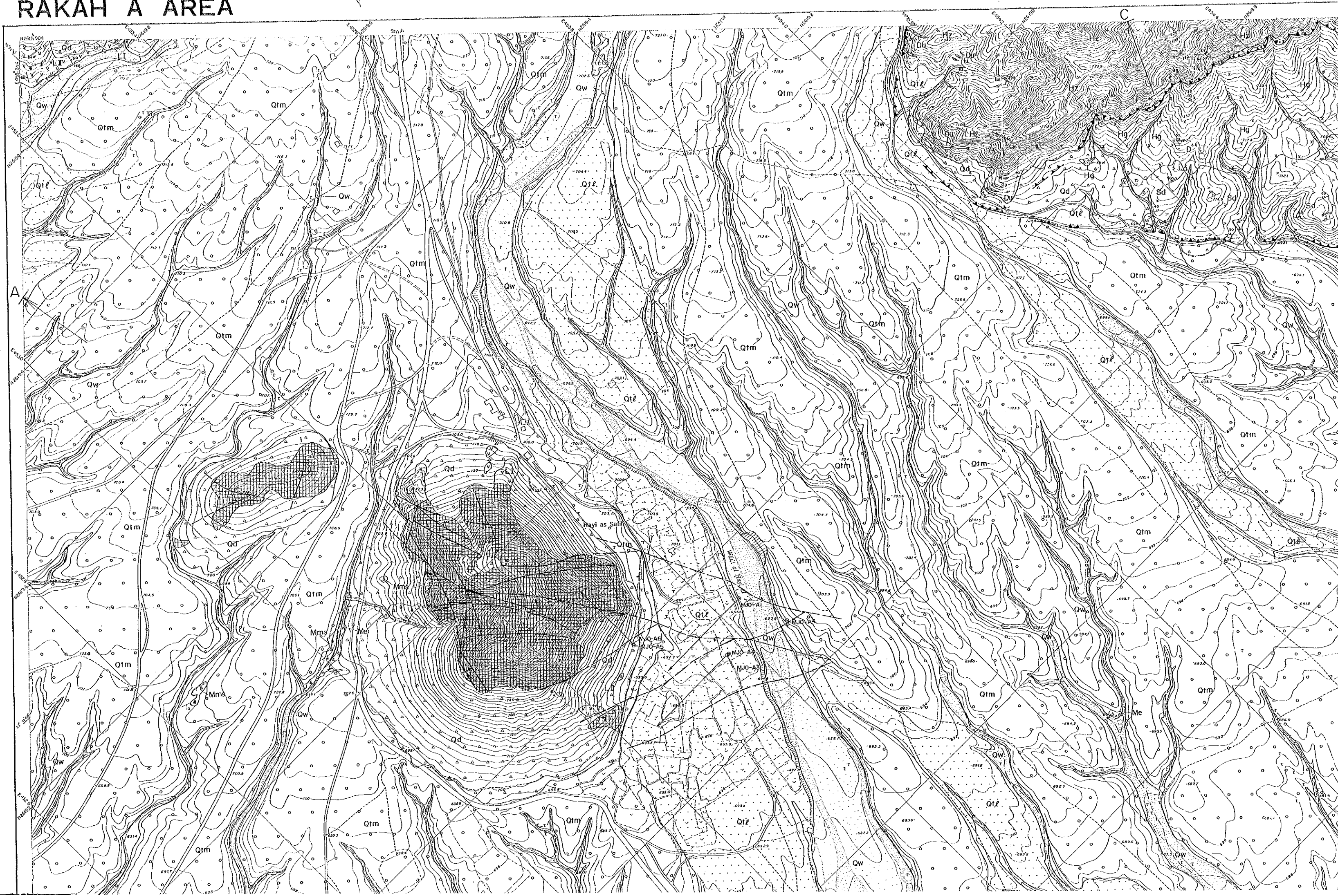
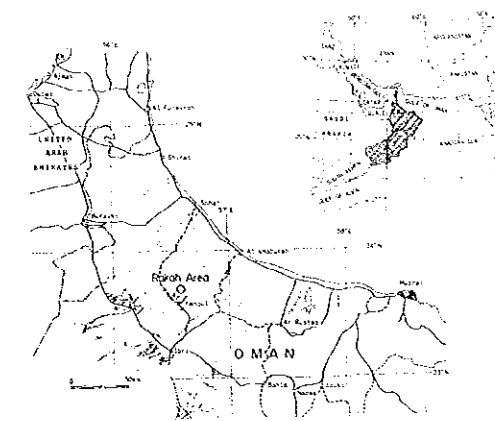


# RAKAH A AREA



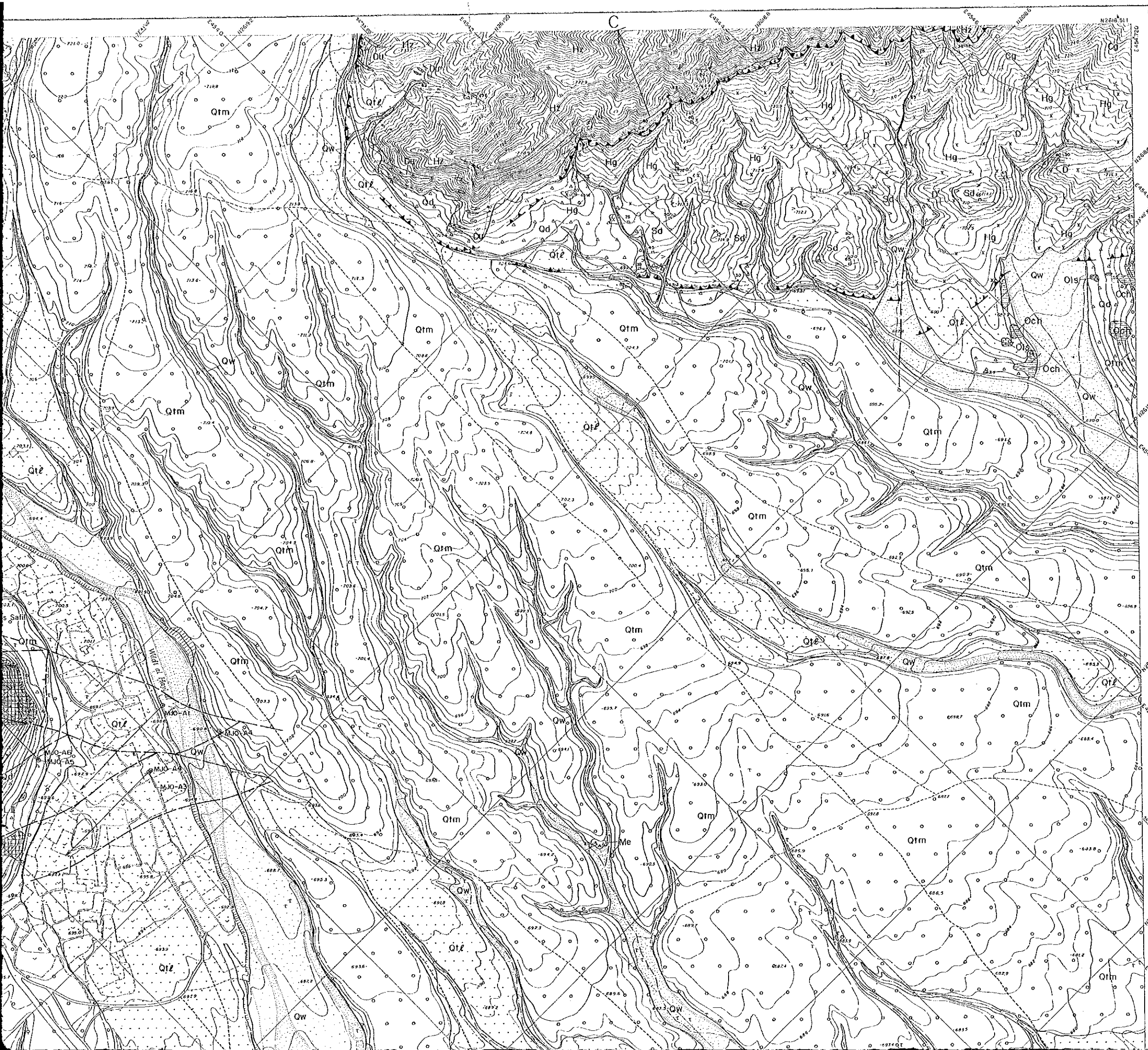
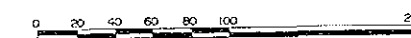
REPORT ON THE MINERAL EXPLORATION  
IN  
THE RAKAH AREA, SULTANATE OF OMAN  
PHASE I

