	beige marble, +25% fine silver mica
HW22	24.8	beige marble,grn.mica 20-30% mica
HW23	24.4	beige marble,low mica
HW24	23.9	beige marble, very fine mica content
HW25	28.1	beige marble, low mica(L200N-242W
HW30	36.6	brn.marble,cse.grn mica+40% blk.flake
HW31	11.4	beige marble3, fine sand,low mica cont.
HW32	18.9	beige marble, cse. sand, -20% mica cont
HW33	23.9	beige marble, cse. sand/frag.+15%mica
HW34	26.7	beige marble, fine sand 15-20% mica
HW35	30.3	beige marble,fine sand,+25%mica
HW36	35.0	beige marble fine sand-silt,+30% mica
HW37	36.7	red-orange sand-amphibolite-marble
HW38	21.8	beige marble, fine sand +20% silv.mica
HW39	28.3	beige marble,fine sand
HW40	40.8	beige marble with pink peg., fine mica cont
HW41	41.1	beige marble, fine sand,+20% mica
HW42	19.5	beige marble,fine sand, ,fine silv.flake

HW43	25.7	beige marble,fine sand,+25% mica
HW44	16.1	beige marble, fine sand, amphibolitic
HW45	14.8	grn-bge marble, fine sand,20-30%mica(gn
HW46	30.4	beige marble, +30% fine grn.mica
HW47	30.7	beige marble, fine sand, +25% fine mica
HW48	21.5	beige marble,fine sand,-20% mica
HW49	31.0	beige marble, fine sand
HW50	7.9	dk.brn.marble, -10% blk. mica
HW51	9.0	amphibolite with low mica content
HW52	17.4	amphibolitic with +15% fine mica
HW53	10.0	amphibolitic+marble, fine sand with fn. mic
HW54	2.9	amphibolite +marble,beige colour silt
HW55	5.4	amphibolite,orange-yellow, fine sand
HW56	5.9	amphibolite, fine sand, beige colour
HW57	2.1	grn.-red amphib.gneiss, fine sand
HW58	9.9	amphibolite gneiss,buff-orange colour
HW59	9.5	amphibolite gneiss, fine sand, beige col.
HW60	4.3	amphibolite gneiss, beige colour, fine sand
HW61	10.0	amphibolite gneiss west bound.40'W

PLA_ A1



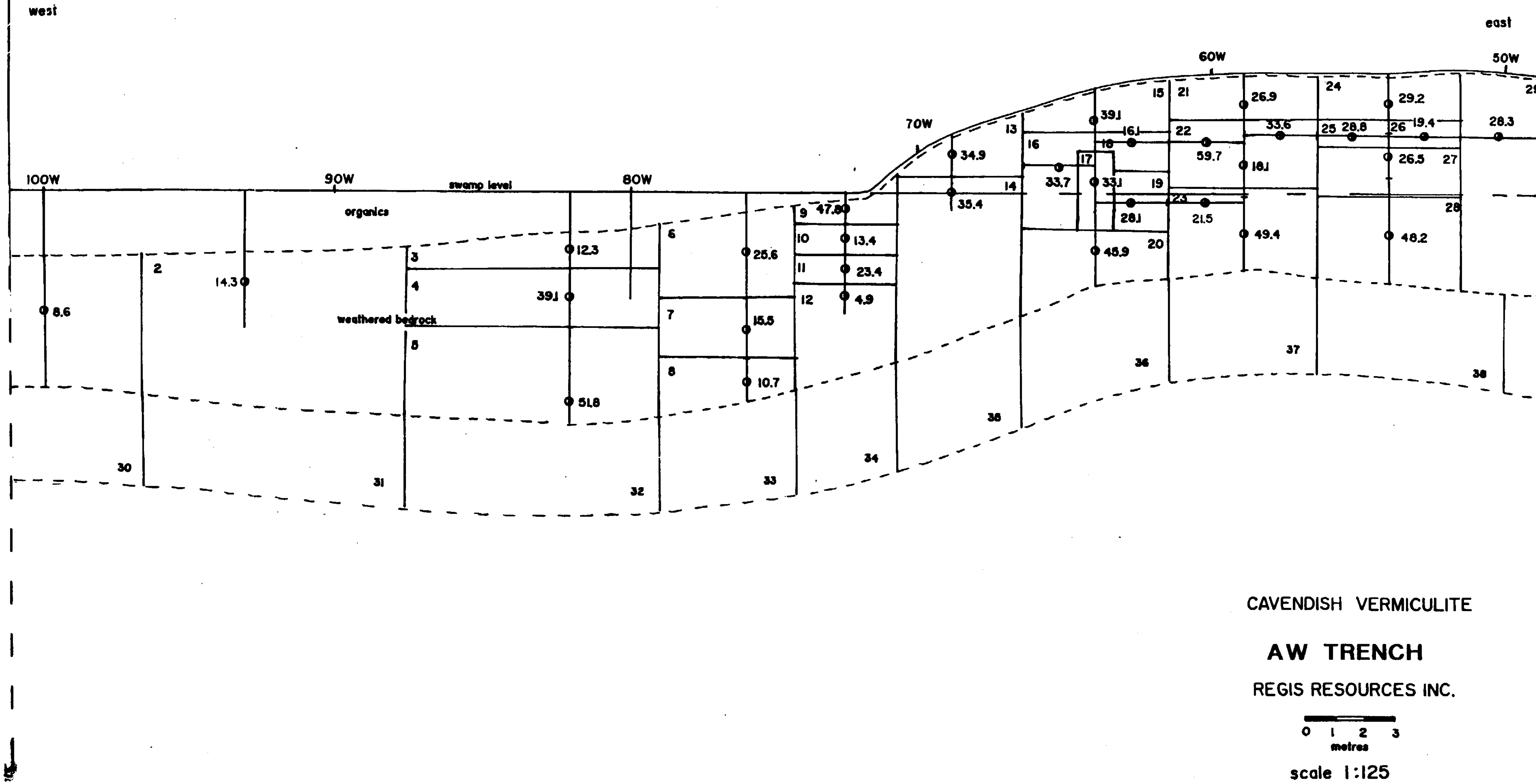
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

scale 1:125

PLATE A2



CAVENDISH VERMICULITE

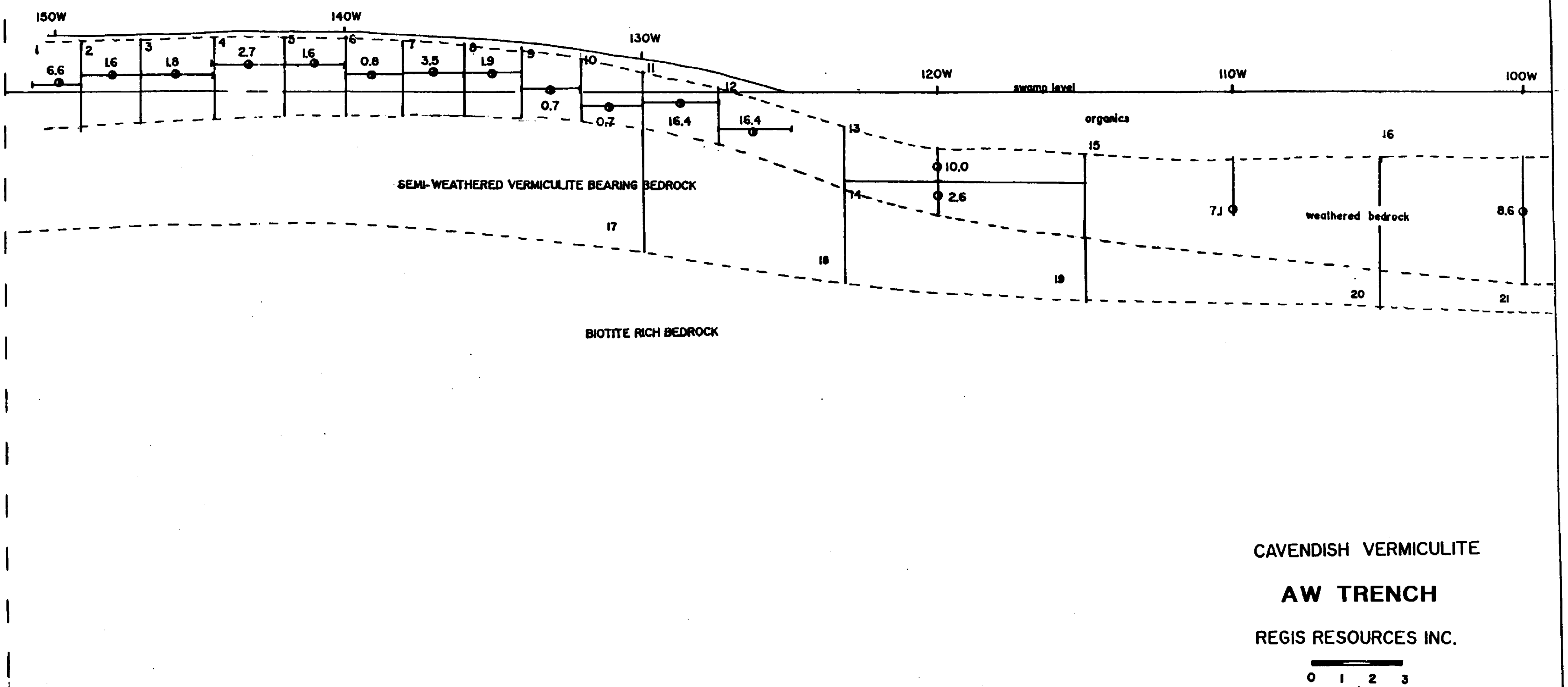
AW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

scale 1:125

PLATE



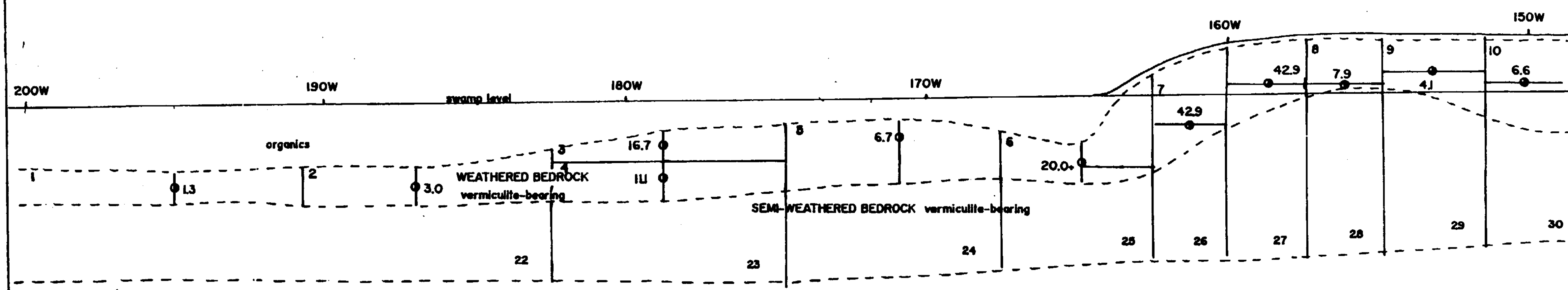
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

scale 1 to 125

PLATE A4



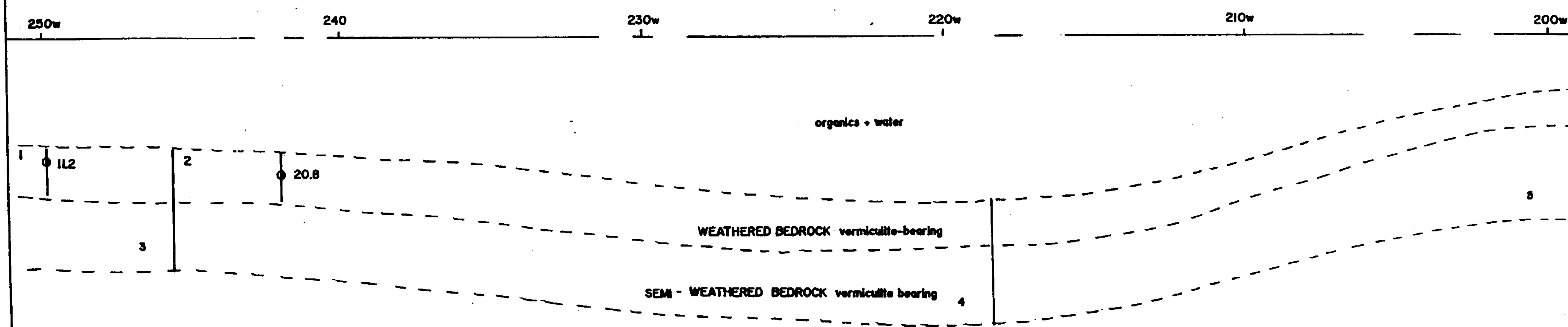
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE A5



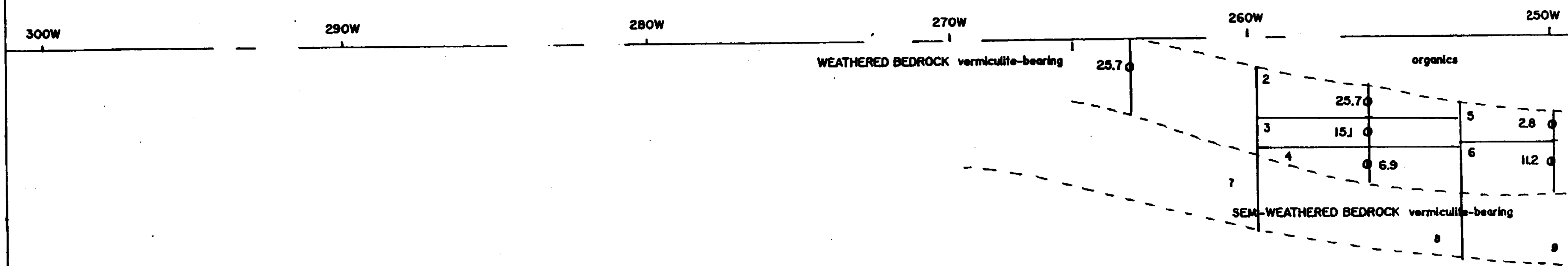
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE A6



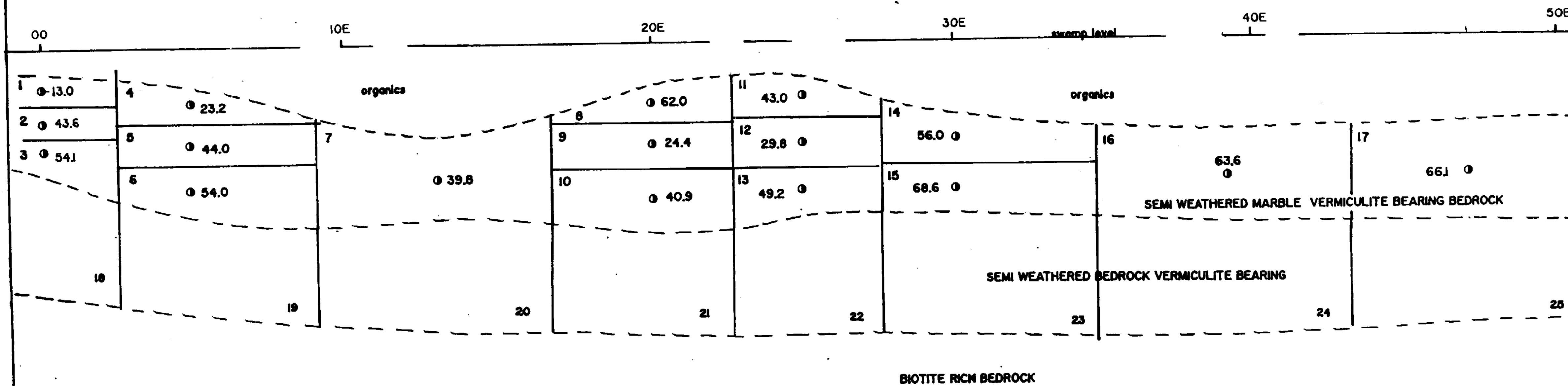
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PL..TE A7

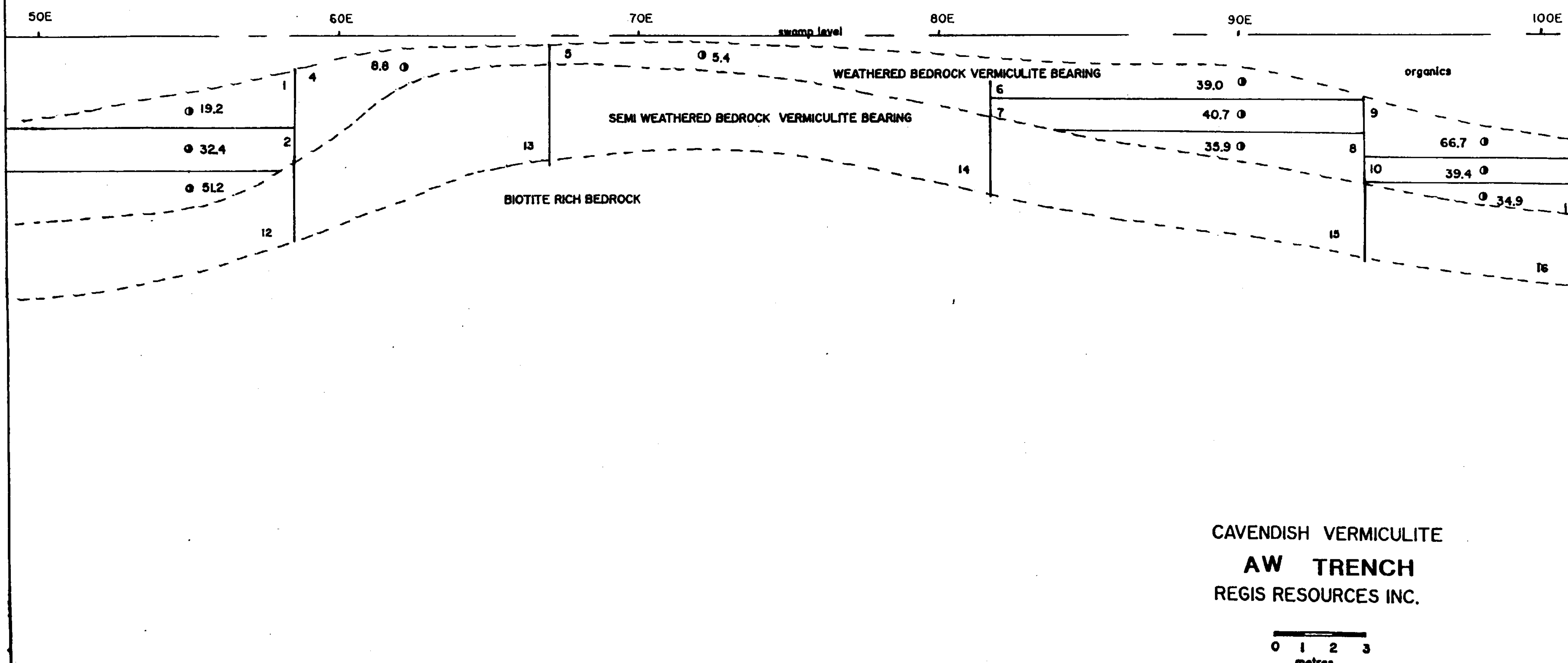


CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

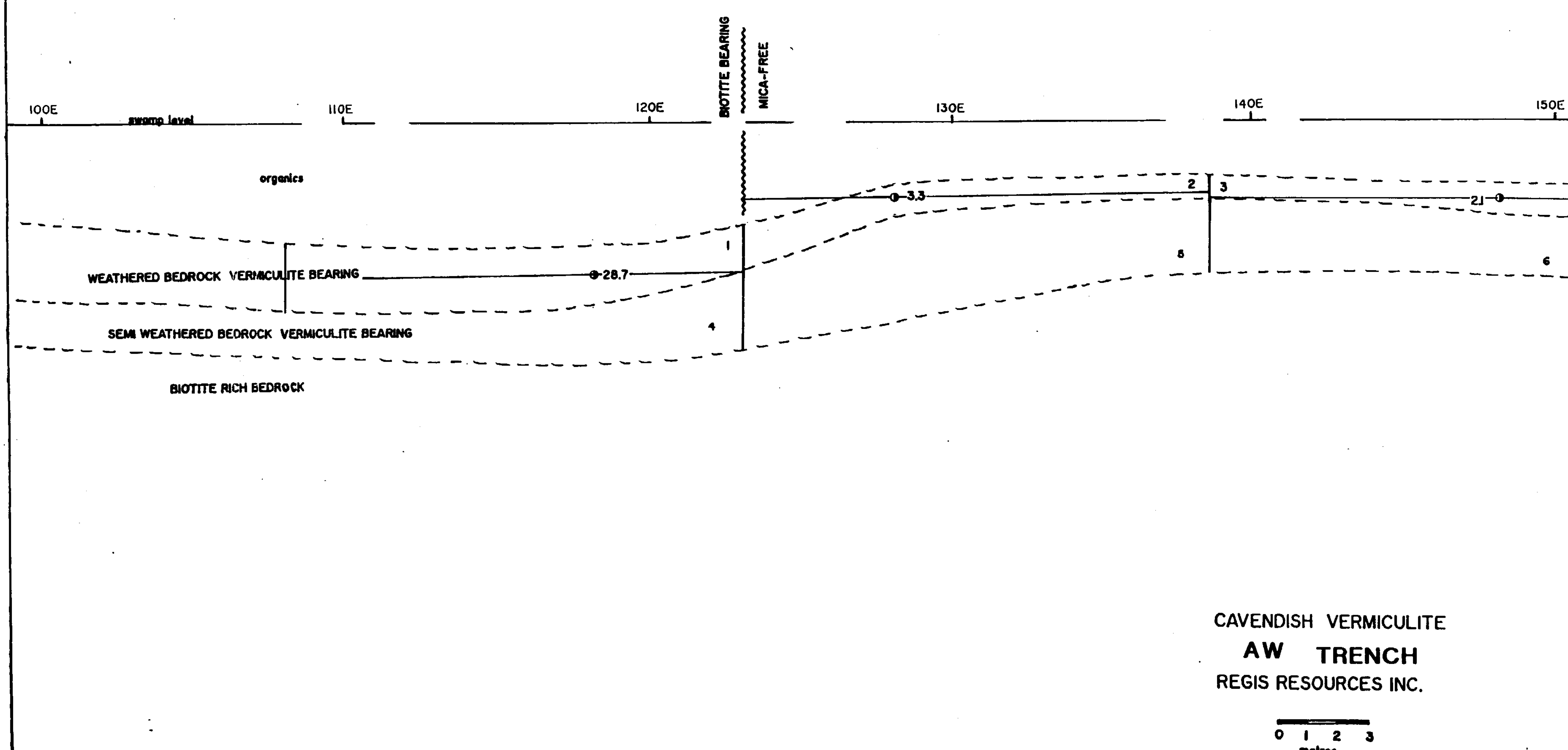
0 1 2 3
metres



CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

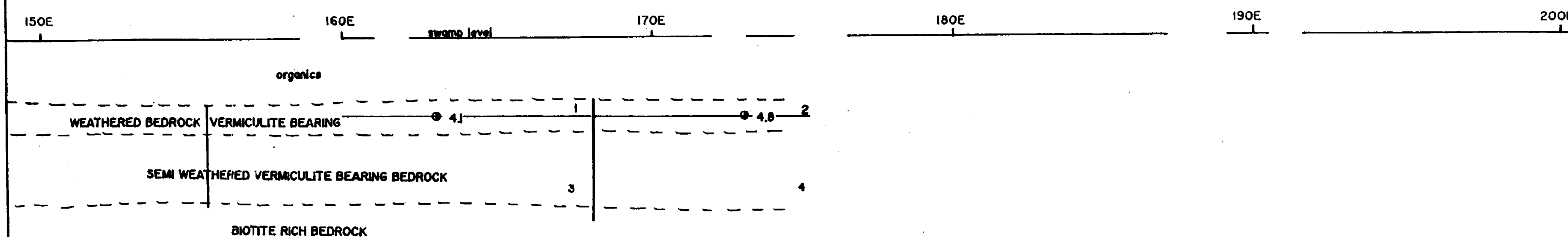


CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

PLATE A10



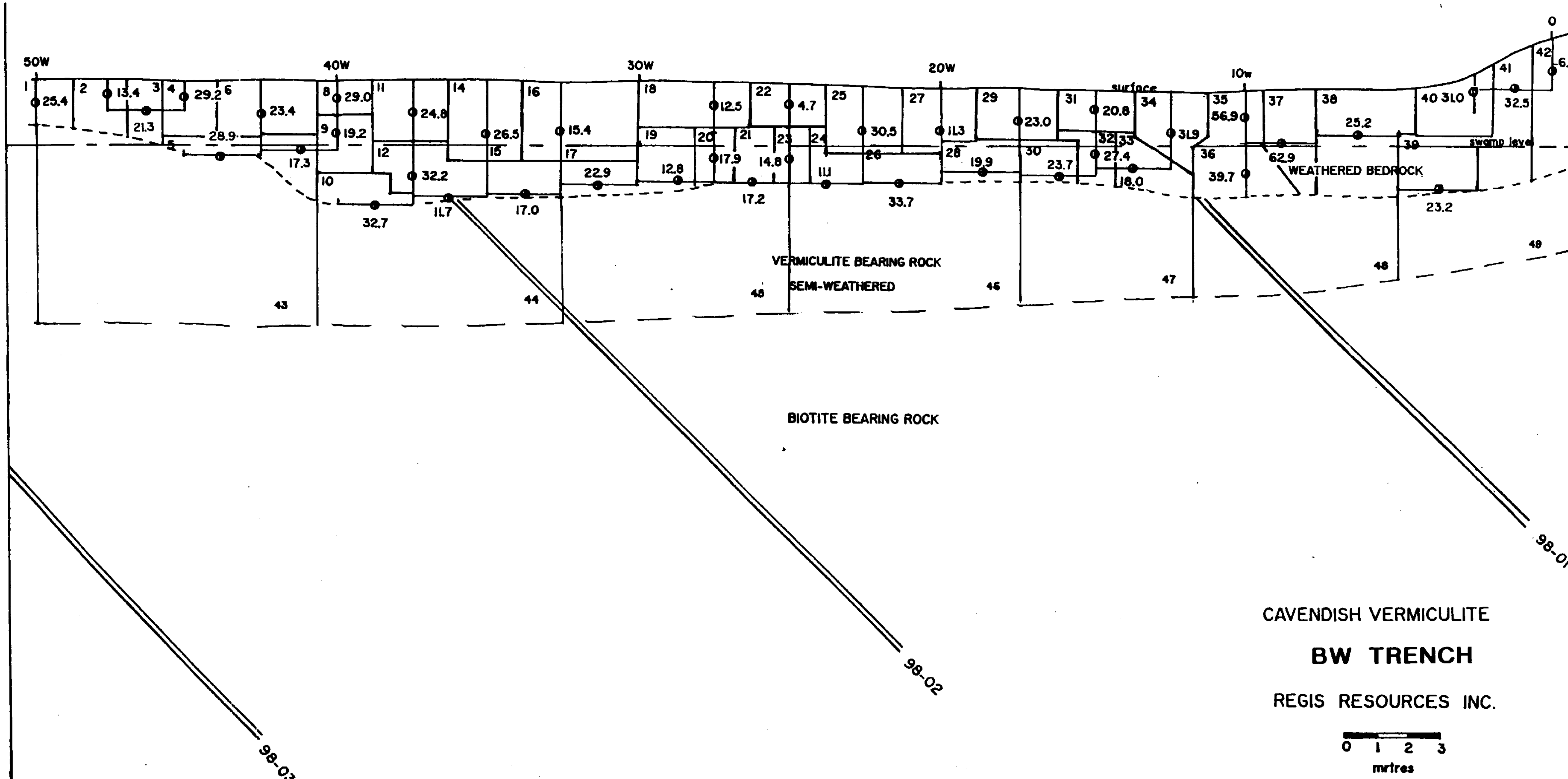
CAVENDISH VERMICULITE

AW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE B1



CAVENDISH VERMICULITE

BW TRENCH

REGIS RESOURCES INC.

0 1 2 3
mrtres
scale 1 to 125

PLATE B2

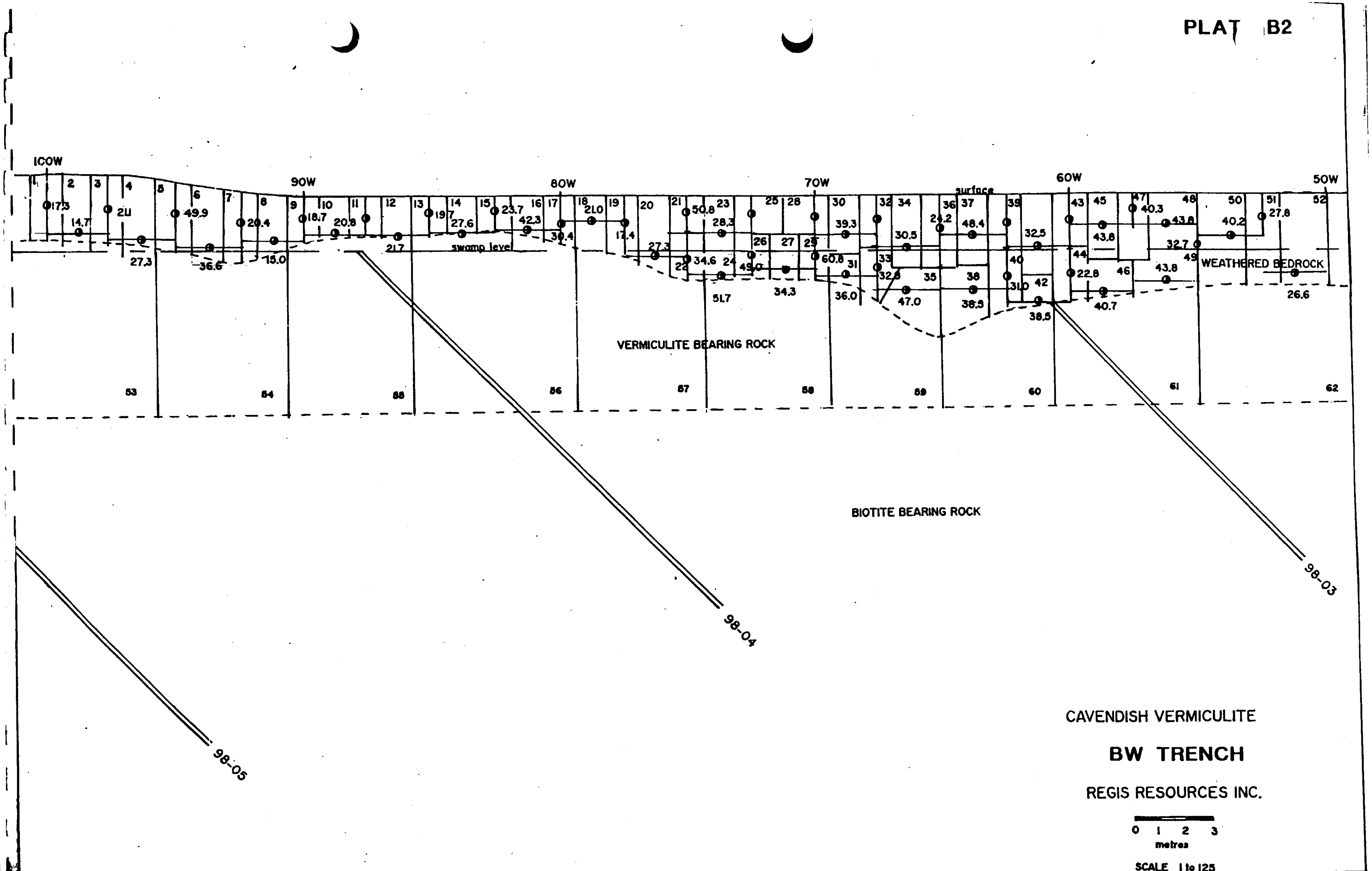
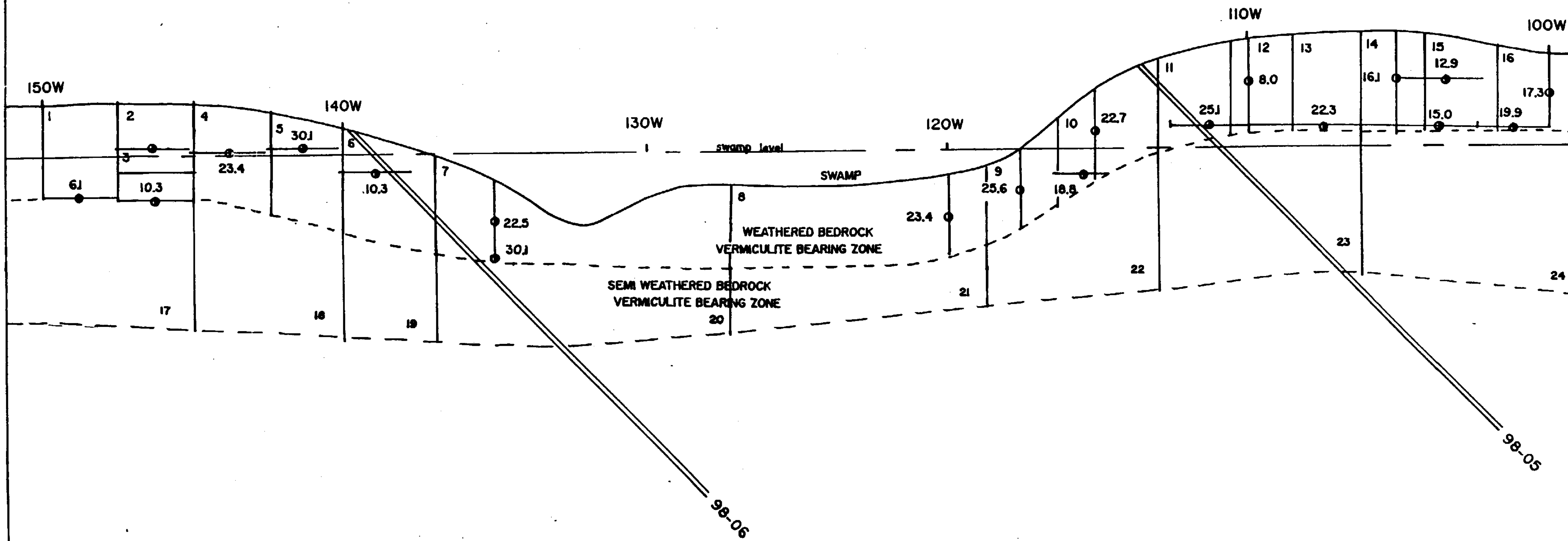

100W
90W
80W
70W
60W
50W
surface
swamp level
WEATHERED BEDROCK
VERMICULITE BEARING ROCK
BIOTITE BEARING ROCK
98-03
98-04
98-05
CAVENDISH VERMICULITE
BW TRENCH
REGIS RESOURCES INC.
0 1 2 3
metres
SCALE 1 to 125

PLATE B3



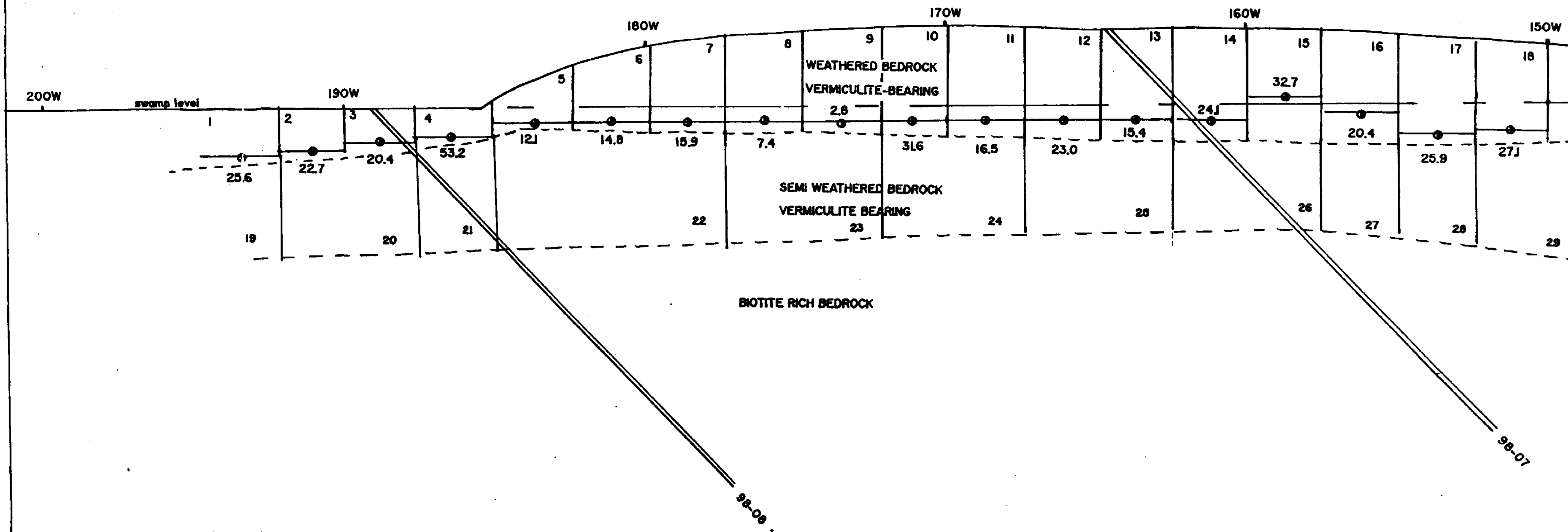
CAVENDISH VERMICULITE

BW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres
scale

PLATE B4



CAVENDISH VERMICULITE

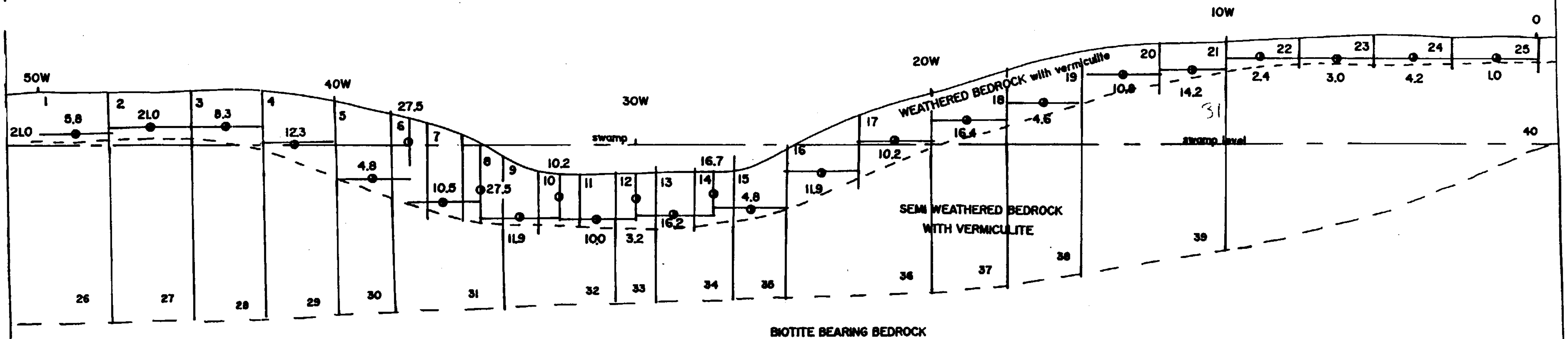
BW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

scale 1 to 125

PLATE, C1



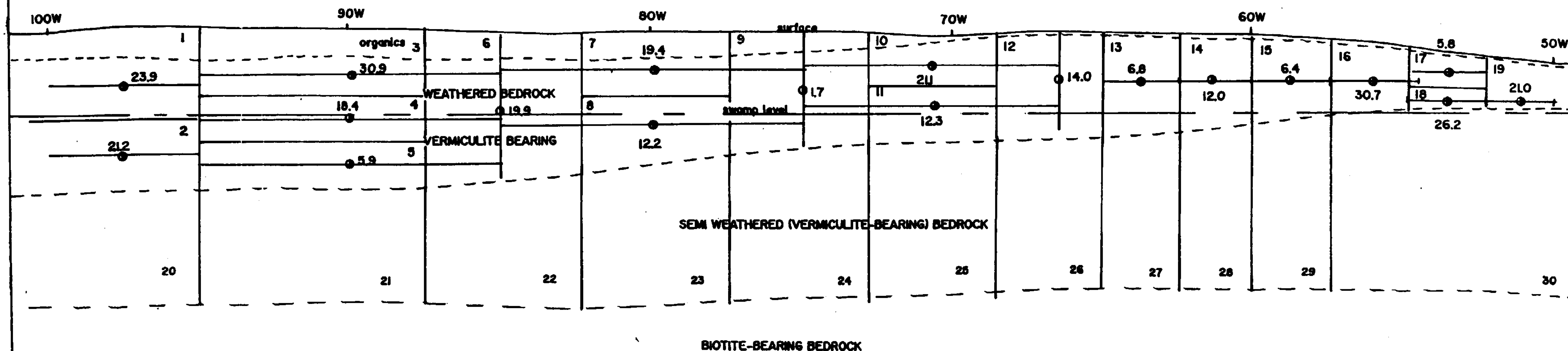
CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE C2

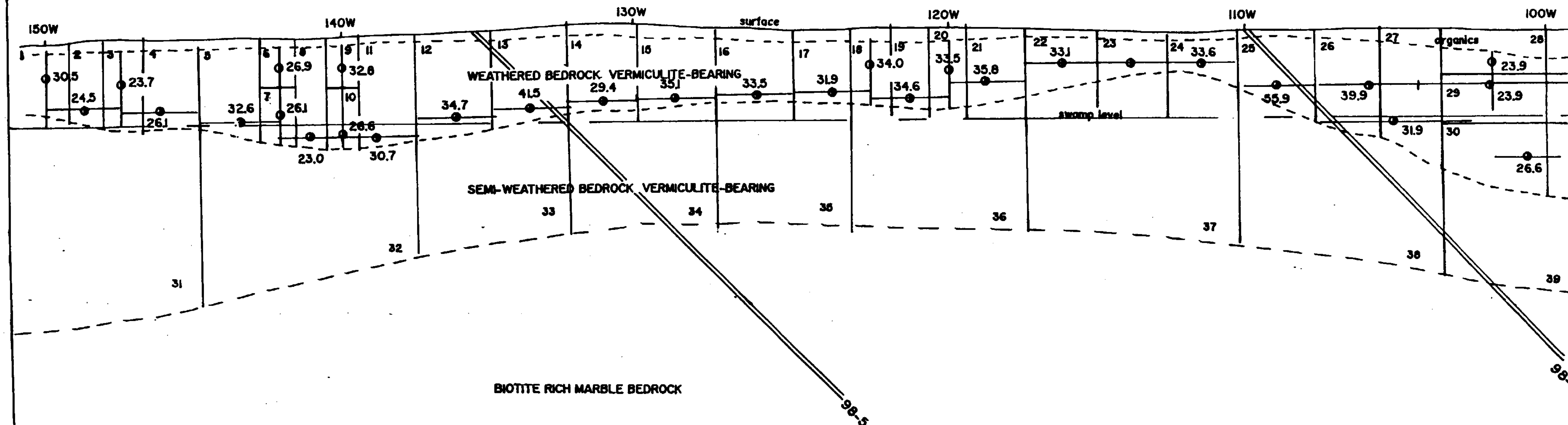


CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

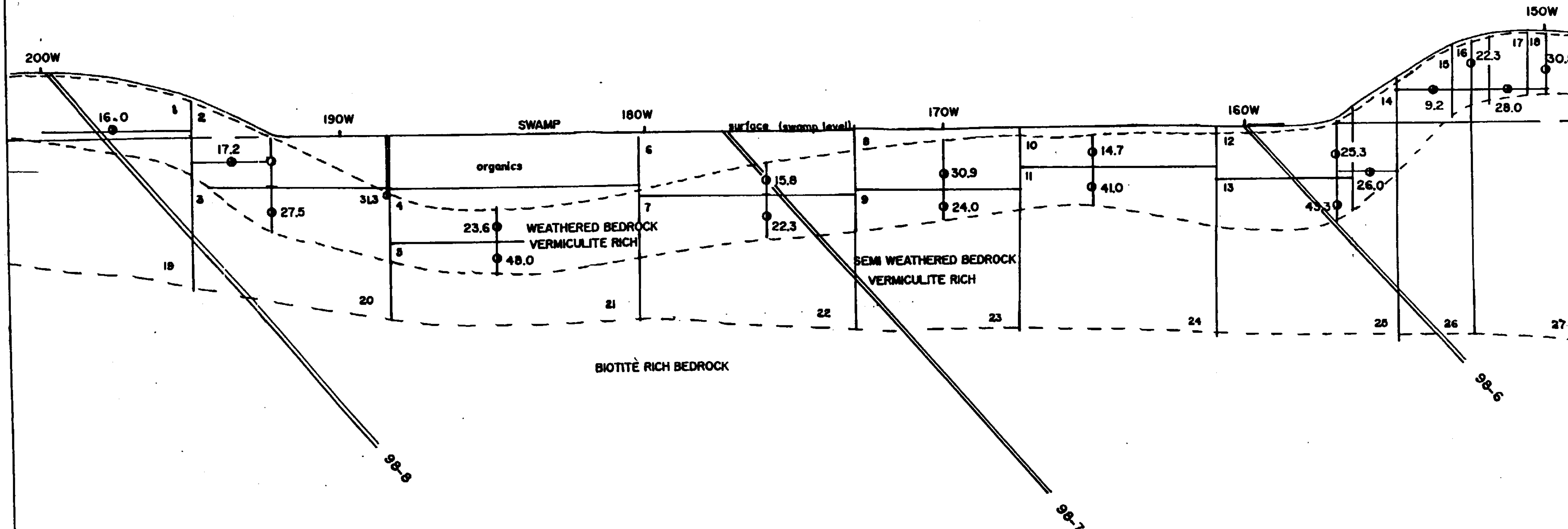


CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres



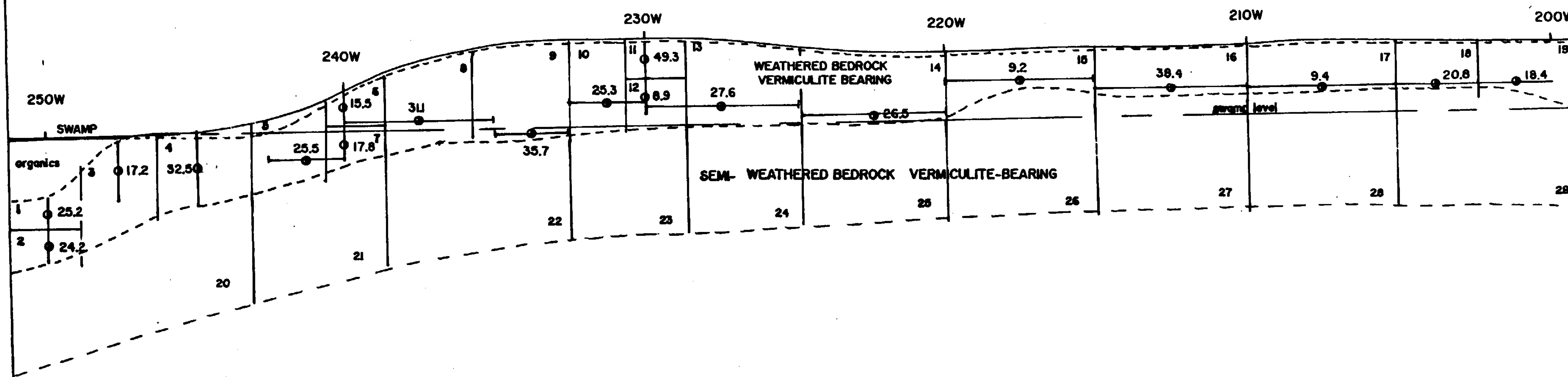
CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE C5

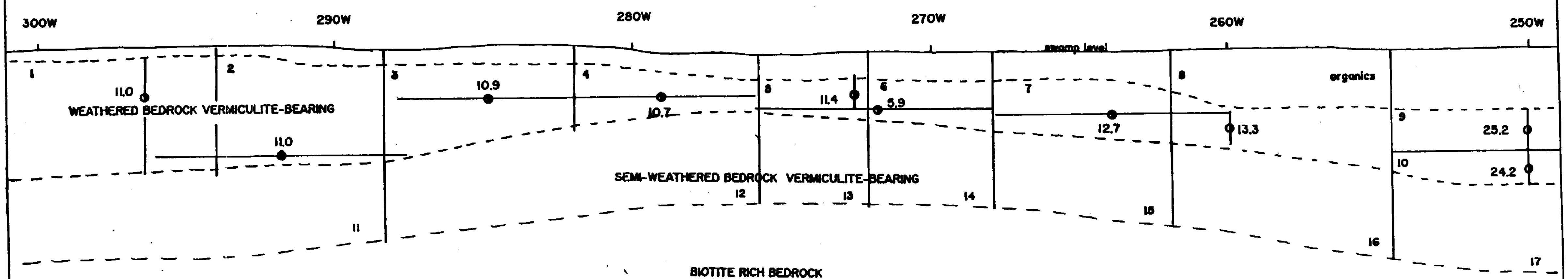


CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

PLATE C6



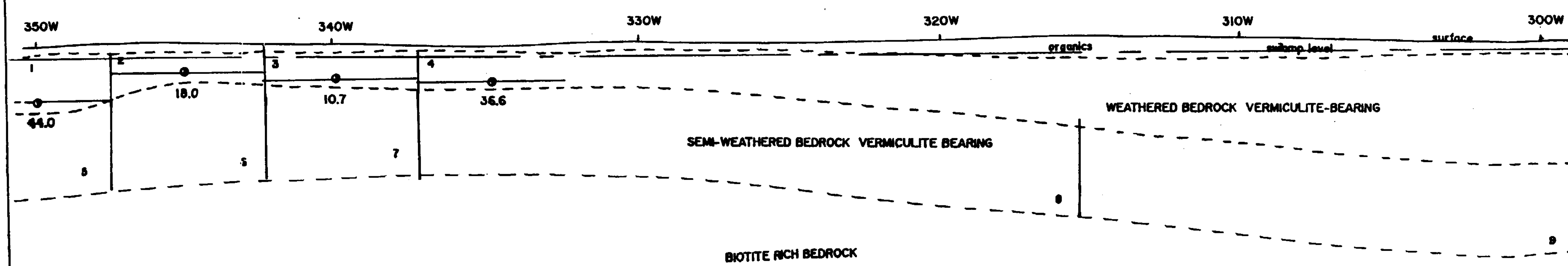
CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3

