

718

GEOLOGICAL REPORT

SILVER KING CLAIM GROUP

(MAP NOS. 1 - 12, MAP NOS. 17 - 26 AND BIG DADDY NOS. 15 - 16

MINERAL CLAIMS)

PACIFICLAND AREA

CROFTON MINING DIVISION, B. C.

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Parallels one degree quadrilaterals;  
11 miles west of Pacificland;  
northwest of 49° - 51°  
(Sheet 82E : 50)

by

H. G. Robinson, P. Eng., P. Geol.

Western Resources Consultants Ltd.  
Calgary, Alberta

October 15th, 1969.

for

King Resources Ltd., Calgary, Alberta  
on behalf of

Mr. G. V. Durkinshaw, owner

Work completed during period  
September 25th and October 15th, 1969.

GEOLOGICAL REPORT

SILVER KING GLASH GULCH

(RIF NOS. 1 - 12, WAZ NOS. 17 - 25 AND BIG DADDY NOS. 13 - 16

MINERAL CLAIMS)

FRANCHISE AREA

OSDYCKE MINING DIVISION, D. C.

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GEOLOGICAL REPORT

SILVER KING CLAIM GROUP

(PAT NOS. 1 - 12, PAT NOS. 17 - 26 AND BIG DADDY NOS. 13 - 16

MINERAL CLAIMS)

PEACHLAND AREA

COYOTES MINING DIVISION, D. C.

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GEOLOGICAL REPORT

SILVER KING CLAIM GROUP

(RAE NOS. 1 - 12, RAE NOS. 17 - 26 AND DIG ANDDY NOS. 13 - 16

INTERNAL CLAIMS)

PEACHLAND AREA

OREGON MINEING DIVISION, B. C.

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INTRODUCTION

General Statement

The following report is concerned with the geology and mineral potential of the Silver King Group of twenty-six located claims situated some eleven miles west of Peachland in the Oroyon Mining Division, British Columbia (Figures 1, 2).

The report is based upon field work conducted by the writer and assistants during the period September 23rd and October 13th, 1963.

The cost of the work involved herein is to be applied against certain assessment work due on the claims in and later than October, 1965.

Location, Extent and Site

The Silver King Group of twenty-six located mineral claims is situated approximately eleven miles west of Peachland on Okanagan Lake in the Oroyon Mining Division, B. C. (Figures 1, 2). Claims of the Group cover the main area of an easterly trending ridge located to the north of Glen Lake (Figures 3, 4). The reader will note that the boundary between the Oroyon and Similkameen Mining Divisions passes through the northwestern corner of the area covered by the Silver King Group (Figures 3, 4). However, most claims are situated in the Oroyon Mining Division under which the Group is therefore administered.

The Silver King Group, as previously noted, includes twenty-six located mineral claims. Twenty-two claims were staked in October, 1963 and the remaining four in April, 1964. Essential staking data are as follows:



Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 718 MAP #6

*M. C. Robinson*

SOUTHERN BRITISH COLUMBIA  
 FIGURE 1  
 PEACHLAND AREA  
 LOCATION MAP

WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	DRAWN BY
SEPT. 1965	1" = 64 MILES	M.C.R.

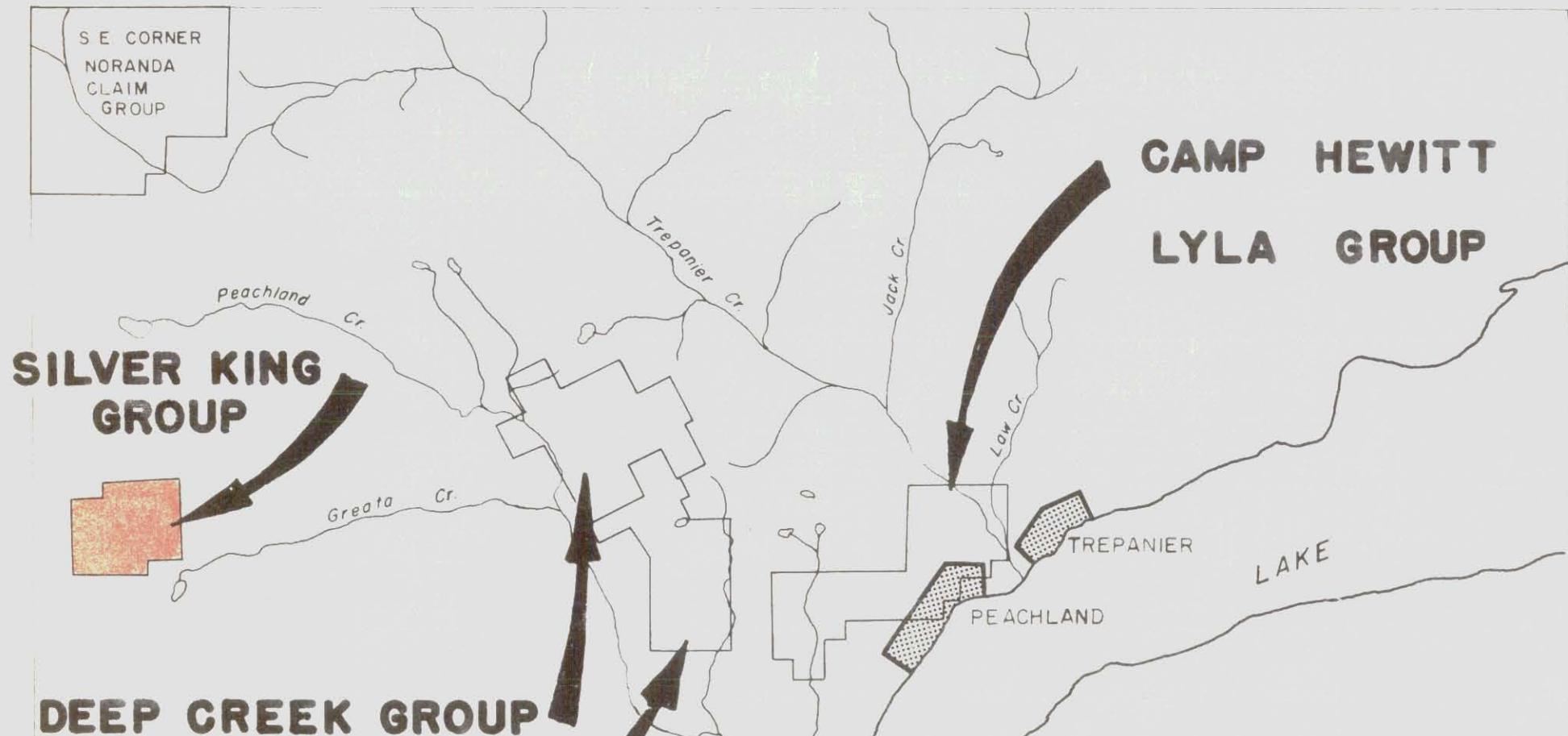


FIGURE 2

PEACHLAND AREA B.C.  
 OSOYOOS MINING DIVISION  
 MAJOR CLAIM GROUPS

**PEACH (PARK) GROUP**  
 Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT

NO. 718 MAP #7

WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	SURVEY
SEPT 1965	1" = 2 MILES	M.C.R.

*M.C. Robinson*



OLD ROAD TO PEACHLAND

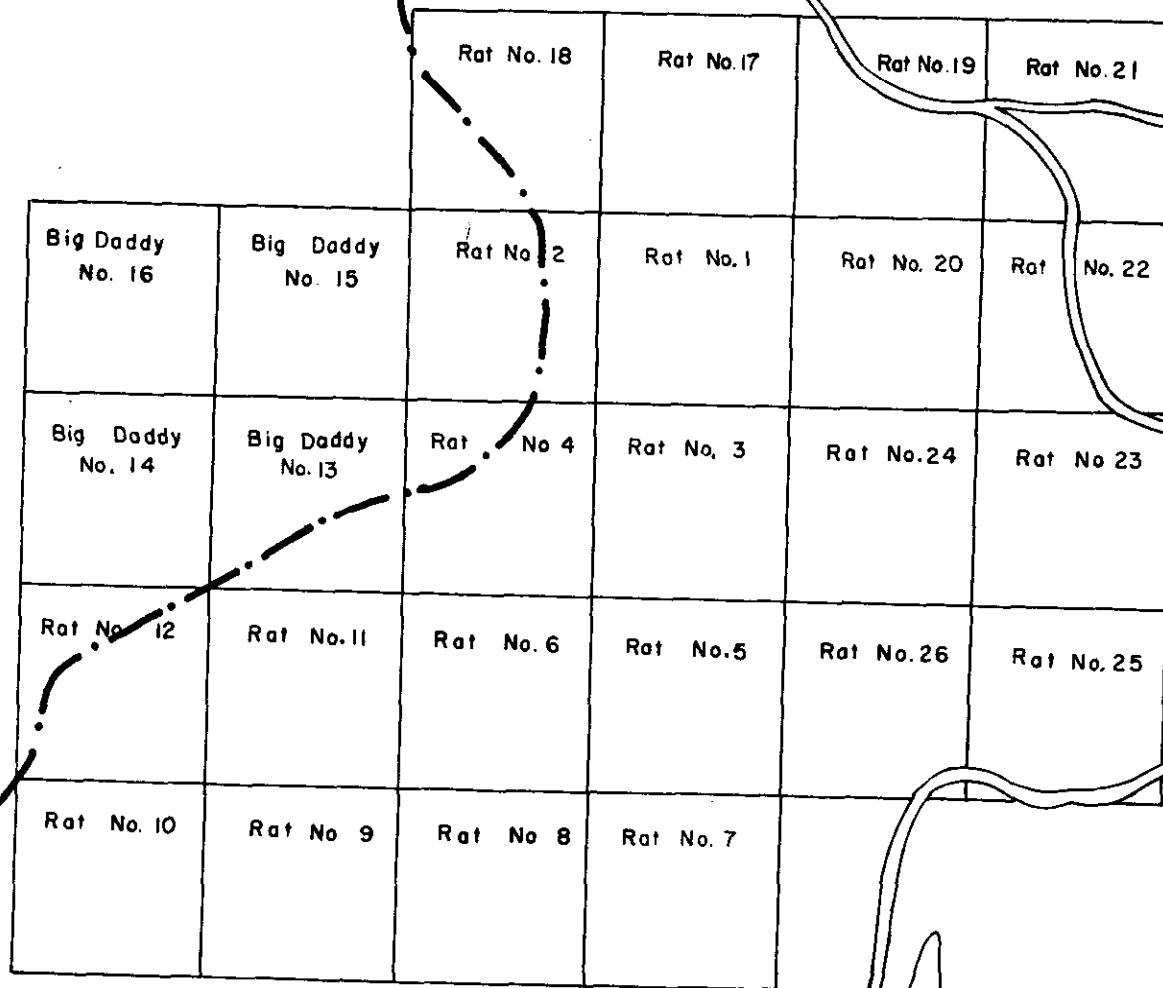
TO PEACHLAND 15 MILES

TO PEACHLAND

FIGURE 3

SILVER KING GROUP PEACHLAND AREA B.C. RECORDED LAYOUT OF CLAIMS

WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	DRAWN BY
Oct. 14, 1965	1" = 1500'	M. C. R.