GEOLOGIC MAP OF AREA A



JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY, 1989

Scale 1 : 2,000

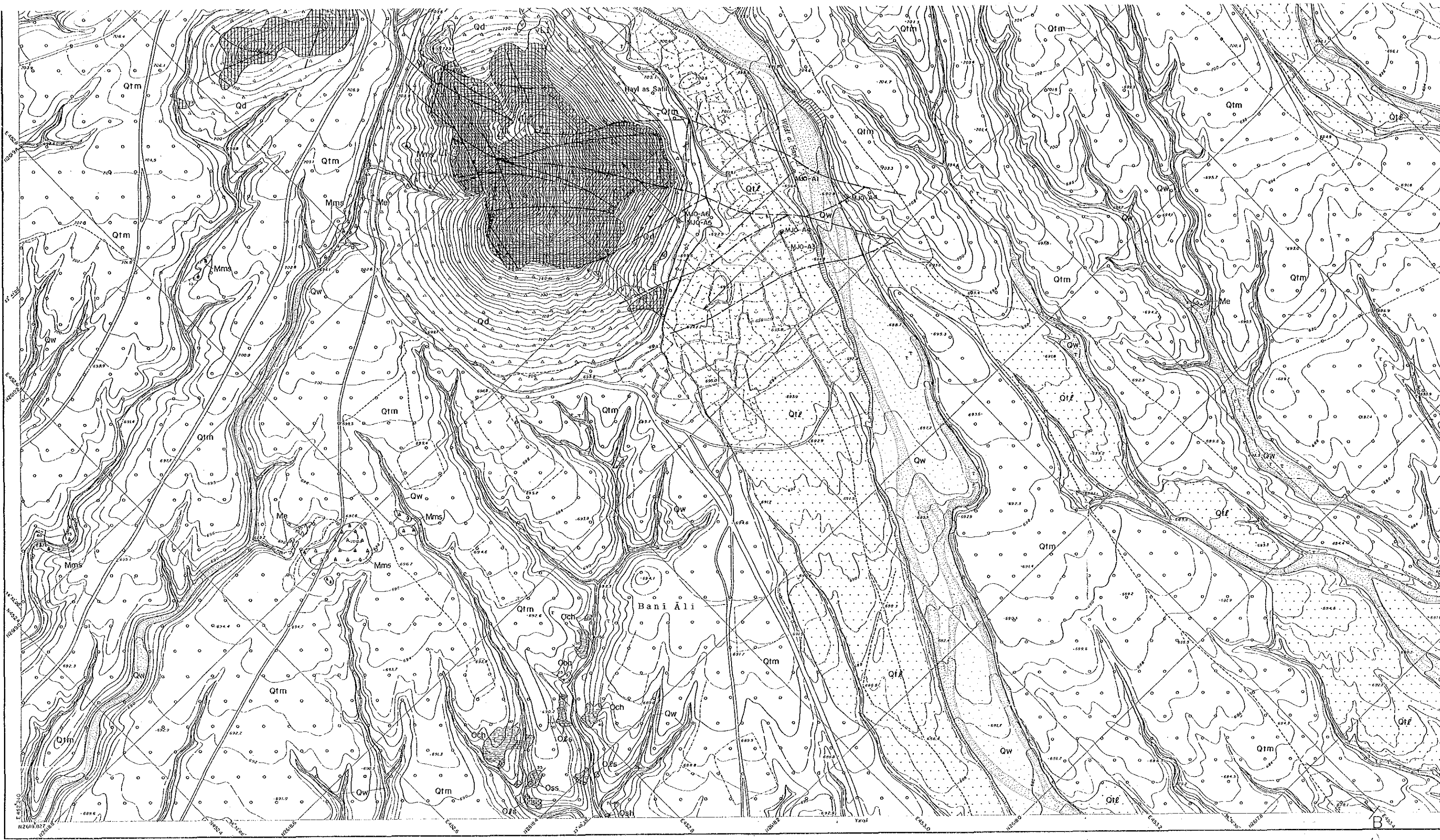


LEGEND

Quaternary	Pleistocene: Holocene	Wadi Sediments	Qw, Gravel, sand	
		Debris	Qd, Talus breccia	
	Superficial Deposits	Terrace Deposits	Ql, Gravel, sand	
			Qtm, Gravel, sand	
Late Cretaceous	Supra-subvolcanic Sediments	Batinah Olistostrome	Ols, Olistolith of limestone	
			Och, Olistolith of chert	
			Osh, Olistolith of shale	
			Oss, Olistolith of sandstone	
			Obo, Olistolith of basalt	
			Me, Pillow lavas	
			Mms, Massive lavas	
			Mm, Metalliferous sediments	
			Lower Extrusives II	LII, Pillow and massive lavas
			Lower Extrusives I	LI, Pillow lavas
Samail Nappe	Samail Ophiolite	Sheeted dyke Complex	Sd, Sheeted dykes	
		High-level Gabbro	Hg, High-level gabbro	
		Cumulate Sequence	Cg, Cumulate layered gabbro	
		Tectonites	Hr, Harzburgite	
			Du, Dunite	
Intrusive Rocks	Cr, Chromitite			
	Ga, Gabbro			
	D, Dykes			

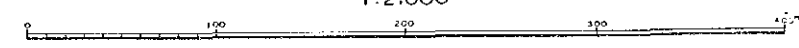
  

	Stratification, inclined		Contact
	Stratification of pillow lavas, inclined		Fault, dashed where inferred or concealed
	Layering, inclined		Thrust fault, saw-tooth, showing dip
	Foliation, inclined		Vein
	Dyke, inclined		Gossan
	Shear zone		Drill hole
			Section

