

VOLUME IIPART 1: Maps depicting the results of the nine geochemical
stream sediment surveys

<u>West Carmarthenshire</u>	<u>Rhayader</u>	<u>Shelve</u>
S1.1 Chromium	S2.1 Chromium	S3.1 Chromium
S1.2 Cobalt	S2.2 Cobalt	S3.2 Cobalt
S1.3 Copper	S2.3 Copper	S3.3 Copper
S1.4 Gallium	S2.4 Gallium	S3.4 Gallium
S1.5 Ferric Oxide	S2.5 Ferric Oxide	S3.5 Ferric Oxide
S1.6 Lead	S2.6 Lead	S3.6 Lead
S1.7 Manganese	S2.7 Manganese	S3.7 Manganese
S1.8 Molybdenum	S2.8 Molybdenum	S3.8 Molybdenum
S1.9 Nickel	S2.9 Nickel	S3.9 Nickel
S1.10 Titanium	S2.10 Titanium	S3.10 Titanium
S1.11 Vanadium	S2.11 Vanadium	S3.11 Vanadium
S1.12 Zinc	S2.12 Zinc	S3.12 Zinc
<u>Machynlleth</u>	<u>Kendal</u>	<u>Bowland Forest</u>
S4.1 Chromium	S5.1 Chromium	S6.1 Chromium
S4.2 Cobalt	S5.2 Cobalt	S6.2 Cobalt
S4.3 Copper	S5.3 Copper	S6.3 Copper
S4.4 Gallium	S5.4 Gallium	S6.4 Gallium
S4.5 Ferric Oxide	S5.5 Ferric Oxide	S6.5 Ferric Oxide
S4.6 Lead	S5.6 Lead	S6.6 Lead
S4.7 Manganese	S5.7 Manganese	S6.7 Manganese
S4.8 Molybdenum	S5.8 Molybdenum	S6.8 Molybdenum
S4.9 Nickel	S5.9 Nickel	S6.9 Nickel
S4.10 Titanium	S5.10 Titanium	S6.10 Titanium
S4.11 Vanadium	S5.11 Vanadium	S6.11 Vanadium
S4.12 Zinc	S5.12 Zinc	S6.12 Zinc

<u>Shaftesbury</u>	<u>Thame</u>	<u>Market Rasen</u>
S7.1 Chromium	S8.1 Chromium	S9.1 Chromium
S7.2 Cobalt	S8.2 Cobalt	S9.2 Cobalt
S7.3 Copper	S8.3 Copper	S9.3 Copper
S7.4 Gallium	S8.4 Gallium	S9.4 Gallium
S7.5 Ferric Oxide	S8.5 Ferric Oxide	S9.5 Ferric Oxide
S7.6 Lead	S8.6 Lead	S9.6 Lead
S7.7 Manganese	S8.7 Manganese	S9.7 Manganese
S7.8 Molybdenum	S8.8 Molybdenum	S9.8 Molybdenum
S7.9 Nickel	S8.9 Nickel	S9.9 Nickel
S7.10 Titanium	S8.10 Titanium	S9.10 Titanium
S7.11 Vanadium	S8.11 Vanadium	S9.11 Vanadium
S7.12 Zinc	S8.12 Zinc	S9.12 Zinc

PART 2: Figures illustrating the distribution of metals
in the bedrock

Fig. R1 Distribution of metals in the bedrock - West
Carmarthenshire survey area

Fig. R2 Distribution of metals in the bedrock - Bowland
Forest survey area

Fig. R3 Distribution of metals in the bedrock - Thame
survey area

PART 3: Figures illustrating the relationship between
the metal content of the overburden and geology
along soil traverse lines in the five detailed
study areas

Fig. T1 Relationship between metal content of the
overburden and geology on Traverses 1, 2 and 3
West Carmarthenshire survey area

- Fig. T2 Relationship between metal content of the overburden and geology on Traverses 1, 2 and 3 Bowland Forest survey area
- Fig. T3 Relationship between metal content of the overburden and geology on Traverses 4, 5 and 6 Bowland Forest survey area
- Fig. T4 Relationship between metal content of the overburden and geology on Traverses 7 and 8 Bowland Forest survey area
- Fig. T5 Relationship between metal content of the overburden and geology on Traverses 1 and 2 Shaftesbury survey area
- Fig. T6 Relationship between metal content of the overburden and geology on Traverses 3 and 4 Shaftesbury survey area
- Fig. T7 Relationship between metal content of the overburden and geology on Traverses 1 and 2 Thame survey area
- Fig. T8 Relationship between metal content of the overburden and geology on Traverses 3 and 4 Thame survey area
- Fig. T9 Relationship between metal content of the overburden and geology on Traverses 1 and 2 Cold Hanworth district. Market Rasen survey area
- Fig. T10 Relationship between metal content of the overburden and geology on Traverses 1 and 2 South Willingham district. Market Rasen survey area

PART 1

Maps depicting the results of the nine geochemical stream
sediment surveys

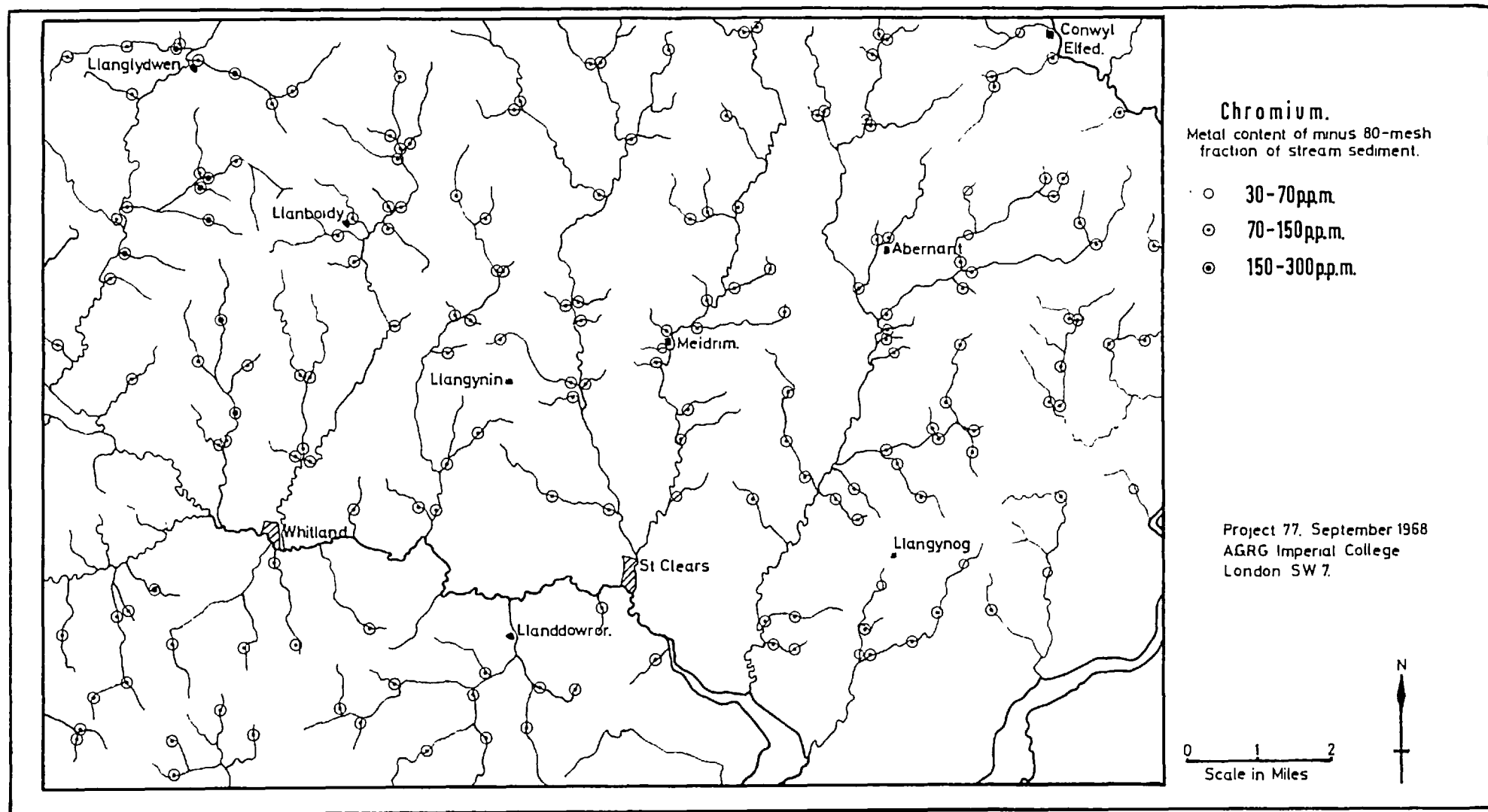


Figure S1.1 West Carmarthenshire Survey Area.

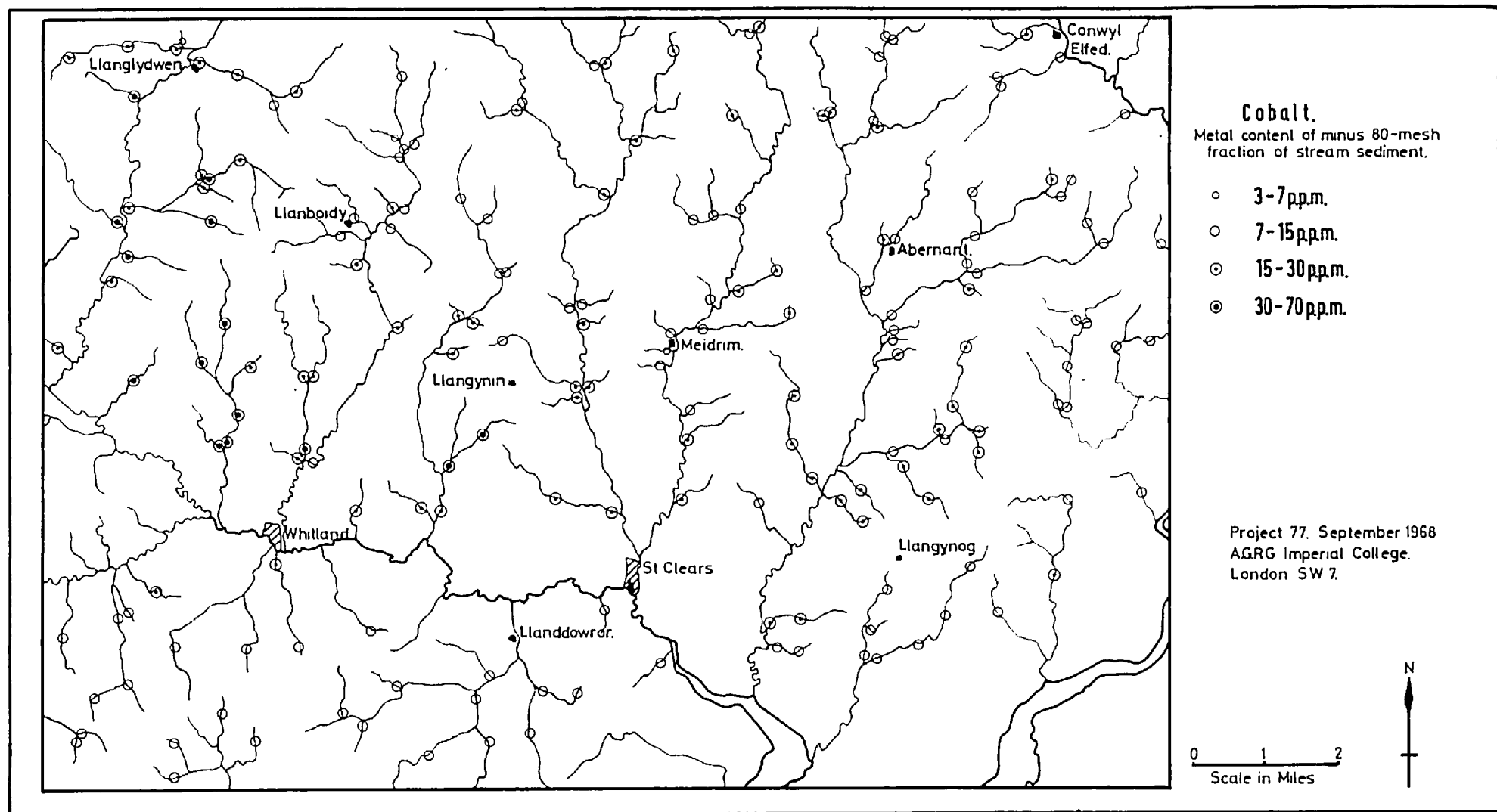


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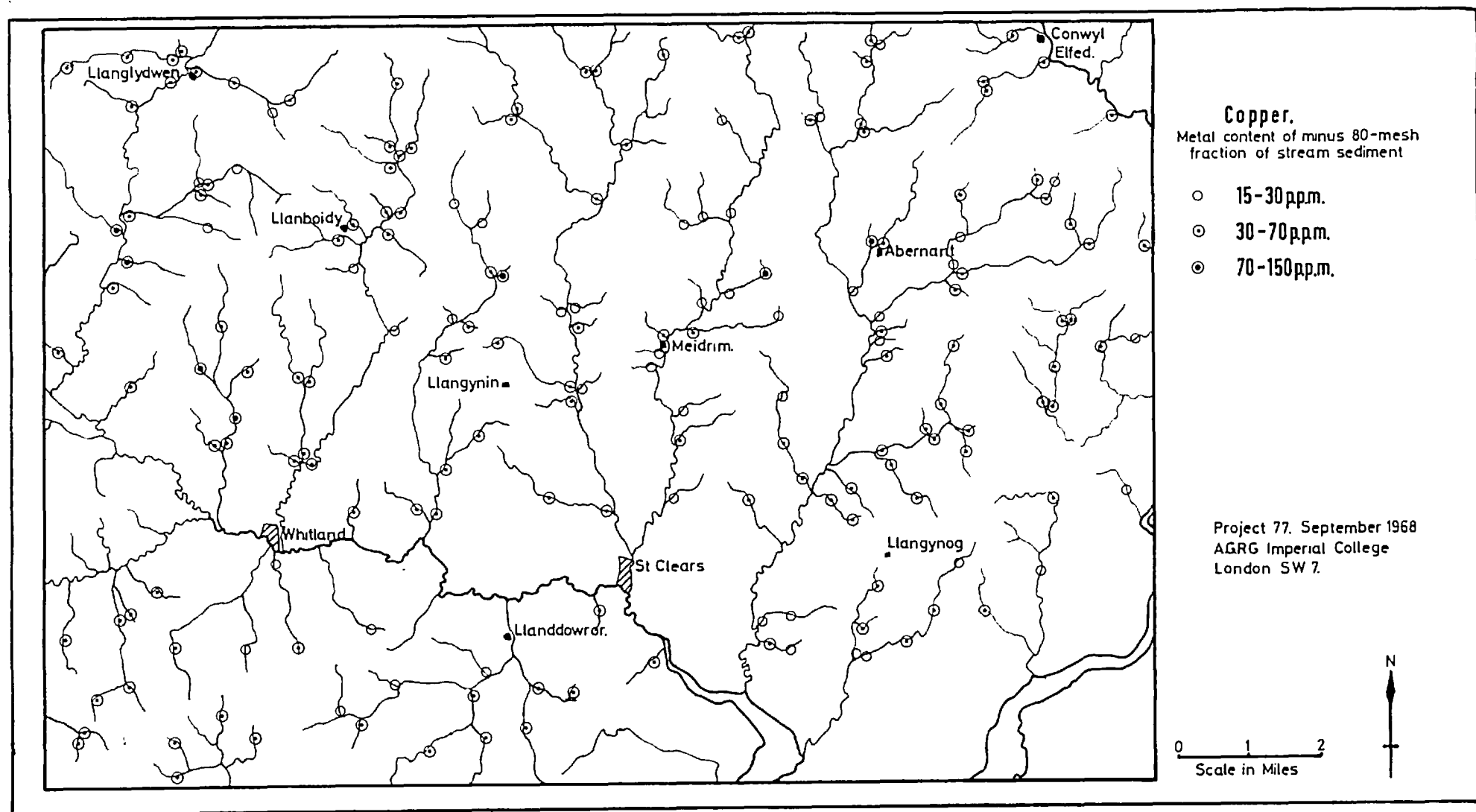


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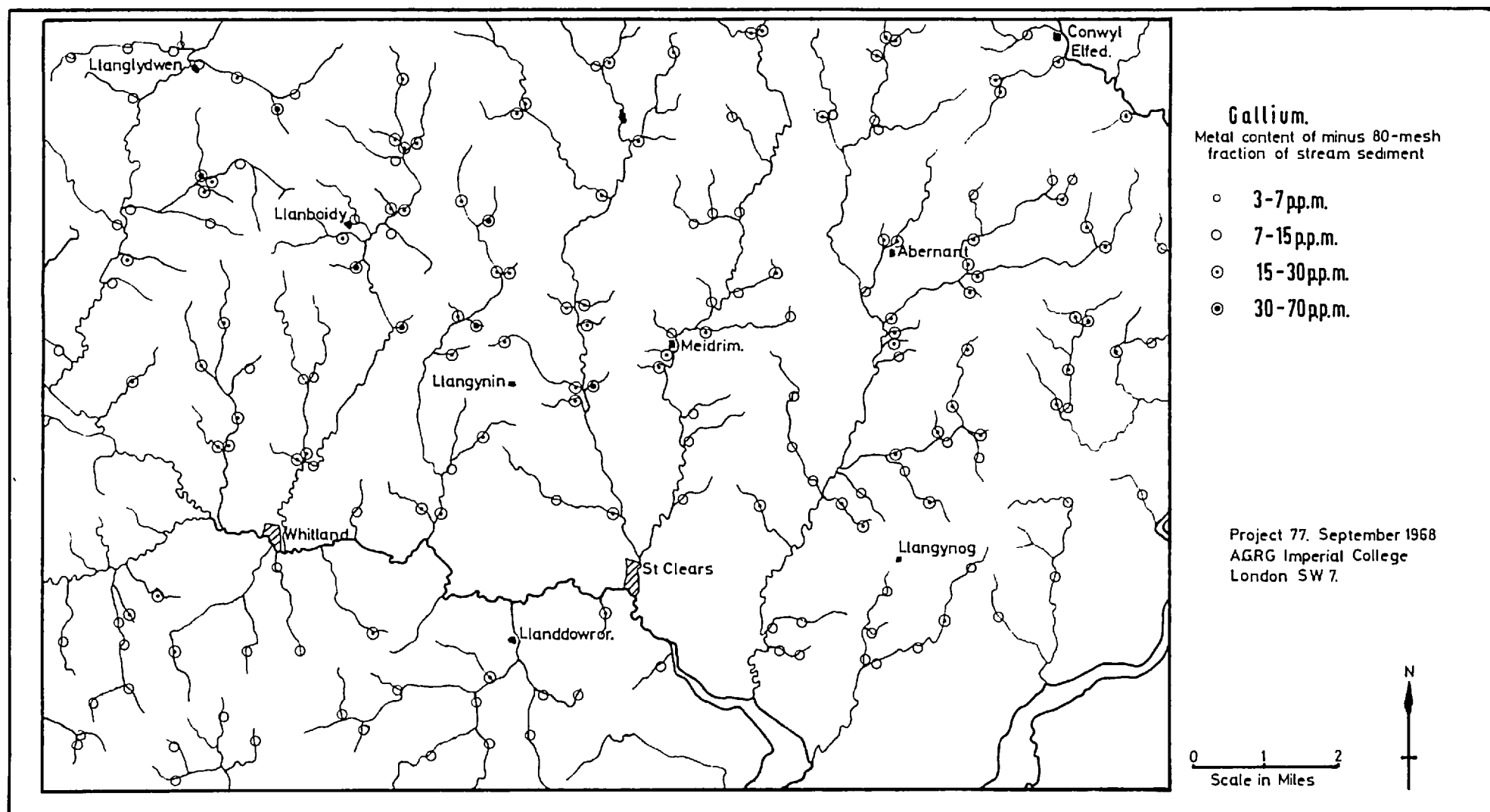


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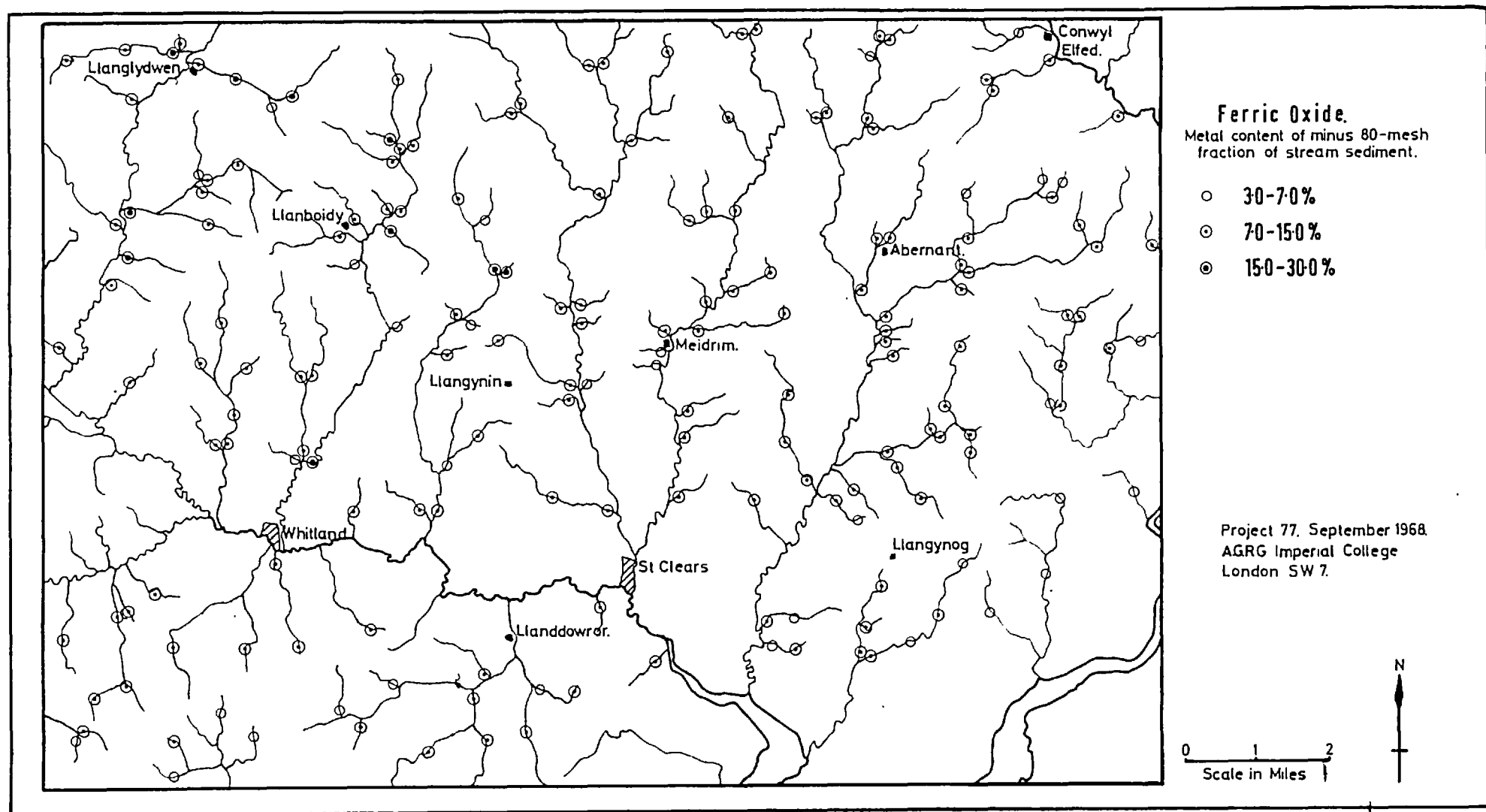


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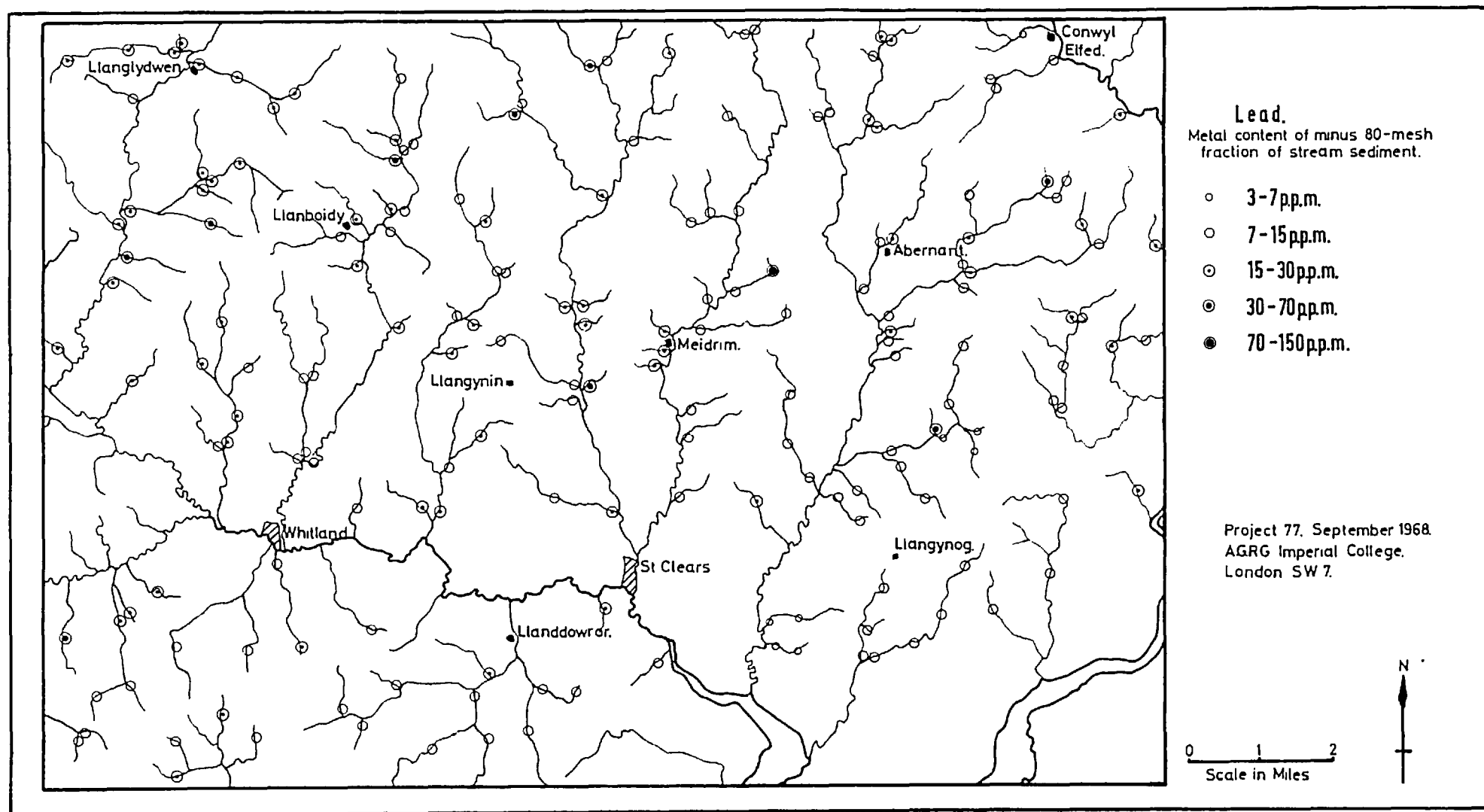


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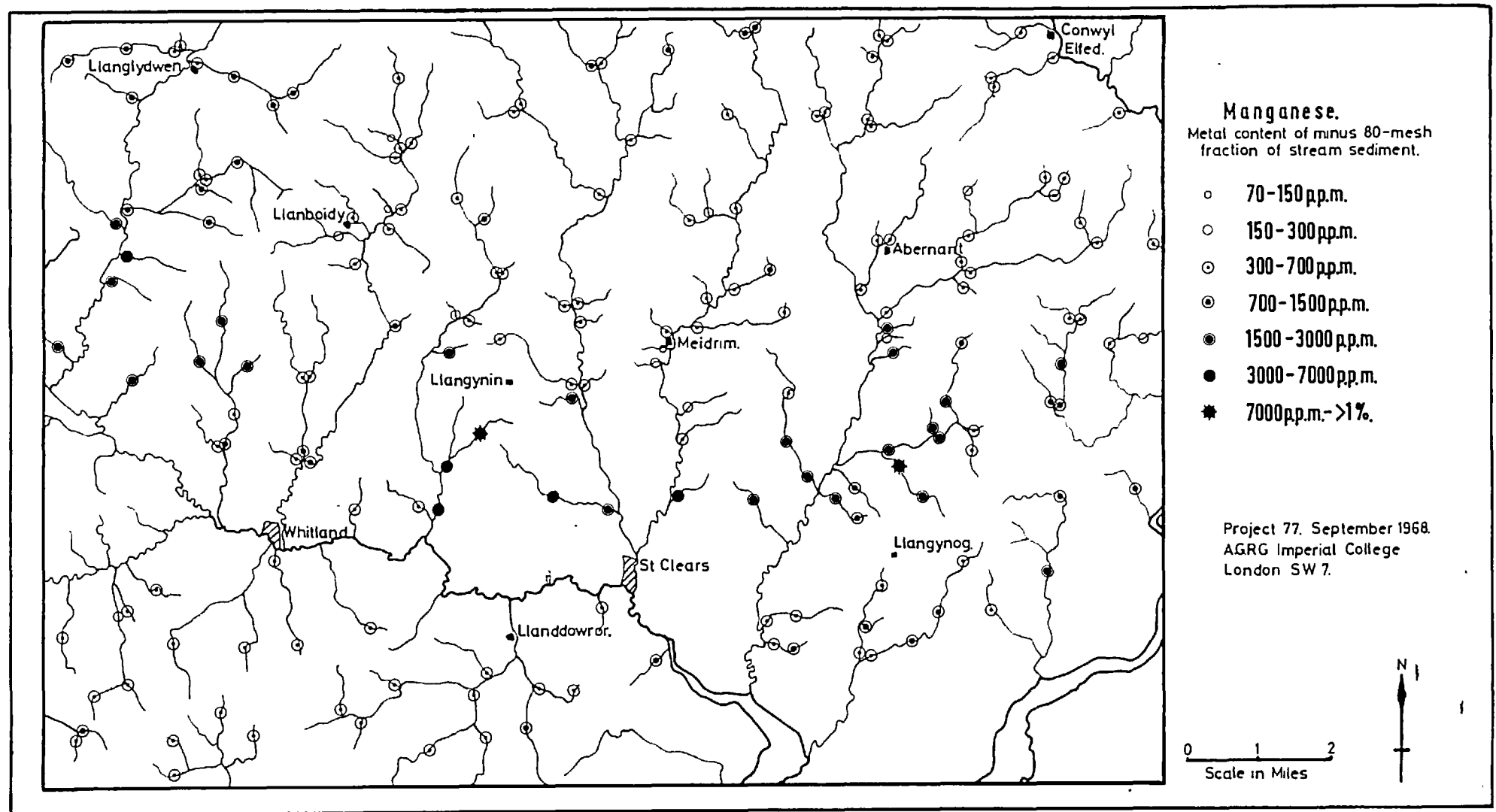


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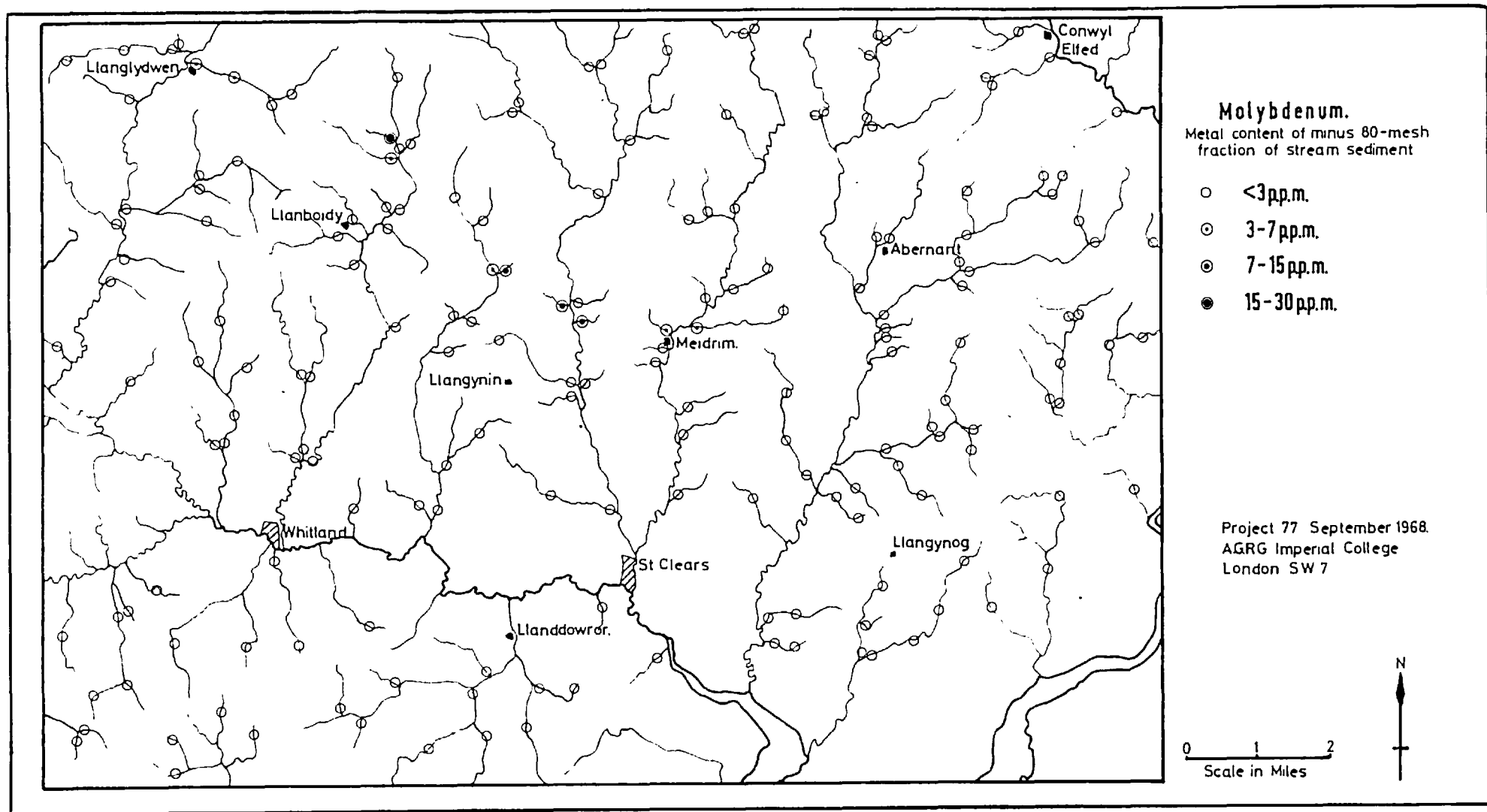


Figure S1.8 West Carmarthenshire Survey Area.

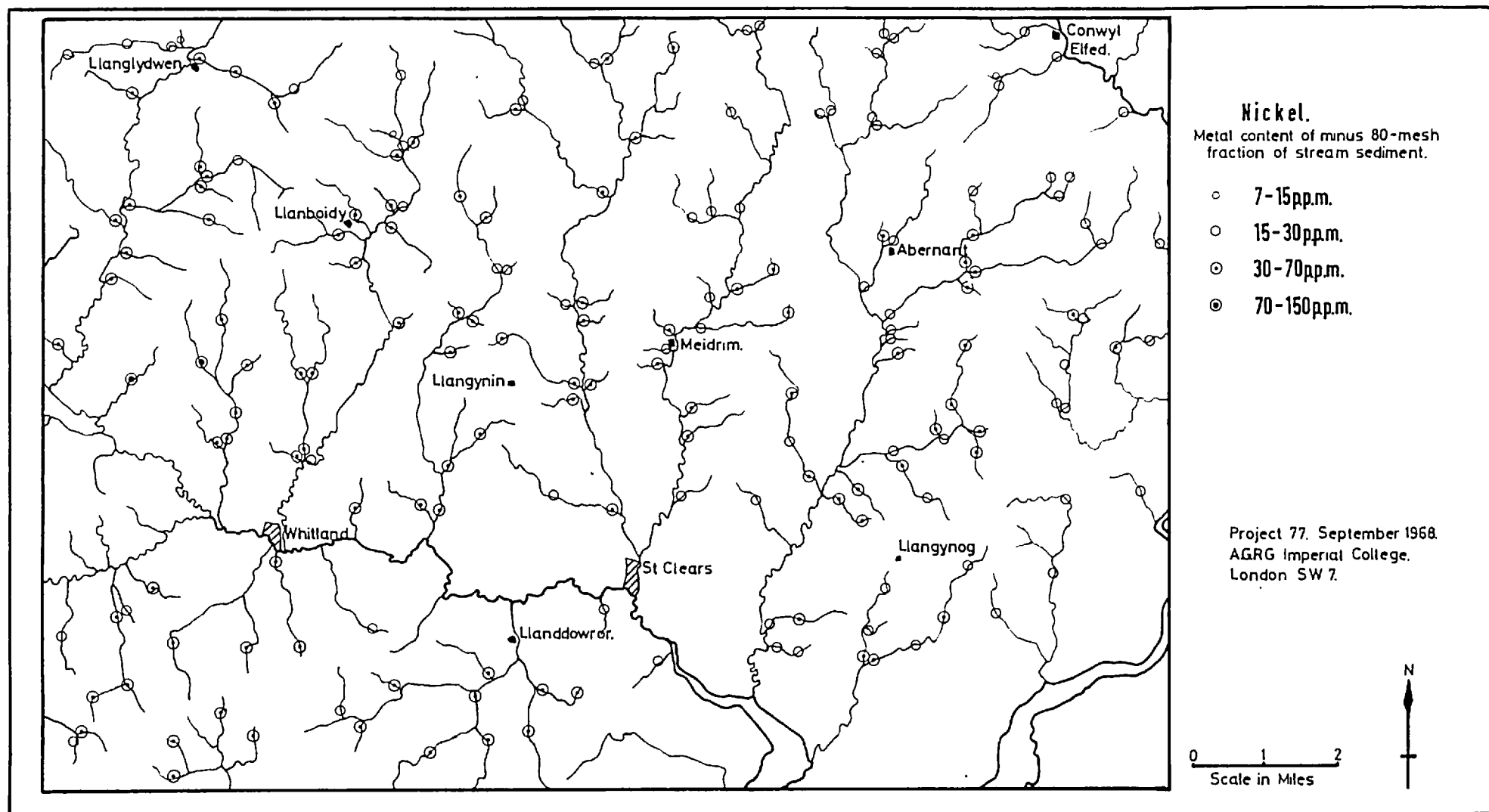


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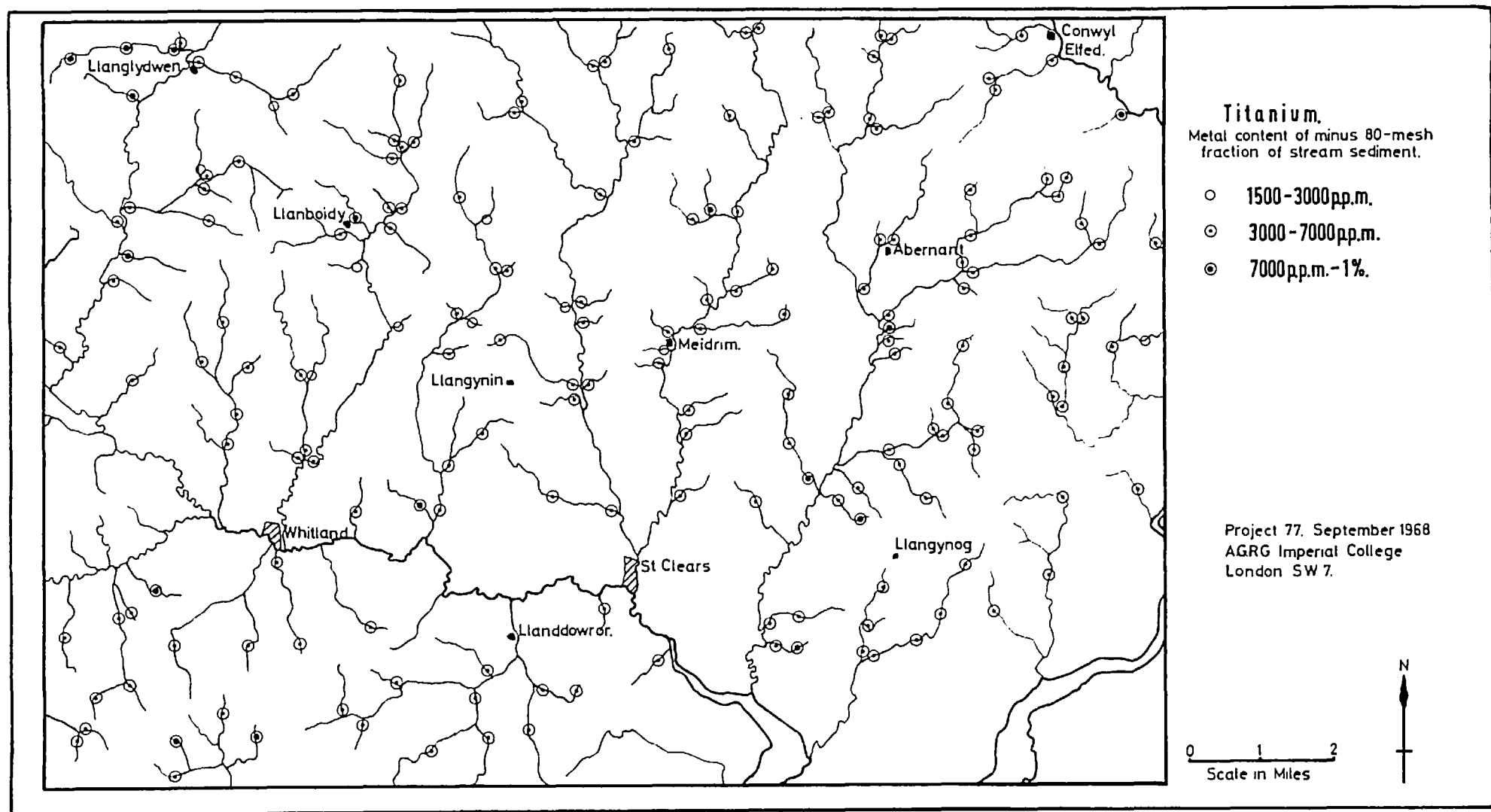


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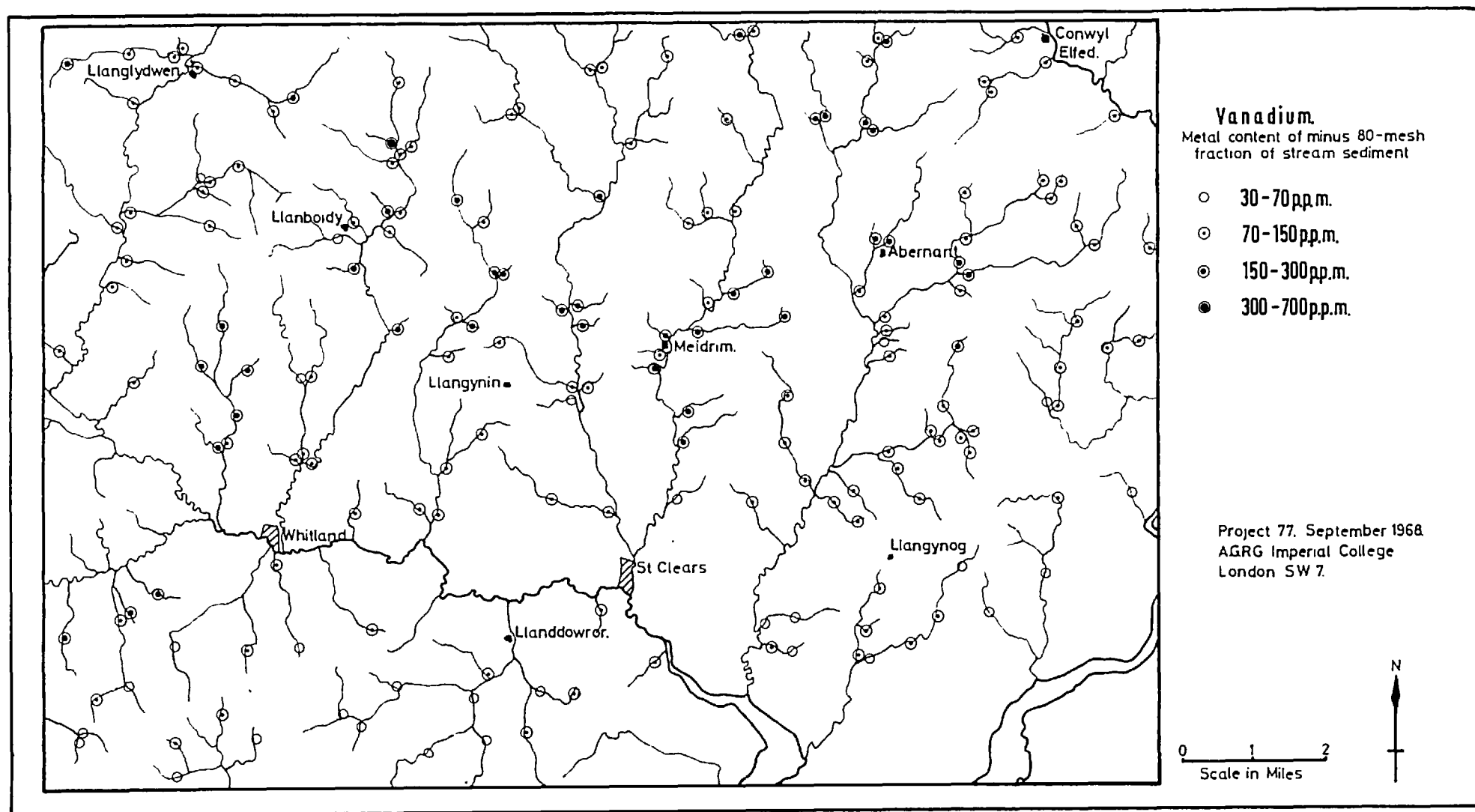


Figure S1.11 West Carmarthenshire Survey Area.

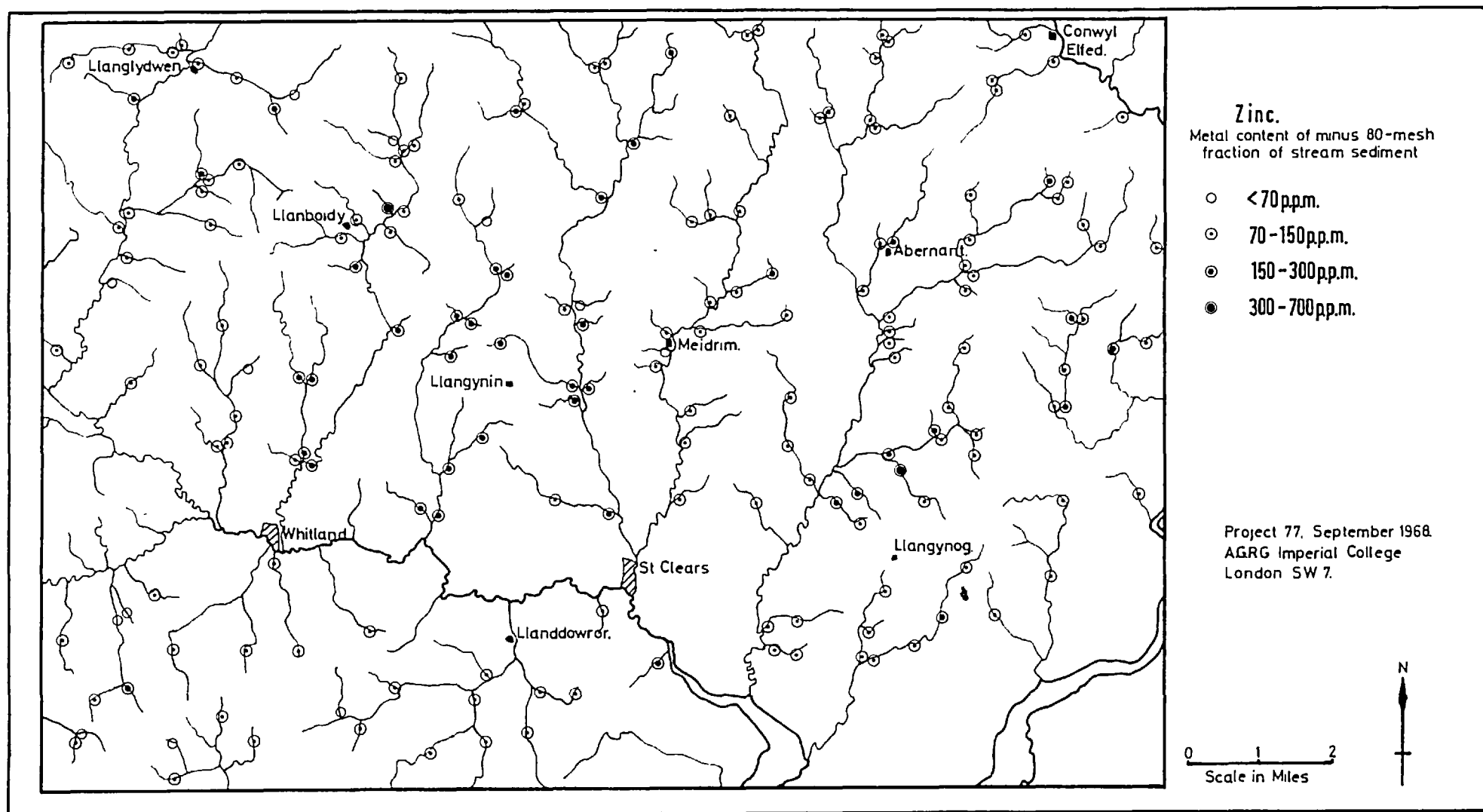


Figure S1:12 West Carmarthenshire Survey Area.

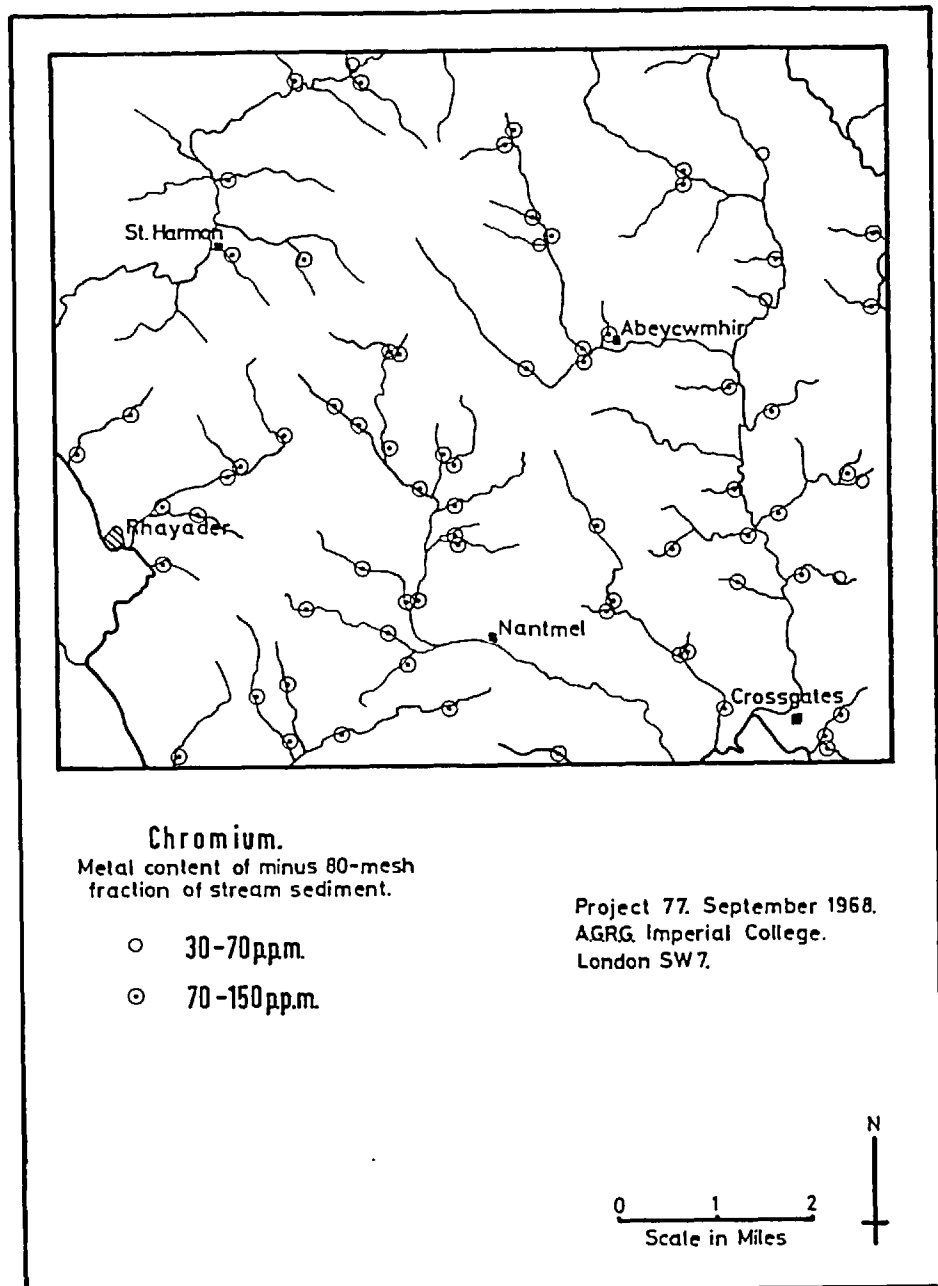


Figure S 2-1 Rhayader Survey Area.

