

83-#721-A-11792

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REPORT ON EXPLORATION DURING 1983
ON THE DAVE PRICE PROPERTY

Omineca Mining Division
Latitude 57°18'N, Longitude 127°02'W
NTS 94E/6E

Prepared for

WESTERN HORIZONS AND REDFERN-SUTTON
JOINT VENTURE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,792

BY

WESTERN HORIZONS RESOURCES LTD.
AGASSIZ B.C.

November 30, 1983

K.E. Northcote Ph.D., P.Eng.

DP

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REPORT ON EXPLORATION DURING 1983 ON THE
GOLDEN STRANGER, COPPER KING-NAMERA IV,
DAVE PRICE, GORD DAVIES CLAIMS

INTRODUCTION

TERMS OF REFERENCE

Agreement was reached by Western Horizons Resources Ltd., Sutton Resources Ltd and Redfern Resources Ltd whereby Sutton-Redfern would provide funding for a joint venture exploration program during the 1983 field season on the GOLDEN STRANGER, GORD DAVIES, DAVE PRICE, McNAMERA claims owned by Western Horizons Resources Ltd. The exploration program was operated by Western Horizons and additional ground staked as mineral potential warranted and funding permitted.

FIELD PROGRAM

S.C.Gower, K.E.Northcote, geologists, and E.Thompson and B.K.Northcote assistants spent the period August 6th to 27th examining these claims. The 1983 program was directed towards discovery of new quartz-vein-breccia structures by geological reconnaissance, prospecting, sampling and where significant structures were discovered, detailed geological mapping and sampling. The field work will be supplemented by limited petrographic and mineral-graphic studies and assays of additional selected specimens.

This report outlines the results of the 1983 field program, conclusions and recommendations for continuing exploration where required.

LOCATION OF TOODOGGONE GOLD-SILVER DISTRICT

The centre of the Toodoggone gold-silver district is located 300 kilometres north of Smithers, at latitude $57^{\circ}22.5'N$ and longitude $127^{\circ}15'W$; NTS 94E. See Figure 1. The area extends 90 kilometers northwesterly from Thutade Lake to north of Stikine River. The central portion of this belt is shown on Figure 2.

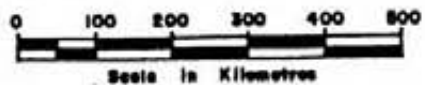
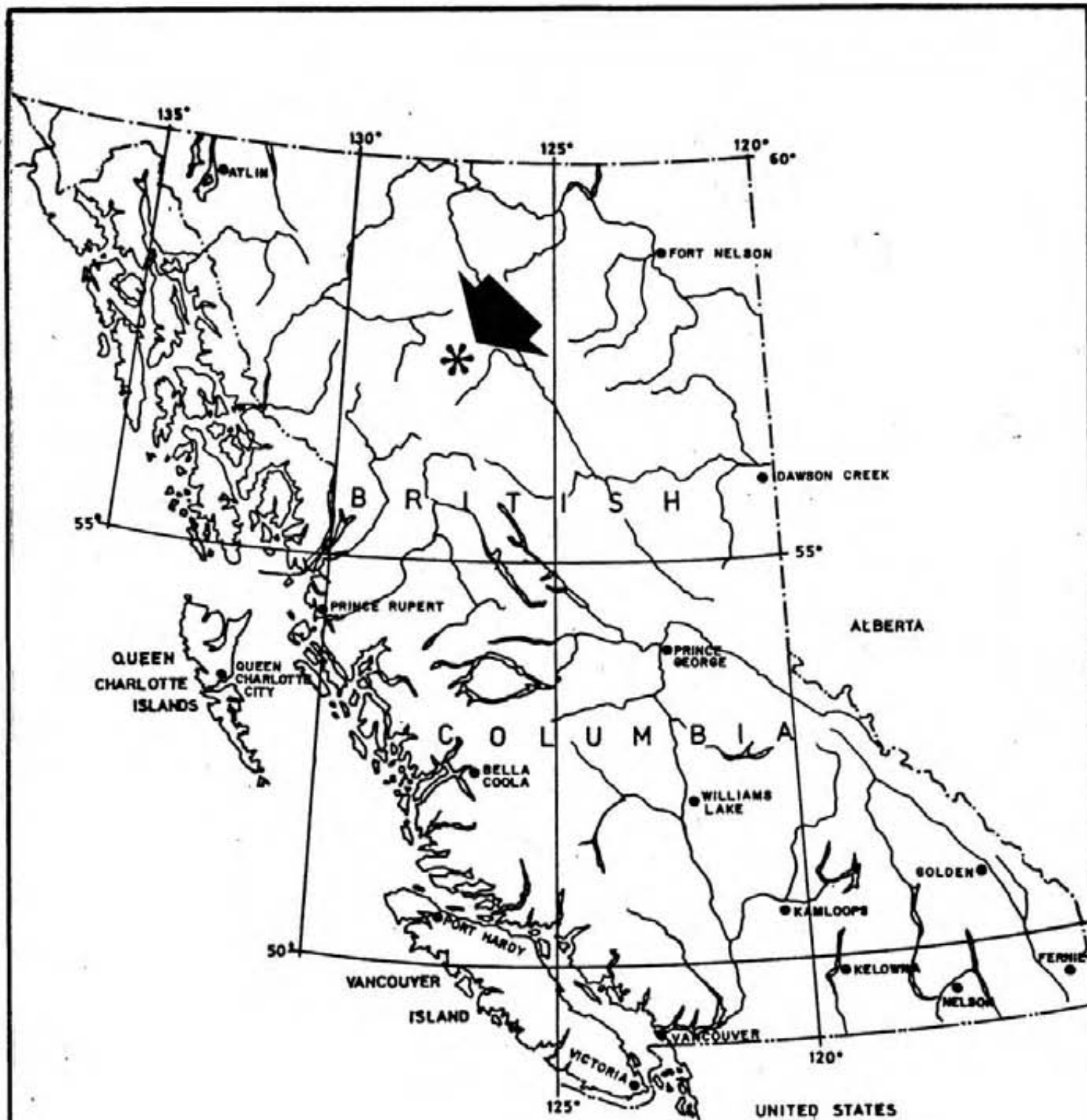
Access to the area is by fixed wing from Smithers to the Sturdee River airstrip thence by road to the Baker and Lawyers properties or by helicopter to other properties in the Toodoggone gold-silver district.

The Toodoggone gold-silver district lies at the east edge of the Intermontane Belt adjacent to the Omineca Belt. An upland area, El. 2000 to 2300 metres (6500 to 7500 ft), is abundantly dissected by rivers and creeks heading in steep-walled cirques. The highest peak in the district is Mt. McNamera at 2523 metres (8278 ft). The lower valley bottoms range between 1150 to 1200 metres (3800 to 4000 ft.)