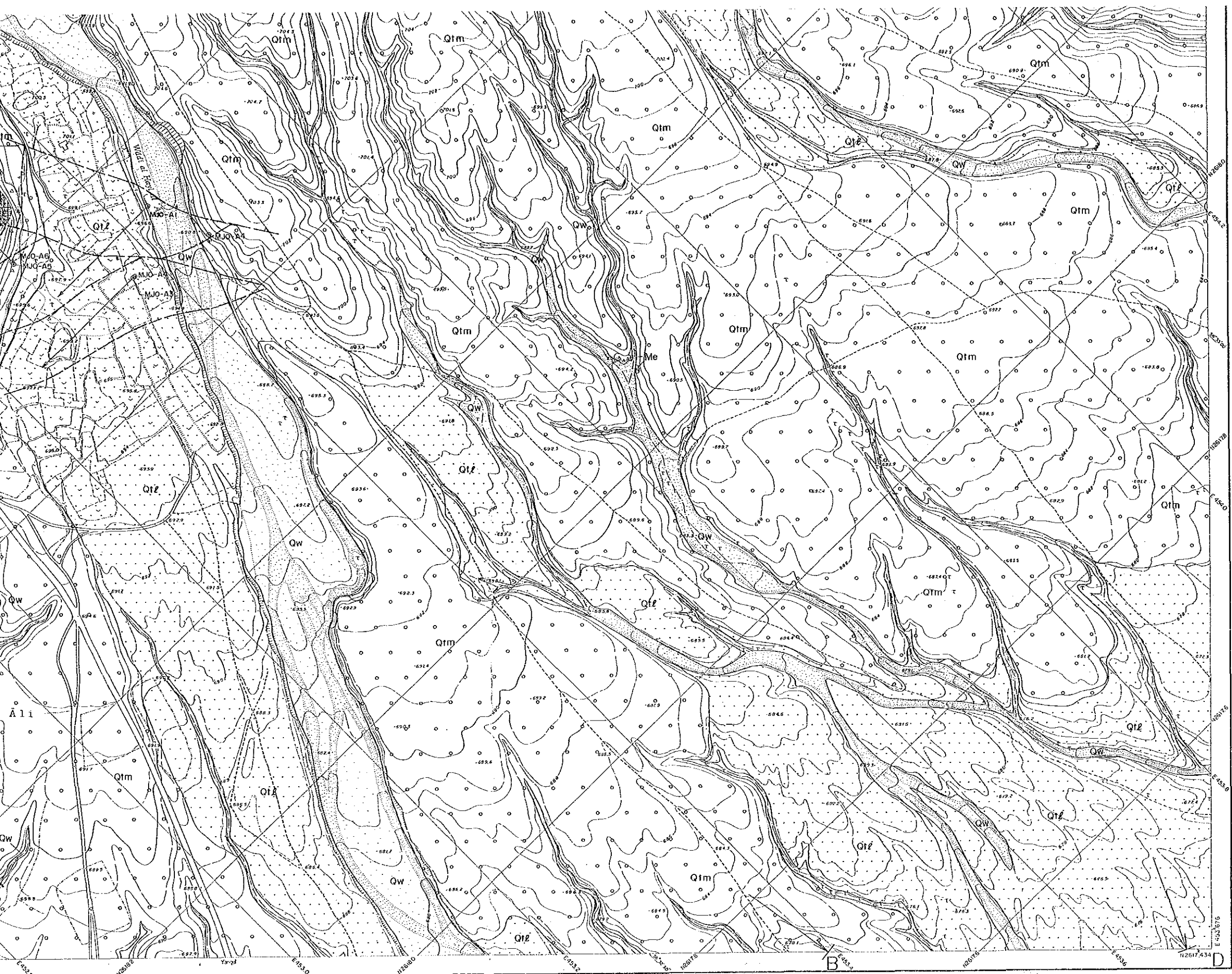


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H2619.027

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B



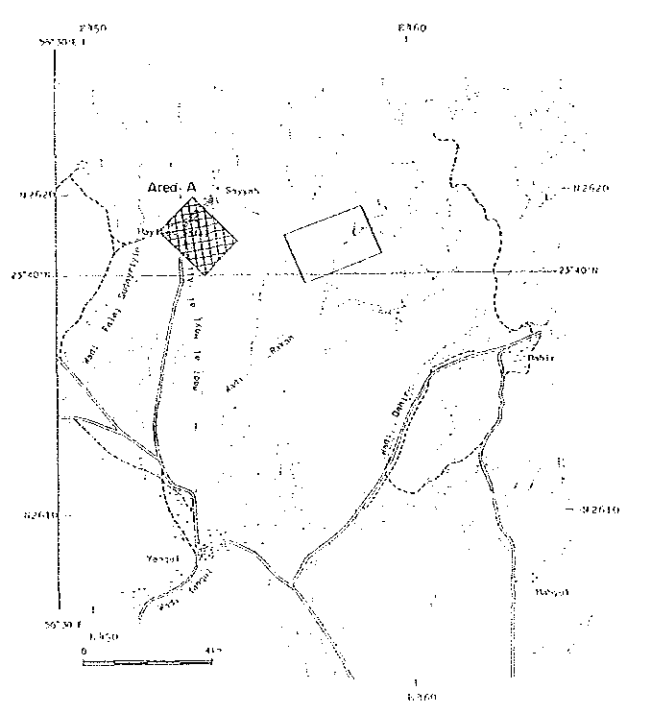
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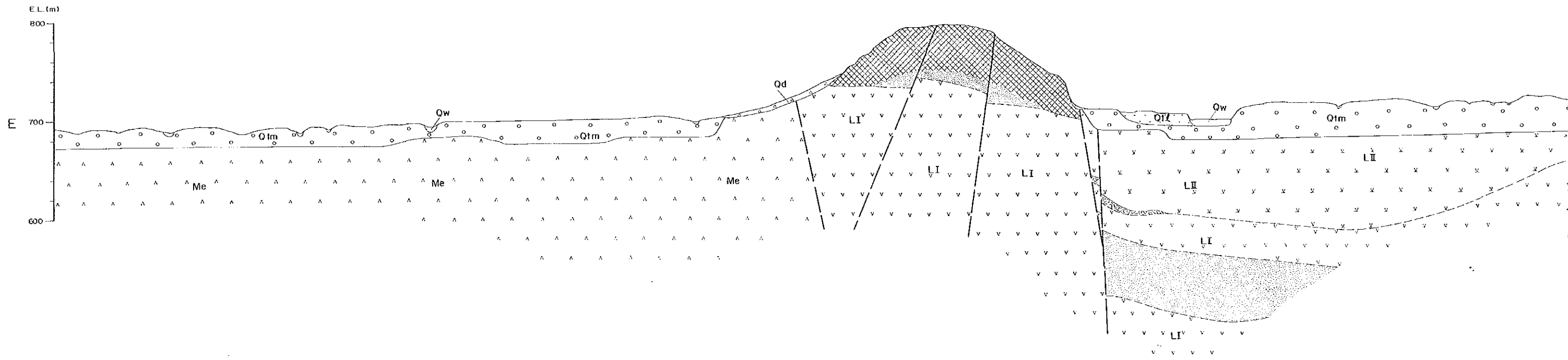
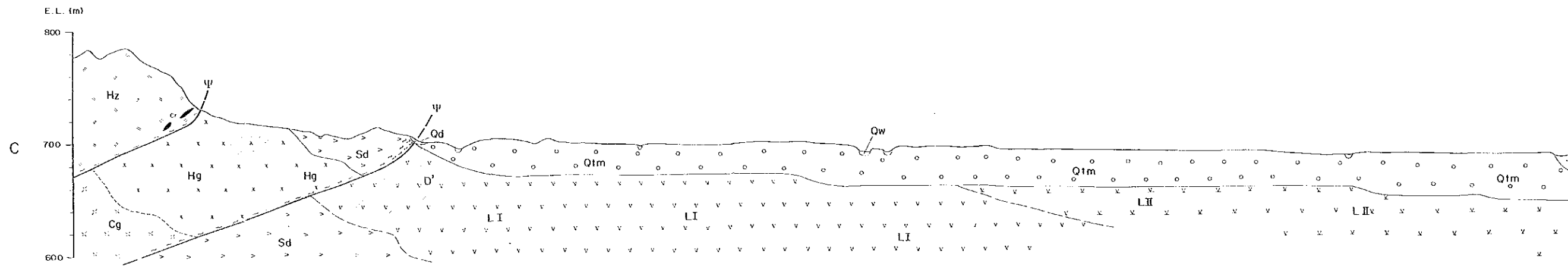
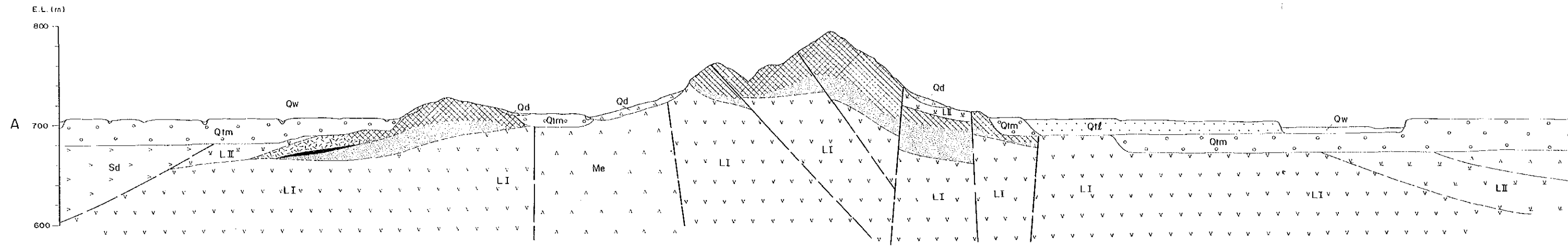
LEGEND

