

PROSPECTUS  
Sept. 13, 1985.  
062209

GOLDEN SHAMROCK RESOURCES LTD.

WIL PROPERTY

(WIL 1 - 8 CLAIMS)

N.T.S. 115A/3

LATITUDE 60 08'N LONGITUDE 137 07'W

WHITEHORSE MINING DISTRICT

YUKON TERRITORY

GEOLOGICAL REPORT AND RECOMMENDATIONS

Randall S. Rogers M.Sc., P.Geol.  
Rogers Exploration Services Ltd.  
Whitehorse, Yukon Territory

01 May 85

## SUMMARY AND RECOMMENDATIONS

The Wil 1 - 8 claim group, owned by Golden Shamrock Resources Ltd., is located in the Dalton Post area of the Yukon Territory, 83 airmiles southwest of Whitehorse.

The original silver - lead showing on the adjacent Tuf property has been intermittently explored since 1955 by prospecting, trenching, soil geochemistry, geophysical surveys and preliminary diamond drilling. A comprehensive program of surface exploration conducted in 1984 by a joint venture of Everest Resources Limited and Northern Horizon Resource Corporation delineated a significant reserve of silver and lead mineralization on the Tuf property with a geochemical and geophysical signature that indicates a probable extension of the ore bearing structures on to the Wil 1 - 8 property of Golden Shamrock Resources Ltd.

Mineralization on the Tuf property is confined to a zone of intense argillic alteration in a buff weathering hornblende-feldspar porphyry dike of Oligocene age intruding Cretaceous granodiorite; significant grades of silver occur within a galena-tetrahedrite-sphalerite-tennantite-pyrite assemblage associated with the dike. Probable reserves on the Tuf property at this writing are 50,000 tons of ore grading 68.64 OPT Ag and 5.04 % Pb.

Preliminary surficial mapping on the Wil property and extrapolation of the field data from the adjoining Tuf property indicate that there is a high probability of structural and geological continuity of the mineralized zone on to the Golden Shamrock Resources Ltd. claim group.

An aggressive program of exploration is recommended for the 1985 field season. The preliminary stage of this exploration would comprise preparation of a contoured orthophotograph; grid construction; a soil geochemical survey with analyses for Cu, Ag, Pb, Zn, As and Sb; a VLF - EM geophysical survey restricted to the 23.4 kHz frequency; geological mapping at an initial scale of 1:50,000; and preliminary prospecting along the zones of inferred extension of the known mineralization. The secondary stage of the exploration program would include detailed geochemical and geophysical surveys; detailed geological mapping and prospecting at a scale of 1:5000 in selected areas; extension of the road access to the central portion of the property and bulldozer trenching of selected geological, geochemical and geophysical anomalies. The third stage of the recommended program would include 750 feet of diamond drilling on specific targets and preparation of a summary report.

The recommended program is presented hereunder in three discrete phases with a total estimated budget of \$ 150,000. The progression from one stage of exploration to the next would depend on the relative success of preceding phases.

Phase I:	<u>Preliminary Exploration</u>		
	1. Preparation of contoured orthophotograph at 1:5000	3,000	
	2. Grid construction: 20 km. @ \$300/km	6,000	
	3. Soil geochemical surveys: (400 samples)		
	Sampling:		
	20 mandays @ \$300	6,000	
	Analytical costs:		
	400 @ \$15.00	6,000	
	4. VLF - EM survey: 60 km. @ \$100/km	6,000	
	5. Geological mapping and project supervision: 30 mandays @ \$400	12,000	
	6. Assays: 20 samples @ \$50.00	1,000	
	TOTAL: Phase I	40,000	40,000

Phase II:	<u>Detailed Exploration</u>		
	1. Soil geochemical surveys: (200 samples)		
	Sampling:		
	10 mandays @ \$300	3,000	
	Analytical costs:		
	200 @ \$15.00	3,000	
	2. VLF - EM surveys: 50 km @ \$100/km	5,000	
	3. Geological mapping and project supervision: 30 mandays @ \$400	12,000	
	4. Extension to access road: 60 Hr. D-7 @ \$80	4,800	
	5. Trenching: 40 Hr. D-7 @ \$80	3,200	
	6. Assays: 100 samples @ \$50.00	5,000	
	7. Contract prospector: 20 mandays @ \$200	4,000	
	TOTAL: Phase II	40,000	40,000

Phase III: Diamond Drilling

1. 3 drill holes @ 250 feet: 750 ft. @ 50	37,500	
2. Assays: 140 samples @ \$50.00	7,000	
3. Geological services and project supervision: 20 mandays @ \$400	8,000	
4. Reporting and Compilation: Drafting	2,500	
Report preparation	4,000	
Printing costs	1,000	
TOTAL: Phase III	<u>60,000</u>	60,000
SUBTOTAL: Phase I - III		<u>140,000</u>
CONTINGENCY:		10,000
TOTAL:		<u>150,000</u>

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## INTRODUCTION

This report summarizes the geology and exploration history of the Wil 1 - 8 mineral claims and tenders recommendations for further development of the property. The present study was commissioned by the directors of Golden Shamrock Resources Ltd. precedent to a planned program of exploration in the 1984 field season.

Background material for the study included geological and engineering reports from previous explorations in the area, a comprehensive literature search and personal examination of the property by the author during the periods 09 - 12 June 1983; 23 - 26 August 1983 and 01 March 1984 to 10 September 1984. The 1983 examinations were conducted while engaged in a regional exploration program for Noranda Exploration Co. Ltd. (NPL) and the 1984 examinations while engaged in a surface exploration program on the adjoining Tuf property for a joint venture of Northern Horizon Resource Corporation and Everest Resources Limited. At the request of the directors of Golden Shamrock Resources Ltd. a preliminary geological investigation of the Wil property was conducted from 14 - 16 September 1984 by the author and an exploration crew under his direct supervision.

The author is currently engaged in contract geological consultation to Everest Resources Limited and Northern Horizon Resource Corporation with respect to their property holdings in the Dalton Post area. Rogers Exploration Services Ltd., an incorporated consulting firm of which the author is president, owns the Junior 1 - 32 mineral claims located four miles west of the present property.

## PROPERTY

### Location and Access

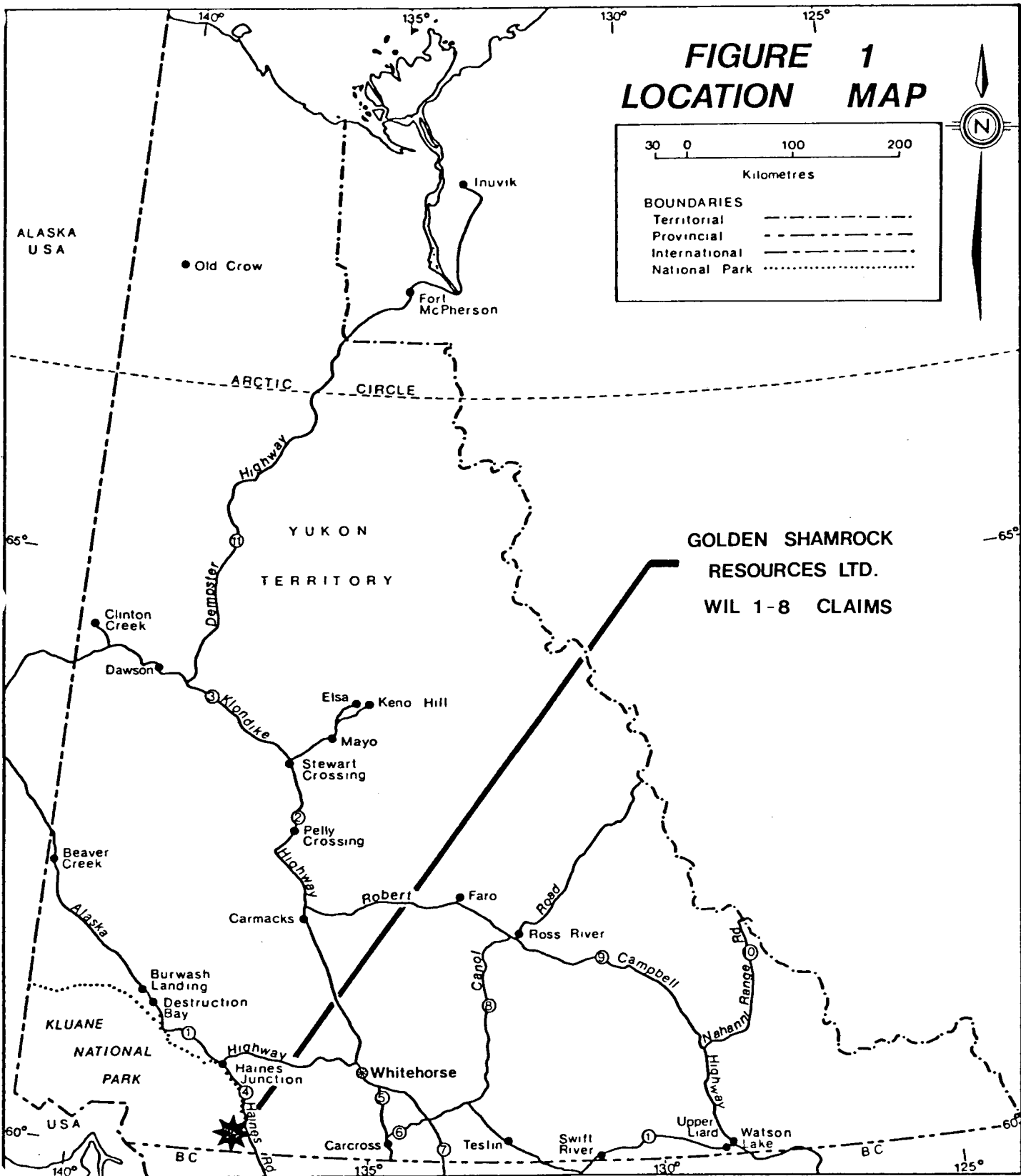
The Wil 1 - 8 claims are located at latitude 60 08'N by longitude 137 07'W on N.T.S. map sheet 115A/3 in the southwestern corner of the Yukon Territory (Figure 1). The property is situated 83 airmiles southwest of Whitehorse, Yukon Territory and 3 miles west of the abandoned settlement of Dalton Post. Access is facilitated by a recently improved four wheel drive road which extends eleven miles from the property to the all-weather Haines Road. The Haines Road (Highway No. 3) connects the deepwater Alaskan port of Haines with the Yukon portion of the Alaska Highway. This 158 mile road is being upgraded through a joint Canada - United States project and is expected to soon become a major supply and shipping route from the Yukon Territory to southern markets. Barge and container shipping facilities are available in Haines, Alaska. The tote road to the Wil claim group intersects this highway 50 miles south of the town of Haines Junction. Helicopter charter, accommodation and supplies are available at Haines Junction.

