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# A REPORT ON THE STUMP LAKE PROPERTY

.

#### NICOLA MINING DIVISION

#### BRITISH COLUMBIA

LATITUDE 50° 20'

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LONGITUDE 120°22'W

N.T.S.

921/8W

For

#### CELEBRITY ENERGY CORPORATION

Вy

G.H. RAYNER, P.ENG.

G.H. RAYNER AND ASSOCIATES LTD.

WEST VANCOUVER, B.C.

APRIL 14, 1983.

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#### SUMMARY AND CONCLUSIONS

At the present time Celebrity Energy Corporation controls the full length of the Stump Lake precious metal mining camp. This camp consists of a system of steeply dipping veins extending over a length of about 7 kilometers. The vein system has been explored at various isolated points in the past and a total of about 77,000 tons of ore has been produced from these workings.

The potential to locate economic bodies of ore around the existing workings and in the intervening areas appears very good.

A program of work in two stages is recommended to evaluate this potential.

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#### INTRODUCTION

At the request of Mr. Paul Frigstad of Celebrity Energy Corporation, I have examined the company's Stump Lake property and the very large volume of available data generated by previous workers in this mining camp.

In the camp steeply dipping veins carrying precious metal values have been intermittently developed along a strike length of 7 kilometers. Between the separate workings unexplored covered areas present extensive target areas.

Although there is a great deal of old data available much of it is general in nature. Specific material, such as assay plans, is known to have existed at one time and may still exist but it is not presently available. The two best sources of assay data presented by reliable engineers are the 1935 report on the Jenny Long by Coats and the 1936 British Columbia Minister of Mines Report description of the camp.

These two documents are appended to this report as Appendices II and III.

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#### LOCATION AND ACCESS

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The Stump Lake area lies in southwestern British Columbia about 40 kilometers northeast of the town of Merritt and about the same distance south of Kamloops. Most services are available in one or the other of these two towns. A paved highway connecting them passes through the western portion of the claim group. Both towns have rail service and from Kamloops there is scheduled air service to Vancouver.

The specific location of the property would be 50°20' North Latitude; 120°22' West Longitude.

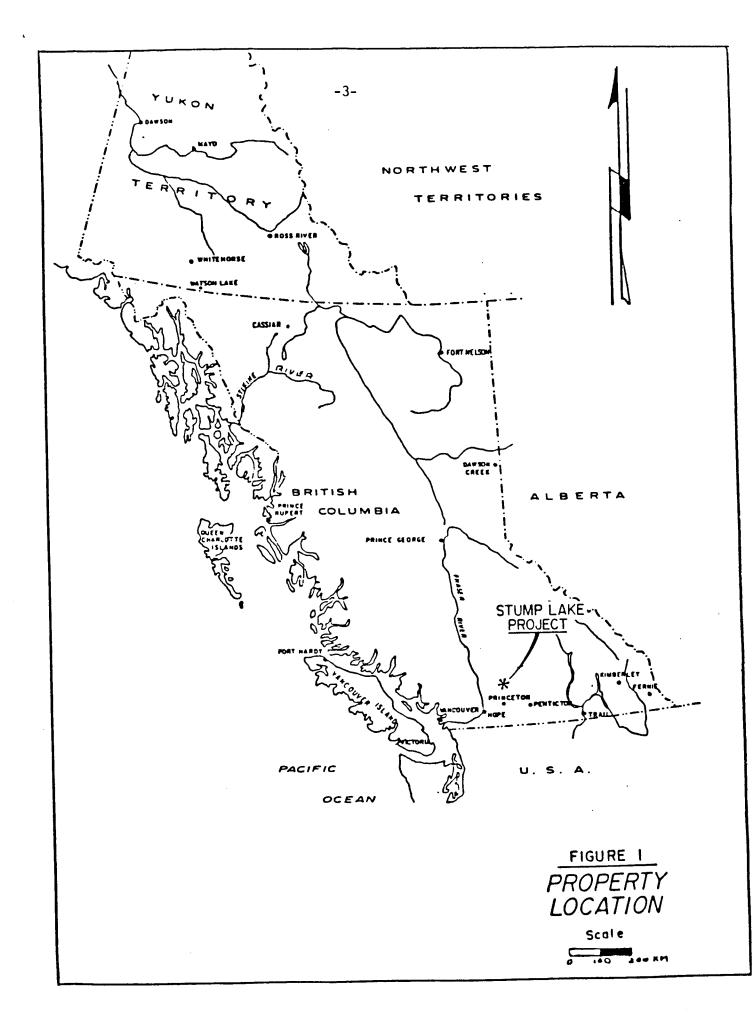
Local logging, ranch and mining roads give good access to most areas of the claim group.

#### CLIMATE AND PHYSIOGRAPHY

The property lies in the southern portion of the interior plateau of the province. Relief on the claims is subdued varying between 720 meters and 920 meters above sea level. The higher areas are sparcely treed while the lower areas consist of open range land.

Climatatic conditions are moderate with warm, dry summers and fairly cool winters with a light snowfall.

Limited water is available on the claims during the early part of the year so that diamond drilling would best be scheduled for the spring months. For an operating mine a water supply would be available from streams and lakes in the area by arrangement with the Water Rights Branch or by purchase of existing water licences.



