



31L08SE0001 2.5409 MARIA

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GEOLOGICAL REPORT  
McVITTIE I AND II GRAPHITE  
PROPERTIES  
MARIA TOWNSHIP, ONTARIO

**RECEIVED**  
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MINING LANDS SECTION

by  
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D. G. INNES AND ASSOCIATES LTD.  
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INTRODUCTION

During September and November, 1962, the writer carried out a preliminary field investigation of the DATUMONE PETROLEUM Ltd., Graphite properties, Maria Township, Renfrew County, Ontario. The results of this field examination together with a review of all relevant government and industry data is herein presented.

The economic potential of these two properties is considered and recommendations for testing this potential are also detailed.

Property Location and Access

The DATUMONE PETROLEUM LTD., graphite properties are located in the north part of Maria Township, Renfrew County, near the village of Bissett Creek, approximately 53 kms east of the Town of Mattawa, (fig. 1). The properties are defined by two separate groups of contiguous claims, (figs. 2 & 3);

McVittie Group I:

- Lots 63 and 64, conc., A
- Claims E0630672 to E0630675 inclusive
- Lots 63 and 64, conc., B
- Claims E0648219 to E0648222 inclusive

McVittie Group II:

- Lots 50 to 53, conc., B
- Claims E0630657, 58, 59, 62, 63, 64 and 69
- Lots 8 to 13, conc., 12 and 13
- Claims E0630660, 61, 65, 66, 67 and 68 and E0648223 to E0648229 inclusive

The claim groups are easily assessed by Highway 17E which cuts both properties. Other bush roads leading from Highway 17E give additional access. The main line of the Canadian Pacific Railroad passes through the village of Bissett Creek and cuts across the northern part of the McVittie II Group and the southern part of the McVittie I Group. A major Hydro Electric Power Commission transmission line lies just to the south of the village of Bissett Creek and crosses the southern most claims of the McVittie I and II Groups.

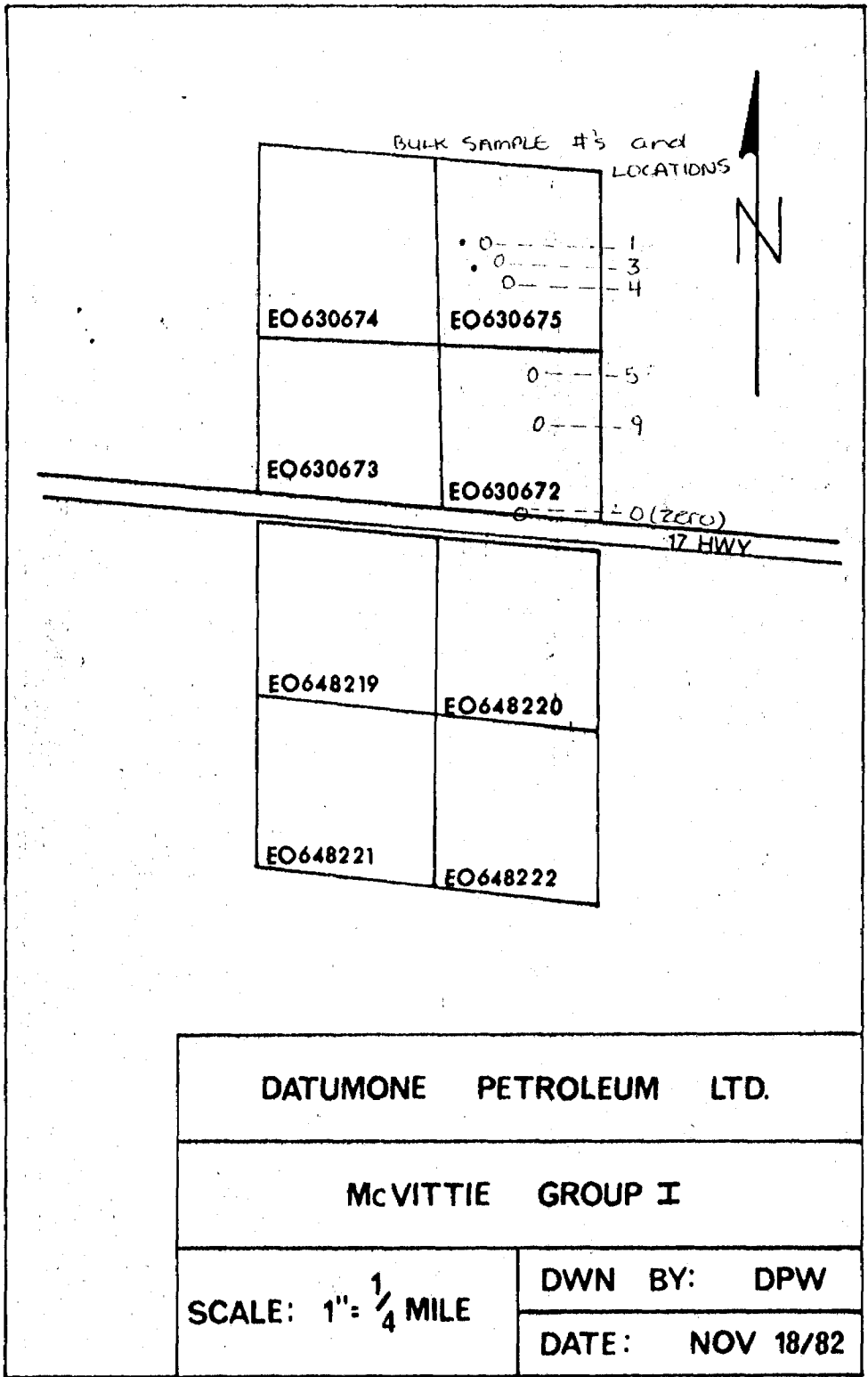


Fig. 2: Claim Group - McVittie Group I

78°30'

78°00'

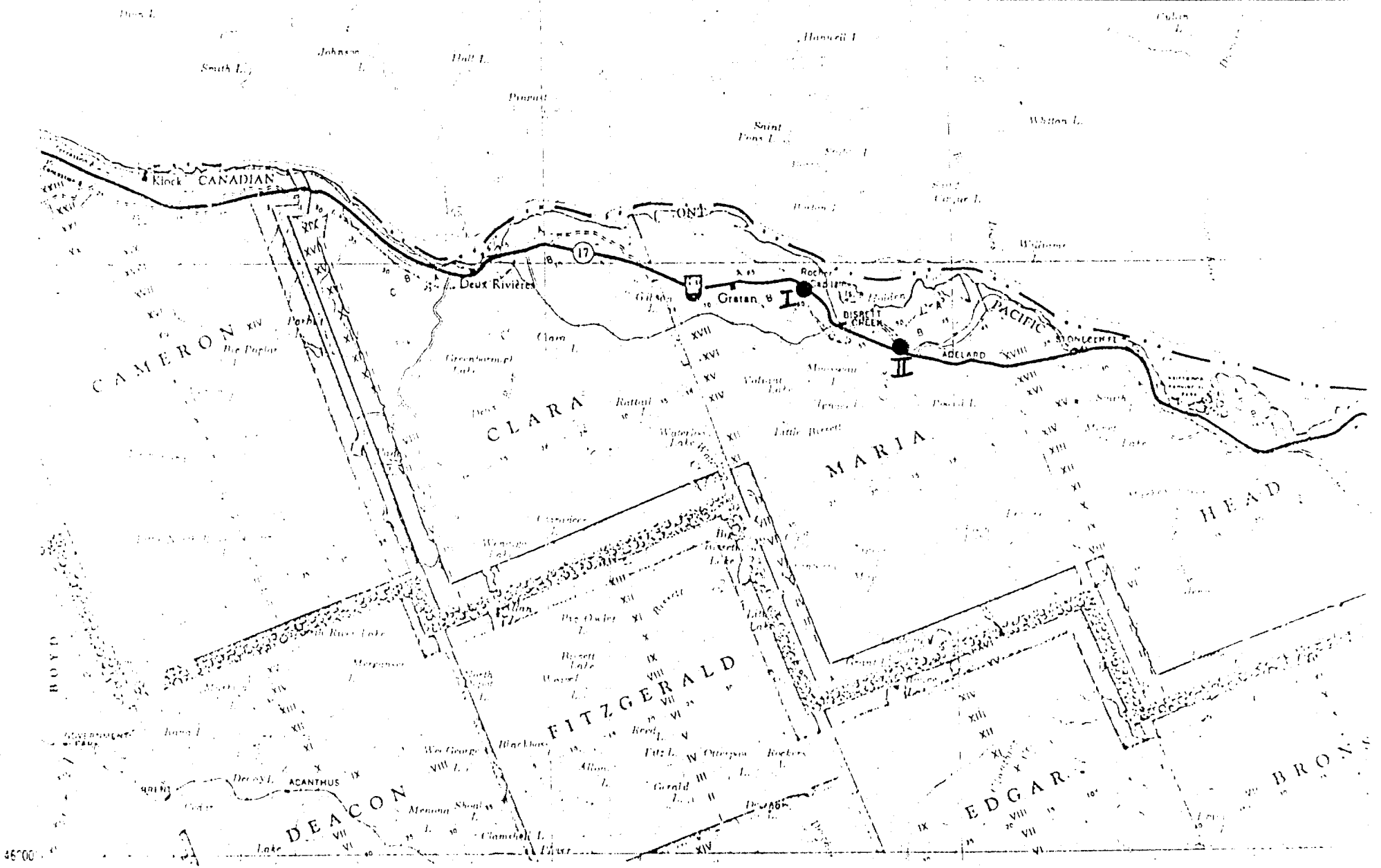


Fig. 1: Location of Datumone Petroleum Ltd., Graphite Properties

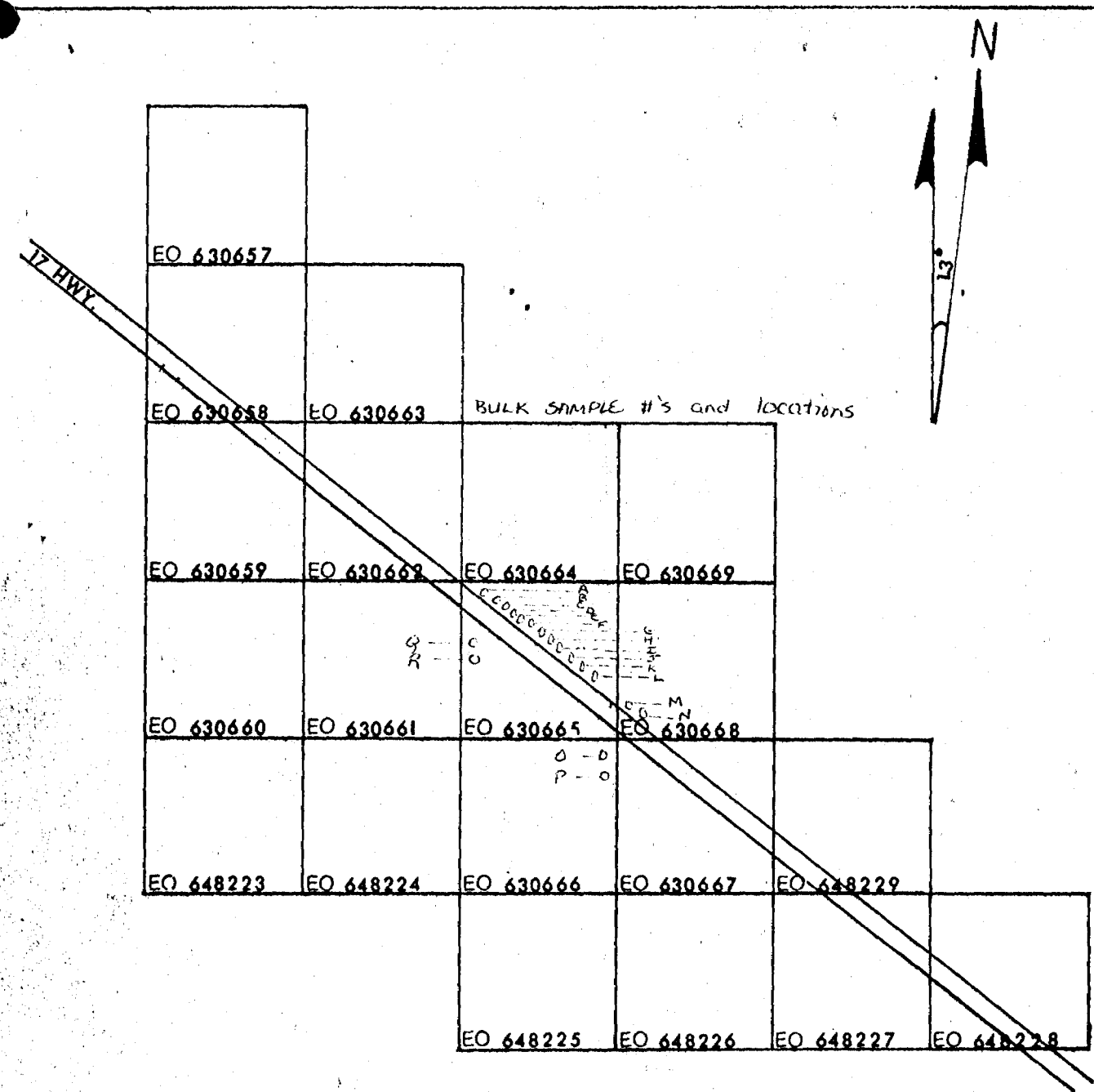


Fig. 3: Claim Group - McVittie Group II

DATUMONE PETROLEUM LTD.	
McVITTIE GROUP II	
SCALE: 1" = 1/4 MILE	DW BY: DPW
	DATE: NOV 18/82

### Previous Work

Mapping by the Ontario Geological Survey, (Preliminary Map P. 1197, Lumbers, 1976) shows the general geology of the region at a scale of 1" = 1 mile. The graphitic units on both claim groups were recognized by the government survey. The area generally, has received very little in the way of mineral exploration and no work is recorded on either of the claim groups. Minor exploration was carried out on similar graphitic showings in the south part of Maria Township in 1974 and 1977 (assessment files, Office of the Resident Geologist, Kempville, Ontario). Exploration (by Donegal Resources Ltd.) on this same deposit is currently underway.

### Physical Environment

The area lies along the north boundary of the Almaguin Highlands, a region of gently rolling hills and ridges covered by a mixed growth of conifers and hardwoods, mainly pine, spruce, maple, poplar, birch and elm. Both properties are located along the south margin of the Ottawa-Bonnechere graben structure, an area of rugged relief, lightly covered by boulder tills and glaciofluvial gravels. Outcrop is commonly exposed along ridges and along road-cuts. Lower areas are characterized by a moderately thick cover of glaciofluvial sandy-gravel outwash and by glaciolustrine silts and Recent silts in creek and bog areas.



Both claim group areas can be considered as undeveloped with only a few dwellings along Highway 17E, at the village of Bissett Creek. Logging operations are currently active in the area and a natural gas pipeline is being installed parallel to the H.E.P.C. transmission line through the south part of the McVittie I and II claim groups.

#### Regional Geological Setting

The Maria Township deposits lie within the Ontario Gneiss Segment of the Grenville Structural Province of the Canadian Shield, (fig. 4). Much of this segment has never been systematically mapped and the most recent work has been done by the O.G.S., (Lumbers, 1976) and by the G.S.C., (Davidson et al., 1979).

Davidson et al., studied structural trends within the Central (or Ontario) Gneiss Belt, and recognized that certain lithological and metamorphic assemblages are associated with particular structural domains. The rocks in the Maria Township area are similar to those which characterize the paragneiss of the Britt and Kiosk Domains of Davidson et al., (1979). Most of the rocks are gneisses of metasedimentary origin which enclose lesser meta-plutonic rocks. The metasediments are the oldest rocks exposed and represent recrystallized derivatives of sandstone-arkose and intercolated shales, siltstones and calcareous sandstone. Local units containing epidote and amphibole probably indicate some original clay and carbonate component.

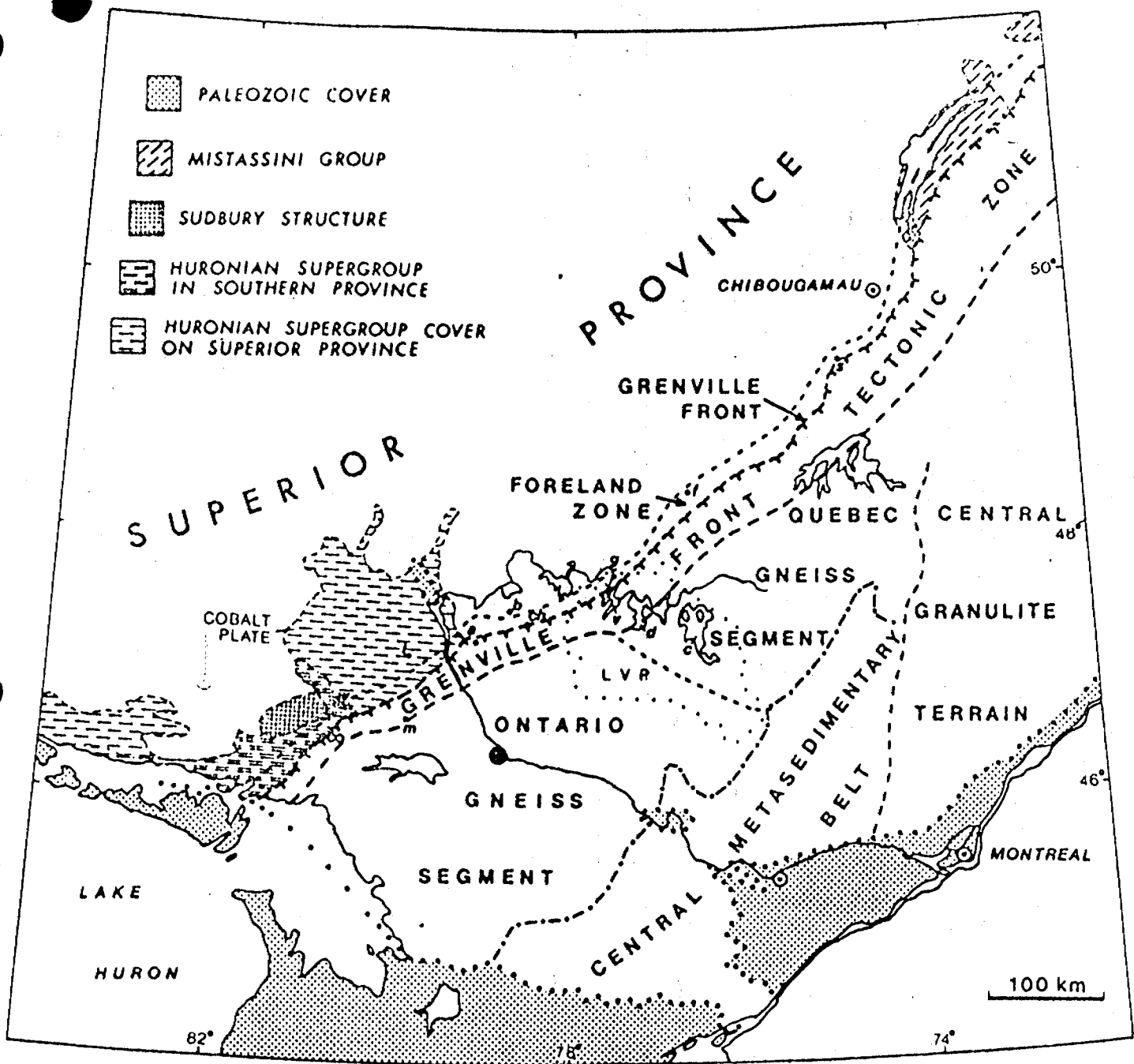


Fig. 4: Location of McVittie I and II Claim groups, Ontario Gneiss Segment Grenville Province, Ontario, (after Wynne-Edward, 1972).

Graphite occurs within semipelitic and pelitic gneiss units within the host paragneiss sequence. The graphite (or carbon) is probably of primary sedimentary origin having formed during metamorphism of carbon-rich shale, siltstone and wacke. Semi-pelitic assemblages are characterized by plagioclase-quartz-biotite-red almandine garnet-hornblende and minor graphite. Pelitic gneissess commonly contain a pale pink garnet, no hornblende and are the primary host for graphite concentrations. As well, the pelitic assemblages commonly contains local concentrations of pyrite, muscovite and sillimanite, giving rise to friable, rusty-weathering gossanous surface exposures. Other lithologies of pelitic affinity that can carry graphite concentrations include sillimanite-bearing quartzofeldspathic gneiss, biotite-quartz gneiss and a white plagioclase-quartz gneiss.

There are a few thin sills and dikes of amphibolite, syenite and tonalite within the area generally, Intrusive anorthosite-suite rocks are more common and one such intrusion is mapped in southern Maria Township (Lumbers, 1976). Late pegmatite dikes, (and sweat-outs) and lamprophyre dikes are also mapped.

All of the above lithologies (except the lamprophyres) were subjected to intense Late Precambrian dynamic metamorphism resulting in strong recrystallization and gneissic deformation. Middle to upper almandine-amphibolite facies mineral assemblages are identified, (Lumbers, 1974) and Davidson et al., (1979), suggest that granulite facies assemblages can be observed.

The gneissic metasediments are complexly folded with relatively tight, recumbent folds commonly developed. Broad open folds and gentle flexures are superimposed on the main structural fabric. Major west to northwest trending faults related to the Ottawa-Bonnechere Graben and Lake Huron Rift, (Innes and Colvine, 1979) are present along northern Maria Township paralleling the Ottawa-Temiskaming River valleys.

### Geology of the McVittie I and McVittie II Properties

#### Introduction

During September and November, 1982, the writer carried out a preliminary geological reconnaissance over the McVittie I and McVittie II graphite properties. Prior to this examination, the writer traversed various parts of both claim groups and the exposed graphite showings were examined. Characterization samples from the main mineralized horizons were collected. A brief description of the reconnaissance geology and graphite mineralization from each of these claim groups follows.

#### McVittie Group I

The McVittie Group I claims are located in Lots 63 and 64, concessions A and B, Maria Township, (fig. 2). A rusty gossan approximately 90m wide along the north side of Highway 17 marks the main graphitic horizon in this claim group. The mineralized

zone trends northwesterly and dips at about  $40^{\circ}$  to the northeast. At this location, disseminated flake graphite visually estimated to range between 2% and 6%, occurs in thinly laminated graphite-quartz-plagioclase-biotite-sillimanite metapelite. Graphitic sillimanite-bearing quartzofeldspathic gneiss is also present in the section. Mauve coloured garnet occurs associated with the more biotitic semi-pelitic rocks. This same graphitic horizon may be traceable for up to 500m in a northerly direction, as similar mineralization was observed in outcrop along this trend through claims E0630672 and E0630675. Reconnaissance south of Highway 17 has confirmed the presence of graphite mineralization in identical lithologies approximately 350m southeast of the highway exposures. Much of the claim group is covered by till and as a consequence, not much outcrop was observed. However, disseminated flake graphite can be found in the overburden along the trend of the showings.

This mineralization has not as yet been tested, (to the best of the writer's knowledge) however, it is very similar to that found on the McVittie II property and to the Tagliamonte property in the south central Maria Township. It is the writer's opinion that both properties and the Tagliamonte property are in fact on the same graphitic horizon or belt.

Flake size varies from 1mm to 2mm in the cleaner sandy facies and is up to 6mm in size in the more biotite-feldspar-quartz facies (visual estimate only). Thin quartz-feldspar segregations commonly have coarse flake and composite flake (smears) developed

along mineral segregation interfaces. With so little of the stratigraphy exposed it is difficult to estimate graphitic horizon thickness. There are well mineralized sections up to 8m thick interbedded with thin (1m to 3m) relatively barren gneisses exposed along the highway section.

### McVittie Group II

The McVittie Group II property is defined within Lots 50 to 53, concession B and Lots 8 to 13, concessions 12 and 13, (fig. 3). This property also lies within the Bissett Creek graphite belt approximately 5 km southeast of the McVittie Group 1 property and about 1.5 km southeast of the village of Bissett Creek on Highway 17. The Bissett Creek Road turn-off is located midway between the two main graphitic exposures on the property, (along Highway 17).

Graphitic horizons similar to those described within the McVittie Group I property, outcrop along Highway 17, in claims E0630658, 59, 61 and 62 and are marked by a pronounced gossan. At these locations, graphite-sillimanite-plagioclase-quartz-biotite metapelites occur intercalated with lesser barren biotite-quartz-feldspar-garnet (red) gneisses. At least seven mineralized horizons are identified within the section along the highway and these vary from 2.5m to greater than 7m thick. The intercalated barren zones average about 1.5m thick. Occasionally a relatively barren zone will carry coarse flake along mineral segregation

interfaces and as clots in the quartz-rich sections.

There is evidence for flexure folding in the Highway showings. Northwest of the Bissett Creek Road turn-off, the gneissosity trends northeasterly, dipping at  $35^{\circ}$  to  $50^{\circ}$  NW and swings to a west-northwest trend and a  $20^{\circ}$  to  $30^{\circ}$  NE dip, southeast of the turn-off.

As was previously suggested, the presence of sillimanite and minor pyrite within the graphitic zones give a friable gossanous expression in outcrop. Within the mineralized facies, graphite occurs as disseminated flake (2% to 8% on visual estimate) averaging 2mm to 3mm in size. Flake to 5mm was observed associated with the quartz-rich segregations. Two units of grey (white weathering) graphite + quartz + white feldspar gneiss were present in the showings and these units were relatively high-grade, (perhaps approaching 10%).

All of the mineralized horizons can be considered as being open, and in that regard, outcrops of mineralized gneiss were observed approximately 350m south of the highway in claim E0630661. Much of the claim group is covered by a thin mantle of till and as was the case in the McVittie I property, disseminated flake graphite can be found in the overburden between and along strike of the outcrop showings. Character samples of the mineralized horizon were collected during the field reconnaissance.

### Other Economic Considerations

The graphitic horizons exposed on each of the two claim groups are confined to the Bissett Creek graphite belt and as such, areas within the belt and outside of the claim groups have potential to host additional mineralization. The area between the McVittie Group I and Group II properties is mainly patented land and is largely covered by overburden. The northwest extension of the McVittie Group I property is limited by thick overburden and the Ottawa River. The area having the highest potential in this regard lies to the southeast of the McVittie Group II property.

Corundum is known from similar high metamorphic grade graphitic metapelites within the Grenville Province and the Central Gneiss Belt specifically (Davidson, et al., 1982). Similar graphitic aluminous metapelites from Ceylon and Madagascar host economic deposits of gem quality corundum (variety ruby). Deposits of this type have not been recognized in the Grenville Province, probably because this association is not commonly known, nor this type of deposit specifically explored for.

There is an association of gold mineralization with known graphitic deposits within the Grenville Province generally. The nature of these occurrences and their economic potential is unknown.

The value of graphite has been known since the 15th century and is based on its inherent qualities. The mineral possesses unctuousness qualities which have been fully utilized. Its refractoriness has long been known and is one of the principal qualities sought by present users. It has good conductivity of



Report for

Donegal Resources Ltd.

"Estimated Graphite Ore Grades of the Various Trenches  
of the Donegal Property"

**RECEIVED**  
MAR 2 1983  
MINING LANDS SECTION

Porto Metal Mills Ltd.  
December 10th, 1982.

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## Introduction

Graphite was concentrated by means of flotation, in order to obtain an estimated graphite ore grade for samples from each of the following trenches: 0,1,2,3,5,9, and A to R. Various reagents were used in the testing of trenches 5,C,K,N, and P.

## Experimental Procedure

Numerous bags of ore were received weekly, representing different trenches of the property. One to six samples per trench were collected for study.

### (i) Sample Preparation

The following steps apply to each trench sample: The sample was crushed to -1 inch using a jaw crusher, and subsequently screened to 100+ mesh. The 20+ mesh fraction was pulverized and re-screened until approximately 20% or less of 20m remained. The latter step may have been repeated several times in order to achieve a grind suited to the ore. The -100 mesh fraction was discarded, and a screen analysis was carried out on the -10m, 100+m ore.

### (ii) Flotation

All samples to be floated weighed 2000.0 g, with the exceptions of A,ND1,ND2,KD1 and KD2; not enough sample was available. Their results have been converted to 2000.0g feeds for comparison purposes only.

All flotation tests, except for samples from trenches 5,C,K,N, and P, were conducted in a similar manner, with 70% pine oil being the sole reagent. The experimental tests were performed with various reagents such as soda ash, sodium silicate, frothers, etc. (Refer to tables 1-11) At the completion of each flotation test, the concentrate

was washed, dried, and then screened to 100+ mesh. The estimated percent graphite of the ore samples provided from each trench, was calculated by concentrate recovery.

Experimental Results

Test results are tabled in Appendix I.

Discussion of ResultsI. Grade of Trenches

Most numerically designated trenches have higher grades than do most alphabetically designated trenches. (Refer to graph 1). The greatest graphite ore grade values are found at trenches 1,3,9,K,L, and R, (5.75, 4.98, 5.80, 4.60, 4.65 and 6.00 respectively), while the lowest grades are found at trenches F and G (1.02% and 0.9% respectively). The overall average estimated graphite ore grade is 3.23%.

II. % Pulverized Ore and Graphite, Retained on Each Screen:

The values on graphs 2 - 25 were obtained by averaging the % retained retained figures from all samples of each trench, for each screen size.