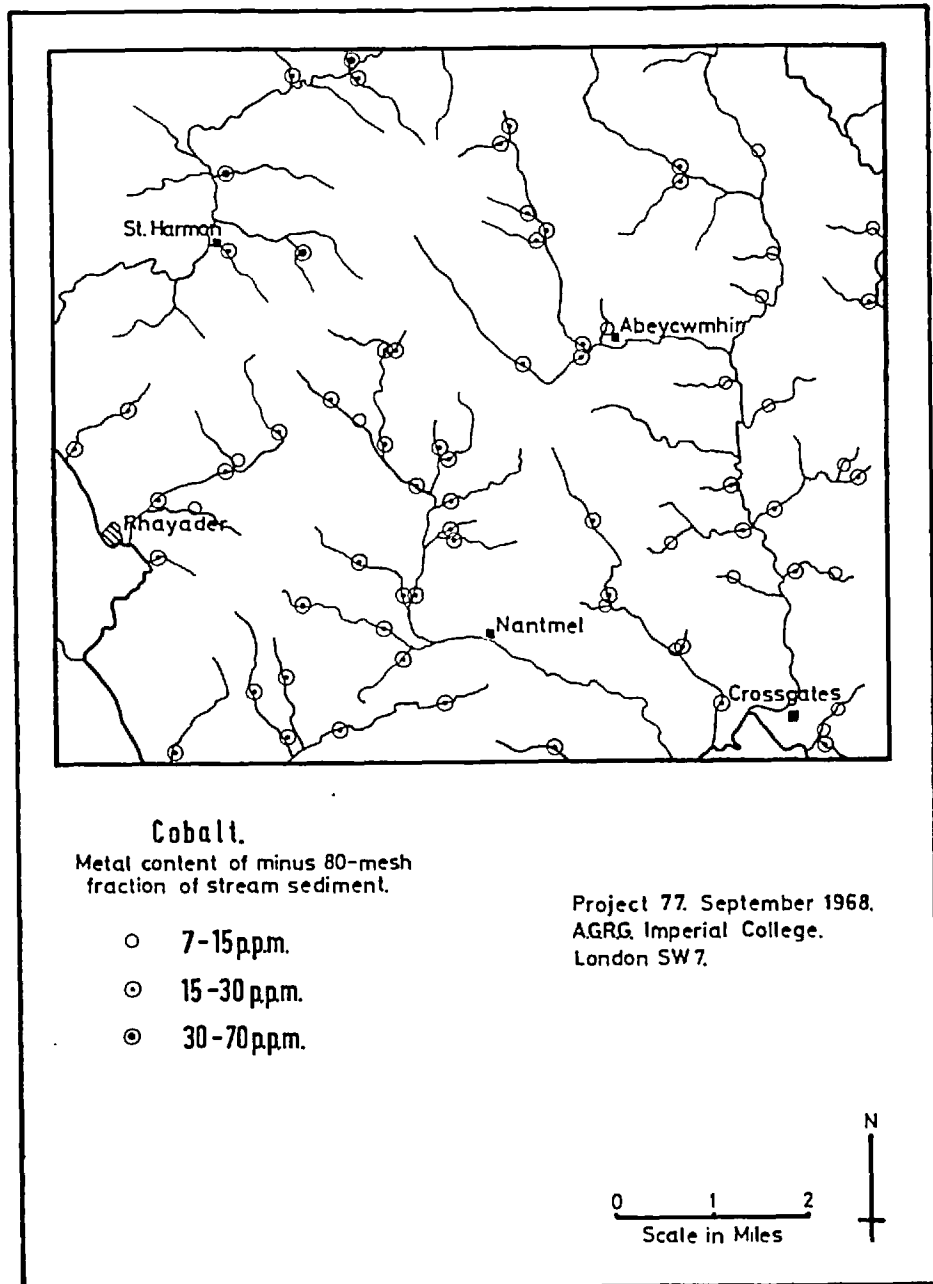


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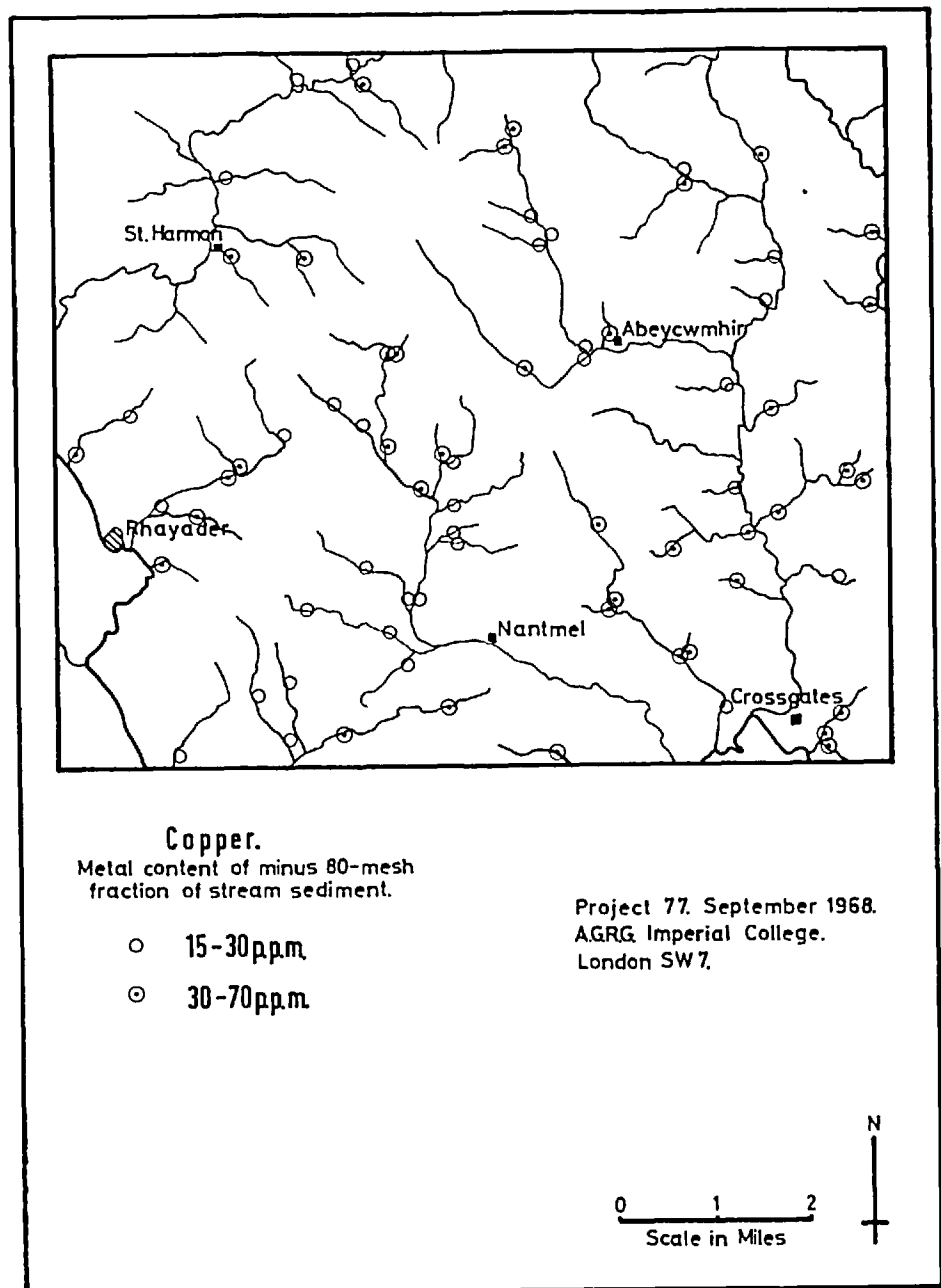


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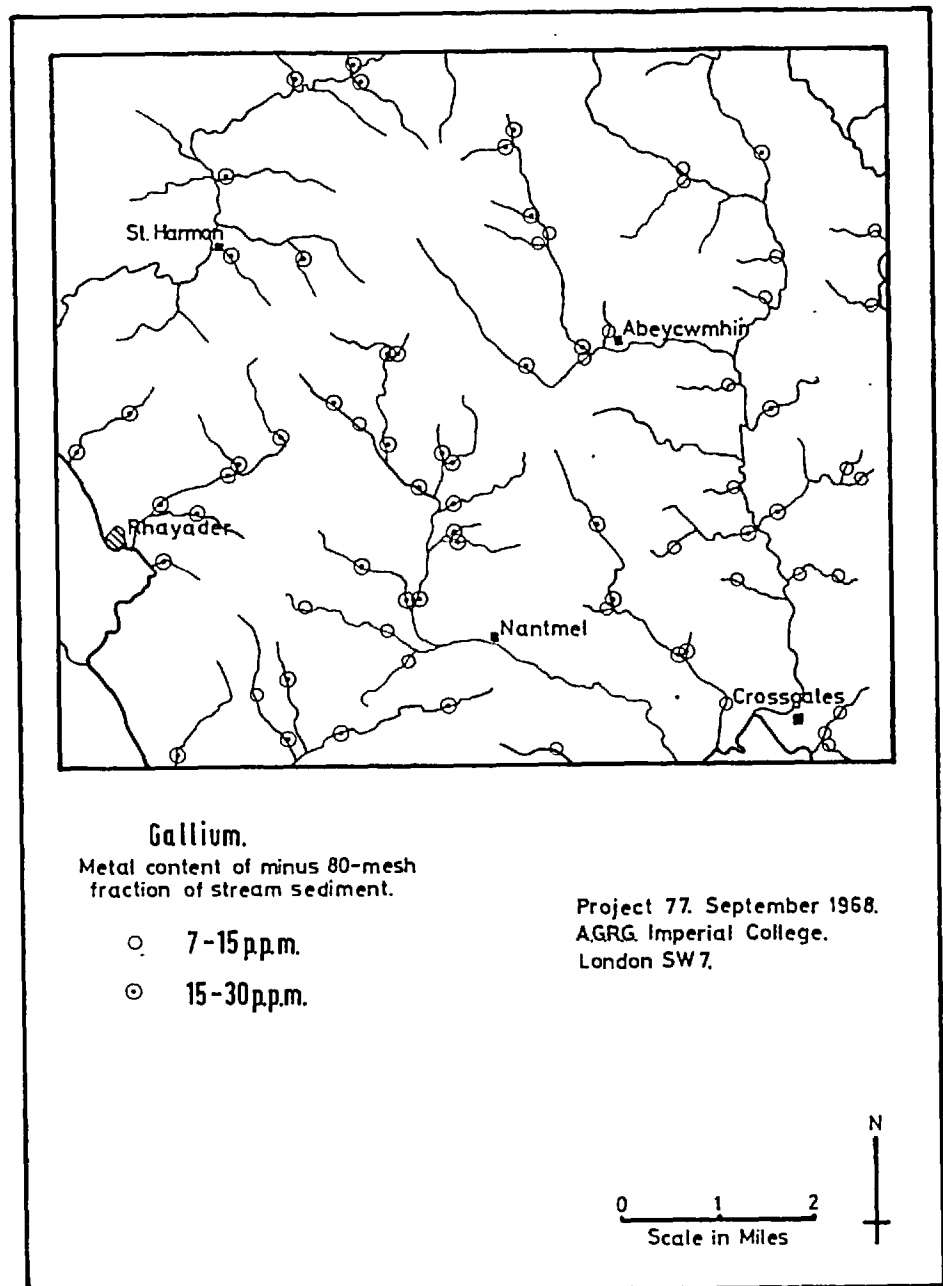


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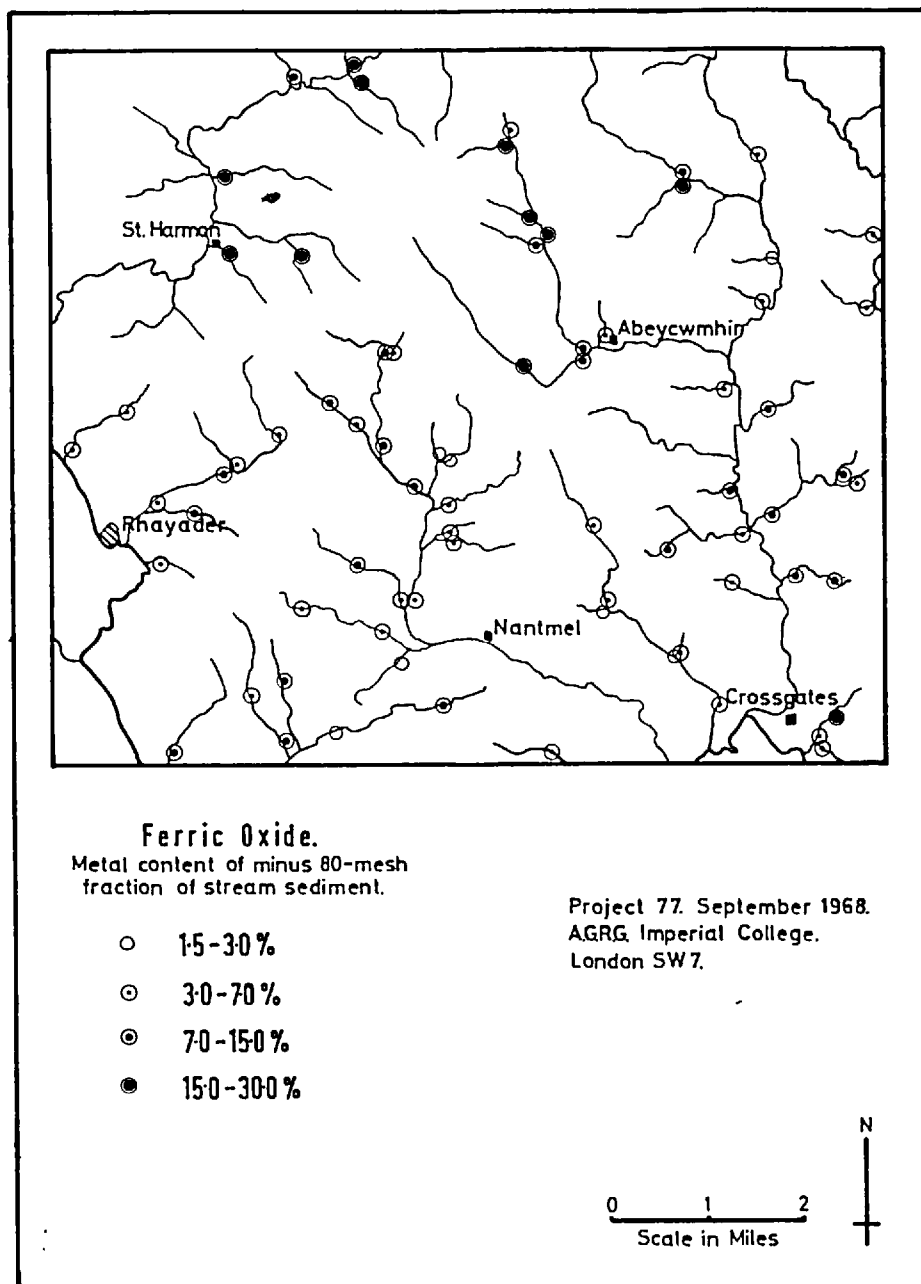


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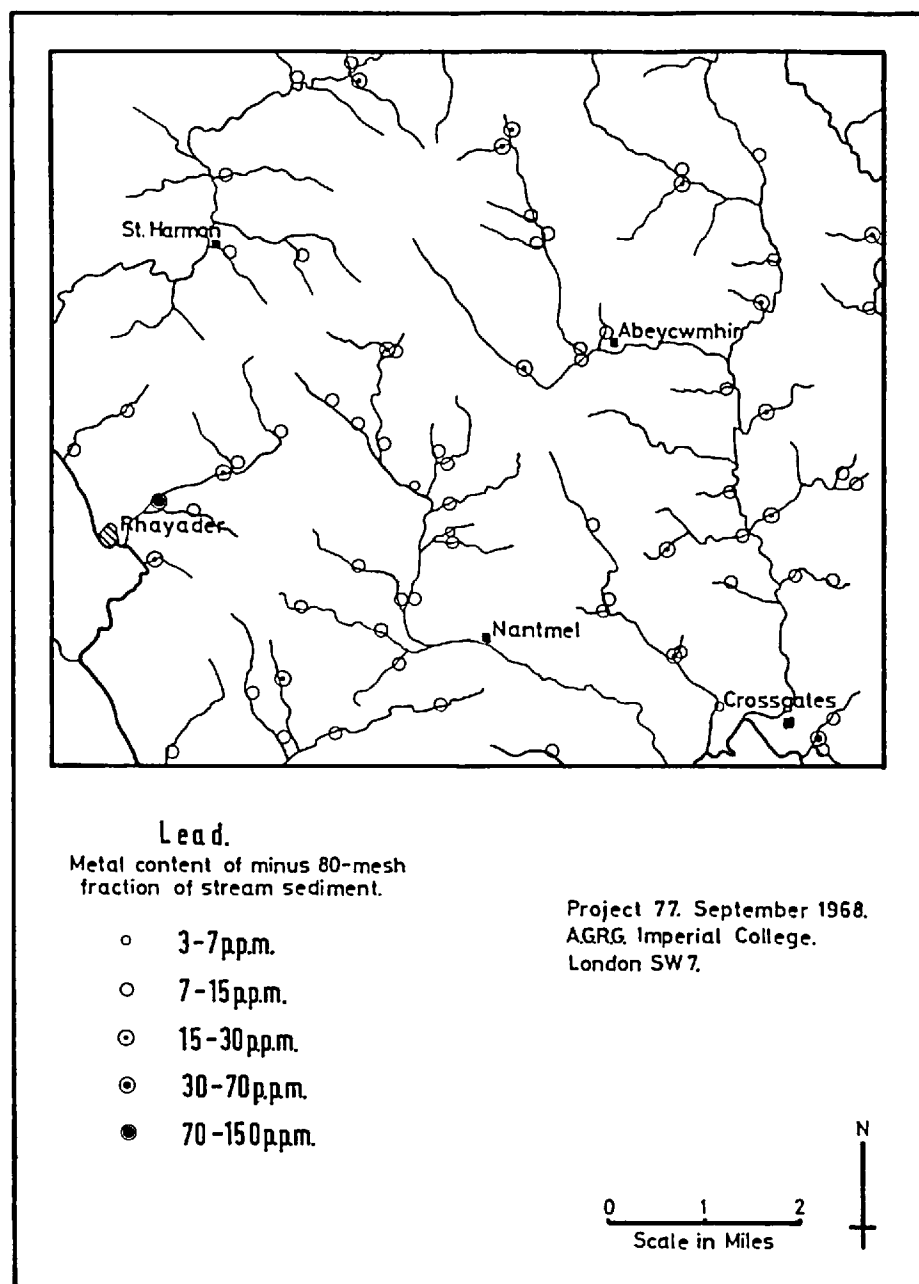


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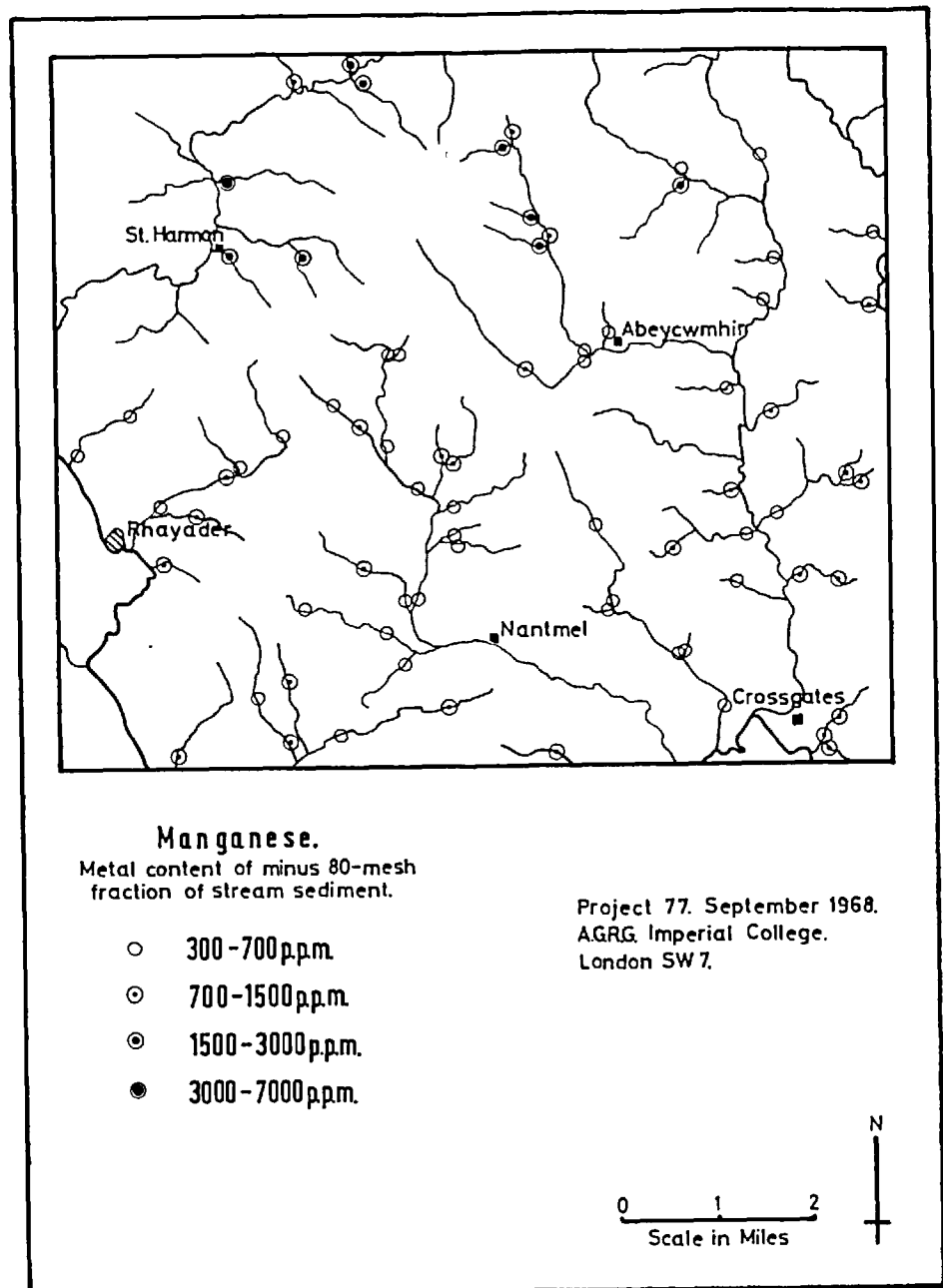


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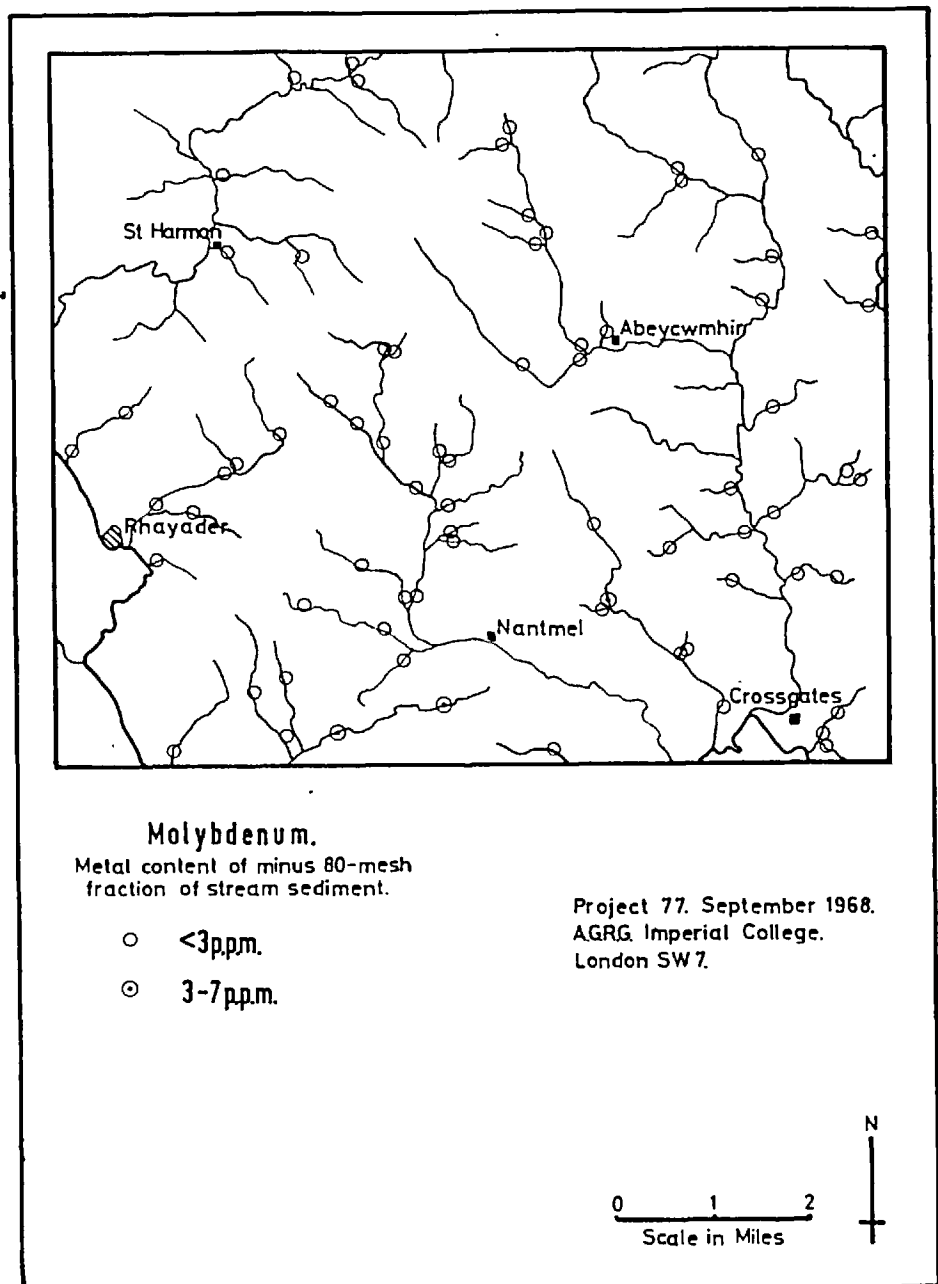


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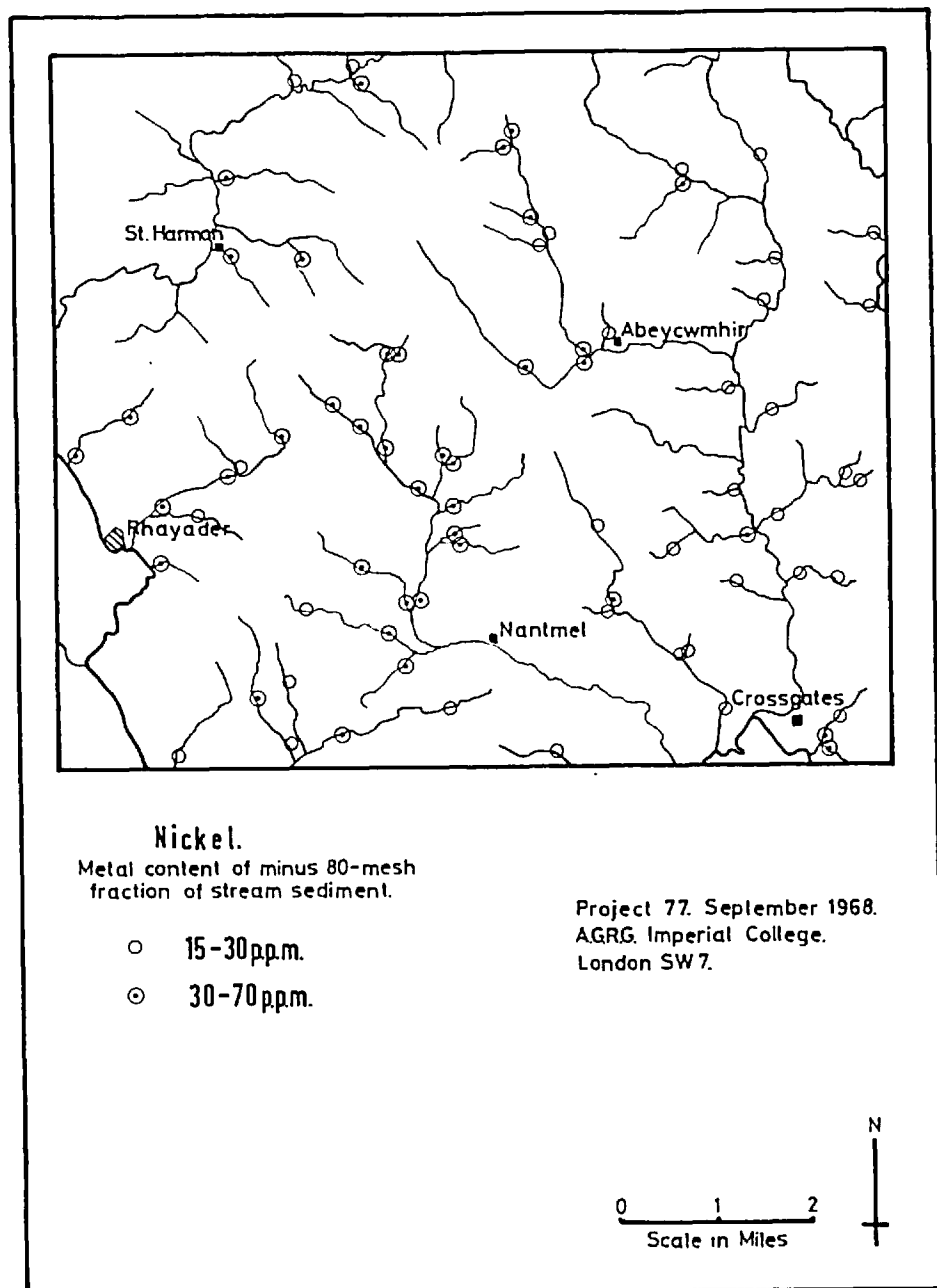


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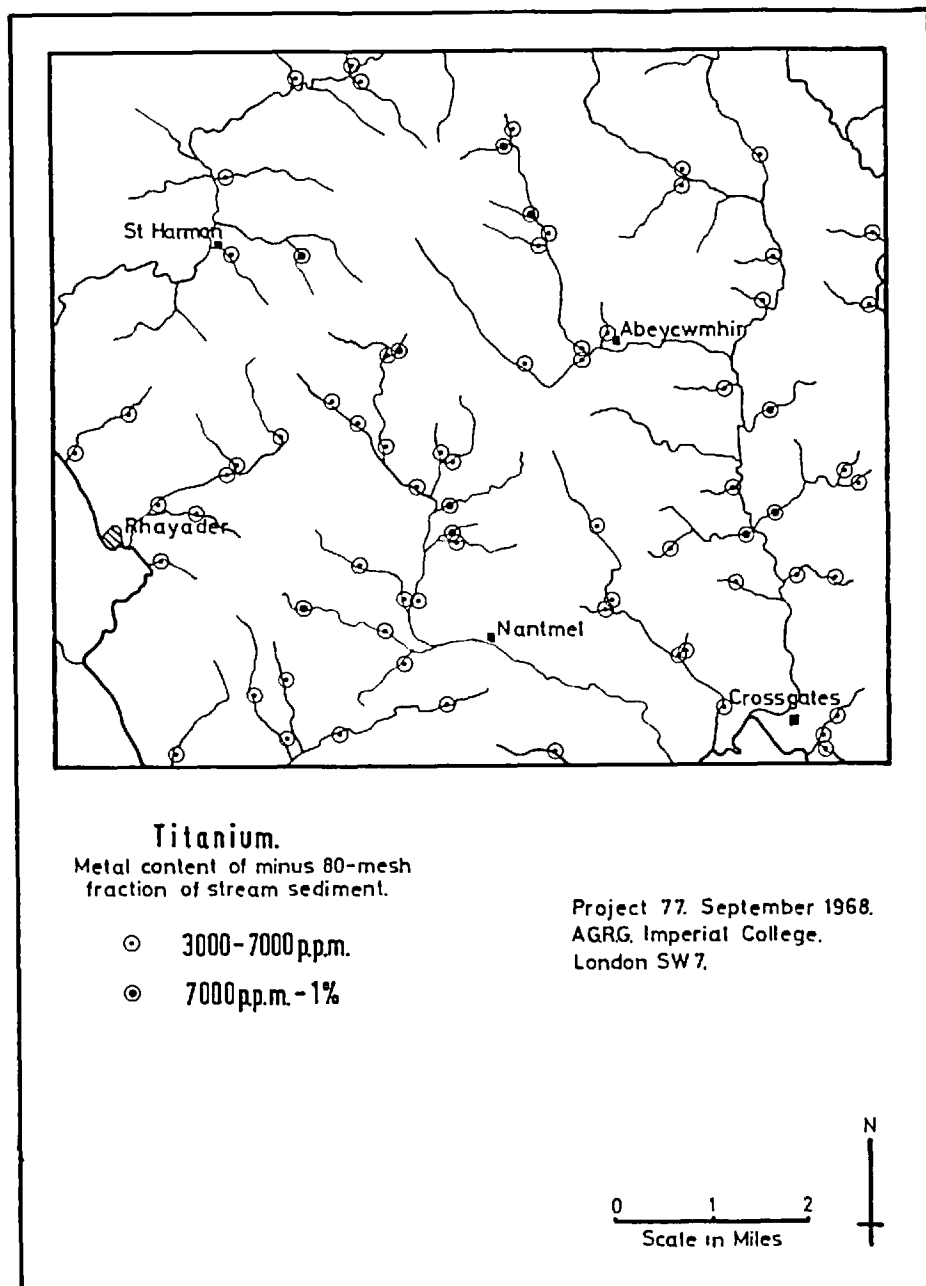


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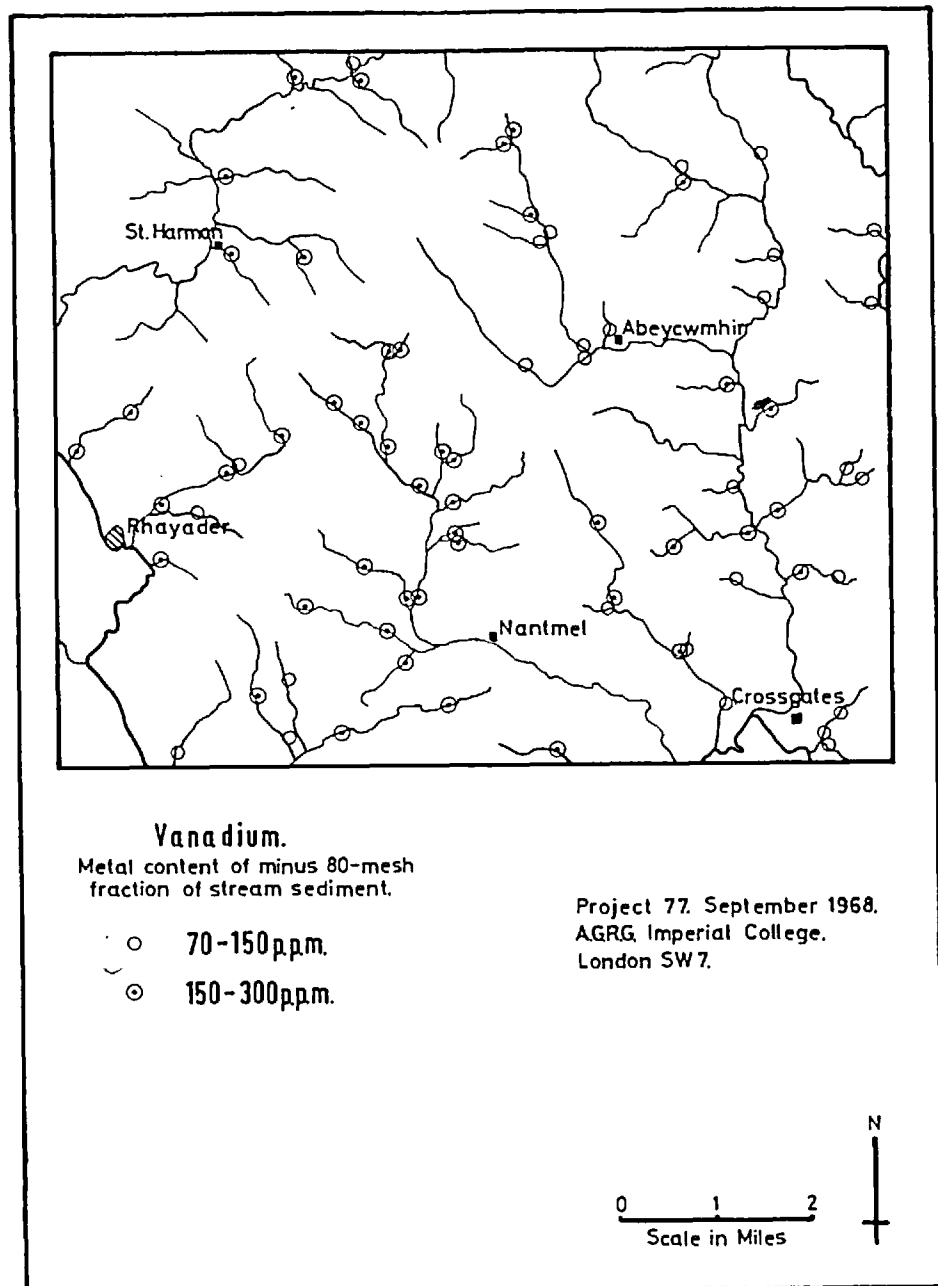


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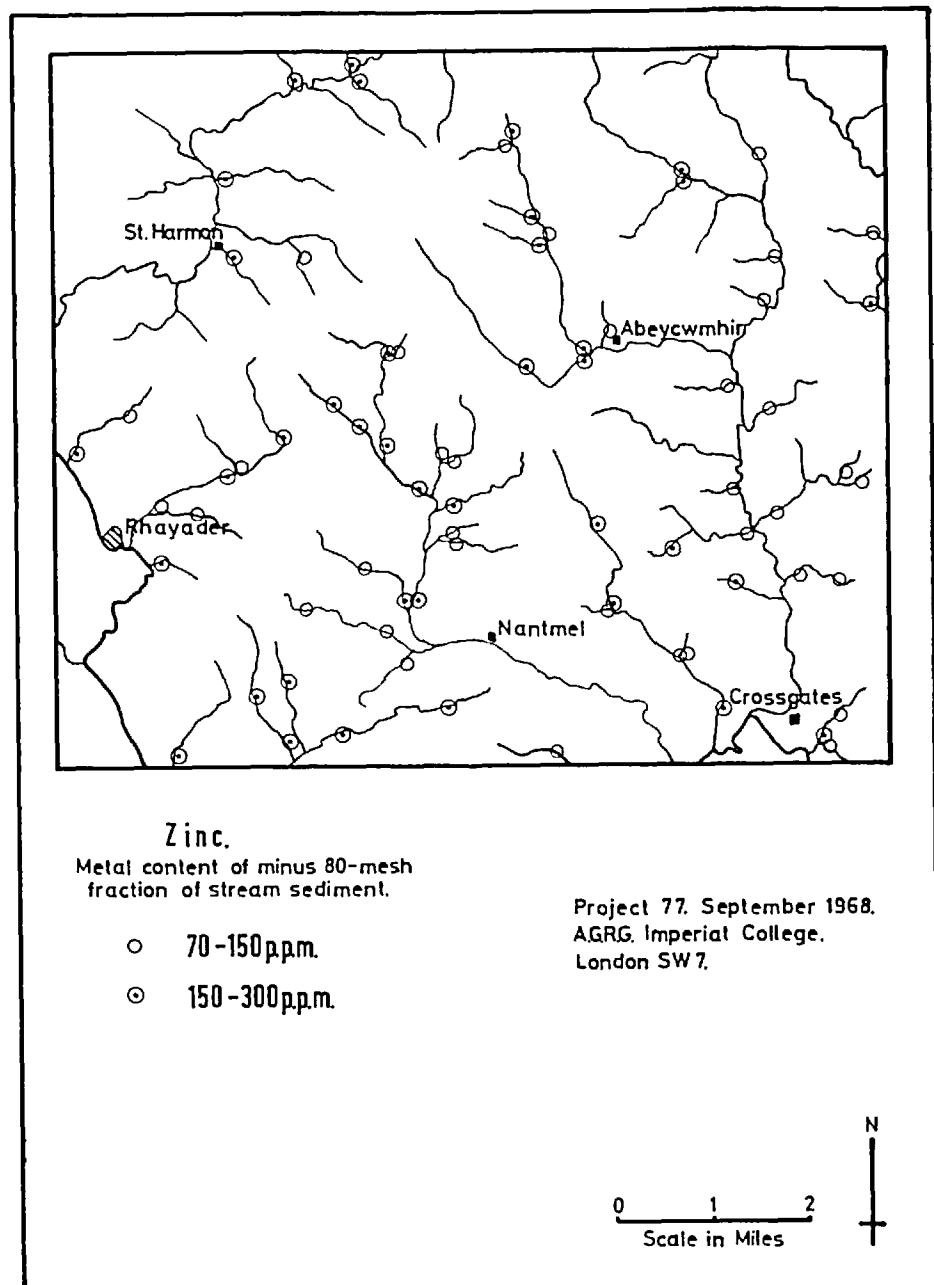


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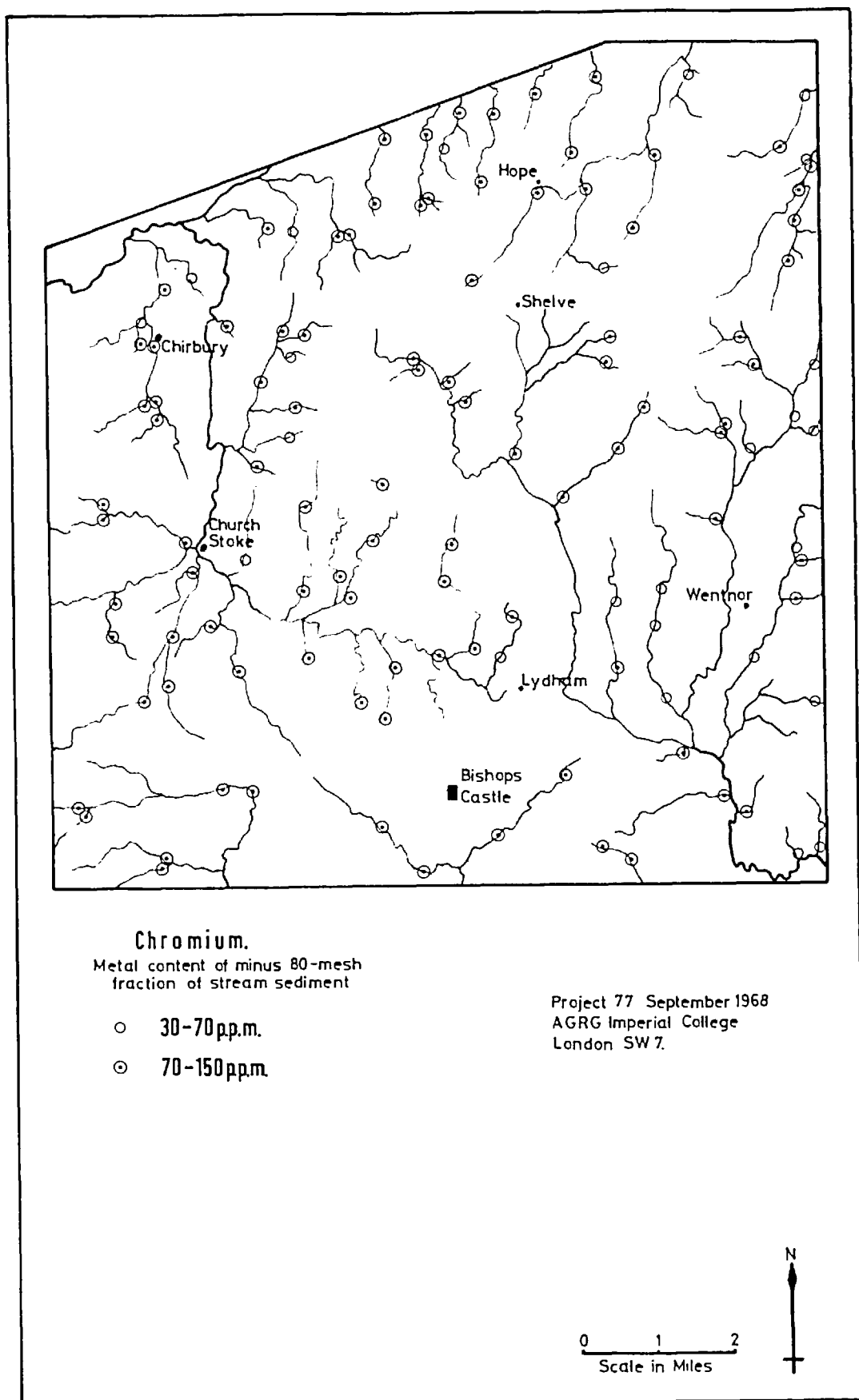


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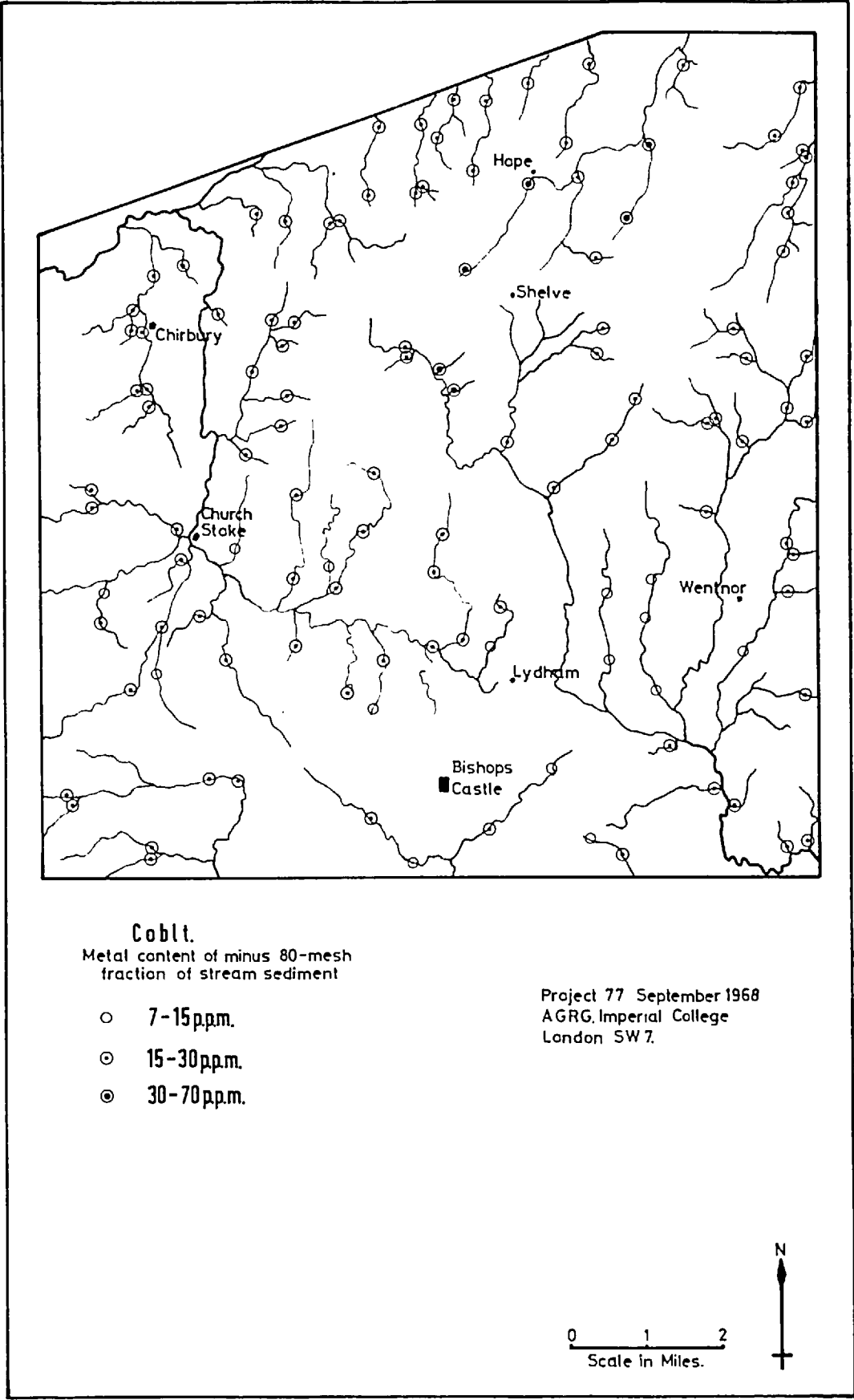


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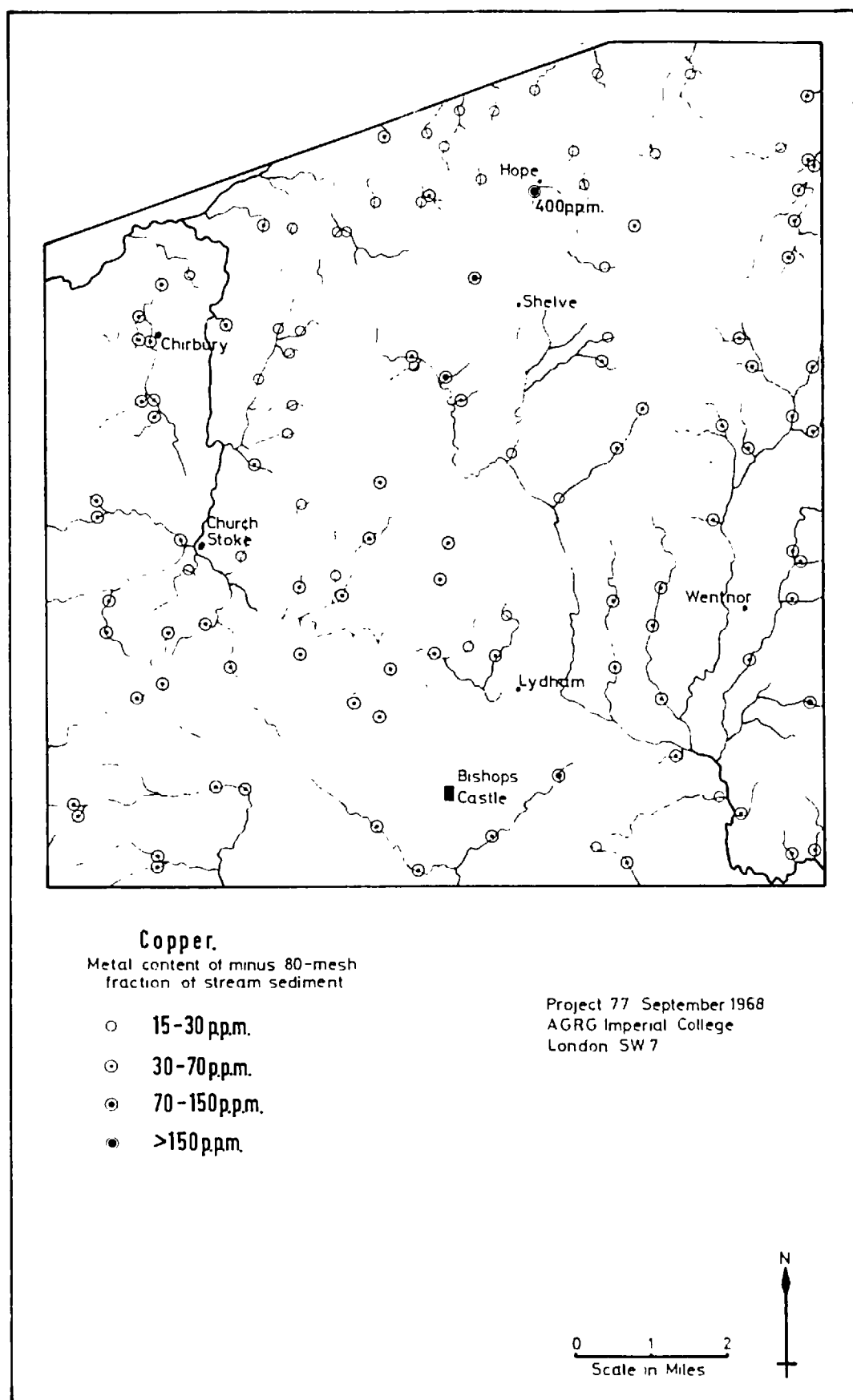


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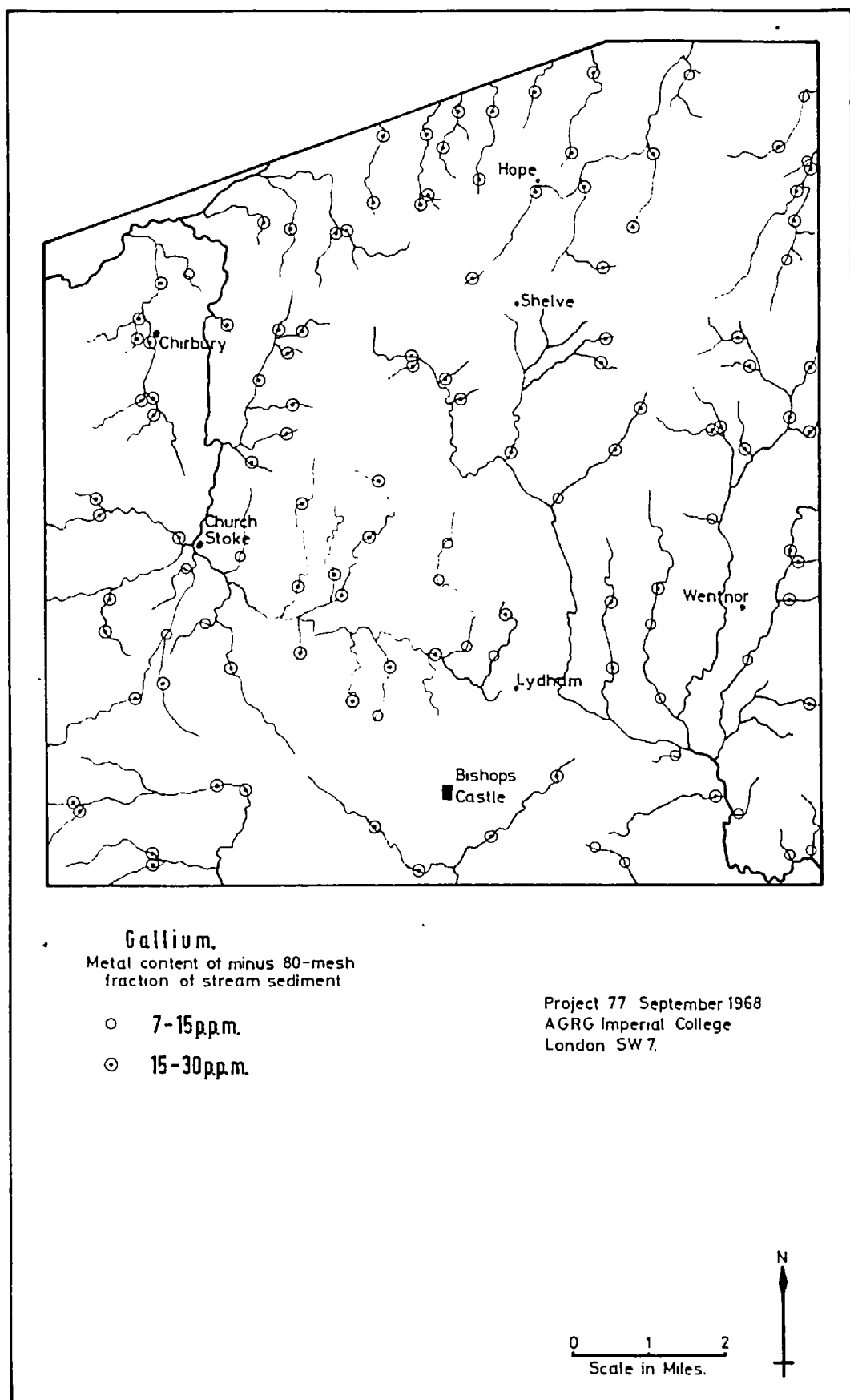


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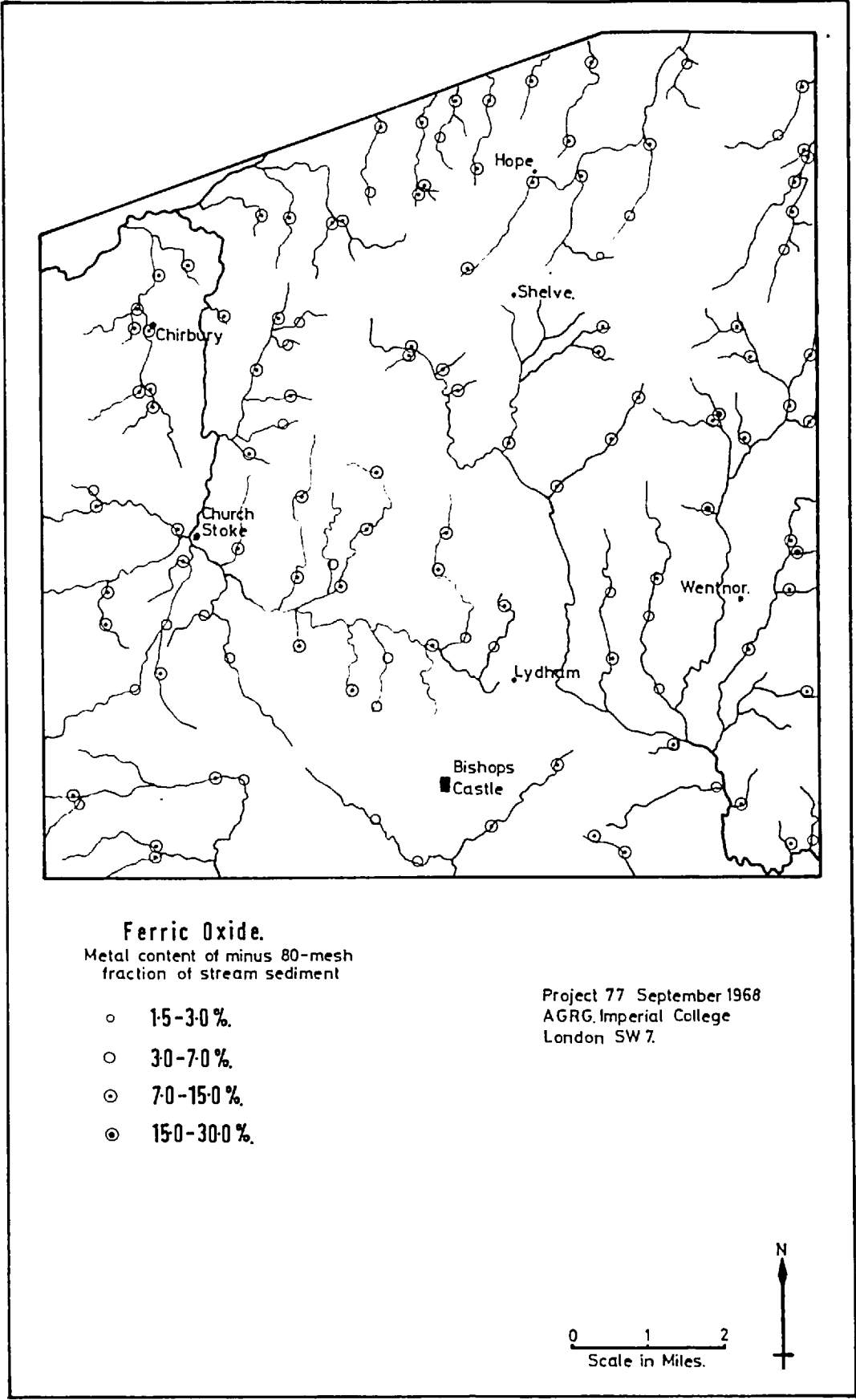