#### HISTORY AND PREVIOUS WORK

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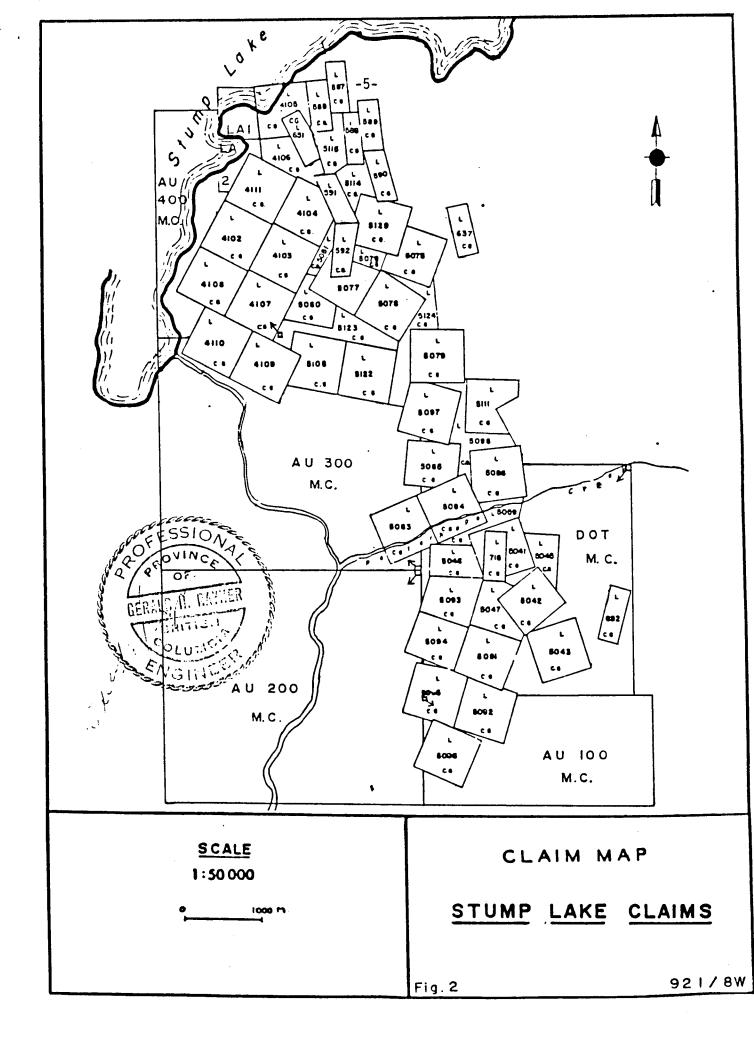
The early history of the camp dates back to the period of original claim staking between 1882 and 1885. Work by Nicola Mining and Milling Company prior to 1890 included the sinking of the Joshua, Tubal Cain and King William shafts, whereas the Star Company put down the Star (Enterprise) and Planet shafts. Work was suspended around 1890 and there appears to have been comparatively little work done until 1916 when Donahue Mines Company, Limited, of Seattle, started work on the Joshua and Tubal Cain veins. A mill was built by this company, but was only operated for a short time. Operations by the company were stopped in 1920.

In 1925 Planet Mines and Reduction Company, Limited, started work on the Enterprise vein. The shaft was deepened to the level of the present crosscut adit (320 feet) and the adit itself was driven. A mill was built and operated from 1929 to early 1931, when the company stopped work. Nicola Mines and Metals Company acquired the property of the Planet Company and in addition a number of other claims. The company did development work on the Joshua, Tubal Cain, and Enterprise veins and there was some production. In 1937 a reorganization took place whereby Consolidated Nicola Goldfields, Limited, acquired the holdings of Nicola Mines and Metals and the other groups. From 1939 to 1942 the company was developing the mine and rebuilding the mill, which was operated at intervals. Operations were suspended in 1942.

Also, in 1935-1936, the Kootenay Nevada Company carried out separate operations to the south on the Jenny Long vein.

Since 1942 various companies including Stump Lake Mines Ltd. and Copper Hill Mining and Exploration carried out limited programs on the ground, however the next significant work was undertaken in 1974 by Juniper Mines Ltd. This company geologically mapped most of the claims area at a scale of 400 feet to the inch. The available photocopies of this work are not particularly clear, however they will serve as an excellent base for further work.

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The Juniper Mines plan of the Jenny Long area shows a diamond drill hole about 100 meters long cutting the vein zone. The collar site was not examined by the writer and it is not known if this hole was actually drilled or only proposed. In any event, no drill data is available.

The operations of Juniper Mines were held back by the low precious metal prices then prevailing. They also did not control the Enterprise, Tubal Cain and some other critical claims at the north end of the camp. Work apparently halted in 1975.

From 1975 to date several companies have controlled various parts of the camp. The only significant work recorded during this period were the two diamond drill holes put down on the Azela Claim in 1980. They are discussed under that property.

Production figures for the camp, as reported by the British Columbia Department of Mines total 77,605 tons of ore mined, yielding 8,494 ounces of gold, 252,939 ounces of silver, 40,822 pounds of copper, 2,206,555 pounds of lead and 367,869 pounds of zinc. This represents a recovered ore grade of 0.109 oz/ton gold, 3.26 oz/ton silver, 0.026% copper, 1.42% lead and 0.24% zinc. Ag:A 30:N

This production was in the period from 1916 to 1944 and came entirely from the Enterprise, King William, Tubal Cain and Joshua veins.

On the Jenny Long property, a 35 ton mill was established in the mid-1930's but no production records are available. A relatively small volume of tailings was produced.

In the period from 1939 to 1944 a minor tonnage of scheelite was produced from the tailings ponded near the Enterprise portal. The total amount of recovered scheelite is not known to the writer.

#### PROPERTY

The Stump Lake area holdings of Celebrity Energy Corporation consist of fifty-five reverted Crown Granted claims, two two-post claims and five Modified Grid claims totalling sixty-four units.

