

52613NW0005 63.4694 PARNES LAKE

GOLDEN RANGE RESOURCES INC.

SUMMARY REPORT ON EXPLORATION - 1983

AND

EXPLORATION PROPOSAL

NEEPAWA ISLAND PROPERTY

PROJECT 224

PARNES LAKE AREA

SIOUX LOOKOUT, ONTARIO

N.T.S. 52 - G - 13

OM83-2-C-102

Timmins, Ontario August, 1983 Kenneth Guy Geologist

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SUMMARY AND RECOMMENDATIONS

INTRODUCTION

PROPERTY

LOCATION AND ACCESS

PREVIOUS WORK

GENERAL GEOLOGY

PROPERTY GEOLOGY

ECONOMIC GEOLOGY

GEOLOGICAL MAPPING AND PROSPECTING - SUMMER 1983

DIAMOND DRILL PROGRAM - SUMMER 1983

PROPOSED EXPLORATION

LIST OF TABLES

| TABLE | 1 | DIAMOND | DRILL | SUMMARY |
|-------|---|----------|-------|---------|
| TABLE | 2 | PROPOSED | BUDGI | ET |

LIST OF FIGURES

| FIGURE 1 | LOCATION MAP | |
|----------|-----------------|-----------------|
| FIGURE 2 | COMPILATION MAP | - 1" = 400' |
| FIGURE 3 | COMPILATION MAP | - 1" = 1/4 mile |

APPENDICES

| I | SCHEDULE OF CLAIMS |
|----|--------------------|
| II | DIAMOND DRILL LOGS |

SUMMARY AND RECOMMENDATIONS

The 1983 exploration program at Neepawa Island consisted of the following:

- Land Acquisition 71 claims were staked to bring the total property position to 81 claims, approximately 3,240 acres.
- Geological Mapping and Prospecting 23 claims were intensively mapped and prospected. Five (5) additional Au occurrences were found in this area, plus one Au occurrence in the northwest section of the claim block. The property now encompasses 10 Au occurrences.
- 3) Diamond Drill Program Six (6) diamond drill holes were completed, totalling 631 feet. Two holes 224-5 and 224-6 encountered highly anomalous gold values within a favourable stratigraphic sequence. High intersections were:

224 - 5 .061 oz/T/2.0 feet and .032 oz/T/5.0 feet 224 - 6 .082 oz/T/1.3 feet and .044 oz/T/2.0 feet

SUMMARY & RECOMMENDATIONS (Cont'd)

The following exploration program is recommended for the property:

- 1) winter diamond drilling 7 holes, 3,000 feet
- winter linecutting and geophysics to the east and west of Neepawa Island - 65 miles
- summer stripping, sampling and mapping of gold occurrences.

The cost of this program is estimated at \$160,000.

This program would evaluate the known Au occurrences, test favourable stratigraphy and groom future drill targets on the relatively unexplored ground encompassing favourable stratigraphy, volcanicsediment contact known to be auriferous, between Neepawa Island and Burnthut Island.

It is further recommended that the owners of leased claims 31711, 31712 and 31714 be approached for a possible option on the ground. These claims encompass the original historic high grade occurrence.



INTRODUCTION

The Neepawa Island Project consists of 81 claims, approximately 3,240 acres, in the Parnes Lake Area, Patricia Mining Division. The ground encompasses 10 gold occurrences and six miles of favourable stratigraphy. The ground surrounds and borders on two historic properties, the original Neepawa Island property and the Burnthut Island property. These two properties have received rather extensive exploration efforts in the past, with the remaining ground having been relatively neglected.

This report details the results of the 1983 exploration program which consisted of a diamond drilling program, a program of geological mapping and prospecting and staking of additional claims to enlargen the project area to its present size.

PROPERTY

The Neepawa Island Project consists of 81 unpatented claims for a total of approximately 3,240 acres. Ten of the claims were recorded in September, 1982, the remaining 71, July 1983.

For a detailed listing of the claims, refer to the Schedule of Claims, Appendix 1.

LOCATION AND ACCESS

The Neepawa Island Project is located in the unsubdivided map area of Parnes Lake in the District of Kenora, Patricia Mining Division, Ontario (Figure 1).

