N2021C0004
2024 CIRNAC LAND USE ANNUAL REPORT

FOR THE ASTON BAY PROPERTY
(ALSO KNOWN AS THE STORM PROJECT)
NUNAVUT, CANADA

Prepared For: Aston Bay Holdings Ltd.
8 King St. E, Suite 1800
Toronto, ON M5C 1B5
Canada

Prepared by: APEX Geoscience Ltd.
410-800 West Pender Street
Vancouver BC V6C 2V6
Canada

March 31, 2025

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1 Summary

CIRNAC Land Use Permit Number: **N2021C0004**

NWB Water Licence Number: **2BE-STO2025**

Work Completed: Drilling, Ground Gravity, Ground Electromagnetic Geophysical Surveys, Soil Sampling and Prospecting

Dates Work Completed: April 11, 2024, to September 13, 2024

Property Location: NTS 058C02, 058C03, 058C06, 058C07, 058C10, 058C11, 058C13, 058C14; Somerset Island, Nunavut, Canada

Storm Camp Location: 73°39’23” N latitude; 94°27’07” W longitude

2 Introduction

The Aston Bay Property is located on northern Somerset Island, Nunavut in the Canadian Arctic Archipelago (Figure 1). The nearest community is the hamlet of Resolute Bay, located 112 km north of the Property, on Cornwallis Island. The Property is approximately 1,500 km northwest of Iqaluit, the capital of Nunavut, and about 1,500 km northeast of Yellowknife, Northwest Territories. The Aston Bay Property includes the Seal Zinc Deposit and a group of copper-silver deposits (Corona, Chinook, Cirrus, Cyclone, Lightning Ridge and Thunder deposits), collectively known as Storm Copper. The Storm Copper area is associated with a regional graben structure known as the Central Graben. The Property also includes several developing prospects including the Tempest prospect, located approximately 40 km south of the Storm Copper area, the Seabreeze prospect, located approximately 25 km north of the Seal Zinc area, and the Tornado prospect, located approximately 7 km southeast of the Storm Copper area.

The 2024 Aston Bay Property exploration program was completed between March 29 and September 26, 2024, including mobilization and demobilization. A total of 22,475.11 m of drilling was completed in 153 holes. Drilling was carried out within claims 100085, 100086, 100089, 100090, 100094, 100595, 102599, and 102596.

Ground geophysical surveys included collection of gravity and electromagnetic data. Geophysical surveys were conducted within claims 100084, 100085, 100086, 100089, 100090, 100094, 100595, 100956, 100957, 100958, 101030, 101031, and 101036.

Multiple campaigns for soil sampling and prospecting were carried out throughout the summer program. Soil sampling grids were conducted within claims 100086, 100090, 100956, 100958, 101030, 101031 and 102632. Prospecting was conducted throughout the Property over claims 100086, 100090, 100589, 100709, 100723, 102593, 102594, 102595, 102603, 102605, 102606, 102621, 102622, 102623, 102630, and 102631.

All personnel were based out of Storm Camp located at approximately 73°39’23” N latitude and 94°27’07” W longitude.

The 2024 field program was managed by APEX Geoscience Ltd. (“APEX”) on behalf of Aston Bay Holdings Ltd. (“Aston Bay”) and their joint venture partners American West Metals Limited (“American West”).