Quaternary	Wadi Sediments	Qw, Gravel, sand
Pliocene Holocene	Debris	Qd, Talus breccia
	Terrace Deposits	Q11, Gravel, sand
Superficial Deposits	Lower Terrace Deposits	Qm, Gravel, sand
	Middle Terrace Deposits	
Late Cretaceous	Batinah Olistostrome	Ol1, Olistolith of limestone
		Ol2, Olistolith of chert
		Ol3, Olistolith of shale
		Ol4, Olistolith of sandstone
		Ol5, Olistolith of basalt
	Middle Volcanic Rocks	Me, Pillow lavas
		Mms, Massive lavas
		Mm, Metalliferous sediments
		LI1, Pillow and massive lavas
		LI2, Pillow lavas
Early to Middle Cretaceous	Sheeted dyke Complex	Sd, Sheeted dykes
	High-level Gabbro	Hg, High-level gabbro
	Cumulate Sequence	Cg, Cumulate layered gabbro
Samail Nappe	Tectonites	Hr, Harzburgite
		Da, Danite
		Cr, Chromitite
		Ga, Gabbro
Intrusive Rocks	D, Dykes	

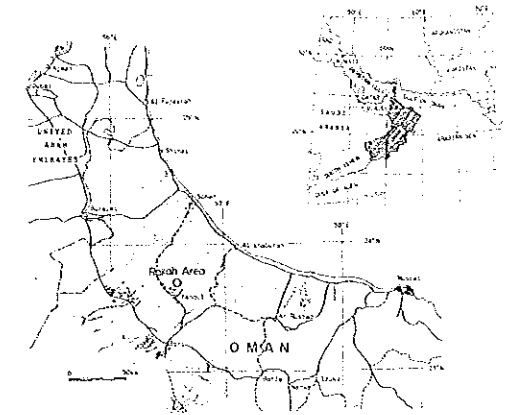
	Stratification, inclined		Contact
	Stratification of pillow lavas, inclined		Fault, dashed where inferred or concealed
	Layering, inclined		Thrust fault, saw-teeth, showing dip
	Foliation, inclined		Vein
	Dyke, inclined		Gossan
	Shear zone		Drill hole
			Section





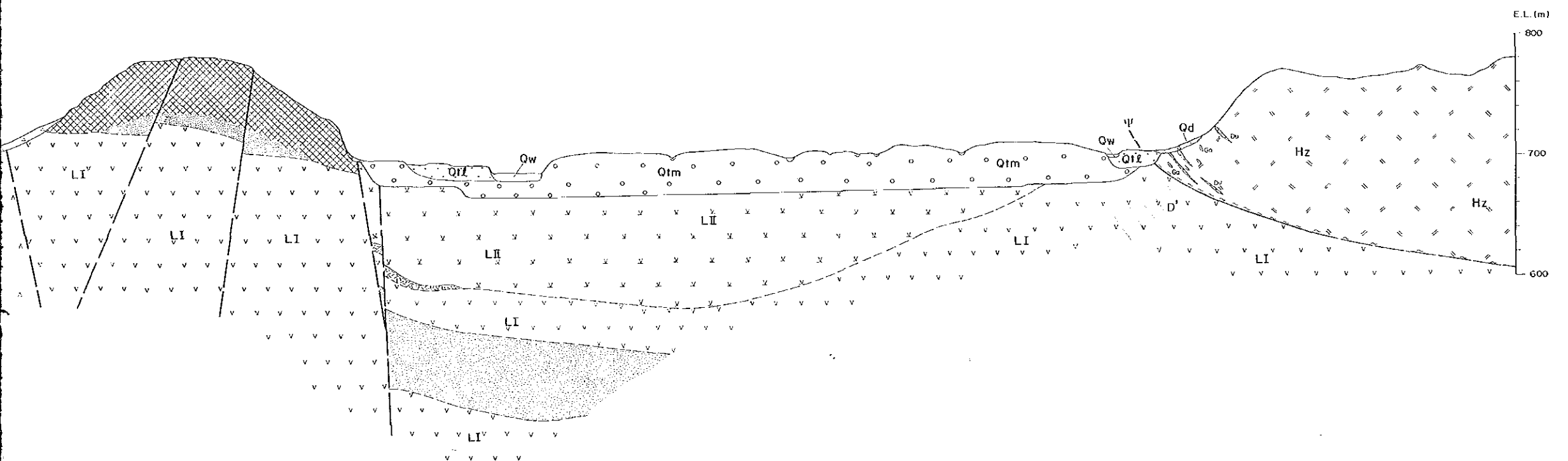
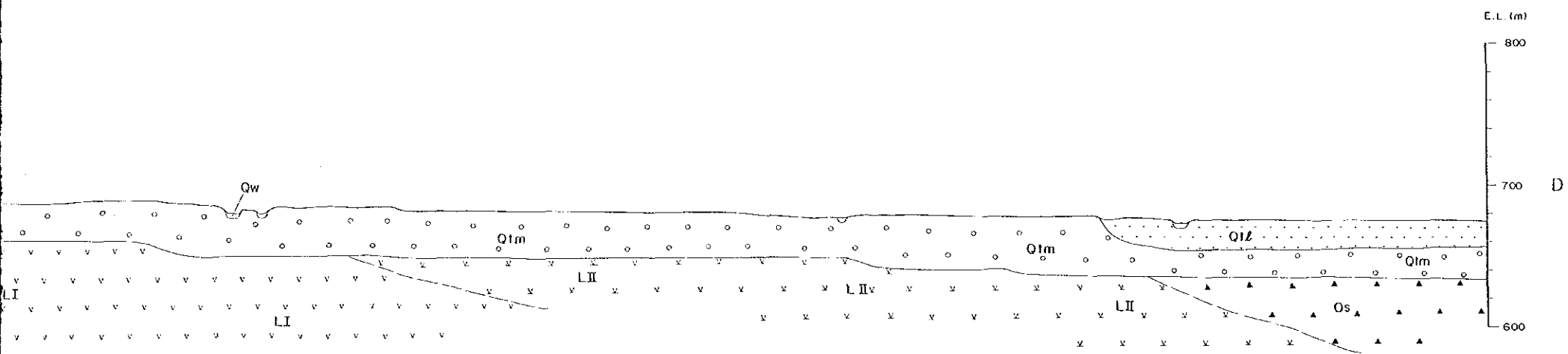
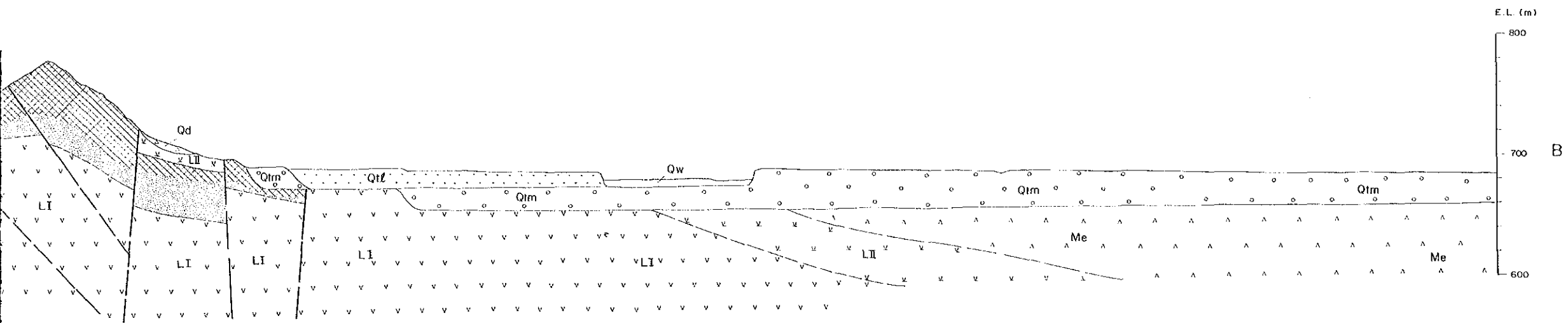
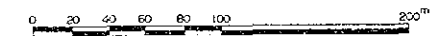
REPORT ON THE MINERAL EXPLORATION  
IN  
THE RAKAH AREA, SULTANATE OF OMAN  
PHASE I