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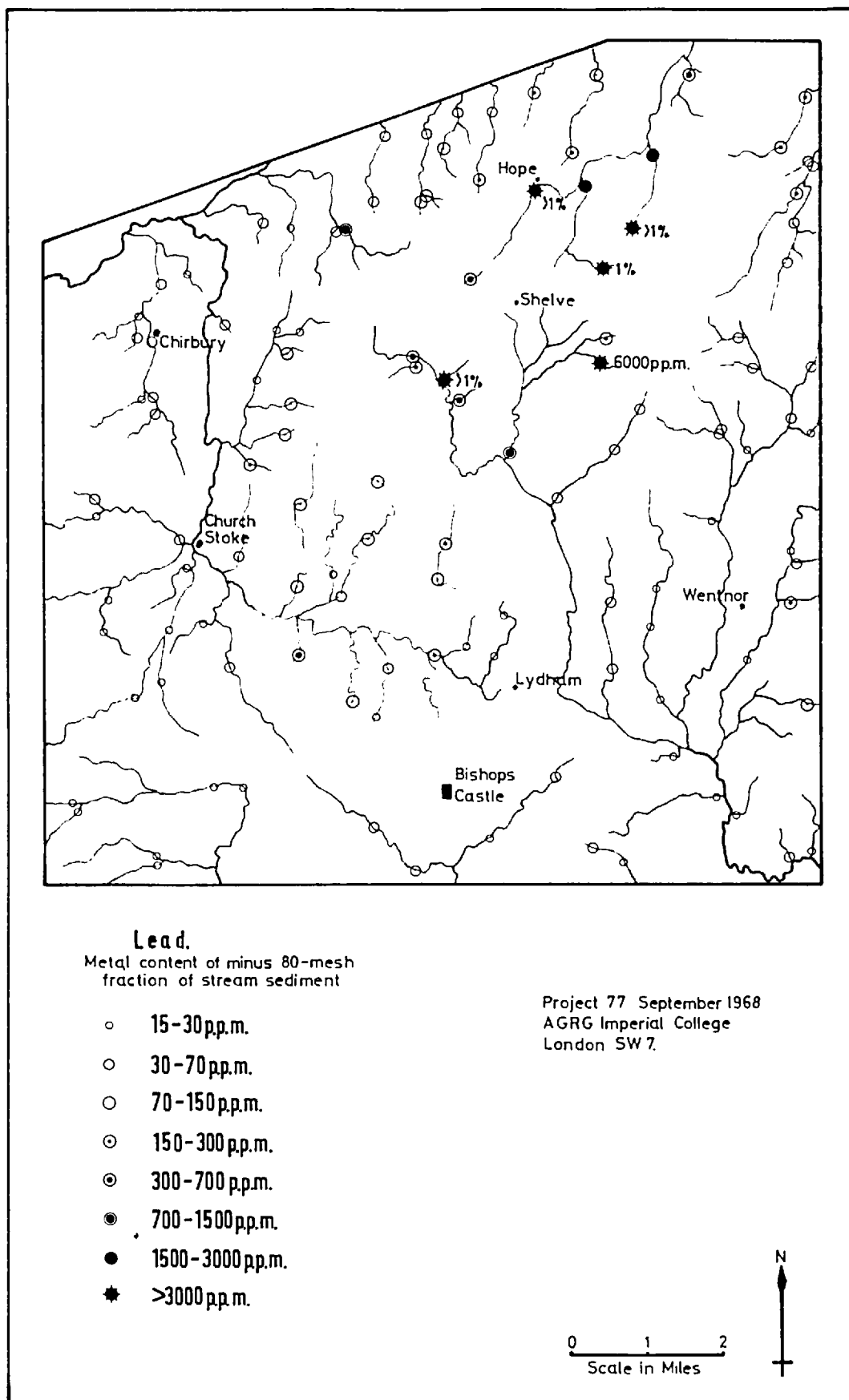


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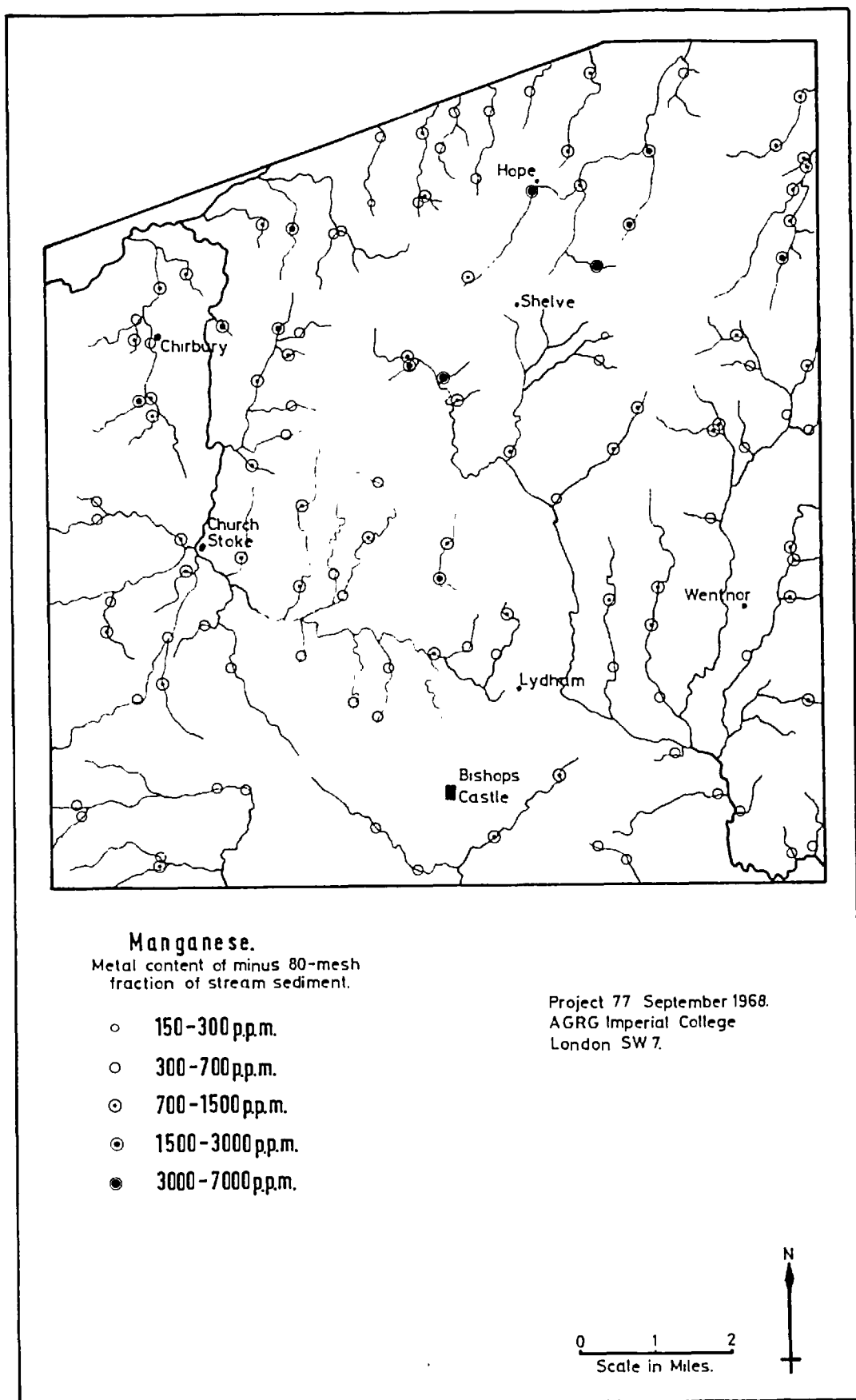


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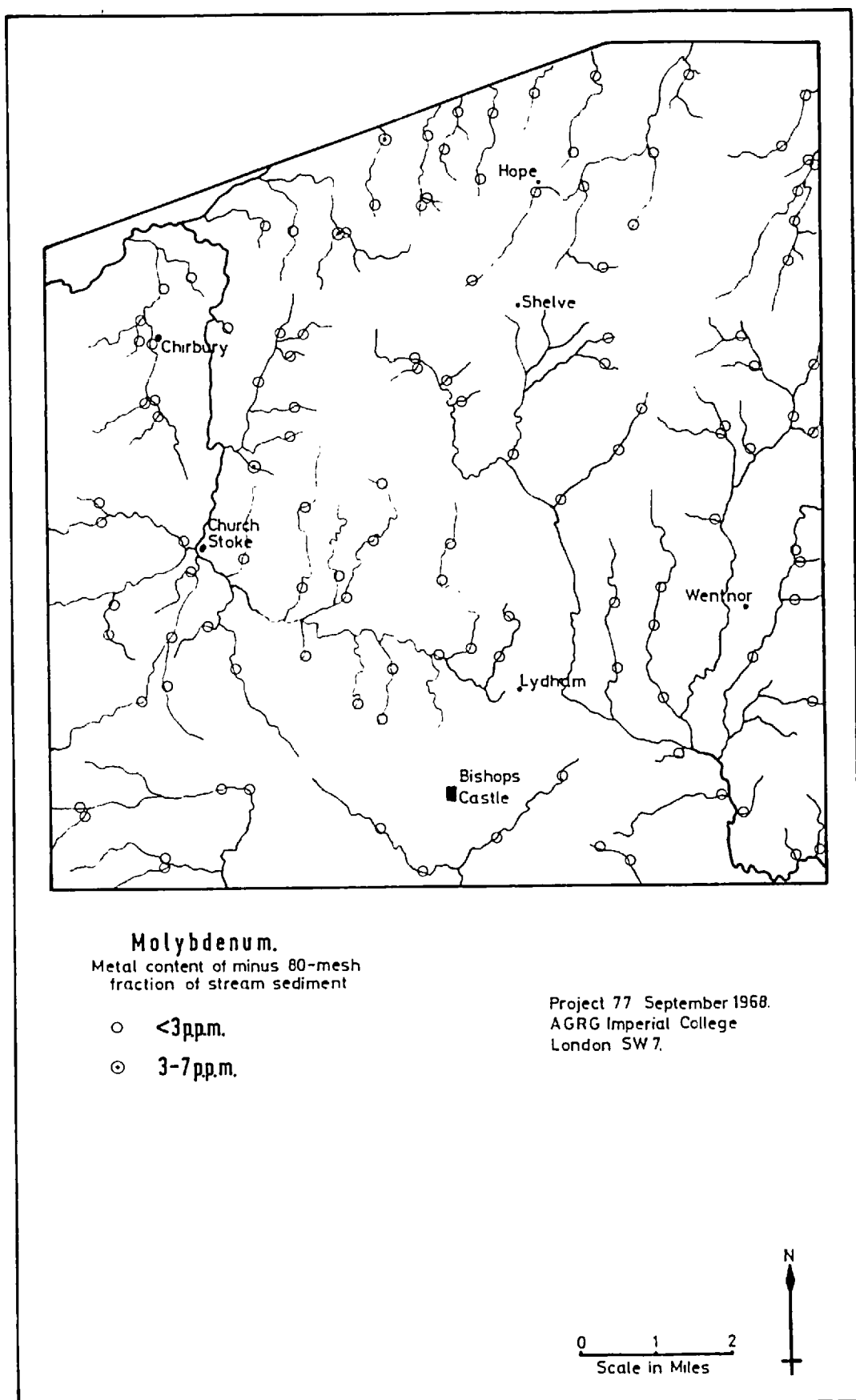


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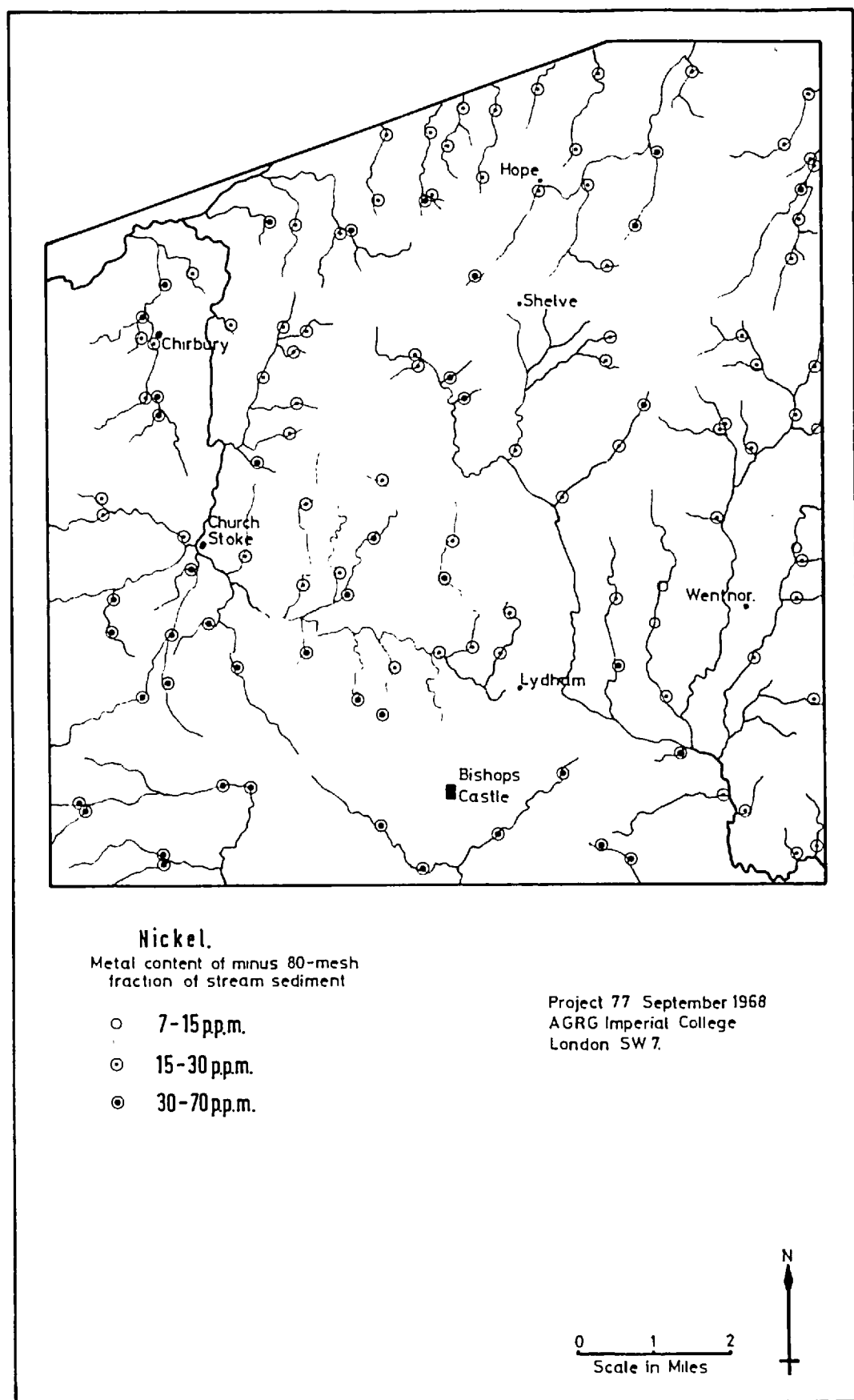


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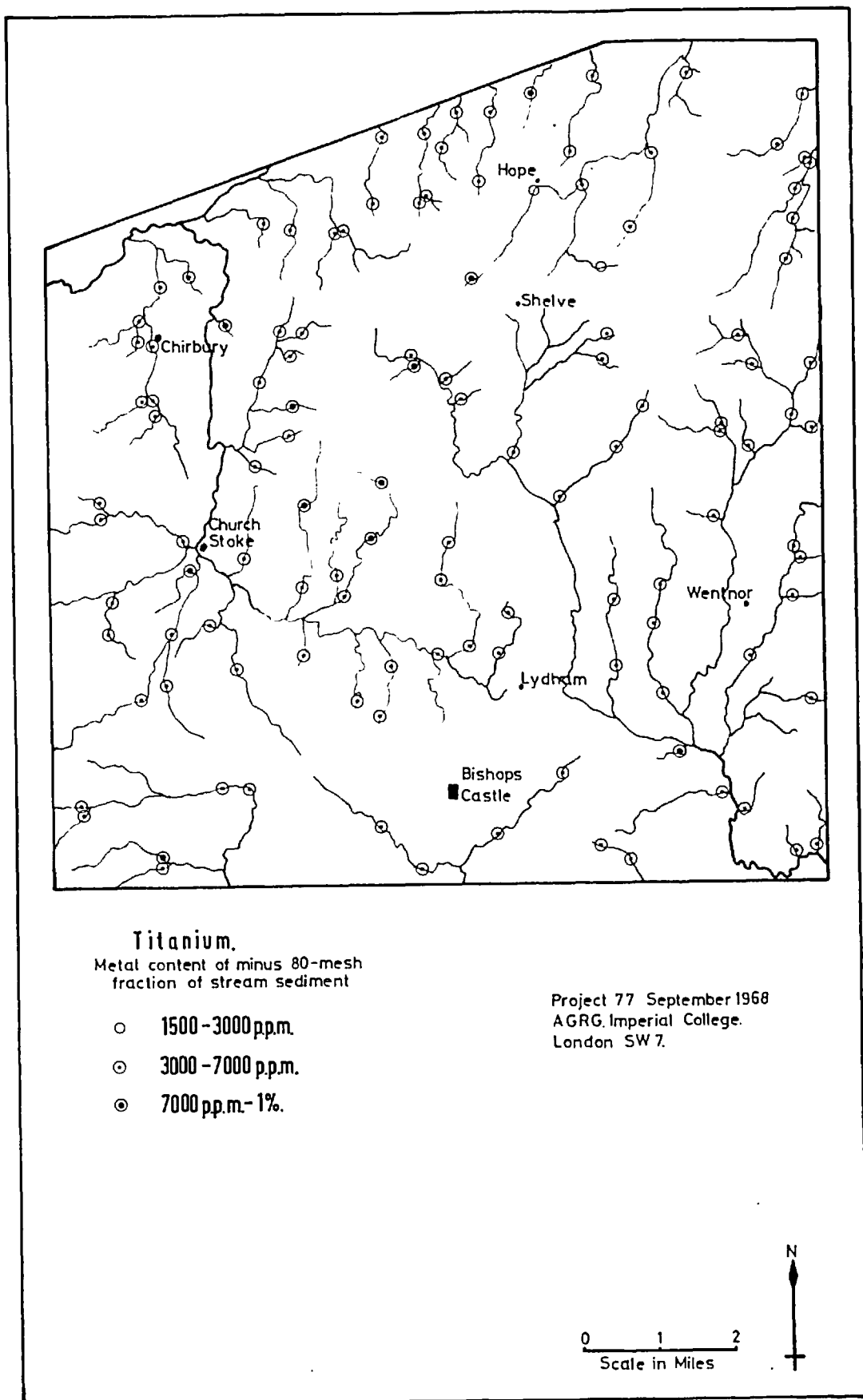


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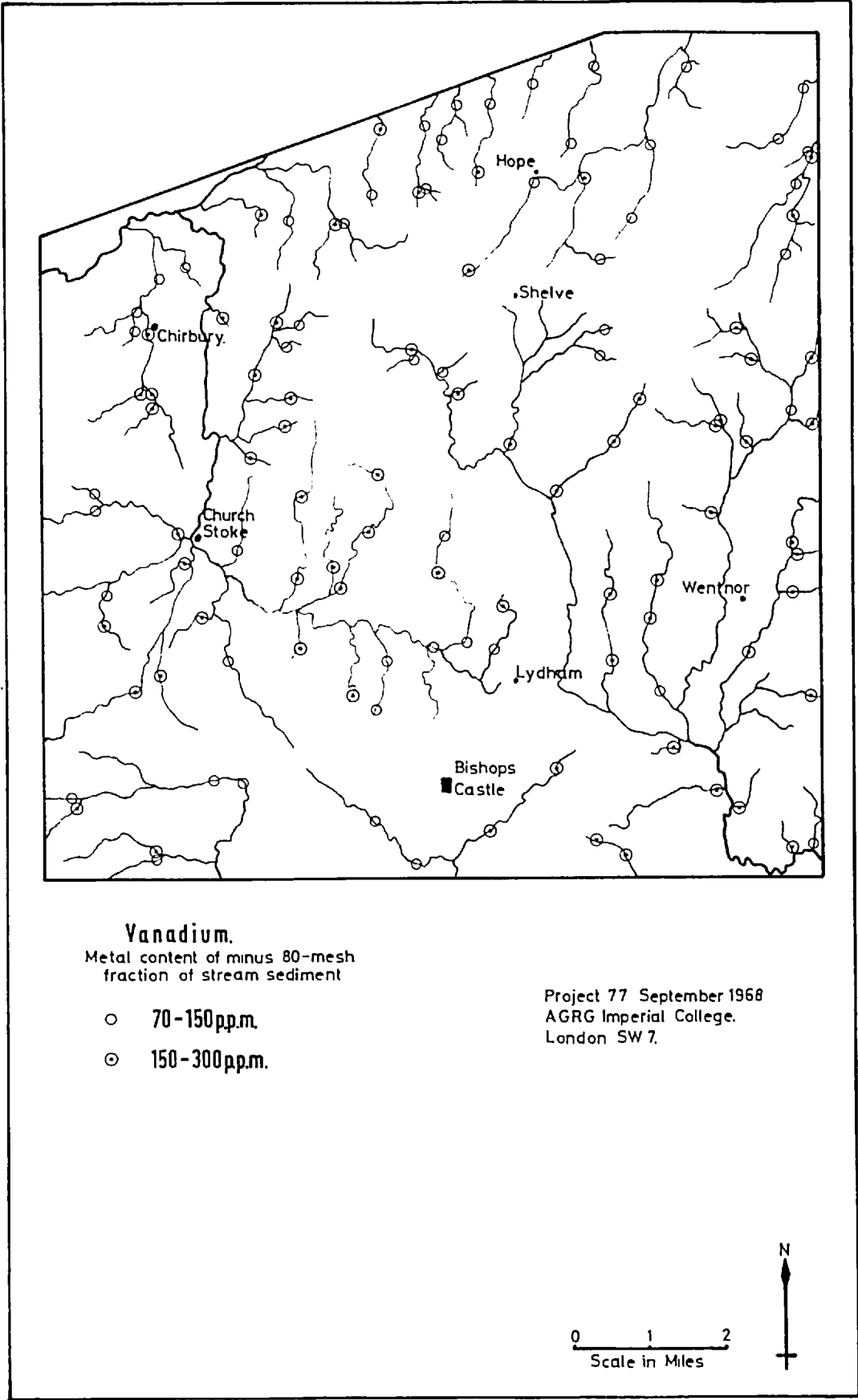


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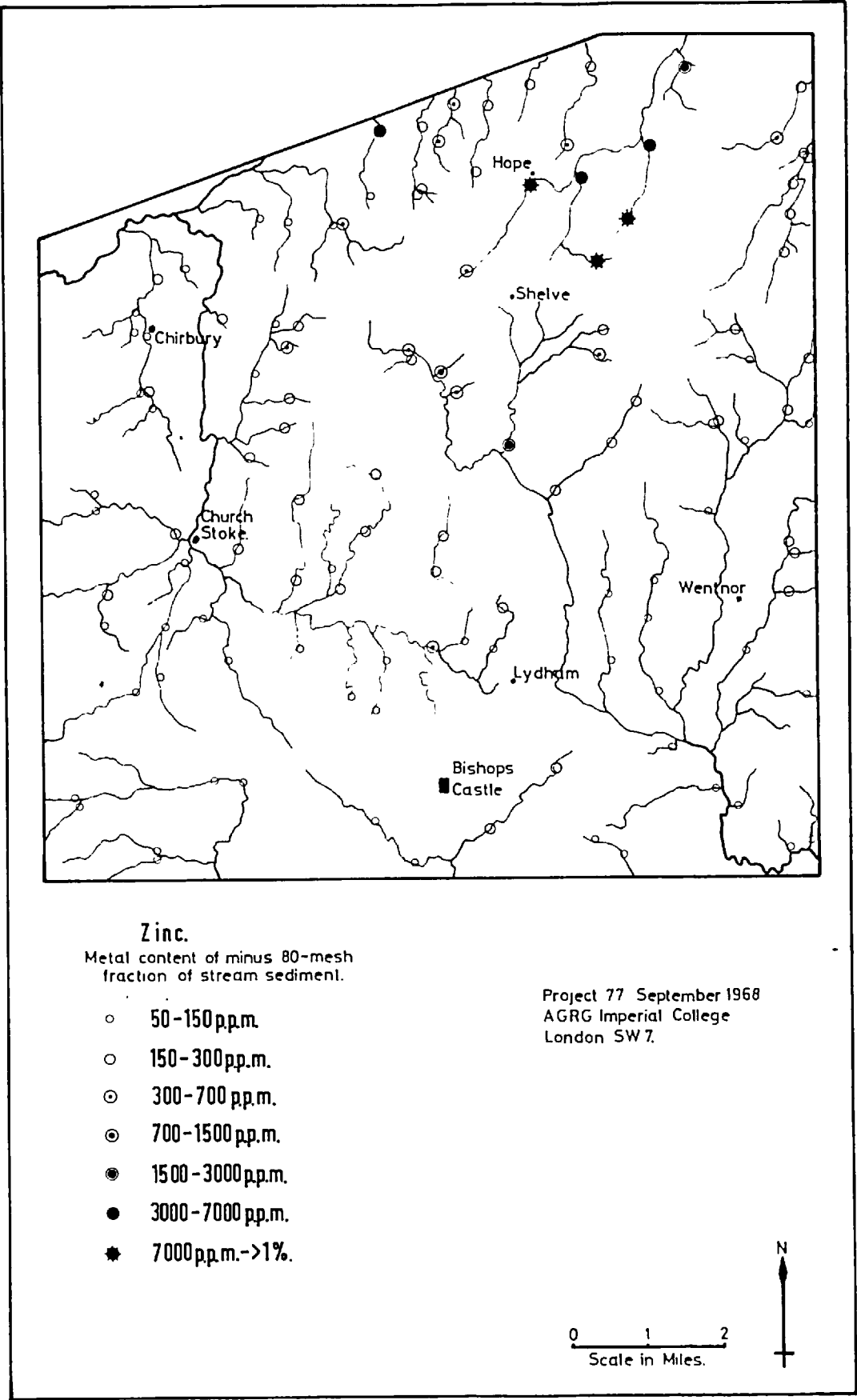


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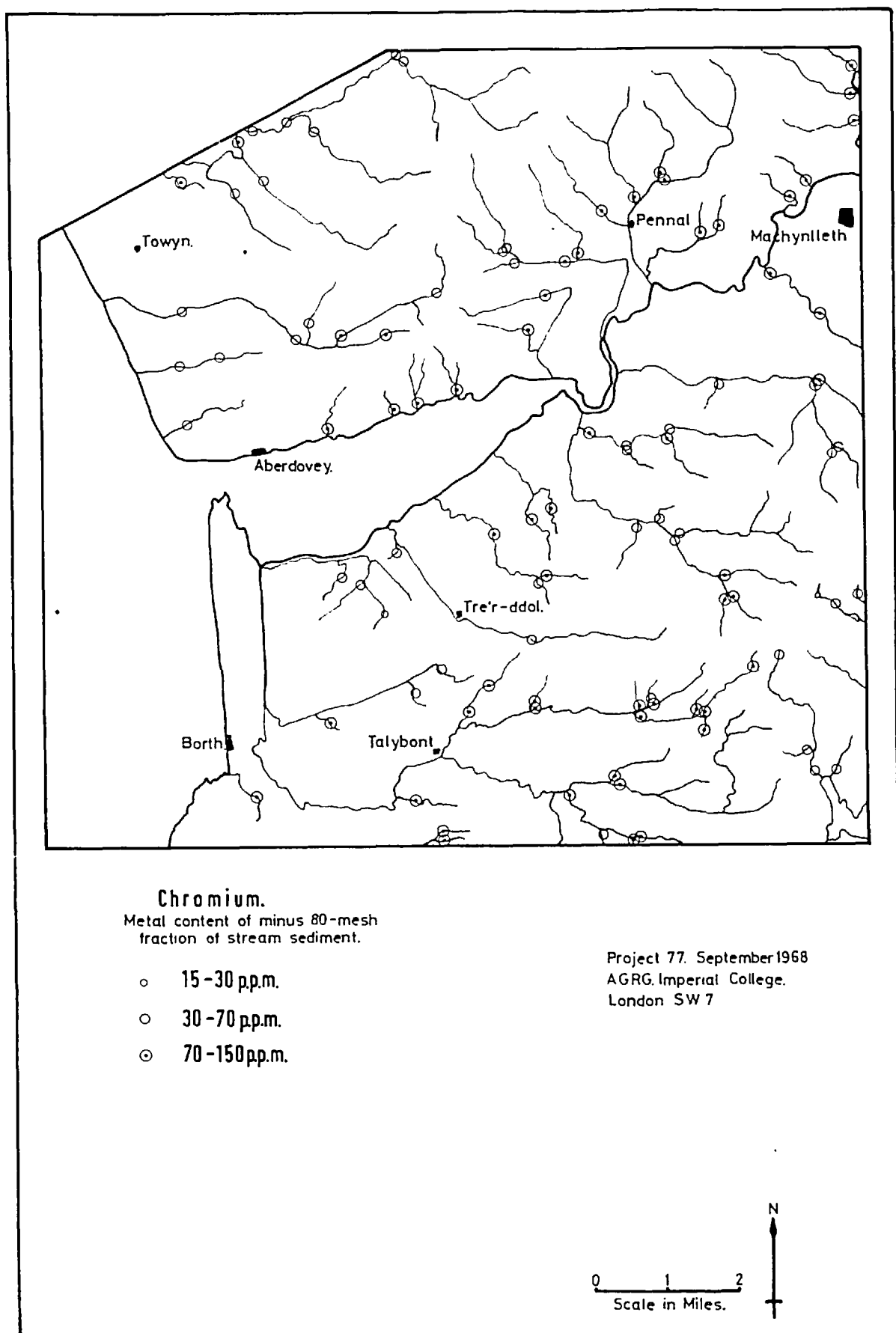


Figure S4.1 Machynlleth Survey Area.

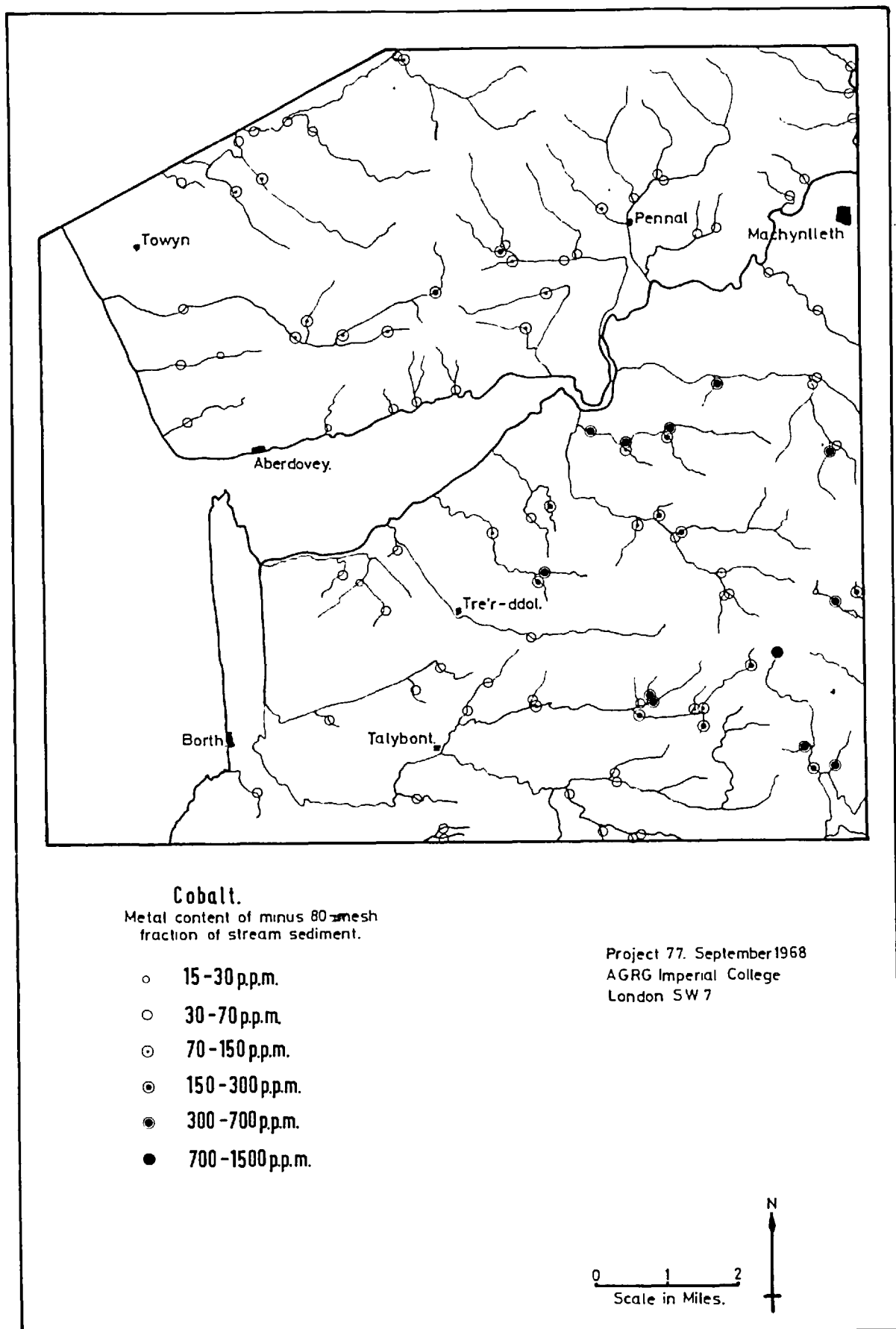


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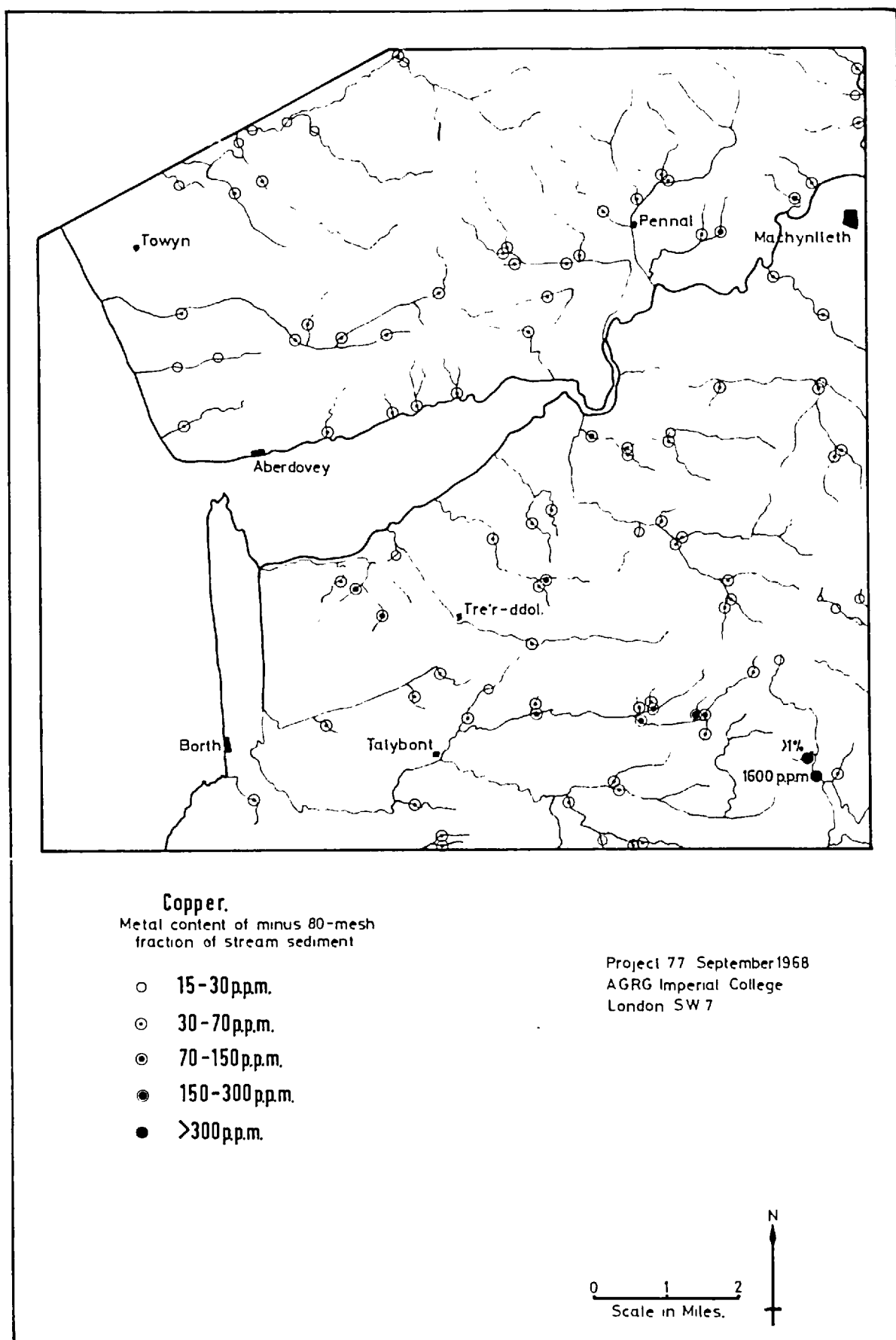


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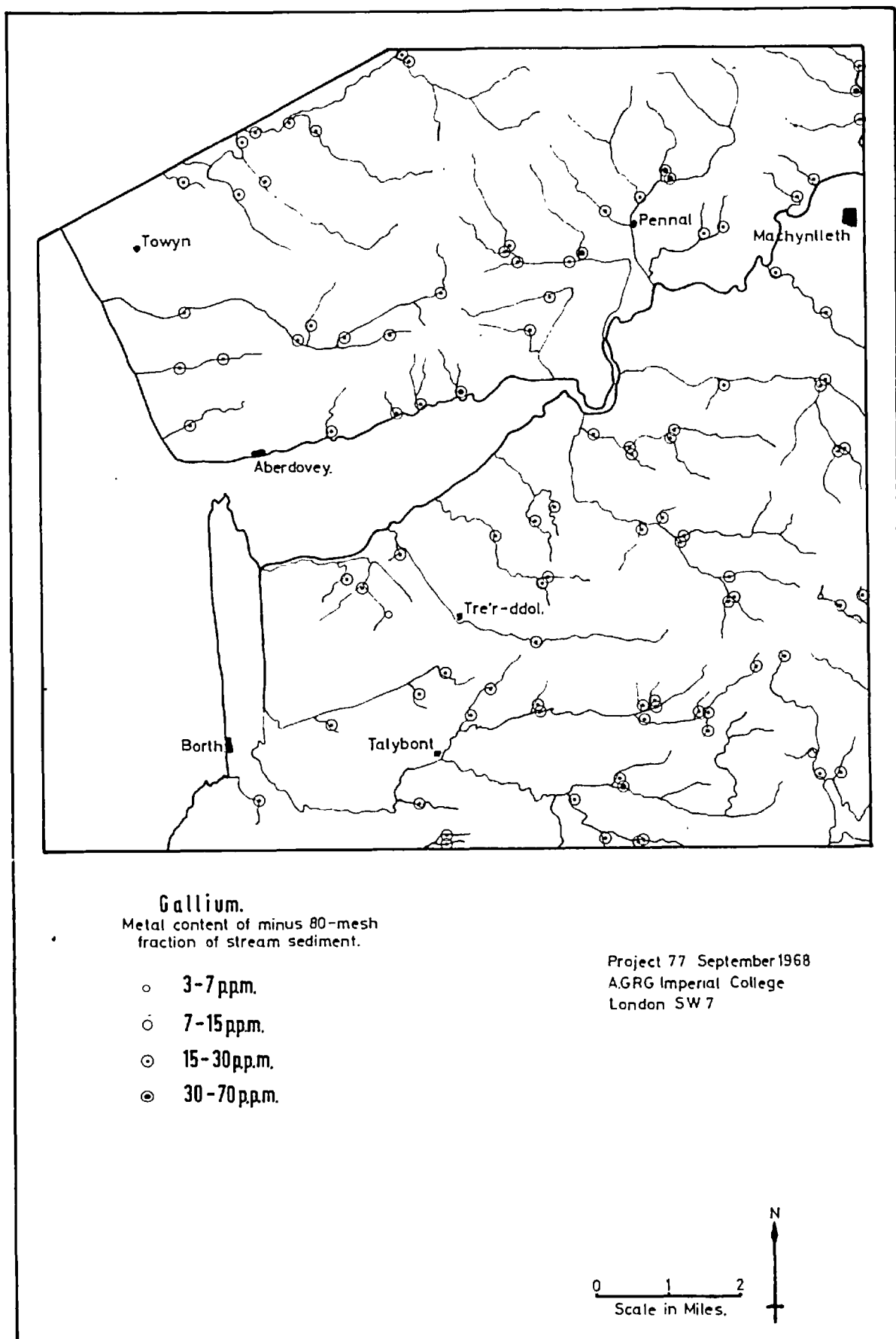


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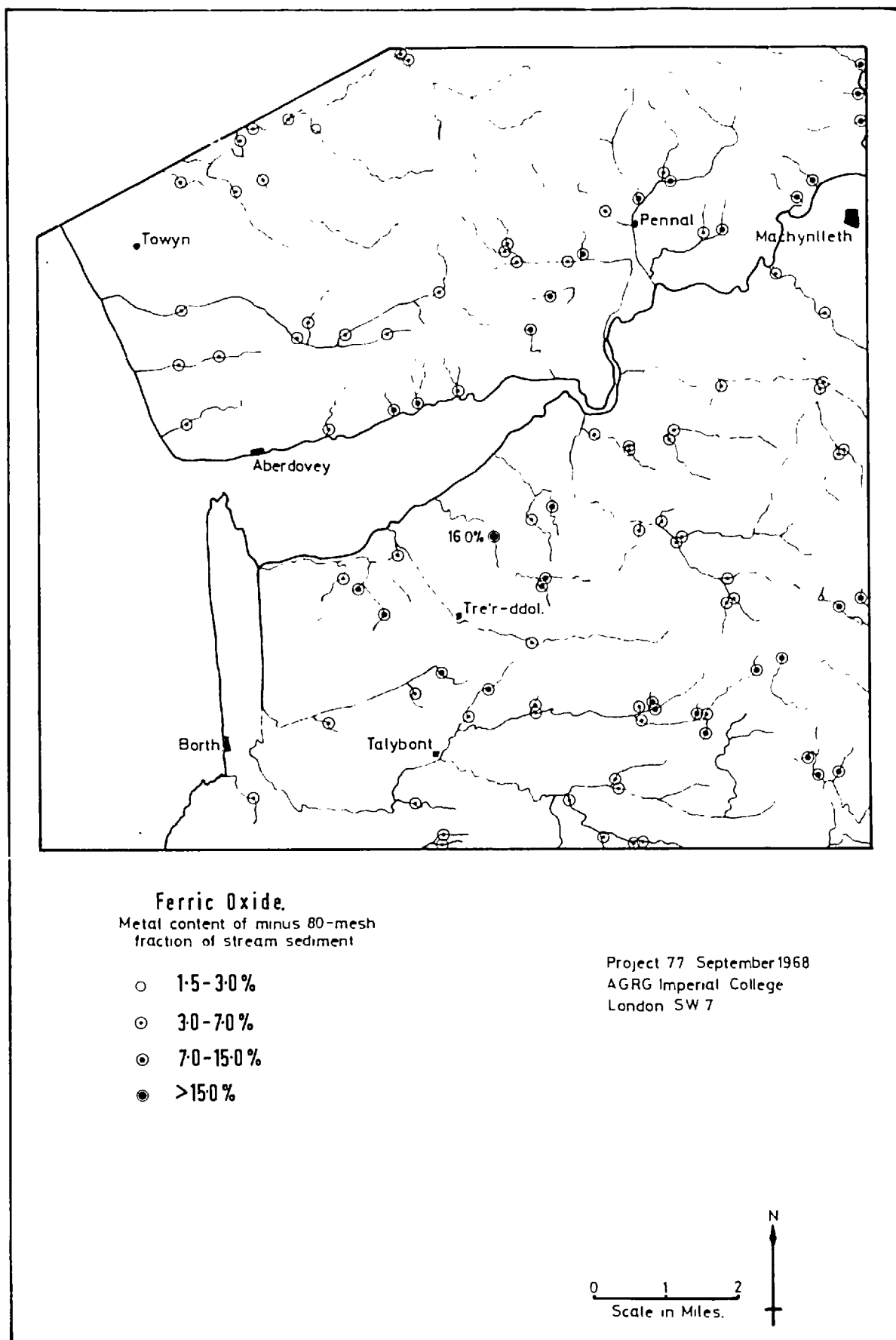


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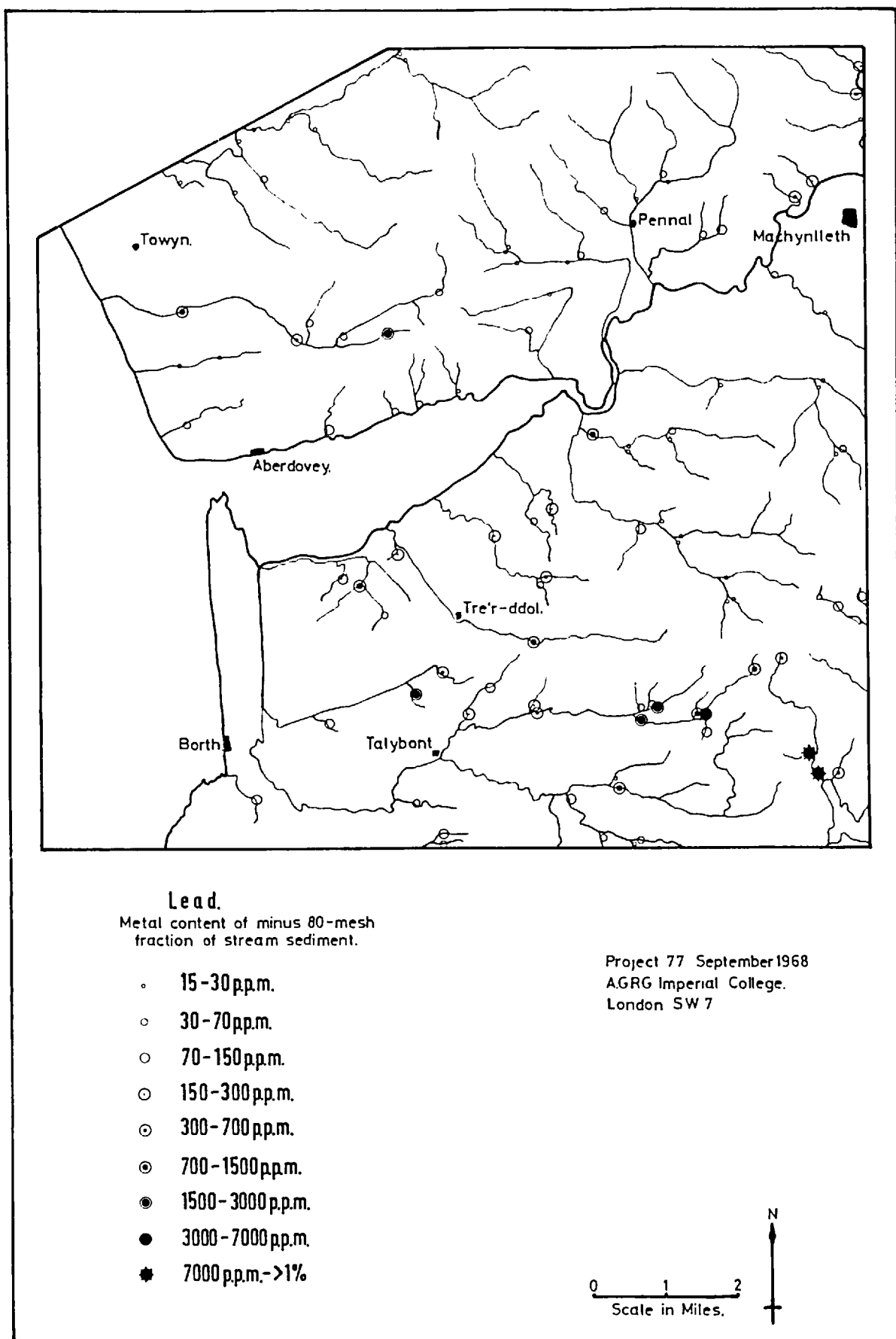


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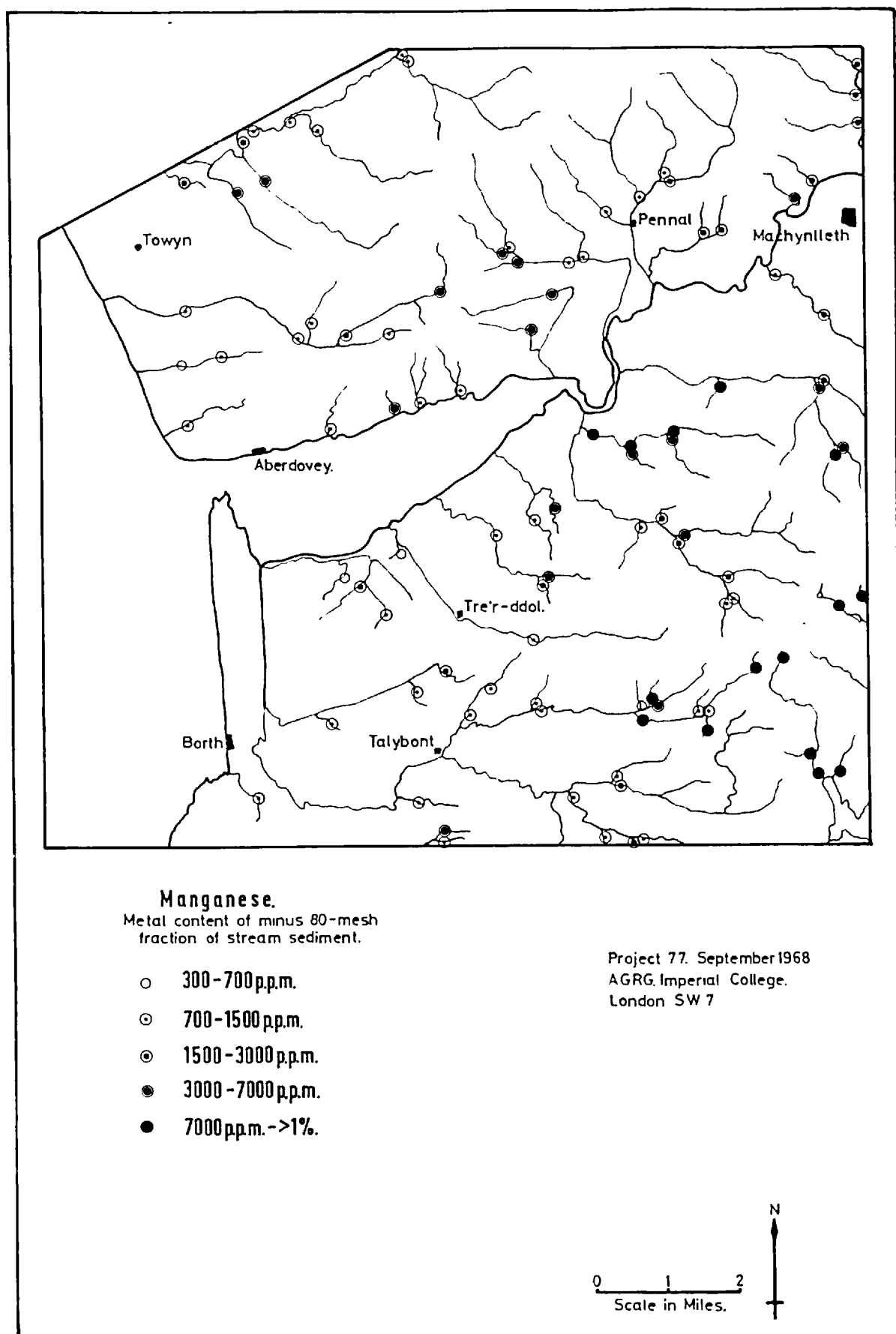


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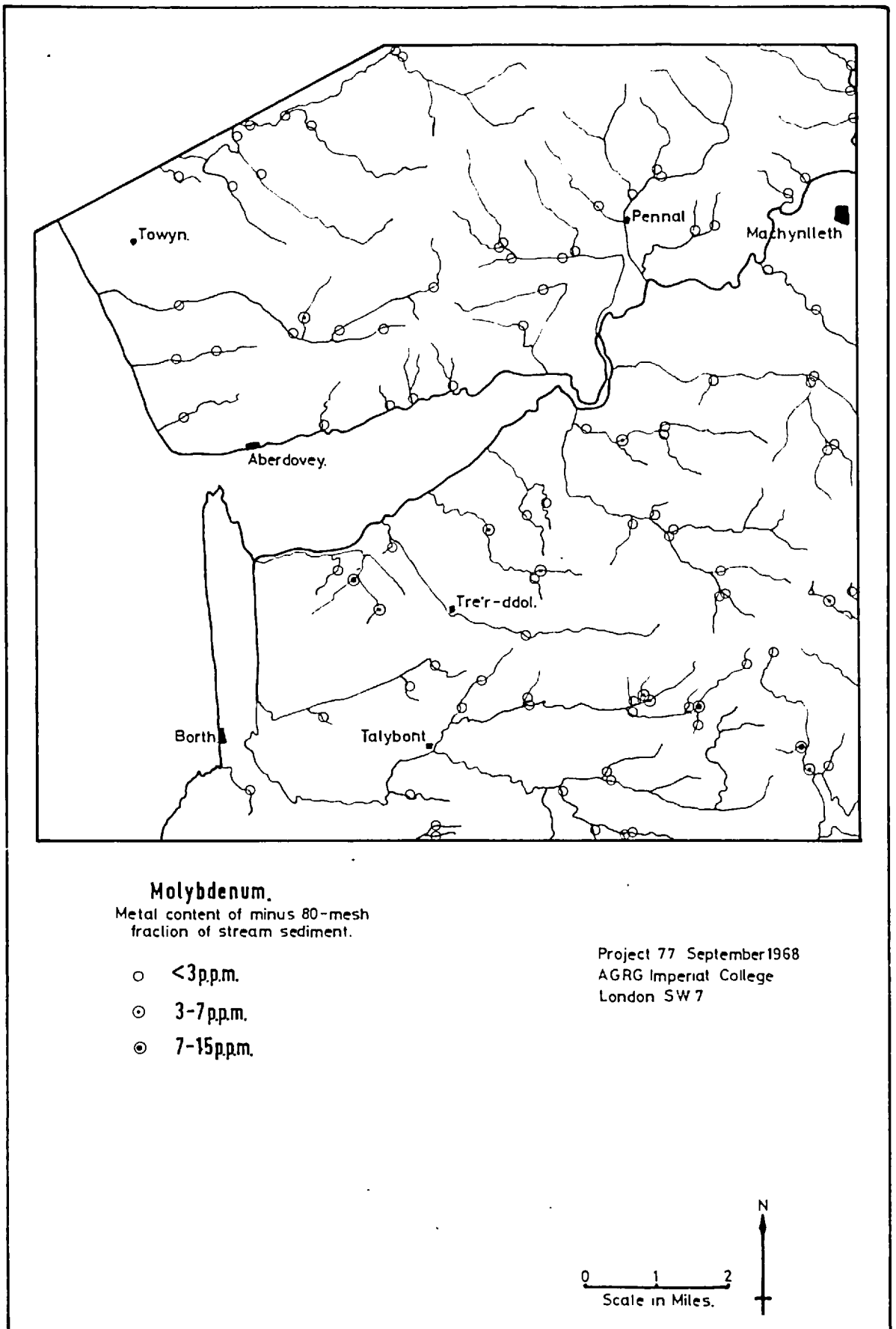


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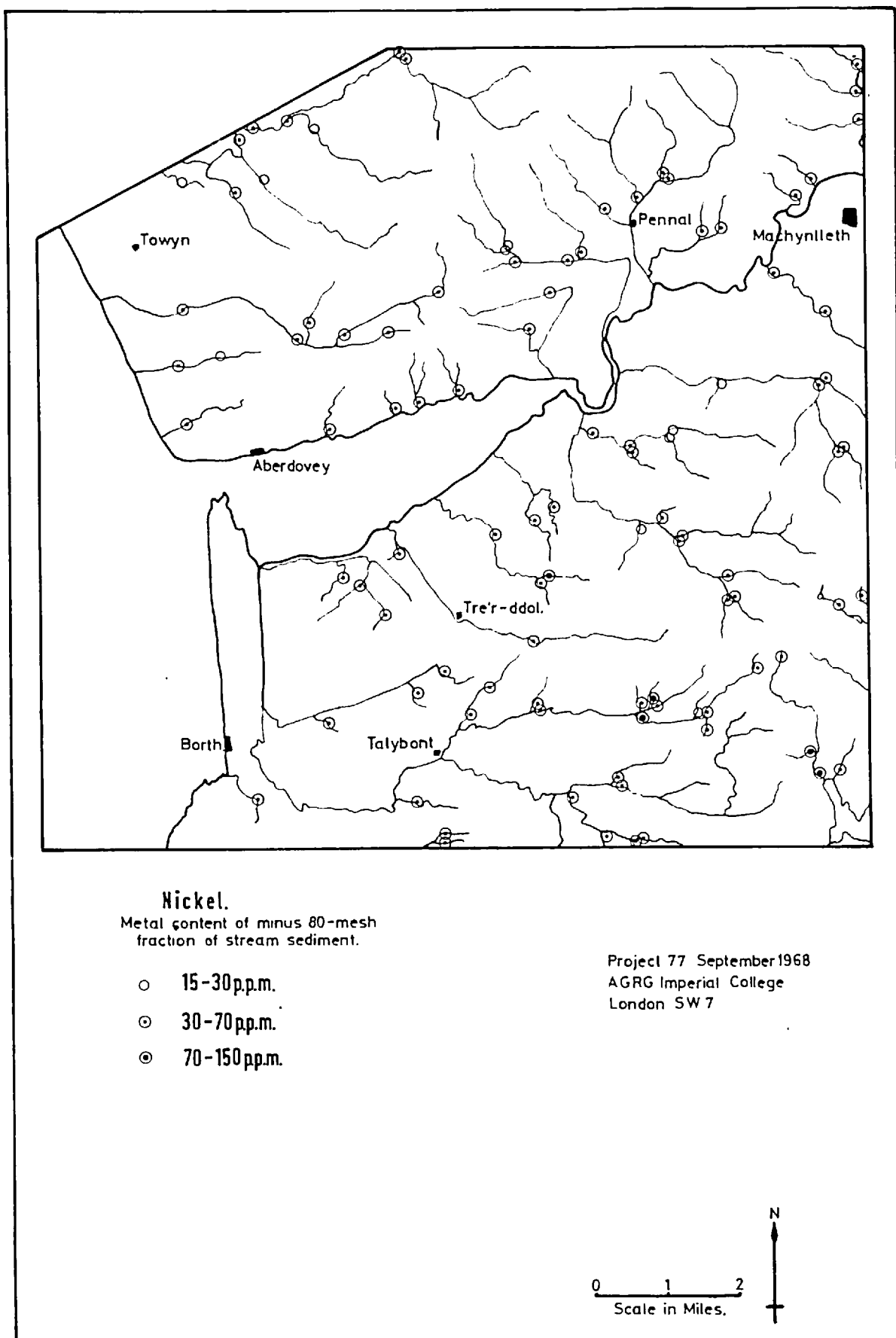


