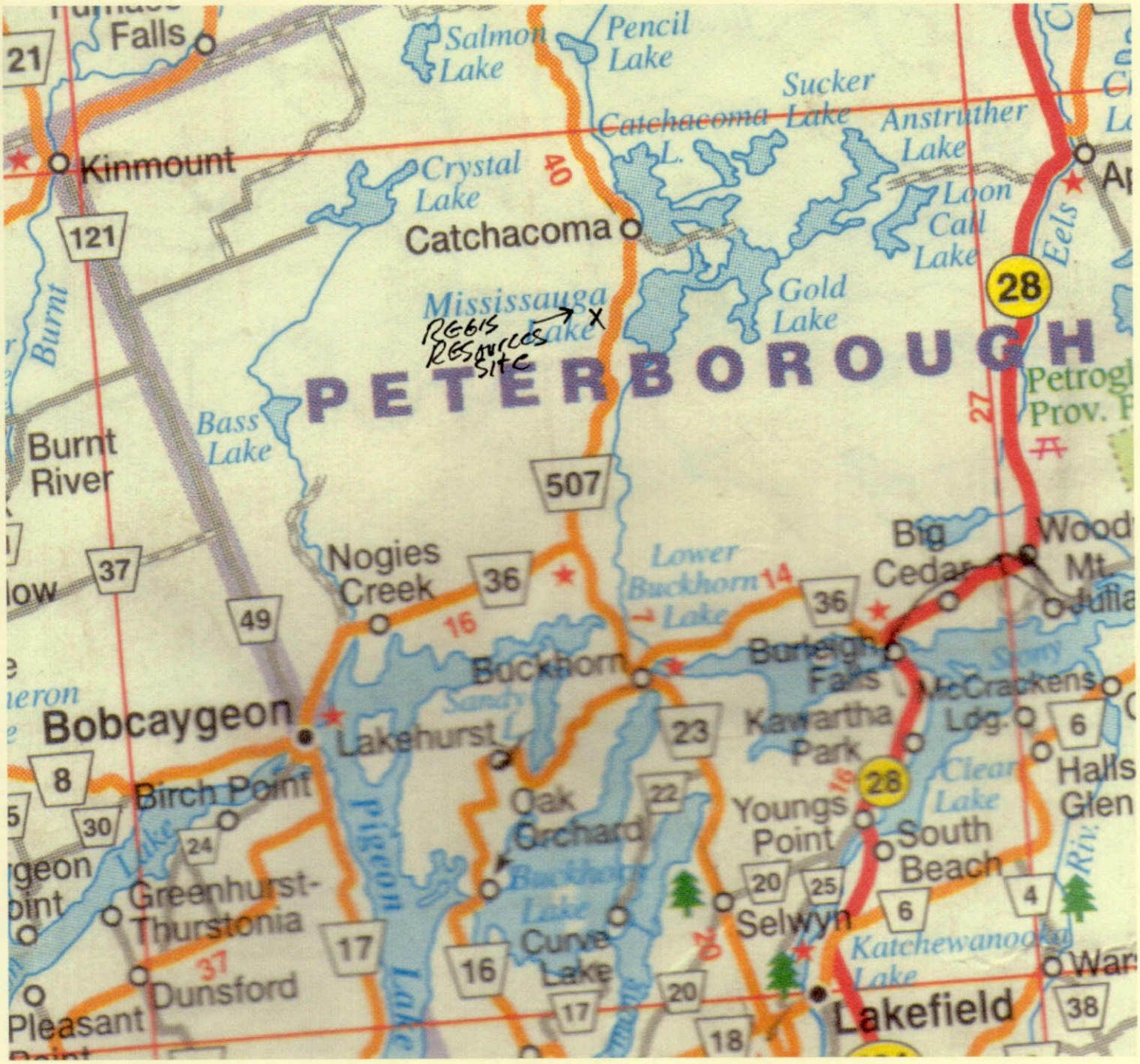
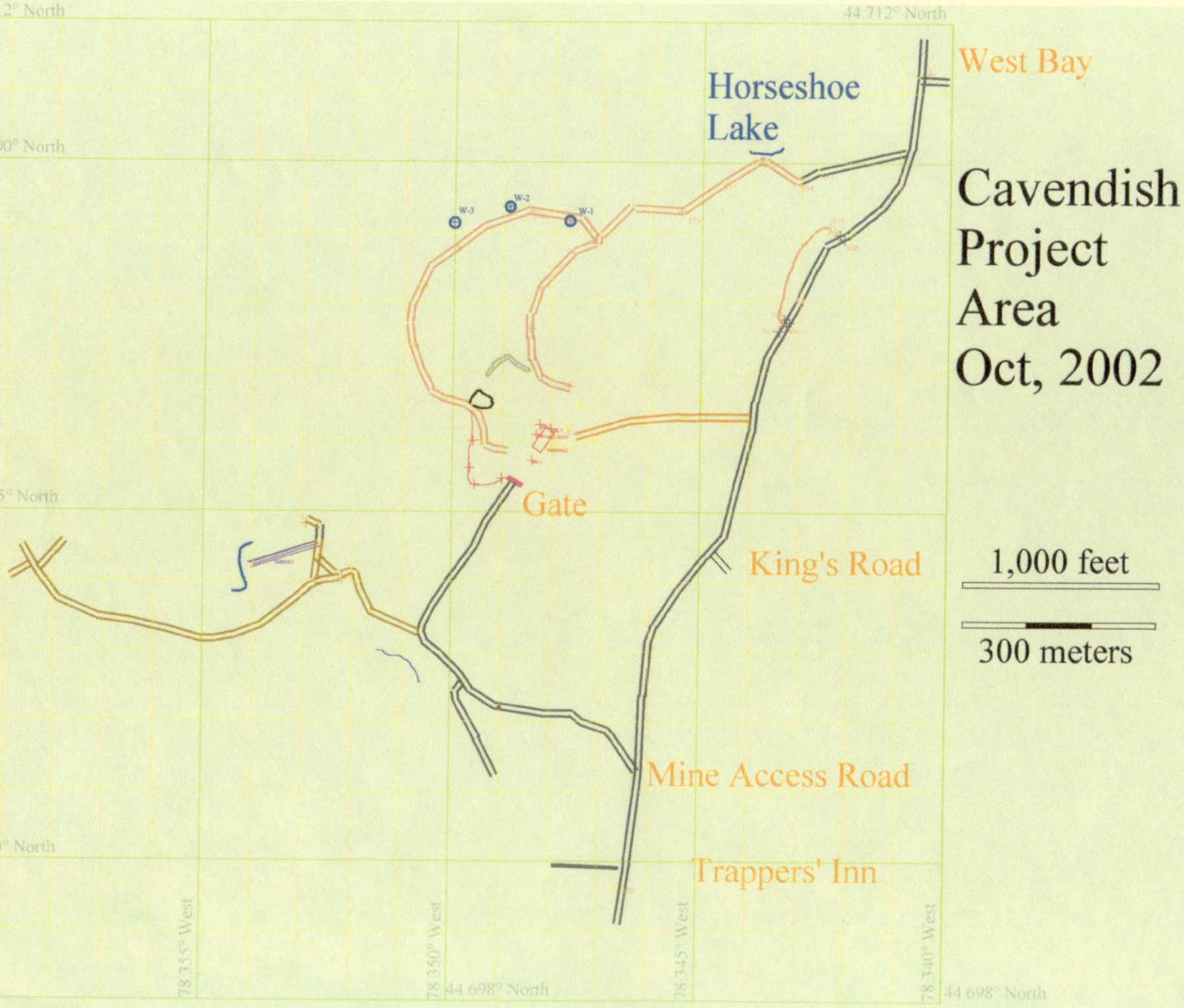
Maps and location

Map	
1	Township and location
2	Cavendish twn. and site access
3	Trench C looking east from 5+75n- 15e
4	Trail linking trenches E and D facing north from trench E at line4+00n- 45w
5	Pit for sample at line 615n
	Index for results
Page32	Back of report contains extra information about verm.

2.23950


Falls
Salmon Lake
Pencil Lake
Sucker Lake
Catchacoma L.
Anstruther Lake
Kinmount
Crystal Lake
Catchacoma
Loon Call Lake
Eels
Burnt
Mississauga Lake
REGIS RESOURCES SITE
Gold Lake
28
PETERBOROUGH
Petrogl
Prov. P
Bass Lake
Burnt River
507
Nogies Creek
Lower Buckhorn Lake
Big Cedar
Wood
Mt
Julia
Buckhorn
Burleigh Falls
McCrackens Ldg.
Bobcaygeon
Lakehurst
Kawartha Park
Halls Glen
Clear Lake
Birch Point
Oak Orchard
Youngs Point
South Beach
Greenhurst-Thurstonia
Pigeon Lake
Curve Lake
Selwyn
Katchewanooka Lake
Dunsford
Pleasant
Lakefield
War

2


44.712° North
West Bay
Horseshoe Lake
44.700° North
W-3
W-2
W-1
Cavendish Project Area Oct, 2002
44.705° North
Gate
King's Road
1,000 feet
300 meters
Mine Access Road
44.700° North
Trappers' Inn
78 355° West
78 350° West
44.698° North
78 345° West
78 340° West
44.698° North


TRENCH C
S 75 W
15 E


400 N
45 W
TRENCH E
looking South
TRENCH D
S 75 N - 50 W

Pit for sample
615 N
45 tons

REGIS RESOURCES INC.

Report prepared by Keith Vatcher for Regis Resources Inc.

Keith Vatcher

Sample prep.

Work performed on several areas of the deposit at the horseshoe lake area.

Trenches A to H 08/00 to 09/00

Monies concerning sample prep.
Work includes;

Areas sampled to determine different sizes and averages.
Colour.
Grade.
Drying time of material.
Expansion factors.
How material reacts to heat and how much it can absorb without losing its ability to Exfoliate.
How material reacts drying slowly verses drying fast.
Moisture content.

Areas tested before sample was taken;

All areas had oversize and under taken off before tested.
Very high 40 plus
High 30 plus
Mid 20-30
Low below 20

trench	area	colour	size range	expansion	average
a	750n-165e	light to silver	0-5	7	very high
b	655n-25e	greenish	3-5	6	high
c	575n-15w	greenish to light	3-5	5	high
c	stringer	dark stingers	0-5	6-7	very high
d	575n-50w	brownish	3-5	4	mid.
e	400n-45w	greenish	4-5	4	low
e	stringer	greenish	0-5	3	mid
f	375n-175w	light to silver	3-5	5-7	high
g	250n-210w	light to silver	3-5	5-7	high
h	190n-250w	light to silver	0-5	6	mid

From total amount taken only 100lbs were sampled. From that 500 grams were used for calculations.

trench	moisture after dried	grade verm% after screened	drying time100lbs	absorb. water	amount taken
a	18.6	40-60%	4 hr	10lbs	1000lbs
b	16.9	32-40%	4 hr	9	1000
c	15.0	18-27%	3.5	7	900
d	16.8	15-22%	3.5	9	1100
e	10.5	10-20%	3.5	7	675
f	18.6	20-29%	4	9	1000
g	18.4	18-32%	4	9	1000
h	16.5	30-32%	4	8	900
totals	16.4%	22.9-32.8%	3.8	8	7575

45 Ton sample
Work performed and results

A pit was dug at line 615n and 45 tons were taken from that to the building were it was piled and later loaded in truck to be shipped to Buckhorn. Due to the access trail, trucks were only able to reach the building site. A 4x4 back hole was used to dig and carry the sample. After 45 tons were at the building site on the property a truck was brought in. (Buckhorn Sand And Gravel)

When the material reached the storage testing area 4-6 persons were hired to dry and screen. The material had to be screened to several sizes to find the best means for assay and separation processes.

Our main concerns were to find averages in the different size ranges and what can be recovered. Of the 45 tons taken 30 tons were dried enough to do the testing. Three types of screens were used to screen. At the start a tramo screen was used to take off the 3/8 and over size material (approx. 5tons from total 45.) leaving 40. Then Sweko Circular Vibrating screens was used to size material into #3,4,5 and -65(under size). The material was placed into 1 ton bags. Those bags were then assayed.

SIZE	WEIGHT	AVER.	FRACTIONS	SEPARATION
Waste-	5tons	n/a	+3/8	N/A
Over 0-2-	1tons	3.2	+18/-3/8	Poor(crushing needed)
#3-	3tons	13.3	+20/-18	Fair (crushing needed)
#4-	8tons	23	+30/-20	Good
#5-	10tons	32	+65/-30	Good
under #6-	8tons	n/a	-65	Good
left over-	5tons			
total	40 tons			

Approx. 5 tons were lost to moisture in different stages. The sample was weighed on truck scales when brought to the site. One ton bags were used to get approx. weight of size ranges.

Sizes were then ran through a air separator to separate vermiculite from dirt. The air separator was made from metal with a blower at the rear and a window at the front to allow the air to draw the lighter material to the rear.