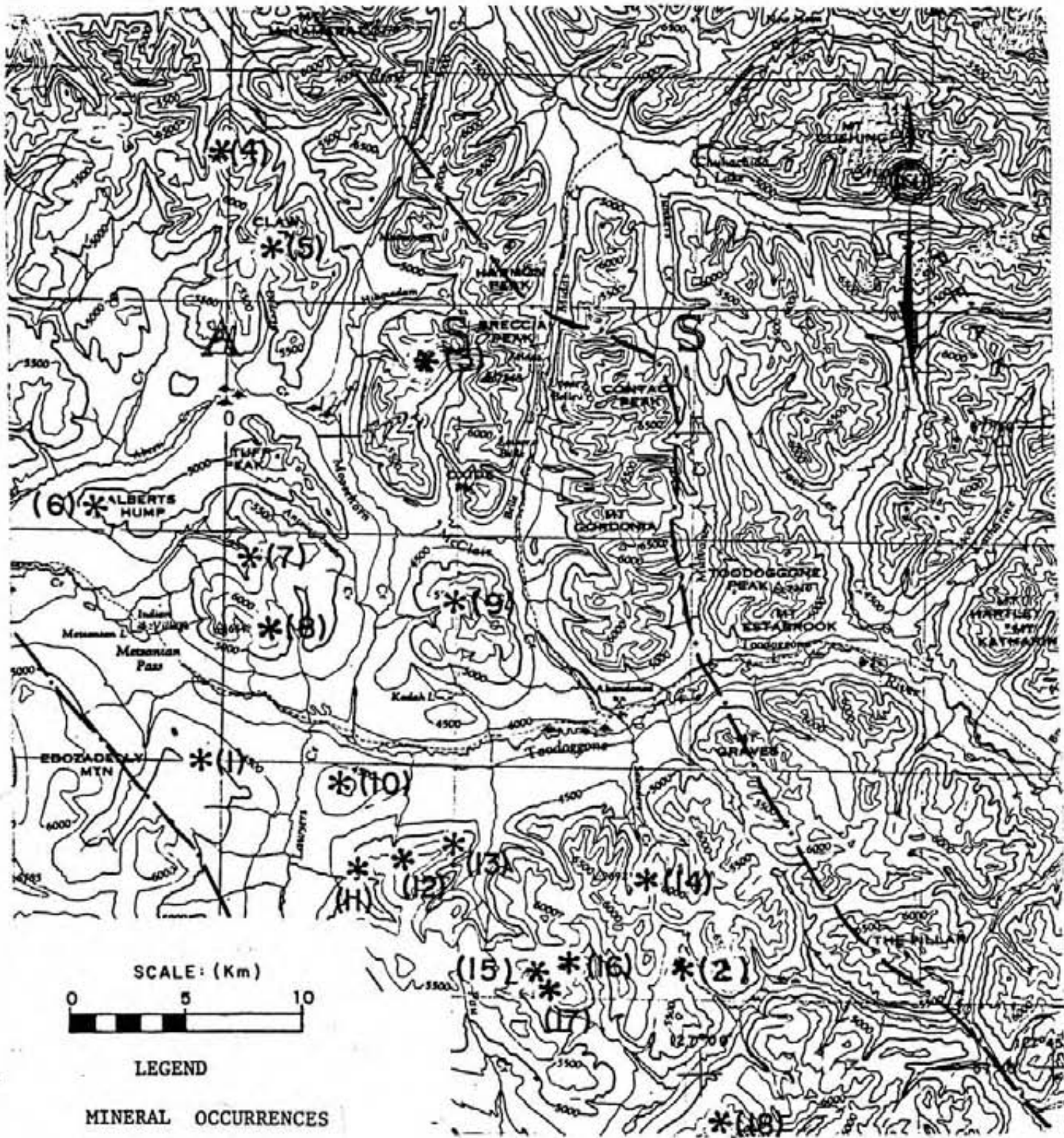
Exploration in the district is largely seasonal with activity beginning in mid May and ending mid October.

MINING HISTORY

Prospecting began in the Toodoggone district early in the 1930's and resulted in discovery of placer gold at Belle Creek but little gold was produced. Although lead-zinc mineralization in skarn near the head of Thutade Lake was discovered and staked at this time by Cominco, the search for the lode gold source resulted in no significant discoveries. Chappelle (Baker Mine) was discovered by Kennco Explorations (Western) Ltd. in 1968 while searching for porphyry copper-molybdenum deposits in the general area. Other companies engaged in



TOODOGGONE JOINT VENTURE	
LOCATION OF TOODOGGONE GOLD-SILVER DISTRICT	
FIGURE: I.	SCALE: 1:10,000,000
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- #1 GOLDEN STRANGER #10 KODAH
 2 DAVE PRICE 11 SILVER POND
 3 GORD DAVIES 12 LAWYERS
 4 COPPER KING 13 LAWYERS
 5 CLAW MTN. 14 GOLDEN NEIGHBOUR
 6 ALBERTS 15 BAKER
 7 NORTH METSANTAN 16 BAKER
 8 METSANTAN 17 BAKER
 9 J.D. 18 SHA

TOODOGGONE JOINT VENTURE	
LOCATION OF . TOODOGGONE GOLD-SILVER DISTRICT MINERAL OCCURRENCES	
FIGURE: 2.	SCALE: 1:250,000
DRAWN BY: P.STOECKLY	DATE: Oct. 83
WESTERN HORIZONS RESOURCES LTD.	

searching for porphyry deposits in the Toodoggone area during the period 1970 to 1982 include Conwest Exploration Ltd., Cordilleran Engineering Ltd., Cominco and Texas Gulf. This activity by companies and individuals resulted in discovery of significant gold and silver mineralization at Lawyers, Claw Mtn, Metsantan, J.D. (McClair), Sha and Remess properties. These and other properties of note are shown on Figure 2.

The Baker Mine (Cappelle) is in production with initial reserves of 120,000 tons 0.8 oz/ton Au, 15.0 oz/ton Ag. At the present time S.E.R.E.M. is preparing the Lawyers property for production with reserves of approximately 400,000 tons 0.3 oz/ton Au and 4.0 oz/ton Ag.