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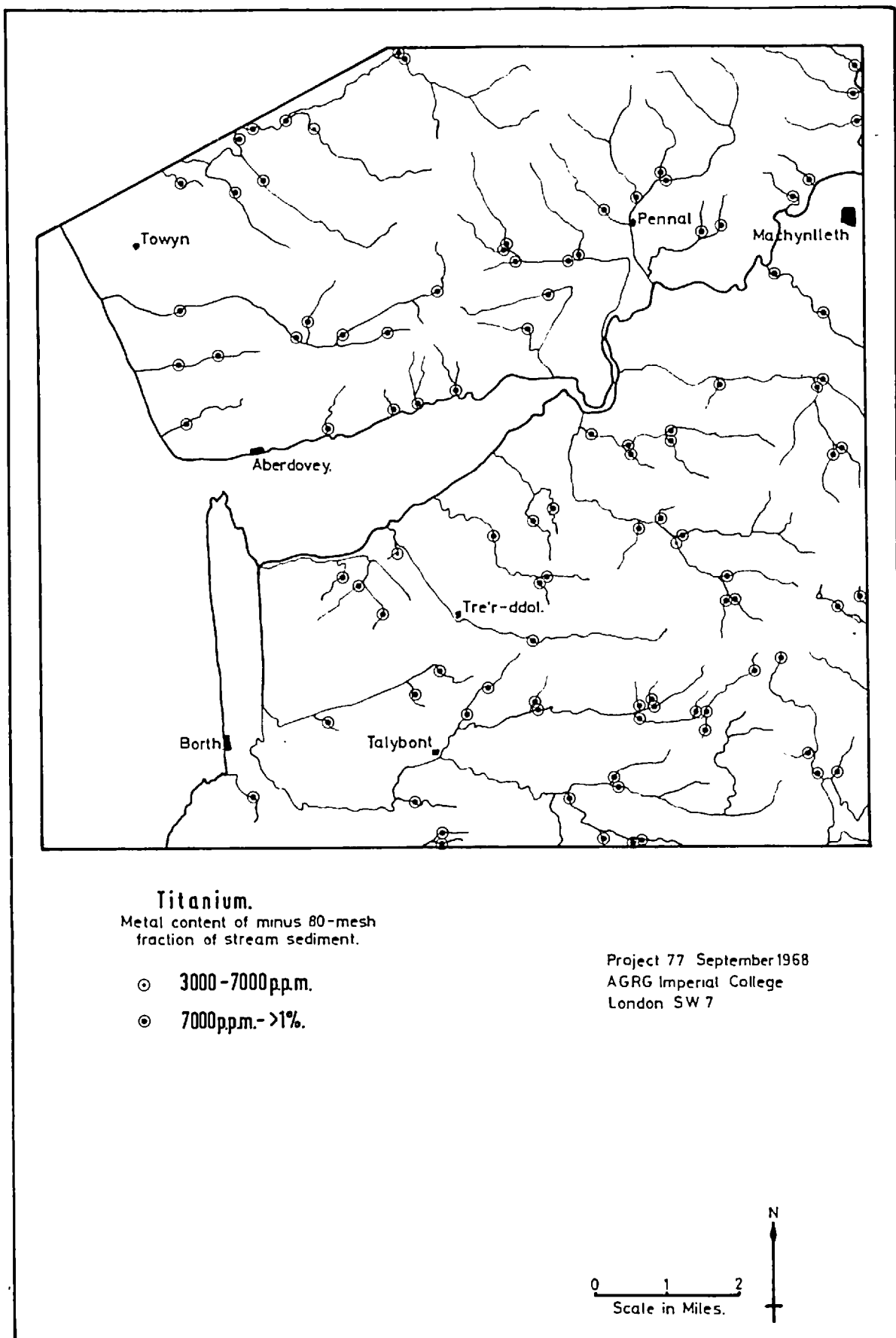


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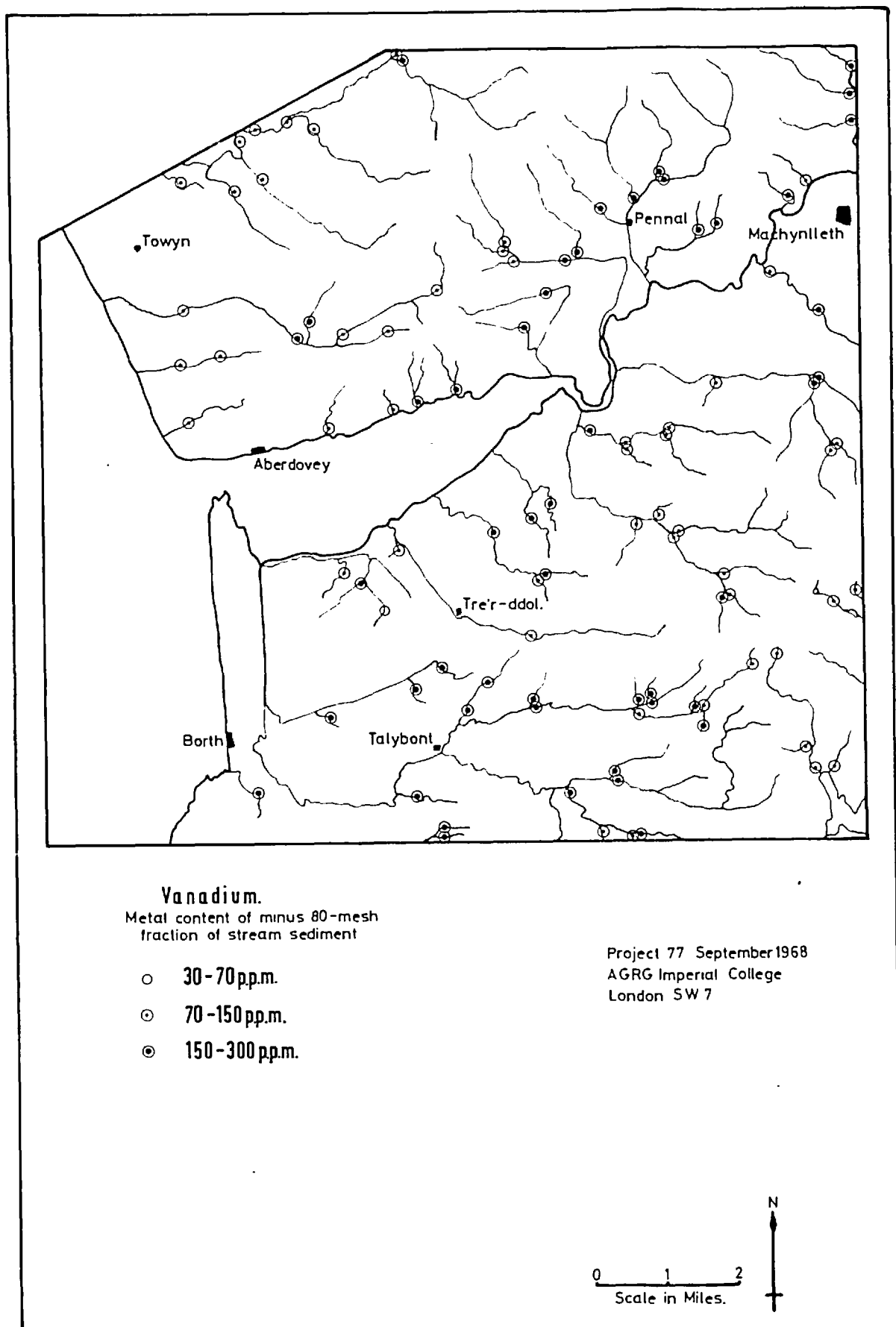


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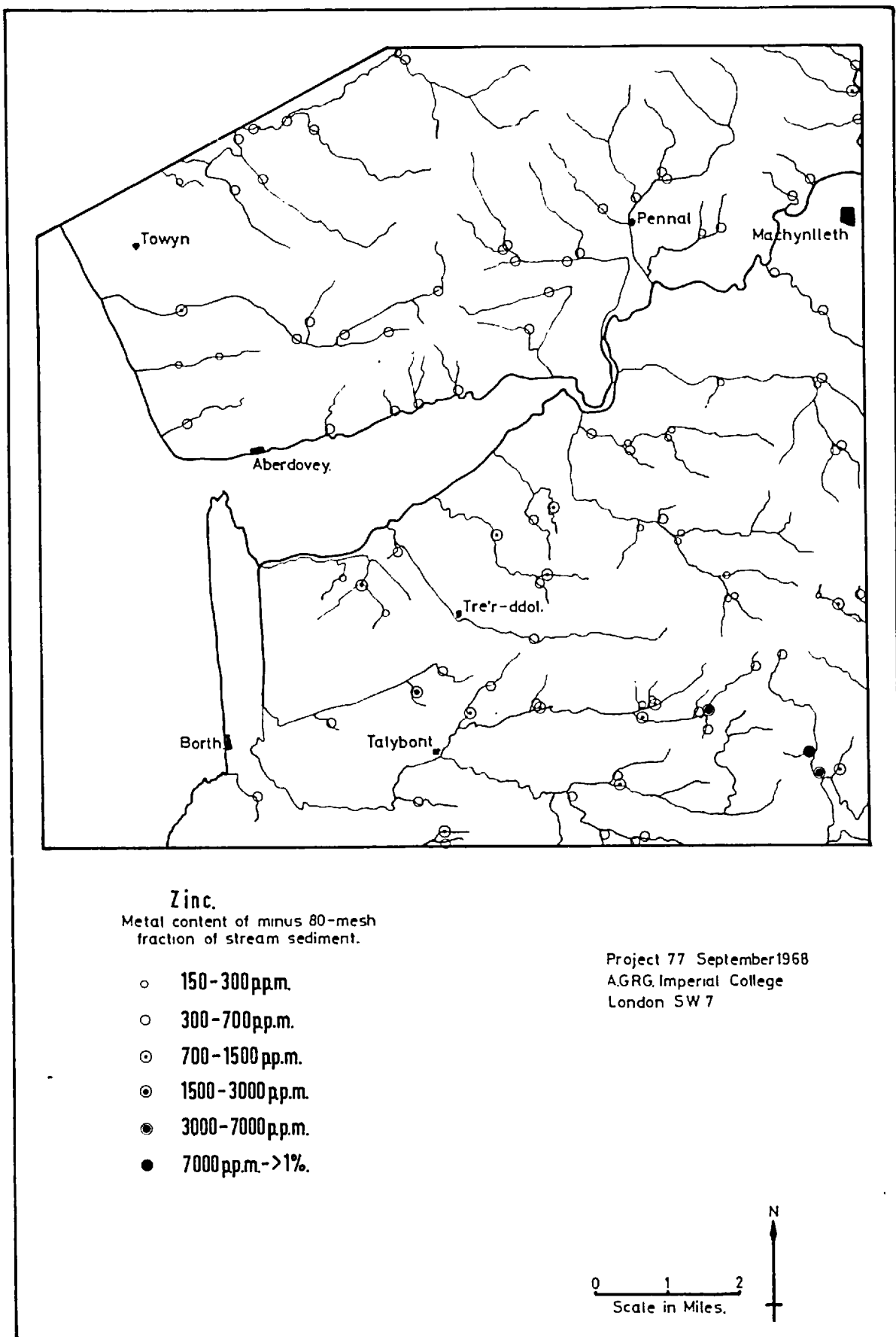


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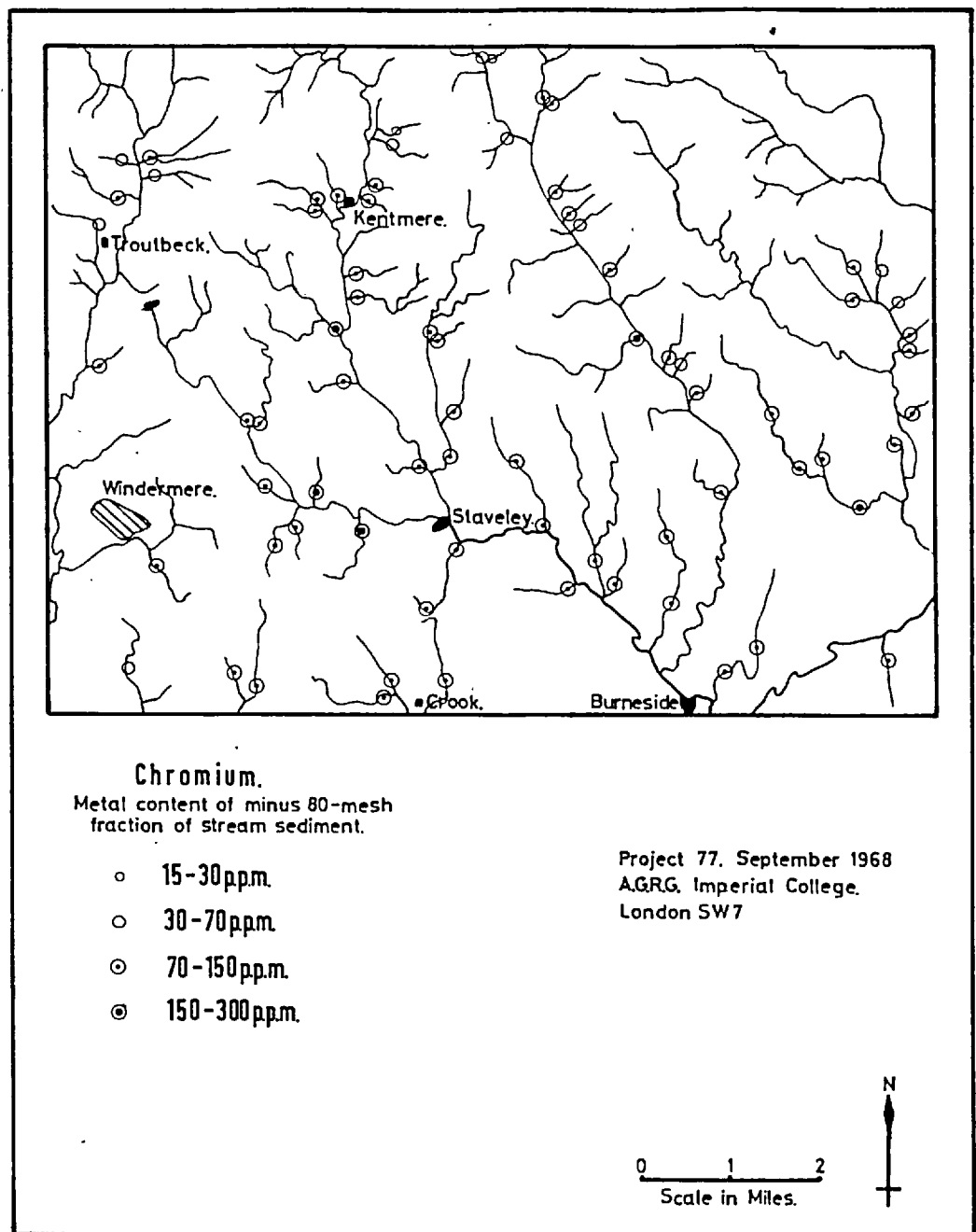


Figure. S5.1

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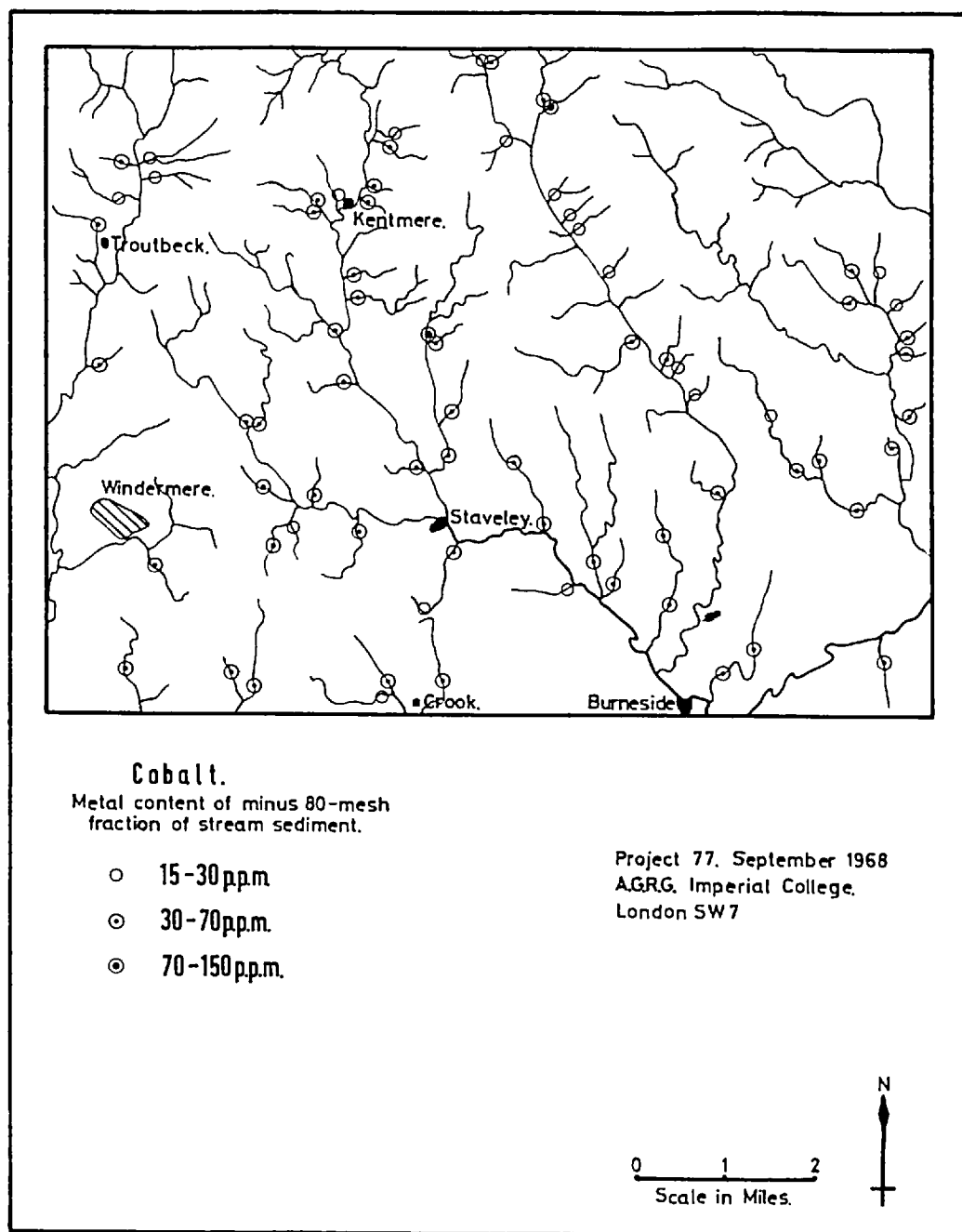


Figure. S5.2

Kendal Survey Area.

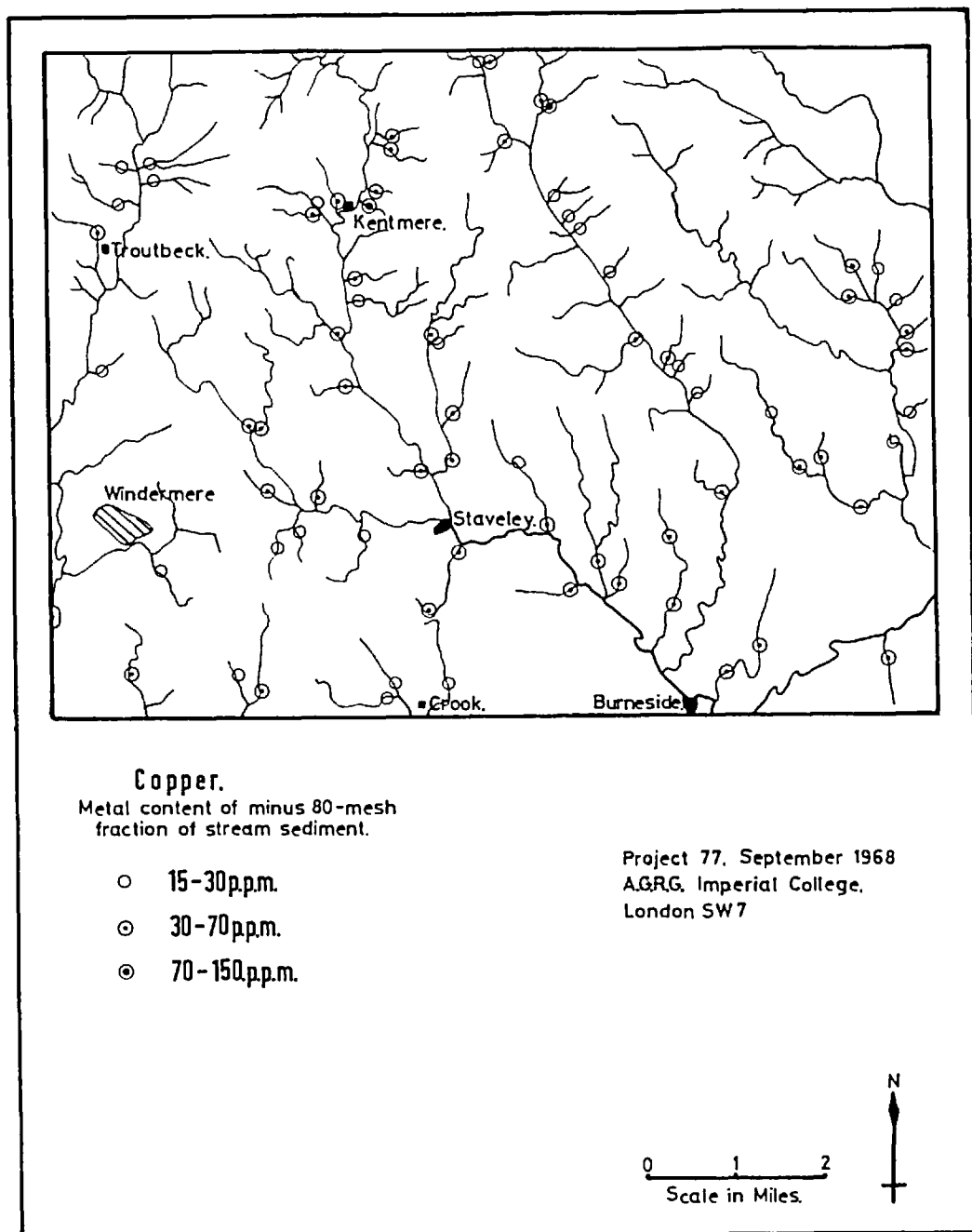


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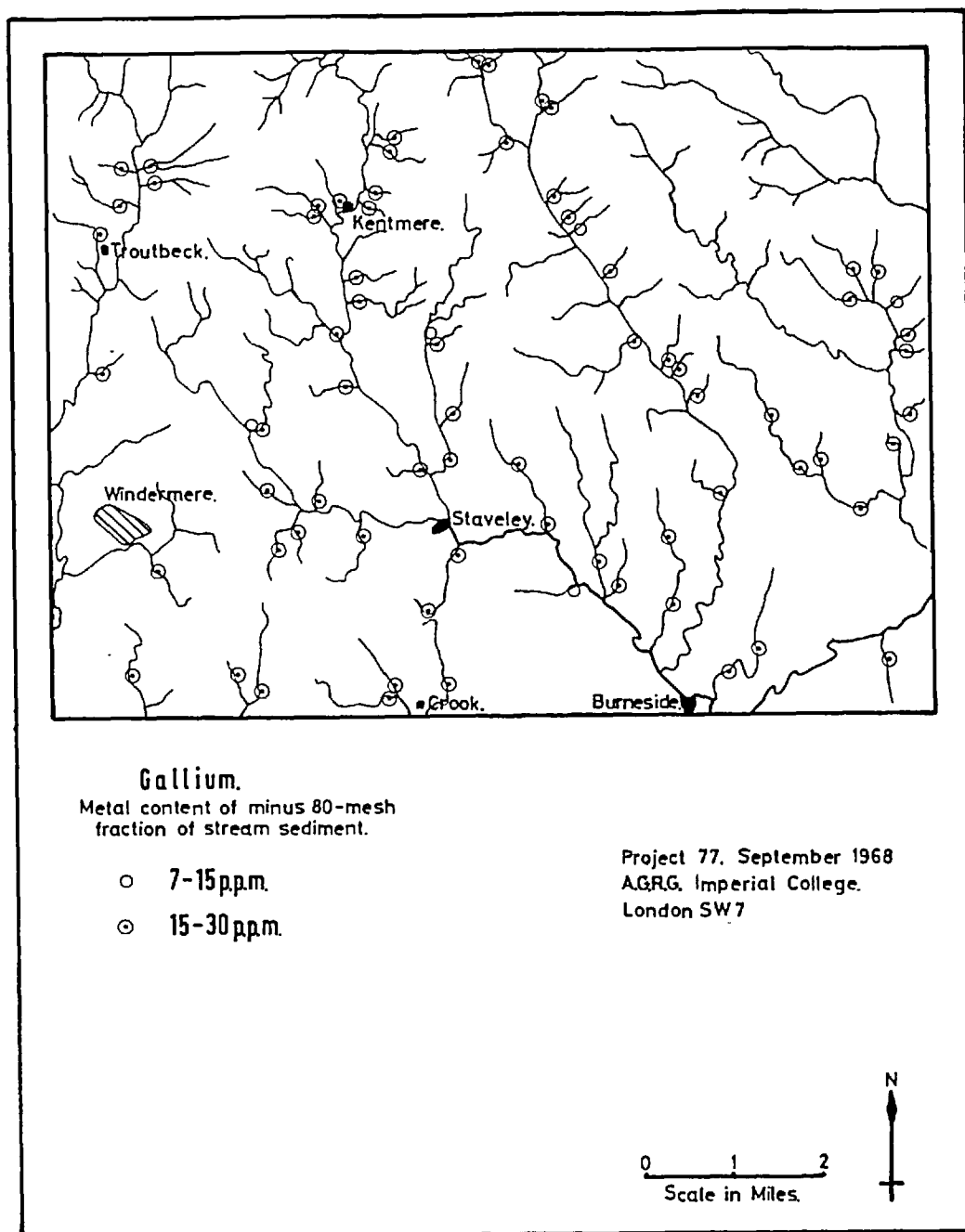


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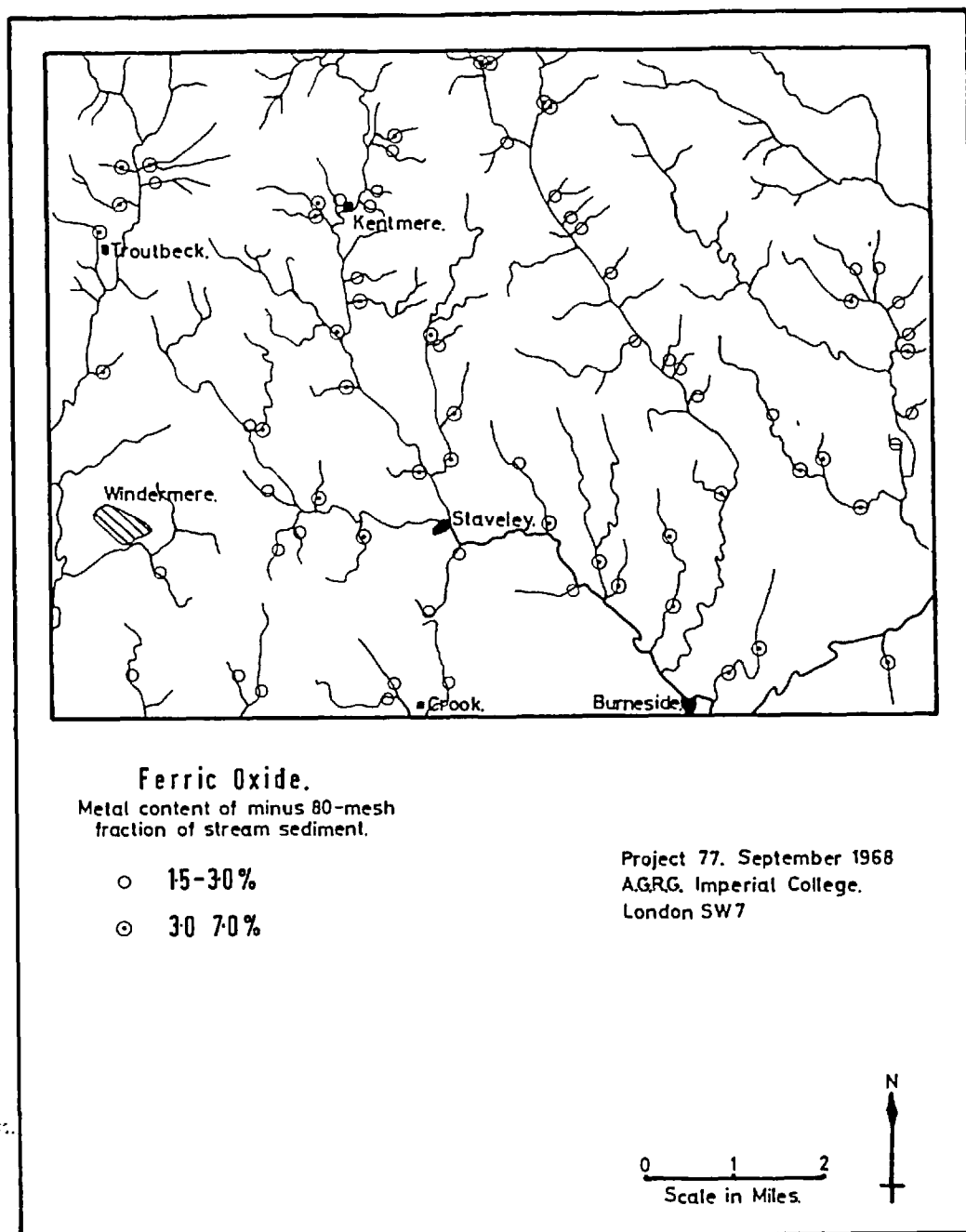


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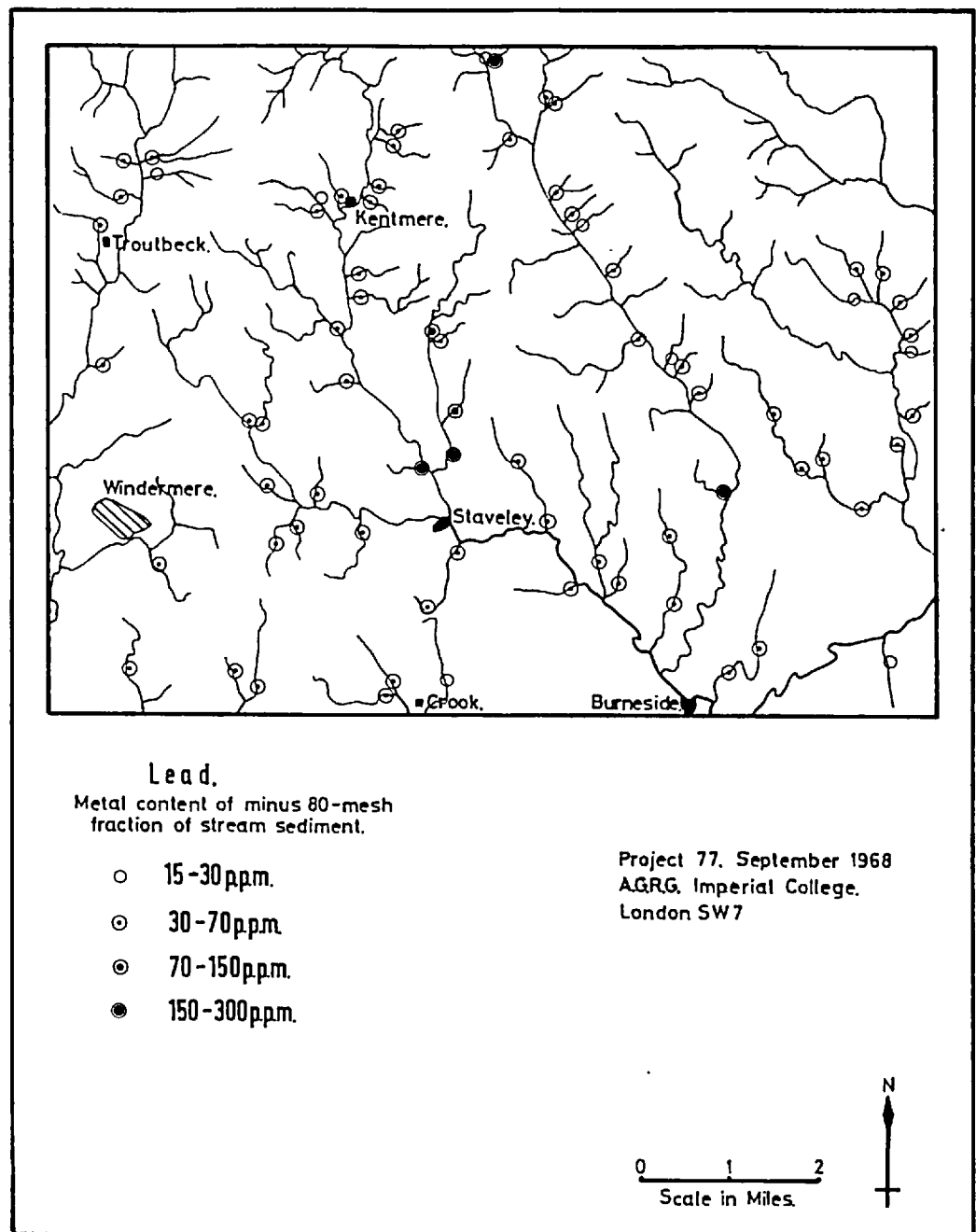


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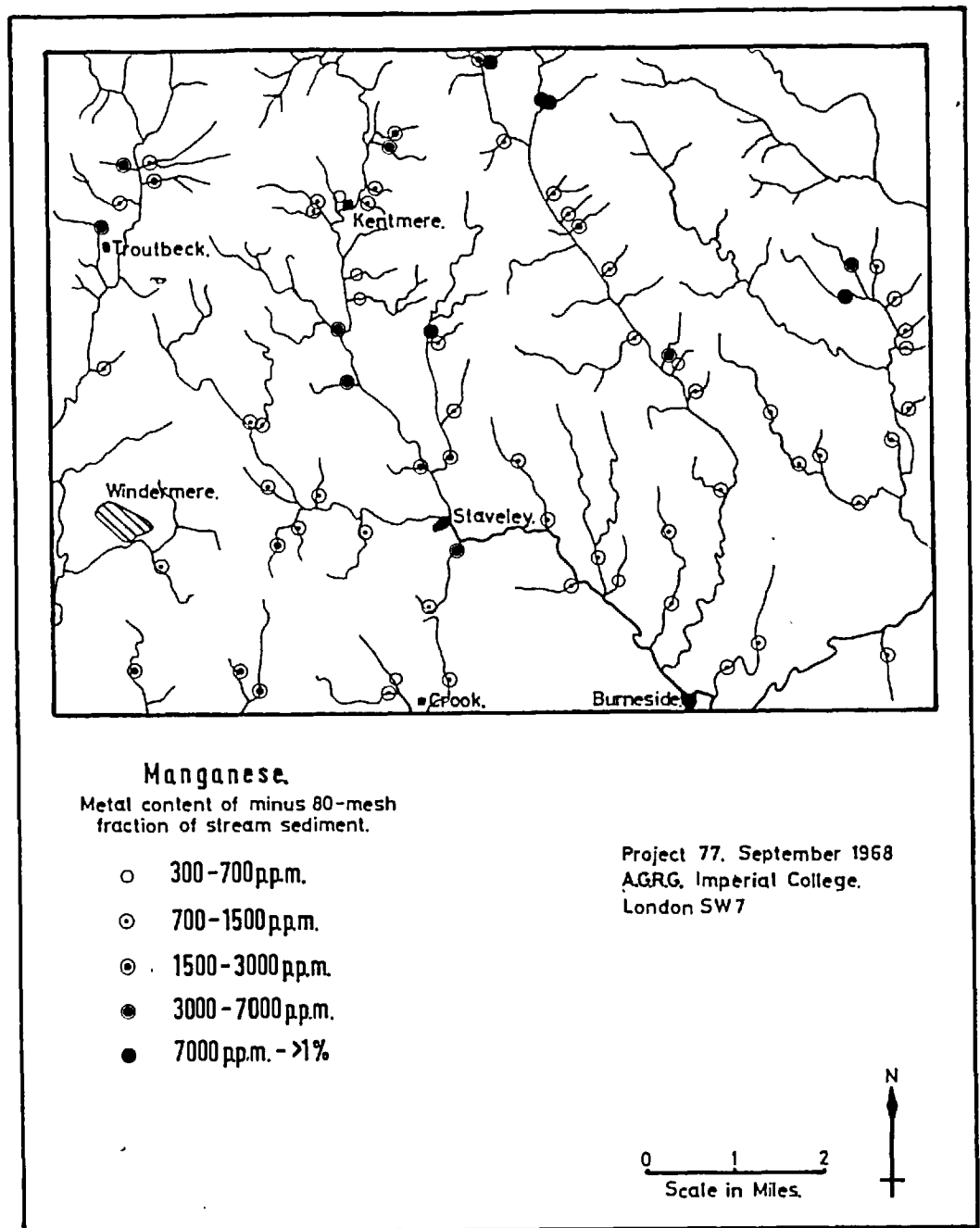


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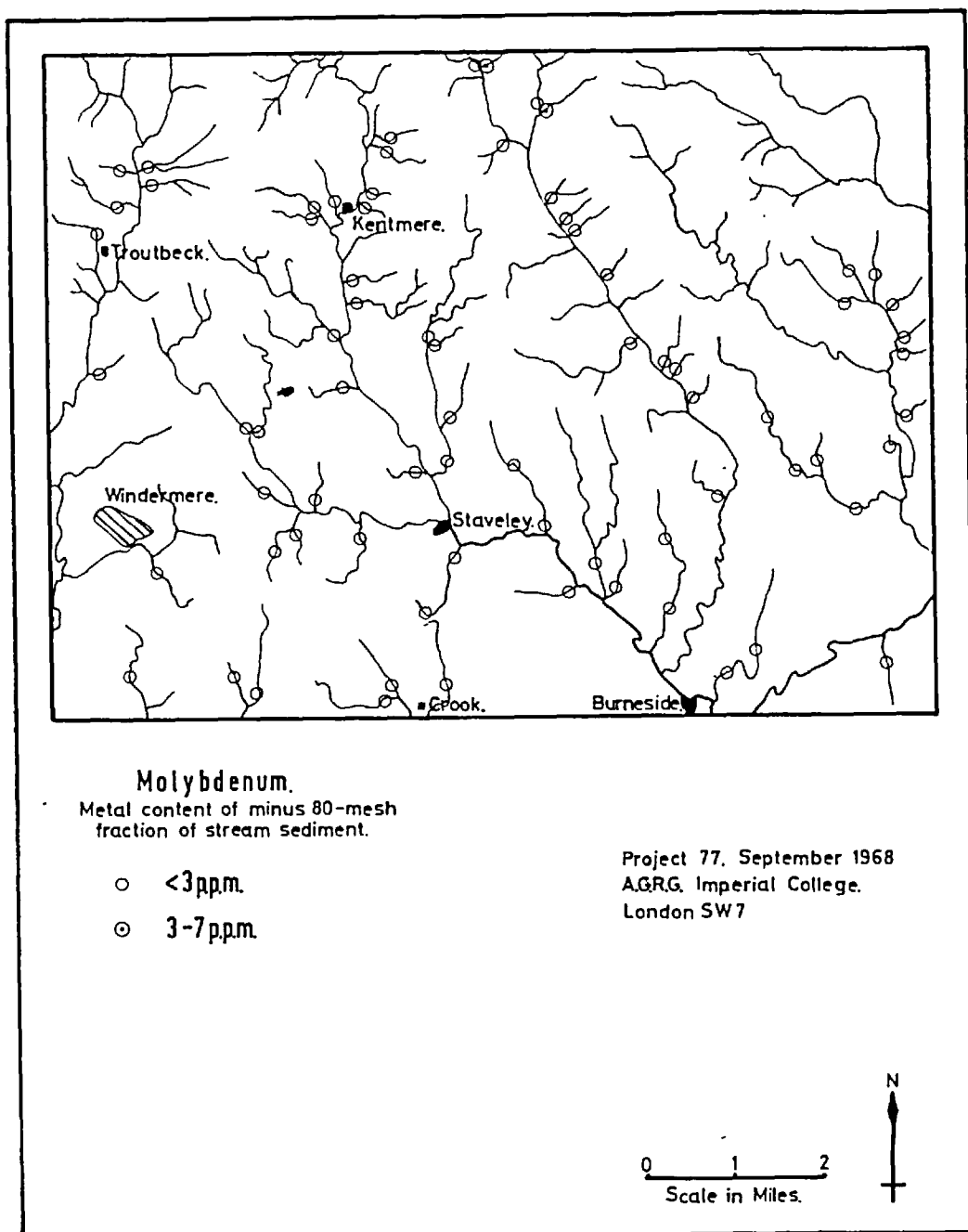


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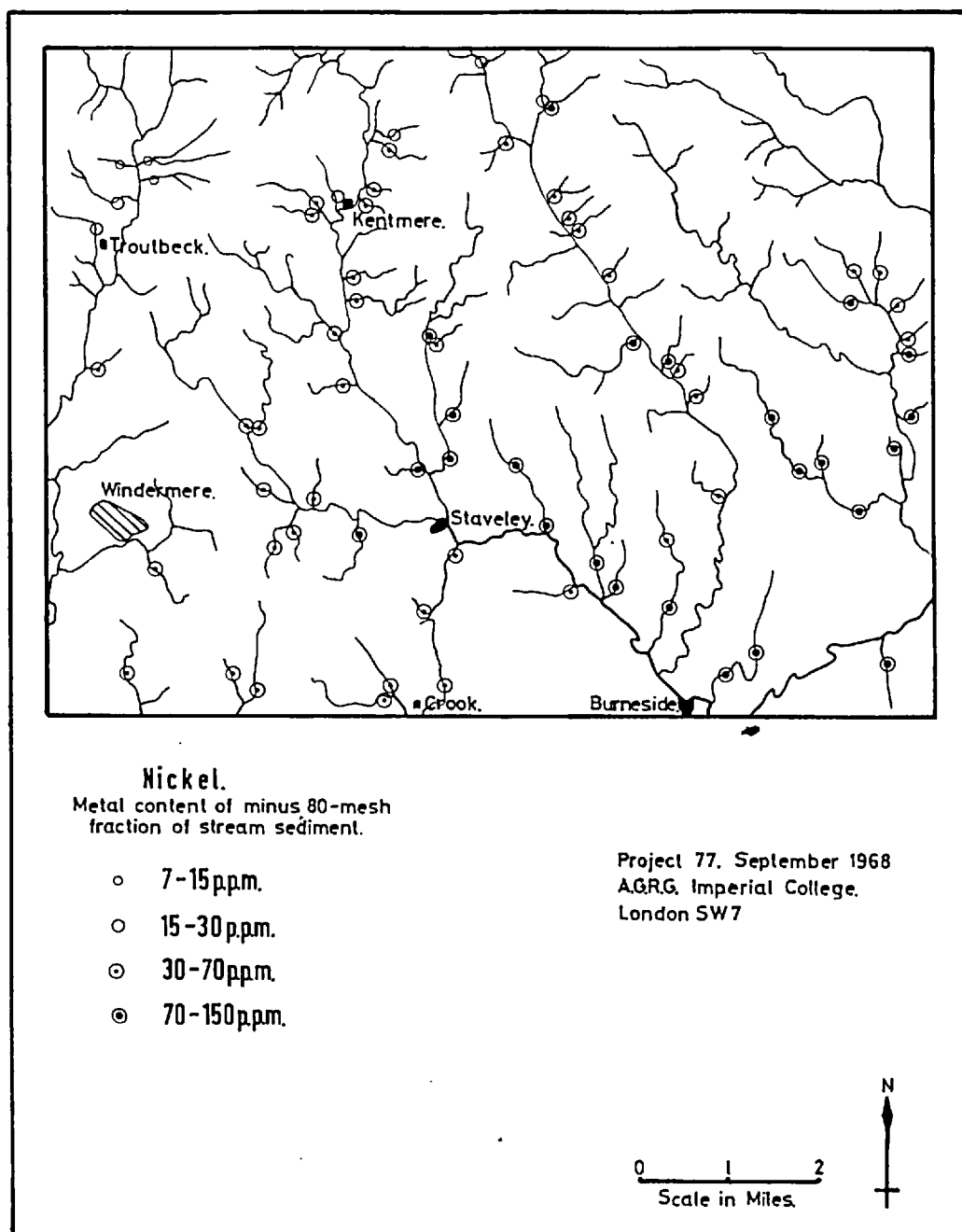


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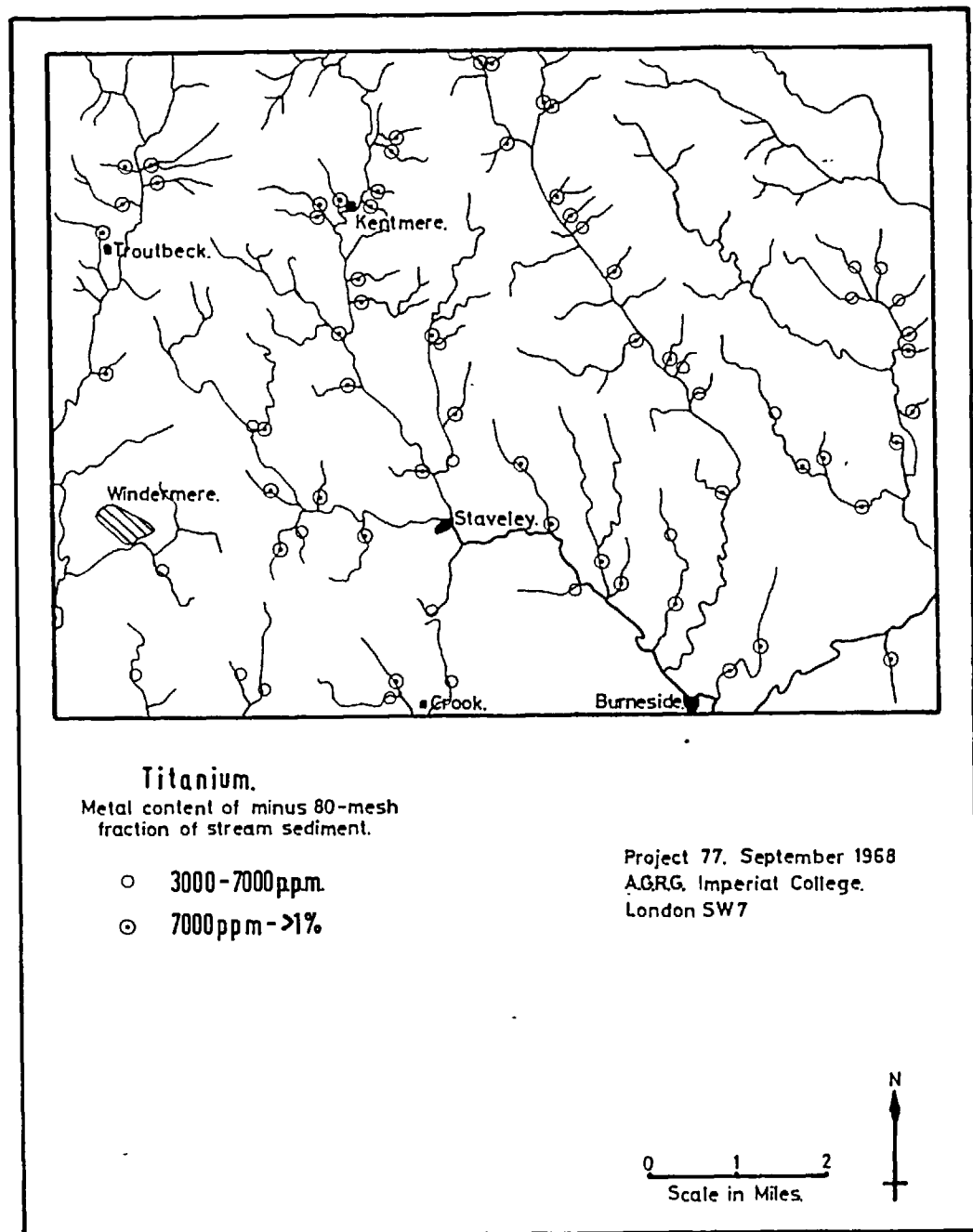


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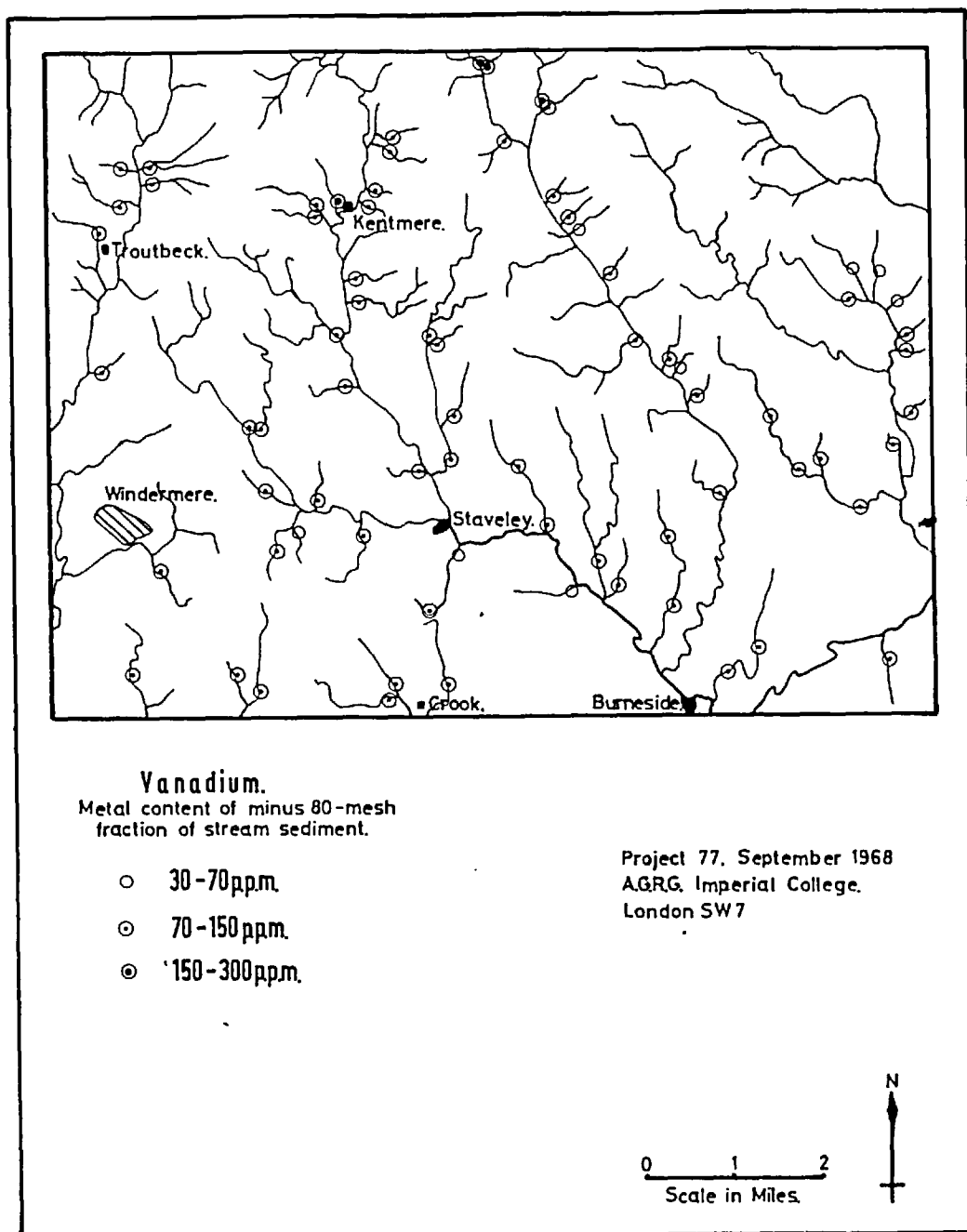


Figure. S5-11

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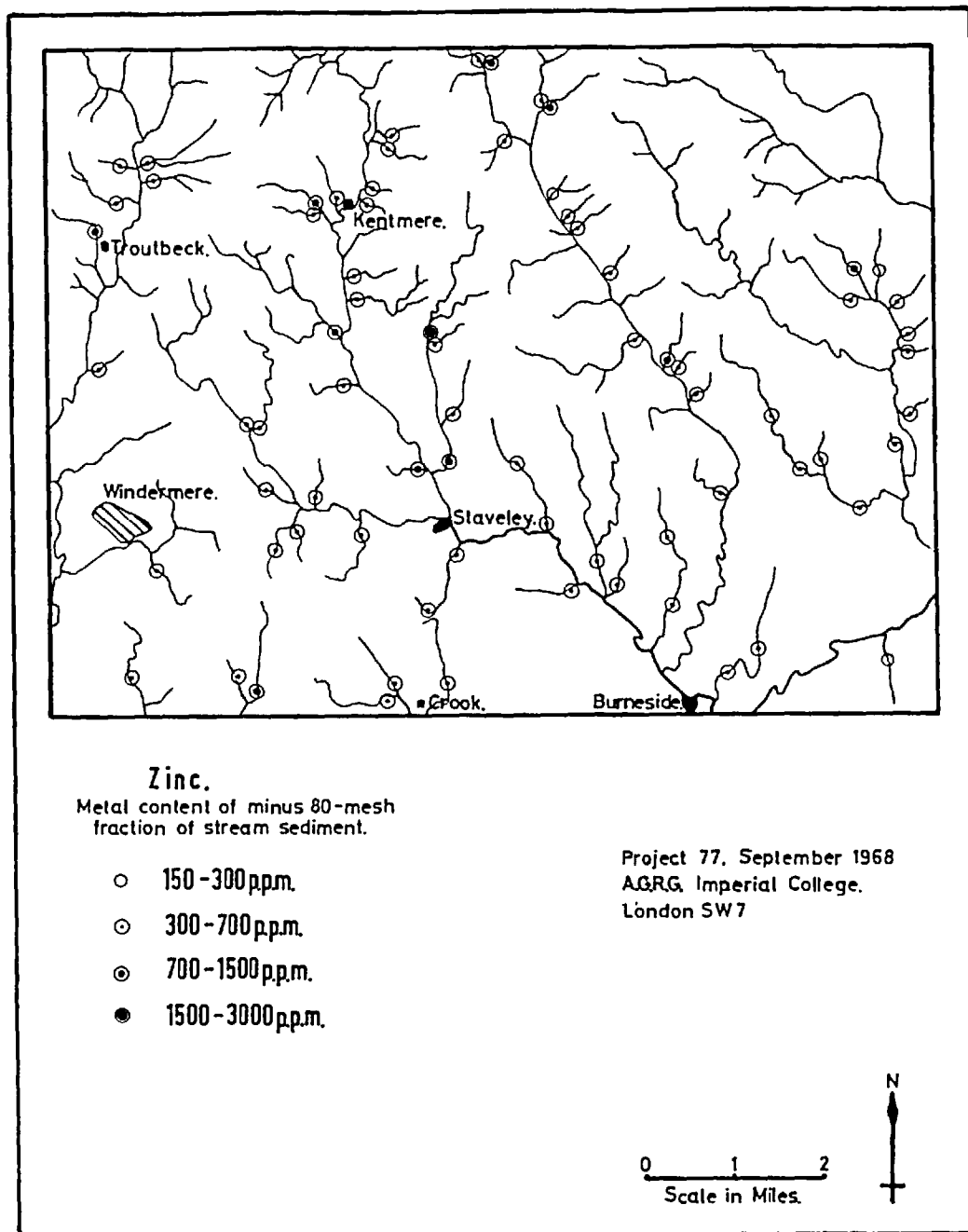


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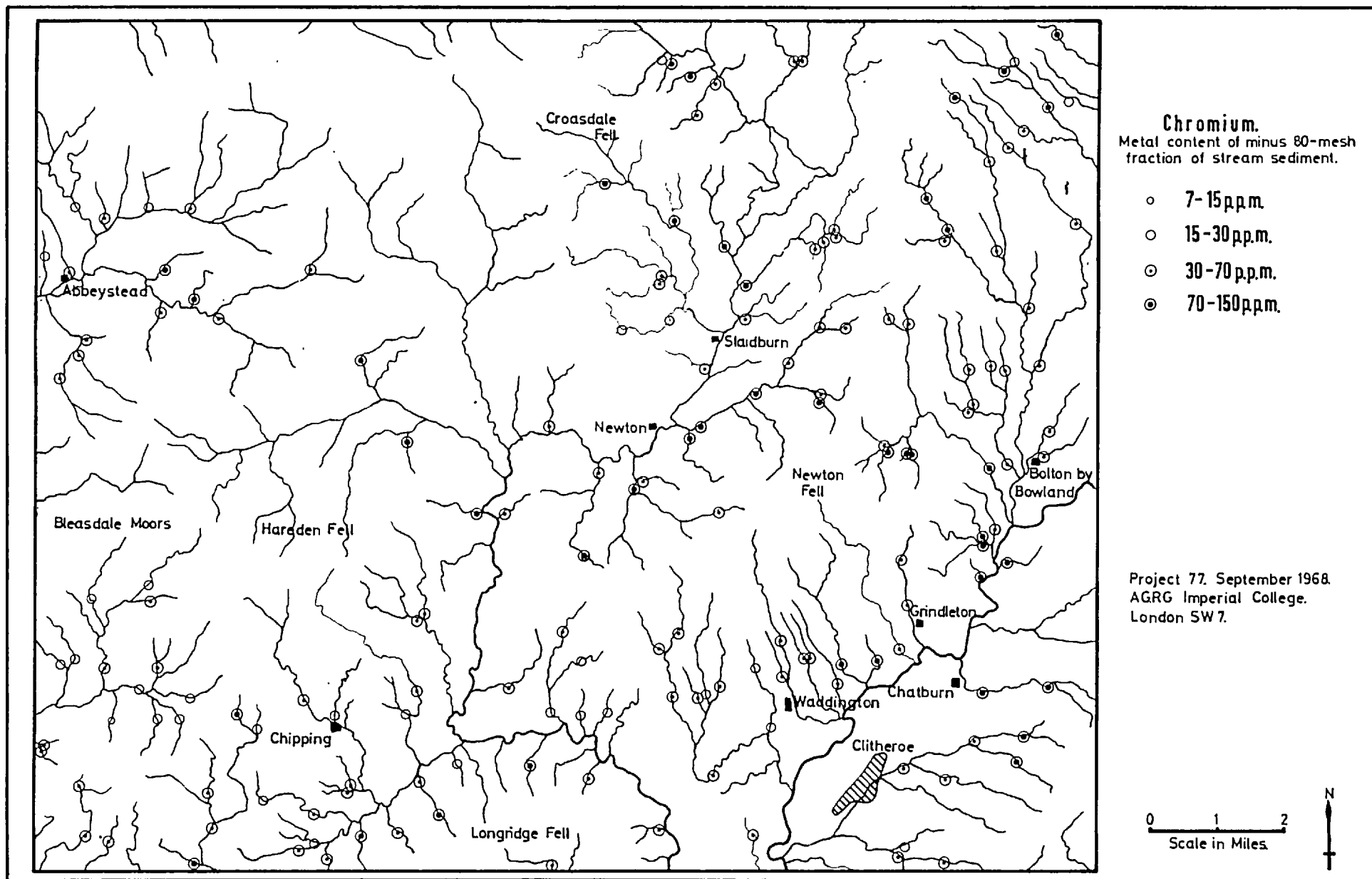


Figure S6-1

Bowland Forest Survey Area.