The difference in weight of vermiculite and the dirt is very little so the sizes have to be screened very close from good results. Vermiculite depending on size range can weigh as much the dirt if the proper drying isn't performed. The separator used was 30 inches wide 12 feet long 4 feet high at the front and 6 at the back.

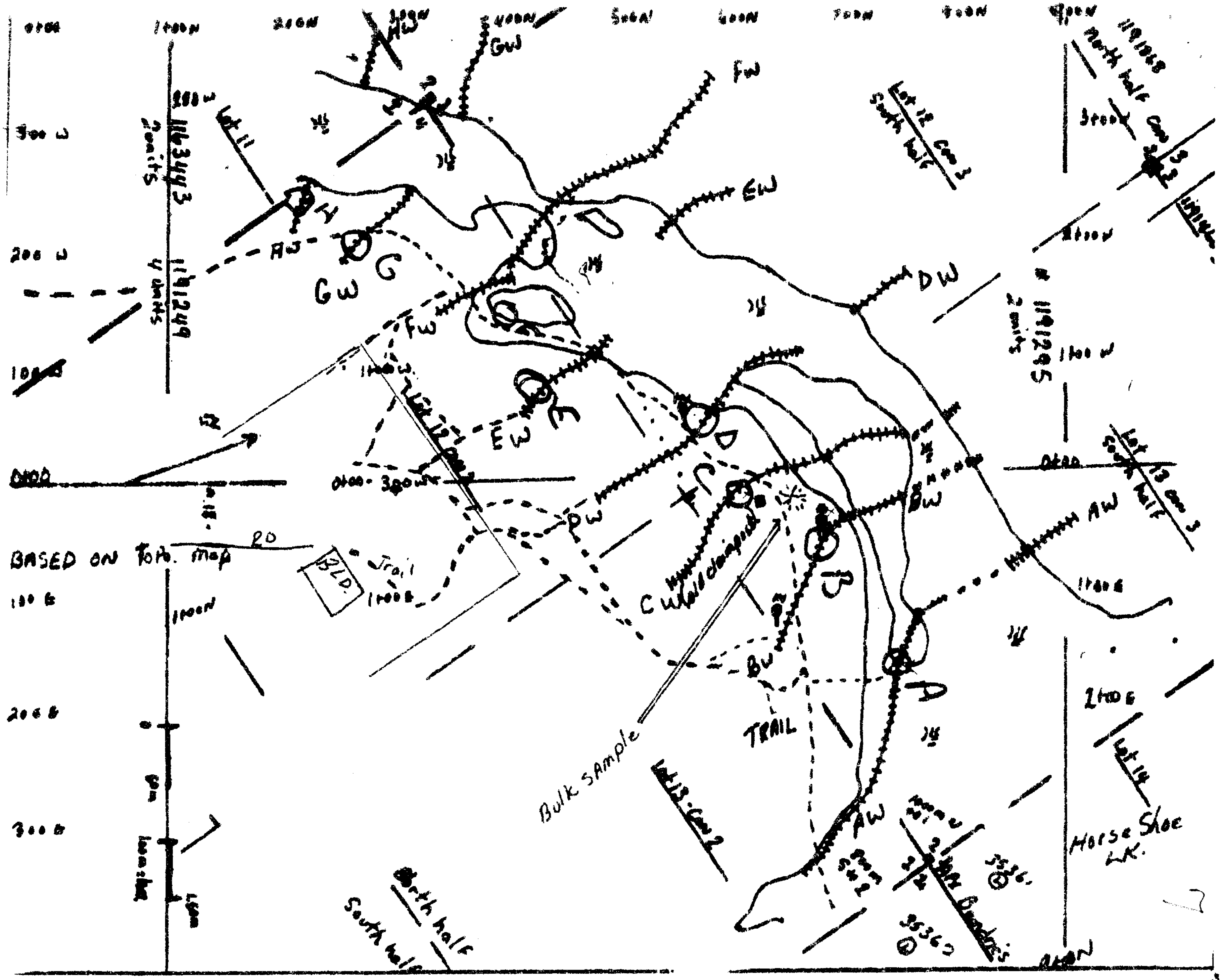
The separator had three compartments at the bottom to catch different grades of material. The front tray would contain 2.8-10% verm. 2nd 40-60% and rear tray 90-100%. Those numbers were pleasing for assay results, but the weight in the compartments needed more adjusting. The rear tray being the final product needed more material volume and less in the first tray.

In the mid tray, when the material was rescreened the averages rose to 80+. Then the undersize from that material was reentered into the separator ran at higher air pressure to draw the material futher to the rear tray leaving less in the front. The waste in the first tray was replaced into bags and left. All 90% + was put into 5 gallon pals and stored.

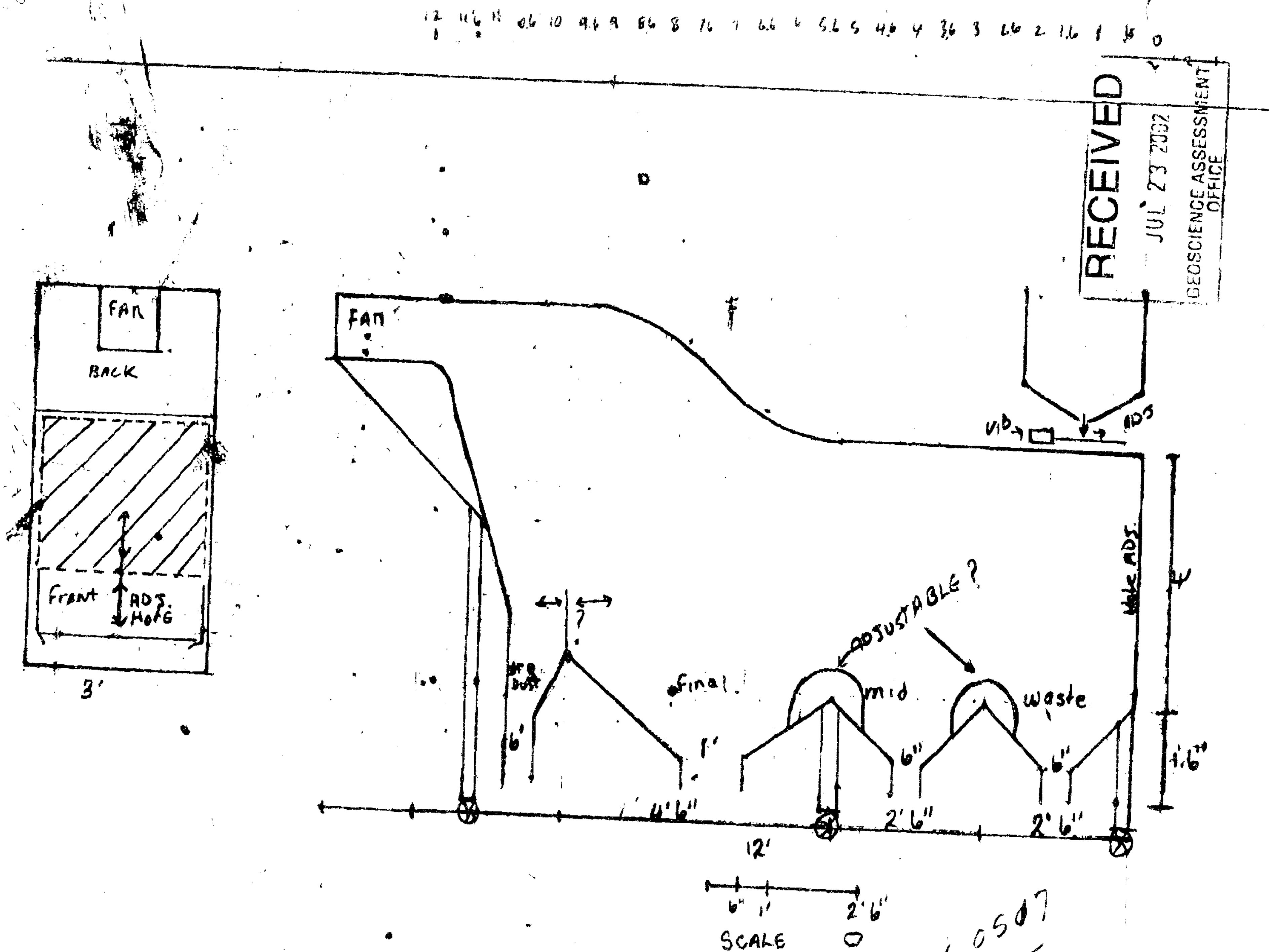
Some experimenting was done with a impact crusher to try and brake the small pebbles of rock that are more brittle then the vermiculite. This process would work with the averages if the volume could be increased and put in a closed circuit with the mids, to screens and returned to the separator. When crushing we have to be aware that vermiculite in rock do not expand as well and could effect the bulk size. We fount that if we ran # 3 we have to crush for #3 and discard the undersize.

The results in the #4 and#5 were pleasing . The numbers were to 96+% where we would like to see them in the first pass. When the mids were screened assays were up to 90% leaving only small amounts of waste in the second run after rescreening.

After ran through the separator we found the best results were achieved with rectangle screens (20 in. X 36in.). A 5 foot x 7 foot would handle the volume needed. We also found that the circular screens ground the vermiculite. If we over screen it could effect the size of material and increase the waste. It is also important that the material dry in a fast time frame without applying over 120 degrees. As long as the material is wet heat won't affect it.