The 1984 exploration program on the adjacent Tuf property included the reconstruction of the tote road on to the property. Golden Shamrock Resources Ltd. joint ventured the construction costs of this road with Everest Resources Limited and Northern Horizon Resource Corporation to secure access to the Wil property and obviate construction of a new and disparate access route to the claim group. The road access to the Wil property is seen in the 1:50,000 topographic map of Figure 2.

### Claims

The property comprises 8 contiguous claims located under the Yukon Quartz Mining Act (Figure 3). The history and current disposition of the claims is presented in Table I, together with a summary of neighbouring claim groups. The author has examined only a limited number of the claim posts that define this property; those located to date appear to be staked in accordance with the requirements of law. A thorough survey should be conducted in the course of future work on the property to correctly locate claim boundaries and identify any internal fractions which may exist.

The Wil property lies within an area temporarily withdrawn from further staking by the federal government pending the settlement of Yukon Native Indian land claims. At such time as the land freeze is withdrawn, consideration should be given to the acquisition of additional claims peripheral to the Wil group.



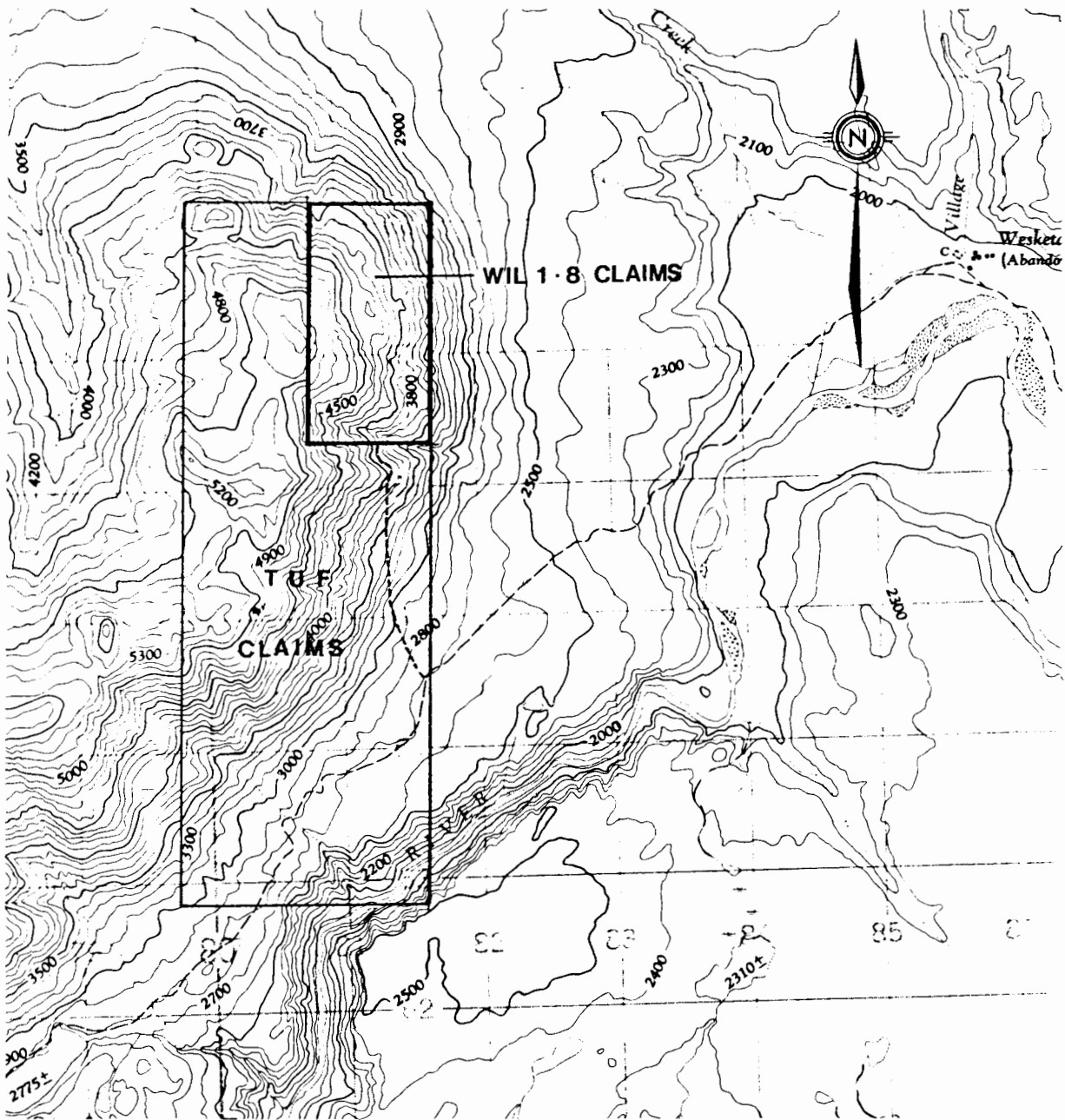
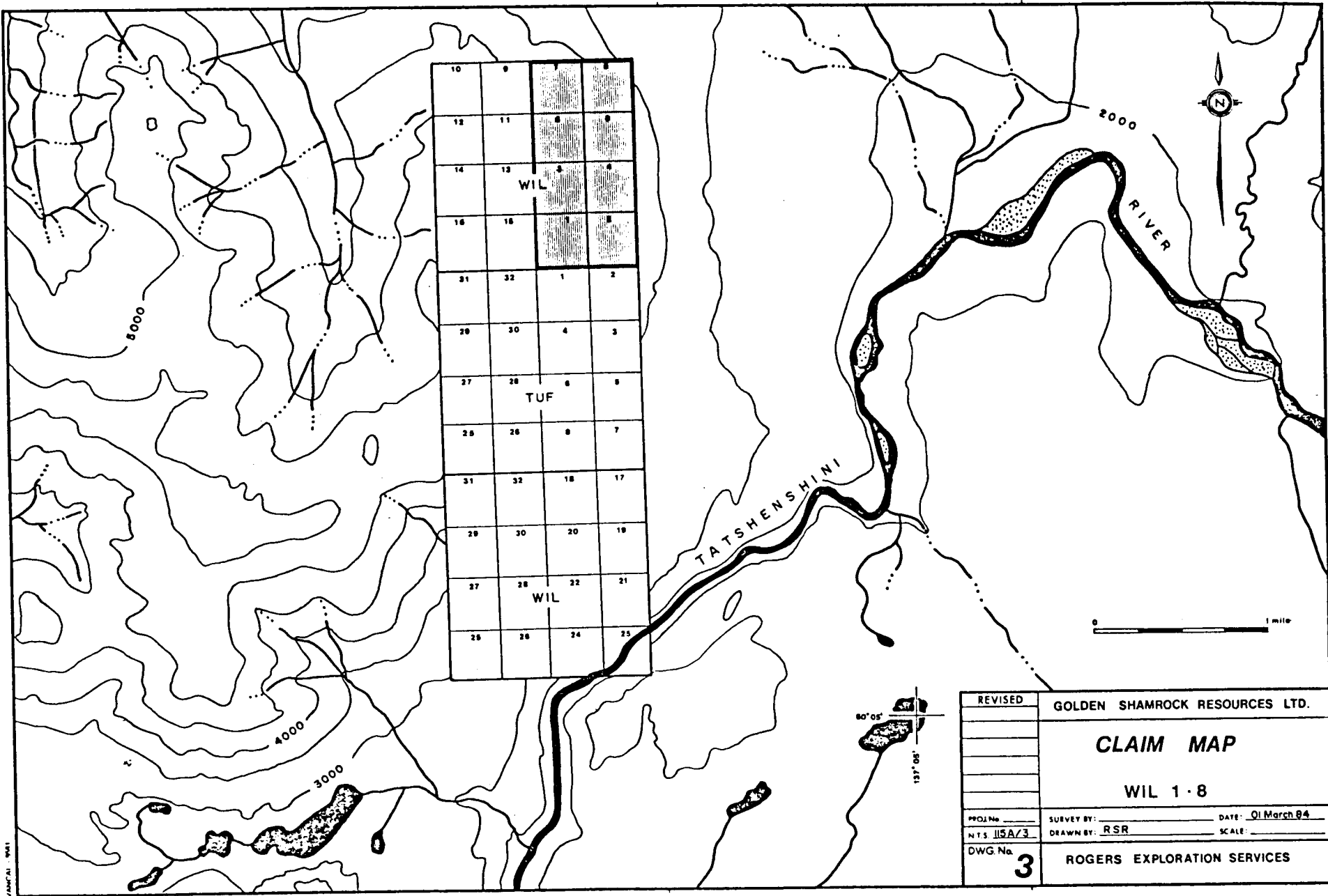