PLATE C7



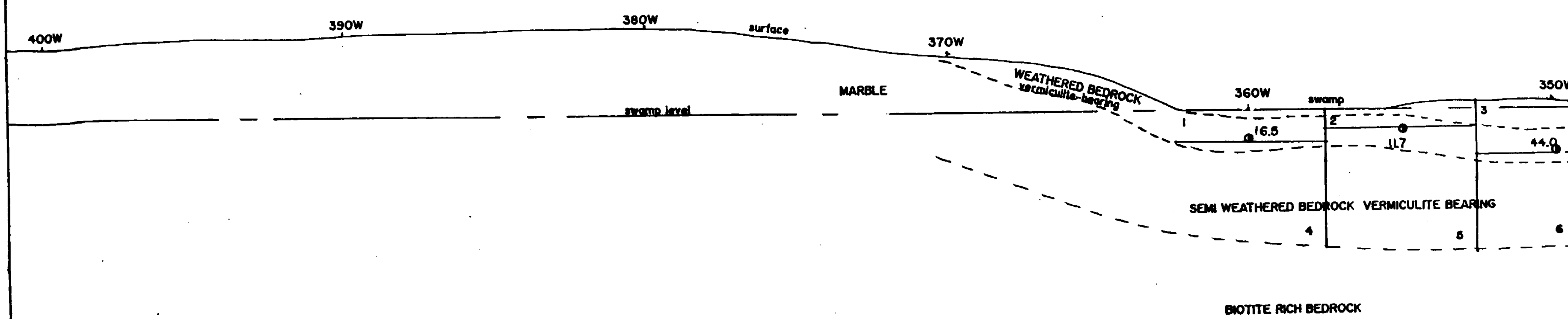
CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3

PLATE C8



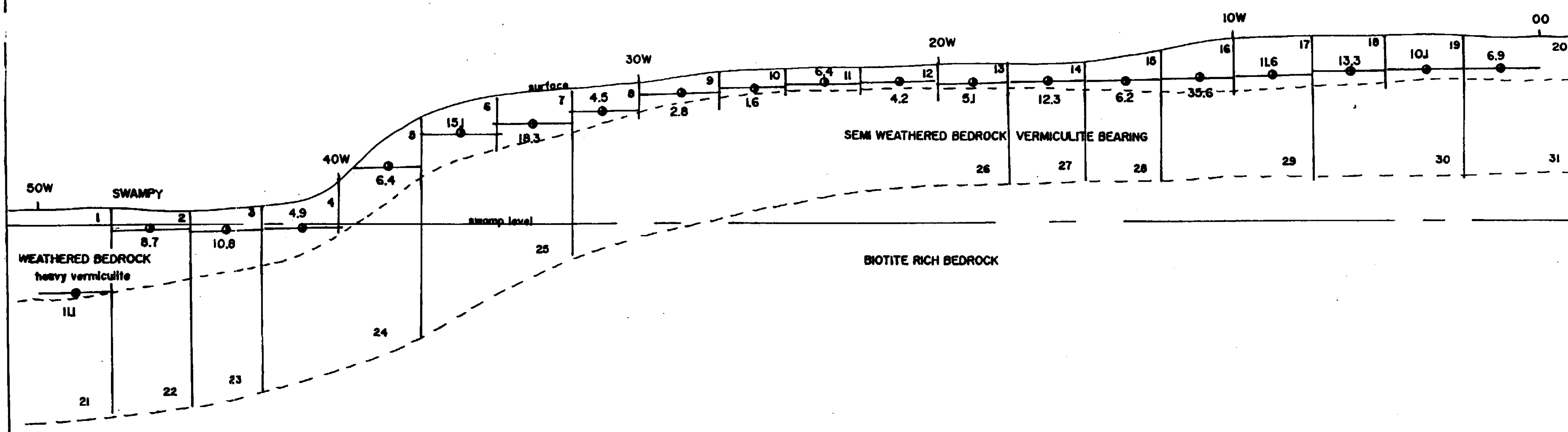
CAVENDISH VERMICULITE

CW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE D1



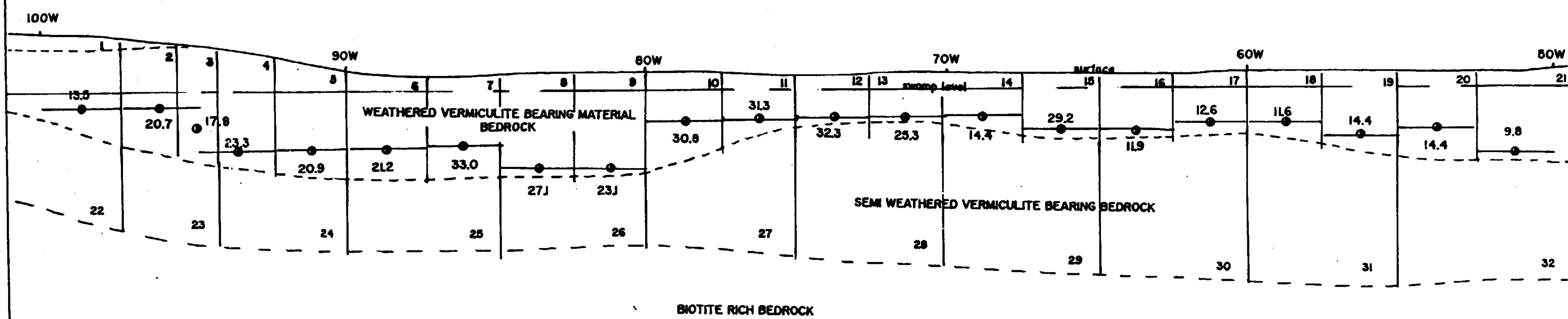
CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE D2

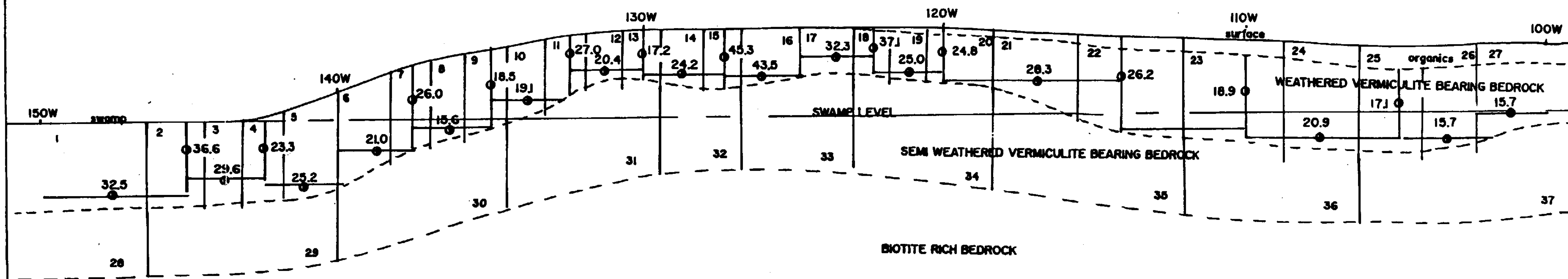


CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

PLATE D3



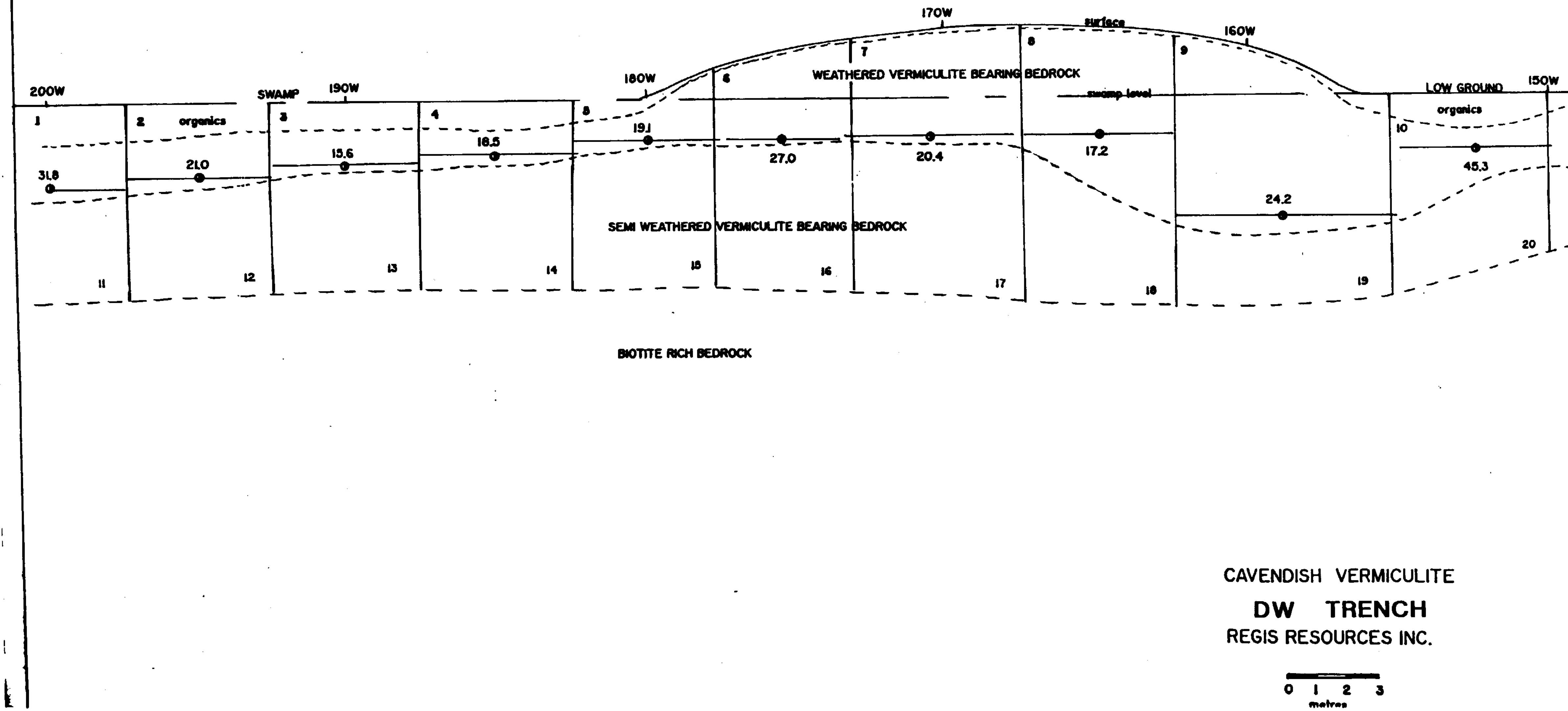
CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

0 1 2 3

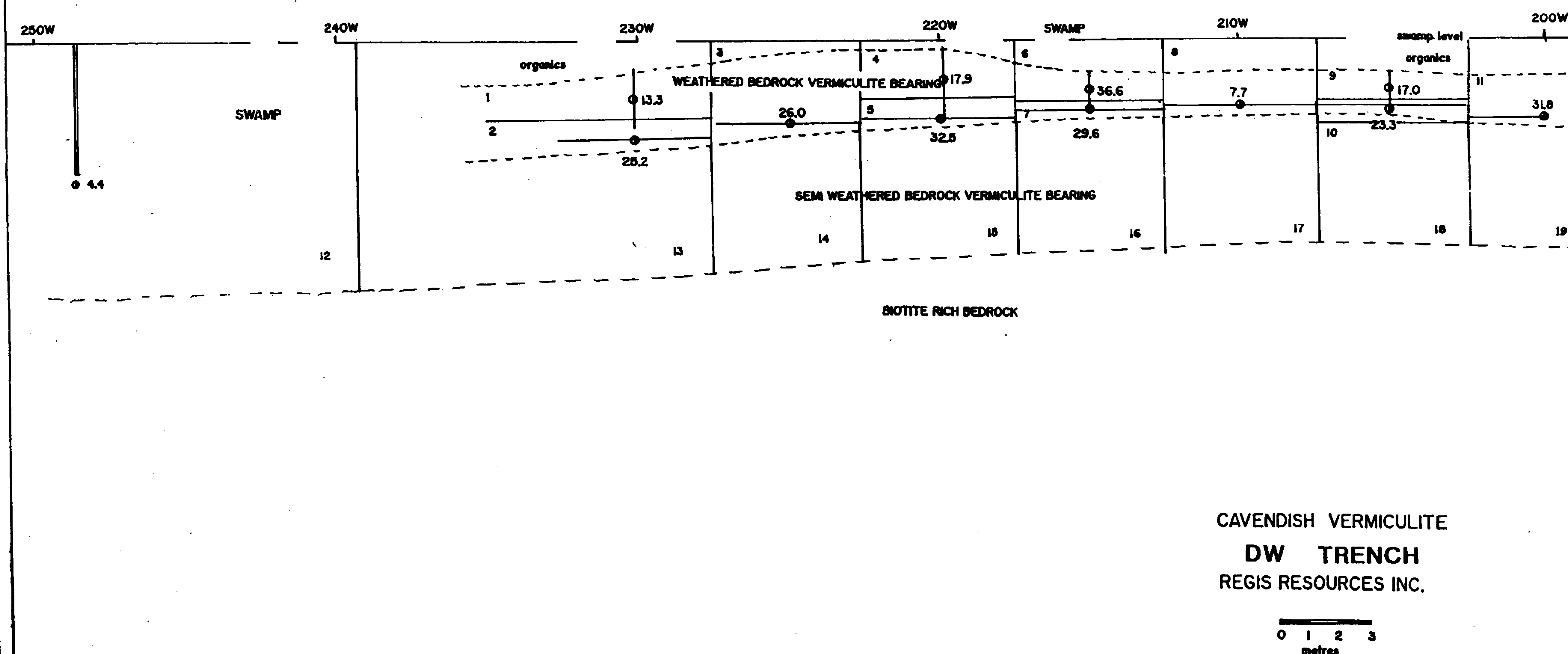
PLATE D4



CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

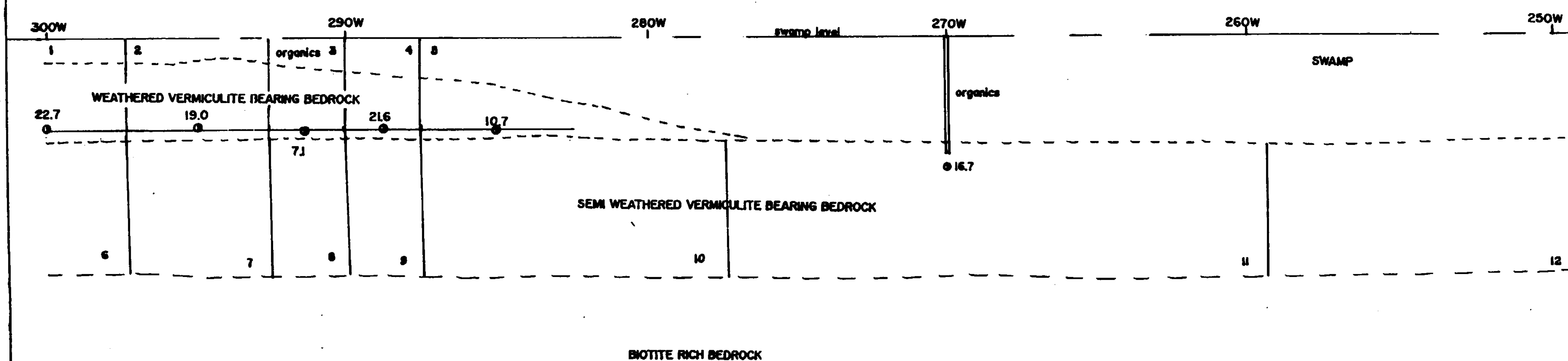


CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

PLATE D6



CAVENDISH VERMICULITE

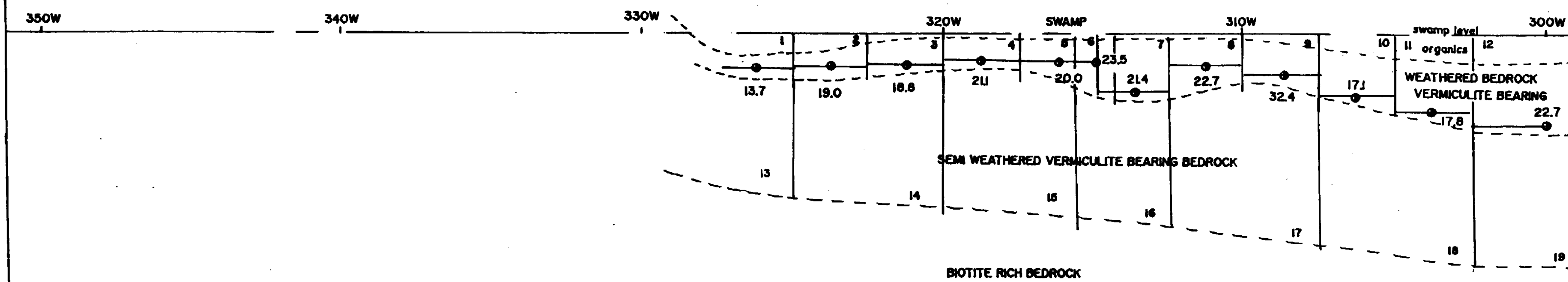
DW TRENCH

REGIS RESOURCES INC.

0 1 2 3

metres

PLATE D7



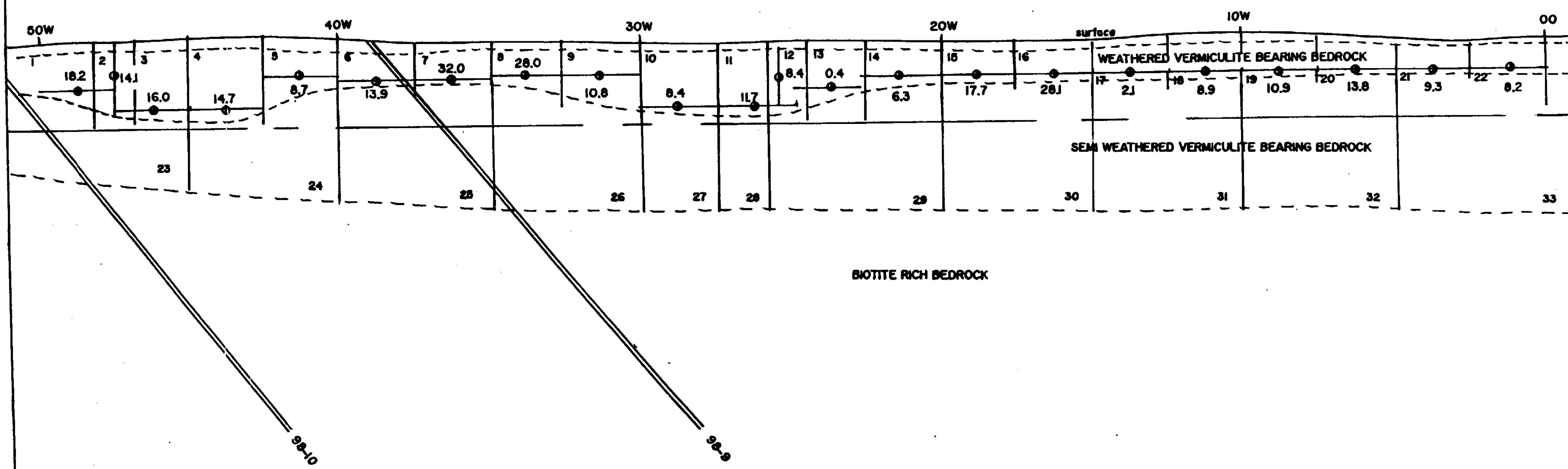
CAVENDISH VERMICULITE

DW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE E1

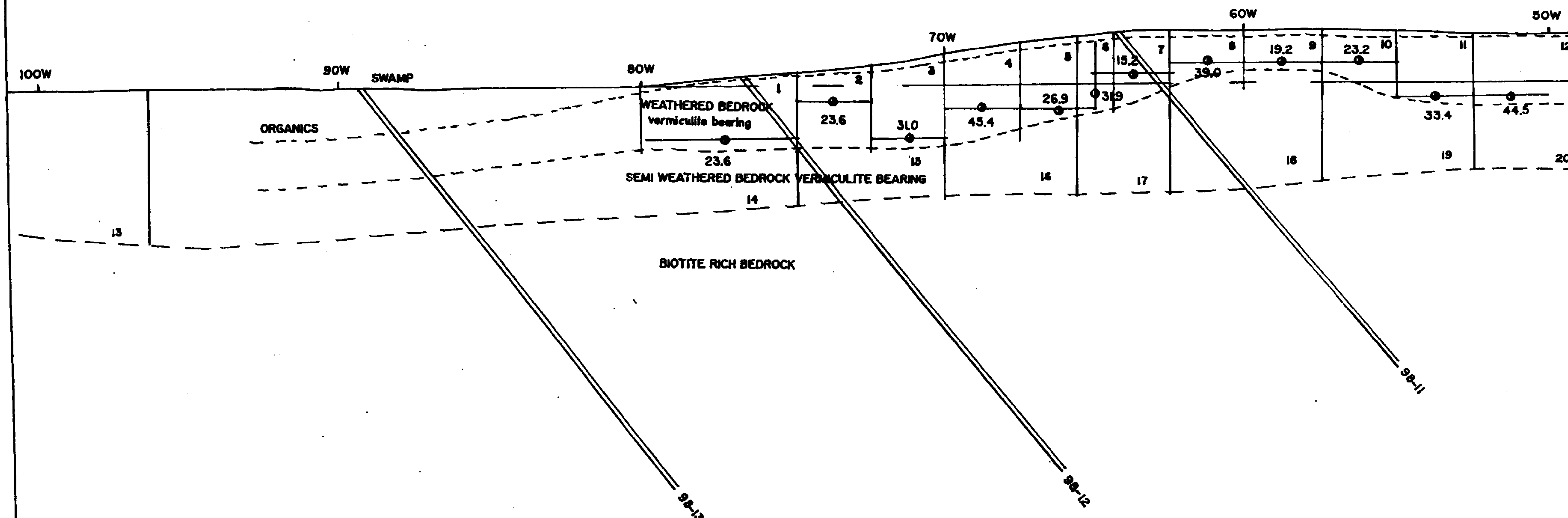


CAVENDISH VERMICULITE

EW TRENCH

REGIS RESOURCES INC.

PLATE E2

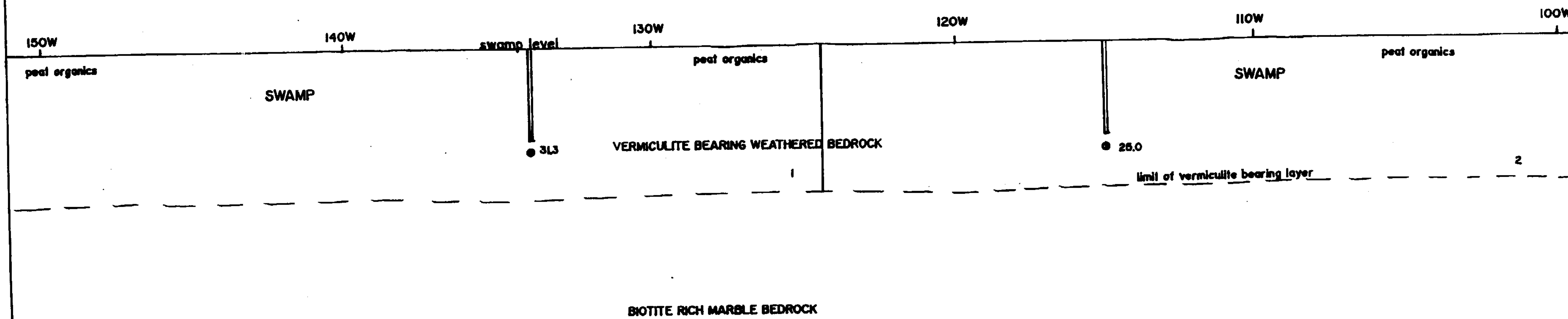


CAVENDISH VERMICULITE

EW TRENCH

REGIS RESOURCES INC.

PLATE E3



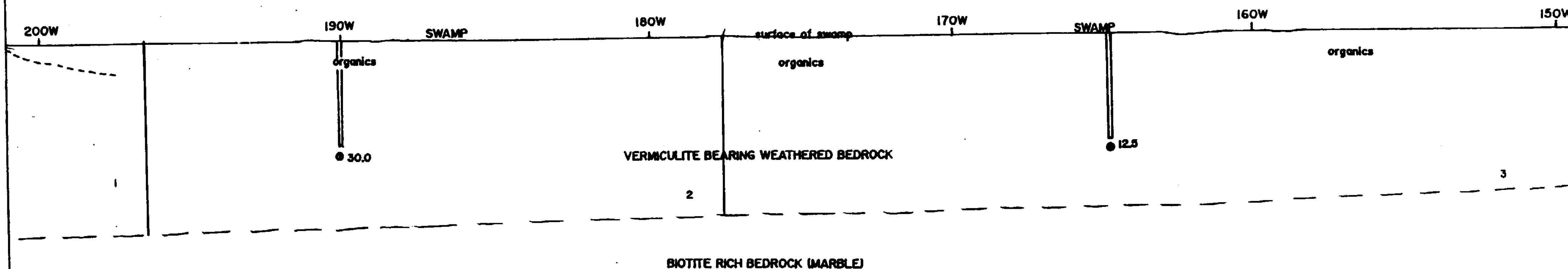
CAVENDISH VERMICULITE

EW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

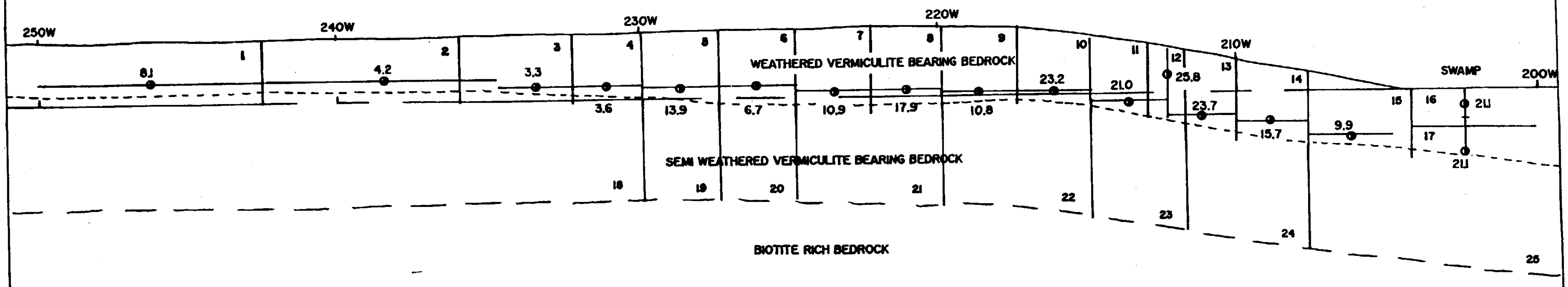
PLATE E4



CAVENDISH VERMICULITE

EW TRENCH

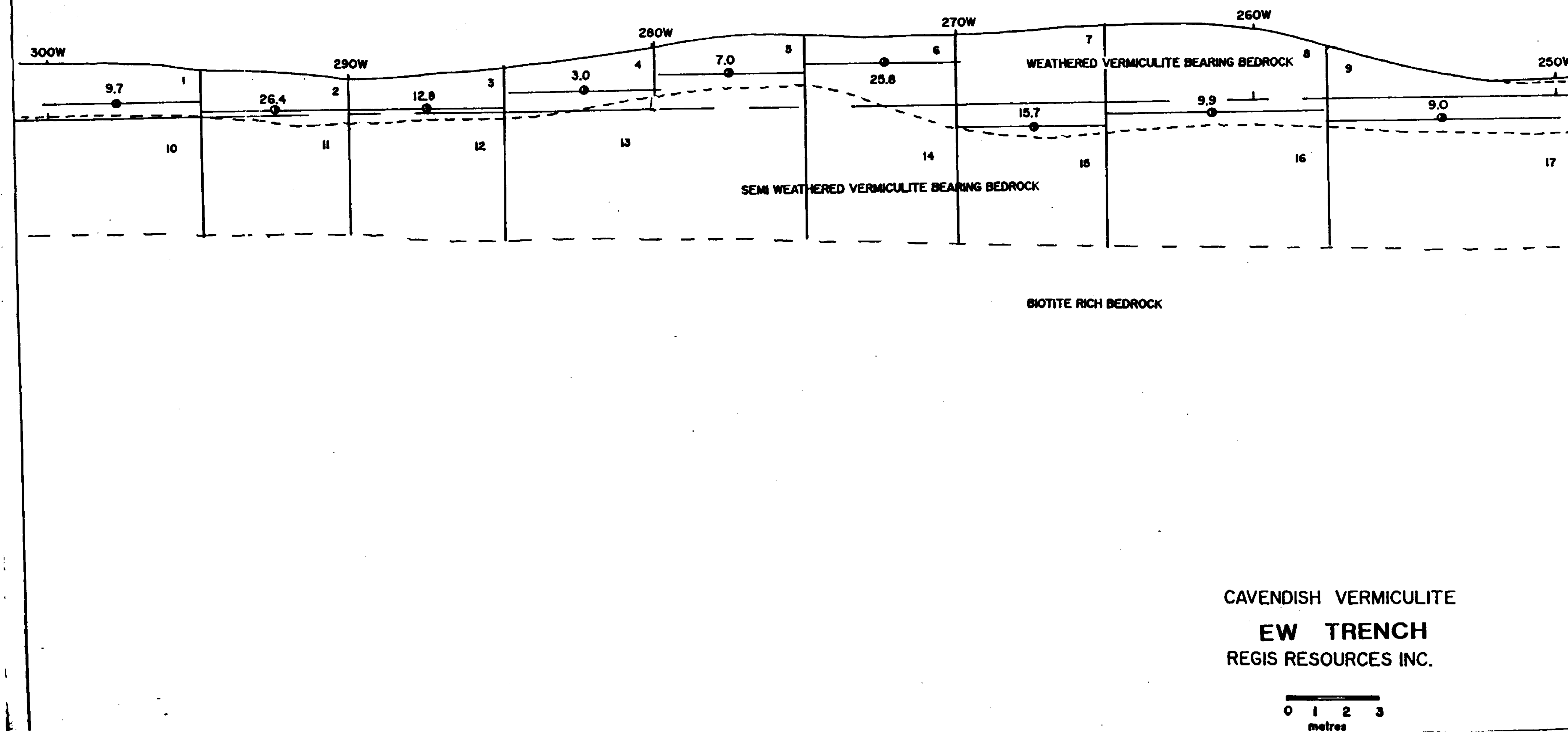
REGIS RESOURCES INC.



CAVENDISH VERMICULITE

EW TRENCH

REGIS RESOURCES INC.

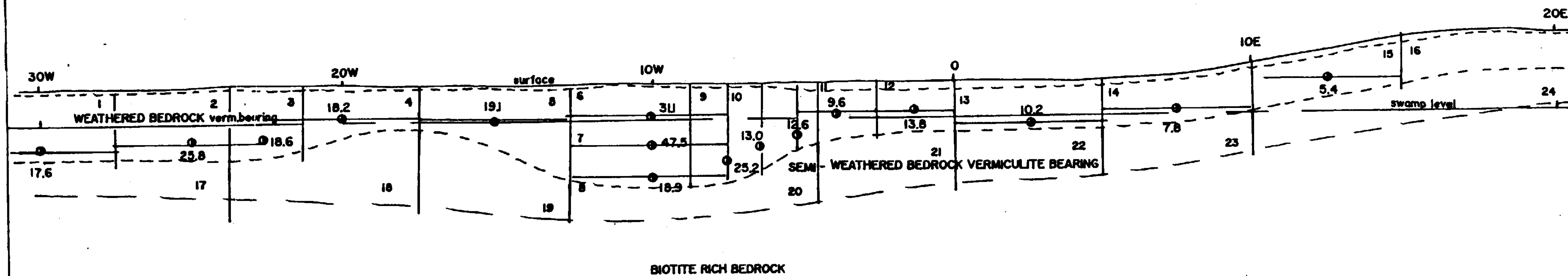


CAVENDISH VERMICULITE

EW TRENCH

REGIS RESOURCES INC.

PLATE F1

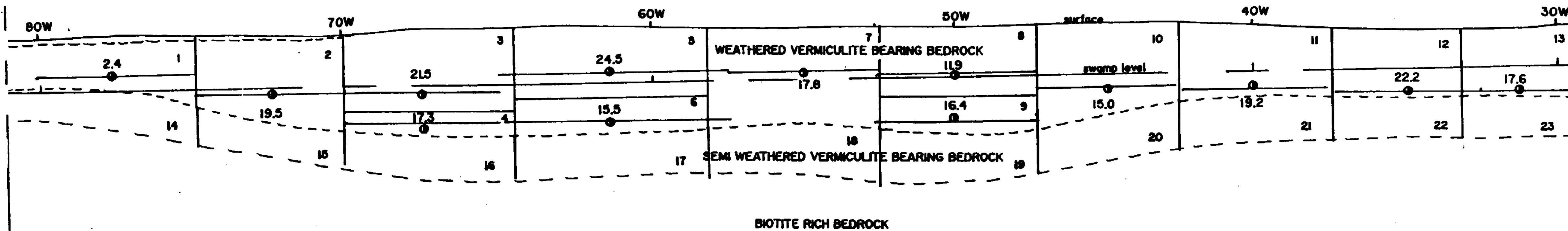


CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

PLATE F2



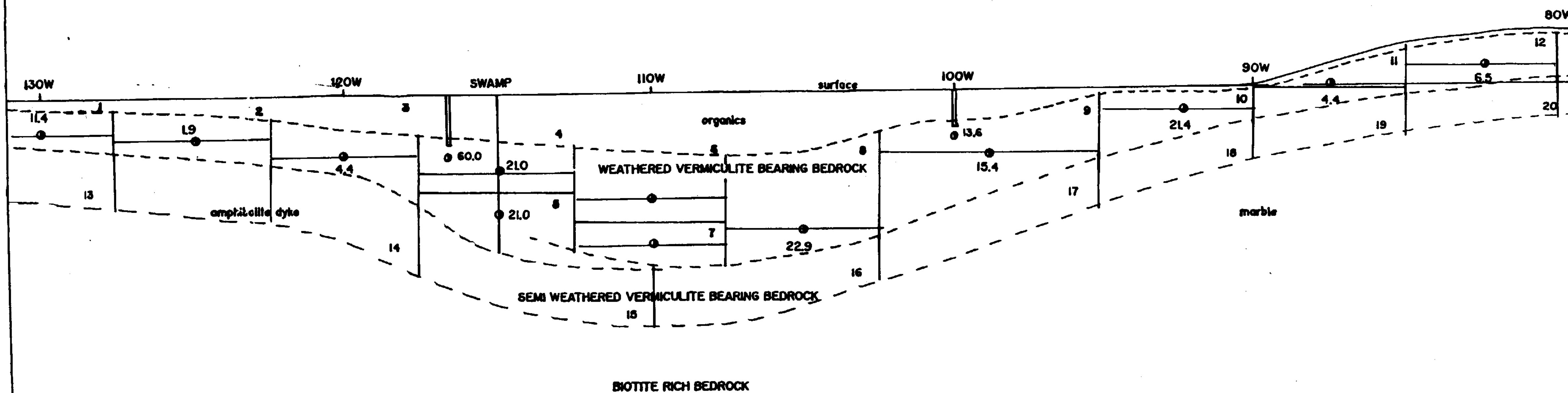
CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE F3



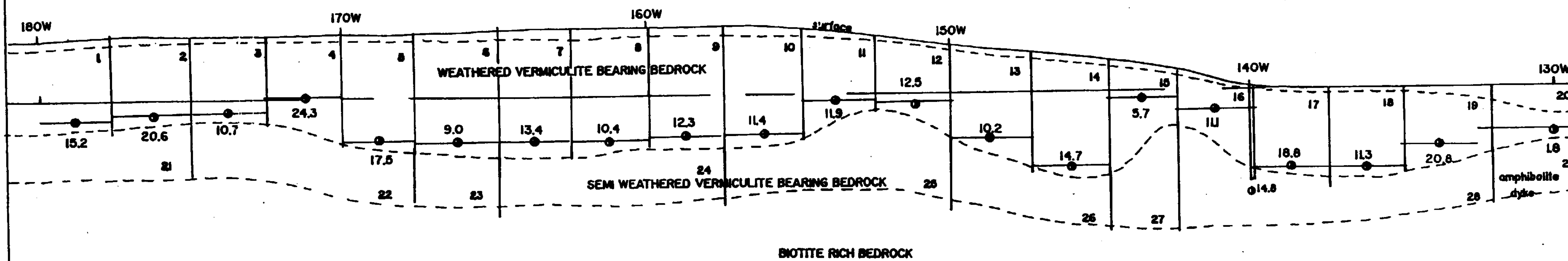
CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE F4



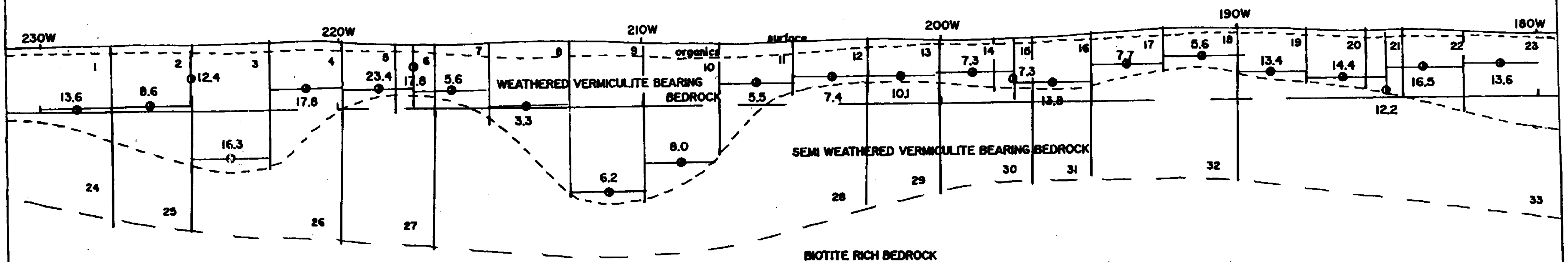
CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

0 1 2 3

PLATE F5



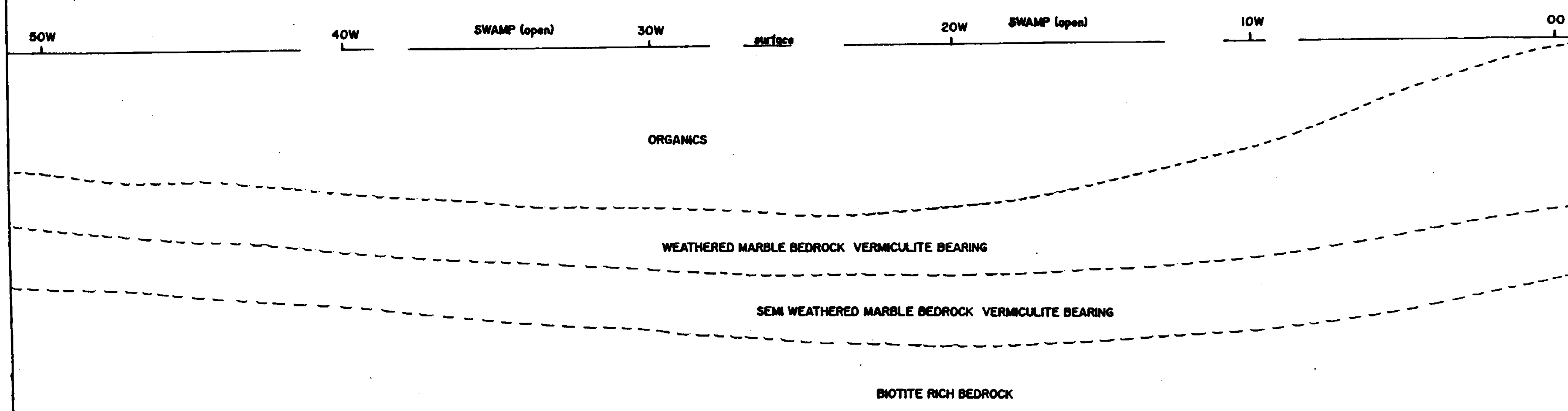
CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE H3



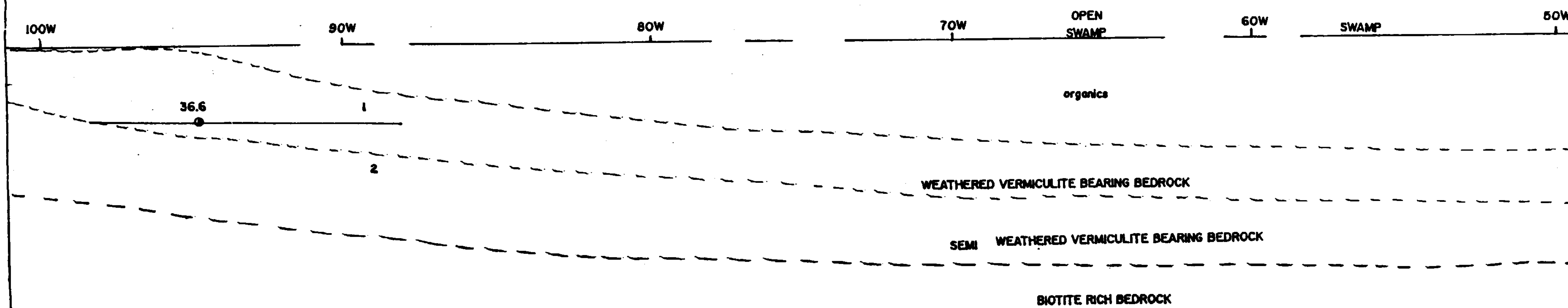
CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE H4

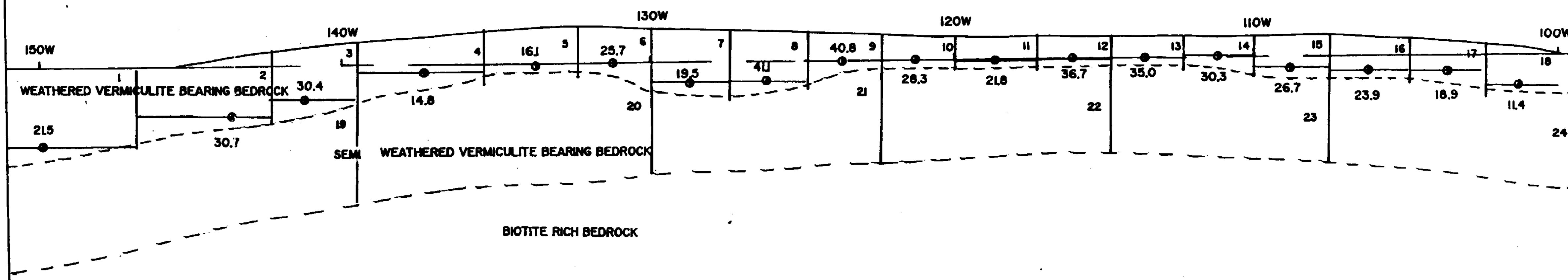


CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

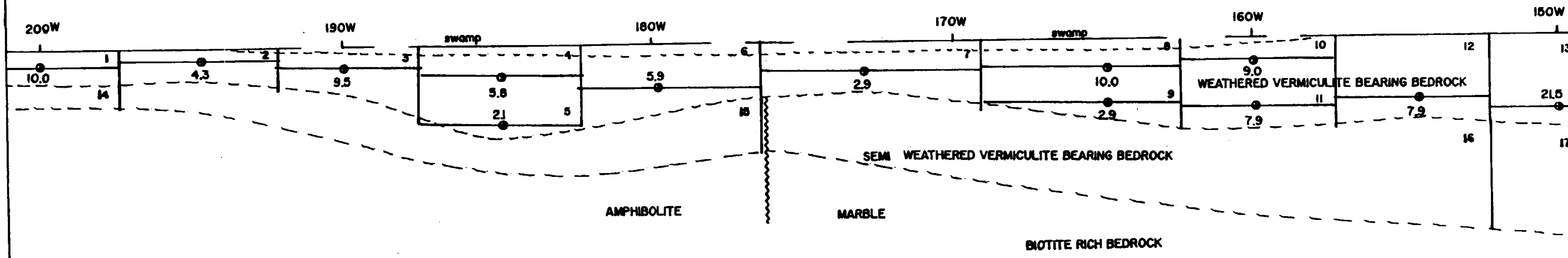
0 1 2 3
metres



CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

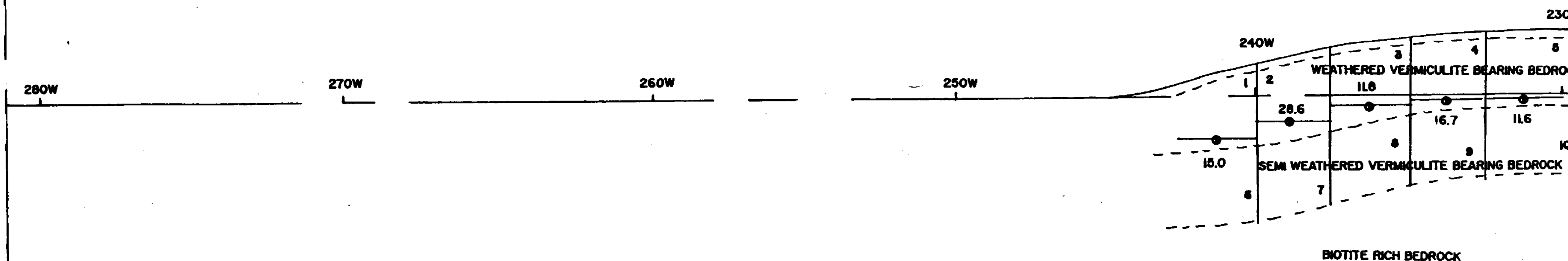


CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

PLATE F6

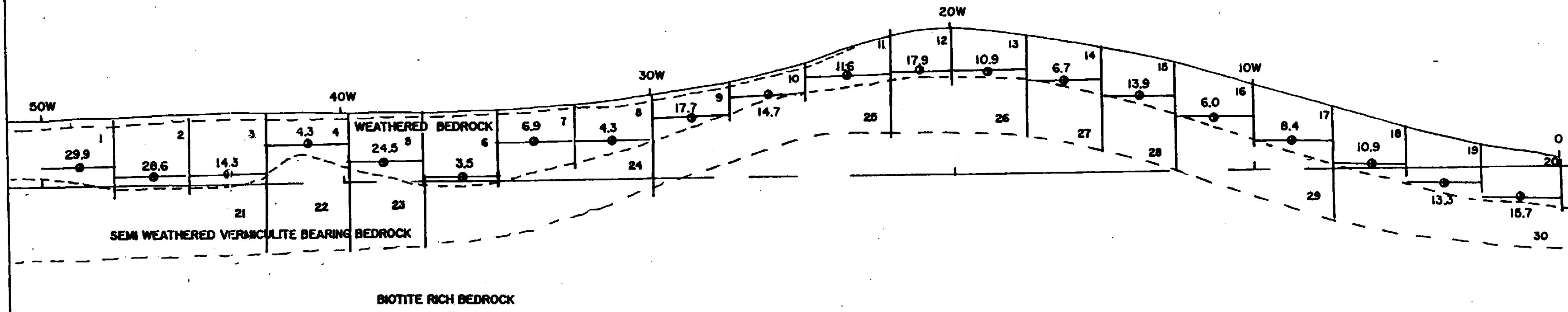


CAVENDISH VERMICULITE

FW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres



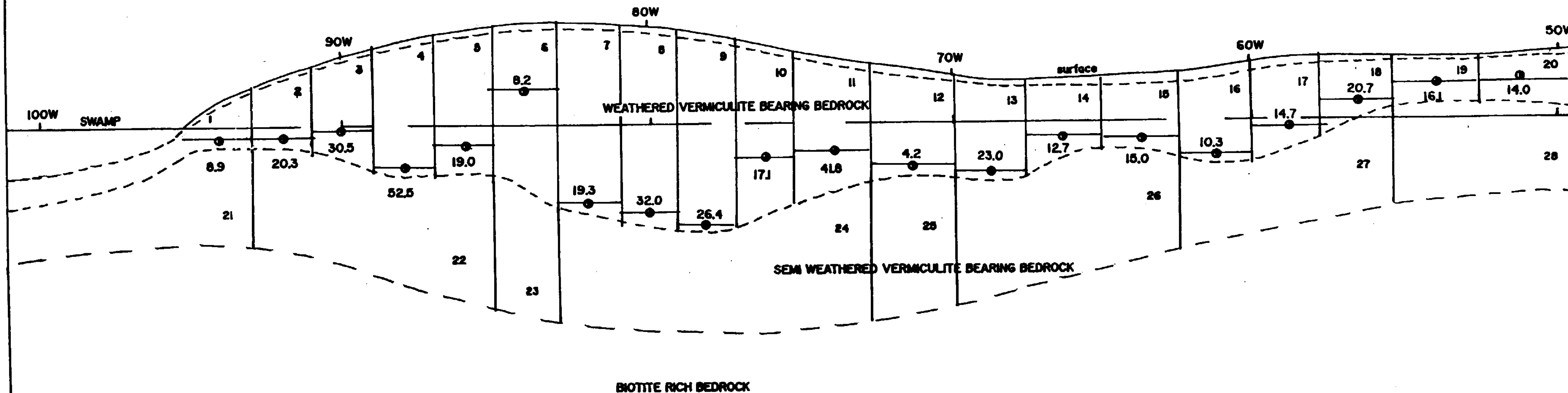
CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE G2