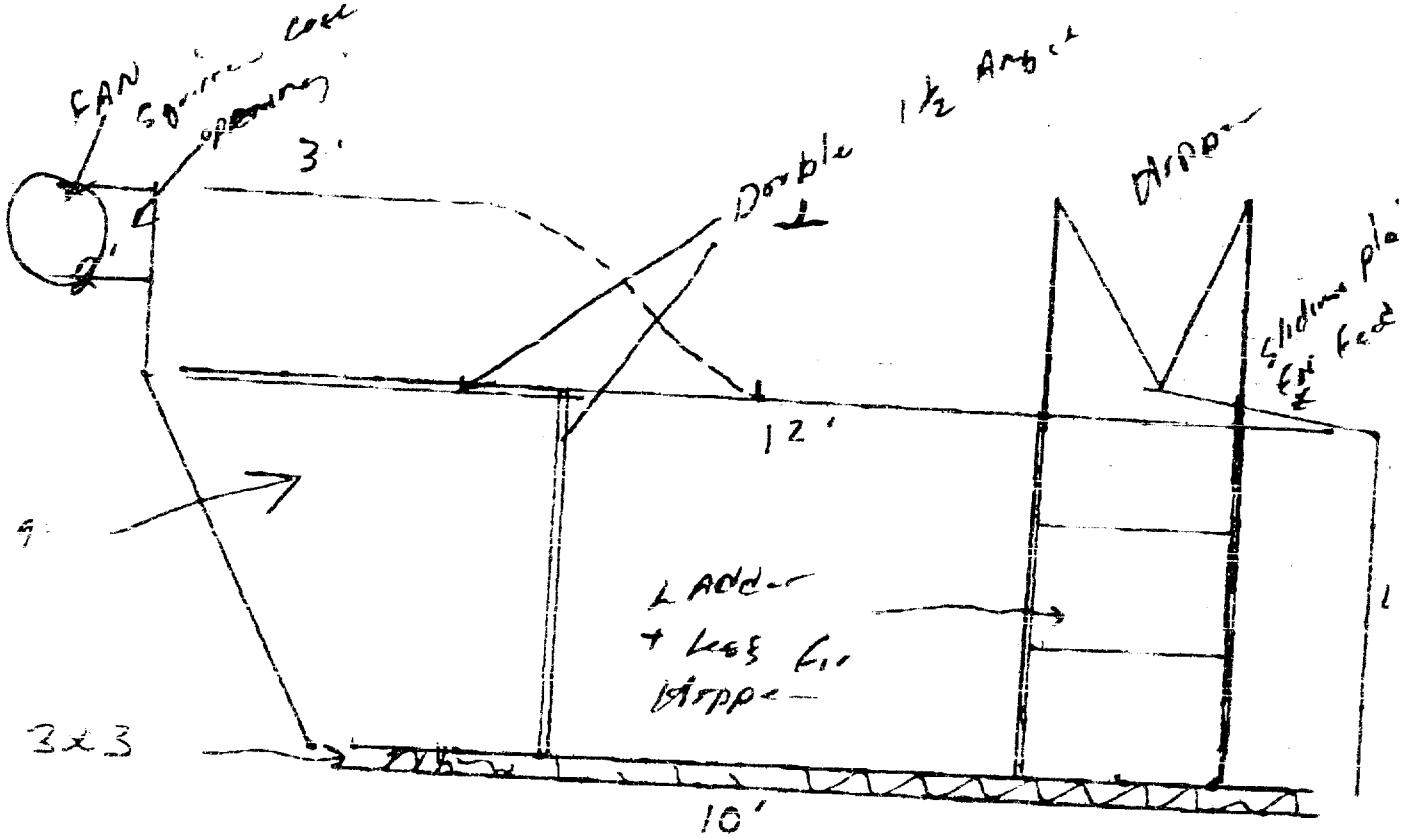


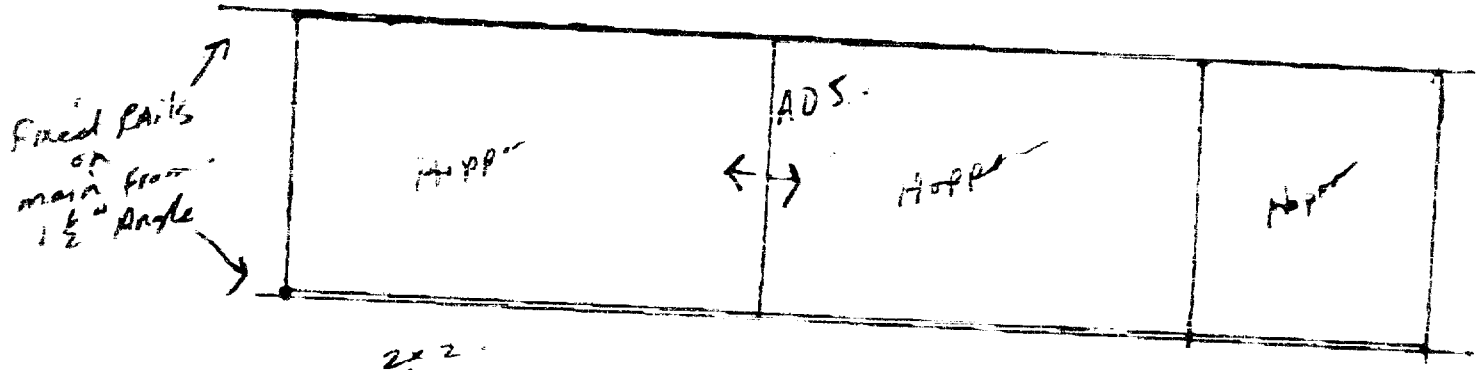
BASED ON Top. map
GW
G
H
AW
FW
EW
E
DW
D
BW
B
AW
A
C
Bulk sample
TRAIL
Trail
BLD.
RD
Lot 11
Lot 14
North half
South half
Horse Shoe LK.
4 units
2 units

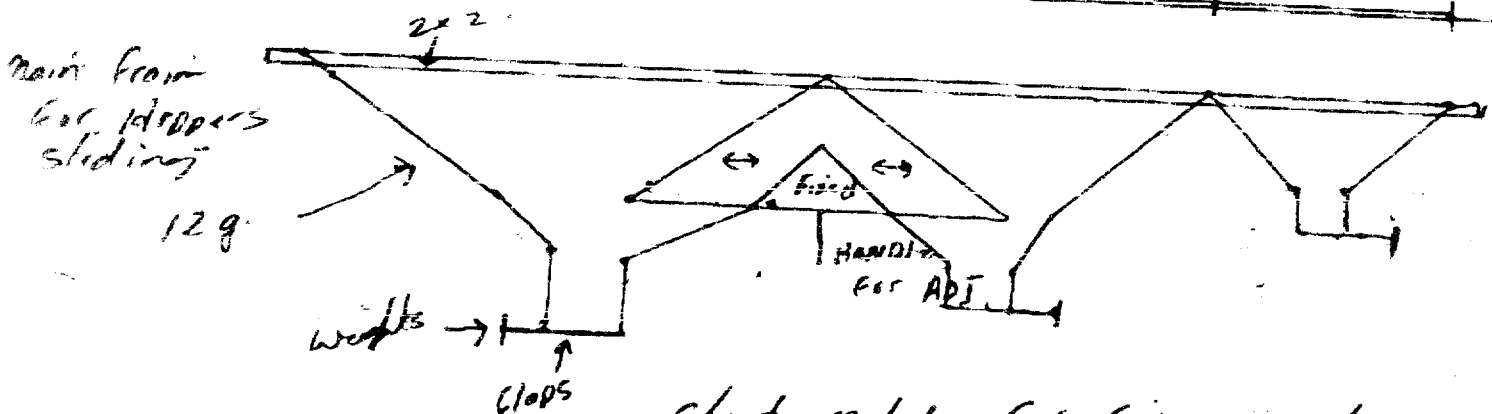


924 0507

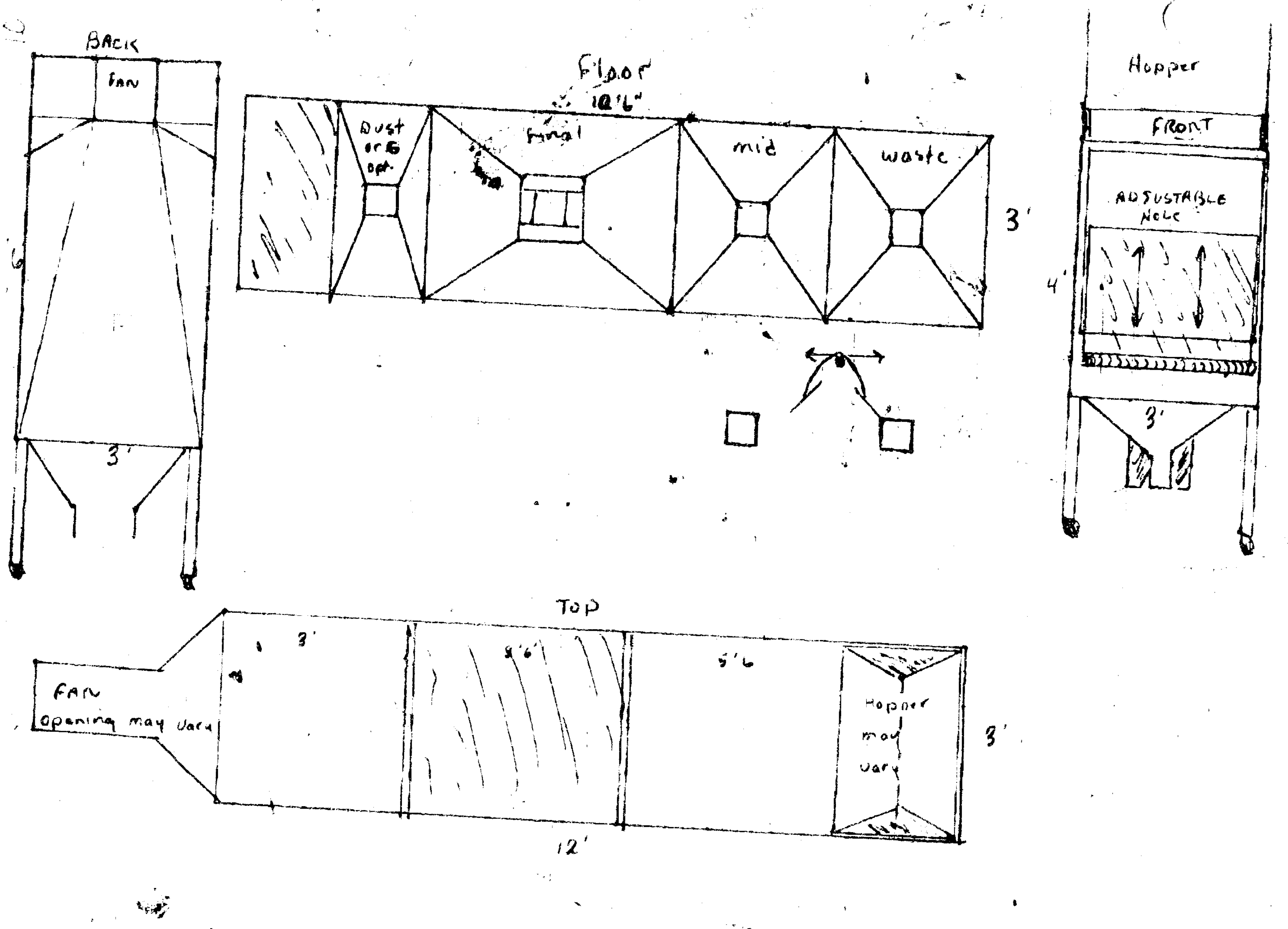
Box Blower frame made from 1½ Angle.







Sheet metal for sides glued on 1"x1" tubing frame.


BACK
FAN
6'
3'
Floor
10'6"
Dust or G opt.
final
mid
waste
3'
Hopper
FRONT
ADJUSTABLE HOLE
4'
ADJUSTABLE
3'
TOP
3'
9'6"
5'6
FAN
opening may vary
Hopper may vary
3'
12'

size	amount dried tons	amount ran tons	amount assayed	amount recovered 90%+	moisture %	% 1st tray waste	%2nd tray mid	%3rd tray final	lbs per second run.	% recovered	raw %
over	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
0-2	1	n/a	300g	13lbs	n/a	n/a	n/a	n/a	n/a	poor	3.2
3	3	2	300g	300lbs	33	2.8	46	85	2.5	poor	13.6
4	8	8	300g	2500lbs	20	10%	50+	90+	3	good	23
5	10	10	300g	3200lbs	18	8%	70+	95+	3	good	32
-65	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
total	30	20	1200g	6013lbs	23.6	6.9	55.3+	90+	2.8	Fair	17.9

BUCKHORN
LAND SURVEYING LTD.
20 Bay Mill Road, Buckhorn, Ontario K0L 1J0
(705) 657-8517 Office
(705) 657-8527 Fax
E-mail: buckhornsurveying@kawarthas.ca
Web Site: buckhornsurveying.com
GST# Tax

INVOICE

Invoice No.: 1439
Date: 14-Feb-2002
Page: 1

Ship To:
Regal Resources Inc.

Regal Resources Inc.,
c/o Martin Shefsky
60 Bloor St.,
Suite 400
Toronto, Ontario M4W 3B8

Business No.: 88777 3073RT

14	hours	Labourer - Chuck & dry	3	0.00	35.00	490.00
6.5	hours	Electrician - set up screening plant	3	0.00	70.00	455.00
6.5	hours	Labourer - assist Backhoe operator	3	0.00	35.00	227.50
6.5	hours	Pick up and deliver phase convertor	3	0.00	35.00	227.50
		Propane from Kellys Fuel	3	0.00		123.60
5,600	lbs	Propane from Cane Welding	3	0.00	0.42	2,352.00
		Subtotal				3,875.60
		G - GST @ 7.0%				271.29

Comments

Payment In Full Upon Job Completion. 2% over 30 days.

Freight	0.00
PST	0.00
Total Balance	4,146.89

BUCKHORN SAND & GRAVEL

[illegible]

2.23950

Invoice No. 14026
Date 31-Jan-2002
Page 1

Husky Steel Building Systems Inc.
1315 Lawrence Ave. E.
Suite 404
North York, Ontario
M3A 3R3

Ship To:
Husky Steel Building Systems Inc.

Business No.: 89777 3073RT

	9.5	hours	Loader - unload steel	3	0.00	75.00	712.50
	7.5	hours	Backhoe - slate pad	3	0.00	70.00	525.00
	3.5	hours	Plow truck - Plow pad	3	0.00	50.00	175.00
	10.5	hours	Sander truck to sand the road	3	0.00	50.00	525.00
	3	loads	Sand	3	0.00	100.00	300.00
2 hrs 140.00	4	hours	Backhoe - load samples, grade around pad	3	0.00	70.00	280.00
			Subtotal:				2,517.50
			3 GST @ 7.0%				176.23

Comments

Payment in Full Upon Job Completion. 2% over 30 days.

Freight	0.00
PST	0.00
Total Amount	2,693.73

BUCKHORN
EQUIPMENT RENTALS
P.O. Box 100, Buckhorn, Ontario K0L 1J0
(705) 657-8011 Office
(705) 657-8012 Fax
E-mail: buckhorn@buckhornequipmentrentals.ca
Web Site: www.buckhornequipmentrentals.ca

INVOICE

Invoice No. 14941
Date 26-Feb-2002
Page 1

Regis Resources Inc.,
c/o Martin Shefsky
60 Bloor St.,
Suite 400
Toronto, Ontario M4W 3B8

Ship To:
Regis Resources Inc.,

Business No.: 89777 3073RT

	1	hour	mechanic help	D	8.00	45.00	45.00
			Cano Welding Invoice # 031908	3	0.00		672.00
	2	each	UAP Invoice # 001-02-60979 Agricultur. Belt	3	8.00	13.82	27.64
			Cano Rental Invoice - Propane Heater	3	8.00		375.00
			Buckhorn Garage - Propane	3	8.00		131.00
	1	month	Rental of shed to dry soil samples	3	0.00	200.00	200.00
							1,450.84
							98.41

Comments:
Payment In Full Upon Job Completion. 2% over 30 days.