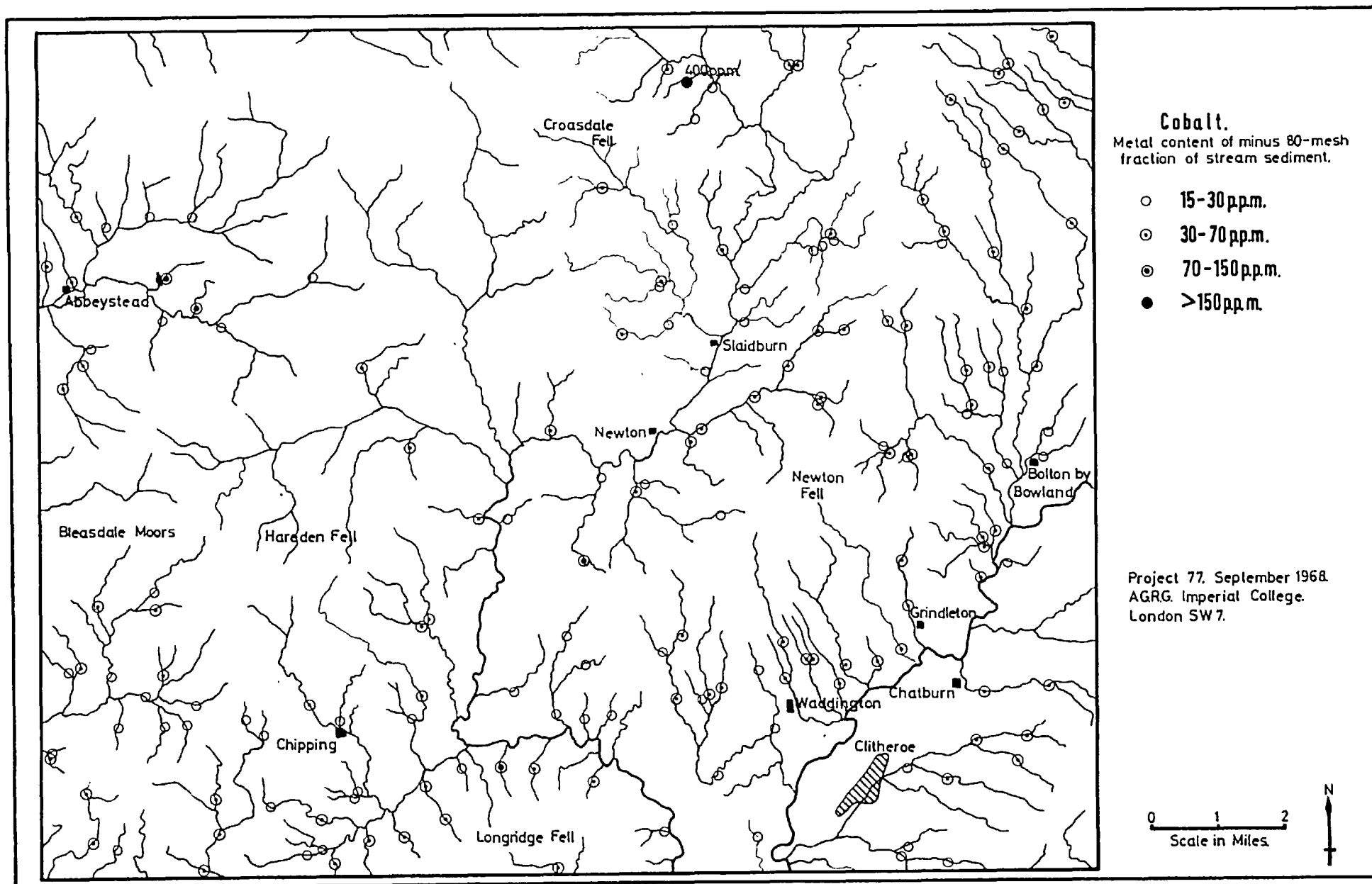


Figure S6-2

Bowland Forest Survey Area.

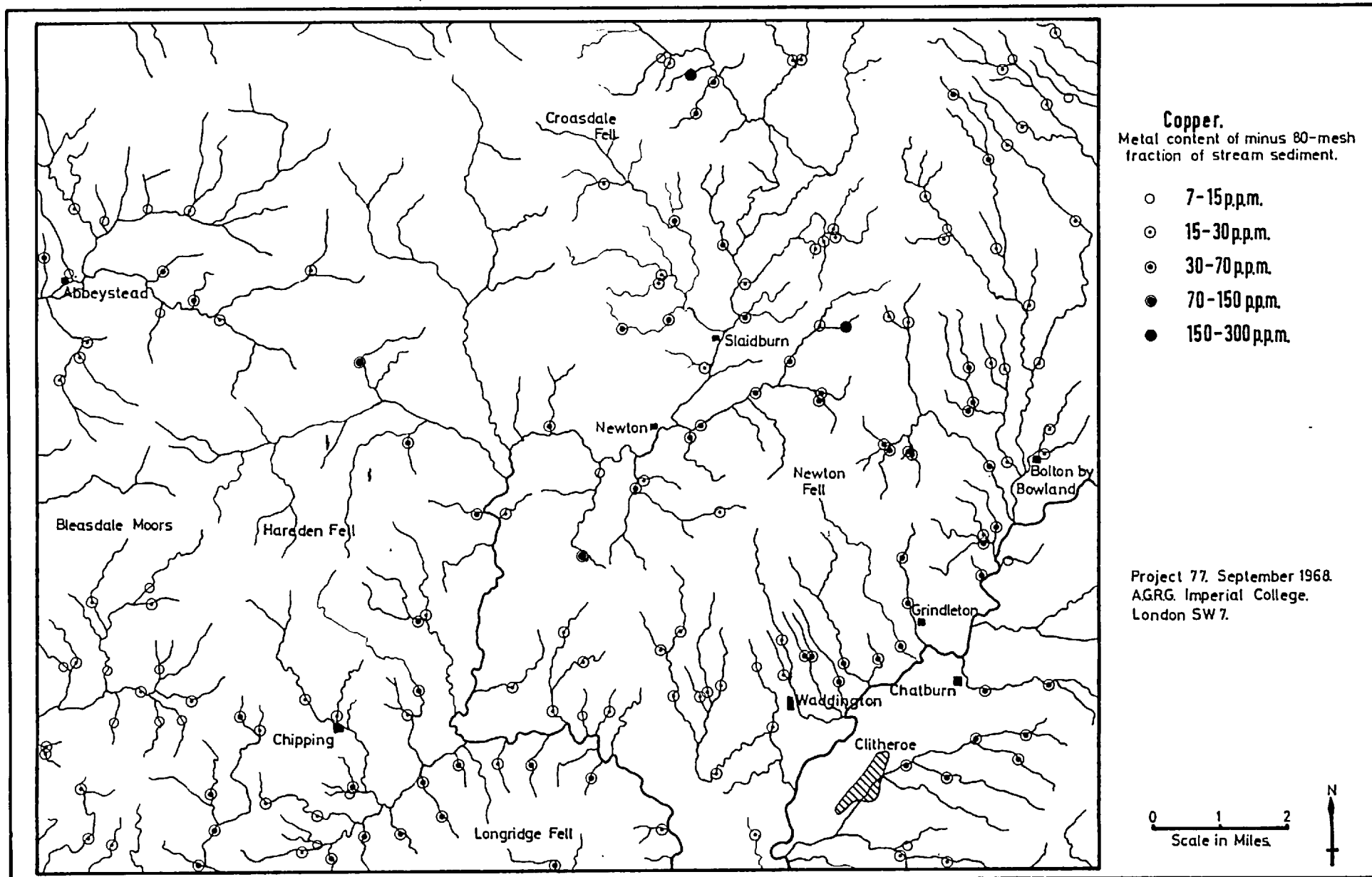


Figure S6-3

Bowland Forest Survey Area.

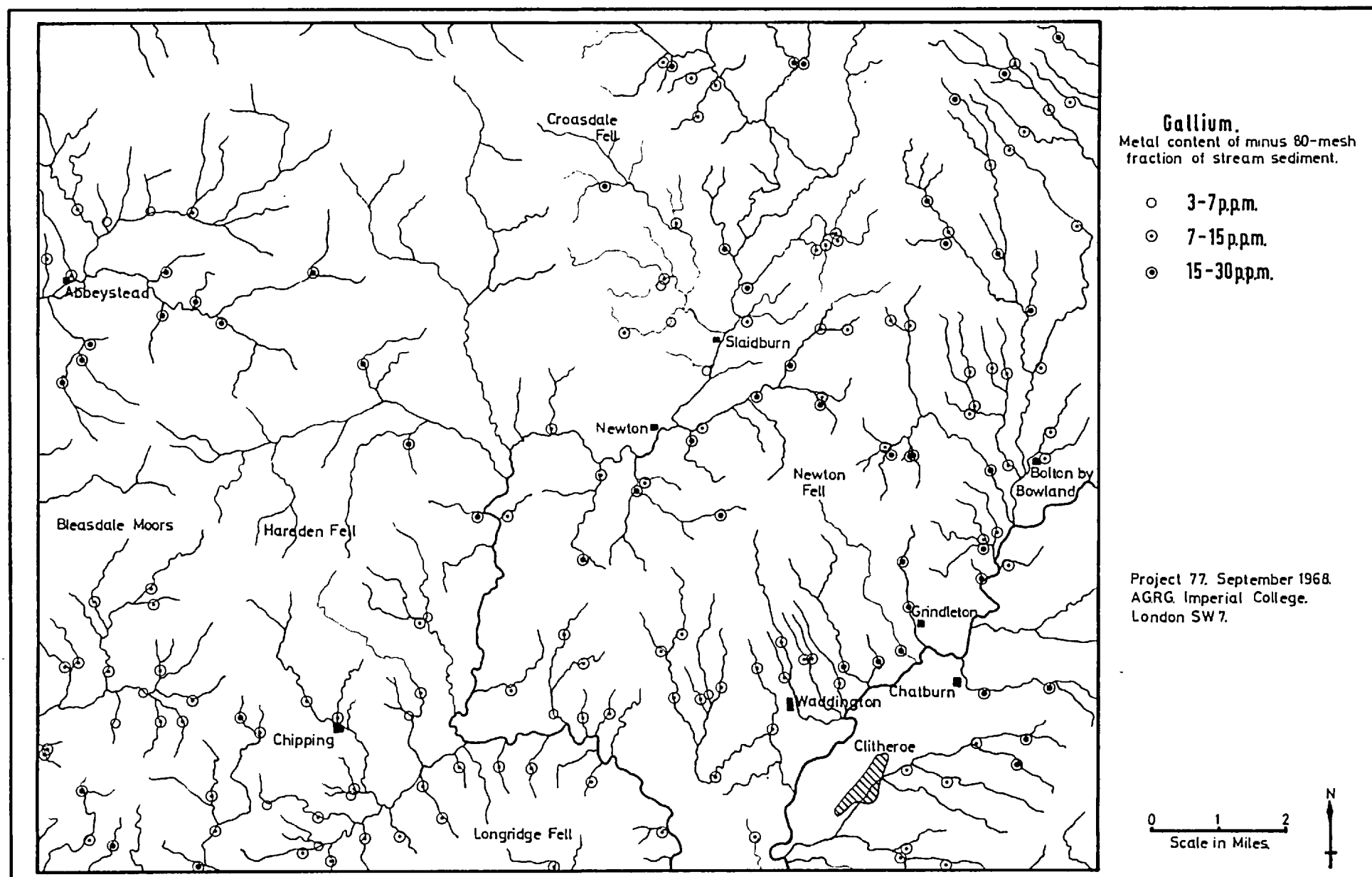


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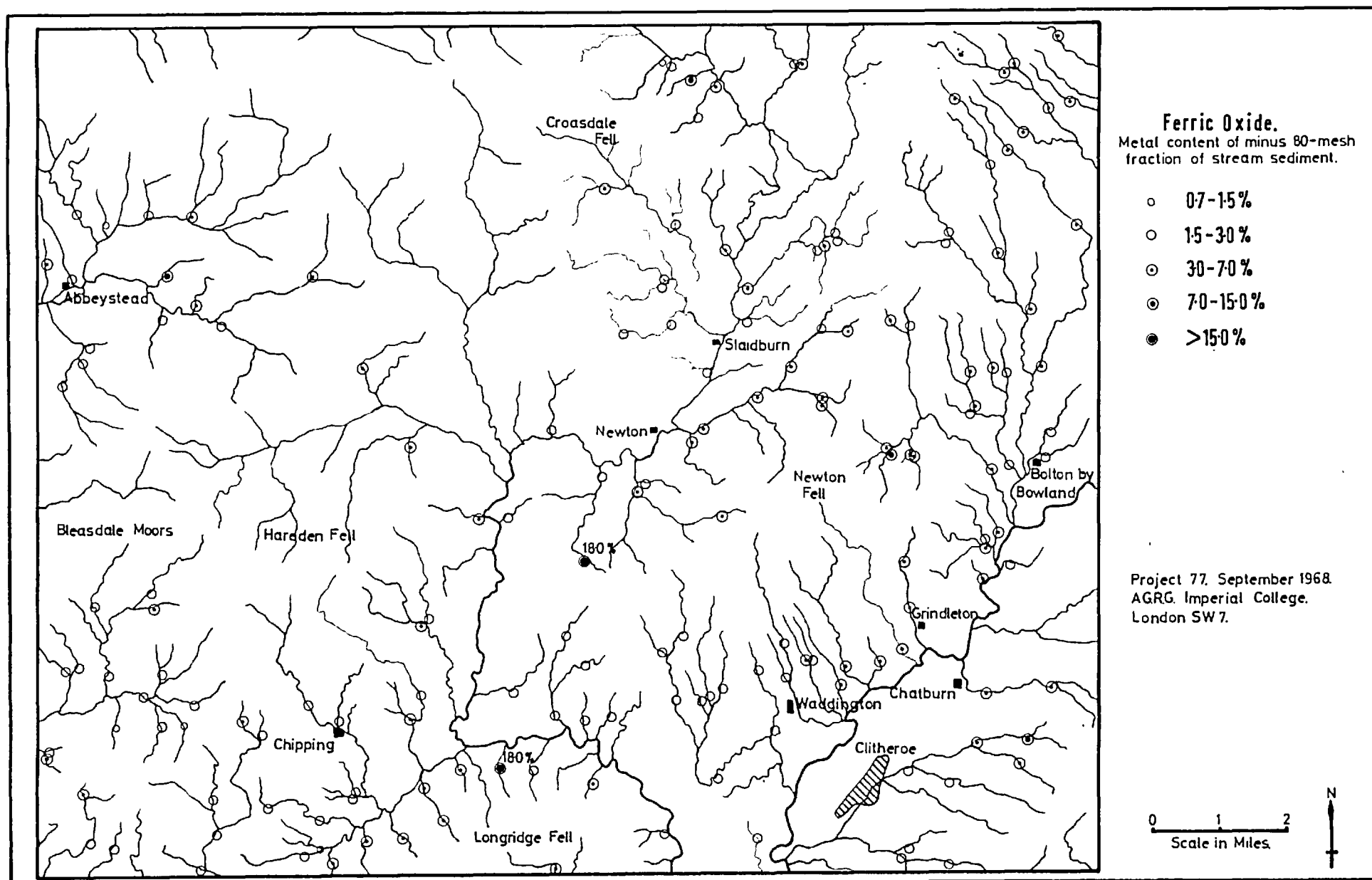


Figure S6-5

Bowland Forest Survey Area.

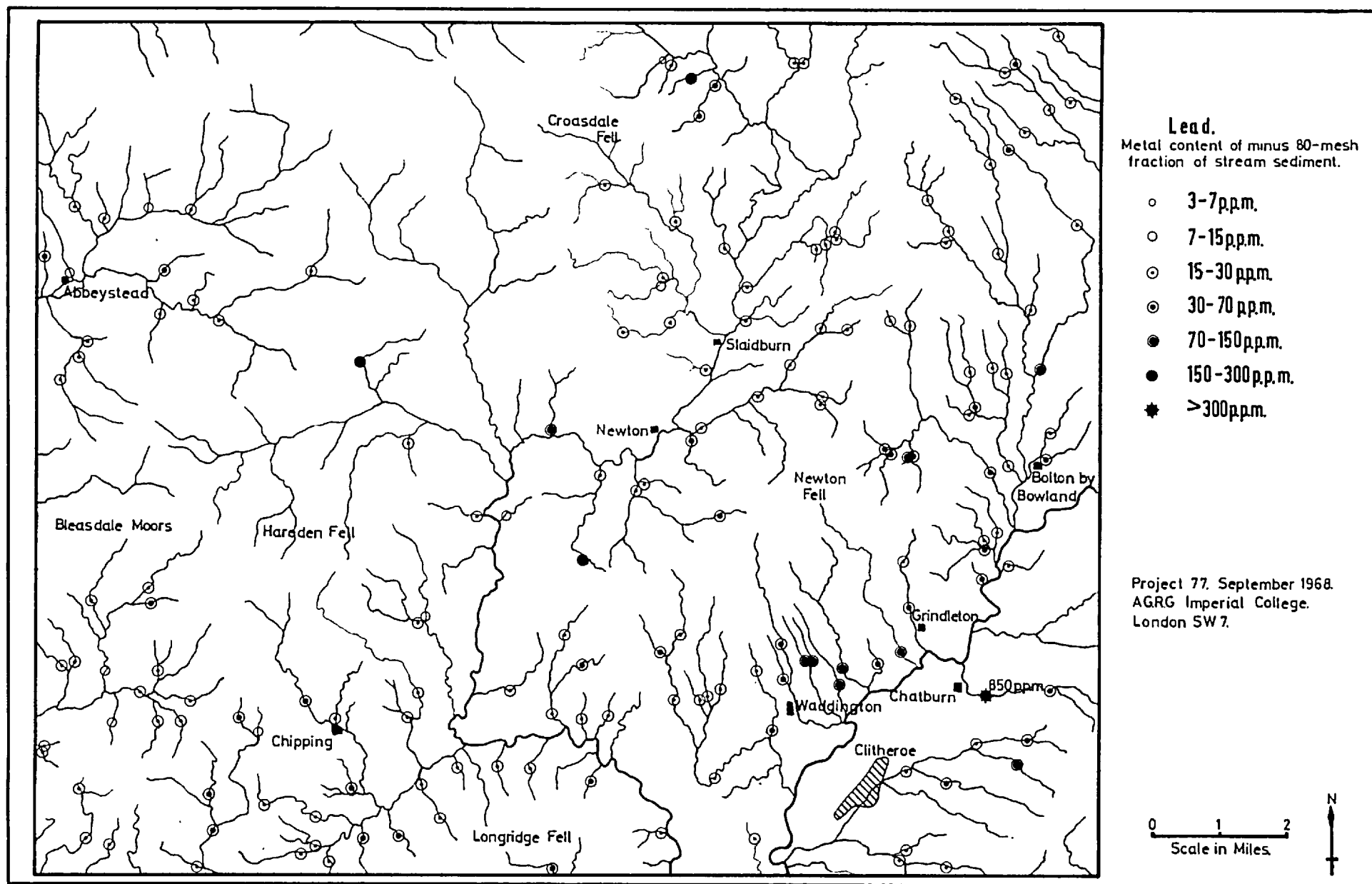


Figure S6-6

Bowland Forest Survey Area.

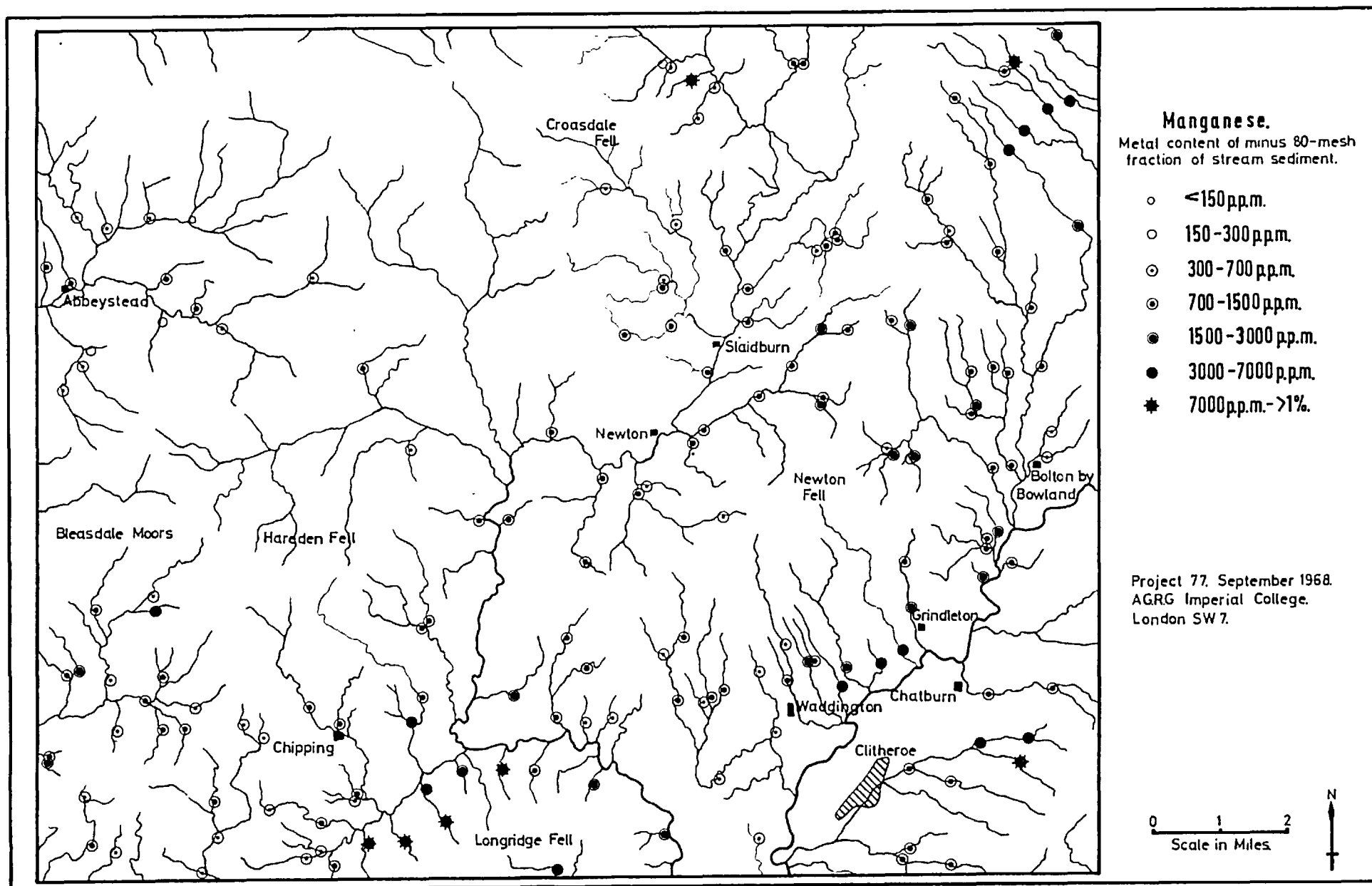


Figure S6-7

Bowland Forest Survey Area.

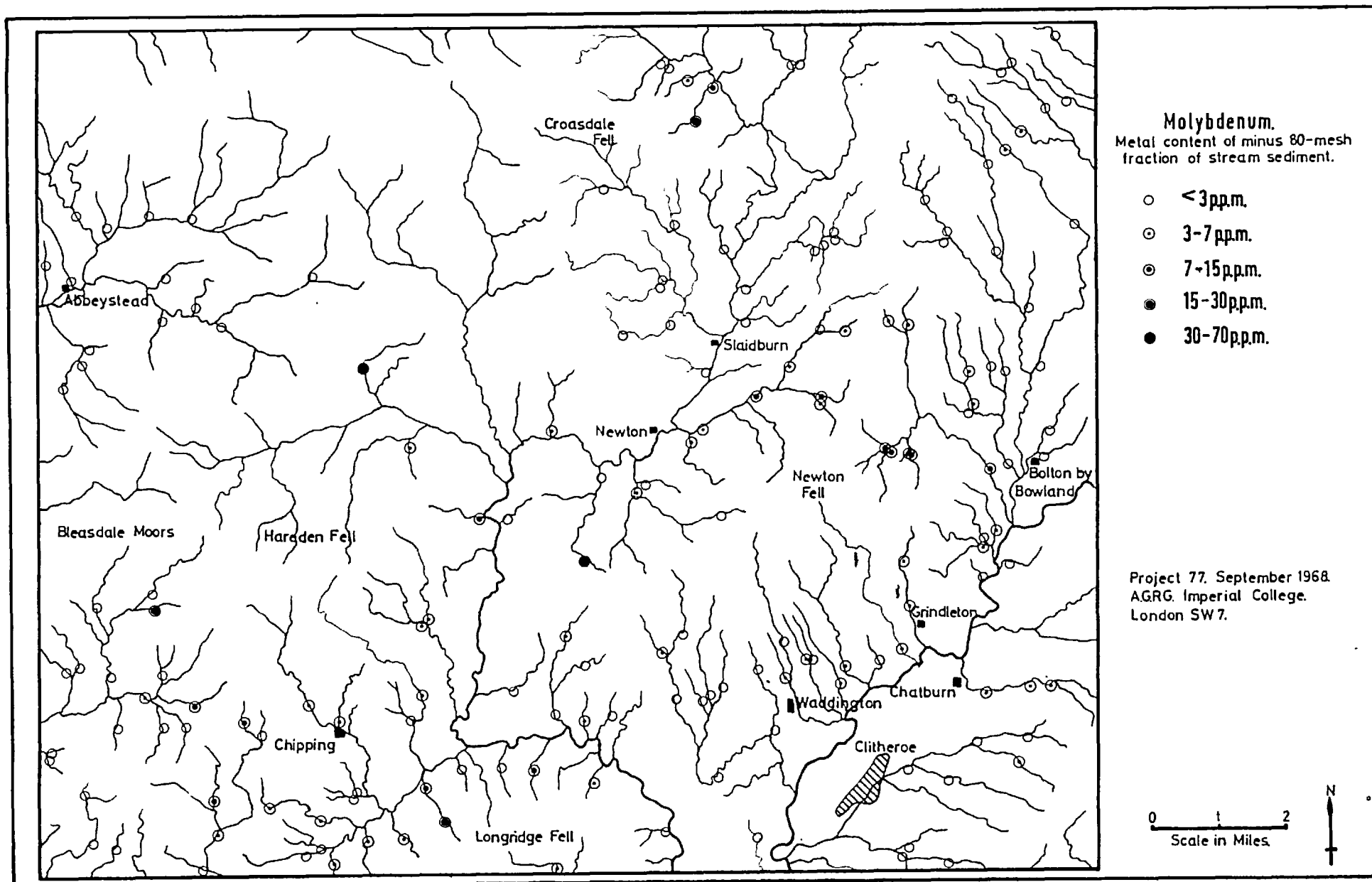


Figure S6-8

Bowland Forest Survey Area.

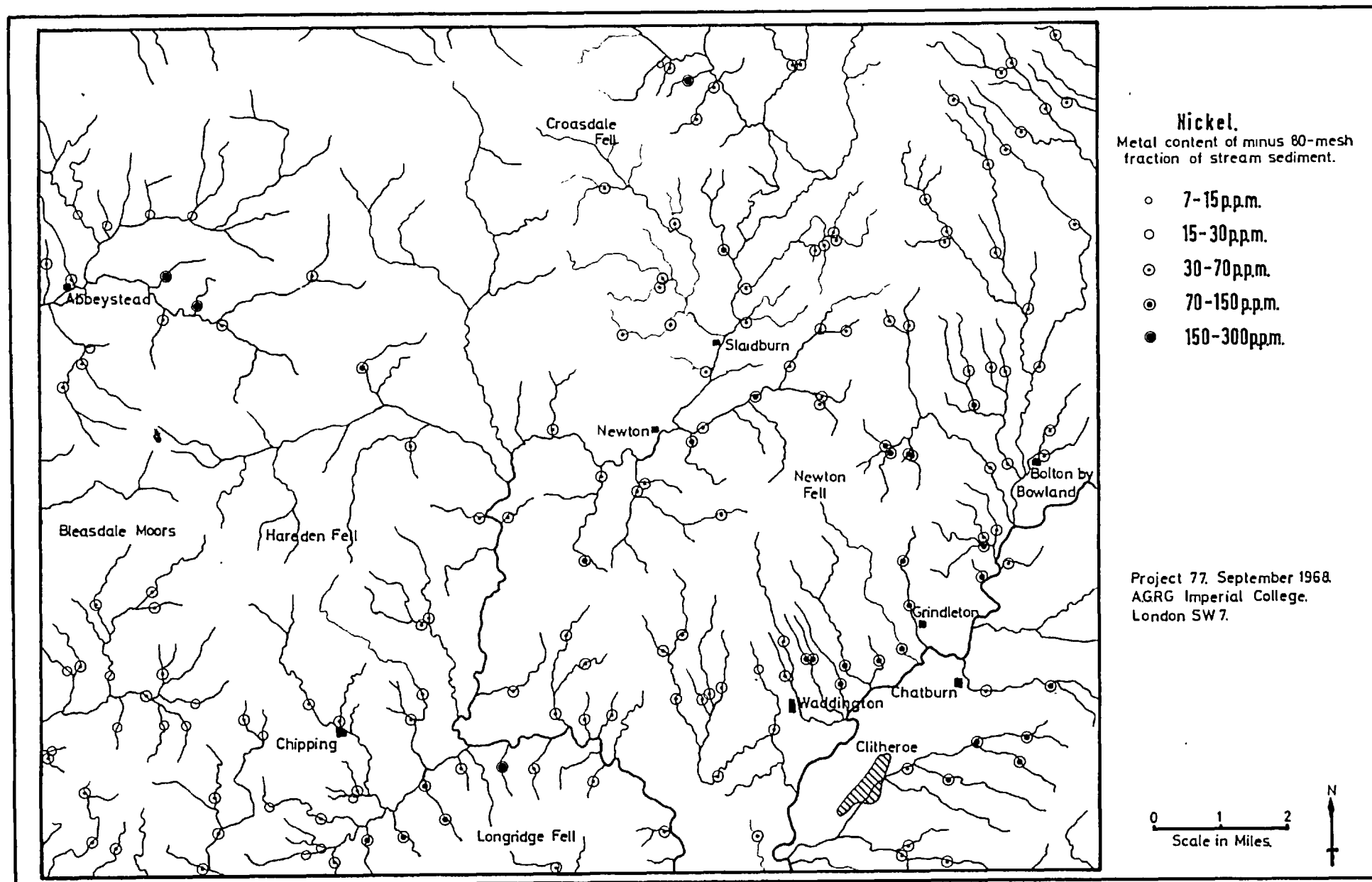


Figure S6-9

Bowland Forest Survey Area.

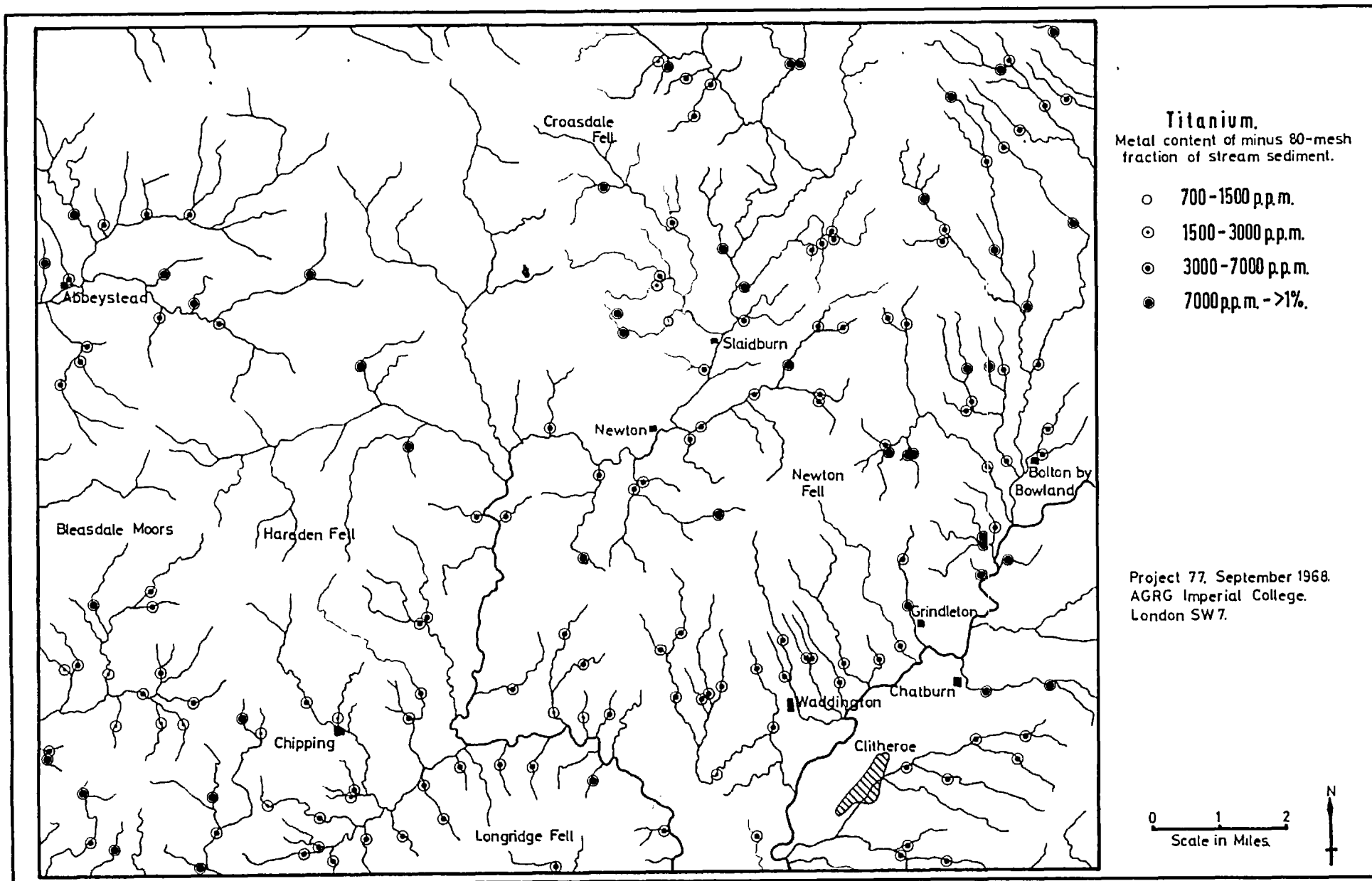


Figure S6-10

Bowland Forest Survey Area.

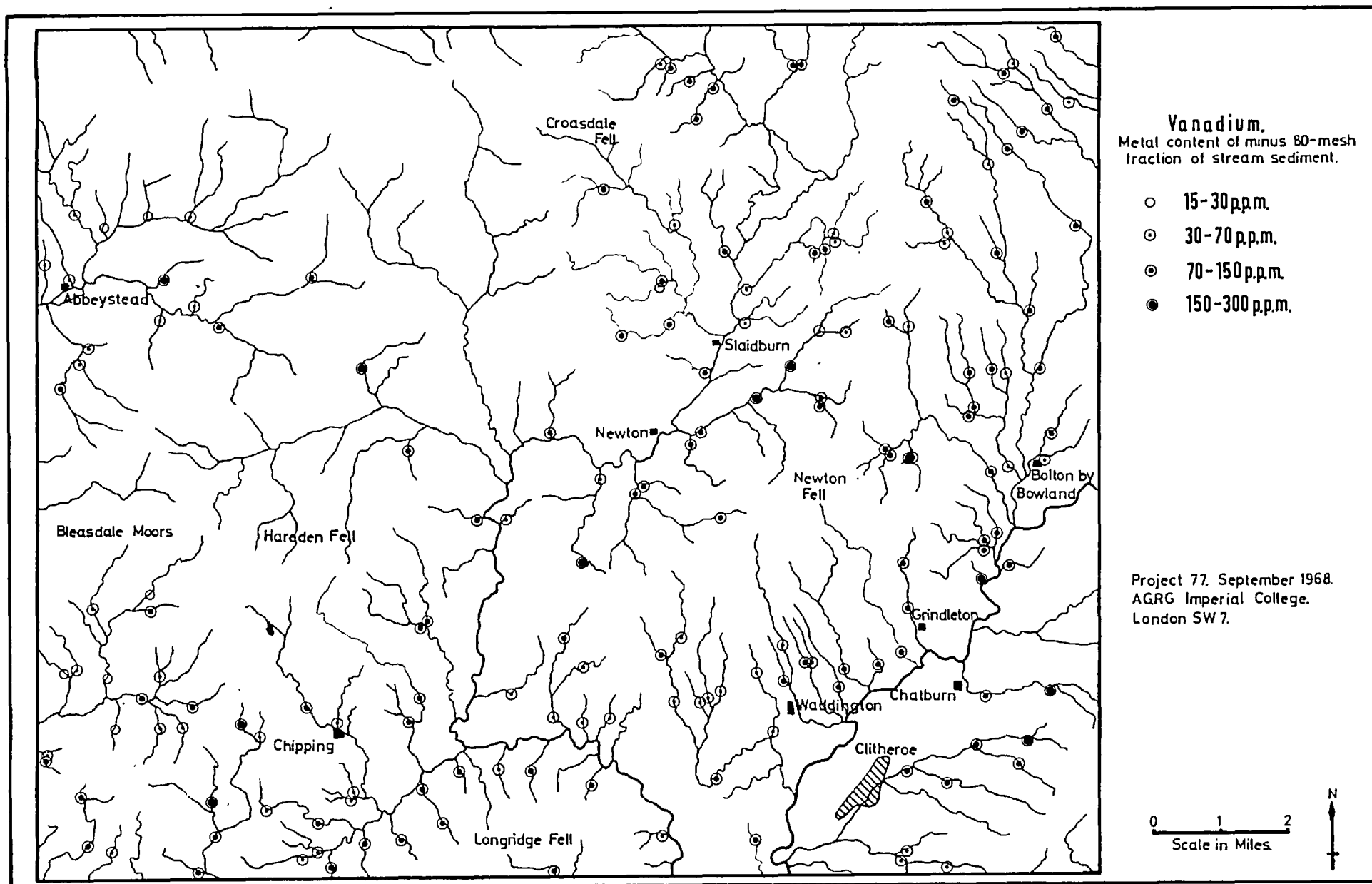


Figure S6-11

Bowland Forest Survey Area.

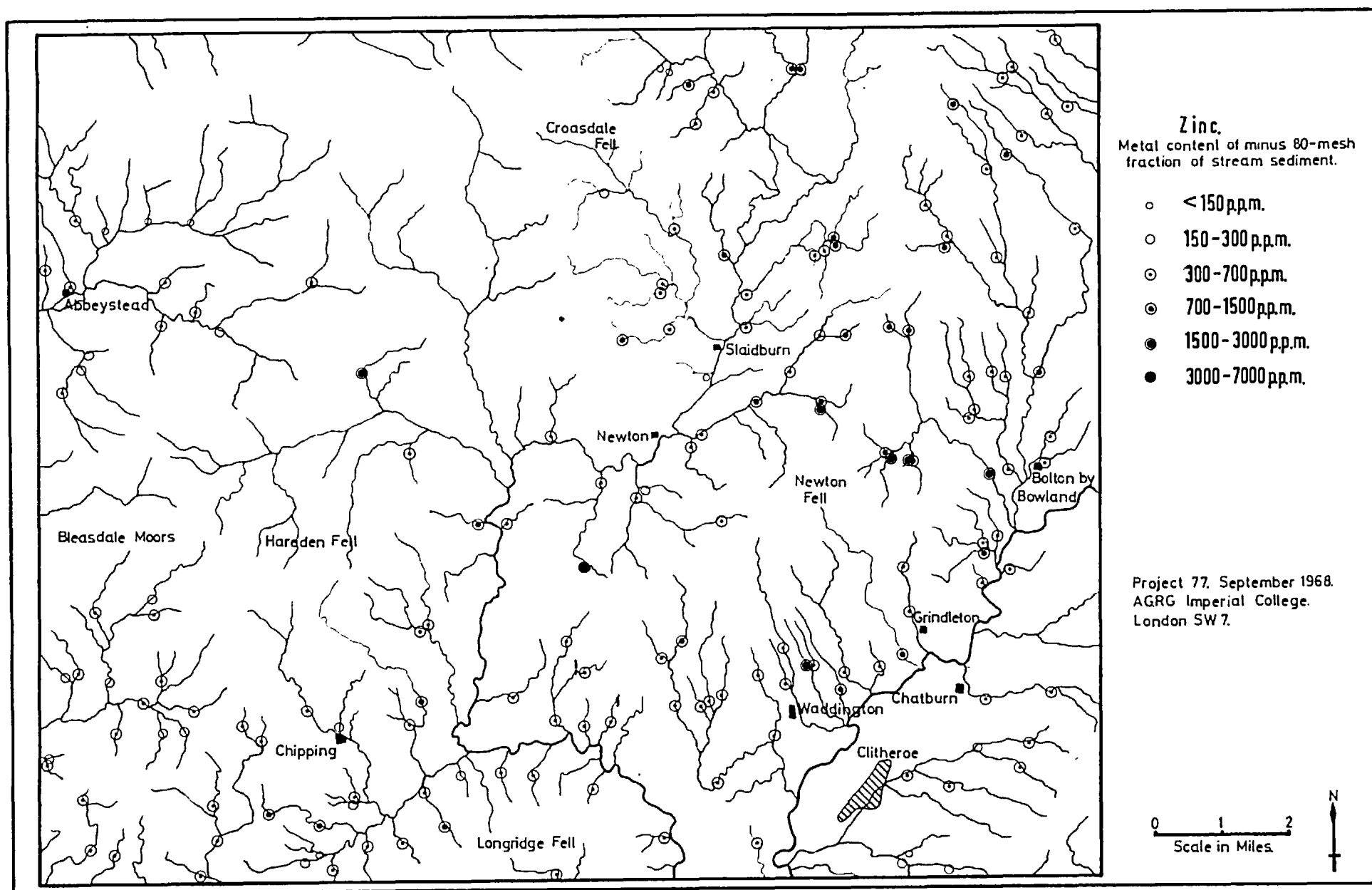


Figure S6-12

Bowland Forest Survey Area.

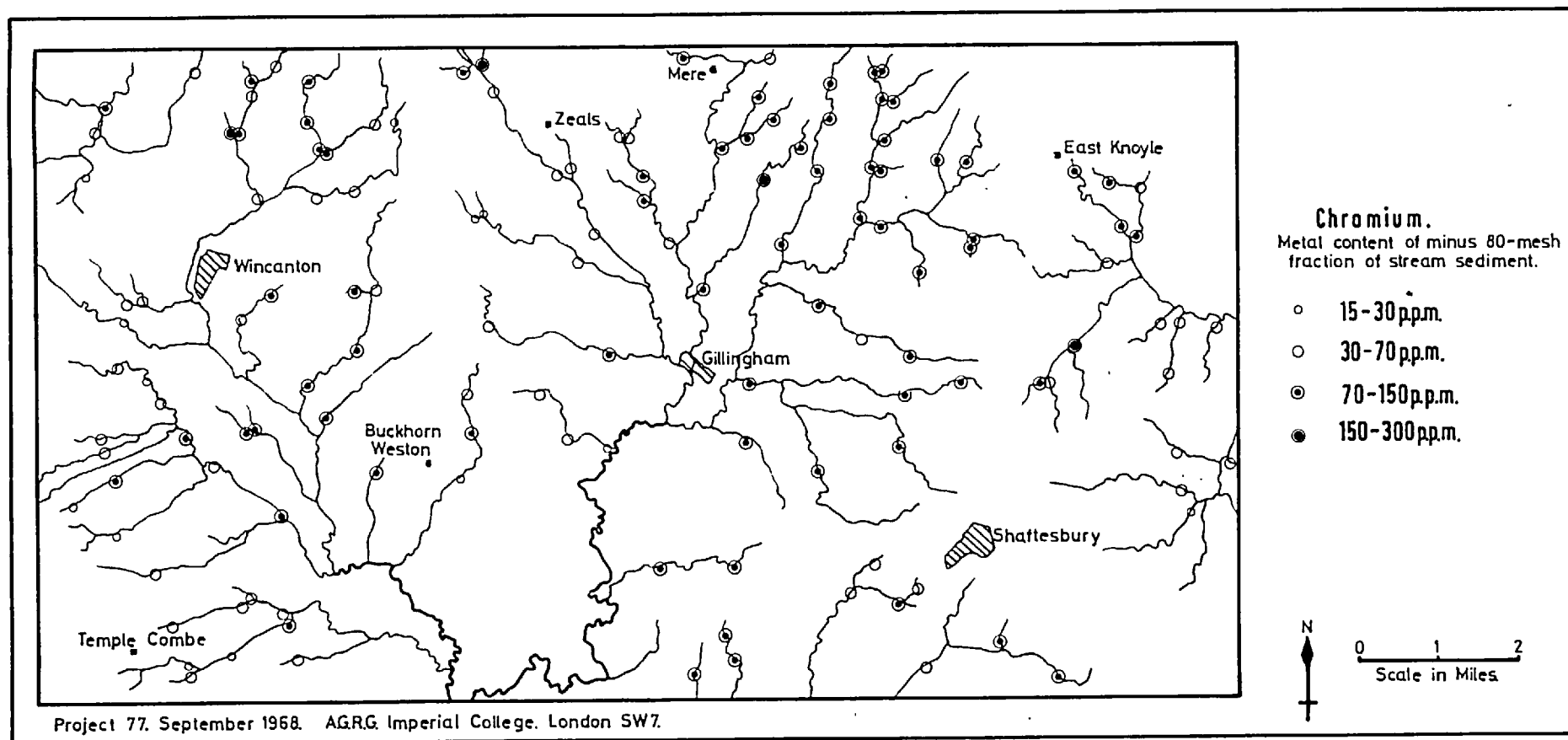


Figure S7.1

Shaftesbury Survey Area.

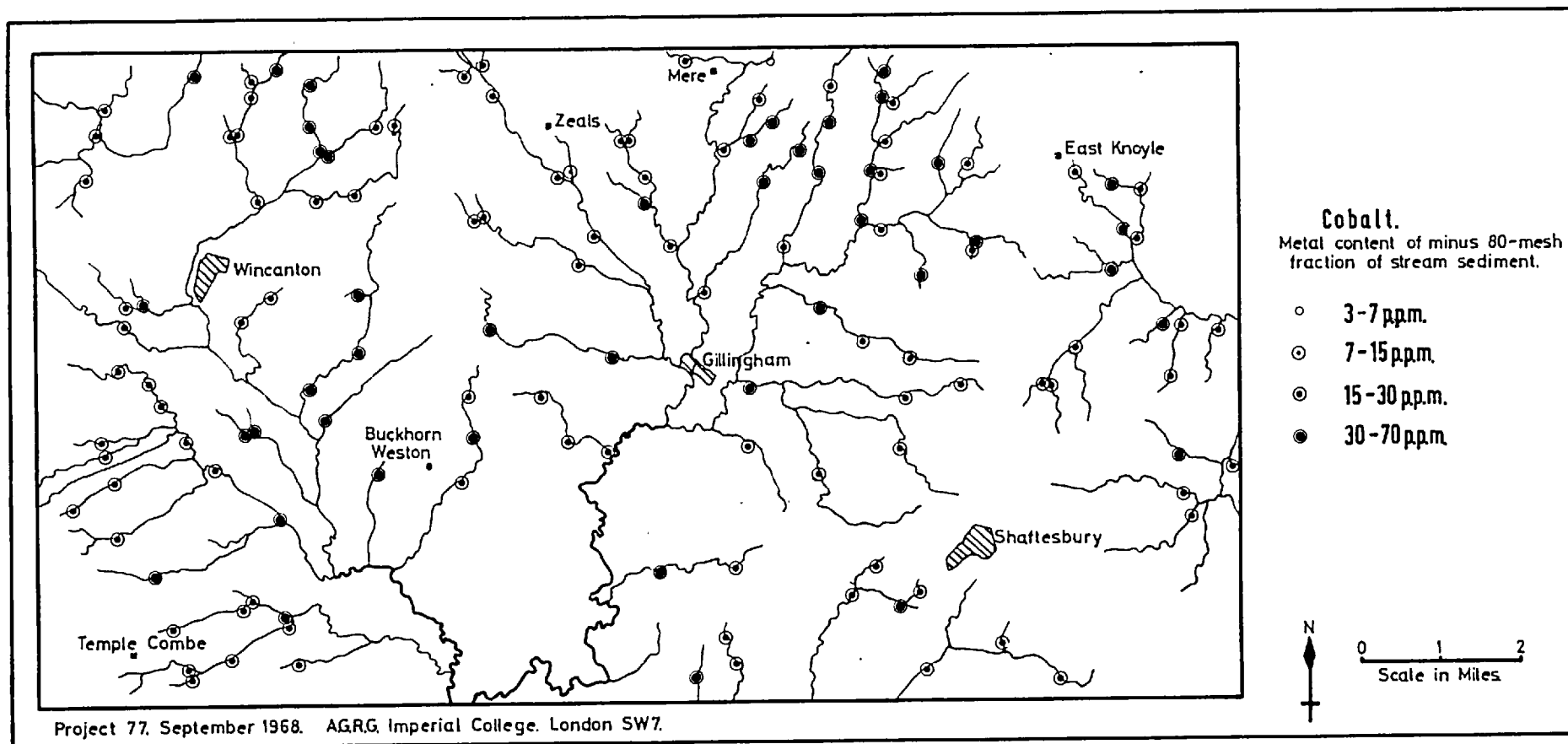


Figure S7-2

Shaftesbury Survey Area.

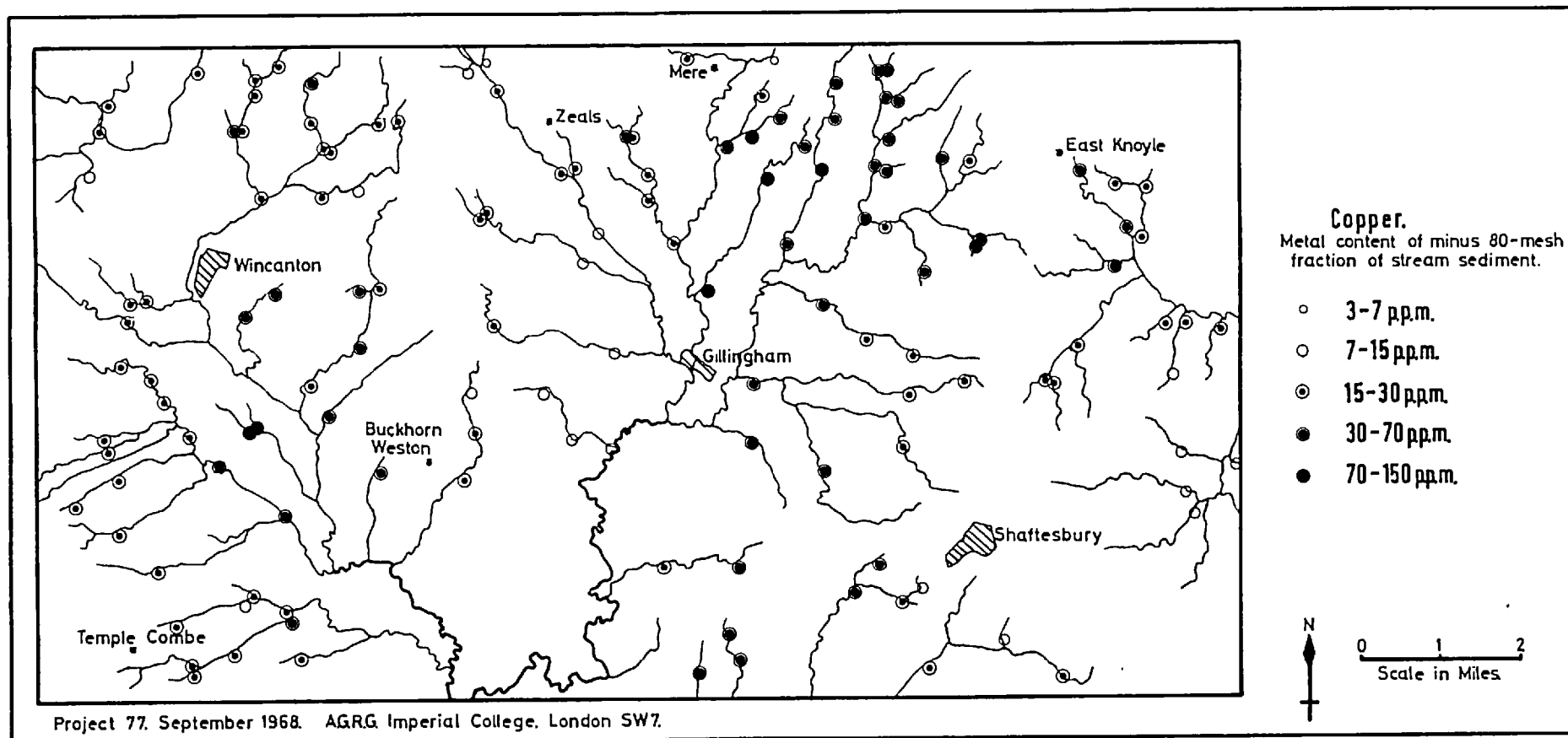


Figure S7-3

Shaftesbury Survey Area.

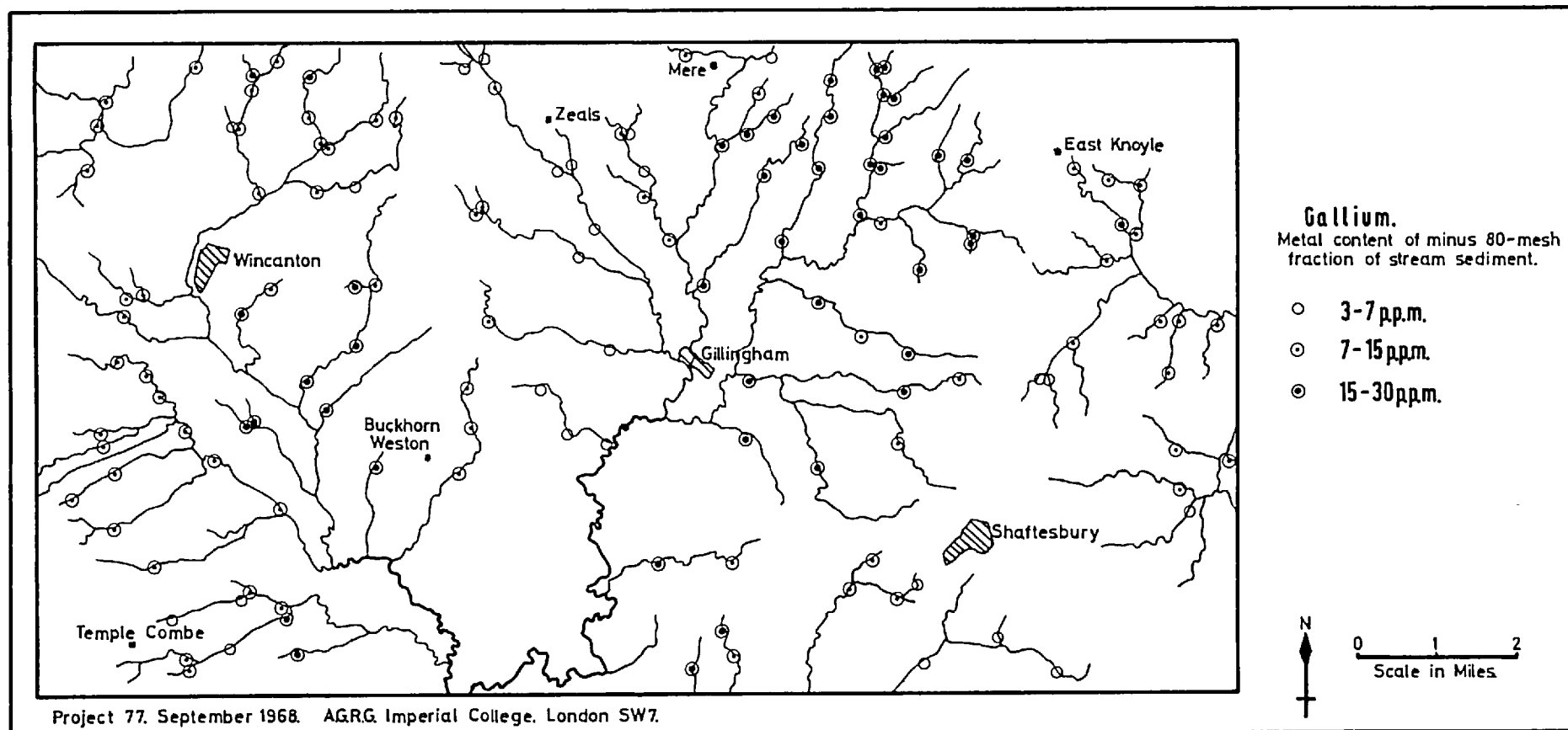


Figure S7-4

Shaftesbury Survey Area.