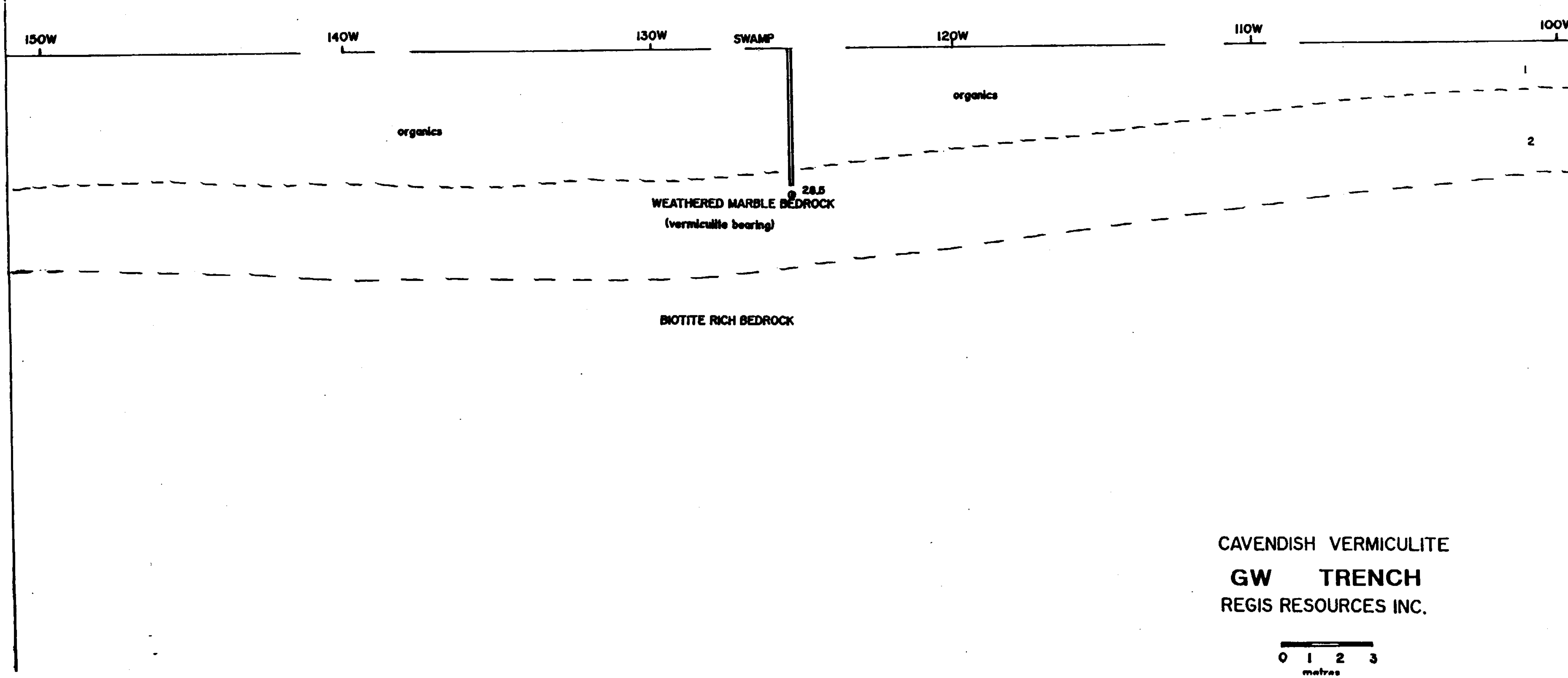


CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

PLATE G3

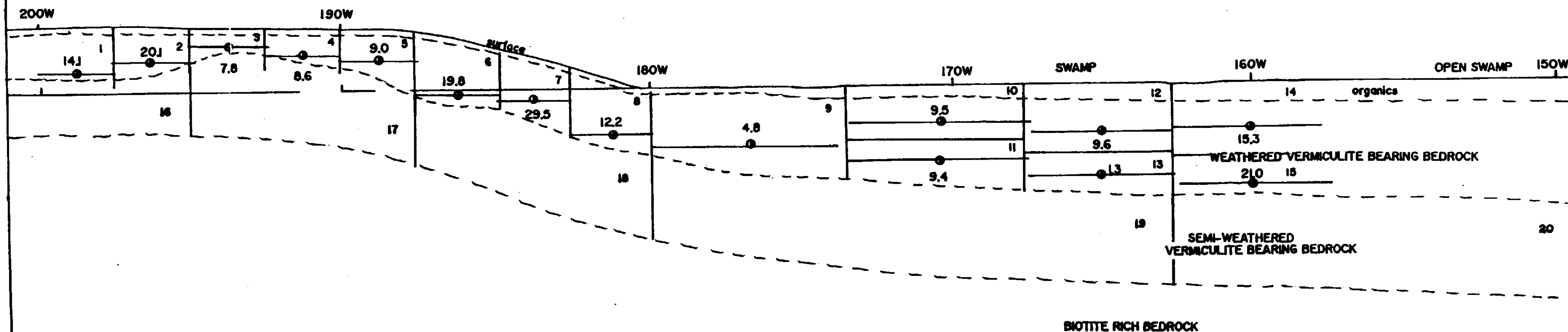


CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

PLATE G4



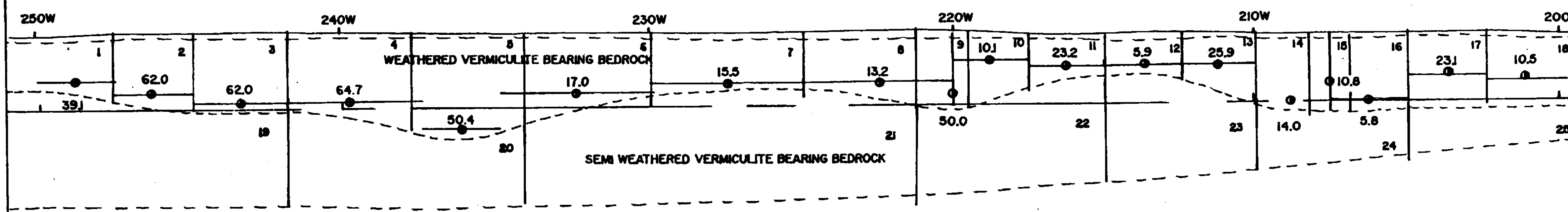
CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PL. .TE G5



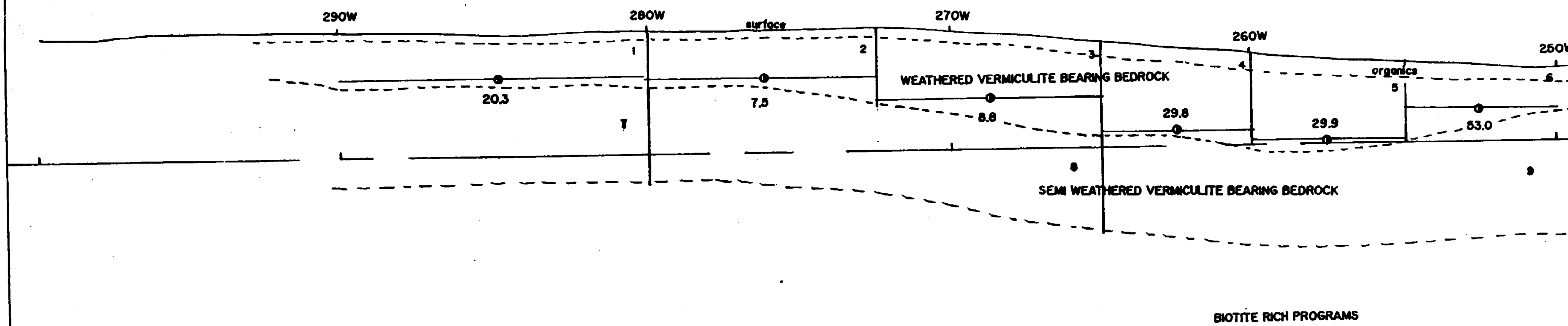
CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE G6



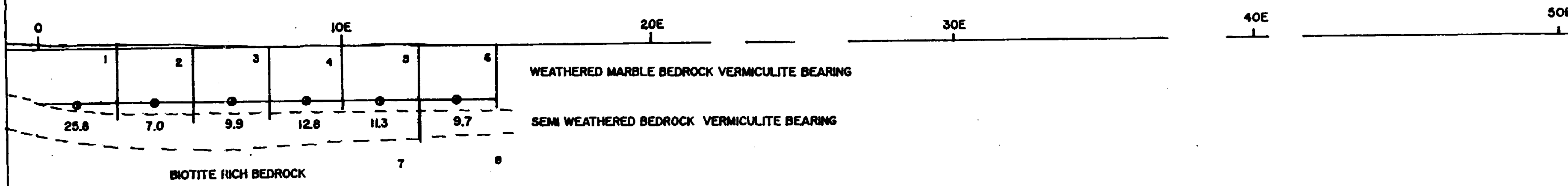
CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PLATE G7



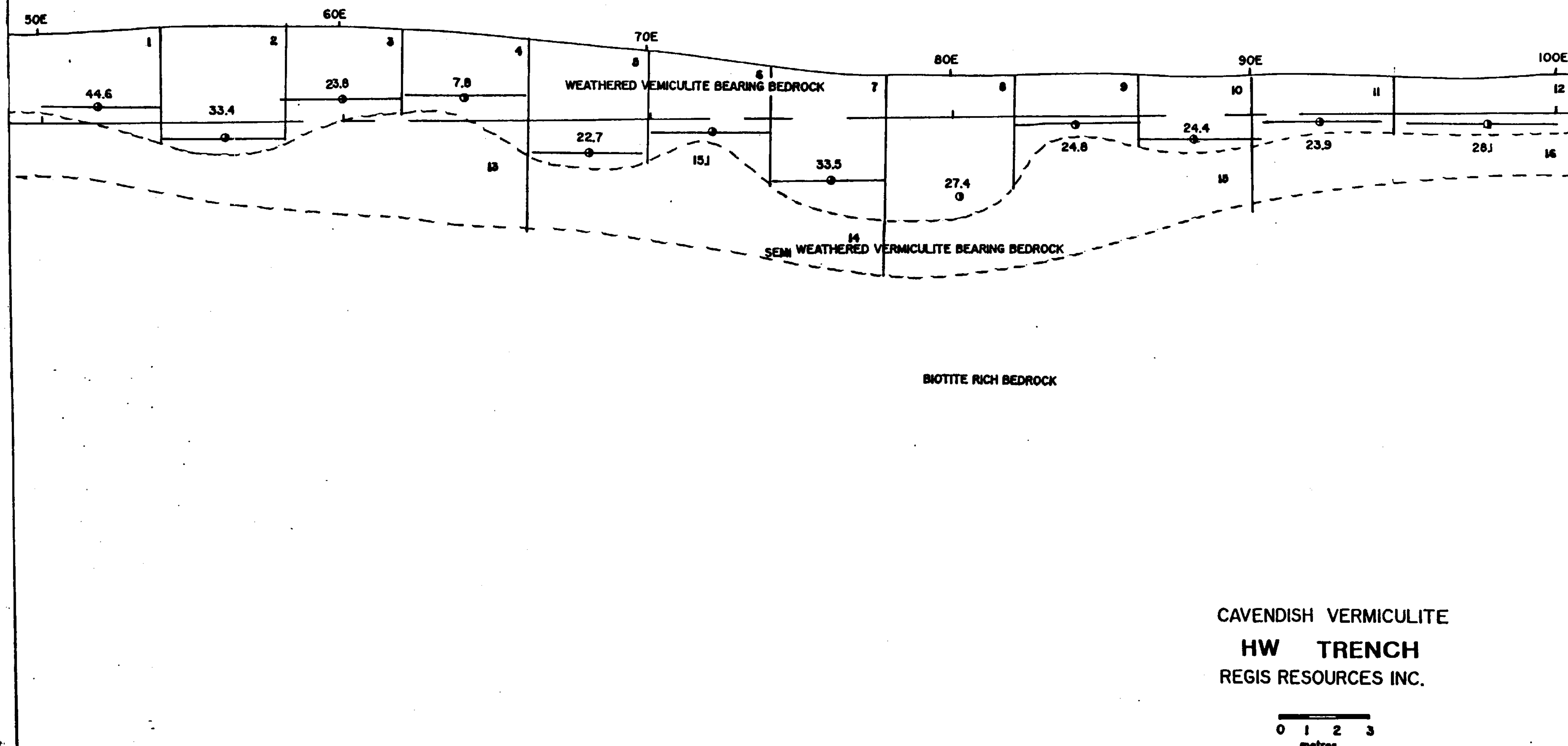
CAVENDISH VERMICULITE

GW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

PL..TE H1

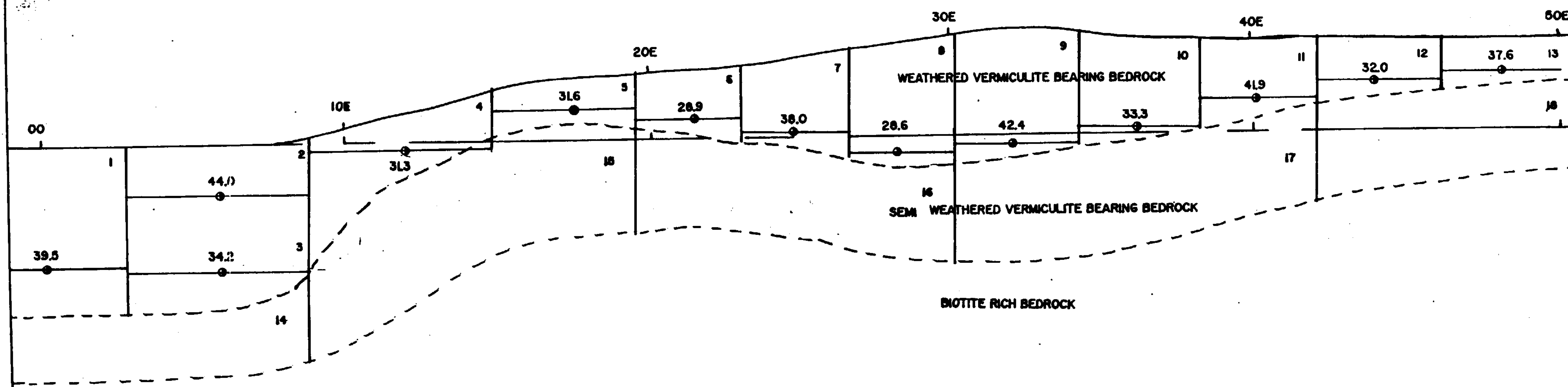


CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

PLATE H2



CAVENDISH VERMICULITE

HW TRENCH

REGIS RESOURCES INC.

0 1 2 3
metres

31D16SW2002 2.20489 CAVENDISH 030

RECEIVED
SEP 25 2000
11:00AM
GEOSCIENCE ASSESSMENT OFFICE

Sample#	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
DW 1	512.5	403.6	28.0	365.3	23.2	6.9
DW 2	401.2	317.2	33.6	283.6	20.9	10.6
DW 3	531.5	376.7	50.2	322.9		13.3
DW 4	508.1	369.2	42.9	325.0		11.6
DW 6	309.4	230.3	14.4	215.9		6.2
DW 7	254.6	182.4	22.5	159.9		12.3
DW 8	434.3	362.4	18.7	343.7		5.1
DW 9	433.0	371.3	15.5	355.8		4.2
DW 10	479.7	436.9	27.8	409.1	8.9	6.4
DW 11	479.8	404.2	6.5	397.7		1.6
DW 12	814.7	755.0	21.4	733.6		2.8
DW 13	716.8	712.4	32.2	680.2		4.5
DW 15	409.3	325.2	53.2	272.0	20.5	15.1
DW 16	782.5	679.7	43.9	635.8		6.4
DW 17	554.8	503.9	24.9	479.0		4.9
DW 18						
DW 19	627.4	536.1	46.7	497.0		8.7
DW 20	569.4	511.6	56.5	454.8		11.1
DW 21						
DW 22	520.1	407.6	29.8	376.7		7.3
DW 25	344.0	310.4	35.9	247.5	9.8	11.6
DW 26	508.3	422.1	53.0	362.5		12.6
DW 28	420.3	379.6	110.8	265.8		29.2
DW 29	483.5	397.3	78.4	316.3		19.7
DW 30	752.6	669.6	169.2	499.5	11.1	25.3

DW 32	697.6	540.0	113.0	426.6		20.9
DW 41	497.9	409.9	95.4	310.4		23.3
DW 42						
DW 44	420.7	3690.5	48.6	315.3		13.5
DW 45	378.6	360.3	56.6	303.7	4.8	15.7
DW 46	588.6	535.6	111.9	419.2		20.9
DW 47	268.4	224.3	58.0	166.6		25.6
DW 48	716.1	614.8	105.3	509.5		17.1
DW 60	398.3	343.5	60.2	283.2		17.5
DW 61	222.9	157.5	78.6	78.9	29.3	49.9
DW 62	598.5	488.7	94.6	391.8		19.4
DW 63	531.3	460.6	59.7	400.9	13.3	12.7
DW 64	515.2	487.5	15.6	469.0		3.2
DW 65	630.0	605.4	19.6	585.8	3.9	3.2
DW 67	481.4	417.6	9.6	403.0		2.3
DW 68	362.1	308.1	31.5	274.6		10.2
DW 69	357.5	325.9	18.5	307.4	8.8	5.7
DW 70	17.3	4.4	1.4	3.0	74.5	31.8
DW 73	461.1	394.7	52.7	342.0	13.5	13.3
DW 78	297.0	242.6	33.6	209.0	18.3	13.8
DW 79	157.1	140.2	26.6	113.6	107.1	19.0
DW 80	572.5	518.3	92.4	422.1		17.8
DW 83	463.8	441.7	100.3	341.4	4.8	22.7
DW 84	556.7	523.8	112.3	411.5	5.9	21.4
DW 87	400.7	377.9	79.6	298.3	5.6	21.1

Trench E - W

Sample #	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
EW 1	625.1	501.9	41.1	460.8	19.7	8.2
EW 2	348.5	301.9	112.3	189.6	13.4	37.2
EW 3	929.7	805.9	111.1	694.8	13.3	13.8
EW 4	962.4	851.6	93.2	754.7	11.9	10.9
EW 5	614.8	553.6	45.9	504.1	6.4	8.9
EW 6	636.1	546.3	9.7	455.6	28.6	2.1
EW 7	548.0	431.2	121.0	310.2	21.3	28.1
EW 8	548.1	385.7	68.1	317.6	29.6	17.7
EW 9	660.2	625.0	39.2	585.8	5.3	6.3
EW 10	758.9	718.5	2.6	715.9	5.3	0.4
EW 11	200.0	175.6	20.5	155.1	12.2	11.7
EW 12	292.1	262.9	22.2	240.7	14.6	8.4
EW13	539.4	487.2	25.2	462.1	9.6	5.2
EW 14	382.1	329.0	35.5	298.5	14.9	10.8
EW 15	378.7	334.2	93.7	240.5	11.5	28.0
EW 16	77.6	67.9	21.7	46.2	12.5	32.0
EW 17	259.0	218.6	30.3	188.3	15.6	13.9
EW 18	334.7	310.1	27.0	285.6	6.6	8.7
EW 19	277.1	245.0	36.1	210.3	11.1	14.7
EW 20	254.6	221.6	35.5	183.9	13.8	16.0
EW 21	453.1	408.0	57.7	350.3	9.6	14.1
EW 22	218.9	188.6	34.3	154.3	13.8	18.2
EW 23	555.7	488.1	217.4	270.7	12.2	44.5
EW 24						
EW 25	464.7	398.5	133.0	265.5	14.2	33.4

EW 26						
EW 27						
EW 28	130.1	102.0	39.8	62.2	21.6	39.0
EW 29	388.6	268.2	40.8	227.4	30.9	15.2
EW 30	508.5	457.6	123.3	335.2	9.8	26.9
EW 31						
EW 32	468.9	366.6	166.4	200.2	21.8	45.4
EW 33	478.0	404.0	125.3	278.4	15.5	31.0
EW 34	339.8	222.4	52.4	170.5	34.4	23.6
EW 35						
EW 36	602.7	508.0	120.6	395.1	14.4	23.7
EW 37	761.3	643.1	134.9	509.5	15.3	21.0
EW 38	753.4	682.3	120.7	561.4	9.5	17.7
EW 39	482.7	433.6	100.6	330.4	10.7	23.2
EW 40	546.6	482.7	52.2	429.8	11.8	10.8
EW 41	634.7	471.7	84.6	384.2	26.1	17.9
EW 42	677.9	592.1	64.7	519.0	13.9	10.9
EW 43	634.9	607.8	40.8	560.8	5.3	6.7
EW 44	609.8	533.9	66.4	487.5	9.2	12.0
EW 45	545.0	503.5	18.3	476.4	9.2	3.6
EW 46	612.0	548.4	18.0	530.4	10.3	3.3
EW 47	319.4	280.9	11.9	236.9	13.6	4.2
EW 48	368.0	286.3	23.3	255.8	24.1	8.1
EW 49						
EW 50						
EW 51						
EW 52						
EW 53						

EW 54	446.4	390.0	82.4	306.1	13.0	21.1
EW 55	489.2	409.3	44.9	360.1	17.2	10.7
EW 56	478.0	420.4	66.1	353.7	12.1	15.7
EW 57	961.3	854.9	220.5	631.3	14.9	25.0
EW 58	425.6	404.3	28.2	369.2	6.6	7.0
EW 59	867.4	789.7	23.9	759.8	19.7	3.0
EW 60	596.3	501.8	64.0	427.9	17.5	12.7
EW 61	316.4	279.7	73.8	207.0	32.1	26.4
EW 62	656.8	515.2	50.1	461.9	9.5	9.7

Sample #	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
FW 1	389.5	330.8	45.7	281.7	15.9	13.8
FW 2	378.0	373.2	36.0	336.9	1.3	9.6
FW 3	499.8	423.5	53.3	367.6	15.8	12.5
FW 4	427.2	379.7	49.3	317.8	14.0	13.0
FW 5	596.1	498.5	125.7	378.9	15.3	25.2
FW 6	800.2	660.2	205.1	454.4	17.5	31.1
FW 7	315.1	247.5	117.6	129.9	21.4	47.5
FW 8	457.1	378.4	70.6	307.3	17.3	18.6
FW 9	233.4	200.7	38.3	162.4	14.0	19.1
FW 10						
FW 11						
FW 12	604.1	506.0	144.1	363.0	16.0	28.5
FW 13	674.2	600.0	105.8	489.6	11.7	17.6
FW 14	411.4	361.9	80.4	281.5	12.0	22.2
FW 15	550.9	482.1	92.6	389.5	16.7	19.2
FW 16						
FW 17	474.0	456.8	68.3	384.6	4.4	14.9
FW 18	524.0	481.9	137.9	342.5	8.3	28.6
FW 19	672.0	627.4	74.3	562.8	5.2	11.8
FW 20	255.1	226.0	37.8	183.6	13.2	16.7
FW 21	692.7	645.6	75.1	593.0	3.5	11.6
FW 22	506.7	458.4	62.1	398.4	9.11	13.5
FW 23	678.4	625.0	53.6	566.1	8.6	8.6
FW 24	559.4	492.4	80.4	416.8	11.1	16.3
FW 25	540.8	470.9	117.2	353.3	13.0	24.9
FW 26	623.8	511.1	119.6	394.6	17.6	23.4

FW 27	603.4	534.6	95.3	438.4	11.5	17.8
FW 28	500.0	408.1	50.6	356.6	18.6	12.4
FW 29						
FW 30	572.1	532.7	29.7	501.9	7.1	5.6
FW 31	611.0	557.9	18.5	539.5	8.7	3.3
FW 32	759.4	707.1	43.9	660.5	7.2	6.2
FW 33	849.3	791.5	63.4	734.8	6.0	8.0
FW 34						
FW 35	481.0	431.9	23.7	405.4	10.8	5.5
FW 36	572.0	529.2	39.4	489.5	7.5	7.4
FW 37	559.7	535.5	54.0	480.8	4.4	10.1
FW 38	586.1	553.0	40.3	511.3	5.9	7.3
FW 39	647.0	609.4	44.44	566.9	5.5	7.3
FW 40	595.1	530.1	73.2	453.3	11.5	13.8
FW 41	752.0	699.3	53.5	644.7	7.1	7.6
FW 42	562.0	480.6	26.8	432.0	18.4	5.6
FW 43	246.3	224.8	30.2	192.9	9.4	13.4
FW 44	610.4	540.3	77.6	463.5	11.3	14.4
FW 45	594.6	523.0	86.1	438.0	11.8	16.5
FW 46	473.8	385.9	52.6	329.3	19.4	13.6
FW 47	722.8	618.8	72.5	546.8	14.3	11.7
FW 48	361.0	317.1	48.1	357.4	12.3	15.2
FW 49	407.9	335.7	69.1	289.4	12.1	20.6
FW 50	517.7	485.9	52.0	437.8	14.3	10.7
FW 51	473.3	404.0	98.2	305.3	14.7	24.3
FW 52	656.3	571.4	100.1	470.4	13.0	17.5
FW 53	257.1	247.4	22.2	222.3	4.9	9.0
FW 54	354.2	328.7	43.9	284.2	7.3	13.4

FW 55	403.2	356.9	37.2	316.2	12.3	10.4
FW 56	392.3	329.7	40.4	290.4	15.7	12.3
FW 57						
FW 58						
FW 59						
FW 60	488.8	454.5	46.5	402.4	8.1	10.2
FW 61	541.4	469.8	68.8	399.8	13.4	14.6
FW 62	446.6	418.3	23.8	391.1	7.1	5.7
FW 63	520.4	470.9	52.4	414.3	10.3	11.1
FW 64	522.4	496.8	93.5	403.9	4.5	18.8
FW 65	587.2	489.0	55.4	430.4	17.3	11.3
FW 66	515.4	459.8	39.4	415.4	11.7	8.6
FW 67	433.8	401.9	83.5	314.5	8.2	20.8
FW 68						
FW 69	829.0	743.9	13.4	718.4	11.7	1.8
FW 70	311.6	296.1	5.6	284.2	7.0	1.9
FW 71	645.9	559.3	24.4	530.3	14.1	4.4
FW 72						
FW 73						
FW 74						
FW 75	461.1	372.9	85.4	281.6	20.4	22.9
FW 76	353.8	300.1	46.2	252.7	15.5	15.4
FW 77	612.9	544.6	116.5	426.6	13.4	21.4
FW 78	500.0	445.5	29.1	416.8	10.9	6.5
FW 79	322.2	291.3	7.1	277.9	11.5	2.4
FW 80	602.4	505.5	98.7	410.1	15.5	19.5
FW 81	442.6	344.6	15.3	330.4	21.9	4.4
FW 82	688.1	576.6	123.9	449.5	16.7	21.5

FW 83	485.0	341.8	59.3	205.0	45.5	16.5
FW 84	311.7	213.7	52.3	155.8	33.2	24.5
FW 85	542.0	448.9	69.7	372.2	18.5	15.5
FW 86	658.7	627.2	152.9	374.0	20.0	24.4
FW 87	402.8	355.7	63.2	289.6	12.4	17.8
FW 88	398.7	327.3	101.6	224.6	18.2	31.0
FW 89	377.9	336.7	40.1	289.9	12.7	11.9
FW 90	623.8	520.0	85.2	431.8	17.1	16.4
FW 91	498.0	426.7	43.5	383.0	14.3	10.2
FW 92						
FW 93	460.7	394.0	21.1	385.2	11.5	5.4
FW 94	746.7	648.3	77.6	568.9	13.4	12.0
FW 95	360.7	310.9	65.3	245.6	13.8	21.0

G.W Sample #	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
G.W.1	618.7	554.6	67.9	466.3	13.6	12.2
G.W.2	595.6	464.9	137.0	323.9	22.6	29.4
G.W.3	680.0	636.0	125.7	487.8	9.8	19.8
G.W.4	648.0	562.9	50.6	510.4	13.4	9.0
G.W.5	456.0	420.8	36.5	383.7	7.8	8.6
G.W.6	434.0	367.9	28.9	337.2	15.6	7.8
G.W.7.	670.0	558.8	112.2	444.9	16.9	20.1
G.W.8	691.7	619.0	87.3	531.7	10.5	14.1
G.W.9	620.0	525.4	55.1	469.0	15.5	10.5
G.W.10	517.3	450.2	103.0	347.2	12.8	23.1
G.W.11	313.9	278.9	16.1	262.7	11.2	5.8
G.W.12	655.0	476.3	51.6	423.9	27.4	10.8
G.W.13	591.7	480.6	67.5	413.1	18.8	14.0
G.W.14	451.7	361.5	96.7	270.7	18.7	25.9
G.W.15	482.0	317.5	24.0	293.5	34.1	7.5
G.W.16	415.0	361.1	83.7	285.4	11.1	23.2
G.W.17	660.0	619.6	62.5	559.8	5.7	10.1
G.W.18	518.5	440.5	120.3	318.5	15.4	27.3
G.W.19	367.5	322.9	42.7	276.2	13.1	13.2
G.W.20	646.0	593.1	91.9	495.6	9.1	15.5
G.W.21	603.3	549.8	93.4	458.0	8.6	37.1
G.W.22	462.9	395.3	199.1	200.7	13.6	50.4
G.W.23	401.0	321.5	208.0	121.5	17.8	64.7
G.W.24	477.2	413.6	153.6	253.9	14.6	37.1
G.W.25	475.0	390.2	206.8	188.9	16.7	53.0
G.W.26						29.9

Sample#	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
G.W. 100	575.7	525.1	22.7	496.9	9.7	4.3
G.W. 101	696.0	617.7	42.9	571.4	11.7	6.9
G.W. 102	496.0	453.5	16.0	432.6	9.5	3.5
G.W. 103	709.0	628.1	153.8	464.1	12.8	24.5
G.W. 104	581.0	499.0	142.9	352.1	14.8	28.9
G.W. 105	602.4	530.2	22.8	497.8	13.6	4.3
G.W. 106	424.6	381.8	24.0	353.3	11.1	6.3
G.W. 107	339.6	296.2	30.3	259.8	14.6	10.2
G.W. 108	674.0	612.1	87.7	520.9	9.7	14.3
G.W. 109	300.0	251.8	75.4	175.0	16.5	29.9
G.W. 110	219.6	189.7	26.6	161.2	14.5	14.0
G.W. 111	407.0	35434	57.2	298.8	12.5	16.1
G.W. 112	311.0	282.3	58.4	223.5	4.4	20.7
G.W. 113	660.5	597.9	87.9	505.0	10.2	14.7
G.W. 114	587.6	554.6	57.0	492.5	6.5	10.3
G.W. 115	450.9	397.2	59.7	336.7	12.1	15.0
G.W.116						
G.W.117						

G.W. 126	416.0	355.3	186.4	160.8	16.5	52.5
G.W. 127	449.8	347.8	106.0	240.9	22.9	30.5
G.W. 128	598.4	539.5	107.7	428.6	10.0	20.3
G.W. 129	664.2	610.5	54.5	554.0		8.9

Sample #	Initial	Total Exfoliated	Vermiculite	Waste	Moisture	Vermiculite %
H.W. 1	401.0	326.3	128.8	197.5	18.6	39.5
H.W. 2	412.4	348.3	153.4	197.9	15.5	44.0
H.W. 3	636.5	509.5	174.3	335.2	19.9	34.2
H.W. 4	238.7	193.0	60.4	132.6	19.9	31.3
H.W. 5	311.1	229.1	72.4	156.7	26.3	31.6
H.W.6	401.7	330.5	82.2	248.3	17.7	28.9
H.W. 7	544.0	434.2	164.9	269.3	20.2	38.0
H.W.8	430.0	357.3	102.3	255.0	16.9	28.6
H.W. 9	530.7	435.1	184.5	250.6	17.6	42.4
H.W. 10	456.6	400.8	133.4	267.4	13.9	33.3
H.W. 11	531.1	448.6	187.8	260.8	15.5	41.9
H.W.12	580.4	485.1	155.2	329.9	16.4	32.0
H.W.13	549.4	450.3	169.5	280.8	18.0	37.6
H.W.14	393.6	328.8	146.8	182.0	16.5	44.6
H.W. 15	456.2	387.1	126.2	260.9	16.8	33.4
H.W.16	420.6	365.6	86.9	278.7	11.8	23.8
H.W. 17	502.1	438.2	34.4	403.8	12.7	7.8
H.W. 18	501.6	458.6	104.2	354.4	8.6	22.7
H.W. 19	492.1	457.5	69.2	388.3	7.1	15.1
H.W.20	551.7	493.7	165.5	328.2	11.8	33.5
H.W.21	334.8	295.7	80.9	214.8	11.7	27.4
H.W.23						24.4
H.W.24	339.8	294.5	70.3	224.2	13.3	23.9
H.W.25	544.3	464.2	130.4	333.8	14.7	28.1

H.W.30	375.5					36.6
H.W.31	589.0	499.7	57.2	442.5	15.2	11.4
H.W.32	562.4	520.2	98.1	422.1		18.9
H.W.33	416.5	359.8	86.0	273.8		23.9
H.W.34	429.8					26.7
H.W..35	398.3	340.8	103.3	237.5		30.3
H.W.36	500.7					35.0
H.W.37	444.9					36.7
H.W.38	559.4	459.5	100.0	359.5	17.8	21.8
H.W.39	507.4	444.5	126.0	318.5		28.3
H.W.40	465.5					40.8
H.W.41	283.8					41.1
H.W.42	391.8	348.6	67.9	280.7	11.0	19.5
H.W.43	539.2	447.7	115.2	332.5	16.7	25.7
H.W.44	519.1	476.1	76.8	397.3	8.7	16.1
H.W.45	432.1	390.6	58.0	332.6	9.6	14.8
H.W.46	531.5					30.4
H.W.47	262.2	214.8	65.9	148.9	10.0	30.7
H.W.48	453.7					21.5
H.W.49	442.7					31.0
H.W.50	564.9	446.2	35.4	410.8	21.0	7.9
H.W.51						9.0
H.W.52	454.6	372.7	64.8	307.9		17.4
H.W.53	372.2	339.6	34.0	305.6	8.7	10.0
H.W.54	575.5	471.9	13.8	458.1	18.0	2.9
H.W.55	617.8					5.4

H.W.56	401.6	363.4	21.3	342.1	9.5	5.9
H.W.57	305.7	285.3	6.1	279.2	6.7	2.1
H.W.58	416.6	330.7	32.6	298.1		9.9
H.W.59	464.0	399.4	38.1	361.3	13.9	9.5
H.W.60	467.3	399.7	17.4	382.3	14.5	4.3
H.W.61	341.7	322.3	32.2	290.1		10.0

The Analysis of Vermiculite

in samples from Cavendish Township

submitted by

Regis Resources Inc.

Progress Report No. 1

Project No.: LR5424

NOTE:

This report refers to the samples as received.

The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research Limited.

LAKEFIELD RESEARCH LIMITED
Postal Bag 4300
185 Concession Street
Lakefield, Ontario, K0L 2H0
Tel: (705) 652-2000
Fax: (705) 652-6365

February 17, 1999

Table of Contents

Introduction

This report describes the analysis of the vermiculite content of trench samples supplied by Regis Resources Inc. of Cavendish Township deposit, Ontario. Samples, each weighing approximately 2 kg, were prepared by air drying, screening, crushing and sampling to obtain a charge weighing approximately 500 g. This charge was then heat treated to exfoliate the vermiculite in equipment supplied by the client. After the heat treatment the vermiculite was separated from the waste material by agitation in a water medium. The waste settled to the bottom of the container whilst the vermiculite was decanted off with the water.

Mr. Martin Shefsky of Regis Resources Inc., or his representatives, Mr. Keith Vatcher and Mr. Garion Forbes were present for the duration of the testwork.

Lakefield Research Limited

A.C.T. Bigg, P.Eng.
Senior Engineer

K.W. Sarbutt
Manager - Mineral processing

Experimental testwork by: D. Imeson, D. Northrop
Report preparation by: S. McKenzie

Summary

1. Sample Preparation

Six series of samples were hand delivered to Lakefield Research between January 18 and February 1, 1999. The samples had been collected from various trenches cut in the Cavendish Township deposit. Selected samples were partially air dried, screened, and the oversize crushed to sub-screen size. The AW-series samples and some of the BW-series samples were screened and crushed to 3/8". The screen size was then changed to a nominal 8 mesh for most of the remainder of the BW-series samples and some of the CW-series samples. 'Nominal' in this sense refers to the open size setting of the Badger jaw crusher, allowing the coarser, flaky vermiculite to drop through the crusher. For the remainder of the samples a 4 mesh screen was used. After crushing, the crushed material was recombined with the fine material, blended, and then riffled to obtain a sample close to 500 g weight for feeding to the exfoliator.

A noted few of the CW-series, DW-series, and FW-series samples were screened at 4 mesh, the minus 4 mesh was split to give the sample for the exfoliation, and then the plus 4 mesh was combined with the reject minus 4 mesh. Since no weight split between the plus and minus 4 mesh fractions was noted, these samples should be used with caution in any pit tonnage calculations. For this reason they have been tabulated separately in the summary tables.

2. Sample Treatment and Evaluation

The prepared samples were fed into the exfoliator and captured at the discharge end by an air classifier. The exfoliator consisted of a rotating tube about 10 feet long with a propane torch at the feed end. The tube had a slight slope towards the discharge end. The feed was introduced by means of a vibratory feeder. Early tests were used to develop a suitable feed rate, burner setting, and air extraction arrangement. The discharge from each test was collected in a bucket, and then water added. The bucket was then agitated to allow the lighter vermiculite to separate from the heavier waste material, and the light material then poured off onto a filter. This process was repeated several times until the float material was completely removed. The sinks were also filtered, both fractions were dried, and weighed. In some early tests on the AW-series only the vermiculite that floated to the top of the water was removed in the separation. This was later changed to include the vermiculite that sank but remained in a fluid state above the sinks when pouring off the water. All of the early samples that showed vermiculite in the 'sink' fraction were retreated by water separation.

3. Results

Table 1: Overall Summary of Results

Series	No. of Samples	Average % Moisture*	Average % Vermiculite
AW	91	9.7	20.9
BW	108	7.4	25.7
CW	54	10.0	29.2
DW	46	7.9	24.1
EW	3	7.4	25.0
FW	1	13.0	18.2
Weighted Average	303	8.6	24.6
CW +4 Mesh Rejected	8	14.7	27.3
DW +4 Mesh Rejected	10	19.6	21.4
FW +4 Mesh Rejected	1	22.1	18.6
Weighted Average	19	17.7	23.7

* Moisture after air drying

The vermiculite content is determined as a percentage of the combined weight of the sink and float products after exfoliation. As such it does not take into account any organic material that may have been present in the feed and burnt off in the exfoliator. On the other hand the moisture content is determined from the difference in weight between the air-dried feed and the combined exfoliator products and therefore will include the weight of any organic material in the feed.

Table 2: AW-Series - Summary of Results

Sample	Dry Feed % Vermiculite	
Aw 1	2.5	
Aw 2	43.6	*
Aw 3	54.1	*
Aw 4	6.8	
Aw 5	22.6	*
Aw 6	14.7	*
Aw 7	22.6	
Aw 8	33.0	*
Aw 9	42.8	*
Aw 10	45.0	*
Aw 11	40.2	*
Aw 12	37.9	*
Aw 13	3.9	
Aw 14	5.7	
Aw 15	34.4	*
Aw 16	39.8	*
Aw 17	54.2	*
Aw 21	21.7	
Aw 22	25.6	*
Aw 26	26.5	*
Aw 27	30.7	*
Aw 28	28.2	*
Aw 29	29.6	*
Aw 29A	15.3	*
Aw 30	35.1	*
Aw 31	28.3	*
Aw 32	19.4	
Aw 33	29.2	*
Aw 34	26.5	
Aw 35	48.2	*
Aw 36	28.8	*
Aw 37	33.6	*

Sample	Dry Feed % Vermiculite	
Aw 38	26.9	*
Aw 39	18.1	*
Aw 40	7.2	
Aw 40A	59.7	*
Aw 42	16.1	
Aw 43	28.1	
Aw 44	39.1	*
Aw 45	33.1	*
Aw 46	45.9	
Aw 47	33.7	*
Aw 49	34.9	
Aw 50	35.4	*
Aw 100	25.7	
Aw 101	15.1	
Aw 102	6.9	
Aw 103	2.8	
Aw 104	11.2	
Aw 105	20.8	
Aw 106	1.3	
Aw 107	3.0	
Aw 108	16.7	*
Aw 109	11.1	
Aw 110	5.1	
Aw 111	20.0	*
Aw 114	42.9	*
Aw 115	7.9	
Aw 116	4.1	
Aw 117	6.6	
Aw 118	1.6	
Aw 119	1.8	
Aw 120	2.7	
Aw 121	1.6	

Sample	Dry Feed % Vermiculite	
Aw 122	0.8	
Aw 123	3.5	
Aw 124	1.9	
Aw 125	0.7	
Aw 128	1.1	
Aw 128	16.4	
Aw 129	10.0	
Aw 130	2.6	
Aw 131	7.1	
Aw 132	8.6	
Aw 133	6.0	
Aw 135	12.3	
Aw 136	39.1	*
Aw 137	51.8	*
Aw 138	8.4	
Aw 139	15.5	*
Aw 140	10.7	
Aw 141	47.8	*
Aw 142	13.4	
Aw 143	23.4	*
Aw 144	4.9	
Aw 145	17.3	
Aw 146	6.4	
Aw 147	10.6	
Aw 148	30.0	*
Aw 149	25.4	*
Aw 150	9.3	
AVERAGE:	20.9	
COUNT:	91	41

* Sample refloated

Table 3: BW-Series - Summary of Results

Sample	Dry Feed % Vermiculite	
Bw 1	6.2	
Bw 2	5.9	*
Bw 5	25.2	
Bw 6	62.9	*
Bw 7	56.9	*
Bw 8	39.7	
Bw 9	15.7	*
Bw 10	31.9	*
Bw 11	18.0	
Bw 13	27.4	
Bw 14	20.8	*
Bw 15	23.0	*
Bw 16	19.9	
Bw 17	11.3	*
Bw 18	33.7	
Bw 19	30.5	
Bw 20	11.1	*
Bw 21	4.7	*
Bw 22	14.8	*
Bw 23	17.2	
Bw 24	12.5	*
Bw 25	17.9	
Bw 26	12.8	*
Bw 27	22.9	*
Bw 28	15.4	*
Bw 29	17.0	*
Bw 30	26.5	*
Bw 31	11.7	*
Bw 32	24.8	*
Bw 33	32.2	
Bw 34	32.7	
Bw 35	29.0	*
Bw 36	19.2	
Bw 37	17.3	*
Bw 38	23.4	
Bw 39	28.7	
Bw 40	29.2	

Sample	Dry Feed % Vermiculite	
Bw 42	13.4	*
Bw 44	25.4	
Bw 46	27.8	
Bw 47	31.4	
Bw 48	32.7	*
Bw 50	40.3	*
Bw 50A	22.8	*
Bw 53	21.1	*
Bw 56	31.0	
Bw 59	24.2	*
Bw 60	40.2	
Bw 61	43.8	
Bw 62	40.7	*
Bw 63	32.5	*
Bw 64	48.4	*
Bw 65	33.5	
Bw 66	30.5	*
Bw 67	47.0	
Bw 68	32.8	*
Bw 69	39.3	*
Bw 70	60.8	
Bw 71	34.3	*
Bw 72	49.0	*
Bw 73	28.3	*
Bw 74	50.8	
Bw 76	17.4	*
Bw 76	24.8	
Bw 78	21.0	
Bw 80	30.4	*
Bw 82	23.7	
Bw 83	27.6	
Bw 84	19.7	*
Bw 85	21.7	*
Bw 86	20.8	
Bw 87	18.7	
Bw 88	15.0	*
Bw 89	20.4	*

Sample	Dry Feed % Vermiculite	
Bw 90	36.6	*
Bw 91	49.9	
Bw 92	27.3	*
Bw 93	21.1	
Bw 94	14.7	
Bw 95	17.3	
Bw 96	19.9	*
Bw 97	12.9	*
Bw 98	15.0	
Bw 99	16.1	*
Bw 100	22.3	
Bw 101	8.0	
Bw 102	25.1	
Bw 103	18.8	
Bw 104	36.0	
Bw 105	51.7	*
Bw 106	34.6	
Bw 110	22.5	
Bw 112	30.1	
Bw 113	23.4	*
Bw 115	10.3	*
Bw 116	6.1	*
Bw 118	27.1	*
Bw 120	32.7	
Bw 123	15.4	*
Bw 123A	25.9	*
Bw 124	23.0	
Bw 126	31.6	
Bw 128	7.4	
Bw 130	14.8	
Bw 131	12.1	
Bw 133	20.4	
Bw 134	22.7	
Bw 135	25.6	*
Average	25.7	
COUNT:	108	

* Crushed to minus 3/8". Remainder crushed to 8 mesh.

Table 4: CW-Series - Summary of Results

Sample	Dry Feed % Vermiculite	
Cw 12	16.2	*
Cw 18	27.5	
Cw 20	12.3	
Cw 24	20.1	
Cw 26	26.2	
Cw 37	30.7	*
Cw 40	33.1	*
Cw 41	35.8	*
Cw 41	48.1	
Cw 42	34.6	
Cw 43	34.0	*
Cw 44	31.9	
Cw 45	33.5	
Cw 46	33.5	
Cw 47	35.1	
Cw 49	29.4	*
Cw 50	41.5	
Cw 51	32.6	
Cw 52	34.7	
Cw 54	23.0	

Sample	Dry Feed % Vermiculite	
Cw 55	32.6	
Cw 56	26.1	
Cw 57	24.5	
Cw 58	28.0	
Cw 60	26.0	
Cw 61	43.3	
Cw 64	23.7	
Cw 65	30.5	*
Cw 65	23.7	*
Cw 66	22.3	
Cw 67	25.3	
Cw 72	24.2	
Cw 76	15.5	
Cw 77	17.8	
Cw 78	25.0	
Cw 79	25.5	
Cw 80	31.1	*
Cw 81	40.6	
Cw 82	47.5	
Cw 83	35.7	

Sample	Dry Feed % Vermiculite	
Cw 84	49.3	
Cw 87	27.6	
Cw 90	26.6	
Cw 94	16.0	
Cw 97	27.5	
Cw 99	48.0	
Cw 101	27.4	*
Cw 103	14.7	
Cw 104	41.0	
Cw 108	24.0	
Cw 109	26.9	
Cw 110	26.1	
Cw 112	26.6	
Cw 208V	10.1	
AVERAGE:	29.2	
COUNT:	54	

* Crushed to 8 mesh.
Remainder crushed to 4 mesh

Table 5: CW-Series - Summary of Results – Plus 4 Mesh Rejected

Sample	Dry Feed % Vermiculite
Cw 37	55.9
Cw 38	33.6
Cw 73	17.2
Cw 95	17.2
Cw 100	15.8

Sample	Dry Feed % Vermiculite
Cw 105	36.7
Cw 107	30.9
Cw 204V	10.7
AVERAGE:	27.3
COUNT:	8

Table 6: DW-Series - Summary of Results

Sample	Dry Feed % Vermiculite
Dw 5	35.6
Dw 14	18.3
Dw 23	14.4
Dw 24	14.4
Dw 31	14.4
Dw 33	32.3
Dw 34	31.3
Dw 35	30.8
Dw 36	23.1
Dw 43	20.7
Dw 43	14.5
Dw 49V	18.9
Dw 50	26.2
Dw 51	28.3
Dw 52	24.6
Dw 53	21.4

Sample	Dry Feed % Vermiculite
Dw 54	24.8
Dw 55	25.0
Dw 56	37.1
Dw 57	32.3
Dw 58	53.9
Dw 59	43.5
Dw 60	45.3
Dw 61	24.2
Dw 62	17.2
Dw 63	20.4
Dw 64	27.0
Dw 65	19.1
Dw 66	18.5
Dw 67	15.6
Dw 68	26.0
Dw 69	21.0

Sample	Dry Feed % Vermiculite
Dw 71	25.2
Dw 72	23.3
Dw 72V	17.0
Dw 73	7.7
Dw 74	29.6
Dw 75	32.5
Dw 77V	7.1
Dw 81	17.1
Dw 82	32.4
Dw 85V	23.5
Dw 86	20.0
Dw 88	18.8
Dw 89	19.0
Dw 90	13.7
AVERAGE:	24.1
COUNT:	46

Table 7: DW-Series - Summary of Results – Plus 4 Mesh Rejected

Sample	Dry Feed % Vermiculite
Dw 27V	11.9
Dw 37	27.1
Dw 38	33.0
Dw 39	21.2
Dw 40	20.9
Dw 71V	13.3

Sample	Dry Feed % Vermiculite
Dw 74V	36.6
Dw 75V	17.9
Dw 76V	10.7
Dw 96	21.6
AVERAGE:	21.4
COUNT:	10

Table 8: EW-Series - Summary of Results

Sample	Dry Feed % Vermiculite
Ew 26	23.2
Ew 27	19.9
Ew 31V	31.9
AVERAGE:	25.0
COUNT:	3

Table 9: FW-Series - Summary of Results

Sample	Dry Feed % Vermiculite	
Fw 10	18.2	
Fw 11V	18.6	*
AVERAGE:	18.4	
COUNT:	2	

* +4mesh rejected

Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Aw 128	649.5	91.3	466.5	14.1	**16.4**	
Aw 129	715.7	70.3	633.5	1.7	**10.0**	
Aw 130	549.3	13.5	506.5	5.3	**2.6**	
Aw 131	966.9	54.7	710.5	20.9	**7.1**	
Aw 132	610.4	47.4	506.0	9.3	**8.6**	
Aw 133	822.0	45.6	713.2	7.7	**6.0**	
Aw 135	933.0	103.7	738.7	9.7	**12.3**	
Aw 136	791.5	271.1	422.9	12.3	**39.1**	*
Aw 137	813.3	383.3	356.8	9.0	**51.8**	*
Aw 138	915.9	72.9	794.7	5.3	**8.4**	
Aw 139	803.9	120.2	653.2	3.8	**15.5**	*
Aw 140	930.4	95.0	791.3	4.7	**10.7**	
Aw 141	905.1	278.5	304.4	35.6	**47.8**	*
Aw 142	562.7	70.7	457.7	6.1	**13.4**	
Aw 143	852.7	189.9	621.3	4.9	**23.4**	*
Aw 144	689.0	30.7	590.9	9.8	**4.9**	
Aw 145	898.4	148.4	711.3	4.3	**17.3**	
Aw 146	643.1	39.6	575.9	4.3	**6.4**	
Aw 147	685.9	70.5	591.5	3.5	**10.6**	
Aw 148	630.0	166.9	388.8	11.8	**30.0**	*
Aw 149	927.7	205.9	604.8	12.6	**25.4**	*
Aw 150	788.5	65.6	639.7	10.6	**9.3**	
AVERAGE:				9.7	**20.9**	
COUNT:					91	41

* Sample refloated

LR: 5424 - ***BW SERIES*** Summary Table

Shaded area are samples that were crushed to -3/8" rather than the revised -8 mesh.