GEOLOGIC SECTIONS OF AREA A



JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY, 1989

Scale 1 : 2,000

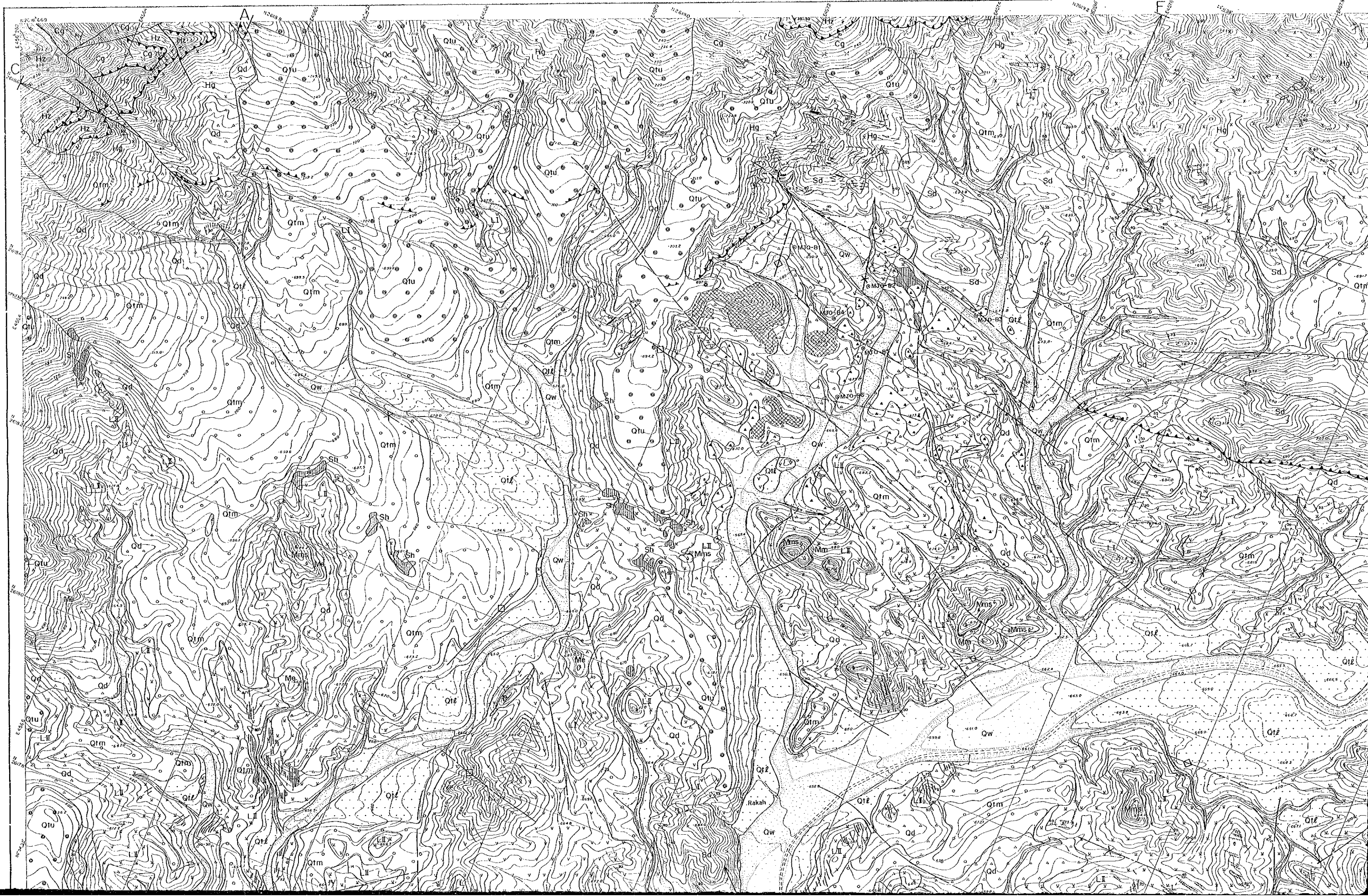


LEGEND

Quaternary	Pleistocene Holocene	Superficial Deposits	Wadi Sediments	Qw, Gravel, sand	
			Debris	Qd, Talus breccia	
			Terrace Deposits	Lower Terrace Deposits	Atl, Gravel, sand
				Middle Terrace Deposits	Atm, Gravel, sand
Sumail Nappe	Early to Middle Cretaceous	Batimah Olistostrome	Olistostromes	Os, Olistoliths	
			Middle Volcanic Rocks	Me, Pillow and massive lavas	
		Samail Volcanic Rocks	Lower Volcanic Rocks	Lower Extrusives II	LII, Pillow and massive lavas
				Lower Extrusives I	LI, Pillow lavas
				Sheeted-dyke Complex	Sd, Sheeted-dykes
		Sumail Ophiolite	High-level Gabbro	Hg, High-level gabbro	
			Cumulate Sequence	Cg, Cumulate layered gabbro	
			Hz, Harzburgite		
		Intrusive Rocks	Tectonites	Du, Dunite	
				Cr, Chromitite	
	Ga, Gabbro				
	D', Dykes				

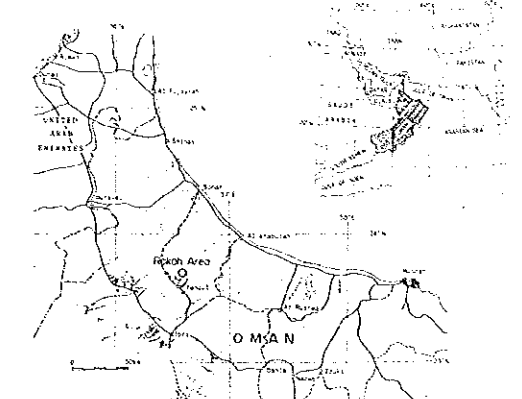
Mineralization	Gossanized zone
	Brecciated ore zone
	Massive ore zone
	Stockwork ore zone
	Contact
Fault; dashed where inferred or concealed	
Thrust fault; saw-teeth, showing dip	
Shear zone	

# RAKAH B AREA



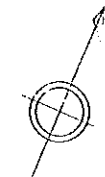
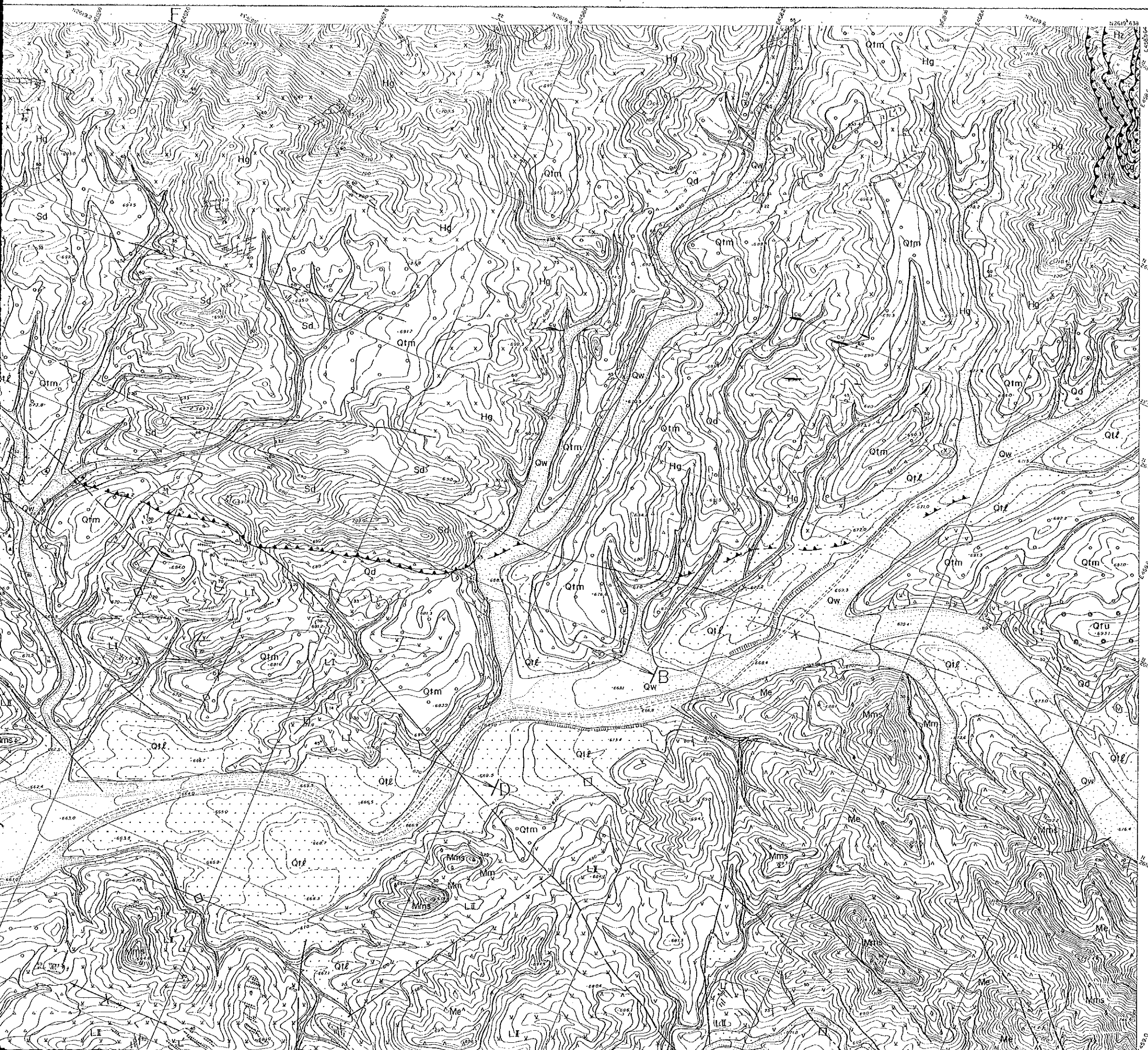
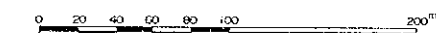
REPORT ON THE MINERAL EXPLORATION  
IN  
THE RAKAH AREA, SULTANATE OF OMAN  
PHASE I