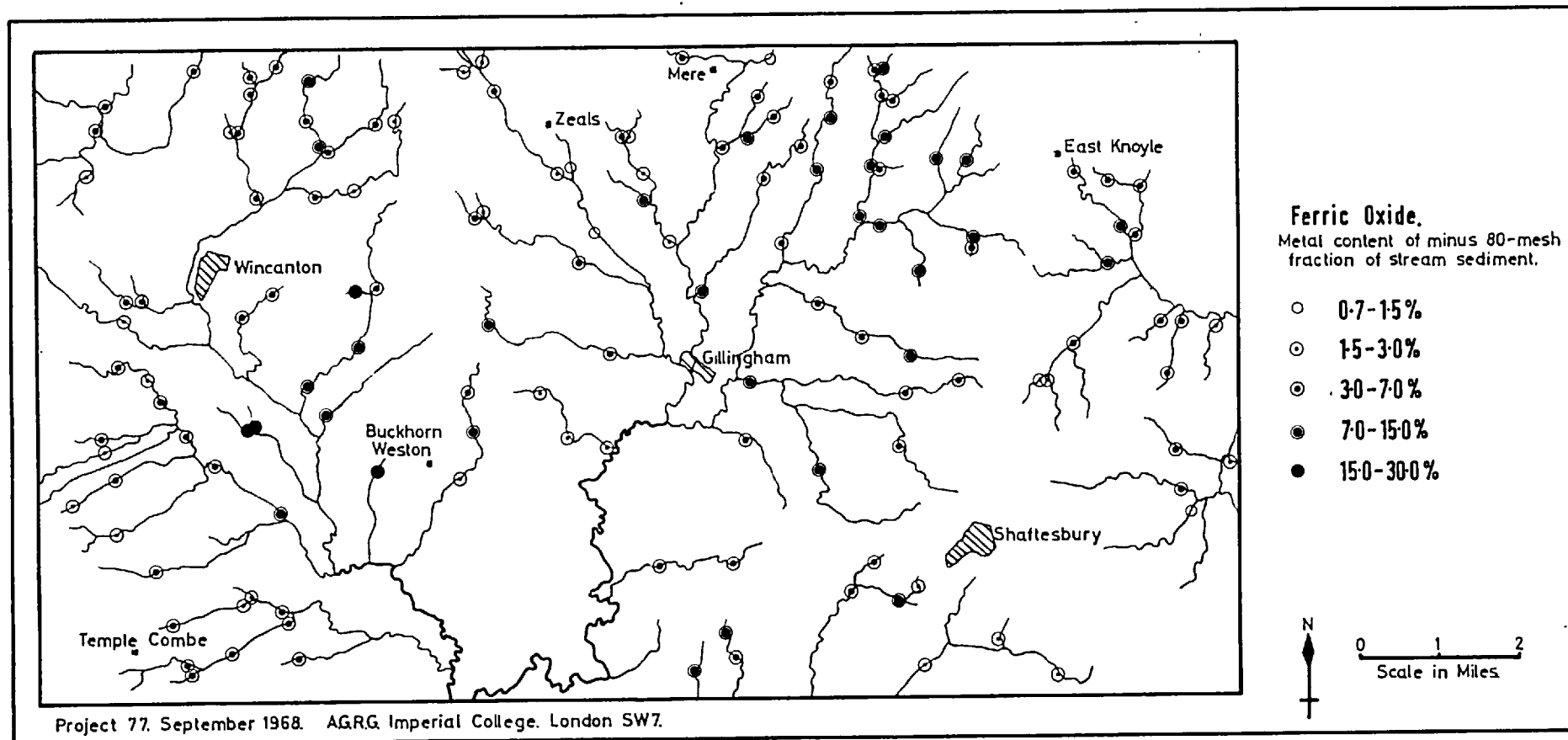


Figure S7-5

Shaftesbury Survey Area.

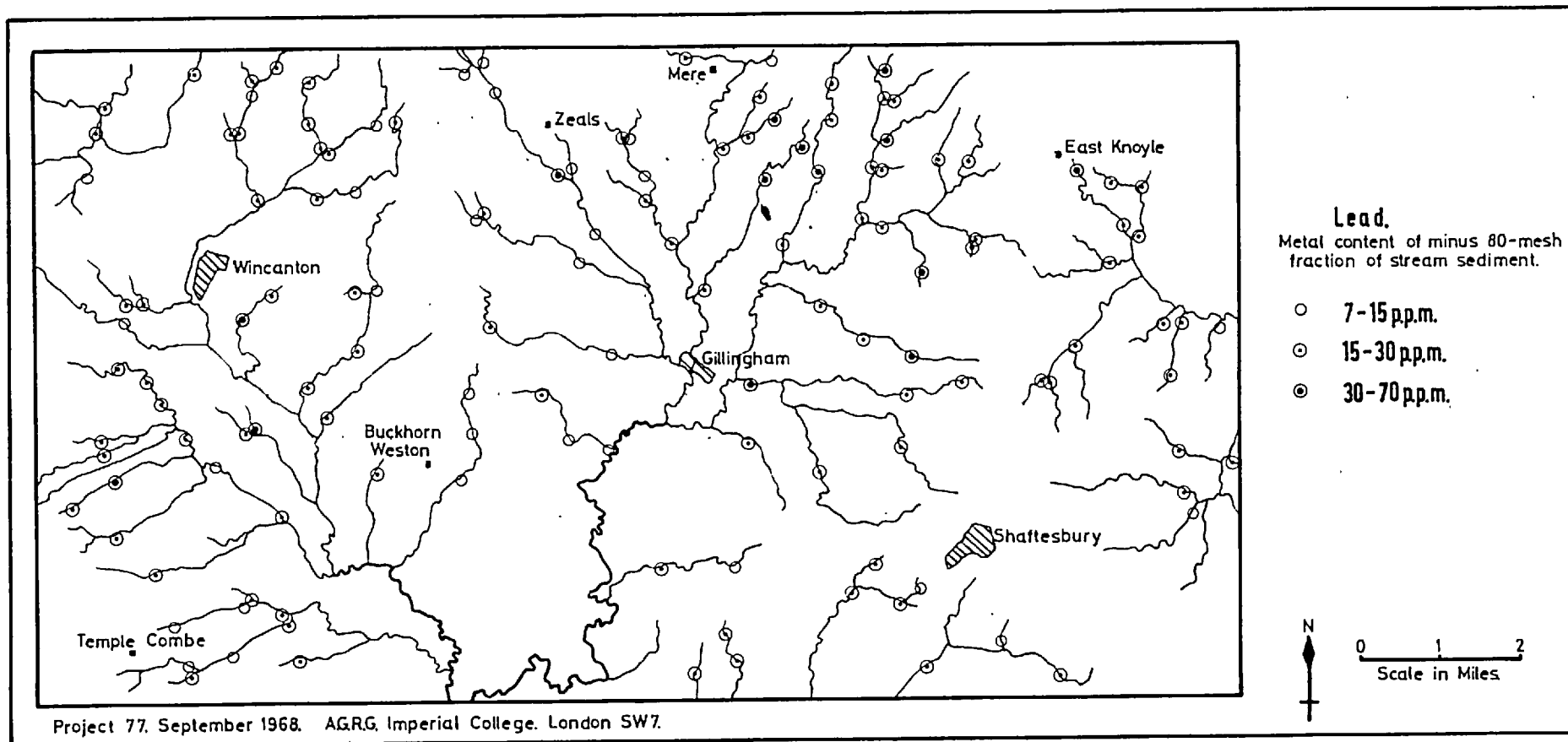


Figure S7-6

Shaftesbury Survey Area.

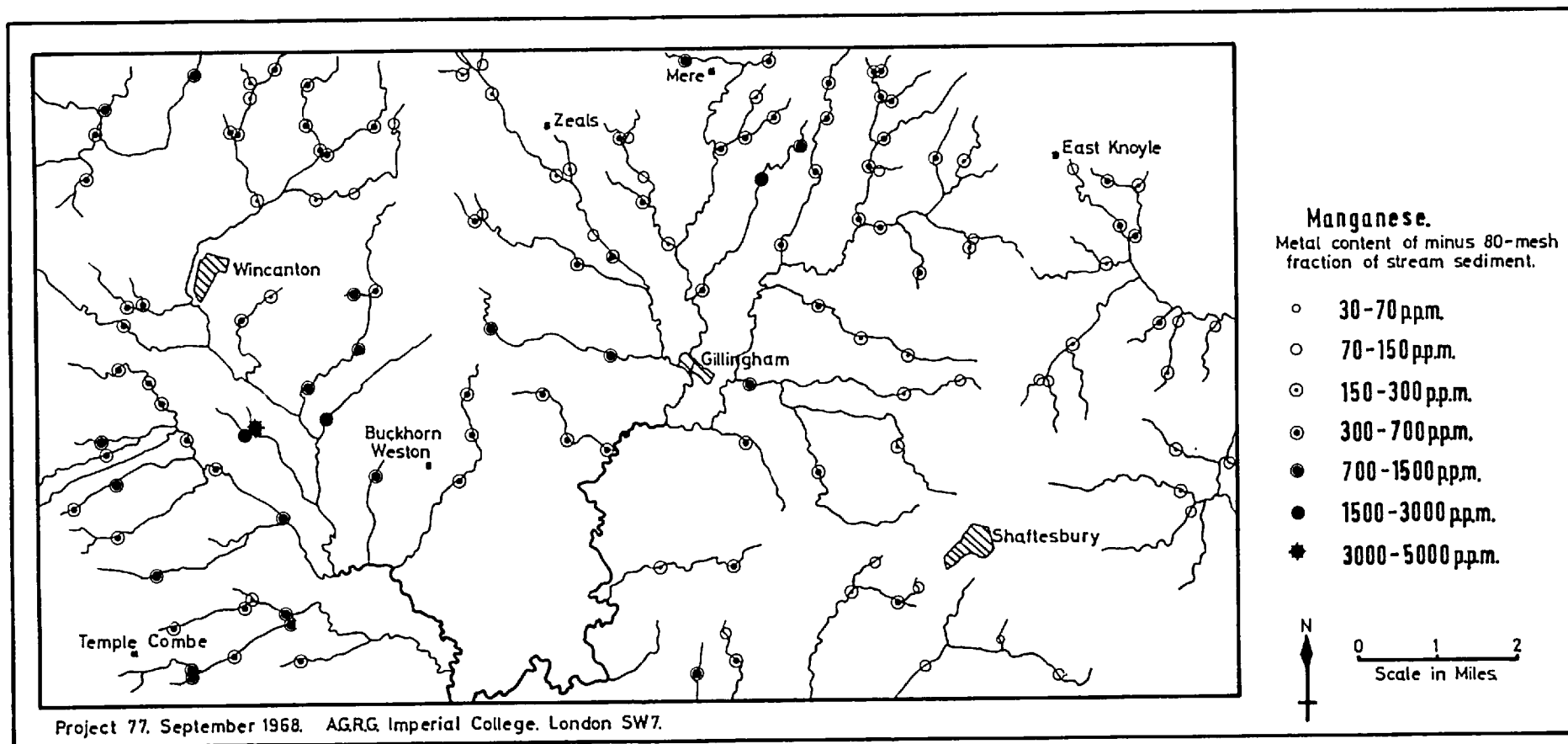


Figure S7-7

Shaftesbury Survey Area.

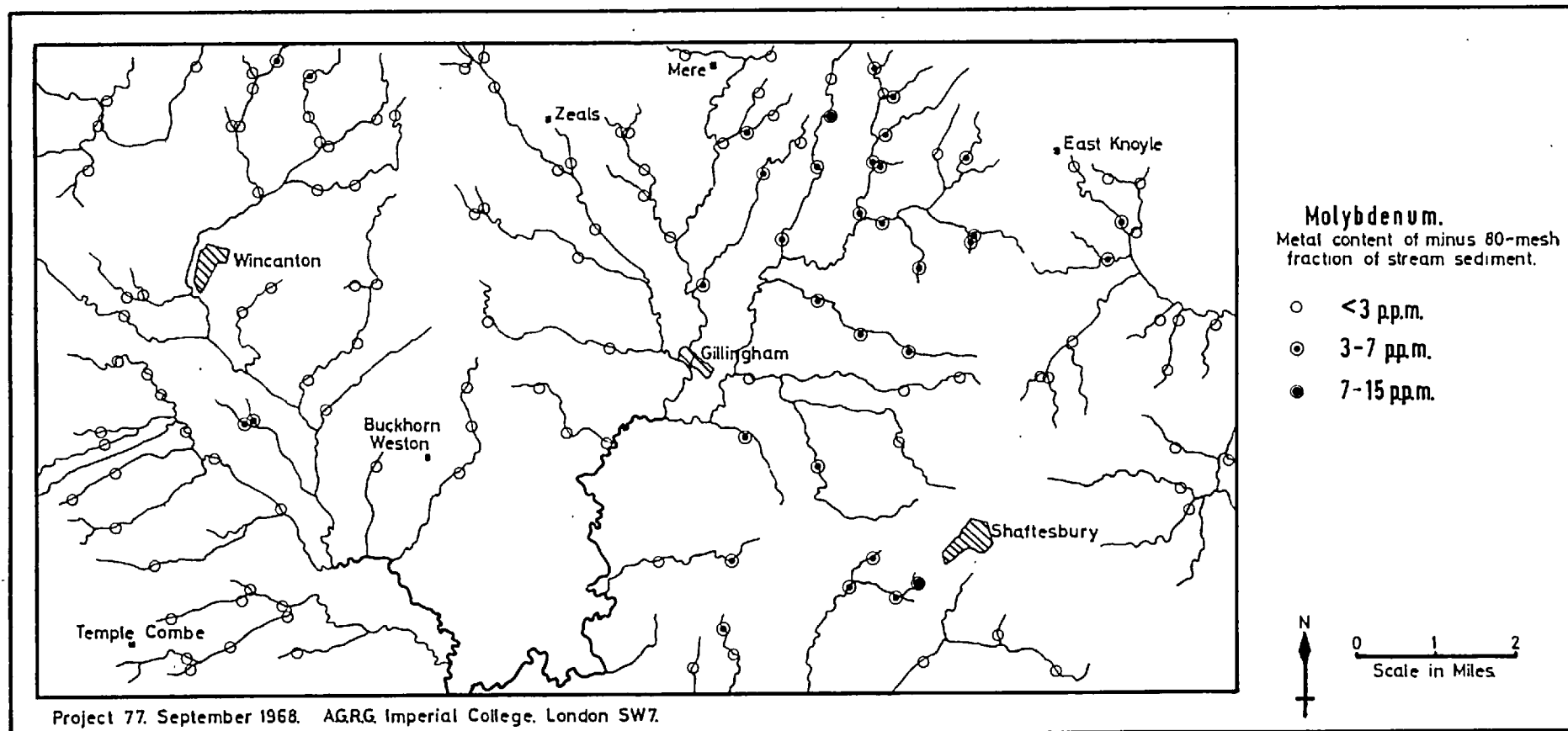


Figure. S7-8

Shaftesbury Survey Area.

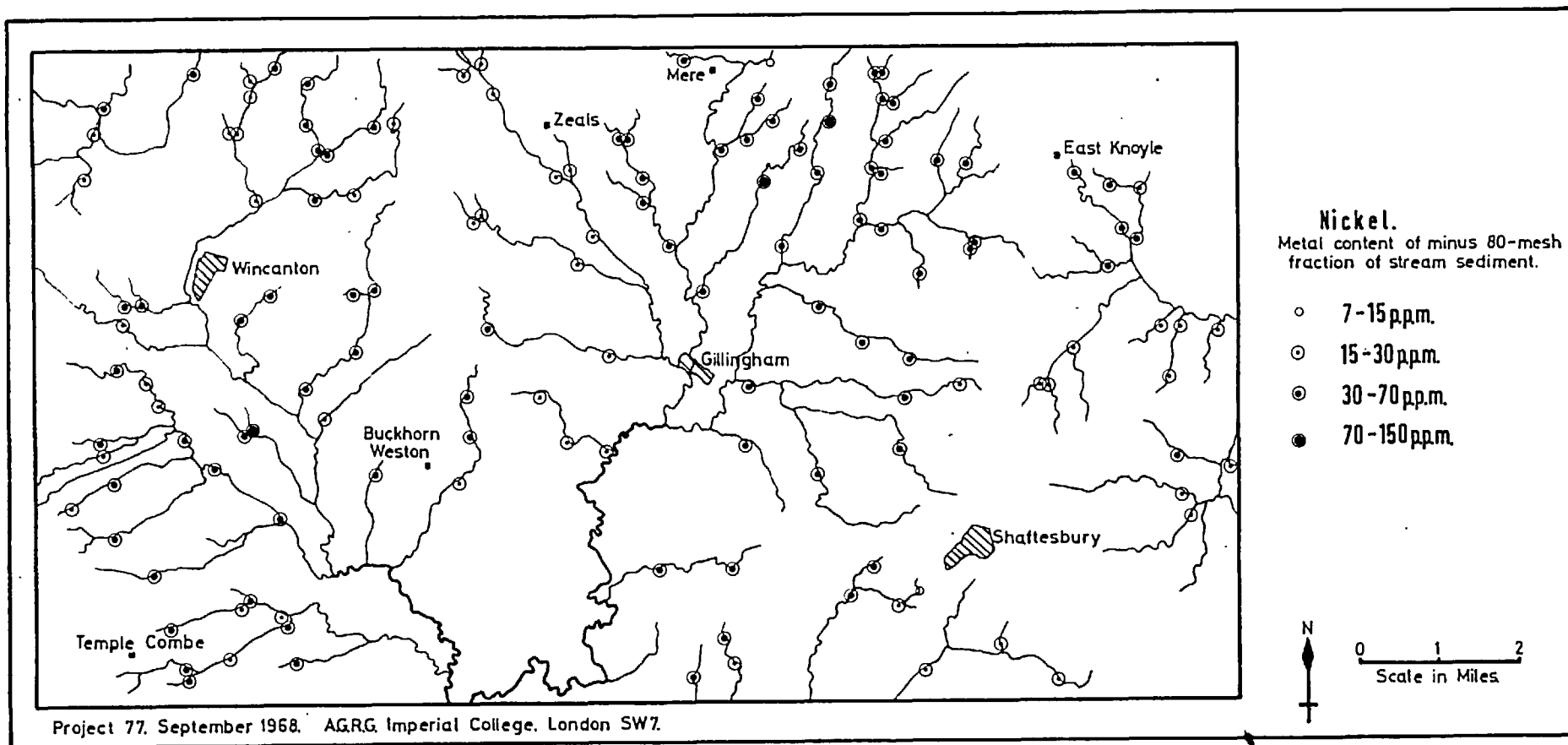


Figure S7-9

Shaftesbury Survey Area.

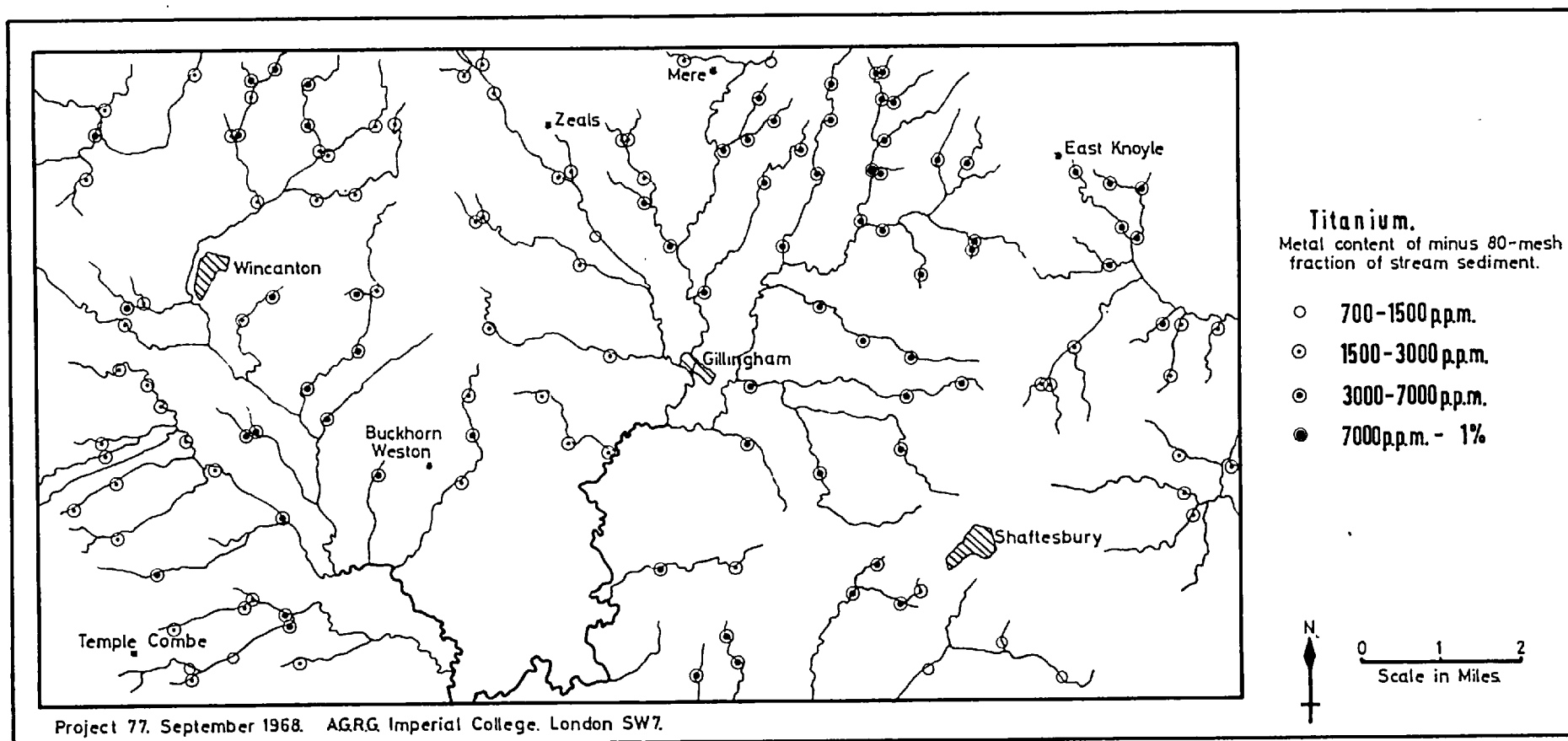


Figure S7-10

Shaftesbury Survey Area.

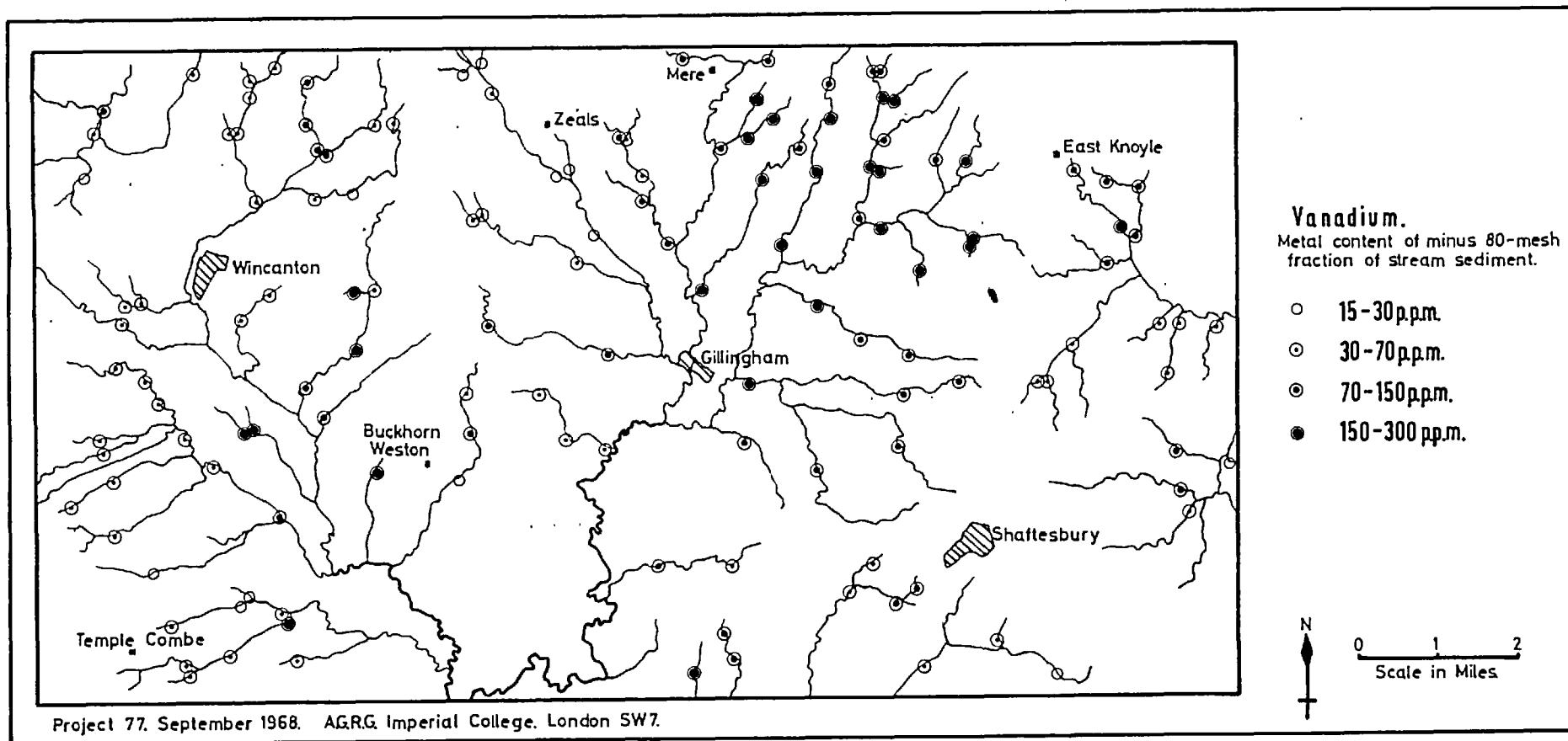


Figure. S7-11

Shaftesbury Survey Area.

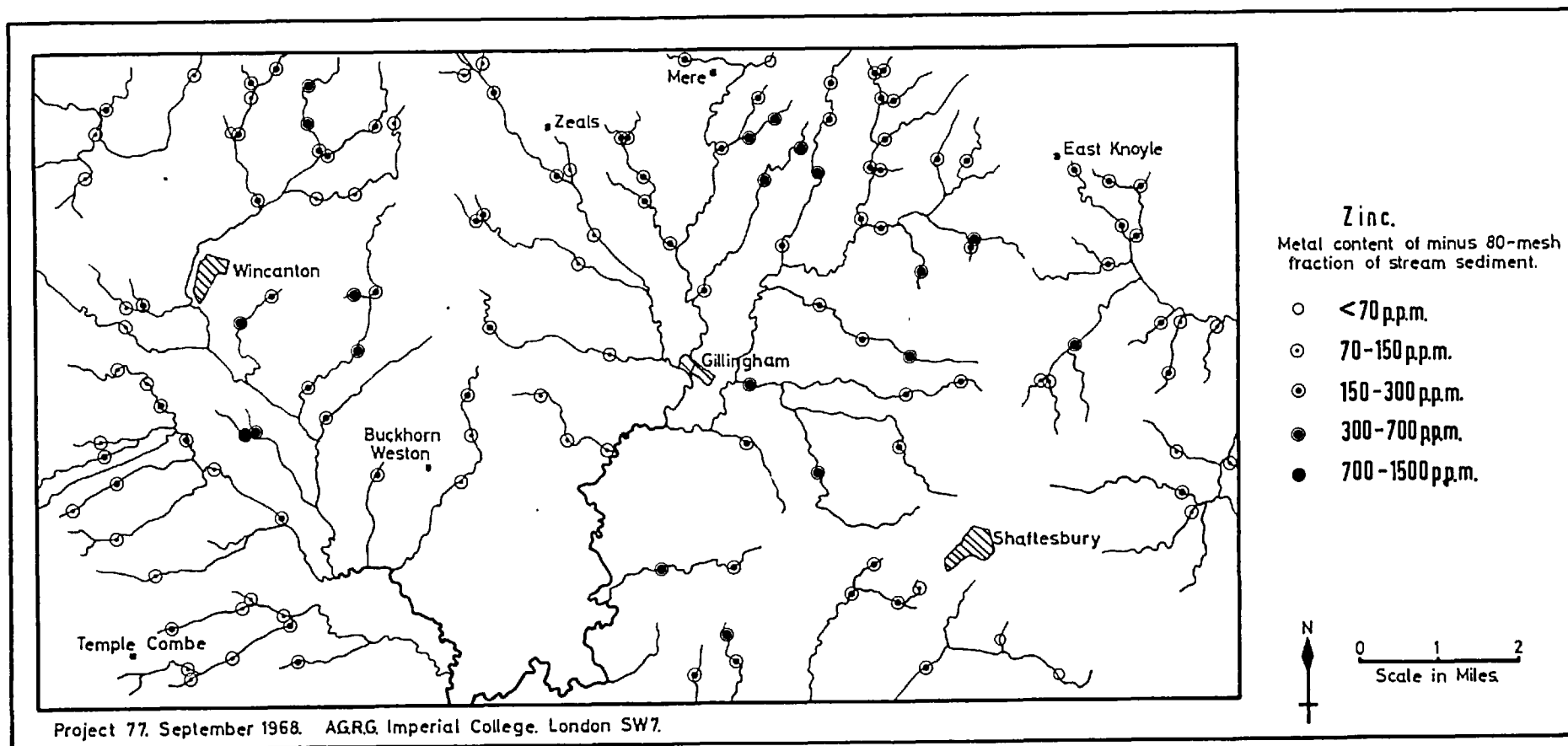


Figure. S7:12

Shaftesbury Survey Area.

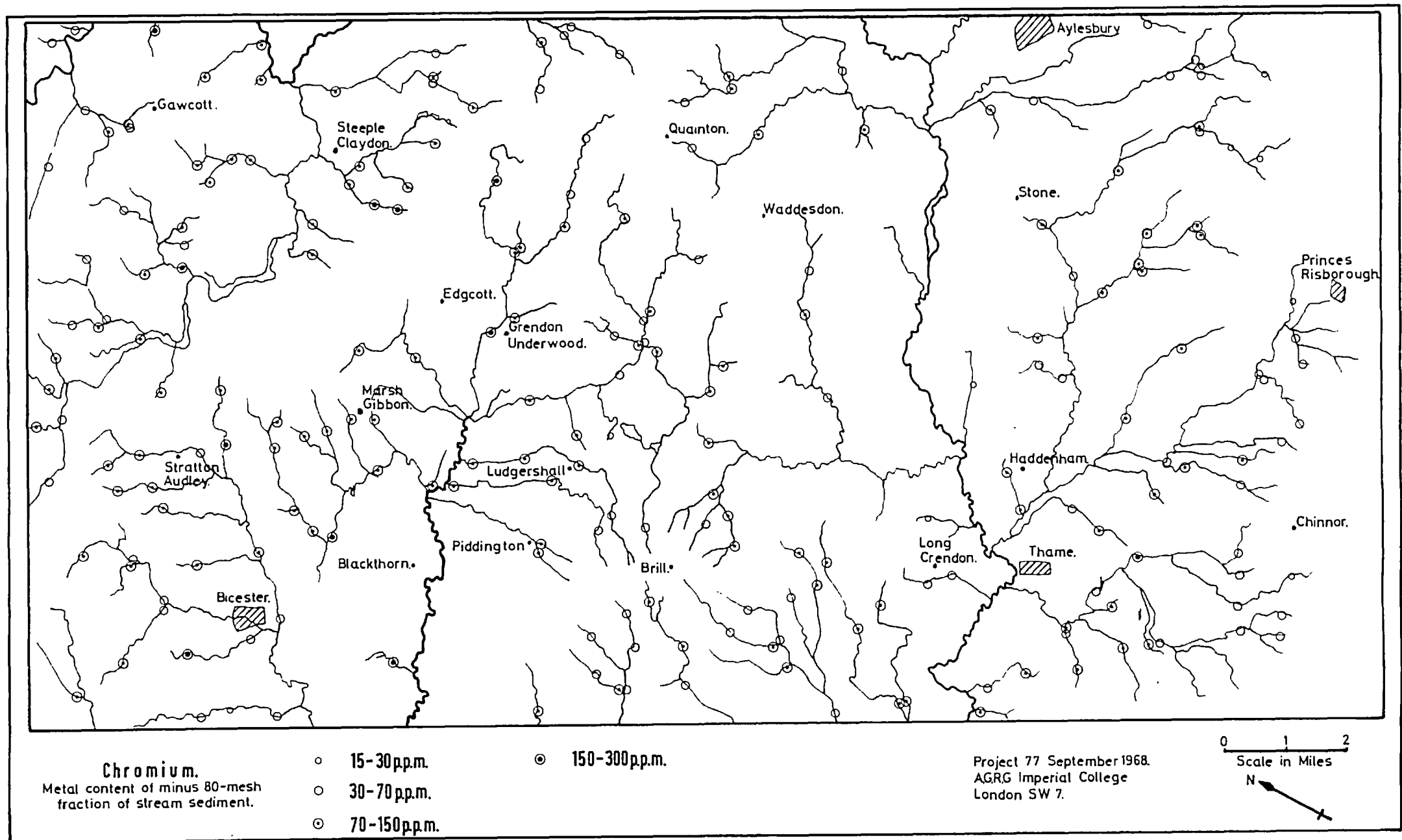


Figure S8.1 Thame Survey Area.

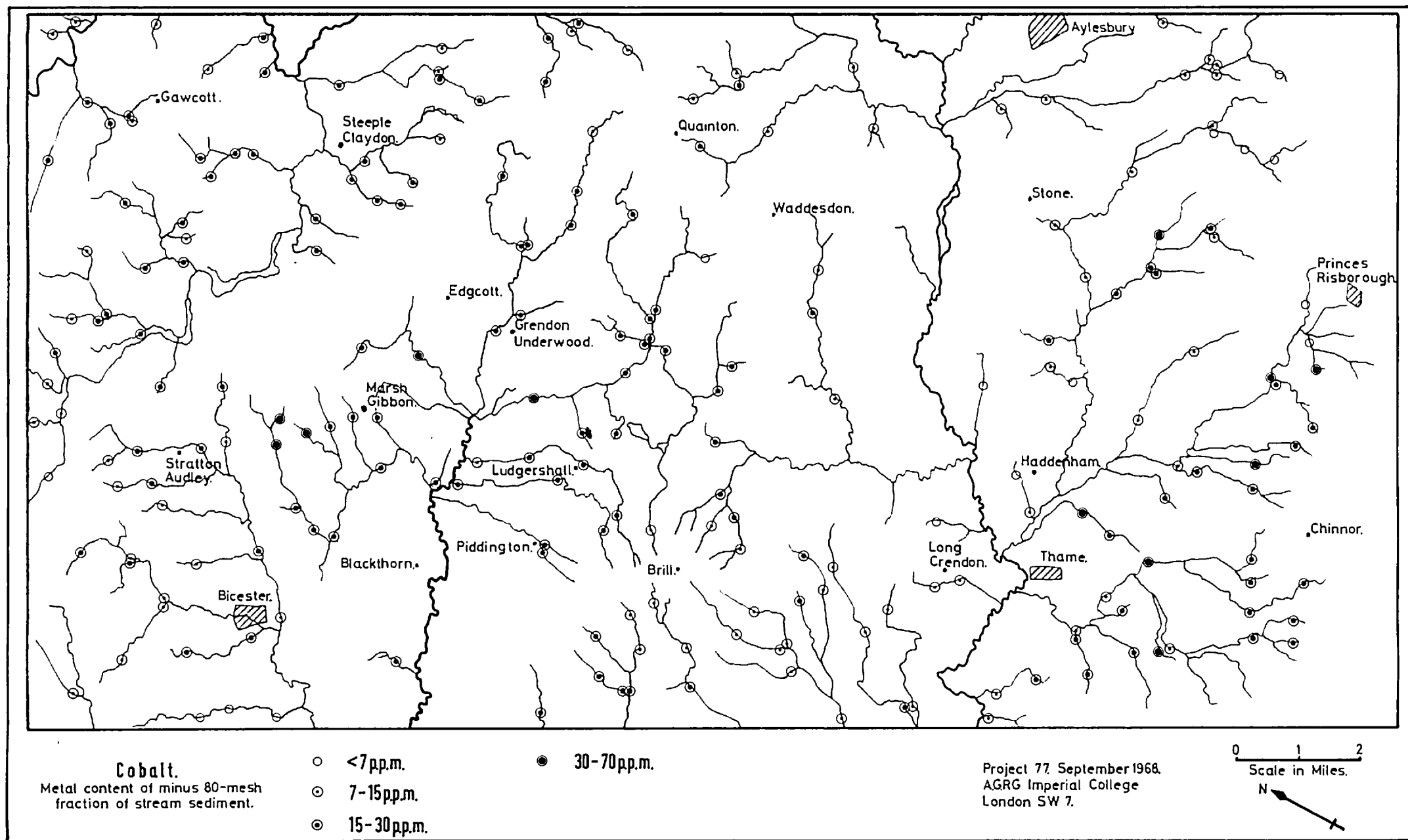


Figure S8-2 Thame Survey Area.

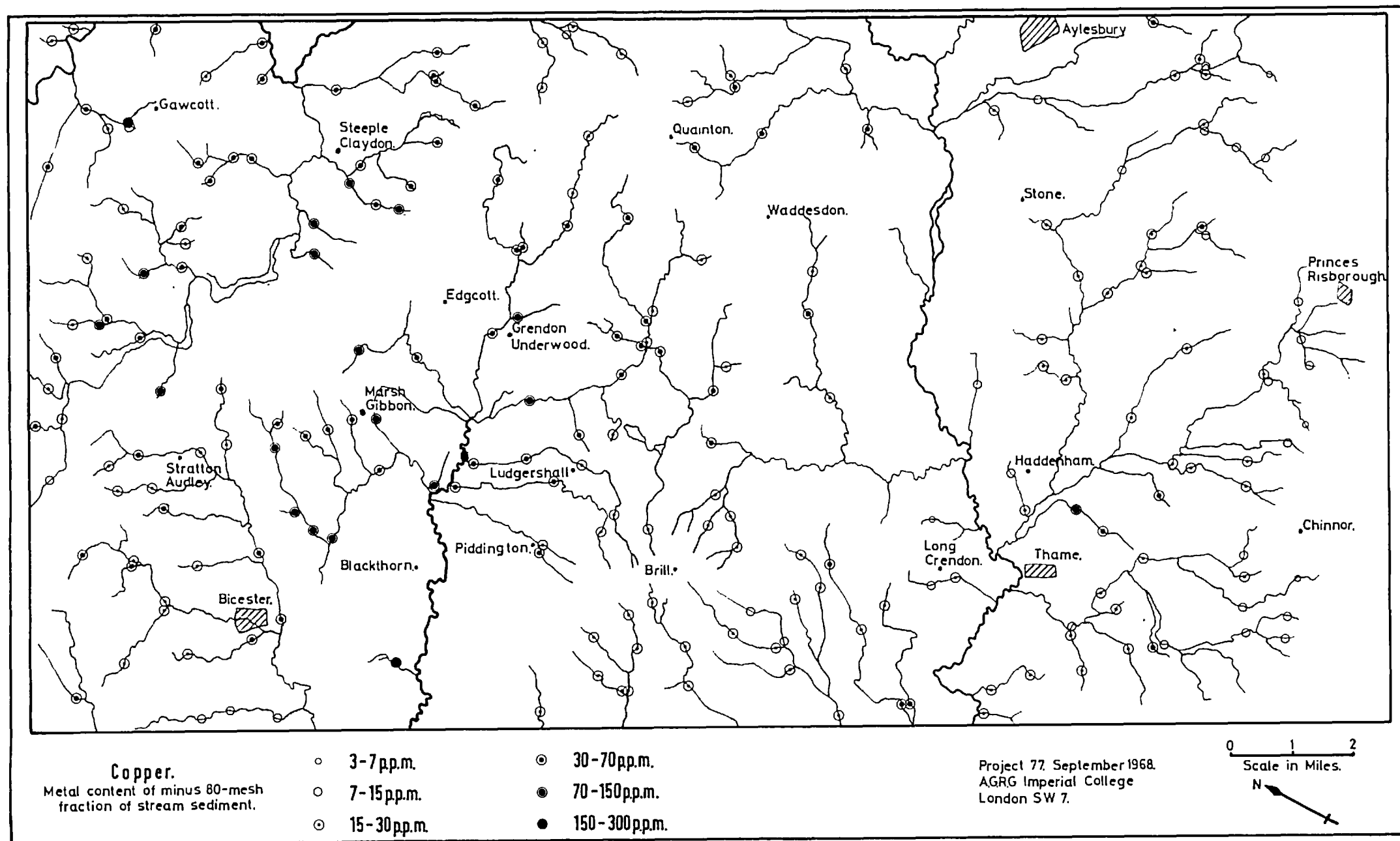


Figure S8.3 Thame Survey Area.

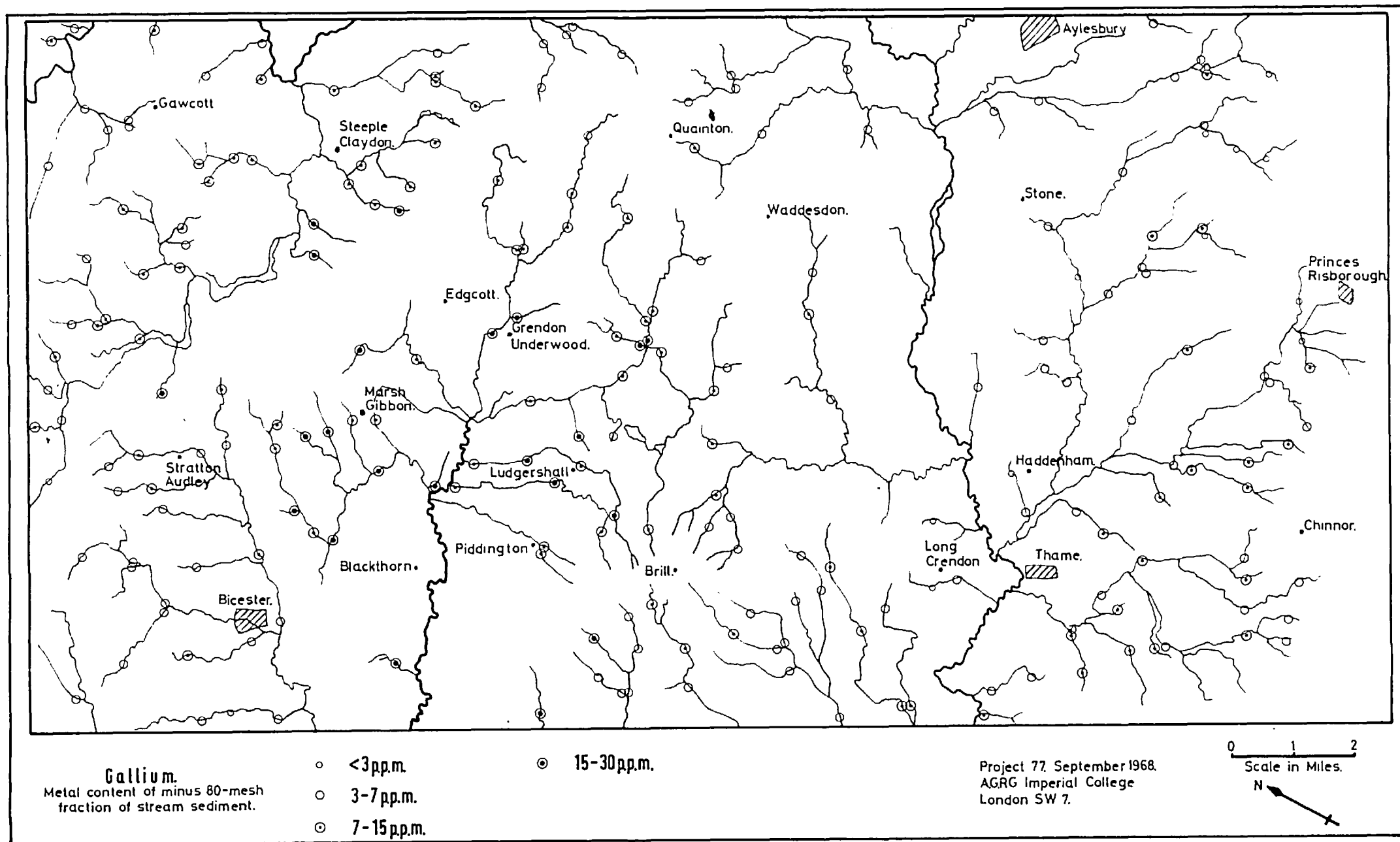


Figure S8.4 Thame Survey Area.

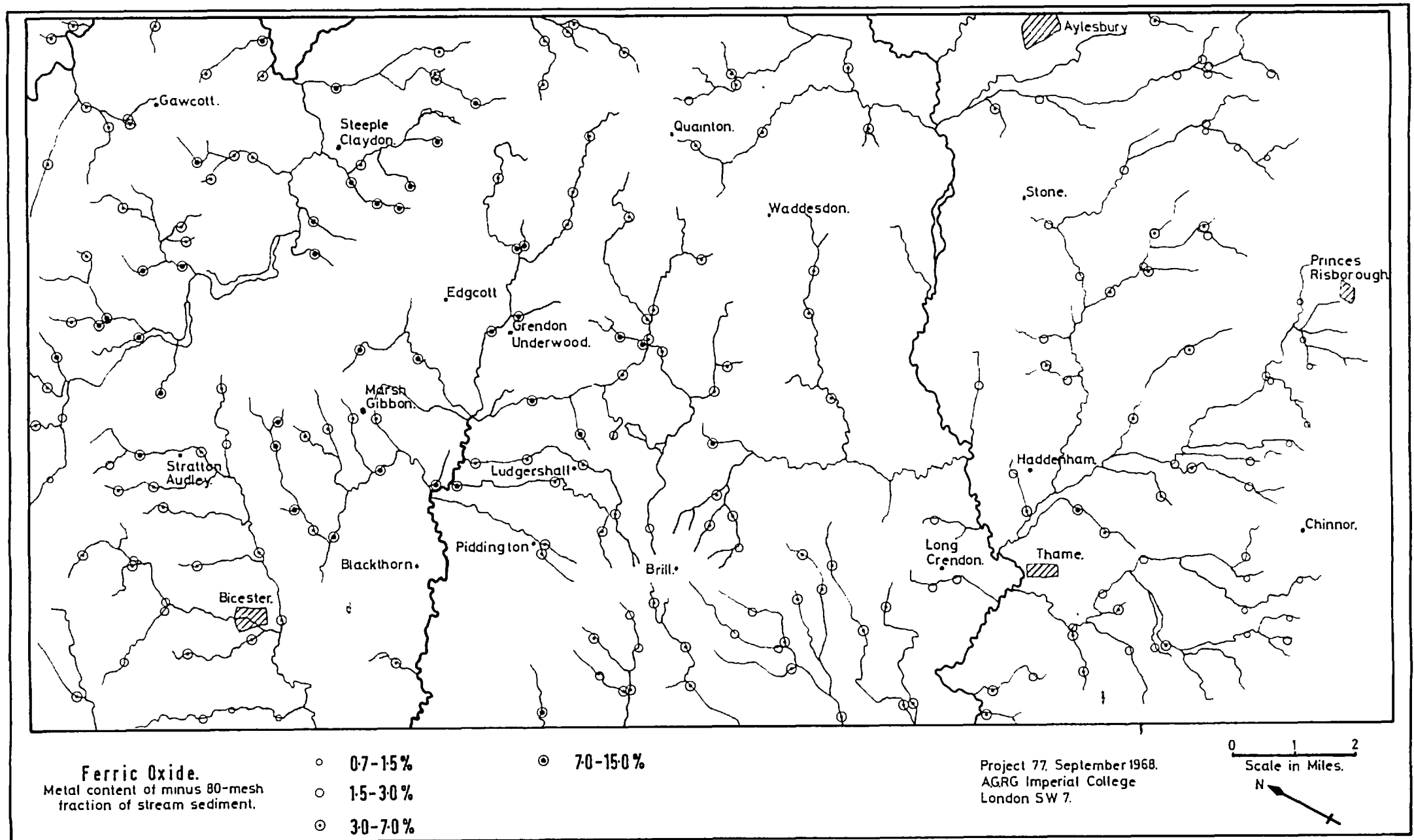


Figure S8.5 Thame Survey Area.

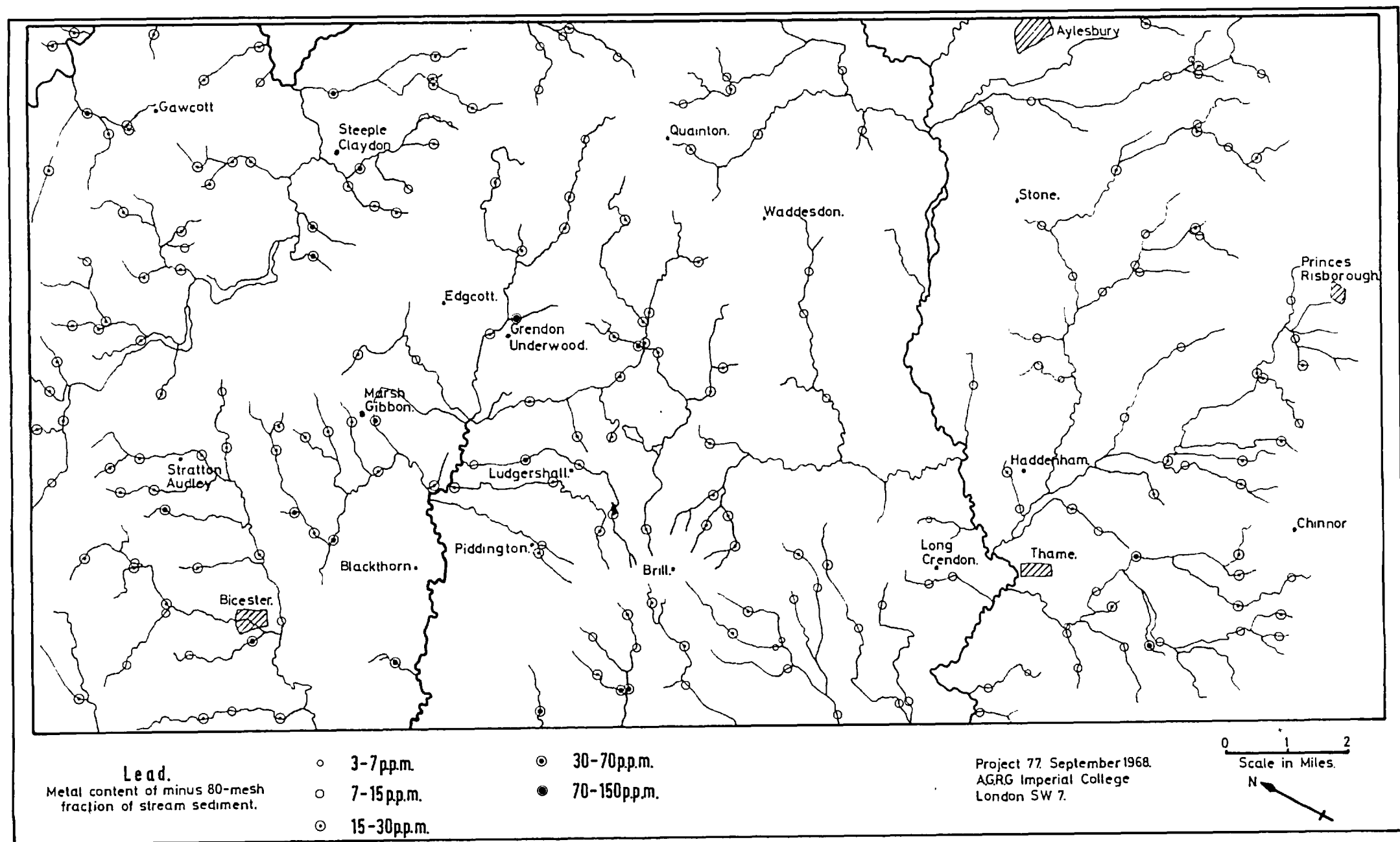


Figure S8.6 Thame Survey Area.

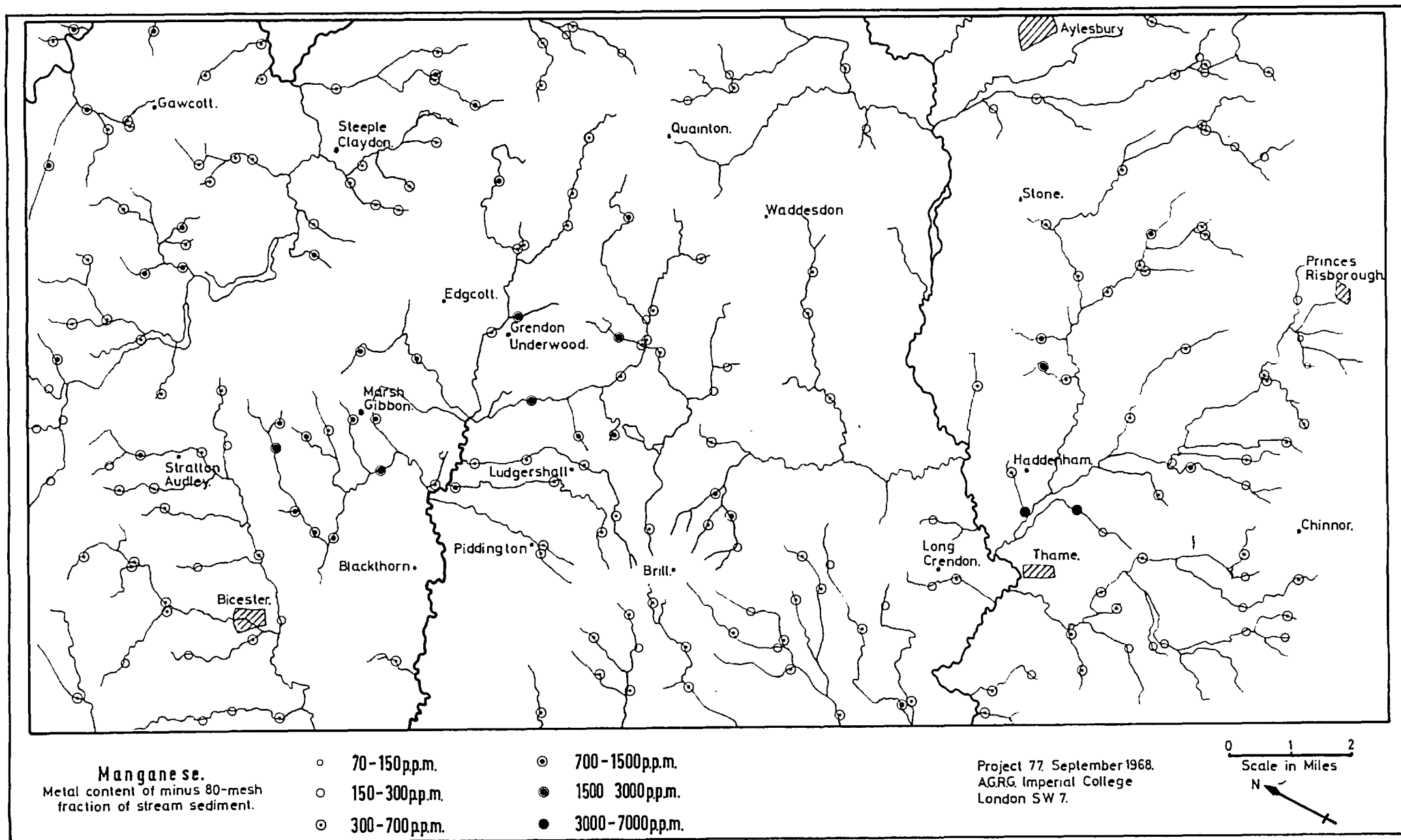


Figure S8.7 Thame Survey Area.

