

Progress Report

2024 Heliostar Metals Limited Exploration Report on Unga and Popof Islands



Photo 1: Reverse Circulation Drill at Aquila Prospect

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1.0 SUMMARY

Heliostar Metals Limited (Heliostar) is committed to focus exploration efforts on lands of The Aleut Corporation, the Unga Corporation and the Shumagin Corporation within the Alaska East Boroughs. However, based on market conditions throughout 2024, Heliostar did not conduct any field-based mineral exploration on Unga and Popof Islands during the year.

2024 Project Developments:

No exploration nor development works were carried out on the Unga Project in 2024.

2.0 INTRODUCTION

The Unga project covers 240 square kilometers of neighboring Unga and Popof Islands, near the Alaska Peninsula and approximately 900 kilometres southwest of Anchorage, Alaska. The property consists of two tracts of subsurface mineral tenure, one on Popof Island and the other on adjacent Unga Island, 100% controlled by Heliostar under an exploration agreement and Mining Lease option with the Aleut Corporation (“TAC”). These two tracts surround six State of Alaska mining claims at the Shumagin deposit and 16 patented U.S. federal mining claims at the Apollo-Sitka prospect, all owned 100% by Heliostar.

Heliostar’s surface tenure for the Unga and Popof tracts are held under agreements with the Unga Corporation and the Shumagin Corporation respectively. The Popof Island tract is located in T56W, R73W, Sections 20-29 and 32-36, Seward Baseline and Meridian. The Unga Island tracts are located in:

- T56S, R74W, Sections 20-23, 26-29 and 32-35,
- T57S, R74W, Sections 19-22 and 27-34,
- T57S, R75W, Sections 1-36,
- T58S, R74W, Sections 4-9 and 16-19 and
- T58S, R75W, Sections 1-4 and 9-15 Seward Baseline and Meridian.

Gold was discovered on the southeast side of Unga Island in 1886. The Apollo gold mine reportedly operated between the late 1880s and the early 1920s; the nearby Sitka mine operated between 1900 and 1922. Both mines produced gold from the upper, oxidized portions of sulfide-rich lodes. Gold production from Popof Island was from a beach placer deposit located near the present site of the Sand Point airport runway.

The modern era of exploration began after the passage of the Alaska Native Claims Settlement Act of 1971 (“ANCSA”). From 1974 through 1991, Quintana Minerals Corp. (“Quintana”), the Duval Corp. (“Duval”), Resource Associates of Alaska (“RAA”), UNC Teton Exploration Drilling Inc. (“UNC Teton”), Battle Mountain Gold Corporation (“BMGC”), and Ballatar Explorations Ltd. (“Ballatar”) explored Unga Island and parts of Popof Island. This period of exploration resulted in the discovery of more than 40 gold and/or base-metal showings, as well as a copper-gold occurrence. A small number of core holes were drilled at each of the Zachary Bay, Aquila, Pook, Pray’s Vein, Orange Mountain, Junior, and Norm’s Vein prospects.