Freight	0.00
PST	46.31
Total Invoice	1,595.56

[illegible] Limited o/a
BUCKHORN
SAND & GRAVEL
P.O. Box 180, Buckhorn, Ontario [illegible]
[illegible] Office
[illegible] Fax
[illegible]
[illegible]

INVOICE

Invoice No.: [illegible]
Date: 31-Jan-2002
Page: 1

Sold To:
Regis Resources Inc.,
c/o Martin Shafsky
60 Bloor St.,
Suite 400
Toronto, Ontario M4W 3B8

Ship To:
Regis Resources Inc.

Business No.: 86777 3073RT

	2	hours	[illegible]	3	0.00	70.00	140.00
	2hrs ~~4~~	hours	Backhoe - load samples, grade around the pits	3	0.00	70.00	280.00
	6	hours	Truck - haul samples	3	0.00	55.00	330.00
	18.5	hours	Labourer - Check vermiculite	3	0.00	35.00	647.50
			Propane	3	0.00	785.62	785.62
			Subtotal				2,183.12
			3 - GST @ 7.0%				152.82

BUCKHORN
SAND & GRAVEL

Comments
Payment in Full Upon Job Completion. 2% over 30 days.

Freight	0.00
PST	0.00
Total Amount	2,335.94

BUCKHORN

INVOICE

2253-0

Date: 18-Apr-2002

Page: 1

Ship To:

Regis Resources Inc.
c/o Martin Shefsky
80 Bloor St.,
Suite 400
Toronto, Ontario M4W 3B8

			Purchase - Chatfield Consulting - # 007177485	3	8.00		17.16
			Kelly's Fuel - Bulk Propane	3	8.00		144.51
2,600	lbs		Propane from Cone Welding Supply	3	0.00	0.42	1,092.00
2	Months		Cone Rentals - 400,000 BTU Heater	3	8.00	375.00	750.00
			Rental of Shed for drying vermiculite	3	0.00		200.00
85	Days		Hydro	3	0.00	10.00	850.00
60	Days		Rental of Field Office	3	0.00	20.00	1,200.00
			Subtotal				6,003.99
			3 - GST @ 7.0%				420.28

Comments

Payment In Full Upon Job Completion. 2% over 30 days.

Freight	0.00
PST	72.96
Total Amount	6,497.23

2.23950

Cost at Buckhorn Sand And Gravel and other labor

labour	rent	propane	trucking	office	supplies	equipment	hydro	
490.00	227.50	123.60	140.00	17.18	27.84	455.00	850.00	
227.50	200.00	2,352.00	140.00	850.00				
647.50	750.00	785.62	330.00					
45.00	200.00	672.00						
22,000.00	1,200.00	375.00						
		131.00						
		144.81						
		1,092.00						
								total
23,410.00	2,577.50	5,676.03	610.00	867.18	27.84	455.00	850.00	34,473.55

INVOICE

May 15,2002

2.23950

To: **Regis Resources Inc.**

From: **Martin Shefsky**

Consulting Services: **BULK SAMPLE PROCESSING**

January	2002	$5,500
February	2002	$5,500
March	2002	$5,500
April	2002	$5,500
Total		**$22,000**

MINING CONSULTANT

MICHAEL P. GROSS *M.S., P.Geol.*

11 Leno Mills Avenue
Richmond Hill, ON
L4S 1J3
Ph (905) 770-3861
Fax (905) 770-4348
E-mail mpgross@attcanada.net

INVOICE

June 10, 2002

Mr. Stephen Shefsky, President
Regis Resources Inc.
Suite 400
60 Bloor Street West
Toronto, ON
M4W 3B8

Invoice # 01-02-02 - January Contract Services **GST # 89311 8992 RT0001**

Dear Stephen:

This invoice is for contract services per our Agreement for Professional Services.

Fees:		**Current Due**	**Carry Forward**
	Contract Services Per Agreement	$7,500.00	$2,916.67
	Transportation Allowance	$500.00	
	GST on the above	$560.00	$204.17
Expenses:	See Attachments	$0.00	$0.00
	Total Due	**$8,560.00**	

Very truly yours,

Michael P. Gross

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562639

DATE Sept 1, 2000

COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU A / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ A / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources

N° D'ENREG. VENDEUR / TAX REG. NO	VENDEUR / SALESPERSON	F.A.B. / F.O.B.	CONDITIONS / TERMS	VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
	Services (29 days @ 200) Oct 31		5800 00
	" (Kirk)		250 00
	" (Dale)		200 00
	Truck Rental		200 00
	Service Charges		50 00
	Rent (Oct)		600 00
	Computer Use		50 00
			7150 ~~00~~
		TPS/GST	500 50
		TVP/PST	
	GST # 967144 2253 R10001	TOTAL	7650 50

BLUELINE DCR 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562642

DATE ~~Nov~~ Dec 1, 2000

COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU A / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources

LIVRÉ A / SOLD TO / ADRESSE / ADDRESS: Regis Resources

N° D'ENREG. VENDEUR / TAX REG. NO	VENDEUR / SALESPERSON	F.A.B. / F.O.B.	CONDITIONS / TERMS	VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
	Services (29 days @ 200) ~~Nov 30~~ Dec. 1		5600 00
	Truck		200 00
	Rent (Nov)		600 00
	Services Charges		50 00
			6450 00
		TPS/GST	451 50
		TVP/PST	
	GST # 967144 2253 R10001	TOTAL	6901 50

BLUELINE DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER: 562629

DATE: Aug 1, 2000

COMMANDE DU CLIENT / CUSTOMER'S ORDER:

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple 'A' Resources

NO D'ENRG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE		MONTANT / AMOUNT	
12 PK	AA Batteries walmart			11	40
5	Roller pins walmart.			6	10
	Telephone (June / July)			74	26
	[illegible]			27	75
	[illegible] (Claim [illegible])			100	37
	Filling Cabinet			145	80
	Sub-total			375	93
	GST # 26744 [illegible] RT0001 TPS/GST			26	27
	TVP/PST				
	TOTAL			402	20

DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER: 562630

DATE: Aug 1, 2000

COMMANDE DU CLIENT / CUSTOMER'S ORDER:

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources Inc.

NO D'ENRG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE		MONTANT / AMOUNT	
	Gas			49	53
	Lines [illegible]			5	46
	Services (Aug. [illegible]) @ 200 [illegible]			2400	00
	Sub-Total			3455	47
	TPS/GST			241	89
	TVP/PST				
	GST # 26744 [illegible] RT0001 TOTAL			3697	37

DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562631
DATE Aug. 1. 2002
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources

NO D'ENREG. VENDEUR / TAX REG. NO.	VENDEUR / SALESPERSON	F.A.B. / F.O.B.	CONDITIONS / TERMS	VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
1	Rent (Flag) (No GST)		600 00
1	Truck Rental (Flag)		900 00
3	Gas		17 53
3	Gas (Bike)		20 00
	Sub-total		1537 53
	TPS/GST		15 37
	TVP/PST		
	GST # 96744 2253 RT0001	TOTAL	553 90

DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562638
DATE Sept. 1, 2002
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources

NO D'ENREG. VENDEUR / TAX REG. NO.	VENDEUR / SALESPERSON	F.A.B. / F.O.B.	CONDITIONS / TERMS	VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
1	Gas (Bike)		18 00
1	Gas (Truck)		124 00
1	Propane		23 00
1	Batteries (GPS)		8 96
1	Ruler		1 97
1	Scale Ruler (Construc)		29 95
			209 48
	TPS/GST		14 69
	TVP/PST		
	GST # 96744 2253 RT0001	TOTAL	224 57

RECEIVED
JUL 23 2002
GEOSCIENCE ASSESSMENT OFFICE

DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER: 562635

DATE: 08/05/00

COMMANDE DU CLIENT / CUSTOMER'S ORDER:

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A"

NO D'ENREG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
08/03	Cut off blade		11 98
08/01	Home Depot (wood)		83 48
08/05	Home Depot (wood)		47 52
08/31	Fuel (Mike)		10 00
08/25	Fuel (Mike & Chuck)		56 07
		TPS/GST	207 75
		TVP/PST	14 54
	GST # 86744 8953 RT0001	TOTAL	222 29

BLUELINE DCB 37

GST Include/ on Invoice

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER: 562634

DATE: 08/05/00

COMMANDE DU CLIENT / CUSTOMER'S ORDER:

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources Inc.

NO D'ENREG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
08/25	Bobcaygeon Marine		22 04
08/14	Peterborough Boating		50 67
08/14	Gary Electrical		44 94
08/06	Fuel - Chuck		42 53
08/30	Fuel - Mike		15 69
08/03	Fuel - Mike		18 69
08/27	Fuel - Chuck		32 64
~~08/27~~	~~Fuel - Cw~~		212 19
		TPS/GST	14 95
		TVP/PST	
	GST # 86744 8953 RT0001	TOTAL	227 04

BLUELINE DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562632
DATE Sept. 2 100
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Rego Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources Inc.

NO D'ENREG. VENDEUR / TAX REG. NO. | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
09/12	Fax - from Community Centre		11 00
09/01	Photocopying		3 00
	Postage		92
09/03	Fax Copy		3 00
09/05	Telephone		49 01
09/16	Coffee Tim (Lunch meeting)		6 65 34
			127 90
		TPS/GST	9 23
		TVP/PST	
	Cst # 86744 2253 RT0001	TOTAL	141 13

BILLELINE DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562633
DATE 09/05/01
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Rego Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources Inc.

NO D'ENREG. VENDEUR / TAX REG. NO. | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
09/01	Rent (September)		600 00
	Clerk		200 00
1	Services (Kirk		500 00
1	Services 7 @ 200 Sept. 30		5400 00
1	Office Charges (Aug)		50 00
			6750 00
		TPS/GST	472 50
		TVP/PST	
	Cst # 86744 2250 RT0001	TOTAL	7222 50

BILLELINE DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562643
DATE Nov. 1, 2000
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resource

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A"

NO D'ENREG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
101.5	Gas (Chain Saw)		25 00
	Chain Oil		99
10/21	Gas		60 00
10/06	Gas		50 00
10/27	Gas (Toronto)		60 00
10/14	Chain Saw Files		39 97
			248 96
		TPS/GST	17 42
		TVP/PST	
	C-ST # 867744 2253 RT0001	TOTAL	266 38

DCB 37

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562644
DATE Nov. 18, 2000
COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "A" Resources Inc.

NO D'ENREG. VENDEUR / TAX REG. NO | VENDEUR / SALESPERSON | F.A.B. / F.O.B. | CONDITIONS / TERMS | VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
10/27	(unload screens)		20 00
10/27	Brampton 11-Haul		32 54
10/27	Brampton 11-Haul		40 00
			132 54
		TPS/GST	9 29
		TVP/PST	
	C-ST # 867744 2253 RT0001	TOTAL	141 82

DCB 37

2.23950

FACTURE - INVOICE

NOTRE NUMÉRO / OUR NUMBER 562645

DATE Nov. 18. 2000

COMMANDE DU CLIENT / CUSTOMER'S ORDER

VENDU À / SOLD TO / ADRESSE / ADDRESS: Regis Resources Inc.

LIVRÉ À / SOLD TO / ADRESSE / ADDRESS: Triple "R" Resources Inc.

NO D'ENTRÉ VENDEUR / TAX REG. NO.	VENDEUR / SALESPERSON	F.A.B. / F.O.B.	CONDITIONS / TERMS	VIA

QUANTITÉ / QUANTITY	DESCRIPTION	PRIX / PRICE	MONTANT / AMOUNT
11/9	Geo		40 00
11/1	Geo		58 00
10/27	Postage		11 24
			109 24
		TPS/GST	7 65
		TVP/PST	
	CST # 96744 2253 RT0001	TOTAL	116 89

DOCUFORM OCS 37

Regis Resources Inc.