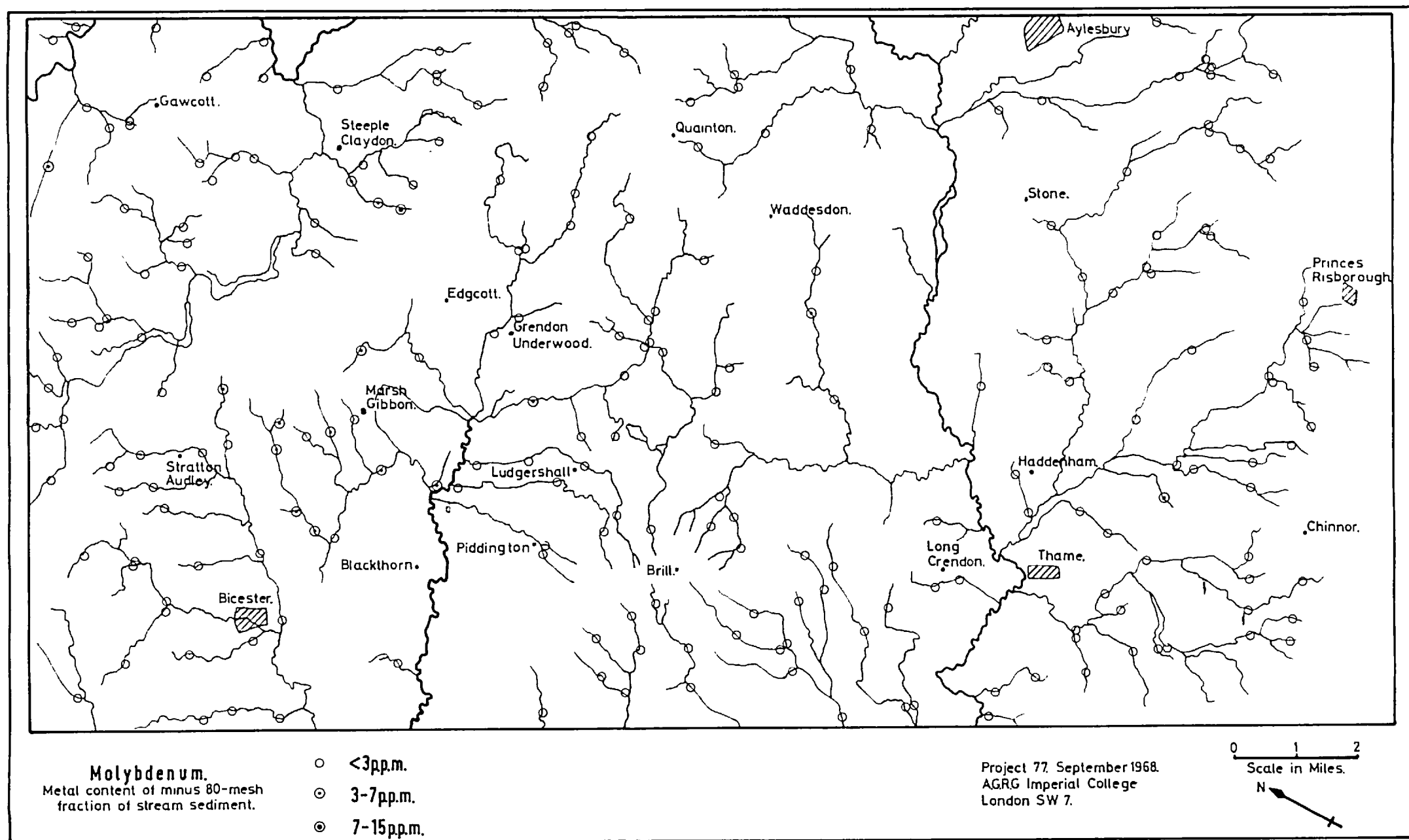


Figure S8.8 Thame Survey Area.

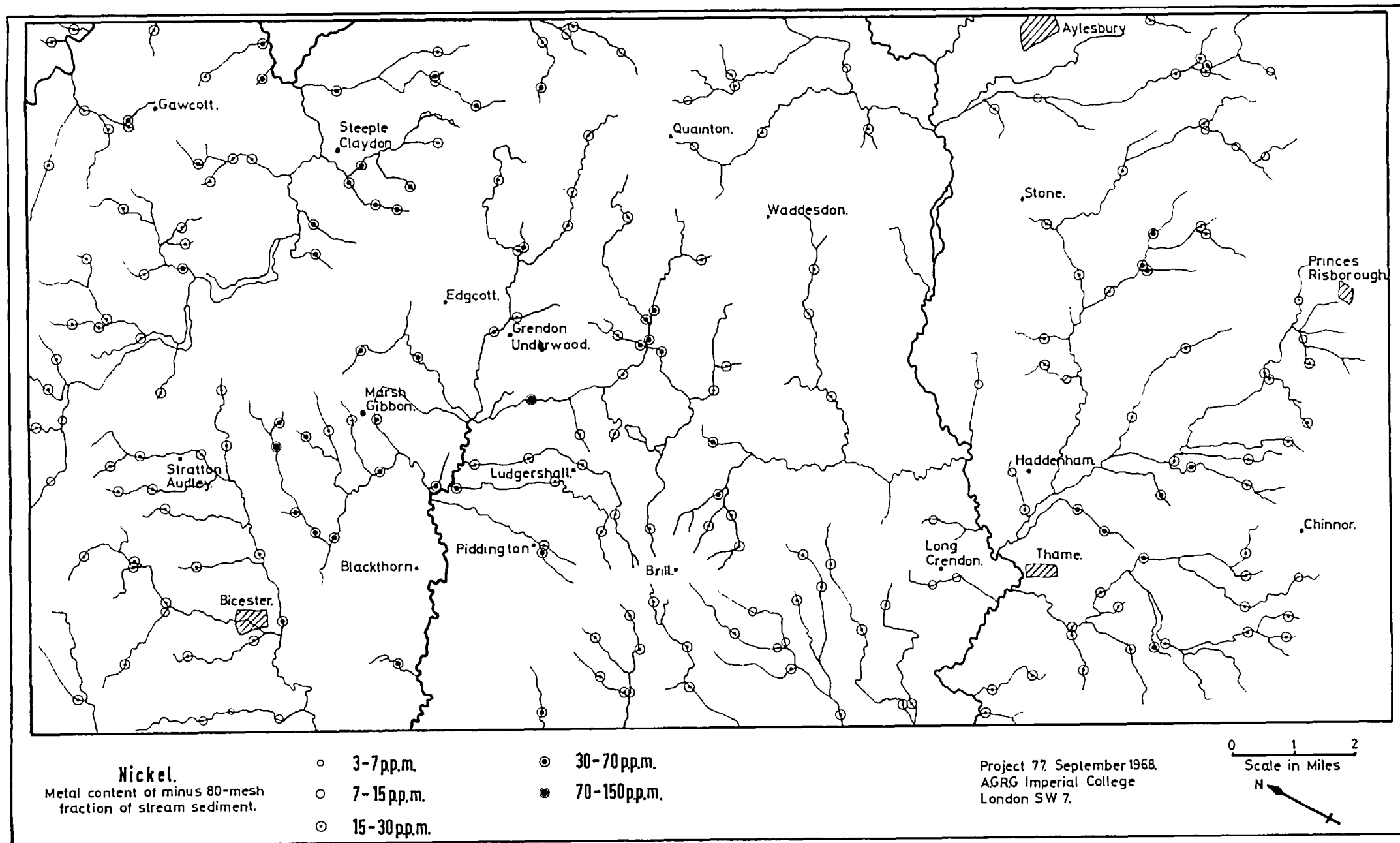


Figure S8.9 Thame Survey Area.

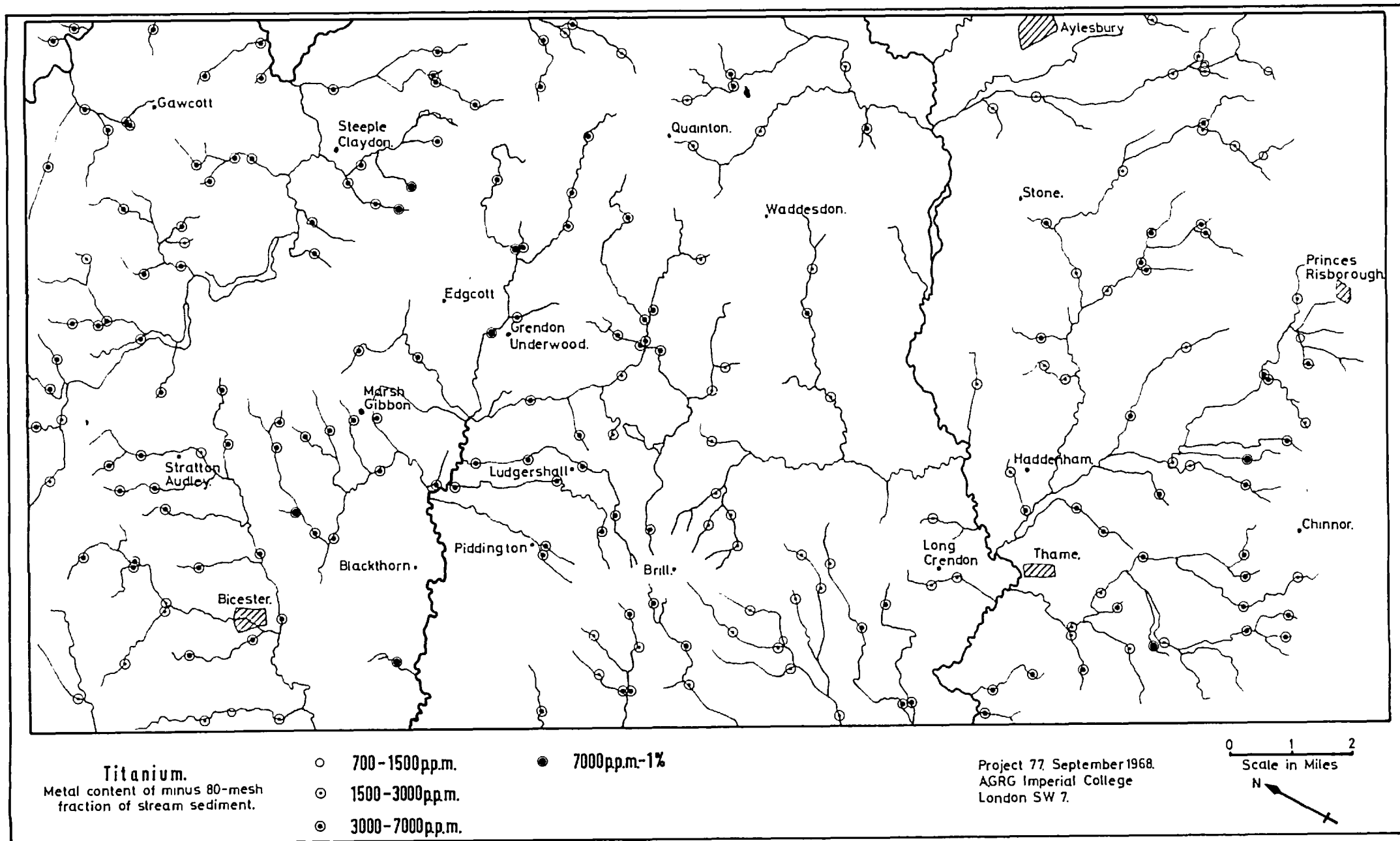


Figure 58.10 Thame Survey Area.

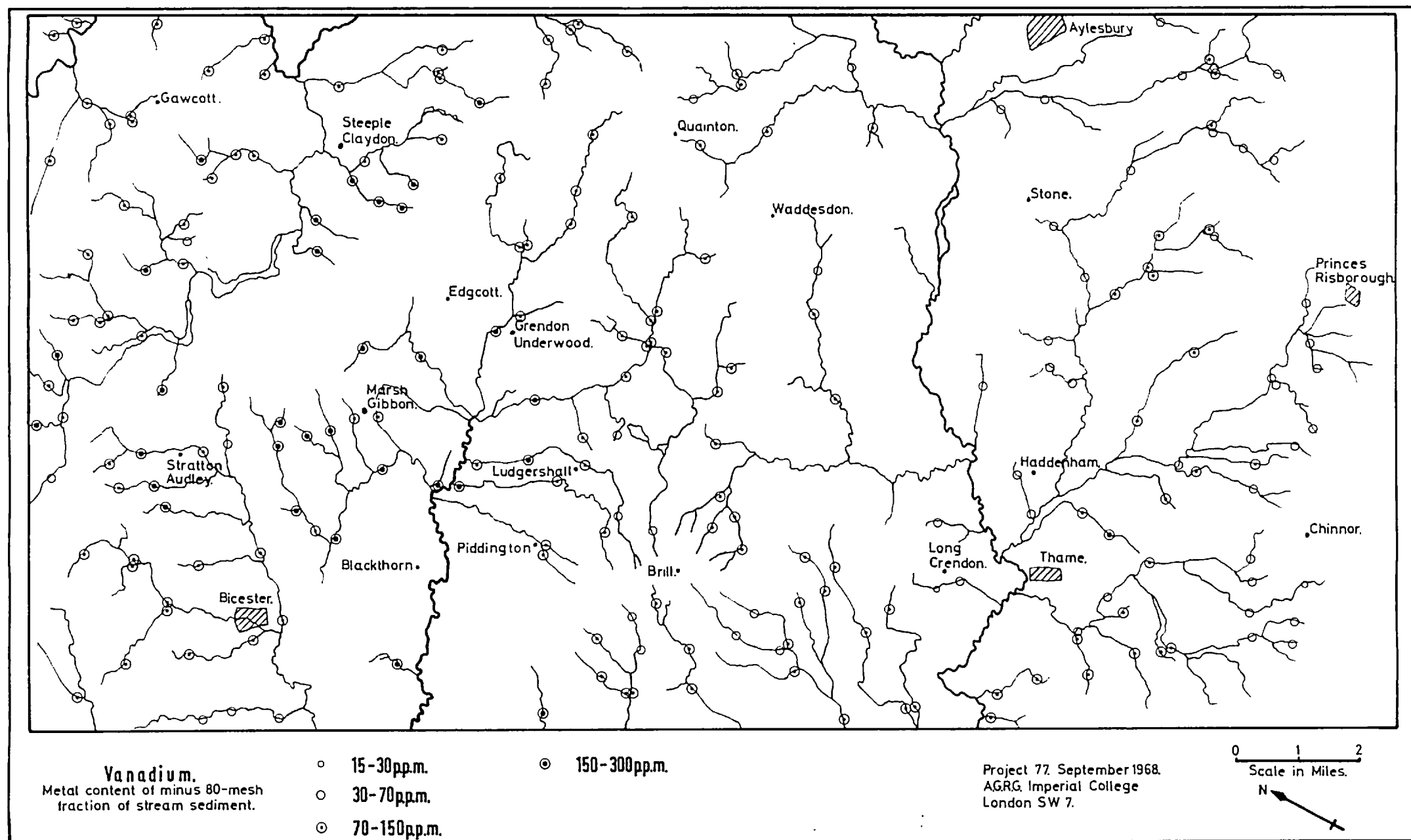


Figure S8-11 Thame Survey Area.

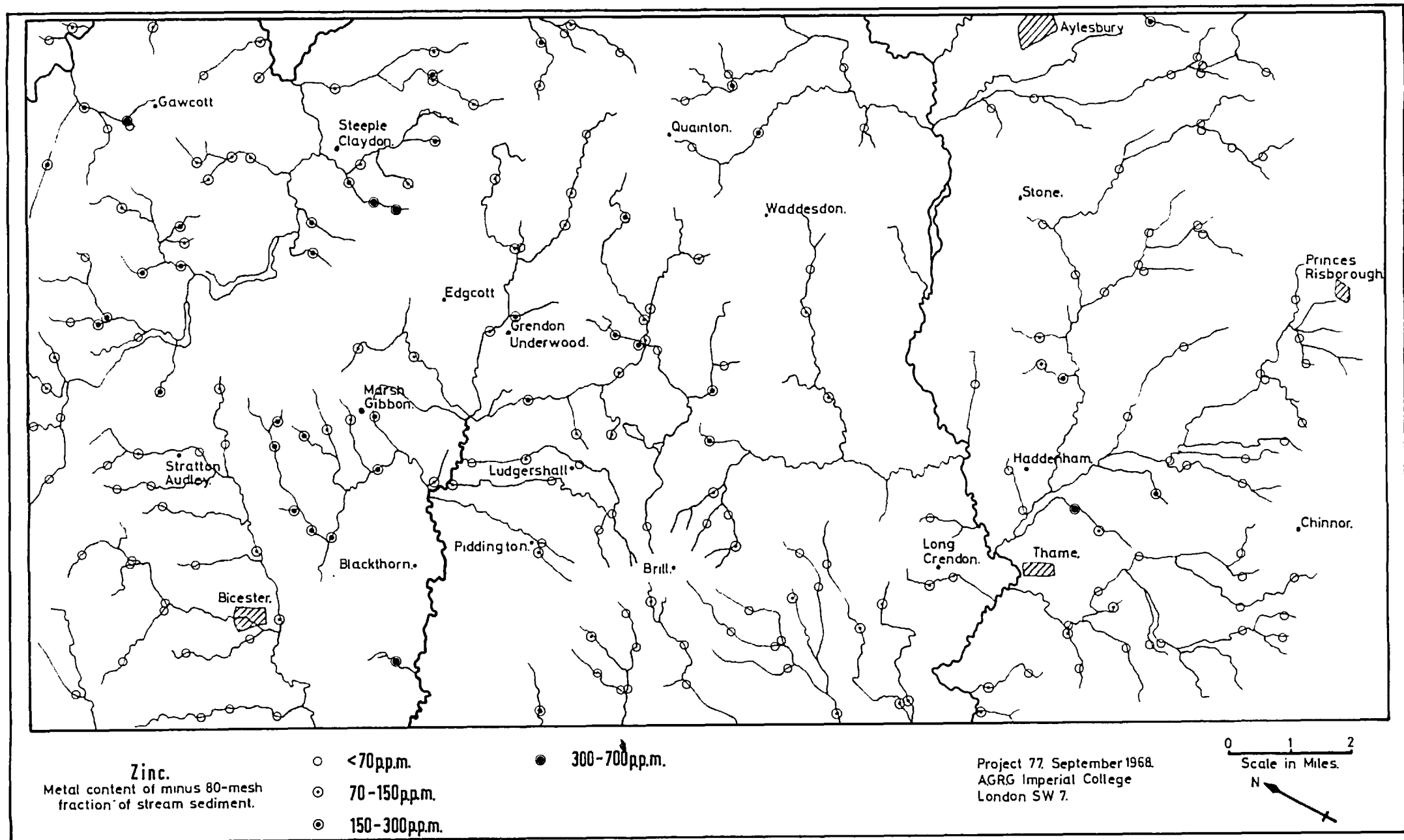


Figure S8.12 Thame Survey Area.

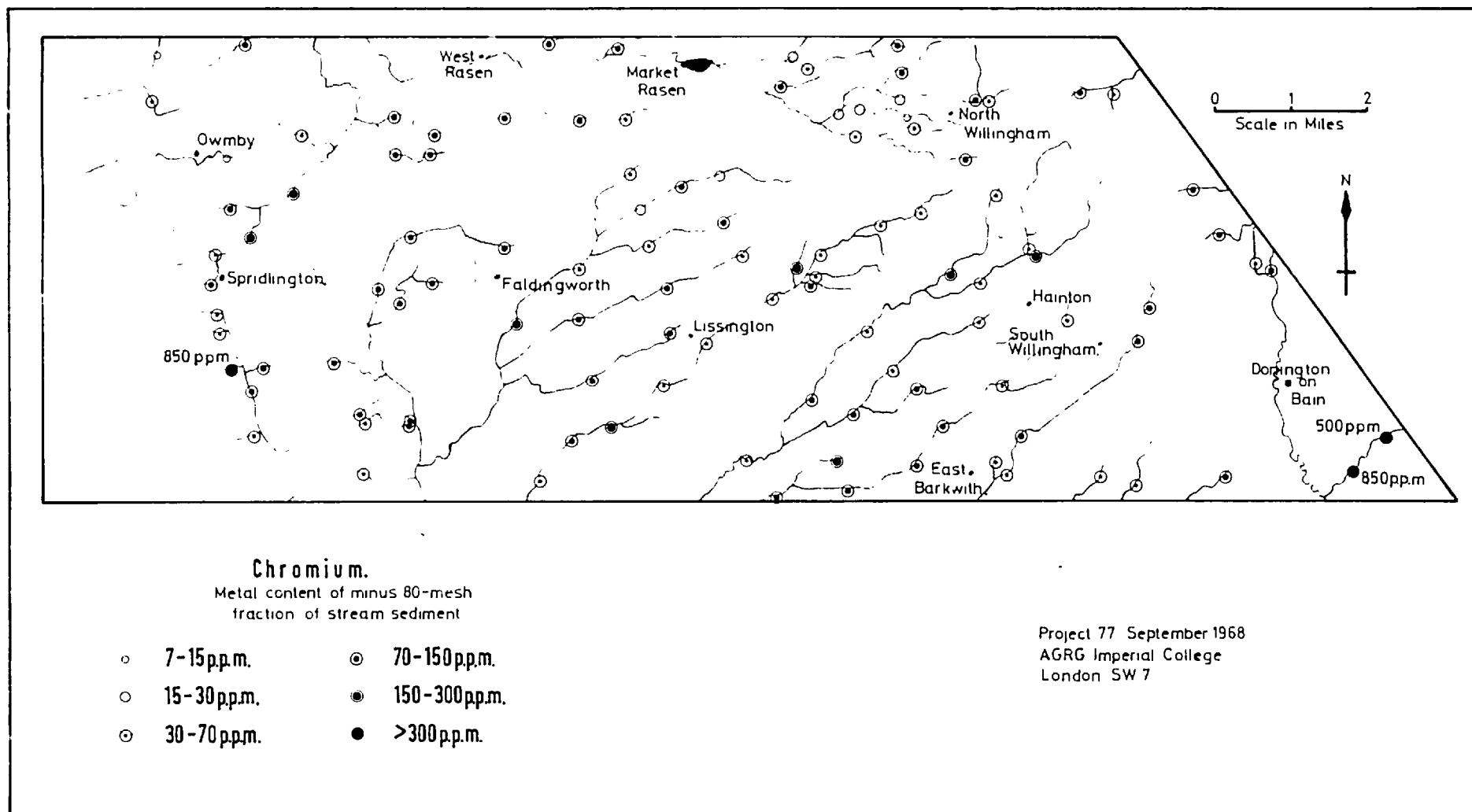


Figure S9.1 Market Rasen Survey Area.

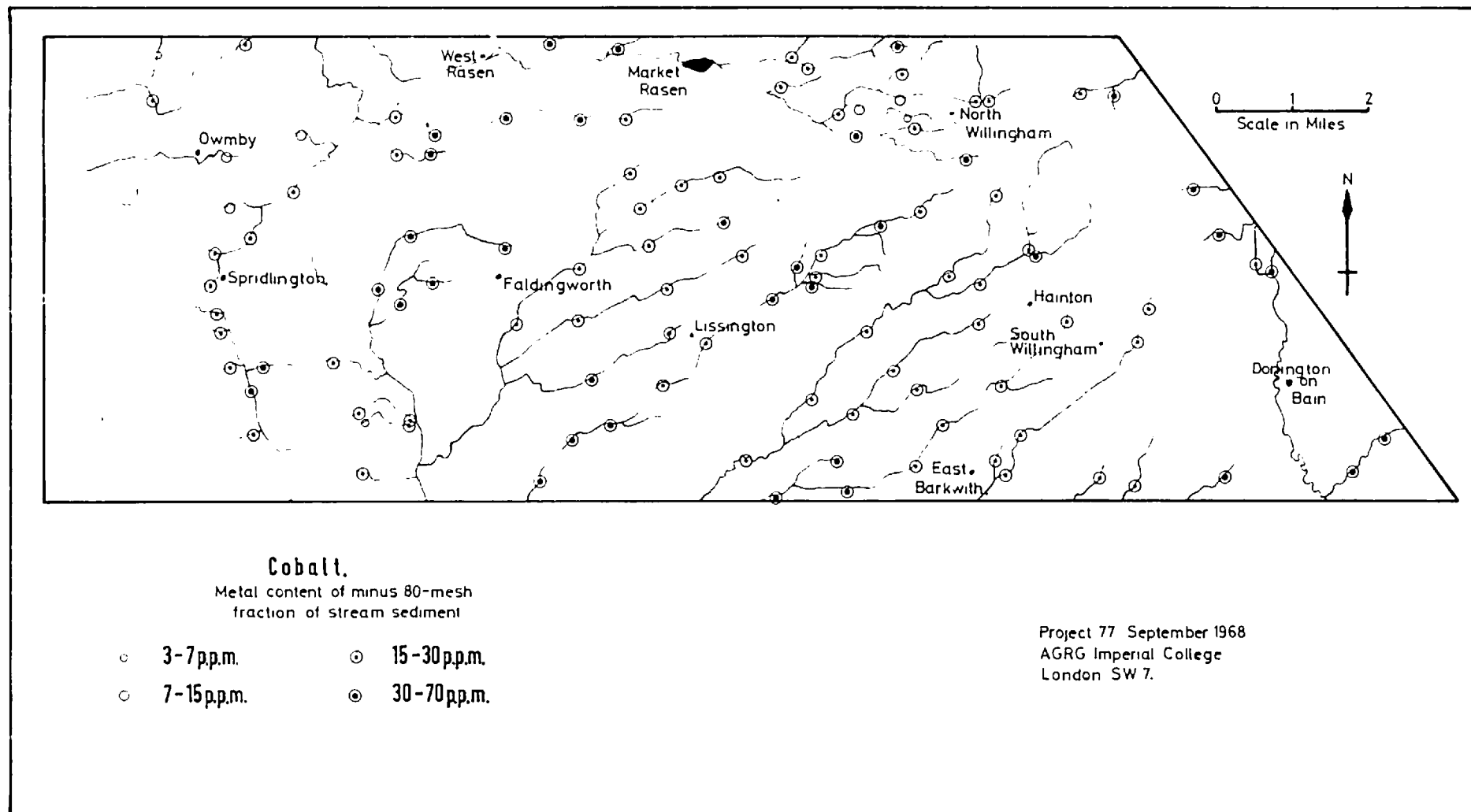


Figure S92 Market Rasen Survey Area.

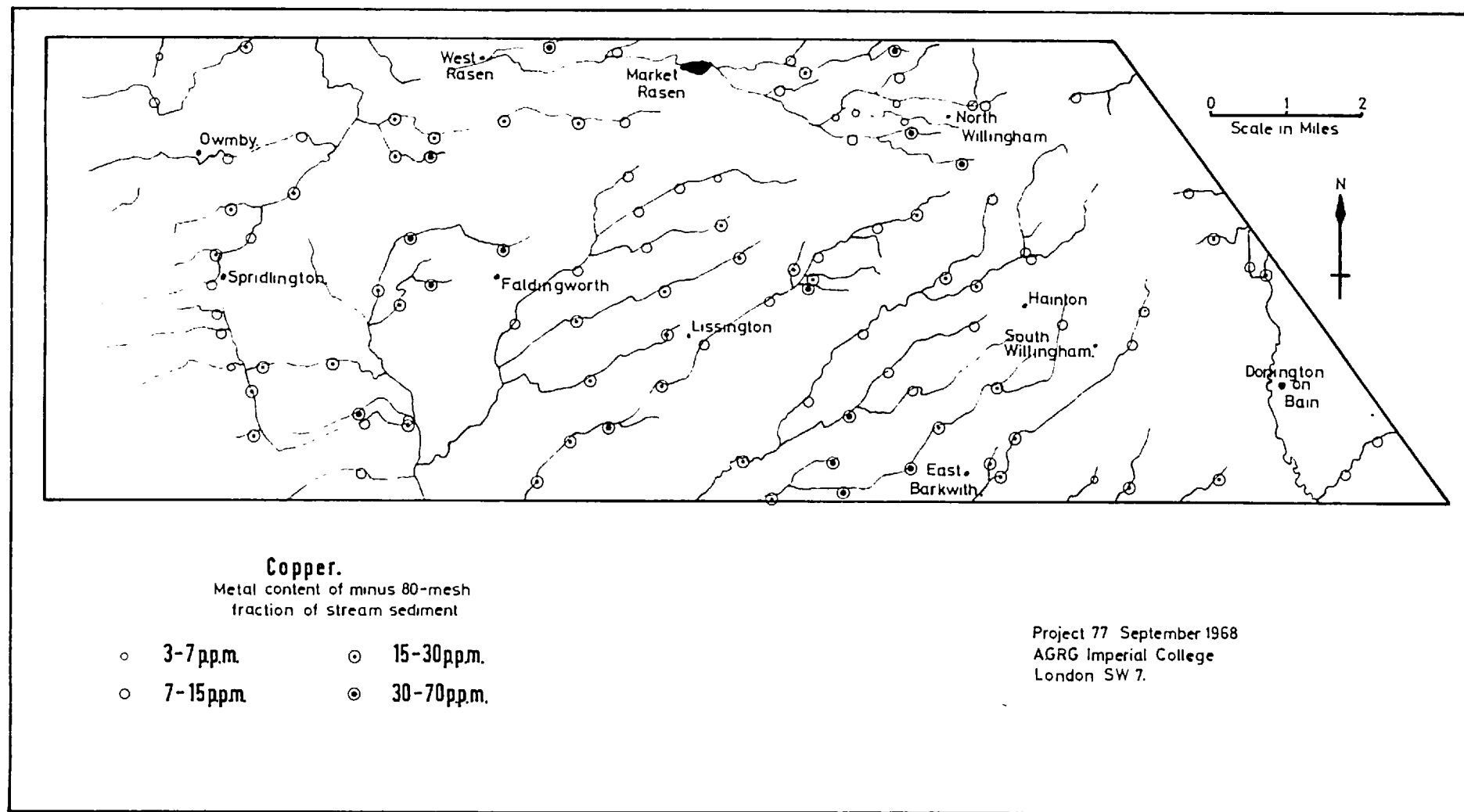


Figure S9.3 Market Rasen Survey Area.

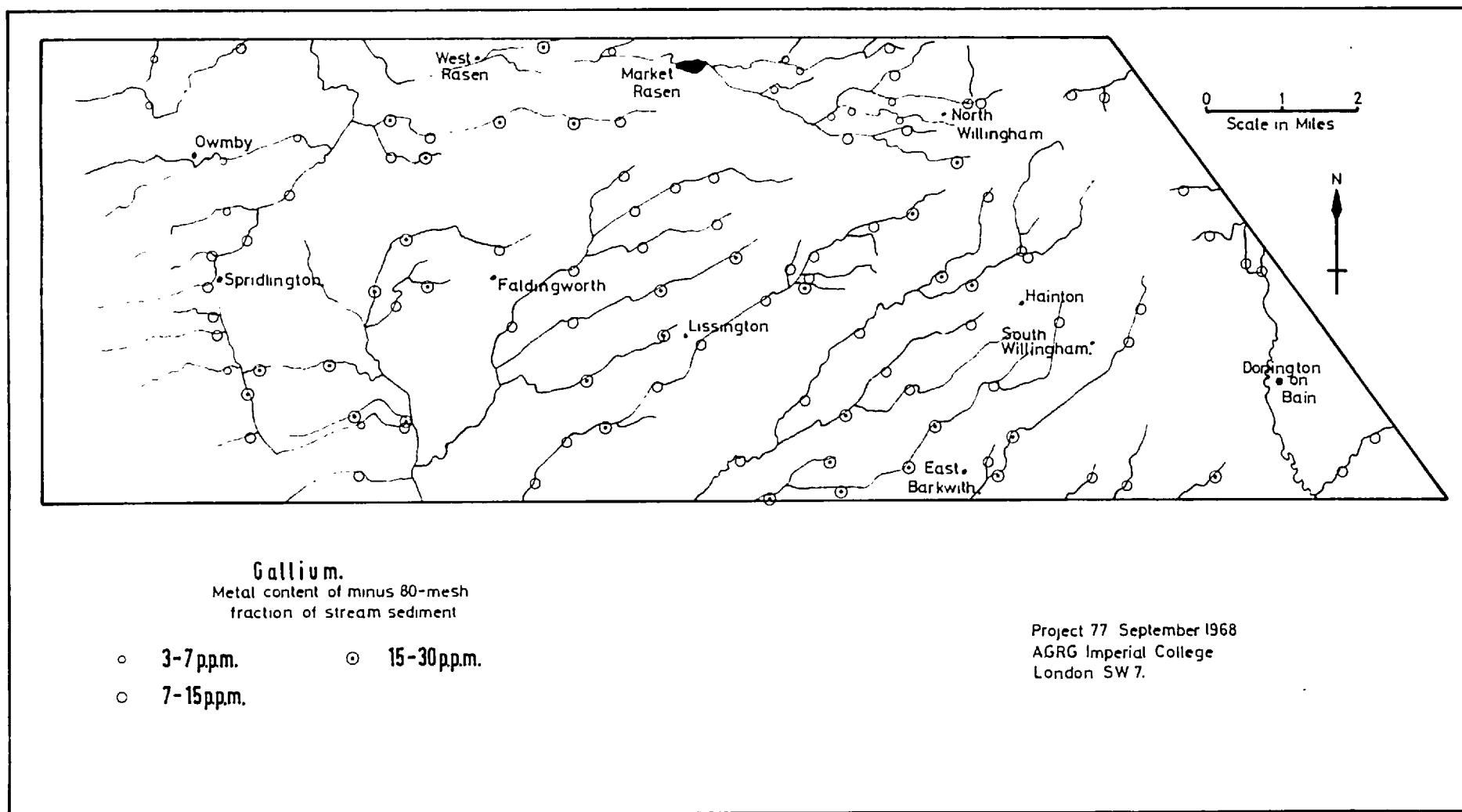


Figure S9.4 Market Rasen Survey Area.

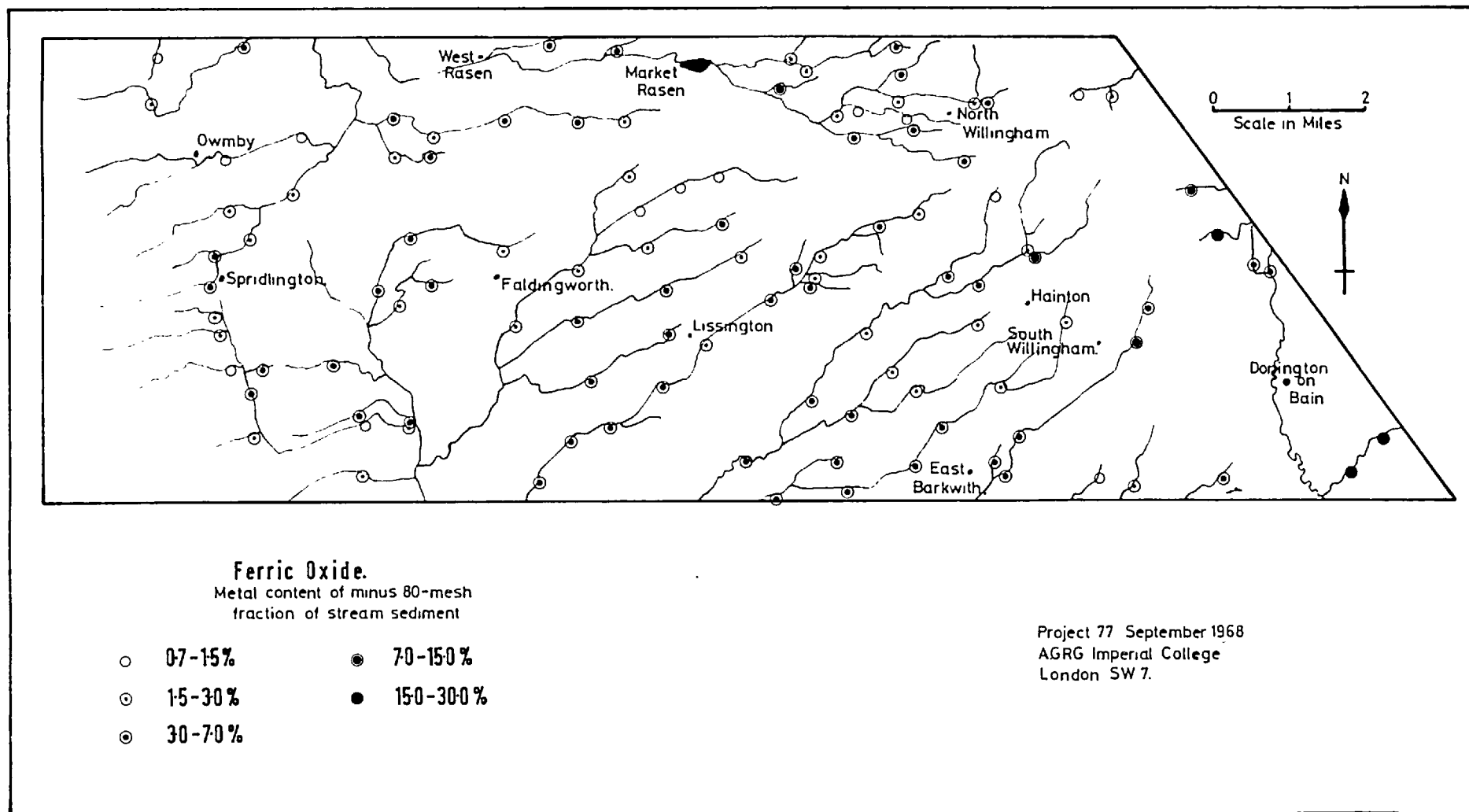


Figure S9.5 Market Rasen Survey Area.

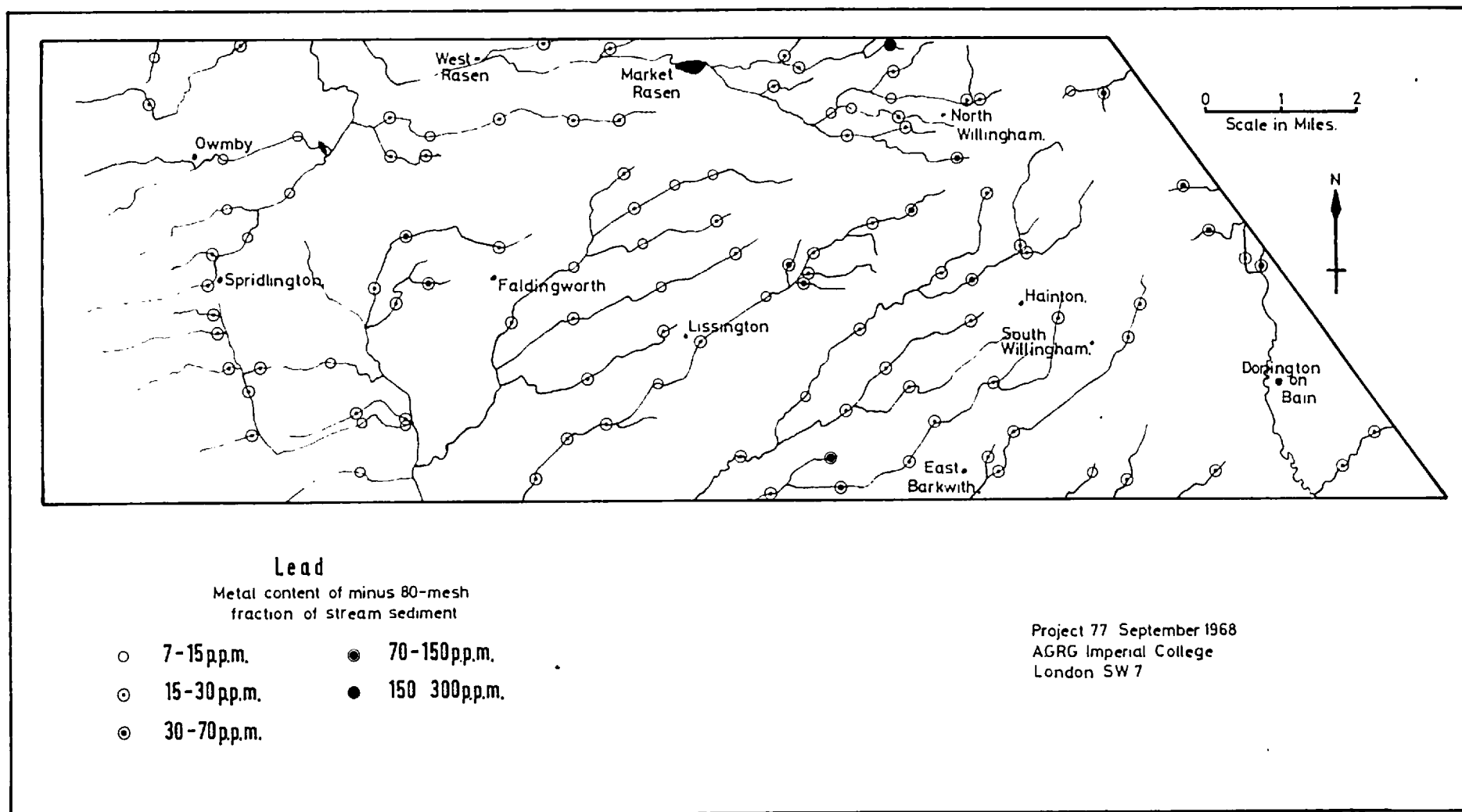


Figure S9.6 Market Rasen Survey Area.

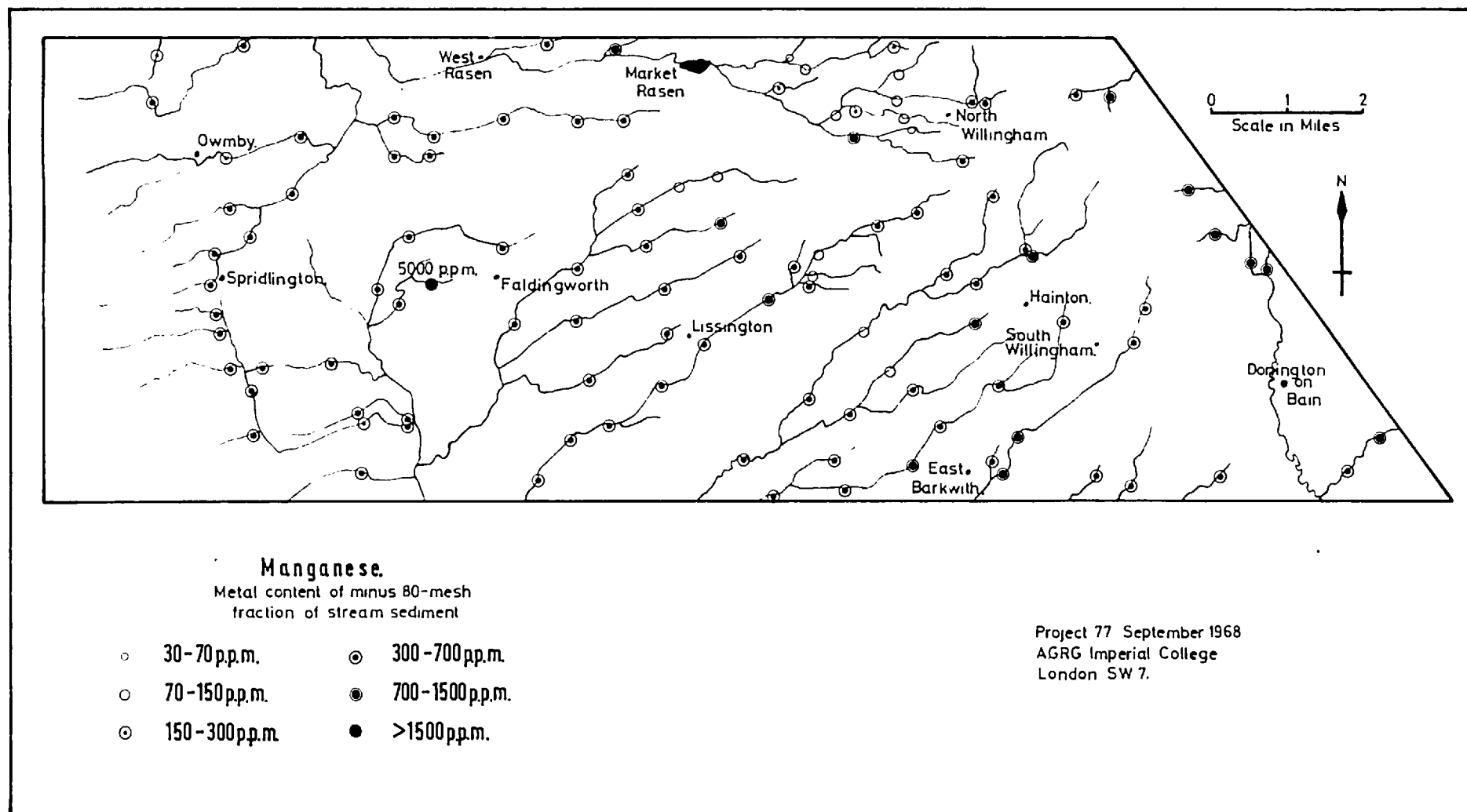


Figure S9.7 Market Rasen Survey Area.

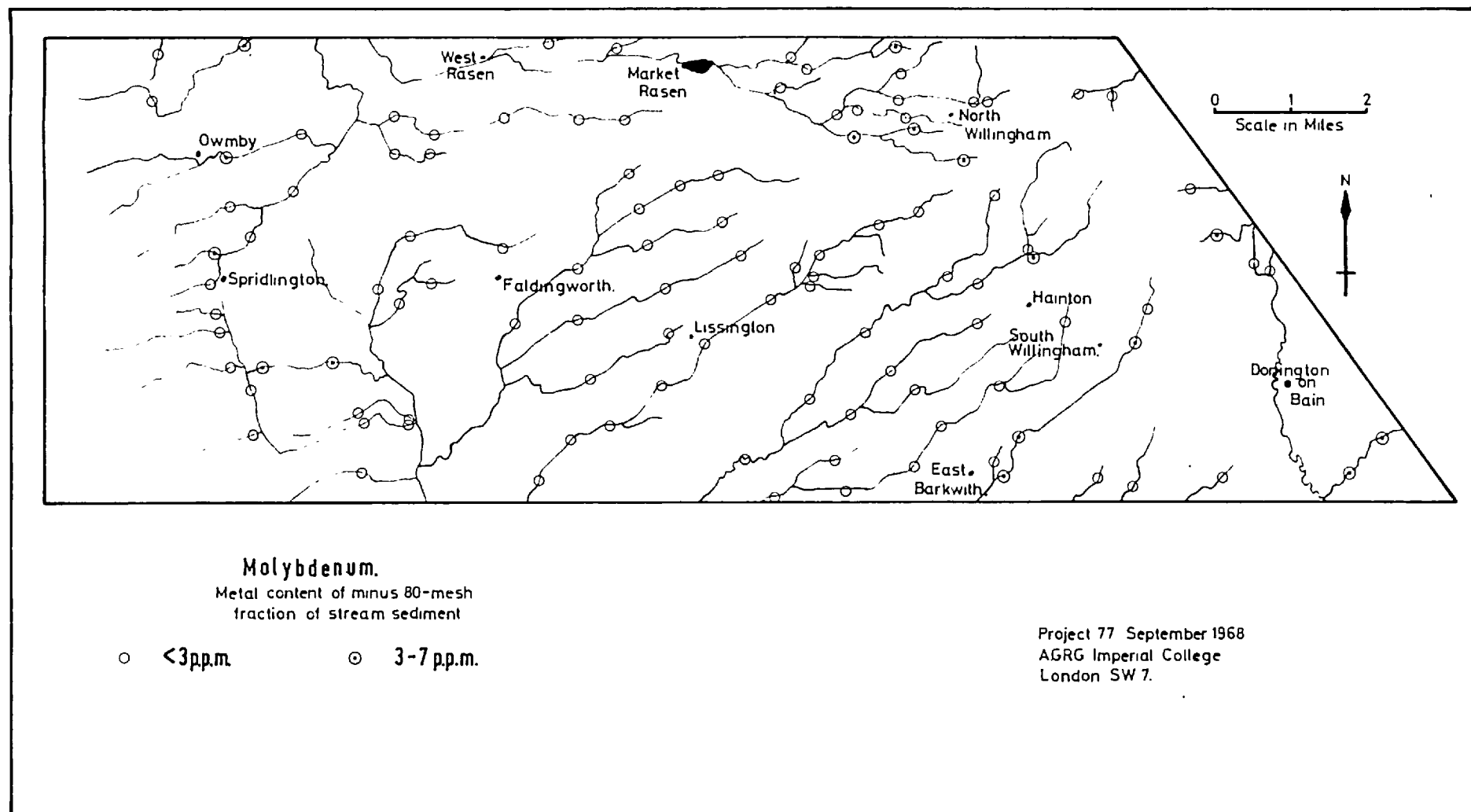


Figure S9.8 Market Rasen Survey Area.

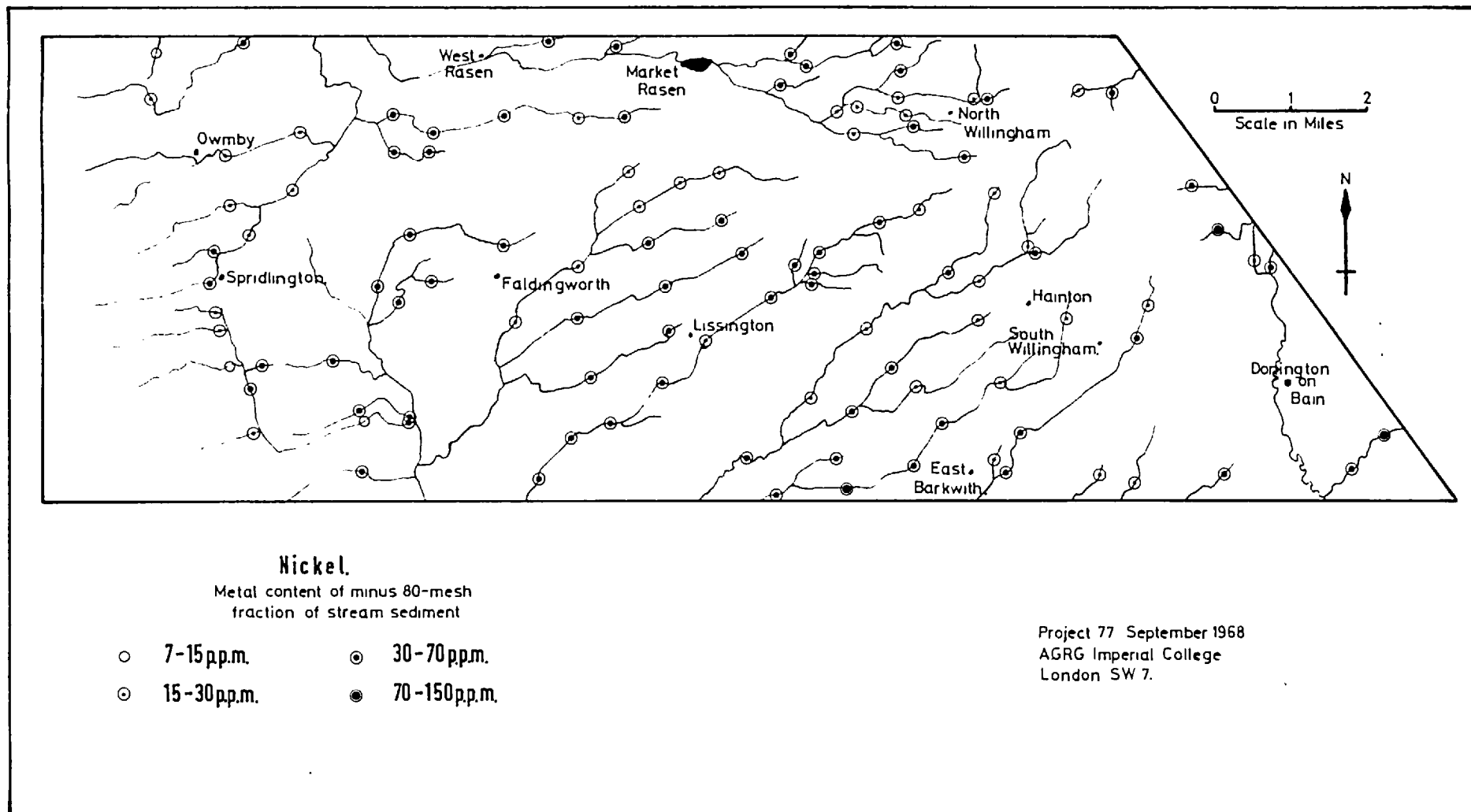


Figure S9.9 Market Rasen Survey Area.

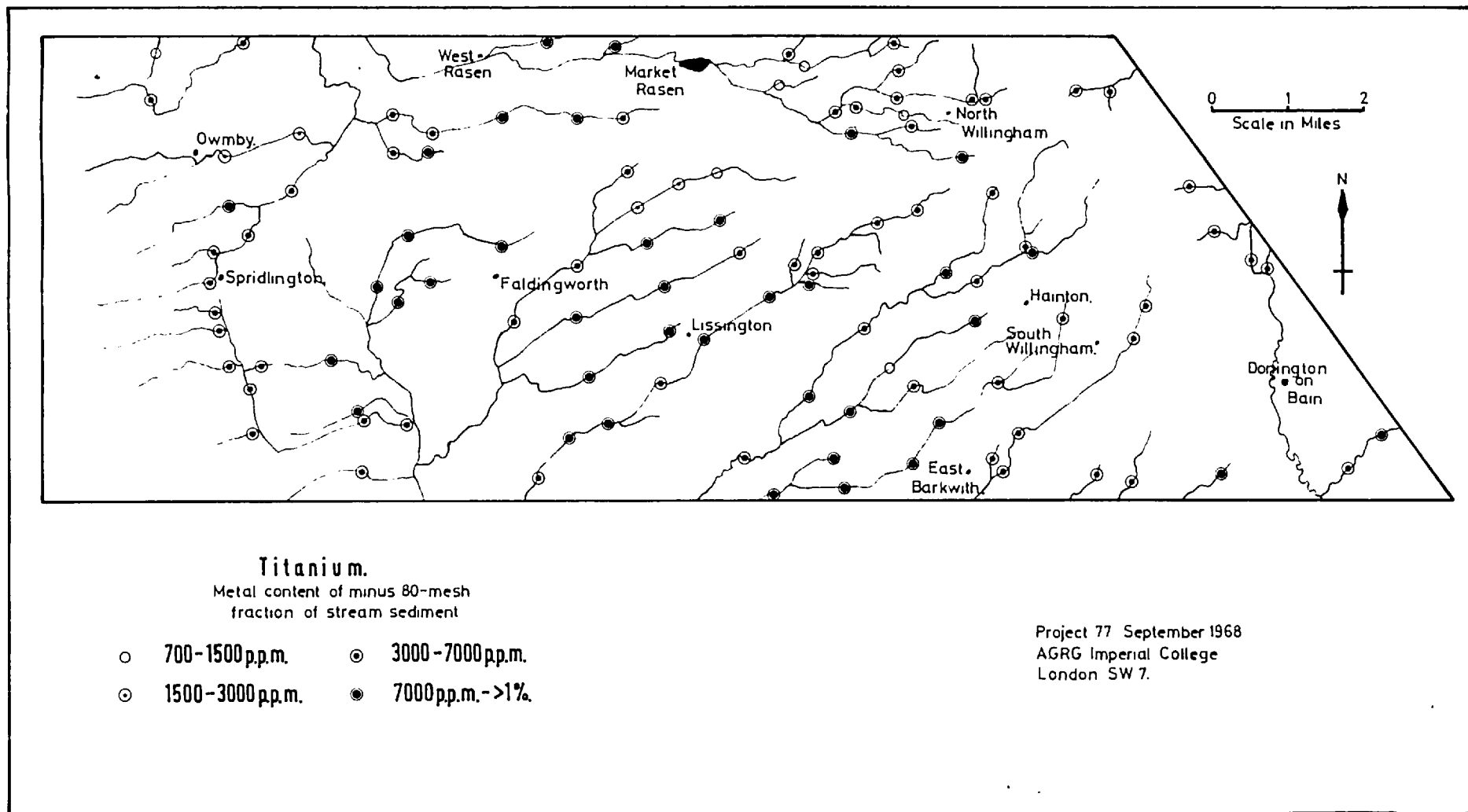


Figure S9.10 Market Rasen Survey Area.

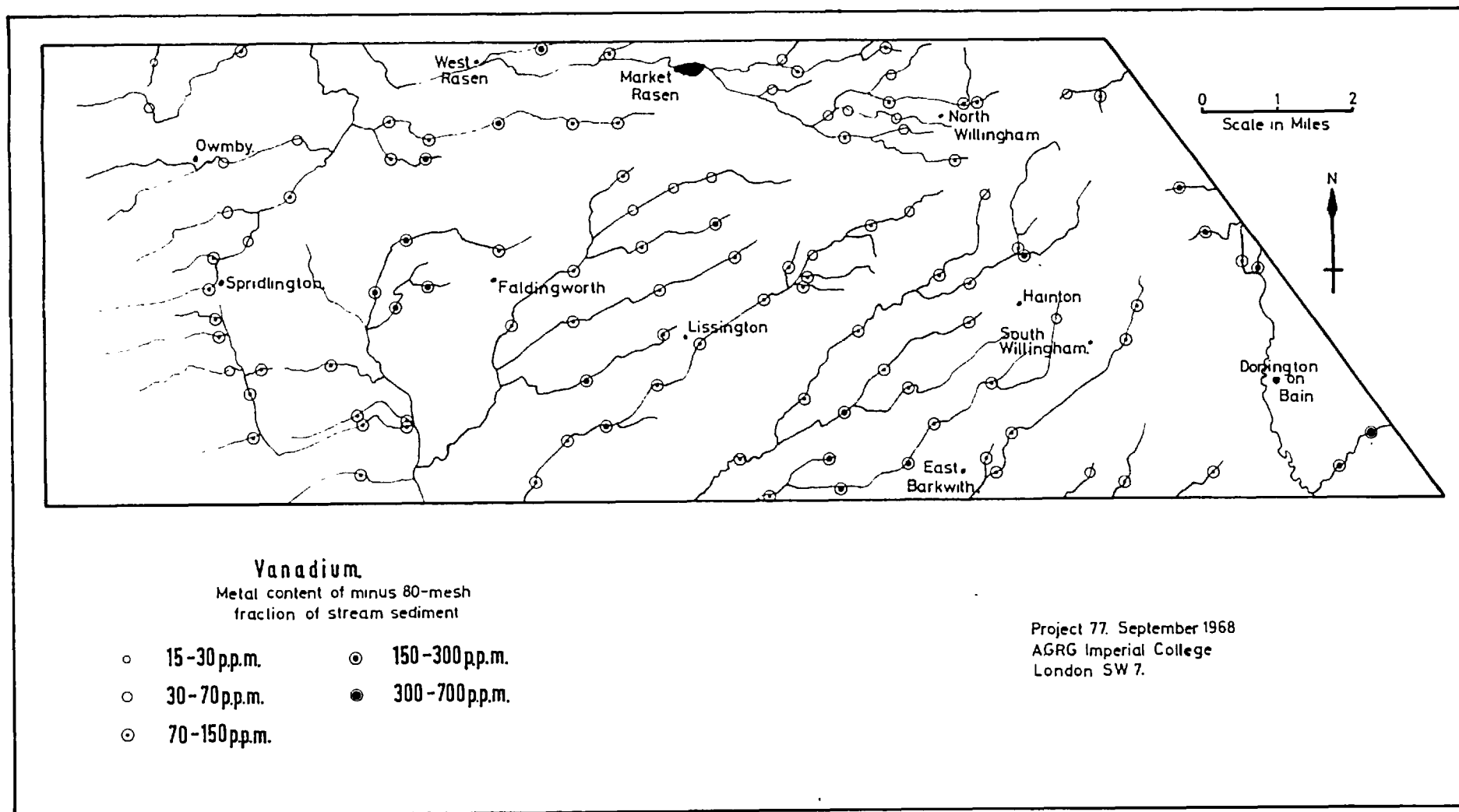


Figure S911 Market Rasen Survey Area.