*M. C. R.*

LS

<u>Claim Name</u>	<u>Staked by</u>	<u>Date Staked</u>
Rat No. 1 °	J. E. Kott, Pontiac, B. C.	October 6, 1953
Rat No. 2 °	J. E. Kott, Pontiac, B. C.	October 6, 1953
Rat No. 3 °	J. E. Kott, Pontiac, B. C.	October 6, 1953
Rat No. 4 °	J. E. Kott, Pontiac, B. C.	October 6, 1953
Rat No. 5 °	J. E. Kott, Pontiac, B. C.	October 13, 1953
Rat No. 6 °	J. E. Kott, Pontiac, B. C.	October 13, 1953
Rat No. 7 °	J. E. Kott, Pontiac, B. C.	October 13, 1953
Rat No. 8 °	J. E. Kott, Pontiac, B. C.	October 13, 1953
Rat No. 9 °	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Rat No. 10 °	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Rat No. 11 °	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Rat No. 12 °	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Rat No. 17 °	J. E. Kott, Pontiac, B. C.	October 27, 1953
Rat No. 18 °	J. E. Kott, Pontiac, B. C.	October 27, 1953
Rat No. 19 °	J. E. Kott, Pontiac, B. C.	October 18, 1953
Rat No. 20 °	J. E. Kott, Pontiac, B. C.	October 18, 1953
Rat No. 21 °	J. E. Kott, Pontiac, B. C.	October 18, 1953
Rat No. 22 °	J. E. Kott, Pontiac, B. C.	October 18, 1953
Rat No. 23 °	R. S. Taylor, Pontiac, B. C.	April 19, 1954
Rat No. 24 °	R. S. Taylor, Pontiac, B. C.	April 19, 1954
Rat No. 25 °	R. S. Taylor, Pontiac, B. C.	April 19, 1954
Rat No. 26 °	R. S. Taylor, Pontiac, B. C.	April 19, 1954
Big Diddy No. 13	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Big Diddy No. 14	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Big Diddy No. 15	R. S. Taylor, Pontiac, B. C.	October 13, 1953
Big Diddy No. 16	R. S. Taylor, Pontiac, B. C.	October 13, 1953

° One or both tags observed by the writer in the field.

The recorded layout of claims within the Group is shown in Figure 3. The writer found a good deal of overlap in claims and irregularity in lines so that the area covered by the claims is not as extensive as is shown in Figure 3 (see Figure 4).

Wesley Taylor and Kott recorded the above claims in Pontiac in October, 1953 and April, 1954. They continued to hold the ground until October, 1954 when the claims were assigned to Mr. G. V. Surkinshaw of Quinlta Petroleum Ltd., Calgary. Mr. Surkinshaw has since continued to hold the ground involved.

Access

The Silver King Group straddles an easterly trending ridge located some eleven miles west of Beachland. Access to lower claims of the group is provided by a combined paved and good gravelled road leading westerly from Okanagan Highway 97 in South Beachland. South Beachland, in turn, can be reached via Highway 97 from the Okanagan centres of Pontiac, Kelowna and Vernon.

LS

The south Peachland cut-off leading to claims of the Group is known as the Brenda Lake - Old Princeton road in its lower section near South Peachland. The road follows the north bank of Peachland Creek for a distance of 7.1 miles from South Peachland. The initial 3.2 miles are paved to an active gravel site and the remaining 3.9 miles are good gravelled roads. A junction is reached at 7.1 miles from South Peachland. From that point the Brenda Lake road continues northwesterly along Peachland Creek and the old Princeton road follows westerly along the north bank of Great Creek (see Figure 2). The old Princeton road is taken from the above point to a second junction, the Glen Lake junction, 3.2 miles distant (total distance from South Peachland - 12.3 miles). The road continues in good gravelled condition to the Glen Lake junction which is 1,600 feet east of the custom boundary of the Silver King Group (Figure 4).

The old Princeton road proceeds southwesterly from the above junction past Glen Lake and provides access to some southern claims of the Group (Figure 4). It is in only fair condition. The main gravelled road known as the Turkey Pass road extends westerly and northwesterly from the Glen Lake junction and provides access to eastern and northern Silver King claims (Figure 4). An old road leading easterly from the Turkey Pass road traverses a part of the northeastern corner of the Group. A combined cat and foot trail assist in gaining access to north central claims.

Apart from the above, there are no subsidiary access routes into Silver King ground. Slopes are, for the most part, normal to steep for mountain terrain and most are heavily wooded so that moderate future internal road costs are to be anticipated. However, comparatively little rock work is indicated.

#### Topography, Vegetation, Water

Claims of the Silver King group cover an easterly trending and easterly plunging ridge which is framed between the Turkey Pass and old Princeton roads (Figure 4).

A northerly oriented steep and accentuated creek canyon followed by the Turkey Pass road traverses lat. Sec. 22 and 23 claims in the northeastern part of the property (Figure 4). This canyon cuts sharply across the above ridge and bedrock is well exposed along its walls.

The major remaining geographic features on the property are the easterly trending crest of the above ridge and the northerly and southerly slopes therefrom. Elevations range from approximately 4,200 feet on the lower slopes on the property to approximately 5,200 feet along the ridge in the southwestern corner.

The northern slope is almost entirely very heavily wooded with thick and dense underbrush and small tree growth. There are virtually no outcroppings of bedrock except in areas immediately adjacent to and in road cuts along the Turkey Pass road which follows a stream valley bottom.

Most of the southern slope, in contrast, is largely open forested country with grassland areas. There are scattered sections of dense undergrowth along some valleys which traverse the higher part of the slope and the lowermost reaches tend towards dense growth. Little bedrock is exposed on the mid section of the south slope and virtually none in the lower section.

The north and south slopes average some 20 degrees but local, much steeper pitches are present.

The ridge crest is primarily open forested country with alternating areas of exposed bedrock and grassland. The easterly inclination of the ridge is steep for a distance of some 1,250 feet west of the north-south cross-cutting canyon. Thereafter to the west the easterly plunge of the ridge is low to moderate. In general, the extent of areas of exposed bedrock along the ridge crest is surprising (Figure 4).

The ridge crest and flanks are cut by a number of minor but very accentuated valleys or steep draws (Figure 5). Most of these trend north-northeasterly to northeasterly. Many have associated geologic features which very strongly suggest that at least some of them reflect bedrock dislocation zones.

Timber growth includes, for the most part, species of spruce and pine although some fir is also present. The available timber is adequate for purposes of mining. Undergrowth includes much small jack pine and spruce as well as miscellaneous varieties of brush.

Water on lowermost sections of the property is available from very small streams and sloughs. Scattered small springs were noted below about 4,700 feet on the lower slopes. Apart from the above, the property is essentially devoid of water when snow and runoff are absent.

#### Climate

Climate in the area is moderate. Precipitation is said to average some 15 inches annually. Permanent snow remains on the ground after about mid-November. Thickness of packed snow reaches a maximum near the end of February and amounts to some three to five feet.

#### History

The history of the property or sections of it dates from the late 1890's during which period the Okanogan valley received fairly substantial prospecting and mining attention.

Reports of the D. C. Minister of Mines for the years 1898 and 1899 make reference to the Silver King and Alma Inter properties. The Silver King is now covered by Pat No. 1 claim of the present Silver King Group and the Alma Inter by Pat No. 22 (Figure 4). The account of underground work mentioned in the report of 1899 is as follows:

Property

Work

Silver King

25 foot shaft and 250 foot tunnel

Alma Linter

3 tunnels - 218 feet, 110 feet and 72 feet.

The extent of accessible workings found or opened up by the writer's party indicates that very little or no mining has been done on the properties since 1899 (Figures 6, 7).

The reports of the 1890's make no reference to shipments but do note values in silver and gold in "free milling ore". Local citizens state that some shipments were made but they differ as to quantities. Little stoping is evident in accessible workings so that the shipped tonnages, if any, cannot have been significant.

Local verbal reports suggest that little or no activity took place on the property between the late 1890's and the approximate period 1929 - 31. It is said that during the latter period a Vancouver based company acquired the property and opened up and examined certain or all of the old tunnels. The company is reported to have done no mining and the writer's findings verify that.

There appeared to have been a second period of inactivity until the late 1930's. Since that time, parts of the present Silver King Group were staked in various years by prospectors, trappers and others. No significant work was done, however.

The 1963 stakers, R. S. Taylor and J. R. Nett, located the present claims because they recognized polydennite in samples from the chips of some tunnels. Mr. Taylor states that a representative of Inco examined the property in 1963.

Previous Investigations

The present writer is not aware of any previous investigations of the subject property save for the Inco examination referred to above. No property reports are available to the writer except the 1893 and 1899 Minister of Mines reports referred to previously.

In a broader and more regional sense, the area surrounding the properties has been examined and mapped by representatives of the Geological Survey of Canada as follows:

<u>Map</u>	<u>Scale</u>	<u>Author</u>
558A	1" = 4 miles	G. J. Cairnes
15-1961	1" = 4 miles	H. W. Little

The above maps are of comparatively little assistance in correlating Silver King ground because of their general and broad-scale coverage.