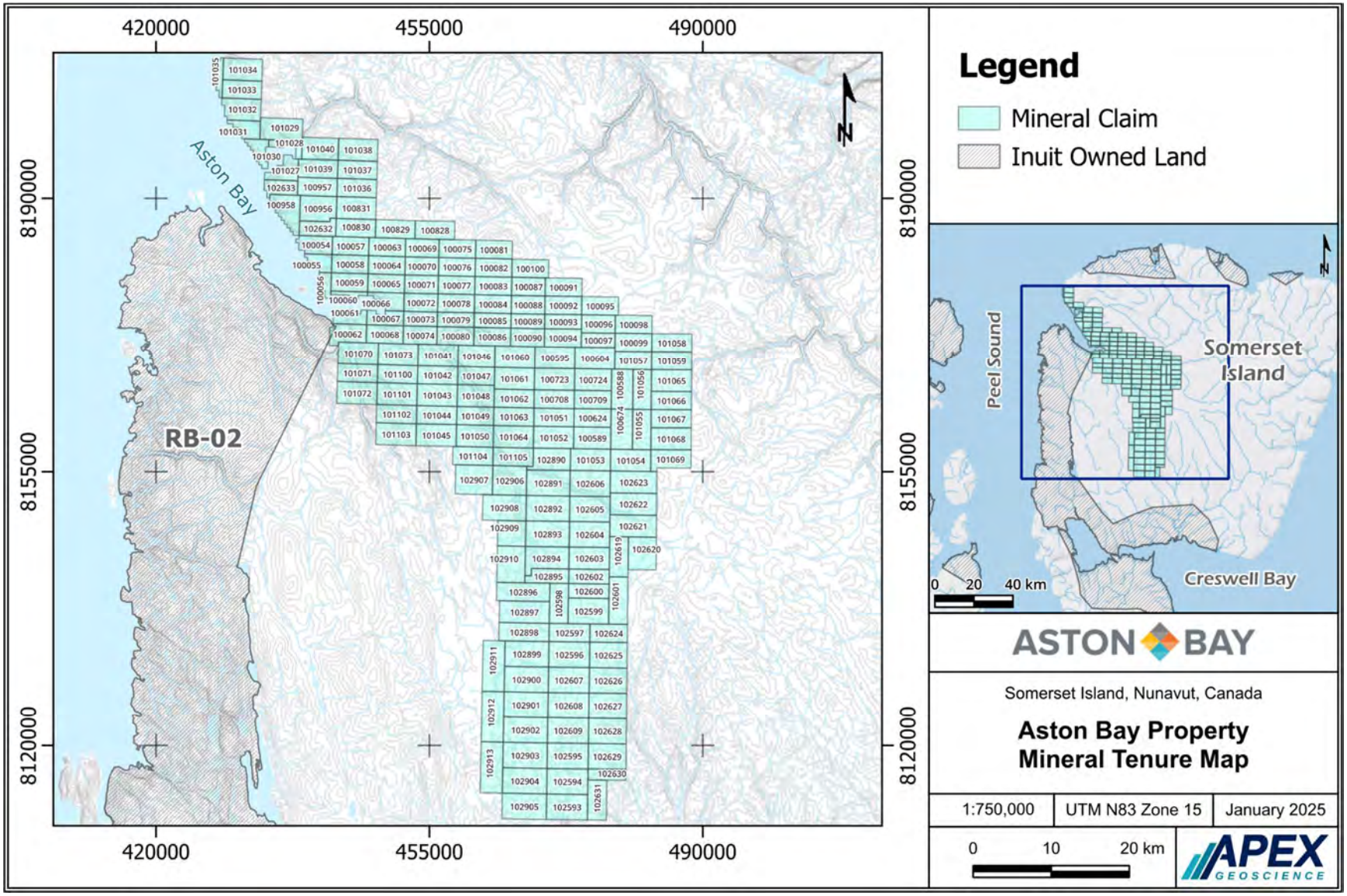
3 Land Use Area Description and Location

The Aston Bay Property is situated in the Qikiqtaaluk Region of Nunavut, within the 1:50,000 scale NTS (National Topographic System) map sheets 058C02, 03, 06, 07, 10, 11, 13 and 14. The Property comprises 173 contiguous mineral claims (Figure 2; Appendix 1).

The Aston Bay Property covers a combined area of approximately 220,248.74 ha. The Property is bound by latitudes 72°05' N and 73°57' N, and longitudes 93°21' W and 95°21' W and is centered at approximately 73°31' N latitude and 94°20' W longitude.

Figure 1. Aston Bay Property Location.

Figure 2. Aston Bay Property Mineral Tenure Map.