Bulk Sample Casual Labour @ $10.00 Per Hour

Week of February 18th

Day	Start Time	Quit Time	Worker	Hours Worked	Wages Earned	Worker	Hours Worked	Wages Earned	Worker	Hours Worked	Wages Earned
22			Cliff Legge	5.0	$50.00						
23			Cliff Legge	9.0	$90.00	Cory	9.0	$90.00			
	Subtotal				$140.00			$90.00			
				Paid	$140.00		Paid	$90.00			

Week of February 26th

27	10:30 AM	7:00 PM	Cliff Legge	8.5	$85.00	Cory	8.5	$85.00			
28	9:00 AM	7:30 PM	Cliff Legge	10.5	$105.00	Cory	7.0	$70.00	Shawn	10.5	$105.00
1-Mar	8:00 AM	1:30 PM	Cliff Legge	5.5	$55.00	Cory	5.5	$55.00	Shawn	5.5	$55.00
	Subtotal				$245.00			$210.00			$160.00
				Paid	$240.00		Paid	$200.00		Paid	$160.00
				Owe	$5.00		Owe	$10.00		Owe	$0.00

Week of March 4th

5	11:30 AM	8:00 PM	Cliff Legge	8.5	$85.00	Cory	3.0	$30.00			
						11:30 1:30 and from 3:30 to 4:30 Medical					
6	8:00 AM	10:00 AM	Cliff Legge	2.0	$20.00	Cory	2.0	$20.00	Shawn	2.0	$20.00
	4:00 PM	6:30 PM	Cliff Legge	2.5	$25.00	Cory	2.5	$25.00	Shawn	2.5	$25.00
7	10:00 AM	7:30 PM	Cliff Legge	6.5	$65.00	Cory	9.5	$95.00			
			Didn't Make it until 1:00 Pm								
8	9:00 AM	5:00 PM	Cliff Legge	8.0	$80.00	Cory	6.0	$60.00			
						Left Early					
	Subtotal				$275.00			$230.00			$45.00
				Paid	$280.00		Paid	$240.00		Paid	$45.00
				Owe	$0.00		Owe	$0.00		Owe	$0.00
									George	Welding	$60.00
									Paid	Martin	$40.00
										Mike	$20.00
9			Cliff Legge	5.0	$50.00						
10			Cliff Legge	6.0	$60.00						

Week of March 11th

11			Cliff Legge	5.0	$50.00						
12	11:00 AM	6:00 PM	Cliff Legge	7.0	$70.00						
13	9:00 AM	6:00 PM	Cliff Legge	11.0	$110.00	Cory	7.0	$70.00	Left @ four		
14	8:00 AM	11:00 PM	Cliff Legge	15.0	$150.00	Cory	12.0	$120.00	Left @ nine		
15	9:00 AM	5:30 PM	Cliff Legge	8.5	$85.00	Cory	7.0	$70.00	Left @ four		
	Subtotal				$575.00			$260.00			
				Paid	$560.00		Paid	$260.00			
				Owe	$15.00		Owe	$0.00			

Regis Resources Inc.

Bulk Sample Casual Labour @ $10.00 Per Hour

17			Cliff Legge		2.0	$20.00								
Week of March 19 th														
18	7:00 AM	8:00 PM	Cliff Legge		13.0	$130.00								
19	9:00 AM	11:00 PM	Cliff Legge		15.0	$150.00	Cory	4.0	$40.00	Left @ one				
20	9:30 AM	7:30 PM	Cliff Legge		10.0	$100.00				Shawn	10.0	$100.00		
21	9:00 AM	8:00 PM	Cliff Legge		11.0	$110.00				Shawn	11.0	$110.00		
22	8:30 AM	5:00 PM	Cliff Legge		8.5	$85.00				Shawn	7.5	$75.00	Left @ four	
	Subtotal					$595.00			$40.00			$285.00		
					Paid	$420.00		Paid	$40.00		Paid	$280.00		
					Owe	$190.00		Owe	$0.00		Owe	$5.00		
Week of March 25th														
25	8:00 AM	5:00 PM	Cliff Legge		9.0	$90.00								
26	8:00 AM	8:00 PM	Cliff Legge		12.0	$120.00	Cory	4.0	$40.00	Left Early				
27	8:30 AM	6:00 PM	Cliff Legge		10.5	$105.00				Shawn	8.0	$80.00	Left Early	
						$315.00			$40.00			$80.00		
	Subtotal			27-Mar	Paid	$175.00		Paid	$40.00		Paid	$80.00		
					Paid	$330.00		Owe	$0.00		Owe	$5.00		
					Owe	$0.00								
28			Cliff Legge		11.0	$110.00	Cory	11.0	$110.00	Shawn	2.0	$20.00		
Week of April 1st														
1							Cory	4.0	$40.00					
2	8:30 AM	8:00 PM	Cliff Legge		11.5	$115.00	Cory	11.5	$115.00					
3	9:00 AM	7:00 PM	Cliff Legge		10.0	$100.00	Cory	7.0	$70.00	Left @ four				
4	9:30 AM	9:00 PM	Cliff Legge		11.5	$115.00	Cory	8.5	$85.00	Left @ six				
5	8:30 AM	6:30 PM	Cliff Legge		10.0	$100.00	Cory	6.5	$65.00	Left @ three				
	Subtotal					$540.00			$485.00			$20.00		
					Paid	$540.00		Paid	$480.00		Paid	$20.00		
					Owe	$0.00		Owe	$5.00					
6	9:00 AM	4:00 PM	Cliff Legge		7.0	$70.00								
Week of April 8th														
8	9:30 AM	11:00 PM	Cliff Legge		13.5	$135.00	Cory	10.0	$100.00	Came in @ one				
9	10:00 AM	7:30 PM	Cliff Legge		9.5	$95.00	Cory	9.5	$95.00					
10	9:30 AM	7:30 PM	Cliff Legge		10.0	$100.00	Cory	10.0	$100.00					
11	9:00 AM	11:30 PM	Cliff Legge		14.5	$145.00	Cory	10.0	$100.00	Tyler Prelovich	11.5	$115.00	Came in @ Ten	
	Subtotal					$545.00			$395.00			$115.00		
					Paid	$500.00		Paid	$385.00		Paid	$0.00		
					Owe	$45.00		Owe	$10.00		Owe	$115.00		

2.23950

Regis Resources Inc.

Bulk Sample Casual Labour @ $10.00 Per Hour

12			Cliff Legge		9.5	$95.00	Cory		2.0	$20.00	Tyler Pretovich	9.5	$95.00
			Paul (Transportation)			$700.00							
Week of April 15th													
15	Cliff Didn't show and Tyler couldn't work because he was moving & Cory didn't come in after Martin went after him.												
16	9:00 AM	7:00 PM	Cliff Legge		10.0	$100.00					Tyler Pretovich	10.0	$100.00
17	9:00 AM	5:00 PM	Cliff Legge		8.0	$80.00					Tyler Pretovich	8.0	$80.00
	Subtotal					$275.00				$20.00			$275.00
				Paid		$340.00		Paid		$55.00		Paid	$390.00
				Owe		$0.00		Owe		$0.00		Owe	$0.00
Additions to previous totals on May 17, 2002													
18	7:45 AM	2:30 PM	Cliff Legge		6.75	$67.50					Tyler Pretovich	6.75	$67.50
19	10:00 AM	3:00 PM	Cliff Legge		5.0	$50.00							
Week of April 22nd													
22			Cliff Legge		8.0	$80.00							
23			Cliff Legge		8.0	$80.00							
24			Cliff Legge	?									
							Keith Vatcher	Oil		$40.00			
						$277.50				$40.00			$67.50
				Paid		$277.50		Paid		$40.00		Paid	$67.50
				Owe		$0.00		Owe		$0.00		Owe	$0.00

Summary

Worker	Earned	Paid	Difference
Cliff Legge	$3,782.50	$3,802.50	$20.00
Cory	$1,770.00	$1,790.00	$20.00
Shawn	$590.00	$585.00	($5.00)
Tyler Pretovich	$457.50	$457.50	$0.00
George (Welding)	$60.00	$60.00	$0.00
Paul (Transportation)	$700.00	$700.00	$0.00
Keith for Oil	$40.00	$40.00	
Total	$7,360.00	$7,395.00	$35.00

Advance Ergonmics			
Bike rental 6x6	amount	gst.	pst.
totals	1450.00	98.07	
Triple A Resources			
Screen rental and screening	7500.00		
Home Depot			
masks, tape, buckets.	103.28	7.23	8.26
Comfort Inn			
rooms	285.60	17.85	
Totals	9338.88	123.15	8.26

6x6 used on site to carry samples and equipment.

Screens used to size material at pit and lab.

Dust mask and other supplies for protection and safety supplies while working with material.

Rooms for two employees.

~~13~~
31

dates 07/01/00 - 06/01/02

Expense summary for exploration on claims for Regis Resources Inc.

Rentals	Fuel	Repairs	Office Supplies	Services	Labour
600.00	49.53	37.75	6.10	3400.00	250.00
200.00	5.46	11.98	74.36	5800.00	200.00
600.00	49.53	23.04	145.80	5600.00	500.00
200.00	20.00	30.67	1.97	5400.00	7395.00
600.00	18.00	44.84	29.95	50.00	
200.00	128.00	38.87	50.00	50.00	
600.00	23.00	103.28	11.00	50.00	
200.00	10.00		2.00	7500.00	
132.54	56.09		.92		
1450.00	42.52		3.00		
285.60	18.69		49.64		
7500.00	18.69		11.24		
	33.64		11.40		
	25.00		8.98		
	6.99				
	60.00				
	57.00				
	60.00				
	40.00				
	58.00				
	500.00				
$12568.14	$1280.14	$290.43	$406.36	$27850.00	$8345.00

grand total $50,740.07

The following information (11 pages) has not been prepared by Regis Resources but added to give extra information about the product.

Vermiculite - Mineral Deposit Profiles, B.C. Geological Survey

VERMICULITE
M08

by G.J. Simandl[1], T. Birkett[2] and S. Paradis[3]
[1]British Columbia Geological Survey, Victoria, B.C., Canada
[2]SOQUEM, Québec City, Québec, Canada
[3]Geological Survey of Canada, Sidney, B.C., Canada

Simandl, G.J, Birkett, T. and Paradis, S. (1999): Vermiculite; in Selected British Columbia Mineral Deposit Profiles, Volume 3, Industrial Minerals, G.J. Simandl, Z.D. Hora and D.V. Lefebure, Editors, British Columbia Ministry of Energy and Mines.

IDENTIFICATION

COMMODITY (BYPRODUCT): Vermiculite (± apatite).

EXAMPLES (British Columbia - *Canadian/International*): Joseph Lake (093K 100), Sowchea Creek vermiculite (093K 101); *Libby (Montana, USA), Waldrop Pit, Enoreeq area (South Carolina, USA), Blue Ridge deposits (North Carolina, USA), Palabora deposit (Republic of South Africa).*

GEOLOGICAL CHARACTERISTICS

CAPSULE DESCRIPTION: These near surface vermiculite deposits may also contain recoverable apatite. World-class vermiculite deposits occur mainly within zoned ultramafic complexes or carbonatites. Smaller or lower grade deposits are hosted by dunites, unzoned pyroxenites, peridotites or other mafic rocks cut by pegmatites and syenitic or granitic rocks.

TECTONIC SETTING: Deposits hosted by carbonatites and ultramafic complexes are commonly related to rifting within the continental platform or marginal to the platform in geosynclinal settings.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING: Mafic and ulramafic igneous or metamorphic rocks exposed to intense weathering and/or supergene, low temperature alteration.

AGE OF MINERALIZATION: Most deposits are derived from rocks of Precambrian to Jurassic age. Deposits post-date emplacement of intrusive host and regional metamorphism. Their age may be linked to periods of intense weathering which show up as erosional surfaces, paleo-regolith or unconformities.

HOST/ASSOCIATED ROCK TYPES: For major deposits the main hosts are biotitites, pyroxenites, phlogopite-serpentine rock, phlogopite-diopside±apatite rock and peridotites. Associated rock types are magnetite pyroxenites, foscorite, carbonatites, and variety of

serpentinites that are in contact with alkali granites, syenites, fenites or pegmatites. For smaller or marginal deposits located in highly metamorphosed settings the typical host rocks are amphibolite and biotite schists in contact with pyroxenites or peridotite dykes or lenses, sometimes cut by pegmatites.

DEPOSIT FORM: Variable shapes, a function of the geometry of the favourable protolith and zone of fluid access. Semi-circular surface exposures found with deposits associated with ultramafic zoned complexes or carbonatites, usually near the core of the intrusion. Lenticular or planar deposits of vermiculite are found along serpetinized contacts between ultramafic rocks and metamorphic country rocks. Individual lenses may be up to 7 metres thick and 30 metres in length. Smaller lenses may be found along fractures and the margins of pegmatites crosscutting ultramafic lenses within high grade metamorphic terranes. The degree of alteration and vermiculite grade generally diminishes with depth. Vermiculite grades of economic interest rarely extend more than 40 metres below the surface.

TEXTURE/STRUCTURE: Vermiculite may be fine-grained or form books up to 20 cm across ("pegmatitic"). Serpentine can form pseudomorphs after olivine.

ORE MINERALOGY [Principal and *subordinate*]: Vermiculite ± hydrobiotite; ± *apatite*.

GANGUE MINERALOGY [Principal and *subordinate*]: Biotite, chlorite, phlogopite, clinopyroxene, tremolite, augite, olivine, hornblende, serpentine. In some of the deposits acicular tremolite and asbestos are reported.

ALTERATION MINERALOGY: Vermiculite is probably, in part, a low temperature alteration product of biotite.

WEATHERING: At least in some deposits, weathering is believed to play an important role in transformation of mafic minerals, mainly biotite, into vermiculite. Weathering also weakens the ore making blasting unnecessary; in extreme case it results in formation of semi- or unconsolidated, residual vermiculite deposits.