FIGURE 2. Property Topography and Access. The Wil 1 - 8 claim group is located on the northeastern side of the Wil - Tuf property. The access road extends from the southern border of the property to the Haines Road, east of the map area. Scale 1 : 50,000.



VANCOUVER

REVISED	GOLDEN SHAMROCK RESOURCES LTD.	
	<b>CLAIM MAP</b>	
	WIL 1-8	
PROJ No	SURVEY BY:	DATE: 01 March 84
N.T.S. 1:50,000	DRAWN BY: RSR	SCALE:
DWG. No	ROGERS EXPLORATION SERVICES	
<b>3</b>		

1. GOLDEN SHAMROCK RESOURCES LTD.

<u>Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Owner of Record</u>
Wil 1 - 8	YA78473-480	21 Sep 85	Golden Shamrock Resources Ltd.

2. ADJACENT PROPERTIES

<u>Claim</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Owner of Record</u>
Tuf 1 - 8	YA23929-935	11 Jan 90	Northern Horizon Resource Corp.
Tuf 25 - 32	YA24042-049	19 Apr 90	Northern Horizon Resource Corp.
Wil 9 - 32	YA78481-504	21 Sep 89	Everest Resources Limited
Muf 1 - 8	YA24018-025	06 Aug 86	J. Tomlinson
Junior 1 - 32	YA85471-502	28 Sep 85	Rogers Exploration Services Ltd.
Cypriot 1 - 16	YA77808-823	12 Jul 85	Archer, Cathro & Associates Ltd.

TABLE I CLAIM DATA

### Physiography and Climate

The property is located in the Western System of the Canadian Cordillera as described by Bostock (1948) and lies wholly within the St. Elias Mountains near the juncture of the Kluane Ranges and the Duke Depression of the Outer Mountain area. The Kluane Ranges extend north and west of the property and form steep and uniform slopes with straight talus scree; in general the ranges comprise a series of major ridges connected by high saddles, locally dissected by major transverse V-shaped valleys containing the Slims, Duke, Donjek, Koidern and White Rivers. West of the Kluane Ranges the isolated plateau like belt of the Duke Depression rises to 5000 feet elevation and includes the Burwash Uplands, Wolverine Plateau and Generc River Plateau all variously dissected by the Alsek, Bates and Tatshenshini Rivers. The property is located between 2000 and 5000 feet in elevation on the eastern flank of a mountain rising above the north bank of the Tatshenshini River, in an area marked by a gradual change from the Kluane Ranges to the Duke Depression (Figure 4).

During Pliocene time great masses of ice accumulated in the Icefield Ranges of the St. Elias Mountains and moved northeasterly into the Shakhak Valley, Duke Depression and Ruby Ranges. The average ice level was at approximately 6000 feet elevation throughout the St. Elias Mountains. Three progressively less extensive ice sheets have been identified, with the upper limit of successive sheets 1000 to 1500 feet below that of the preceding sheet, so that previous erosion surfaces were obliterated. With the retreat of the last sheet at the close of the Glacial Epoch, glacial meltwaters filled several large basins in the area forming glacial lakes of major proportions. Recent glacial activity has been restricted to alpine glaciation in the high peaks of the St. Elias Mountains west of the property.

The forest cover of the property is light, with treeline at 3500 feet elevation. Black spruce, white spruce, balsam poplar and white poplar dominate the forested slopes; alder, willow and small alpine plants are found above timberline.

The property is shielded from the Pacific Ocean by the high St. Elias Mountains, and thus has a dry continental climate despite the proximity of tidewater. Summers are short and hot with temperatures up to 35 degrees Celsius, while winters are severe with short daylight hours and temperatures as low as minus 60 degrees Celsius. As a general rule the valley of the Tatshenshini River thaws well before the central parts of the Yukon, and under normal circumstances the surface exploration season extends from mid April to late October. Timber and water for development purposes are abundant on the property.



FIGURE 4. Aerial Photograph : Wil Property. Scale 1 : 50,000. The aerial photograph shows the location of the main showing and 1984 road construction. The area of the photo corresponds with the topographic map of Figure 2.

## HISTORY

In 1892 Jack Dalton and E. Glave travelled overland with four packhorses from the Chilkat River near Haines, Alaska to Kluane Lake over a footpath that had been used for over two centuries as a trading route by the coastal Chilkat Indians. Dalton established trading posts at Pleasant Camp (the present site of the Canada Customs post on the Haines Road) and at Dalton Post on the Tatshenshini River. Over the next few years, Dalton cleared and improved the trail as far north as the Nordenskiold River at Carmacks, and the route became known as the Dalton Trail. Klondike prospectors used the trail extensively at the turn of the century en route to the gold fields of Dawson, but prospecting in the Kluane district wasn't firmly established until 1903 at which time Silver City was settled at the eastern end of Kluane Lake and became the center of mining activity in southwestern Yukon. Silver City boasted a post office, NWMP detachment and mining recorder; a wagon road led east to Champagne and Whitehorse. During this period, most of the Kluane district was prospected on foot from the Tatshenshini River to Beaver Creek; most of the staking records for the era have been destroyed.

The threat of a Japanese invasion of Alaska prompted the completion of the Alaska highway in 1942, and the Haines Road was completed in 1944. The improved roads brought on an exploration boom in the post-war period, and many important prospects were rediscovered.

The area surrounding the Wil claim group was prospected in the mid 1950's by George Black, who excavated a series of small hand trenches over surficial showings of galena and chalcoprynite. W.E. Kilmer and P. Simonson staked the Pet, etc. claims in October of 1955 to the south of Black to cover a copper showing that after a succession of owners became the Jackpot Copper property.

In the mid 1960's Johnny Johns of Carcross discovered silver rich galena float in the canyon of a creek draining the present property, just north of the Tatshenshini River. The float was traced to a bedrock source, and Johns staked the Mary and Johns claims (Y25331) to protect the showing. He optioned the property in 1969 to a private syndicate headed by Ace Parker; this group explored the area and excavated a few trenches with a bulldozer. In 1970, Parker and associates trenched on the shoulder of the ridge above John's showing, and reportedly shipped 15 tons of hand cobbled high grade ore. At the same time, Jackpot Copper had optioned their ground to Ramid International, who drilled a few exploratory holes under the direction of Cec Coveney.

