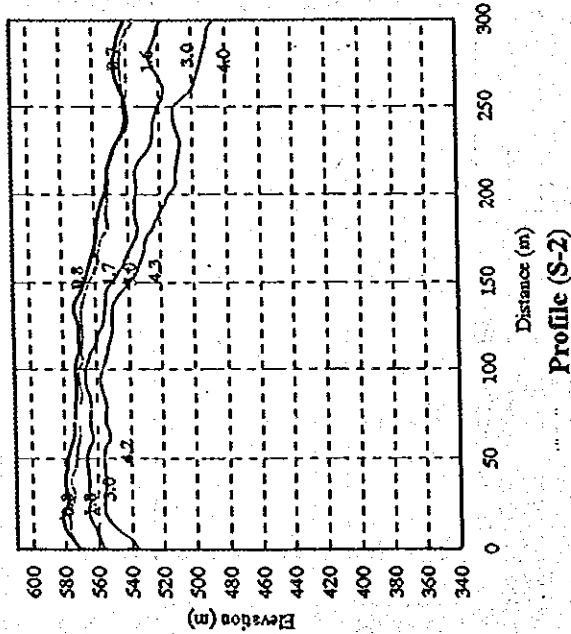
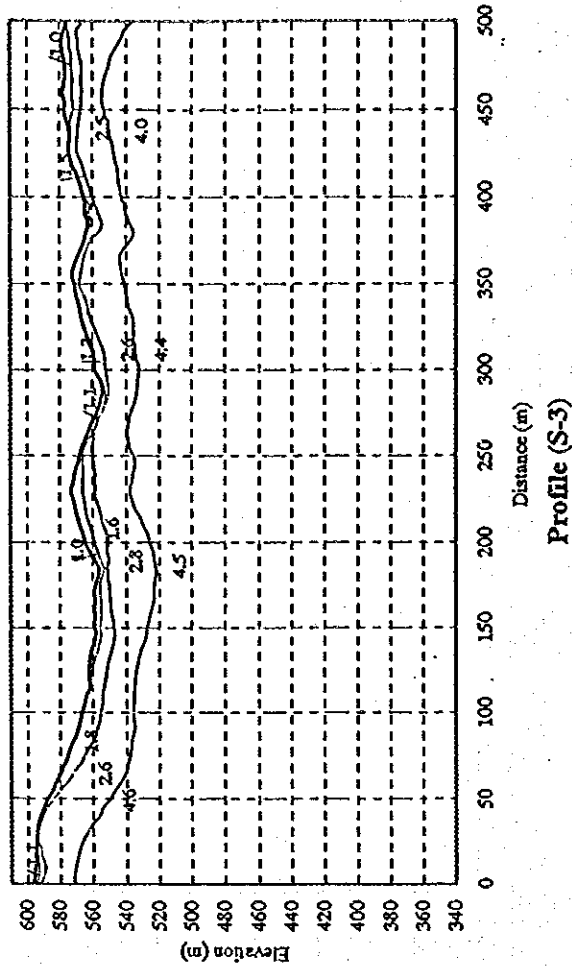


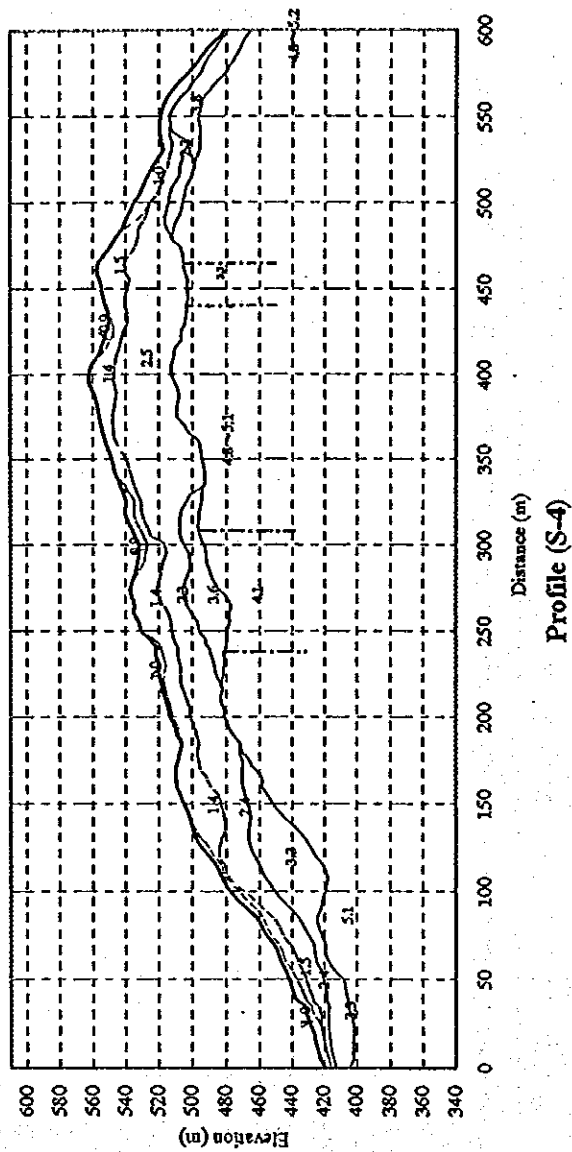
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Figure B3.6-1 Seismic Prospecting,  
 Wave Velocity Profile S-1, Dam Site



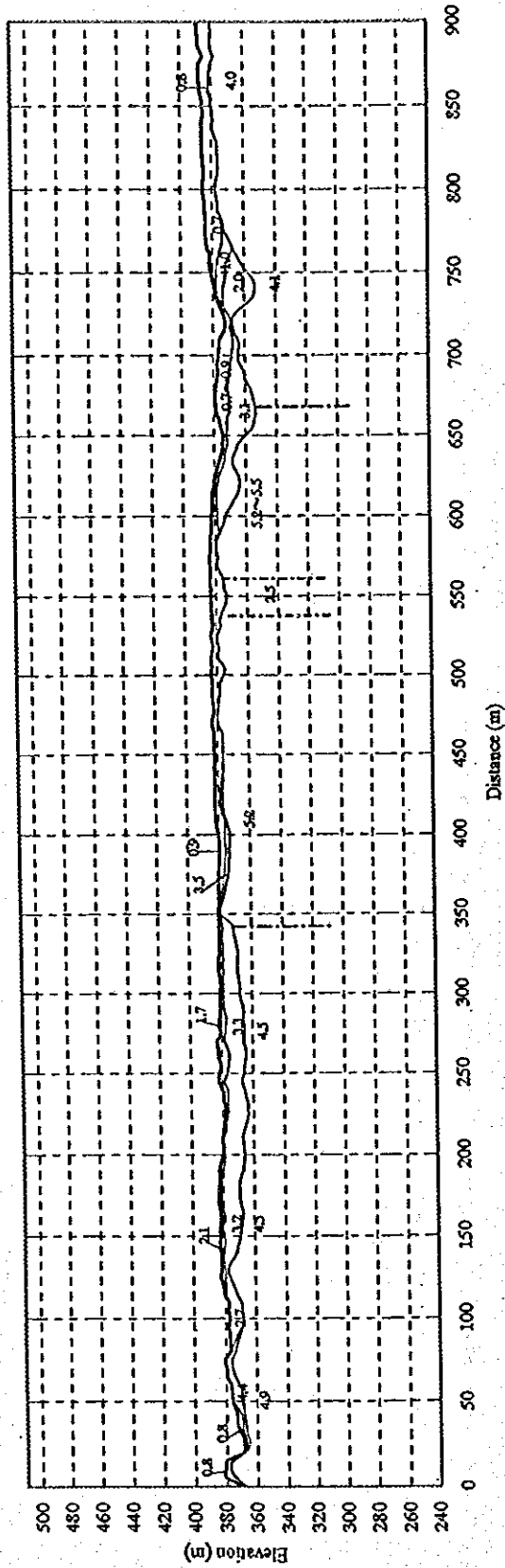
FEASIBILITY STUDY  
 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT  
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Figure B3.6-2 Seismic-Prospecting  
 Wave Velocity Profile S-2 & S-3,  
 Dam Site