The Stump Lake Camp forms a coherent geological unit with a single set or system of veins. However, the ground position presently assembled by Celebrity apparently represents the first time since some time in the 1940's that all of the properties of the camp have been gathered under one ownership to allow for a unified evaluation of the full length of the vein system.

The claim holdings are outlined on Figure 2 and the claim details are presented in Table I.

# TABLE I CLAIM DETAILS MODIFIED GRID SYSTEM CLAIMS

NAME OF CLAIM	RECORD NO.	UNITS	EXPIRY DATE
Dot	803	8	Feb. 13, 1983
Au No. 100	1338	8	Feb. 2, 1984
Au No. 200	1339	20	Feb. 2, 1984
Au No. 300	1340	20	Feb. 2, 1984
Au No. 400	1341	8	Feb. 2, 1984
	TWO POST (	CLAIMS	
NAME OF CLAIM	RECORD	NO.	EXPIRY DATE
L.A.#1	1237		March 24, 1984
L.A.#2	1238		March 24, 1984

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# <u>TABLE I (cont</u>)

# REVERTED CROWN GRANTED MINERAL CLAIMS

NAME OF CLAIM	LOT NUMBER	RECORD NUMBER	EXPIRY DATE
Azela	692	677	Aug. 13, 1984
Jenny Long	718	678	Aug. 13, 1983
Parkview #3	5041	679	11
Bluebird	5042	680	11
Wren	5043	681	11
Clara B.	5045	682	11
The Garden No. 1	5046	683	п
Dorothy	5047	684	11
Brian	5091	685	11
Scotia	5092	686	11
The Garden No. 2	5093	687	н
The Garden No. 3	5094	688	11
The Garden No. 4	5095	689	и
The Garden No. 5	5096	690	H
Big Sandy	637	1243	April 22, 1984
Silver Star	4104	305	Aug. 5, 1983
L. Fraction	5123	395	Feb. 20, 1984
E. Fraction	5098	396	н
Ruby M Fraction and			
Star Fraction #1	5080, 5081	397	11
Jessie B.	5078	398	н
Georgina M. Fr.	5076	399	. 11
Esther M. Fr.	5075	400	N
C. Fraction	5059	401	11
Entente Cordial	4110	402	Feb. 24, 1984
New Emblem	4109	403	11
Lee No. 8	5122	404	11
Sun	5083	405	и
Eileen O Fraction	5105	406	11

# TABLE I (Cont)

# REVERTED CROWN GRANTED MINERAL CLAIMS (cont)

NAME OF CLAIM	LOT NUMBER	RECORD NUMBER	EXPIRY DATE
No Surrender and			
King William	591,592	357	Dec. 22, 1983
Silver King No. 2	4103	358	11
Planet Extension	4108	359	u
Silver King Extension	4107	360	ıt
Nels Fraction	5115	361	11
Gentle Annie	589	362	п
Maybelle Fraction	5114	363	п
Thistle Fraction	5085	366	Jan. 18, 1984
Early Bird	5086	367	и
Raven	5097	368	11
Sheelah	5129	369	11
Marion C. Fraction	5077	370	It
Belle Scott	590	371	It
IXL No. 6	5111	376	Feb. 6, 1984
Raven No. 2	5079	377	11
Moon	5084	378	11
M.Fraction	5124	394	Feb. 20, 1984
Planet No. 1	4102	306	Aug. 5, 1983
New Star No. 2			
Fraction	4106	307	И
Daystar	4111	308	li
New Star Fr.	4105	410	March 1, 1984
Enterprise	651	411	11
Tubal Cain	586	412	11
Christina	588	412	11

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All claims are understood to be in the name of Celebrity Energy Corporation by agreement.

The writer checked the Legal Corner Posts in the field for the Dot, Au No. 100, Au No. 200, Au No. 300 and Au No. 400 as well as some of the identification posts.

All were found to be properly staked in accordance with the provisions of the British Columbia Mineral Act.

Details of title were not further investigated.

7-0

#### REGIONAL GEOLOGY

The regional geology of the district has been mapped by W.E. Cockfield of the Geological Survey of Canada on a scale of 1:250,000 and published as G.S.C. Memoir 249 (1947).

In the Stump Lake area the geological framework is basically composed of an underlay of Nicola Volcanic rocks of Upper Triassic Age. The Nicola Group is composed of a succession of volcanic flows add pyroclastics with minor sedimentary sections. Nicola Volcanics are dominantly of intermediate composition but variations from basalts to rhyolites do occur.

Regionally, the Nicola Group is underlain by the Cache Creek Group of Carboniferous to Permian Age. The Cache Creek is a sedimentary Group in which argillite predominates. Minor volcanics are interbedded in certain areas and substantial sections of limestone occur in areas to the north.

In the Stump Lake area, Cache Creek rocks crop out extensively to the east of the claims and as occasional windows to the south.

Extensive intrusive bodies cut the older rocks. These bodies are of batholithic

size and are assigned to the Coast Intrusives of Jurassic or later age. Granodiorites and related phases predominate.

Structurally, the Stump Lake Area lies in a synclinal package of Nicola rocks compressed between Cache Creek sediments and the Penask Batholith on the east and the Nicola Batholith on the west.

Miocene flows of the Kamploops Group overlies the older units. Examples of these largely basaltic volcanics are found just to the north of Stump Lake.

#### LOCAL GEOLOGY

8-0

Mappingon a scale of 1 inch to 200 feet was carried out over the property except for the northern sections by Agilis Engineering for Juniper Mines in 1974. This work shows the area to be almost exclusively underlain by "greenstone" of the Nicola Group. The work delineated some of the main mineralized structures and projected their traces through covered areas.