Present Work

The program of work involved in the inspection and appraisal of claims of the Silver King Group includes:

- (1) general reconnaissance of the area.
- (2) surveying of control lines through the claim area (Figure 4).
- (3) cruising with the aid of assistants the areas adjoining the above control lines in order to locate areas of outcrop, old workings, etc. (Figure 5).
- (4) mapping and inspection of old workings, surface cuts, etc. (Figures 6, 7, 8, 9, 10).
- (5) supervision of sampling of old workings, cuts, etc. (Figures 11, 12, 13, 14).
- (6) preparation of the present report and maps covering the above.

The subject work was done during the period September 23rd and October 13th, 1965.

Cost to Date of Present Work

The cost to date of the work upon which this report and maps is based is detailed below. A fairly substantial additional cost will be added when assays and analytical charges are received.

<u>Item</u>	<u>Cost</u>
<u>Manpower</u>	
Ecologist - H. C. Robinson, total - 14 days @ \$125.00 per day	0 1,750.00 *
Draftsman - E. R. Becker, et al, total 61 hours @ \$5.00 per hour	305.00
Technical Assistants - drafting, total 43 hours @ \$2.50 per hour	125.00
Field Assistants - J. G. Brown and A. G. Meh - contract including vehicle, subsistence, etc. 60 hours @ \$10.00 per hour	600.00
<u>Expenses</u>	
Travel - pro rated	100.00
Other - hotel, meals, supplies, etc.	<u>430.00</u>
<b>TOTAL HEREIN (including assays)</b>	<b><u>0 3,570.00</u></b>

\* Includes typing, etc.

## GEOLOGICAL GEOGRAPHY

### Regional Setting

The regional setting of claims of the Silver King Group is presented on Geological Survey of Canada Maps Nos. 533-A (Cairnes, 1939) and 19-1961 (Little, 1961). The reports and notes accompanying the maps provide some general descriptions of bedrock types.

The regional information presented on the above maps indicates that the Silver King Group and surrounding area are underlain by intrusive rocks. The area of the intrusive material shown extends northerly to include Noranda Mines claims covering an active copper-cobaltium prospect (Figure 2).

No attempt is made on the part of either Cairnes or Little to subdivide or classify intrusive rock types in the Silver King area. Cairnes notes, however, that the rocks are principally porphyritic granite and granodiorite.

Cairnes refers to the intrusives as Okanogan intrusives of Jurassic or later age. He also notes that a number of Tertiary (?) dikes cut the Okanogan intrusives.

Little has named the intrusive rocks which he has mapped the Holcon Plutonic realm of Cretaceous (?) age.

No structural features are shown in the Silver King area by either Cairnes or Little. Little does, however, show northerly to easterly trending and steeply inclined foliation in the granitic rocks.

### Local Geology

#### Introductory Statement

The writer's observations in the Silver King and adjoining areas in the Nechlan district tend, in a broad sense to confirm the views of Cairnes and Little that these areas are underlain in large part by rocks of granitic appearance. However, there is a rather broad range in compositional, textural and structural characteristics of the granitic rocks. There is also a strong suggestion that much of the material classified as intrusive by Cairnes and Little and as granitic by the writer is, in fact, transformed sedimentary and volcanic rock.

Partly altered to highly altered sedimentary and volcanic rocks are present over a small part of the Silver King Group and they have been noted in areas to the east. Cairnes and Little have not mapped such material on the Silver King Group but in the areas to the east they have noted such rocks and have questionably assigned them to the Nicola Group of upper Triassic (?) age.



Bedrock Units

Bedrock is very poorly to fairly well exposed on Silver King ground. The best exposures are to be found along the crest of an easterly trending ridge which traverses the property, along steep creek canyons and along the Turkey Pass road (Figures 4, 5). Exposures are poor to absent on the northerly and southerly slopes from the above ridge.

The principal bedrock types mapped are as follows:

<u>Age</u>	<u>Unit</u>
Tertiary (?)	<u>Minor Intrusives</u> , Aplites, pegmatite and other acid intrusives.
Cretaceous (?)	<u>Granitic rocks</u> (Holcon Plutonic Rocks) <ul style="list-style-type: none"><li>- greenish east granodiorite</li><li>- biotite granite</li><li>- feldspar porphyry</li><li>- highly altered granitic (?) rocks</li></ul>
Upper Triassic (?)	<u>Volcanic and sedimentary rocks</u> (Hicola Group ?) <ul style="list-style-type: none"><li>- greenstone</li><li>- argillaceous quartzite</li><li>- mixed argillite, argillaceous quartzite, greenstone and buffaceous rocks.</li></ul>

Minor Intrusives

Small bodies of acid intrusive rock are scattered through bedrock of the area and are very abundant in the greenish east granodiorite in the southeastern part of the Silver King claim group (Figure 5). For the most part, the material occurs in irregular stringers, lenses, veinlets and masses in the host rocks. Locally, more tabular bodies are present, notably when the host rocks are foliate. In these cases, the acid intrusives tend to parallel the foliation. In some areas, particularly on southeastern claims, the minor intrusives form a spider web like pattern in the host rock. Thicknesses of individual bodies vary from a fraction of an inch to a few feet.

The most common minor acid intrusive types are medium to very coarse grained potash feldspar pegmatite and a light colored, pinkish tinted, very fine-grained rock referred to here as aplites. Crystals of potash feldspar reach as much as five inches in maximum dimension in the pegmatitic units. Milky white quartz is present in some pegmatites and may, in larger bodies, form a central core of the body. Basic minerals are noticeably absent from most minor acid intrusives which therefore are everywhere light in color.

## Granitic Rocks

### Greenish Cast Granodiorite

Greenish cast granodiorite forms the bulk of bedrock beneath the Silver King claims (Figure 5). The rock displays a very wide range in color, texture and fabric, but is everywhere characterized by a greenish cast imparted to it by the mineral barabicide.

The color of the rock ranges from almost white to very dark green. The color variation is a function of the amount of green mafic mineral in the rock. The writer received the impression that the area mapped as greenish cast granodiorite can be further broken down into lithologic units of varying mafic concentration and therefore of varying color.

For the most part, the rock is medium grained, although very fine to fine-grained and coarse grained places were observed locally. The very fine to fine-grained material, where seen, is dark green in color and contains little feldspar or other light mineral. The coarser grained material contains minor to moderate amounts of the green mafic.

The greenish cast granodiorite varies in fabric from even-grained and equigranular to strongly foliate. All variations between the two extremes are to be seen, both regionally and in local outcrop areas. The foliate rock is very finely to finely laminated and its appearance suggests that of a highly altered and granitized sedimentary or volcanic rock. The foliation averages northerly to easterly in strike and dips steeply. Local detailed variations are, however, present.

### Biotite Granite

Light colored, fresh biotite granite was observed in a number of outcrops along the Turkey Pass road, in one outcrop area on Hat No. 9 claim and in another on Hat No. 23. The impression was received that bodies of this rock type tend to be peripheral to the main area of granodiorite exposed on Silver King ground.

This rock type is characteristically an equigranular, medium-grained granite containing a low proportion of mafic minerals, principally biotite. Fine and coarse grained places were noted locally.

### Feldspar Porphyry

Feldspar porphyry is exposed on and adjacent to the Turkey Pass road where it extends through the canyon on Hat No. 22 mineral claim. The rock is a blocky and jointed, pinkish colored material with euhedral crystals of potash feldspar up to one inch in maximum diameter. The matrix of the rock is fine to medium in grain.

Much of the material exposed along and adjacent to the Turkey Pass road is fairly fresh in appearance but some has a highly altered, baked and bleached appearance.

### Highly Altered Granitic (?) Rocks

Highly altered granitic appearing rocks are present in some outcrops along the Turkey Pass road, in a local outcrop on Nat No. 22 claim and in several outcrops on Nat Nos. 9, 19 and 21 claims (Figure 9).

These rocks vary rather widely in color but share the characteristics of a baked and altered appearance with phenoxycts up to one-quarter inch cut in a very fine-grained groundmass. It is possible that, rather than being altered granitic rocks, they are altered volcanic rocks.

The distribution of the rocks, like that of the biotite granite appears to be roughly peripheral to the main area of greenish east granodiorite. In addition, there appears to be some relationship between the distribution of the altered rocks and the biotite granite referred to above.

The color of the highly altered rocks varies from medium to dark grey through medium to dark green to buff and medium to dark brown. The phenoxycts are characteristically the same color as the groundmass but are generally much darker in shade of color.

### Volcanic and Sedimentary Rocks

#### Greenstones

Very fine grained, broken, sheared and altered greenstone is present in a few scattered outcrops and is associated with sedimentary rocks in others. The material is believed to be of volcanic origin and to form a part of a sequence of sedimentary and volcanic rocks which appears to border the granitic terrain on the northeast, northwest and, perhaps, north.

#### Argillaceous Quartzite

Fine-grained, dark colored, rusty weathering, broken and fractured argillaceous quartzite is present in an outcrop on the Turkey Pass road where it crosses Nat No. 19 claim. It is also present in outcrops of mixed sedimentary and volcanic rocks on Nat No. 21, along the road to the east of Nat No. 21 and along the western capped part of the Turkey Pass road (Figure 9). The rock type forms a part of the sedimentary and volcanic rock type sequence referred to above.

#### Mixed Sedimentary and Volcanic Rocks

Several outcrops of mixed sedimentary and volcanic rocks were mapped in the northern part of the area covered (Figure 9). The types present include argillite, argillaceous quartzite (in part slightly limy), greenstones and tuffaceous rocks. They, too are included in the above sequence.

## Local Structure

### Introductory Statement

The structural geology of the area surrounding and including the Silver King Group has not yet been revealed through either regional or local studies including those conducted by the present writer. Furthermore, no qualified investigator has yet established the genesis and history of bedrock of the area. As a result, the following record and interpretation of observations made by the writer on Silver King ground must be accepted as tentative pending the results of a more complete and time consuming study.