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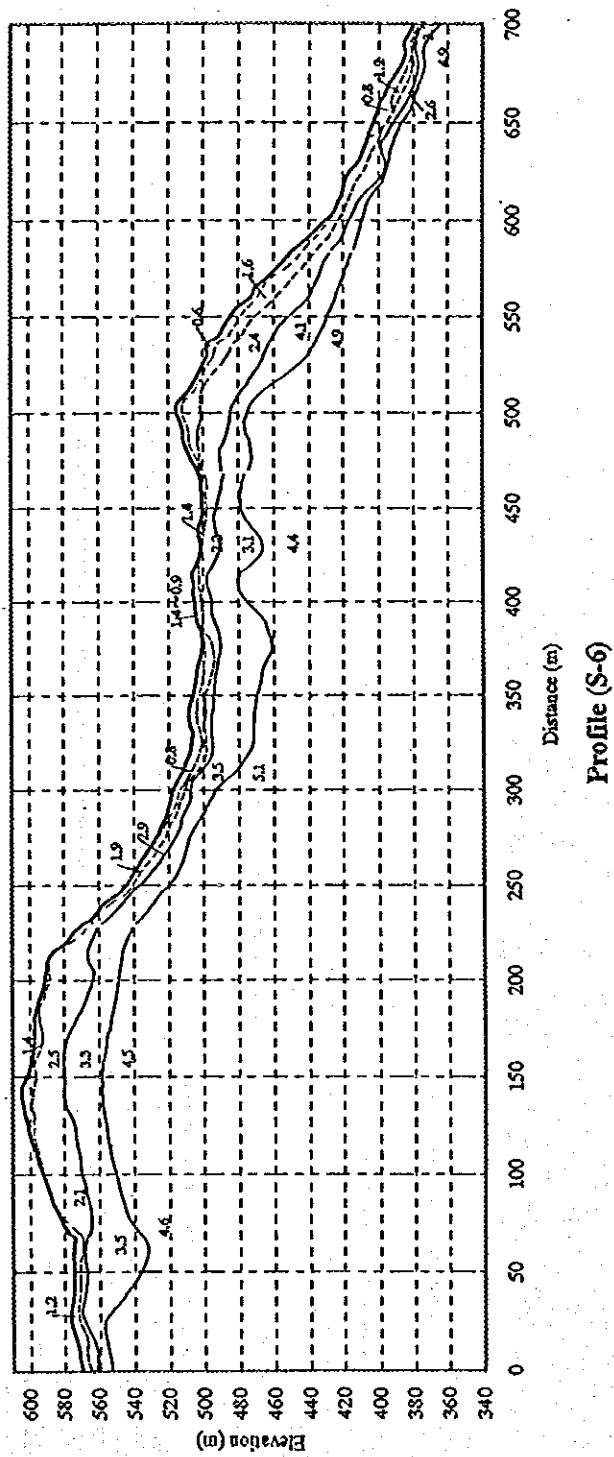
Figure B3.6-3 Seismic Prospecting,  
 Wave Velocity Profile S-4, Dam Site



Profile (S-5)

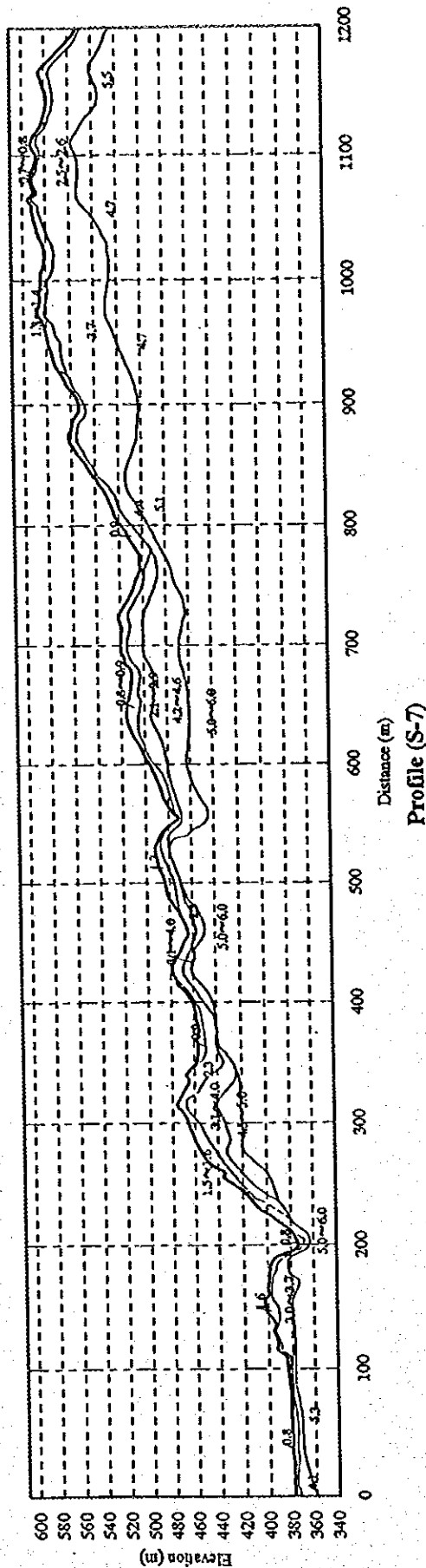
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Figure B3.6-4 Seismic Prospecting,  
 Wave Velocity Profile S-5, Dam Site



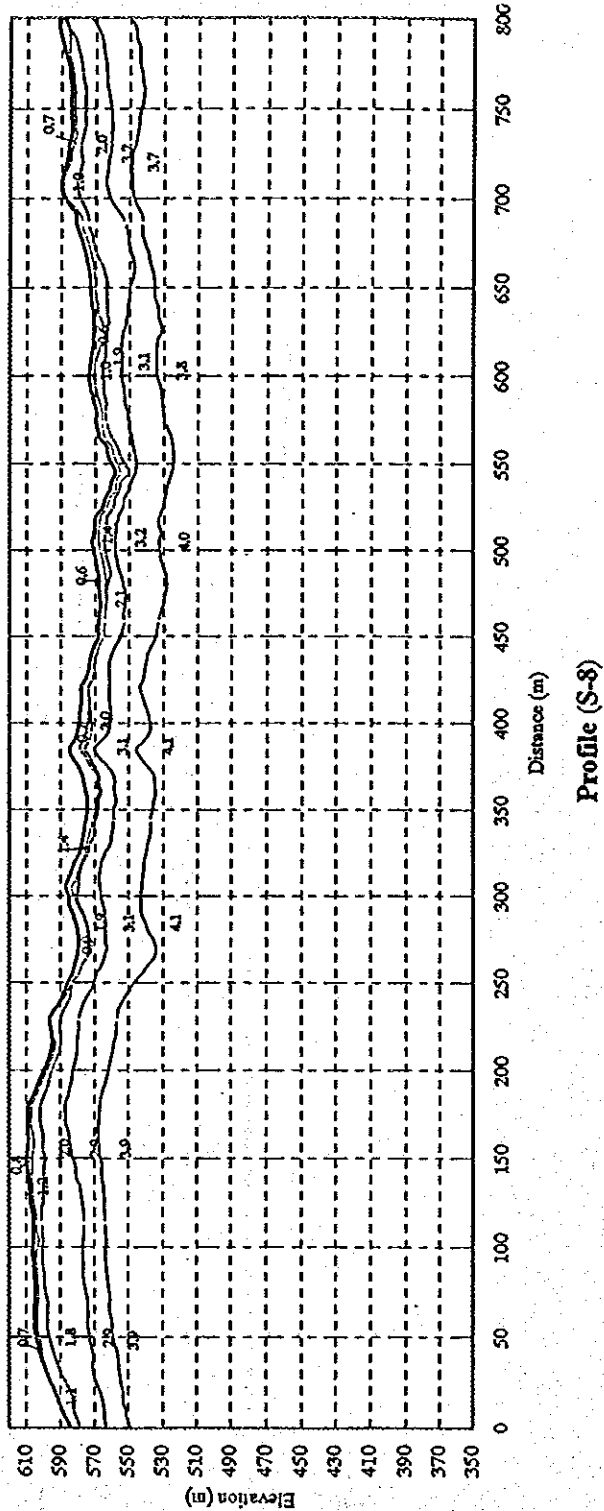
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Figure B3.6-5 Seismic Prospecting,  
 Wave Velocity Profile S-6, Dam Site



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
Figure B3.6-6 Seismic Prospecting,  
 Wave Velocity Profile S-7, Dam Site