(a) Trenches 0,1,3,4,5,9,:

The pulverized ore curves for these trenches (except trench 1) show that: - less than 16% of the sample is retained on the 10m and 20m screens; - the greatest amount of pulverized ore is retained on the 35m screen (average 46%); the amount decreases to approximately 30% on the 65m screen, and to 11% or less on the 100m screen. The concentrate curves show that the greatest percentage of concentrate is found on the 35m and 65m screens (86% average). An average of less than 5% graphite was retained on the 20m. These trenches average 90.21% concentrate 65+ mesh. Trench #1 sample contained 37% 20m size ore. This coarse grind did not show favorable results. (See graphs 2 - 7).

(b) Trenches A to R:

The pulverized ore curves peak at 35m and then decrease. The concentrate curves show that the highest % of graphite is found on the 35m and 65m screens (85% average). These trenches average 89.51% concentrate 65+ mesh. (see graphs 8-25)

### III. Grade of Various Ore Sizes:

Graphite grades of trenches with several samples were averaged for each mesh size. (Refer to tables 12 to 23).

#### (a) Trenches 0,1,3,4,5,9:

The best grades of pulverized ore from these trenches are found on the 35m, 65m and 100m sizes (3.91%, 6.33% and 4.52% respectively). The grades of most trenches peak at the 65m size. (Refer to graphs 26 to 31).

#### (b) Trenches A to R:

The best ore grades of the pulverized ore are found on the 35m, 65m and 100m sizes (2.3%, 3.52% and 2.52% respectively). The grades of most trenches peak at 65m. (Refer to graphs 26 to 31).

### IV. Experimental Tests - Trenches 5,C,K,N and P:

(a) Trench 5: Six flotation tests were performed on this trench. Five tests consisted of adding soda ash (to raise <sup>PH</sup> level), kerosene, and pine oil. The last test was conducted in a similar manner, but F77A frother replaced the pine oil. No apparent significant difference resulted.

#### (b) Trench C:

(i) C100 vs C65: The 100m fraction was eliminated in the C65 test, resulting in an increase in the amount of 20m and 35m graphite recovered. The total % graphite recovered for C100 was 4.0% and for C65 was 3.9%.

(ii) CD1 vs CD2: Warm and cold water were tested, to determine if warm water would improve the % graphite recovered. The difference in resulting grades is minimal (2.4% vs 2.7%). (Refer to graph 32)

(iii) Trench K: Three tests are compared - K (pine oil) vs KD1 ( $\text{Na}_2\text{SiO}_3$ ,  $\text{Na}_2\text{CO}_3$ , Kerosene, Pine Oil) vs KD2 ( $\text{Na}_2\text{CO}_3$ , Kerosene, Pine Oil).

KD1 and KD2 have much cleaner concentrates than K, and more

importantly, show an increase in % graphite (K-4.2%, KD1 - 4.4%, KD2 - 5.2%) (Refer to graph 32.)

(ii) Trench N: Three tests are compared - N(Pine oil) vs ND1( $\text{Na}_2\text{SiO}_3$ , F73) vs ND2 ( $\text{Na}_2\text{SiO}_3$ , Pine oil). ND1 has a higher % graphite (4.2%) than N (3.3%) and ND2 (3.5%), therefore possibly indicating, that F73 frother is more potent than pine oil. (Refer to graph 32).

(v) Trench P: Three tests are compared - Po (pine oil) vs  $P_1$  ( $\text{Na}_2\text{CO}_3$ , Pine oil) vs  $P_2$  ( $\text{Na}_2\text{CO}_3$ , Kerosene, pine oil). P0 (2.1%) shows a higher % graphite than  $P_1$  (1.3%) and  $P_2$  (1.6%). However,  $P_1$  and  $P_2$  displayed cleaner concentrates.

CONCLUSION

The overall estimated graphite ore grade, averaged from all trenches of the property, is 3.23%. Numerically designated trenches (0,1,3,4,5 and 9) generally have higher grades, as these trenches were blasted. Alphabetically designated trenches (A to R) generally have lower grades, as these trenches were sampled from the surface only. (Surface weathering - erosion, frost, etc. - has caused a good deal of the graphite flakes to disperse). An overall higher grade of graphite would be expected for trenches A to R when they are blasted. The testing of various reagents shows that the combination of soda ash, pine oil - and possibly kerosene - provides a good graphite grade by recovery.

For all trenches, the bulk of the concentrate (average 85.23%) is found on the 35m and 65m screens, indicating that the ore consists of large, highly marketable graphite flakes. A grind of -20m, 100+m, or even -20m, 65+m would probably produce a much higher graphite grade.

Respectfully Submitted,

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NOTE

All testing was done on samples submitted by Donegal Resources Ltd.

All testing on the samples submitted was conducted according to good testing standards. Neither we, nor our employees, shall be responsible for any loss or damage resulting directly, or indirectly from any defaults, errors or omissions.

Porto Metal Mills Ltd.

APPENDIX I

TABLE 1

SUMMARY OF FLOTATION TESTS TRENCHES 0 and 1

CONDITION	TRENCH 0					TRENCH 1	
	SAMPLE # / FLOTATION TEST #						
	1/5	2/3	3c/2-1	3e/2-2	4/4	1-P/1	1-T/2
% SOLIDS	I-----			22.22			I-----
AIR	I-----			OFF			I-----
PINE OIL (lb/ton)	.18	.15	.20	.15	.15	.20	.22
SCOOP TIME (min.)*	3	3	-	2	3	5	2
AIR	I-----			ON			I-----
PINE OIL (lb/ton)	-	-	-	-	.07	-	-
SCOOP TIME (min.)	3	3	5	1	4	3	8
% GRAPHITE (Recovered)	1.80	2.10	1.50	1.70	2.90	9.00	2.50

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.

TABLE 2

SUMMARY OF FLOTATION TESTS TRENCH 3

CONDITION	SAMPLE # / FLOTATION TEST #					
	A/13	B/14	C/10	D/8	E/12	F/11
% SOLIDS	I-----	-----	All 22.22% Solids	-----	-----	I-----
AIR	I-----	-----	All Off	-----	-----	I-----
PINE OIL (lb/ton)	.20	.20	.15	.18	.20	.15
SCOOP TIME (min.)*	3	4	3	3	3	4
AIR	I-----	-----	All On	-----	-----	I-----
PINE OIL (lb/ton)	-	-	.03	-	-	.03
SCOOP TIME (min.)	3	3	2	3	3	3
% GRAPHITE (Recovered)	7.10	5.30	2.30	3.20	6.80	5.20

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.

TABLE 3

SUMMARY OF FLOTATION TESTS TRENCH 4

CONDITION	SAMPLE # / FLOTATION TEST #				
	A/9	B/18	C/6	D/15	E/7
% SOLIDS	I-----	-----	22, 22%	-----	I-----
AIR	I-----	-----	Off-----	-----	I-----
PINE OIL (lb/ton)	.18	.15	.15	.20	.18
SCOOP TIME (min.)*	3	2	2	3	5
AIR	I-----	-----	On-----	-----	I-----
PINE OIL (lb/ton)	-	.05	.05	-	-
SCOOP TIME (min.)	1	2	3	3	2
% GRAPHITE (Recovered)	1.92	2.08	2.90	4.50	4.20

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.

TABLE 4

## SUMMARY OF FLOTATION TESTS TRENCH 5

CONDITION	SAMPLE # / FLOTATION TEST #					
	1/55	2/60	3F/57	3R/56	4/59	5/58
% SOLIDS	I-----	-----	All 22.22%	Solids	-----	I-----
AIR	I-----	-----	All Off	-----	-----	I-----
pH	7.30	6.80	7.10	6.95	6.60	6.80
Na <sub>2</sub> CO <sub>3</sub> (lb/ton)	I-----	-----	All 3.0	-----	-----	I-----
pH	9.90	9.80	10.00	9.70	9.70	9.80
REAGENT (lb/ton)	.20 K*	.20 K	.10 F**	.20 K	.20 K	.20 K
CONDITIONING TIME (min.)	2	2	1	2	2	2
PINE OIL (lb/ton)	.30	.30	-	.30	.30	.30
SCOOP TIME (min.) ***	2	2	2	3	2	2
AIR	I-----	-----	All On	-----	-----	I-----
SCOOP TIME (min.)	1	.50	.50	2	1	.50
% GRAPHITE (recovered)	3.50	2.10	1.80	1.70	3.10	4.90

\*K - Kerosene (promoter)

\*\*F - F77A (frother)

\*\*\* greatest amount  
of graphite recovered  
at this stage of flo-  
tation.

TABLE 5

## SUMMARY OF FLOTATION TESTS TRENCH 9

CONDITION	SAMPLE # / FLOTATION TEST #						
	H1 <sup>x</sup>	H2 <sup>xx</sup>					
% SOLIDS	22.2	22.2					
AIR	OFF	OFF					
PINE OIL (lb/ton)	0.15	0.17					
SCOOP TIME (min.)*	2	2					
AIR	ON	ON					
PINE OIL (lb/ton)	.03	-					
SCOOP TIME (min.)	3	4					
% GRAPHITE (Recovered)	5.9	5.6					

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.  
 x H1 - Hi-Grade #1 ,                      xx H2 - Hi-Grade #2

TABLE 6

SUMMARY OF FLOTATION TESTS A and B

CONDITION	TRENCH A				TRENCH B		
	SAMPLE # / FLOTATION TEST #						
	F <sup>1</sup> /17	1/19	A/27	2-1 <sup>1</sup> /22	B/28	2/16	2-2 <sup>1</sup> /23
% SOLIDS	I-----22,22-----I						
AIR	OFF	OFF	OFF	OFF	ON	OFF	OFF
PINE OIL (lb/ton)	.20	.20	.15	.17	.18	.20	.18
SCOOP TIME (min.)*	4	3	1	2	9	3	3
AIR	ON	ON	ON	ON	-	ON	ON
PINE OIL (lb/ton)	-	-	-	-	-	-	-
SCOOP TIME (min.)	3	3	2	3	-	3	4
% GRAPHITE (Recovered)	5.30	3.50	2.60	2.50	1.20	1.50	3.90

\*GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.

<sup>1</sup>F - Furthest on Road, <sup>1</sup>2-1 - 2nd last #1, <sup>1</sup>2-2 - 2nd last #2



TABLE 7

## SUMMARY OF FLOTATION TESTS TRENCH C

CONDITION	SAMPLE # / FLOTATION TEST #				
	2-3/24	C 100/31	C 65/32	CD1/46	CD2/47
% SOLIDS	I-----		22.22		I-----
AIR	I-----		OFF		I-----
WATER TEMP. (°C)	18	18	18	29	18
REAGENT (lb/ton)	P.O. .17	P.O. .17	P.O. .17	Na <sub>2</sub> SiO <sub>3</sub> 1.50	Na <sub>2</sub> SiO <sub>3</sub> 1.50
CONDITIONING TIME (min.)	.50	.50	.50	3.00	3.00
REAGENT (lb/ton)	-	-	-	P.O. .20	P.O. .20
SCOOP TIME (min.) *	2	3	3	2	2
REAGENT (lb/ton)	-	-	-	P.O. .03	P.O. .03
AIR	I-----		ON		I-----
REAGENT (lb/ton)	-	P.O. .03	-	-	-
SCOOP TIME (min.)	4	6	6	2	2
% GRAPHITE (recovered)	2.30	4.00	3.90	2.40	2.70

\*GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION  
 2-3 - 2nd last #3, CD1 - C dep 1, CD2 - C dep 2, P.O. - pine oil

TABLE 8

SUMMARY OF FLOTATION TESTS TRENCHES D, E, F, G, H

CONDITION	TRENCH D	TRENCH E	TRENCH F		TRENCH G	TRENCH H
	SAMPLE # / FLOTATION TEST #					
	D/29	E/33	Fr/30	Fc/30-2	G/38	H/34
% SOLIDS	I-----	-----	22.22	-----	-----	-----I
AIR	OFF	OFF	ON	ON	OFF	OFF
PINE OIL (lb/ton)	.18	.15	.17	.17	.15	.18
SCOOP TIME (min.)*	3	2	9	9	2	3
AIR	ON	ON	-	-	ON	ON
PINE OIL (lb/ton)	-	-	-	-	-	-
SCOOP TIME (min.)	2	3	-	-	3	3
% GRAPHITE (Recovered)	1.70	1.90	1.20	.83	.90	1.80

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.

TABLE 9

## SUMMARY OF FLOTATION TESTS TRENCHES I, J, K, L

CONDITION	TR. I	TR. J	TRENCH K			TRENCH L	
	SAMPLE # / FLOTATION TEST #						
	I/43	J/39	K/35	KD1/50	KD2/51	L/36	L,oil/37
% SOLIDS	-----			22.22	-----		
AIR	OFF	ON	OFF	OFF	OFF	OFF	OFF
REAGENT (lb/ton)	P.O. .18	P.O. .17	P.O. .15	Na <sub>2</sub> SiO <sub>3</sub> .76	-	P.O. .15	P.O. .15
pH	-	-	-	7.45	7.60	-	-
REAGENT (lb/ton)	-	-	-	Na <sub>2</sub> CO <sub>3</sub> 3.00	Na <sub>2</sub> CO <sub>3</sub> 3.00	-	-
pH	-	-	-	9.65	9.65	-	-
REAGENT (lb/ton)	-	-	-	K .10	K .10	-	-
REAGENT (lb/ton)	-	-	-	P.O. .15	P.O. .15	-	-
CONDITIONING TIME (min.)	-	-	-	5	5	-	-
SCOOP TIME (min.) *	2	2	2	2	1	2	3
AIR	ON	-	ON	ON	ON	ON	ON
SCOOP TIME (min.)	2	4	2	1	2	4	3
% GRAPHITE recovered	2.30	1.60	4.20	4.40	5.20	4.80	4.50

\*GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION  
P.O. - pine oil, KD1 - KDep 1, KD2 - KDep 2, K - Kerosene

TABLE 10

SUMMARY OF FLOTATION TESTS TRENCHES M,N,O

CONDITION	TRENCH M	TRENCH N			TRENCH O
	SAMPLE #		FLOTATION TEST #		
	M/40	N/42	ND1/48	ND2/49	O/41
% SOLIDS	I-----	-----	22, 22	-----	-----I
AIR	I-----	-----	OFF	-----	-----I
REAGENT (lb/ton)	P.O. .15	P.O. .18	Na <sub>2</sub> SiO <sub>3</sub> .50	Na <sub>2</sub> SiO <sub>3</sub> .50	P.O. .18
CONDITIONING TIME (min.)	-	-	3	3	-
REAGENT (lb/ton)	-	-	F** .20	P.O., .20	-
SCOOP TIME (min.)	2	2	No Conc.	2	3
AIR	I-----	-----	ON	-----	-----I
SCOOP TIME (min.)	3	2	3	1	5
% GRAPHITE RECOVERED	1.70	3.30	4.20	3.30	2.20

\*GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION

\*\* F - F73 (frother)

TABLE 11

SUMMARY OF FLOTATION TESTS- TRENCHES P,Q,R

CONDITION	TRENCH P			TRENCH Q	TRENCH R		
	SAMPLE #			FLOTATION TEST #			
	P <sub>0</sub> /44	P <sub>1</sub> /52	P <sub>2</sub> /53	Q/45	H5/25	H6/26	
% SOLIDS	I-----		22,22	-----	-----	-----I	
AIR	I-----		OFF	-----	-----	-----I	
pH	6.85	7.20	7.10	-	-	-	
REAGENT (lb/ton)	P.O. .20	Na <sub>2</sub> CO <sub>3</sub> 3.00	Na <sub>2</sub> CO <sub>3</sub> 3.00	P.O. .18	P.O. .18	P.O. .15	
pH	-	9.70	9.55	-	-	-	
REAGENT (lb/ton)	-	P.O. .30	K .15	-	-	-	
REAGENT (lb/ton)	-	-	P.O. .30	-	-	-	
CONDITIONING TIME	-	4	4	-	-	-	
SCOOP TIME * (min.)	2	1	2	2	3	3	
AIR	I-----		ON	-----	-----	-----I	
SCOOP TIME (min.)	2	2	1	1	2	2	
% GRAPHITE (recovered)	2.10	1.30	1.60	1.70	6.00	5.90	

\* GREATEST AMOUNT OF GRAPHITE RECOVERED AT THIS STAGE OF FLOTATION.  
 K - Kerosene  
 P.O. - pine oil

TABLE 12

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH 0							AVG. % RECOVERED
	SAMPLE #							
	1	2	3c	3f	4			
10	0.0	*25.00	2.94	3.33	0.63			1.73
20	0.12	1.39	0.32	4.06	0.88			1.33
35	1.85	1.87	1.24	1.24	2.43			1.73
65	3.00	2.77	2.79	2.10	3.95			2.92
100	1.96	1.77	2.37	1.48	3.16			2.15

\*Excluded from avg. % recovered calculation.

TABLE 13

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH 3							AVG. % RECOVERED
	SAMPLE #							
	A	B	C	D	E	F		
10	0.0	0.0	0.0	0.0	0.0	1.56		0.26
20	0.56	0.67	0.26	0.90	0.86	1.18		0.74
35	7.44	5.24	2.45	3.33	5.82	5.32		4.93
65	9.29	7.45	3.47	4.03	11.33	7.23		7.13
100	6.10	3.76	2.17	2.46	8.52	4.81		4.64

TABLE 14

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH 4							AVG. % RECOVERED
	SAMPLE #							
	A	B	C	D	E			
10	0.0	0.0	0.41	0.0	5.56*			0.10
20	0.46	0.47	0.77	0.48	2.66			0.97
35	1.23	1.74	3.35	4.55	3.88			2.95
65	2.70	3.08	4.17	6.87	5.25			4.41
100	1.87	2.78	2.69	4.21	3.32			2.97

\*Excluded from avg. % recovered calculation.

TABLE 15

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH 5							AVG. % RECOVERED
	SAMPLE #							
	1	2	3F	3R	4	5		
10	8.33	0.0	0.0	0.0	0.0	8.93		2.88
20	*18.18	0.46	0.91	0.81	1.79	4.74		1.74
35	3.06	1.79	1.69	1.36	2.60	4.45		2.49
65	3.45	2.49	2.19	2.14	4.21	5.60		3.35
100	2.63	2.56	1.30	2.07	3.11	4.48		2.69

\*Excluded from avg. % recovered calculation.

TABLE 16

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH A							AVG. % RECOVERED
	SAMPLE #							
	F*	1	A	2-1*				
10	8.14	0.0	6.56	1.85				4.14
20	1.84	.90	2.08	2.09				1.73
35	5.77	3.50	2.18	2.54				3.50
65	7.31	4.30	3.35	2.70				4.42
100	4.53	2.78	2.55	1.53				2.85

\*F - Furthest on Road  
2-1 - 2nd last #1

TABLE 17

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH B							AVG. % RECOVERED
	SAMPLE #							
	B	2	2-2*					
10	1.39	.93	7.60					3.31
20	.29	.28	9.87					3.48
35	.89	1.14	3.25					1.76
65	1.99	2.30	3.23					2.51
100	2.05	2.21	2.12					2.13

\*2-2 - 2nd last #2



TABLE 18

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH C							AVG. % RECOVERED
	SAMPLE #							
	2-3*	C100	C65	CD1	CD2			
10	3.03	6.67	6.67	6.25	0.0			4.52
20	0.99	1.83	2.12	0.61	.76			1.26
35	2.33	4.21	3.59	2.22	2.55			2.98
65	3.20	5.35	6.00	3.67	4.06			4.46
100	1.68	3.70	-	2.75	3.02			2.79

\* 2-3 - 2nd last #3

TABLE 19

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH K							AVG. % RECOVERED
	SAMPLE #							
	K	KD1	KD2					
10	0.0	5.42	5.42					3.61
20	.49	27.70	31.70					19.96
35	3.60	4.24	5.11					4.32
65	6.55	5.44	5.82					5.94
100	4.83	.72	2.16					2.57

TABLE 20

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH N							AVG. % RECOVERED
	SAMPLE #							
	N	ND1	ND2					
10	0.0	4.26	0.0					1.42
20	.46	6.69	3.66					3.60
35	3.43	4.48	3.18					3.70
65	4.76	4.29	3.76					4.27
100	2.90	1.66	2.38					2.31

TABLE 21

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	% GRAPHITE RECOVERED - TRENCH P							AVG. % RECOVERED
	SAMPLE #							
	P <sub>0</sub>	P <sub>1</sub>	P <sub>2</sub>					
10	50.00	25.00	25.00					33.33
20	1.00	.84	1.15					.99
35	1.42	.83	1.09					1.11
65	3.53	1.87	2.37					2.59
100	2.28	2.52	2.58					2.46

TABLE 22

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	AVERAGE % GRAPHITE (RECOVERED)						
	TRENCH #						
	1	9	D	E	F	G	H
10	0.20	5.00	3.41	0.00	0.60	0.00	0.00
20	0.48	2.93	0.81	0.22	0.09	0.02	0.19
35	5.22	6.16	1.12	1.64	0.75	0.34	1.39
65	13.11	7.08	2.81	2.50	1.54	1.60	2.89
100	11.01	3.66	3.56	1.89	1.46	1.73	1.89

TABLE 23

PERCENTAGE OF CONCENTRATE RECOVERED, BASED ON  
% OF PULVERIZED ORE RETAINED ON EACH SCREEN

MESH # (TYLER EQUIV.)	AVERAGE % GRAPHITE (RECOVERED)						
	TRENCH #						
	I	J	L	M	O	Q	R
10	0.00	0.00	1.85	0.00	0.00	0.00	1.25
20	0.07	0.52	2.53	0.07	0.52	0.57	2.04
35	1.75	1.36	4.62	1.40	1.98	1.23	6.49
65	3.60	2.31	5.97	2.61	3.19	2.54	7.53
100	2.07	1.57	4.31	1.84	3.06	2.43	4.39

SCREEN ANALYSIS #1-1 Pulverized Ore 1-P

SAMPLE: Donegal

DATE: Sept. 9/82

SCREEN TIME: 10 min.

WEIGHT USED: 526.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 1

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	9.10	1.73	1.73	98.27
20	116.40	22.13	23.86	76.14
35	220.60	41.93	65.79	34.21
65	128.70	24.46	90.25	9.75
100	51.30	9.75	100.00	-
TOTAL	526.10	100.00	-	-

SCREEN ANALYSIS #1-2 Conc. FT #1 1-P

SAMPLE: Donegal

DATE: Sept. 9/82

SCREEN TIME: 10 min.

WEIGHT USED: 180.g

% GRAPHITE

RECOVERY: 9.0%

Trench: 1

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.05	.03	.03	99.97
20	2.50	1.40	1.43	98.57
35	59.20	33.06	34.49	65.51
65	89.40	49.93	84.42	15.58
100	27.90	15.58	100.00	-
TOTAL	179.05	100.00	-	-

SCREEN ANALYSIS #1-3 Pulverized Ore 1-T

SAMPLE: Donegal

DATE: Sept. 9/82

SCREEN TIME: 10 min.

WEIGHT USED: 523g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 1

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	10.10	1.93	1.93	98.07
20	273.50	52.32	54.25	45.75
35	158.30	30.30	84.55	15.45
65	62.10	11.88	96.43	3.57
100	18.70	3.57	100.00	-
TOTAL	522.70	100.00	-	-

SCREEN ANALYSIS #1-4 Conc. FT #2 1-T

SAMPLE: Donegal

DATE: Sept. 9/82

SCREEN TIME: 10 min.

WEIGHT USED: 49.7g

% GRAPHITE  
RECOVERY: 2.5%

Trench: 1

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.20	.20	99.80
20	4.10	8.37	8.57	91.43
35	20.40	41.63	50.20	49.80
65	18.90	38.57	88.77	11.23
100	5.50	11.23	100.00	-
TOTAL	49.00	100.00	-	-

SCREEN ANALYSIS #2 Pulverized Ore

#3  
Coarse

SAMPLE: Bisset Creek (Mattawa Sample)

DATE: Sept. 20/82

SCREEN TIME: 10 min.

WEIGHT USED: 749g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.30	.17	.17	99.83
20	212.70	28.41	28.58	71.42
35	299.20	39.97	68.55	31.45
65	176.90	23.63	92.18	7.82
100	58.50	7.82	100.00	-
TOTAL	748.60	100.00	-	-



SCREEN ANALYSIS # 3 Conc. FT # 2-1

# 3  
Coarse

SAMPLE: Bisset Creek

DATE: Sept. 20/82

SCREEN TIME: 10 min.

WEIGHT USED: 29.5g

% GRAPHITE  
RECOVERY: 1.5%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.35	.35	99.65
20	1.80	6.27	6.62	93.38
35	9.90	34.50	41.12	58.88
65	13.20	45.99	87.11	12.89
100	3.70	12.89	100.00	-
TOTAL	28.70	100.00	-	-

SCREEN ANALYSIS #4-1 Pulverized Ore

#3  
Fine

SAMPLE: Bisset Creek

DATE: Sept. 20/82

SCREEN TIME: 10 min.

WEIGHT USED: 518g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.80	.15	.15	99.85
20	10.20	1.97	2.12	97.88
35	252.10	48.72	50.84	49.16
65	191.20	36.96	87.80	12.20
100	63.10	12.20	100.00	-
TOTAL	517.40	100.00	-	-

SCREEN ANALYSIS #4-2 Conc. FT# 2-2

#3  
Fine

SAMPLE: Bisset Creek

DATE: Sept. 20/82

SCREEN TIME: 10 min.

WEIGHT USED: 33.7g

% GRAPHITE  
RECOVERY: 1.7%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.31	.31	99.69
20	1.60	4.86	5.17	94.83
35	12.10	36.78	41.95	58.05
65	15.50	47.11	89.06	10.94
100	3.60	10.94	100.00	-
TOTAL	32.90	100.00	-	-

SCREEN ANALYSIS #5 Pulverized Ore

#2

SAMPLE: Bisset Creek

DATE: Sept. 21/82

SCREEN TIME: 10 min.

WEIGHT USED: 513g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.02	.02	99.98
20	60.70	11.84	11.86	88.14
35	249.90	48.74	60.60	39.40
65	149.90	29.24	89.84	10.16
100	52.10	10.16	100.00	-
TOTAL	512.70	100.00	-	-

SCREEN ANALYSIS # 6 Conc. FT #3

#2

SAMPLE: Bisset Creek

DATE: Sept. 20/82

SCREEN TIME: 10 min.

WEIGHT USED: 41.7g

% GRAPHITE  
RECOVERY: 2.1%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.24	.24	99.76
20	3.30	7.97	8.21	91.79
35	18.20	43.96	52.17	47.83
65	16.20	39.13	91.30	8.70
100	3.60	8.70	100.00	-
TOTAL	41.40	100.00	-	-

SCREEN ANALYSIS #7 Pulverized Ore

#4

SAMPLE: Bisset Creek

DATE: Sept. 21/82

SCREEN TIME: 10 min.

WEIGHT USED: 662g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	5.30	.80	.80	99.20
20	79.00	11.94	12.74	87.26
35	288.90	43.64	56.38	43.62
65	218.60	33.03	89.41	10.59
100	70.10	10.59	100.00	-
TOTAL	661.90	100.00	-	-

SCREEN ANALYSIS #8 FT #4 Conc.

#4

SAMPLE: Bisset Creek

DATE: Sept. 21/82

SCREEN TIME: 10 min.

WEIGHT USED: 57.2g

% GRAPHITE  
RECOVERY: 2.9%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.18	.18	99.82
20	2.10	3.74	3.92	96.08
35	21.20	37.72	41.64	58.36
65	26.10	46.44	88.08	11.92
100	6.70	11.92	100.00	-
TOTAL	56.20	100.00	-	-

SCREEN ANALYSIS # 9 Pulverized Ore

#1

SAMPLE: Bisset Creek

DATE: Sept. 21/82

SCREEN TIME: 10 min.

WEIGHT USED: 504 g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.60	.12	.12	99.88
20	107.10	21.28	21.40	78.60
35	190.90	37.92	59.32	40.68
65	155.90	30.97	90.29	9.71
100	48.90	9.71	100.00	-
TOTAL	503.40	100.00	-	-



SCREEN ANALYSIS #10 Conc. FT #5

#1

SAMPLE: Bisset Creek

DATE: Sept. 21/82

SCREEN TIME: 10 min.

WEIGHT USED: 36.9g

% GRAPHITE  
RECOVERY: 1.8%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.50	1.35	1.35	98.65
35	14.00	37.94	39.29	60.71
65	18.60	50.41	89.70	10.30
100	3.80	10.30	100.00	-
TOTAL	36.90	100.00	-	-

SCREEN ANALYSIS # 11 Pulverized Ore 4C

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 404g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	4.90	1.21	1.21	98.79
20	88.90	22.01	23.22	76.78
35	160.30	39.68	62.90	37.10
65	113.90	28.19	91.09	8.91
100	36.00	8.91	100.00	-
TOTAL	404.00	100.00	-	-

SCREEN ANALYSIS # 12 Conc. FT #6 4C

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 58.5g

% GRAPHITE  
RECOVERY: 2.9%

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.17	.17	99.83
20	3.40	5.82	5.99	94.01
35	26.60	45.55	51.54	48.46
65	23.50	40.24	91.78	8.22
100	4.80	8.22	100.00	-
TOTAL	58.40	100.00	-	-

SCREEN ANALYSIS #13 Pulverized Ore. 4-E

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 433g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.40	.09	.09	99.91
20	39.00	9.01	9.10	90.90
35	203.70	47.08	56.18	43.82
65	145.90	33.72	89.90	10.10
100	43.70	10.10	100.00	-
TOTAL	432.70	100.00	-	-

SCREEN ANALYSIS # 14 Conc. FT #7 4-E

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 83.6g

% GRAPHITE  
RECOVERY: 4.2%

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	COMULATIVE	
10	.10	.12	.12	99.98
20	4.80	5.75	5.87	94.13
35	36.50	43.71	49.58	50.42
65	35.40	42.40	91.98	8.02
100	6.70	8.02	100.00	-
TOTAL	83.50	100.00	-	-

SCREEN ANALYSIS #15 Pulverized Ore 3-D

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 423g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.40	.09	.09	99.91
20	56.20	13.30	13.39	86.61
35	190.40	45.05	58.44	41.56
65	132.60	31.38	89.82	10.18
100	43.00	10.18	100.00	-
TOTAL	422.60	100.00	-	-

SCREEN ANALYSIS #16 Conc. FT #8 3-D

SAMPLE: Donegal

DATE: Sept. 30/82

SCREEN TIME: 10 min.