### General Observations

Observations made by the writer suggest that:

- (1) an easterly trending belt of highly deformed, altered and oxidized sedimentary and volcanic rocks borders the Silver King Group on the north.
- (2) the bedrock core of greenish east granodiorite underlying the main area of the Group is, in fact, altered sedimentary and volcanic material. Such an interpretation would account for the wide range in composition and fabric of the granodiorite and would also explain the intricate but local contortions observed in the foliate rocks of the granodiorite.
- (3) the only bona fide intrusive rocks of the Silver King area are likely to be the minor acid intrusives, the biotite granite and the felspar porphyry.

### Local Structural Detail

Minor structural features within bedrock of the area include foliation cleeting and jointing, probable faults and major and minor slips.

As noted previously, foliation or gneissosity is developed only in the greenish east granitic rocks. In general, it strikes northeasterly to easterly and dips steeply. Local contortions are, however, common in the area.

Probable faults possessing a north - northeasterly strike have been mapped where steep and accentuated valleys cross the easterly trending ridge which passes through the property (Figure 5). Abundant quartz veins, lenses, etc. together with irregular veinlets, lances and masses of white, fine-grained sugary textured material are spatially related to the valleys.

Jointing and cleeting along consistent directions were observed locally both at the surface and underground (Figures 5, 8, 9, 10). A northeasterly strike and steep dip is the most common attitude displayed by these features.

27  
A major cleav and crushed zone striking northerly to north-  
northwesterly is present at the surface and underground in the Silver  
King tunnel area (Figures 9, 10). The zone dips at 50 to 60 degrees  
towards the east and varies in width from one to four feet.

Minor slips and fractures of varying attitude were observed  
at the surface and underground. The most common directions of slipping  
are northerly and northeasterly. Dips vary but, as a rule, are towards  
the east and southeast.

28

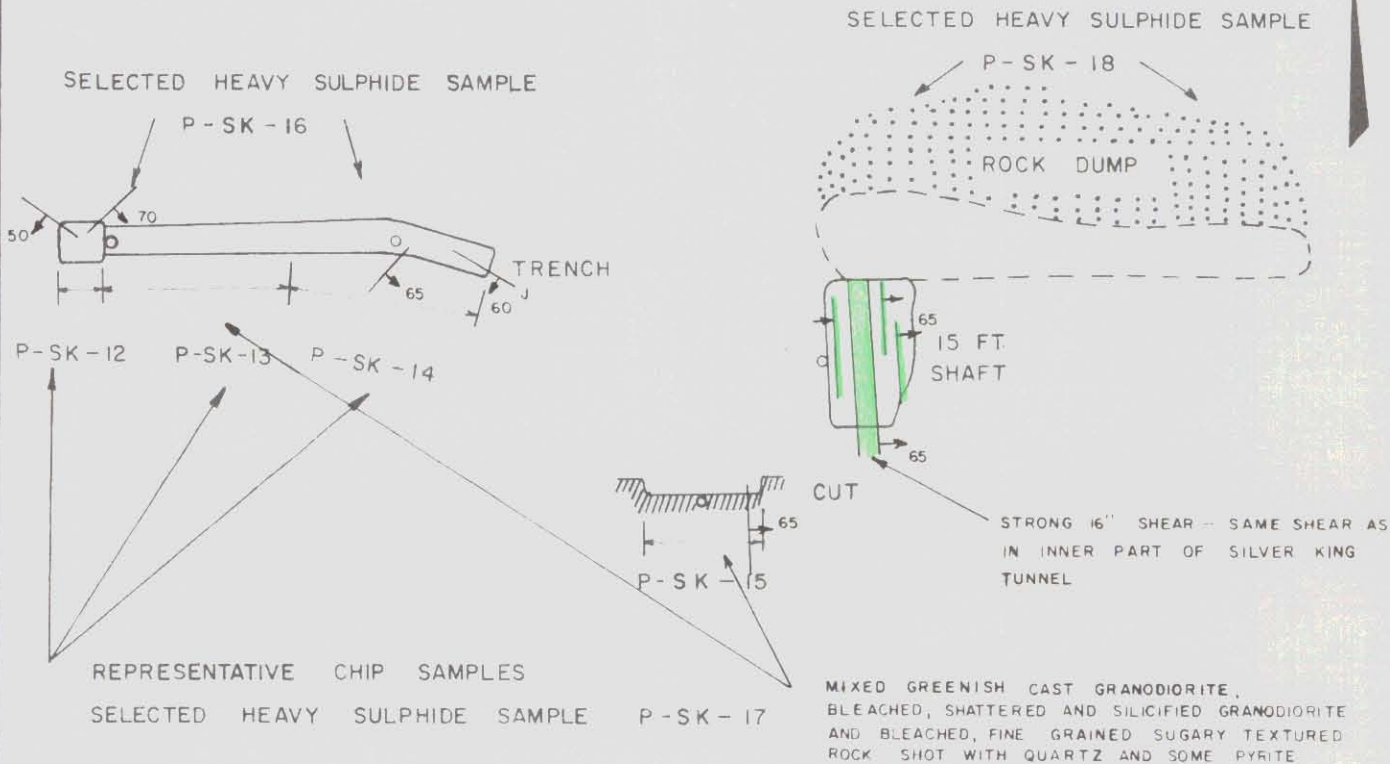




**Department of  
Mines and Petroleum Resources**

**ASSESSMENT REPORT**

NO. **718** MAP **#10**



**LEGEND**

- STRONG SHEAR ZONE
- SLIPS, SHEARS
- FRACTURES MINOR SLIPS
- JOINTS

*M. C. Johnson*

FIGURE 10

SILVER KING GROUP  
PEACHLAND AREA B.C.

**GEOLOGICAL PLAN**

SILVER KING CUTS

WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	DRAWN BY
Oct. 13, 1965	1" = 20'	M. C.R.

MINERAL GEOLOGY

General Statement

Mineral deposits present on Silver King ground includes:

- (1) quartz veins - both barren and sulphide bearing.
- (2) quartz-sulphide lenses, stringers, etc. along and adjacent to cleare, slips, etc.
- (3) quartz, quartz-sulphide and sulphide veinlets, masses, etc. in heavily broken ground.
- (4) finely disseminated sulphides in granitic rocks.

The deposits have received attention in the area of the former Silver King workings on lot No. 1, in the area of the former Alma later workings on lot No. 22, along the Turkey Pass road on lot No. 22, and in a few small pits located along the easterly trending ridge which passes through the property.

Mine Workings

Mine workings present on the property are as follows:

Alma Later Workings (Figure 6).

The old Alma later workings are situated on lot No. 22 claims in the eastern part of the property and include:

- (1) No. 1 level - 185 feet - El. approx. 4,335.
- (2) No. 2 level - caved but reported to have been some 110 feet in length - El. approx. 4,360.
- (3) No. 3 level - 37 feet - El. approx. 4,325.

Silver King Workings (Figure 7).

The old Silver King workings are located on lot No. 1 claim in the north central part of the property (Figure 6). The workings include:

- (1) a 214 foot tunnel.
- (2) 52 feet of crosscut from the above tunnel.
- (3) a shaft sunk from the surface, caved at 15 feet but reported to have extended at least 25 feet down (probably intersected by underground workings - Figure 7).
- (4) a surface pit five feet in depth.
- (5) 50 feet of surface trenching.



In addition to the above:

- (1) a cut has been made on a quartz vein section along the Turkey Lane road a short distance south of the Alma Water workings (Cut No. 22 claim)
- (2) small surface pits have been dug on lot Nos. 5, 6, 11, 20 and 22 claims.

#### Alma Water Property

The lower Alma Water tunnel (No. 3) was driven along a zone of east - northeasterly striking and southerly dipping cleaving which follows roughly along the contact between feldspar porphyry and greenstone (Figure 8). The upper tunnel (No. 1) was collared and driven some distance in the feldspar porphyry and then entered greenish east granodiorite and a greyish east, medium-grained diorite which is believed to be a phase of the granodiorite. The intermediate tunnel (No. 2) is caved but is believed to have been driven in feldspar porphyry.

Irregular thin stringers and lenses of quartz containing small amounts of pyrite and very minor galena are present along dips in both the upper and lower tunnels. Quartz and some associated pyrite are also present locally in shattered and broken ground between and adjoining dips and shears. In addition to the above, very finely disseminated sulphides are sparingly present in the granitic rocks of both accessible tunnels but notably in those explored in the inner part of the upper tunnel. Pyrite and galena were identified and it is possible that molybdenite may also be present.

#### Silver King Property

The Silver King workings are all in greenish east granodiorite and bleached, altered and silicified granodiorite (Figures 9, 10).

The tunnel was collared in a zone of northerly trending and easterly dipping cleaving. The ground between and along dips in the initial 60 feet of the tunnel is highly shattered and broken. Quartz together with some pyrite and minor very fine-grained grey sulphides including galena are present along the dips and in the shattered and broken ground.

A cross-cut driven northeasterly from a point 70 feet from the portal follows a branching zone of cleaving with highly broken ground between shear strands. Veinlets, lenses and masses of quartz, quartz-pyrite and solid pyrite are present along the shear strands and in the intervening ground.

The innermost 50 feet of the tunnel explores a very strong appearing zone of cleaving one to four feet in width. The zone strikes northerly and dips to the east at 50 to 65 degrees. It is composed largely of gouge and crushed rock. The zone is poorly to non-mineralized. Quartz and very minor amounts of pyrite are sparingly present in the zone.

Very small amounts of disseminated pyrite and fine-grained grey metallic sulphides including galena and, probably, molybdenite are present

in some sections of wall rock exposed in the tunnel.

The shaft sunk from the surface follows the steeply dipping northerly trending zone of shearing explored in the inner part of the Silver King tunnel. It is probable that the second cross-cut in from the Silver King portal intersects the shaft. Both the face of the cross-cut and the lower part of the shaft are caved.

The surface pit and cuts above the Silver King tunnel have been made in broken, shattered, bleached and silicified country rock. The broken and shattered material is shot with veinlets and masses of quartz with some associated pyrite and occasional but very minor concentrations of very fine-grained, grey metallic sulphides.

#### Highway Quartz Vein

A two foot vein of quartz containing small amounts of pyrite in grains and masses is present along the Turkey Pass road some 400 feet south of the lowermost Alma Inter tunnel (Figure 5). The vein strikes easterly and dips to the north at 70 degrees.