GEOLOGIC MAP OF AREA B



JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY, 1989

Scale 1 : 2,000



LEGEND

Quaternary	Holocene	Wadi Sediments	Qw, Gravel, sand	
		Debris	Qd, Talus breccia	
Pleistocene	Superficial Deposits	Lower Terrace Deposits	Ql, Gravel, sand	
		Middle Terrace Deposits	Qm, Gravel, sand	
		Upper Terrace Deposits	Qu, Gravel, sand	
Late Cretaceous	Subvolcanic	Batinah Olistostrome	Ols, Olistolith of limestone	
		Olistostromes	Och, Olistolith of chert	
Samaal Nappe	Early to Middle Cretaceous	Sahaylah Formation	Sp, Serpentine	
		Middle Volcanic Rocks	Sh, Chert	
			Me, Pillow lavas	
			Mms, Massive lavas	
		Samaal Volcanic Rocks	Mm, Metalliferous sediments	
			Lower Extrusives II	LII, Pillow and massive lavas
		Lower Volcanic Rocks	Lower Extrusives I	Lm, Metalliferous sediments
			L, Pillow lavas	
		Sheeted-dyke Complex	Sd, Sheeted dykes	
			High-level Gabbro	Hg, High-level gabbro
Cumulate Sequence	Cg, Cumulate layered gabbro			
Tectonites	Ht, Harzburgite			
Intrusive Rocks	D, Dykes			
		L', Late dykes		

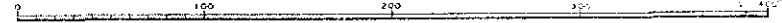
  

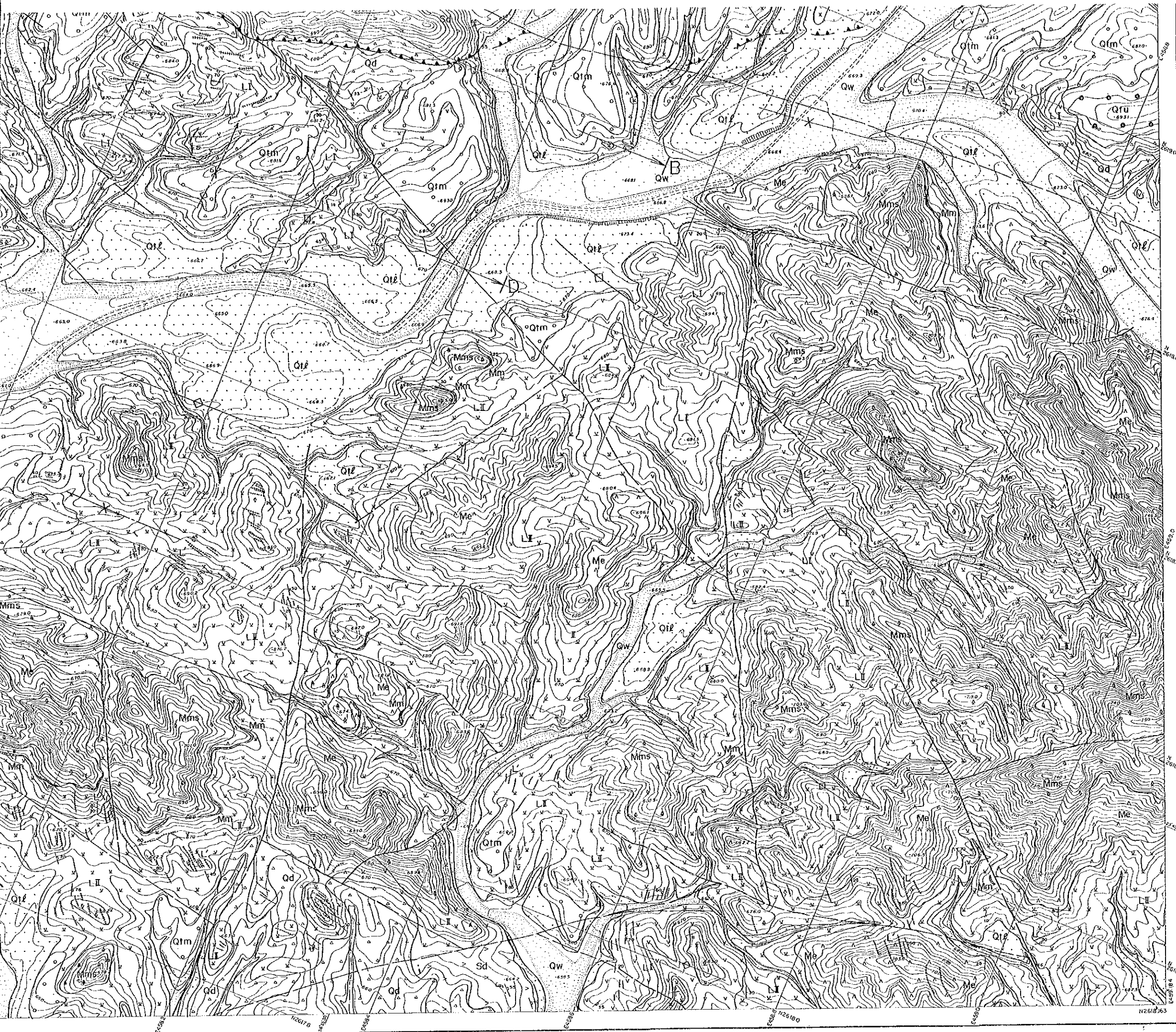
Stratification; inclined	Fault; dashed where inferred or concealed
Stratification of pillow lavas; inclined	Thrust fault; saw-teeth, showing dip
Layering; inclined	Vein
Foliation; inclined	Gosran
Dyke; inclined	Drill hole
Shear zone	Slag dump
Contact	Section