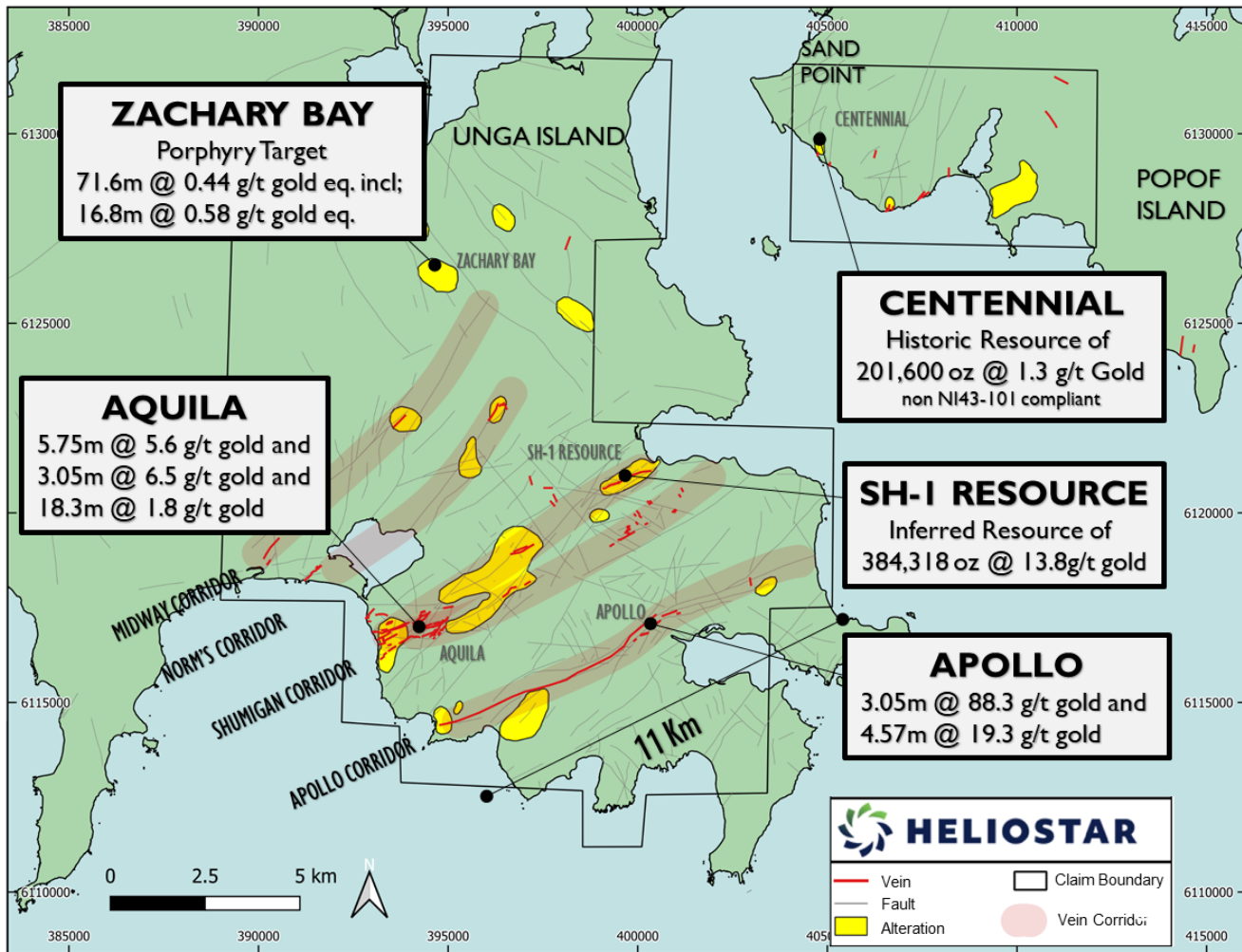


Figure 1: Location Map

Simultaneously, exploration work was conducted by Alaska Apollo Gold Mining (“AAGM”) from 1983 through 1989 at the Apollo mine and Sitka mine and at the SH-1 prospect. Both the Apollo-Sitka and SH-1 prospects were drilled as part of this work, in part through a joint venture with Ballatar and the drilling began to define an epithermal gold-silver±lead±zinc vein deposit at SH-1.

On Popof Island, BMGC initiated exploration at the Centennial gold prospect in 1987, and drilled a total of 59 core holes in 1988 and 1989, as well as a few holes at the nearby Red Cove and Propalof prospects. In 1990, BMGC also drilled a single core hole that intersected the SH-1 vein zone down-dip from the AAGM and Ballatar intercepts; this hole remains important to this day.

From 1987 through 1996, AAGM commissioned preliminary feasibility studies of the SH-1 Deposit. In August of 1993, Daugherty Petroleum acquired all of the assets of AAGM and which ended up being owned by a subsidiary of Magnum Hunter Resources.

Full Metal Minerals (“FMM”) carried out geophysics and a satellite remote-sensing study of alteration under a joint venture with Metallica Resources Inc. in 2005.

Heliostar completed the acquisition of the SH-1 and Apollo-Sitka claims from NGAS in 2013 and completed acquisition of the Unga and Popof tracts in 2014.

3.0 BACKGROUND GEOLOGY

Regional Structural Setting:

The project area is a product of a fore arc setting from subduction during the Cretaceous geological period and volcanic and tectonic activity resulting in subduction of oceanic crust since the Mesozoic. The project is located within the tectonic influence of the projected south western extension of the Border Ranges Fault System (BRFS) that stretches for > 2,000km along the Aleutian Arc.