Controls for vein quartz and mineralization are not at all clear from the data at hand. It would seem from the distribution of stoped areas in the northern workings that the structures tended to make ore on north-north-westerly rather than northerly trending vein segments. Examples of this include the southern Enterprise-King William section where the north-north-westerly tending King William vein was stoped while the northerly trending Enterprise was not. Similarly on the Tubal Cain system the northerly trending (western) splay is a largely barren shear while the north-north westerly trending branch to the east makes some ore. This ore distribution suggests that the main regional shear structure may have a northerly trend and a sinistral movement causing areas of low pressure and vein formation on related tensional structures.

The large ore zone in the northern part of the Enterprise workings would also fit this structural picture. Here the ore is localized on an arcuate section of vein which would tend to open with north-south strike slip movement to form a wider mineralized section.

Further work and new mapping, particularly in the underground workings, will be required to clarify this question and to outline other ore controls.

The mineralized structures in the northern part of the property can be examined from the workings of the Enterprise 320 level which remains in generally good condition except for the southern Enterprise-King William section. These various underground exposures on the Enterprise, Tubal Cain and Joshua veins are described in the following sections by property name.

#### 9-0 PROPERTY DESCRIPTIONS

The Camp has been developed in the past on the basis of individual veins or properties. The following descriptions continue to address these areas on an individual basis since that is the manner in which the available data is arranged. The reader should remain aware that all of these separate veins or properties are parts of a single coherent vein camp. In several cases the unexplored, covered sections along strike between properties present excellent exploration potential.

#### 9-1 ENTERPRISE-KING WILLIAM SYSTEM

The Enterprise and King William structures were originally explored as separate properties but underground work over the years has clarified the relations between them.

The Enterprise vein was developed from surface by an inclined shaft sunk along the dip of the vein for 320 feet. At a later date an adit was driven to intersect the vein near the bottom of this shaft. This adit was also continued to the east to crosscut the Tubal Cain and Joshua veins. All three veins were drifted upon extensively on this 320 foot level.

On the Enterprise vein the existing plans show very meager lateral development from the shaft above the 320 foot level. Stoping is continuous for long sections from the 320 foot level for about one hundred to one hundred and fifty feet above it. At no point does stoping appear to have broken through to surface or to overburden. If this reflects the distribution of ore in the vein then all of the Enterprise ore shoots appear to have been blind: a point to bear in mind in exploring the other veins of the camp.

Below the 320 foot level a new internal shaft was suck to below the 900 foot level and drifts were driven from it at the 440, 550, 675 800 and 900 foot levels. The Enterprise vein as exposed in these workings varies in width. In stoped sections on the 320 level it appears from pillars and remnants to have been from one to three feet wide. Through most of the unstoped areas it is only about a foot in width with considerable swelling and pinching.

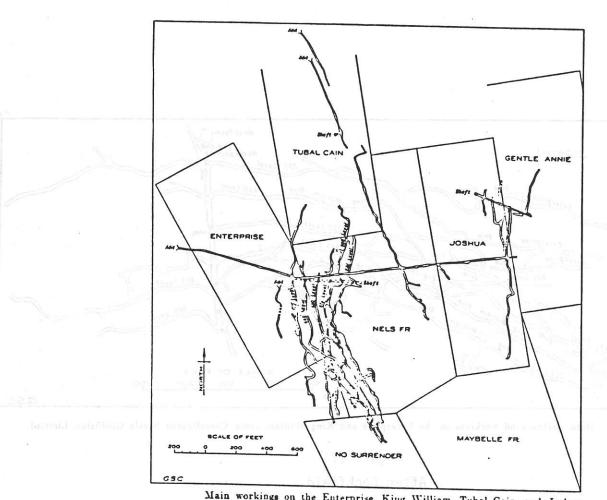
The vein is quite continuous over its exposed length. The strike is variable, generally about 350° azimuth and turning to about 015° azimuth in the section to the north of the shaft. The dip is easterly at about 50 degrees with variations from 40 degrees to 80 degrees reported.

In general the bleached alteration envelope in the underground workings appears quite thin.

Two samples were cut by the writer from the Enterprise vein on the 320 level. The first was cut as a continuous chip across 0.15 meters (6 inches) in a shatter zone 0.6 meters (2 feet) wide located on the 320 level.

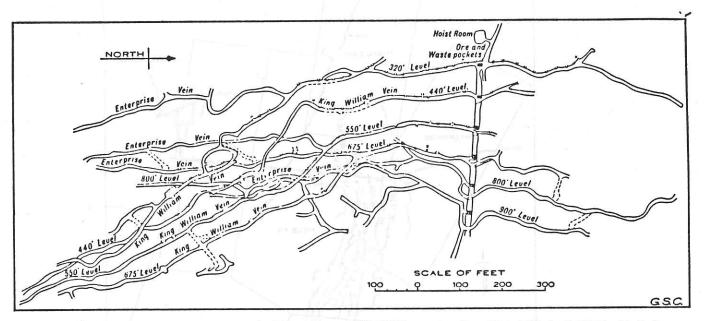
The second sample was a grab across about 0.6 meters (2 feet) of vein from a pillar at the junction of the two north drifts on the Enterprise vein. The results were as follows:

Sample No.	Width	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	Pb%	<u>Zn%</u>	W03%
12517	0.15 M.	0.102	10.05	1.07	1.29	0.002
12518	grab	0.938	7.01	3.11	1.76	0.001



Main workings on the Enterprise. King William. Tubal Cain, and Joshua veins, Consolidated Nicola Goldfields, Limited.