1:2,000

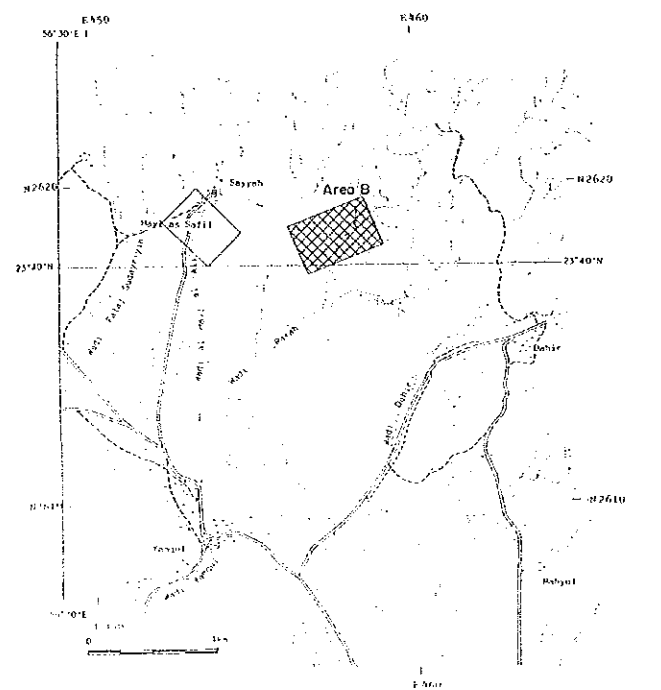


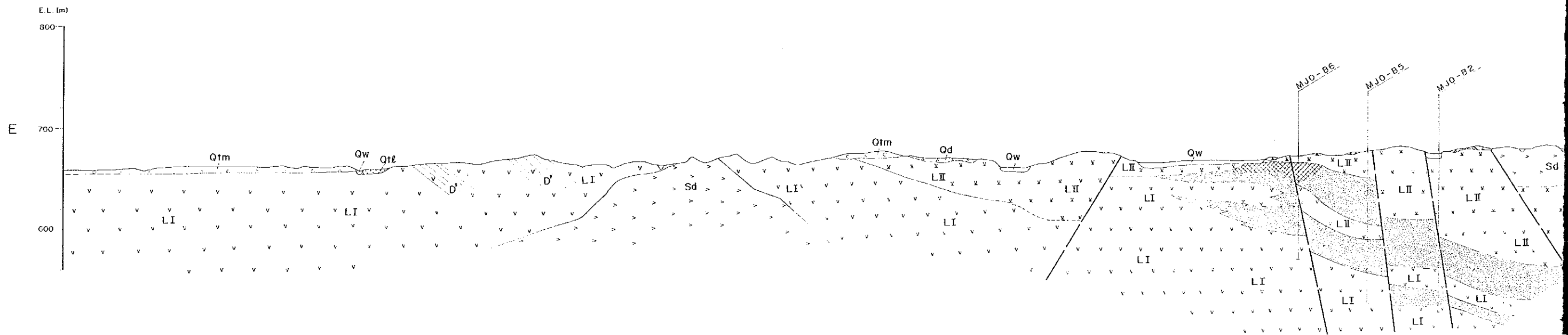
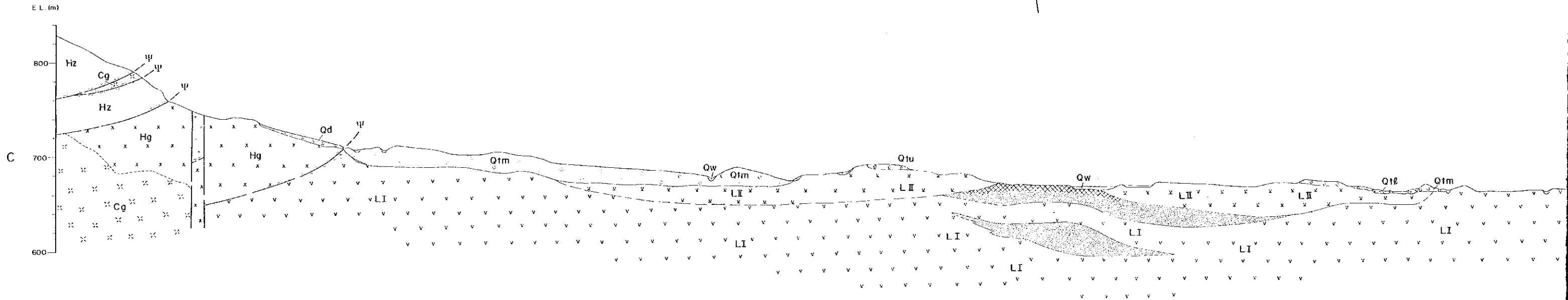
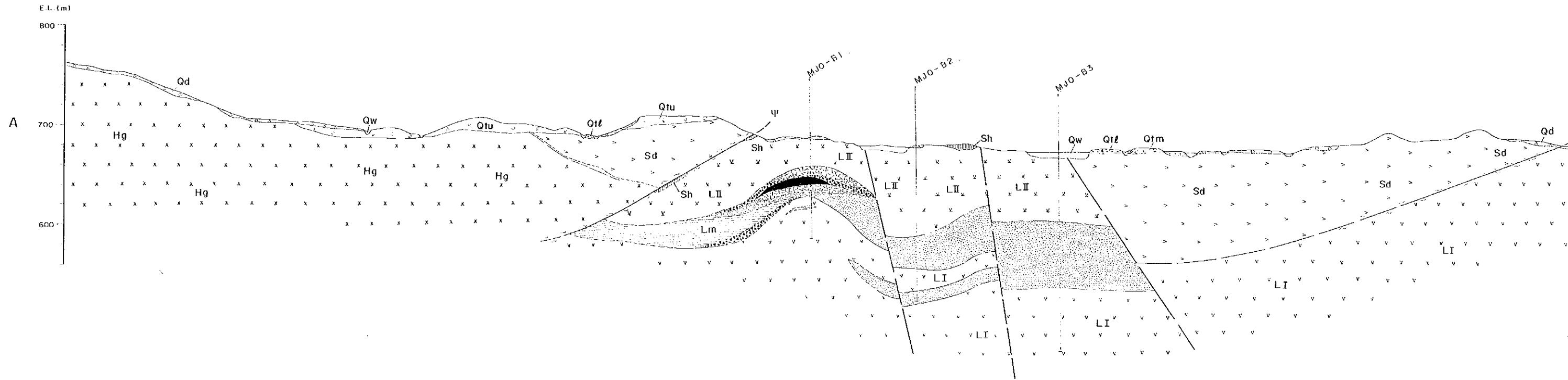


LEGEND

Quaternary	Holocene	Wadi Sediments	Qw	Gravel, sand
		Debris	Qil	Talus breccia
			Qim	Gravel, sand
Pleistocene	Superficial Deposits	Lower Terrace Deposits	Qtl	Gravel, sand
		Middle Terrace Deposits	Qtm	Gravel, sand
		Upper Terrace Deposits	Qtu	Gravel, sand
Late Cretaceous	Supracrustal Sediments	Balnash Glistostrome	Qls	Olistolith of limestone
			Qch	Olistolith of chert
			Sp	Serpentine
		Sabaylah Formation	St	Chert
			Me	Pillow lavas
			Mms	Massive lavas
		Samail Volcanic Rocks	Mm	Metalliferous sediments
			LI	Pillow and massive lavas
			Lm	Metalliferous sediments
		Samail Ophiolite	Lower Volcanic Rocks	LI
Lj	Pillow lavas			
Samail Nappe	Early to Middle Cretaceous	Sheeted-dyke Complex	Sd	Sheeted dykes
		High-level Gabbro	Hg	High-level gabbro
		Cumulate Sequence	Cg	Cumulate layered gabbro
		Tectonites	Hz	Harzburgite
		Intrusive Rocks	D	Dykes
			L	Late dykes

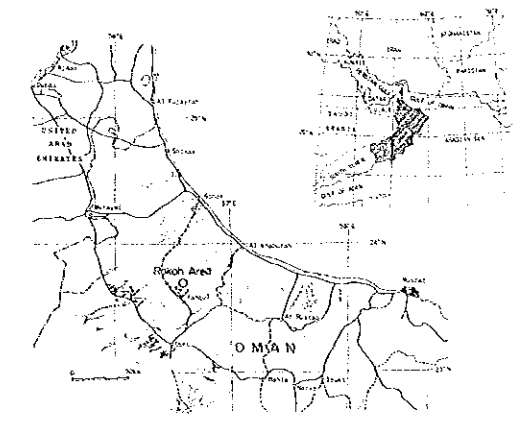
Stratification; inclined	Fault; dashed where inferred or concealed
Stratification of pillow lavas; inclined	Thrust fault; saw-teeth, showing dip
Layring; inclined	Vein
Foliation; inclined	Gogran
Dyke; inclined	Drill hole
Shear zone	Slag dump
Contact	Section