Sample	Weights (g)			Wet Feed	**Dry Feed**
	Initial	Float	Sink	% Moisture	**% Vermiculite**
Bw 1	439.1	20.8	316.0	23.3	**6.2**
Bw 2	520.8	25.5	404.6	17.4	**5.9**
Bw 5	448.5	109.6	325.3	3.0	**25.2**
Bw 6	418.3	261.6	154.5	0.5	**62.9**
Bw 7	548.5	277.7	210.4	11.0	**56.9**
Bw 8	430.0	170.1	258.2	0.4	**39.7**
Bw 9	550.9	84.6	455.0	2.1	**15.7**
Bw 10	490.5	161.4	345.3	-3.3	**31.9**
Bw 11	422.3	69.1	314.0	9.3	**18.0**
Bw 13	511.0	132.5	351.3	5.3	**27.4**
Bw 14	464.8	78.3	298.1	19.0	**20.8**
Bw 15	443.8	82.9	278.1	18.7	**23.0**
Bw 16	513.0	80.1	322.9	21.4	**19.9**
Bw 17	731.6	74.4	583.3	10.1	**11.3**
Bw 18	493.2	156.8	308.1	5.7	**33.7**
Bw 19	394.9	111.5	253.7	7.5	**30.5**
Bw 20	472.6	47.9	384.4	8.5	**11.1**
Bw 21	762.0	34.5	697.3	4.0	**4.7**
Bw 22	457.0	55.8	322.5	17.2	**14.8**
Bw 23	479.3	66.3	319.7	19.5	**17.2**
Bw 24	406.9	51.6	362.3	-1.7	**12.5**
Bw 25	480.6	83.4	382.5	3.1	**17.9**
Bw 26	494.6	58.4	397.5	7.8	**12.8**
Bw 27	433.8	103.4	348.6	-4.2	**22.9**
Bw 28	468.9	63.8	350.9	11.6	**15.4**
Bw 29	446.0	75.0	367.1	0.9	**17.0**
Bw 30	453.8	112.7	312.3	6.3	**26.5**
Bw 31	554.0	64.8	488.6	0.1	**11.7**
Bw 32	803.0	158.7	480.7	20.4	**24.8**
Bw 33	389.0	115.7	243.9	7.6	**32.2**
Bw 34	449.7	155.3	319.5	-5.6	**32.7**
Bw 35	501.9	146.2	357.5	-0.4	**29.0**
Bw 36	499.2	84.8	357.8	11.3	**19.2**
Bw 37	846.9	132.6	631.8	9.7	**17.3**
Bw 38	484.8	98.8	323.0	13.0	**23.4**
Bw 39	515.4	117.1	290.3	21.0	**28.7**
Bw 40	508.0	119.6	290.6	19.3	**29.2**
Bw 42	498.1	69.7	450.4	-4.4	**13.4**
Bw 44	419.8	112.0	328.6	-5.0	**25.4**

Sample	Weights (g)			Wet Feed	**Dry Feed**
	Initial	Float	Sink	% Moisture	**% Vermiculite**
Bw 46	484.6	121.6	316.0	9.7	**27.8**
Bw 47	557.6	189.1	412.4	-7.9	**31.4**
Bw 48	438.0	145.1	298.4	-1.3	**32.7**
Bw 50	439.6	174.0	257.6	1.8	**40.3**
Bw 50A	534.1	106.6	360.3	12.6	**22.8**
Bw 53	979.7	195.0	727.7	5.8	**21.1**
Bw 56	507.3	135.6	302.0	13.7	**31.0**
Bw 59	994.7	216.6	678.7	10.0	**24.2**
Bw 60	435.2	178.2	265.2	-1.9	**40.2**
Bw 61	437.4	184.0	235.8	4.0	**43.8**
Bw 62	394.6	142.9	208.2	11.0	**40.7**
Bw 63	567.1	165.9	345.3	9.9	**32.5**
Bw 64	581.0	248.0	264.5	11.8	**48.4**
Bw 65	515.9	187.3	372.0	-8.4	**33.5**
Bw 66	879.1	242.9	554.4	9.3	**30.5**
Bw 67	472.6	196.9	222.3	11.3	**47.0**
Bw 68	452.3	148.6	304.2	-0.1	**32.8**
Bw 69	524.3	187.2	289.6	9.1	**39.3**
Bw 70	514.1	397.1	255.5	-26.9	**60.8**
Bw 71	499.9	150.6	288.9	12.1	**34.3**
Bw 72	452.7	200.8	208.8	9.5	**49.0**
Bw 73	512.1	131.9	334.0	9.0	**28.3**
Bw 74	504.8	226.7	219.4	11.6	**50.8**
Bw 76	827.9	134.0	634.1	7.2	**17.4**
Bw 76	505.6	134.0	406.8	-7.0	**24.8**
Bw 78	518.2	126.7	475.6	-16.2	**21.0**
Bw 80	464.5	124.8	285.2	11.7	**30.4**
Bw 82	436.8	121.7	391.1	-17.4	**23.7**
Bw 83	511.4	135.0	353.6	4.5	**27.6**
Bw 84	437.5	84.6	345.7	1.6	**19.7**
Bw 85	571.2	111.9	402.6	9.9	**21.7**
Bw 86	506.4	107.0	406.7	-1.4	**20.8**
Bw 87	422.8	63.1	273.8	20.3	**18.7**
Bw 88	567.3	77.9	440.1	8.7	**15.0**
Bw 89	445.2	86.3	337.2	4.9	**20.4**
Bw 90	435.0	158.7	274.6	0.4	**36.6**
Bw 91	302.6	133.0	133.7	11.9	**49.9**
Bw 92	817.6	195.6	521.8	12.3	**27.3**
Bw 93	416.2	67.0	250.4	23.7	**21.1**
Bw 94	513.5	70.3	406.7	7.1	**14.7**
Bw 95	384.0	73.2	349.8	-10.2	**17.3**
Bw 96	472.4	81.3	327.5	13.5	**19.9**
Bw 97	616.0	72.2	485.9	9.4	**12.9**
Bw 98	485.3	75.2	427.6	-3.6	**15.0**
Bw 99	477.4	72.6	377.8	5.7	**16.1**

Sample	Weights (g)			Wet Feed	**Dry Feed**
	Initial	Float	Sink	% Moisture	**% Vermiculite**
Bw 100	371.8	71.4	249.1	13.8	**22.3**
Bw 101	442.8	23.9	276.6	32.1	**8.0**
Bw 102	496.0	102.4	305.7	17.7	**25.1**
Bw 103	493.1	85.5	369.1	7.8	**18.8**
Bw 104	416.2	170.1	302.3	-13.5	**36.0**
Bw 105	649.9	280.3	261.5	16.6	**51.7**
Bw 106	471.1	140.9	266.3	13.6	**34.6**
Bw 110	421.6	77.4	266.0	18.5	**22.5**
Bw 112	471.3	132.0	307.1	6.8	**30.1**
Bw 113	514.2	111.1	364.5	7.5	**23.4**
Bw 115	794.2	79.2	689.9	3.2	**10.3**
Bw 116	518.0	28.8	444.1	8.7	**6.1**
Bw 118	504.3	127.4	342.4	6.8	**27.1**
Bw 120	472.5	144.1	296.9	6.7	**32.7**
Bw 123	516.3	60.9	334.1	23.5	**15.4**
Bw 123A	478.4	96.2	274.7	22.5	**25.9**
Bw 124	452.9	90.0	301.4	13.6	**23.0**
Bw 126	454.0	129.6	280.5	9.7	**31.6**
Bw 128	492.9	32.6	405.0	11.2	**7.4**
Bw 130	482.8	55.7	320.0	22.2	**14.8**
Bw 131	427.6	35.4	257.5	31.5	**12.1**
Bw 133	416.6	86.6	338.7	-2.1	**20.4**
Bw 134	589.9	144.3	492.1	-7.9	**22.7**
Bw 135	478.4	114.8	333.6	6.3	**25.6**
Average				**7.4**	**25.7**
COUNT:		108	108		

LR: 5424 - C*W* ***SERIES*** Summary Table

Sample	Weights (g)			Wet Feed	Dry Feed	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Cw 12	565.1	82.4	425.9	10.1	**16.2**	*
Cw 18	489.0	126.0	332.0	6.3	**27.5**	
Cw 20	458.8	44.6	319.4	20.7	**12.3**	
Cw 24	395.1	42.5	169.3	46.4	**20.1**	
Cw 26	490.1	124.9	352.1	2.7	**26.2**	
Cw 37	441.6	140.9	318.4	-4.0	**30.7**	*
Cw 37	525.8	264.7	208.7	10.0	**55.9**	**
Cw 38	481.6	146.7	290.2	9.3	**33.6**	**
Cw 40	427.8	164.0	331.8	-15.9	**33.1**	*
Cw 41	441.9	131.7	236.6	16.7	**35.8**	*
Cw 41	516.2	198.5	213.9	20.1	**48.1**	
Cw 42	479.0	144.9	273.3	12.7	**34.6**	
Cw 43	422.1	128.2	248.9	10.7	**34.0**	*
Cw 44	333.4	123.8	263.7	-16.2	**31.9**	
Cw 45	438.7	131.6	261.0	10.5	**33.5**	
Cw 46	503.9	156.4	310.8	7.3	**33.5**	
Cw 47	433.7	159.4	294.5	-4.7	**35.1**	
Cw 49	489.5	92.1	220.9	36.1	**29.4**	*
Cw 50	490.1	175.1	246.9	13.9	**41.5**	
Cw 51	536.4	170.3	352.6	2.5	**32.6**	
Cw 52	448.4	120.5	226.7	22.6	**34.7**	
Cw 54	472.2	100.0	333.9	8.1	**23.0**	
Cw 55	445.0	147.2	303.8	-1.3	**32.6**	
Cw 56	575.7	144.7	409.7	3.7	**26.1**	
Cw 57	545.1	107.9	333.1	19.1	**24.5**	
Cw 58	445.8	124.1	319.8	0.4	**28.0**	
Cw 60	556.8	124.4	353.4	14.2	**26.0**	
Cw 61	499.8	210.0	274.6	3.0	**43.3**	
Cw 64	559.1	125.6	404.6	5.2	**23.7**	
Cw 65	470.0	116.5	265.5	18.7	**30.5**	
Cw 65	574.5	115.6	372.7	15.0	**23.7**	
Cw 66	535.6	117.3	408.3	1.9	**22.3**	*
Cw 67	572.9	139.6	411.4	3.8	**25.3**	*
Cw 72	571.0	100.9	316.9	26.8	**24.2**	
Cw 73	439.9	59.4	285.0	21.7	**17.2**	**

Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Cw 76	434.9	67.3	367.4	0.0	**15.5**	
Cw 77	507.1	84.7	392.0	6.0	**17.8**	
Cw 78	555.3	130.6	391.4	6.0	**25.0**	
Cw 79	483.1	99.3	289.8	19.5	**25.5**	
Cw 80	427.3	127.5	282.6	4.0	**31.1**	
Cw 81	485.0	170.3	249.0	13.5	**40.6**	
Cw 82	442.9	238.9	264.1	-13.6	**47.5**	*
Cw 83	555.3	187.9	337.7	5.3	**35.7**	
Cw 84	430.4	222.6	229.2	-5.0	**49.3**	
Cw 87	455.8	98.0	256.5	22.2	**27.6**	
Cw 90	460.5	99.6	274.3	18.8	**26.6**	
Cw 94	503.3	65.8	346.3	18.1	**16.0**	
Cw 95	613.8	88.1	423.6	16.6	**17.2**	**
Cw 97	462.4	122.3	322.3	3.8	**27.5**	
Cw 99	527.9	246.2	266.2	2.9	**48.0**	
Cw 100	476.0	65.7	349.8	12.7	**15.8**	**
Cw 101	488.1	93.7	248.7	29.9	**27.4**	*
Cw 103	453.2	63.1	367.2	5.1	**14.7**	
Cw 104	534.2	175.0	252.3	20.0	**41.0**	
Cw 105	532.8	161.4	278.2	17.5	**36.7**	**
Cw 107	545.4	161.1	360.9	4.3	**30.9**	**
Cw 108	515.1	110.2	349.0	10.9	**24.0**	
Cw 109	578.7	130.1	353.7	16.4	**26.9**	
Cw 110	440.6	98.1	277.4	14.8	**26.1**	
Cw 112	503.4	104.8	289.4	21.7	**26.6**	
Cw 204V	603.1	48.0	402.3	25.3	**10.7**	**
Cw 208V	495.5	49.5	440.2	1.2	**10.1**	
AVERAGE				10.6	**28.9**	
COUNT:		62	62			

* Crushed to 8 mesh. Remainder crushed to 4 mesh

** The following applies to these samples:

1. Entire sample screened on 4 mesh to remove plus 4 mesh material
2. Minus 4 mesh material riffled to approximately 500g for processing
3. Minus 4 mesh reject AND plus 4 mesh combined and bagged

LR: 5424 - D*W* ***SERIES*** Summary Table

Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Dw 5	594.9	151.3	273.9	28.5	**35.6**	
Dw 14	395.4	62.7	280.6	13.2	**18.3**	
Dw 23	506.9	72.3	428.7	1.2	**14.4**	
Dw 24	533.7	75.0	447.1	2.2	**14.4**	
Dw 27V	583.2	58.3	432.4	15.9	**11.9**	**
Dw 31	438.5	71.6	426.7	-13.6	**14.4**	
Dw 33	502.2	151.2	316.6	6.8	**32.3**	
Dw 34	453.9	125.2	275.2	11.8	**31.3**	
Dw 35	489.7	147.5	331.2	2.2	**30.8**	
Dw 36	418.0	79.3	264.2	17.8	**23.1**	
Dw 37	446.1	109.5	294.0	9.5	**27.1**	**
Dw 38	512.4	140.4	285.1	17.0	**33.0**	**
Dw 39	652.4	117.1	435.3	15.3	**21.2**	**
Dw 40	576.4	108.0	409.3	10.3	**20.9**	**
Dw 43	537.6	120.0	459.0	-7.7	**20.7**	
Dw 43	470.3	65.4	386.7	3.9	**14.5**	
Dw 49V	476.4	77.1	331.1	14.3	**18.9**	
Dw 50	495.4	117.4	329.9	9.7	**26.2**	
Dw 51	419.4	107.1	271.7	9.7	**28.3**	
Dw 52	519.2	122.1	374.7	4.3	**24.6**	
Dw 53	473.7	94.1	345.5	7.2	**21.4**	
Dw 54	517.2	112.1	339.7	12.6	**24.8**	
Dw 55	598.6	124.7	374.3	16.6	**25.0**	
Dw 56	456.7	148.0	251.0	12.6	**37.1**	
Dw 57	523.7	154.9	324.8	8.4	**32.3**	
Dw 58	508.3	250.1	214.3	8.6	**53.9**	
Dw 59	462.6	189.8	246.6	5.7	**43.5**	
Dw 60	461.1	186.0	224.4	11.0	**45.3**	
Dw 61	453.4	122.0	382.1	-11.2	**24.2**	
Dw 62	543.5	86.8	418.9	7.0	**17.2**	
Dw 63	485.9	109.6	428.2	-10.7	**20.4**	
Dw 64	442.8	111.6	302.0	6.6	**27.0**	
Dw 65	505.0	99.3	421.5	-3.1	**19.1**	
Dw 66	573.8	100.1	440.1	5.9	**18.5**	
Dw 67	544.0	62.0	336.4	26.8	**15.6**	

Dw 68	592.5	143.4	407.2	7.1	**26.0**	
Dw 69	550.0	109.4	411.4	5.3	**21.0**	
Dw 71	490.8	75.5	224.5	38.9	**25.2**	
Dw 71V	515.7	53.5	349.8	21.8	**13.3**	**
Dw 72	597.8	126.4	415.2	9.4	**23.3**	
Dw 72V	432.3	68.1	333.6	7.1	**17.0**	
Dw 73	484.0	43.9	523.1	-17.1	**7.7**	
Dw 74	445.1	127.3	302.6	3.4	**29.6**	
Dw 74V	666.4	162.7	281.8	33.3	**36.6**	**
Dw 75	517.8	151.2	314.4	10.1	**32.5**	
Dw 75V	630.7	69.0	316.2	38.9	**17.9**	**
Dw 76V	443.2	40.4	338.5	14.5	**10.7**	**
Dw 77V	505.0	37.7	493.1	-5.1	**7.1**	
Dw 81	525.1	94.9	461.4	-5.9	**17.1**	
Dw 82	580.0	152.9	319.6	18.5	**32.4**	
Dw 85V	516.1	95.6	311.4	21.1	**23.5**	
Dw 86	563.8	102.3	409.1	9.3	**20.0**	
Dw 88	503.1	63.3	274.1	32.9	**18.8**	
Dw 89	437.5	81.4	346.4	2.2	**19.0**	
Dw 90	588.3	67.6	427.5	15.8	**13.7**	
Dw 96	397.3	69.1	250.5	19.6	**21.6**	**
AVERAGE				10.0	**23.6**	
COUNT:		56	56			

** The following applies to these samples:

1. Entire sample screened on 4 mesh to remove plus 4 mesh material
2. Minus 4 mesh material riffled to approximately 500g for processing
3. Minus 4 mesh reject AND plus 4 mesh combined and bagged

LR: 5424 - E*W* ***SERIES*** Summary Table

Sample	Weights (g)			Wet Feed	**Dry Feed**
	Initial	Float	Sink	% Moisture	**% Vermiculite**
Ew 26	459.3	107.2	355.2	-0.7	**23.2**
Ew 27	443.1	83.2	335.8	5.4	**19.9**
Ew 31V	506.8	133.7	285.3	17.3	**31.9**
AVERAGE				7.4	**25.0**
COUNT:		3	3		

LR: 5424 - F*W SERIES* Summary Table

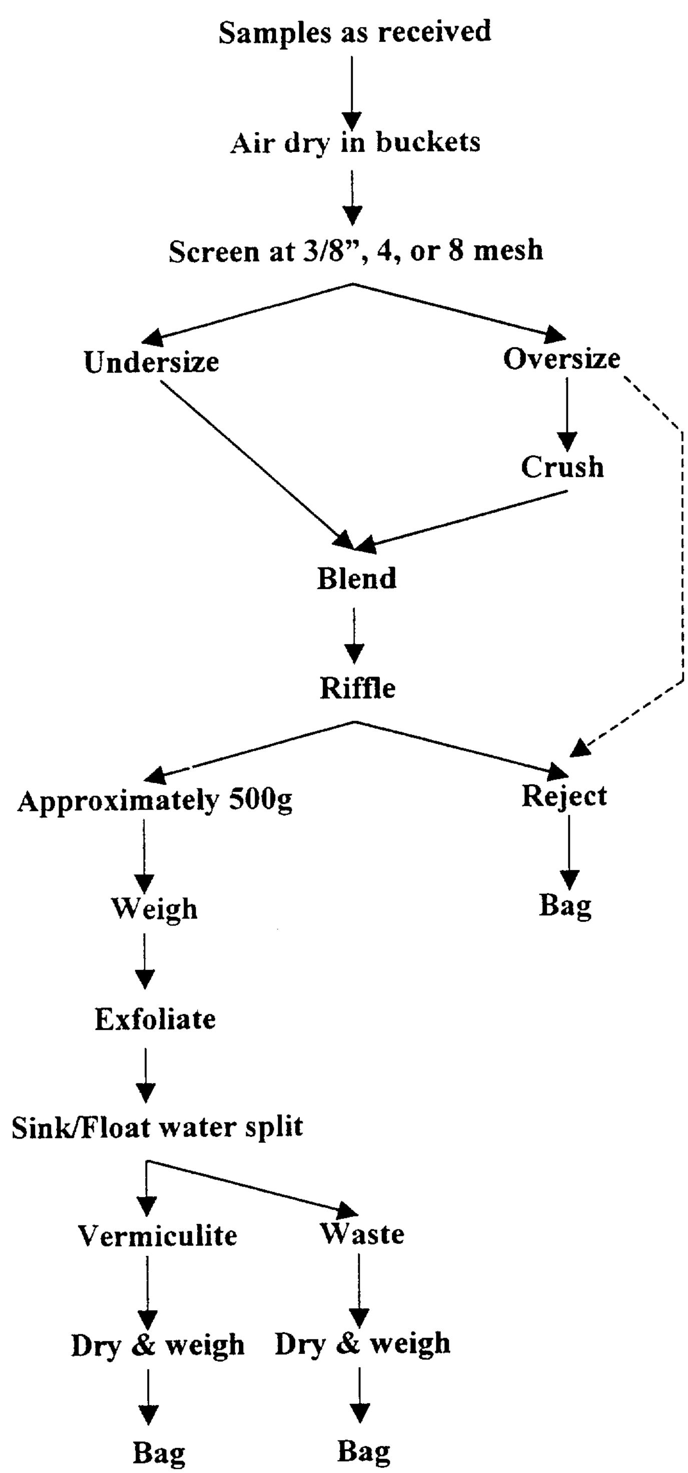
Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Fw 10	495.9	78.5	353.0	13.0	**18.2**	
Fw 11V	611.9	88.5	388.4	22.1	**18.6**	**
AVERAGE				17.5	**18.4**	
COUNT:		2	2			

** The following applies to these samples:

1. Entire sample screened on 4 mesh to remove plus 4 mesh material
2. Minus 4 mesh material riffled to approximately 500g for processing
3. Minus 4 mesh reject AND plus 4 mesh combined and bagged

Details of Tests

FLOWSHEET


Samples as received
Air dry in buckets
Screen at 3/8", 4, or 8 mesh
Undersize
Oversize
Crush
Blend
Riffle
Approximately 500g
Reject
Weigh
Bag
Exfoliate
Sink/Float water split
Vermiculite
Waste
Dry & weigh
Dry & weigh
Bag
Bag

Note: The occasional negative moisture contents in the following tables can be attributed to either a hold-up of coarse material from the previous sample in the rotary section of the exfoliator or material in the air classifier

LR: 5424 - ***AW SERIES*** Summary Table

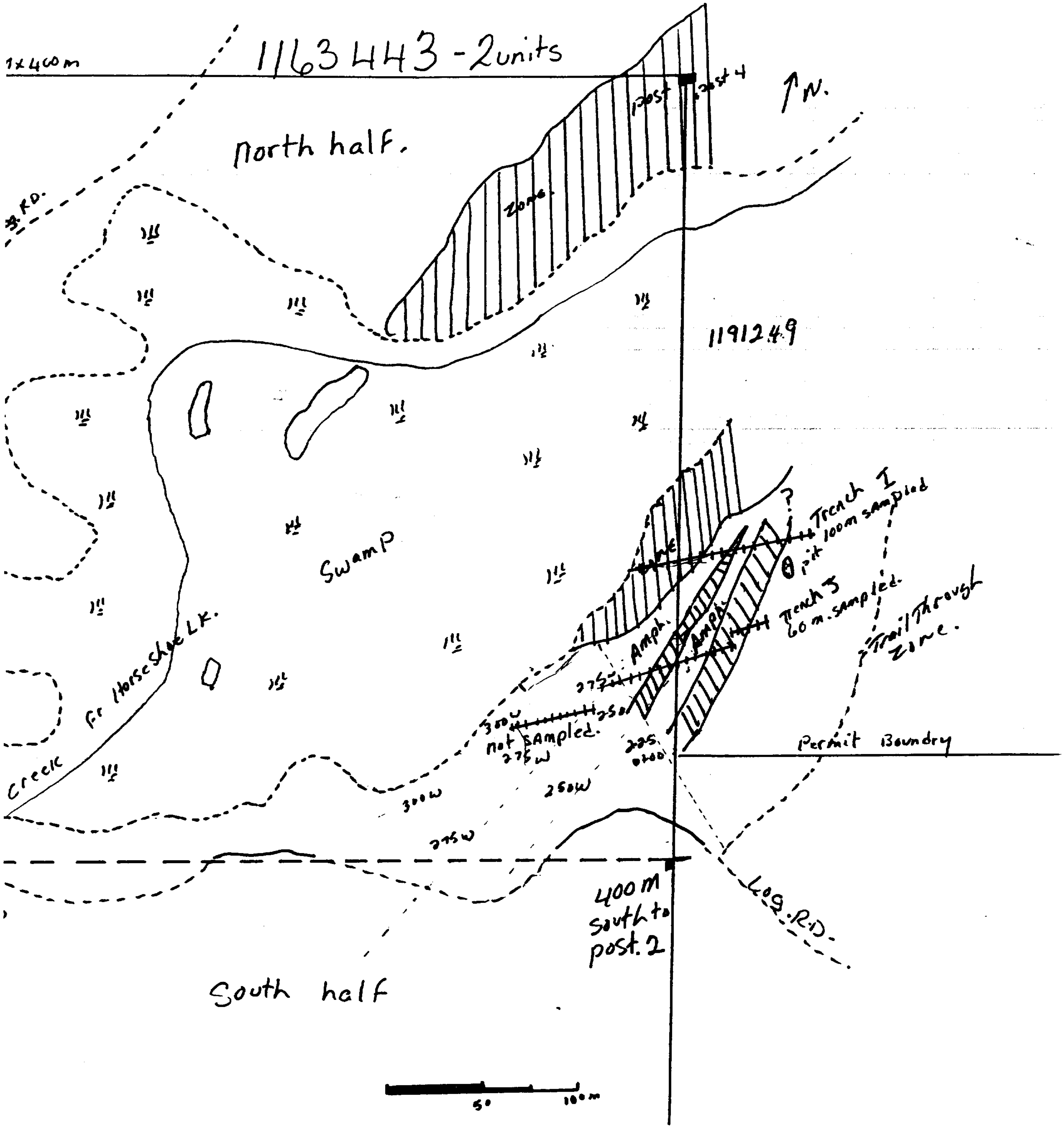
Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Aw 1	977.5	21.5	821.8	13.7	**2.5**	
Aw 2	622.7	355.7	460.3	-31.0	**43.6**	*
Aw 3	517.2	238.7	202.3	14.7	**54.1**	*
Aw 4	908.4	60.1	819.2	3.2	**6.8**	
Aw 5	829.3	165.2	564.9	12.0	**22.6**	*
Aw 6	552.3	73.7	428.2	9.1	**14.7**	*
Aw 7	905.1	176.2	602.1	14.0	**22.6**	
Aw 8	586.5	175.0	355.2	9.6	**33.0**	*
Aw 9	721.9	264.7	353.7	14.3	**42.8**	*
Aw 10	979.7	404.4	494.7	8.2	**45.0**	*
Aw 11	537.4	192.7	286.3	10.9	**40.2**	*
Aw 12	531.1	180.8	296.0	10.2	**37.9**	*
Aw 13	801.0	27.3	679.1	11.8	**3.9**	
Aw 14	519.3	28.1	463.5	5.3	**5.7**	
Aw 15	612.7	198.2	378.4	5.9	**34.4**	*
Aw 16	616.8	204.0	309.1	16.8	**39.8**	*
Aw 17	903.5	398.0	336.7	18.7	**54.2**	*
Aw 21	877.8	181.8	654.7	4.7	**21.7**	
Aw 22	662.1	160.6	465.8	5.4	**25.6**	*
Aw 26	601.8	152.3	422.0	4.6	**26.5**	*
Aw 27	901.5	212.0	478.4	23.4	**30.7**	*
Aw 28	656.2	176.8	450.5	4.4	**28.2**	*
Aw 29	601.3	163.0	387.2	8.5	**29.6**	*
Aw 29A	558.1	63.6	351.4	25.6	**15.3**	*
Aw 30	522.1	163.3	301.4	11.0	**35.1**	*
Aw 31	?	211.8	536.3	?	**28.3**	*
Aw 32	447.8	81.1	336.0	6.9	**19.4**	
Aw 33	885.8	245.1	593.3	5.4	**29.2**	*
Aw 34	723.0	178.4	494.7	6.9	**26.5**	
Aw 35	772.6	340.3	366.3	8.5	**48.2**	*
Aw 36	789.3	214.3	530.0	5.7	**28.8**	*

Sample	Weights (g)			Wet Feed	**Dry Feed**	
	Initial	Float	Sink	% Moisture	**% Vermiculite**	
Aw 37	645.6	198.5	391.7	8.6	**33.6**	*
Aw 38	570.6	138.9	376.5	9.7	**26.9**	*
Aw 39	799.3	139.2	628.0	4.0	**18.1**	*
Aw 40	508.5	30.6	395.0	16.3	**7.2**	
Aw 40A	747.0	410.1	276.3	8.1	**59.7**	*
Aw 42	855.6	129.3	675.0	6.0	**16.1**	
Aw 43	888.8	227.1	581.2	9.1	**28.1**	
Aw 44	995.4	331.6	516.8	14.8	**39.1**	*
Aw 45	579.4	173.1	349.5	9.8	**33.1**	*
Aw 46	1007.2	403.6	476.6	12.6	**45.9**	
Aw 47	680.1	144.2	283.9	37.1	**33.7**	*
Aw 49	602.5	185.8	347.0	11.6	**34.9**	
Aw 50	930.2	252.5	461.1	23.3	**35.4**	*
Aw 100	689.2	109.2	315.4	38.4	**25.7**	
Aw 101	688.7	99.7	559.7	4.3	**15.1**	
Aw 102	883.8	58.3	786.7	4.4	**6.9**	
Aw 103	860.4	23.5	805.6	3.6	**2.8**	
Aw 104	858.7	90.4	714.7	6.2	**11.2**	
Aw 105	775.7	103.0	391.2	36.3	**20.8**	
Aw 106	890.4	10.6	811.4	7.7	**1.3**	
Aw 107	670.2	17.7	570.5	12.2	**3.0**	
Aw 108	751.8	108.0	539.3	13.9	**16.7**	*
Aw 109	789.7	84.3	678.2	3.4	**11.1**	
Aw 110	587.1	28.3	521.8	6.3	**5.1**	
Aw 111	?	103.3	414.4	?	**20.0**	*
Aw 114	494.0	168.8	224.7	20.3	**42.9**	*
Aw 115	792.3	53.5	620.1	15.0	**7.9**	
Aw 116	607.3	23.8	550.5	5.4	**4.1**	
Aw 117	844.2	53.1	751.0	4.8	**6.6**	
Aw 118	545.6	8.4	521.9	2.8	**1.6**	
Aw 119	747.6	12.9	716.5	2.4	**1.8**	
Aw 120	648.3	16.2	591.8	6.2	**2.7**	
Aw 121	877.3	13.1	830.8	3.8	**1.6**	
Aw 122	909.1	7.1	861.4	4.5	**0.8**	
Aw 123	747.3	24.5	679.6	5.8	**3.5**	
Aw 124	667.2	12.3	637.2	2.7	**1.9**	
Aw 125	625.2	4.1	604.3	2.7	**0.7**	
Aw 128	525.3	5.6	509.6	1.9	**1.1**	

CLAIM NUMBER 1163443
UNITS 2
LOT 11 CONCESSION 2
CAVENDISH TOWNSHIP
SOUTHERN ONTARIO

Two trenches were trenched on this claim starting ~~on~~ March 28,2000. Trench I and trench J. Those trenches were a extension of the trenches on the claim 1191249 where the bulk of our work has been done. The trenches are located in the north half of the claim near the east claim line, with 66 samples taken for assay and 100 lbs. taken for density test.

Second copy of Assays in Booklet


1163443 - 2units
1x400m
Post 1
Post 4
N.
North half.
Zone
1191249
Swamp
Cr Horseshoe LK.
Creek
Trench I
pit 100m sampled
Trench 3
60 m. sampled
Amph.
Amph.
Trail Through Zone.
300W
not sampled.
275W
250
225
0+00
Permit Boundry
300W
250W
275W
400M
south to
post. 2
Log. R.D.
South half
50
100m

Horse-Shoe Trench I

		Total Sample	Total Ext.	Gross moisture	% moisture	waste	verm	% verm
1	135301	315.1	246.0	69.1	21.9	238.5	7.5	3.0
2	135302	493.7	422.0	71.7	14.5	358.0	64.0	15.1
3	135303	220.6	202.9	17.7	8.0	200.9	2.0	0.9
4	135304	375.3	334.7	40.6	10.8	314.1	20.6	6.1
5	135305	641.8	568.0	73.8	11.4	379.9	1881	33.1
6	135306	525.8	398.0	127.8	24.3	396.2	15.8	3.9
7	135307	225.1	175.5	49.6	22.0	175.5	0	0
8	135308	399.6	335.6	64.0	16.0	328.6	7.0	2.0
9	135309	560.7	489.5	71.2	12.6	478.1	14.4	2.3
10	135310	504.1	441.4	62.7	12.4	375.3	66.1	14.9
11	135311	406.9	367.9	39.0	9.5	311.9	56.0	15.2
12	135312	459.8	412.6	47.2	10.2	359.9	52.7	12.7
13	135313	657.1	542.6	114.5	17.4	478.9	63.7	11.7
14	135314	471.1	376.2	94.9	20.1	298.1	78.1	20.7
15	135315	475.9	381.7	94.2	19.7	268.0	113.7	29.7
16	135316	530.3	429.6	100.7	18.9	299.0	1306	30.4
17	135317	572.9	457.3	115.6	20.1	327.8	1295	28.3
18	135318	538.2	407.1	131.1	24.3	393.2	13.9	3.4
19	135319	456.6	334.2	122.4	26.8	264.2	70.0	20.9
20	135320	513.7	392.2	121.5	23.6	365.5	26.7	6.8
21	135321	4736	370.4	103.2	21.7	338.7	31.7	8.5
22	135322	5330	410.9	122.1	22.9	364.3	46.6	11.3
23	135323	663.6	527.1	136.5	20.5	452.4	74.7	14.1
24	135324	449.8	400.9	48.9	10.8	350.9	50.0	12.4
25	135325	626.3	567.9	58.4	9.3	528.3	39.6	6.9
26	135326	927.8	808.3	119.5	12.8	769.3	39.0	4.8
27	135327	7294	650.8	78.6	10.7	515.1	135.7	20.8
28	135328	681.5	591.9	89.6	13.1	481.1	110.8	18.7
29	135329	601.5	512.2	89.3	14.8	415.2	97.0	18.9
30	135330	529.4	471.2	58.2	10.9	420.7	50.5	10.7
31	135331	644.6	540.1	1045	16.2	519.3	20.8	3.8
32	135332	651.7	556.4	95.3	14.6	548.0	8.4	1.5
33	135333	651.1	528.9	122.2	18.7	503.5	25.4	4.8

TRENCH I

		Total sample	Total EXF	Grams moisture	% Moisture	waste	Verm	% Verm
34	135334	521.1	457.6	63.5	12.1	439.5	18.1	3.9
35	135335	619.7	538.5	81.2	13.1	460.8	77.7	14.4
36	135336	985.3	862.6	122.7	12.4	687.7	174.9	20.2
37	135337	677.1	576.4	100.7	14.8	405.1	171.3	29.7
38	135338	837.0	733.3	103.7	12.3	605.4	127.9	17.4
39	135339	692.3	613.6	78.7	11.3	471.3	142.3	23.1
40	135340	629.6	551.4	78.2	12.4	481.5	69.9	12.6
41	135342	491.5	435.8	55.7	11.3	387.8	48.0	11.0
42	135343	610.6	537.8	72.8	11.9	521.2	16.6	3.0

VERT. samples

		Total sample	Total EXF.	Grams moisture	% Moisture	waste	Verm	% Verm
1V	135341	294.7	268.4	26.3	8.9	255.2	13.2	4.9
2V		433.8	414.6	19.2	4.4	392.4	22.2	5.3
3V		558.0	416.4	141.6	25.3	386.3	30.1	7.2
4V		464.0	378.6	85.4	18.4	308.8	69.8	18.4
5V		593.7	529.3	64.4	10.8	516.0	13.3	2.5

Bulk TEST trench A.

	wet	DRY	water	% water	wet	DRY	Loss	% Loss
A	478 LBS	386 LBS	92 LBS	19.2	30 gal.	28.5 gal	1.5 gal	5.0
A	79.6 LBS	64.3 LBS	15.3 LBS	19.2	5 gal.			

Horse-Shoe Trench. J

		Total Sample	Total Exf.	Grams moisture	% moisture	Waste	Verm.	% Verm
1	135348	494.5	447.5	47	9.5	418.5	29.0	6.4
2	135349	683.2	604.7	78.5	11.4	553.3	51.4	8.5
3	135350	499.1	393.3	105.8	21.1	393.3	0	0
4	135351	486.3	351.2	135.1	27.7	351.2	0	0
5	135352	452.5	354.0	98.5	21.7	343.7	10.3	2.9
6	135353	192.0	144.5	47.5	24.7	142.4	2.1	1.4
7	135354	515.7	428.2	87.5	16.9	299.5	128.7	30.3
8	135355	363.4	321.4	42.0	11.5	236.0	85.4	26.5
9	135356	730.9	606.4	124.5	17.0	398.6	207.8	34.2
10	135357	581.0	476.1	104.9	18.0	331.3	144.8	30.4
11	135358	581.3	468.0	113.3	19.4	320.4	147.6	31.5
12	135359	560.3	465.3	95.0	16.9	288.7	176.6	37.9
13	135360	840.5	726.6	113.9	13.5	638.1	88.5	12.1
14	135361	864.0	733.5	130.5	15.1	735.5	0	0
15	135362	793.2	639.8	153.4	19.3	630.9	8.9	1.3
16	135363	736.5	578.9	157.6	21.3	578.9	0	0
17	135364	469.8	412.6	52.7	12.1	369.0	43.6	10.5
18	135365	683.4	581.9	101.5	14.8	537.3	44.6	7.6
19	135366	492.4	443.3	49.1	9.9	426.0	17.3	3.9

18	Recheck.	683.4	581.9	101.5	14.8	537.3	44.6	7.6

MAPS BY

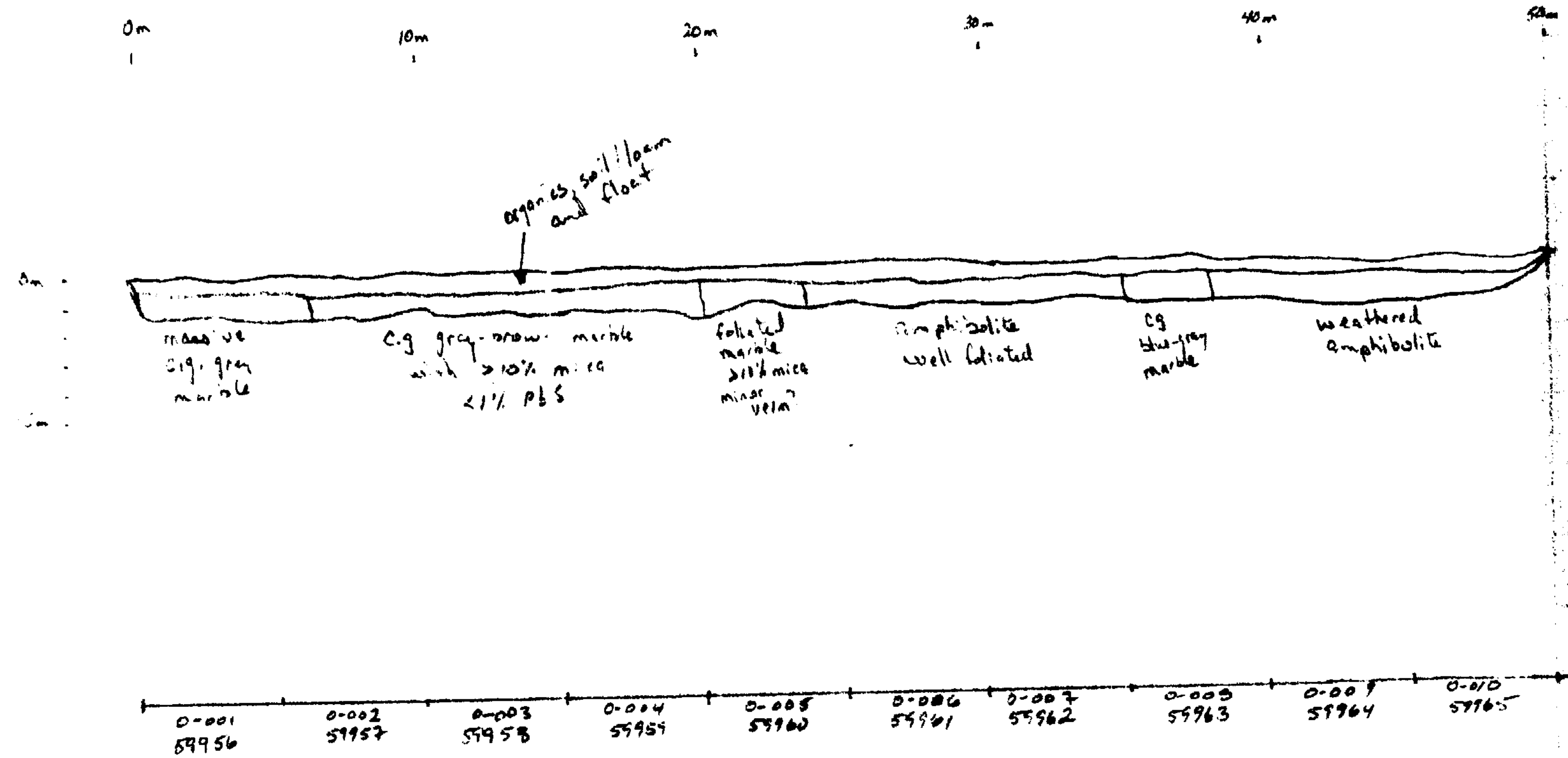
DAN LEROUX

TRENCHES
REGIS RESOURCES INC.