Magmatic activity and structural deformation were syn-hydrothermal and occurred in tandem during subduction and transpression. Mineralization at different prospects may have formed at different times and been exposed to different chemistry and amount of fluid flow, even on the same Trend.

Regional Geological Setting:

Unga Island and Popof Island are located between the Aleutian trench and the active Aleutian volcanic arc on the Alaska Peninsula. Volcanism on the Alaska Peninsula, Unga Island, and Popof Island began shortly after about 43 Ma. Mapping of Unga Island, and Popof Island by the United States Geological Survey indicates four sequences of sedimentary and calc-alkaline volcanic rocks are present, from oldest to youngest: the Eocene and Oligocene Stepovak Formation, the Eocene and Oligocene Popof volcanic rocks, the Unga Formation conglomeratic rocks of Oligocene and Miocene ages, and early to mid- Miocene volcanic rocks.

Several N50°E to N60°E faults and fault zones completely transect Unga Island. Numerous N10°W to N10°E faults are also present, but they are much less through going. The most prominent of the major northeast-trending structures are the Shumagin and Apollo-Sitka fault zones, which completely transect the southeast part of the island. Each of these forms a structural corridor 0.5 to 1.0 kilometres in width and approximately nine to 10 kilometres in length, respectively. These two structural corridors contain extensive areas of hydrothermally altered rocks and several exposures of epithermal quartz-carbonate veins, vein-breccias, and vein stockworks, and are known as the Shumagin and Apollo-Sitka "Trends". A similar structural architecture is thought to be present in the northwest portion of Popof Island, but with a north-northeast trend.

Mineralization occurs in volcanic-hosted, low- to intermediate-sulfidation, epithermal, quartz-carbonate- adularia veins with locally high-grade gold + silver and variable lead, zinc and copper content at The SH1 Zone, the historic Apollo and Sitka Mines and the Aquila Zone prospects; and porphyry copper-gold at the Zachary Bay prospect area on Unga Island. On Popof Island there is widely disseminated volcanic- hosted free gold at the Centennial prospect area.

4.0 RECLAMATION

There were no exploration activities undertaken in 2024. There is disturbance from the 2021 drill program that remains to be reclaimed which includes disturbance on State Mineral Claims, patented Federal Mining claims and on private land. The 2021 exploration work focused on the historic Shumigan (SH-1) Prospect centered around State Mineral Claims owned by Heliostar in Drill Area A. Additional holes tested the Apollo (Drill Area B) and Sitka (Drill Area C) Prospects centered around the patented Federal Mining Claims owned by Heliostar. Reverse circulation (RC) holes were also drilled at the Aquila (Area D), Orange Mountain (Area E) and Zachary Bay Prospects (Area F) on adjacent private lands under lease-agreement from The Aleut Corporation (TAC) owner of the subsurface estate, and The Unga Corporation, the surface estate owner.

Pending Reclamation of Drill Sites

A total of 49 drill sites were utilized during 2021 with one to three core and one or two RC holes completed from each pad. Three sites at SH-1 utilized two wooden pads constructed in 2020 and one wooden pad constructed in 2021 that were entirely supported by helicopter. The drill sites at Apollo and Sitka were located on or adjacent to pre-existing roads or newly rehabilitated or newly-constructed roads. At Aquila, a helicopter-supported rig and a track-mounted drill rig were flown by helicopter to the Aquila area. The track-mounted rig walked between sites while the helicopter-supported rig was flown between hand-excavated sites. A helicopter-supported rig was flown to the three hand-excavated sites at Orange Mountain and Zachary Bay.

Three sites remain to be reclaimed at the SH-1 Prospect; the timbers need to be removed and sumps need to be backfilled, recontoured and re-seeded.

At the Apollo Prospect on patented claims, 10 sites have pending reclamation. Six additional sites remain to be re-contoured and re-seeded and four additional sites need to have rejects emptied into a disposal pit, re-contoured and re-seeded. At the Sitka Prospect on patented claims, a total of 12 sites have pending reclamation. Ten sites remain to be re-contoured and re-seeded and an additional two sites need to have rejects emptied into a disposal pit, re-contoured and re-seeded.

At the Aquila Prospect, 13 sites need to have rejects emptied into a disposal pit, re-contoured and re-seeded. At the Orange Mountain Prospect, the site needs to have rejects emptied into a disposal pit, re-contoured and re-seeded. At the Zachary Bay Prospect, the two sites need to have rejects emptied into a disposal pit, re-contoured and re-seeded.