In 1971, Parker terminated the option with Johns. Jackpot Copper continued to explore the area south of the silver-lead showing, and on 16 June 1972, examined Johns' trenches and tied on a few claims to protect the north flank of Johns' property (on what is now the Wil property). Jackpot Copper drilled three short angle holes on the silver showing in 1974, but appear to have collared the holes too far east of the vein (Hilker, 1975) on the Ste 127 claim. In August of 1974, Skyline Explorations Limited explored the Ste claims (Y21793) and optioned Johns' Mohawk (Y78928) claims, and added the Sky (Y80164) claims. Skyline excavated the old workings (Trenches 1 - 4) and bulldozed two new trenches at 285S and 185S on baseline 0+00 W. One hundred and sixty five soil samples were collected from a grid over the old showings, and analysed for Pb, Ag, Cu and Mo; sixteen selected samples of rock from the trenches were sent for Zn, Pb, and Ag rock geochemistry. A Crone C.E.M. survey was conducted over the trench area with 50 and 100 foot spacings on lines 110, 160, 260, 360 and 460 South. Skyline dropped the option on the ground in May of 1975. Johnny Johns worked the trenches briefly in the following two years without much success. On January 11, 1979, W. Kuhn staked the Tuf 1 - 8 claims (YA23929) for Northern Horizon Resource Corporation, and Peter Sevensma proposed a program of exploration. The Tuf 9 - 48 (YA24026) claims were added on April 19, 1979, and J.H. Kruzick conducted a program of mapping, prospecting and geochemical sampling in July of that year for Northern Horizon. The old trenches were excavated and access roads upgraded with a D-7 bulldozer.

Noranda Exploration Company Ltd. (NPL) staked the Kid 1-32 claims in July of 1982 under direction of the author to protect Au-Ag anomalies on Silver Creek, four miles west of the present property. This ground was explored with grid soil geochemistry and trenching in 1983; in July of that year, Archer, Cathro and Associates staked the Cypriot 1-16 claims (YA77808) six miles northwest of the Wil claims to protect a Cu-Co showing.

In August of 1983, Victor Cukor summarized the history of the Tuf claim group for Northern Horizon Resource Corporation, and proposed a program of exploration. A portion of the Tuf group lapsed in 1983 and were restaked as the Wil 1 - 32 claims by Everest Resources Limited. The Wil 1 - 8 claims were acquired by Golden Shamrock Resources Ltd. on 19 October, 1983. In January of 1984, Northern Horizon Resource Corporation entered into a joint venture agreement with Everest Resources Limited to explore the Tuf property; the latter paid \$ 17,500 cash and 75,000 shares of common stock and committed to a \$ 125,000 works program due October 31, 1984 to earn a 35% interest in the claims.

The author was retained by the joint venture to review the history of the Tuf property and to generate a set of recommendations for further development on February 17, 1984. A summary report was prepared on 01 March, 1984 recommending a program of exploration for the 1984 field season at a budgetted cost of \$ 125,000. The field program began in May of 1984 and continued until early July of that year and included grid construction, trenching, road construction, soil geochemical surveys and VLF-EM geophysical surveys. Significant silver-lead mineralization was discovered in the 1984 field program, and a number of coincident geochemical-geophysical anomalies detected that warrant further investigation. A number of these anomalous features are open to the north, on to the Wil 1 - 8 claims of Golden Shamrock Resources Ltd. and described elsewhere in this report. The cost of building the access road to the property was joint ventured with Golden Shamrock Resources Ltd. who also acquired an interest in the field information generated by the program on the Tuf property.

Archer, Cathro and Associates were granted a lease to mine the Tuf property under an agreement dated 04 September, 1984. Golden Shamrock Resources Ltd. retained the author to conduct a brief geological investigation of the Wil 1 - 8 claims from the 14th to the 16th of September, 1984. Rogers Exploration Services Ltd. staked the Junior 1 - 32 claims to the west of the Wil property in September of 1984.

On 21 April, 1985 the author was retained by the directors of Golden Shamrock Resources Ltd. to review the history of the Wil 1 - 8 claim area and to prepare a geological report complete with recommendations for field investigation that would make the most cost-effective use of the information gathered in the various explorations conducted to date.

## REGIONAL GEOLOGY

The regional geological setting of the Dezadeash map area (NTS 115A) was originally documented by Kindle, (1953). The Geological Survey of Canada launched a major program in the southwestern Yukon from 1973 to 1979, investigating the entire area south and west of the Alaska highway and Haines Road. The results of this Operation St. Elias have been released in a series of open file reports (Campbell et al, 1979) and OFR 831 covers the Dezadeash map area.

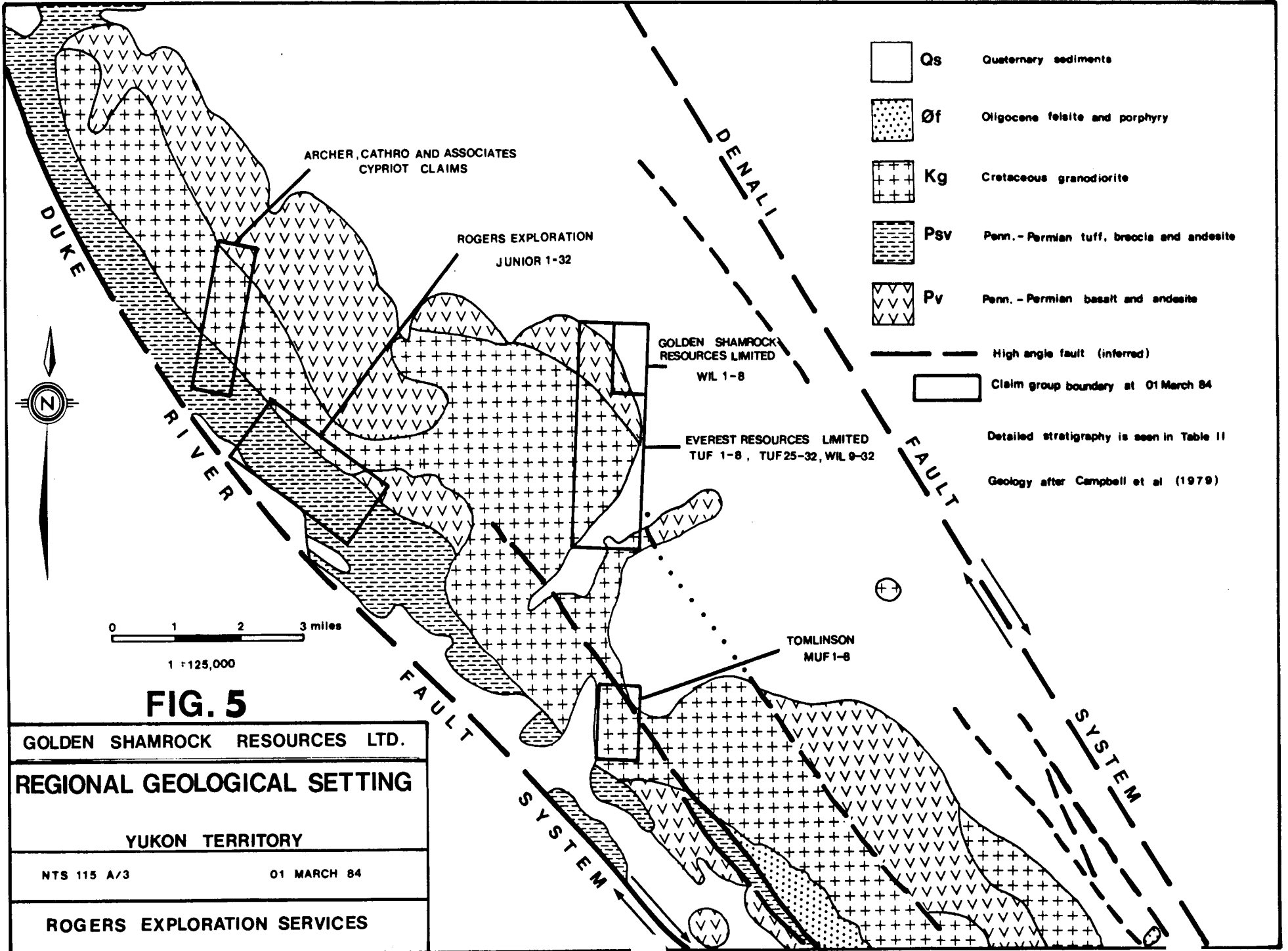
The St. Elias Mountains are dominated by a sub-parallel system of major regional faults, most of which display dextral strike-slip displacement ranging up to 200 kilometers in extent. These faults separate the region into discrete geological blocks; within each block the geology is uniform and more or less continuous, between adjacent blocks correlation of geology is difficult or impossible.