4 2024 Exploration Program

The 2024 exploration programs were completed between April 11 and September 13, 2024. The exploration was completed in two phases, the spring program from April 11 to May 22, and the summer program from June 20 to September 13, 2024. A notice of commencement was sent to CIRNAC at aadnc.landsmining.aandc@canada.ca on March 18, 2024.
All exploration work was conducted within mineral claims 100084, 100085, 100086, 100089, 100090, 100094, 100589, 100595, 100709, 100723, 100956, 100957, 100958, 101030, 101031, 101036, 102593, 102594, 102595, 102596, 102599, 102603, 102605, 102606, 102621, 102622, 102623, 102630, 102631, and 102632. All drilling, geophysical, and sampling activities were helicopter supported and based out of Storm Camp, located at approximately 73°39’23” N latitude and 94°27’07” W longitude.

The 2024 field program was managed by APEX, on behalf of Aston Bay and their joint venture partners American West. Ground geophysical surveys were completed by Initial Exploration Services (of Saskatoon, SK). Drilling activities completed by Northspan Explorations Ltd. (of Kelowna, BC) and Top Rank Drilling Ltd (of Ste. Rose du Lac, MB). Helicopter support was provided by Custom Helicopters Ltd. of St. Andrews, MB, and Great Slave Helicopters 2018 Ltd. of Yellowknife, NT. Fixed-wing support was provided by Kenn Borek Air Ltd. of Calgary, AB, and Air Tindi Ltd. of Yellowknife, NT. Camp services and logistical support was provided by 953731 NWT Ltd. of Resolute Bay, NU, Atco Structures & Logistics of Resolute Bay, NU, H.A. Butler Contracting Ltd. of Smithers, BC, and Discovery Mining Services Ltd. of Yellowknife, NT. Fuel and supplies for were delivered in preparation for the 2025 season by Nunavut Eastern Arctic Shipping Inc. (NEAS.) of Montreal, QC.

4.1 Diamond and Reverse Circulation Drilling

Drilling in 2024 focused primarily on the Storm Copper area and comprised 2,596.11 m of diamond drilling in 15 holes and 19,879 m of reverse circulation (RC) drilling in 138 holes (Table 1; Figures 3 and 4). Drilling at Storm Copper targeted the Cyclone, Chinook, and Thunder deposits, as well as several other exploration targets within the Storm Central Graben. Limited drilling was also completed at the Tornado and Tempest prospects.

Table 1. 2024 Drillhole Locations.