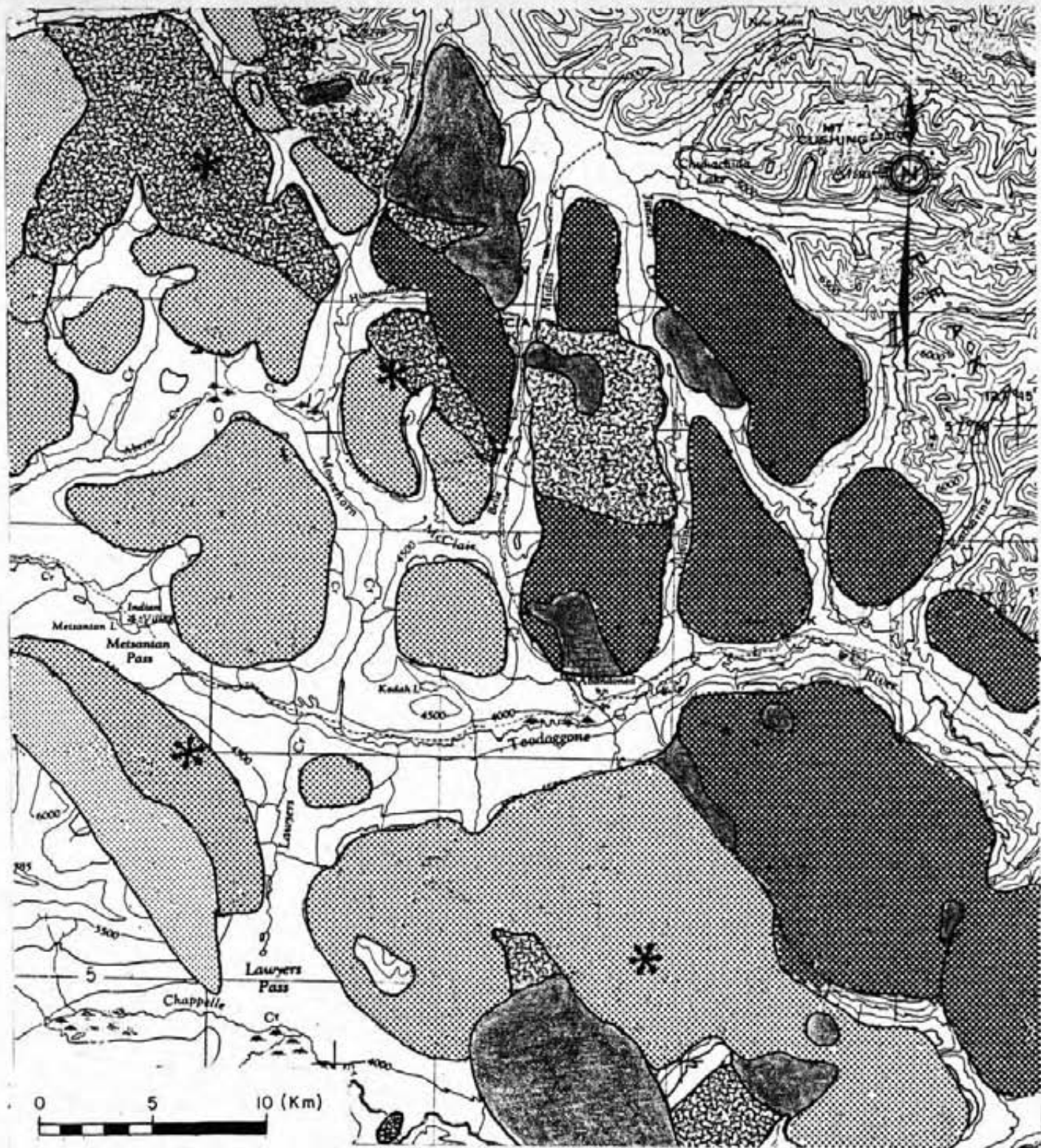
Exploration during the 1983 field season was carried out by S.E.R.E.M., Newmont, Kidd Creek (Texasgulf), Dupont, St. Joseph and Western Horizons. Total exploration expenditures of these companies in the Toodoggone area during 1983 are estimated to be 1.5 million dollars.

REGIONAL GEOLOGY






The Toodoggone mineral district, is underlain by a northwesterly trending belt 90 by 15 kilometres of sediments, volcanics and intrusives ranging in age from Paleozoic to Tertiary. Figure 3 shows that the Sustut Group (Upper Tertiary to Cretaceous) sediments, which form the west margin of the Toodoggone belt, unconformably overlie the Toodoggone volcanics (Hazelton Group, Lower Jurassic). To the east, and as fault blocks within Toodoggone volcanics, Takla Group (Upper Triassic) volcanics form a disrupted belt of faulted segments containing lesser fault blocks of Asitka (Permian) limestone. The Omineca Intrusions form the east margin of the Toodoggone belt.

STRUCTURAL SETTING

The geological framework of the Toodoggone gold-silver



LEGEND

-  SUSTUT SEDIMENTS
-  TOOGOGGONE VOLCANICS
-  TAKLA VOLCANICS
-  ASITKA SEDIMENTS (carbonate)
-  OMINECA-RELATED INTRUSIVES

TOODOGGONE JOINT VENTURE

GEOLOGY OF TOODOGGONE GOLD-SILVER AREA

FIGURE: 3. **SCALE:** 1:250,000

DRAWN BY: P. STOECKLY **DATE:** Oct. 83

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camp is a result of comagmatic intrusive-volcanic-hydrothermal processes occurring along deep-seated northerly trending structural breaks during a 20-million-year period in upper Triassic to lower Jurassic time. Volcanism resulted in deposition of a thick succession of Toodoggone volcanic rocks in a subaerial, perhaps partly shallow marine environment, on a "basement" of older Takla volcanics and Asitka sediments. Intrusive and hydrothermal systems associated with volcanism invaded these volcanic rocks along the same deep-seated and periodically reactivated structural breaks controlling volcanism. Stocks, dykes and sills of Omineca related intrusions were thereby emplaced in Toodoggone volcanics and "basement" Takla-Asitka rocks. Linear zones of varied kinds and intensity of hydrothermal alteration, veining and mineralization, associated with emplacement of plutons, were also impressed at different structural levels in Toodoggone and older rocks.

Subsequently the Toodoggone and earlier rocks were subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. Within these fault blocks Toodoggone rocks display broad open folds commonly with dips less than 25 degrees.

Sustut Group sedimentary rocks unconformably overlies these earlier rocks and have relatively flat dips with few major structural disruptions.

STRATIGRAPHY

Asitka Group (Permian)

Asitka Group carbonates to greater than 150 metres thick are the oldest known rocks in the Toodoggone area. These rocks occur as fault blocks in association with Takla volcanics. In some areas these limestones are associated with brecciated serpentinite. Skarn development near contacts with Omineca Intrusions may contain garnet,

magnetite, tremolite, galena and sphalerite and are hosts for some silver-lead-zinc deposits.

Takla Group (Triassic)

Barr (1978) subdivides the Takla Group volcanics into four units at Chappelle property (Baker Mine) as follows:

- (1) Pyroclastic breccia
- (2) Dark grey porphyritic andesite
- (3) Fine grained andesite
- (4) Tremolite andesite porphyry

The Takla Group volcanics may include some local development of limestone

Hazelton Group (Jurassic) Toodoggone volcanics.