The St. Elias Mountains are bordered on the east by the Shakwak-Denali-Dalton Fault System. West of the fault, the St. Elias Mountains are divided into three distinct terranes: the easternmost Taku-Skolai Terrane (Wrangellia) of mainly permo-Pennsylvanian strata; the central Alexander Terrane of Cambrian to Carboniferous units and the southwestern Chugach Terrane of Cretaceous to Jurassic age. The Taku-Skolai Terrane (Wrangellia) includes the Wil claim group area and extends over portions of Dezadeash (115A), St. Elias (115B&C), Kluane (115F&G) and Snag (115J&K) map sheets. It includes Pennsylvanian to Permian volcanics, Permian sedimentary rocks, mid-Triassic to lower Cretaceous pelites and sandstones. The Terrane is bounded by the Shakwak-Denali-Dalton Fault System on the east and the Duke River Fault on the west.

Intrusive rocks common to all three fault blocks include sills, dikes and stocks of pre-Permian to Miocene age. In the area of the Wil claim group, these are restricted to Cretaceous granodiorite and Oligocene felsite and porphyry.

The regional geological setting of the property is seen in Figure 5. Island arc volcanics and volcanoclastics of the Pennsylvanian to Permian Station Creek Formation (Pv and Psv) occur in a broad northwesterly trending band between the Shakwak-Denali-Dalton Fault and the Duke River Fault. The volcanic unit Pv, including dark green massive porphyritic (augite) basalt to andesite flows and breccia and the volcanoclastic unit Psv, including tuff, breccia and argillite define a broad regional anticlinorium, trending northwest with indeterminate plunge and cored by Cretaceous granodiorite (Kg). The contact between the intrusive and the volcanic rocks is faulted and most likely predates the major displacements of the Shakwak-Denali-Dalton and Duke River Faults, although expressive of a similar stress regime. An Oligocene white to creamy white felsite and biotite and/or quartz hornblende latite porphyry unit (Of) locally occurs as dikes and sills showing varying degrees of bleaching, silicification, brecciation and pyritization and appears to be preferentially emplaced along zones of structural weakness.

The regional Stratigraphic Column for the Wil claim area is seen in Table II.



- Qs Quaternary sediments
- Øf Oligocene felsite and porphyry
- Kg Cretaceous granodiorite
- Psv Penn.-Permian tuff, breccia and andesite
- Pv Penn.-Permian basalt and andesite

- High angle fault (inferred)
- Claim group boundary at 01 March 84
- Detailed stratigraphy is seen in Table II
- Geology after Campbell et al (1979)

**FIG. 5**

GOLDEN SHAMROCK RESOURCES LTD.	
REGIONAL GEOLOGICAL SETTING	
YUKON TERRITORY	
NTS 115 A/3	01 MARCH 84
ROGERS EXPLORATION SERVICES	

ERA	PERIOD	FORMATION	LITHOLOGY
CENOZOIC	QUATERNARY	Qs	UNDIVIDED SURFICIAL DEPOSITS, INCLUDING GLACIAL DEPOSITS, ALLUVIUM, AND COLLUVIUM.
	TERTIARY	ØF	WHITE TO CREAMY WHITE FELSITE, BIOTITE AND/OR HORNBLENDE QUARTZ PORPHYRY, LOCALLY BLEACHED, SILICIFIED, BRECCIATED AND PYRITIC.
MESOZOIC	CRETACEOUS	Kg	GRANODIORITE, QUARTZ DIORITE AND DIORITE, HIGH LEVEL INTRUSIONS.
PALEOZOIC	PENN.-PERMIAN	STATION CREEK Fm.	
		Psv	TUFF, BRECCIA, SILICEOUS ARGILLITE
		Pv	PREDOMINANTLY FLOWS OF DARK GREEN MASSIVE PORPHYRITIC (AUGITE) BASALT TO ANDESITE, MINOR BRECCIA AND ARGILLITE.

TABLE II REGIONAL STRATIGRAPHIC COLUMN

## LOCAL GEOLOGY

Preliminary geological investigation of the Wil 1 - 8 claims was conducted in September of 1984, and involved a few days of limited prospecting and orientation. The geological picture of the property is therefore limited by the cursory nature of that investigation and to a large extent derived by extrapolation from the adjacent Tuf property, which the author has mapped in considerable detail. The preliminary geological map of the property appears in Figure 6. Outcrop is restricted to talus and rubble on the steep slopes that characterise this property and limited outcrop in seasonal meltwater channels.

The southern portion of the property appears to be primarily underlain by altered Cretaceous granodiorite similar to that exposed on the neighbouring Tuf property. Where exposed in outcrop, the granodiorite is seen to be highly argillized with distinctive gouge and shear zones locally bleached and pyritic.

The contact of the Cretaceous intrusive with the overlying Station Creek volcanics is brecciated and well sheared, suggesting at least a partly faulted contact. The relative age of the intrusive body to the volcanic unit is confirmed by a well developed chill margin in the former.

The Pennsylvanian to Permian Station Creek volcanic - volcanoclastic unit is exposed in the central portion of the property, and stratigraphically occurs as the eastern limb of a broad regional anticline, cored by the Cretaceous intrusive and trending northwesterly. Locally, the volcanic unit is a dark green aphanitic basalt to andesite with restricted zones of augite porphyroclasts up to one quarter of an inch in diameter.

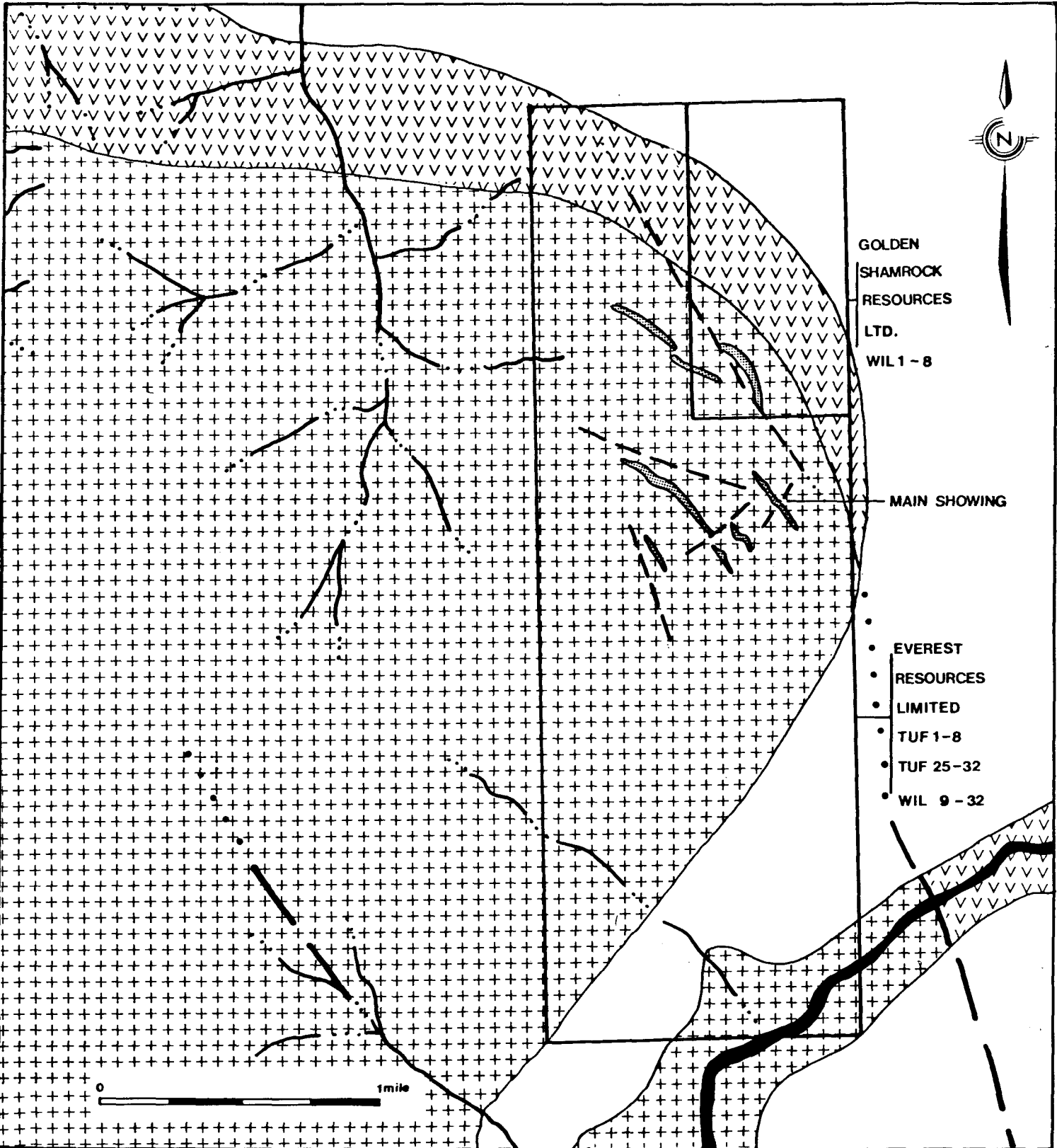
The Oligocene felsite porphyry dikes which may locally include rocks of early Miocene age appear to have at least three principal phases in evidence on the Wil property. The youngest phase is a dark green to black basaltic unit with random quartz porphyroclasts. The second set is of a white to cream colored quartz-feldspar acidic dike rock with pronounced lenticular form where exposed, and apparently intermediate in the dike hierarchy. The oldest and most prolific dike rock seen is a buff to grey weathering quartz-hornblende-feldspar porphyry with secondary calcite, hematite, muscovite, cloudy quartz augen and pyritic boxwork. Argillic alteration is pervasive throughout this latter dike set, which appears to be predominantly associated with the silver-lead mineralization on the adjoining Tuf property. The dike swarms of Oligocene age are, at this level of mapping, restricted to the extreme southern portion of the property, directly correlative with similar rocks on the Tuf property.