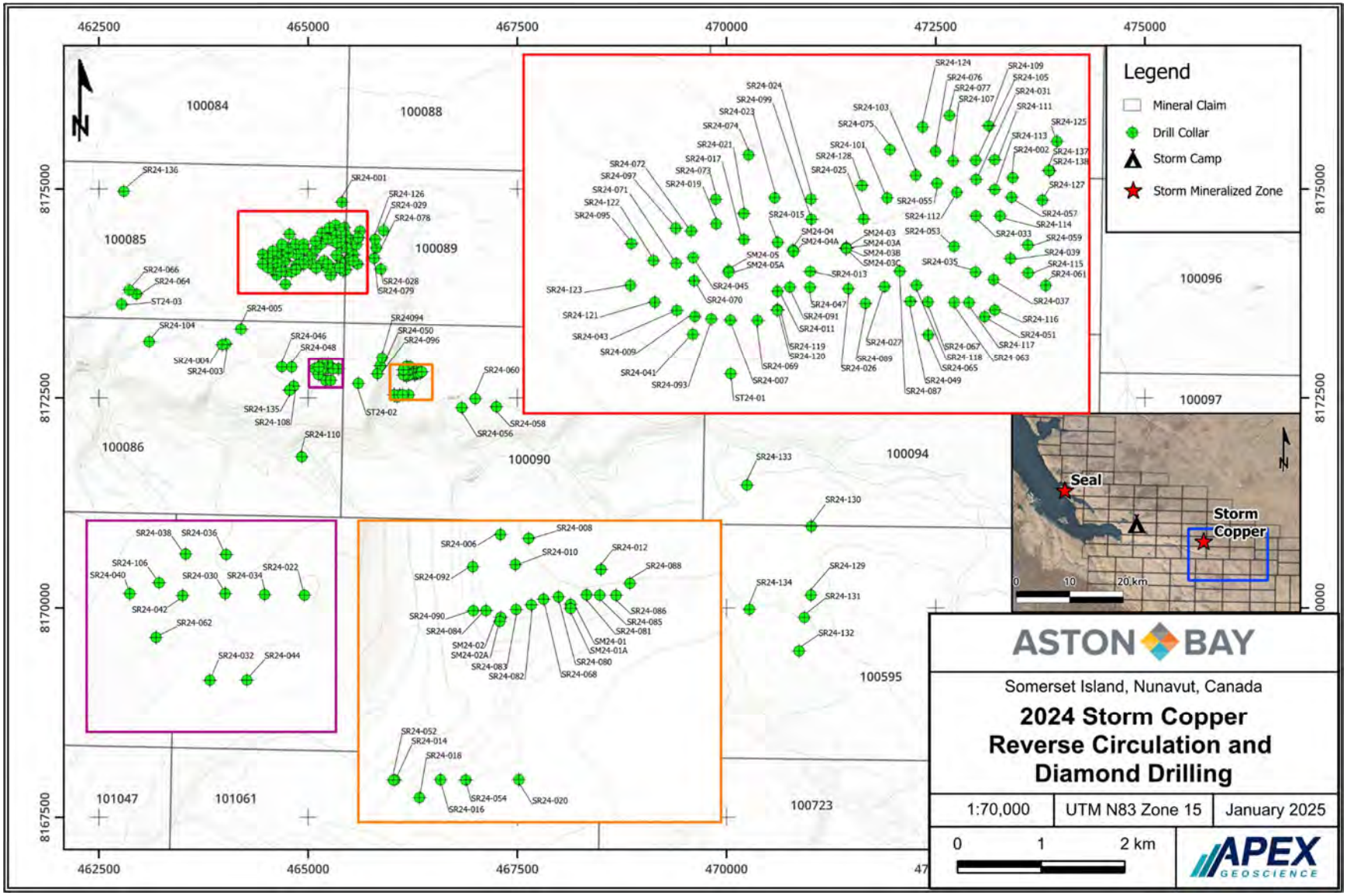
Drillhole	Zone	Latitude	Longitude
SR24-001	Cyclone	73.6637	-94.1020
SR24-002	Cyclone	73.6598	-94.0987
SR24-003	The Gap	73.6483	-94.1452
SR24-004	The Gap	73.6483	-94.1465
SR24-005	The Gap	73.6500	-94.1395
SR24-006	Chinook	73.6463	-94.0763
SR24-007	Cyclone	73.6562	-94.1230
SR24-008	Chinook	73.6462	-94.0750
SR24-009	Cyclone	73.6562	-94.1261
SR24-010	Chinook	73.6459	-94.0756
SR24-011	Cyclone	73.6569	-94.1190
SR24-012	Chinook	73.6459	-94.0718
SR24-013	Cyclone	73.6574	-94.1162
SR24-014	Lightning Ridge	73.6432	-94.0807
SR24-015	Cyclone	73.6581	-94.1190
SR24-016	Lightning Ridge	73.6432	-94.0787
SR24-017	Cyclone	73.6582	-94.1220
SR24-018	Lightning Ridge	73.6430	-94.0796
SR24-019	Cyclone	73.6585	-94.1244
SR24-020	Lightning Ridge	73.6432	-94.0752
SR24-021	Cyclone	73.6588	-94.1220
SR24-022	Thunder	73.6458	-94.1021
SR24-023	Cyclone	73.6592	-94.1194
SR24-024	Cyclone	73.6592	-94.1162
SR24-025	Cyclone	73.6587	-94.1116
SR24-026	Cyclone	73.6570	-94.1128
SR24-027	Cyclone	73.6571	-94.1097
SR24-028	Cyclone	73.6567	-94.0867
SR24-029	Cyclone	73.6608	-94.0860
SR24-030	Thunder	73.6458	-94.1062
SR24-031	Cyclone	73.6597	-94.1019
SR24-032	Thunder	73.6446	-94.1069
SR24-033	Cyclone	73.6588	-94.1018
SR24-034	Thunder	73.6458	-94.1042
SR24-035	Cyclone	73.6575	-94.1018
SR24-036	Thunder	73.6464	-94.1062
SR24-037	Cyclone	73.6573	-94.1002
SR24-038	Thunder	73.6464	-94.1083
SR24-039	Cyclone	73.6578	-94.0988
SR24-040	Thunder	73.6458	-94.1111