#### Sampling

The Silver King and Alma Inter workings were sampled as shown in Figures 11, 12, 13 and 14. In addition, F- K-22-1, a selected heavy pyrite sample was taken from the quartz vein exposed along the Turkey Pass road (Figure 5).

Analytical data have not yet been received. When available, they will be appended hereto.

#### Remarks

The quartz-sulphide mineralization along and in broken ground adjoining shear zones is unlikely to prove to be of economic interest although final appraisal must await receipt of sample data.

The disseminated, very fine-grained grey metallic sulphide mineralization present in some granitic rocks may prove to be of interest, particularly if values in molybdenum are obtained in samples.

Recommendations

Complete appraisal of the Silver King property upon receipt of sample data and formulate future program if warranted.

*M. C. Robinson*

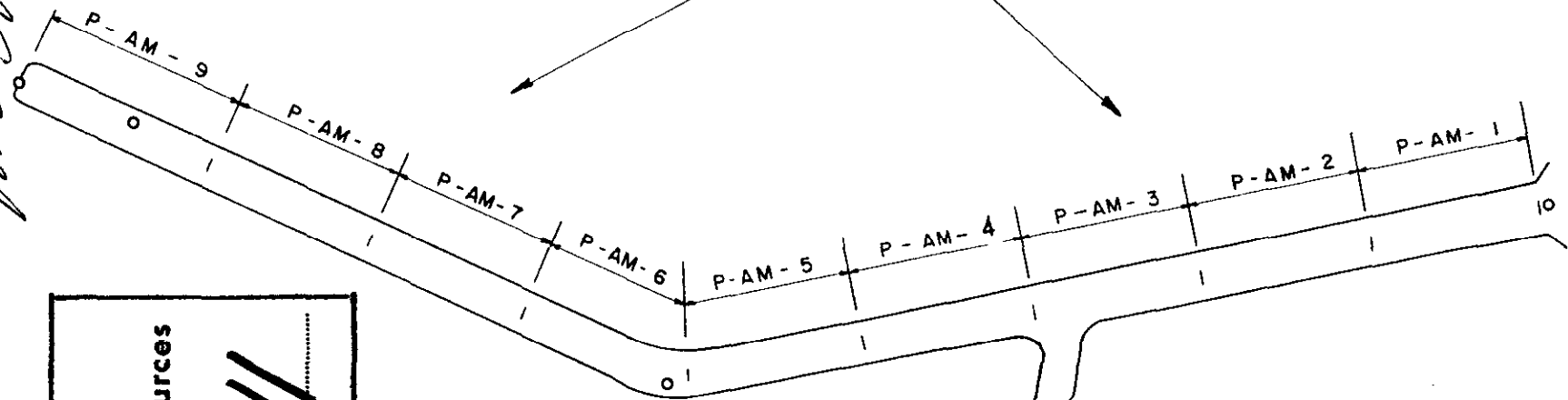
M. C. Robinson, D. Eng., D. Geol.

*M. C. Robinson*

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REPRESENTATIVE CHIP SAMPLES

20 FOOT INTERVALS



3 FOOT CHANNEL SAMPLE

P - AM - 10

SELECTED HEAVY PYRITE SAMPLE : P - AM - 11

SELECTED GREY METALLIC SULPHIDES : P - AM - 12

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NO. **718** MAP **#11**

FIGURE 11

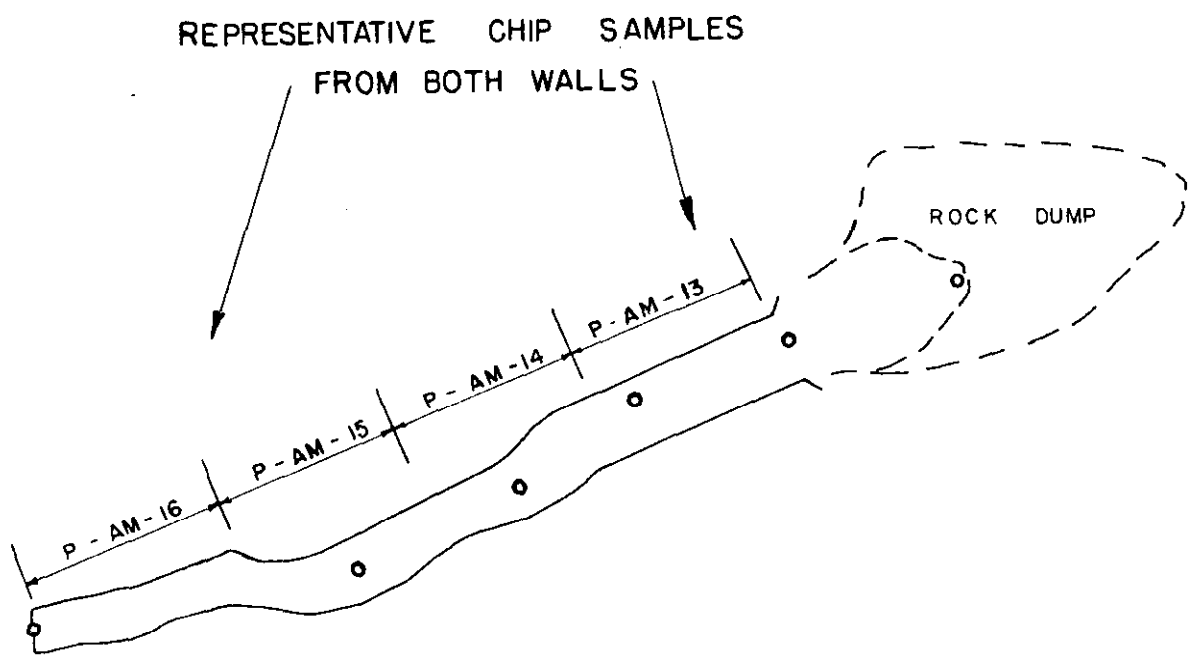
SILVER KING GROUP  
PEACHLAND AREA B.C.  
SAMPLE PLAN  
ALMA MATER NO.1

WESTERN RESOURCES CONS LTD.		
DATE	SCALE	DRAWN BY
Oct. 13, 1965	1" = 20'	M. C. R.

*M. C. Robinson*

*M. C. Robinson*

Department of  
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ASSESSMENT REPORT  
NO. *718* MAP # *12*

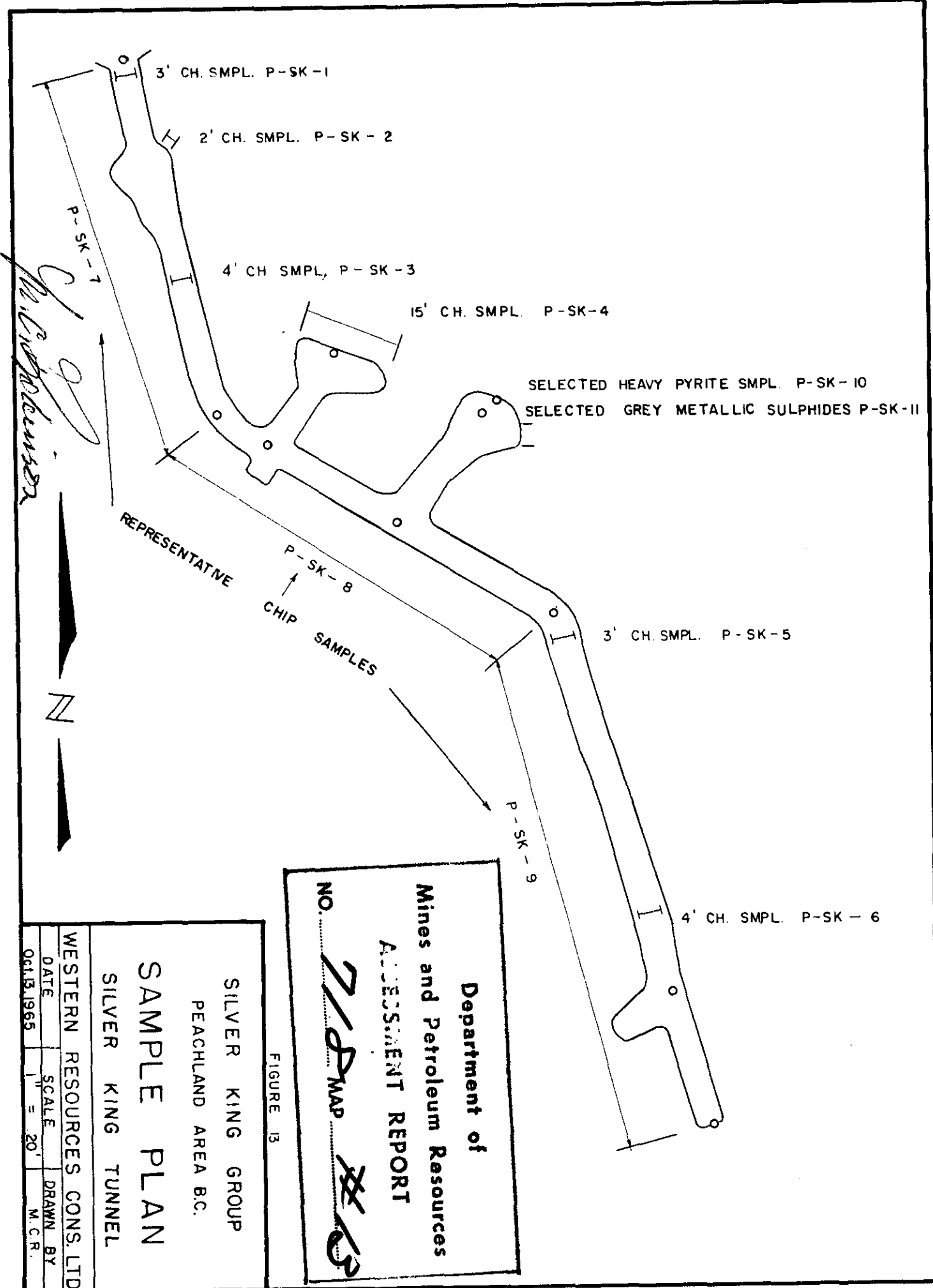


SELECTED HEAVY PYRITE SAMPLE : P - AM - 17

FIGURE 12

SILVER KING GROUP		
PEACHLAND AREA B.C.		
SAMPLE PLAN		
ALMA MATER NO. 3		
WESTERN RESOURCES CONS LTD.		
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Oct 13, 1965	1" = 20'	M.C.R.