ORE CONTROLS: 1) The existence of a suitable protore, commonly dunite or pyroxenite rock containing abundant biotite or phlogopite which may be of late magmatic to hydrothermal origin. 2) Deposits occur mainly at surface or at shallow depths, but in some cases as a paleoregolith along an unconformity. 3) Vermiculite develops from periods of intense weathering or near surface alteration. 4) The maximum depth extent of the ore zone depends on the permeability, porosity, jointing and fracture system orientation which permit the circulation of meteoric fluids.

GENETIC MODELS: Vermiculite can form from variety of mafic minerals, but biotite or Fe-bearing phlogopite are deemed key components of the protore within economic deposits.

Most of the early studies suggest that vermiculite is a late magmatic, low temperature hydrothermal or deuteric alteration product.. Currently, the most accepted hypothesis is that vermiculite forms by supergene alteration due to the combined effect of weathering and circulation of meteoric fluids.

ASSOCIATED DEPOSIT TYPES: Palabora-type complexes or other carbonatites (N01) contain vermiculite mineralization. Ultramafic-hosted asbestos (M06), ultramafic-hosted talc-magnesite (M07), nepheline-syenite (R13), Ni and platinoid showings, some sapphire deposits associated with so called "crossing line" pegmatites and placer platinoid deposits (C01 and C02) may be associated with the same ultramafic or mafic complexes as vermiculite deposits.

COMMENTS: In British Columbia, vermiculite is reported from surface exposures of granite, granodiorite and quartz diorite at the Joseph Lake and Sowchea Creek showings in the Fort Fraser/Fort St. James area (White, 1990). Low grades in combination with the preliminary

metallurgical studies indicate that these occurrences are probably subeconomic (Morin and Lamothe, 1991). Similar age, or older, mafic or ultramafic rocks in this region may contain coarse-grained vermiculite in economic concentrations.

EXPLORATION GUIDES

GEOCHEMICAL SIGNATURE: Vermiculite in soil.

GEOPHYSICAL SIGNATURE: Ultramafic rocks that host large vermiculite deposits are commonly characterized by strong magnetic anomalies detectable by airborne surveys. Since vermiculite is an alteration product of ultramafic rocks, vermiculite zones are expected to have a negative magnetic signature. However, no detailed geophysical case histories are documented.

OTHER EXPLORATION GUIDES: The largest commercial deposits usually form in the cores of ultramafic or alkaline complexes (mainly pyroxenites and carbonatites). The roof portions of these complexes have the best potential because they may be biotite-rich. Deposits derived from biotite schist are typically much smaller. All these deposits are commonly associated with some sort of alkali activity, be it only alkali granite or syenite dykes. Vermiculite deposits may have a negative topographic relief. A portable torch may be used to identify vermiculite in hand specimen since it exfoliates and forms golden flakes when heated. Therefore, an excellent time to prospect for vermiculite is after forest fires. Fenitization halos associated with alkaline ultramafic complexes and carbonatites increases the size of the exploration target. Horizons of intense paleo-weathering that exposed mica-bearing ultramafic rocks are particularly favourable.

ECONOMIC FACTORS

TYPICAL GRADE AND TONNAGE: Deposits with over 35% vermiculite (<65 mesh) are considered high grade. Most of the economic deposits contain from few hundred thousand to several million tonnes; although clusters of small, high-grade, biotite schist-hosted deposits ranging from 20 000 to 50 000 tonnes were mined in South Carolina.

ECONOMIC LIMITATIONS: World vermiculite production in 1995 was estimated at 480 000 tonnes. Major producing countries were South Africa (222 000 tonnes, mainly from Palabora), USA (170 000 tonnes) and Brazil (41 500 tonnes). In the early half of 1996 the prices of South African vermiculite imported to USA varied from US$127 to 209 per tonne. Deposits must be large enough to be amenable to open pit mechanized mining. Large flake size (more than 65 mesh) is preferred. Both wet and dry concentrating methods are in use. Crude vermiculite is moved in bulk to exfoliation plants that are typically located near the markets. In commercial plants expansion of 8 to 15 times the original volume is typical, but up to 20 times may be achieved. The higher the degree of expansion (without decrepitation) the better the concentrate. The concentrates from those deposits where vermiculite coexists with asbestos or "asbestiform" tremolite are difficult to market because of the concerns over related health risks.

END USES: Agriculture 40%, insulation 23%, light weight concrete aggregate 19%, plaster and premixes 13%, other 5% (USA statistics). Other applications include carrier substrate for predatory mites in pest extermination, additive to fish feed, removal of heavy metals from soils and absorbent in poultry litter.

IMPORTANCE: Some vermiculite is derived from laterite-type deposits. Vermiculite may be substituted in concrete applications by expanded perlite or by expanded shale. Recently the use of vermiculite in cement compounds has reduced due to substitution by polystyrene. In agricultural applications it may be substituted by peat, perlite, sawdust, bark, etc. In ion exchange applications it may be substituted by zeolites.

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January 29, 1999

[M03] [M04] [M05] [M06] [M07] [M08] [Published Profile Index]
[Deposit Profiles]

Last Updated November 09, 2000

VERMICULITE

(Data in thousand metric tons, unless otherwise noted)

Domestic Production and Use: Two companies with mining and processing facilities produced vermiculite concentrate. One company had its operation in South Carolina, and the other company had an operation in Virginia and an operation in South Carolina run by its subsidiary company. Most of the vermiculite concentrate was shipped to 19 exfoliating plants in 10 States. The end uses for exfoliated vermiculite were estimated to be lightweight concrete aggregates (including concrete, plaster, and cement premixes), 15%; and insulation, agricultural, and other, 85%.

Salient Statistics—United States:	1997	1998	1999	2000	2001[e]
Production[1]	W	W	[e 2]175	[e 3]150	150
Imports for consumption[e]	67	68	71	59	60
Exports[e]	9	11	13	5	5
Consumption, apparent, concentrate	W	W	[e]240	[e]204	205
Consumption, exfoliated[e]	155	170	175	165	165
Price, average value, concentrate, dollars per ton, f.o.b. mine	W	W	W	[3 4]114	114
Stocks, producer, yearend	NA	NA	NA	NA	NA
Employment, mine and mill, number[e]	230	230	230	230	230
Net import reliance[5] as a percentage of apparent consumption	W	W	[e]27	[e]26	27

Recycling: Insignificant.

Import Sources (1997-2000): South Africa, 71%; China, 25%; and other, 4%.

Tariff: Item	Number	Normal Trade Relations 12/31/01
Vermiculite, perlite and chlorites, unexpanded	2530.10.0000	Free.
Exfoliated vermiculite, expanded clays, foamed slag, and similar expanded materials	6806.20.0000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: None.

Prepared by **Michael J. Potter [(703) 648-7723, mpotter@usgs.gov, fax: (703) 648-7722]**

VERMICULITE

Events, Trends, and Issues: Vermiculite use in insulation includes moderately high-temperature applications. Vermiculite is used with selective binders (sodium and potassium silicate) and compressed into blocks, boards, or special shapes. Bonded refractory boards and shapes are used as backup insulation behind hot refractory surfaces or as hot face media themselves. In lower-temperature, metal-melting industries, vermiculite can be used in contact with the molten metal and can withstand heat and flame up to 1,200° C. Vermiculite shapes are used in the aluminum industry in particular because vermiculite has a nonwetting characteristic with aluminum. Vermiculite also is used in refractory concretes, such as ramming mixes and castables.[6]

South Africa and the United States have been the largest producers of vermiculite. China had an estimated output of 40,000 tons in 2000. In Uganda, a Canadian firm, Canmin Resources Ltd., began commercial mining and production in 2001 with 2,000 tons of vermiculite being mined for stockpiling. The company expected to serve markets for insulation and horticulture in the Middle East.[7] In Zimbabwe, Samrec Vermiculite (Pvt.) Ltd., the Imerys Group-owned operator of the Shawa Mine, was completing work to double its vermiculite capacity to more than 40,000 tons per year. Two-thirds of the production was being sold to Europe with the remainder going to Asia and the Middle East. The increased production would be marketed worldwide.[8]

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves[9]	Reserve base[9]
	2000	2001[e]		
United States	[e][3]150	150	25,000	100,000
Brazil	23	25	NA	NA
China	40	50	NA	NA
Russia	25	25	NA	NA
South Africa	209	162	20,000	80,000
Zimbabwe	19	15	NA	NA
Other countries[10]	46	40	5,000	20,000
World total (may be rounded)	512	470	50,000	200,000

World Resources: Marginal reserves of vermiculite, occurring in Colorado, Nevada, North Carolina, Texas, and Wyoming, are estimated to be 2 to 3 million tons. Resources in other countries may include material that does not exfoliate as well as United States and South African vermiculite.

Substitutes: Expanded perlite is a substitute for vermiculite in lightweight concrete and plaster. Other more dense but less costly material substitutes in these applications are expanded clay, shale, slate, and slag. Alternate materials for loosefill fireproofing insulation include fiberglass, perlite, and slag wool. In agriculture, substitutes include peat, perlite, sawdust, bark and other plant materials, and synthetic soil conditioners.

[e]Estimated. NA Not available. W Withheld to avoid disclosing company proprietary data.

[1]Concentrate sold and used by producers.

[2]Roskill Information Services, Ltd., 1999, The economics of vermiculite: London, Roskill Information Services, Ltd., July, 99 p. plus appendix.

[3]Moeller, E.M., 2001, Vermiculite: Mining Engineering, v. 53, no. 6, June, p. 65.

[4]Average of price range of $60 to $168 per ton, depending on sized grades.

[5]Defined as imports - exports + adjustments for Government and industry stock changes.

[6]Russell, Alison, 2000, Vermiculite: Financial Times Executive Commodity Reports, p. 16.

[7]Industrial Minerals, 2001a, Mineral notes: Industrial Minerals, no. 407, August, p. 77.

[8]———2001b, World of minerals: Industrial Minerals, no. 408, September, p. 19.

[9]See Appendix C for definitions.

VERMICULITE

By Michael J. Potter

Domestic survey data and tables were prepared by Nicholas A. Muniz, statistical assistant, and the world production table was prepared by Glenn J. Wallace, international data coordinator.

Vermiculite is a hydrated magnesium-aluminum-iron silicate. Flakes of raw vermiculite concentrate are mica-like in appearance and contain water molecules within their internal structure. When the flakes are heated rapidly at a temperature of 900° C or higher, the water flashes into steam, and the flakes expand into accordion-like particles. The color, which can range from black and various shades of brown to yellow for the raw flakes, changes to gold or bronze. This expansion process is called exfoliation, and the resulting lightweight material is chemically inert, fire resistant, and odorless. In lightweight plaster and concrete, vermiculite provides good thermal insulation. Vermiculite can absorb such liquids as fertilizers, herbicides, and insecticides, which can then be transported as free-flowing solids (Harben and Kuzvart, 1996).

Production

Domestic production (sold or used) data for vermiculite were collected by the U.S. Geological Survey (USGS) from two voluntary surveys—one for mine-mill operations and the other for exfoliation plants. Of three mine-mill operations, partial data were obtained from one.

Because there have only been three U.S. mining operations (two companies) of vermiculite concentrate in recent years, any vermiculite production data collected by the USGS are proprietary and must be withheld. The two U.S. producers of vermiculite concentrate were Virginia Vermiculite Ltd., with operations near Woodruff, SC, and in Louisa County, VA, and W.R. Grace & Co., from its operation at Enoree, SC.

Vermiculite concentrate was shipped to exfoliating plants for conversion into lightweight material (table 2). Output of exfoliated vermiculite sold or used in 2001, using partly estimated data, was about 140,000 metric tons (t) (table 1). Domestic production of exfoliated vermiculite sold or used was by 14 companies operating 19 plants in 10 States (table 2). Of the 19 known exfoliation plants, 9 (47%) responded. The nine operations represented 42% of the sold or used vermiculite listed in tables 1 and 3. Data for the remaining operations were estimated from previous years' production levels. States that produced exfoliated vermiculite, in descending order of output sold and used, were South Carolina, New Jersey, Ohio, Arizona, Pennsylvania, Florida, Arkansas, Illinois, Texas, and New Mexico.

W.R. Grace & Co. voluntarily filed for reorganization under chapter 11 of the U. S. Bankruptcy Code in response to a sharply increasing number of asbestos claims against the company. Grace's asbestos liabilities largely stem from commercially purchased asbestos added to some of its fire protection products; the company ceased to add any asbestos to its products in 1973. The filing would enable the company to operate in the usual manner under court protection from its creditors and claimants while developing and implementing a plan for addressing the asbestos-related claims against it (W.R. Grace & Co., 2001b§[1]).