Drillhole	Zone	Latitude	Longitude
SR24-041	Cyclone	73.6558	-94.1263
SR24-042	Thunder	73.6458	-94.1084
SR24-043	Cyclone	73.6564	-94.1277
SR24-044	Thunder	73.6446	-94.1050
SR24-045	Cyclone	73.6577	-94.1264
SR24-046	Storm	73.6460	-94.1237
SR24-047	Cyclone	73.6570	-94.1162
SR24-048	Storm	73.6460	-94.1199
SR24-049	Cyclone	73.6567	-94.1074
SR24-050	Storm	73.6463	-94.0863
SR24-051	Cyclone	73.6564	-94.1009
SR24-052	Lightning Ridge	73.6432	-94.0808
SR24-053	Cyclone	73.6581	-94.1037
SR24-054	Lightning Ridge	73.6432	-94.0776
SR24-055	Cyclone	73.6596	-94.1053
SR24-056	Storm	73.6419	-94.0550
SR24-057	Cyclone	73.6593	-94.0988
SR24-058	Storm	73.6421	-94.0419
SR24-059	Cyclone	73.6581	-94.0973
SR24-060	Storm	73.6429	-94.0499
SR24-061	Cyclone	73.6572	-94.0957
SR24-062	Thunder	73.6452	-94.1097
SR24-063	Cyclone	73.6567	-94.1036
SR24-064	Storm	73.6535	-94.1795
SR24-065	Cyclone	73.6559	-94.1058
SR24-066	Storm	73.6539	-94.1822
SR24-067	Cyclone	73.6567	-94.1059
SR24-068	Chinook	73.6455	-94.0743
SR24-069	Cyclone	73.6562	-94.1207
SR24-070	Cyclone	73.6571	-94.1263
SR24-071	Cyclone	73.6575	-94.1278
SR24-072	Cyclone	73.6583	-94.1266
SR24-073	Cyclone	73.6591	-94.1245
SR24-074	Cyclone	73.6602	-94.1217
SR24-075	Cyclone	73.6604	-94.1094
SR24-076	Cyclone	73.6604	-94.1055
SR24-077	Cyclone	73.6613	-94.1043
SR24-078	Cyclone	73.6589	-94.0886
SR24-079	Cyclone	73.6578	-94.0893
SR24-080	Chinook	73.6455	-94.0736
SR24-081	Chinook	73.6455	-94.0724
SR24-082	Chinook	73.6454	-94.0748

Drillhole	Zone	Latitude	Longitude
SR24-083	Chinook	73.6453	-94.0755
SR24-084	Chinook	73.6453	-94.0768
SR24-085	Chinook	73.6455	-94.0718
SR24-086	Chinook	73.6455	-94.0711
SR24-087	Cyclone	73.6574	-94.1084
SR24-088	Chinook	73.6457	-94.0705
SR24-089	Cyclone	73.6566	-94.1113
SR24-090	Chinook	73.6453	-94.0774
SR24-091	Cyclone	73.6570	-94.1179
SR24-092	Chinook	73.6459	-94.0775
SR24-093	Cyclone	73.6562	-94.1247
SR24-094	Storm	73.6471	-94.0856
SR24-095	Cyclone	73.6580	-94.1318
SR24-096	Storm	73.6454	-94.0873
SR24-097	Cyclone	73.6584	-94.1279
SR24-098	Tempest	73.3329	-93.8417
SR24-099	Cyclone	73.6587	-94.1162
SR24-100	Tempest	73.3321	-93.8362
SR24-101	Cyclone	73.6592	-94.1096
SR24-102	Tempest	73.2913	-93.8216
SR24-103	Cyclone	73.6598	-94.1071
SR24-104	Storm	73.6484	-94.1743
SR24-105	Cyclone	73.6602	-94.1019
SR24-106	Thunder	73.6460	-94.1096
SR24-107	Cyclone	73.6602	-94.1039
SR24-108	Squall	73.6439	-94.1190
SR24-109	Cyclone	73.6610	-94.1009
SR24-110	Storm	73.6364	-94.1155
SR24-111	Cyclone	73.6602	-94.1003
SR24-112	Cyclone	73.6594	-94.1035
SR24-113	Cyclone	73.6595	-94.1003
SR24-114	Cyclone	73.6588	-94.0997
SR24-115	Cyclone	73.6575	-94.0972
SR24-116	Cyclone	73.6565	-94.1001
SR24-117	Cyclone	73.6567	-94.1023
SR24-118	Cyclone	73.6571	-94.1069
SR24-119	Cyclone	73.6565	-94.1190
SR24-120	Cyclone	73.6564	-94.1190
SR24-121	Cyclone	73.6566	-94.1296
SR24-122	Cyclone	73.6576	-94.1298
SR24-123	Cyclone	73.6570	-94.1318
SR24-124	Cyclone	73.6610	-94.1066

