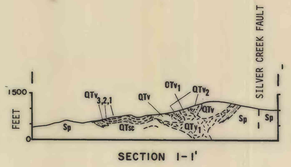
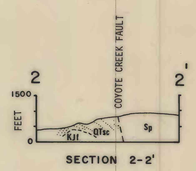
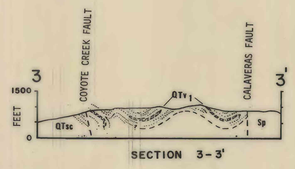
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

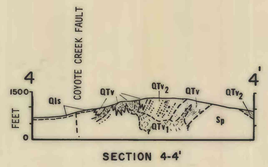
OPEN-FILE REPORT
80-1256

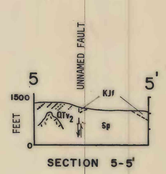
GEOLOGY BY JOHN K. NAKATA 1976

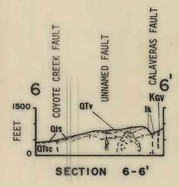






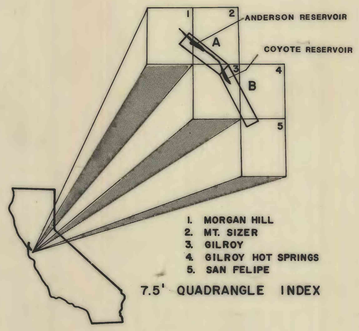






SCALE 1:24000
1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 0 1 KILOMETER

CONTOUR INTERVAL 40 FEET
DASHED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL



1. MORGAN HILL
2. MT. SIZER
3. GILROY
4. GILROY HOT SPRINGS
5. SAN FELIPE

7.5' QUADRANGLE INDEX

GEOLOGIC STRIP MAP OF THE ANDERSON-COYOTE RESERVOIR AREA SANTA CLARA COUNTY, CALIFORNIA

JOHN K. NAKATA

1980

DEFINITION AND CORRELATION OF MAP UNITS

	Qls	Landslide deposit			QUATERNARY
	Qal	Alluvium			
UNCONFORMITY					
	Qoa	Older alluvium			
UNCONFORMITY					
Volcanic rocks of the Anderson-Coyote Reservoir area	QTv: QTv_1, QTv_2, QTv_3	olivine basalt flow and tuff breccia; tuffaceous rocks	QTsc	Santa Clara Formation	PLEISTOCENE AND PLIOCENE; QUATERNARY AND TERTIARY
UNCONFORMITY					
	Tg	gravel			TERTIARY (?)
Knoxville Formation	KJgv: Jk	Great Valley Sequence	CRETACEOUS (?) JURASSIC	KJf	Franciscan assemblage; CRETACEOUS; JURASSIC
DEPOSITIONAL AND (OR) FAULT CONTACT					
	sp	Serpentinite			AGE UNKNOWN

DESCRIPTION OF MAP UNITS

Qls LANDSLIDE DEPOSITS (QUATERNARY) --Unconsolidated soil and rock debris

Qal ALLUVIUM (QUATERNARY) --Gravel, sand, silt, and clay

Qoa OLDER ALLUVIUM (QUATERNARY) --Cobbles, gravel, sand, and silt--locally well indurated

QTsc SANTA CLARA FORMATION (PLIOCENE AND PLEISTOCENE) --Gravel, sand, silt, calcareous lenses, and their partly lithified equivalents

QTv VOLCANIC ROCKS OF ANDERSON-COYOTE RESERVOIR AREA (PLIOCENE AND PLEISTOCENE) --Includes olivine basalt, flow and tuff breccia, and tuffaceous rocks. Locally divided into:

QTv_1 OLIVINE BASALT --Vesicular to massive; contains ultramafic inclusions

QTv_2 FLOW AND TUFF BRECCIA -- Angular ejecta ejecta ranging from scoriaceous to massive fragments of basaltic rock

QTv_3 TUFFACEOUS ROCKS-- Consists of volcanic fragments less than four millimeters in diameter

Tg GRAVEL (TERTIARY ?) --Loosely consolidated pebbles and cobbles of sandstone, chert, serpentine, and shale. Basaltic clasts are absent

KJf FRANCISCAN ASSEMBLAGE (JURASSIC AND CRETACEOUS) --Graywacke, shale, blueschists, greenschist, chert, greenstone, and gabbro

KJgv GREAT VALLEY SEQUENCE (JURASSIC AND CRETACEOUS ?) --Feldspathic and lithic sandstone lenses, siltstone, mudstone, and shale. Minor occurrences of conglomerate and limestone lenses. May include Tertiary rocks. Locally includes:

Jk KNOXVILLE FORMATION (UPPER JURASSIC) --Shale and sandstone, contains Buchi piochii indicating a Late Jurassic age D.L. Jones, oral comm., 1975

sp SERPENTINITE (AGE UNKNOWN) --Sheared masses of serpentinized ultramafic and silica-cabonate rock

STRIKE AND DIP OF BEDDING
- Inclined
- Verticle
- Overturned

STRIKE AND DIP OF FOLIATION
- Inclined
- Verticle

AXIS OF FOLDS
- Anticline
- Syncline, overturned

CONTACTS
- Definite
- Indefinite

FAULTS
- Definite
- Inferred
- Concealed

RELATIVE MOVEMENT
- U up
- D down
- lateral

- AGE DATE
- DRILL CORE LOCATION
- FOSSIL LOCALITY
- XENOLITH LOCALITY
- LANDSLIDES
- CROSS SECTION
- GEOGRAPHIC DISTRIBUTION OF VOLCANIC ROCKS I, II, III, IV
- VOLCANIC VENT
- LOCATION OF CHEMICALLY ANALYZED ROCKS

U.S. GEOLOGICAL SURVEY
OPEN-FILE REPORT
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PLATE 1