Casing was left in holes APSRC21-03, APSRC21-08, SKRC21-03, SKRC21-04, SKRC21-08, SKRC21-11, AQRC21-02, AQRC21-03, AQRC21-04 and AQRC21-05 to facilitate Acoustic Televiwer drill hole surveys; these remain to be cut to ground surface.

No new roads were constructed to support the drilling on State claims, but limited road rehabilitation or road construction was carried out on patented claims. Small foot paths were locally used to some of the helicopter-supported drill sites.



The Unga project has un-reclaimed disturbance by the former mining operators and exploration activities on both State and private ground previous to Heliostar's involvement. All drilling activities and existing remaining disturbance are located specifically in T. 57 S., R. 74 W. Section 19 & 30 covered by State Mining Claims ADL 318702; 318703 & 318704; and T. 58 S., R. 74 W. Sections 5 and 6 covered by patented federal mining claims within U.S. Mineral Survey Number 548.

Specifically, there are:

- **0.115** – acres remaining to be reclaimed from prior activities on State ground (see Reclamation Plan and Table 1)
- **0.220** - acres remaining to be reclaimed (Aquila, Orange Mountain and Zachary Bay Prospects) at drill sites constructed in the 2021 drilling season on the private land (Table 2).
- **0.337** - acres remaining to be reclaimed (Apollo and Sitka Prospects) at drill sites constructed in the 2021 drilling season on the patented land (Table 3). There was an additional 0.521 acres of disturbance on patented land from new drill sites access construction (Table 4).