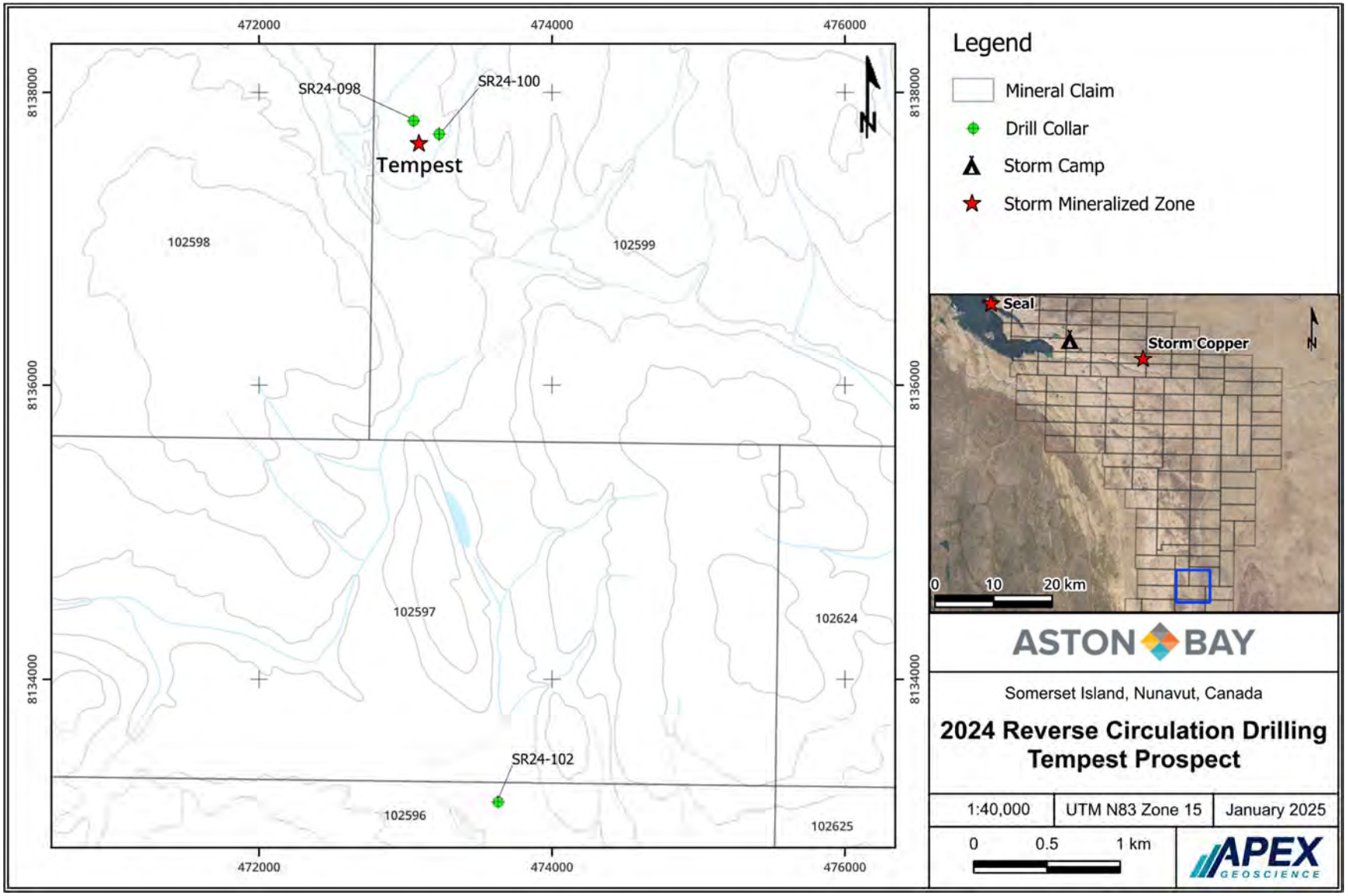
Drillhole	Zone	Latitude	Longitude
SR24-125	Cyclone	73.6607	-94.0949
SR24-126	Cyclone	73.6598	-94.0891
SR24-127	Cyclone	73.6592	-94.0961
SR24-128	Cyclone	73.6595	-94.1118
SR24-129	Tornado	73.6226	-93.9212
SR24-130	Tornado	73.6299	-93.9215
SR24-131	Tornado	73.6202	-93.9236
SR24-132	Tornado	73.6166	-93.9254
SR24-133	Tornado	73.6342	-93.9461
SR24-134	Tornado	73.6210	-93.9445
SR24-135	Squall	73.6435	-94.1206
SR24-136	Storm	73.6645	-94.1851
SR24-137	Cyclone	73.6600	-94.0955
SR24-138	Cyclone	73.6600	-94.0956
SM24-01	Chinook	73.6454	-94.0731
SM24-01A	Chinook	73.6454	-94.0731
SM24-02	Chinook	73.6452	-94.0762
SM24-02A	Chinook	73.6452	-94.0762
SM24-03	Cyclone	73.6580	-94.1131
SM24-03A	Cyclone	73.6580	-94.1131
SM24-03B	Cyclone	73.6580	-94.1131
SM24-03C	Cyclone	73.6580	-94.1131
SM24-04	Cyclone	73.6579	-94.1177
SM24-04A	Cyclone	73.6579	-94.1177
SM24-05	Cyclone	73.6574	-94.1233
SM24-05A	Cyclone	73.6573	-94.1233
ST24-01	Cyclone	73.6548	-94.1229
ST24-02	Storm	73.6443	-94.0945
ST24-03	Cirrus	73.6524	-94.1850