The property geology is dominated by a sub-parallel system of major faults trending northwesterly, with steep westerly dip. Right lateral strike slip displacement is inferred on these faults from exposed offset on the Tuf claims. Secondary fault sets subordinate to the dominant trend are seen throughout the southern portion of the property.

The Oligocene dike sets trend nearly parallel to the main fault traces, and it is inferred that the dikes were emplaced on pre-existing zones of weakness in the cooling intrusive.

The relative position of the Wil 1 - 8 property with respect to the known mineralization on the Tuf claims is geologically very favorable; further detailed exploration on this property may well define similar reserves of silver-lead mineralization in association with the Oligocene dikes and fault traces which clearly project from the Tuf to the Wil claims.

The present level of geological mapping on the Wil property should be upgraded in the 1985 field season; the preparation of a contoured orthophotograph at a scale of 1:2000 as a base for field mapping is indicated and physical mapping of the property could be easily accomplished in the early stages of the season.








GOLDEN  
SHAMROCK  
RESOURCES  
LTD.  
WIL 1 - 8

MAIN SHOWING

- EVEREST
- RESOURCES
- LIMITED
- TUF 1-8
- TUF 25-32
- WIL 9 - 32

0 1mile

-  Oligocene porphyry dike swarms
-  Cretaceous granodiorite
-  Pennsylvanian - Permian volcanics
-  High angle dextral strike slip fault
-  Local fault, attitude unknown

**FIG. 6**

GOLDEN SHAMROCK RESOURCES LTD.	
PRELIMINARY PROPERTY GEOLOGY	
TUF AND WIL CLAIMS	
NTS 115A/3	01 MARCH 84
ROGERS EXPLORATION SERVICES	

## MINERALIZATION

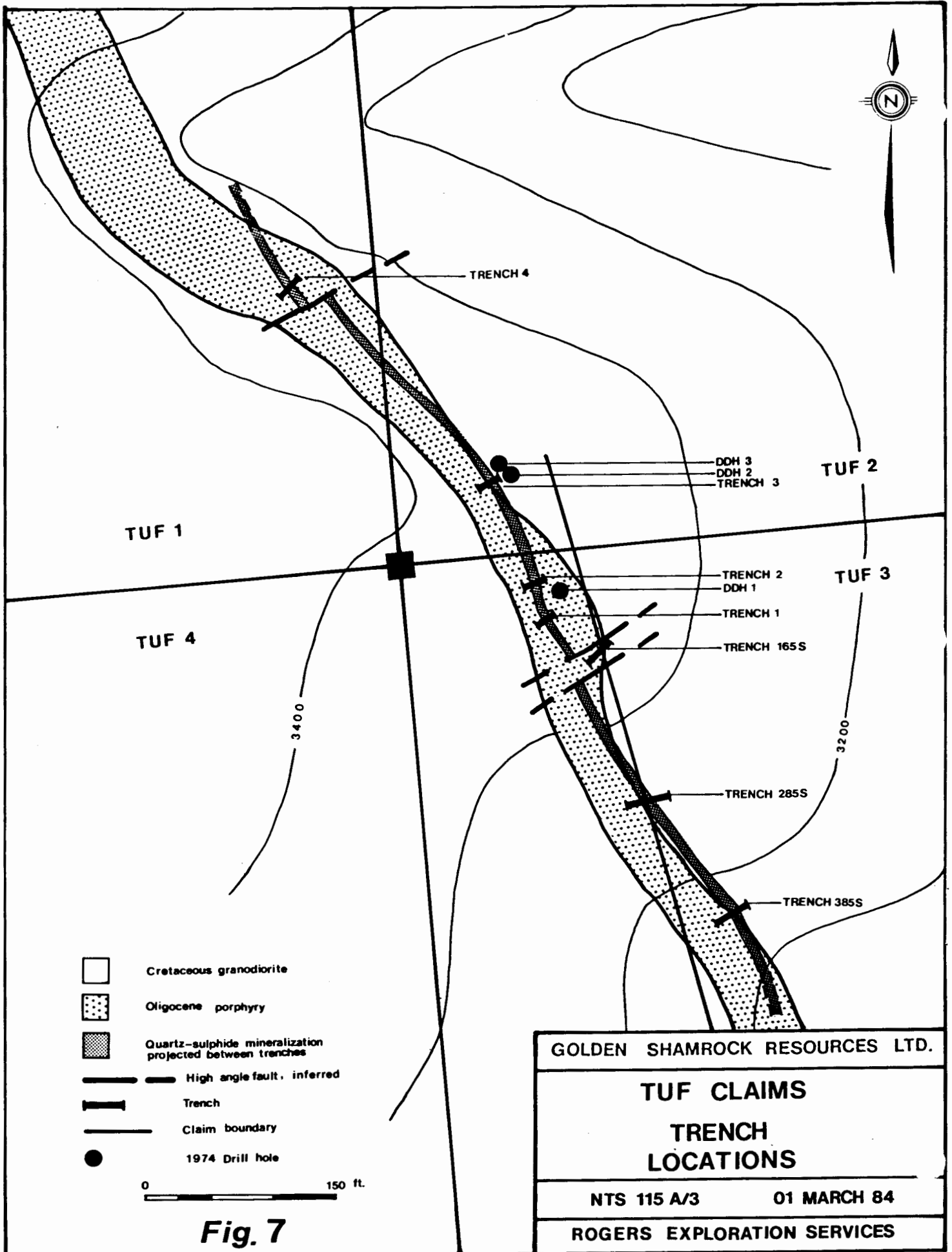
There are at present no proven reserves of economic mineralization on the Wil 1 - 8 claims of Golden Shamrock Resources Ltd. A sample of tetrahedrite-galena float taken from the southern portion of the claim group in September of 1984 assayed 46.20 OPT Ag, 0.74 % Pb, 0.30 % Zn and 0.028 OPT Au. The analysis was performed by Chemex Labs Ltd. on sample number 13171D collected by the author. The mineralized float has not at this writing been traced to a bedrock source on the Wil property; it is likely that the source of the float will be defined in the 1985 field program. The position of the float sample on the property suggests that it was displaced downhill from the area of inferred extension of the Tuf mineralization on to the Wil claims, but at least a further 1000 feet north of the property boundary. The implications for strike extension of the mineralized zone are therefore considerable; and as the exploration potential of this property is intrinsically tied to the mineralization on the adjacent Tuf property, a description of the latter follows.

The Tuf property mineralization is confined to a zone of intense argillic alteration and brecciation within a grey to buff weathering quartz-hornblende-feldspar porphyry dike trending northwesterly through the area of the trenches (Figure 7). The mineralization does not appear to be strictly confined to the dike, and appears variously as vein like quartz stockworking within the dike and as a selvage border at the altered intrusive contact.