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SELECTED HEAVY PYRITE SMPL. P-SK-10  
 SELECTED GREY METALLIC SULPHIDES P-SK-11

REPRESENTATIVE

P-SK-8  
 CHIP SAMPLES

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NO. 718 MAP 163

FIGURE 13

SILVER KING GROUP  
 PEACHLAND AREA B.C.  
 SAMPLE PLAN  
 SILVER KING TUNNEL

WESTERN RESOURCES CONS. LTD

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Oct 13, 1965	1" = 20'	M.C.R.

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**ASSESSMENT REPORT**

NO. 718 MAP #14

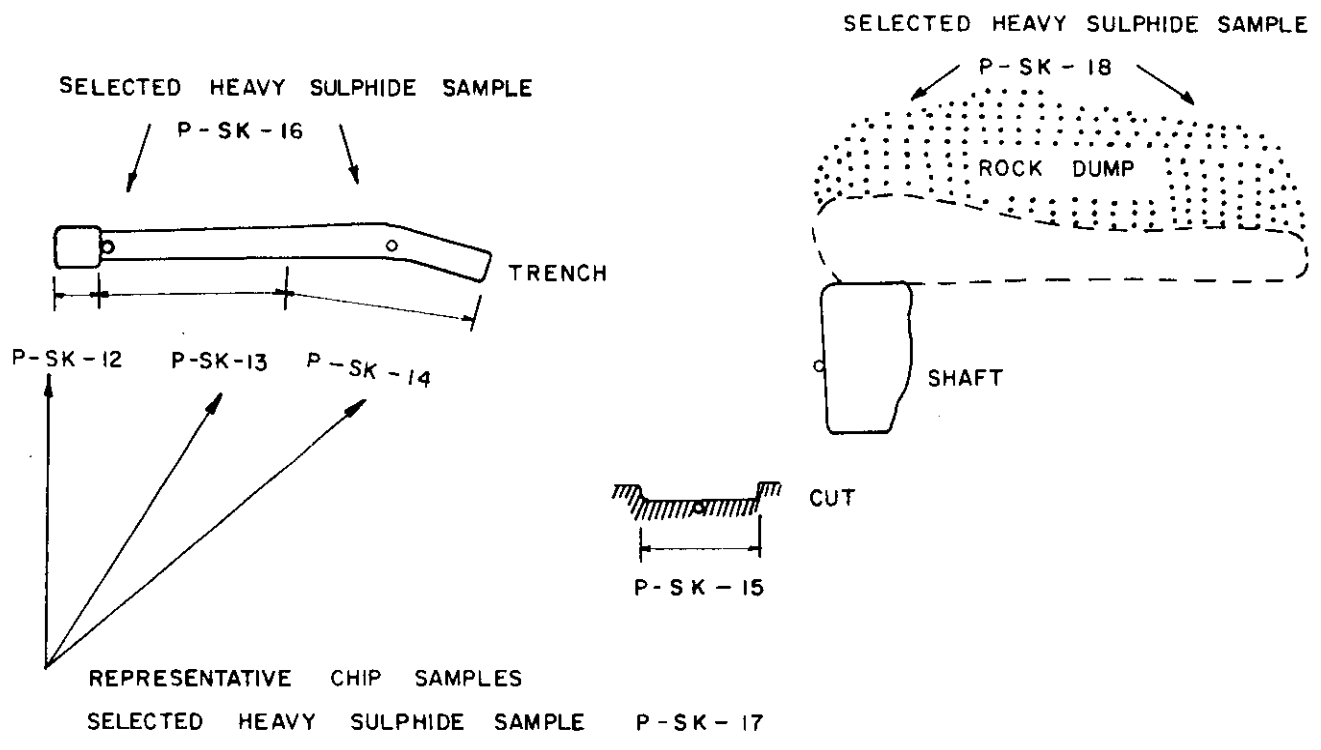


FIGURE 14

SILVER KING GROUP  
PEACHLAND AREA B.C.

**SAMPLE PLAN**


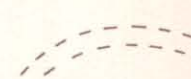
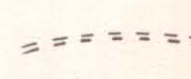









SILVER KING CUTS

WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	DRAWN BY
Oct. 13, 1965	1" = 20'	M.C.R.

*M. C. Robinson*



**LEGEND**

-  MAIN ROAD
-  ROAD APPROXIMATE
-  CAT TRAIL
-  CONTOUR APPROXIMATE
-  LAKE OR SLOUGH
-  STREAM
-  SURVEY STATION
-  OUTCROP AREA
-  MINE TUNNEL
-  CAVED MINE TUNNEL
-  CRUISED AREA NO OBSERVED OUTCROPS
-  OBSERVED CLAIM POST



SILIKAMEEN M.D.  
OSOYOOS M.D.

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NO. **718** MAP **#1**

**718**

NOTE  
TO ACCOMPANY GEOLOGIC REPORT BY  
DR. M.C. ROBINSON P. ENG. ON SILVER  
KING CLAIM GROUP, PEACHLAND AREA  
OSOYOOS MINING DIVISION DATED OCT. 1965

FIGURE 4

**KING RESOURCES LTD.**

PEACHLAND AREA *Assess. Report #718*  
OSOYOOS MINING DIVISION B.C.

**SILVER KING CLAIM GROUP**

**SURVEY PLAN**

---

PREPARED BY  
**WESTERN RESOURCES CONSULTANTS LTD**

SCALE - 1" = 500' GEOLOGIST - Dr. M.C. Robinson  
DATE - October 1965 DRAFTSMAN - E.R.B. FILE - F.M-1

**M - - - 65**



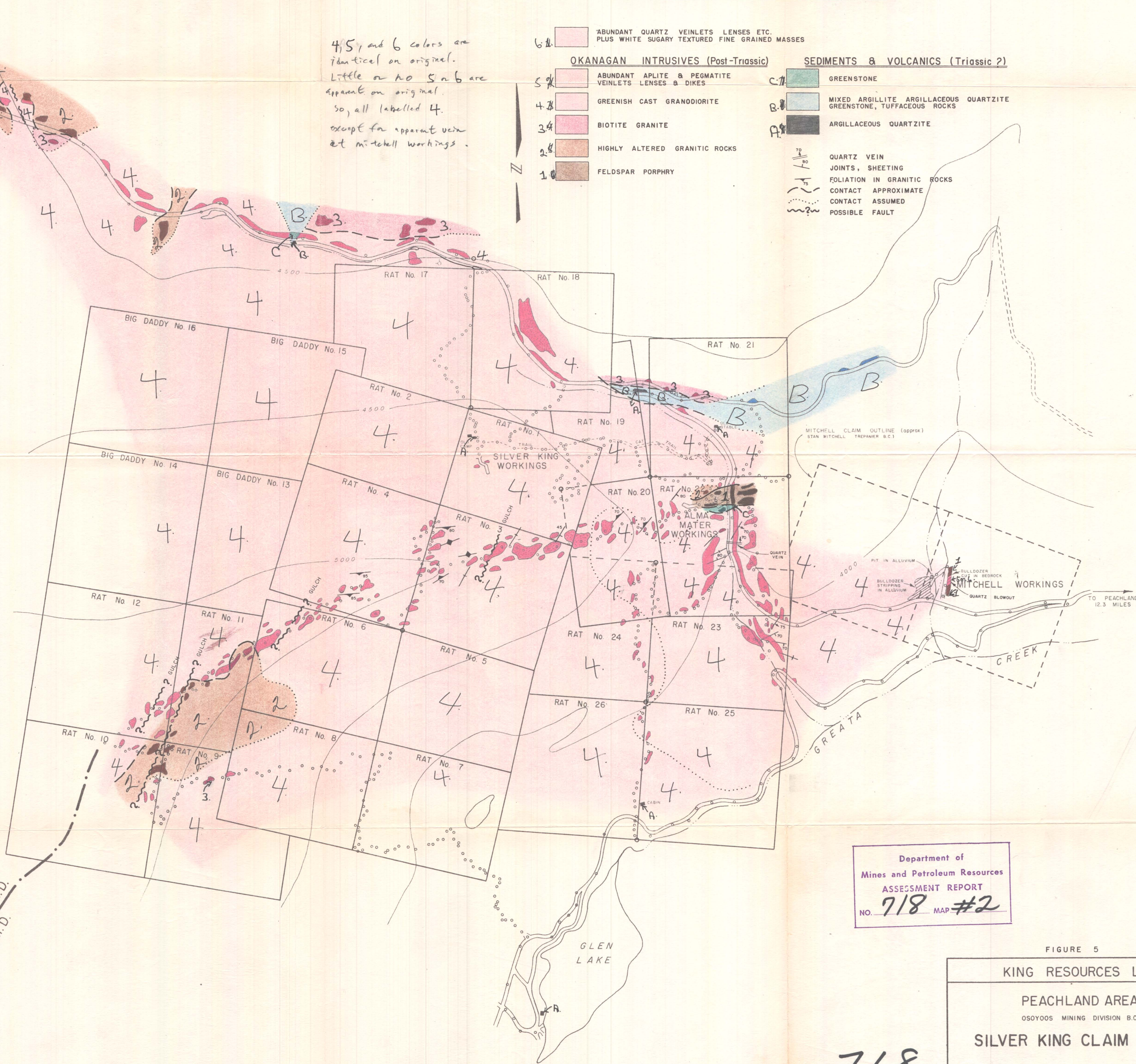
GEOLOGIC LEGEND

4, 5, and 6 colors are identical on original. Little or no 5 or 6 are apparent on original. So, all labelled 4. except for apparent vein at Mitchell workings.