Legislation and Government Programs

The U.S. Environmental Protection Agency (EPA) continued to test for the presence of asbestos in and around a former vermiculite mine, the local environment, and homes in Libby, MT. The mine was shut down in 1990. The agency also was continuing to assess the risk posed by exposure to the Libby material. Reports on the epidemiological and monitoring activities were available on the website for EPA region 8 (U.S. Environmental Protection Agency, 2002§).

The EPA issued a report investigating whether any of the mineralogical and chemical characteristics of vermiculite products might serve as tracers to help regulators identify product sources. Interest in tracking sales of vermiculite products arose because of the presence of asbestos in some of the Libby, MT, vermiculite products that were sold in the past. The objective of the EPA report was to form the groundwork for additional studies on tracer components. Two of the more promising areas for future study were compositional variations in amphiboles and micas and trace element variations in the ores from different locations. The study recommended various methods of analysis for further study and a sampling protocol (Frank and Edmond, 2001).

Consumption

Vermiculite has a wide range of uses that take advantage of its attributes, such as low density, good insulating properties, inertness, fire resistance, and high liquid absorption capacity. Vermiculite is used in general building plasters either in its own formulations or combined with such other aggregates as perlite. Specialist plasters include fire protection and acoustic products in which vermiculite is combined with a binder, such as gypsum or portland cement, plus fillers and rheological aids (Roskill Information Services Ltd., 1999, p. 72-76).

Exfoliated vermiculite treated with a water repellent is used to fill pores and cavities in masonry construction (especially hollow blockwork) to enhance fire ratings, insulation, and acoustic performance. Exfoliated finer grades of vermiculite are used to produce insulation shapes. The manufacturing process is very similar to that used for the production of silicate-bound building boards (Roskill Information Services Ltd., 1999, p. 84). Vermiculite-based insulation shapes can be used in lower temperature metal-melting-processing industries; vermiculite can be used in contact with molten metal up to 1,200° C. Vermiculite shapes are used in the aluminum industry, in particular, because vermiculite is said to have a nonwetting characteristic with aluminum (Russell, 2000, p. 16).

Exfoliated vermiculite has been combined for many years

[1]References that include a section twist (§) are found in the Internet References Cited section.

with high alumina (also known as aluminous or calcium aluminate) cements and such aggregates as expanded shale, clay, and slate to produce refractory and/or insulation concretes and mortars. These are used in areas where strength and corrosion/abrasion resistance are of secondary importance; the most important factor is the insulation performance of the in-place refractory lining. These mixes are used in such industries as iron and steel, cement, and hydrocarbon processing (Roskill Information Services Ltd., 1999, p. 85).

In horticulture, exfoliated vermiculite improves soil aeration and moisture retention. When vermiculite is mixed with peat or other composted materials, such as pine bark, the resulting product provides a good growing medium for plant propagation. As a soil conditioner, exfoliated vermiculite can improve the aeration of "sticky" soils and the water holding characteristics of sandy soils. This allows for easier watering and reduces the likelihood of cracking, crusting, and compaction of the soil. Vermiculite is used in the fertilizer/pesticide market because of its ability as a carrier, bulking agent, and extender (Roskill Information Services Ltd., 1999, p. 81, 90-91).

Finer grades of exfoliated vermiculite are used to partially replace asbestos in brake linings primarily for the automotive market (Roskill Information Services Ltd., 1999, p. 84).

Prices

Published prices for vermiculite serve only as a general guide because of variations in source, quantity, application, and other factors. Prices for raw (unexpanded) U.S. vermiculite concentrate, bulk, ex-mill were unchanged from 2000—from about $143 per metric ton to $220 per ton, depending on particle size. For imported South African crude vermiculite, bulk, free on board barge, U.S. Gulf Coast, prices ranged from $187 per ton to $243 per ton (Industrial Minerals, 2001c).

The average value of U.S. exfoliated vermiculite sold or used by producers, using partly estimated data, was $340 per ton (table 1), which was a composite value including both U.S. and imported material.

Foreign Trade

Trade data for vermiculite concentrate are not collected as a separate category by the U.S. Census Bureau but are included within the basket category "vermiculite, perlite, and chlorite, unexpanded" under tariff code 2530.10.0000. According to Moeller (2002), U.S. exports of vermiculite concentrate in 2001 were about 7,000 t (table 1). Total U.S. imports of vermiculite in 2001 were about 65,000 t (Port Import/Export Reporting Service, unpub. data, 2002). South Africa supplied about 73% of the tonnage, and China, 25%.

World Review

In Western Europe, an estimated 55% of exfoliated vermiculite was going into proprietary products used in construction of commercial and industrial structures, including building boards, general construction plasters, and specialist fire protection/acoustic plasters (Roskill Information Services Ltd., 1999, p. 3).

Australia.—Imdex Ltd., based in Perth, Western Australia, was planning to sell its mining concern Australian Vermiculite Industries. The operation is the country's only vermiculite producer; the mine is located 160 kilometers northeast of Alice Springs in the Northern Territory. Output was about 10,000 to 12,000 metric tons per year (t/yr), which was supplying 80% of the domestic market as well as being exported to Europe, Japan, the Middle East, New Zealand, and Taiwan. Markets were fire protection, building products, and horticulture (Industrial Minerals, 2001a).

China.—Although data were not fully available, output of vermiculite was estimated to be at least 30,000 to 40,000 t/y from the four main producers in Xinjiang Province. An additional 15,000 t of output (not listed in table 4) was estimated to have been produced in Hebei Province (Moeller, 2002). Hebei Metals & Minerals Import and Export Corp. (Hebei Minmetals), which deals with metals, minerals, and other products in Hebei Province, classifies vermiculite into two types. Silver-white vermiculite contains 5% to 13% iron oxide (Fe_2O_3) and is for use in the construction industry. Golden yellow vermiculite, with 16% to 22% Fe_2O_3, is used in agriculture and horticulture. Export destinations for Chinese vermiculite included Japan, the Republic of Korea, and North America (Li, 2001).

South Africa.—Reported production of vermiculite in 2001 was 156,632 t, a 25% decrease from that of 2000. Production at Palabora Mining Co. Ltd., the world's largest vermiculite producer, was hampered by wet in-pit mining conditions and low availability of plant and heavy equipment (Profile Data, 2002§). New management, dryer weather conditions, and improvements at the mine and mill could allow increased production in 2002 (Moeller, 2002).

Uganda.—Canmin Resources Ltd. began mining and production at its Namekara vermiculite project in the Mbale District of southeast Uganda. Canmin is a wholly owned subsidiary of Canadian junior mining and investment company IBI Corp. Some 2,000 t of vermiculite was being mined for stockpiling, and processing equipment had been installed in a newly constructed processing building. Canmin's target output was around 40,000 t/yr of vermiculite for insulation and horticulture, which would be exported to Europe and the Middle East (Industrial Minerals, 2001b). Also, prospective customers in Canada and the United States were assessing the feasibility of using the large-flake, coarse-grade vermiculite for similar purposes (Mining Journal, 2001).

Zimbabwe.—Samrec Vermiculite (Zimbabwe) (Pvt.) Ltd. (the Imerys-owned operator of the Shawa mine) was doubling its vermiculite capacity to 40,000 t/yr. Also, the plant was being automated, which would reduce production costs. The basis for the plant expansion was demand for large-flake vermiculite, of which Samrec was one of only a few producers worldwide. Two-thirds of the current production from Shawa was being sold to Europe, with the remainder going to Asia and the Middle East. The increased production would be marketed worldwide; some of the product was being tested in North America (Industrial Minerals, 2001d).

Outlook

Besides traditional end uses, such as horticulture, including potting soils, soil amendments, and as a fertilizer carrier, vermiculite is being used increasingly in other areas. One use is as an intumescent (swelling) material used, for example, in fire-rated building products where its expansion qualities under fire prolong the products' structural integrity; another example is use in composites where its intumescent action provides an insulating thermal barrier (W.R. Grace & Co., 2001a§). Another application is in dispersions of vermiculite in water

produced by the chemical exfoliation of vermiculite for various coatings and film-forming applications (Hindman, 1994). These films improve the fire resistant properties of such industrial products as gaskets and automotive seals for catalytic converters (Roskill Information Services Ltd., 1999, p. 86).

In China, vermiculite production capacity is said to be increasing at a significant rate (not reflected in table 4); about 80% of the output is being exported. China appears to be emerging as a major supplier of vermiculite (Moeller, 2002).

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TABLE 1
SALIENT VERMICULITE STATISTICS 1/

(Thousand metric tons and thousand dollars, unless otherwise specified)

	1997	1998	1999	2000	2001
United States:					
Sold and used by producers:					
Concentrate	W	W	175 e/	150 e/	W
Exfoliated e/	155	170	175	165	140
Quantity					
Value e/	49,400	53,300	55,300	53,200	48,000
Average value e/ 2/ dollars per metric ton	$318	$313	$315	$322	$340
Exports e/	9	11	13	5	7
Imports for consumption	67	68	71	59	65
World, production 3/	301 4/	328 4/	541	512	305 e/ 4/

e/ Estimated. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to no more than three significant digits.

2/ Based on unrounded data.

3/ Excludes production by countries for which data were not available.

4/ Excludes U.S. data.

TABLE 2
ACTIVE VERMICULITE EXFOLIATION PLANTS IN THE UNITED STATES IN 2001

Company	County	State
Isolatek International	Sussex	New Jersey.
J.P. Austin Associates, Inc.	Beaver	Pennsylvania.
P.V.P. Industries	Trumbull	Ohio.
Palmetto Vermiculite Co., Inc.	Spartanburg	South Carolina.
Schundler Co., The	Middlesex	New Jersey.
Scotts Company, The	Union	Ohio.
Do.	Greenville	South Carolina.
Southwest Vermiculite Co., Inc.	Bernalillo	New Mexico.
Sun Gro Horticulture, Inc.	Jefferson	Arkansas.
Do.	La Salle	Illinois.
Thermal Ceramics Inc.	Macoupin	Do.
Thermo-O-Rock West, Inc.	Maricopa	Arizona.
Thermo-O-Rock East, Inc.	Washington	Pennsylvania.
Verlite Co.	Hillsborough	Florida.
Vermiculite Industrial Corp.	Allegheny	Pennsylvania.
Vermiculite Products, Inc.	Harris	Texas.
W.R. Grace & Co., Construction Products Division	Maricopa	Arizona.
Do.	Broward	Florida.
Do.	Greenville	South Carolina.

TABLE 3
ESTIMATED EXFOLIATED VERMICULITE SOLD AND USED IN THE UNITED STATES, BY END USE 1/

(Metric tons, unless otherwise specified)

	2000	2001
Aggregates 2/	25,000	31,000
Insulation 3/	W	W
Agricultural:		
Horticultural	33,800	20,600
Soil conditioning	31,300	32,800
Fertilizer carrier	W	W
Total	W	W
Other 4/	W	2,690
Grand total	165,000	140,000

W Withheld to avoid disclosing company proprietary data; included with "Grand total."
1/ Data rounded to no more than three significant digits; may not add to totals shown.
2/ Includes concrete, plaster, and premixes (acoustic insulation, fireproofing, and texturizing uses).
3/ Includes loose-fill, block, and other (high-temperature and packing insulation and sealants).
4/ Includes various industrial and other uses not specified.

TABLE 4
VERMICULITE: WORLD PRODUCTION, BY COUNTRY 1/ 2/

(Metric tons)

Country	1997	1998	1999	2000	2001 e/
Argentina e/	822 3/	903 r/	2,800	2,800	2,800
Australia e/	5,000	10,000	12,000	12,000	12,000
Brazil 4/	23,000	24,300	23,400 e/	23,400 r/ e/	23,400
China	NA	NA	40,000 e/	40,000 e/	40,000
Egypt	447	12,376	12,000 e/	12,000 e/	12,000
India	4,405	4,080	4,000 e/	4,200 e/	4,300
Japan e/	15,000	15,000	15,000	15,000	15,000
Kenya	1,418	353	164 5/	124 r/ 5/	125
Mexico	295	--	-- r/	-- r/	--
Russia e/	25,000	25,000	25,000	25,000	25,000
South Africa	211,001	221,300	217,800	208,835	156,632 3/
Uganda	--	--	--	--	2,000
United States, sold and used by producers 4/	W	W	175,000 e/	150,000 e/	W
Zimbabwe	14,841	14,804	13,898	18,935	11,632 3/
Total	301,000	328,000	541,000	512,000	305,000

e/ Estimated. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; not included in "Total." -- Zero.
1/ World totals, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.
2/ Excludes production by countries for which data are not available and for which general information is inadequate for formulation of reliable estimates. Table includes data available through July 22, 2002.
3/ Reported figure.
4/ Concentrate.
5/ Reported exports.