Galena, tetrahedrite, sphalerite, tennantite and pyrite dominate the mineral assemblage, with auxilliary stibnite, Jamesonite and chalcopryrite. The zone of mineralization roughly parallels the trend of the dike for over 600 feet of strike length, although it appears to be displaced at the north end by a dextral strike slip fault and disrupted by a crosscutting shear zone near Trench 165 S.

Examination of the aerial photography for the Tuf and Wil properties and LANDSAT imagery from the Canada Center for Remote Sensing suggests that the main showing area lies directly on the northern extension of the Oligocene felsite unit seen on Figure 5 on the southern side of the Tatshenshini River. A strong linear feature appears to connect the known exposure of this unit with the mineralized zone on the property and extends northward on to the Wil 1 - 8 claims.

Assay data from the trenches on the Tuf property of Northern Horizon Resource Corporation and Everest Resources Limited is presented in Table III. The author has calculated probable reserves of 50,000 tons of ore grading 68.64 OPT Ag and 5.04% Pb in a separate report for Everest Resources Limited.



**Fig. 7**

TRENCH	SAMPLER	DATE	WIDTH	ASSAYS			COMMENTS
				SILVER OPT	LEAD %	ZINC %	
4	Sevensma	1974	6"	288.30	49.70	-	
	Kruzick	1979	12"	26.60	0.41	-	
3	Sevensma	1974	8"	117.80	9.23	-	
	Sevensma	1974	4"	298.80	33.95	0.79	
	Kruzick	1979	12"	123.00	7.70	-	
2	Sevensma	1974	60"	2.88	0.05	0.17	
1	Sevensma	1974	22"	91.00	2.85	2.52	
	Kruzick	1979	24"	125.00	5.25	-	
285 S	Sevensma	1974	8"	136.80	10.95	6.12	5.0Ft depth
	Sevensma	1974	10"	124.80	2.93	2.46	6.0Ft depth
	Sevensma	1974	12"	281.10	12.77	5.64	8.0Ft depth
	Sevensma	1974	8"	180.80	5.12	5.76	10.0Ft depth
	Sevensma	1974	10"	44.90	0.38	0.34	15.0Ft depth
	Sevensma	1974	5"	88.60	12.00	2.40	20.0Ft depth
	Sevensma	1974	6"	122.30	4.35	3.66	22.0Ft depth
	Kruzick	1979	22"	38.30	0.42	-	
385 S	Kruzick	1979	24"	3.21	0.12	-	
165 S	Kruzick	1979	8"	187.70	18.89	3.72	

Note: all samples reported are channel samples collected orthogonal to strike.

TRENCH No.	SAMPLE No.	INTERVAL		WIDTH Ft.	ASSAYS		
		Ft.	Ft.		SILVER(OPT)	GOLD(OPT)	LEAD(%)
4	13132D	0.00-	1.00	1.0	8.68	0.012	0.45
	13133D	1.00-	2.00	1.0	0.44	0.006	LO.01
3	13128D	0.0 -	0.75	0.75	25.11	0.018	0.30
	13129D	0.75-	1.33	0.58	114.10	0.029	9.81
	13130D	1.33-	2.50	1.17	6.10	0.012	0.24
	13131D	2.50-	5.00	2.50	1.08	0.003	0.09
2	13124D	0.00-	0.50	0.50	0.20	LO.003	LO.01
	13125D	0.50-	2.00	1.50	155.97	0.112	3.62
	13126D	2.00-	4.80	2.80	11.90	0.014	0.16
	13127D	4.80-	7.00	2.20	0.64	LO.003	0.02
1	13118D	0.00-	5.00	5.00	0.76	LO.003	0.10
	13119D	5.00-	6.00	1.00	0.60	LO.003	0.05
	13120D	6.00-	7.00	1.00	0.08	LO.003	0.01
	13121D	7.00-	7.80	0.80	0.66	LO.003	0.02
	13122D	7.80-	12.16	4.36	0.10	LO.003	LO.01
	13123D	12.16-	16.00	3.84	1.38	LO.003	0.01
	P3187	surface	grab		139.16	0.044	12.80
	P3188	surface	grab		120.78	0.062	8.54
	P3189	surface	grab		72.80	0.016	2.96
	P3190	surface	grab		281.86	0.094	1.51
	P3191	surface	grab		333.20	0.094	23.60
	P3192	surface	grab		279.06	0.102	8.86
	P3193	surface	grab		115.80	0.064	7.48
	P3194	surface	grab		199.42	0.136	16.50
165S	13114D	0.00-	4.00	4.00	0.72	0.005	0.06
	13115D	4.00-	6.16	2.16	3.44	0.003	0.22
	13116D	6.16-	7.00	0.84	170.23	0.052	22.40
	13117D	7.00-	9.00	2.00	2.56	0.003	0.43
285S	13101D	0.00-	1.25	1.25	0.24	LO.003	0.02
	13102D	1.25-	2.33	1.08	22.32	0.020	0.50
	13103D	2.33-	3.50	1.17	4.72	0.006	0.06
	13104D	3.50-	4.50	1.00	29.10	0.040	0.25
	13105D	4.50-	9.50	5.00	0.42	LO.003	0.01
	13106D	9.50-	12.25	2.75	0.56	LO.003	0.05
	13107D	12.25-	13.30	1.05	0.18	LO.003	LO.01
	13108D	13.30-	18.33	5.03	0.58	0.003	0.04
	13109D	18.33-	20.40	2.07	0.38	LO.003	0.03
	13110D	20.40-	23.33	2.93	7.28	0.014	0.22

TRENCH No.	SAMPLE No.	INTERVAL Ft.	WIDTH Ft.	ASSAYS		
				SILVER(OPT)	GOLD(OPT)	LEAD(%)
285S	13134D	grab 10'E.	0.33	13.88	0.040	0.91
	13135D	grab 10'E.	1.25	65.55	0.022	2.03
	13136D	select		86.60	0.095	2.84
	13137D	select		43.30	0.088	1.66
385S	13111D	0.00- 5.00	5.00	0.12	LO.003	LO.01
	13112D	5.00- 6.80	1.80	0.98	0.005	0.04
	13113D	6.80-11.80	5.00	0.14	LO.003	0.01

TABLE IIIB ASSAY SUMMARY : 1984 SAMPLING

## EXPLORATION TO DATE

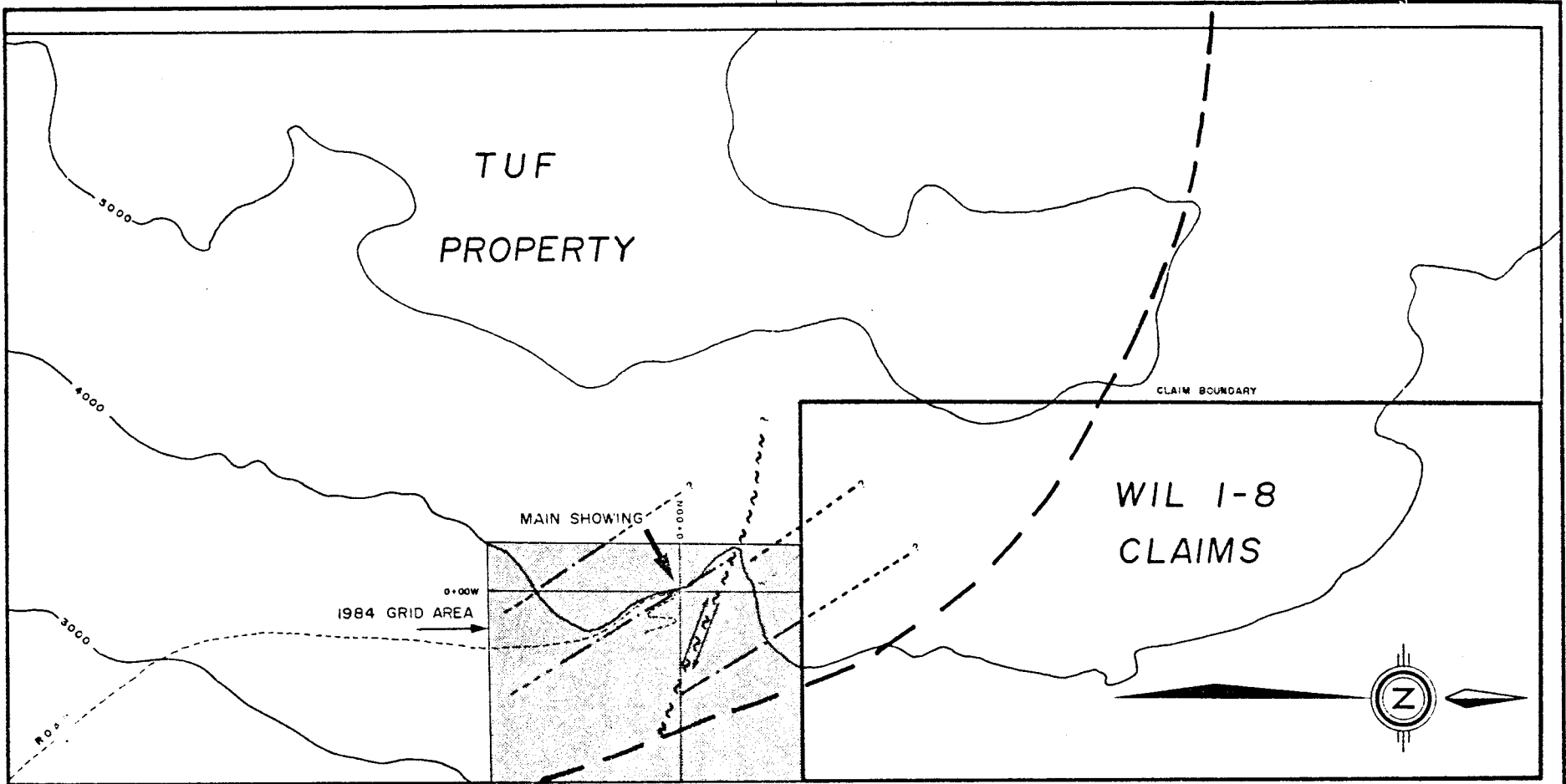
Golden Shamrock Resources has incurred exploration expenditures totalling \$ 20,840 on the Wil 1 - 8 group of claims between 01 March 84 and 01 May 85, exclusive of the costs of acquiring the property and preparation of the current and previous summary reports and administrative expenses. This amount includes \$ 20,000 paid to the Everest Resources Limited and Northern Horizon Resource Corporation joint venture to defray Golden Shamrock Resources Ltd.'s portion of the road construction expense and to obtain complete transcripts of all surface exploration work conducted on the adjoining Tuf property by that joint venture. The balance of the funds were expended in a preliminary field investigation of the Wil 1 - 8 claims by the author in September of 1984.