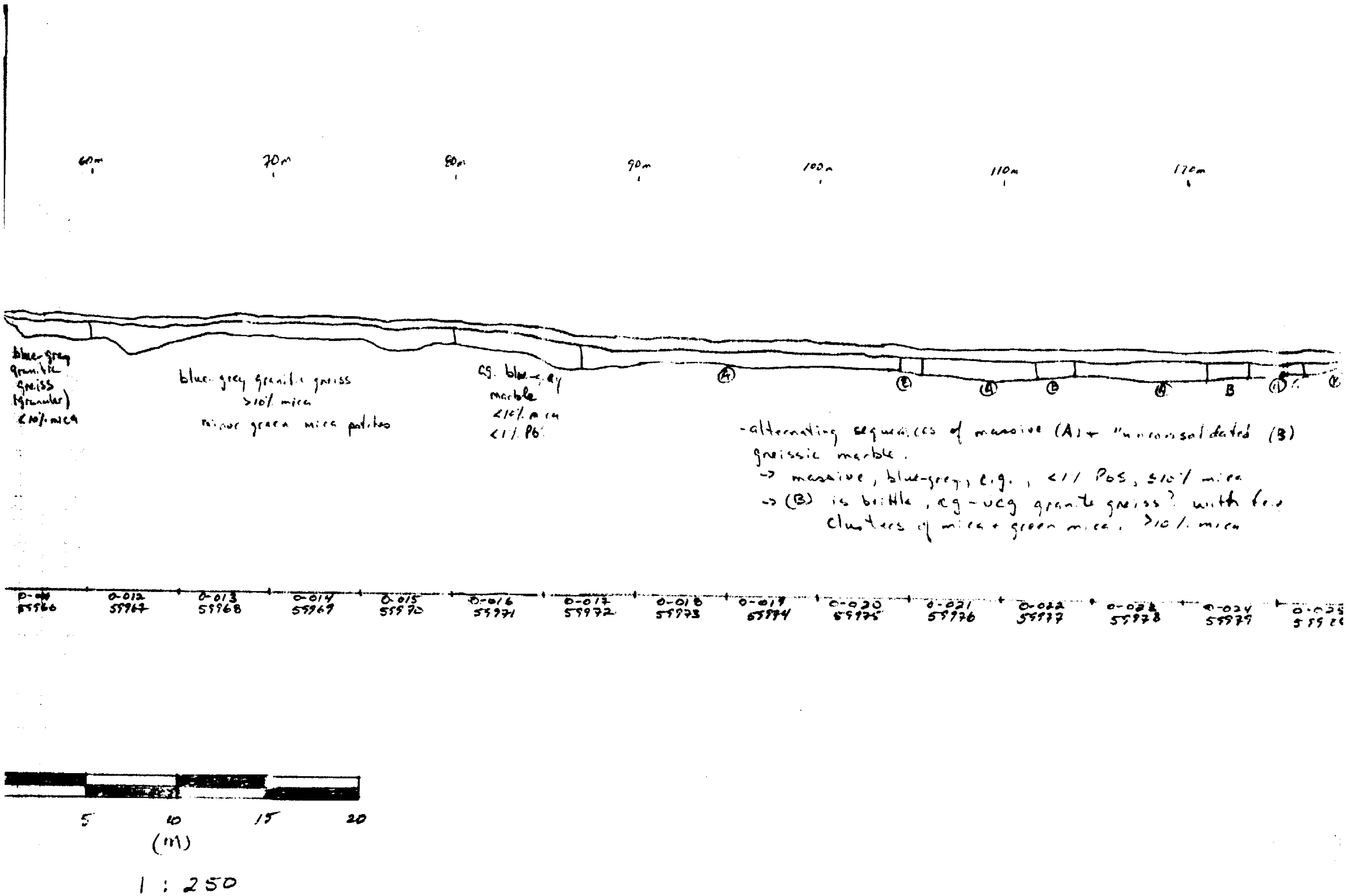
NORTH ZONE. 0,1N,1S,AND 2S
ZONE 2. 200,335,AND 400
HORSE SHOE. I AND J

REGIS RESOURCES INC	
NORTH ZONE TRENCH O	
MAPPED BY: D. LEBOW	DATE: MARCH 2000
DRAWN BY: D. LEBOW	SCALE: 1:250
CLAIM No:	MAG DECL: 14° W
TRENCH AZIMUTH:	FIGURE

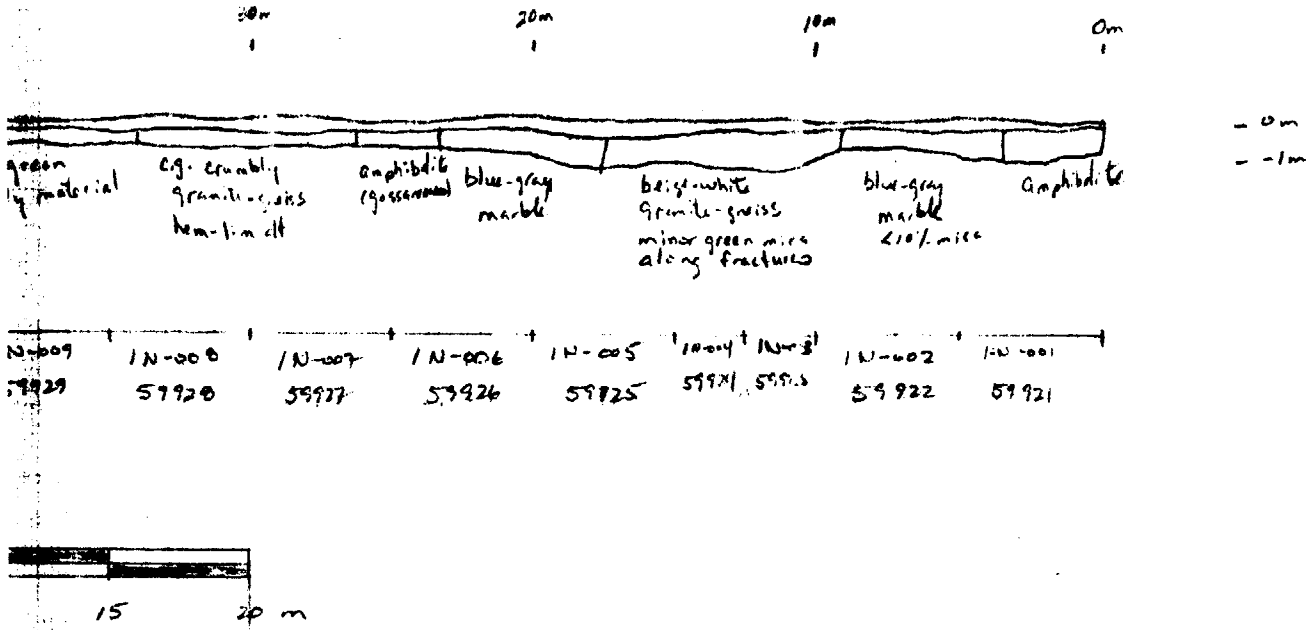
TRENCH O


0m
10m
20m
30m
40m
50m
organics, soil/loam and float
massive c.g. gray marble
C.g gray-brown marble with >10% mica <1% PbS
foliated marble >10% mica minor vein
amphibolite well foliated
cg blue-gray marble
weathered amphibolite
0-001 59956
0-002 59957
0-003 59958
0-004 59959
0-005 59960
0-006 59961
0-007 59962
0-008 59963
0-009 59964
0-010 59965

TRENCH 0


60m
70m
80m
90m
100m
110m
120m
blue-grey granitic gneiss (granular) <10% mica
blue-grey granitic gneiss >10% mica minor green mica patches
cg. blue-grey marble <10% mica <1% Po
A
B
A
B
A
B
-alternating sequences of massive (A) + "unconsolidated" (B) gneissic marble.
-> massive, blue-grey, c.g., <1% Pos, ≤10% mica
-> (B) is brittle, cg-vcg granite gneiss? with few clusters of mica + green mica. >10% mica
0-012 55967
0-013 55968
0-014 55969
0-015 55970
0-016 55971
0-017 55972
0-018 55973
0-019 55974
0-020 55975
0-021 55976
0-022 55977
0-023 55978
0-024 55979
5
10
15
20
(m)
1 : 250

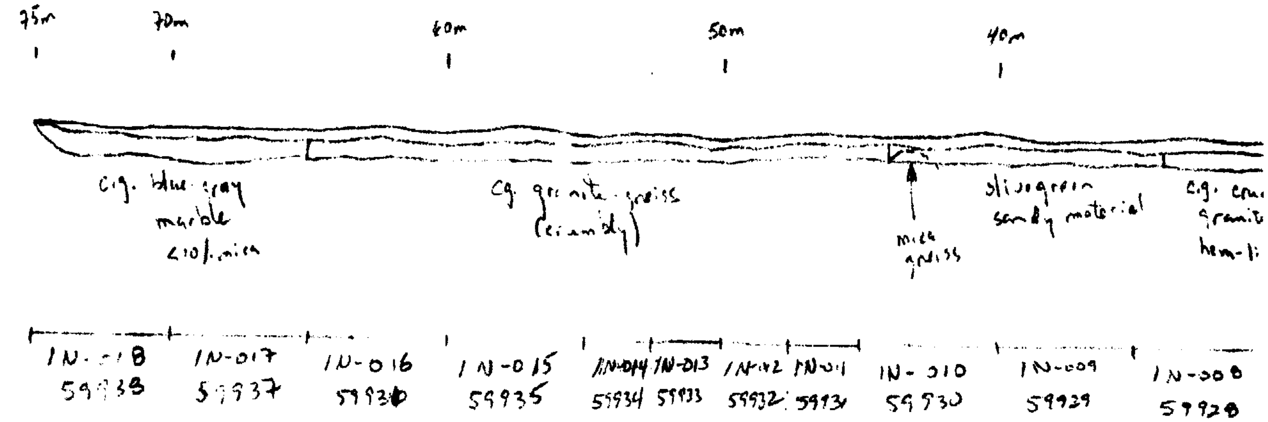
TRENCH O



REGIS RESOURCES INC.	
NORTH ZONE TRENCH 1-N	
MAPPED BY: D. LEROUX	DATE:
DRAWN BY: D. LEROUX	SCALE: 1:250
CLAIM No	MAG DECL: 14°W
TRENCH AZIMUTH:	FIGURE

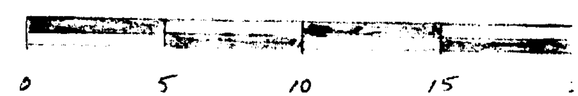
TRENCH 1-N

LOOKING



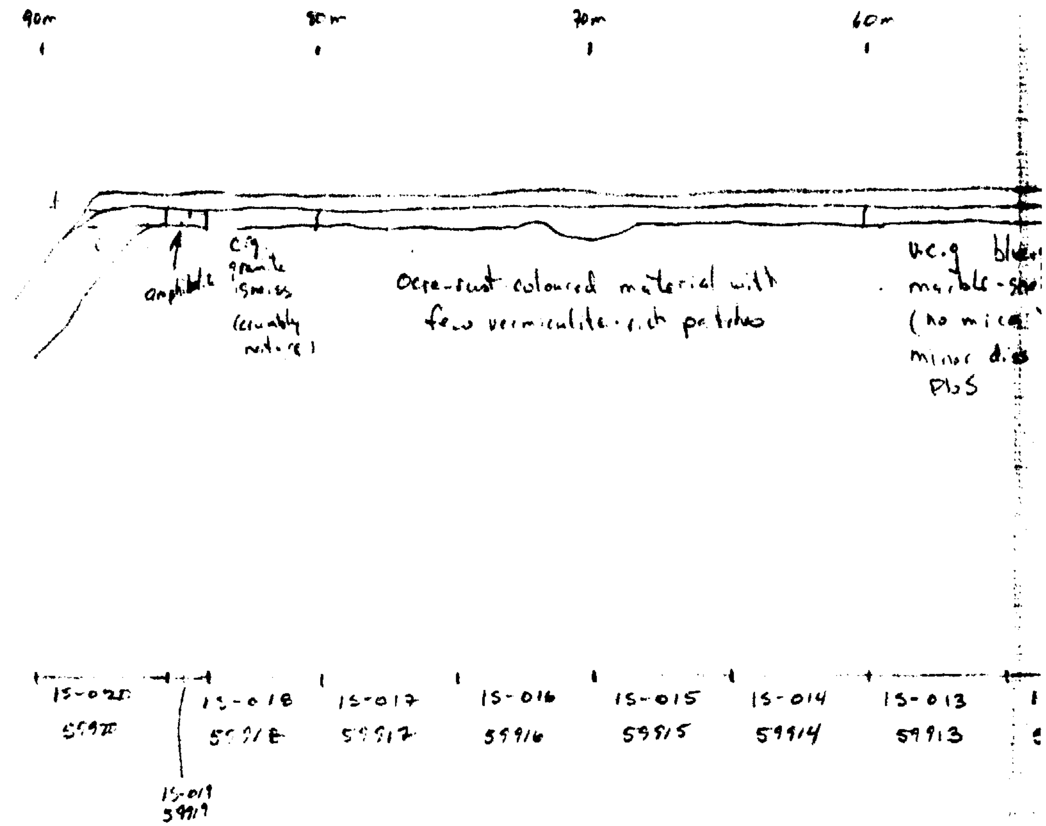
LEGEND

horizontal channel sample
IN-017 field number
59937 lab number



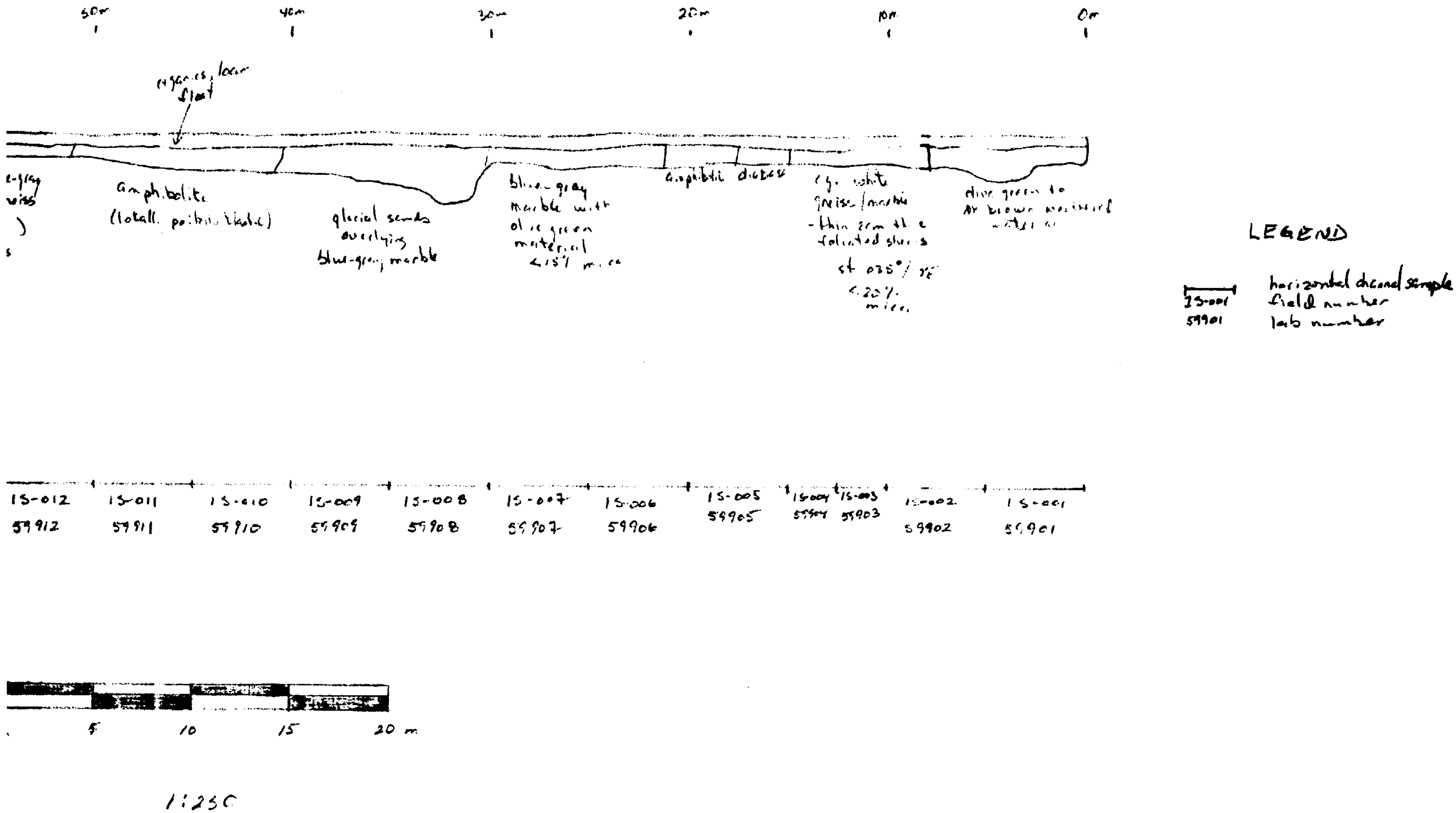
TRENCH 1-N

TRENCH 1 South

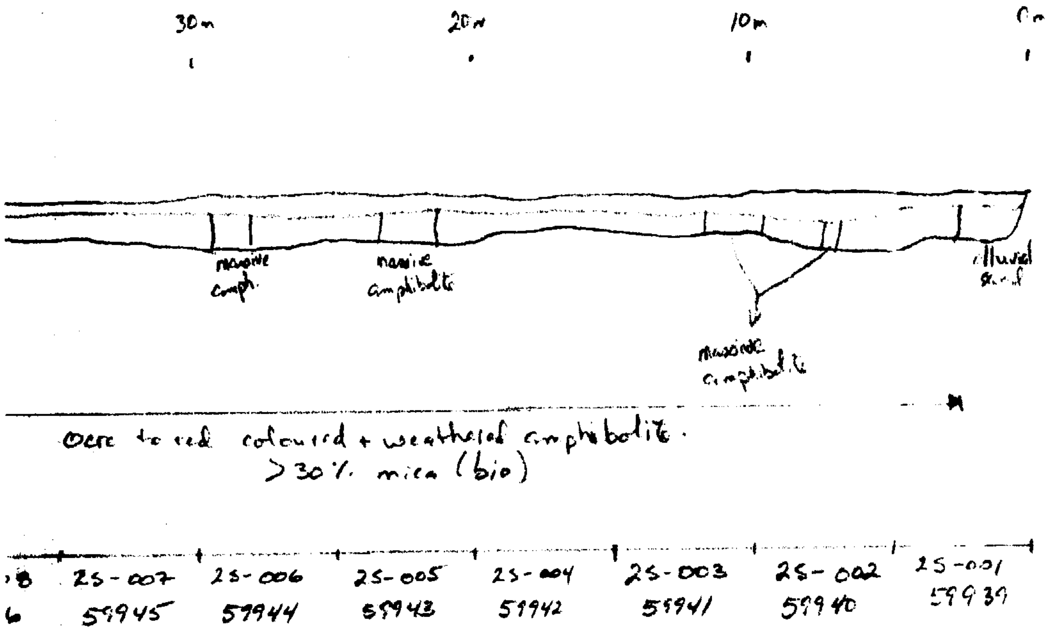


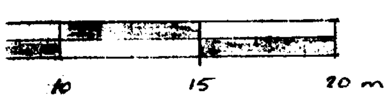
REGIS RESOURCES INC	
NORTH ZONE TRENCH 1 S	
MAPPED BY: D. LEROUX	DATE:
DRAWN BY: D. LEROUX	SCALE 1:250
CLAIM No:	MAG. DECL 14° W
TRENCH AZIMUTH:	FIGURE

TRENCH 1-S


50m
40m
30m
20m
10m
0m
organics, loam
float
amphibolite
(totally pervasively foliated)
glacial sands
overlying
blue-gray marble
blue-gray
marble with
olive green
material
<15% mica
amphibolite dikes
c.g. white
gneiss/marble
- thin 2cm thick
foliated shears
olive green to
dk brown weathered
material
LEGEND
horizontal channel sample
field number
lab number
IS-001
59901
IS-012
59912
IS-011
59911
IS-010
59910
IS-009
59909
IS-008
59908
IS-007
59907
IS-006
59906
IS-005
59905
IS-004
59904
IS-003
59903
IS-002
59902
IS-001
59901
5
10
15
20 m
1:250

TRENCH 1-S

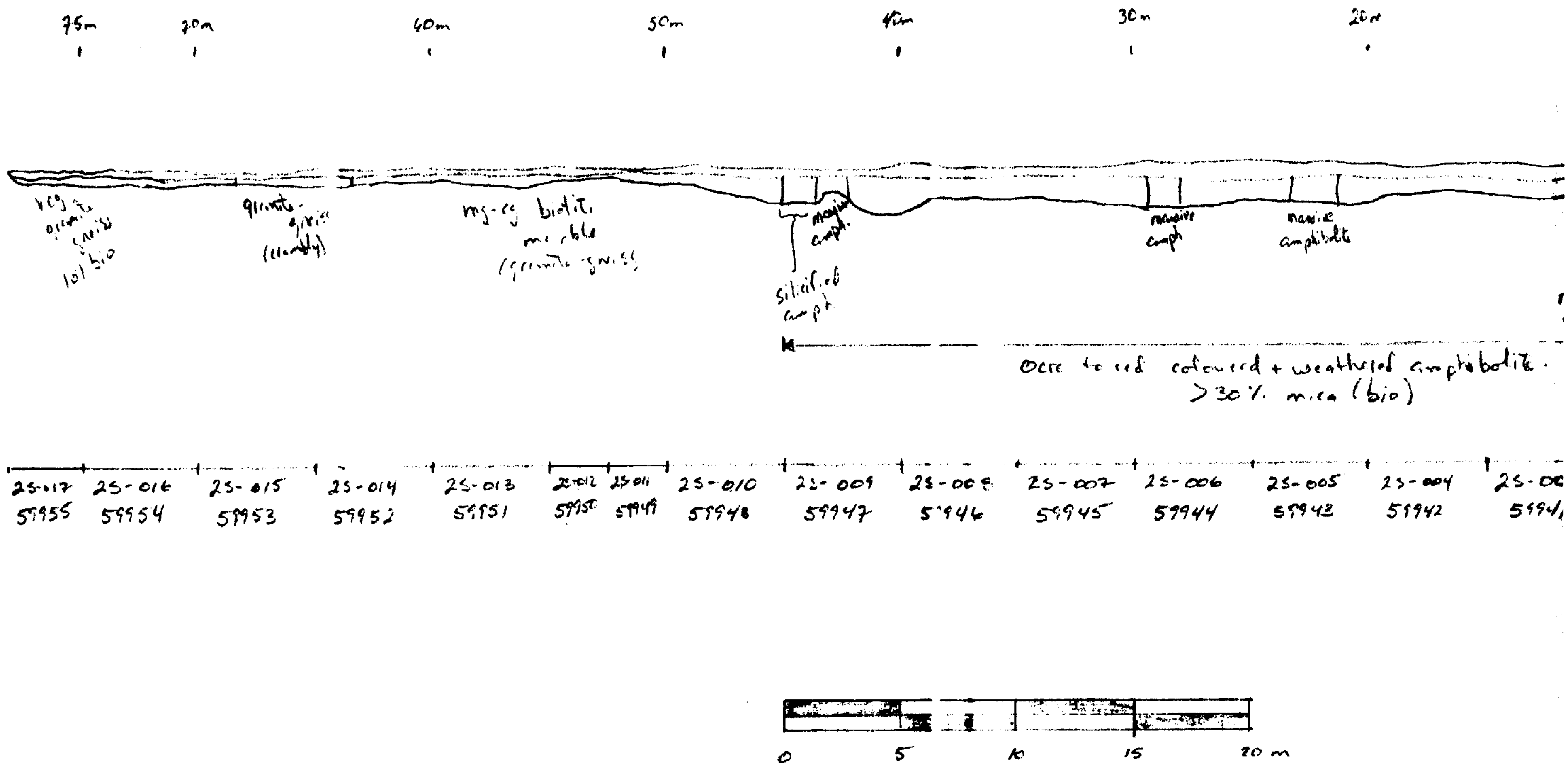




REGIS RESOURCES INC	
NORTH ZONE TRENCH 2S	
MAPPED BY: D.LEROUX	DATE:
DRAWN BY: D.LEROUX	SCALE 1:250
CLAIM No:	MAG DECL. 14° W
TRENCH AZIMUTH	FIGURE

TRENCH 2-S

Trench 2 S (looking N)



TRENCH 2-S

MAPS BY

DAN LEROUX

TRENCHES
REGIS RESOURCES INC.

NORTH ZONE. 0,1N,1S,AND 2S

ZONE 2. 200,335,AND 400

HORSE SHOE. I AND J

RECEIVED
SEP 25 2000
11:00AM
GEOSCIENCE ASSESSMENT OFFICE

= = granular marble

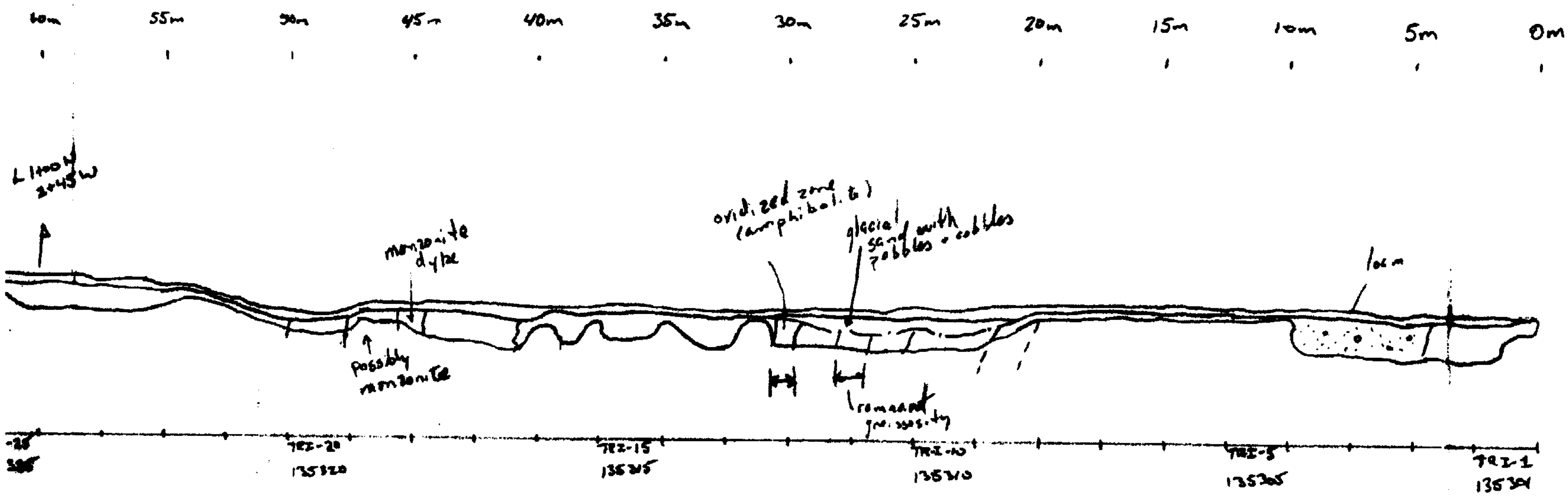
LEGEND

- - -	limit of weathering profile
TRI-5	horizontal channel sample field number
135305	lab number
	swamp

REGIS RESOURCES INC.	
HORSESHOE GRID TRENCH I	
MAPPED BY: D. LEROUX	DATE: MARCH 29, 2000
DRAWN BY: D. LEROUX	SCALE: 1:250
CLAIM NO:	MAG. DECL: 14° W
TRENCH AZIMUTH:	FIGURE

TRENCH I

Looking 315°



oxidized greenish dolomitic marble

monzonite

oxidized greenish mica-rich marble

Massive, silicified green spotted marble

A fg-mg, massive, well banded, greenish mica-rich marble/dolomite
- marble is pink-beige to light lime green with few glassy green crystals present.
- loam has abundant vermiculite due to weathering of dark green talc-like mica

A lime green, fg-mg marble?
- sections of unit are massive to saprock whereas upper horizontal section is saprolitic
- lime green possibly epidote?
- minor biotite ± vermiculite in massive sections
- a maroon coloured alteration product along fractures with mica + vermiculite

Contact Zone
- > 20% dark green mica (vermiculite)
- more gneissic
- contact @ 010°/85° NW

Spotty, mg-cg, pinkish marble/dolomite
- minor banding of greenish mineral
- no visible mica
- vugs found in weathered portion of unit

glacial sand with well rounded pebbles + cobbles
- sand is limonitic

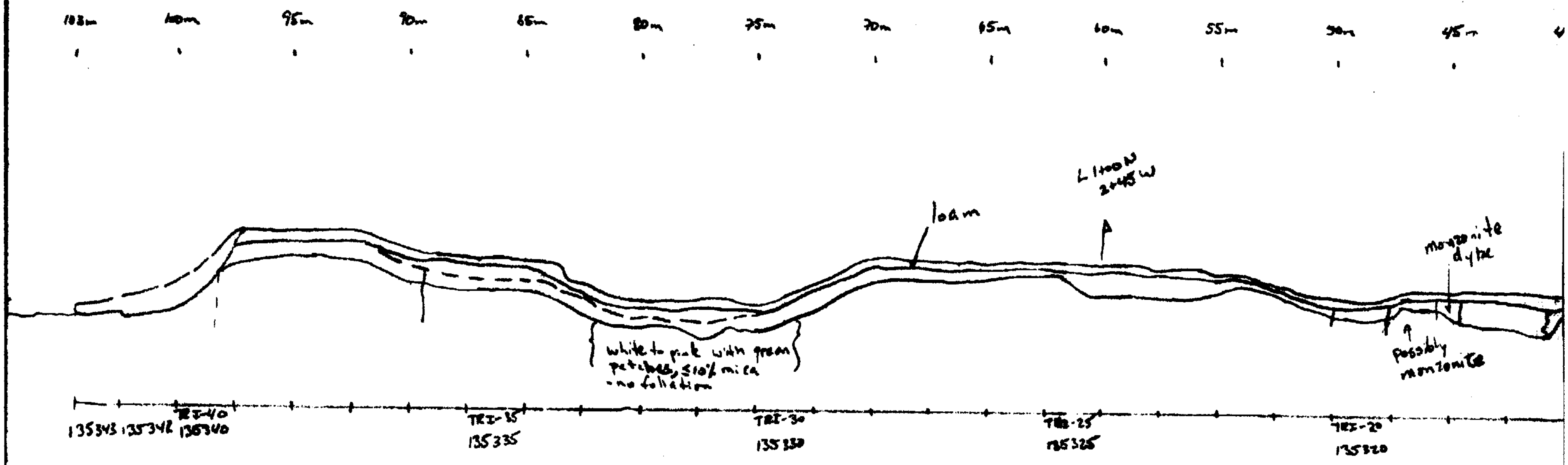
A greenish, mg-cg, mica-rich marble/schist
- green mica is talc-like
- saprock
- 305°/70° SW

A massive, mg, silicified, greenish mica-rich marble/schist

patches

TRENCH I

Looking 315°



A gray-white to lime green, fg-mg, massive to weakly banded marble-schist
- >20% mica found along schist-like fractures.
- chert-like appearance.

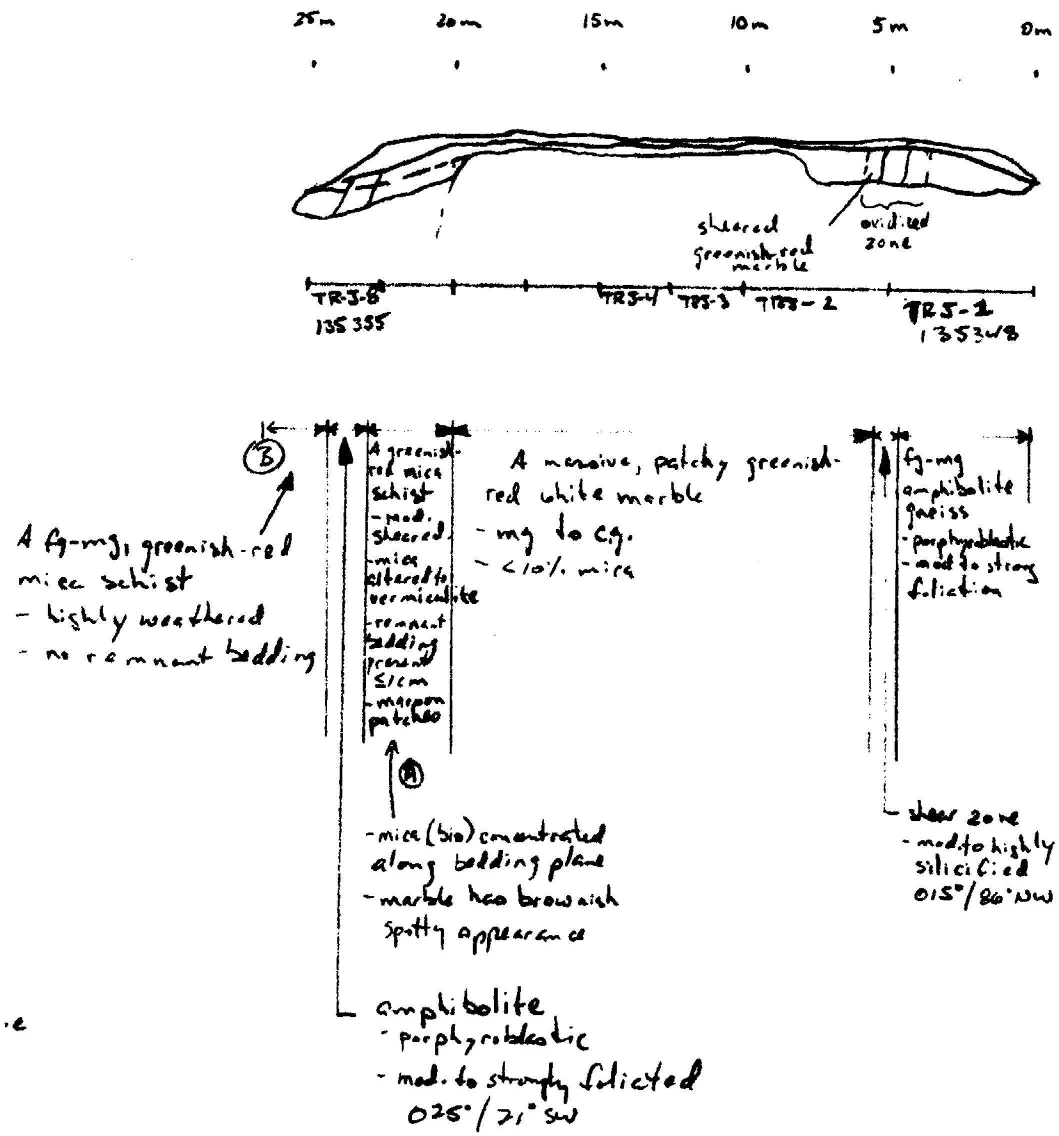
Spotty marble / dolomite
- same as at 10.0-20.0m
- >10% mica, ± 10% vermiculite in weathered horizon
- sections with gneissic banding present
- thin vermiculite horizon in loam above saprock
- light, lime-green colour with maroon coloured patches that are also parallel to gneissosity

oxidized greenish clustered marble

monzonite

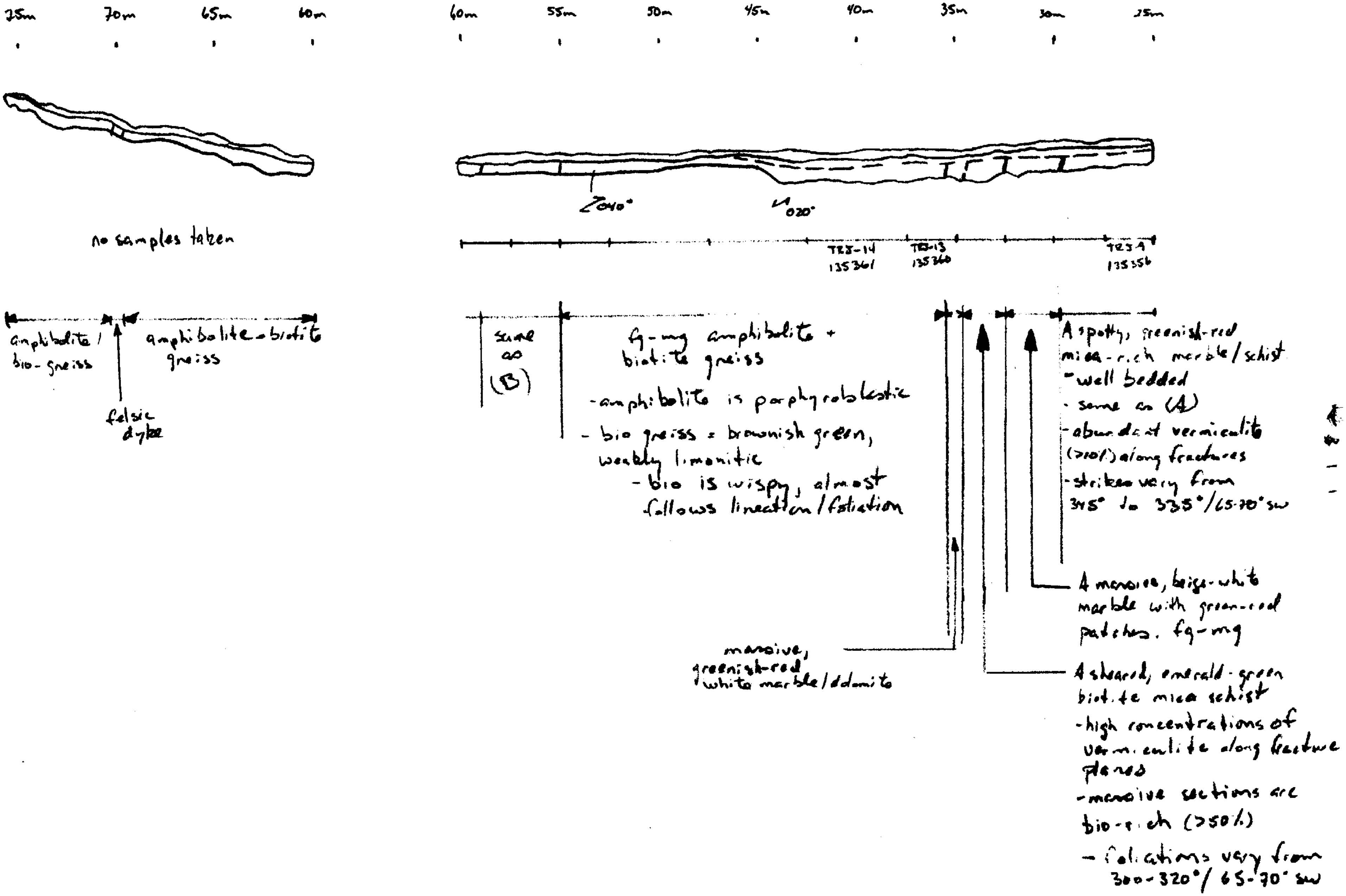
oxidized greenish mica-rich marble

TRENCH I



REGIS RESOURCES INC.	
HORSE SHOE GRID TRENCH J	
MAPPED BY: D. LEROUX	DATE: MAR 29, 2000
DRAWN BY: D. LEROUX	SCALE: 1:250
CLAIM No:	MAG DECL: 14°W
TRENCH AZIMUTH:	FIGURE

TRENCH J



75m 70m 65m 60m
60m 55m 50m 45m 40m 35m 30m 25m
040°
020°
no samples taken
TR8-14 135361
TR8-13 135360
TR8-9 135356
amphibolite / bio-gneiss
amphibolite - biotite gneiss
felsic dyke
same as (B)
fg-mg amphibolite + biotite gneiss
-amphibolite is porphyroblastic
- bio gneiss = brownish green, weakly limonitic
- bio is wispy, almost follows lineation / foliation
A spotty, greenish-red mica-rich marble / schist
-well bedded
- same as (A)
-abundant vermiculite (>10%) along fractures
-strikes vary from 345° to 335°/65-70° sw
A massive, beige-white marble with green-red patches. fg-mg
massive, greenish-red white marble / dolomite
A sheared, emerald-green biotite mica schist
-high concentrations of vermiculite along fracture planes
-massive sections are bio-rich (>50%)
- foliations vary from 300-320°/ 65-70° sw

TRENCH J 1

13A	2-3	1+12.5S-0+0	0	0-4-3
B	3	1+12.5S-0+0	0	3
C	3-4	1+12.5S-0+0	10.2	15
13 D	'3'	1+00S-0+0	11.3	
14	2-3	1+25S-0+0	26.0	
15	2-3	1+37.5S-0+0	15.3	
16A	0-1	1+50S-0+0	8.2	15
16B	2	1+50S-0+0	12.0	
17	2-3	1+62.5S-0+0	8.7	
18	0-2	1+75S-0+0	0+	0-1
19	0+2	1+87.5S-0+0	6.3	4
20A	2'	2+00S-0+0	0	4
B	2-3	2+00S-0+0	0+	0-4
C	3	2+00S-0+0	28.4	4
D	3-4	2+00S-0+0	3.8	
E	4	2+00S-0+0		
		2+00S-0+0		

2.20489

Claim #'s 1077036 + [redacted]9

Nov [redacted] - Dec | 99 - 4 June 2000

Samp #	Depth	Location	Norm	
0	2'	0+0-0+0	8.3	
1A	0-1	0+03.5S-0+0	8.9	
1B	1-2	0+03.5S-0+0	8.4	
2A	2-3'	0+07S-0+0	23.8	
2B	3'	0+07S-0+0	34.7	
3	3'	0+12.5S-0+0	0	1
4A	1-2	0+25S-0+0	3.4	
B	2-3	0+25S-0+0	5.5	
C	3	0+25S-0+0		
D	3-4	0+25S-0+0		
5A	2	0+31S-0+0	0+3	1 - 16
B	2-3	0+31S-0+0	10.7	
C	3	0+31S-0+0	6.2	
D	3-4	0+31S-0+0	5.6	
E	4	0+31S-0+0	7.4	
6	2'	0+37.5S-0+0	0	1
7A	2	0+42S-0+0	0	0-1
7B	3-4	0+42S-0+0	0+	0-1-16
8	2'	0+50S-0+0	0	0-3
9	2'	0+56S-0+0	0+	4-16
10	2-3	0+62.5-0+0	4.2	
11A	2	0+75S-0+0	0+	4-16-
B	2-3	0+75S-0+0	25.0	
C	3-4	0+75S-0+0	4.3	15
D	4	0+75S-0+0	5.5	15
E	4-5	0+75S-0+0	6.3	
12A	2	0+87.5S-0+0	8.3	
12B	3	0+92S-0+0		

30 A	2	0+0 - 0+12.5 E	0	0+4
B	2-3	0+0 - 0+12.5 E	0+5	5-15-12
C	3-4	0+0 - 0+12.5 E	4.6	
D	4	0+0 - 0+12.5 E	2.5	
E	4-5	0+0 - 0+12.5 E	4.0	
F	5	0+0 - 0+12.5 E	12.7	
31 A	2	0+0 - 0+25 E	0	0-1
31 B	3	0+0 - 0+25 E	0+	0-1 - Lg F. 15
32 A	2	0+0 - 0+37.5 E	31.9	
B	2-3	0+0 - 0+37.5 E	7.5	15
C	3-4	0+0 - 0+37.5 E	6.2	15
33	2-3	0+0 - 0+50 E	16.5	
34 A	2	0+0 - 0+62.5 E	0	0+4
B	3	0+0 - 0+62.5 E	0	4
35	2	0+0 - 0+75 E		
36 A	2	0+0 - 0+87.5 E	0	0-4
B	2-3	0+0 - 0+87.5 E	0	0-4
C	3-4	0+0 - 0+87.5 E	0	0-4
D	4	0+0 - 0+87.5 E	0	0-5
37 A	2	0+0 - 1+00 E	0	0-4 heavy mica
B	3	0+0 - 1+00 E	0	0+1 heavy mica
38	2-3	0+0 - 1+12.5 E	0	3
39	2	0+0 - 1+25 E	0	
40	2	0+0 - 1+37.5 E	5.0	0+1
41 A	2	0+0 - 1+50 E	0	0+1
41 B	3-4	0+0 - 1+50 E	0+	0+1

43A	2	0+0-0+12.5W	13.4	
B	2-3	0+0-0+12.5W	13.8	
C	3	0+0-0+12.5W	31.3	
44	2	0+0-0+25W	14.0	
45A	0-1	0+0-0+37.5W	0+	1 16
B	2	0+0-0+37.5W	0+	1 12-16
C	3	0+0-0+37.5W	0+	1 12-16
46A	0-1	0+0-0+50W	0+	4-16
B	2-3	0+0-0+50W	15.6	
C	3-4	0+0-0+50W	10.8	
D	4	0+0-0+50W	6.6	
E	4-5	0+0-0+50W	8.9	15
F	5	0+0-0+50W	4.6	
47	2-3	0+0-0+62.5W	0	1
48A	2-3	0+0-0+75W	0	1
B	3-4	0+0-0+75W	0	12-
C	4	0+0-0+75W	0	12-15
D	5	0+0-0+75W	0	12
49A	2	0+0-0+87.5W	0	1
B	3	0+0-0+87.5W	0+	1
C	3-4	0+0-0+87.5W	0	0-1-12-15
50A	2	0+0-1+00W	0	0-4
B	3	0+0-1+00W	0+1	0-4
C	4	0+0-1+00W	~~0~~ 7.4	0-4 8⇒(7.4)

58E				
55A	2	0+0 - 1+12.5W		
B	3	0+0 - 1+12.5W		
56 A	2	0+0 - 1+25W	0	3
B	3	0+0 - 1+25W	0	0-3
C	3-4	0+0 - 1+25W	0	12
D	4	0+0 - 1+25W	0	
E	4-5	0+0 - 1+25W	0	
57 A	2	0+0 - 1+37.5W	0+	4
B	3	0+0 - 1+37.5W	0+	1-4
C	3-4	0+0 - 1+37.5W		
D	4	0+0 - 1+37.5W	0	4
E	4-5	0+0 - 1+37.5W		
F	5	0+0 - 1+37.5W	0+	4
58 A	2	0+0 - 1+50W	0	
B	3	0+0 - 1+50W	0	4
C	4	0+0 - 1+50W	0	
D	5	0+0 - 1+50W		
59 A	2	0+0 - 1+62.5W		
B	3	0+0 - 1+62.5W		
C	3-4	0+0 - 1+62.5W	0	
D	4	0+0 - 1+62.5W	0	3
E	4-5	0+0 - 1+62.5W		
F	5	0+0 - 1+62.5W	0	0-4
G	5+	0+0 - 1+62.5W		

60 A	0-2'	0+00 – 1+75W	17.6		
B	2'	0+00 – 1+75W	20.8		
61 A	2	0+00 – 1+87.5W			
B	3	0+00 – 1+87.5W	0	4	
62	2	0+00 – 2+00 W	05	4	
63 A	32'	0+00 – 2+12.5W			
B	3'	0+00 – 2+12.5W			
64 A	2	0+00 – 2+25 W	3.1		
B	3	0+00 – 2+25W	8.0		
65 A	2	0+00 – 2+37.5W			
B	3	0+00 – 2+37.5W			
C	3-4	0+00 – 2+37.5W	18.6		
66 A	2	0+00 – 2+50W			
B	3	0+00 – 2+50W	0		
67 A	2	0+00 – 2+62.5W	7.5		
B	3	0+00 – 2+62.5W	0+	12	Rusty collour
68 A	2	0+00 – 2+75W	0+	1	
B	3	0+00 – 2+75W	0	1	

70A	2	0+25S-0+12.5W	0+5	
B	2-3	0+25S-0+12.5W	11.4	
C	3	0+25S-0+12.5W	5.5	
D	3-4	0+25S-0+12.5W	6.4	
E	4	0+25S-0+12.5W	6.1	
F	4-5	0+25S-0+12.5W	8.4	
71A	2	0+25S-0+25W	24.4	
B	2-3	0+25S-0+25W	5.2	
C	3	0+25S-0+25W	6.7	
D	3-4	0+25S-0+25W	7.3	
E	4	0+25S-0+25W		
F	4-5	0+25S-0+25W	8.3	
G	5	0+25S-0+25W	5.7	
72 A	3	0+25S-0+37.5W	0	0-4
B	3-4	0+25S-0+37.5W	30.2	
C	4	0+25S-0+37.5W	11.1	
D	4-5	0+25S-0+37.5W	8.4	
73A	2	0+25S-0+50W	0+	1-16
B	2-3	0+25S-0+50W	0+	0-1
C	3	0+25S-0+50W	0	4
74	2	0+25S-0+62.5W	0	3
75A	2	0+25S-0+75W	0	4
B	3-4	0+25S-0+75W		
76	2	0+25S-0+87.5W	0	1-12
77A	2	0+25S-1+00W	14.2	
B	3	0+25S-1+00W	26.5	
78 A	2	0+25S-1+12.5W		
79A	2	0+25S-1+25W	0	0-4

79	B	3	0+25S-1+25W	0	0-4
	C	3-4	0+25S-1+25W	0	0-4
	D	4	0+25S-1+25W	0	0-4 -3
80	A	2	0+25S-1+37.5W	0	1-3
	B	3-4	0+25S-1+37.5W	0	1-3
81	A	2	0+25S-1+50W		
	B	3-4	0+25S-1+50W	0	3
82		3-4	0+25S-1+62.5W	0	4
83	A	3	0+25S-1+75W	0+1	1
	B	3-4	0+25S-1+75W	0+1	4-15
84	A	2	0+25S-1+87.5W	0	0-1
	B	3	0+25S-1+87.5W		
	C	3-4	0+25S-1+87.5W		
	D	4	0+25S-1+87.5W	0	
	E	4-5	0+25S-1+87.5W	0+	4
	F	5	0+25S-1+87.5W		
85	A	2	0+25S-2+00W		
	B	3	0+25S-2+00W	0	4
86		2	0+25S-2+125W	0	4
87	A	3	0+25S-2+25W	0	0-4
	B	3[redacted]	0+25S-2+25W	0	0-4
	C	3-4	0+25S-2+25W	0	0-4
	D	4	0+25S-2+25W		

S1		0+00 0+20N	14.8	
S2		0+17.5	11.0	
S3		0+15	45.7	
S4		0+12.5	9.0	
S5		0+10	209	
S6		0+7.5	58.1	-39.0
S7		0+5	.	
S8		0+2.5	10.6	
S9		0+00		
pit.		0+20N-0+38E	10.4	
Zone 4		no grid	35.2	
[illegible]		0+25N-0+35E	14.6	
99A	0-2	0+06N-0+00	220	
99B	2	0+06N-0+00	25.1	
99C	2-3	0+06N-0+00	23.2	

nos only to check Stringers & Bed rock not accurate overall picture.