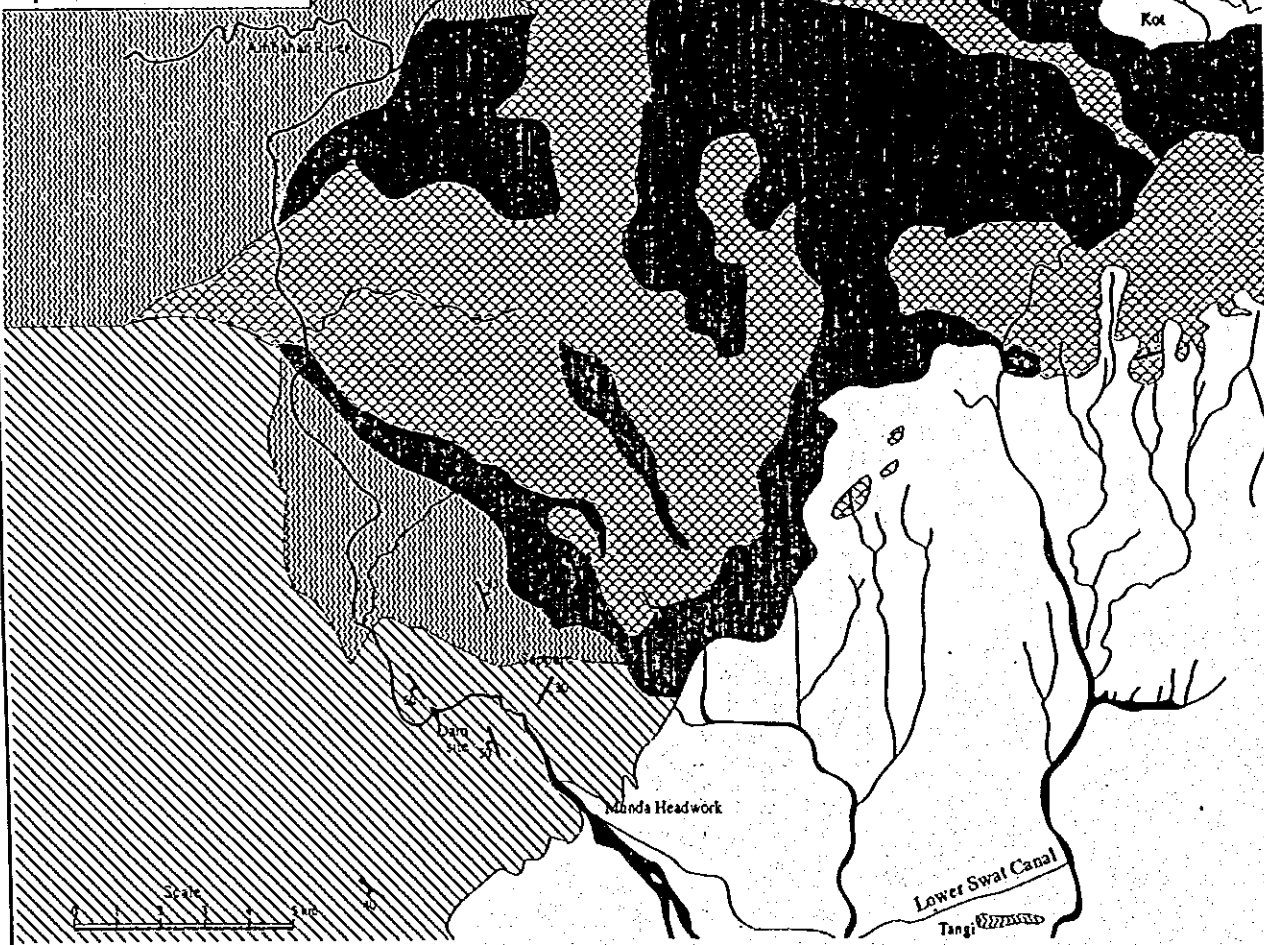


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Figure B3.6-7 Seismic Prospecting,  
 Wave Velocity Profile S-8, Dam Site

**LEGEND**

-  Alluvial deposits
-  Melange zone (Middle Jurassic - Cretaceous)  
Volcanic, ultramafic and other oceanic sediments.
-  Marghozar Formation (Mesozoic)  
Amphibolite schist, quartzite, limestone and marble.
-  Saidu Formation (Triassic - Middle Jurassic)  
Graphitic schist, phyllite with quartz veins and dykes.
-  Kishora Formation (Lower Triassic)  
Calcareous schist with crystalline limestones of varies thickness.
-  Duma Formation (Permian)  
Graphitic schist, calcic marble, psammite schist, quartzite & quartz veins, garnet chlorite schist and basic intrusions.
-  Angra Granite  
Granite and gneiss.
-  Strike and dip (figure) of beds











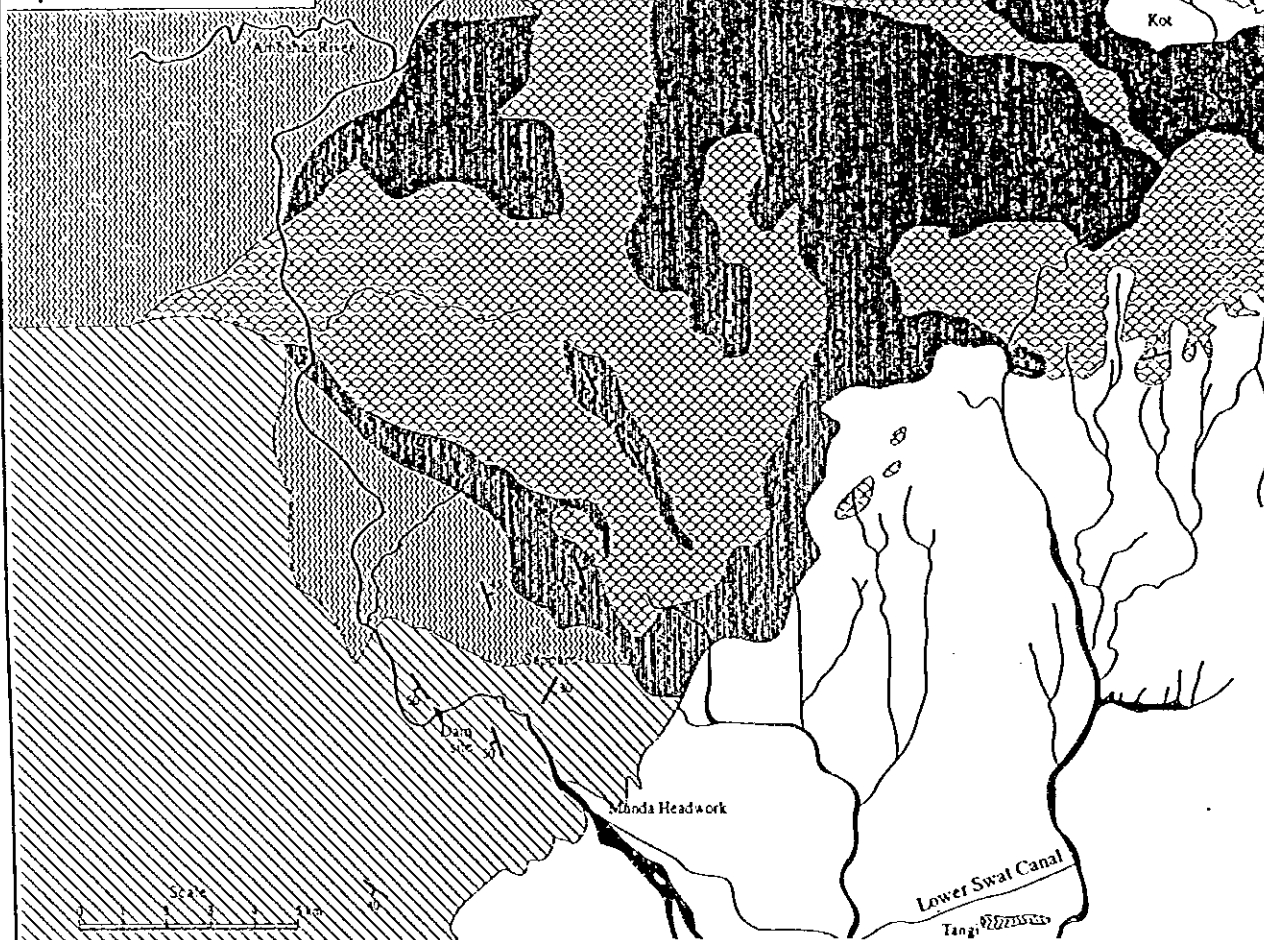
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**Figure B4.1**  
**Geological Map of Dam and Reservoir Area**



**LEGEND**

-  Alluvial deposits
  -  Melange zone  
(Middle Jurassic - Cretaceous)  
Volcanic, ultramafic and other  
oceanic sediments
  -  Marghozar Formation (Mesozoic)  
Amphibolite schist, quartzite,  
limestone and marble.
  -  Saidu Formation  
(Triassic - Middle Jurassic)  
Graphitic schist, phyllite with  
quartz veins and dykes.
  -  Kashara Formation (Lower Triassic)  
Calcareous schist with  
crystalline limestones of varies  
varies thickness.
  -  Dama Formation (Permian)  
Graphitic schist, calotte marble,  
pyramitic schist, quartzite &  
quartz veins, garnet chlorite  
schist and basic intrusions.
  -  Augra Granite  
Granite and gneiss.
-  40 Strike and dip (figure) of beds



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Figure B4.1  
Geological Map of Dam and Reservoir Area

