UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STRATEGIC MINERALS INVESTIGATIONS
PRELIMINARY MAP

GEOLOGIC AND TOPOGRAPHIC MAP OF THE ROYAL JOHN MINE AREA SWARTZ DISTRICT GRANT COUNTY, NEW MEXICO

Original survey points from transit survey by A.T. Abbott, Peru Mining Co.

EXPLANATION

SEDIMENTARY ROCKS

CARBONIFEROUS	PENNSYLVANIAN		Cm	MAGDALENA LIMESTONE
DEVONIAN	UPPER		Dp	PERCHA SHALE
ORDOVICIAN	UPPER	MONTOYA LIMESTONE	Omg	Montoya gnarly chert & limestone (Dashed line shows top of a gnarly chert zone, dotted line where inferred)
			Omt	Montoya thin-bedded limestone
			Omm	Montoya massive limestone (Dashed line shows base of chert concretion zone, dotted line where inferred)
	LOWER		Oep	EL PASO LIMESTONE

IGNEOUS ROCKS

TERTIARY (?)	Tr	RHYOLITE-EXTRUSIVE
	Ta	ANDESITE-INTRUSIVE

- Formation boundary
- Member boundary
- Inferred boundary
- Strike and dip of beds
- Fault and dip of fault plane
- U/D Fault (U, upthrow, D, downthrow)
- Fault, not accurately located
- Fault, hypothetical
- Shears and fractures
- Sulfide mineralization
- Shaft
- Open cut, pit, or trench
- Outline of underground workings
- Cribbing
- Drill hole in ore
- Drill hole, trace of mineralization
- Drill hole, blank
- Drill hole, no records
- Drill site, recommended
- C Triangulation station

Approximate location of natural underground water course draining Discovery Workings cave.

PLATE I.

UNITED STATES DEPARTMENT OF THE INTERIOR
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BUREAU OF MINES PROJECT 10-105
GEOLOGIC AND TOPOGRAPHIC MAP
OF THE
ROYAL JOHN MINE AREA SWARTZ DISTRICT
GRANT COUNTY, NEW MEXICO
Scale
0 100 200 300 Feet
CONTOUR INTERVAL 20 FEET
GEOLOGY AND TOPOGRAPHY BY O.B. KINNEY AND R.E. WEISS
JUNE-JULY, 1944