> Figure III After Cockfield G.S.C. Memoir 249



Main underground workings on the Enterprise and King William veins, Consolidated Nicola Goldfields, Limited.

Figure IV After Cockfield G.S.C. Memoir 249

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#### TUBAL CAIN

-16-

The Tubal Cain vein lies to the east of the Enterprise vein some 250 meters. This vein strikes N20<sup>c</sup> W and dips 65 to 85 degrees eastward near the surface and splits at depth into two branches which diverge to the south. One of these branches is the almost vertical downward extension of the vein at surface, and the other , the more easterly, has an average dip of 75 degrees easterly and a north-northwesterly strike.

Various, now inaccessible workings, explore the upper part of the vein. The best exposures now available are on the Enterprise 320 crosscut level which cuts the system below the old upper workings. On this level the western branch of the vein is a zone of strong shearing but of very little vein filling. About 1100 feet of drifting has developed this structure but no sections have been stoped.

Some of the best scheelite responses to the lamp were seen on this vein segment. A sample taken by the writer across a quartz lens with a length of 8 meters and a maximum thickness of 2 meters ran as follows:

Sample No.	<u>Width</u>	<u>Au oz/ton</u>	Ag oz/ton	<u>Pb%</u>	<u>Zn%</u>	W03%	
12520	1.5 M	0.029	1.11	1.01	0.66	0.914	
		Gold	Silver	Copper	Zine	Tungsten	

The eastern branch has a more north-northwesterly trend and is less strongly sheared and altered. It has been less extensively explored on this level however some stoping has taken place.

One sample was cut by the writer at a point 20 meters south of the north end of the drift on the east segment. This sample was a continuous chip across 0.6 meters (2 feet) in quartz lens 2.4 meters (8 feet) thick. The results are as follows:

Sample No.	Width	<u>Au oz/ton</u>	Ag oz/ton	<u>Pb%</u>	<u>Zn%</u>	<u>W03</u> %
12519	0.6 M	0.029	0.99	1.29	6.45	0.003

9-2

#### THE JOSHUA VEIN

-17-

The Joshua Vein lies some 250 meters to the east of the Tubal Cain. It is a northerly striking structure with a steep easterly dip. It has been developed by a shaft and various levels to a depth of 750 feet. It is also connected to the 320 level crosscut from the Enterprise workings which cut the Joshua vein just above the Joshua 400 foot level. At the present time only the 320 level is accessible. The workings below this are flooded and those above are in poor condition.

On the 320 level the vein has been drifted on for about 300 meters. The structure is very continuous throughout this length but widths are nowhere impressive. Widths up to 1.1 meters were noted but most of the structure would average 0.3 meters or less. On the north end of the 320 level a length of about 35 meters has been stoped in one area. In the development to the south the vein seems to weaken in width and sulphide content although continuity is still good. Also in the drift to the south the vein has been displaced to the west a few meters by low angle faults at two points. The faults seem to have been readily solved by the mine staff and the displaced vein is picked up with a minimum of dead work.

A single sample was cut by the writer on the Joshua vein. This was a 1.1 meter chip cut from vein material in a pillar 30 meters north of the main 320 crosscut. The results are as follows:

Sample No.	<u>Width</u>	<u>Au oz/ton</u>	Ag oz/ton	<u>Pb%</u>	<u>Zn%</u>	W03%
12521	1.1 M	0.08	11.80	1.95	4.00	0.021

#### JENNY LONG MINE

The Jenny Long Mine is situated about 4000 meters southeast of the Enterprise. Some surface bulldozer trenching has been carried out on the property in recent years exposing quartz vein material and rusty altered wallrock. The material in the trenches is disturbed so that no accurate widths can be seen.

9-3

9-4

The old mine workings are flooded and inaccessible. The following description is taken from Cockfield (1948) and is based on old reports.

"The shaft is stated to be sunk on the westerly of the two north-south veins, with an inclination of 56 degrees. The vein was followed for 90 feet where it left the foot-wall of the shaft, which was continued to a depth of 280 feet with workings at the 65-, 165-, and 265-foot levels. The 65-foot level is shown by the mine maps to have been driven about 200 feet northerly and 280 feet southerly from the shaft. The No. 1 vein was traced for 180 feet northerly from the shaft, and is shown 30 feet from the northern end of the working. It is probably a branch of the No. 2 vein, which has been traced the length of the workings. In the north end of the working, a third vein with a strike of north 50 degrees west has been followed by a drift 160 feet long. According to Hedley, the vein system averages less than 29 inches of quartz in width, but locally the quartz reaches widths of 6 feet. Some stoping has been done on the veins.

The 165-foot level is about 90 feet long, excluding the crosscut from the shaft to the vein. About 40 feet of the drift is north of the crosscut, and encounters a vein near its north end that has not been drifted on, but which may be one of the veins referred to above. The southern drift shows a vein near the shaft. The relations of these to the veins in the upper level are not clear.

The 265-foot level is about 50 feet long, including the shaft crosscut. It encountered a vein, but the relations withthe veins above are not known.

Part of the quartz on the mine dump carries scheelite. According to Hedley, "values judging from the intensity and character of mineralization in different parts of the mine, must be erratic, and close sampling is necessary for determination of averages"."

J.F. Coats, Consulting Engineer for Kootenay Nevada Mines Ltd. reports

(Coats 1935) muck samples from the 165 foot level carrying as high as 0.8 oz/ton gold. A level plan with some assay values is also included in the Coats report. (Appendix III).

A 35 ton per day mill was operated on the property for a short time by the Kootenay Nevada Company. No production figures are available.