WEIGHT USED: 63.7g

% GRAPHITE  
RECOVERY: 3.2%

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	2.40	3.83	3.83	96.17
35	30.00	47.85	51.68	48.32
65	25.30	40.35	92.03	7.97
100	5.00	7.97	100.00	-
TOTAL	62.70	100.00	-	-

SCREEN ANALYSIS # 17 Pulverized Ore, 4A

SAMPLE: Donegal

DATE: Sept. 30, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 398g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	COMULATIVE	
10	0	0	0	100.00
20	13.00	3.27	3.27	96.73
35	182.70	46.01	49.28	50.72
65	147.20	37.07	86.35	13.65
100	54.20	13.65	100.00	-
TOTAL	397.10	100.00	-	-



SCREEN ANALYSIS # 18 Conc. FT #9 4A

SAMPLE: Donegal

DATE: Sept. 30, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 38.3g

% GRAPHITE RECOVERY: 1.92

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.30	.82	.82	99.18
35	11.30	30.79	31.61	68.39
65	20.00	54.49	86.10	13.90
100	5.10	13.90	100.00	-
TOTAL	36.70	100.00	-	-

SCREEN ANALYSIS # 19 Pulverized Ore, 3C

SAMPLE: Donegal

DATE: October 1, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 399g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.50	.13	.13	99.87
20	85.50	21.47	21.60	78.40
35	151.00	37.91	59.51	40.49
65	119.90	30.10	89.61	10.39
100	41.40	10.39	100.00	-
TOTAL	398.30	100.00	-	-

SCREEN ANALYSIS # 20 Conc. FT #10 3C

SAMPLE: Donegal

DATE: October 1, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 46.5g

% GRAPHITE  
RECOVERY: 2.3

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.10	2.44	2.44	97.56
35	18.60	41.24	43.68	56.32
65	20.90	46.34	90.02	9.98
100	4.50	9.98	100.00	-
TOTAL	45.10	100.00	-	-

SCREEN ANALYSIS # 21 Pulverized Ore, 3F

SAMPLE: Donegal

DATE: October 1, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 369g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.60	.16	.16	99.84
20	63.90	17.35	17.51	82.49
35	147.40	40.01	57.52	42.48
65	112.10	30.43	87.95	12.05
100	44.40	12.05	100.00	-
TOTAL	368.40	100.00	-	-

SCREEN ANALYSIS # 22 Conc. FT #11 3F

SAMPLE: Donegal

DATE: October 1, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 103g

% GRAPHITE  
RECOVERY: 5.2

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.05	.05	.05	99.95
20	4.10	4.00	4.05	95.95
35	42.60	41.62	45.67	54.33
65	44.00	43.00	88.67	11.33
100	11.60	11.33	100.00	-
TOTAL	102.35	100.00	-	-

SCREEN ANALYSIS # 23 Pulverized Ore, 3E

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 546g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.02	.02	99.98
20	92.30	16.90	16.92	83.08
35	250.20	45.82	62.74	37.26
65	149.60	27.40	90.14	9.86
100	53.80	9.86	100.00	-
TOTAL	546.00	100.00	-	-

SCREEN ANALYSIS # 24 Conc. FT #12 3E

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 136g

% GRAPHITE  
RECOVERY: 6.8

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	2.90	2.15	2.15	97.85
35	53.30	39.45	41.60	58.40
65	62.10	45.96	87.56	12.44
100	16.80	12.44	100.00	-
TOTAL	135.10	100.00	-	-

SCREEN ANALYSIS # 25 Pulverized Ore, 3-A

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 394g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.05	.05	99.95
20	45.90	11.67	11.72	88.28
35	169.10	43.00	54.72	45.28
65	133.30	33.89	88.61	11.39
100	44.80	11.39	100.00	-
TOTAL	393.30	100.00	-	-



SCREEN ANALYSIS # 26 Conc. FT #13 3-A

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 142.9g

% GRAPHITE  
RECOVERY: 7.1

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.30	.91	.91	99.09
35	64.00	45.01	45.92	54.08
65	63.00	44.30	90.22	9.78
100	13.90	9.78	100.00	-
TOTAL	142.20	100.00	-	-

both heat and electricity and is inert to a large range of reagents. It also has the quality of miscibility with other materials and liquids. More recently its strength in combination with lightness of weight have become important. New uses for graphite are growing exponentially, some of them experimental and others proven. The most exciting horizon perhaps is the carbon fabric industry. Currently, this industry uses manufactured carbon derived from the reprocessing of coal by-products. Experimentation using natural graphite flake in place of the manufactured graphite is currently underway (E. Blanchard, per. comm.). At present there are three basic markets established for graphite (carbon), and these include; crucible, carbon-refractories and carbon additives. The specifications and relative values of these markets is beyond the scope of this report and the reader is referred to current market and industry literature.

### Conclusions

Significant graphite mineralization is exposed on both claim groups. Both deposits are probably part of the same graphitic paragneiss belt, the Bissett Creek Belt. Neither deposit has a history of exploration, however, reconnaissance mapping would suggest that both deposits have potential for significant strike lengths and widths in individual and as composite stratigraphic horizons. The estimated flake size and graphite content are within current industry specifications.

Nowhere is the overburden very thick and this must be considered as a positive element in the property's assessment. Low stripping ratios, together with relatively flat outcrop is present within each of the properties. Even in areas of cover, the graphitic zone can be traced using the disseminated graphite flake present in the overlying soils. Relatively isolated with respect to other land uses, this area is at the same time easily accessible and has transportation and power facilities immediately available.

### Recommendations

The following recommendations are based on the preliminary reconnaissance and are designed to further define grade, character and limits of the mineralized zones.

1. Airphoto coverage for Maria Township should be obtained in order to facilitate mapping and further exploration and definition of the Bissett Creek graphite belt.
2. A series of basemaps should be drafted to cover both properties collectively and individually. Because the mineralized horizons appear to have shallow dips and are highly folded, (recumbent, flexure and interference folds) it is advised that topographic basemaps be prepared for each claim group. This is necessary for projection of specific mineralized horizons, interpreting exploration data, and ultimately for spotting drill sites. Estimates of mineralized horizon thickness from surface exposures and trenching would also benefit.
3. Baselines should be established across both claim groups, parallel to or using Highway 17 and grids cut at 100m centres.
4. The grids should be surveyed using VLF with readings taken at 15m stations.
5. The grids should be mapped and all graphitic horizons sampled. Close attention must be paid to structural characteristics

because of the shallow dips and the nature of the folding. This information will be necessary in interpreting the VLF survey data.

6. The mineralized horizons, (defined by 4 and 5 above) should be trenched and bulk sampled.
7. Each sample should be representative of the mineralized horizon and the sample size should be in the order of 10 to 20 kilograms. Collected samples should be tested for graphite content, recoverability (floatation testing), carbon content of the concentrate, and the range and percentage of flake size established.
8. In areas of till cover and between known mineralized horizons, soils should be examined to help in projecting strike continuation of the mineralization. This can be done in conjunction with the geological survey.
9. The southeast extension of the McVittie Group II property through to the Powell Lake area, (see map P. 1197, Lumbers, 1976) should be prospected for additional graphite showings.
10. A review of all of the above data will determine the when and where of exploratory drilling targets.

BUDGET

The following budget is prepared as an estimate only and does not include any allowance for drilling. A second budget for this phase of exploration, should it be warranted, can only be prepared after an assessment of the data gained from the recommendations.

1. Airphoto coverage .....	\$ 100.00
2. Basemap preparation .....	\$ 750.00
3. Baseline and grids .....	\$ 5,000.00
4. VLF surveys .....	\$ 3,500.00
5. Geological mapping and consulting .....	\$ 4,500.00
6. Trenching and stripping .....	\$10,000.00
7. Sampling, prep. and shipping, assaying, floatation and graphite separation testing .....	\$ 6,500.00
8. Additional prospecting .....	\$ 1,500.00
9. Logistics for above .....	\$ 3,500.00
10. Supervision and consulting .....	\$ 5,000.00
11. Preparation of maps, reports and assessment filings. ....	\$ 2,500.00
	<hr/>
sub-total .....	\$42,850.00
+ 10% contingency .....	\$ 4,300.00
	<hr/>
TOTAL .....	\$47,150.00
	=====

SELECTED REFERENCES

Davidson, A.

1982: Graphite Occurrences in the Algonquin Region, Grenville Province, Ontario; G.S.C. Open File 870.

Davidson, A., Britton, J. M., Bell, K., and Blenkinsop, J.

1979: Regional Synthesis of the Grenville Province of Ontario and Western Quebec; Current Research, Part B, G.S.C., Paper 70-1B, p. 153-172.

G.S.C.

Aeromagnetic Maps: 14686, Mattawa; 14676, Kiosk; 14586, Maganasipi River; 14576, Brent; 14476, Des Joachims; 14376, Chalk River.

Innes, D. G. and Colvine, A.

1979: Metallogenetic Development of the Eastern Part of the Southern Province of Ontario; Ontario Geological Survey, Misc., Paper 90.

Lumbers, S. B.

1972: Mattawa-Deep River Area, Dist. of Nipissing and County of Renfrew; p. 139-143 in Summary of Field Work, 1972, Ont. Div. of Mines, MP 53.

1973: Mattawa-Deep River Area, Dist. of Nipissing and County of Renfrew; p. 144-147, in Summary of Field Work, 1973, Ont. Div. of Mines, MP 56.

1974: Mattawa-Deep River Area, Dist. of Nipissing and County of Renfrew; p. 146-149 in Summary of Field Work, 1974, Ont. Div. of Mines, MP 59.

1976: Mattawa-Deep River Area, (Eastern Half) District of Nipissing and County of Renfrew; Ont. Div. of Mines, Prelim. Map P. 1197, scale 1:63,360.

N.T.S. 31/K3W,4; 31L/1E,8E.

Wynne-Edward, H. R.

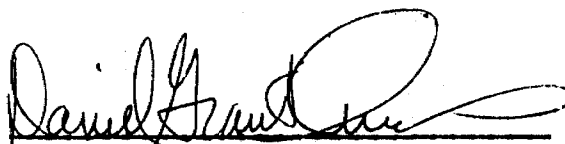
1972: The Grenville Province; in Variations in Tectonic Styles in Canada, ed. R. A. Price and R. J. W. Douglas; G.A.C., Special Paper No. 11, p. 263-334.



C O N S E N T

I, DANIEL GRANT INNES, do hereby consent to the use by DATUMONE PETROLEUM LTD., of my report on the McVITTIE GROUP I and McVITTIE GROUP II PROPERTIES, Maria Township, County of Renfrew, Ontario, November 20, 1982, in any statement of material facts or prospectus of DATUMONE PETROLEUM LTD., and the filing of such report with the Vancouver Stock Exchange and/or Superintendent of Brokers for British Columbia.

Dated this 20th day of November, 1982.



Daniel Grant Innes  
H.B. Sc., M. Sc., F.G.A.C.



C E R T I F I C A T E

I, DANIEL GRANT INNES, of the Town of Callander, in the District of Parry Sound, in the Province of Ontario, hereby certify as follows;

1. That I am a consulting geologist and reside at R.R. No. 1, Wasi Road, Callander, Ontario.
2. That I hold a Master of Science degree in Geology from Laurentian University, Sudbury, Ontario.
3. That I have been practising in my profession since 1968 in Canada.
4. That my report dated November 20, 1982 on the McVittie Group I and McVittie Group II Properties, Maria Township, Ontario is based on personal examination, published government and mining company reports.
5. That the examination and field work on the properties was made by me during September and November, 1982 in my capacity as President, D. G. Innes and Associates Ltd.
6. That I have no interest or equity in the Maria Township Properties or adjoining lands in the vicinity relative to this property.



D. G. Innes  
H.B. Sc., M. Sc., F.G.A.C.  
November 20, 1982



SCREEN ANALYSIS #32 Conc. FT #16 #2

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 30.3g

% GRAPHITE  
RECOVERY: 1.5

Trench: B

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.66	.66	99.34
20	.60	1.99	2.65	97.35
35	10.80	35.76	38.41	61.59
65	14.20	47.02	85.43	14.57
100	4.40	14.57	100.00	-
TOTAL	30.20	100.00	-	-

SCREEN ANALYSIS #27 Pulverized Ore, 3B

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 501.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.02	.02	99.98
20	56.50	11.27	11.29	88.71
35	210.20	41.93	53.22	46.78
65	167.80	33.47	86.69	13.31
100	66.70	13.31	100.00	-
TOTAL	501.30	100.00	-	-

SCREEN ANALYSIS # 28 Conc. FT #14 3B

SAMPLE: Donegal

DATE: October 4, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 106g

% GRAPHITE  
RECOVERY: 5.3

Trench: 3

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.50	1.42	1.42	98.58
35	44.00	41.75	43.17	56.83
65	49.90	47.34	90.51	9.49
100	10.00	9.49	100.00	-
TOTAL	105.40	100.00	-	-

SCREEN ANALYSIS # 29 Pulverized Ore, 4-D

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 528g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	94.30	17.89	17.89	82.11
35	224.30	42.56	60.45	39.55
65	160.30	30.41	90.86	9.14
100	48.20	9.14	100.00	-
TOTAL	527.10	100.00	-	-

SCREEN ANALYSIS #31 Pulverized Ore, #2

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 775g

2 GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench:     B    

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	8.30	1.07	1.07	98.93
20	83.80	10.82	11.89	88.11
35	366.50	47.31	59.20	40.80
65	238.90	30.84	90.04	9.96
100	77.20	9.96	100.00	-
TOTAL	774.70	100.00	-	-

SCREEN ANALYSIS #30 Conc. FT #15 4-D

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 90.5g

% GRAPHITE  
RECOVERY: 4.5

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.70	1.89	1.89	98.11
35	38.70	43.05	44.94	55.06
65	41.80	46.50	91.44	8.56
100	7.70	8.56	100.00	-
TOTAL	89.90	100.00	-	-



Screen Analysis #88 Conc. FT #44 P<sub>0</sub>

SAMPLE : Donegal

DATE : Nov. 17/82

SCREEN TIME: 10 min.

WEIGHT USED: 42g

MESH SIZE (TYLER)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.48	.48	99.52
20	1.30	3.13	3.61	96.39
35	16.00	38.46	42.07	57.93
65	20.40	49.04	91.11	8.89
100	3.70	8.89	100.00	-
TOTAL	41.60	100.00	-	-

SCREEN ANALYSIS # 89 Pulverized Ore Q

SAMPLE: Donegal

DATE: Nov. 12/82

SCREEN TIME: 10 min.

WEIGHT USED: 584g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: Q

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	61.10	10.47	10.47	89.53
35	295.60	50.63	61.10	38.90
65	180.20	30.87	91.97	8.03
100	46.90	8.03	100.00	-
TOTAL	583.80	100.00	-	-

SCREEN ANALYSIS # 86 Conc. FT # 43 I

SAMPLE: Donegal

DATE: Nov. 12/82

SCREEN TIME: 10 min.

WEIGHT USED: 46.5g

% GRAPHITE  
RECOVERY: 2.3%

Trench: I

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.10	.22	.22	99.78
35	16.00	34.56	34.78	65.22
65	24.80	53.56	88.34	11.66
100	5.40	11.66	100.00	-
TOTAL	46.30	100.00	-	-

SCREEN ANALYSIS # 87 Pulverized Ore P-0  
P-1  
P-2

SAMPLE: Donegal

DATE: Nov. 17/82

SCREEN TIME: 10 min.

WEIGHT USED: 100g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: P

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.02	.02	.02	99.98
20	6.51	6.53	6.55	93.45
35	56.20	56.41	62.96	37.04
65	28.80	28.91	91.87	8.13
100	8.10	8.13	100.00	-
TOTAL	99.63	100.00	-	-

SCREEN ANALYSIS # 84 Conc. FT #42 N

SAMPLE: Donegal

DATE: Nov. 1/82

SCREEN TIME: 10 min.

WEIGHT USED: 66g

% GRAPHITE  
RECOVERY: 3.3%

Trench: N

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.50	2.29	2.29	97.71
35	33.10	50.53	52.82	47.18
65	26.60	40.61	93.43	6.57
100	4.30	6.57	100.00	-
TOTAL	65.50	100.00	-	-

SCREEN ANALYSIS # 85 Pulverized Ore I

SAMPLE: Donegal

DATE: Nov. 12/82

SCREEN TIME: 10 min.

WEIGHT USED: 379.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: I

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	25.80	6.80	6.80	93.20
35	173.30	45.69	52.49	47.00
65	130.80	34.49	86.98	13.02
100	49.40	13.02	100.00	-
TOTAL	379.30	100.00	-	-

SCREEN ANALYSIS #82 Conc. FT # 41 0

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 43.7g

% GRAPHITE  
RECOVERY: 2.2%

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.70	3.93	3.93	96.07
35	18.90	43.65	47.58	52.42
65	18.40	42.49	90.07	9.93
100	4.30	9.93	100.00	-
TOTAL	43.30	100.00	-	-

SCREEN ANALYSIS # 83 Pulverized Ore N

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 489.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: N

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.04	.04	99.96
20	80.00	16.35	16.39	83.61
35	236.10	48.26	64.65	35.35
65	136.70	27.94	92.59	7.41
100	36.20	7.41	100.00	-
TOTAL	489.20	100.00	-	-



SCREEN ANALYSIS #80 Conc. FT #40 M

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 33.5g

% GRAPHITE  
RECOVERY: 1.7%

Trench: M

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.20	.62	.62	99.38
35	13.10	40.43	41.05	58.95
65	15.80	48.76	89.81	10.19
100	3.30	10.19	100.00	-
TOTAL	32.40	100.00	-	-

SCREEN ANALYSIS # 81 Pulverized Ore 0

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 266.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 0

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	43.90	16.49	16.49	83.51
35	126.90	47.67	64.16	35.8
65	76.70	28.81	92.97	7.03
100	18.70	7.03	100.00	-
TOTAL	266.20	100.00	-	-

SCREEN ANALYSIS # 78 Conc. FT #39 J

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 32g

% GRAPHITE  
RECOVERY: 1.6%

Trench: J

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.10	3.47	3.47	96.53
35	13.30	41.96	45.43	54.57
65	14.20	44.79	90.22	9.78
100	3.10	9.78	100.00	-
TOTAL	31.70	100.00	-	-

SCREEN ANALYSIS #79 Pulverized Ore M

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 300g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: M

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	42.05	14.03	14.03	85.97
35	140.08	46.72	60.75	30.25
65	90.72	30.26	91.01	8.99
100	26.95	8.99	100.00	-
TOTAL	299.80	100.00	-	-

SCREEN ANALYSIS # 76 Conc. FT #38 G

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 17.5g

% GRAPHITE  
RECOVERY: .9%

Trench: G

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.05	.29	.29	99.71
35	3.20	18.66	18.95	81.05
65	10.40	60.64	79.59	20.41
100	3.50	20.41	100.00	-
TOTAL	17.15	100.00		

SCREEN ANALYSIS # 77 Pulverized Ore J

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 482.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: J

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.02	.02	99.98
20	51.40	10.65	10.67	89.33
35	235.20	48.76	59.43	40.57
65	148.20	30.72	90.15	9.85
100	47.50	9.85	100.00	-
TOTAL	482.40	100.00	-	-

SCREEN ANALYSIS # 74 Conc. FT #37 L (oil)

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 90.2g

% GRAPHITE  
RECOVERY: 4.5%

Trench: L

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.30	.33	.33	99.67
20	11.40	12.68	13.01	86.99
35	41.90	46.61	59.62	40.38
65	30.30	33.70	93.32	6.68
100	6.00	6.68	100.00	-
TOTAL	89.90	100.00	-	-

SCREEN ANALYSIS # 75 Pulverized Ore G

SAMPLE: Donegal

DATE: Oct. 29/82

SCREEN TIME: 10 min.

WEIGHT USED: 499g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: G

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.80	.16	.16	99.84
20	52.80	10.60	10.76	89.24
35	232.70	46.73	57.49	42.51
65	161.40	32.41	89.90	10.10
100	50.30	10.10	100.00	-
TOTAL	498.00	100.00	-	-



SCREEN ANALYSIS # 72 Conc. FT #36 L

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 95.7g

% GRAPHITE  
RECOVERY: 4.8%

Trench: L

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.11	.11	99.89
20	5.90	6.18	6.29	93.71
35	43.20	45.28	51.57	48.43
65	38.20	40.04	91.61	8.39
100	8.00	8.39	100.00	-
TOTAL	95.40	100.00	-	-

SCREEN ANALYSIS #73 Pulverized Ore L (oil)

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 417.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: L

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	2.60	.62	.62	99.38
20	76.90	18.43	19.05	80.95
35	190.10	45.57	64.62	35.38
65	114.00	27.33	91.95	8.05
100	33.60	8.05	100.00	-
TOTAL	417.20	100.00	-	-

SCREEN ANALYSIS # 70 Conc. FT # 35 K

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 83.4g

% GRAPHITE  
RECOVERY: 4.2%

Trench: K

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.40	1.69	1.69	98.31
35	33.80	40.72	42.41	57.59
65	39.60	47.71	90.12	9.88
100	8.20	9.88	100.00	-
TOTAL	83.00	100.00	-	-

SCREEN ANALYSIS # 71 Pulverized Ore L

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 514g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: L

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	2,00	.39	.39	99.61
20	77,20	15,07	15,46	84,54
35	238,30	46,52	61,98	38,02
65	152,90	29,84	91,82	8,18
100	41,90	8,18	100,00	-
TOTAL	512,30	100,00	-	-

SCREEN ANALYSIS # 68 Conc. FT #34 H

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 36g

% GRAPHITE

RECOVERY: 1.8%

Trench: H

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.40	1.12	1.12	98.88
35	13.10	36.59	37.71	62.29
65	18.20	50.84	88.55	11.45
100	4.10	11.45	100.00	-
TOTAL	35.80	100.00	-	-

SCREEN ANALYSIS # 69 Pulverized Ore K

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 510g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: K

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.04	.04	99.96
20	72.80	14.28	14.32	85.68
35	239.50	46.98	61.30	38.70
65	154.00	30.21	91.51	8.49
100	43.30	8.49	100.00	-
TOTAL	509.80	100.00	-	-

SCREEN ANALYSIS # 66 Conc. FT #33 E

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 37.5g

% GRAPHITE  
RECOVERY: 1.9%

Trench: E

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.30	.81	.81	99.19
35	15.90	42.86	43.67	56.33
65	16.70	45.01	88.68	11.32
100	4.20	11.32	100.00	-
TOTAL	37.10	100.00	-	-

SCREEN ANALYSIS # 67 Pulverized Ore H

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 355.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: H

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	37.60	10.59	10.59	89.41
35	167.20	47.10	57.69	42.31
65	111.60	31.44	89.13	10.87
100	38.60	10.87	100.00	-
TOTAL	355.00	100.00	-	-



SCREEN ANALYSIS # 64 Conc. FT #32 C (65+)

SAMPLE: Donegal

DATE: Oct, 27/82

SCREEN TIME: 10 min.

WEIGHT USED: 77,5g

% GRAPHITE  
RECOVERY: 3,9%

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.26	.26	99.74
20	9.10	11.82	12.08	87.92
35	39.30	51.04	63.12	36.88
65	28.40	36.88	100.00	-
TOTAL	77.00	100.00	-	-

SCREEN ANALYSIS #65 Pulverized Ore E

SAMPLE: Donegal

DATE: Oct. 28/82

SCREEN TIME: 10 min.

WEIGHT USED: 480g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: E

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	33.40	6.97	6.97	93.03
35	232.40	48.49	55.46	44.53
65	160.20	33.42	88.88	11.12
100	53.30	11.12	100.00	-
TOTAL	479.30	100.00	-	-

SCREEN ANALYSIS #62 Conc. FT #31 C (100+)

SAMPLE: Donegal

DATE: Oct. 27/82

SCREEN TIME: 10 min.

WEIGHT USED: 81g

% GRAPHITE  
RECOVERY: 4%

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.40	.50	.50	99.50
20	7.20	8.94	9.44	90.56
35	38.20	47.45	56.89	43.11
65	29.30	36.40	93.29	6.71
100	5.40	6.71	100.00	-
TOTAL	80.50	100.00	-	-

SCREEN ANALYSIS # 63 Pulverized Ore C (65+)

SAMPLE: Donegal

DATE: Oct. 27/82

SCREEN TIME: 10 min.

WEIGHT USED: 100g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.15	.15	.15	99.85
20	21.31	21.42	21.57	78.43
35	54.50	54.77	76.34	23.66
65	23.54	23.66	100.00	-
TOTAL	99.50	100.00	-	-

SCREEN ANALYSIS # 60-2 Conc. FT #30-2 F  
Cleaner

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 16.5g

% GRAPHITE  
RECOVERY: .83%

Trench: F

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.30	1.83	1.83	98.17
35	7.40	45.12	46.95	53.05
65	7.50	45.73	92.68	7.32
100	1.20	7.32	100.00	-
TOTAL	16.40	100.00	-	-

SCREEN ANALYSIS # 61 Pulverized Ore C (100+)

SAMPLE: Donegal

DATE: Oct. 27/82

SCREEN TIME: 10 min.

WEIGHT USED: 470.2g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.40	.30	.30	99.70
20	92.40	19.66	19.96	80.04
35	213.10	45.34	65.30	34.70
65	128.80	27.40	92.70	7.30
100	34.30	7.30	100.00	-
TOTAL	470.00	100.00	-	-

SCREEN ANALYSIS # 59 Pulverized Ore F  
 Rougher & Cleaner

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 450g

% GRAPHITE  
 RECOVERY: \_\_\_\_\_

Trench: F

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.96	.21	.21	99.79
20	51.29	11.41	11.62	88.38
35	217.27	48.33	59.95	40.05
65	141.43	31.46	91.41	8.59
100	38.65	8.59	100.00	-
TOTAL	449.60	100.00	-	-

SCREEN ANALYSIS # 60 Conc. FT #30 F

Rougher

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 23.1g

% GRAPHITE

RECOVERY: 1.2%

Trench: F

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.05	.22	.22	99.78
20	.10	.44	.66	99.34
35	7.00	30.63	31.29	68.71
65	11.90	52.08	83.37	16.63
100	3.80	16.63	100.00	-
TOTAL	22.85	100.00	-	-



SCREEN ANALYSIS #57 Pulverized Ore D

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 505.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: D

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	2.20	.44	.44	99.56
20	87.40	17.31	17.75	82.25
35	247.90	49.09	66.84	33.16
65	129.20	25.58	92.42	7.58
100	38.30	7.58	100.00	-
TOTAL	505.00	100.00	-	-

SCREEN ANALYSIS # 58 Conc. FT #29 D

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 34g

% GRAPHITE  
RECOVERY: 1.7%

Trench: D

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.30	.90	.90	99.10
20	2.80	8.33	9.23	90.77
35	11.00	32.74	41.97	58.03
65	14.10	41.96	83.93	16.07
100	5.40	16.07	100.00	-
TOTAL	33.60	100.00	-	-

SCREEN ANALYSIS # 55 Pulverized Ore B

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 674g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: B

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.20	.18	.18	99.82
20	103.00	15.29	15.47	84.53
35	310.30	46.06	61.53	38.47
65	196.60	29.19	90.72	9.28
100	62.50	9.28	100.00	-
TOTAL	673.60	100.00	-	-

SCREEN ANALYSIS # 56 Conc. FT #28 B

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 24.7g

% GRAPHITE  
RECOVERY: 1.2%

Trench: B

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.05	.20	.20	99.80
20	.90	3.67	3.87	96.13
35	8.20	33.40	37.27	62.73
65	11.60	47.25	84.52	15.48
100	3.80	15.48	100.00	-
TOTAL	24.55	100.00	-	-

SCREEN ANALYSIS # 53 Pulverized Ore A

SAMPLE: Donagal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 370g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.60	.16	.16	99.84
20	51.50	13.95	14.11	85.89
35	180.70	48.93	63.04	36.96
65	106.40	28.81	91.85	8.15
100	30.10	8.15	100.00	-
TOTAL	369.30	100.00	-	-

SCREEN ANALYSIS of 54 Conc. FT #27 A

SAMPLE: Donegal

DATE: Oct. 26/82

SCREEN TIME: 10 min.

WEIGHT USED: 49.4g

% GRAPHITE  
RECOVERY: 2.6%

Trench: A

1,928.8g

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)		% RETAINED		% PASS
	1,928g	2,000g*	INDIVIDUAL	CUMULATIVE	
10	.20	.21	.41	.41	99.59
20	5.60	5.81	11.43	11.84	88.16
35	20.60	21.36	42.04	53.88	46.12
65	18.60	19.29	37.96	91.84	8.16
100	4.00	4.15	8.16	100.00	-
TOTAL	49.00	50.82	100.00	-	-

\* Conc. from 1928.8g feed converted to 2000.0g feed for comparison only.