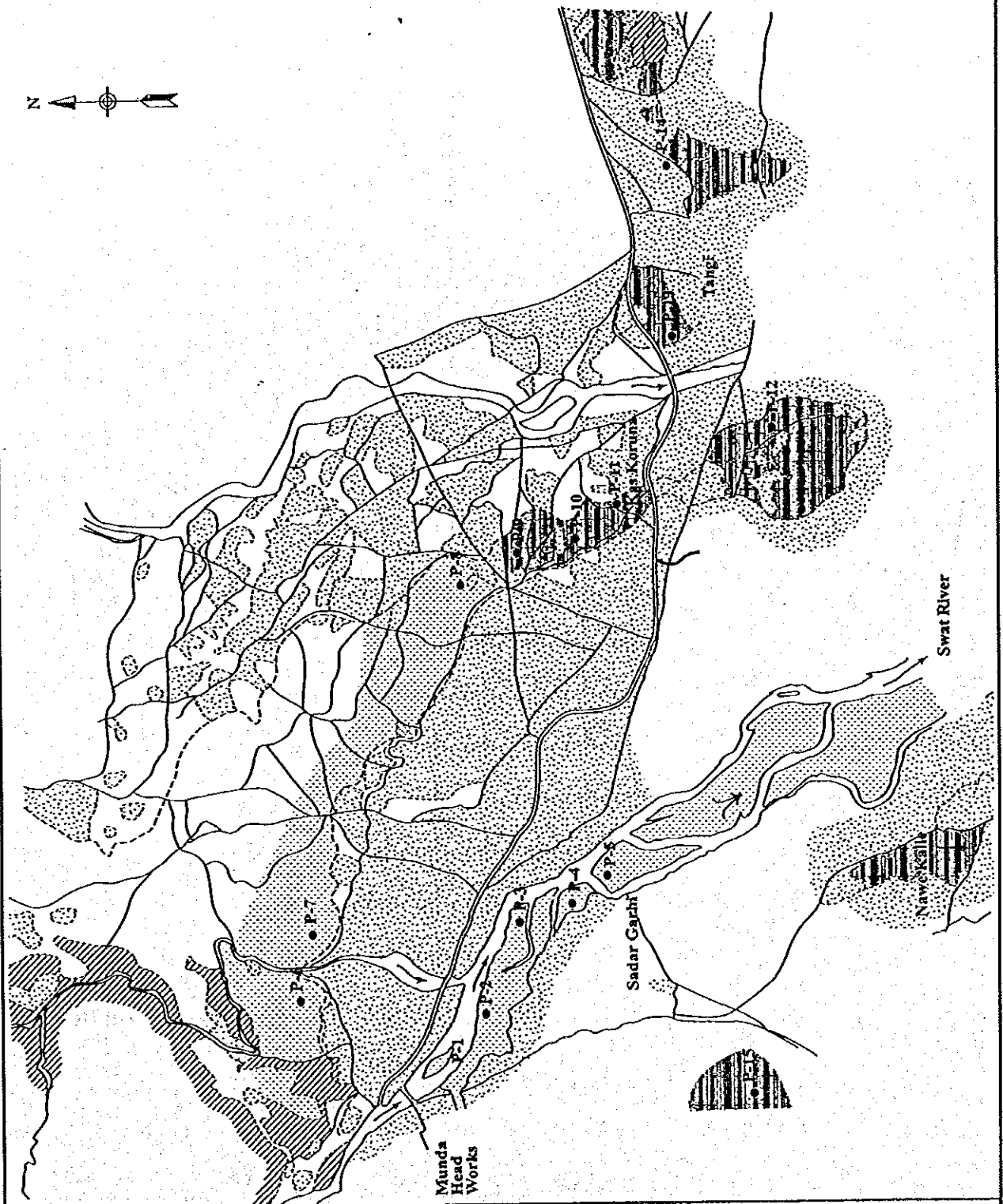
**Legend**

- Gravel
- Gravel + Silt
- Silt
- Rocky area (Pelitic schist)
- Cultivated or housing area
- Limestone

**Pits**

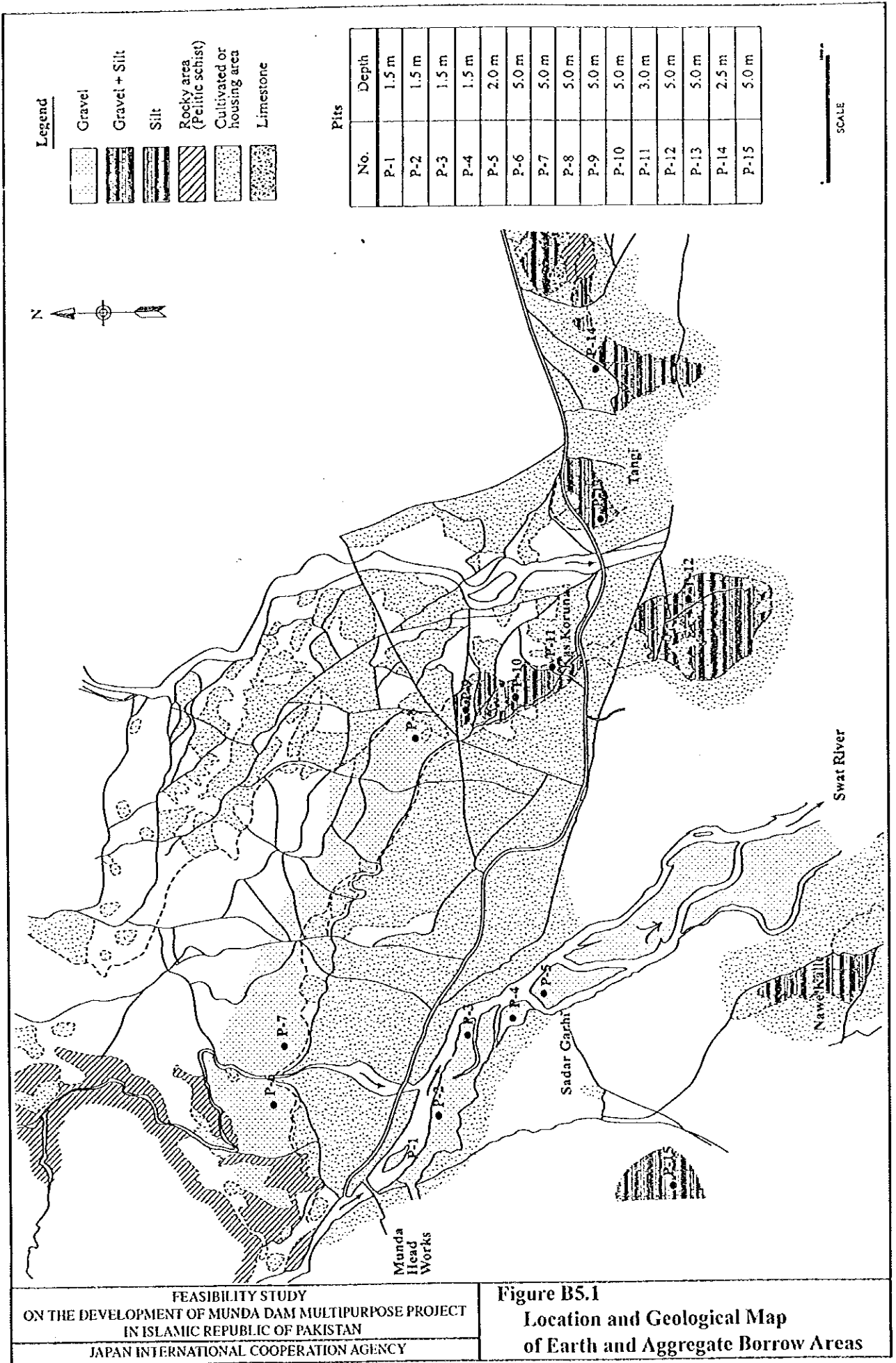
No.	Depth
P-1	1.5 m
P-2	1.5 m
P-3	1.5 m
P-4	1.5 m
P-5	2.0 m
P-6	5.0 m
P-7	5.0 m
P-8	5.0 m
P-9	5.0 m
P-10	5.0 m
P-11	3.0 m
P-12	5.0 m
P-13	5.0 m
P-14	2.5 m
P-15	5.0 m

SCALE



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 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT  
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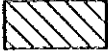
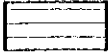
**Figure B5.1**  
 Location and Geological Map  
 of Earth and Aggregate Borrow Areas

