Location/Identification

MINFILE Number: 082ESW108

Name(s): **TORRES**

MARS, YORK, BAR, DOE, MAY 1, VIKING

Status:	Past Producer	**Mining Division:**	Osoyoos
Mining Method	Underground	**Electoral District:**	Penticton-Okanagan Valley
Regions:	British Columbia	**Resource District:**	Okanagan Shuswap Forest District
BCGS Map:	082E022		
NTS Map:	082E04E	**UTM Zone:**	11 (NAD 83)
Latitude:	49 13 30 N	**Northing:**	5455893
Longitude:	119 40 03 W	**Easting:**	305783
Elevation:	1060 metres		
Location Accuracy:	Within 500M		

Comments: The approximate location of underground workings on the May 1 claim (Assessment Report 4637).

Mineral Occurrence

Commodities: Gold, Silver, Copper, Lead, Zinc

Minerals

Significant: Chalcopyrite, Galena, Sphalerite, Arsenopyrite, Tetrahedrite, Gold, Silver

Associated: Quartz, Pyrite

Mineralization Age: Unknown

Deposit

Character: Vein, Shear, Disseminated

Classification: Hydrothermal, Epigenetic

Type: I05: Polymetallic veins Ag-Pb-Zn+/-Au

Shape: Irregular **Modifier:** Faulted

Dimension: 1x0x0 metres **Strike/Dip:** 000/

Comments: The quartz veins in the upper inclined adit are 0.9 to 1.2 metres wide.

Host Rock

Dominant Host Rock: Plutonic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Paleozoic	Kobau	Undefined Formation	------
Middle Jurassic	------	------	Nelson Intrusions
Jurassic	------	------	Oliver Plutonic Complex

Isotopic Age	Dating Method	Material Dated
------	------	------
------	------	------
152 +/-3 Ma	Uranium/Lead	Zircon

Lithology: Diorite, Diorite Feldspar Porphyry, Granite, Granodiorite, Chloritic Schist, Limestone, Greenstone, Serpentinite, Aplite Dike, Lamprophyre Dike

Comments: The Kobau Group is of Carboniferous to Permian age. Refer to Fieldwork 1988, pages 19-25 for age data.

Geological Setting

Tectonic Belt: Intermontane **Physiographic Area:** Thompson Plateau

Terrane: Okanagan, Plutonic Rocks

Metamorphic Type: Regional

Grade: Greenschist

Inventory

Ore Zone: ADIT
Category: Assay/analysis
Year: 1933
Report On: N
NI 43-101: N

Sample Type: Chip

Commodity	Grade
Gold	8.2300 grams per tonne

Comments: A 1.8-metre chip sample.
Reference: Minister of Mines Annual Report 1933, page 167.

Summary Production

		Metric		Imperial	
Mined:		42	tonnes	46	tons
Milled:		0	tonnes	0	tons
Recovery	Silver	996	grams	32	ounces
	Gold	62	grams	2	ounces
	Lead	80	kilograms	176	pounds
	Zinc	40	kilograms	88	pounds

Capsule Geology

The Torres occurrence is located 3 kilometres southeast of Orofino Mountain, near the summit of the old Fairview-Cawston road. Oliver lies 9 kilometres to the southeast and Keremeos lies 12.5 kilometres to the west-southwest.

The Torres occurrence is located within Middle Jurassic diorite and dioritic feldspar porphyry that has been subsequently intruded by granite and granodiorite of the Jurassic Oliver plutonic complex. To the immediate south of the occurrence lies metasediments and metavolcanics of the Carboniferous to Permian Kobau Group. Chloritic schist with intercalated limestone, greenstone and serpentinite comprise lithologies of the Kobau Group. Younger aplite and lamprophyre dikes are found crosscutting all older rock units.

The old workings were restaked on the Mars 1 claim, which is underlain by diorite. The quartz veins occupy a shear zone in diorite. The veins contain lenses and disseminations of pyrite, chalcopyrite, galena, sphalerite, arsenopyrite, tetrahedrite, gold and silver. Crossfaults have displaced some of these veins about a metre.

The Torres occurrence was first discovered in 1933 and acquired by Viking Gold Mines, Ltd. in 1934. A 10-metre inclined adit and numerous open pits explored two 0.9 to 1.2-metre wide quartz veins. A chip sample across 1.8 metres yielded 8.23 grams per tonne gold (Minister of Mines Annual Report 1933, page 167). A grab sample yielded 274 grams per tonne gold. A select grab sample from the adit yielded 30.86 grams per tonne gold and 394 grams per tonne silver (Minister of Mines Annual Report 1933, page 167).

In 1934, a 186-metre adit was driven slightly below the inclined adit. This adit intersected two veins varying from several centimetres to 1.8 metres wide. Crosscuts were made north and south of the adit. Samples generally yielded low gold values but some high-grade sections were intersected. A 7.6-centimetre vein was sampled at the face of the adit. An assay of this vein yielded 100 grams per tonne gold and 840 grams per tonne silver (Minister of Mines Annual Report 1934, page D15). In 1935, Viking Gold Mines shipped 2 tonnes of ore, yielding 187 grams of silver, likely from this property.

Topper Mining Ltd. mined 40 tonnes of ore from the Torres occurrence in 1973. Recovery included 809 grams of silver, 62 grams of gold, 80 kilograms of lead and 40 kilograms of zinc.

Bibliography

EMPR AR *1933-167,168; *1934-D15; 1935-A25; 1973-54
EMPR ASS RPT 4383, *4637
EMPR BC METAL MM00369; MM00371
EMPR GEM *1973-44

EMPR OF 1989-2; 1989-5
EMPR INDEX 3-217
GSC MAP 341A; 538A; 539A; 541A; 15-1961; 1736A; 2389
GSC MEM 38; 179
GSC OF 481; 637; 1505A; 1565; 1969; 2167
GSC P 37-21
EMPR PFD 639

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	1996/11/30	**Revised By:**	Keith J. Mountjoy (KJM)	**Field Check:**	N