SCREEN ANALYSIS # 51 Pulverized Ore  
Hi-Grade Section October 18,  
1982

SAMPLE: Donegal

DATE: October 18, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 332.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench:     R    

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	COMULATIVE	
10	.80	.24	.24	99.76
20	58.30	17.55	17.79	82.21
35	150.80	45.41	63.20	36.80
65	97.20	29.27	92.47	7.53
100	25.00	7.53	100.00	-
TOTAL	332.10	100.00	-	-

SCREEN ANALYSIS # 52 FT #26 Hi-Grade Section  
Conc. October 18, 1982

SAMPLE: Donegal

DATE: October 21, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 117g

% GRAPHITE  
RECOVERY: 5.9

Trench: R

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100
20	5.20	4.48	4.48	95.52
35	62.10	53.44	57.92	42.08
65	43.10	37.09	95.01	4.99
100	5.80	4.99	100.00	-
TOTAL	116.20	100.00	-	-



SCREEN ANALYSIS # 49 Pulverized Ore, Hi-Grade  
Section, Oct. 18/82

SAMPLE: Donegal

DATE: October 18, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 550g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench:     R    

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.10	.20	.20	99.80
20	88.10	16.03	16.23	83.77
35	269.80	49.09	65.32	34.68
65	151.00	27.47	92.79	7.21
100	39.60	7.21	100.00	-
TOTAL	549.60	100.00	-	-

SCREEN ANALYSIS #50 Conc. FT #25 Hi-Grade  
Section, Oct. 18/82

SAMPLE: Donegal

DATE: October 21, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 118.9g

% GRAPHITE  
RECOVERY: 6.0

Trench: R

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.08	.08	99.92
20	8.30	7.03	7.11	92.89
35	60.30	51.06	58.17	41.83
65	42.30	35.82	93.99	6.01
100	7.10	6.01	100.00	-
TOTAL	118.10	100.00	-	-

SCREEN ANALYSIS #47 Pulverized Ore, 2nd  
Last #3

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 643g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	2.10	.33	.33	99.67
20	129.50	20.15	20.48	79.52
35	275.90	42.93	63.41	36.59
65	173.80	27.05	90.46	9.54
100	61.30	9.54	100.00	-
TOTAL	642.60	100.00	-	-

SCREEN ANALYSIS #48 FT #24 Conc., 2nd Last #3

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 45.0g

% GRAPHITE  
RECOVERY: 2.3

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.45	.45	99.55
20	4.00	8.95	9.40	90.60
35	20.00	44.74	54.14	45.86
65	17.30	38.70	92.84	7.16
100	3.20	7.16	100.00	-
TOTAL	44.70	100.00	-	-

SCREEN ANALYSIS # 45 Pulverized Ore, 2nd  
Last #2

SAMPLE: Donegal

DATE: October 13, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 198g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: B

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.90	.46	.46	99.54
20	19.70	9.98	10.44	89.56
35	97.00	49.14	59.58	40.42
65	61.20	31.00	90.58	9.42
100	18.60	9.42	100.00	-
TOTAL	197.40	100.00	-	-

SCREEN ANALYSIS #46 FT #23 Conc. 2nd Last #2

SAMPLE: Donegal

DATE: October 13, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 77.0g

% GRAPHITE  
RECOVERY: 3.85

Trench: B

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.70	.92	.92	99.08
20	19.70	25.82	26.74	73.26
35	31.90	41.81	68.55	31.4
65	20.00	26.21	94.76	5.24
100	4.00	5.24	100.00	-
TOTAL	76.30	100.00	-	-

SCREEN ANALYSIS #43 Pulverized Ore, 2nd  
Last #1

SAMPLE: Donegal

DATE: October 13, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 367.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench:     A    

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.00	.27	.27	99.73
20	49.10	13.38	13.65	86.35
35	171.30	46.67	60.32	39.68
65	110.90	30.22	90.54	9.46
100	34.70	9.46	100.00	-
TOTAL	367.00	100.00	-	-

SCREEN ANALYSIS #44 FT #22 Conc., 2nd  
Last #1

SAMPLE: Donegal

DATE: October 13, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 49.0g

% GRAPHITE  
RECOVERY: 2.45

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.20	.20	99.80
20	5.60	11.52	11.72	88.28
35	23.70	48.77	60.49	39.51
65	16.30	33.54	94.03	5.97
100	2.90	5.97	100.00	-
TOTAL	48.60	100.00	-	-



SCREEN ANALYSIS #41 Pulverized Ore, Hi-Grade #2

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 411.0g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 9

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.60	.15	.15	99.85
20	68.10	16.58	16.73	83.27
35	202.00	49.17	65.90	34.10
65	111.10	27.04	92.94	7.06
100	29.00	7.06	100.00	-
TOTAL	410.80	100.00	-	-

SCREEN ANALYSIS #42 Conc. FT #21, Hi-Grade #2

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 111.5g

% GRAPHITE  
RECOVERY: 5.6

Trench: 9

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.09	.09	99.91
20	8.30	7.47	7.56	92.44
35	58.90	53.02	60.58	39.06
65	38.10	34.29	94.87	5.13
100	5.70	5.13	100.00	-
TOTAL	111.10	100.00	-	-

SCREEN ANALYSIS #39 Pulverized Ore, Hi-Grade 1

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 400.5g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: 9

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.60	.15	.15	99.85
20	59.10	14.77	14.92	85.08
35	201.20	50.27	65.19	34.81
65	109.40	27.34	92.53	7.47
100	29.90	7.47	100.00	-
TOTAL	400.20	100.00	-	-

SCREEN ANALYSIS #40 Conc. FT #20, Hi-Grade 1

SAMPLE: Donegal

DATE: October 12, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 118.0g

% GRAPHITE

RECOVERY: 5.9

Trench: 9

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.17	.17	99.83
20	9.90	8.43	8.60	91.40
35	63.60	54.17	62.77	37.23
65	38.80	33.05	95.82	4.18
100	4.90	4.18	100.00	-
TOTAL	117.40	100.00	-	-

SCREEN ANALYSIS # 37 Pulverized Ore,

1

SAMPLE: Donegal

DATE: October 7, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 726g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.50	.07	.07	99.93
20	72.90	10.05	10.12	89.88
35	326.70	45.04	55.16	44.84
65	241.80	33.34	88.50	11.50
100	83.40	11.50	100.00	-
TOTAL	725.30	100.00	-	-

SCREEN ANALYSIS #38 Conc. FT #19

1

SAMPLE: Donegal

DATE: October 7, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 68.9g

% GRAPHITE  
RECOVERY: 3.45

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.80	2.63	2.63	97.37
35	31.50	46.05	48.68	51.32
65	28.70	41.96	90.64	9.36
100	6.40	9.36	100.00	-
TOTAL	68.40	100.00	-	-

SCREEN ANALYSIS # 35 Pulverized Ore, 4B General

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 500g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.05	.01	.01	99.99
20	63.70	12.74	12.75	87.25
35	240.95	48.20	60.95	39.05
65	149.40	29.89	90.84	9.16
100	45.80	9.16	100.00	-
TOTAL	499.90	100.00	-	-

SCREEN ANALYSIS #36 Ft # 18 Conc., 4B General

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 41.6g

% GRAPHITE  
RECOVERY: 2.08

Trench: 4

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100
20	1.20	2.89	2.89	97.11
35	16.80	40.48	43.37	56.63
65	18.40	44.34	87.71	12.29
100	5.10	12.29	100.00	-
TOTAL	41.50	100.00	-	-



SCREEN ANALYSIS #33 Pulverized Ore, Furthest On Road

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 460g

% GRAPHITE RECOVERY: \_\_\_\_\_

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	2.00	.43	.43	99.57
20	97.70	21.25	21.68	78.32
35	203.90	44.35	66.03	33.97
65	122.70	26.69	92.72	7.28
100	33.50	7.28	100.00	-
TOTAL	459.80	100.00	-	-

SCREEN ANALYSIS #34 Conc. FT #17 Furthest On Road

SAMPLE: Donegal

DATE: October 6, 1982

SCREEN TIME: 10 min.

WEIGHT USED: 105.5g

% GRAPHITE RECOVERY: 5.3

Trench: A

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.70	.66	.66	99.34
20	7.80	7.41	8.07	91.93
35	51.20	48.62	56.69	43.31
65	39.00	37.04	93.73	6.27
100	6.60	6.27	100.00	-
TOTAL	105.30	100.00	-	-

SCREEN ANALYSIS # 91 Pulverized Ore C Depressed  
1 & 2

SAMPLE: Donegal

DATE: Nov. 15/82

SCREEN TIME: 10 min.

WEIGHT USED: 500g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.80	.16	.16	99.84
20	82.20	16.45	16.61	83.39
35	240.00	48.02	64.63	35.
65	140.40	28.09	92.72	7.28
100	36.40	7.28	100.00	-
TOTAL	499.80	100.00	-	-

SCREEN ANALYSIS # 90 Conc. Pt # 45 Q

SAMPLE: Donegal

DATE: Nov. 12/82

SCREEN TIME: 10 min.

WEIGHT USED: 33.5g

% GRAPHITE  
RECOVERY: 1.7%

Trench: Q

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.20	3.60	3.60	96.40
35	12.50	37.54	41.14	58.86
65	15.70	47.15	88.29	11.71
100	3.90	11.71	100.00	-
TOTAL	33.30	100.00	-	-

SCREEN ANALYSIS # 93 Conc. Ft # 47 C Depressed  
-2

SAMPLE: Donegal

DATE: Nov. 15/82

SCREEN TIME: 10 min.

WEIGHT USED: 54.5g

% GRAPHITE  
RECOVERY: 2.7%

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	2.50	4.61	4.61	95.39
35	24.50	45.20	49.81	50.19
65	22.80	42.07	91.88	8.12
100	4.40	8.12	100.00	-
TOTAL	54.20	100.00	-	-

SCREEN ANALYSIS # 92 Conc. FT #46 C Depressed 1

SAMPLE: Donegal

DATE: Nov. 15/82

SCREEN TIME: 10 min.

WEIGHT USED: 48.5g

% GRAPHITE  
RECOVERY: 2.4%

Trench: C

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.41	.41	99.59
20	2.00	4.16	4.57	95.43
35	21.30	44.28	48.85	51.15
65	20.60	42.83	91.68	8.32
100	4.00	8.32	100.00	-
TOTAL	48.10	100.00	-	-

SCREEN ANALYSIS # 94 Pulverized Ore N Dep-1  
&  
Dep-2

SAMPLE: Donegal

DATE: November 15/82

SCREEN TIME: 10 min.

WEIGHT USED: 147.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: N

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.40	.27	.27	99.73
20	5.40	3.66	3.93	96.07
35	74.00	50.20	54.13	45.87
65	52.10	35.35	89.48	10.52
100	15.50	10.52	100.00	-
TOTAL	147.40	100.00	-	-

SCREEN ANALYSIS: # 95 Conc. FT #48 N Dep-1

SAMPLE: Donegal

DATE: Nov. 16/82

SCREEN TIME: 10 min.

WEIGHT USED: 72.5g

% GRAPHITE  
RECOVERY: 4.2%

Trench: N

1,715.5g

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)		% RETAINED		% PASSING
			INDIVIDUAL	CUMULATIVE	
	1,715.5	2,000.0			
10	.20	.23	.28	.28	99.72
20	4.20	4.90	5.83	6.11	93.89
35	38.60	45.00	53.61	59.72	40.28
65	26.00	30.31	36.11	95.83	4.17
100	3.00	3.50	4.17	100.00	-
TOTAL	72.00	83.94	100.00	-	-

\* Conc. from 1,715.5g feed converted to 2000g feed for comparison only



SCREEN ANALYSIS # 96 Conc. FT # 49 N Dep. 2

SAMPLE: Donegal

DATE: Nov. 16/82

SCREEN TIME: 10 min.

WEIGHT USED: 57g

% GRAPHITE  
RECOVERY: 3.3%

Trench: N

1,715.5g

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)		RETAINED		% PASSING
			INDIVIDUAL	CUMULATIVE	
	1,715.5g	2,000.0g*			
10	0	0	0	0	100.00
20	2.30	2.68	4.05	4.05	95.95
35	27.40	31.94	48.24	52.29	47.71
65	22.80	26.58	40.14	92.43	7.57
100	4.30	5.01	7.57	100.00	-
TOTAL	56.80	66.21	100.00	-	-

\* Conc. from 1,715.5g feed converted to 2000.0g feed for comparison only.

SCREEN ANALYSIS # 97 Pulverized Ore K Dep-1

&  
Dep-2

SAMPLE: Donegal

DATE: Nov. 16/82

SCREEN TIME: 10 min.

WEIGHT USED: 161.5g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: K

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.12	.12	99.88
20	.80	.50	.62	99.38
35	81.90	50.74	51.36	48.64
65	59.30	36.74	88.10	11.90
100	19.20	11.90	100.00	-
TOTAL	161.40	100.00	-	-

SCREEN ANALYSIS: # 98 Conc. PP # 50 K Dep 1

SAMPLE: Donegal

DATE: NOV. 16/82

SCREEN TIME: 10 min.

WEIGHT USED: 66.5g

GRAPHITE

RECOVERY: 4.4%

Trench: K

1,515.4g

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)		% RETAINED		% PASSING
			INDIVIDUAL	CUMULATIVE	
	1,515.4	2,000.*			
10	.10	.13	.15	.15	99.85
20	2.10	2.77	3.16	3.31	96.69
35	32.60	43.02	49.10	52.41	47.59
65	30.30	39.99	45.63	98.04	1.96
100	1.30	1.72	1.96	100.00	-
TOTAL	66.40	87.63	100.00	-	-

\* Conc. from 1,515.4g feed converted to 2,000.0g feed for comparison only.

SCREEN ANALYSIS # 99 Conc. FP #51 K Dep 2

SAMPLE: Donegal

DATE: Nov. 16/82

SCREEN TIME: 10 min.

WEIGHT USED: 78.5g

% GRAPHITE

RECOVERS: 5.2

Trench: K

1,515.4g

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)		% RETAINED		% PASSING
			INDIVIDUAL	CUMULATIVE	
	1,515.4	2,000.0*			
10	.10	.13	.13	.13	99.87
20	2.40	3.17	3.07	3.20	96.80
35	39.30	51.87	50.32	53.52	46.48
65	32.40	42.76	41.49	95.01	4.99
100	3.90	5.15	4.99	100.00	-
TOTAL	78.10	103.08	100.00	-	-

\* Conc. from 1,515.4g feed converted to 2000.0g feed for comparison only.

Screen Analysis # 100 Conc. FT #52 P

SAMPLE : Donegal

DATE : Nov. 17/82

SCREEN TIME: 10 min.

WEIGHT USED: 25.7g

MESH SIZE (TYLER)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	COMULATIVE	
10	.10	.39	.39	99.61
20	1.10	4.31	4.70	95.30
35	9.40	36.86	41.56	58.44
65	10.80	42.35	83.91	16.09
100	4.10	16.09	100.00	-
TOTAL	25.50	100.00	-	-

Screen Analysis # 101 Conc. FT # 53 P.

SAMPLE : Donegal

DATE : Nov. 17/82

SCREEN TIME: 10 min.

WEIGHT USED: 32g

MESH SIZE (TYLER)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.10	.31	.31	99.69
20	1.50	4.72	5.03	94.97
35	12.30	38.68	43.71	56.29
65	13.70	43.08	86.79	13.21
100	4.20	13.21	100.00	-
TOTAL	31.80	100.00	-	-

SCREEN ANALYSIS # 104 Pulverized Ore #1

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 325g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.38	.12	.12	99.48
20	5.73	1.76	1.88	98.12
35	175.94	54.17	56.05	43.95
65	110.66	34.07	90.12	9.88
100	32.08	9.88	100.00	-
TOTAL	324.79	100.00	-	-

SCREEN ANALYSIS # 105 Conc. FT # 55 #1

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 69g

% GRAPHITE  
RECOVERY: 3.5%

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.20	.29	.29	99.71
20	6.40	9.34	9.63	90.37
35	33.20	48.47	58.10	41.90
65	23.50	34.31	92.41	7.59
100	5.20	7.59	100.00	-
TOTAL	68.50	100.00	-	-



SCREEN ANALYSIS # 106 Pulverized Ore #3

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 350g

% GRAPHITE  
RECOVERY:

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	34.53	9.87	9.87	90.13
35	173.03	49.47	59.34	40.66
65	111.86	31.98	91.32	8.68
100	30.37	8.68	100.00	-
TOTAL	349.79	100.00	-	-

SCREEN ANALYSIS # 107 Conc. FT # 56 #3 (Ker)

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 33g

% GRAPHITE  
RECOVERY: 1.7%

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.60	4.94	4.94	95.06
35	13.50	41.67	46.61	53.29
65	13.70	42.28	88.89	11.11
100	3.60	11.11	100.00	-
TOTAL	32.40	100.00	-	-

SCREEN ANALYSIS # 108 Conc. FT # 57 #3 (F77)

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 35g

% GRAPHITE  
RECOVERY: 1.8%

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	1.80	5.17	5.17	94.83
35	16.70	47.99	53.16	46.84
65	14.00	40.23	93.39	6.61
100	2.30	6.61	100.00	-
TOTAL	34.80	100.00	-	-

SCREEN ANALYSIS #109 Pulverized Ore #5

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 100g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.28	.28	.28	99.72
20	7.99	8.01	8.29	91.71
35	53.93	54.10	62.39	37.61
65	29.38	29.47	91.86	8.14
100	8.11	8.14	100.00	-
TOTAL	99.69	100.00	-	-

SCREEN ANALYSIS #110 Conc. FT #58 #5

SAMPLE: Donegal

DATE: Nov. 18/82

SCREEN TIME: 10 min.

WEIGHT USED: 97g

% GRAPHITE  
RECOVERY: 4.9%

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.50	.52	.52	99.48
20	7.60	7.88	8.40	91.60
35	48.10	49.84	58.24	41.76
65	33.00	34.20	92.44	7.56
100	7.30	7.56	100.00	-
TOTAL	96.50	100.00	-	-

SCREEN ANALYSIS # 111 Pulverized Ore #4

SAMPLE: Donegal

DATE: Nov. 19/82

SCREEN TIME: 10 min.

WEIGHT USED: 300g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	.58	.19	.19	99.81
20	18.43	6.15	6.34	93.66
35	156.77	52.31	58.65	41.
65	96.01	32.04	90.69	9.31
100	27.91	9.31	100.00	-
TOTAL	299.70	100.00	-	-

SCREEN ANALYSIS # 112 Conc. FT #59 #4

SAMPLE: Donegal

DATE: Nov. 19/82

SCREEN TIME: 10 min.

WEIGHT USED: 62.3g

% GRAPHITE  
RECOVERY: 3.1%

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	2.20	3.54	3.54	96.46
35	27.20	43.73	47.27	52.73
65	27.00	43.41	90.68	9.32
100	5.80	9.32	100.00	-
TOTAL	62.20	100.00	-	-

SCREEN ANALYSIS # 113 Pulverized Ore #2

SAMPLE: Donegal

DATE: Nov. 19/82

SCREEN TIME: 10 min.

WEIGHT USED: 300g

% GRAPHITE  
RECOVERY: \_\_\_\_\_

Trench: 5

MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	1.38	.46	.46	99.54
20	19.61	6.55	7.01	92.99
35	141.90	47.36	54.37	45.63
65	103.89	34.68	89.05	10.95
100	32.82	10.95	100.00	-
TOTAL	299.60	100.00	-	-



SCREEN ANALYSIS # 114 Conc. FT #60 #2

SAMPLE: Donegal

DATE: Nov. 19/82

SCREEN TIME: 10. min.

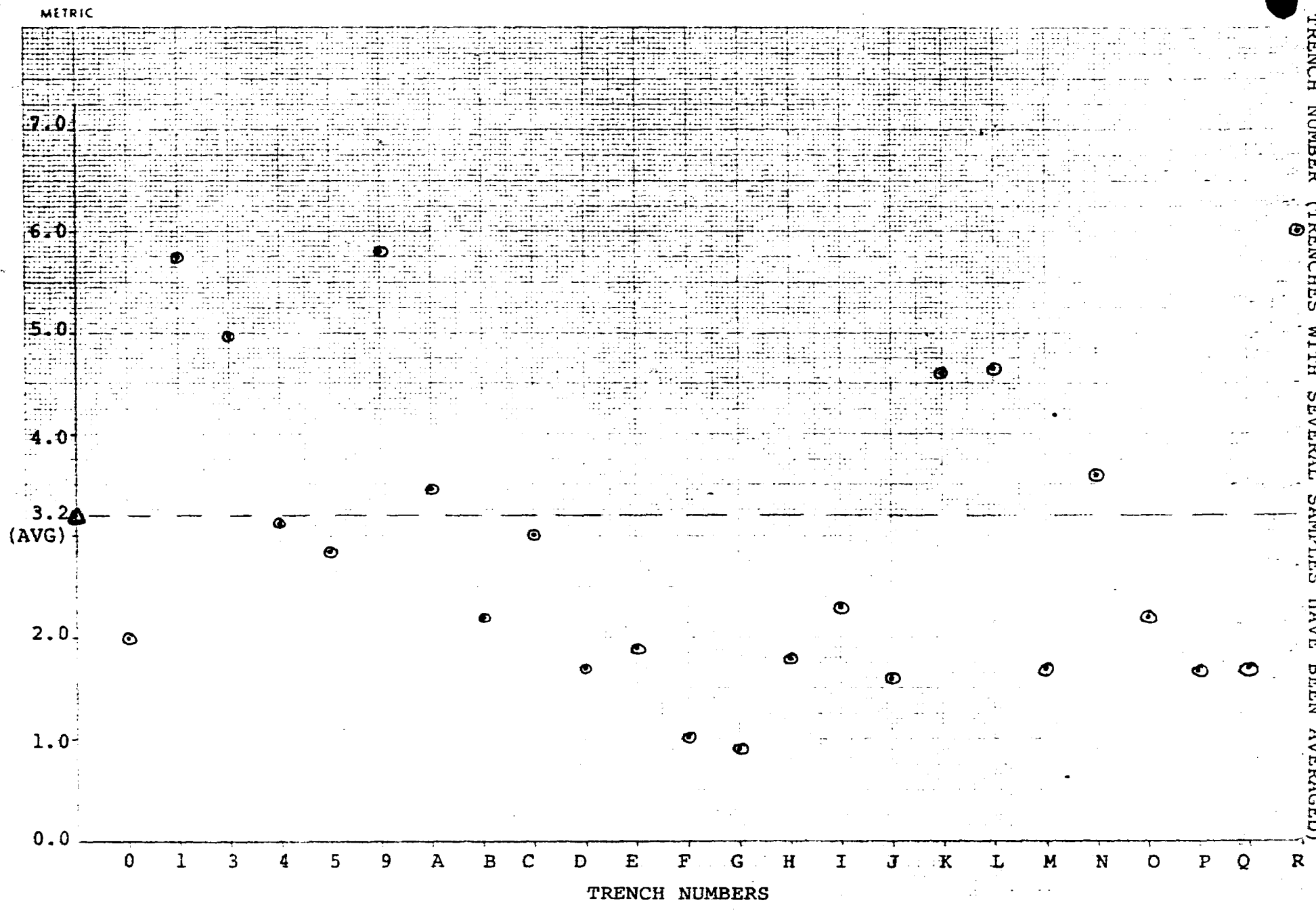
WEIGHT USED: 41g

% GRAPHITE  
RECOVERY: 2.1%

Trench: 5

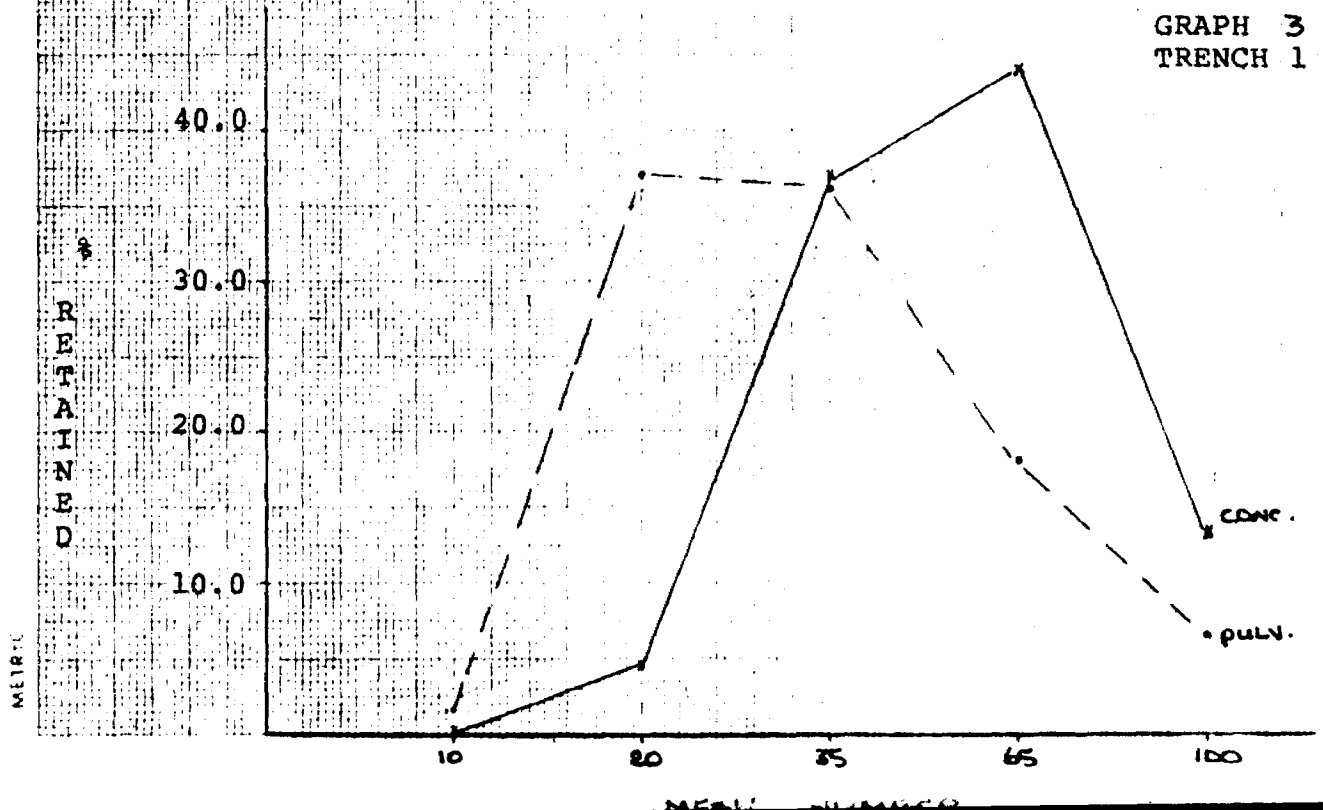
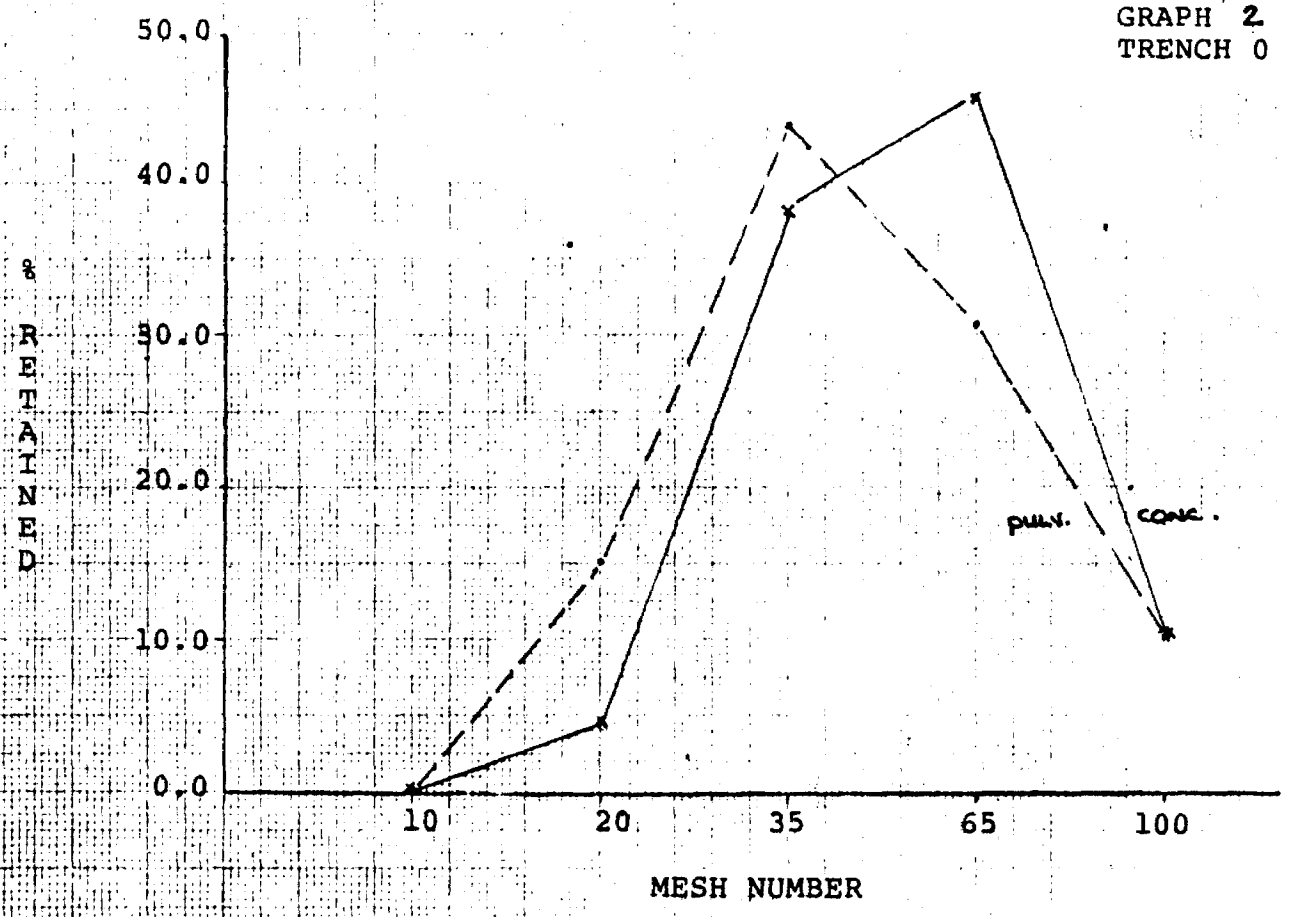
MESH SIZE TYLER (INCHES)	WEIGHT (GRAMS)	% RETAINED		% PASSING
		INDIVIDUAL	CUMULATIVE	
10	0	0	0	100.00
20	.60	1.48	1.48	98.52
35	17.00	41.97	43.45	56.55
65	17.30	42.72	86.17	13.83
100	5.60	13.83	100.00	-
TOTAL	40.50	100.00	-	-