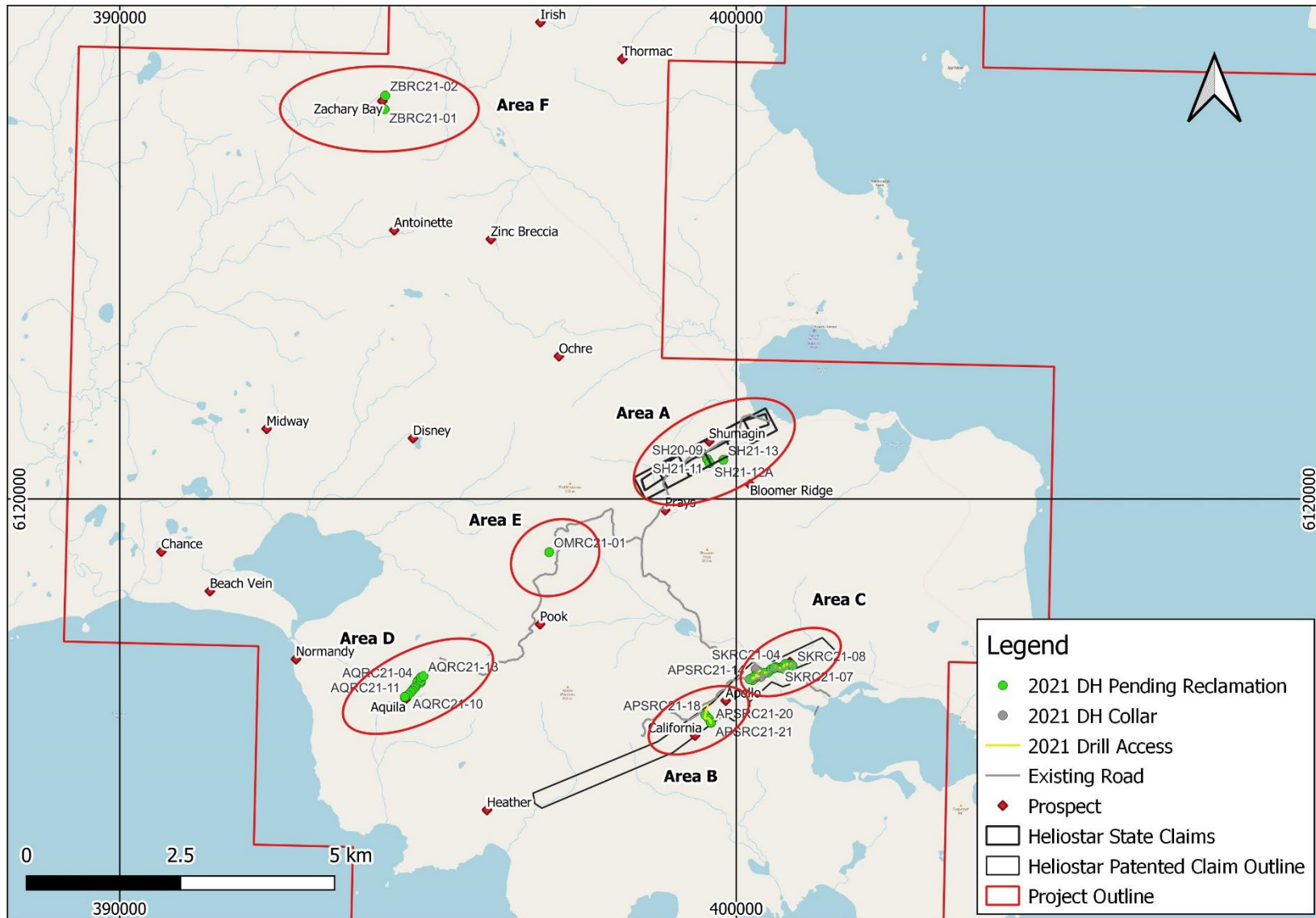


Figure 2: Unga Island Mineral Tenure, Prospects and Drill Areas

Table 1: Drill Sites Pending Reclamation on State Claims

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
SH21-10	50 ft by 50 ft	2500	0.057	On site of SH20-09	Pending back-filling sump, re-contouring and re-seeding
SH21-11	n/a	n/a	n/a	On site of SH20-09	Pending back-filling sump, re-contouring and re-seeding
SH21-12	50 ft by 50 ft	2500	0.057		Pending removal of pad timbers, back-filling sump, re-contouring and re-seeding
SH21-12A	n/a	n/a	n/a		Same site as SH21-12
SH21-13	n/a	n/a	n/a	On 2020 site SHU_R	Pending removal of pad timbers, back-filling sump, re-contouring and re-seeding
SHRC21-01	n/a	n/a	n/a	On road	Completed
SHRC21-02	n/a	n/a	n/a	On road	Completed
		Total:	0.115		

Table 2: Drill Sites Pending Reclamation on Aleut Corp. Lands

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
AQRC21-01	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-02	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-03	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-04	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding

Table 2 (Continued): Drill Sites Pending Reclamation on Private Land

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
AQRC21-05	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-06	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-07	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-08	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-09	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-10	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-11	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-12	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
AQRC21-13	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
OMRC21-01	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
ZBRC21-01	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
ZBRC21-02	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
SH21-13	n/a	n/a	n/a	On 2020 site SHU_R	Pending removal of pad timbers, back-filling sump, re-contouring and re-seeding
		Total:	0.220		

Table 3: Drill Sites Pending Reclamation on Patented Claims

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
APS21-08	n/a	n/a	n/a	On existing disturbance	Completed
APSRC21-01	30 ft by 30 ft	900	0.021		Completed
APSRC21-02	n/a	n/a	n/a	Same site as APSRC21-01	Completed
APSRC21-03	n/a	n/a	n/a	On road	Completed
APSRC21-04	30 ft by 30 ft	900	0.021		Completed
APSRC21-05	n/a	n/a	n/a	Same site as APSRC21-04	Completed
APSRC21-06	n/a	n/a	n/a	On road	Completed
APSRC21-07	20 ft by 30 ft	600	0.014		Pending re-contouring and re-seeding
APSRC21-08	20 ft by 30 ft	600	0.014		Completed
APSRC21-09	30 ft by 30 ft	900	0.021		Pending back-filling, re-contouring and re-seeding
APSRC21-10	n/a	n/a	n/a	Same site as APSRC21-09	Pending back-filling, re-contouring and re-seeding
APSRC21-11	30 ft by 30 ft	900	0.021		Pending back-filling, re-contouring and re-seeding
APSRC21-12	n/a	n/a	n/a	Same site as APSRC21-11	Pending back-filling, re-contouring and re-seeding
APSRC21-13	20 ft by 30 ft	600	0.014		Pending back-filling, re-contouring and re-seeding
APSRC21-14	20 ft by 30 ft	600	0.014		Pending back-filling, re-contouring and re-seeding