Neepawa Island, about seven miles south of Sioux Lookout, is located on Minnitaki Lake on the English River system. Sioux Lookout is located about 180 miles northwest of Thunder Bay, Ontario. Sioux Lookout is serviced by Provincial Highway 72, railway and a municipal airport.

Access to the property is by boat from Sioux Lookout or the numerous access points to Minnitaki Lake off Highway 72.

PREVIOUS WORK

For a more detailed handling of the previous work see Rupert, R. J., 1983.

Much of the previous work was centred on the central Neepawa Island claims and Burnthut Island. These two locations are historical occurrences which received much publicity in the past. Work throughout the area has been spotty and intermittent due to fragmentation of property ownership.



PREVIOUS WORK (Cont'd)

The previous work most pertinent to the Golden Range property is that of Neepawa Island Gold Mines Ltd., 1957, Asarco Exploration, 1961, New Hugh Malartic Mines Ltd., 1951, Central Manitoba Gold Mines Ltd., 1950 and Mid Canada Exploration, 1980-81.

The diamond drilling and other work filed for assessment is shown on the Compilation Map, Figure 2. This map shows the known gold occurrences plus any additional discovered during prospecting and mapping in the summer of 1983.

This report details the first phase of exploration conducted by Golden Range Resources Inc.

GENERAL GEOLOGY

Regionally, the area is underlain by rocks of Early Precambrian (Archean) age, structurally part of the Wabigoon subprovince, comprised of metavolcanics and metasediments.

The area contains two belts of east-northeast-trending metavolcanics and metasediments. The metavolcanics consist mainly of intermediate to mafic flows and pyroclastics with very minor felsic volcanics. Small dikes and masses of quartz porphyry intrude the volcanics. The metasediments consist of gradational sequences of conglomerate through to slates. The contacts of the sediments with the volcanics varies from conformable to unconformable and faulted contacts.

GENERAL GEOLOGY (Cont'd)

More locally, alteration, especially carbonate, is quite extensive and pervasive, especially in the vicinity of the volcanic-sediment contact.

PROPERTY GEOLOGY

The property straddles the volcanic-sedimentary contact which trends east-northeast through the central and eastern section of the property. The western section of the property covers an area underlain by volcanics and quartz porphyry with the sediments to the south and east.

Pillowed flows and graded bedding indicate stratigraphic tops to the south making the volcanics older than the sediments. The quartz porphyry in the vicinity of Burnthut Island is probably of similar age as the volcanics. The sediment-volcanic contact is conformable in places such as east of Neepawa Island where drill hole data indicates volcaniclastic tuffs grading conformable into greywackes. Other places it appears to be an unconformable contact or faulted contact. The quartz porphyry is intrusive into the volcanics while the porphyry-sediment contact appears to be faulted.

The sediment-volcanic contact is highly altered with green carbonate, pyrite, silica and carbonate being quite pervasive in the upper volcanic sequence. The lower sediments are well defined with regional AEM conductors, probably graphitic horizons.

ECONOMIC GEOLOGY

The area has many gold occurrences, small shafts have been sunk but no production recorded from any occurrences in the vicinity. The nearest producer, past and present, is the Goldlund mine, about 18 miles to the southwest along strike which is a present producer.

The two historic occurrences in the immediate vicinity are at Burnthut Island and Neepawa Island. Burnthut Island is mainly underlain by mafic-volcanics with a sheared quartz porphyry body at the south end of the island. Quartz veins occur in a shear zone along the contact. The main vein ranges from three to four feet in width and extends for 1,300 feet.

The best zone obtained in drilling was 300 feet by four feet grading .18 oz/T. Further drilling failed to verify the continuity.

The main showing on Neepawa Island occurs in heavily sheared, pyritized and carbonatized agglomerate and andesite. Quartz veinlets are randomly oriented and in places display minute fold patterns. The gold mineralization is associated with the quartz stringers and also the carbonatized, pyritized wall rock. Trenching and drilling results have found erratic distribution of gold.

On the Golden Range Resources claims were located four occurrences with an additional six being located during the summer prospecting and mapping program. For details refer to the section -Geological Mapping and Prospecting - Summer 1983 - this report and see Figures 2 and 3.