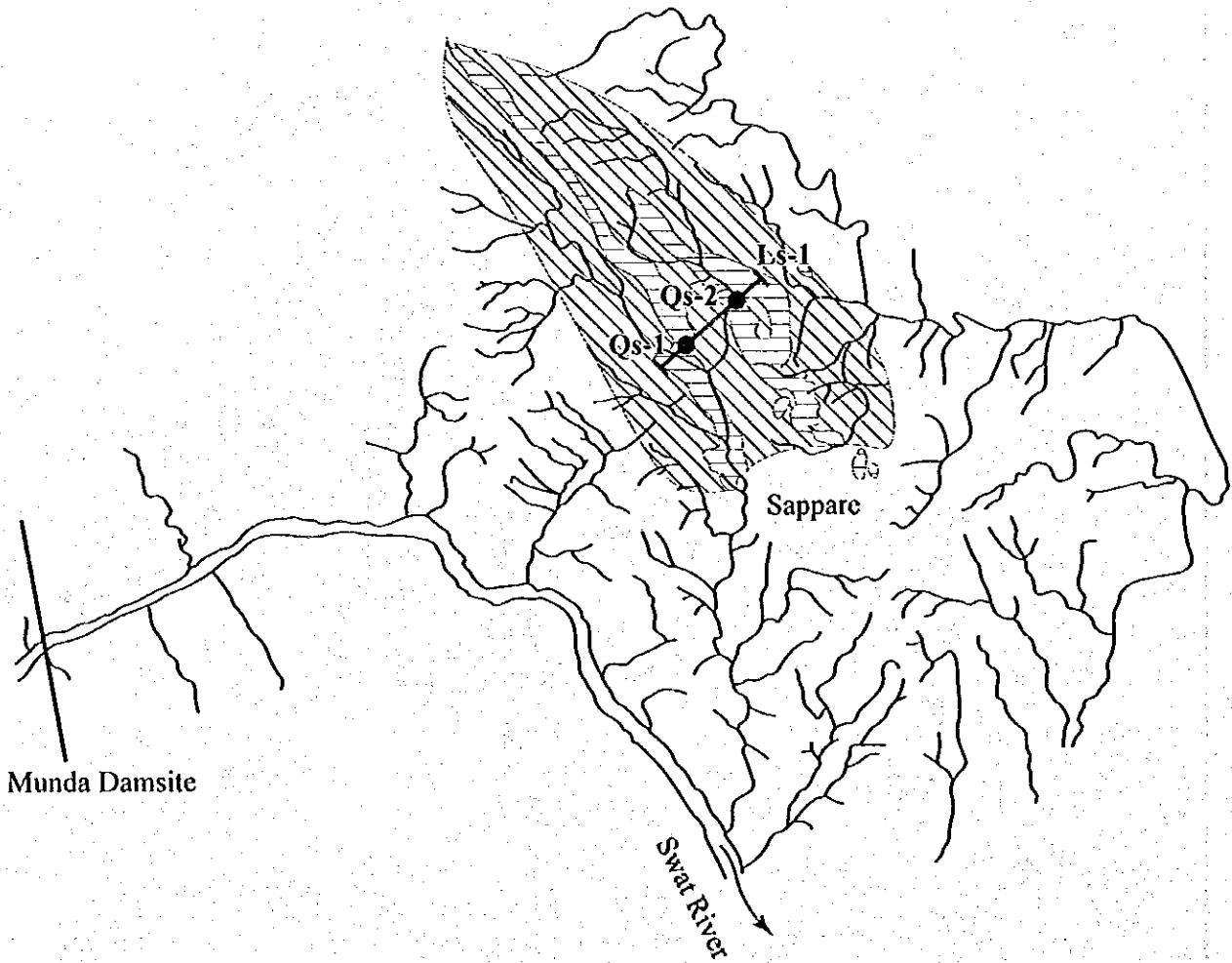


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**Legend**

-  Pelitic schist
-  Limestone



Munda Damsite

Swat River

Sappare

**Seismic Prospecting Line**

No.	Length
Ls-1	520 m

**Drill Holes**

No.	Depth
Qs-1	50 m
Qs-2	100m



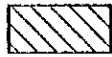


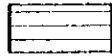

**SCALE**

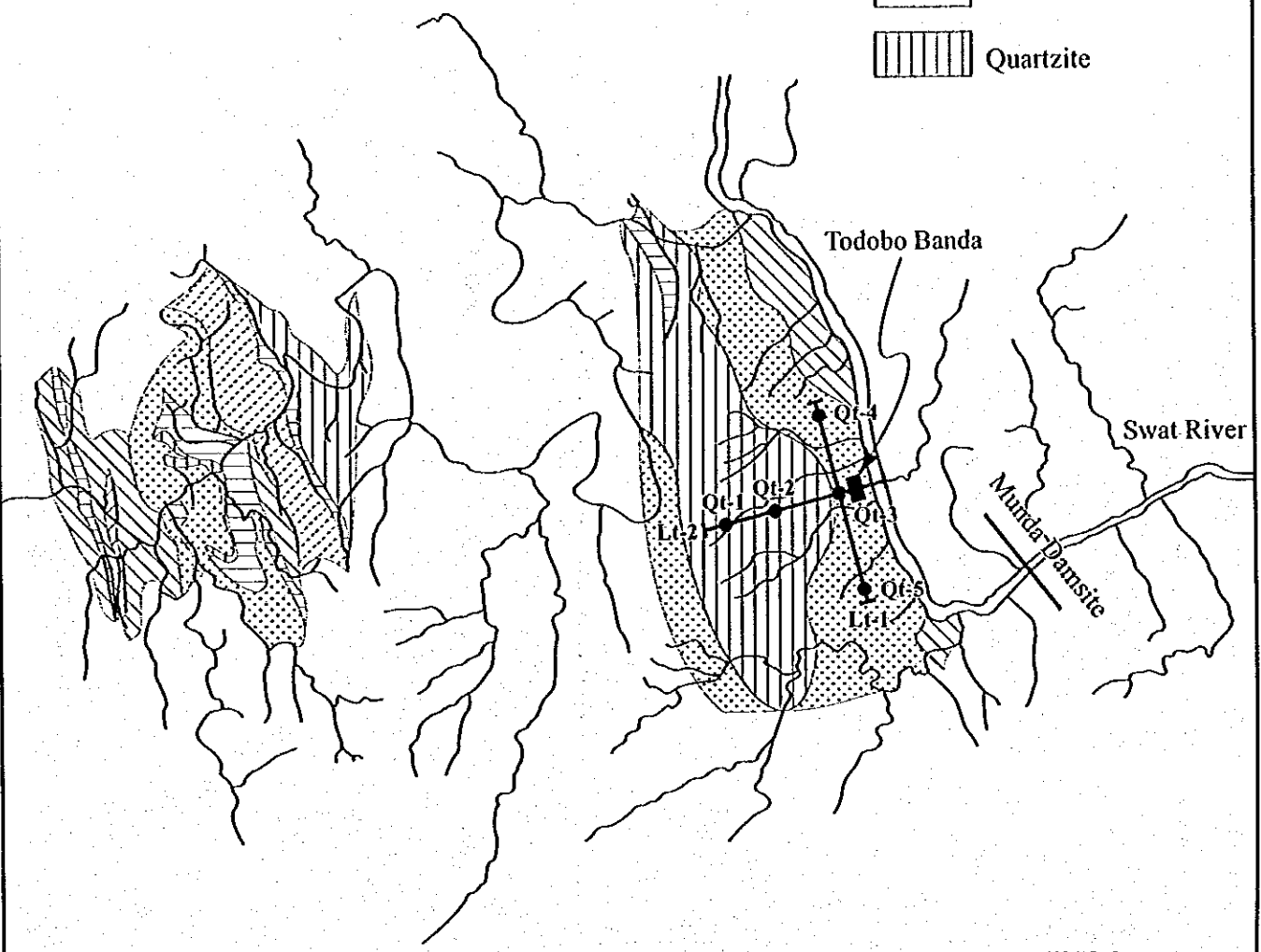
FEASIBILITY STUDY  
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT  
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**Figure B5.2-1**  
**Investigation Location and Geological Map of**  
**Sappare Quarry**

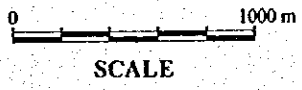


**Legend**

-  Pelitic schist
-  Psammitic schist
-  Calcareous schist
-  Limestone
-  Quartzite

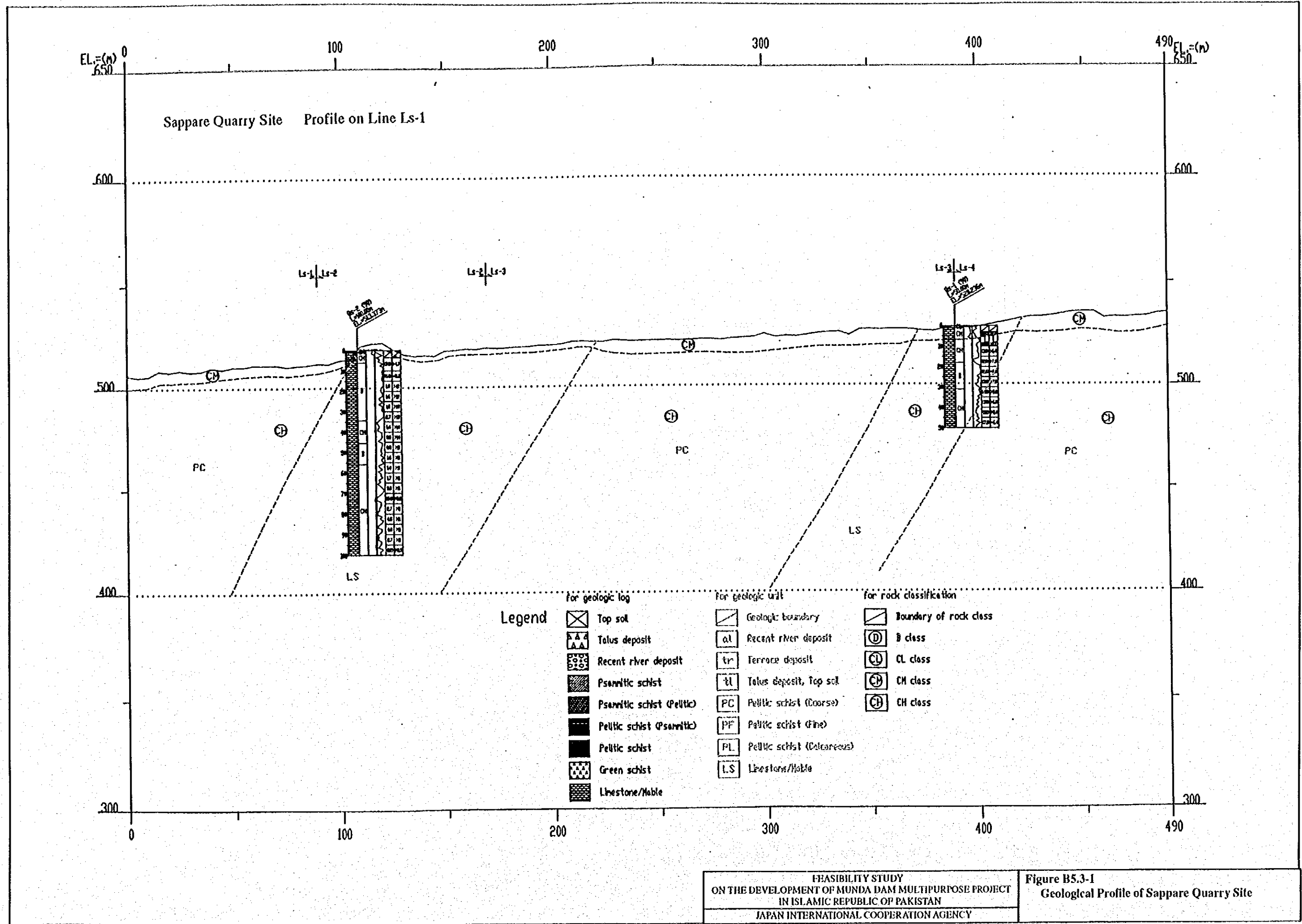


Seismic Prospecting Line		Drill Holes	
No.	Length	No.	Depth
Lt-1	1,080 m	Qt-1	50 m
Lt-2	850 m	Qt-2	100m
		Qt-3	50 m
		Qt-4	50 m
		Qt-5	50 m