OKANAGAN INTRUSIVES (Post-Triassic)		SEDIMENTS & VOLCANICS (Triassic ?)	
6	ABUNDANT QUARTZ VEINLETS LENSES ETC. PLUS WHITE SUGARY TEXTURED FINE GRAINED MASSES	C	GREENSTONE
5	ABUNDANT APLITE & PEGMATITE VEINLETS LENSES & DIKES	B	MIXED ARGILLITE ARGILLACEOUS QUARTZITE GREENSTONE, TUFACEOUS ROCKS
4	GREENISH CAST GRANODIORITE	A	ARGILLACEOUS QUARTZITE
3	BIOTITE GRANITE		
2	HIGHLY ALTERED GRANITIC ROCKS		
1	FELDSPAR PORPHYRY		

LEGEND

	MAIN ROAD
	ROAD APPROXIMATE
	CAT TRAIL
	CONTOUR APPROXIMATE
	LAKE OR SLOUGH
	STREAM
	SURVEY STATION
	OUTCROP AREA
	MINE TUNNEL
	CAVED MINE TUNNEL



SILIKAMEEN M.D.  
OSOYOOS M.D.

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ASSESSMENT REPORT  
NO. 718 MAP #2

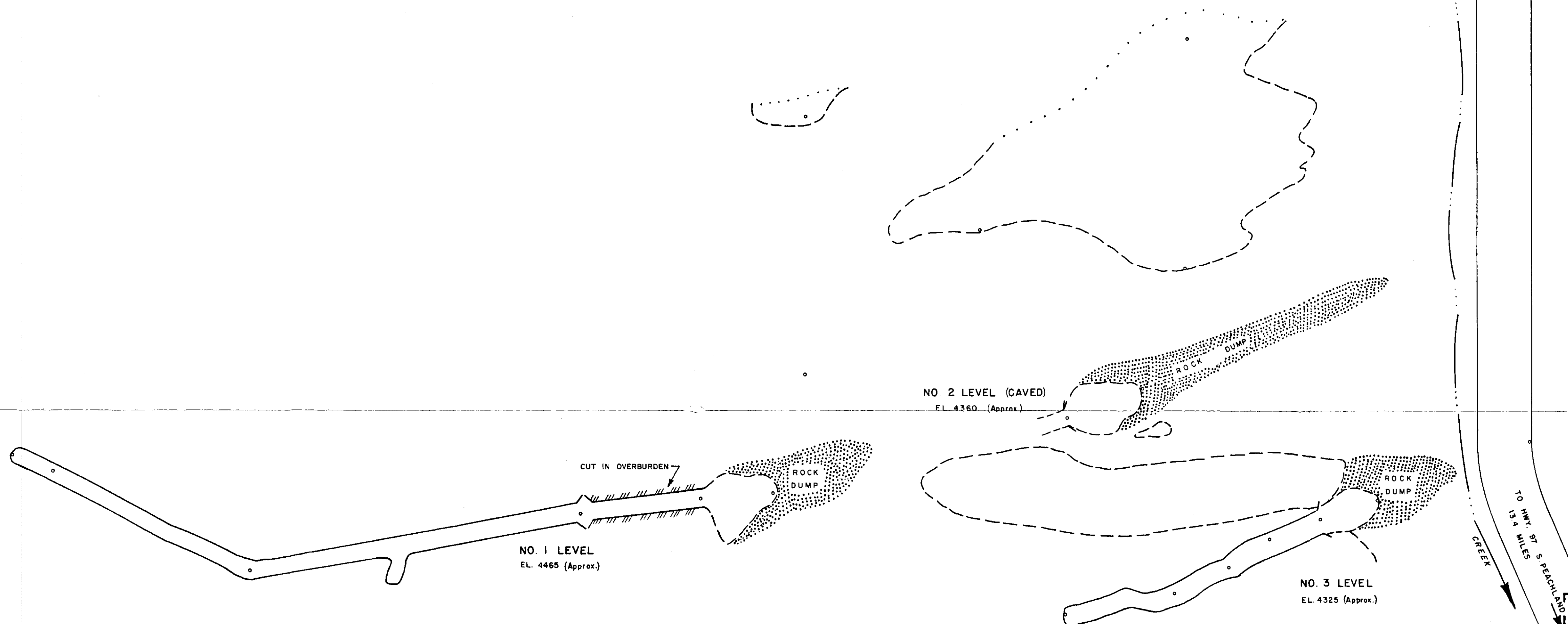
FIGURE 5  
KING RESOURCES LTD.  
PEACHLAND AREA *Assess. Rpt. #718*  
OSOYOOS MINING DIVISION B.C.  
SILVER KING CLAIM GROUP  
GEOLOGICAL PLAN

NOTE  
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KING CLAIM GROUP, PEACHLAND AREA  
OSOYOOS MINING DIVISION DATED OCT. 1965

PREPARED BY  
WESTERN RESOURCES CONSULTANTS LTD  
SCALE - 1" = 500'  
GEOLOGIST - Dr. M.C. Robinson  
DATE - October 1965  
DRAFTSMAN - E. R.B.  
M - - - 66  
FILE - F-M-1

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NO. **718** MAP **#3**

FIGURE 6

KING RESOURCES LTD.

PEACHLAND AREA

OSOYOOS MINING DIVISION, B.C.

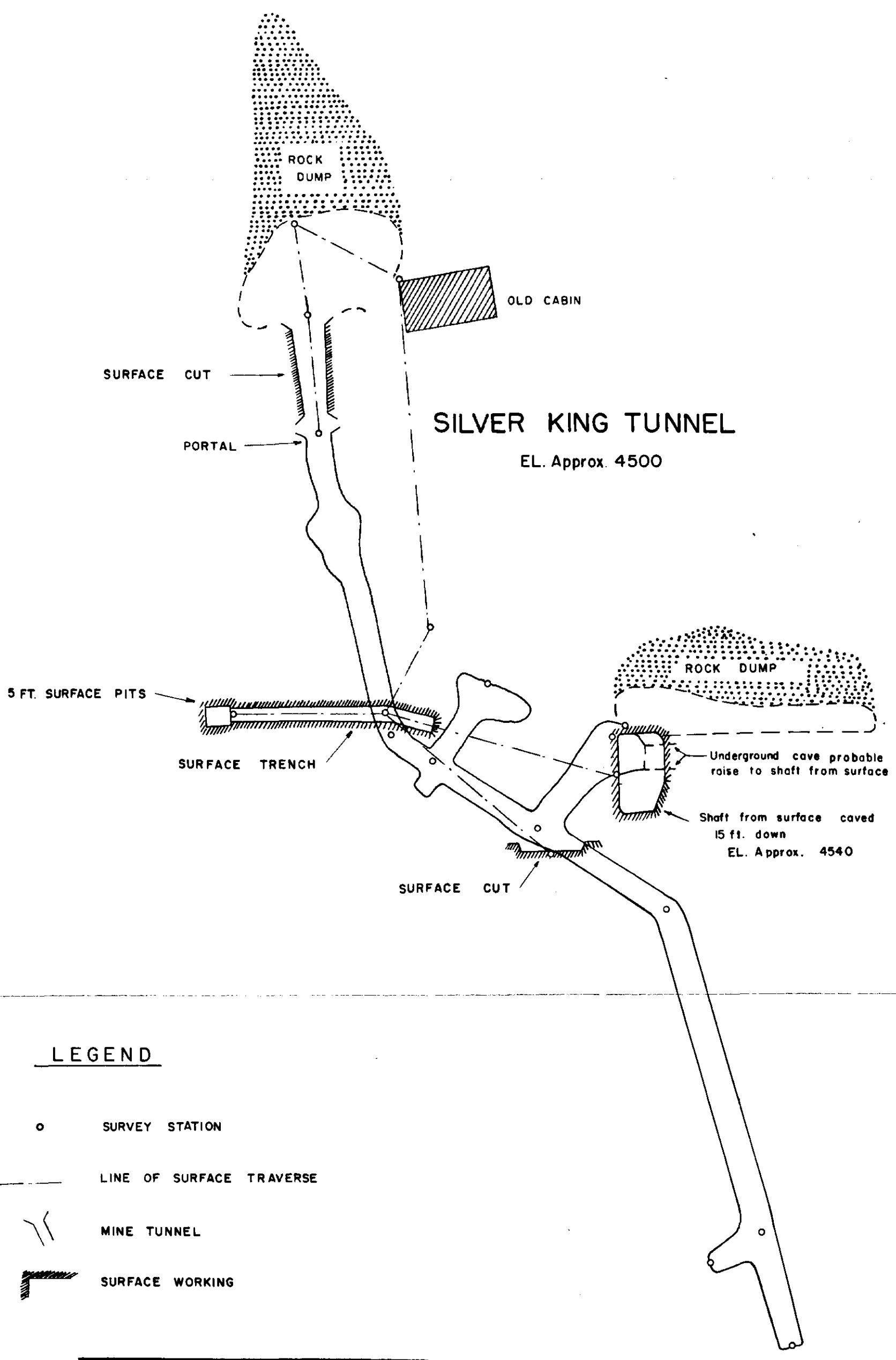
SILVER KING CLAIM GROUP  
ALMA MATER SECTION  
PLAN OF WORKINGS

718

NOTE  
TO ACCOMPANY GEOLOGIC REPORT BY  
DR. M.C. ROBINSON P. ENG. ON SILVER  
KING CLAIM GROUP, PEACHLAND AREA  
OSOYOOS MINING DIVISION DATED OCT. 1965

*M.C. Robinson*

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SCALE - 1" = 20'	GEOLOGIST - Dr. M.C. Robinson
DATE - October 1965	DRAFTSMAN - M. J.G.
SHEET NUMBER - <b>M - - - 67</b>	
FILE NUMBER - F-111	



LEGEND

- SURVEY STATION
- LINE OF SURFACE TRAVERSE
- ∩ MINE TUNNEL
- ▨ SURFACE WORKING

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 NO. **718** MAP **#4**

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FIGURE 7

NOTE

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 DR. M.C. ROBINSON P. ENG. ON SILVER  
 KING CLAIM GROUP, PEACHLAND AREA  
 OSOYOOS MINING DIVISION DATED OCT. 1965