1. ESTIMATED GRAHILE GRADES, CALCULATED BY RECOVERY, VS. EACH TRENCH NUMBER (TRENCHES WITH SEVERAL SAMPLES HAVE BEEN AVERAGED)

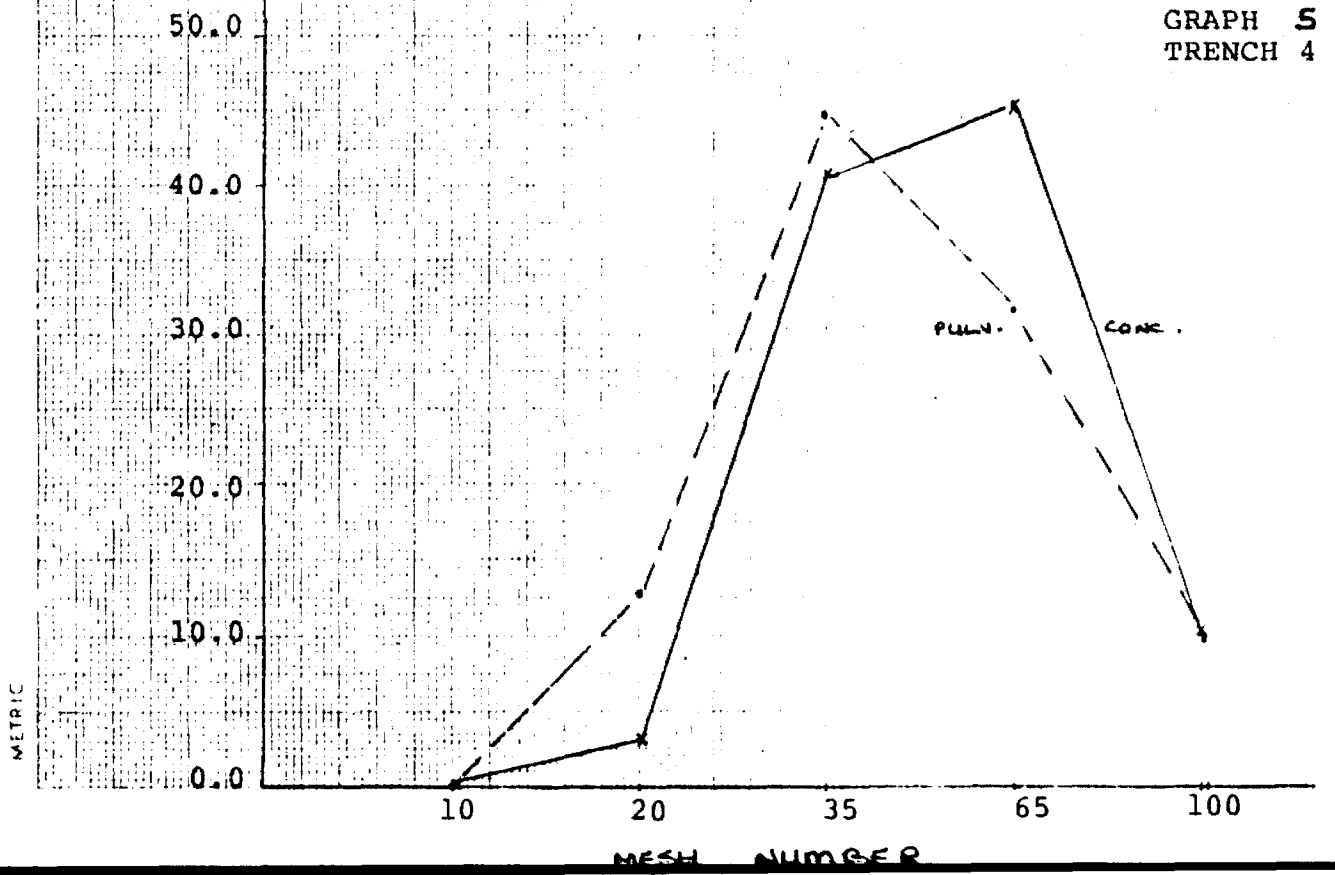
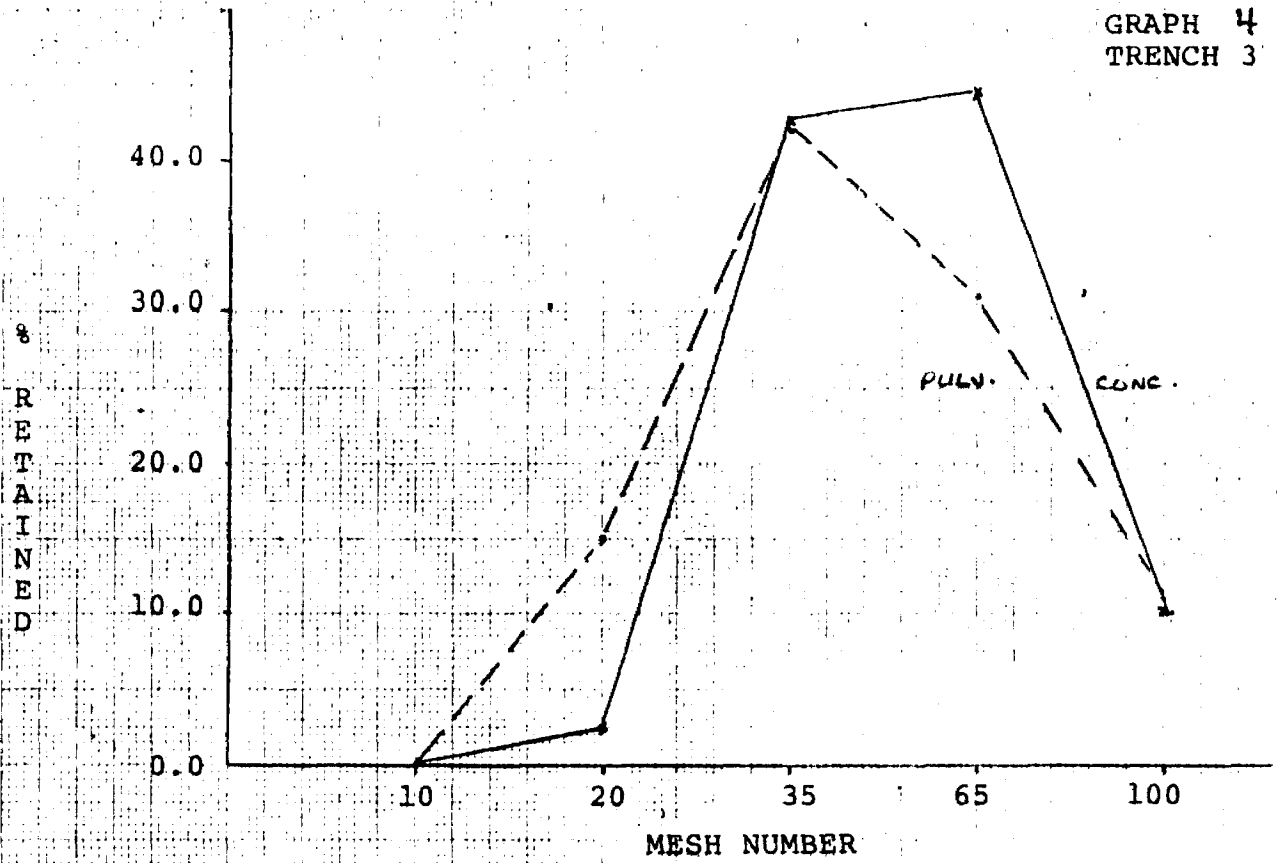


GRAHILE

GRAPHS 2 & 3 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

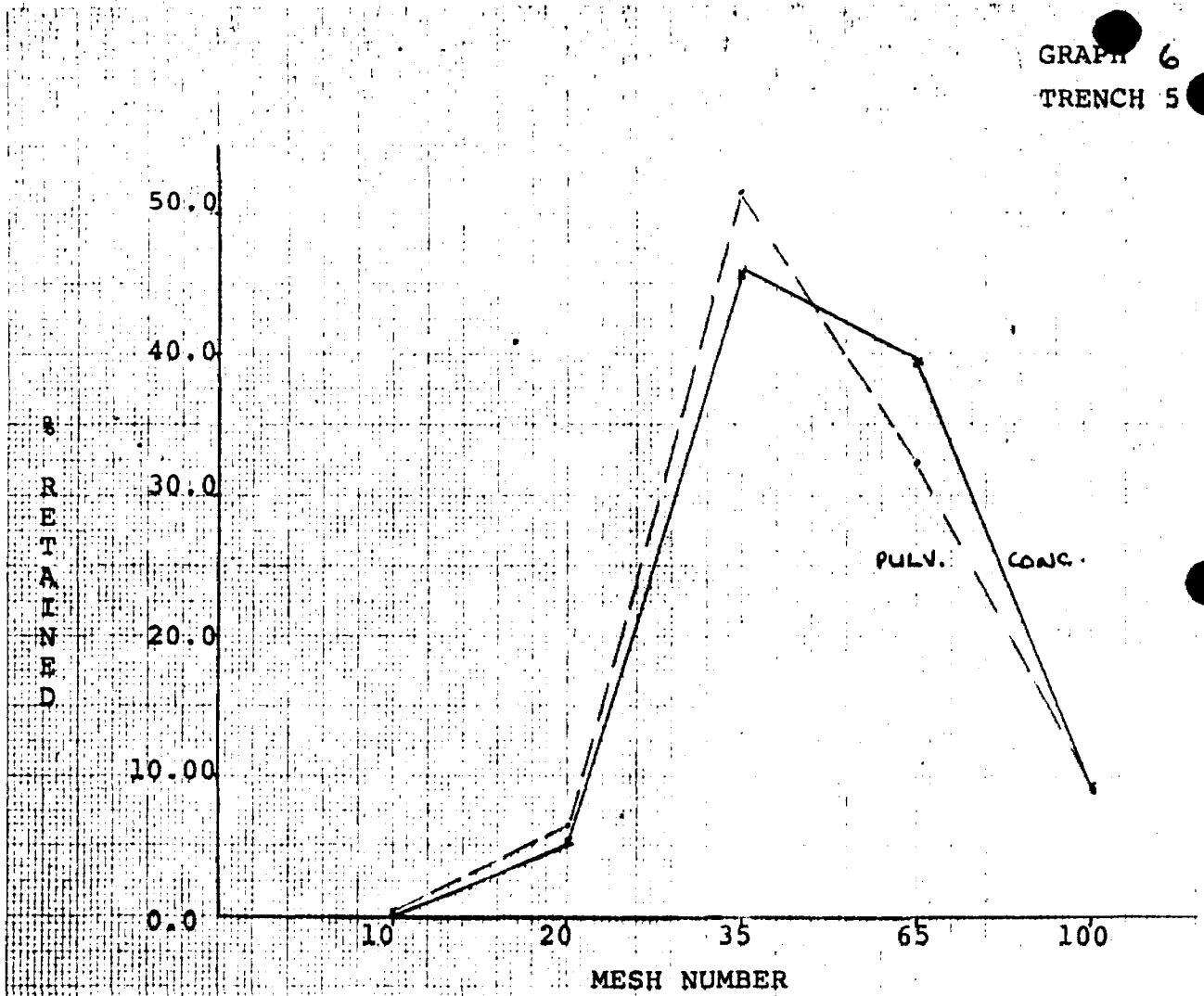


GRAPHS 4 & 5 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
 RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

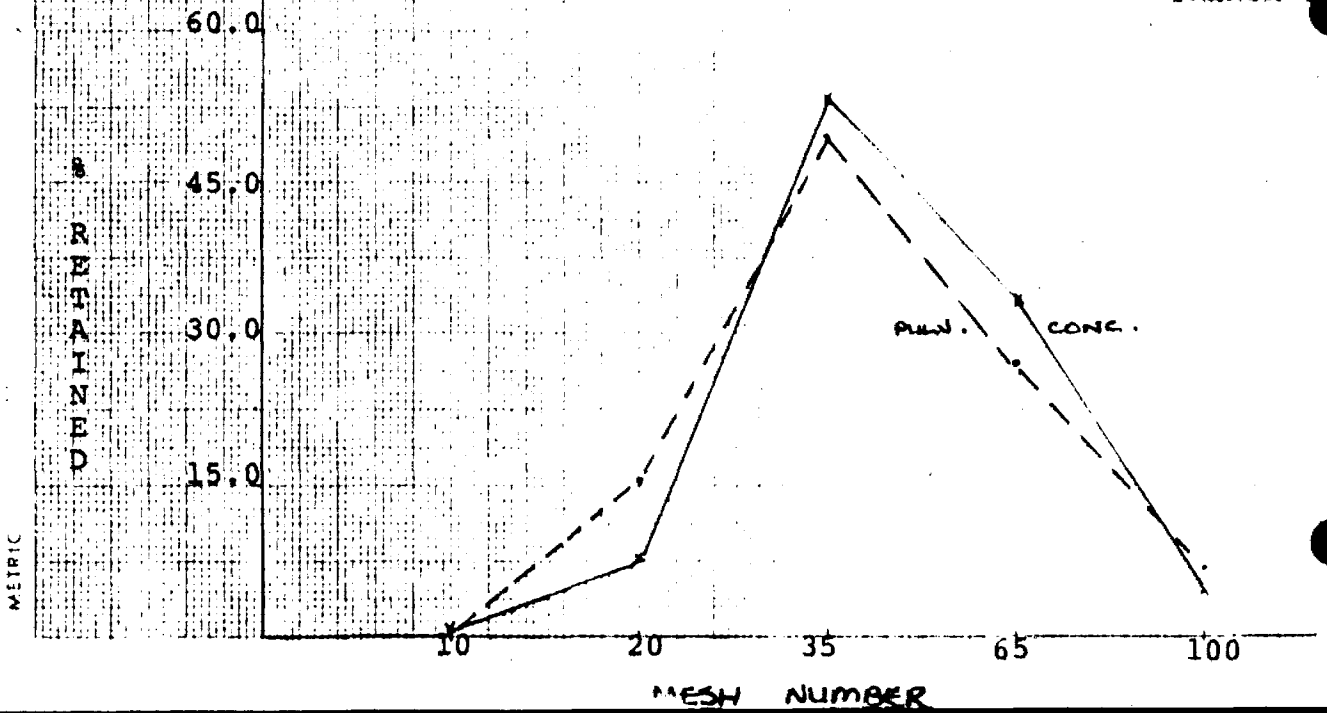


GRAPHS 6 & 7 : OF PULVERIZED ORE CONCENTRATE  
RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

GRAPH 6  
TRENCH 5

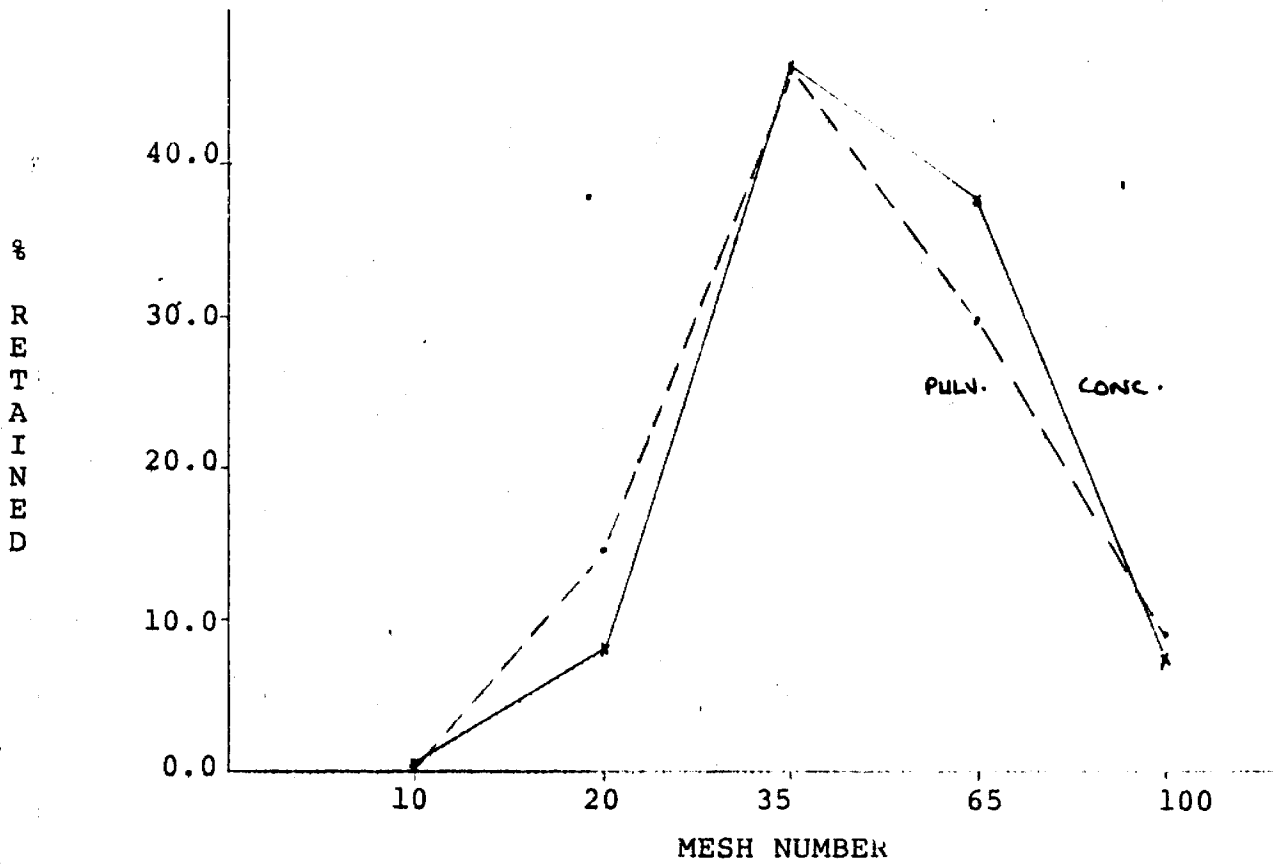


GRAPH 7  
TRENCH 9

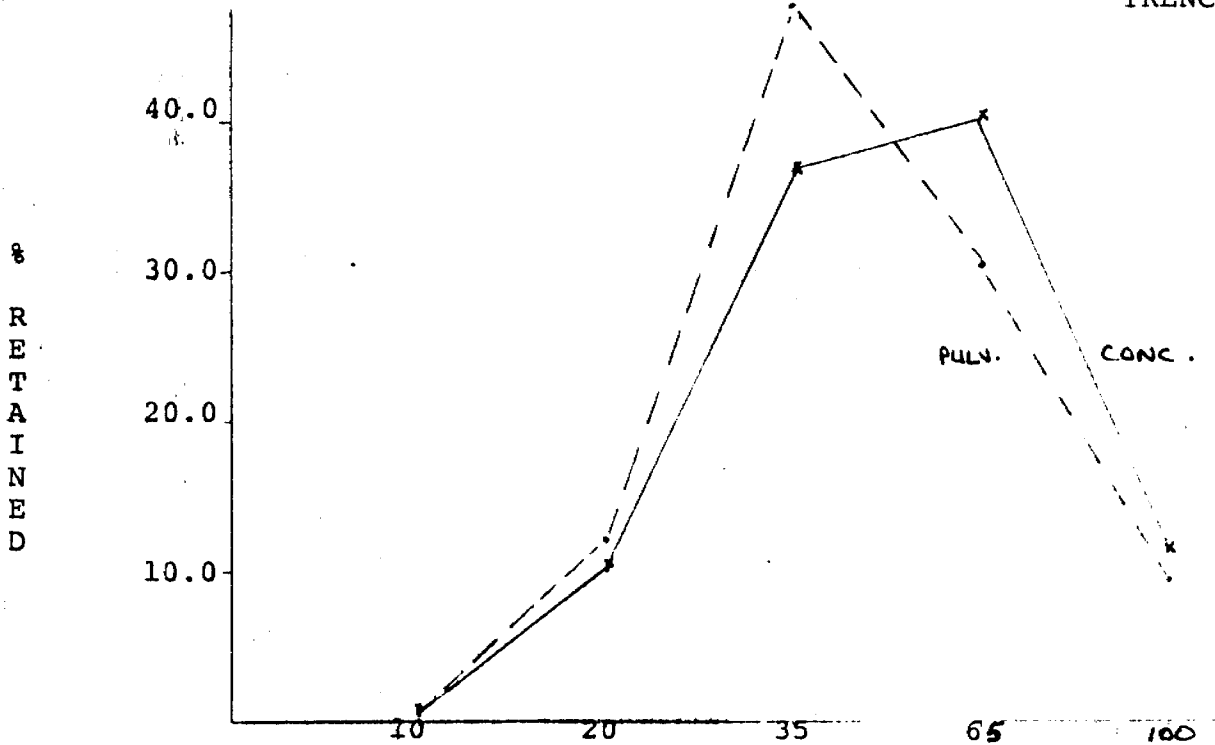


GRAPHS 8 & 9 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

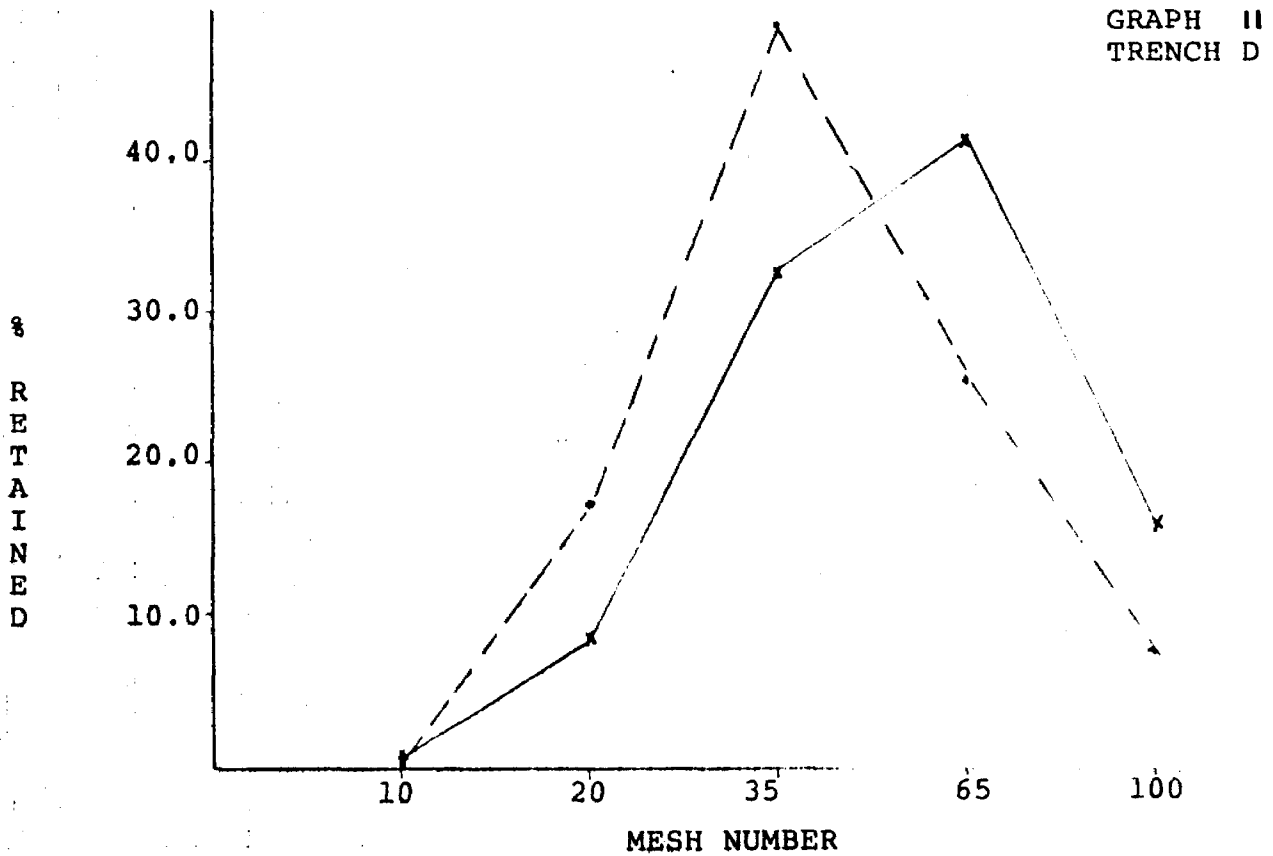
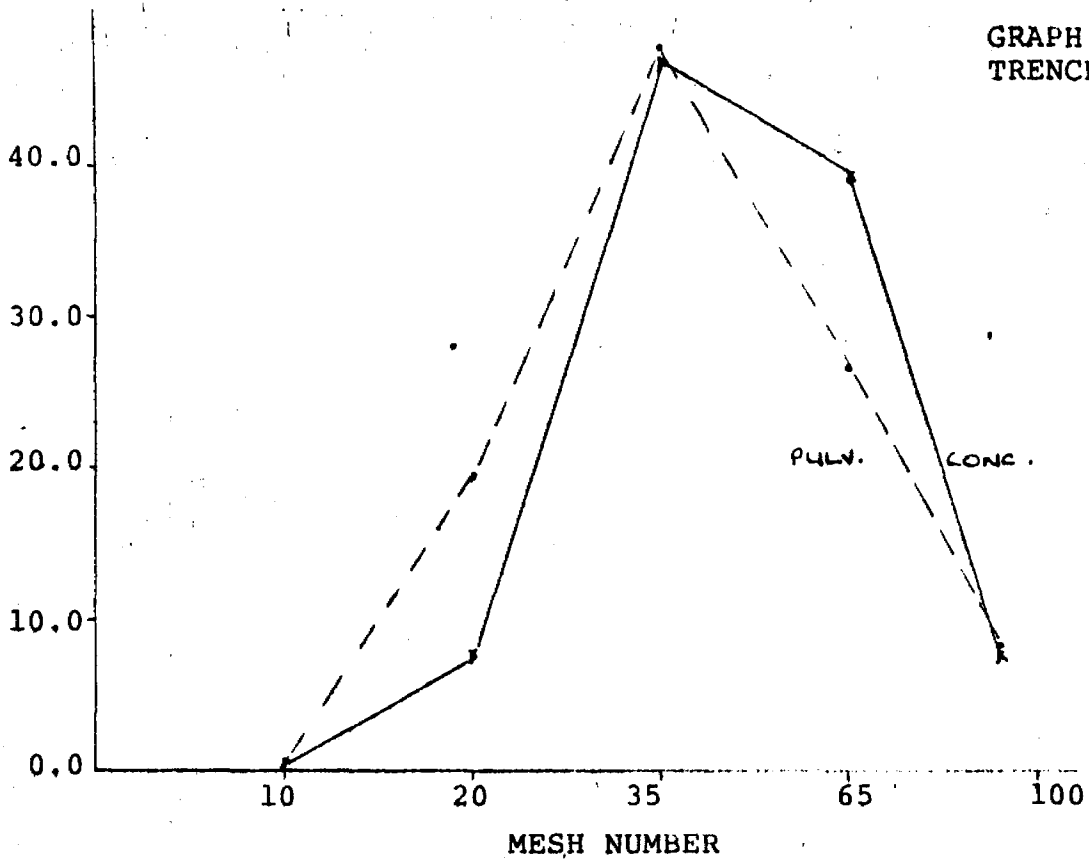
GRAPH 8  
TRENCH A