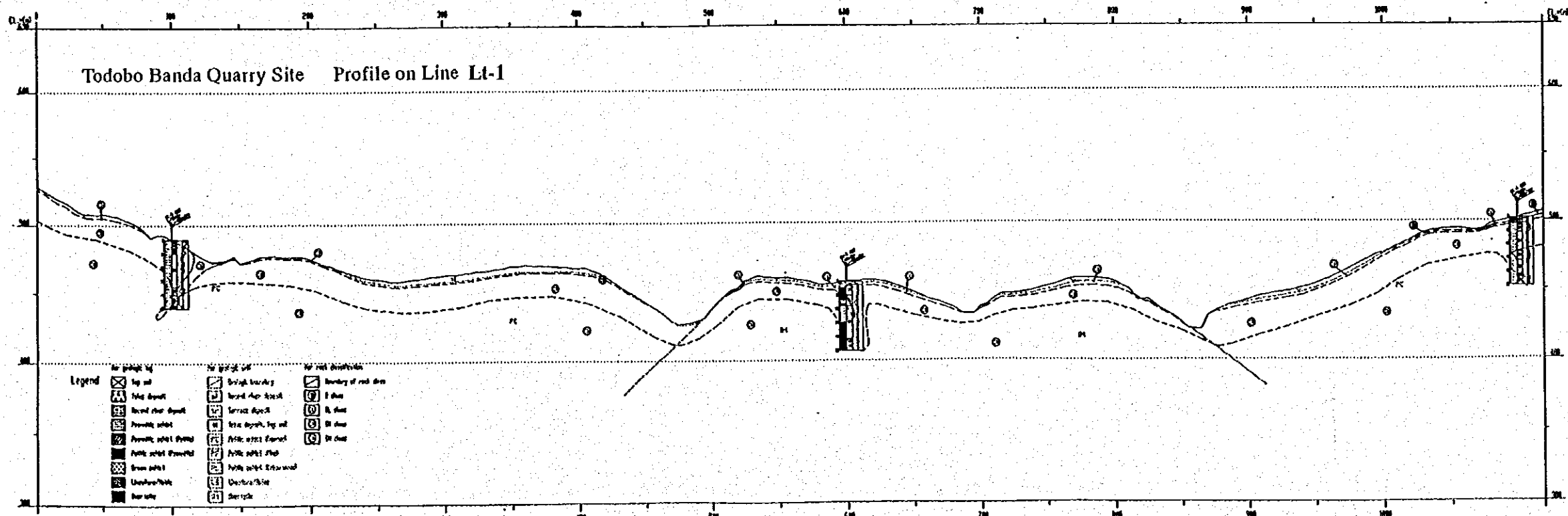
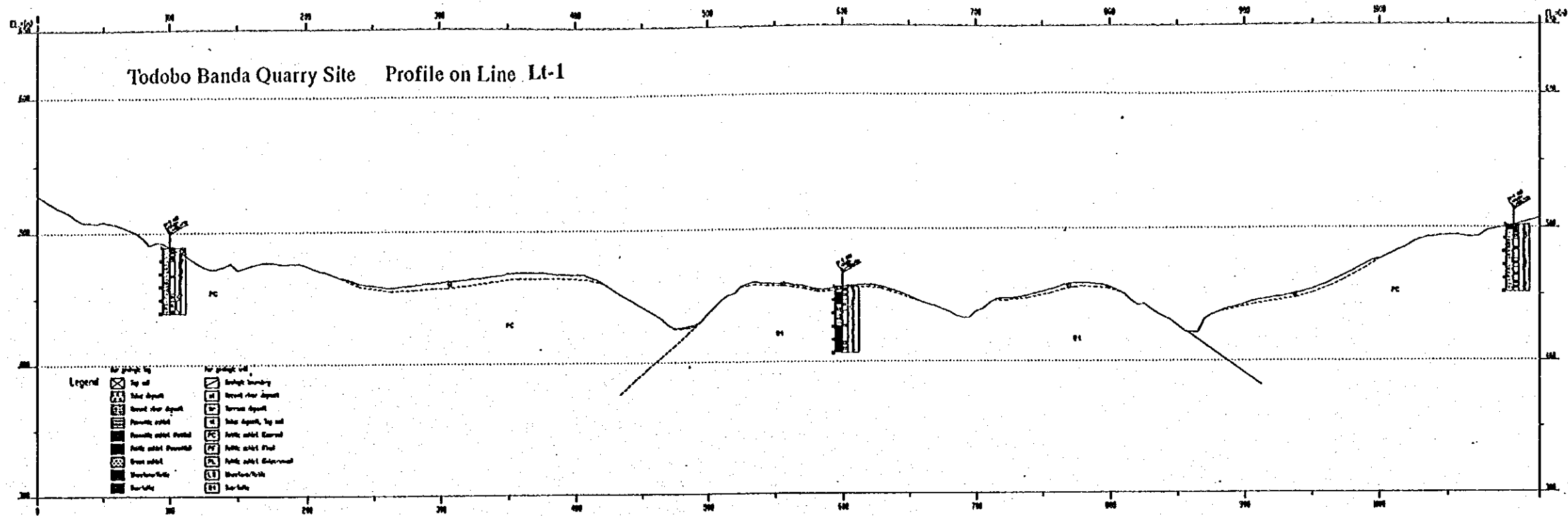
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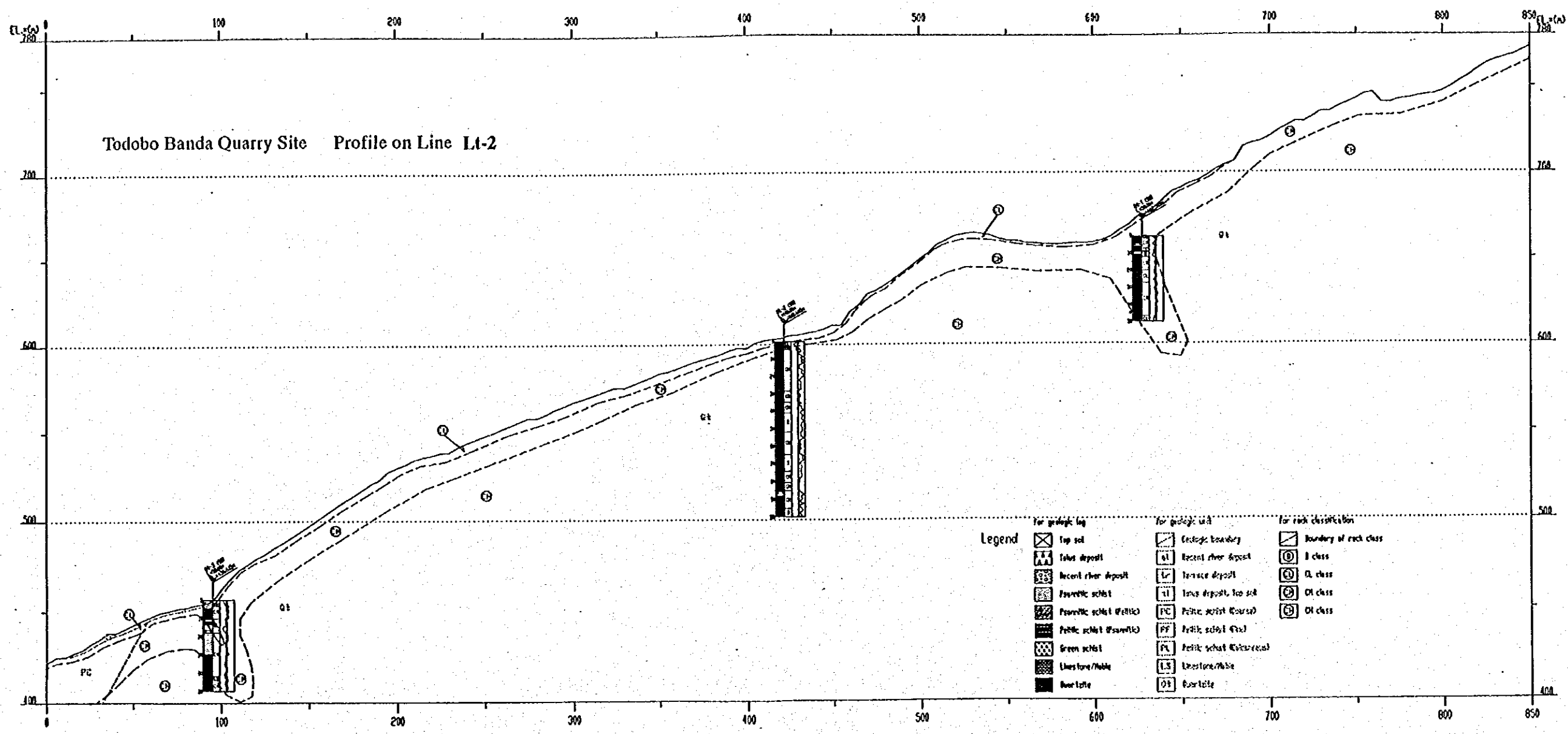
**Figure B5.2-2**  
 Investigation Location and Geological Map of  
 Todobo Banda Quarry