100A	2	0+12.5N-0+00		
B	2-3	0+12.5N-0+00	0+3	12
101 A	2	0+25N-0+00	0+	1+4 - 15
B	2-3	0+25N-0+00		
C	3	0+25N-0+00	0+5	12
D	3-4	0+25N-0+00		
E	4	0+25N-0+00	5.3	
F	4-5	0+25N-0+00	5.7	
102	0-1	0+25N-0+12.5E	0+5	15
103 A	0-2	0+25N-0+25E	0+2	0
B	2	0+25N-0+25E	0	1+4
C	3-4	0+25N-0+25E	0	4
D	4	0+25N-0+25E	0	4
E	4-5	0+25N-0+25E		
F	5	0+25N-0+25E	0	4
104A	0-1	0+25N-0+37.5E	7.8	
B	1	0+25N-0+37.5E	6.1	
C	1-2	0+25N-0+37.5E	10.3	
D	2-3	0+25N-0+37.5E	12.6	
E	3	0+25N-0+37.5E	29.6	
105	1-2	0+25N-0+50E	0+	0 - 1 - 16
106 A	1-2	0+25N-0+62.5E	24.0	
B	2-3	0+25N-0+62.5E		
C	3	0+25N-0+62.5E	6.1	
D	3-4	0+25N-0+62.5E	6.8	
107	2	0+25N-0+75E		
108	2	0+25N-0+87.5E		
109A	0-1	0+25N-0+92E	0+	1

109B	2-3	0+25N-0+92E		
110 A	8" outcrop	0+25N-1+00E	0	1
111	1-2'	0+25 N - 1+12.5E		
112A	2	0+25N - 1+25 E	0	1 - 3
B	2-3	0+25N - 1+25E	0+	1 - 3
113	1-2	0+25N - 1+37.5E	0	1
114A	3	0+25N - 1+50E	0	1.
B	4	0+25N - 1+50E	0	1
115A	2-3	0+25S - 0+12.5 E	0+	(0+25 S)
B	3-4	0+25S - 0+12.5E	11.3	(0+25 S)
C	4-5	0+25S - 0+12.5E	21.9	(0+25 S)
116	2'	0+25S-0+[redacted]06.5E	0+1	(0+06.5E) 15
117A	2	0+25S-0+[redacted]25E	0	(0+25 E) 1
B	3	0+25S-0+25E	0	3
C	4	0+25S - 0+25 E	0	1
118A	2	0+25S - 0+37.5E	0+	1-4
B	3	0+25S-0+37.5E	2	3
119	2	0+25S-0+50E	12.5	15
120	1	0+25S- 0+62.5E	0	1-3-12
121A	1	0+25S - 0+75E	0	1-3
B	2-3	0+25S - 0+75E	0	1-3
122A	1-2	0+25S - 0+87.5E	0	0
B	2	0+25S - 0+87.5 E	0	3
123A	3	0+25S- ~~0+87.5E~~	0	(1+00E) 1
124A	2	0+25S-1+12.5E	0+	3 - 13
B	3	0+25S-1+12.5E	0+5	
125A	2	0+25S 1+25E	0+	1

125 D	4	0+25 S - 1+25 E	0	4
125 B	3	0+25 S - 1+25 E	0	1
C	3-4	0+25 S - 1+25 E	0	4
126	2	0+25 S - 1+37.5 E	0	1-3
127	1	0+25 S - 1+50 E	0+5	12
128 A	2	0+25 S - 1+62.5 E	0	1
B	2-3	0+25 S - 1+62.5 E	0	1
C	3-4	0+25 S - 1+62.5 E	0	1
D	4	0+25 S - 1+62.5 E	0	1
E	4-5	0+25 S - 1+62.5 E	0	
F	5	0+25 S - 1+62.5 E	0+	1
129	outcrop	0+25 S - 1+75 E	0	1
130	1	0+25 S - ~~1~~+87.5 E	0	3 - 12
131	1	0+25 S - 2+00 E	0	1 - 3
130 F?	~~0~~		0	
132 A	2-3	1+00 N - 0+00?		
B	3-4			
C	4			
D	5			
E	5+			
133 A	1-2	1+00 N - 0+12.5 E		
B	2-3			
134 A	2	1+00 N - 0+25 E	0	
B	3			
C	3-4			
D	4			
135 A	2	1+00 N - 0+37.5 E		
B	3	1+00 N - 0+37.5 E		

C	3-4		.	
D	4		.	
136A	2	1+00N - 0+50E	.	
B	2-3		15.3	
C	3		13.0	
D	4		20.0	
E	4-5		14.9	
F	5		14.6	
G	5+		38.0	
137A	0-2	1+00N - 0+62.5E	0 +	0 - Heavy
B	2			
C	3		9.5	
D	3-4		7.1	
G	4		10.0	
E	5			
138A	2	1+00N - 0+75E		
B	2-3		11.9	
C	3-4		10.3	
D	4		8.8	
139	2	1+00N - 0+87.5E		
140A	2	1+00N - 0+00E		
B	3	1+00N - 1+00E	23.6	
C	3-4			
D	4		12.0	
141A	2	1+00N - 1+12.5E		
B	3			
C	3-4			
142A	2	1+00N - 1+25E		

380

150A	2	0+25N - 0+12.5W	0#2	3
B	2-3	0+25N - 0+12.5W	0+1	0 - 1-3
C	3	0+25N - 0+12.5W	13.7	
D	3-4	0+25N - 0+12.5W	17.7	
151	2	0+25N - 0+25W	0	1-3
152	2	0+25N - 0+37.5W	0+	0 - 3
153A	2	0+25N - 0+50W	0	
B	3	0+25N - 0+50W	0	1-3 12
C	3-4	0+25N - 0+50W	0+	3+12
154A	2	0+25N - 0+62.5W	0	3-4
B	3	0+25N - 0+62.5W	0+	
C	3-4	0+25N - 0+62.5W	0	5 - 12
155A	2	0+25N - 0+75W	0	1-3
B	3	0+25N - 0+75W	0	4-5
C	3-4	0+25N - 0+75W	0	5
156A	2	0+25N - 0+87.5W	0	1-3
B	2-3	0+25N - 0+87.5W	0+	1-3
C	3-4	0+25N - 0+87.5W	5	4 + 16
D	4	0+25N - 0+87.5W	5	17
E	4-5	0+25N - 0+87.5W	3	4 + 16
F	5	0+25N - 0+87.5W	13.9	4 - 17
G	5+	0+25N - 0+87.5W	3	4 - 17
157A	2	0+25N - 1+00W	0	3 - 12
157B	2-3	0+25N - 1+00W	0	1
158A	2	0+25N - 1+12.5W	0	
B	2-3	0+25N - 1+12.5W	0	12 - 3
C	3	0+25N - 1+12.5W	3	4 12

159A	2	0+25N - 1+25W	0	3
B	2-3	0+25N - 1+25W	0	
C	3	0+25N - 1+25W	0	3
D	3-4	0+25N - 1+25W	0	3
E	4	0+25N - 1+25W	0	3
F	4-5	0+25N - 1+25W	0	
160A	2	0+25N - 1+37.5W	0	(1+37.5) 3
B	3	0+25N - 1+37.5W	0	3
C	3-4	0+25N - 1+37.5W	0	
D	4	0+25N - 1+37.5W	0	
E	4-5	0+25N - 1+37.5W	0	3
F	5+	0+25N - 1+37.5W	G	
161A	2	0+25N - 1+50W	0	
B	3	0+25N - 1+50W	0	
C	3-4	0+25N - 1+50W	0+3	4-16
D	4	0+25N - 1+50W	0+3	
162A	2	0+25N - 1+62.5W	0	
B	3	0+25N - 1+62.5W	0	3
163A	2	0+25N - 1+75W	0	1-3
B	3	0+25N - 1+75W	0	
C	3-4	0+25N - 1+75W	0	1-3
D	4	0+25N - 1+75W	0+5	4-16- 17
E	4-5	0+25N - 1+75W	0+1	15
F	5	0+25N - 1+75W	0	3
G	5+	0+25N - 1+75W	30.6	
164A	2	0+25N - 1+87.5W	0	1 to 3
B	2-3	0+25N - 1+87.5W	0	0
C	3	0+25N - 1+87.5W	25.9	

164 D	3-4	0+25N - 1+87.5W	11.2	
E	4.	0+25N - 1+87.5W	9.4	
F	4-5	0+25N - 1+87.5W	21.5	
G	5	0+25N - 1+87.5W	17.0	
165				
166 A	2	0+50S - 0+12.5E	0+	
B	2-3	0+50S - 0+12.5E	0	
C	3	0+50S - 0+12.5E	0	
D	3-4	0+50S - 0+12.5E	0	3
E	4-5	0+50S - 0+12.5E	18.7	
F	5	0+50S - 0+12.5E	13.2	
G+G+	5+	0+50S - 0+12.5E	~~47.4~~	18.2
G+	5+6	0+50S - 0+12.5E	47.4	
167	3	0+50S - 0+6E	0	1
168	3	0+50S - 0+18E	0	3
169.	3	0+45S - 0+18E	7.1	
170 A	3'	0+40S - 0+18E	0+5	1
171 A	2'	0+50S - 0+25E	0	1
B	2-3'	0+50S - 0+25E	0+	
C	3~~-4~~'	0+50S - 0+25E	0+5	12
D	3-4	0+50S - 0+25E	8.0	
171 E	4'	0+50S - 0+25E	1.9	
172 A	2	0+50S - 0+37.5E	9.5	
B	2-3	0+50S - 0+37.5E	27.3	15
C	3	0+50S - 0+37.5E	45.3	
D	3-4	0+50S - 0+37.5E	15.3	

380

175C	3-4	0+50 S - 0+75E	40.6	
173A	2'	0+50S - 0+50E	0	
174A		0+50S - 0+62.5E	0	
174B		0+50S - 0+62.5E	0+	
175A	2	0+50S - 0+75E	0	4
175B	3	0+50S - 0+75E	~~40.6~~ 28.8	
176A	2	0+50S - 0+75E	0	0
B	3-4	0+50S - 0+75E	0	
C	4-5	0+50S - 0+87.5E	0	
D	5	0+50S - 0+87.5E	0	
E	5+	0+50S - 0+87.5E		
177	2-3	0+50S - 1+00E	0	
178	2-3	0+50S - 1+125E	0+3	1 organics.
179	2-3	0+50S - 1+25E	0	
180A	2-3	0+50S - 1+37.5E		
B		0+50S - 1+37.5E	0	
C		0+50S - 1+37.5E	0	
181	2-3	0+50 S - 1+50E		
182	2	0+50S - 1+62.5E	0	
183A	2	0+50S - 0+75E	0	
B	3	0+50S - 1+75E	0+	
C	3-4	0+50S - 1+75E	0+	
184	2'	0+50S - 1+87.5E	0	
185	2'	0+50S - 2+00E	0	
186	2'	0+50S - 2+12.5E	0+6	1 (org.)

405

190 A	0-1	2+00S-0+12.5E	0	
B	1		0	
C	1-2		0	
D	2-3		0	Gran.
191 A	1-2	2+00S-0+25E	0	
B	2-3		0	
C	3		0	
D	3-4		0	
E	4		0	
F	4-5		0	
192 A	2	2+00S-0+37.5E	0	
B	2-3		0	
C	3-4		0	
D	4		0	
E	5		0	
193 A	1-2	2+00S-0+50.0E	0+2	(0+50E) 1
B	3	2+00S-0+50E	0+6	
194	2	2+00S-0+62.5E	0+2	
195A	2	2+00S-0+75E	0	
B	3		0	
C	3-4		0	
196 A	2	2+00S-0+87.5E	0	
B	3		0	
C	3-4		0	
D	4		0	
E	4-5		0+2	
197B	2	2+00S-1+00E		
C	3			

198 A	2-3	2+00S-1+00E	0	
199 A	2	2+00 S-1+12.5E	0	
B	3	2+00 S-1+12.5E	0	
200	3	2+00S-1+25E	0	
201A	1-2	200 S - 0+12.5W	0	1
B	3	2+00S - 0+12.5W	0	
C	3-4	2+00S - 0+12.5W	0	
D	4	2+00S - 0+12.5W	0	
202 A	2-3	2+00S - 0+25W	0+	
B	3	2+00S - 0+25W	0	mica
203	2	2+00S - 0+37.5W	0	
204	2-3	2+00S - 0+50W	0+2	
205 A	2-3	200 S - 0+62.5W	0+5	1
B	3	2+00S - 0+62.5W	21.8	
C	3-4	2+00S - 0+62.5W	9.7	
206 A	2	2+00S - 0+75W	30.5	
B	3	2+00S - 0+75W	43.1	
207A	2	2+00S - 0+87.5W	0+3	
B	3	2+00S - 0+87.5W	12.2	
C	3-4	2+00S - 0+87.5W	0+6	12
208 A	2-3	2+00S - 1+00W	0	
B	3	2+00S-1+00W	0+1	15
C	3-4	2+00S-1+00W	0+1	
D	4	2+00S-1+00W	0+5	17
E	4-5	2+00S-1+00W	26.6	15(several)
209 A	2	2+00S -1+12.5W	11.3	
B	3	2+00S-1+12.5W		
C	3-4	2+00S-1+12.5W	8.9	

210	4	2+00S-1+25W	0	
211A	2	2+00S-1+37.5W		15
B	3	2+00S-1+37.5W	0	
C	4	2+00S-1+37.5W	0+2	15
D	4-5	2+00S-1+37.5W	0+2	15
212A	2	2+00S-1+50W	0+5	15 (several)
B	3	2+00S-1+50W	0+5	15-1 12
C	3-4	2+00S-1+50W	0+2	12
D	4	2+00S-1+50W	0+3	
213	2'	2+00S-1+62.5W	0	15
214A	3	2+00S-1+75W	0	15
B	3-4	2+00S-1+75W	0	
C	4	2+00S-1+75W	0+5	12
215A	3	2+00S-1+87.5W	0	organics-
B	4-5	2+00S-1+87.5W	0	
216	4'	2+00S-2+00W		

220 A	2	1+00S-0+12.5E	0+3	1-3
B	3		0	3
C	4		0	3
D	4-5		0	
E	5		0+3	5
221 ·A	2	1+00S-0+25E	0+3	12
·B	3		0+2	12
·C	4		0+3	12
222 A	2	1+00S-0+37.5E	5.8	
223	3	1+00S-0+50E	0	
224 A	2-3	1+00S-0+25W	0	1
·B	3-4	1+00S-0+25W	0+3	3
225	2-3	1+00S-0+50W	17.0	
226 A	2-3	1+00S-0+75W	44.7	
B	3		36.2	36.2
C	3-4		4	
·D	4		45.5	
·E	4-5		20.5	
·F	5		47.2	
227	3	1+00S-1+00W	0+	1

228	2	1+00S-1+25W	0+~~4~~	12.
229 A	3	1+00S-1+50W	0	
B	4		0	
C	4-5		0+1	12
230	2-3	1+00S-1+75W	0	12
231 A	3	1+00S-2+50W	0	~~Bo~~3
B	4		0	13
232	3	1+00S-2+75W	17.0	
233	3	1+00S-3+00W	0+	12
234 A	2	1+00S-3+25W	0	12
B	3		0+5	12
C	4		13.7	
D	4-5		12.7	
235	3	1+00S-3+50W	13.1	
236	3	1+00S-3+75W	0	
237	3	1+00S-4+00W	0+4	3-12
240 A	0-1	~~1+50~~ 1+50S-0+12.5E	6.5	
B	3	1+50S-0+12.5E	19.8	
241 A		1+50S-0+25E	0	3
B			0	3
C			0	3
D			0	3
E			0	3

241F	5+	1+50S-0+25E	0+2	4-12
242A	2	1+50S-0+37.5E	0	2
B	3		0+6	3
243	3	1+50S-0+50E	0+3	
244	2	1+50S-0+62.5E	0	3
245	3	1+50S-0+75E	0+	1
246A	2	1+50S-0+12.5W	11.2	
B	3	1+50S-0+12.5W	8.5	
247A	2	1+50S-0+25W	0+5	3
B	3	1+50S-0+25W	0	
C	3-4	1+50S-0+25W	0	1
D	4	1+50S-0+25W	0+1	3
E	5	1+50S-0+25W	0+1	
248A	1	1+50S-0+50W	0	3
B	2	1+50S-0+50W	0	1-3
249A	2	1+50S-0+62.5W	0	1-3
B	3	1+50S-0+62.5W	0	1-3
250A	2	1+50S-0+75W	0	1-4
B	3	1+50S-0+75W	0	1
251A	2	1+50S-0+87.5W	0	mica 1
B	3	1+50S-0+87.5W	8.4	
252A	2	1+50S-1+37.5W	0	1
B	3	1+50S-1+37.5W	0	1
C	3-4	1+50S-1+37.5W	0	
D	4	1+50S-1+37.5W	0	1-12
E	5	1+50S-1+37.5W	0	
253	1	1+50S-1+50W	4.7	
254A	2	1+50S-1+62.5W	0+1	1

254B	3	1+50S - 1+62.5W	0+ 1	3 - 1
C	3-4	1+50S - 1+ 62.5W	0	12
255A	2	1+50S - 1+75W	0+5	1
B	3	1+50S - 1+75W	0+5	1 - 12
C	3-4	1+50S - 1+75W	7.8	.
256A	2	1+50S - 2+62.5W	0	.1-
B	2-3	1+50S - 2+62.5W	0	1
257A	2	1+50S - 2+75W	0	3
B	3	1+50S - 2+75W	0+	
C	4	1+50S - 2+75W	0	1 - 3
D	4-5	1+50S - 2+75W	0	
E	5	1+50S - 2+75W	0	1-3
258A	2	1+50S - 2+87.5W	0	3-4
B	3	1+50S - 2+87.5W	0	3
C	3-4	1+50S - 2+87.5W	0+	15
D	4	1+50S - 2+87.5W	0	3
E	5	1+50S - 2+87.5W	0	3
259A	2	1+50S - 3+00W	27.4	
B	3	1+50S - 3+00W	0	3-8
C	3-4	1+50S - 3+00W	40.0	
260A	2	1+50S - 3+12.5W	0	0 1
B	3	1+50S - 3+12.5W	0	0-1
C	3-4	1+50S - 3+12.5W	0	0-1-12
261A	2	1+50S - 3+25W	0+2	15-1
B	3	1+50S - 3+25W	0	0-1
262A	2	1+50S - 3+37.5W	0+	1
B	3	1+50S - 3+37.5W	0	1
263A	~~B~~ 1'	1+50S - 3+3+50W	0	1

263 B	3	1+50S - 3+50W	0	3
264 A	3	1+50S - 3+62.5W	0	1-3-12
264 B	4	1+50S - 3+62.5W	0	4
264 C	4-5	1+50S - 3+62.5W	0	12
264 D	5	1+50S - 3+62.5W	0	12
265 A	3	1+50S - 3+75W	0	5
B	4	1+50S - 3+75W	0	5
C	4-5	1+50S - 3+75W	0	4
D	5	1+50S - 3+75W	0	1-3-12
266 A	4	1+50S - 3+87.5W	0	3-12

271	3-4	0+50N - 0+25E	15.4	
272A	2	0+50N - 0+37.5E	0	0 1
B	3	0+50N - 0+37.5E	0	0 - 1
273	3	0+50N - 0+50E	20.8	
274 A	3	0+50N - 0+62.5E	0	3
B	4	0+50N - 0+62.5E	0	3
C	4-5	0+50N - 0+62.5E	0	4 ~~12~~ -13
D	5	0+50N - 0+62.5E	~~0~~ 11.2	(11.2)
275	3	0+50N - 0+75E	0	0 - 3 - 4
276A	3	0+50N - 0+87.5E	0	1 - 0
B	4	0+50N - 0+87.5E	0	3
C	4-5	0+50N - 0+87.5E	0	
277	3	0+50N - 1+00E	0	1 - 0
278	1'	0+50N - 1+12.5E	0	outcrop. 1
279	2'	0+50N - 1+25E	0	1
280	1'	0+50N - 1+37.5E	0	1
281	2'	0+50N - 1+50E	0	1
		0+50N - 1+55.8E swamp		

300 A	0-1	0+50N - 0+12.5W	40.8		
B	2-3		27.8		
301 A	2-3	0+50N - 0+25 W	0	3-5	
B	3		0	0-3	
C	3-4		0+	15-3-5	
302	2-3	0+50N - 0+37.5W	0	1	
303	3'	0+50N - 0+50W	0+	15	
304 A	2	0+50N - 0+62.5W	0	3	
B	2-3		0+1	3	
C	3-4		0+6	15-1	
D	4		0+5	1	
305 A	2-3	0+50N - 0+75W	0	1	
B	3-4		0	3-4	
306 A	2	0+50N - 0+87.5W	0	.1	hillside
B	3		0+	3	
C	3-4		0	3-5	
D	4		0	0-1	
307	2-3	0+50N - 1+00W	0	1	
308 A	2	0+50N - 1+12.5W	0+2	15-4	
B	4		0+2	3-4	
C	4-5		21.8	17	
309 A	1	0+50N - 1+25W	0	3-5	
B	3	0+50N - 1+25W	0	3-4	
310	2-3	0+50N - 1+37.5W	0+	0-1	
311	3	0+50N - 1+50W	0	3-5 .12	
312	3-4	0+50N - 1+62.5W	0+6	3	
313	3'	0+50N - 1+75W	15.2	15	
314	3	0+50N - 1+87.5W	0	4	

315A	3	0150N - 0200N	0	3
B	3-4		0	3-4
C	4-5		0	3
i				

(659.) samples.

CLAIM 1077036
UNITS 12
LOTS 12 to 15 NORTH HALF OF CONCESSION 6
LOTS 12 to 15 ALL OF CONCESSION 7
CAVENDISH TOWNSHIP
SOUTHERN ONTARIO
WORK TYPE. .TRENCHING,AUGURING,GRID,PITS AND PROSPECTING.

Work on this claim started in the summer of 1999 in the southwest area of the claim and near the west claim line .In the first of June a outcrop and was discovered on the snow mobile trail at the number 2 claim post of 1077038 which is 500 meters north of post 3 of claim 1077036. On June 7th maps of that area was picked up and some work was done. Flagging tape was used to mark the zone as we sampled.On June 10 a 4x4 rubber tire hole was brought in to dig 4 short trenches in the hillside.Our main concern at this point was to determine if it would be worth bring a larger excavator in. To bring a machine in it would have to be travelled in over two plus kms,and would take several hours. We did take some samples in the trenches to get a idea of what was there .At the time the trenches were put in there was no grid.Based on the grid put in later the trenches are approximately. located at

B 9+00S-7+00W
A 20 METERS SOUTH OF B
D 5+50S-9+00W
C 20 METERS SOUTH OF D

Trenches were labelled after the grid was put in the north area.Of the 30 plus samples taken from the four trenches most had some verm. in them . Trench B had some good averages near the bedrock which was a form of mica schist similar to some of the schist found at the horse shoe property. Between the layers of rock there were averages of 30 percent.This does not mean the zone will be 30 .
Four pits were also dug on the top of the hills to extend trenches B and D. On the top of the hill there was a layer of soil containing biotite maybe from weathered biotite or granite gneiss that was placed there and not part of the zone in B. Trench D was a different zone that consist of gneiss ,maybe similar to the covering on trench B,not enough work was done to determine the exact geology. No real averages were done we plan on doing more work there later ,and heading north.

In the area of 4+00s-4+00w to 7+00w and 5+00s-4+00w to 6+00w approximately. 26 samples were taken,from 6+00s-6+00w to 8+00w and 7+00s 6+00w to 8+00w 45 and then down to 9+00s from 5+50w to 7+00w 25 to 30 were taken. All those samples were taken by using a GPS.to have a general idea of the direction and area of travel. Later the north grid was extended to tie in the area of the zone.The grid wasn't put in the north until October. The grid then ran from 1+00n down to 3+00s.A line then was ran from 3+00s -4+00w to 5+00s to tie in the swamp and the zones worked on. Those samples were done by sampling with a auger and placing the sample in aluminium trays.Several samples were taken and left to dry for a while in the trays. Later in the evening we would go back and test them for verm. .We were not as much concerned about percentages as we were where the zone ran .

Most of the samples tested had verm. in them. Sometimes you may hit float in the hole and not get into the verm.,using a auger .Also most of the holes were shadow from 1 foot to 3 which is not good for verm. tonnage .Some of the areas near the swamp around 5+00s -4+00w heading 260 degrees southwest in which we were following the zone, we had four holes with better averages. Most of this area is higher and dryer which don't allow for much weathering or erosion. The area between 3+00s - 1+00w to 7+00w and south for approximately,50 meters, is low and wet and the verm. did not exfoliate well.

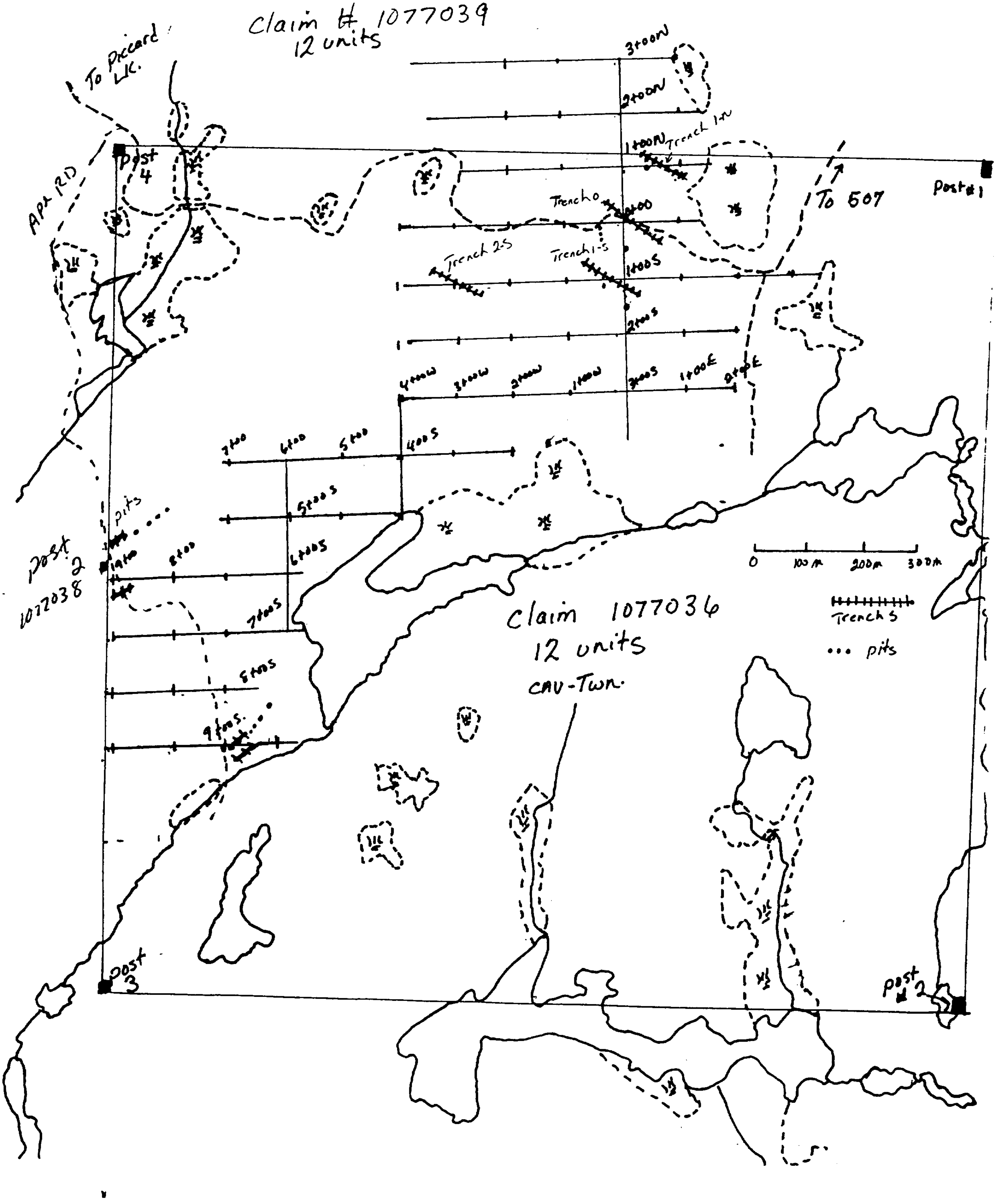
During the month of November the grid was sampled and samples were taken back for assaying. Also 3000 pounds of samples were taken from several pits in the area to experiment with. At this time we were also experimenting with separating and screening. Grid samples are included but information on the equipment won't be released .

Also in the grid area 4 trenches were dug .

TRENCH 2 SOUTH. Started at 1+15s- 2+60w and ran 290 degrees to 0+75s-3+25w This zone was in an amphibolite. To the west of it we got into gneiss. which didn't run. To the east of this trench was a low wet area approximately. 50 meters wide.
TRENCH 1 SOUTH started at 1+25s-0+00e it also ran 290 degrees west to 0+80s-0+75w. This trench started on the top of the hill down to the low wet area.The rock type is marble with narrow stringers of different rock types.
TRENCH 0 started at 0+25s-0+55e and went to 0+25n-0+75w this trench was very similar to 1 south.
TRENCH 1 NORTH started at 0+95n-1+00e to 1+00n -0+50e
All those trenches started at the granite to the east which ran with the verm. zone from north to south. More detailed geology will be done later when more work is done in the area. Trenches on this claim ,1077035 and 1191249 were all assayed and results calculated alike.The trenching started on 15th of march. All trenches were sampled length ways from east to west.

CLAIM NUMBER 1077039
UNITS 12
LOTS 12 TO 15 CONCESSION 8
LOTS 12 TO 15 SOUTH HALF CONCESSION 9
CAVENDISH TOWNSHIP
SOUTHERN ONTARIO
WORK TYPE, GRID, PROSPECTING, AUGER HOLES

Work performed on this claim was done by extending work on the zone in claim 1077036. The zone catches the south east corner of lot 13 con.8 runs through lot 14, and the north west corner of lot 15. The grid was extended to 3+00n but only minor drilling was done due to the lack of time we had before the trenching was to start. Also the frost in the area slowed the work down. The zone was traced to the the gate in the road at the top of lot 15 concession 8.



Claim # 1077039
12 units
To Piccard Lk.
Apt RD
Post 4
3+00N
2+00N
1+00N
Trench 1-N
Trench 0
Trench 2-S
Trench 1-S
1+00S
2+00S
4+00W
3+00W
2+00W
1+00W
3+00S
1+00E
2+00E
To 507
Post #1
7+00
6+00
5+00
4+00S
5+00S
6+00S
7+00S
8+00S
9+00S
pits
Post 2
1077038
0
100m
200m
300m
Claim 1077036
12 units
CAV-Twn.
Trenches
pits
Post 3
Post #2

Dates 2000

TRENches 1-N, 0, 1-S, 2-S, claim 1077036

~~TRENches 200 - 335 - 400, claim 1077035~~

TRENches I + J Horse shoe property

31D16SW2002 2.20489 CAVENDISH 090

2.20489

TRENCH 0 North ZONE

	wet	Dry	water	water %	oz wet	Dry	oz Loss	% Loss
1	—							—
2	886.9	775.3	111.6	12.5	30	24.2	5.8	19.3
3	967.1	870.3	96.8	10.0	↓	26	4.0	13.3
4	941.4	851.8	89.6	9.5		25	5.0	16.6
5	1045.3	950.6	94.7	9.0		24.5	5.5	18.3
6	937.4	796.9	140.5	14.9		23.5	6.5	21.6
7	956.4	858.7	97.7	10.2		24	6	20.0
8	1023.1	985.2	37.9	3.7		26.5	3.5	11.6
9	951.3	862.9	88.4	9.2		24	6	20.0
10	914.0	822.2	91.8	10.0	↑	26	4	13.3
11	1027.1	967.4	59.7	5.8		26.5	3.5	11.6
12	955.6	887.7	67.9	7.1		26	4	13.3
13	1006.7	977.2	29.5	2.9	30	27	3	10.0
14	401.5	390.0	11.5	2.8				—
15	282.1	273.9	8.2	2.9				—
16	326.6	287.3	39.3	12.0				—
17	952.5	854.9	97.6	10.2	30	26	4	13.3
18	891.0	775.5	115.5	12.9				—
19	908.9	788.0	120.9	13.3	30	24	6	20.0
20	873.7	713.4	160.3	18.3	30	24	6	20.0
21	358.0	295.5	62.5	17.4				—
22	905.0	774.9	130.1	14.3	30	24	6	20.0
23	870.4	728.2	142.2	16.3	30	23.5	6.5	21.6
24	517.9	463.1	54.8	10.5				—
25	984.4	896.8	87.6	8.8				—

1 - 2 = 3 ÷ 1 = 4

water is the difference in the wet sample weight and air dried sample

Bulk test was done with a 30 oz container (not accurate)

	1	2	3	4	1	2	3	4

	Total sample	Sample under 1.70	After EXF	over 1.70	After EXF.	Total EXF	Grams of moisture	% moisture
1	448.4	263.3	217.9	185.1	161.1	379.0	69.4	15.4
2	775.3	522.2	439.1	253.1	233.3	672.4	102.9	13.2
3	870.3	522.5	429.9	347.8	329.0	758.9	111.4	12.8
4	851.8	669.3	554.0	182.5	166.5	720.5	131.3	15.4
5	950.6	700.2	570.6	250.4	221.3	791.9	158.7	16.6
6	796.9	656.8	531.3	140.1	125.1	656.4	140.5	17.6
7	388.3	388.3	307.1			307.1	81.2	20.9
8	1447.8	985.2	909.7	462.6	427.7	1337.4	110.4	7.6
9	862.9	724.2	561.7	138.7	128.4	690.1	172.8	20.0
10	250.9	250.9	243.2			243.2	7.7	3.0
11	967.4	595.7	525.9	371.7	349.1	875.0	92.4	9.5
12	887.4	598.8	484.7	288.9	265.4	750.1	137.3	15.4
13	977.2	574.6	496.7	402.6	388.2	885.1	92.1	9.4
14	390.0	243.6	209.9	146.4	141.1	351.0	39.0	10.0
15	273.9	187.8	158.6	86.1	79.0	237.6	36.3	13.2
16	287.3	287.3	180.1			180.1	107.2	37.3
17	854.9	650.2	479.8	204.7	178.4	658.2	196.7	23.0
18	775.5	647.7	413.4	127.8	116.0	529.4	246.1	31.7
19	375.6	375.6	246.3			246.3	129.3	34.4
20	505.1	423.5	385.3	81.6	72.1	475.4	47.7	9.4
21	632.5	632.5	582.5			582.5	50.0	7.9
22	364.8	364.8	278.5			278.5	86.3	23.6
23	368.1	368.1	251.6			251.6	116.5	31.6
24	463.1	368.3	270.9	94.8	83.2	354.1	109.0	23.5
25	896.8	601.4	478.8	295.4	272.3	751.1	145.7	16.2

3 + 5 = 6
2 + 4 = 1
1 - 6 = 7 ÷ 1 = 8

1	2	3	4	5	6	7	8

	waste	verm	total	% under	waste	verm	total	% over
1	184.6	28.5	213.1	13.3	155.7	3.2	158.9	2.0
2	331.3	99.4	430.7	23.0	198.9	33.3	232.2	14.3
3	354.5	59.4	413.9	14.3	321.6	3.4	325.0	1.0
4	509.8	35.0	544.8	6.4	162.3	2.6	164.9	1.5
5	470.4	100.7	571.1	17.6	160.8	57.3	218.1	26.2
6	451.8	52.1	503.9	10.3	122.4	0.2	122.6	0.1
7	287.0	11.9	298.9	3.9				-
8	876.1	32.0	908.1	3.5	421.7	4.4	426.1	1.0
9	487.8	73.0	560.8	13.0	121.5	4.5	126.0	3.5
10	223.7	12.8	236.5	5.4				-
11	478.1	48.2	526.3	9.1	344.5	4.5	349.0	0.2
12	400.3	103.8	504.1	20.5	257.3	4.1	261.4	1.5
13	394.4	106.4	500.8	21.2				-
14	181.8	28.6	210.4	13.5	133.5	2.9	136.4	2.1
15	126.2	57.3	183.5	31.2	75.3	2.6	77.9	3.3
16	160.8	6.4	167.2	3.8				-
17	414.2	40.1	454.3	8.8	133.7	43.5	177.2	24.5
18	356.0	55.4	411.4	13.4				-
19	227.0	8.3	235.3	3.5				-
20	320.8	40.3	361.1	11.1	67.1	3.0	70.1	4.2
21	522.8	59.0	581.8	10.1	183.4	24.4	207.8	11.7
22	239.1	27.9	267.0	10.4				-
23	222.3	13.0	235.3	5.5				-
24	256.1	7.5	263.6	2.8	81.3	0.5	81.8	0.6
25	455.5	6.0	461.5	1.3	268.9	1.8	270.7	0.6

#1 + 2 = 3
#2 ÷ 3 = 4

samples were broken down in two sizes and ran seperatly when needed. Larger soil particols will not exfoilate. (if verm. contained inside)

1	2	3	4	1	2	3	4

	waste	verm	total	%verm	water	moisture	Bulk loss
1	340.3	31.7	372.0	8.5	–	15.4	–
2	530.2	132.7	662.9	20.0	12.5	13.2	19.3
3	676.1	62.8	738.9	8.4	10.0	12.8	13.3
4	672.1	37.6	709.7	5.2	9.5	15.4	16.6
5	631.2	158.0	789.2	20.0	9.0	16.6	18.3
6	574.2	52.3	626.5	8.3	14.9	17.6	21.6
7	287.0	11.9	298.9	3.9	10.2	20.9	20.0
8	1297.8	36.4	1334.2	2.7	3.7	7.6	11.6
9	609.3	77.5	686.8	11.2	9.2	20.0	20.0
10	223.7	12.8	236.5	5.4	10.0	3.0	13.3
11	822.6	52.7	875.3	6.0	5.8	9.5	11.6
12	657.6	107.9	765.5	14.0	7.1	15.4	13.3
13	394.4	106.4	500.8	21.2	2.0	9.4	10.3
14	315.3	31.5	346.8	9.0	2.8	10.0	–
15	201.5	59.9	261.4	22.9	2.9	13.2	–
16	160.8	6.4	167.2	3.8	12.0	–	–
17	547.9	83.6	631.5	13.2	10.2	23.0	13.3
18	356.0	55.4	411.4	13.4	12.9	–	–
19	227.0	8.3	235.3	3.5	13.3	34.4	20.0
20	387.9	43.3	431.2	10.0	18.3	9.4	20.0
21	706.2	83.4	789.6	10.5	–	7.9	–
22	239.1	27.9	267.0	10.4	14.3	23.6	20.0
23	222.3	13.0	235.3	5.5	16.3	31.6	21.6
24	337.4	8.0	345.4	2.3	10.5	23.5	–
25	724.4	7.8	732.2	1.0	8.8	16.2	–

waste = ABOVE and BELOW 1.70 and Verm = ABOVE and Below 1.70

weights from both parts of each sample were combined for final average.

Trench 1-N North Zone

	Wet	Dry	Grams of water	water %	oz wet	oz Dry	oz Loss	% Loss
1	804.0	680.4	123.6	15.3	30	24	6	20.0
2	981.4	919.3	62.1	6.3	↓	26	4	13.3
3	1074.5	1043.3	31.2	2.9		27.3	2.7	9.0
4	1150.1	1104.3	45.8	3.9		27	3	10.0
5	1002.2	906.3	95.9	9.5		26	4	13.3
6	897.8	785.5	112.3	12.5		25.5	4.5	15.0
7	1091.8	984.0	107.8	9.8	30	26	4	13.3
8		405.3						
9	855.2	740.0	115.2	13.4	30	24	6	20.0
10	959.7	882.0	77.7	8.0				
11	984.8	847.6	137.2	13.9	30	25	5	16.6
12	1052.3	1019.8	32.5	3.0	↓	27.1	2.9	9.6
13	1075.2	1007.4	67.8	6.3		25	5	16.6
14	1024.6	884.4	140.8	13.7	30	25.5	4.5	15.0
15		896.0						
16	835.6	611.5	244.1	26.8	30	24	6	20.0
17		444.3						
18	833.6	682.1	151.5	18.1	30	24	6	20.0

	Total Sample	under 1.70	After ExF	over 1.70	After 1.70	Total ExF	Grams Moisture	% Moisture
1	680.4	534.2	436.5	146.2	197.7	634.2	46.2	6.7
2	919.3	770.2	688.2	149.1	135.8	824.0	95.3	10.0
3	1043.3	989.3	931.2	54.0	51.4	982.6	60.7	5.8
4	1104.3	1001.4	904.9	102.9	92.4	997.3	107.0	9.6
5	906.3	693.3	560.1	213.0	188.8	748.9	157.4	17.3
6	785.5	610.4	469.7	175.1	155.1	624.8	160.7	20.4
7	444.3	299.5	240.1	144.8	146.7	386.8	57.5	12.9
8	405.3	405.3	295.7	-	-	-	109.6	27.0
9	362.3	362.3	270.1	-	-	-	92.2	25.4
10	898.9	658.2	480.1	213.7	206.8	686.9	212.0	23.5
11	824.6	824.6	668.5	-	-	-	156.1	18.9
12	1000.8	836.9	766.9	163.9	172.4	939.3	61.5	6.2
13	999.2	919.2	796.0	80.0	87.0	883.0	116.2	11.6
14	884.4	675.6	485.9	208.8	177.1	663.0	221.4	25.0
15	896.0	505.0	413.4	391.0	364.0	777.4	118.6	13.2
16	611.5	545.8	275.5	65.7	57.3	332.8	278.7	45.5
17	444.3	444.3	280.3	-	-	-	164.0	36.9
18	682.1	622.3	520.1	59.8	54.3	574.4	107.0	15.7

	waste	Verm	total	% under	waste	verm	total	% over
1	376.1	49.3	425.4	11.5	130.4	4.3	134.7	3.1
2	634.8	45.4	680.2	6.6	133.3	2.5	135.8	1.8
3	892.8	38.4	931.2	4.1	50.9	0.5	51.4	0.9
4	856.6	48.3	904.9	5.3	90.6	1.8	92.4	1.9
5	505.1	52.0	557.1	9.3	183.7	5.1	188.8	2.7
6	413.9	35.2	449.1	7.8	152.8	2.3	155.1	1.4
7	198.7	39.8	238.5	16.6	117.2	29.5	146.7	20.0
8	262.6	19.5	282.1	6.9	-	-	-	-
9	255.9	14.2	270.1	5.2	-	-	-	-
10	447.9	32.2	480.1	6.7	190.9	15.9	206.8	7.6
11	562.2	70.6	632.8	11.7	-	-	-	-
12	723.5	43.4	766.9	5.6	150.1	22.3	172.4	12.9
13	737.7	58.3	796.0	7.3	69.2	17.8	87.0	20.4
14	418.0	67.9	485.9	13.9	173.5	3.6	177.1	2.0
15	373.3	40.1	413.4	9.7	355.5	8.5	364.0	2.3
16	237.7	37.8	275.5	13.7	54.3	3.0	57.3	5.2
17	241.9	30.3	272.2	11.1	-	-	-	-
18	474.5	42.6	517.1	8.2	-	-	-	-

	total waste	verm	total sample	% verm	water	moisture	Bulk Loss
1	506.5	53.6	560.1	9.5	15.3	6.7	20.0
2	768.1	47.9	816.0	5.8	6.3	10.0	13.3
3	943.7	389	982.6	3.9	2.9	5.8	9.0
4	947.2	50.1	997.3	5.0	3.9	9.6	10.0
5	688.8	57.1	745.9	7.6	9.5	17.3	13.3
6	566.7	37.5	604.2	6.2	12.5	20.4	15.0
7	315.9	69.3	385.2	17.9	9.8	12.9	13.0
8	262.6	19.5	282.1	6.9	-	27.0	-
9	255.9	14.2	270.1	5.2	13.4	254	20.0
10	638.8	48.1	686.9	7.0	8.0	23.5	-
11	562.2	70.6	623.8	11.1	13.9	18.9	16.6
12	837.6	65.7	909.3	7.2	3.6	6.2	9.6
13	806.9	76.1	883.0	8.6	6.3	11.6	16.6
14	591.5	71.5	663.0	10.7	13.7	25.0	15.0
15	728.8	48.6	777.4	6.2	-	13.2	-
16	292.0	40.8	332.8	12.2	268	45.5	20.0
17	2419	30.3	2721	11.1	-	36.9	-
18	474.5	42.6	517.1	8.2	18.1	15.1	20.0

Trench 1-South North Zone

	wet	DRY	water	water %	oz wet	oz Dry	oz Loss	% Loss
1								
2	758.0	699.3	78.7	10.3				
3		941.6						
4	962.0	843.9	118.0	12.2	30	26	4	13.3
5								
6		615.7						
7	358.1	300.7	57.4	16.0				
8								
9		565.9						
10	1035.2	882.3	152.9	14.7	30	24.5	5.5	18.3
11		708.8						
12		417.3						
13		271.1						
14	890.4	746.9	143.5	16.1	30	24.0	6	20.0
15								
16	507.8	447.8	60.0	11.8				
17	1050.6	923.3	127.3	12.1	30	25.3	4.7	15.6
18	1047.8	1002.1	45.7	4.3				
19								
20	958.0	849.2	108.8	11.3	30	25.4	4.6	15.3

	Total Sample	under 1.70	After C×F	over 1.70	After C×F	Total C×F	Gram Moisture	% Moisture
1	608.0	608.0	444.1	-	-	444.1	163.9	26.9
2	915.7	350.0	257.5	565.7	505.5	763.0	152.7	16.6
3	454.2	454.2	424.3			424.3	29.9	6.5
4	1342.7	498.8	421.2	843.9	806.8	1228.0	114.7	8.5
5	310.7	310.7	232.3			232.5	78.4	25.2
6	615.7	615.7	456.7			456.7	159.0	25.8
7	300.7	300.7	231.5			231.5	69.2	23.0
8	378.9	378.9	285.0			285.0	93.9	24.7
9	565.9	565.9	317.4			317.4	248.5	43.9
10	882.3	882.3	632.2			632.2	250.1	28.3
11	352.0	352.0	266.8			266.8	85.2	24.1
12	417.3	417.3	320.2			320.2	97.1	23.2
13	271.1	271.1	184.3			184.3	86.8	32.0
14	385.4	385.4	297.2			297.2	88.2	22.8
15	436.4	436.4	338.0			338.0	98.4	22.5
16	447.8	238.8	192.4	209.0	185.6	378.0	69.8	15.5
17	1498.3	1180.4	1067.0	317.9	270.6	1337.6	160.7	10.7
18	1002.1	882.7	802.9	119.4	111.1	914.0	88.1	8.7
19								
20	849.2	640.3	492.2	208.9	178.1	670.3	178.9	21.0

	waste	verm	total	% verm	waste	verm	total	% verm
1	418.0	26.1	444.1	5.8				
2	231.4	26.1	257.5	10.1	480.6	24.9	505.5	4.9
3	382.4	41.9	424.3	9.8				
4	369.3	51.9	421.2	12.3	718.0	88.8	806.8	11.0
5	223.0	9.3	232.3	4.0				
6	440.5	16.2	456.7	3.5				
7	231.5	0	231.5	0				
8	285.0	0	285.0	0				
9	310.3	7.1	317.4	2.2				
10	589.2	43.0	632.2	6.8				
11	255.0	11.8	266.8	4.4				
12	305.3	14.9	320.2	4.6				
13	175.4	8.9	184.3	4.8				
14	286.6	10.6	297.2	3.5				
15	298.9	39.1	338.0	11.5				
16	169.0	23.4	192.4	12.1	120.3	65.3	185.6	35.1
17	979.7	87.3	1067.0	8.1	222.4	48.2	270.6	17.8
18	776.0	26.9	802.9	3.3	110.2	0.9	111.1	0.8
19				0				0
20	456.2	36.0	492.2	17.3	175.3	128.1	178.1	1.5

19 Rock - no soil sample

	Total waste	verm	Total sample	% verm	water	Moisture	Bulk loss
1	418.0	26.1	444.1	5.8			
2	712.0	51.0	763.0	6.6	10.3	16.6	
3	382.4	41.9	424.3	9.8		6.5	
4	1087.3	140.7	1228.0	11.4	12.2	8.5	13.3
5	223.0	9.3	232.3	4.0		25.2	
6	440.5	16.2	456.7	3.5		25.8	
7	231.5	0	231.5	0	16.0	23.0	
8	285.0	0	285.0	0		24.7	
9	310.3	7.1	317.4	2.2		43.9	
10	589.2	43.0	632.2	6.8	14.7	28.3	18.3
11	255.0	11.8	266.8	4.4		24.1	
12	305.3	14.9	320.2	4.6		23.2	
13	175.4	8.9	184.3	4.8		32.0	
14	286.6	10.6	297.2	3.5	16.1	22.8	20.0
15	298.9	39.1	338.0	11.5		22.5	
16	289.3	88.7	378.0	23.4	11.8	15.5	
17	1202.1	135.5	1337.6	10.1	12.1	10.7	15.6
18	886.2	27.8	914.0	3.0	4.3	8.7	
19							
20	631.5	38.8	670.3	5.7	11.3	21.0	15.3

trench 2-South North zone

	Wet	DRY	Grams Water	Water %	OZ W	OZ DRY	OZ Loss	% Loss
1	—							
2	1051.1	876.7	174.4	16.5	30 oz	24.7	5.3	17.6
3	—							
4	660.7	534.6	126.1	19.0	30	24.1	5.9	19.6
5	—							
6	683.2	594.1	89.1	13.0	30	25.7	4.3	14.3
7	—							
8	1065.0	819.3	245.7	23.0	30	24.0	6.0	20.0
9	—							
10	1088.3	1018.9	69.4	6.3	30	26.0	4.0	13.3
11	846.6	708.7	137.9	16.2	30	25.0	5.0	16.6
12	—							
13	—							
14	778.9	652.7	126.2	16.2				
15	526.7	418.4	108.3	20.5	30	24.0	6.0	20.0
16	—	413.8						
17	—			~~16.3~~	~~30~~		~~5.2~~	~~17.3~~
18				~~16.3~~	~~30~~		~~5.2~~	~~17.3~~

	Total sample	under 1.70	After Exf.	Over 1.70	After Exf	Total Exf	G. moisture	% moisture
1	416.2	416.2	358.0			358.0	58.2	13.9
2	810.3	560.3	507.8	250.0	223.7	731.5	78.8	9.7
3	908.4	550.7	498.1	357.7	313.8	811.9	96.6	10.6
4	534.6	534.6	478.8			478.8	55.8	10.4
5	330.8	330.8	277.7			277.7	53.1	16.0
6	319.5	319.5	270.3			270.3	49.2	15.3
7	829.6	829.6	707.6			707.6	122.0	14.7
8	809.0	399.0	333.0	410.0	328.6	661.6	147.9	18.2
9	550.7	550.7	497.7			497.7	53.0	9.6
10	1088.3	1088.3	946.3			946.3	142.0	13.0
11	564.1	564.1	447.7			447.7	116.4	20.6
12	305.8	305.8	132.6			132.6	173.2	56.6
13	690.0	690.0	438.1			483.1	206.9	29.9
14	652.7	652.7	536.4			536.4	116.3	17.8
15	418.4	418.4	311.2			311.2	107.2	25.6
16	409.8	409.8	312.4			312.4	97.4	23.7
17	526.5	526.5	394.8			394.8	131.7	25.0
18								

	waste	verm	total	under 1.70 % verm	waste	verm	total	over 1.70 % verm
1	321.6	36.4	358.0	10.1				
2	427.3	80.5	507.8	15.8	182.2	41.5	223.7	18.7
3	471.7	27.1	488.1	5.4	280.2	33.6	313.8	10.7
4	423.6	55.2	478.8	11.5				
5	263.1	14.6	277.7	5.2				
6	228.3	42.0	270.3	15.5				
7	575.3	132.3	707.6	18.6				
8	306.7	26.3	333.0	7.8	318.3	10.3	328.6	3.1
9	492.5	5.2	497.7	1.0				
10	926.2	20.1	946.3	2.1				
11	421.2	26.5	447.7	5.9				
12	122.6	10.0	132.6	7.5				
13	451.1	32.0	483.1	6.6				
14	473.0	63.4	536.4	11.8				
15	280.8	30.4	311.2	9.7				
16	293.0	19.4	312.4	6.2				
17	366.5	28.3	394.8	7.1				

	Total waste	verm	Total sample	% verm	% water	moisture	Bulk loss
1	321.6	36.4	358.0	10.1			
2	609.5	122.0	731.5	16.6	16.5	9.7	17.6
3	751.9	60.7	812.6	7.4		10.6	
4	423.6	55.2	478.8	11.5	19.0	10.4	19.6
5	263.1	14.6	277.7	5.2		16.0	
6	228.3	42.0	270.3	15.5	13.0	15.3	14.3
7	575.3	132.3	707.5	18.6		14.7	
8	625.0	36.6	661.6	5.5	23.0	18.2	20.0
9	492.5	5.2	497.7	1.0		9.6	
10	962.2	20.0	982.3	2.0	6.3	13.0	13.3
11	421.2	26.5	447.7	5.9	16.2	20.6	16.6
12	122.6	10.0	132.6	7.5		56.6	
13	451.1	32.0	483.1	6.6		29.9	
14	473.0	63.4	536.4	11.8		17.8	
15	280.8	30.4	311.2	9.7	20.5	25.6	20.0
16	293.0	19.4	312.4	6.2		23.7	
17	366.5	28.3	394.8	7.1		25.0	

Horse-Shoe Trench I

		Total Sample	Total Ext.	Grams moisture	% moisture	waste	verm	% verm
1	135301	315.1	246.0	69.1	21.9	238.5	7.5	3.0
2	135302	493.7	422.0	71.7	14.5	358.0	64.0	15.1
3	135302	220.6	202.9	17.7	8.0	200.9	2.0	0.9
4	135304	375.3	334.7	40.6	10.8	314.1	20.6	6.1
5	135305	641.8	568.0	73.8	11.4	379.9	1881	33.1
6	135306	525.8	398.0	127.8	24.3	396.2	15.8	3.4
7	135307	225.1	175.5	49.6	22.0	175.5	0	0
8	135308	399.6	335.6	64.0	16.0	328.6	7.0	2.0
9	135309	560.7	489.5	71.2	12.6	478.1	14.4	2.3
10	135310	504.1	441.4	62.7	12.4	375.3	66.1	14.9
11	135311	406.9	367.9	39.0	9.5	311.9	56.0	15.2
12	135312	459.8	412.6	47.2	10.2	359.9	52.7	12.7
13	135313	657.1	542.6	114.5	17.4	478.9	63.7	11.7
14	135314	471.1	376.2	94.9	20.1	298.1	78.1	20.7
15	135315	475.9	381.7	94.2	19.7	268.0	113.7	29.7
16	135316	530.3	428.6	100.7	18.9	299.0	130.6	30.4
17	135317	572.9	457.3	115.6	20.1	327.8	129.5	28.3
18	135318	538.2	407.1	131.1	24.3	393.2	13.9	3.4
19	135319	456.6	334.2	122.4	26.8	264.2	70.0	20.9
20	135320	513.7	392.2	121.5	23.6	365.5	26.7	6.8
21	135321	473.6	370.4	103.2	21.7	338.7	31.7	8.5
22	135322	533.0	410.9	122.1	22.9	364.3	46.6	11.3
23	135323	663.6	527.1	136.5	20.5	452.4	74.7	14.1
24	135324	449.8	400.9	48.9	10.8	350.9	50.0	12.4
25	135325	626.3	567.9	58.4	9.3	528.3	39.6	6.9
26	135326	927.8	808.3	119.5	12.8	769.3	39.0	4.8
27	135327	729.4	650.8	78.6	10.7	515.1	135.7	20.8
28	135328	681.5	591.9	89.6	13.1	481.1	110.8	18.7
29	135329	601.5	512.2	89.3	14.8	415.2	97.0	18.9
30	135330	529.4	471.2	58.2	10.9	420.7	50.5	10.7
31	135331	644.6	540.1	104.5	16.2	519.3	20.8	3.8
32	135332	651.7	556.4	95.3	14.6	548.0	8.4	1.5
33	135333	651.1	528.9	122.2	18.7	503.5	25.4	4.8

TRENCH I

		Total sample	Total EXF	Grams moisture	% Moisture	waste	Verm	% Verm
34	135334	521.1	457.6	63.5	12.1	439.5	18.1	3.9
35	135335	619.7	538.5	81.2	13.1	460.8	77.7	14.4
36	135336	985.3	862.6	122.7	12.4	687.7	174.9	20.2
37	135337	677.1	576.4	100.7	14.8	405.1	171.3	29.7
38	135338	837.0	733.3	103.7	12.3	605.4	127.9	17.4
39	135339	692.3	613.6	78.7	11.3	471.3	142.3	23.1
40	135340	629.6	551.4	78.2	12.4	481.5	69.9	12.6
41	135342	491.5	435.8	55.7	11.3	387.8	48.0	11.0
42	135343	610.6	537.8	72.8	11.9	521.2	16.6	3.0

VERT. samples

		Total sample	Total EXF.	Grams moisture	% Moisture	waste	Verm	% Verm
1V	135341	294.7	268.4	26.3	8.9	255.2	13.2	4.9
2V		433.8	414.6	19.2	4.4	392.4	22.2	5.3
3V		558.0	416.4	141.6	25.3	386.3	30.1	7.2
4V		464.0	378.6	85.4	18.4	308.8	69.8	18.4
5V		593.7	529.3	64.4	10.8	516.0	13.3	2.5

Bulk Test trench A.

	wet	DRY	water	% water	wet	DRY	Loss	% Loss
A	478 LBS	386 LBS	92 LBS	19.2	30 gal.	28.5 gal	1.5 gal	5.0
A	79.6 LBS	64.3 LBS	15.3 LBS	19.2	5 gal.			