GRAPH 9  
TRENCH B

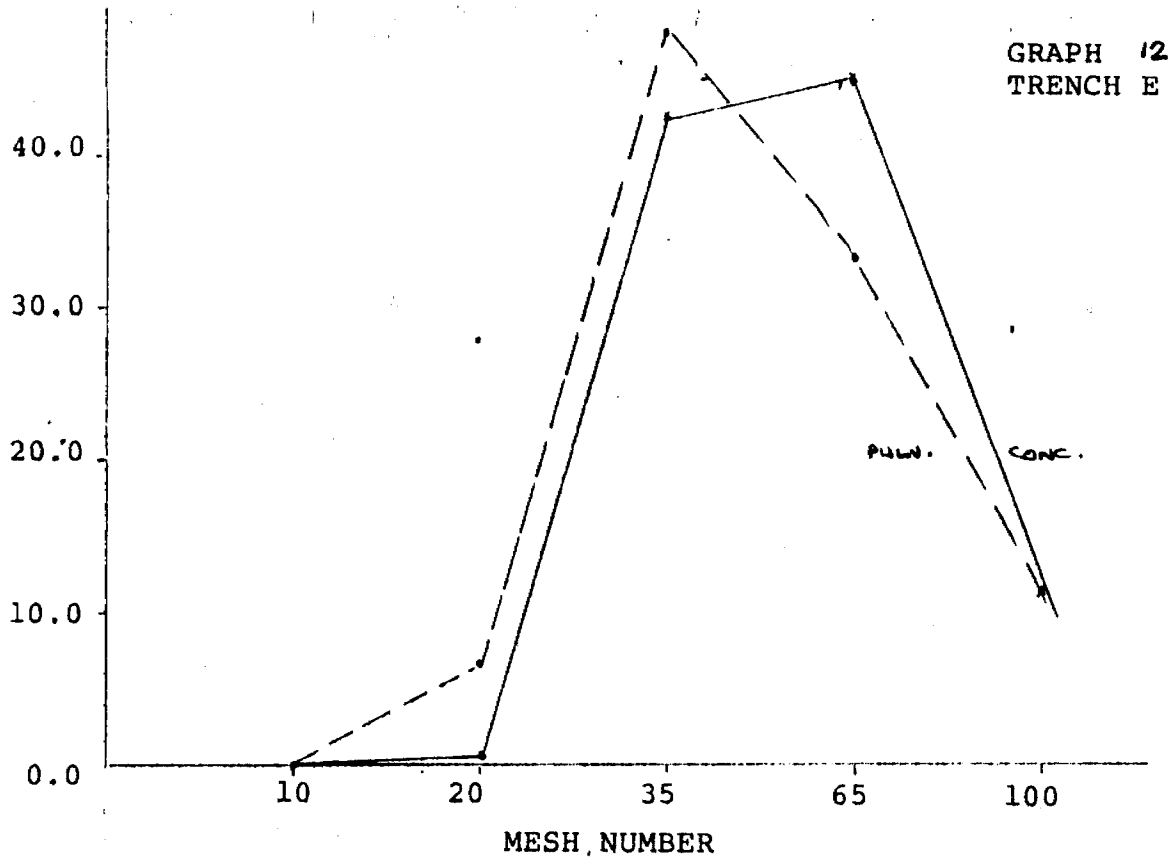


10211 : PULVERIZED ORE AND CONCENTRATE  
 RETAINED ON EACH SCREEN VS. MESH NUMBER (TYLER EQUIVALENT)

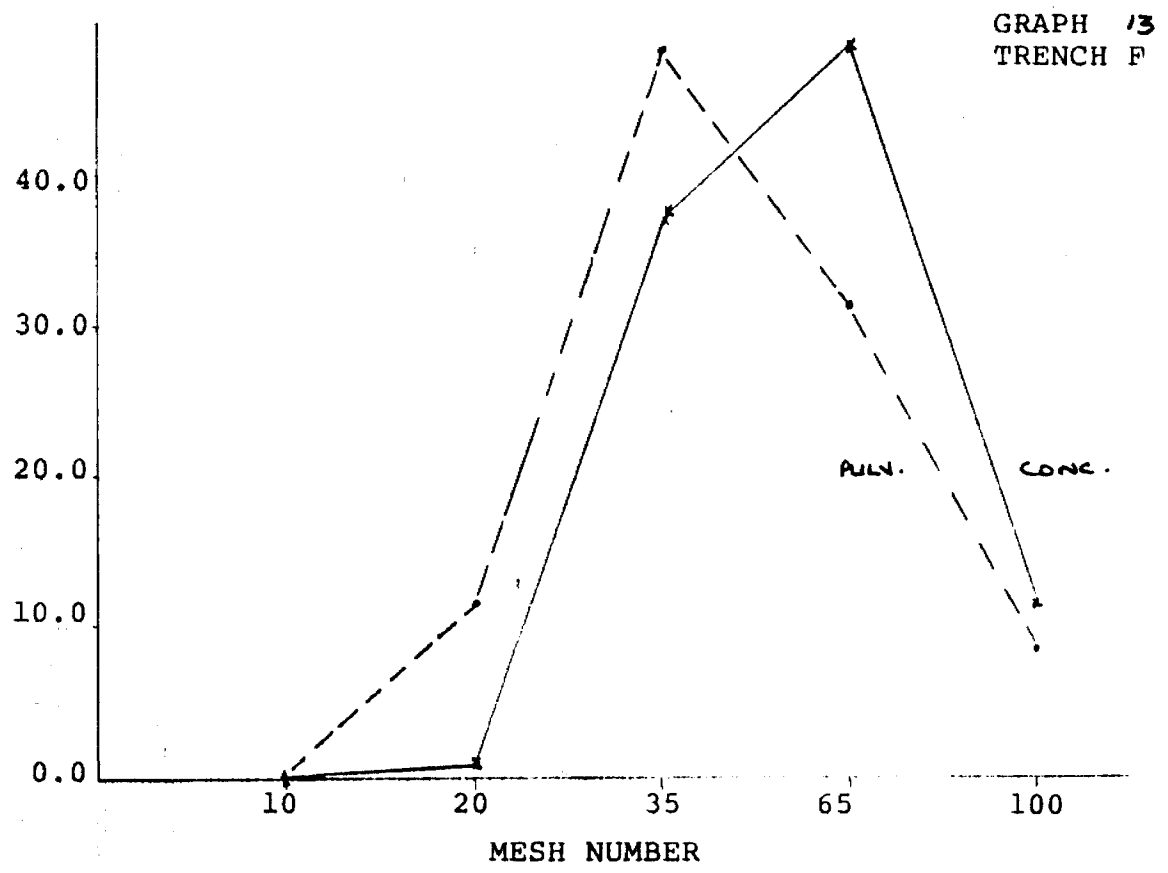


GRAPHS 12 & 13 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
 RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

%  
 R  
 E  
 T  
 A  
 I  
 N  
 E  
 D

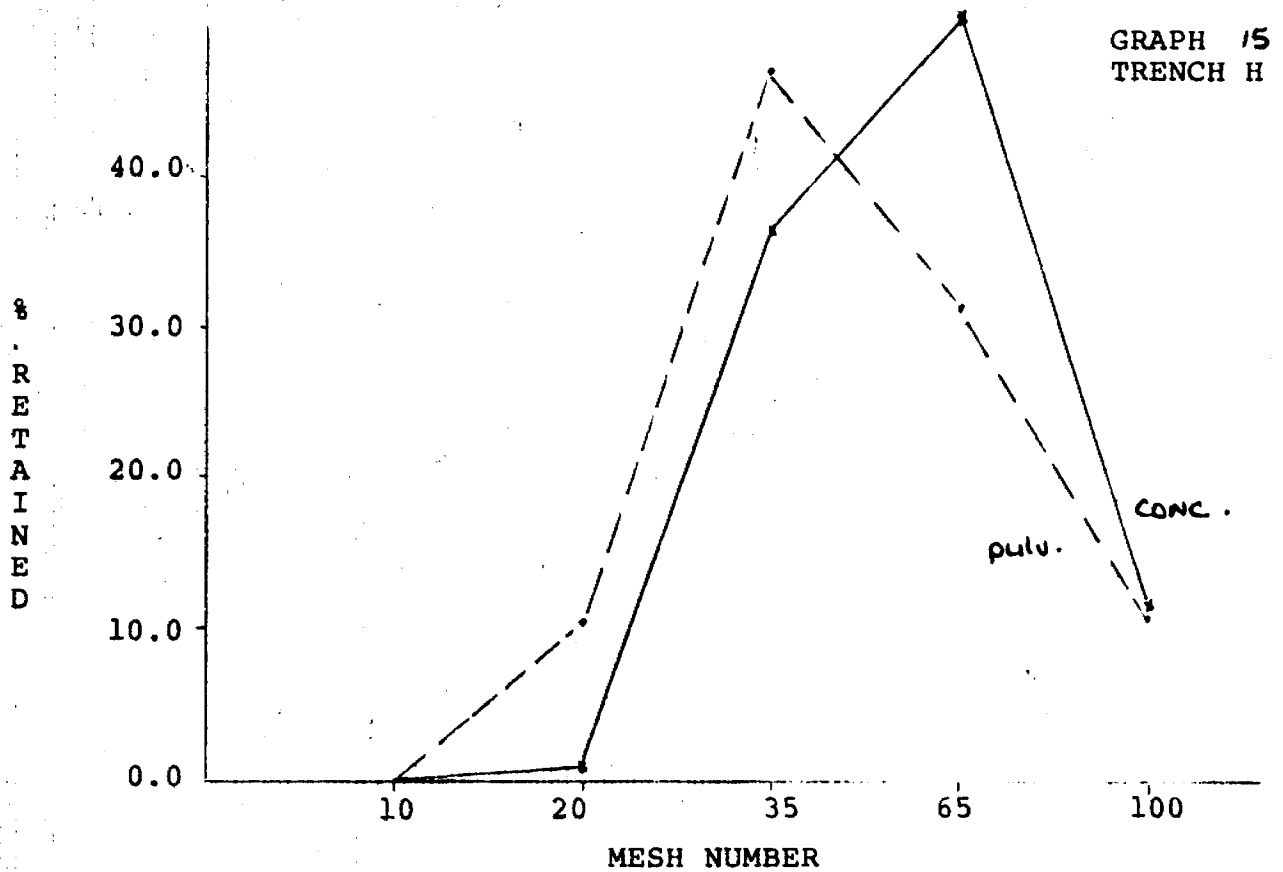
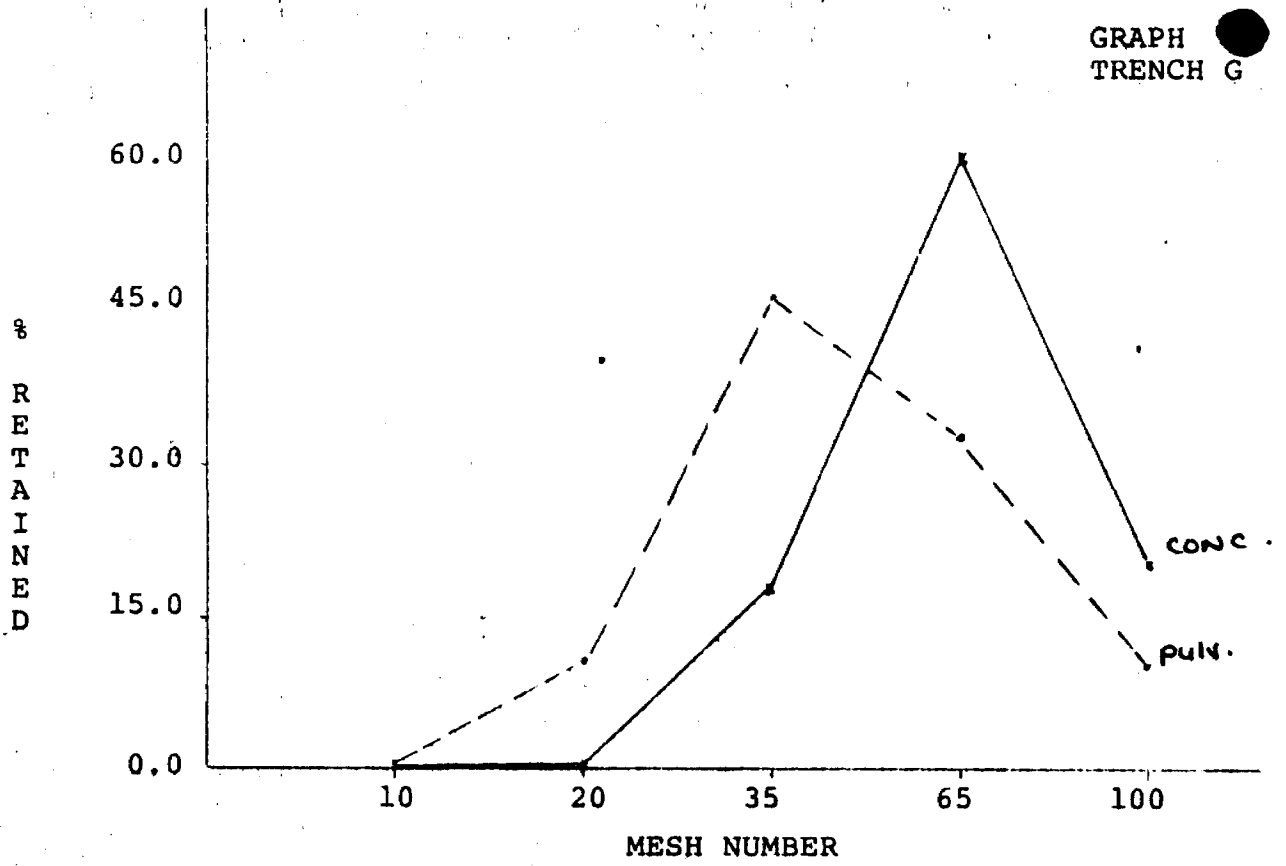


%  
 R  
 E  
 T  
 A  
 I  
 N  
 E  
 D





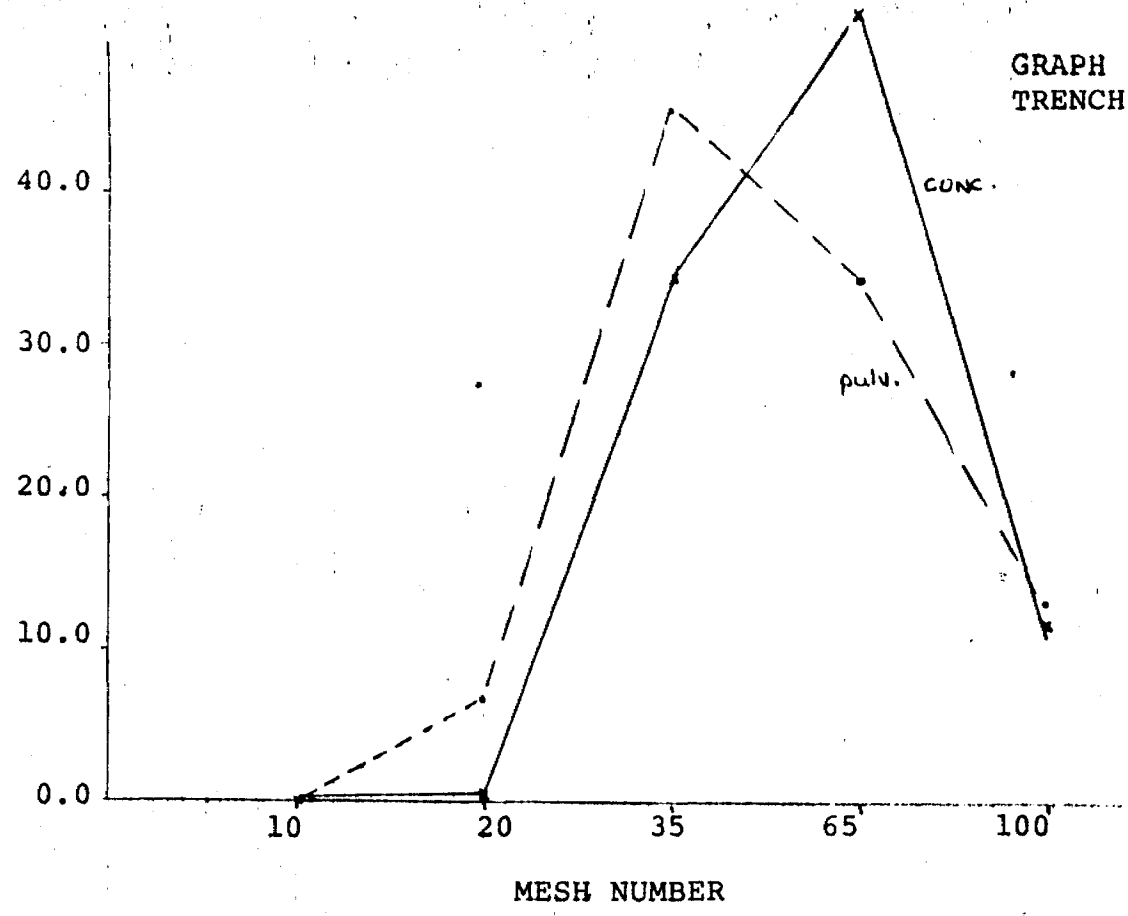
4415  
RETAINED ON EACH SCREEN VS. MESH NUMBER (TYLER EQUIVALENT)



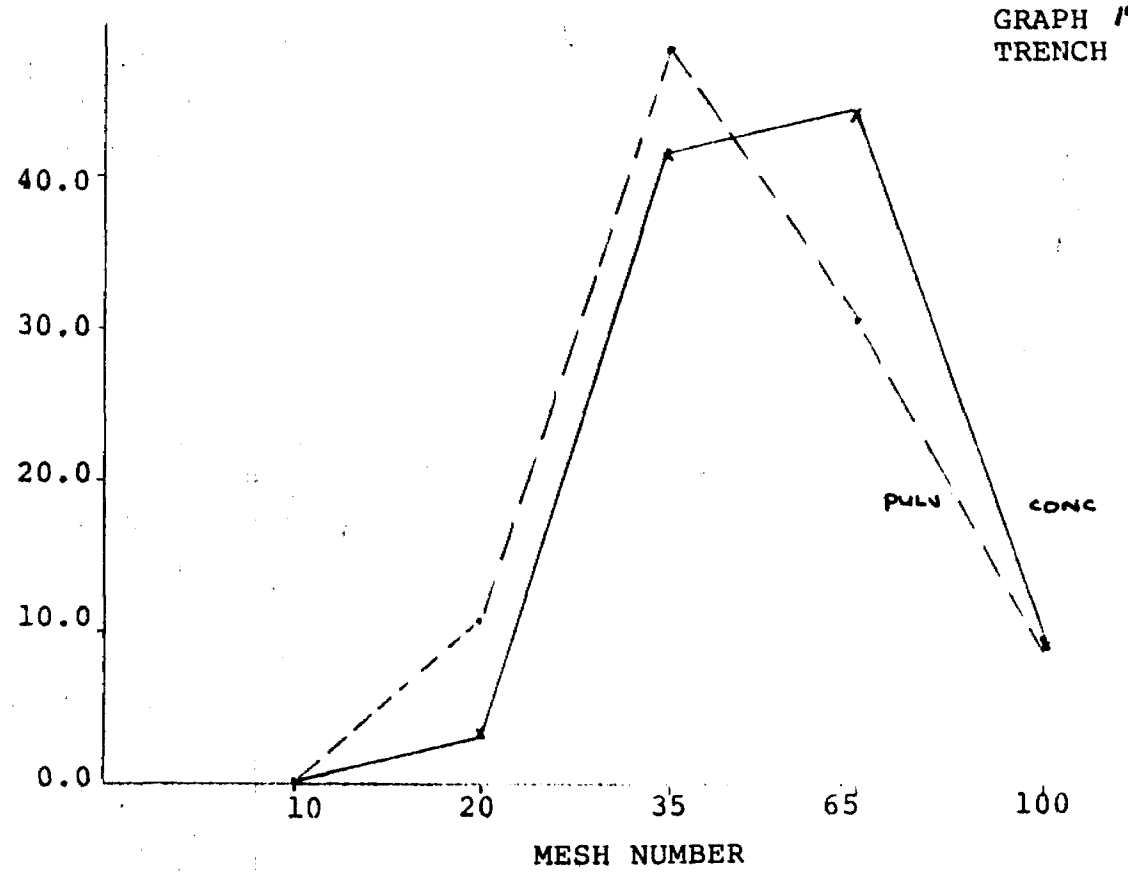
16-17

RETAINED ON EACH SCREEN vs. MESH NUMBER (TYLER EQUIVALENT)

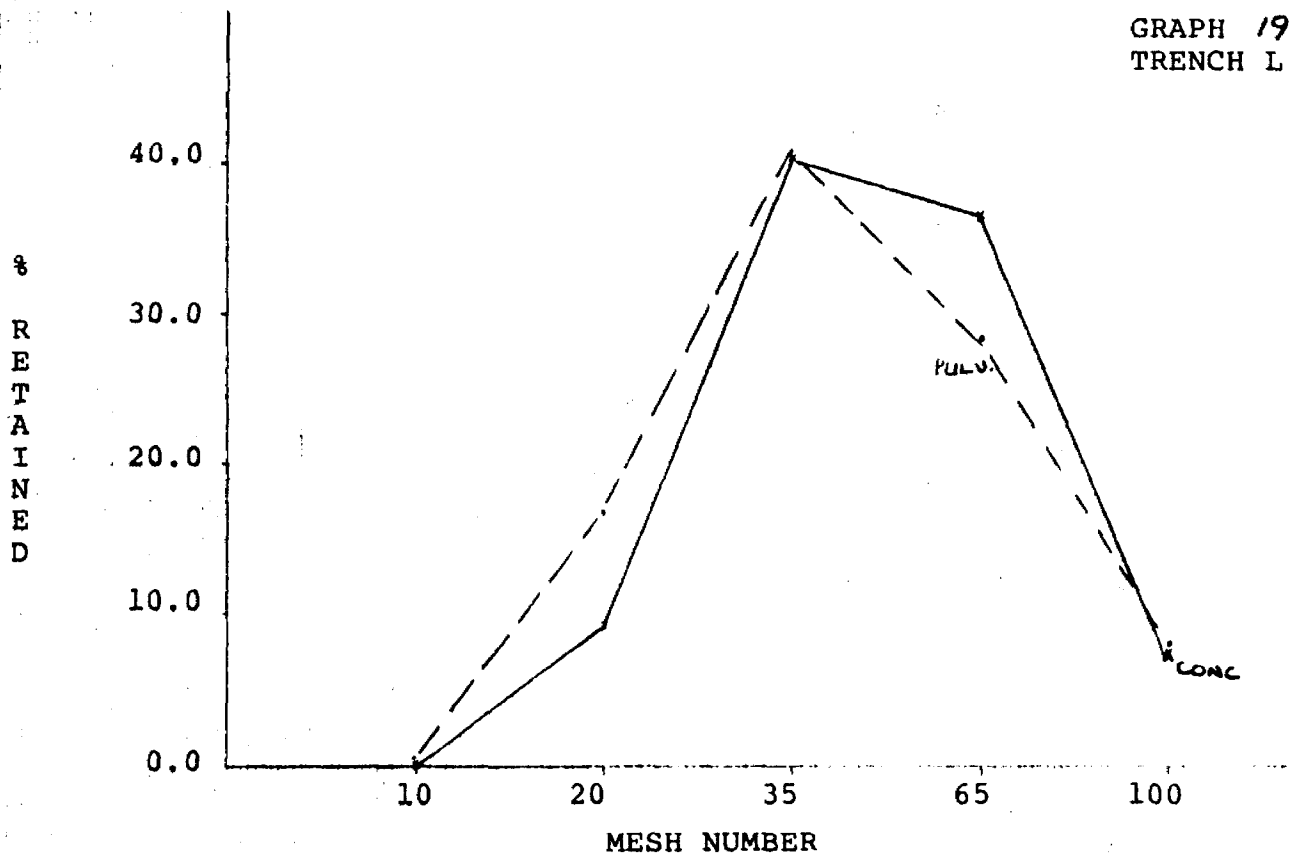
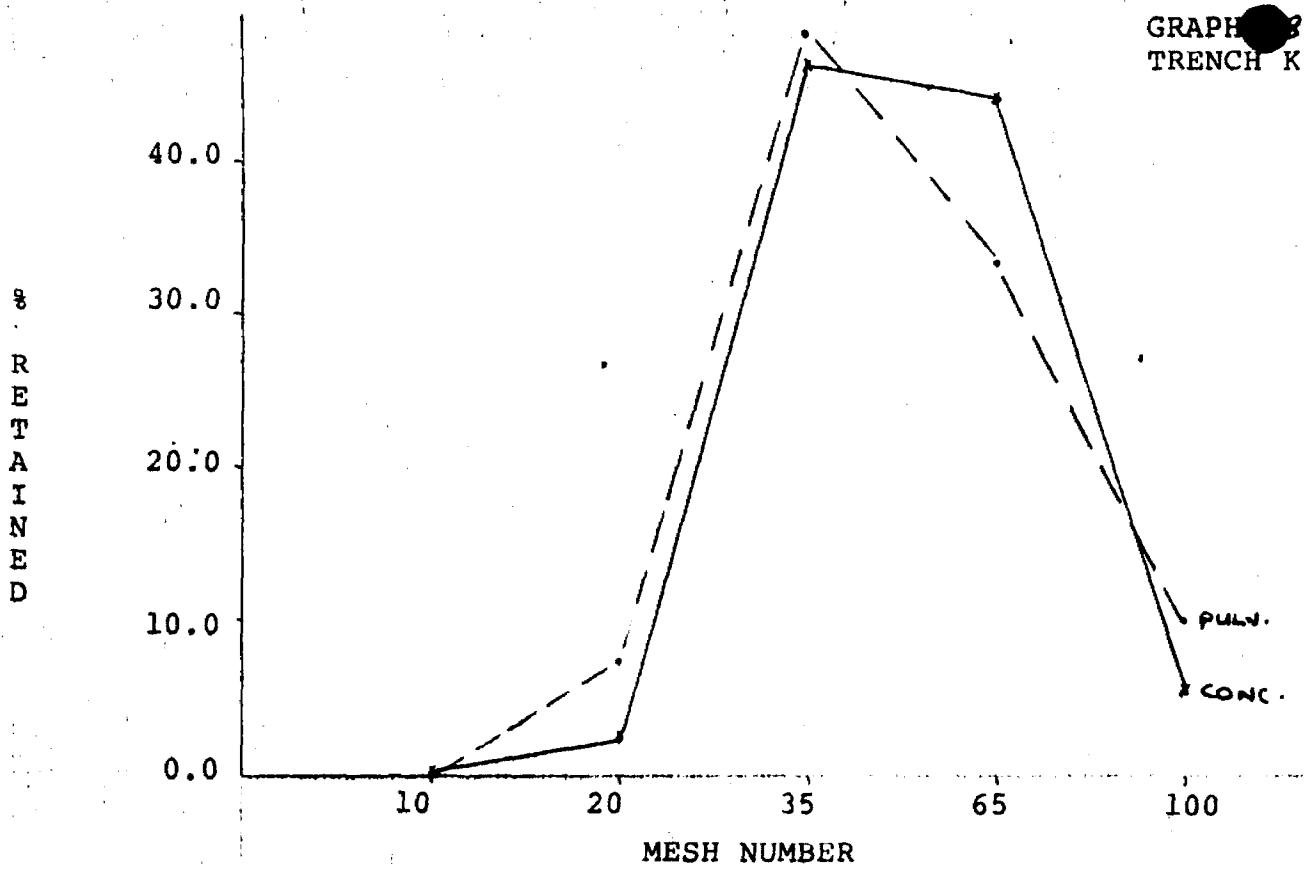
%  
R  
E  
T  
A  
I  
N  
E  
D