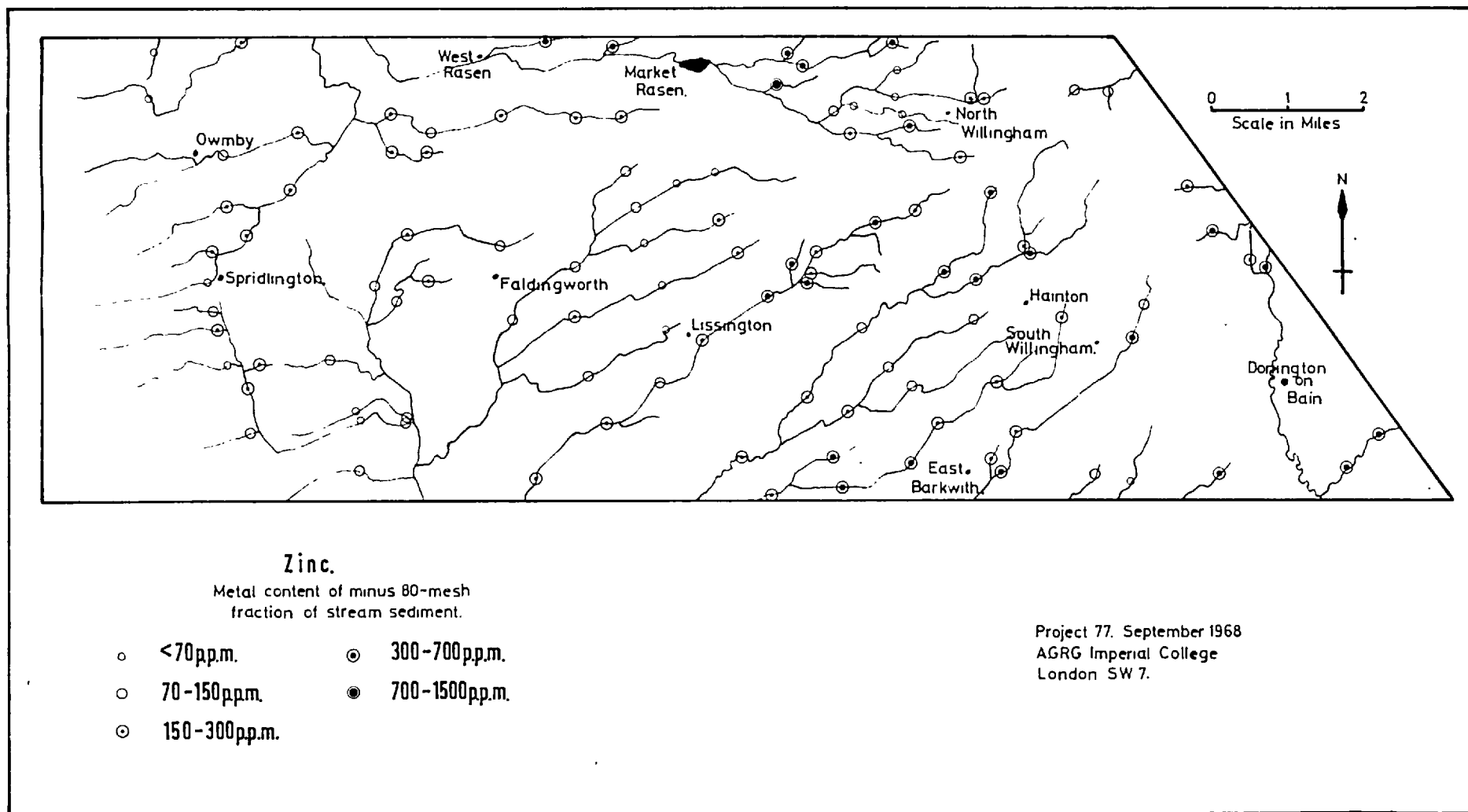


Figure S9.12 Market Rasen Survey Area.

PART 2

Figures illustrating the distribution of metals in the
bedrock

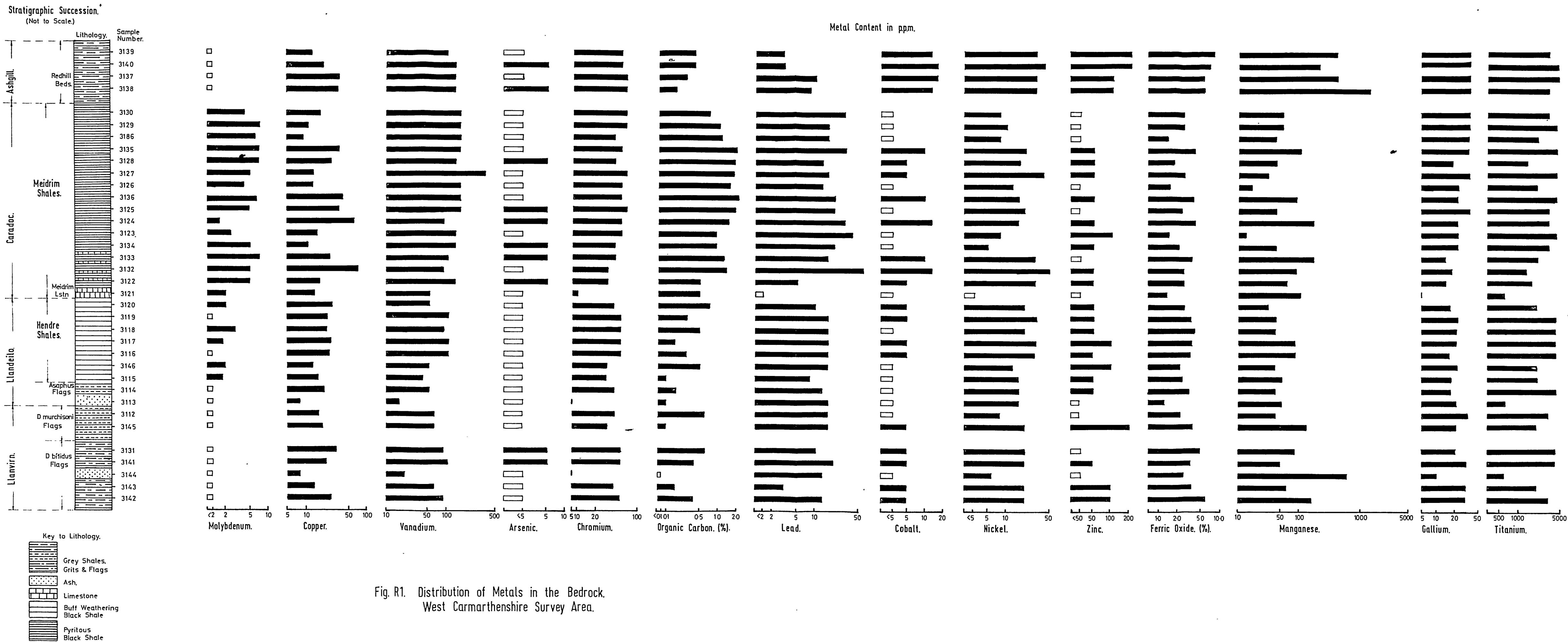
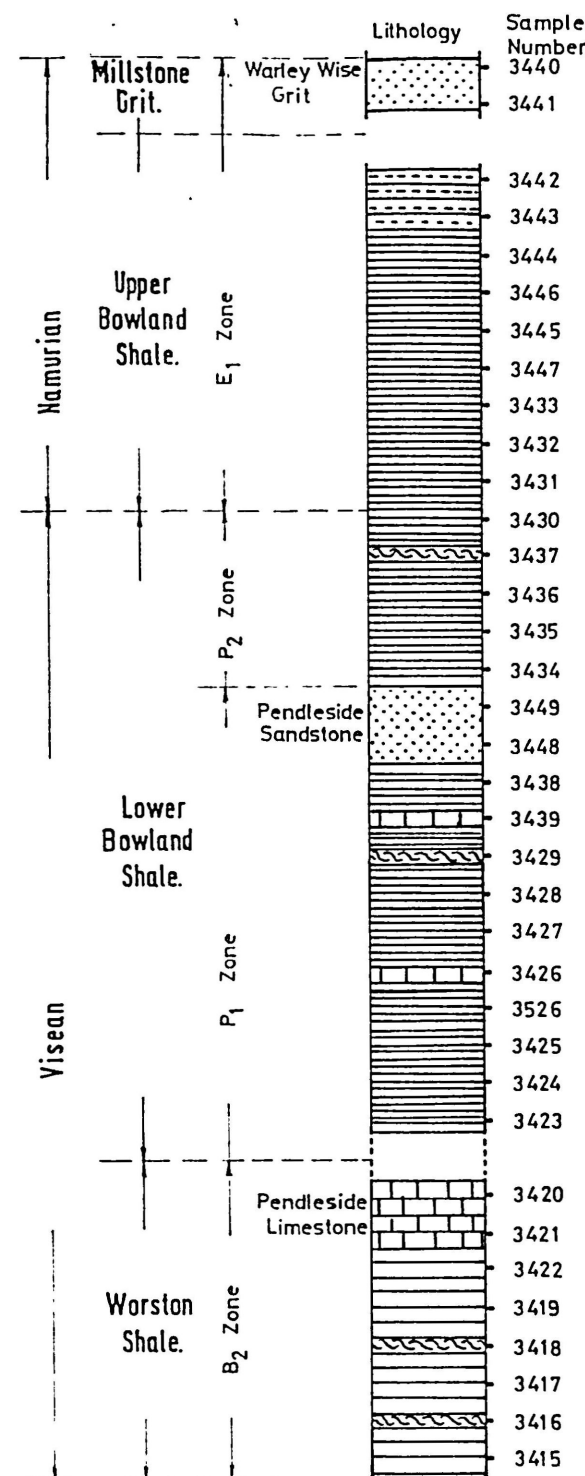


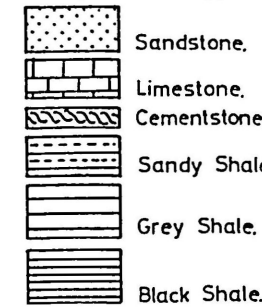
Fig. R1. Distribution of Metals in the Bedrock.
West Carmarthenshire Survey Area.

*Based on Cantrill and Thomas (in Strahan et al, 1909)

Stratigraphic Succession.
(Not to Scale)



Key to Lithology.



*Based on Earp et al (1961)

Metal Content in ppm.

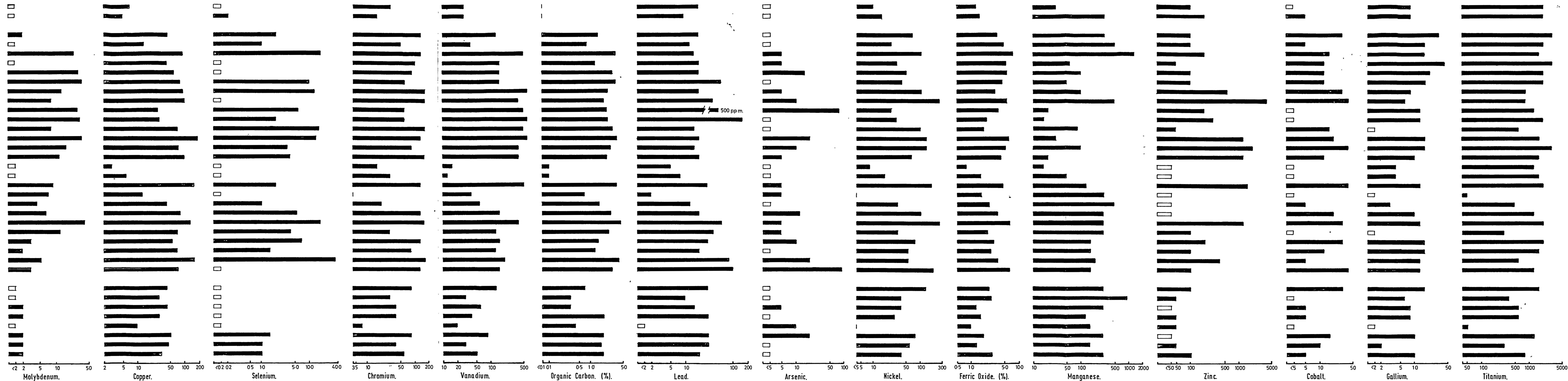
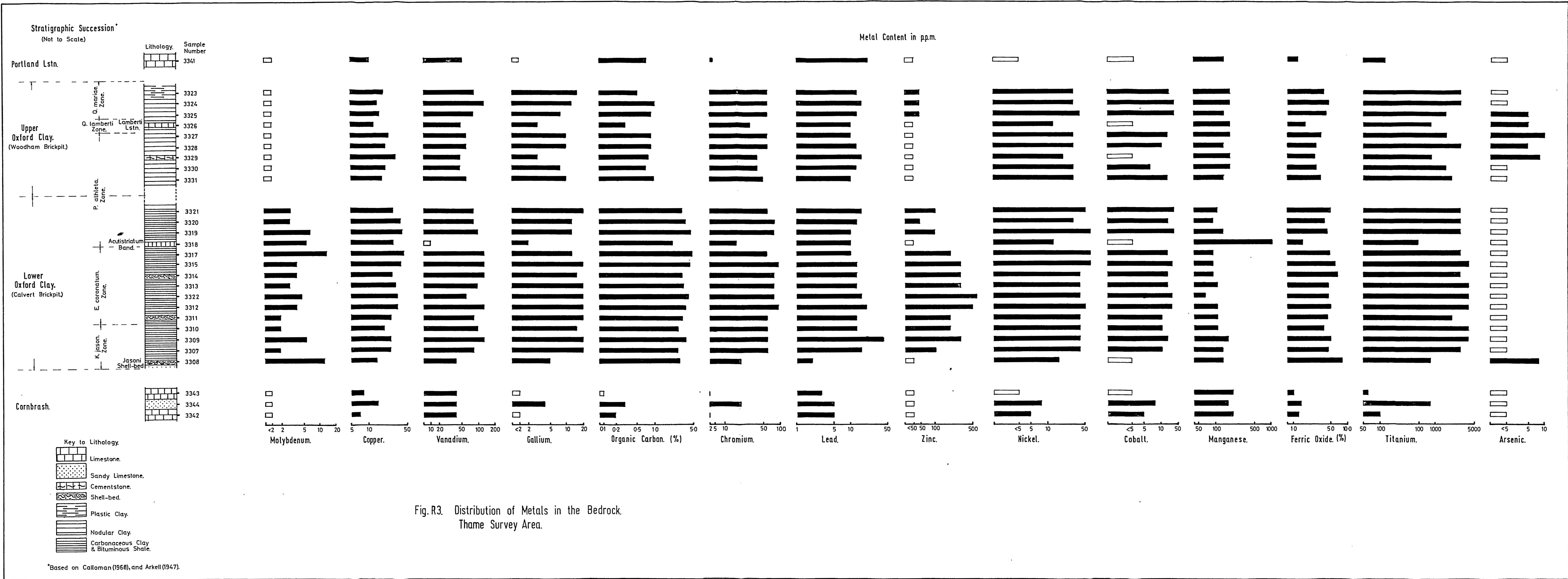


Fig. R2. Distribution of Metals in the Bedrock.
Bowland Forest Survey Area.



PART 3

Figures illustrating the relationship between the metal content of the overburden and geology along soil traverse lines in the five detailed study areas

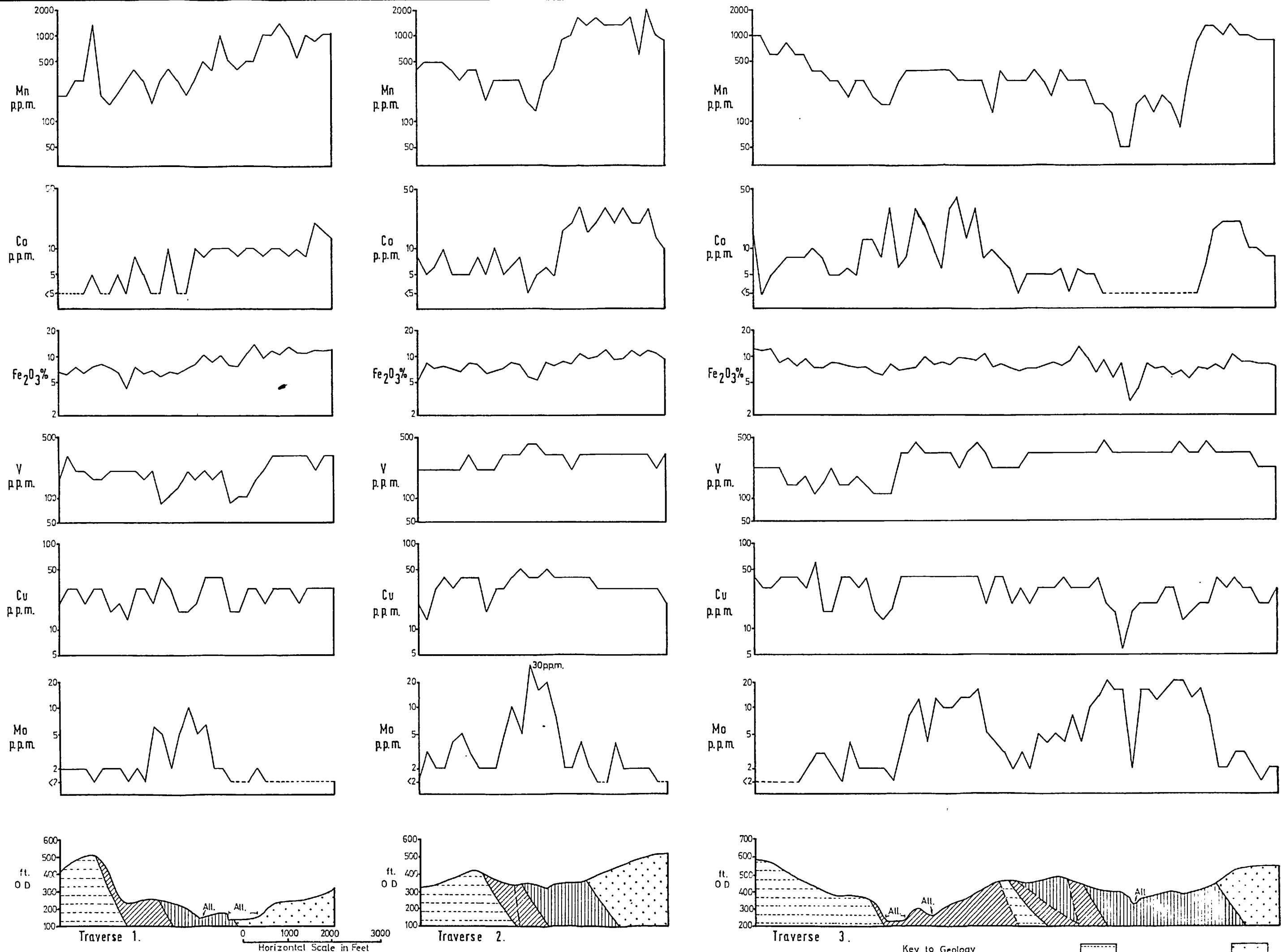


Fig.T1. Relationship Between Metal Content of the Overburden and Geology on Traverses 1,2 & 3.
West Carmarthenshire Survey Area. Sample depth 12-18 ins.

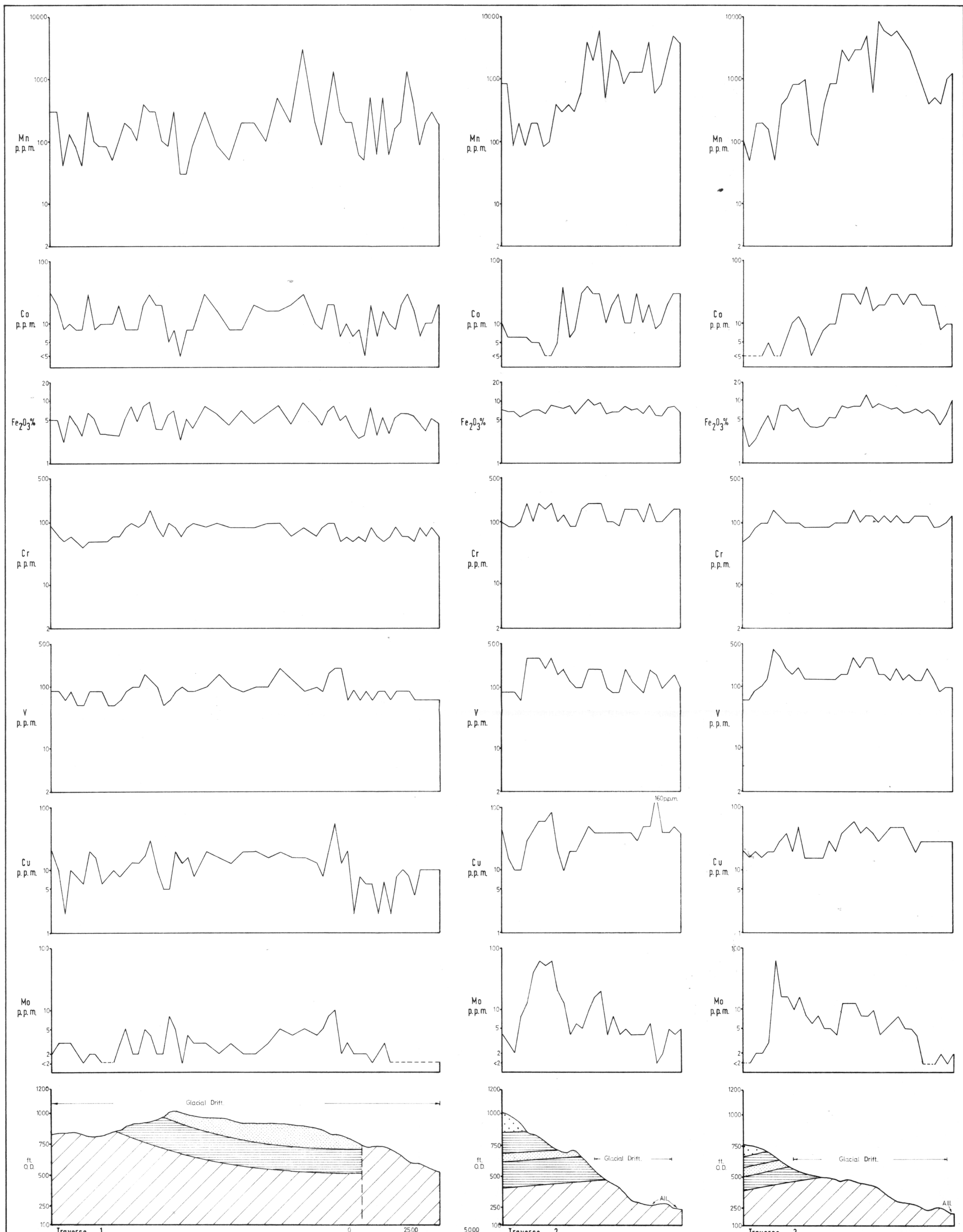


Fig.T2. Relationship Between Metal Content of the Overburden and Geology on Traverses 1,2&3.
Bowland Forest Survey Area.

Key to Geology.

Alluvium.	All.	Bowland Shale.	Worston Shale.
Namurian Sstn.	Bowland Shale Sstn.	Chatburn Lstn.	

Geology after I.G.S. Sheet 68(1960) and Parkinson(1936)

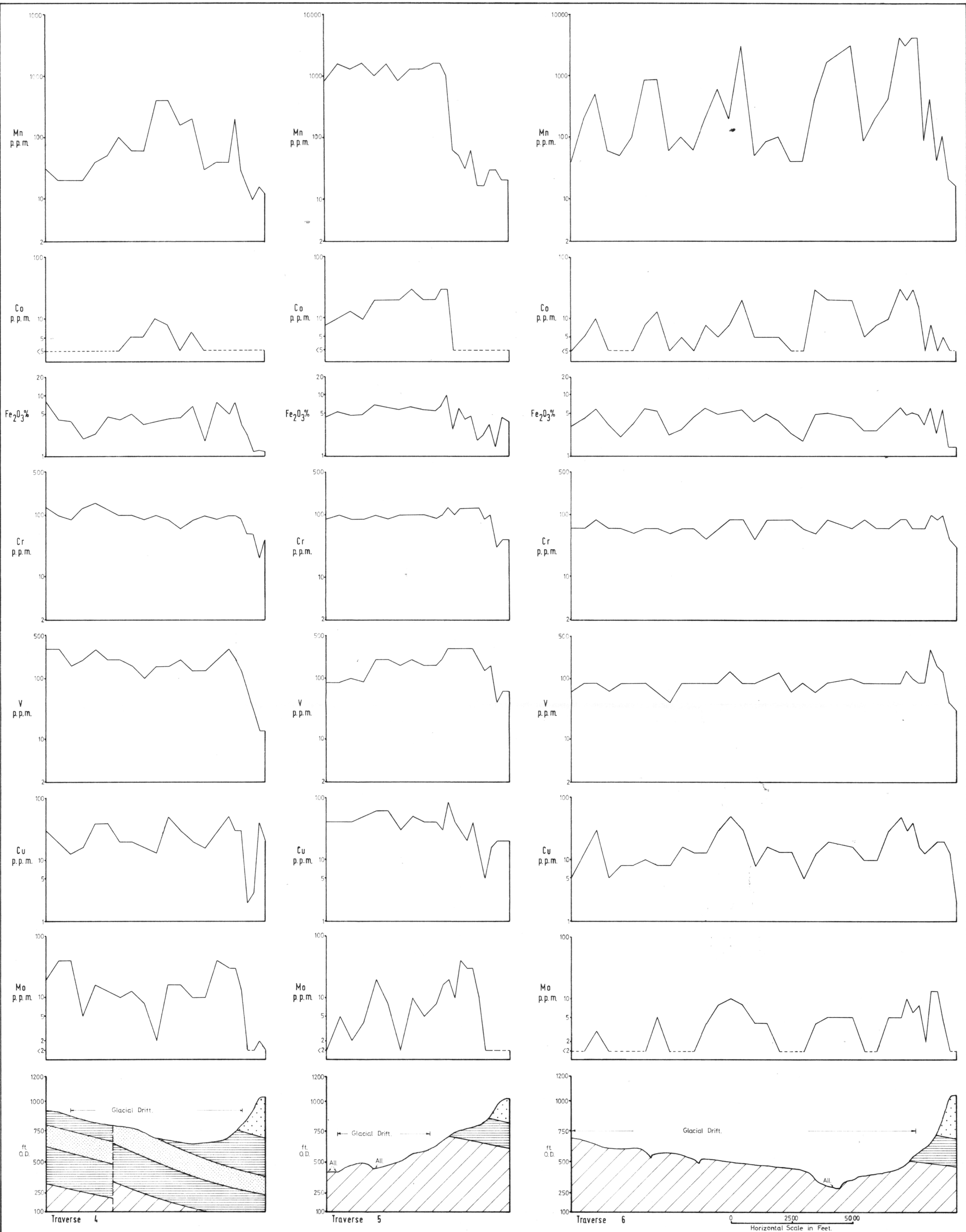


Fig.T3. Relationship Between Metal Content of the Overburden and Geology on Traverses 4,5&6. Bowland Forest Survey Area. Sample depth 12-18ins.

Geology after I.G.S. Sheet 68 (1960), Sheet 91 SE (1883), and Parkinson (1936).

For Key to Geology see Fig. T2.

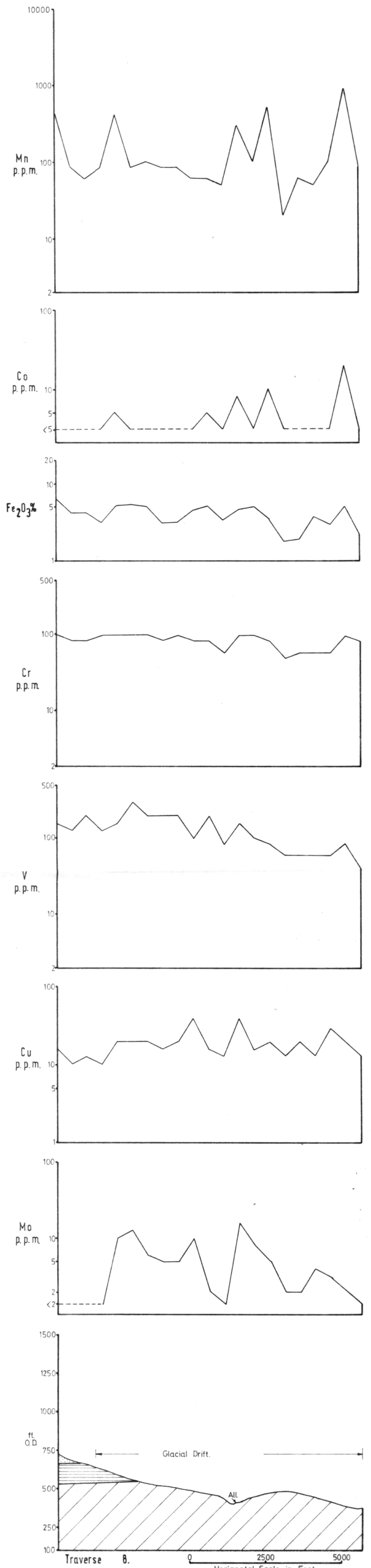
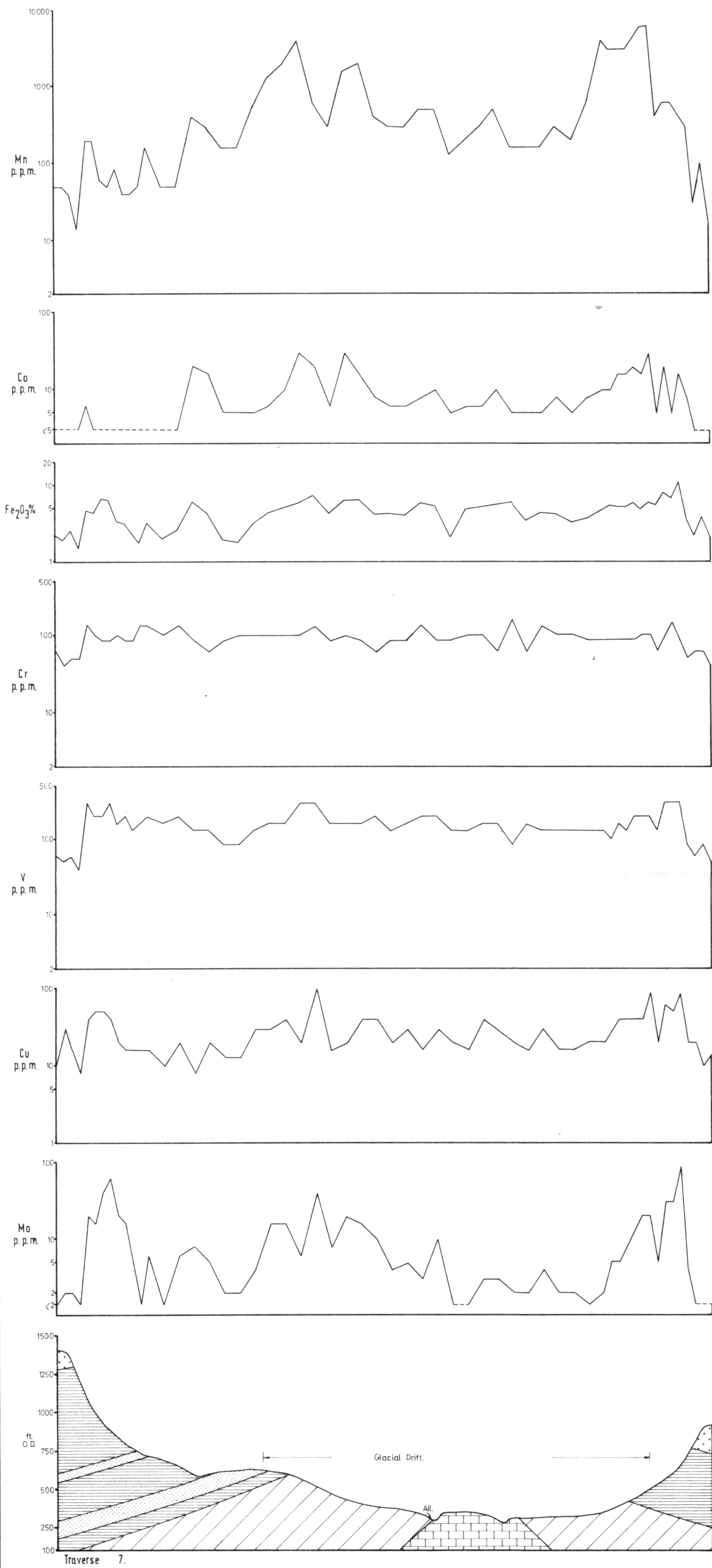


Fig.T4. Relationship Between Metal Content of the Overburden and Geology on Traverses 7&8.
Bowland Forest Survey Area.
Sample depth 12-18ins.

Geology after I.G.S. Sheet 91 SE (1883)
For Key to Geology see Fig.T2.

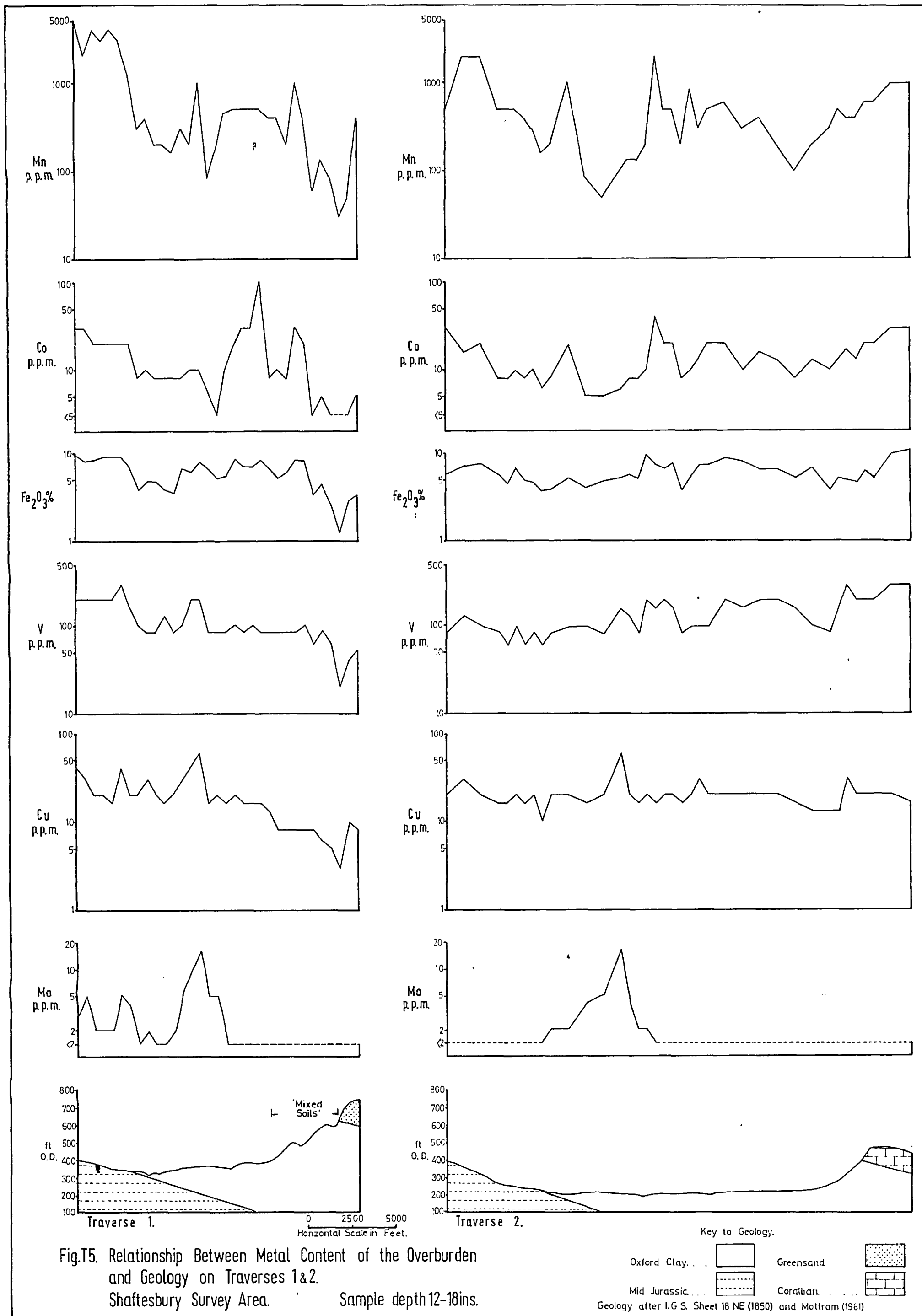


Fig.T5. Relationship Between Metal Content of the Overburden and Geology on Traverses 1&2. Shaftesbury Survey Area. Sample depth 12-18ins.

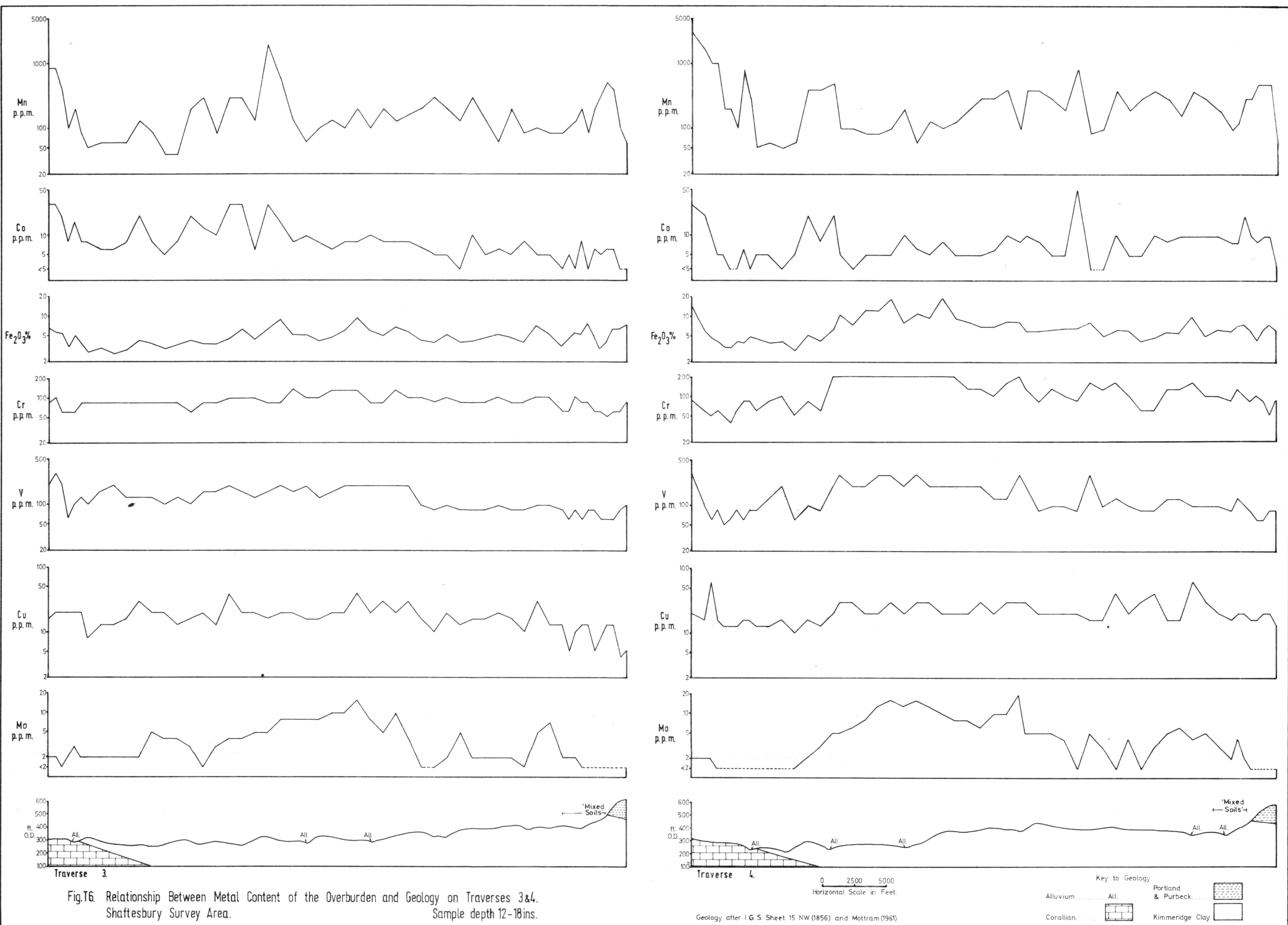
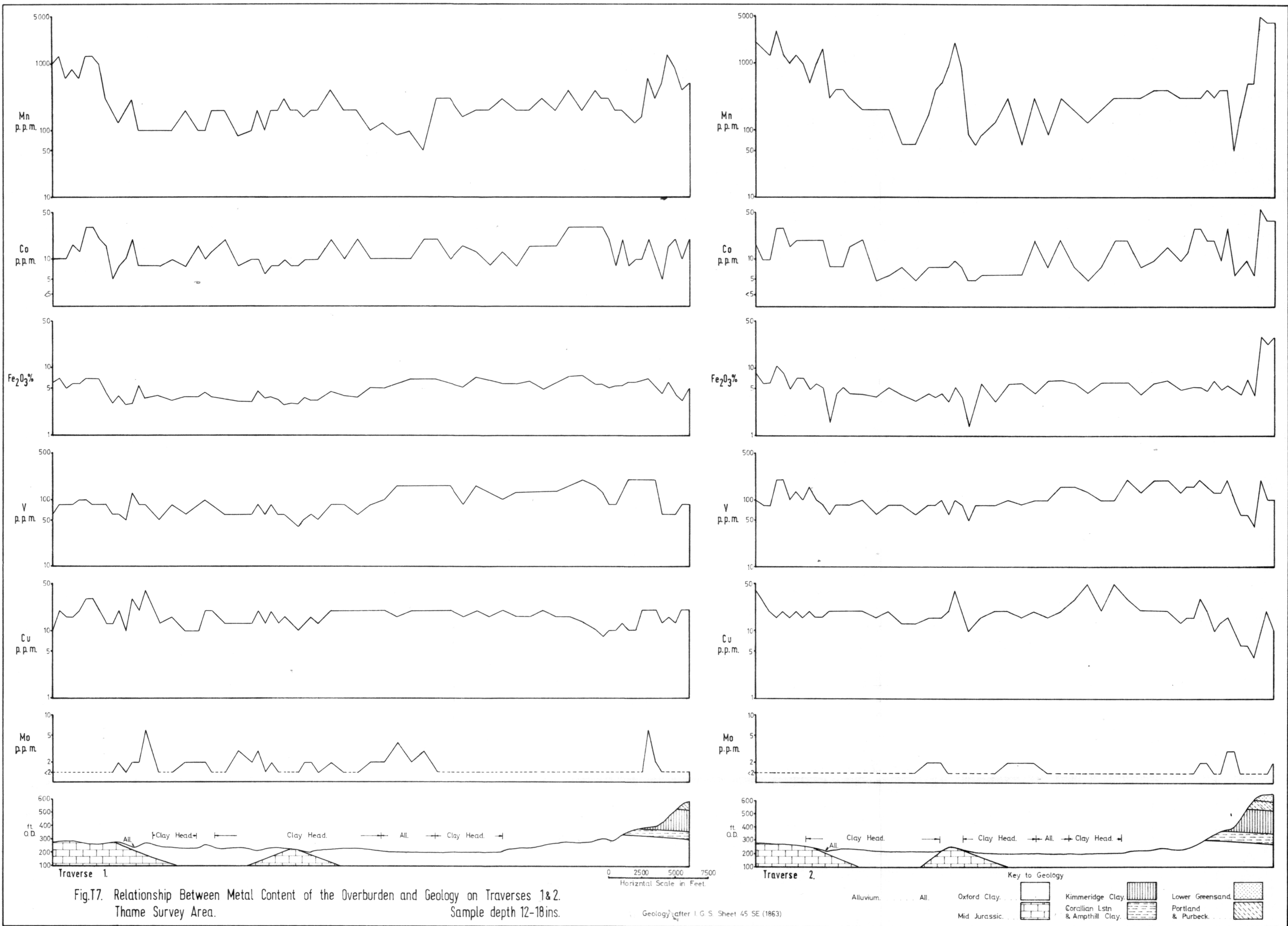
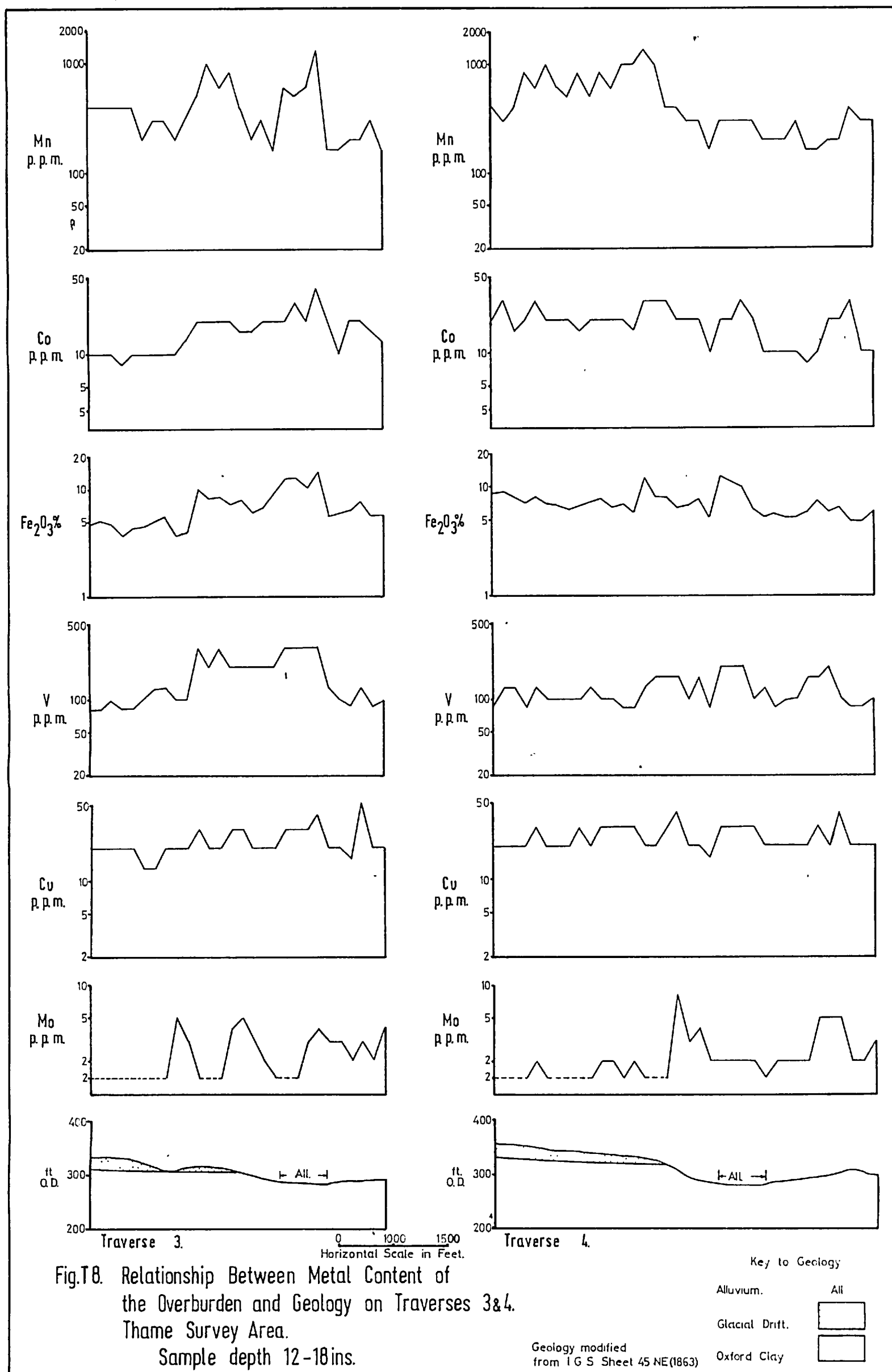


Fig.T6. Relationship Between Metal Content of the Overburden and Geology on Traverses 3&4.
Shaftesbury Survey Area. Sample depth 12-18ins.





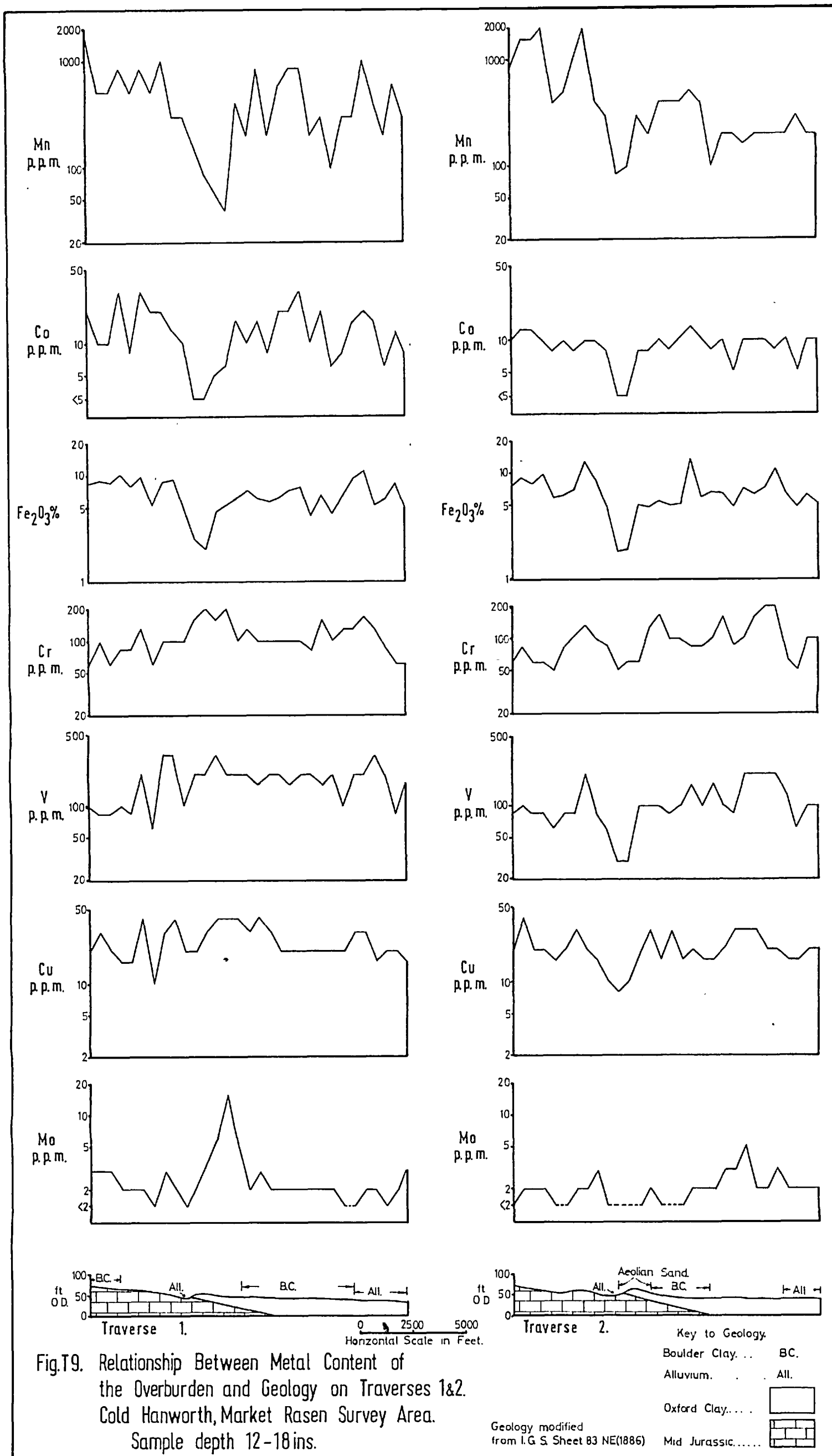


Fig.19. Relationship Between Metal Content of the Overburden and Geology on Traverses 1&2. Cold Hanworth, Market Rasen Survey Area. Sample depth 12-18ins.

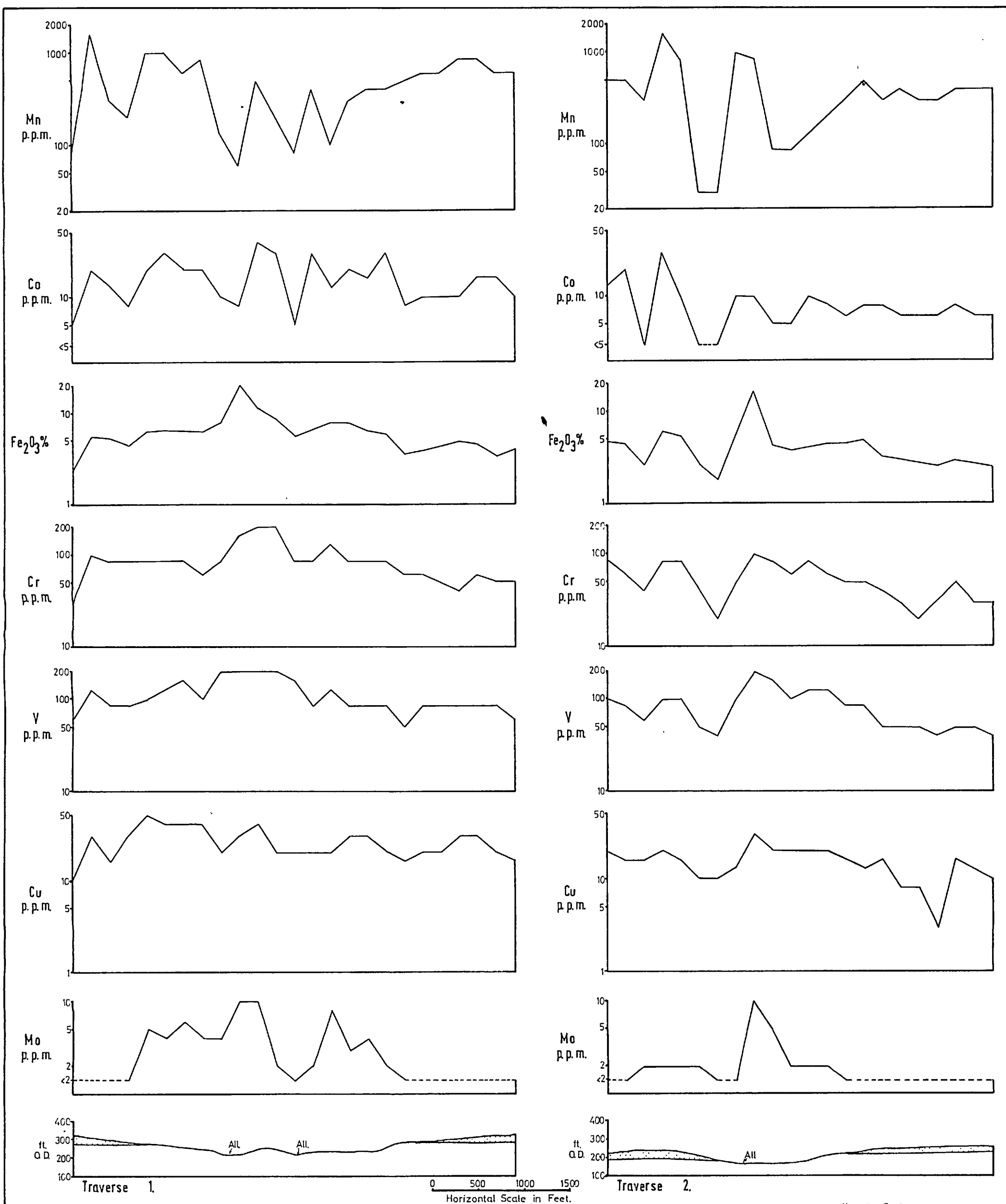


Fig.T10. Relationship Between Metal Content of the Overburden and Geology on Traverses 1 & 2.
South Willingham, Market Rasen Survey Area.
Sample depth 12-18 ins.

Geology after I.G.S. Sheet 83 NE (1886)

Key to Geology.

Alluvium.	All.
Boulder Clay.	
Kimmeridge Clay.	