Toodoggone volcanics unconformably overlie Takla Group and consist of thick ashflow units succeeded by thin discontinuous and locally reworked ashflow material, volcanic breccias, and thin airfall tuffs.

Panteleyev (1983) divides the Toodoggone volcanics in the Toodoggone - Sturdee River area into six major units as follows:

- Unit 6 Grey dacite
- Unit 5 Andesite and trachyandesite flows
 - Unit 5 ai Pyroxene basalt intrusion
 - Unit 5 a, b, c Basaltic sequence east of Saunders Creek- West Jock Creek fault system.
- Unit 4 Quartzose andesite pyroclastic rocks
- Unit 3 Andesite flows and tuffs

TABLE I FORMATIONS IN THE TOODOGGONE AREA

ERA	PERIOD OR EPOCH	FORMATIONS	LITHOLOGIC UNITS	LITHOLOGY
CENOZOIC	UPPER TERTIARY TO CRETACEOUS	SUSTUT	LOWER TANGLE CREEK	Pebble conglomerates and sandstones
MESOZOIC	Unconformity			
	LOWER TO MIDDLE JURASSIC	TOODOGGONE VOLCANICS	Unit 6	Grey dacite
			Unit 5 (5ai)	Andesite and trachyandesite flows Pyroxene basalt intrusion
			(5a,b,c)	Basaltic sequence
Unit 4			Pyroclastic rocks	
Unit 3			Andesite flows and tuffs	
Unit 2	Andesite flows			
Unit 1 (1a)	Tuff and tuffaceous sandstone "redbeds" Volcanic flow			
Unconformity				
TRIASSIC	TAKLA	Pyroclastic breccia		
		Porphyritic feldspar andesite		
		Fine grained andesite		
		Tremolite andesite porphyry		
Unconformity				
PALEOZOIC	PERMIAN	ASITKA FORMATION (150+)	CACHE CREEK GROUP	Calcite marble, chert, argillite, sandstone, skarn, garniferous calcite, marble, limestone

**GEOLOGICAL BRANCH
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OMINECA
INTRUSIONS

Quartz monzonite,
granodiorite
syenomonzonite

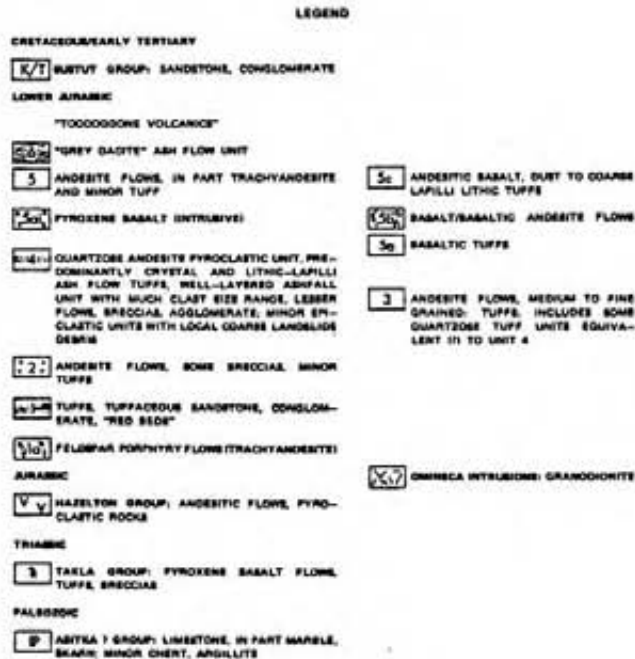
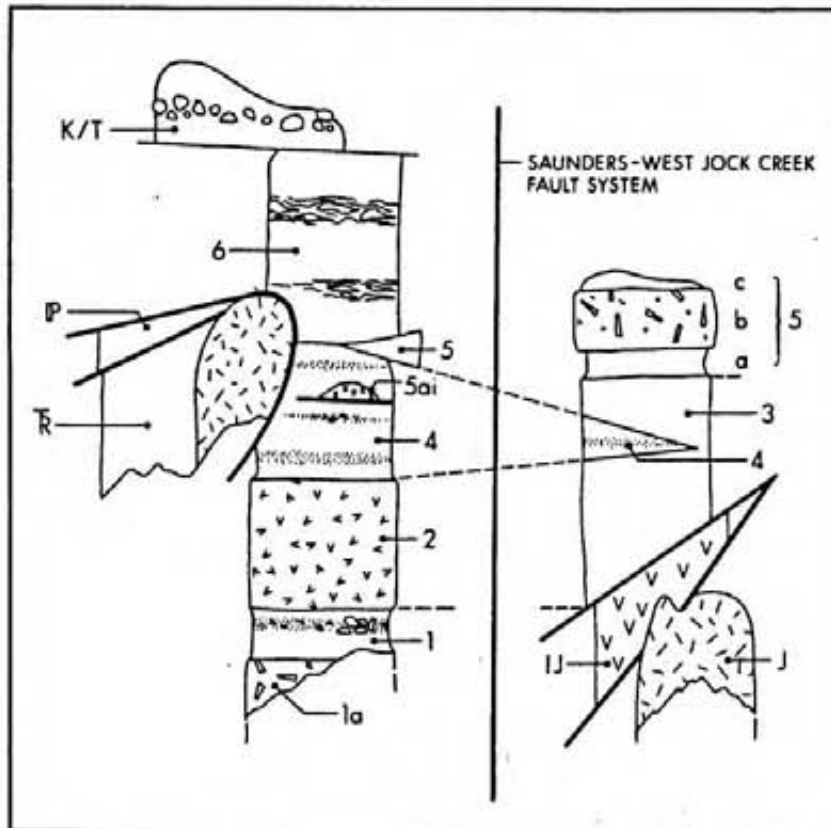


Figure 4 Diagrammatic stratigraphic column, Toodoggone-Sturdee River area.

- Unit 2 Andesite flows
- Unit 1 Tuff and tuffaceous sandstone "redbeds"
- Unit 1a Volcanic flow unit
- Moosehorn Creek - overlain by Unit 1

Panteleyev states that collective radiometric dates from Toodoggone volcanics from this gold-silver belt indicates that these rocks were deposited over 20 million-year period from approximately 180 to 200 Ma.

Omineca Intrusions

The Omineca Intrusions of Jurassic (and Cretaceous?) age, with potassium-argon age determination 186 to 200 + Ma, range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz-feldspar porphyry dykes may be feeders to the Toodoggone rocks. There is increasing evidence in support of Schroeter's contention that Omineca Intrusions and Toodoggone volcanics may be comagmatic and coeval.