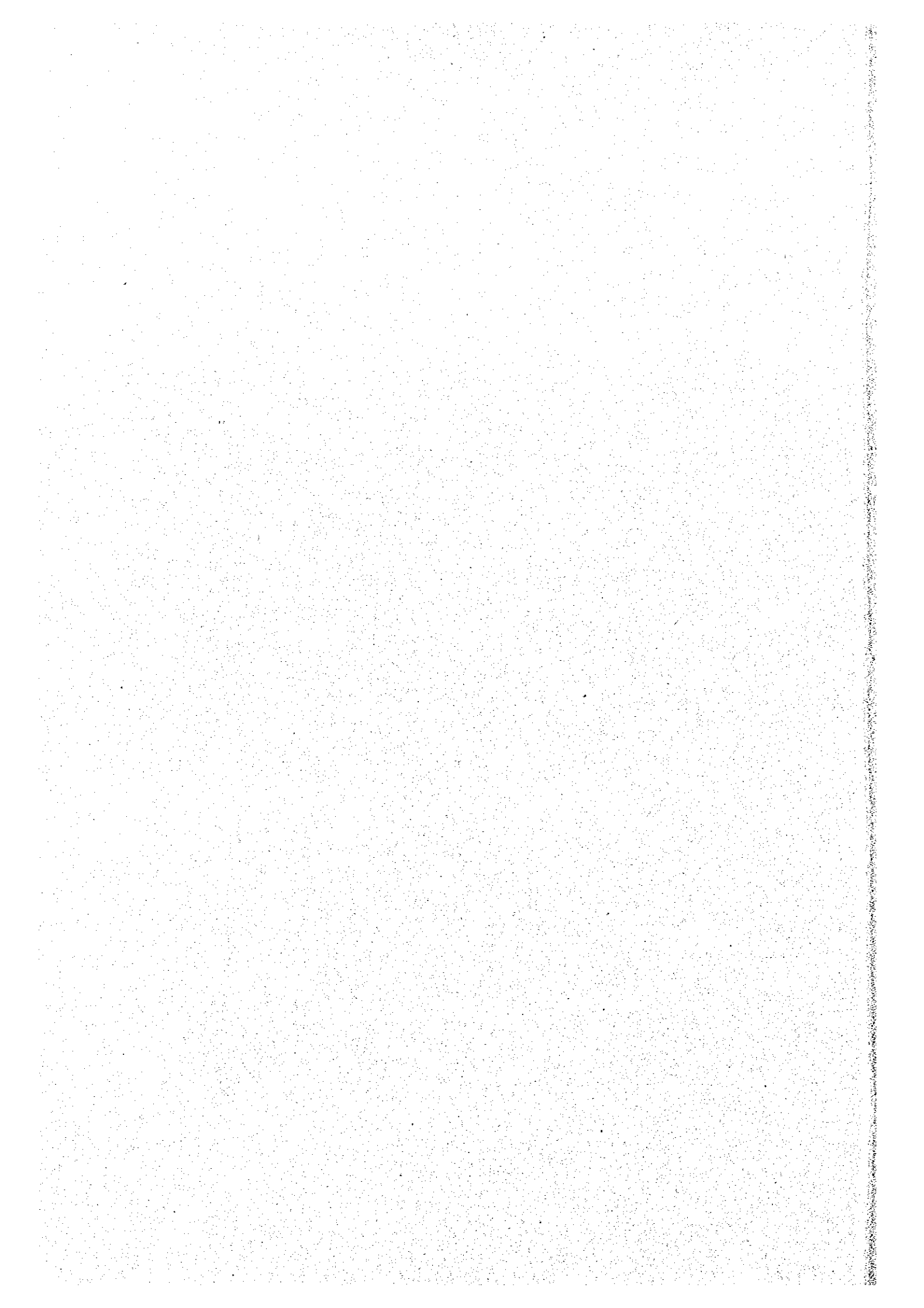
FEASIBILITY STUDY  
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT  
IN ISLAMIC REPUBLIC OF PAKISTAN  
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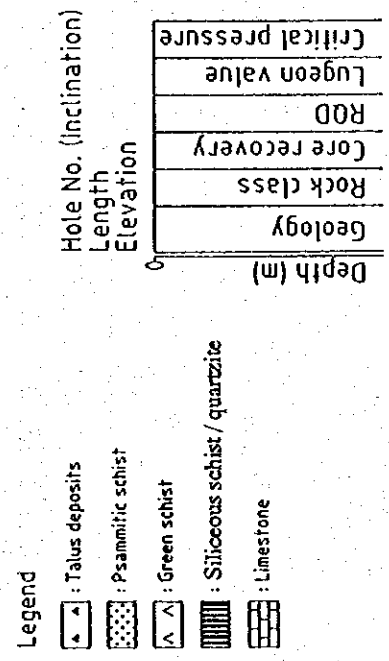
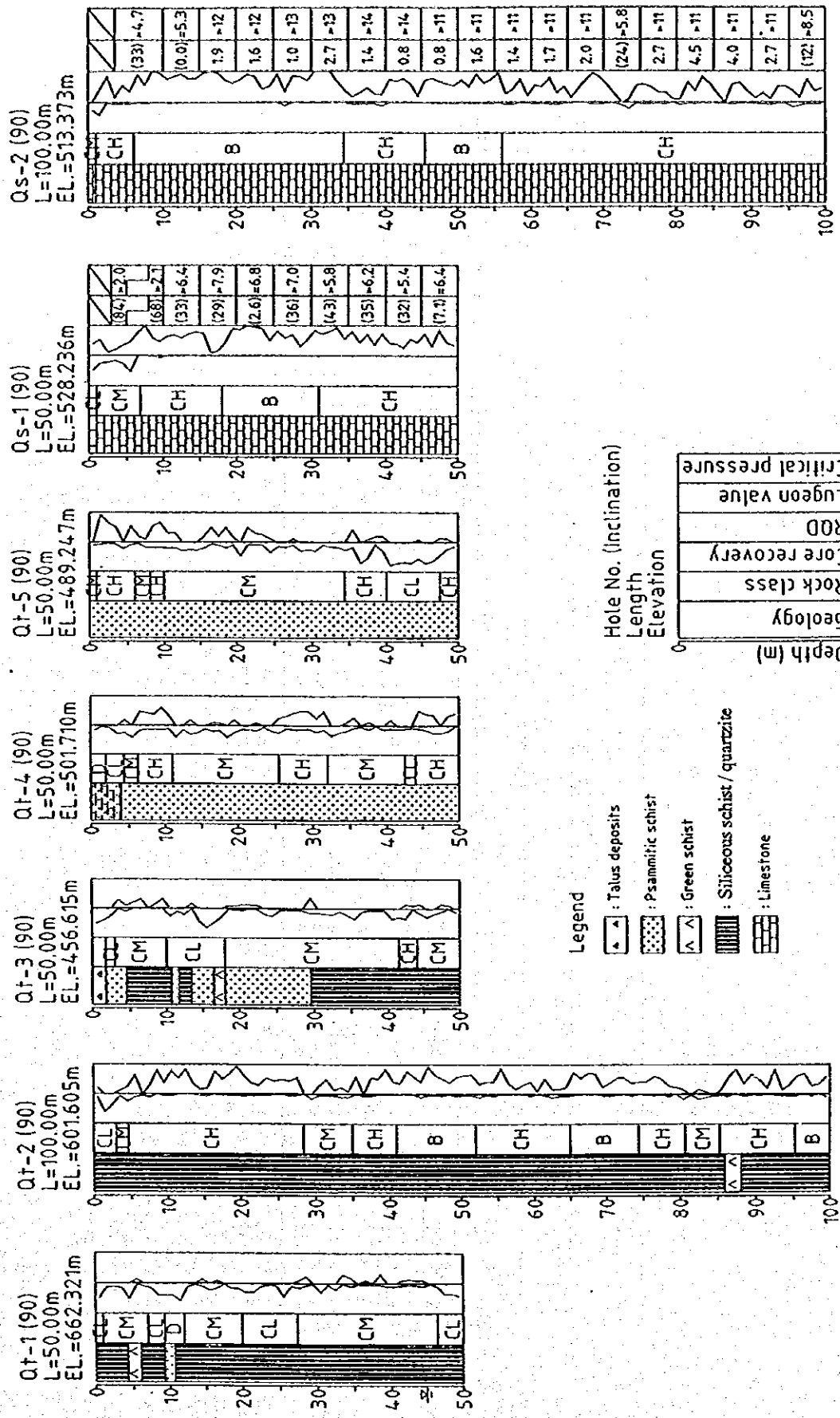
**Figure B5.3-1**  
Geological Profile of Sappare Quarry Site





