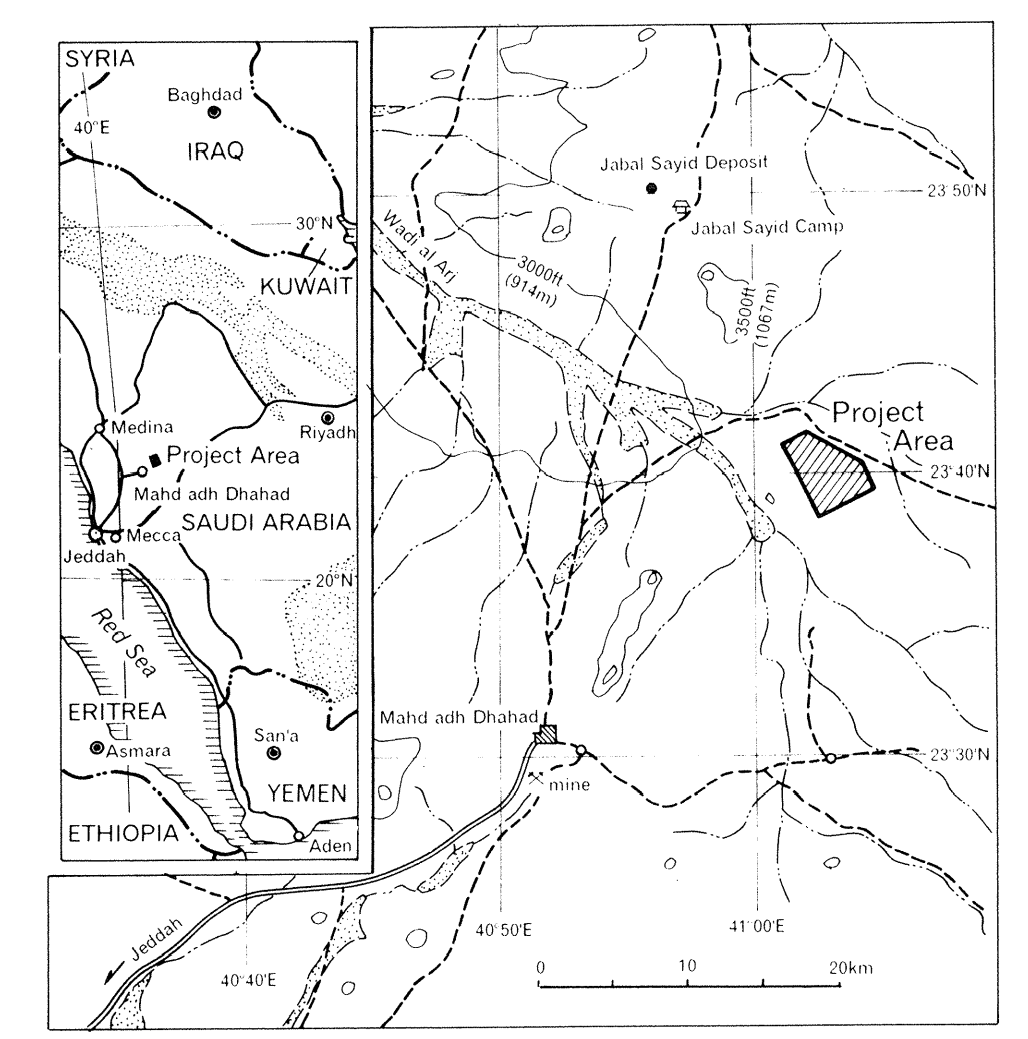


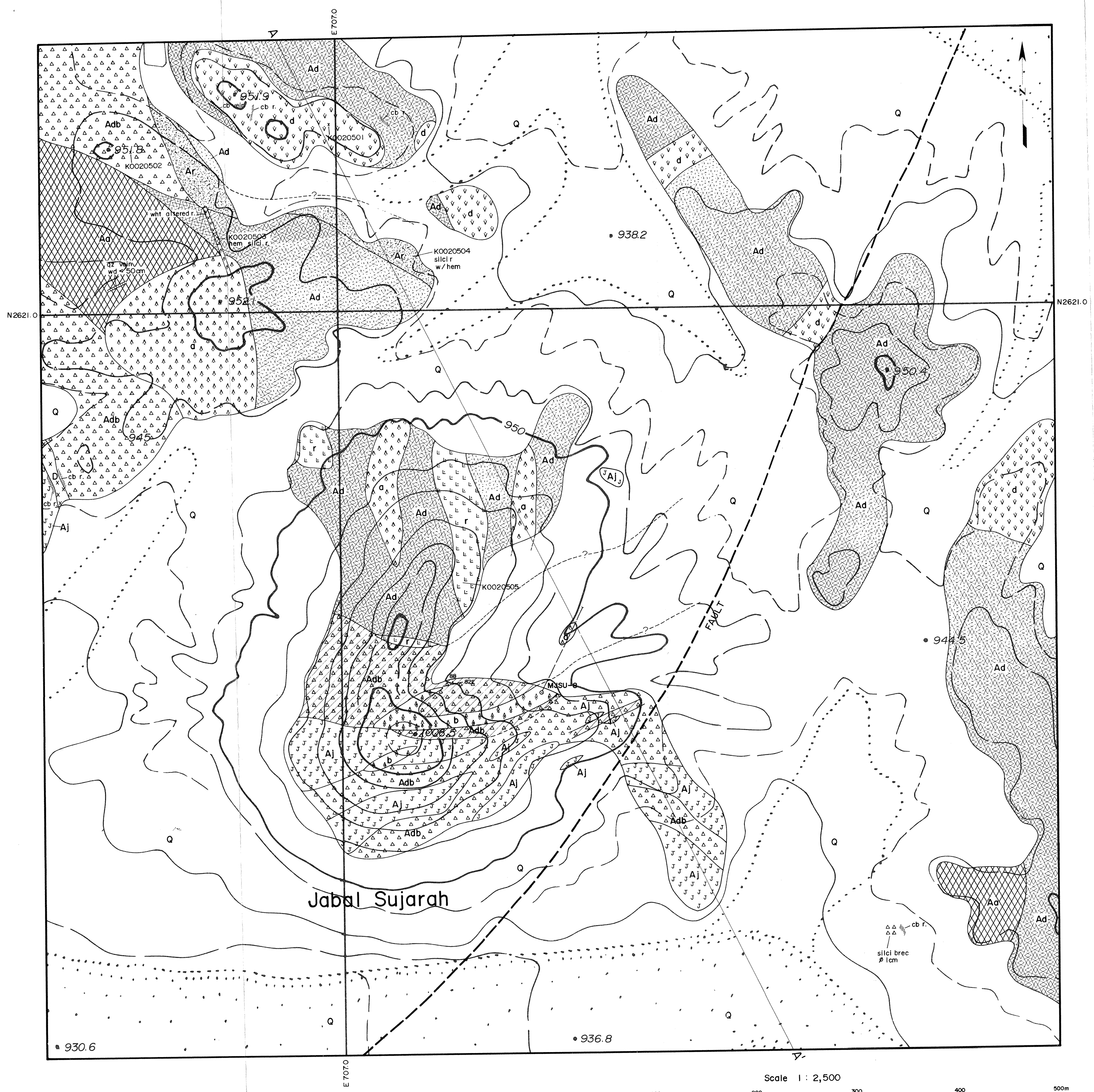
REPORT ON THE COOPERATIVE MINERAL EXPLORATION
IN THE UMM AD DAMAR AREA
THE KINGDOM OF SAUDI ARABIA
PHASE II

DETAILED GEOLOGICAL MAP AND GEOLOGICAL SECTION
OF AREA A (JABAL SUJARAH)



MARCH 2000

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN



AGE	SEDIMENTARY AND VOLCANIC ROCKS	INTRUSIVE ROCKS
CEENOZOIC QUATERNARY	Q Sand, Gravel	
LATE PROTEROZOIC		x D x Diorite
		b a Porphyritic basalt
		a a Porphyritic andesite
		d v Porphyritic dacite
		r r Rhyodacite
		Aa Andesite, Andesitic pyroclastic rocks
	ARJ GROUP (Jabal Azlam & Sayid Formations)	Ad Dacite, Dacitic pyroclastic rocks (Adb: Breccia)
	Ar Rhyodacite, Rhyodacitic	
	Aj Jasper	

Carbonatized breccia distribution zone

Abbreviation

agglomerate	agl	moderate	mod
altered	alt	network	ntwk
amphibole	amp	opaque minerals	op
andesite	an	phenocryst	pheno
andesitic	an	phyllitic	phy
apatite	apa	plagioclase	pl
basic	b	porphyritic	por
black	blk	pyrite	py
breccia	brec	quartz	qz
brecciated	brecd	rhyodacite	rd
carbonate	cb	rhyolite	rh
chart	cht	rock	r
chlorite	chl	rounded	round
chloritized	chl	sandstone	sst
clay minerals	cly	schist	sch
clinopyroxene	cpx	sericite	ser
dacite	dac	shale	sh
dark	dk	sheared	shear
diorite	dr	siliceous	sil
disseminated	diss	silicified	silci
dotted	dott	spotted	spot
epidote	epi	stain	stn
ferruginous	ferr	structure	str
film	film	sulfide	sul
gravel	gr	titania	tit
gray	grn	tonalite	to
green	grn	tuff	tf
hematite	hem	veinlet	vnl
hornblende	hb	weakly	wkly
intrusive	int	white	wh
K-feldspar	kf	width	wd
lapilli tuff	lt	with	w/
light	lt		
massive	mass		
microdiorite	mdr		