%  
R  
E  
T  
A  
I  
N  
E  
D

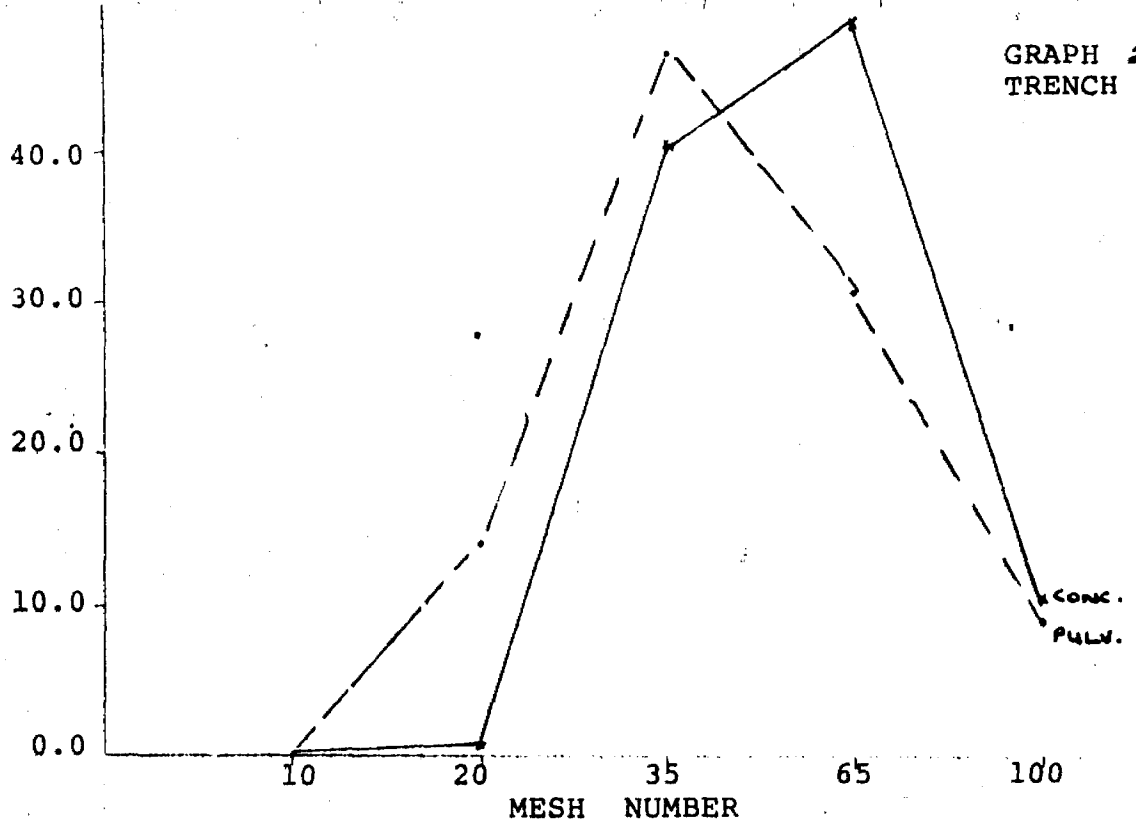


1849 PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
RETAINED ON EACH SCREEN vs. MESH NUMBER

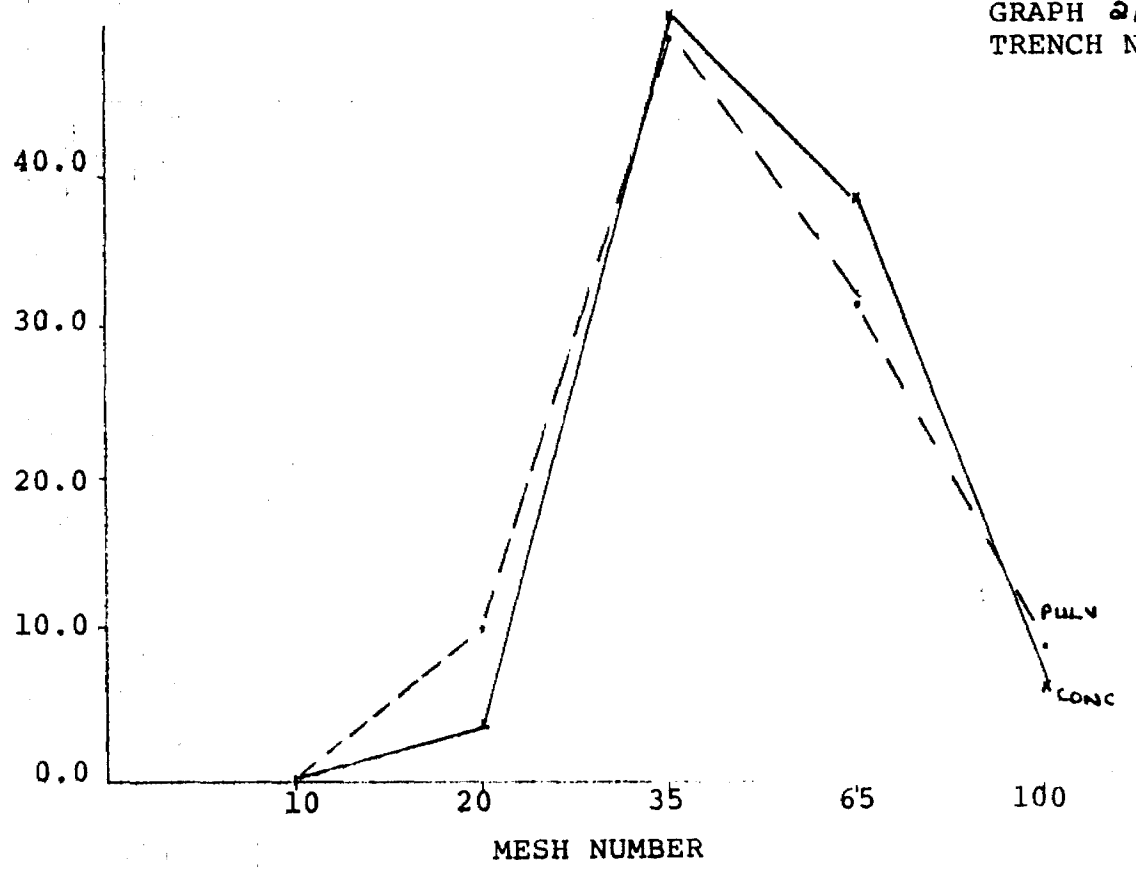


GRAPHS 20421 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
RETAINED ON EACH SCREEN vs. MESH NUMBER

%  
R  
E  
T  
A  
I  
N  
E  
D



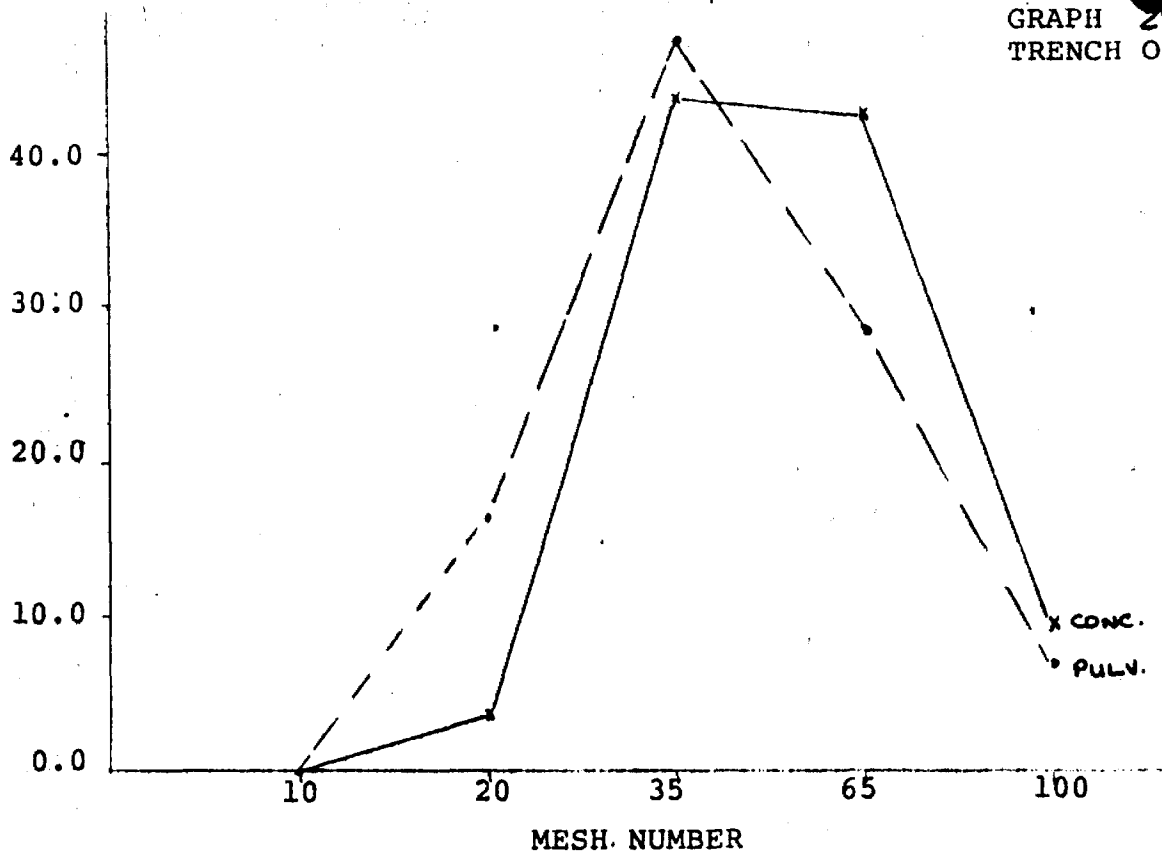
%  
R  
E  
T  
A  
I  
N  
E  
D



GRAPHS 22 & 23: PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
RETAINED ON EACH SCREEN vs. MESH NUMBER

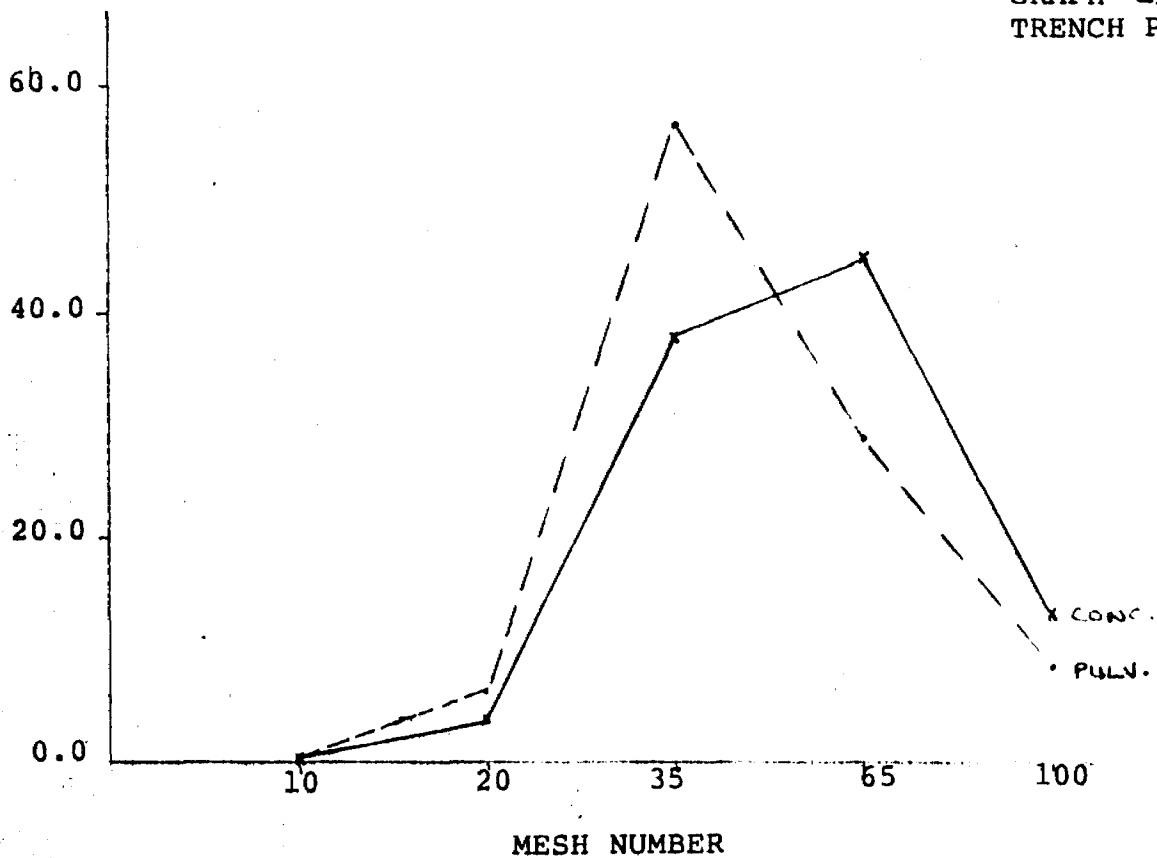
GRAPH 22  
TRENCH O

%  
R  
E  
T  
A  
I  
N  
E  
D



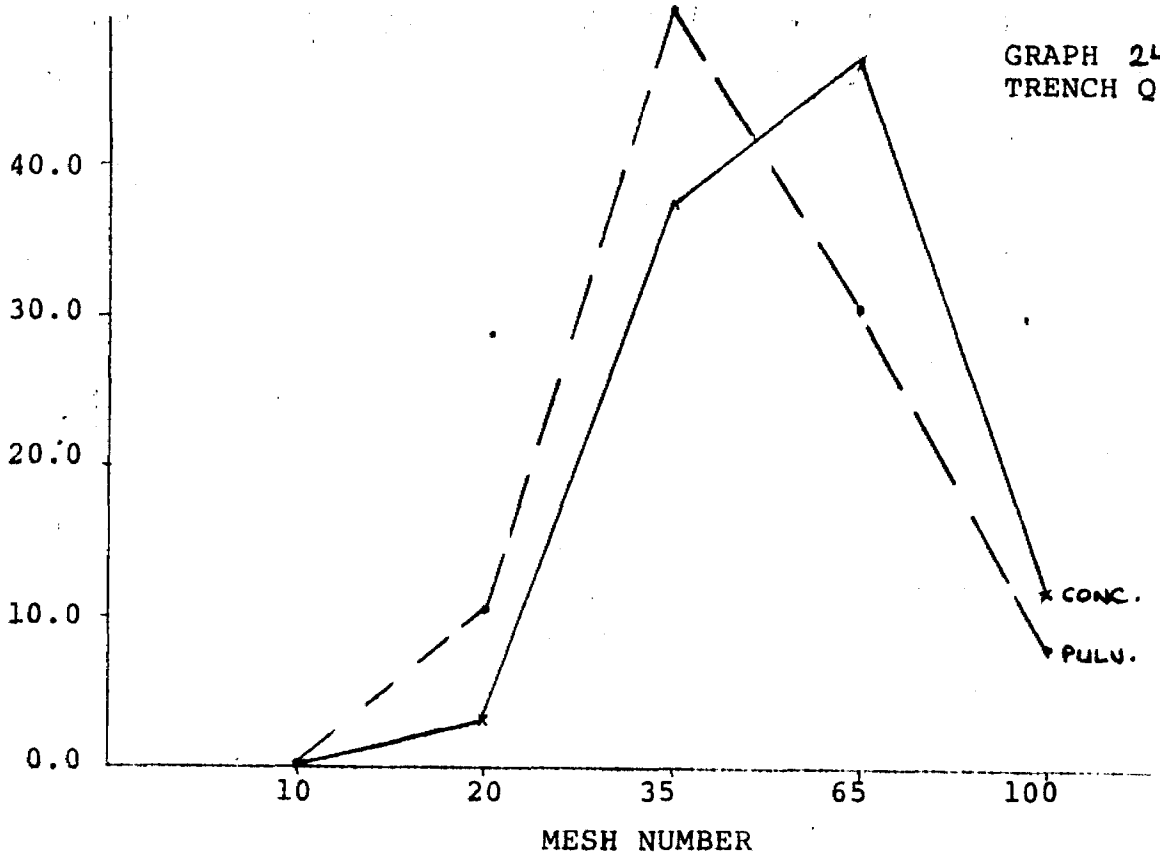
GRAPH 23  
TRENCH P

%  
R  
E  
T  
A  
I  
N  
E  
D

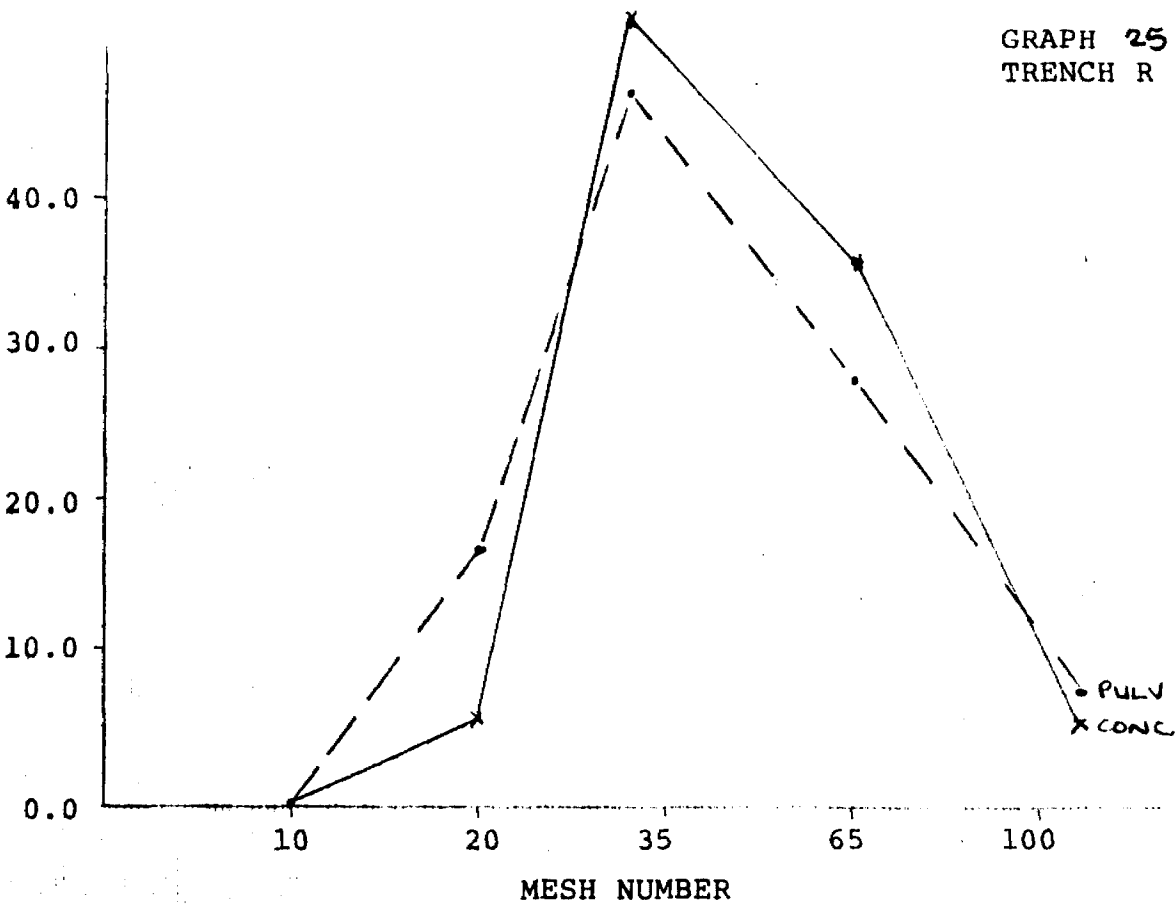


GRAPHS 24 & 25 : PERCENTAGE OF PULVERIZED ORE AND CONCENTRATE  
RETAINED ON EACH SCREEN vs. MESH NUMBER

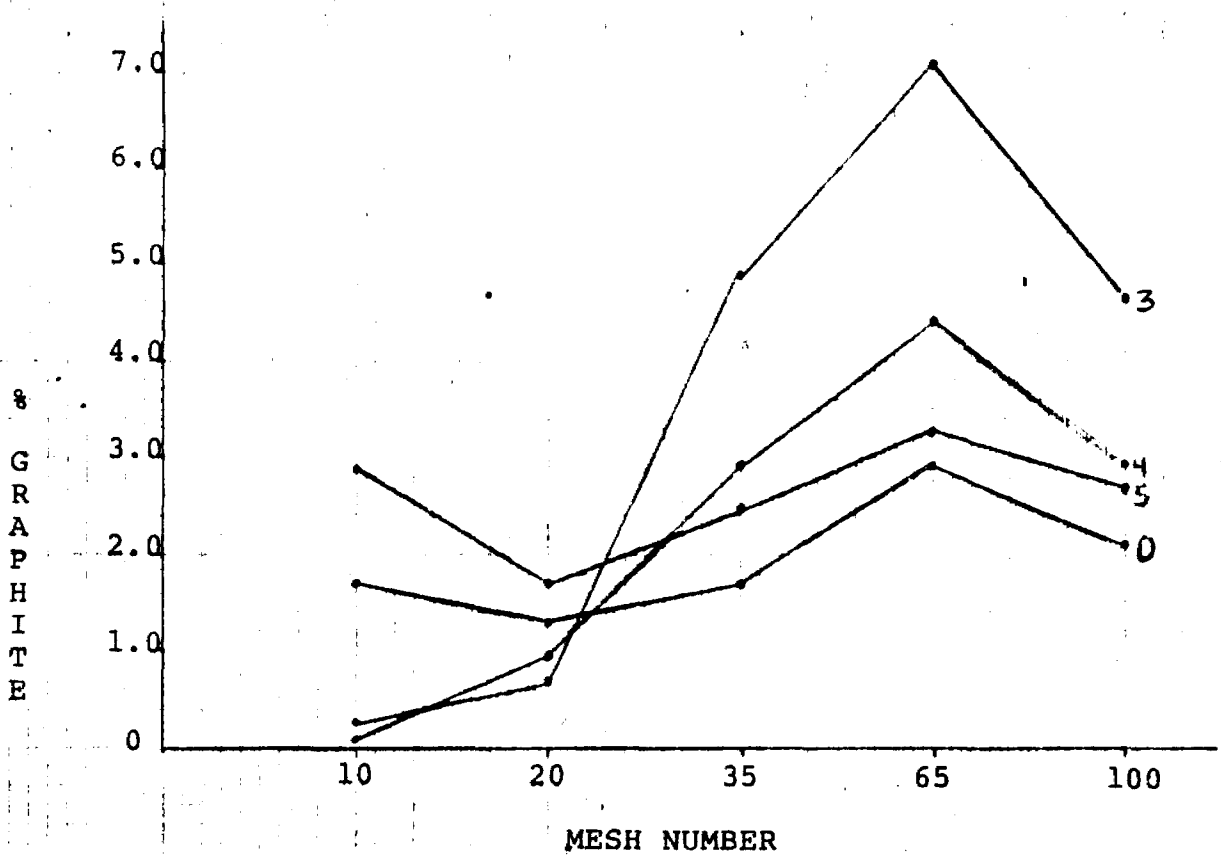
%  
R  
E  
T  
A  
I  
N  
E  
D



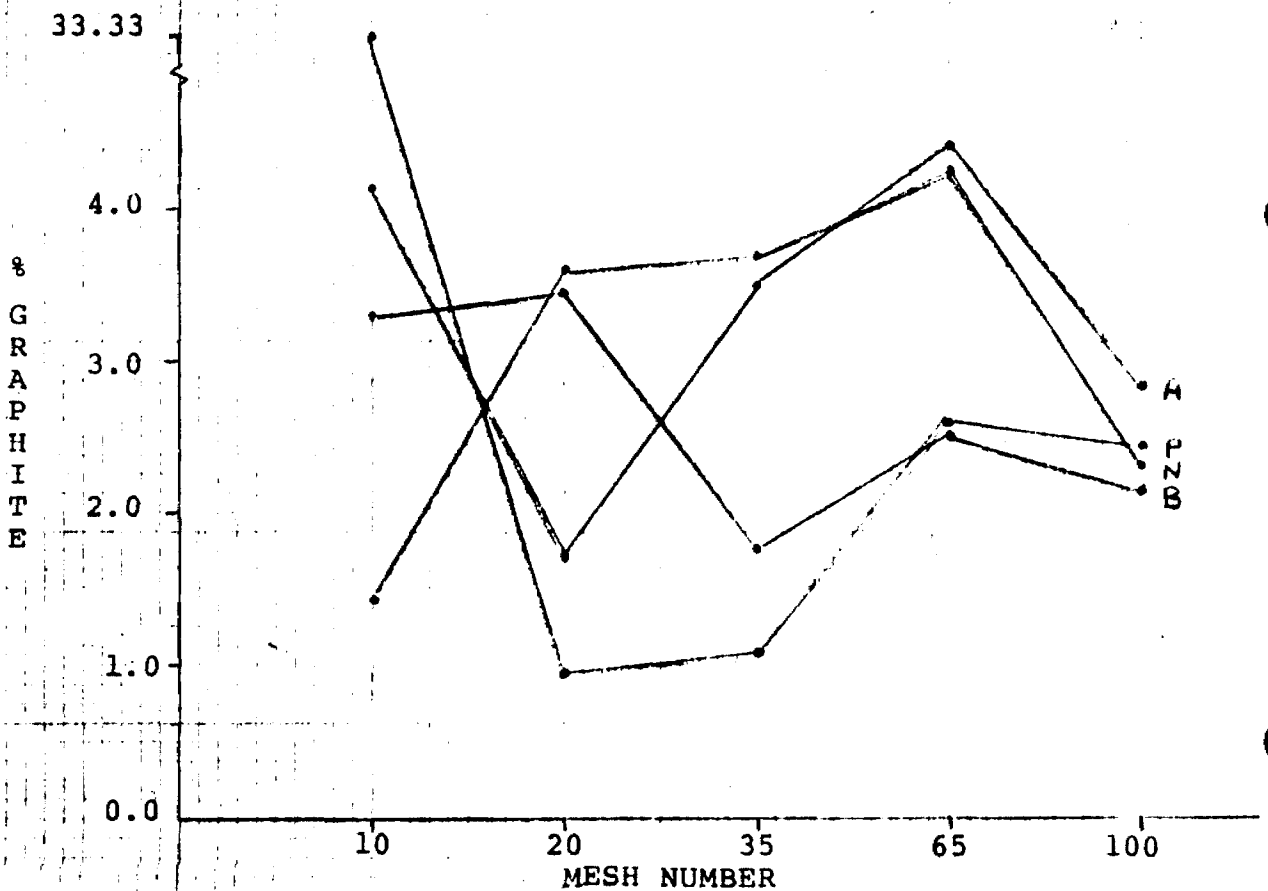
%  
R  
E  
T  
A  
I  
N  
E  
D



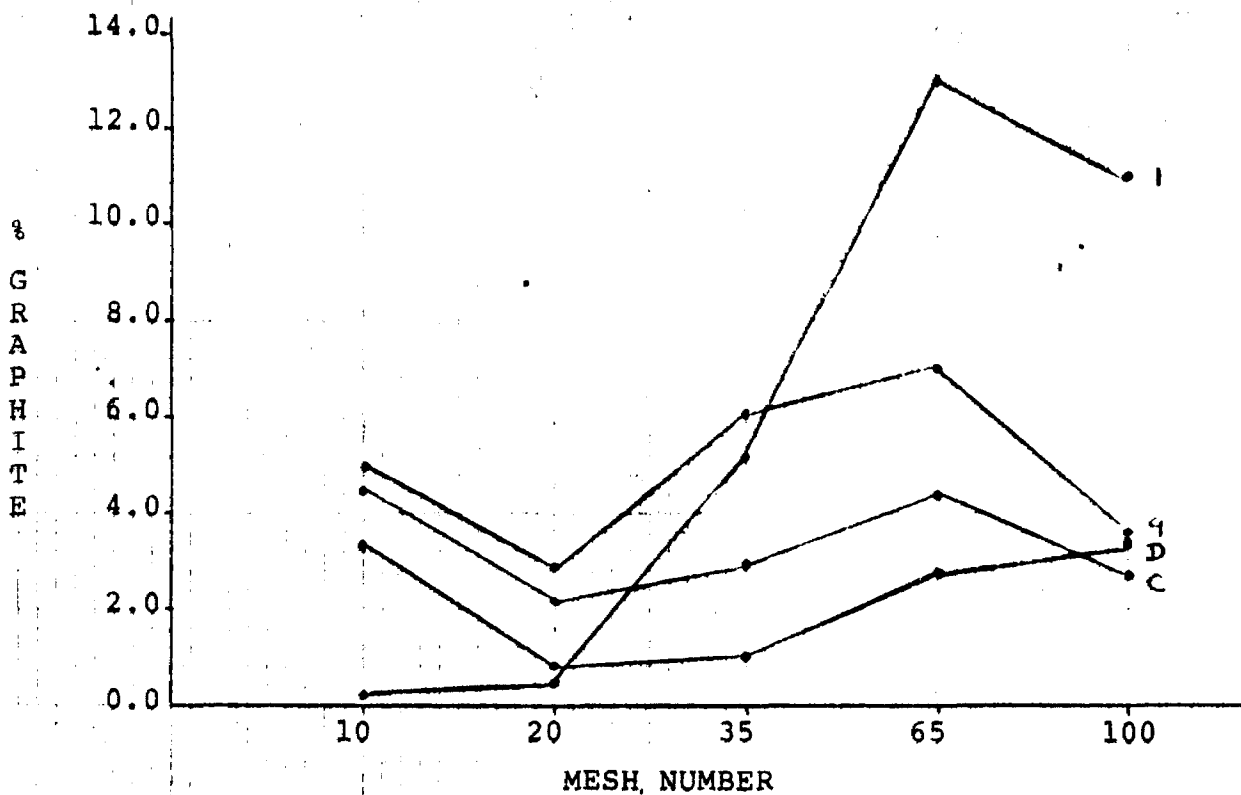
GRAPH 26: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES 0,3,4,5 VS. MESH NUMBER (TYLER EQUIVALENT)