MINERAL POTENTIAL

The following account is reproduced from Schroeter, 1981:

MINERALIZATION

The Toodoggone area is host to many polymetallic mineral prospects and four main types are recognized:

- (1) *'Porphyry'* copper±molybdenum±silver±gold — mainly associated with Omineca Intrusions. Chalcopyrite and pyrite, with or without molybdenite, occur in fractures, as disseminations, or in quartz veins within both intrusive and the host volcanic rocks (mainly Takla Group andesitic rocks). Secondary chalcocite and covellite may form layers up to 30 metres thick. In these 'porphyries,' silver may exceed 3.1 grams per tonne (0.1 ounce per ton) and gold 0.47 gram per ton (0.015 ounce per ton) and therefore be economically significant [for example, Riga (MI 94E-3, 4, 5), Fin (MI 94E-16), Pillar (MI 94E-8), Rat (MI 94E-25), Mex (MI 94E-57), Kemess (94E-21)].
- (2) *Skarn* — contact of limestone and host rock resulting in formation of small bodies of magnetite, galena, and sphalerite [for example, Castle Mountain (MI 94E-27) and several other minor showings west of Duncan Lake].

(3) *Precious and base metal epithermal — gold-silver±copper±lead±zinc*

- (a) Fissure-vein type — the most important economic type. It is associated with predominantly silicified zones (quartz veins and/or older volcanic 'centres') related to repeated, extensive block faulting and possible tensional fractures formed during late doming. Large and small-scale faulting were integral processes in the sequential development of calderas formed by progressive emplacement and subsequent collapse of different phases of composite magmas (batholiths). So far, no distinct superimposed complex zones have been identified as isolated calderas in the Toodoggone area. Many calderas have a moat structure around their periphery, which is infilled by lacustrine sedimentary and pyroclastic rocks, mainly volcanic ash, deposited penecontemporaneously in the moat. Local conglomerate deposits form adjacent to the steeper walls away from tributary streams. In the Toodoggone area, recurrent faulting during crater building would guide intrusions and the soft lacustrine sedimentary rocks may have acted as an impermeable barrier to mineralizing solutions.

Principal ore minerals include fine-grained argentite, electrum, native gold, and native silver with minor amounts of chalcopyrite, galena, and sphalerite. Rare constituents include bornite, polybasite, stromeyerite, and secondary chalcocite and covellite. Gangue minerals include, in order of decreasing abundance: amethystine to white quartz, chalcedony, calcite, hematite, manganese oxide, and rare barite and fluorite. Deposits occur in the form of vein fillings, stockworks, irregular branching fissures, and large, recurrently brecciated fault zones. Common textures include comb structures, symmetrical banding, crustifications, and drusy cavities — all typical features of epithermal deposits formed at shallow depths and at low temperatures. Alteration is commonly restricted to vein systems [Chappelle (MI 94E-26), Lawyers (MI 94E-17), Metsantan Lake (MI 94E-35), McClair, Cliff Creek, Shas (MI 94E-50), Saunders (MI 94E-37)].

- (b) Hydrothermally altered and mineralized type — associated with major fault zones and possibly after subsidence of volcanic centres followed by a doming of caldera cores. Pyrite is the most common sulphide present with minor amounts of galena and sphalerite and rare molybdenite and scheelite. This type is probably somewhat older or contemporaneous with fissure-type mineralization. Cauldron zones are strongly leached and sulfatarically altered to varying degrees to clay minerals and silica; some areas contain alunite (for example, Alberts Hump). Epidote is a common alteration mineral in both hydrothermal and fracture zones [for example, Kodah, Alberts Hump, Saunders (MI 94E-17), Chappelle (MI 94E-26), Oxide].
- (c) Alteration generally associated with the precious and base metal epithermal is as follows:
- (i) Epidotization and silicification in the vicinity of quartz veins,
 - (ii) Laumontite in fractures,
 - (iii) Extensive pyritization,
 - (iv) Anhydrite as veinlets and fractures up to 70 metres or more long,
 - (v) Hematization near surface, and
 - (vi) Carbonatization at depth.

- (4) *Stratabound (?)* — galena±sphalerite±chalcopyrite occur in or adjacent to limestone with interbedded chert in Takla Group (?) volcanic agglomerates and tuffs. This type of deposit, which may have been deposited on the flank of a volcano adjacent to a limestone reef, usually has associated low-grade silver values [for example, Firesteel (MI 94E-2), Attycelley (MI 94E-22)].

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MEMPR Geological Fieldwork, 1982, Paper 1983-1, pp 123-133



REPORT ON DAVE PRICE CLAIMS

LOCATION

The DAVE PRICE claim is located approximately 11 kilometres north-northeast of the Sturdee airstrip. The property lies on the east side of Saunders Creek pass between elevations 1600 to 2100 metres in a drainage leading to Black Lake which in turn drains into Sturdee River. The claim is in Ominica Mining Division at Latitude 57°18'N, Longitude 127°02'W, NTS 94E/6E. See Figures 2 and 3. The property is accessible by helicopter from Sturdee airstrip.

CLAIM STATUS

A total of 6 units comprise the DAVE PRICE claim. See Figures 10 and 11.