ECONOMIC GEOLOGY (Cont'd)

All the gold occurrences occur within the volcanics in a suite of highly carbonatized and pyritized rocks. Most of the occurrences occur within a half mile of the volcanic-sediment contact. An occurrence at the southwest corner of Neepawa Island occurs on the contact and has been intersected in four drill holes by previous owners. This zone is extremely interesting and in need of considerable work.

GEOLOGICAL MAPPING AND PROSPECTING - SUMMER 1983

During the summer of 1983 a detailed geological mapping program was conducted on 23 claims on and around Neepawa Island. The purpose of the program was to obtain an idea of the stratigraphic and structural controls of the gold mineralization. Most of the claims were underlain by mafic volcanics. All the showings within the claim group were mapped and sampled. Prior to the program, four showings were known in the area, mapping and prospecting revealed an additional five areas of gold mineralization. All the showings with the sampling results obtained during the program or those obtained from the assessment files are shown on Figure 2. For details of the geological survey see - Report of a Geological Survey by Kenneth Guy - 1983.

The areas requiring additional stripping, sampling and mapping are:

- L8W to L16W, 50N to 250N grab samples during the mapping program assayed highs of .376 oz/T, .195 oz/T and .166 oz/T. Diamond drill indications have also been received both by Golden Range Resources and previous owners. This location has been the site of work in the past but much more could be stripped and sampled.
- 2) L16W to 19W, 7N a grab sample assayed .277 oz/T. Narrow quartz-carbonate veins with random orientations in highly carbonatized mafic tuff with coarse,euhedral pyrite to 30%. This was a previously unknown occurrence and needs additional work to better evaluate the potential.

GEOLOGICAL MAPPING AND PROSPECTING - SUMMER 1983 (Cont'd)

- 3) 2150W, 1550W in bay on island 405 a grab sample of .173 oz/T was obtained from a four feet wide quartz carbonate stockwork trending 080/N. The altered mafic volcanics contained up to 30% py. This was also an unknown occurrence and needs to be stripped for additional sampling.
- 4) 600W, 650N Two old pits and trenches with old diamond drill holes indicated but no assays available.
 A grab of green carbonate with 20% py and 15% quartz veining assayed .132 oz/T. This is located on the property boundary but there is scope for considerable more stripping to the southwest along strike within the Golden Range block.
- 5) Island 410 an old pit and two diamond drill holes with no assays available. A grab of silicified host rock, sericite schist, highly carbonatized and 20% coarse grained, euhedral py assayed .135 oz/T. Additional stripping is recommended to better evaluate the potential.

DIAMOND DRILL PROGRAM - SUMMER 1983

The diamond drill program commenced July 21, 1983 and was completed August 6, 1983. Six (6) holes were drilled totalling 631 feet.

The diamond drill logs are contained in Appendix II. The location of the holes can be seen on the compilation sheet, Figure II.

A summary of the drill holes and results is given in Table I.

Due to the water access, a small X-Ray drill was utilized for the program. This resulted in drill hole spot selections being closely scrutinized for overburden depth due to the limitations of the machine. The result was that one hole 224 - 2, was lost in overburden.

Hole 224 - 1 tested a VLF-EM conductor. The conductor was explained as graphite within the volcanic sequence. The hole ended in green carbonate rock due to the limitations of the small drill.

Hole 224 - 3 attempted to explain a conductor as well as yield stratigraphic information in an area covered by water. The conductor was not reached so remains unexplained.

Hole 224 - 4 tested a quartz-carbonate zone. Much alteration and quartz-veining were intersected but no significant gold assays were obtained.

Hole 224 - 5 tested a quartz-carbonate zone in an area where previous operators had obtained significant gold values. Highly altered volcanics with quartz-carbonate zones were intersected. Assays were .061 oz/T/2.0 feet and .032 oz/T/5.0 feet.