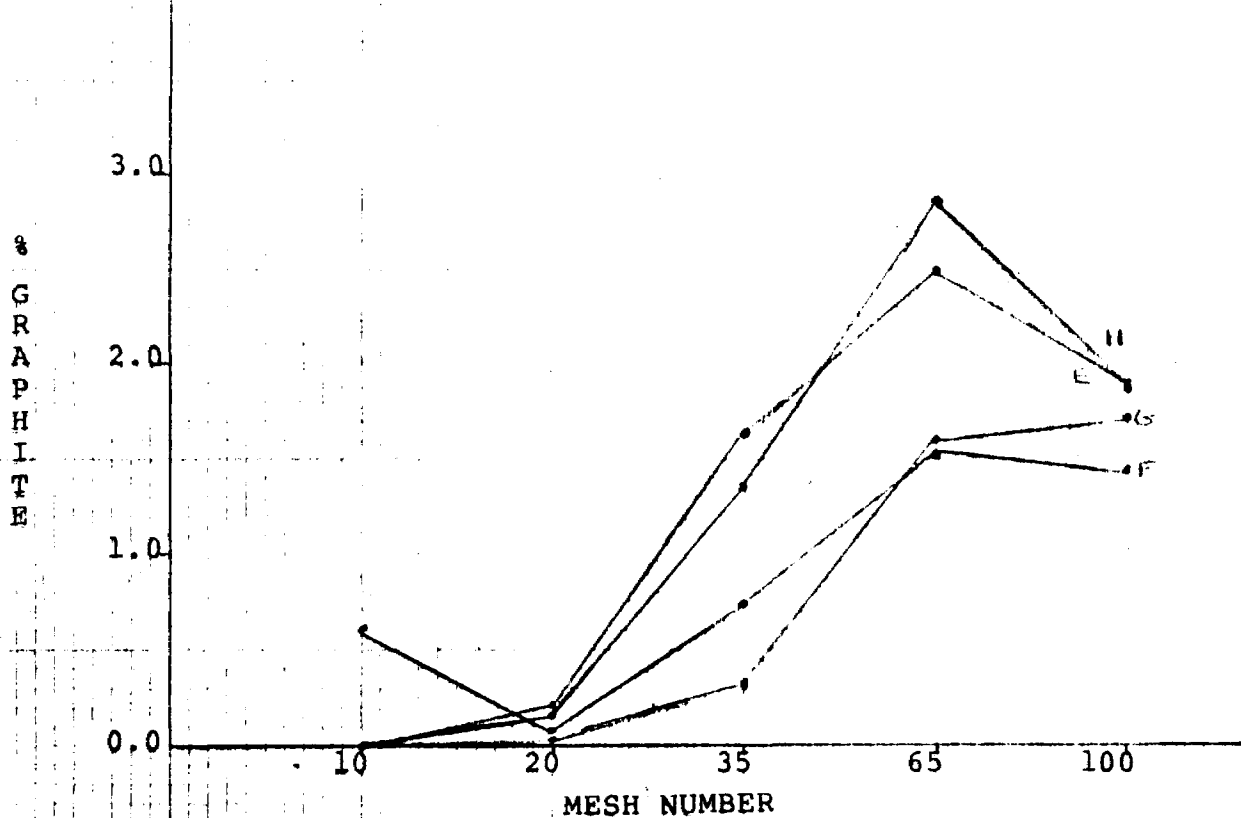
GRAPH 27: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES A,B,N,P vs. MESH NUMBER (TYLER EQUIVALENT)



GRAPH 28: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES 1,9,C,D vs. MESH NUMBER (TYLER EQUIVALENT)

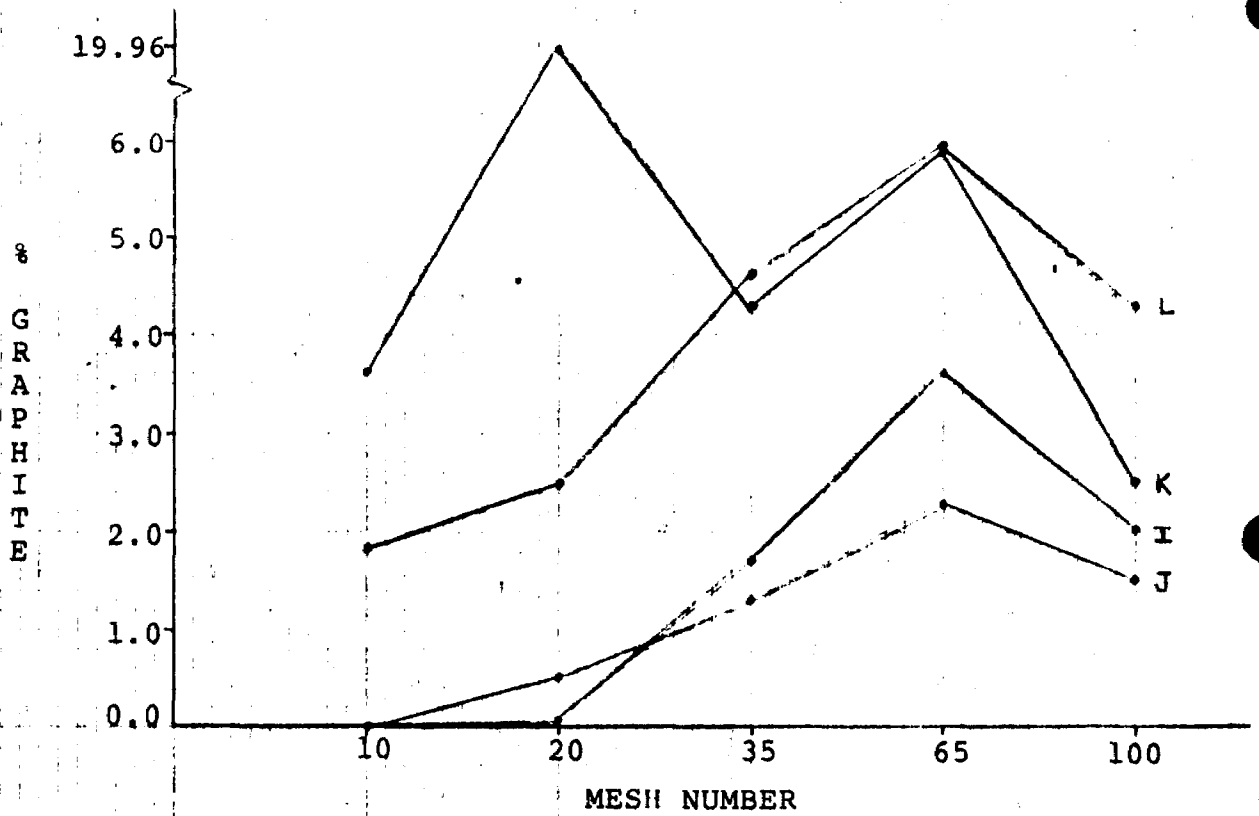


GRAPH 29: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES E,F,G,H vs. MESH NUMBER (TYLER EQUIVALENT)

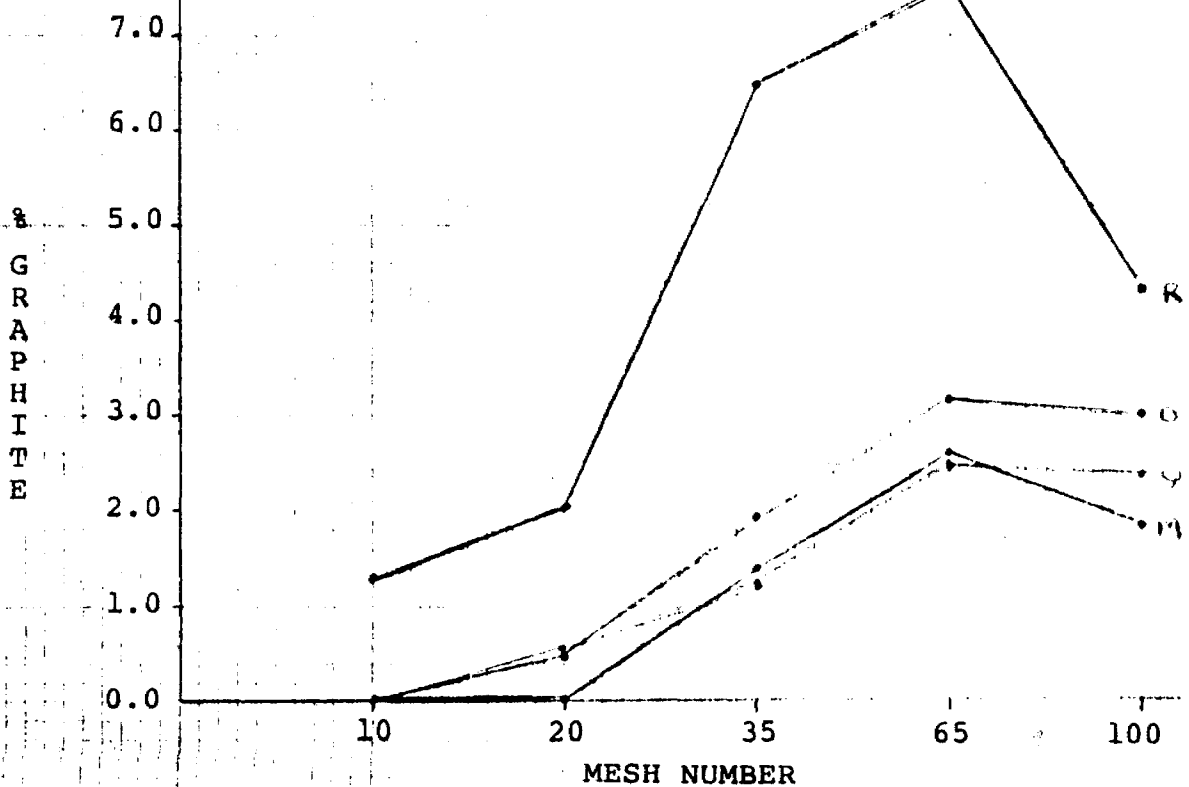




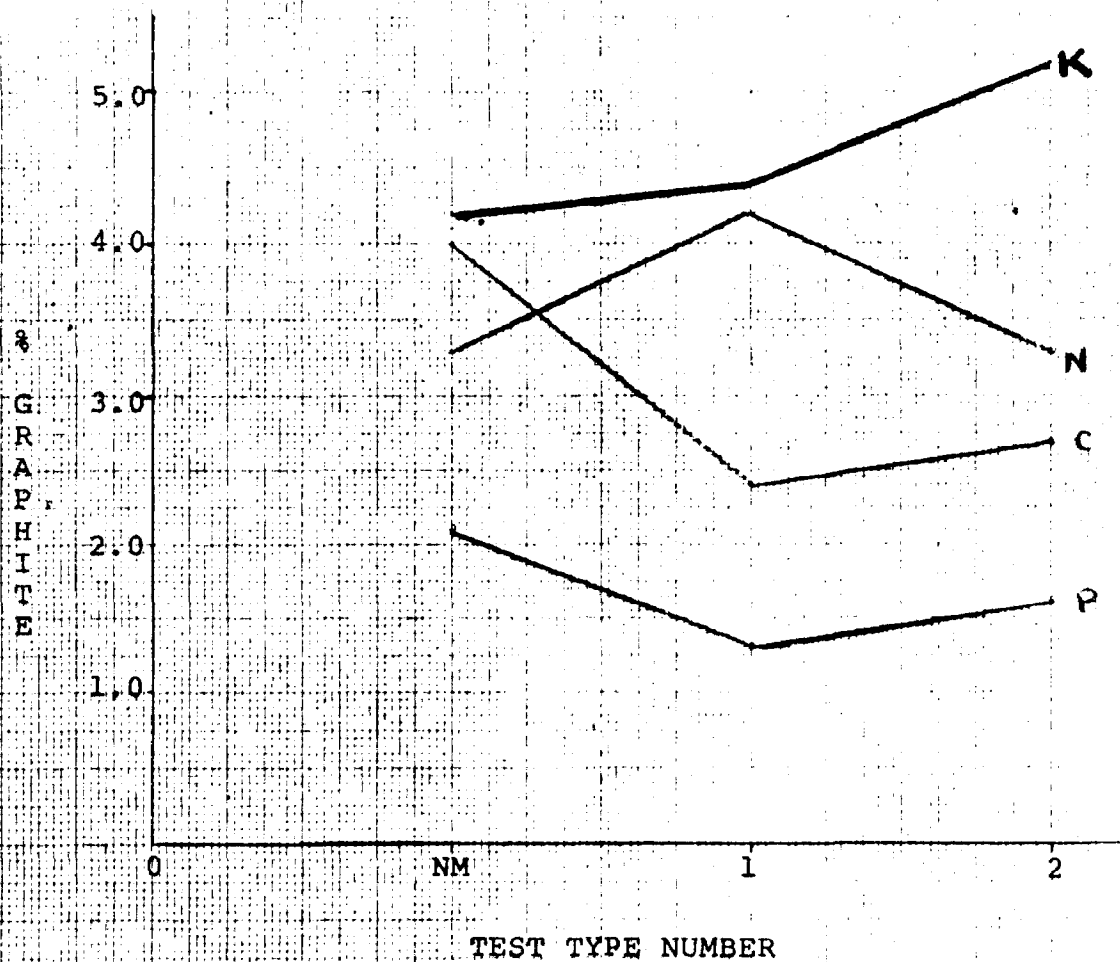
GRAPH 30: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES I, J, K, L vs. MESH NUMBER (TYLER EQUIVALENT)



GRAPH 31: ESTIMATED GRAPHITE GRADE OF VARIOUS ORE SIZES OF TRENCHES M, O, Q, R vs. MESH NUMBER (TYLER EQUIVALENT)



GRAPH 32: ESTIMATED GRAPHITE GRADES, CALCULATED BY RECOVERY, VS. TEST TYPE NUMBER\* FOR TRENCHES C, K, N, P.



TEST TYPE NUMBER	SAMPLE #
NM	N <sub>0</sub> , P <sub>0</sub> , K, C <sub>100</sub>
1	ND <sub>1</sub> , P <sub>1</sub> , KD <sub>1</sub> , CD <sub>1</sub>
2	ND <sub>2</sub> , P <sub>2</sub> , ND <sub>2</sub> , CD <sub>2</sub>

METRIC



Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

L.M.B

# 83-4



31L085E0001 2.5409 MARIA

900

file E0630657

The Mining Act

Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
- Do not use shaded areas below.

Type of Survey(s) VLF	Township or Area MARIA TOWNSHIP
Claim Holder(s) EDWARD J. BLANCHARD	Prospector's Licence No. C 27571
Address 106 FIELDING RD., LIVELY, ONTARIO POM 2E0	
Survey Company ERANA MINES LIMITED	Date of Survey (from & to) 01 11 82   26 11 82 Day   Mo.   Yr.   Day   Mo.   Yr.
Total Miles of line Cut 4.5 miles	
Name and Address of Author (of Geo-Technical report) Dan Innes RR#1 Wasi Rd Callander Ont/ E. Blanchard 106 Fielding Rd Lively Ont	

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
	Geophysical	Days per Claim
	- Electromagnetic	14
Complete reverse side and enter total(s) here	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits	Geochemical	
	Electromagnetic	
	Magnetometer	
Note: Special provisions credits do not apply to Airborne Surveys.	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
EO	630657	43			
	630658	43			
	630659	43			
	630660	43			
	630661	43			
	630662	43			
	630663	43			
	630664	43			
	630665	43			
	630666	43			
	630667	43			
	630668	43			
	630669	43			

RECEIVED

MAR 2 1983

MINING LANDS SECTION

MINING RECORDS OFFICE - TORONTO  
RECEIVED  
FEB 11 1983  
AM 7:30 10:11 12:12 3:45 5:58 PM

Expenditures (excludes power stripping)

Type of Work Performed  
VLF ELECTROMAG. SURV & BENEFICIATION

Performed on Claim(s)  
EO 630659, 630660, 630661,  
630665, 630668

Calculation of Expenditure Days Credits

Total Expenditures		Total Days Credits
\$ 8,385.00	+ 15	= 559

Total number of mining claims covered by this report of work. 13

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only		Mining Recorder <i>[Signature]</i> Branch Director
Total Days Cr. Recorded	Date Recorded	
741	Feb. 11, 1983	
Date Approved as Recorded		

Date  
Feb 10, 1983

Recorded Holder or Agent (Signature)  
*[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying  
*[Signature]*

Date Certified  
Feb 10 1983

Certified by (Signature)  
*[Signature]*





GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) VLF  
Township or Area Maria Twp.  
Claim Holder(s) Datumone Petroleum Ltd.  
(E. Blanchard, J. Jewell)  
Survey Company Erana Mines Limited  
Author of Report Dan Innes and E. Blanchard  
Address of Author RR # 1, Wasi Rd. / 106 Fielding  
Callander, Ont. / Copper Cliff  
Covering Dates of Survey Nov. 1-26, 1982 Ont.  
(line cutting to office)  
Total Miles of Line Cut 3 Miles

MINING CLAIMS TRAVERSED  
List numerically

(prefix)	(number)
EO	630672
EO	630673
EO	630674
EO	630675

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

ENTER 40 days (includes  
line cutting) for first  
survey.  
ENTER 20 days for each  
additional survey using  
same grid.

	DAYS per claim
Geophysical	
- Electromagnetic	<u>30</u>
- Magnetometer	_____
- Radiometric	_____
Beneficiation	<u>43</u>
- Other	_____
Geological	_____
Geochemical	_____

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic 30 Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Feb. 7, 1983 SIGNATURE: E. Blanchard  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

**Previous Surveys**

File No.	Type	Date	Claim Holder

RECEIVED  
MAR 2 1983

MINING LANDS SECTION

TOTAL CLAIMS 4

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 342 Number of Readings 342
Station interval 50' Line spacing 200'
Profile scale
Contour interval Frazer Filter

MAGNETIC

Instrument
Accuracy - Scale constant
Diurnal correction method
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument SCINTREX SCOPAS serial # Mod 707011-101016
Coil configuration
Coil separation
Accuracy
Method: [ ] Fixed transmitter [ ] Shoot back [ ] In line [ ] Parallel line
Frequency Transmitting station Cutler Maine (specify V.L.F. station)
Parameters measured Dip angle and field strength

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [ ] Time Domain [ ] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_

(specify for each type of survey)

Accuracy \_\_\_\_\_

(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_

Beneficiation - mill testing grade  
evaluation.

General Bulk samples taken from  
graphitic zone on claim # 630672 ,

Laboratory expenses \$2580.00.

ANALYTICAL METHODS

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory ( Flotation tests)

Name of Laboratory Porto Metal Mills Ltd.

Extraction Method Flotation

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General All work done by Donegal  
Resources Ltd. for Datumone  
Petroleum Ltd.





Ministry of Natural Resources

File \_\_\_\_\_

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) VLF  
Township or Area Maria Twp.  
Claim Holder(s) Datumone Petroleum Ltd.  
(E. Blanchard, J. Jewell)  
Survey Company Erana Mines Limited  
Author of Report Dan Innes / E. Blanchard  
RR #1 Wasi Rd / 106 Fielding Rd  
Address of Author Callander, Ont. / Copper Cliff, Ont  
Covering Dates of Survey November 1-26, 1982  
(linecutting to office)  
Total Miles of Line Cut 4.5 Miles or 180 days

MINING CLAIMS TRAVERSED  
List numerically

(prefix) (number)  
EO 630657  
EO 630658  
EO 630659  
EO 630660  
EO 630661  
EO 630662  
EO 630663  
EO 630664  
EO 630665  
EO 630666  
EO 630667  
EO 630668  
EO 630669

If space insufficient, attach list

SPECIAL PROVISIONS  
CREDITS REQUESTED

DAYS  
per claim

Geophysical  
-Electromagnetic 14  
-Magnetometer \_\_\_\_\_  
-Radiometric \_\_\_\_\_  
Beneficiation 43  
-Other \_\_\_\_\_  
Geological \_\_\_\_\_  
Geochemical \_\_\_\_\_

ENTER 40 days (includes  
line cutting) for first  
survey.  
ENTER 20 days for each  
additional survey using  
same grid.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic 14 Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Feb. 7, 1983 SIGNATURE: E. Blanchard  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

Previous Surveys

File No.	Type	Date	Claim Holder

RECEIVED

MAR 2 1983

MINING LANDS SECTION

TOTAL CLAIMS 13

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 454 Number of Readings 454  
Station interval 50' Line spacing 200'  
Profile scale \_\_\_\_\_  
Contour interval \_\_\_\_\_

**MAGNETIC**

Instrument \_\_\_\_\_  
Accuracy - Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base Station check-in interval (hours) \_\_\_\_\_  
Base Station location and value \_\_\_\_\_

**ELECTROMAGNETIC**

Instrument SCINTREX SCOPAS Serial # Mod 707011-101016  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency Transmitting station Cutler Maine  
(specify V.L.F. station)  
Parameters measured Dip angle and field strength

**GRAVITY**

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_  
Elevation accuracy \_\_\_\_\_

**INDUCED POLARIZATION  
RESISTIVITY**

Instrument \_\_\_\_\_  
Method  Time Domain  Frequency Domain  
Parameters - On time \_\_\_\_\_ Frequency \_\_\_\_\_  
- Off time \_\_\_\_\_ Range \_\_\_\_\_  
- Delay time \_\_\_\_\_  
- Integration time \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) \_\_\_\_\_

Instrument(s) \_\_\_\_\_

(specify for each type of survey)

Accuracy \_\_\_\_\_

(specify for each type of survey)

Aircraft used \_\_\_\_\_

Sensor altitude \_\_\_\_\_

Navigation and flight path recovery method \_\_\_\_\_

Aircraft altitude \_\_\_\_\_ Line Spacing \_\_\_\_\_

Miles flown over total area \_\_\_\_\_ Over claims only \_\_\_\_\_

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken \_\_\_\_\_

Total Number of Samples \_\_\_\_\_

Type of Sample \_\_\_\_\_  
(Nature of Material)

Average Sample Weight \_\_\_\_\_

Method of Collection \_\_\_\_\_

Soil Horizon Sampled \_\_\_\_\_

Horizon Development \_\_\_\_\_

Sample Depth \_\_\_\_\_

Terrain \_\_\_\_\_

Drainage Development \_\_\_\_\_

Estimated Range of Overburden Thickness \_\_\_\_\_

SAMPLE PREPARATION  
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis \_\_\_\_\_

Beneficiation - mill testing  
grade evaluation.

General Bulk samples taken from  
graphitic zone on claim # 630655.

Laboratory expenses \$ 8,385.00

ANALYTICAL METHODS

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others \_\_\_\_\_

Field Analysis (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Field Laboratory Analysis

No. (\_\_\_\_\_ tests)

Extraction Method \_\_\_\_\_

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

Commercial Laboratory (Flotation tests)

Name of Laboratory Porto Metal Mills Ltd.

Extraction Method Flotation

Analytical Method \_\_\_\_\_

Reagents Used \_\_\_\_\_

General All work done by Donegal  
Resources Ltd. for Datumone Petroleum  
Ltd.

REGISTERED

83-4

November 25, 1983

2.5409

Edward J. Blanchard  
106 Fielding Road  
Lively, Ontario  
POM 2E2

Dear Sir:

RE: Geophysical (Electromagnetic) Survey  
submitted on mining claims EO 630657  
et al in the Township of Maria

---

Enclosed is a copy of our letter dated August 9, 1983  
requesting additional information for the above-mentioned  
survey.

Unless you can provide the required data by December 7,  
1983 the mining recorder will be directed to cancel the  
work credits recorded on February 11, 1983.

For further information, please contact Mr. F.W. Matthews  
at (416)965-1380.

Yours very truly,

E.F. Anderson'  
Director  
Land Management Branch

Whitney Block, Room 6610  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

D. Kinvig:mc

Encl.

cc: Mining Recorder  
Toronto, Ontario

REGISTERED

83-5

November 25, 1983

2.5409

Mr. J. Jewell  
82 Pine Crescent  
Toronto, Ontario  
M4E 1L4

Dear Sir:

RE: Geophysical (Electromagnetic) Survey  
submitted on mining claims EO 630672  
et al in the Township of Maria

---

Enclosed is a copy of our letter dated August 9, 1983  
requesting additional information for the above-mentioned  
survey.

Unless you can provide the required data by December 7,  
1983 the mining recorder will be directed to cancel the  
work credits recorded on February 11, 1983.

For further information, please contact Mr. F.W. Matthews  
at (416)965-1380.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6610  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

D. Kinvig:mc

Encl.

cc: Mining Recorder  
Toronto, Ontario

2.5409

1983 12 19

Our File: 2.5409

Resident Geologist  
Ministry of Natural Resources  
Box 9000  
Huntsville, Ontario  
POA 1K0

Dear Sir:

RE: Geophysical (Electromagnetic) Survey submitted  
on Mining Claims E0 630657 et al in the Township  
of Maria

---

Further to my letter of March 10, 1983 which acknowledged receipt of the above survey, the data has not been assessed because the Recorded Holder is no longer interested in the property and will not forward the data necessary to complete his report.

Enclosed is a copy of the report (no maps) for your information.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

A. Barr:mc

cc: Edward J. Blanchard  
106 Fielding Road  
Lively, Ontario  
POM 2E0

cc: Mining Recorder  
Toronto, Ontario

1983 03 10

2.5409

Mrs. R.M. Charnesky  
Mining Recorder  
Ministry of Natural Resources  
Whitney Block, Room 2548  
99 Wellesley Street West  
Queen's Park  
Toronto, Ontario  
M7A 1W3

Dear Madam:

We have received reports and maps for a Geophysical  
(Electromagnetic) and Beneficiation Survey on Mining  
Claims EO 630657 et al in the Township of Maria.

This material will be examined and assessed and a  
statement of assessment work credits will be issued.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: 416/965-1380

A. Barr:sc

cc: Erana Mines Limited  
Copper Cliff, Ontario  
POM 1N0



August 9, 1983

2.5409

Erana Mines Limited  
106 Fielding Road  
Copper Cliff, Ontario  
POM 1N0

Dear Sir:

RE: Geophysical (Electromagnetic) and Beneficiation Survey  
on Mining Claims EO 630657 et al in Maria Township

---

Returned herein are the VLF Plans, (in duplicate), for the above-mentioned survey. Please show the raw data readings and have the author of the report sign and date each map.

The following information is required before your report will be considered complete:

- 1) Complete the enclosed Assessment Work Breakdowns (in duplicate) for each claim group.
- 2) A financial summary listing all types of work and costs involved. All expenditures for which credits are requested must be verified by submission of signed receipts, cancelled cheques, etc. (in duplicate)
- 3) A complete report covering the electromagnetic (VLF) survey carried out (in duplicate).

Please provide a resume of the qualifications for E. Blanchard, as shown outlined on the attached.

When submitting this material, please quote file 2.5409.

For further information, please contact Mr. F.W. Matthews at (416)965-1380.

Yours very truly,

E.F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

S. Hurst:mc

Encl.

cc: Mining Recorder  
Toronto, Ontario

1983 12 22

7561.1V2

Mrs. R.M. Charnesky  
Mining Recorder  
Ministry of Natural Resources  
Whitney Block, Room 2548  
99 Wellesley Street West  
Queen's Park  
Toronto, Ontario  
M7A 1W3

Dear Madam:

557

Edward J. Blanchard recorded ~~747~~ days Expenditure assessment work credits on each of mining claims EO 630657 to 69 inclusive on February 11, 1983. He is no longer interested in the property and will not forward the data needed to assess the report.

You are hereby authorized to delete the work credits recorded on February 11, 1983 from each of the claim record sheets. Please inform the recorded holder accordingly.

Yours very truly,

E. F. Anderson  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone: (416)965-1380

A. Barr:mc

cc: Edward J. Blanchard  
106 Fielding Road  
Lively, Ontario  
POM 2E0

(705) 682-0649  
TELEX # 067-7261

**ERANA** MINES LIMITED

106 FIELDING RD.  
COPPER CLIFF, ONTARIO  
P0M 1N0

TO: Donegal Resources Ltd.  
2000-609 Granville St.  
Box 10336 Pacific Centre  
VANCOUVER, B.C.  
V7Y 1A1 Att'n: Mr. David Copeland

INVOICE NO. DR-3(a)

DATE: November 1, 1982

TERMS:

FEES:

Laboratory work, assessment work,  
and report

\$10,965

May 21/83

Mining Lands Comments

- maps not signed  
 - no VLF report  
 - no magnetic readings or VLF Plans  
 - no magnetic Breakdown  
 Mr. Kusstra are the claim group maps (pages 445 of geology report) sufficient as bench location maps?  
 - qualification by K. Blanchard

OK. CLK

To: Geophysics Mr. Roger Barlow

Comments  
 VLF survey - No report  
 Maps not signed  
 Need readings on profiles

Approved  Wish to see again with corrections Date July 26/83 Signature Douglas H. P. Peter

To: Geology - Expenditures Mr. C. Kusstra

Comments

Approved  Wish to see again with corrections Date July 26/83 Signature C. Kusstra

To: Geochemistry

Comments  
 L.D.

Approved  Wish to see again with corrections Date Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

Edward J. Blanchard  
106 Fielding Road  
Lively, Ontario  
POM 2E0

December 2, 1983

Ministry of Natural Resources  
Whitney Block, Room 6610  
Queen's Park  
TORONTO, Ontario  
M7A 1W3

ATTENTION: E. F. Anderson  
Land Management Branch

RE : Your file #2.5409

**RECEIVED**

DEC 9 1983

**MINING LANDS SECTION**

Dear Sir:

Thank you for your letter of November 25, 1983 warning me of a December 7, 1983 deadline. You may proceed an any time to instruct the mining recorder to cancel the work credits recorded on February 11, 1983.

Unfortunately, the area surveyed presents too many impediments (i.e. gas line, hydro line, rights of way, etc.) to warrant any further investigation or reporting on my part.

Thanking you for time spent reviewing the work submitted, I remain,

Very truly yours

*E. Blanchard/dd*

Edward J. Blanchard.

EJB:jf

cc Mrs. R. Charnesky  
Mining Recorder  
Toronto



CANADIAN IMPERIAL  
BANK OF COMMERCE  
HASTINGS & GRANVILLE  
VANCOUVER, B.C.

Nov. 15<sup>th</sup> 1982

PAY TO THE  
ORDER OF

Erana Mines Limited

\$ 23,652.58

REGISTERED  
R88NB4664 23652 DOLS 58 CTS

DOLLARS

DONEGAL RESOURCES LTD

RE 427

⑈054⑈ ⑆00010⑈010⑆ 31⑈16913⑈

X NOTES WORK CONTRACTED BY ERANA MINES LIMITED  
FROM DONEGAL RESOURCES LTD, IN BEHALF OF  
PORTO METAL MILLS LTD