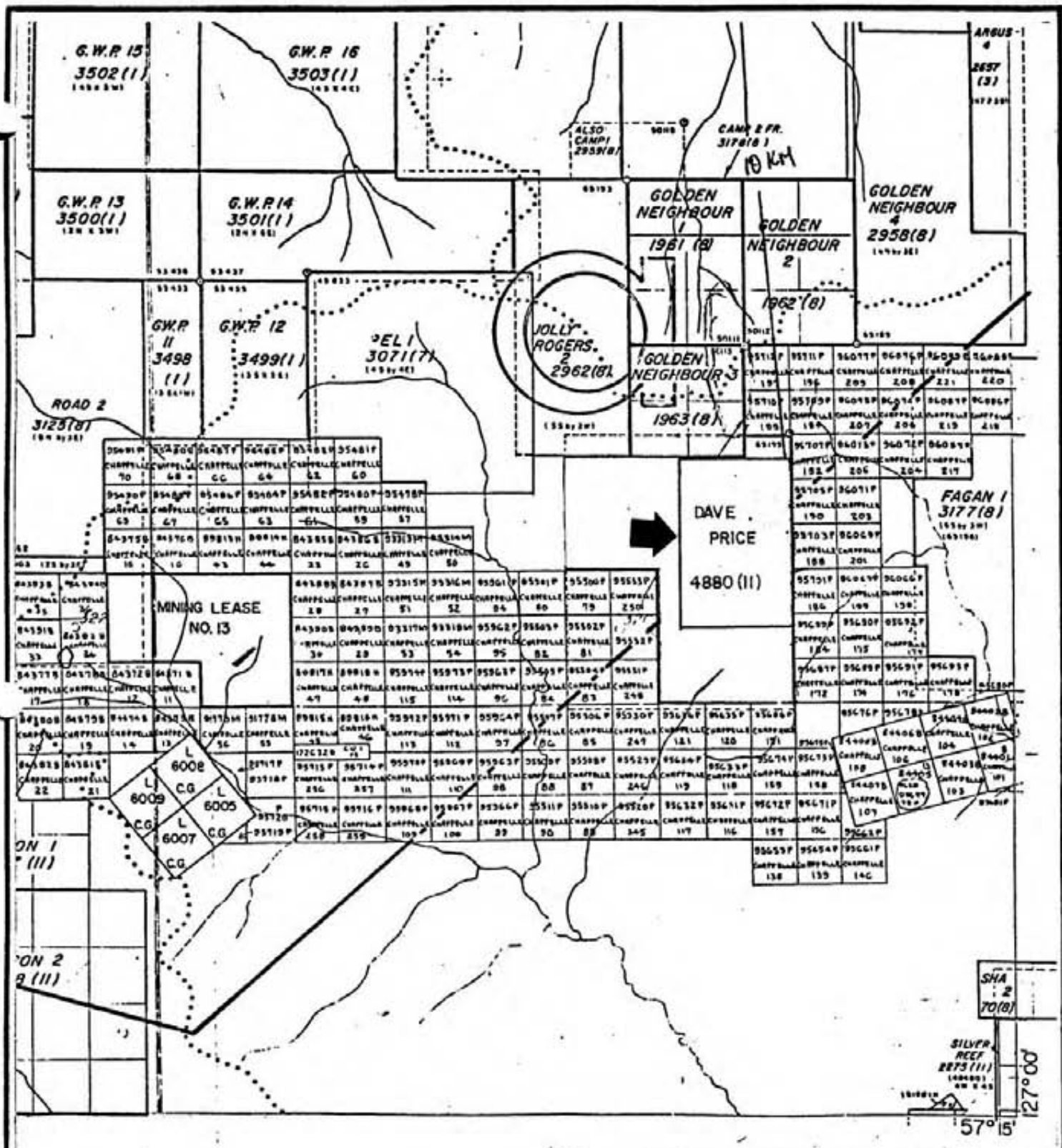
TABLE VI
DAVE PRICE CLAIM

CLAIM	UNITS	RECORD NO	ANNIVERSARY DATE
DAVE PRICE	6	4880 (11)	November 3, 1983 [*]

*

Three years assessment work reported herein has been applied to the DAVE PRICE claim to extend the expiry date to November 3, 1986

The legal corner post is located at 1650 metres elevation, 13 kilometres south-southeast of the junction of Saunders Creek and the Toodoggone River. The DAVE PRICE claim is owned by Western Horizons Resources Ltd. by Bill of Sale from E.M. Thompson August 2, 1983.



TOODOGGONE JOINT VENTURE

DAVE PRICE CLAIM

FIGURE: 10.	SCALE: 1:50,000
DRAWN BY: P.STOCKLY	DATE: NOV. 1983
WESTERN HORIZONS RESOURCES LTD.	

GEOLOGY

GEOLOGY OF THE DAVE PRICE PROPERTY

The regional geologic map GSC O.F. #483 shows the DAVE PRICE claim lies within a broad belt of Toodoggone volcanics. A possible unconformity occurs in the volcanic succession in the claims area.

Beneath the unconformity the Toodoggone volcanics consist of porphyritic flow breccias which contain scattered small exotic lithic fragments. These rocks locally have primary hematitic fragments and matrix suggesting subaerial origin. The porphyritic flow breccias have undergone varied epidote-chlorite-pyrite alteration. At least two gossanous zones of brecciated quartz-sericite-pyrite hydrothermal alteration are evident on the DAVE PRICE property. Siliceous breccias associated with a shear-fault system of unknown extent were also noted.

The volcanics above the apparent unconformity are composed of relatively unaltered porphyritic flow breccias of probable dacitic composition.

MINERAL POTENTIAL

The zones of siliceous-sericitic-pyritic alteration breccias and associated jarositic gossans probably represent high structural level hydrothermal centres. The size and configuration of these centres has not been determined. In addition siliceous breccias were noted in association with linear shear-fault structures. These hydrothermal centres and silicified faults provide potential for significant mineralization.

PREVIOUS WORK

Anomalous gold values (>20 ppb Au) from sampling programs reported

in Assessment Report 8445 and 9425 are summarized on Figure 11. Gold values in soils range from 5 ppb to 250 ppb Au on the DAVE PRICE property. A single high value of 1525 ppb Au from soil was obtained from sample site approximately 100 metres east of the DAVE PRICE boundary.

Silt samples from within the claims gave values ranging from 5 to 55 ppb Au with the highest values occurring in the northeast corner of the claim group.

Two quartz-sericite breccia systems sampled previously gave values ranging from 0.1 to 1.7 ppm Ag, and 5 to 45 ppb Au with the higher values associated with the lower jarositic-quartz-sericite breccia system. See Figure 11.

Some trenching was initiated in frost heaved debris of the upper quartz-sericite-breccia zone on the flank of the ridge crest but this zone was not sampled earlier because of uncertainty of whether or not bedrock was reached. The lower jarositic quartz-sericite breccia zone has not been trenched or adequately sampled.

The property has not been mapped in detail nor is the petrography and petrology well documented or understood.

PRESENT WORK

K.E. Northcote, S.C. Gower, geologists, and E.M. Thompson and B.K. Northcote, assistants, spent one day, August 27, 1983, examining the property. Outcrops were examined and sampled with a view to determining the geological environment and to provide samples for possible later petrographic study. Visual descriptions of the samples are included



CHAPPELLE
DUPONT

2000

JOLLY ROGER
LACANA

GOLDEN NEIGHBOUR
LACANA





1800

2000

DAVE PRICE
- WESTERN HORIZONS

MASSIVE
JAROSITE

DETAILED
SAMPLING

-  QTZ FLOAT
-  GOLD IN SOIL ANOMALY
-  X35 ppb Au IN SILT
-  CLAIM BOUNDARY

GEOCHEMISTRY FROM KENCO &
LACANA ASSESSMENT REPORT

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,792

TOODOGGONE JOINT VENTURE

DAVE PRICE PROSPECT
GEOCHEMISTRY & CLAIM
STATUS



Prepared by: S.C.B. E.M.T.	Scale: 1:50,000	Date: OCT. 1993	Figure: 11.
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in Appendix C along with descriptions of samples collected for gold-silver geochemical analyses.

RESULTS

A quartz vein-breccia system of undetermined width and extent, associated with a shear-fault zone, was discovered in an untested area of the DAVE PRICE claim. Results of detailed sampling are listed on Table VII with sample sites indicated on Figures 11 and 12.