*M.C. Robinson*

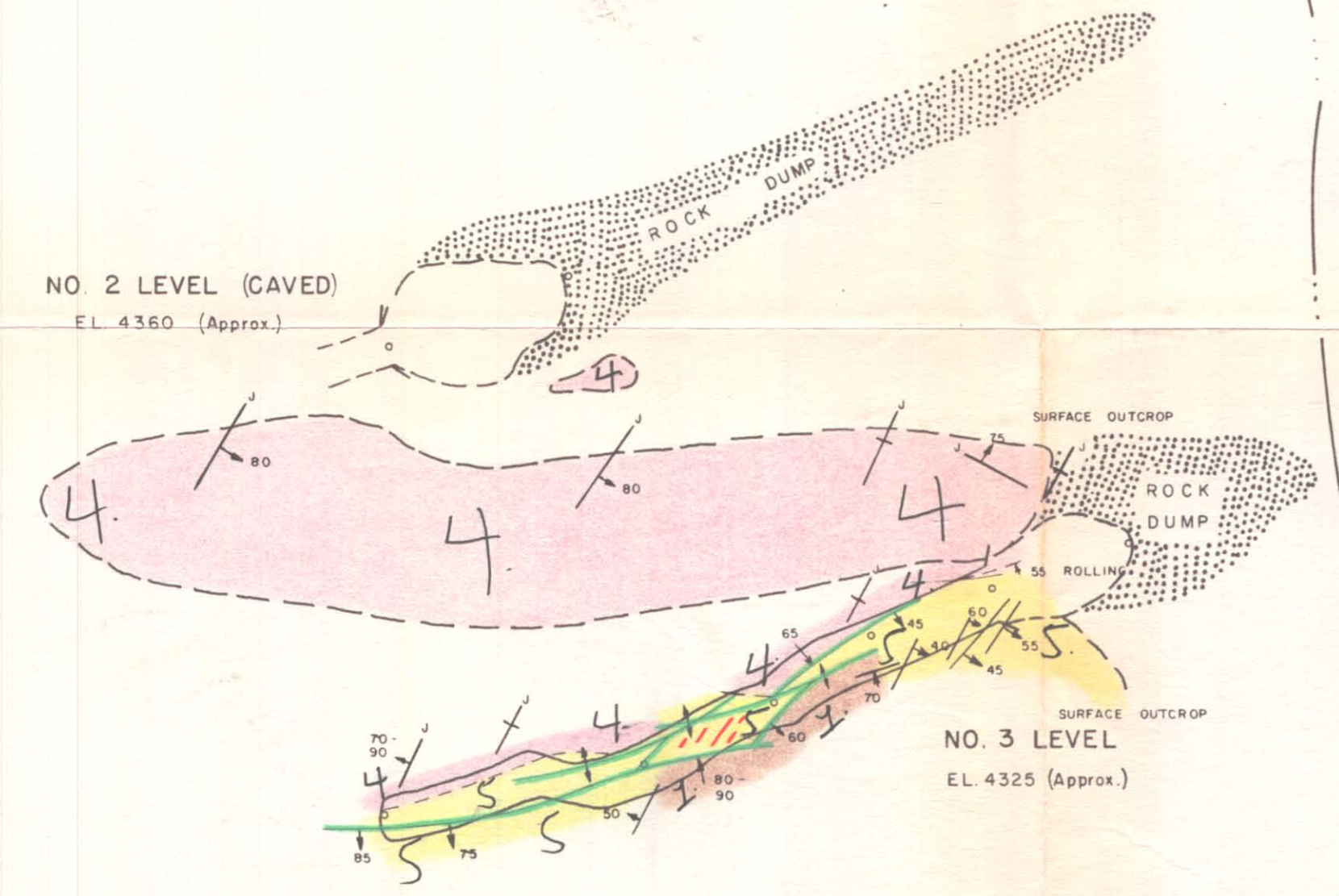
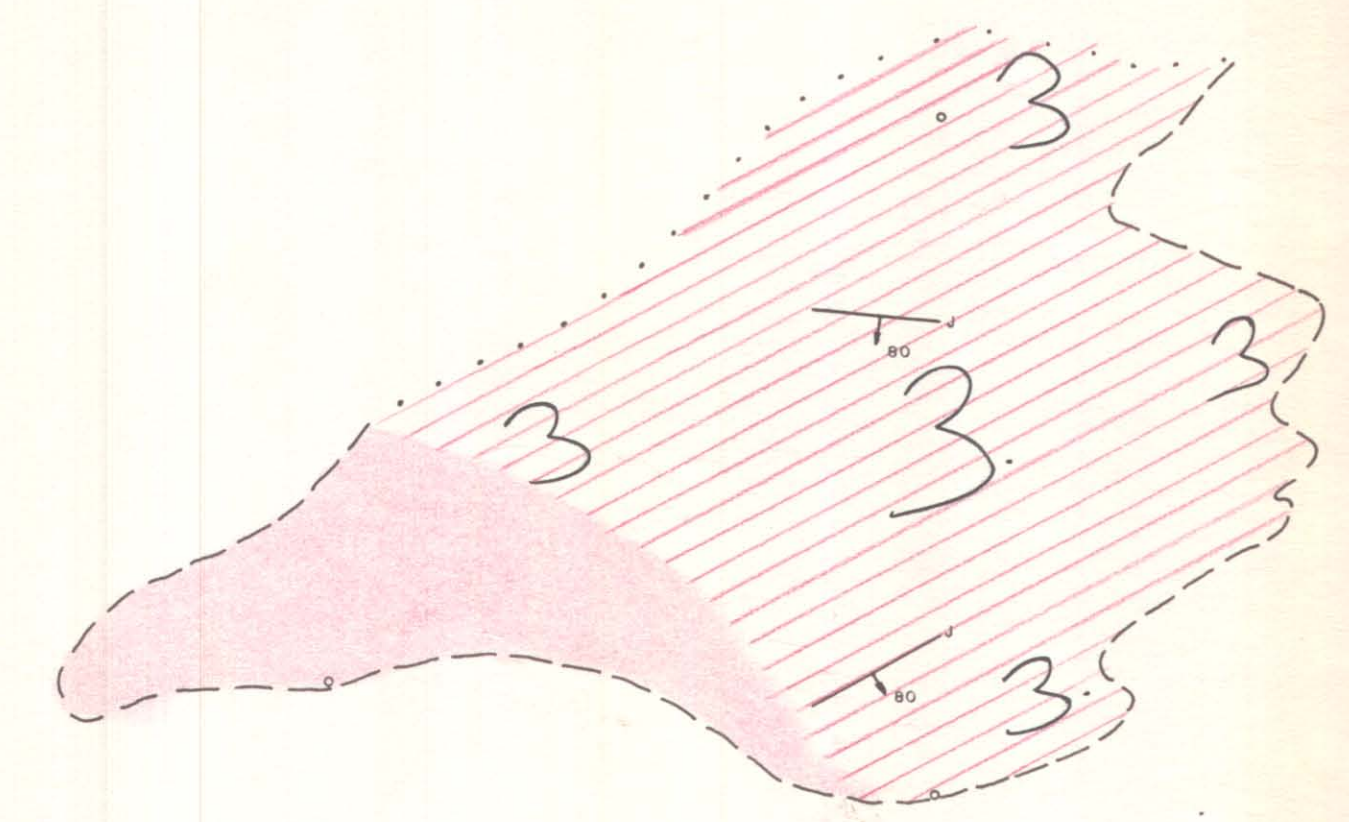
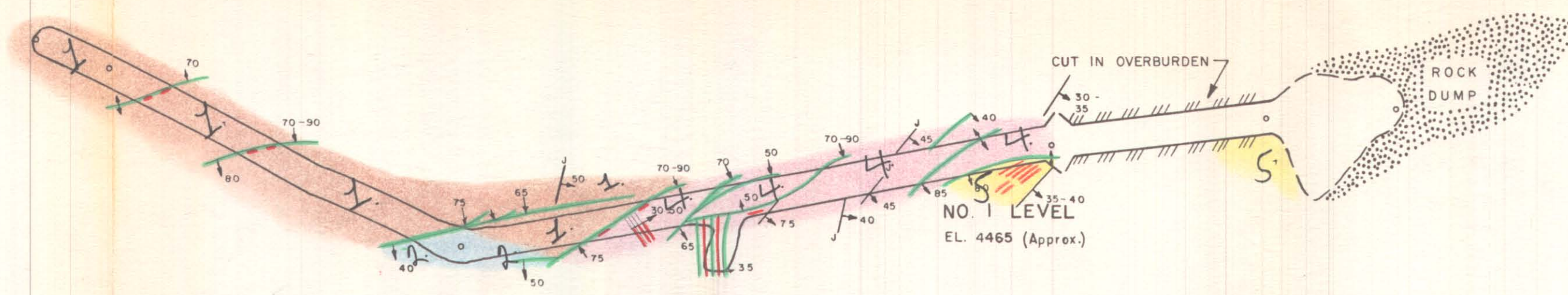
<b>SILVER KING GROUP          SILVER KING SECTION          PLAN OF WORKINGS</b>		
WESTERN RESOURCES CONS. LTD.		
DATE	SCALE	DRAWN BY
Oct 13, 1965	1" = 20 Feet	M. C. R.





**LEGEND**

-  TUNNEL OUTLINE
-  SHEAR ZONE
-  FRACTURES MINOR SLIPS
-  JOINTS
-  BROKEN GROUND SHOT AND VEINED WITH QUARTZ AND SOME PYRITE
-  GREENSTONE
-  FELDSPAR PORPHYRY
-  FELDSPAR PORPHYRY ? ALTERED
-  GREENISH CAST GRANODIORITE
-  GREY DIORITE



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NO. **718** MAP #5

FIGURE 8

KING RESOURCES LTD.

PEACHLAND AREA

OSOYOOS MINING DIVISION, B.C.

SILVER KING CLAIM GROUP

ALMA MATER WORKINGS

GEOLOGICAL PLAN

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NOTE  
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KING CLAIM GROUP, PEACHLAND AREA  
OSOYOOS MINING DIVISION DATED OCT. 1965

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SCALE - 1" = 20'	GEOLOGIST - Dr. M.C. Robinson	SHEET NUMBER -	M - - - 68
DATE - October 1965	DRAFTSMAN - M. J.G.	FILE NUMBER - F-M-1	