Horse-Shoe Trench. J

		Total Sample	Total Exf.	Grams moisture	% moisture	Waste	Verm.	% Verm
1	135348	494.5	447.5	47	9.5	418.5	29.0	6.4
2	135349	683.2	604.7	78.5	11.4	553.3	51.4	8.5
3	135350	499.1	393.3	105.8	21.1	393.3	0	0
4	135351	486.3	351.2	135.1	27.7	351.2	0	0
5	135352	452.5	354.0	98.5	21.7	343.7	10.3	2.9
6	135353	192.0	144.5	47.5	24.7	142.4	2.1	1.4
7	135354	515.7	428.2	87.5	16.9	299.5	128.7	30.3
8	135355	363.4	321.4	42.0	11.5	236.0	85.4	26.5
9	135356	730.9	606.4	124.5	17.0	398.6	207.8	34.2
10	135357	581.0	476.1	104.9	18.0	331.3	144.8	30.4
11	135358	581.3	468.0	113.3	19.4	320.4	147.6	31.5
12	135359	560.3	465.3	95.0	16.9	288.7	176.6	37.9
13	135360	840.5	726.6	113.9	13.5	638.1	88.5	12.1
14	135361	864.0	733.5	130.5	15.1	735.5	0	0
15	135362	793.2	639.8	153.4	19.3	630.9	8.9	1.3
16	135363	736.5	578.9	157.6	21.3	578.9	0	0
17	135364	469.8	412.6	52.7	12.1	369.0	43.6	10.5
18	135365	683.4	581.9	101.5	14.8	537.3	~~[illegible]~~ 44.6	7.6
19	135366	492.4	443.3	49.1	9.9	426.0	17.3	3.9

18	Recheck.	683.4	581.9	101.5	14.8	537.3	44.6	7.6

Trench #'s	0	1-North	1-South	2-South	total Ave (APX.)
water	9.8	10.8	12.0	16.3	12.2
Bulk Loss	16.6	15.1	16.5	17.3	16.3
Moisture After E&F.	17.5	18.4	21.5	19.4	19.2
verm Ave.	9.6	8.3	7.1	8.7	8.4

Total from each trench (est.)

Regis Resources Inc.

Cavendish Vermiculite Properties

By Keith Vatcher

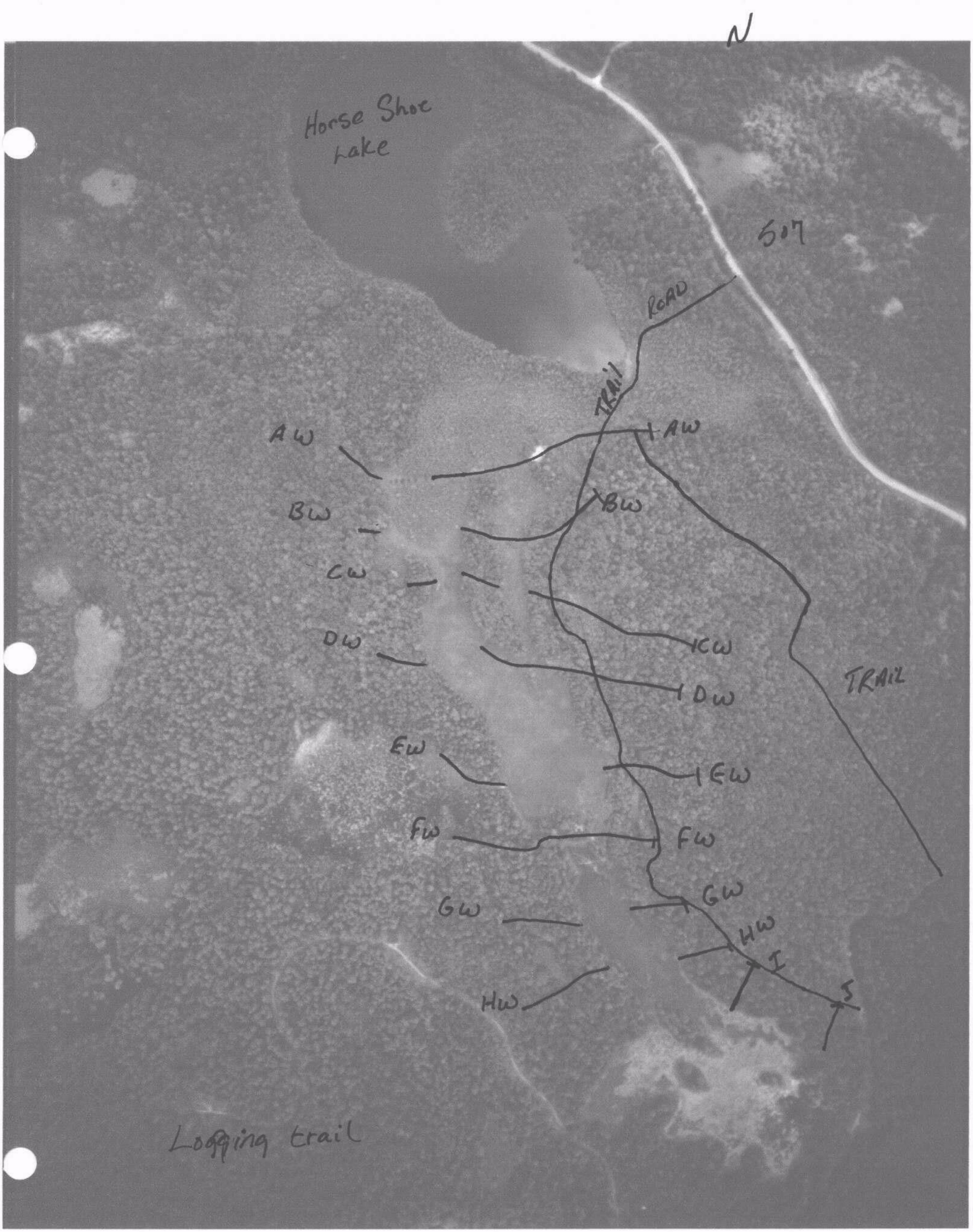
Index

Bulk sample report

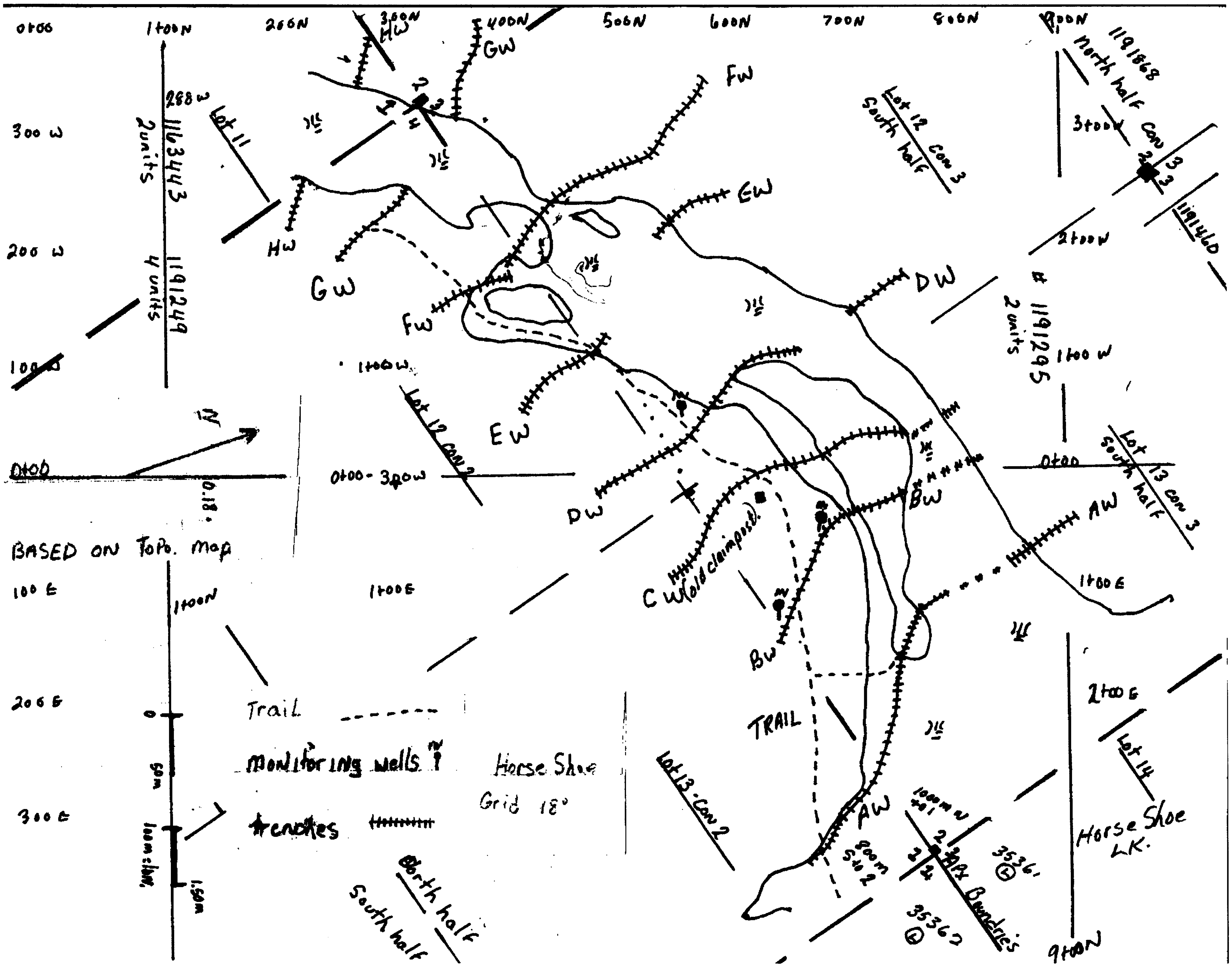
Claim #s 1191249 and 1191259

Horse shoe Lake property

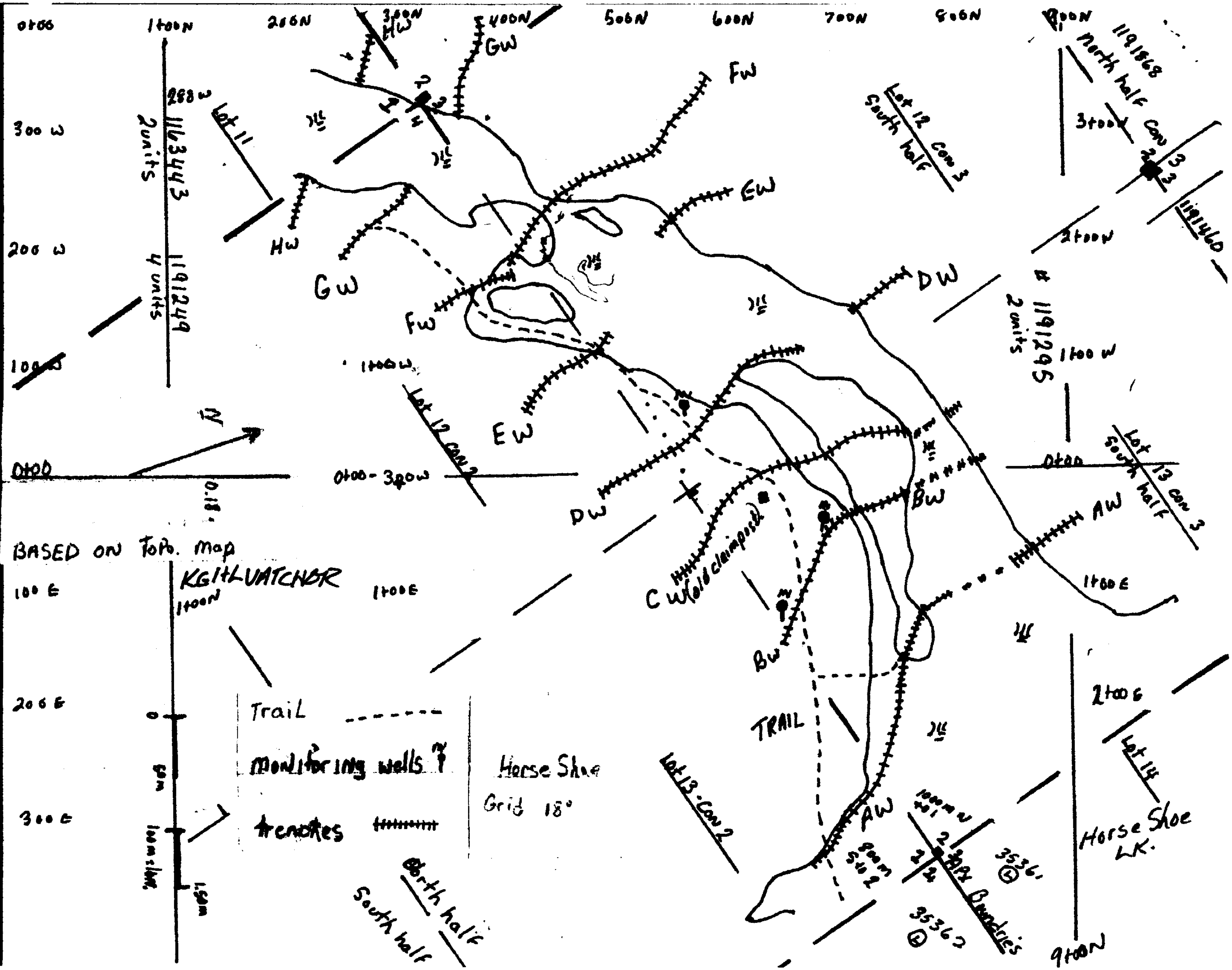
KEITH VATCHER
REGIS RESOURCES INC.



N
Horse Shoe Lake
507
ROAD
TRAIL
AW
AW
BW
BW
CW
CW
DW
DW
EW
EW
FW
FW
GW
GW
HW
HW
I
J
TRAIL
Logging trail



0+00
1+00N
200N
300N
400N
500N
600N
700N
800N
900N
1191868
North half Con 3
Lot 12 Con 3
South half
300 W
288 W
2 units
1163443
Lot 11
200 W
4 units
1191249
100 W
HW
GW
FW
EW
DW
CW (old claim post)
BW
AW
3+00W
2+00W
1+00W
1+00W
1191460
2 units
1191295
Lot 12 Con 2
0+00-3+00W
0+00
Lot 13 Con 3
South half
0.18°
BASED ON Topo. map
100 E
1+00N
1+00E
1+00E
200E
2+00E
300E
Trail
monitoring wells
trenches
Horse Shoe
Grid 18°
TRAIL
Lot 13 - Con 2
Lot 14
Horse Shoe LK.
1000m N
900m S+0 2
Max Boundries
35361
35362
North half
South half
9+00N
50m
100m=1cm
150m


0+00
1+00N
200N
300N
HW
400N
GW
500N
600N
700N
800N
900N
1191868
North half
Con 3
FW
288 w
300 w
1163443
2 units
Lot 11
Lot 12 Con 3
South half
3+00
EW
HW
GW
200 w
1191249
4 units
2+00N
1191460
DW
FW
2 units
1191295
1+00 w
100 w
1+00 w.
Lot 12 Con 2
EW
N
0+00
0+00 - 3+00 w
0+00
Lot 13 Con 3
South half
DW
BW
AW
BASED ON Topo. map
KGITLUATCHER
C W (old claim post)
100 E
1+00N
1+00 E
1+00 E
BW
200 E
2+00 E
Trail
monitoring wells
Horse Shoe
Grid 18°
TRAIL
Lot 13 - Con 2
Lot 14
300 E
trenches
AW
100m
50m
1.50m
North half
South half
Horse Shoe LK.
Boundries
35361
35362
9+00N

CLAIM #'S 1191249 AND 1191295 Cavendish, southern Ontario.

Work on the bulk sample started on April 14.
Tools, a shovel , nylon bags.
A 6x6 polaris atv.
Six screens.
Tarps.
Dust mask

The bulk sample started on April 14.and was completed on May 5. The work was not continuous. Due to the drying time and the weather. We could'nt work on sample on wet days. Eight trenches were sampled by walking each trench starting east at the start and working to the west. Samples were shoveled into bags with no complicated method. Every 2 steps a shovel full was collected. Trenches A,B,C,D,E,F,G,and H.
All samples were carried out by the atv. along the trail to the Horseshoe Lake road located to the northeast of the claim that branches off the hiway 507. Claim # 1191249.
The samples were than spread out on tarps inside a tent made out of 2 by 4 and tarps with the ends open so the air could pass through to remove the moisture.
After the samples were dried they were screened into seven sizes.

Screen size	Size over	% shipped	Total weight	Weight shipped	%Verm.
over	2mm.	0	112 lbs.	0	-n/a
2mm.	18 micro	1/4	240 lbs	60 lbs	-n/a
18 micro	24 micro	1/2	100 lbs	50 lbs	9.0
24 micro	40 micro	1/2	236 lbs	118 lbs	18.8
40 micro	60 micro	1/2	426 lbs	209 lbs	34.2
60 micro	65 micro	1/2	168 lbs	84 lbs	50.6
65 micro	under	1/4	260 lbs	65 lbs	-n/a

The screens used were made up of 2 by 4's and 2 by 3 screens. A frame was then made to hold the screens and a set of ropes was then used to shake the screens. Then weight shipped is the amount that was placed into barrows and shiped to Allen Blake [Technical Consulting] Ltd. in England. A note was sent along with the sample simular to this report with our findings. Later we talked with Mr. Blake on the telephone to get his response. He was impressed with our material and stated that he was interested in working with us. We did't get any paper work from him we only wanted his view on our material . Mr. Blake got the same averages that we did . He did not charge for his work but would like to be involved .
Sonic Soil located in Concord Ontario sent the sample.

Keith V[illegible]

BULK SAMPLE [BLAKE]

Two samples taken from each screen size from different bags .

LARGER #1 SMALLER #4 FIRST RUN

Screen #	Total sample	After exf.	Waste	Verm.	Moisture	% verm.
1	200 g.	188.9	171.9	17.0	5.5	9.0
2	200 g.	183.1	148.7	34.4	8.4	18.8
3	200 g.	181.1	119.2	61.9	9.4	34.2
4	200 g.	170.4	84.2	86.2	14.8	50.6
Total	800 g.	723.5	524.0	199.5	9.6	27.6

SECOND RUN

1	200 g.	188.2	168.7	11.9	5.9	10.4
2	200 g.	183.1	150.5	32.6	7.8	17.8
3	200 g.	180.9	116.1	64.8	9.5	35.8
4	200 g.	175.4	80.3	95.1	12.3	54.2
0						
Total	800 g.	727.6	515.6	212.0	9.0	29.1

Some of the dust and fine verm. can be lost in the chimney of the exfolatior which can change the percentages when dealing with small samples . Several samples have to be redone just to double check. The chimney on the exfolator reacts to the wind in the same way as it would on a wood stove. The more wind the more vacumn up the pipe and small particals of verm . will get drawn up.. Larger samples do not lose as much . We usually avoid running samples on windy days. We have made changes that have helped catch the fines but when dealing with tenths of a gram and several hundred gram samples the averages does not change much if any at all. We usually try to run 300 g. or more up to as much as 1200 g.

Trenching

Claim #1191249,1191259 and 1163443

Horse shoe Lake property

KEITH VATCHER
REGIS RESOURCES INC.

Trenching on the claims 1191295,1191249 and 1163443 was done with two excavators. A 320 cat opperated by Dale Methot from Thunder Bay who dug trenches A to H . from January to April 99. Then trenches I and J were dug with a JSW. opperated by Larry Oliver from Buckhorn on March 28/ 2000. The trenches were all sampled from east to west along the walls near the bottom of the trenches . Any areas where the trenches were 2 metres or more in depth vertical samples were also taken. All samples were then dried in metal plates. After the samples were dried they were riffled into two sections, one used for assay and one was replaced into the oringal sample bag for storage. All samples were then ran into the exfolator. The samples were then seperated with water, floating the verm. off in a screen covered with paper towel so water could pass through without lossing the verm. The waste was put in a separate tray. Both parts were then dried and weighed . Vermiculite percentages were then calculated by dividing the weight of the vermiculite into the weight of the vermiculite plus waste. All samples were ran through the exfolator owned by Regis Resources Inc. and opperated by Keith Vatcher. Some samples were ran into Lakefield at the lab. under the supervision of Tony Big. Those samples were from A to G. All other samples were ran by Keith at a cottage set up as a lab in buckhorn during and for a short time after the trenching was completed.

Claim # 1191295	Lots 12 and 13 south half of concession 3
1191249	All of lots 12 and 13 concession 2
1163443	All of lot 11 concession 2

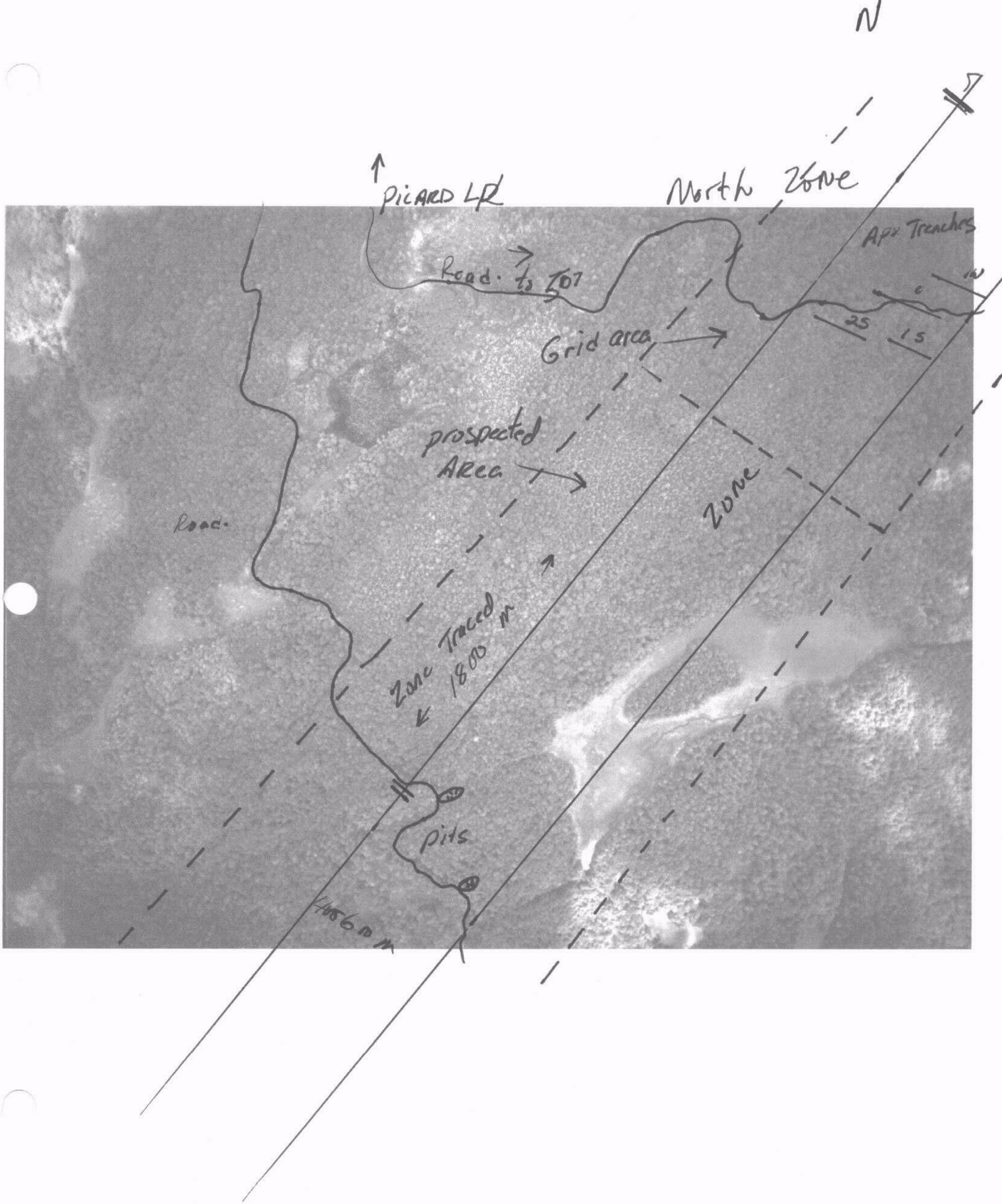
Keith Vatcher

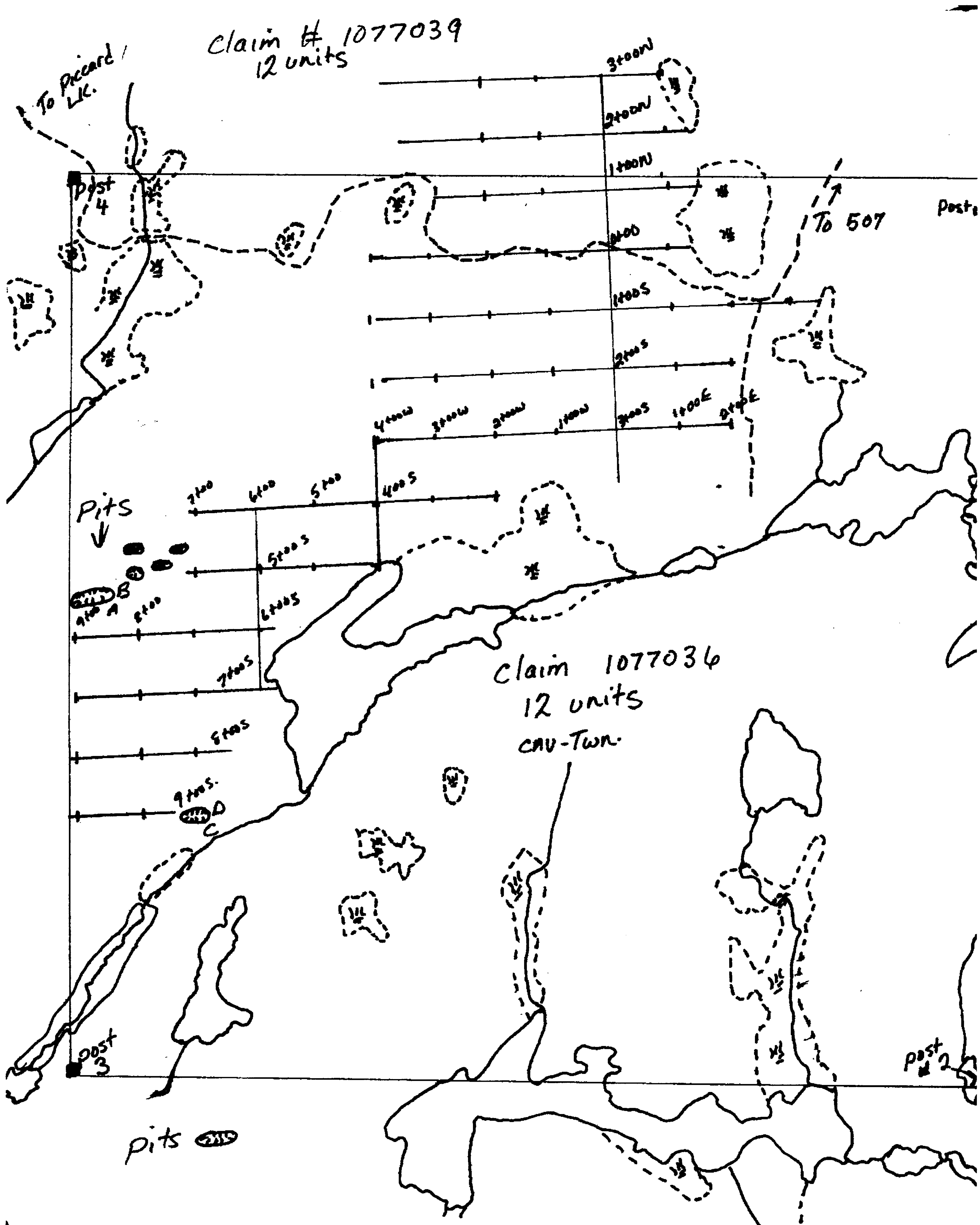
Trench Samples
Trenches in the North zone

Claim # 1077039
Lots 12,13,14 and 15 South half of concession 9
All of lots 12,13,14 and 15 concession 8

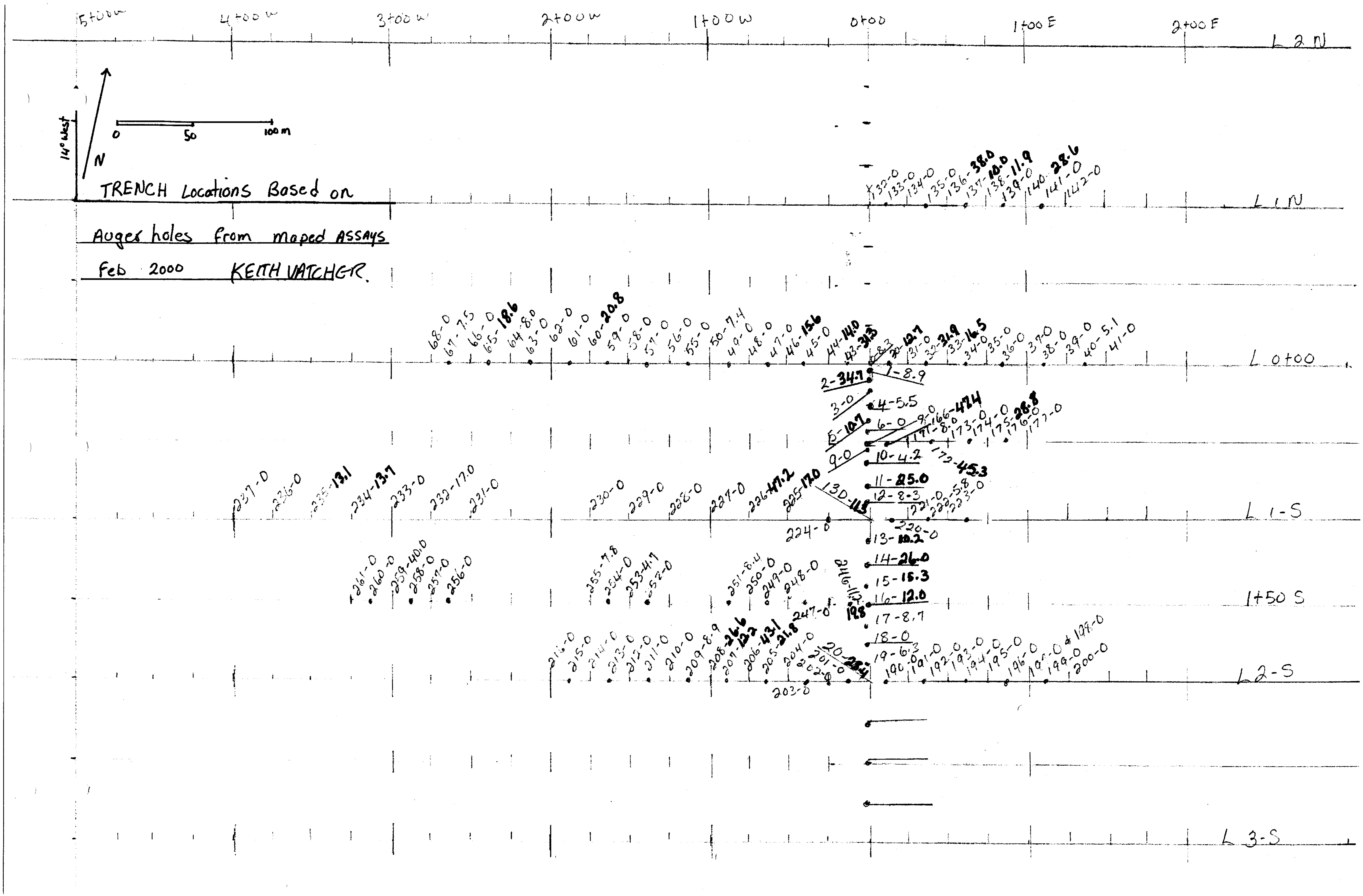
Claim # 1077036
All of Lots 12,13,14 and 15 of concession 7
Lots 12,13,14 and 15 North half of concession 6

Work on those claims were performed with a JSW excavator owned and operated by Larry Oliver of Buckhorn
Samples were taken by Keith Vatcher
Dan Leroux mapped and witnessed the project
Kirk Watson cleared trails and gathered samples
Total of 4 trenches were dug .
0, 1 north, 1 south, and 2 south.

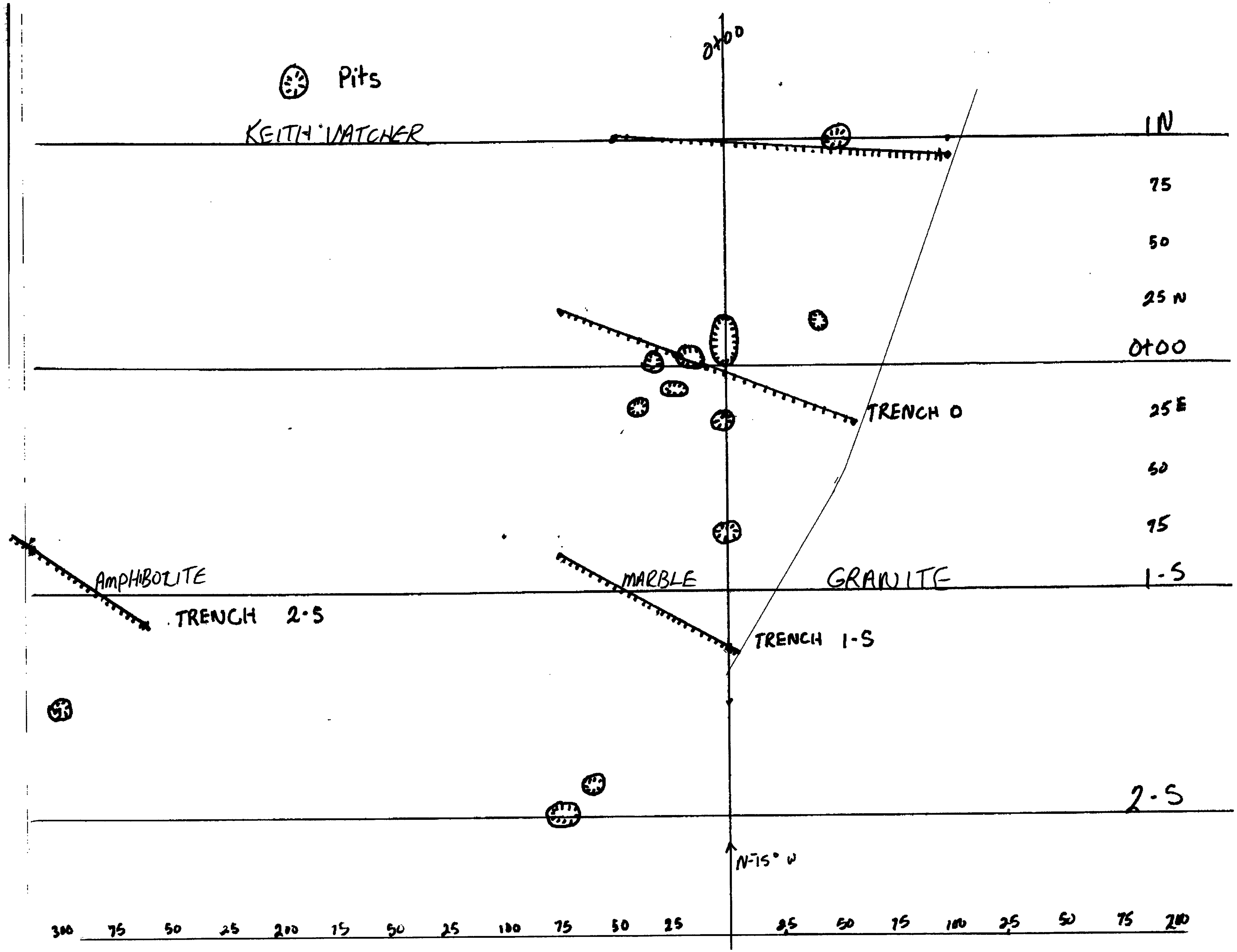

N
PICARD LK
North Zone
Apx Trenches
Grid area
prospected
Area
ZONE
Road.
Zone Traced
1800 m
pits



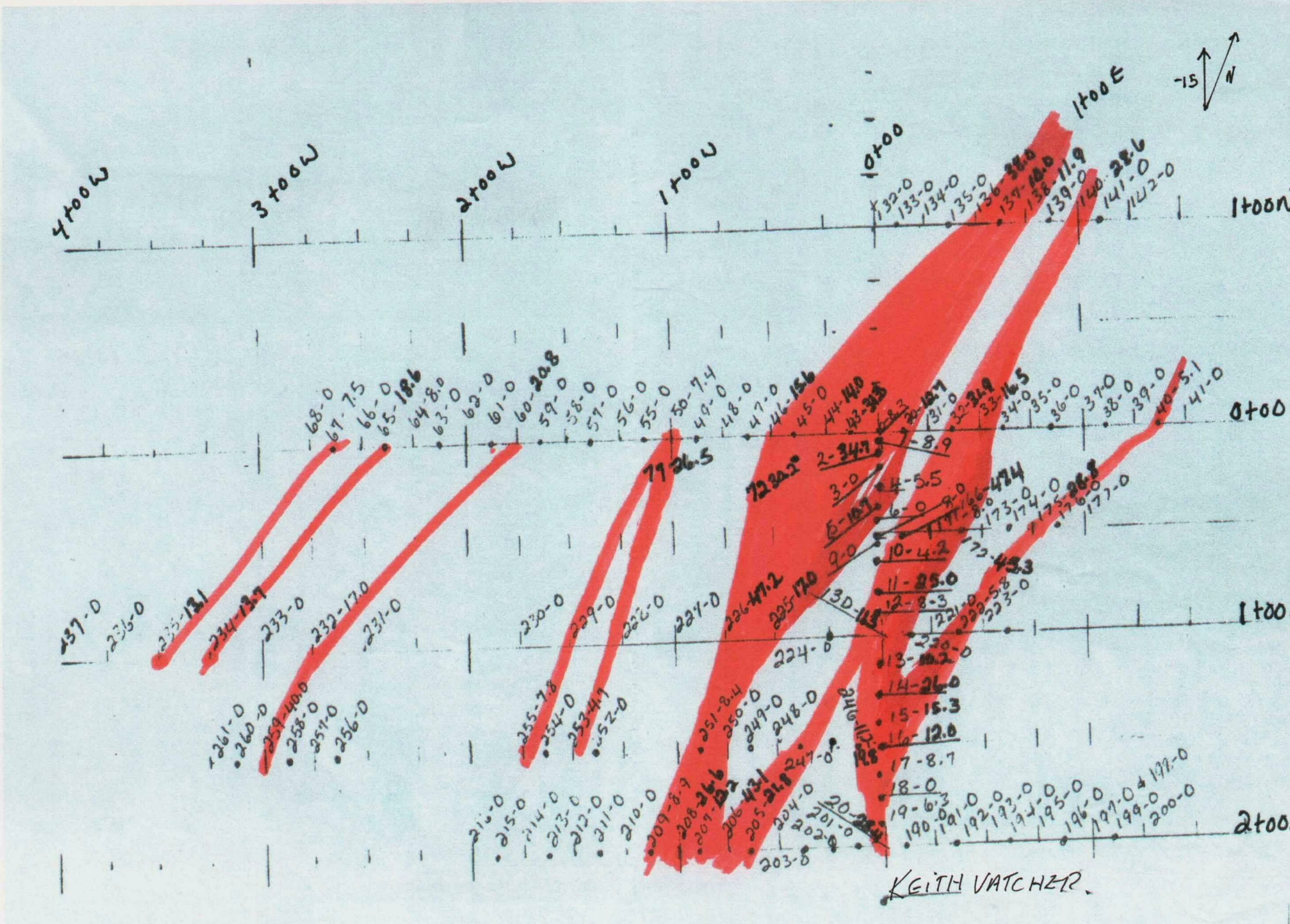
Claim # 1077039
12 units
To Piccard Lk.
Post 4
To 507
Post
3+00N
2+00N
1+00N
0+00
1+00S
2+00S
4+00W
3+00W
2+00W
1+00W
3+00S
1+00E
2+00E
7+00
6+00
5+00
4+00S
5+00S
6+00S
7+00S
8+00S
9+00S.
9+00
8+00
Pits
A
B
C
D
Claim 1077036
12 units
CAV-Twn.
post 3
post #2
pits



TRENCH Locations Based on
Auger holes from maped ASSAYS
Feb 2000 KEITH VATCHER
14° West
N
0
50
100 m
5+00W
4+00W
3+00W
2+00W
1+00W
0+00
1+00E
2+00E
L 2 N
L 1 N
L 0+00
L 1-S
1+50 S
L 2-S
L 3-S



0+00
Pits
KEITH VATCHER
1N
75
50
25 N
0+00
TRENCH 0
25 E
50
75
AMPHIBOLITE
MARBLE
GRANITE
1-S
TRENCH 2-S
TRENCH 1-S
2-S
N-15° W
300
75
50
25
200
75
50
25
100
75
50
25
25
50
75
100
25
50
75
200



4+00W
3+00W
2+00W
1+00W
0+00
1+00E
1+00N
0+00
1+00S
2+00S
N
-15
KEITH VATCHER

Trench 0

Sample #	Location	Vermiculite	Rock type
1[59956]	0 - 5 m.	8.5	gray marble
2[59957]	5 - 10m.	20.0	gray marble
3[59958]	10-15m.	8.4	gray-brown marble
4[59959]	15-20m.	5.2	gray-brown marble
5[59960]	20-25m.	20.0	foliated marble
6[59961]	25-30m.	8.3	amphibolite well foliated
7[59962]	30-35m.	3.9	amphibolite , well foliated
8[59963]	35-40m.	2.7	blue-gray marble
9[59964]	40-45m.	11.2	weathered amphibolite
10[59965]	45-50m.	5.4	light marble
11[59966]	55-60m.	6.0	light marble, narrow veins of high percent vermiculite
12[59967]	60-65 m.	14.0	light marble, narrow veins of high percent vermiculite
13[59968]	65-70m.	21.2	light marble, narrow veins of high percent vermiculite
14[59969]	70-75m.	9.0	light marble, narrow veins of high percent vermiculite
15[59970]	75-80m.	22.9	light marble, narrow veins of high percent vermiculite
16[59971]	80-85m.	3.8	blue gray marble
17[59972]	85-90m.	13.2	gray marble
18[59973]	90-95m.	13.4	light gray marble
19[59974]	95-100m.	3.5	light gray marble
20[59975]	100-105m.	10.0	light gray marble
21[59976]	105-110m.	10.5	light gray marble
22[59977]	110-115m.	10.4	light gray marble
23[59978]	115-120m.	5.5	light marble ,coarse grain
24[59979]	120-125m.	2.3	light marble, coarse grain very brittle
25[59980]	125-130m.	1.0	light marble, coarse grain very brittle

Trench 1 north

Sample#	Location	Vermiculite	Rock type
1[59921]	0-5m.	9.5	Amphibolite
2[59922]	5-10m.	5.8	Blue-gray marble
3[59923]	10-12.5m.	3.9	Granite-gneiss
4[59924]	12.5-15m.	5.0	Granite-gneiss
5[59925]	15-20m.	7.6	Blue-gray marble
6[59926]	20-25m.	6.2	Amphibolite
7[59927]	25-30m.	17.9	Granite-gneiss
8[59928]	30-35m.	6.9	Granite-gneiss
9[59929]	35-40m.	5.2	Sandy material
10[59930]	40-45m.	7.0	Gneiss
11[59931]	45-50m.	11.1	Light marble
12[59932]	50-55m.	7.2	Light marble course grain , brittle
13[59933]	50-52.5m.	8.6	Light marble course grain , brittle
14[59934]	52.5-55m.	10.7	Light marble coarse grain , very brittle
15[59935]	55-60m.	6.2	Light marble coarse grain, very brittle
16[59936]	60-65m.	12.2	Light marble coarse grain, brittle
17[59937]	65-70m.	11.1	Blue-gray marble
18[59938]	70-75m.	8.2	Blue-gray marble

Trench 1 south

Sample#	Location	Vermiculite	Rock type
1[59901]	0-5m.	5.8	Amphibolite
2[59902]	5-10m.	6.6	Marble
3[59903]	10-12.5m.	9.8	Marble
4[59904]	12.5-15m.	11.4	Marble,gneiss
5[59905]	15-20m.	4.0	Amphibolite ,narrow zone of diabase
6[59906]	20-25m.	3.5	Blue gray marble
7[59907]	25-30m.	0	Sandy material
8[59908]	30-35m.	0	Sandy material
9[59909]	35-40m.	2.2	Sandy material,and Amphibolite
10[59910]	40-45m.	6.8	Amphibolite
11[59911]	45-50m.	4.4	Amphibolite
12[59912]	50-55m.	4.6	Blue-gray marble
13[59913]	55-60m.	4.8	Blue gray marble
14[59914]	60-65m.	3.5	Light gray marble
15[59915]	65-70m.	11.5	Marble, narrow veins of high percent verm.
16[59916]	70-75m.	23.4	Marble, narrow veins of high percent verm.
17[59917]	75-80m.	10.1	Marble
18[59918]	80-85m.	3.0	Marble, coarse brittle
19[59919]	85-87.5m.	0	No sample, rock
20[59920]	87.5-90m.	5.7	Amphibolite

Trench 2 south

Sample	Location	Vermiculite	Rock type
1[59939]	0-5m.	10.1	Amphibolite
2[59940]	5-10m.	16.6	Amphibolite
3[59941]	10-15m.	7.4	Amphibolite
4[59942]	15-20m.	11.5	Amphibolite
5[59943]	20-25m.	5.2	Amphibolite
6[59944]	25-30m.	15.5	Amphibolite
7[59945]	30-35m.	18.6	Amphibolite
8[59946]	35-40m.	5.5	Amphibolite
9[59947]	40-45m.	1.0	Amphibolite
10[59948]	45-50m.	2.0	Biotite gneiss
11[59950]	50-55m.	5.9	Biotite gneiss
12[59951]	55-60m.	7.5	Biotite gneiss
13[59952]	60-65m.	6.6	Biotite gneiss
14[59953]	65-70m.	11.8	Biotite gneiss
15[59954]	70-75m.	9.7	Biotite gneiss
16[59955]	75-80m.	6.2	Biotite gneiss
17[59956]	80-85m.	7.1	Biotite gneiss

Horse shoe Lake property Trenches

Trenches I and J

Work on those claims were performed with JSW. excavator owned and operated by Larry Oliver of Buckhorn
Samples were taken by Keith Vatcher
Dan Leroux mapped and witnessed the project
Kirk Watson cleared trails and gathered samples

TRENCH I

Sample #	Location	Vermiculite	Rock type
1[135301]	0-2.5m.	3.0	Marble schist
2[135302]	2.5-5m.	15.1	Marble schist
3[135303]	5-7.5m.	0.9	Glacial sand
4[135304]	7.5-10m.	6.1	Marble under sand
5[135305]	10-12.5m.	33.1	Pinkish marble
6[135306]	12.5-15m.	3.9	Pinkish marble
7[135307]	15-17.5m.	0	Pinkish marble
8[135308]	17.5-20m.	2.0	Pinkish marble
9[135309]	20-22.5m.	2.3	Pinkish marble
10[135310]	22.5-25m.	14.9	Greenish marble
11[135311]	25-27.5m.	15.2	Greenish marble
12[135312]	27.5-30m.	12.7	Greenish marble
13[135313]	30-32.5m.	11.7	Greenish marble
14[135314]	32.5-35m.	20.7	Greenish marble
15[135315]	35-37.5m.	29.7	Greenish marble
16[135316]	37.5-40m.	30.4	Greenish marble
17[135317]	40-42.5m.	28.3	Greenish marble
18[135318]	42.5-45m.	3.4	Monzonite
19[135319]	45-47.5m.	20.9	Greenish marble
20[135320]	47.5-50m.	6.8	Greenish marble
21[135321]	50-52.5m.	8.5	Dolomite marble
22[135322]	52.5-55m.	11.3	Dolomite marble
23[135323]	55-57.5m.	14.1	Dolomite marble
24[135324]	57.5-60m.	12.4	Dolomite marble
25[135325]	60-62.5m.	6.9	Dolomite marble
26[135326]	62.5-65m.	4.8	Dolomite marble
27[135327]	65-67.5m.	20.8	Dolomite marble
28[135328]	67.5-70m.	18.7	Dolomite marble
29[135329]	70-72.5m.	18.9	Dolomite marble
30[135330]	72.5-75m.	10.7	Dolomite marble
31[135331]	75-77.5m.	3.8	Dolomite marble
32[135332]	77.5-80m.	1.5	Dolomite marble
33[135333]	80-82.5m.	4.8	Dolomite marble
34[135334]	82.5-85m.	3.9	Dolomite marble

35[135335]	85-87.5m.	14.4	Dolomite marble
36[135336]	87.5-90m.	20.2	Dolomite marble
37[135337]	90-92.5m.	29.7	Light marble schist
38[135338]	92.5-95m.	17.4	Light marble schist
39[135339]	95-97.5m.	23.1	Light marble schist
40[135340]	97.5-100m.	12.6	Light marble schist
41[135341]	100-102.5M.	11.0	Light marble schist
42[135342]	102.5-105M.	3.0	Light marble schist

Trench J

Sample#	Location	Vermiculite	Rock type
1[135348]	0-5m.	6.4	Light marble
2[135349]	5-10m.	8.5	Light marble
3[135350]	10-12.5m.	0	Dyke
4[135351]	12.5-15m..	0	Dyke
5[135352]	15-17.5m.	2.9	Light marble
6[135353]	17.5-20m.	1.4	Light marble
7[135354]	20-22.5m	30.3	Marble schist
8[135355]	22.5-25m.	26.5	Marble schist
9[135356]	25-27.5m	34.2	Marble schist
10[135357]	27.5-30m.	30.4	Marble schist
11[135358]	30-32.5m.	31.5	Marble schist
12[135359]	32.5-35m.	37.9	Marble schist
13[135360]	35-37.5m.	12.2	Marble
14[135361]	37.5-42.5m.	0	Sandy material
15[135362]	42.5-47.5m.	1.3	Sandy material
16[135363]	47.5-52.5m.	0	Sandy material
17[135364]	52.5-55m.	10.5	Marble
18[135365]	55-57.5m.	7.6	Marble
19[135366]	57-60m.	3.9	Marble

EXAMPLE OF TIME INVOLVED IN SAMPLING PROCEDURES

When using a hand auger we usually take 100 samples per. day.[8a.m.-3p.m.]. All samples are labeled at the location where they are collected. A starting point is based on pervious exploration in the area. Then using a tape we walk in a line sampling at what intervals we choose usually 12.5 m. east-west and 50 m. north- south. Flagging tape is used to mark the location. The locations are marked on the bags and the flagging tape. eg. 1+00n-1+00e. All samples are left at the area where they taken until the line is completed or leaving time. When the samples are brought back to camp they are put into plates to dry and after the line has been completed a number is given to the samples eg. 1-a or 1-041.The samples are usually rifilled into two sections one for assay and one for storage. The drying time depends on the size of the sample. Usually if the samples are put into plates they will dry overnight in the drier, which can hold 150 samples. Swamp samples and samples over 400g. take extra time apx. 16 to24 hours. When 30 samples are dry we start exfoliating. A sample weighing 400g. take usually 8 to 20 minutes depending on the amount of vermiculite in them. If the average appears to be low the feed can be speed up, if it is high it is slowed down. If a sample has no vermiculite in them it will take only seconds to run. After the sample has been ran they are put into a bucket and filled with water. The vermiculite is than floated off into a screen that has been covered with a paper towel. This process usually takes the amount of time it takes to run a sample. The more vermiculite, the more time. It is important to run samples that will allow us to get a system in place that will allow us to run and separate at the same time. After the sample has been separated with water it is then put into a oven that runs at very high temperatures to dry. This oven can dry 30 samples in 4 hours. The samples are removed as soon as they are dry so as they are not over dried. If a sample is over dried they can get powdery and brittle making them hard to screen if they needed to be screened at all. When running samples we can complete 50 to 100 each day and test as many with one person. We test our own samples so it is hard to put a price on each sample. We have assayed and tested well over 5000 samples we only keep track of numbered samples. We can test any sample anywhere with a torch and get a reasonable accurate average that will tell us if the area is worth sampling.