Although vein widths in the Jenny Long were narrow and grades erratic, some wider and higher grade sections do occur. Widths up to 6 feet have been reported.

The system consists of several sub-parallel veins open both laterally and to depth.

There is some outcrop and sub-outcrop in the immediate area of the mine workings but beyond this, continuous overburden extends along strike in both directions. The trend to the north toward the known deposits of the Enterprise would particularly warrant investigation.

A single sample was taken by the writer across a vein exposure in a bulldozer trench about 40 meters north of the shaft. The sample was composed of disturbed material and the width of the vein could not be ascertained. The sample returned as follows:

Sample No.	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	WO3
12516	0.329	5.12	1.88	0.2	0.015

#### AZELA (JOHANNESBURG)

9-5

The Azela area is situated about 4900 meters southeast of the Enterprise workings.

The main shaft on the Azela vein is now flooded but is reported to be 24 meters (78 feet) deep.

The vein lies in a shear zone about 2 meters wide striking 015 degrees azimuth and dipping 55 degrees to the east. At the collar the shear carries little quartz however a width of over 0.5 meters can be seen at the top of the water level a few meters down the shaft. The dump material is dominantly quartz carrying minor amounts of pyrite, sphalerite, galena and malachite. A general grab sample of dump material taken by the writer ran as follows: Sample No. Au oz/ton Ag oz/ton Pb% Zn% W02% 4.69 12515 0.03 0.26 3.40 0.023

Some pitting has been done at a few points for about 200 meters to the northwest toward the Jenny Long. Exposures are not good but some altered structure seems to have been found.

Two diamond drill holes were put down on the Azela structure in 1980. The following description is taken from Wolfe (1981):

"Two diamend drill holes were drilled from the same setup to intercept the Azela vein.

<u>Hole A</u>

Collar location - 71.6 m (235'), N. 05° E. of the Azela shaft. Azimuth S. 70° W.

Inclination -45°

Assay Highlights

Depth	<u>Ag oz/ton</u>	<u>Au oz/ton</u>	<u>Cu%</u>
110-115'	7.82	0.072	1.39
115-120'	2.70	0.022	0.47

Hole B

Inclination -65°

110-115'	2.10	0.031	0.04

Alteration: Choritization generally-pyritization, carbonitization and silification associated with the vein."

No further detail on the work is available.

#### OTHER SHOWINGS (AFTER HOLCAPEK)

Various other minor showings are known on the claim group but were not seen by the writer. The following series of descriptions is quoted from F. Holcapek, P. Eng. (Holcapek, 1974) who mapped parts of the area for Juniper Mines in 1974.

The assays within the quoted section are also by Holcapek.

#### NEW STAR VEIN

A caved shaft or pit in greenstone has been located. Quartz material containing galena, pyrite derived from a zone of strong alteration has been sampled.

<u>Sample</u>	Width	<u>Au oz/ton</u>	<u>Ag_oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
756	grab	.09	4.55			
757	grab	.02	1.02			

#### NO SURRENDER VEIN

On the No surrender claim extensive cat trenching and pitting has been found. Most of the pits and trenches are along strike of the veins and are in part, sloughed.

Two sets of veins are partially exposed. The first trending N2O to N3O°E dipping 75° east.

The zone is essentially a 10 foot wide shear with strong alteration, carbonitization of the greenstone, containing a quartz vein of variable width traced for a length of 800 feet.

9-6

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Samples taken are chip or grab samples depending on the quality of the exposure.

<u>Sample</u>	Au	oz/ton	<u>Ag oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
59		tr	0.24			
60		.07	2.23	2.14	.04	.01
61		.05	7.49			
62		.32	26.10			
63		.01	.55			
64		.005	.48			
The seco	nd vein tr	ends northwest	erly and is expose	d in one	trenc	h.
The vein	is essent	ially a 6 foot	: wide alteration z	one cont	aining	
quartz s	tringers.	The main trer	ich is water filled	•		
Sample	Au	<u>oz/ton</u>	<u>Ag oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
65	grab	.04	.01			
	(dump)					
66	11	.44	36.7	38.0	2.88	. 16

#### EMULATOR VEIN--SHEELAH MINERAL CLAIMS

The old workings on this vein system consists of an adit and numerous pits and trenches. All of the workings are sloughed except the adit which is open but has not been mapped.

The vein is possibly the extension of the Joshua Vein system but no outcrop of the vein has been found between the two areas.

The vein consists of an alteration zone within greenstone followed by quartz filling.

Samples taken are grab samples from the sloughed trenches and pits or dump samples from the adit.

<u>Sample</u>		<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
775	pit	.03	.27			
776	dump	. 39	1.12			
777	dump	.005	.50			

#### SILVER KING VEIN

The Silver King shaft located in the western central part of the claim is garbage filled. The vein where visible consists of a 2 foot 2 inch alteration zone with quartz.

Several pits have been excavated, now sloughed, on the vein. The vein strikes northerly and dips  $70^{\circ}$  E.

<u>Sample</u>		<u>Au oz/ton</u>	Ag oz/ton	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>
778	grab	.01	.43			
779		.06	8.26			
780		.13	7.26	14.0	.23	.01
781		.03	1.19	.13	.01	ζ.01

#### RUBY M VEIN SYSTEM

Three areas of trenching have been found, believed to be the old Ruby M workings.

The main pit is on a northeasterly trending vein, dipping at 50° east. Here 18" of quartz vein material is exposed with traces of pyrite. Relationship of this vein to the other zones is not known. This could be the southern extension of one of the No Surrender Veins.