SUMMARY OF DIAMOND DRILL RESULTS - SUMMER 1983

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| HOLE NO. | LOCATION | DIP | LENGTH | GEOLOGY AND RESULTS |
|----------|-------------|-------|--------|--|
| 224-1 | LO, 600N | -45° | 121' | Mafic Flow, Graphitic Argillite, Mafic Flows and Tuffs, Carbonate Rock - tested VLF EM conductor, Graphite |
| 224-2 | LO, 400N | -45° | 51' | Hole lost in overburden |
| 224-3 | 2650W,725N | -45° | 132' | Mafic Flows and Tuffs - Carbonatized, Qtz-cb veins, py |
| 224-4 | 2700W,75N | -40° | 107' | Mafic Flows and Tuffs - carbonatized, Qtz-cb veins, py |
| 224-5 | L1200W,225N | -45 O | 113' | Mafic Tuff - carbonatized, Qtz-cb veins, py .061 oz/t/2.0', .032 oz/t/5.0' |
| 224-6 | 1400W, 160N | -35° | 107' | Intermediate Tuff, Felsite, Chertz Tuff, Mafic Tuff - Carbonatized, Qtz-cb veins, py 044 oz/t/2.0', .082 oz/t/1.3' |

Six holes totalling 631 feet

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TABLE 1



DIAMOND DRILL PROGRAM - SUMMER 1983 (Cont'd)

Hole 224 - 6 tested a quartz-carbonate zone. Highly altered volcanics with quartz-carbonate zones were intersected. Assays were .082 oz/T/1.3 feet and .044 oz/T/2.0 feet.

PROPOSED EXPLORATION

The proposed exploration program has two objectives:

- to examine and evaluate known gold occurrences within the project area;
- to initiate exploration for gold on the remainder of the property.
- 1) The first objective is best accomplished in two ways:
 - a) further stripping, sampling and mapping of known occurrences;
 - b) diamond drill testing of favourable stratigraphy and/or geophysical anomalies in the vicinity of known gold occurrences.

The areas recommended for additional stripping are those described earlier under the Geological Mapping and Prospecting section, five occurrences are recommended as areas for stripping.

A phase one diamond drill program would further evaluate the gold potential in the area of known occurrences. The recommended program consists of seven (7) holes totalling 3,000 feet. The recommended program is summarized in Table 2 with the proposed hole locations shown on Figure 2.

PROPOSED EXPLORATION (Cont'd)

2) The program to initiate exploration on the remainder of the property would commence with a linecutting and geophysical program. This would cover the ground west and east of Neepawa Island and be tied in to the 1981 Mid-Canada, Rayan grid. For complete coverage 65 miles would be necessary which includes 1.5 miles of detail grid in the southwest corner of Neepawa Island where additional geophysics is necessary to better resolve the volcanic-sediment contact. This program would trace the volcanic-sediment contact for the full six-mile strike. The AEM survey of the area indicates conductivity lying just north of the contact in the western section of the property. This anomalous conductivity would constitute a drill target. The ground geophysics would also greatly aid in structural interpretation of the project area.

PROPOSED DIAMOND DRILL PROGRAM

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| LOCATION | DIRECTION | DIP | LENGTH | TARGET |
|------------|-------------|-------|--------|---|
| L8W,300N | Grid S 30°E | -450 | 500' | Test known auriferous stratigraphy and test VLF anomaly - Volcanic-sediment contact |
| 14W,200N | Grid S 30°E | -45° | 5001 | as above test known auriferous stratigraphy and test VLF anomaly Volcanic-sediment contact |
| L20W,100N | Grid S | -50° | 600' | as above Test known auriferous stratigraphy and test VLF anomaly Volcanic-sediment contact |
| L32W,350S | Grid S | -50° | 350' | as above Test known auriferous stratigraphy and test VLF anomaly Volcanic-sediment contact |
| L20W,900N | Grid S | -50 ° | 4001 | Test VLF anomaly along strike from gold occurrence |
| L36E,2750N | Grid S 20°E | -50° | 350' | Test strong VLF anomaly where fault is suspected |
| L48E,1800N | Grid S 20°E | -50° | 300' | Test strong VLF anomaly along strike from gold occurrence |

Seven holes totalling 3,000 feet

TABLE 2

BUDGET FOR PROPOSED EXPLORATION

Both the proposed programs are mainly winter programs due to the amount of property covered by water. The estimated cost of the proposed program is as follows:

- 1) a. Summer stripping, mapping, sampling 15 days X 2 men = 30 man days 30 days @ \$200.00/day \$ 6,000.
 - b. Winter diamond drill program
 7 holes, 3,000 feet X \$30./foot 90,000.
 includes assay and supervision costs
- 2) Winter geophysical program Linecutting 65 miles X \$350./mile VLF EM and Magnetic Surveys 65 miles X \$300./mile 65 miles X \$650./mile 42,250. \$138,250. plus Overhead and Contingency at 15% 20,750.
 - (Approximately) <u>\$160,000.</u>