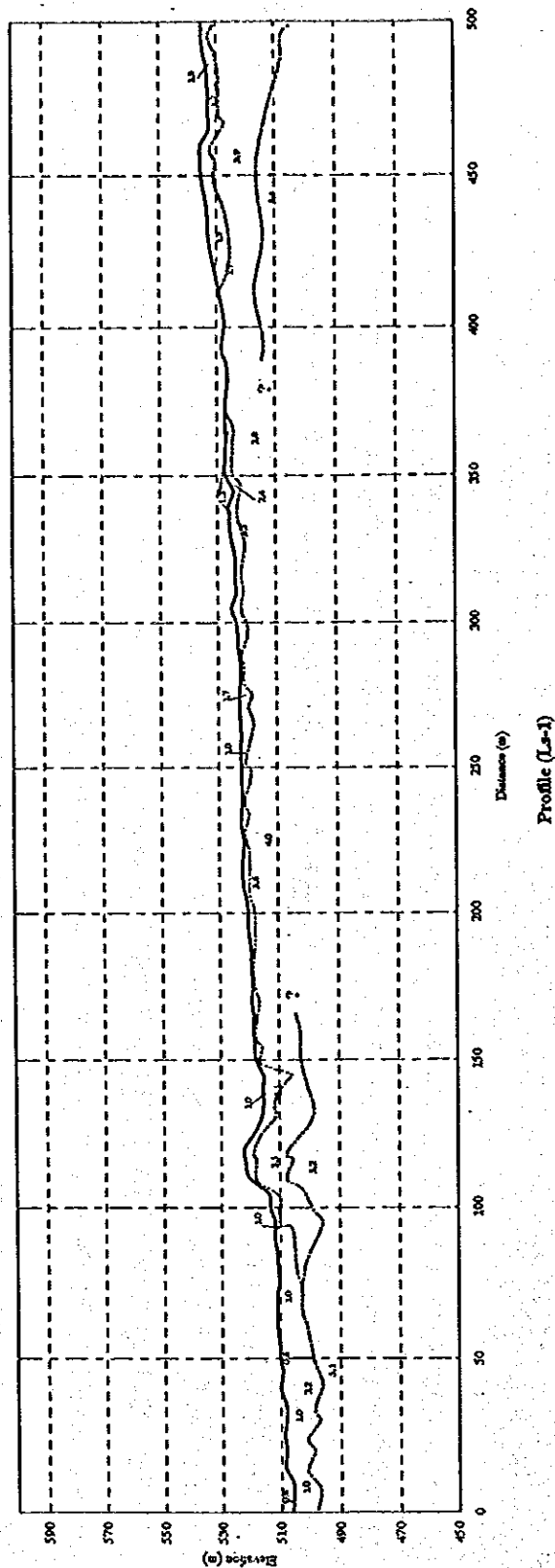






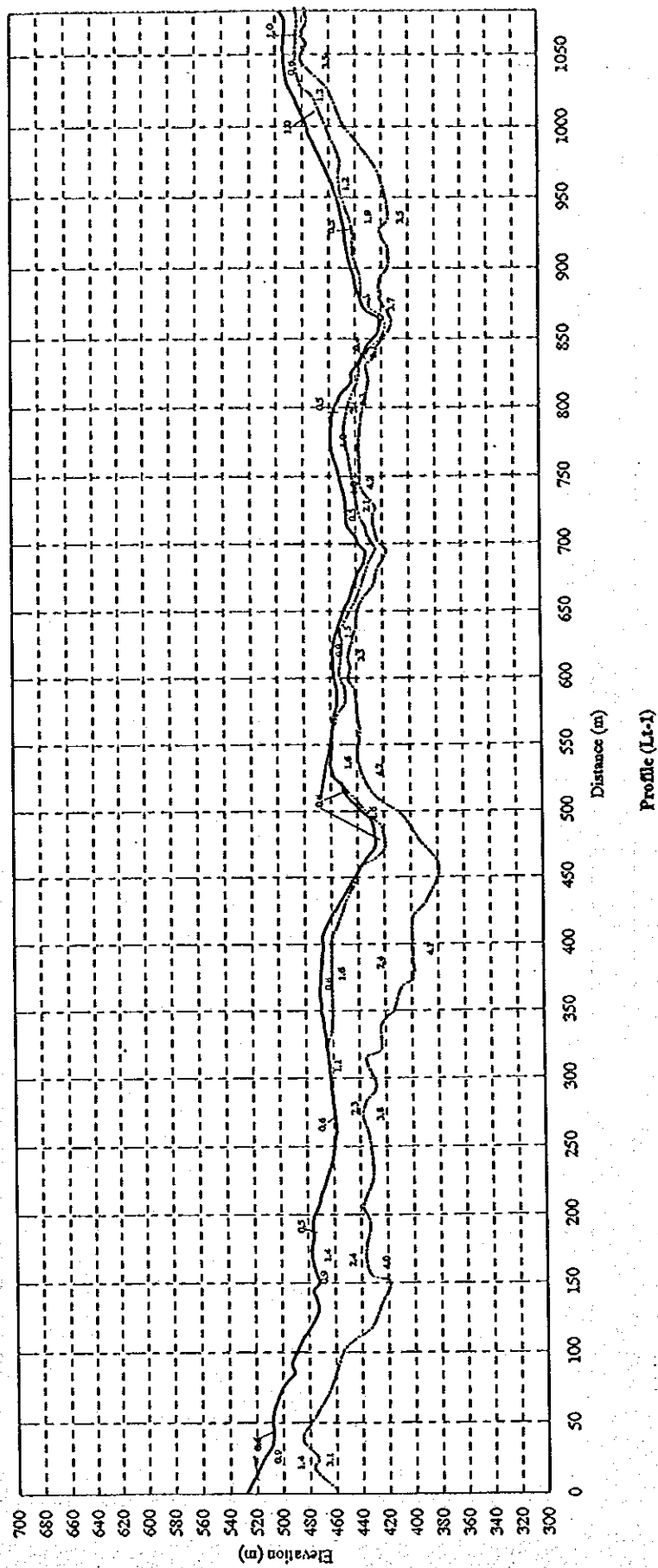
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**Figure B5.4**  
**Summarized Drill Logs,**  
**Quarry Sites**



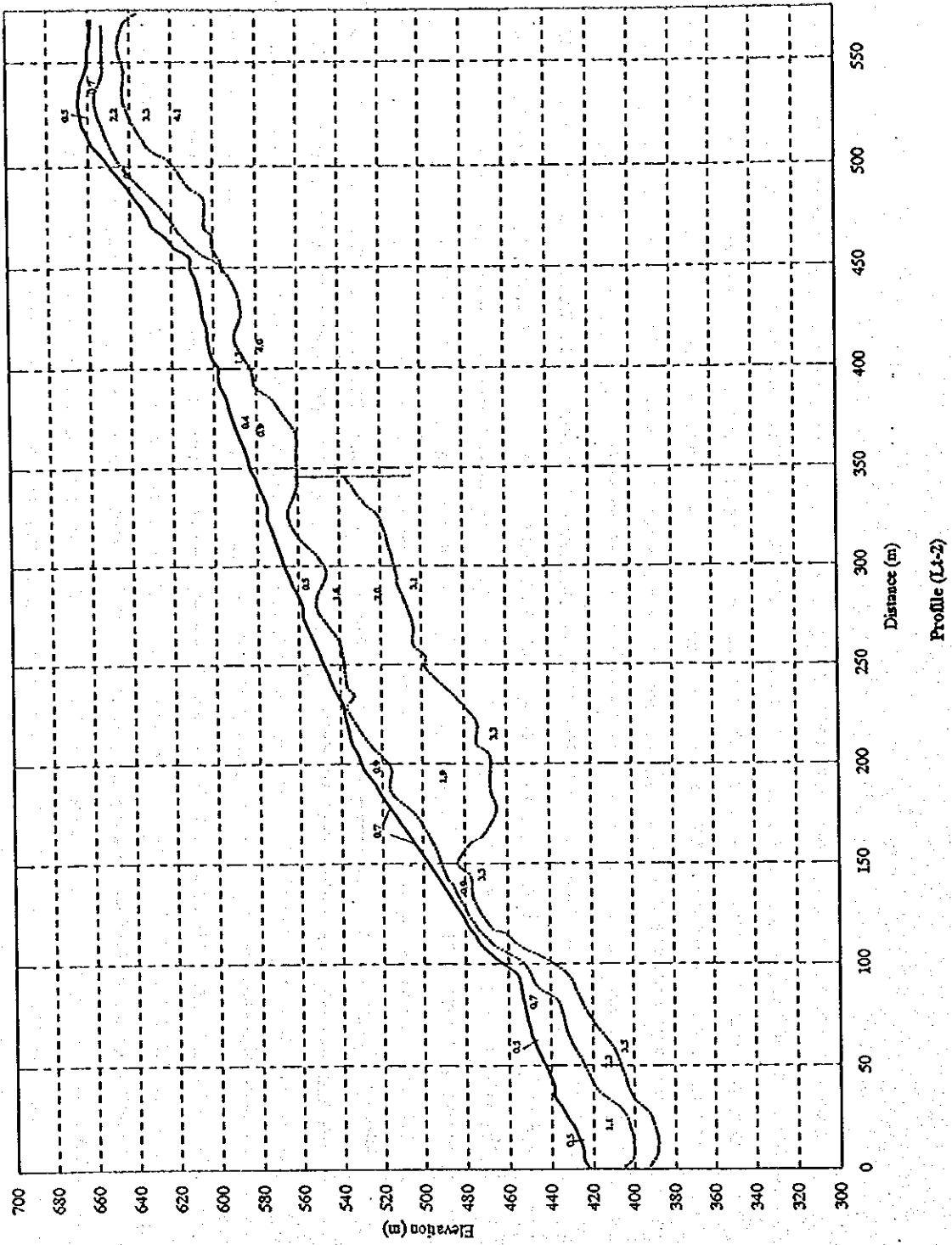
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Figure B5.5-1 Seismic Prospecting  
 Wave Velocity Profile Ls-1,  
 Sappare Quarry



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Figure B5.5-2 Seismic Prospecting  
 Wave Velocity Profile Lt-1,  
 Todobo Banda Quarry



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Figure B5.5-3 Seismic Prospecting  
 Wave Velocity Profile Lt-2,  
 Todobo Banda Quarry