Sample		<u>Au oz/ton</u>	Ag oz/ton
796	18" qtz. minor pyrite	.003	.20

West of the pit, a stripped area with quartz boulders containingbornite and minor pyrite has been located.SampleAu oz/ton795.011.03

South east of the latter an old cut with no outcrops is located. Minor quartz boulders with minor sulfides have been collected for sampling.

# SampleAu oz/tonAg oz/tonPb%Zn%Cu%790grab.393.97

#### MARION C VEIN SYSTEM

This vein system appears to be the southern most exposed section of the Enterprise--No Surrender--King William vein system.

Two outcrops of the vein system have been found. The first consists of a 4 inch quartz vein striking N2O-30E dipping 55°E. Minor pyrite occurs associated with the quartz. This outcrop was not sampled.

The second outcrop lies due south of the King William Main workings. Here an incline at 75°E was sunk on the vein for 50 feet. The vein has an indicated northerly strike and dip at 75°E.

The vein appears	to be a shear	filling with	associa	ted alt	eration	•
Sample	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>Pb%</u>	<u>Zn%</u>	<u>Cu%</u>	
784	.003	.52	.09	.03	.01	
785	.005	.54			.01	
786	.005	.41			.01	

#### ESTER M VEIN

Four old cuts were located in the area of the Ester M. vein. Three of the cuts do not show bedrock. Quartz bolders in the vicinity of the cuts indicate that the vein has been reached. The fourth shows quartz stringers in brown shales with traces of pyrite.

SampleAu oz/tonAg oz/ton783.01.81

#### BIG SANDY

Along the northern boundary of the claim, beside the NW corner post an old hand trench completely caved was found. Erratics in the trench

-24-

consists of greenstone boulders. No quartz material was found in this trench.

#### 7-32 MIDDLE MAPPED SECTION

Mapping in this part was based on compass and chain traverses for ground control. Vein systems mapped in the middle section of the property appears to lie along the extension of the Ester vein system, the relationship to other veins is not known. The general trend of this vein indicates that they are definitely not part of the Enterprise, No Surrender-King William vein system.

#### M FRACTION

On this claim along the eastern margin, three cuts were mapped. The northern most, a trench 4'x5' shows strongly sheared greenstone with minor alteration-carbonatization. A quartz vein 9" wide follows the shear. No sulfides have been found associated with the vein material. Minor pyrite occurs as dissemination within the greenstone. The vein trends N10-20°E,  $65^{\circ}E$ .

Two other trenches are completely filled, but altered greenstonecarbonate rock and quartz boulders have been found showing traces fo galena and pyrite.

<u>Sample</u>			<u>Au oz</u>	<u>Ag oz</u>	<u>Pb</u>	<u>Zn</u>	<u>Cu</u>	
16908	Grade	float	.02	1.28	1.21	.01	.02	
16909	9"		tr.	.16	.01	.41	.01	

#### RAVEN II

The main workings are located along the southeastern limits of a large greenstone outcrop. Two trenches 4x6x6 ft. and 4x5x4 ft. expose the vein. The vein strikes N2OW,  $65^{\circ}$ E., on surface. At the bottom of the first trench the dip of the vein flattens to a  $40-45^{\circ}$  dip.

The vein has a width of 1.5 feet and is surrounded by a 4 foot wide alteration zone.

The other trenches are completely sloughed, but in vicinity of the trenches, the greenstone outcropping is strongly fractured and shows disseminated pyrite.

<u>Sample</u>	<u>Width</u>	<u>Au oz</u>	<u>Ag oz</u>	<u>Pb</u>	<u>Zn</u>	<u>Cu</u>
16910	1.5' vein	.02	2.04	.09	.31	.04

#### IXL-FR.

The vein was found outcropping along a steep west slope. The first outcrops consists of a poorly exposed quartz vein cutting greenstone. The vein trends N10W and dips approximately 60° E, into the mountain. Strong shearing is indicated parallel to the vein.

Approximately 400 feet south a shaft has been sunk on the vein. The shaft is water filled and of unknown depth. Strong east-west shearing occurs north of the shaft. Numerous quartz stringers follow the shear direction.

The vein material consists of quartz with galena, sphalerite, and pyrite. Minor malachite and azurite occurs as staining. The vein strikes northerly and dips at  $60^{\circ} \bar{c}$ .

<u>Sample</u>		<u>Au oz</u>	<u>Ag oz</u>	<u>Pb</u>	<u>Zn</u>	<u>Cu</u>
16907	dump	.02	3.68	.84	.03	.01

#### 7-33 SOUTH SECTION

Mapping in this part was completed using a 200 x 100 foot picketed grid for ground control.

In general it was found that outcrops are very sparse west of the baseline and the eastern portion is covered by heavy glacial till in the topographically higher part of the grid.

#### -27-

#### MOON

A completely sloughed and filled old hand trench was located on this claim. Outcrops in the immediate area are greenstone, strongly fractured. No good exposures have been found in this area.

#### PARKVIEW 3

Along the northern boundary of the Parkview claim, on line 6N 1W, a sloughed trench is located. No vein material was found. The trench appears to lie along the strike of the Jenny Long vein."

10-0

#### GEOCHEMISTRY

No general geochemical surveys have been run over the property according to available records. This is rather surprising considering the relatively shallow overburden over much of the area and the consistent presence of zinc along with lead and gold and silver values in the better grade sections of the vein. Geochemical soil surveys would appear to be a promising tool to assist in locating mineralized structures in the covered areas of the claims. Although glacial cover is continuous over much of the property the depth of cover is normally not great.

Soil samples should be analysed for zinc as well as for silver and gold.