Time 8am. to 3pm collect samples 50 to 100 samples
4pm to 6pm place out to dry
7 to 11 run and separate 20 to 40 samples
11pm to 12am refill ovens
20.00 prophane, 100 to 250 samples
1 days labor [200 per day] 50 to 100 samples
A usual day when running samples

KEITH VATCHER

Trench samples are assayed in the same way as auger samples, except trench samples are usually larger . Trench samples are taken along the wall running the length of the trench. In places where the trench is more than 1.5 m extra samples are taken. [vertical]. The trenches are sampled as the excavator digs, we usually stay back 25m. for a safe distance. All the trench is sampled , bags are labeled and left in the location until the excavator has completed the trench then the bags are moved in a safe place so the excavator can fill the trench back in. A atv. is then used to pick up the samples, each weighing apx. 1500g. plus. The trenches in the north zones were apx. 100m. and took apx. 5 hours of digging and some time to make trails to the area. Labor rate for the excavator was $90 dollars per hour. The trenches 200,335 and 400 were dug by Larry Oliver with a J.S.W. excavator at $90 per hour and took 18.5 hours. A total of 275m. were dug putting the cost at apx. $6.05 dollars per meter. The cost of each sample was apx. $2.00 to $5.00. to run at our lab., and at the Lakefield lab. the cost was between $15 and $30 . The price can vary a large amount depending on the amount of vermiculite in each sample.

Keith Vokah

Lovenia Olven

DATE Mar 26 19 00

NO ENRG TAXE / TAX REG NO Sun -

NOM / NAME Regis Resource INC.

ADRESSE / ADDRESS

VENDU PAR / SOLD BY	C.R. / C.O.D.	CHARGE	REÇU A/C / ON ACCT.	MONT. REPORTÉ / ACCT. FWD.

Excavator -
Kirks - Watsons -
10 AM - 6 P.M -
8 hr
@ $90 hr
$720 =

12 SIGNATURE

63NCR-29

Lovenia Olven
6598853

DATE Mar 24th 19 00

NO ENRG TAXE / TAX REG NO Fri -

NOM / NAME Regis Resource INC -

ADRESSE / ADDRESS

VENDU PAR / SOLD BY	C.R. / C.O.D.	CHARGE	REÇU A/C / ON ACCT.	MONT. REPORTÉ / ACCT. FWD.

1 Fri - Excavator -
2 Move To Kirk
3 watsons - Float -
4
5 7 - 5:30
6
7 10½ hr @ $90 =
8 $945 =
9
10

11 SIGNATURE

63NCR-29

Lovenia Olven
6598853 -

DATE Mar 22 19 00

NO ENRG TAXE / TAX REG NO

NOM / NAME Regis Resource INC

ADRESSE / ADDRESS

VENDU PAR / SOLD BY	C.R. / C.O.D.	CHARGE	REÇU A/C / ON ACCT.	MONT. REPORTÉ / ACCT. FWD.

1 Excavator -
2 Float Moven
3
4 To Horse Shoe
5
6 Plus Make Road
7
8 9:30 - 12:30 (3 hr)
9 @ $90 hr =
10 $270 =

13 SIGNATURE

63NCR-29

Regis Resources Inc.
Resource Estimate- Plans & Sections
Cavendish Vermiculite Deposit- West Zone

by:

Frederick T. Archibald, B.Sc.Geologist

April 5, 1999

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Assessment Files Research Imaging

...sections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, this ...t work and correspond with the mining land holder. Questions about this collection ...nt and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5

31D16SW2002 2.20489 CAVENDISH 900

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.
- Please type or print in ink.

2.20489

1. Recorded holder(s) (Attach a list if necessary)

Name REGIS RESOURCES INC.	Client Number 303719
Address 60 BLOOR ST. WEST	Telephone Number 416-250-0744
SUITE 400; TORONTO; ONT. M4W-3B8	Fax Number 416-250-7547
Name M4W-3B8	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

☐ Geotechnical: prospecting, surveys, assays and work under section 18 (regs)
■ Physical: drilling stripping, trenching and associated assays
☐ Rehabilitation

Work Type	Office Use
	Commodity
Prospecting, Trenching, Lines, Assaying	Total $ Value of Work Claimed 130693
Dates Work Performed From 14 (Day) April (Month) 1999 (Year) To 1 (Day) 06 (Month) 2000 (Year)	NTS Reference
Global Positioning System Data (if available) / Township/Area CAVENDISH	Mining Division Southern Ont
M or G-Plan Number 72 Southern Ontario	Resident Geologist District Tweed

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

4. Certification by Recorded Holder or Agent

I, KEITH VATCHER (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent Keith Vatcher	Date June 1/2000
Agent's Address 8 BEAVER LK. RD. RR#1 Buckhorn, Ont. K0L-1J0 / Telephone Number 705-657-7379	Fax Number

.41 (03/97)

RECEIVED
JUN 09 2000
GEOSCIENCE ASSESSMENT OFFICE

land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

Amendment W0090.00054

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims	Bank. Value of work to be distributed at a future date
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1	1077036	12	68,086.96	9,600.00	~~[illegible]~~ 23794.00 KV	3,4693.53 KV
2	1163443	2	9,008.62	800.00	8208.62	↑34693.53
3	1191249	4	27342.14	-	27342.14	
4	1191295	2	26,255.81	-	26,255.81	
5	1077034	12	-	9,600.00	-	
6	1077037	3	-	2,400.00	-	
7	1077038	12	-	9,600.00	-	
8	1077039	12	-	9,600.00	-	
9	1077040	3	-	2,400.00	-2	~~2 04 39~~
10	1077042	3	-	2,400.00	-	
11	1077043	9	-	7,200.00	-	
12	1077044	4	-	3,200.00	-	
13	1077045	6	-	4,800.00		
14	1077460	6	-	4,800.00	-	
15	1077459	12	-	9,600.00	-	
	Column Totals		130,693.53		96,000.00	3,469353 KV 3,4693.53

I, KEITH VATCHER (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
Keith Vatcher	June 1/2000 (Keith Vatcher June 19 2000

6. **Instructions for cutting back credits that are not approved.**

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ■ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

RECEIVED 3:10pm JUN 27 GEOSCIENCE ASSESSMENT OFFICE

RECEIVED JUN 09 2000 GEOSCIENCE ASSESSMENT OFFICE

0241 (03/97)

land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

Amendment W0090.00054

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map	Number of Claim Units. For other mining land, list hectares	Value of work performed on this claim or other mining land	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1	1077461	8	–	6,400.00	–	
2	1077458	8	–	6,400.00	–	
3	1077417	9	–	7,200.00	–	
4						
5						
6						
7						
8						
9						
10					2.20489	
11						
12						
13						
14						
15						KV
	Column Totals	~~130693.53~~ 187	130693.53	96,000.00	96,000.00	~~3,4693.53~~ 34,693.53

I, KEITH VATCHER (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
Keith Vatcher	June 1/2000 — Keith Vatcher June 19/2000

6. **Instructions for cutting back credits that are not approved.**

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp

RECEIVED 3:10pm JUN 27 2000 GEOSCIENCE ASSESSMENT OFFICE

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

RECEIVED JUN 09 2000 GEOSCIENCE ASSESSMENT OFFICE for Assessment Credit

W0090.00054

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section , of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

1077036 - 12 units

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
ACA Howe Int. LTD.	Confirming work while trenching		3975.80
Excavating	3 trenches.		2385.00
Backhoe	4 Short trenches.		500.00
Labor.	~~42~~,		42,502.00
			2. 20489
Associated Costs (e.g. supplies, mobilization and demobilization).		propane	225.00
Bike			154.91
Service chg + Office			555.06
Telephone + Hydro.			1,240.39
Supplies			3,456.66
Gas			878.52
Transportation Costs truck			200.00
Bike Rental.			750.00
Truck Rental (Sonic)			2,776.73
Food and Lodging Costs Fed ex -			406.39
Rent.			7,364.50
Meals			716.00
		Total Value of Assessment Work	68086.96

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, KEITH VATCHER (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Exploration Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

RECEIVED
JUN 09 2000
GEOSCIENCE ASSESSMENT OFFICE

Signature: Keith Vatcher | Date:

0212 (02/96)

Ontario | Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W0090.00054

Personal Information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Claim # 1191295 - 2 units

Work Type	Units of Work (Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.)	Cost Per Unit of work	Total Cost
Trenching	8 trenches 2 claims		20,000.00
Assaying			
Bulk Testing	5000 lbs		
	1s - 8N (900m)		
	3E - 4 W (Apx 5000m)		
	April - July Labor	20,000.00	
		200 per day	
Associated Costs (e.g. supplies, mobilization and demobilization).			
Supplies + Food.			1,255.81
(prophone, Gas, oil, towels etc.)			
Transportation Costs			
Food and Lodging Costs			
Cottage Rental		500 per Week.	5.000.00
		Total Value of Assessment Work	26,255.81

2. 2011 89

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, KEITH VATCHER (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Exploration Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

RECEIVED
JUN 09 2000
GEOSCIENCE ASSESSMENT OFFICE

Signature: Keith Vatcher | Date: June 1/2000

0212 (02/96)

Ontario | Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W0090.00054

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Claim # 1163443 - 2 units

Work Type	Units of Work (Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.)	Cost Per Unit of work	Total Cost
TRENCHING	APX 200 m		1,710.00
SAmpling	3 Days at 200 per day		600.00
ASSAYING	20 Days at 200 per day		4,000.00
prospecting assistant	$160.00 at 16 ⓐ 10 hrs (~~7 days at~~ 2 00 per Day)		1,560.00
		2. 20489	
Associated Costs (e.g. supplies, mobilization and demobilization).			
prophane			22.00
fuel			36.50
other			156.12
Transportation Costs			
Truck			200.00
Gas			124.00
Food and Lodging Costs			
Rent			600.00
		Total Value of Assessment Work	9,008.62

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, KEITH VATCHER (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Co. P - Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

RECEIVED
JUN 09 2000
GEOSCIENCE ASSESSMENT OFFICE

Signature: Keith Vatcher | Date: June 1/2000

0212 (02/96)

Ontario Northern Development and Mines

for Assessment Credit

W0090.00054

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Claim # 1191249 - 4 units

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
ASSAY - SAmples	1600 plus SAmples		13,636.62
maps (walker)			119.84
Site inspection			439.66
ACA, Howe int.			11,711.03
		8,204.88	
Associated Costs (e.g. supplies, mobilization and demobilization).			
Bulk sAmple shipping			926.66
GAS + prophane			121.85
Expences			386.48
Transportation Costs			
Food and Lodging Costs			
		Total Value of Assessment Work	27,342.14

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, KEITH VATCHER (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Exploration Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

RECEIVED
JUN 09 2000
GEOSCIENCE ASSESSMENT OFFICE

Signature: Keith Vatcher — Date: June 1/2000

0212 (02/96)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9845
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

October 27, 2000

REGIS RESOURCES INC.
60 BLOOR ST. W. SUITE 400
TORONTO, ONTARIO
M4W-3B8

Dear Sir or Madam:

Submission Number: 2.20489

		Status
Subject: Transaction Number(s):	W0090.00054	Approval After Notice

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact BRUCE GATES by e-mail at bruce.gates@ndm.gov.on.ca or by telephone at (705) 670-5856.

Yours sincerely,

Steven B. Beneteau

ORIGINAL SIGNED BY
Steve B. Beneteau
Acting Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 15386
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.20489

Date Correspondence Sent: October 27, 2000 **Assessor:** BRUCE GATES

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W0090.00054	1077036	CAVENDISH	Approval After Notice	October 21, 2000

Section:
9 Prospecting PROSP
17 Assays ASSAY
10 Physical PSTRIP

The revisions outlined in the Notice dated September 6, 2000 have been corrected.

NOTE: We have allowed analyses costs, as reported, for samples with %vermiculite and without the detailed calculations and weights. All future submissions will require these detailed calculations to receive any assessment credit.

On claim 1191249: the work by ACA Howe - Feasibility Study - is not a type of work eligible under the assessment work regulation - (ore reserve calculations, feasibility studies, compilation reports are not eligible) - $11,711 has been removed from this submission and the additional cost submitted by fax on Oct 02, $36,037 is also not eligible; the reports will be returned; the cost of shipping the bulk sample to Blake, $927, has not been allowed as no results were supplied for any testing by Blake.

The assessment credit is being reduced by $12,638.00. The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is $118,055.00

Correspondence to:
Resident Geologist
Tweed, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Keith Vatcher
BUCKHORN, ONTARIO

REGIS RESOURCES INC.
TORONTO, ONTARIO

Correspondence ID: 15386

Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

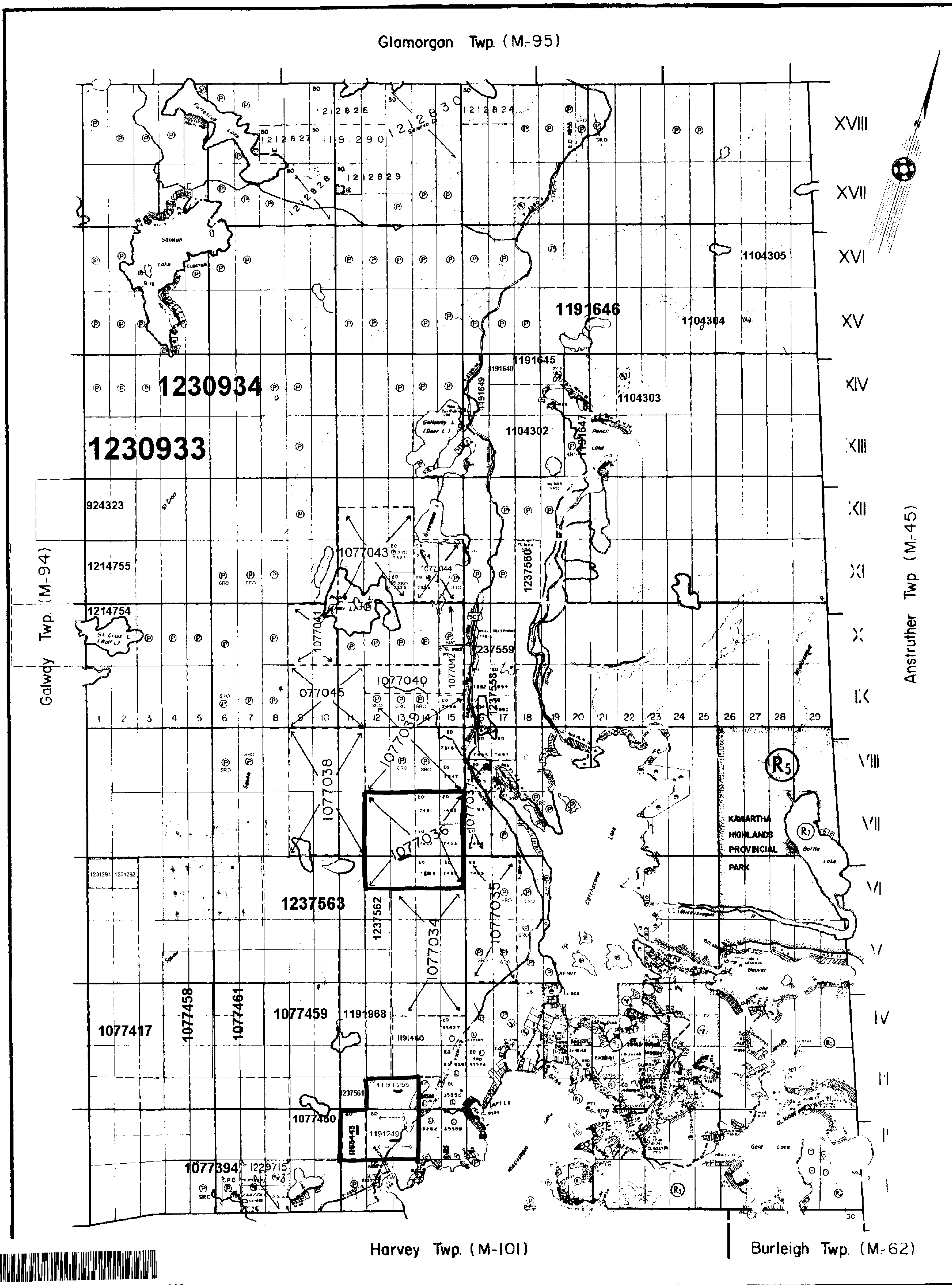
Date: October 27, 2000

Submission Number: 2.20489

Transaction Number: W0090.00054

Claim Number	Value Of Work Performed
1191249	14,704.00
1077036	68,087.00
1163443	9,008.00
1191295	26,256.00
Total: $	118,055.00

Correspondence ID: 15386



THE TOWNSHIP OF CAVENDISH

COUNTY OF PETERBOROUGH

SOUTHERN ONTARIO MINING DIVISION

SCALE: 1 INCH=40 CHAINS

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S
LEASE	Ⓛ
LOCATED LAND	Loc
LICENSE OF OCCUPATION	L.O
MINING RIGHTS ONLY	M.R.O
SURFACE RIGHTS ONLY	S.R.O
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	⚒
CANCELLED	C
PATENTED FOR S.R.O.	

NOTES

This Map Is Not To Be Used - FOR SURVEY PURPOSES

400' Surface Rights Reservation along the shores of all lakes and rivers

For status of summer resort locations & islands please contact Ministry of Natural Resources

Original shoreline shown thus

FRI shoreline shown thus

Patents Map shoreline shown thus

Area shown thus reserved for proposed Provincial Park, withdrawn from staking Sec. 34(a) of Mining Act File 160708

Mining claims staked in this Tp. subject to Sec. 118 of Mining Act

SAND & GRAVEL

Gravel File 154616

Gravel " 21547

M.N.R. Gravel Pit 76 File 21538

Gravel File 40832

Gravel " "

Gravel " 73125

QUARRY PERMIT

M.N.R. Gravel Pit No 138 File 152744

Gravel File 104960

Gravel File 40832

Areas withdrawn from staking under Section of the Mining Act

	Order	File	Date	Disposition
	W.67/74	7598V.4	19/12/74	S.R. & M.R.
R1	W.3/77	34261	3/1/77	S.R. & M.R.
R	W.50/83	160708	29/8/83	S.R. & M.R.
	BEDS OF LAKES AND RIVERS WITHIN PARK LIMIT			
R	W.11/83	73118	30/9/83	S.R. & M.R.
R	W.67/74	7598V.4	19/12/74	M.R.O.

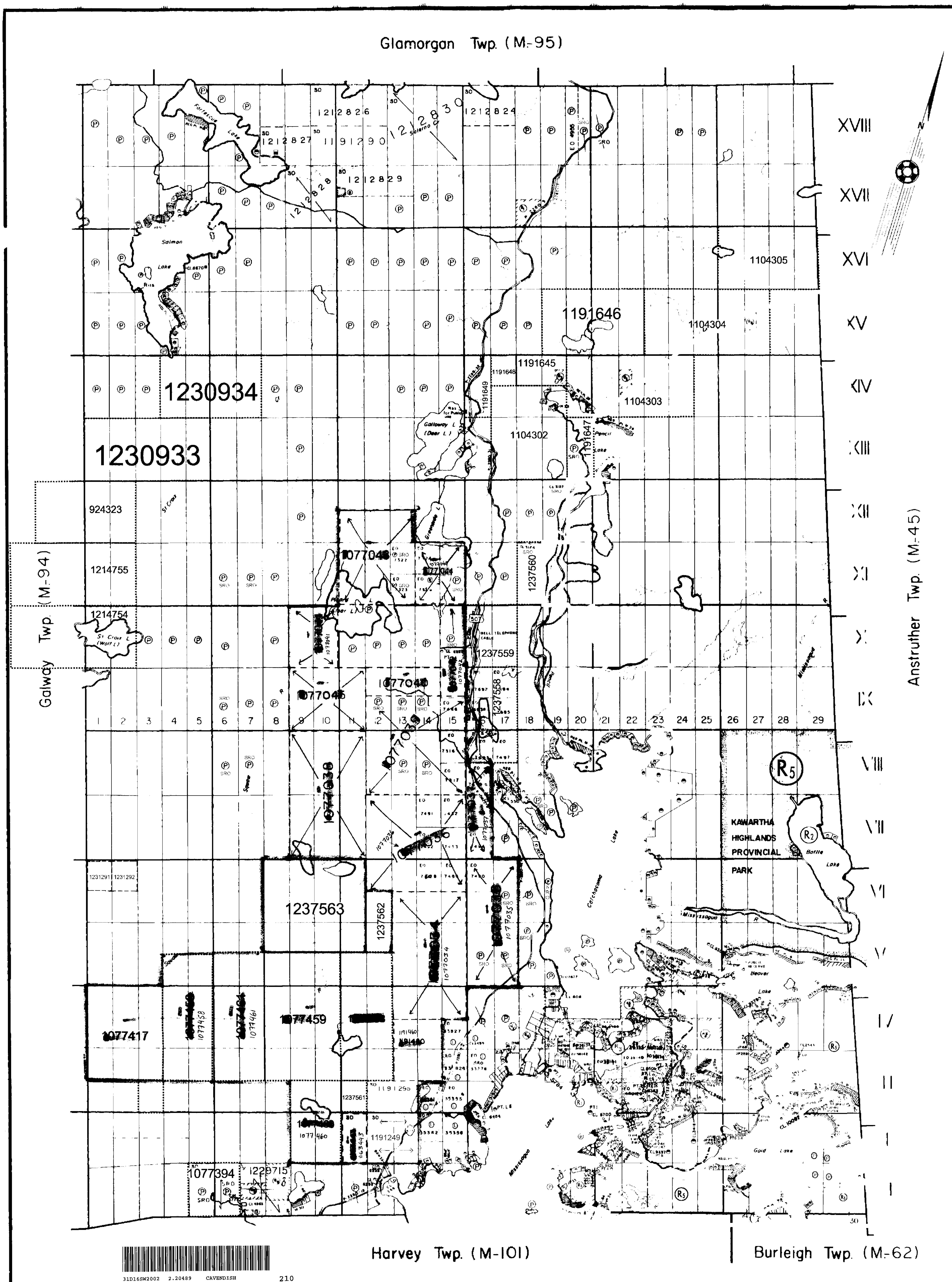
SEC 35 W-LL-P 26/99 ONT MAY 17/99 M+S

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

PLAN NO.- M-72

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

31D16SW2002 2.20489 CAVENDISH 200



THE TOWNSHIP
OF

CAVENDISH

COUNTY OF
PETERBOROUGH

SOUTHERN ONTARIO
MINING DIVISION

SCALE: 1 INCH=40 CHAINS

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S
LEASE	(L)
LOCATED LAND	Loc
LICENSE OF OCCUPATION	L.O
MINING RIGHTS ONLY	M.R.O
SURFACE RIGHTS ONLY	S.R.O
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C
PATENTED FOR S.R.O.	

NOTES

This Map Is Not To Be Used
- FOR SURVEY PURPOSES

400' Surface Rights Reservation along the shores of all lakes and rivers

For status of summer resort locations & islands please contact Ministry of Natural Resources

Original shoreline shown thus
FR1 shoreline shown thus
Patents Map shoreline shown thus

Area shown thus reserved for proposed Provincial Park, withdrawn from staking Sec. 34 (d) of Mining Act File 160708

Mining claims staked in this Tp. subject to Sec. 118 of Mining Act

SAND & GRAVEL

Gravel File 154616
Gravel " 21547
M.N.R. Gravel P. 176 File 21538
Gravel File 40832
Gravel " "
Gravel " 73125
QUARRY PERMIT

M.N.R. Gravel Pit No. 138 File 152744
Gravel File 104960
Gravel File 40832

Areas withdrawn from staking under Section of the Mining Act

	File		Date	Disposition
	W.67/74	7598V 4	19/12/74	S.R. & M.R.
(R1)	W.3/77	34261	3/1/77	S.R. & M.R.
(R2)	W.50/83	160708	29/8/83	S.R. & M.R.
	BEDS OF LAKES AND RIVERS WITHIN PARK LIMIT			
(R3)	W.11/83	73118	30/9/83	S.R. & M.R.
(R4)	W.67/74	7598V 4	19/12/74	M.R.O

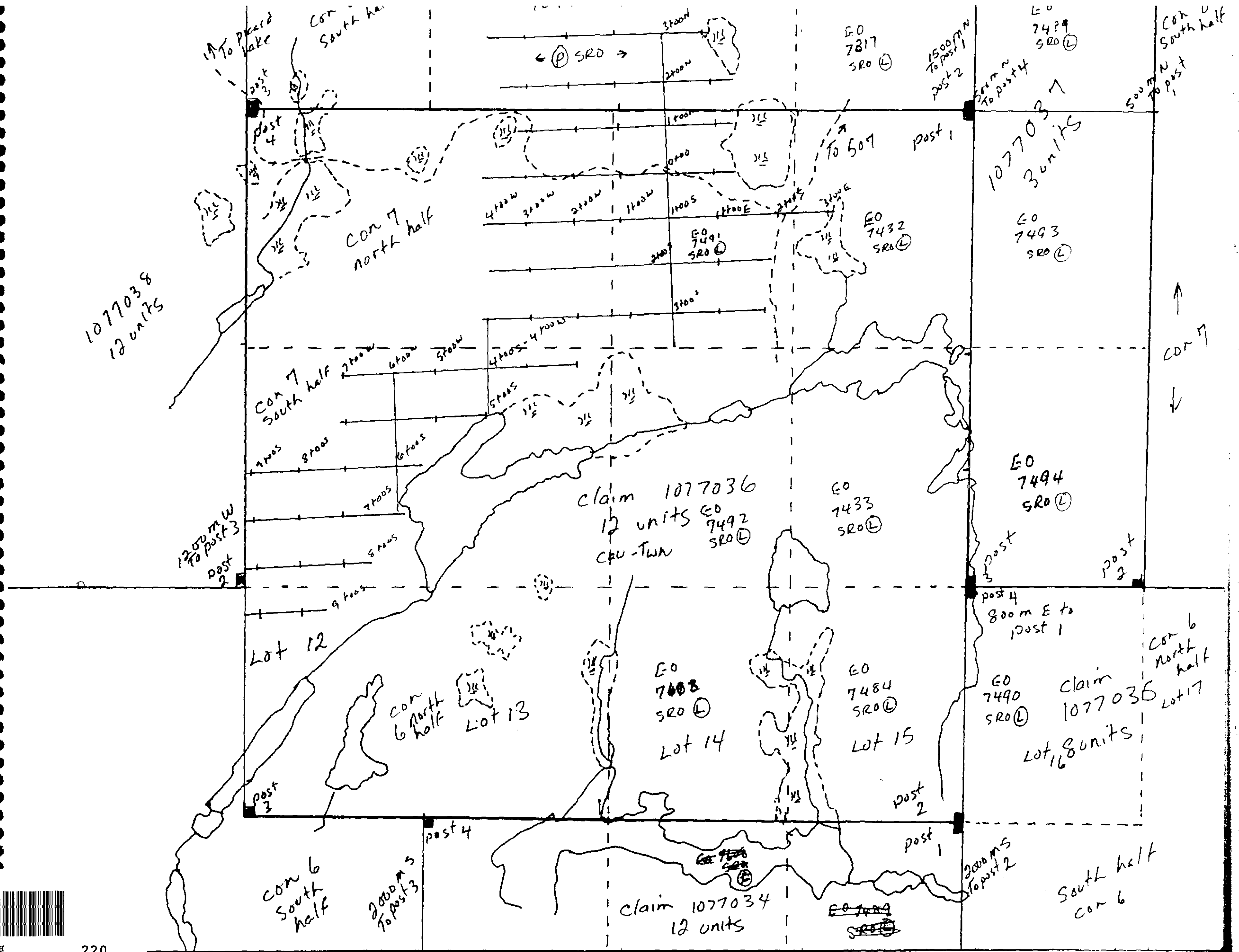
(R5) SEC 35 W-LL-P 26/99 ONT MAY 17/99 M+S

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON

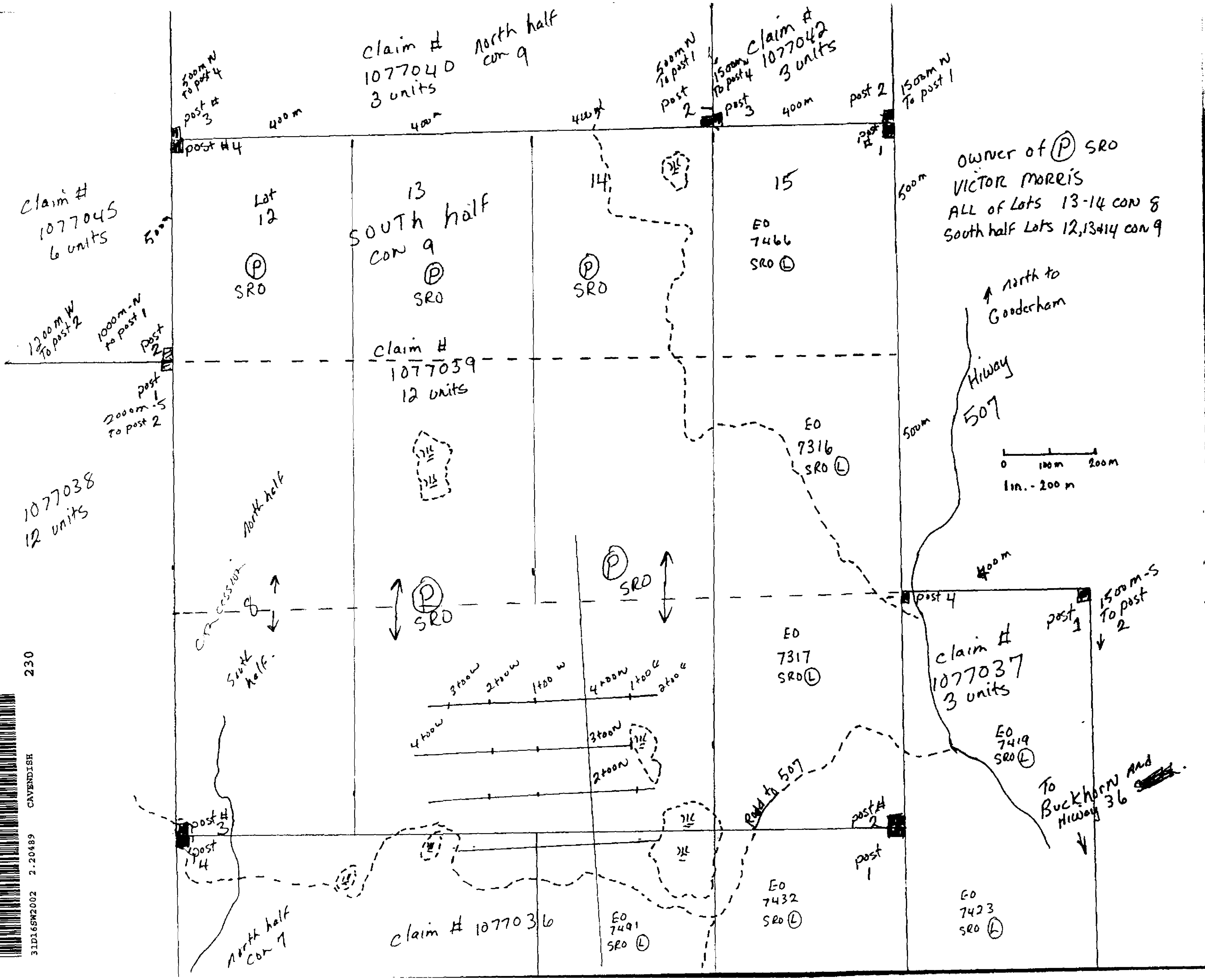
PLAN NO.- M-72

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

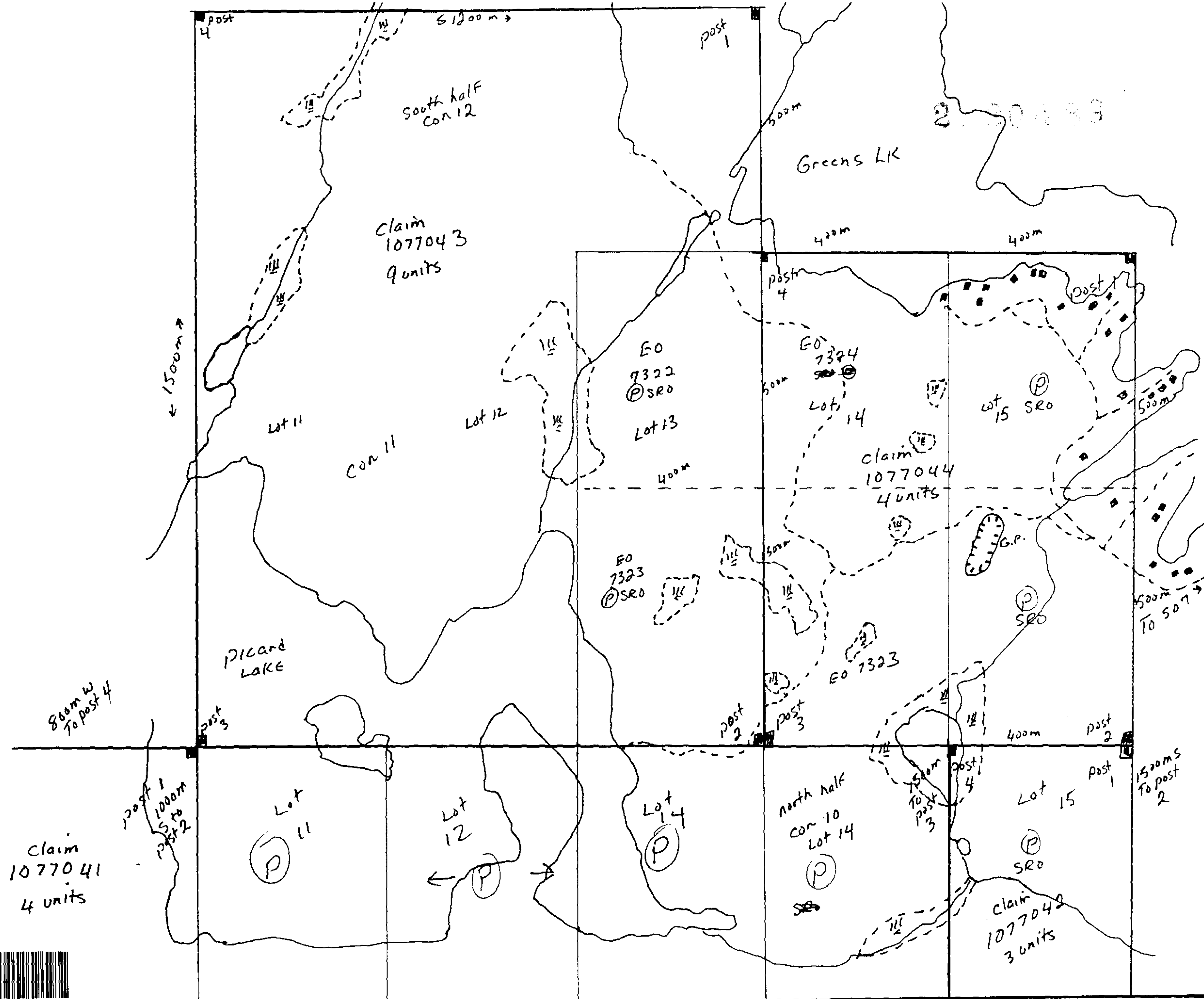
31D16SW2002 2.20489 CAVENDISH 210



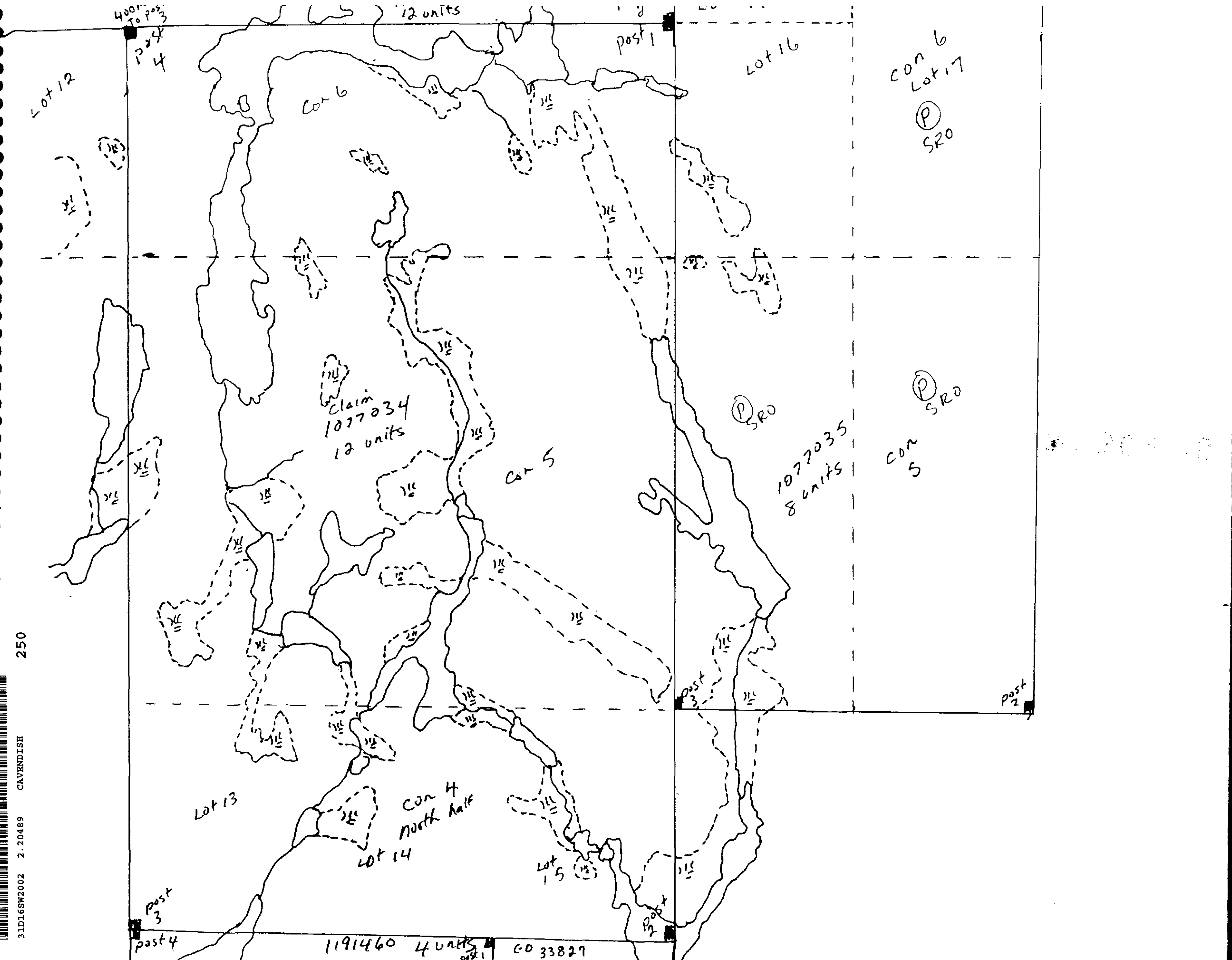
To Picard Lake
post 3
post 4
Con 7 north half
1077038 12 units
Con 7 South half
P SRO
To 507
post 1
post 2
1500m N To post 1
500m N To post 4
500m N To post 1
1077037 3 units
Con 7 South half
EO 7817 SRO L
EO 7479 SRO L
EO 7432 SRO L
EO 7493 SRO L
EO 7491 SRO L
con 7
1200m W To post 3
post 2
claim 1077036 12 units
CAU-TWN
EO 7492 SRO L
EO 7433 SRO L
EO 7494 SRO L
post 3
post 2
post 4
800m E to post 1
Lot 12
con 6 north half
Lot 13
EO 7408 SRO L
Lot 14
EO 7484 SRO L
Lot 15
EO 7490 SRO L
claim 1077036
Lot 16 8 units
con 6 north half Lot 17
post 3
post 4
post 2
post 1
con 6 South half
2000m S To post 3
claim 1077034 12 units
2000m S To post 2
South half con 6



Claim # 1077040
3 units
North half con 9
500m N To post 4
post # 3
post #4
400m
Claim # 1077042
3 units
500m N To post 1
1500m N To post 4
post 2
post 3
post 2
1500m N To post 1
post # 1
owner of (P) SRO
VICTOR MORRIS
ALL of Lots 13-14 CON 8
South half Lots 12,13 & 14 con 9
Claim # 1077045
6 units
500m
Lot 12
13
14
15
SOUTH half
CON 9
(P) SRO
EO 7466
SRO (L)
North to Gooderham
1200m W To post 2
1000m N To post 1
post 2
Claim # 1077039
12 units
post 1
2000m S To post 2
Hiway 507
EO 7316
SRO (L)
500m
0 100m 200m
1in. - 200 m
1077038
12 units
North half
Concession 8
South half
400m
1500m S To post 2
post 4
post 1
EO 7317
SRO (L)
Claim # 1077037
3 units
EO 7419
SRO (L)
To Buckhorn And Hiway 36
Road to 507
post # 3
post 4
post # 2
post 1
North half con 7
Claim # 1077036
EO 7491
SRO (L)
EO 7432
SRO (L)
EO 7423
SRO (L)



post 4
S 1200 m
post 1
South half Con 12
500m
Greens LK
Claim 1077043 9 units
400m
400m
post 4
post 1
EO 7322 SRO
Lot 13
EO 7374
Lot 14
Lot 15 SRO
500m
1500m
Lot 11
Lot 12
Con 11
400m
Claim 1077044 4 units
G.P.
EO 7323 SRO
500m
SRO
500m To 507
EO 7323
Picard Lake
800m W To post 4
post 3
post 2
post 3
400m
post 2
post 1 1000m S to post 2
Lot 11
Lot 12
Lot 14
North half Con 10 Lot 14
1500m To post 3
post 4
Lot 15
post 1
1500m S To post 2
SRO
Claim 1077041 4 units
Claim 1077042 3 units



12 units
400m To post 3
post 4
post 1
Lot 16
Con 6
Lot 17
Lot 12
Con 6
SRO
Claim
1077034
12 units
Con 5
1077035
8 units
Con 5
SRO
SRO
post 3
post 2
Lot 13
Con 4
North half
Lot 14
Lot 15
post 3
post 2
post 4
1191460 4 units
post 1
CO 33827