ONTARIO

MINISTRY OF NORTHERN DEVELOPMENT AND MINES

Work Report Summary

Transaction No: W0290.01222 **Status:** APPROVED
Recording Date: 2002-JUL-23 **Work Done from:** 2000-JUL-01
Approval Date: 2003-FEB-21 **to:** 2002-JUN-01

Client(s):

303719 REGIS RESOURCES INC.

Survey Type(s):

BENEF

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
SO 1077034	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-JUL-27
SO 1077037	$0	$0	$1,200	$1,200	$0	0	$0	$0	2003-JUL-27
SO 1077038	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-JUL-27
SO 1077039	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-JUL-27
SO 1077040	$0	$0	$1,200	$1,200	$0	0	$0	$0	2003-JUL-27
SO 1077041	$0	$0	$875	$875	$0	0	$0	$0	2003-JUL-27
SO 1077042	$0	$0	$1,200	$1,200	$0	0	$0	$0	2003-JUL-27
SO 1077043	$0	$0	$3,600	$3,600	$0	0	$0	$0	2003-JUL-27
SO 1077044	$0	$0	$1,600	$1,600	$0	0	$0	$0	2003-JUL-27
SO 1077045	$0	$0	$2,400	$2,400	$0	0	$0	$0	2003-JUL-27
SO 1077414	$0	$0	$3,200	$3,200	$0	0	$0	$0	2003-AUG-02
SO 1077416	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-AUG-02
SO 1163443	$10,000	$5,500	$0	$0	$475	475	$9,525	$5,025	2003-NOV-03
SO 1191249	$20,000	$16,500	$0	$0	$17,000	16,500	$3,000	$0	2005-AUG-25
SO 1191295	$20,740	$22,289	$0	$0	$17,000	17,500	$3,740	$4,789	2005-NOV-18
	$50,740	$44,289	$34,475	$34,475	$34,475	$34,475	$16,265	$9,814	

External Credits: $0

Reserve:

$9,814 Reserve of Work Report#: W0290.01222

$9,814 Total Remaining

Status of claim is based on information currently on record.

31D09NW2020 2.23950 CAVENDISH 900

Work Report Summary

Transaction No: W0290.01264 **Status:** APPROVED
Recording Date: 2002-AUG-02 **Work Done from:** 2002-JAN-05
Approval Date: 2003-MAR-04 **to:** 2002-APR-01

Client(s):

303719 REGIS RESOURCES INC.

Survey Type(s):

BENEF

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
SO 1163443	$0	$0	$800	$800	$0	0	$0	$0	2004-NOV-03
SO 1191295	$34,474	$33,915	$0	$0	$18,800	18,800	$15,674	$15,115	2005-NOV-18
SO 1230938	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-AUG-02
SO 1230939	$0	$0	$2,400	$2,400	$0	0	$0	$0	2003-AUG-28
SO 1237558	$0	$0	$2,400	$2,400	$0	0	$0	$0	2003-OCT-18
SO 1237559	$0	$0	$1,600	$1,600	$0	0	$0	$0	2003-OCT-18
SO 1237560	$0	$0	$800	$800	$0	0	$0	$0	2003-OCT-18
SO 1237561	$0	$0	$400	$400	$0	0	$0	$0	2003-OCT-28
SO 1237562	$0	$0	$800	$800	$0	0	$0	$0	2003-OCT-28
SO 1237563	$0	$0	$4,800	$4,800	$0	0	$0	$0	2003-OCT-28
	$34,474	$33,915	$18,800	$18,800	$18,800	$18,800	$15,674	$15,115	

External Credits: $0

Reserve:

$15,115 Reserve of Work Report#: W0290.01264

$15,115 Total Remaining

Status of claim is based on information currently on record.

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

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

Date: 2003-FEB-21

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

Submission Number: 2.23950
Transaction Number(s): W0290.01222

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

The total value of work approved for W0290.01222 is $44,289.00.

If you have any question regarding this correspondence, please contact LUCILLE JEROME by email at lucille.jerome@ndm.gov.on.ca or by phone at (705) 670-5858.

Yours Sincerely,

Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

Regis Resources Inc.
(Claim Holder)

Keith Alwyn Vatcher
(Agent)

Assessment File Library

Regis Resources Inc.
(Assessment Office)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

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

Date: 2003-MAR-04

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

Submission Number: 2.23950
Transaction Number(s): W0290.01264

Dear Sir or Madam

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Yours Sincerely,

Ron Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

Regis Resources Inc.
(Claim Holder)

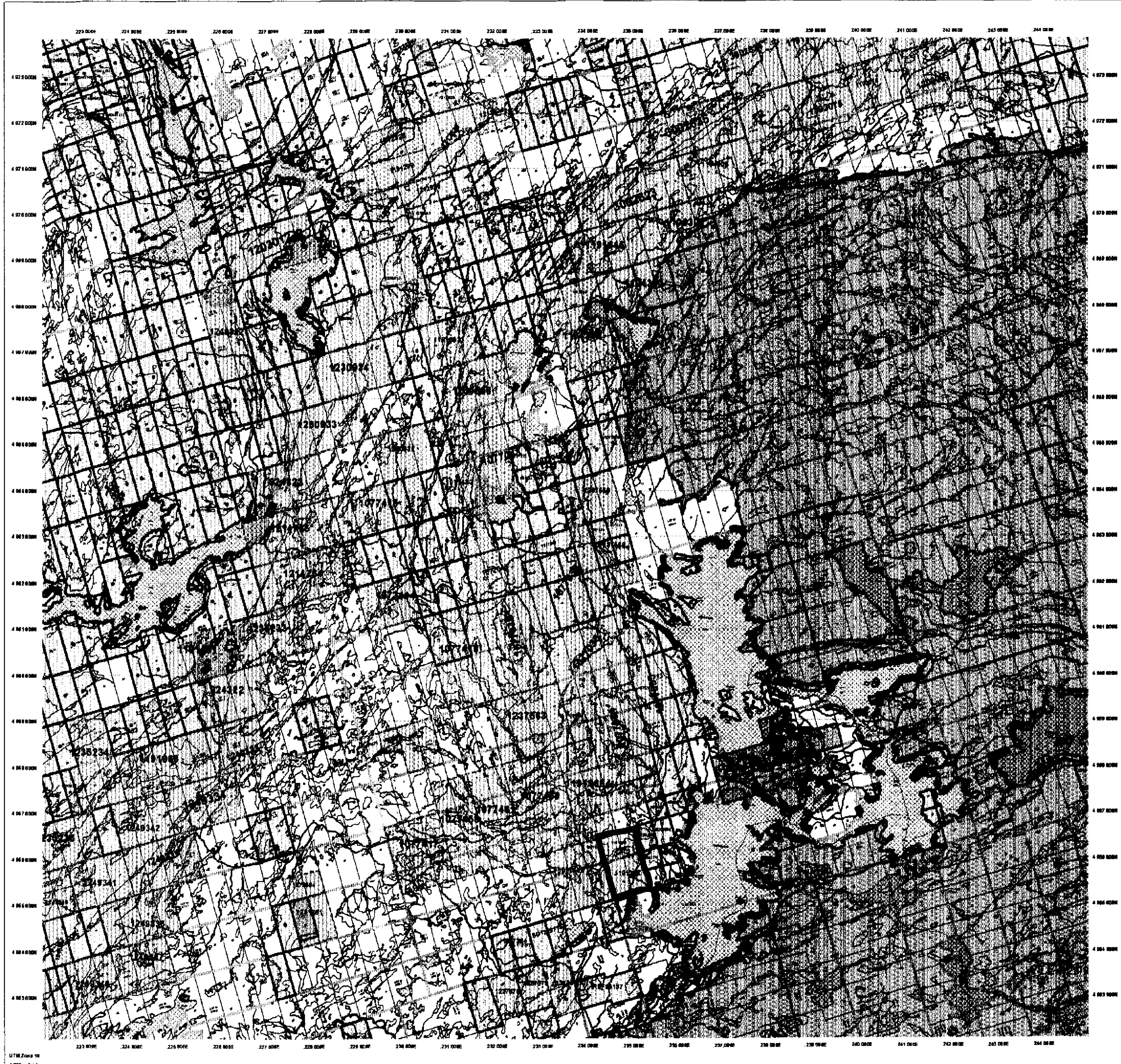
Keith Alwyn Vatcher
(Agent)

Assessment File Library

Regis Resources Inc.
(Assessment Office)

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
PROVINCIAL MINING RECORDER'S OFFICE

MINING LAND TENURE MAP



UTM Zone 18
1 000m Grid

Date / Time of Issue	Jul 24 2002	12:33h Eastern
TOWNSHIP / AREA		PLAN
CAVENDISH		M-0072

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division	Southern Ontario
Land Titles/Registry Division	PETERBOROUGH
Ministry of Natural Resources District	BANCROFT

TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession, Lot
- Provincial Park
- Indian Reserve
- Cliff, Pit and Pile
- Contour
- Contour - Approx., Auxiliary Depression
- Shaft
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Hydro Line
- Communication Line
- Wooded Area
- Monument - Geodetic, Historic, Horiz. Control

LAND TENURE

Freehold Patent
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

Licence of Occupation
- Use not Specified
- Surface And Mining Rights
- Surface Rights Only
- Mining Rights Only

- Land Use Permit
- Order in Council
- Water Power Lease Agreement
- Mining Claim

LAND TENURE WITHDRAWALS

Areas Withdrawn from Disposition
Mining Act Withdrawal Types
Wsm Surface and Mining Rights Withdrawn
Ws Surface Rights Only Withdrawn
Wm Mining Rights Only Withdrawn
Order in Council Withdrawal Types
W'sm Surface and Mining Rights Withdrawn
W's Surface Rights Only Withdrawn
W'm Mining Rights Only Withdrawn

IMPORTANT NOTICES

2.23950
BENEF

0 Km 3.0 Km

LAND TENURE WITHDRAWAL DESCRIPTIONS

Identifier	Type	Date	Description
8686	Wsm	Jan 1 2001	RESERVE FOR PUBLIC USE 17729
8727	Wsm	Jan 1 2001	LAND ACQUISITION
8720	Wsm	Jan 1 2001	LAND ACQUISITION
8748	Wsm	Jan 1 2001	400FT SURFACE RIGHTS RESERVATION ALONG THE SHORES OF ALL LAKES & RIVERS
8761	Wsm	Jan 1 2001	Pending Application Under the Public Lands Act (July 27, 2000)
8768	Wsm	Jan 1 2001	PUBLIC RESERVE
8740	Wsm	Jan 1 2001	400FT SURFACE RIGHTS RESERVATION AROUND ALL LAKES & RIVERS
8773	Wsm	Jan 1 2001	W.3/77 34281 3/1/77 S.R. & M.R.
8783	Wsm	Jan 1 2001	A.P. 17152
8801	Wsm	Jan 1 2001	41313 VOL.1
8802	Wsm	Jan 1 2001	41313 VOL.1
8803	Wsm	Jan 1 2001	M.N.R. RESERVE
W.50/83	Wsm	Aug 29 1983	W.50/83 180708 29/8/83 S.R. & M.R. BEDS OF LAKES AND RIVERS WITHIN PARK LIMIT
W-LL-P 26/88	Wsm	May 17 1988	SEC 35 W-LL-P 25/88 ONT MAY 17/88 M+S
W.50/83	Wsm	Aug 29 1983	SEC.35/RO W.50/83 29/8/83 M&S 180708 BED OF LAKES & RIVERS WITHIN PARK LIMITS'
W.50/83	Wsm	Aug 29 1983	W.50/83 180708 29/8/83 S.R. & M.R. BEDS OF LAKES AND RIVERS WITHIN PARK LIMIT
W.3/77	Wsm	Jan 1 2001	W.3/77 34281 3/1/77 S.R. & M.R.
W.3/77	Wsm	Jan 1 2001	W.3/77 34281 3/1/77 S.R. & M.R.
W.3/77	Wsm	Jan 1 2001	W.3/77 34281 3/1/77 S.R. & M.R.
W.87/74	Wsm	Dec 10 2001	W.87/74 7506 V.4 4/12/74 S.R. & M.R.
W.87/74	Wsm	Dec 10 2001	W.87/74 7506 V.4 4/12/74 S.R. & M.R.
W.11/83	Wsm	Sep 30 1983	W.11/83 75119 30/9/83 S.R. & M.R.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.
W-LL-P26	Wsm	Nov 23 2001	Mining and Surface rights withdrawal Section 35 of the Mining Act RSO 1990 Order # W-LL-2001/01 ONT, Nov. 21, 2001 Note: this boundary closely represents the area that is being proposed for regulation and may be subject to further change.

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Lands Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

General Information and Limitations

Contact Information:
Provincial Mining Recorders' Office
Willet Green Miller Centre
933 Ramsey Lake Road
Sudbury, ON P3E 6B5
Home Page: www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Toll Free
Tel. 1 (888) 415-9845
Fax. 1 (877) 670-1444

Map Datum: NAD 83
Projection: UTM (6 degree)
Topographic Data Source: Land Information Ontario
Mining Land Tenure Source: Provincial Mining Recorders' Office

This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, flooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.

31D09NW2020 2.23950 CAVENDISH

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