REFERENCES

- Assessment Files Patricia Mining Division, Sioux Lookout, Ontario.
- Johnston, F. J. 1972 Geology of the Vermilion Abram Lakes Area, ODM report 101.
- 3) Meikle, R. J. 1981 Geophysical Survey for Mid-Canada Exploration Services Ltd., Neepawa Island Area - by Rayan Exploration Ltd.
- 4) Ontario Geological Survey 1982 Airborne Electromagnetic and Total Intensity Magnetic Survey, Sioux Lookout Area, District of Kenora - by Aerodat Ltd. for OGS, Geophysical/ Geochemical Series.

GOLDEN RANGE RESOURCES INC.

NEEPAWA ISLAND PROJECT

SCHEDULE OF CLAIMS

WORK RECORDED

D.D. 60 days

D.D. 60 days

D.D. 40 days

D.D. 60 days

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RECORDED

Sept. 2/83

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CLAIM NO.

802 803

Pa741551 July 27/83

July 27/84

WORK DUE

Sept. 2/85

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Sept. 2/85

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Sept. 2/84 (70 days)

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| 556 | 11 | 11 |
| 557 | 11 | 17 |
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| 560 | 17 | 19 |
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| 564 | 11 | 11 |
| 565 | ** | 11 |
| 566 | 11 | tf |
| 567 | 11 | 11 |
| | | |

2) SCHEDULE OF CLAIMS

| CLAIM NO. | RECORDED | WORK RECORDED | WORK DUE |
|-----------|------------|---------------|-------------------|
| Pa741568 | July 27/83 | | July 27/84 |
| 569 | 11 | | |
| 570 | ** | | 71 |
| 571 | 11 | | 11 |
| 572 | u | | 11 |
| 573 | ** | | 11 |
| 574 | 11 | | 11 |
| 575 | 17 | | 75 |
| 576 | 11 . | | ** |
| 577 | ** | | 19 |
| 578 | ** | | 11 |
| 580 | 11 | | 18 |
| 581 | 17 | | 11 |
| 582 | 17 | | ** |
| 583 | 11 | | 11 |
| 585 | 17 | | **** ** |
| 586 | 11 | | 11 |
| 587 | 11 | | 11 |
| 588 | ** | | 11 |
| 589 | 11 | | 11 |
| 590 | 11 | | 11 |
| 591 | 11 | | 11 |
| 592 | ** | | 11 |
| 593 | 17 | | 11 |
| 594 | 17 | | 11 |
| 595 | | | 11 |
| 596 | 11 | | 11 |
| 597 | 11 | | 11 |
| 598 | 11 | | 11 |
| Pa741599 | 11 | | 11 |

3) SCHEDULE OF CLAIMS

| CLAIM NO. | RECORDED | WORK RECORDED | WORK DUE | |
|-----------|------------|---------------|--------------------|---|
| Pa741300 | July 27/83 | | July 27/84 | |
| 301 | 11 | | 19 | |
| 302 | 17 | | tt . | |
| 303 | 71 | | ti - | • |
| 304 | 77 | | 11 | |
| 305 | 11 | | ** | |
| 306 | 81 | | | |
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| 311 | ** | | 11 | |
| 312 | 11 | | 11 | |
| 313 | 11 | | ** | |
| 314 | 11 | | 59 | |
| 315 | 11 | | 11 | |
| 316 | TI | | 19 | |
| 317 | 11 | | ** | |
| 318 | 11 | | ** | |
| 319 | 11 | | 11 | |
| 320 | н. | | 38 | |
| 321 | TT | | 11 | |
| Pa697342 | July 19/83 | | July 19/8 4 | |
| 343 | 17 | | If | |



900 OM83-2-C-102 OF VARIOUS THIS SUBMITTAL CONSISTED REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES): 1) 5 DRILL HOLES (#224-1, #224-3 to ⇒ TORONTO FILE NUMBER #224-6), JULY-AUGUST /83, NEEPAWA 52G/13NW-0016-AI ISLAND PROJECT, MID-CANADA EXPLORATION SERVICES LTD.