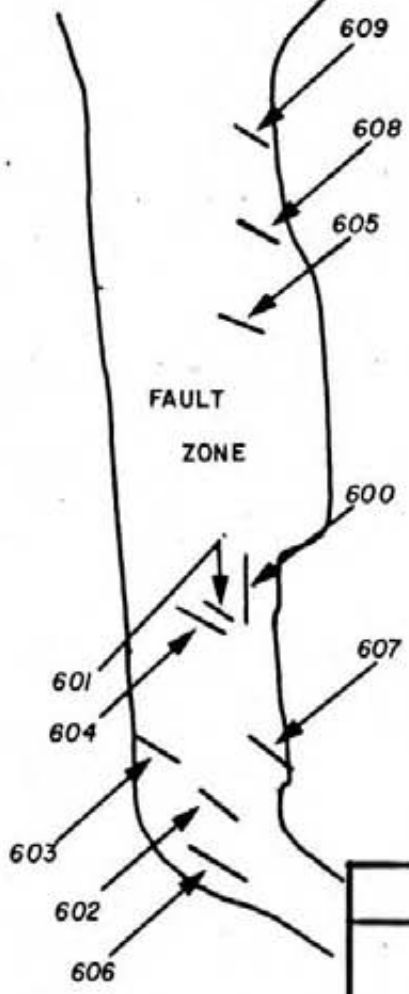
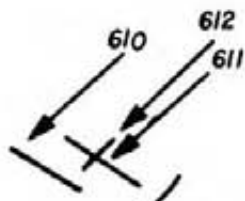
TABLE VII
ROCK GEOCHEMISTRY DAVE PRICE CLAIM
(See Figure 12)

SAMPLE NO	WIDTH	AG. PPM	AU. PPB	DESCRIPTION
DP 83-601	-	0.7	5	Fault gouge, quartz fragments. Adjacent to east wall.
DP 83-602	-	1.6	210	Jarosite gouge with pyritic quartz fragments
DP 83-603	2m	0.7	5	Fault gouge, jarosite quartz fragments. Adjacent to west wall.
DP 83-604	-	0.7	5	Fault gouge, northwest margin of structure
DP 83-605	-	0.4	5	Granular leached zone
DP 83-606	-	1.6	125	Pyritic quartz
DP 83-607	-	1.5	130	Altered wall rock. Eastern end
DP 83 608	-	1.2	3	Rock fragments from within fault



613 Composite Rock Samples

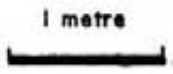
ALTERED
TOODOGGONE
VOLCANICS



TALUS

FAULT
ZONE

*
Edge of Tarn - 2.5 metres
to west



TOODOGGONE JOINT VENTURE	
DAVE PRICE CLAIM	
ROCK GEOCHEMISTRY SAMPLES	
FIGURE: 12.	SCALE: 1:100
DRAWN BY: RSTOECKLY	DATE: Nov. 1983
WESTERN HORIZONS RESOURCES LTD.	

TABLE VII (Continued)

SAMPLE NO	WIDTH	AG. PPM	AU. PPB	DESCRIPTION
DP 83-609	-	0.7	3	Rock fragments from within fault.
DP 83-610	-	0.3	5	Leached fault gouge Jarositic clots
DP 83-611	-	0.5	15	Jarositic fault gouge
DP 83-612	-	0.9	4	Rock fragments in #611
DP 83-613	2.5m	1.0	1	Chip samples of altered pyritic volcanics

CONCLUSIONS

The DAVE PRICE claims have not been mapped in detail. The geology and mineral potential of the property are poorly understood. Two centres of siliceous-sericitic-pyritic brecciated hydrothermal alteration and siliceous breccias associated with faults provide potential for significant mineralization and none of these systems have been adequately tested. The exposed structural level of these systems should be determined. Geological mapping accompanied by sampling for assay, petrographic, mineralographic and fluid inclusion studies are required to assess the potential of this property.

RECOMMENDATIONS

A program of geologic mapping and sampling for assay, petrography, alteration and fluid inclusion studies is recommended for 1984. Trenching is required on the upper and lower quartz-sericite brecciated hydrothermally altered centres and on the newly discovered quartz-breccia system associated with the shear-fault zone. Trenching will expose wider areas of these features, provide less-leached material for assays and petrographic studies

and afford better measurement of their attitude and lateral extent.

This work should result in clearer understanding of geologic environment, structural level of the hydrothermal systems, and provide an assessment of potential for significant mineralization.



PRELIMINARY ESTIMATED COST OF PROGRAM DAVE PRICE PROPERTY 1984
 (Subject to revision in communication with Joint Venture partners)

Professional Fees		\$ 6 300.00
10 day period		
2 teams @ \$315.00/day		
Food and lodging		1 500.00
10 X 2 parties X 75		
Trenching and blasting		2 500.00
Powder costs, Copco drill rental		
Assays		1 500.00
100 samples @ \$15.00		
Petrographic and fluid inclusion studies		3 000.00
Report preparation		5 000.00
Transportation		5 400.00
Fixed wing	1 900.00	
Helicopter 4hrs	3 200.00	
Vehicle milage	300.00	(shared with other projects)
Miscellaneous		1 300.00
Camp fuel	100.00	
Expediting	150.00	
Radio	250.00	
Freight	100.00	
Bookkeeping	700.00	
Contingencies		<u>2 000.00</u>
Total		<u><u>\$28 500.00</u></u>



APPENDIX E

SAMPLE DESCRIPTIONS DAVE PRICE CLAIM

1 Samples for Assay

2 Samples for Petrography

SAMPLES FOR ASSAY
DAVE PRICE CLAIMS

- DP-83-601 Sample of cream-tan fault gouge from major structure cutting Toodoggone volcanics near tarn. Fault gouge contains bluish quartz fragments. Sample is adjacent to east wall. No width. Values 0.7 ppm Ag, 5 ppb Au.
- DP-83-602 Sample of jarosite gouge containing rounded quartz fragments with pyrite. Same structure as 601. No width. Values 1.6 ppm Ag, 210 ppb Au.
- 603 Sample of cream-tan fault gouge containing jarosite and bluish quartz fragments adjacent to west wall. Width-2metres. Values 0.7 ppm Ag, 5 ppb Au.
- 604 Sample of yellowish-orange fault gouge situated at north-western boundary of structure. No width. Values 0.7 ppm Ag, 5 ppb Au.
- 605 Sample of granular leached gouge situated at northerly boundary of structure. No width. Values 0.4 ppm Ag, 5 ppb Au.
- 606 Sample of bluish quartz containing abundant pyrite forming a horse in fault structure. No width. Values 1.6 ppm Ag, 125 ppb Au.
- 607 Sample of highly altered wall rock in fault adjacent to eastern wall. No width. Values 1.5 ppm Ag, 130 ppb Au.
- 608 Sample of rock fragments between walls of fault. No width. Values 1.2 ppm Ag, 3 ppb Au.
- 609 Sample of rock fragments between walls of fault north of sample 608. No width. Values 0.7 ppm Ag, 3 ppb Au.
- 610 Sample of leached fault gouge containing jarositic clots. No width. Values 0.3 ppm Ag, 5 ppb Au.
- 611 Sample of jarositic fault gouge. No width. Values 0.5 ppm Ag, 15 ppb Au.
- 612 Sample of rock fragments from sample 611. No width. Values 0.9 ppm Ag, 4 ppb Au.
- 613 Representative chip samples of altered pyritic Toodoggone volcanics adjacent to previously sampled fault to the northeast. Width-25 metres. Values 1.0 ppm Ag, 1 ppb Au.