#### 11-0 GEOPHYSICAL CONSIDERATIONS

The vein structures of the camp are continuous and commonly contain wet sheared material along the walls. As such they should show good electromagnetic response. In 1960 a Ronka Mark II EM Survey was run over most of the area now under consideration. This survey outlined numerous anomalies and conductors. Unfortunately, except for the Azela-Johannesburg area, the conductors showed a marked lack of correspondence with known vein structures. The primary anomaly arising out of this survey follows a strong topographic linear occupied in part by a swamp. This anomaly apparently was never tested.

The general appearance of the vein structures underground suggests that they should show an electromagnetic response. They are wet and well sheared and altered although across narrow widths. Further EM work is believed to be justified but in view of the unsatisfadtory results of the previous surveys, any new work should be preceeded by orientation surveys to ensure that the method selected is effective over the known veins.

#### 12-0

#### RECOMMENDATIONS

A substantial exploration program is recommended for the camp in two stages.

Stage I

The first stage should include:

- 1. The preparation of base maps and the compilation of available data on them.
- Geological, Soil Geochemical and Electromagnetic Surveys over the claims. The EM Survey to be preceded by orientation work to select a suitable method.
- 3. Dewatering and making safe the underground workings: mapping and sampling available exposures.
- 4. About 1000 meters of underground diamond drilling in the northern underground workings to test only for the continuation of known productive structures. The irregularity of occurence of known ore is such that drilling cannot be relied upon to test for the existence of ore shoots.

#### Stage II

The second stage to be undertaken only following a favourable engineering review of the results of Stage I:

- 1. Surface backhoe trenching to prospect the extensions of known veins and to test surface survey results.
- Surface diamond drilling to test for extensions of productive structures beyond the area of old workings and to test at depth the results of surface surveys. Provision should be made for 3000 meters of surface drilling.
- 3. Rehabilitation and re-equipping Enterprise shaft, main haulage and some lateral workings.
- 4. 400 meters of exploratory underground drifting to test for ore-bearing sections in structures defined by drilling.

#### <u>13-0</u>

#### COST ESTIMATES

Stage I Base map preparation and data compilation \$ 4,000 Dewater workings 35,000 Mapping and sampling underground 10,000 Assaying 12,000 Surface grid 5,000 Geophysical orientation 4,000 Geophysical E.M. Survey 10,000 Soil Geochemistry survey and analyses 7,000 Underground diamond drilling station preparation 25,000 Underground diamond drilling (1000 meters @\$100/meter) 100,000 Engineering 15,000 Supervision and administration 8,000 Contingencies 15,000 Total Stage I \$250,000

# Total Stage I \$250,000

# \$ 250,000

<u>Stage II</u>		
Surface backhoe trenching (Includes filling		
and surface rehabilitation of failed		
trenches)	\$ 40,000	
Surface diamond drilling (3000 meters @		
\$60/meters)	180,000	
Exploratory underground drifting (400 meters		
@ \$1000/meter	400,000	
Rehabilitation of main haulage, Enterprise		
shaft and some lateral workings	55,000	
Hoist Installation and electrical	75,000	
<u>Total Stage I</u>	<u>I \$750,000</u>	750,000
Total Stages I&I	<u>I</u>	\$1,000,000

Respectfully suppristing EASHE GE G.H.Rayner, Eng.

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Wolfe, R.; 1981, Report on the Jenny Long Group. Private Report.

#### CERTIFICATE

I, Gerald H. Rayner do hereby certify that:

15-0

- 1. I am a consulting geological engineer with offices at 626 Duchess Avenue, West Vancouver, B.C.
- 2. I am a graduate of the University of British Columbia (B.Sc. Geology).
- 3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- 4. I have practised my profession since 1958 primarily in Western North America and the South Pacific.
- 5. This report is based on a field examination of the property and underground workings on March 23, 1983; on the references cited and on various company maps and data.
- 6. I have no interest in the properties or shares of Celebrity Energy Corporation nor do I expect to receive any.
- 7. I hold no interest in any property within 10 kilometers of the Stump Lake property.

G.H: Rayner

Dated this 14th day of April, 1983 at West Vancouver, B.C.



# G.H. RAYNER & ASSOCIATES LIMITED

626 DUCHESS AVENUE, WEST VANCOUVER, B.C. V7T 1G7

TELEPHONE (604) 926-5690

April 14, 1983.

The Directors Celebrity Energy Corporation 611-475 Howe St. Vancouver, B.C. V6C 2V8

Gentlemen:

This letter will serve as authorization for inclusion of my report on the Stump Lake Property, dated April 14, 1983, for Celebrity Energy Corporation in any statement of material facts or prospectus to be filed by the company with the regulatory authorities for the purpose of raising funds for this project.

I trust that the above meets with your satisfaction.

Yours truly, 1.2. U.() G.H. Rayner, P.

GHR:klr

#### APPENDIX I

ASSAY RESULTS FOR G.H. RAYNER SAMPLING

MARCH 1983.

# MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET, NORTH VANCOUVER, B.C. V7M 1T2 PHONE: (604) 980-5814 OR (604) 988-4524

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# Certificate of Assay

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SAMPLE No.	Pb %	Zn %	Ag	Au	W03 %	
12515	.26	3.40	oz/ton_ 4.69	oz/ton030	.023	<u></u>
16	1.88	20	5.12	.329	.015	
17	1.07	1.29	10.05	.102	.002	
18	3,11	1.76	7.01	.938	,001	
19	1,29	6.45	.99	.029	.003	
20	1,01	.66	1.11	.029	.914	
12521	1.95	4.00	11.80	.080	.021	
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