Table 3 (Continued): Drill Sites Pending Reclamation on Patented Claims

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
APSRC21-15	30 ft by 30 ft	900	0.021		Pending re-contouring and re-seeding
APSRC21-16	n/a	n/a	n/a	Same site as APSRC21-15	Pending re-contouring and re-seeding
APSRC21-17	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
APSRC21-18	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
APSRC21-19	20 ft by 30 ft	600	0.014		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
APSRC21-20	30 ft by 30 ft	900	0.021		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
APSRC21-21	n/a	n/a	n/a	Same site as APSRC21-21	Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
SKRC21-01	n/a	n/a	n/a	On road	Completed, pending re-seeding
SKRC21-02	n/a	n/a	n/a	On road	Completed, pending re-seeding
SKRC21-03	20 ft by 30 ft	600	0.014		Pending back-filling, re-contouring and re-seeding
SKRC21-04	20 ft by 30 ft	600	0.014		Pending back-filling, re-contouring and re-seeding
SKRC21-05	20 ft by 30 ft	600	0.014		Pending back-filling, re-contouring and re-seeding
SKRC21-06	30 ft by 30 ft	900	0.021		Pending back-filling, re-contouring and re-seeding
SKRC21-07	n/a	n/a	n/a	Same site as SKRC21-06	Pending back-filling, re-contouring and re-seeding
SKRC21-08	n/a	n/a	n/a		Pending back-filling, re-contouring and re-seeding

Table 3 (Continued): Drill Sites Pending Reclamation on Patented Claims

Hole_ID	Disturbance	Sq. Feet	Acres	Note	Reclamation Status
SKRC21-09	n/a	n/a	n/a		Pending back-filling, re-contouring and re-seeding
SKRC21-10	20 ft by 30 ft	600	0.014		Completed, pending re-seeding
SKRC21-11	30 ft by 30 ft	900	0.021		Pending back-filling, re-contouring and re-seeding
SKRC21-12	n/a	n/a	n/a	Same site as SKRC21-11	Pending back-filling, re-contouring and re-seeding
SKRC21-13	30 ft by 30 ft	900	0.021		Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
SKRC21-14	n/a	n/a	n/a	Same site as SKRC21-13	Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
SKRC21-15	n/a	n/a	n/a	On road	Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
SKRC21-16	n/a	n/a	n/a	Same site as SKRC21-15	Pending emptying rejects in sump, back-filling, re-contouring and re-seeding
		Total:	0.337		

5.0 RECOMMENDATIONS FOR FUTURE WORK

Exploration work on the Unga project in 2021 was successful in advancing several targets, including significant discoveries at Aquila, on the Apollo-Sitka trend and at Zachary Bay.

Additional core drilling is warranted at **SH-1** to continue to test the deposit at depth and along strike to test for additions to the existing mineral resource.

At **Apollo-Sitka** core drilling should be carried out to test mineralization intersected in 2021 at depth and along strike at the Sitka Mine, the Shaft 2 area of the Apollo Mine and to the southwest of the Apollo workings. Also on the Apollo-Sitka trend, the mineralized intersection in the 2020 Empire Ridge hole and the Rising Sun target should be followed up with reverse circulation drilling. Reverse circulation drilling is a more effective and rapid test of these targets along strike from known mineralization.

Core drilling is also recommended at **Aquila** to follow-up on the mineralized Amethyst and Ankle Vein. Reconnaissance reverse circulation drilling should also be carried out on other veins peripheral to the Amethyst and Ankle Veins at the Aquila prospect.

Reverse circulation drilling should also be carried out at **Centennial** to test for the potential for higher-grade, steep structures untested by previous drilling and interpreted from the 2021 drone magnetics survey.

At **Zachary Bay** deep core drilling is warranted to test the depth and aerial extent of the mineralization identified by shallow 2021 RC drilling.

Mapping and drill targeting work has identified drill targets at **Bloomer Ridge** and **Pook** and these prospects should be followed up with first-pass RC drilling.

There are upwards of 30 additional prospects throughout Unga Island that should be evaluated using compiled data and subsequent field ground-truthing and ranking to define additional drill targets. Included among these are the **Normandy Vein**, **Beach Vein**, **Heather** and **California** prospects.

2025 Exploration Budget:

Pending market conditions, Heliostar will carry out a program comprising reverse circulation drilling of high-priority drill targets at the Centennial, Aquila, Apollo and Sitka Prospects with a minimum placeholder of \$US 3 million. This program would also include reclamation of drill pads from the 2021 drill program.

Respectfully submitted,

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