The road access to the Wil 1 - 8 property has now been upgraded to a seasonal four wheel drive road from Dalton Post to the main showing area on the Tuf claims. Culverts were installed and a number of small bridges constructed along the route to facilitate access during the spring break up period, effectively extending the surface exploration season by ensuring vehicular access to the properties.

The acquisition of maps and sample reports for the 1984 Tuf property program will be of use to Golden Shamrock Resources Ltd. in planning an effective trenching program on the Wil claims, and the acquisition of the geochemical survey data from the Tuf property will save Golden Shamrock Resources Ltd. the need for conducting an orientation geochemical soil survey to determine background and threshold values of the indicator elements specific to this style of mineralization. The apparent continuity of VLF - EM conductors on to the Wil 1 - 8 property from the known mineralization of the Tuf property will provide Golden Shamrock Resources Ltd. with an immediate focus for the early stages of the recommended program.

Golden Shamrock Resources Ltd. has also acquired copies of the topographic map base, LANDSAT imagery and aerial photography for the property from the Tuf joint venture; the geological interpretation of these conducted for the joint venture and the savings in capital expenditure will aid in furthering a cost effective program on the Wil 1 - 8 claims.

The extrapolation of geological, geochemical and geophysical features from the adjacent Tuf property is presented in Figure 8.



 1984 GRID AREA

— BASELINE  
 — CLAIM BOUNDARY  
 - - - - ROAD

— VOLCANIC - INTRUSIVE CONTACT  
 ~ ~ ~ ~ FAULT  
 - . - . COINCIDENT GEOCHEMICAL AND GEOPHYSICAL ANOMALY  
 - - - - ( INFERRED )



REVISED	GOLDEN SHAMROCK RESOURCES LTD.	
	<b>COMPILATION</b>	
PROJ.No	SURVEY BY <u>RSR</u>	DATE <u>01 MAY 95</u>
NTS <u>1:5000</u>	DRAWN BY <u>RSR</u>	
DWG.No	ROGERS EXPLORATION SERVICES LTD.	
<b>8</b>	OFFICE <u>WHITEHORSE</u>	

MINERAL 881

## CONCLUSIONS

The exploration work conducted to date on the Wil 1 - 8 mineral claims by Golden Shamrock Resources Ltd., together with the proximity of significant reserves of silver-lead mineralization on the adjacent Tuf property indicate that the property warrants a comprehensive program of exploration in the 1985 field season. A program of exploration is presented in this report comprising three discrete phases of exploration with a total budgetted cost of \$ 150,000; this program should be initiated in the early part of the 1985 field season.

Experience on adjacent properties suggests that initial concentration should be on the probable extension of ore bearing structures from the Tuf claims. A program of surface mapping, prospecting, geochemical sampling of surface soils, and VLF-EM geophysics should be carried out with this objective. Geochemical thresholds for the area of the Wil claims are as noted below; values returned in excess of these should be addressed in the second phase of the program: Cu: 65 ppm; Ag : 0.9 ppm; Pb : 28ppm; Zn : 110 ppm; As : 45ppm and Sb : 5.5 ppm. Geophysical surveys employing VLF-EM electromagnetic techniques are indicated, and experience on the Tuf property suggests that the 23.4 KHz frequency is the best indicator of conductivity coincident with mineralization.

If the results produced in the preliminary phase of the program are encouraging, the decision should be made to proceed to a secondary phase of detailed exploration including detailed geochemical and geophysical surveys, detailed mapping and prospecting, extension to the access road and trenching of selected targets.

The decision to proceed to diamond drilling , the third and final stage recommended herein, would be dependent on the results of preceding phases.

It is likely that the recommended program of exploration on the Wil 1 - 8 claim group may define similar style and grade of mineralization to that seen on the Tuf property. The tonnage potential, given the extent of the dike-fault system exposed to date and the location of the mineralized sample found on the Wil property, is quite high. It is recommended that the exploration program detailed in the summary to this report be conducted on the Wil 1 - 8 claim group by Golden Shamrock Resources Ltd. at an early date in the 1985 field season.

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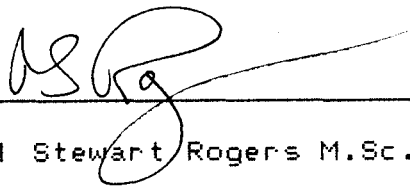
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CERTIFICATE

I, Randall Stewart Rogers, of the City of Whitehorse in the Yukon Territory, DO HEREBY CERTIFY:

1. THAT I am a consulting professional geologist with offices located at 32 Marion Crescent, Whitehorse, Yukon Territory;
2. THAT I am a Professional Geologist (P.Geol.) licenced by the Association of Professional Engineers, Geologists and Geophysicists of Alberta;
3. THAT I am a graduate of the University of British Columbia with the degree of Bachelor of Science (Honors) in Geology;
4. THAT I am a graduate of Queen's University at Kingston, Ontario with the degree of Master of Science in Mineral Exploration;
5. THAT I am a member of the Canadian Institute of Mining and Metallurgy;
6. THAT I am a member of the Geological Association of Canada;
7. THAT I have personally examined the property now covered by the Wil 1 - 8 mineral claims from 9 to 12 June 1983, from 23 to 26 August 1983, from 1 March to 10 September 1984 and from 14 to 16 September 1984;
8. THAT I have no interest, direct or indirect, in any of the securities or properties of Golden Shamrock Resources Ltd. and do not expect to receive or acquire any;
9. THAT I consent to the use of this report for the purposes of financing Golden Shamrock Resources Ltd.

DATED at the City of Whitehorse, Yukon;  
this first day of May, A.D. 1985.

  
\_\_\_\_\_  
Randall Stewart Rogers M.Sc., P.Geol.



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Telex: 043 52597

## CERTIFICATE OF ASSAY

TO : GOLDEN SHAMROCK RESOURCES LTD.

303 - 1285 W. PENDER ST.  
VANCOUVER, B.C.  
V6E 4B1

\*\* CERT. # : A8416564-001-  
INVOICE # : I8416564  
DATE : 3-OCT-84  
P.O. # : NONE  
8411007

ATTN: NASH DDWDLE CC: R. ROGERS

Sample description	Prep code	Pb %	Zn %	Ag oz/T RUSH FA	Au oz/T RUSH FA		
13171 D	236	0.74	0.30	46.20	0.028	--	--

.....  
Registered Assayer, Province of British Columbia