SAMPLES FOR PETROGRAPHY

DAVE PRICE CLAIMS

- Sp 83 KN 601-I Porphyritic andesite/dacite. white plagioclase phenocrysts
15%, 1 to 3 mm biotite-hornblende mafic 1 to 2 mm in a
mottled brown-grey to cream-brown aphanitic matrix
- 601-II Volcanic; fragmental, purplish red-brown hematitic fragments
and stain, small lithic fragments, well indurated
- 601-III Quartz monzonite-granite, medium grained porphyritic leucocratic
chloritic mafic interlocking crystals plagioclase has pinkish
stain coloration not all feldspar is K-spar
- 601-IV Altered tuffaceous? rock; mottled medium cream-brown and diffuse
light creamy blue, small lithic fragments grading outwards to
fairly distinct altered plagioclase phenocrysts. Disseminated
quartz fragments or grains. Sericite, pyrophyllite?
Disseminated pyrite
- 601-V Altered tuffaceous? rock pseudoporphyratic, light bluish cream
altered fragments/phenocrysts in light creamy brown aphanitic
matrix. Disseminated pyrite.
- 601-VI Siliceous breccia; quartz fragments in discolored cream-brown
siliceous matrix, drusy as a result of weathered out material
and drusy quartz in filling of open spaces. Iron staining.
- 601-VII Float Possible K-spar impregnation granitic texture
- 601-VIII Brecciated silicified zone, mottled light cream and light cream-
purplish brown, some drusyness with minute quartz crystal
encrustations. Scattered sericite pockets representing altered
feldspar grains
- 601-IX Layered siliceous breccia, iron stained, disseminated argillic?
altered feldspar grains or fragments
- 601-X Quartz breccia, drusy between fragments, minor sericitic
infilling Iron stained
- 601-XI as for 83-KN-601-X
- Sp 83 KN 602-I Porphyritic flow breccia, fragments visible by variation in color
on cut surfaces. Fragments/phenocrysts plagioclase, quartz, mafics
- 602-II As for 602-I shows some polymictic lithic fragments.

- 602-III Chloritic, epidotized porphyritic andesite/dacite flow breccia, fragments.
- IV Hematitic porphyritic/fragmental, breccia; lithic fragments, quartz not conspicuous
- 602-V Hematitic porphyritic flow breccia, lithic fragments, some disseminated magnetite.
- 602-VI Alteration; sericite and quartz
- 602-VII Alteration; fragmental; iron staining, sericite-quartz, purplish pink hematitic coloration. Possible K-spar. Disseminated pyrite.
- 602-VIII Quartz breccia as for 601-X
- 602-IX Altered fragmental porphyry; bleached, sericitized feldspar phenocrysts disseminated quartz grains in very fine/aphanitic cream brown matrix. Disseminated pyrite
- 602-X Quartz-sericite breccia. Iron stained
- 602-XI Massive alteration, veining waxy appearance, quartz-sericite mixture
- 83 KN 603 Layered altered breccia; quartz, sericite, K-spar. Dark very fine grained diffuse pyritic fragments. Iron staining in fractures
- 83 KN 604 (6 samples) From vicinity of pipe structure
- 604-I Limonitic/jarositic, gossan
- 604-II Limonitic/jarositic, breccia gossan
- 604-III Alteration, pinkish cream chalky
- 604-IV Porphyritic flow breccia; lithic fragments, epidote-chlorite alteration. Disseminated pyrite
- 604-V Hematitic porphyritic flow breccia, lithic fragments disseminated medium grained feldspar phenocrysts
- 604-VI Altered quartz sericite breccia; late fractures iron stained

83 KN 605

Siliceous breccia; siliceous fragments with diffuse K-spar impregnations. Moderate to abundant pyrite grains as disseminations and aggregates of grains. Strong iron staining.

83 KN 606

Breccia/altered volcanic fragments?; abundantly pyritized
Siliceous, sericitic infilling with late brecciation showing iron stained surfaces.

APPENDIX F
ASSAYS DAVE PRICE CLAIM

MIN-EN Laboratories Ltd.

705 WEST 15th STREET,
NORTH VANCOUVER, B.C., CANADA V7M 1T2
TELEPHONE (604) 980-5814

ANALYTICAL REPORT

Project Date of report Sept/8/83.
File No. 3-906 Date samples received Aug.30/83.
Samples submitted by:
Company: Ken Northcote
Report on: 7 soil, 26 rock (assay prep) Geochem samples
..... Assay samples

Copies sent to:

1. Ken Northcote, Agassiz, B.C.
2.
3.

Samples: Sieved to mesh -80 soil Ground to mesh -100

Prepared samples stored discarded

rejects stored discarded soil

Methods of analysis: ag-nitric, perchloric digestion.A.A.,

Au-fire.

Remarks:

CERTIFICATE

I, Kenneth E. Northcote of 2346 Ashton Road, R.R.#1, Agassiz B.C. do hereby certify that:

1] I have been practicing as a professional geologist for a period of approximately 25 years for petroleum exploration companies, mining exploration and consulting companies, federal and provincial agencies.

2] I obtained a Ph.D in geology from U.B.C. in 1968 and qualified for registration with the Association of Professional Engineers of B.C. in 1967.

3] This report is based on geological reconnaissance and sampling by S.C. Gower, K.E. Northcote geologists, E.M. Thompson and B.K. Northcote assistants in the period August 6 to 28, 1983 and on analyses of samples at Min-En and Bondar-Clegg Laboratories. In addition available reports and data from earlier programs were utilized and listed in References.

4] I am an officer of Western Horizons Resources Ltd which company owns an interest in GOLDEN STRANGER, GOLDEN STRANGER II, GORD DAVIES, DAVE PRICE, COPPER KING 1-5 and NAMERA IV claims.



K.E. Northcote Ph.D., P.Eng.