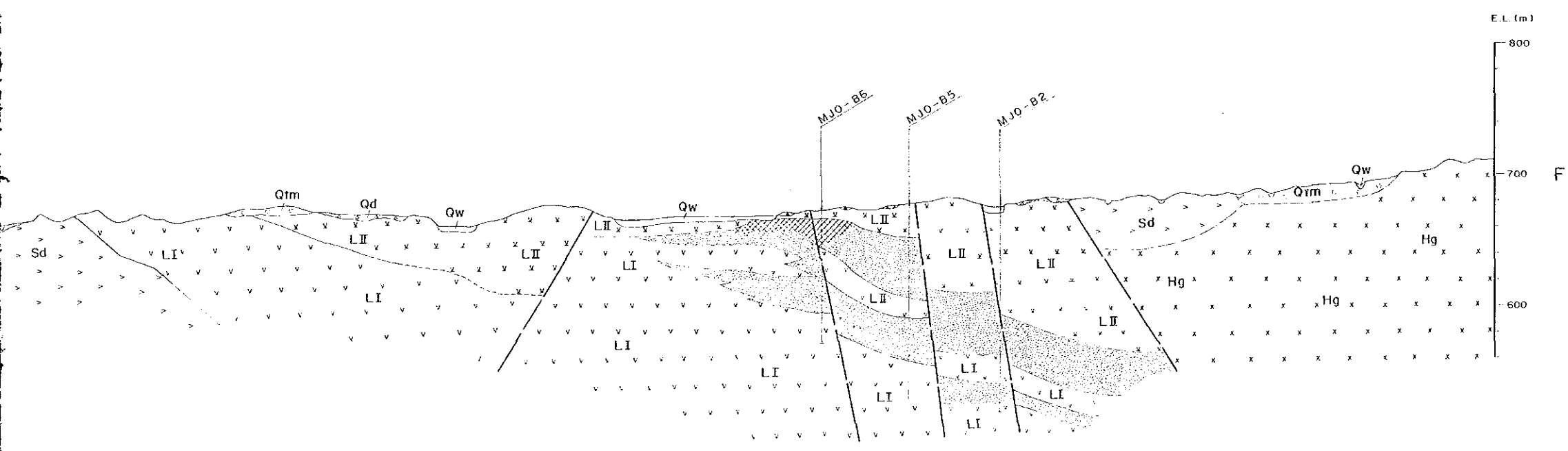
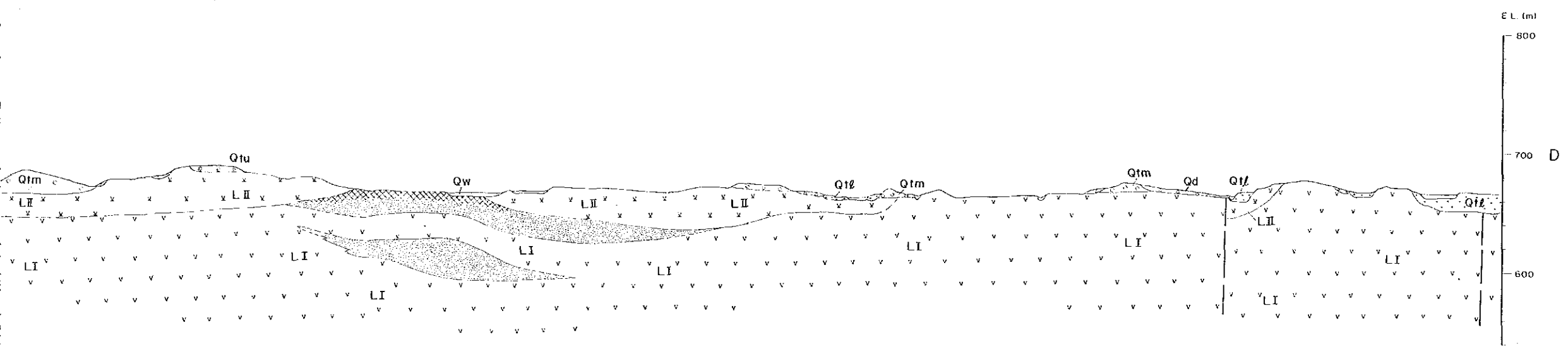
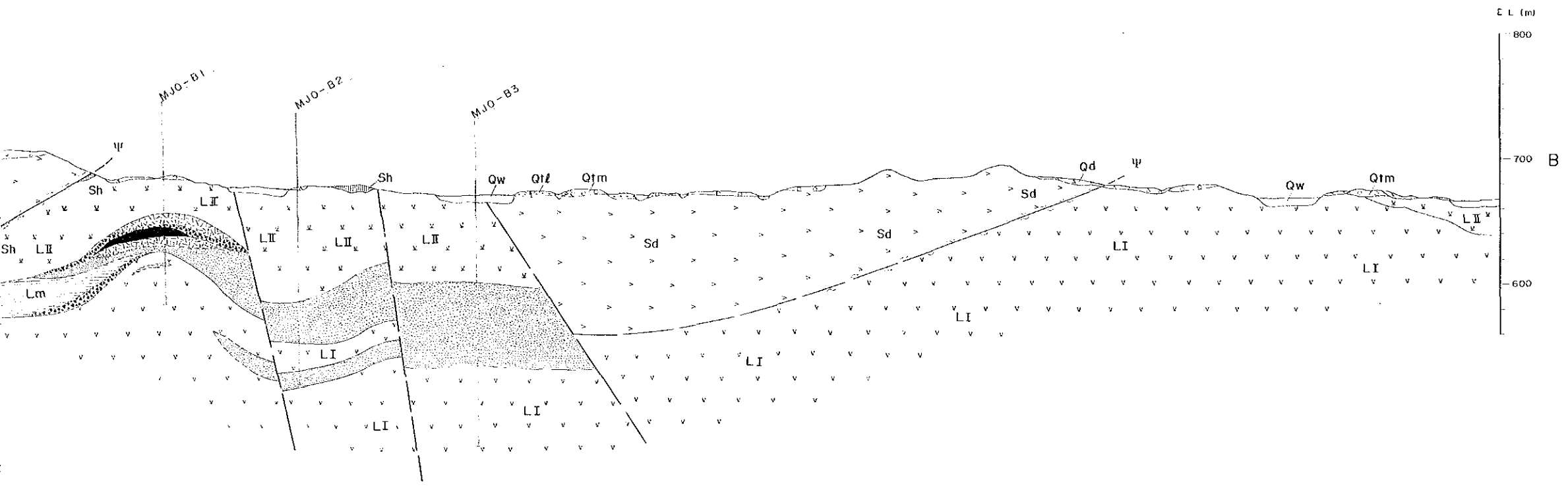
REPORT ON THE MINERAL EXPLORATION  
IN  
THE RAKAH AREA, SULTANATE OF OMAN  
PHASE I

GEOLOGIC SECTIONS OF AREA B



JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY, 1989

Scale 1 : 2,000



LEGEND

Quaternary	Wadi Sediments	Qw, Gravel, sand
	Debris	Qd, Talus breccia
	Terrace Deposits	<ul style="list-style-type: none"> <li>Lower Terrace Deposits: QI, Gravel, sand</li> <li>Middle Terrace Deposits: Qtm, Gravel, sand</li> <li>Upper Terrace Deposits: Qtu, Gravel, sand</li> </ul>
Pliocene	Subayyah Formation	Sh, Chert
	Samail Volcanic Rocks	<ul style="list-style-type: none"> <li>Lower Extrusives II: LII, Pillow and massive lavas</li> <li>Lower Extrusives I: LI, Pillow lavas</li> </ul>
Early to Middle Cretaceous	Samail Ophiolite	Sd, Sheeted-dykes
	High-level Gabbro	Hg, High-level gabbro
	Cumulate Sequence	Cg, Cumulate layered gabbro
	Tectonites	Ht, Harzburgite
Intrusive Rocks		D, Dykes
	Mineralization	<ul style="list-style-type: none"> <li>Gossanized zone</li> <li>Siliceous ore zone</li> <li>Brecciated ore zone</li> <li>Massive ore zone</li> <li>Stockwork ore zone</li> </ul>

Contact	Symbol
Fault, dashed where inferred or concealed	Symbol
Thrust fault; saw-teeth, showing dip	Symbol
Shear zone	Symbol
Slag dump	Symbol
Drill hole	Symbol



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