Figure 3. 2024 Drillhole Locations at Storm Copper.



APEX GEOSCIENCE

Figure 4. 2024 Drillhole Locations at Tempest.



4.2 Geophysical Surveys

The 2024 exploration programs included ground geophysical surveys collecting gravity and electromagnetic data. Moving-loop electromagnetic (MLEM) surveys were conducted at Storm Copper, including the Chinook, Cirrus, Corona, Cyclone and Thunder prospects and at the Tornado prospect, for a total of 82 line-km (Figures 5 and 6).

Ground gravity was collected at 710 stations over two zones at the Seabreeze prospect (Figures 7 and 8). A summary of geophysical activities during the 2024 exploration programs is presented in Table 2.

All geophysical surveys were conducted by personnel on foot and supported by helicopter. During snow cover in the spring, snowmobiles were used to move personnel and equipment within the electromagnetic grid areas.

Table 2. 2024 Ground Geophysical Activities Summary.

Geophysical Data Collection	Prospect	Lines	Line-km	Stations
Moving-Loop Electromagnetics	Storm Copper	44	71.15	777
	Tornado	6	10.9	115
Gravity	North Seabreeze	4	4.7	99
	South Seabreeze	4	29.2	611

Figure 5. Moving-Loop Electromagnetic Line Path and Stations at Storm Copper.

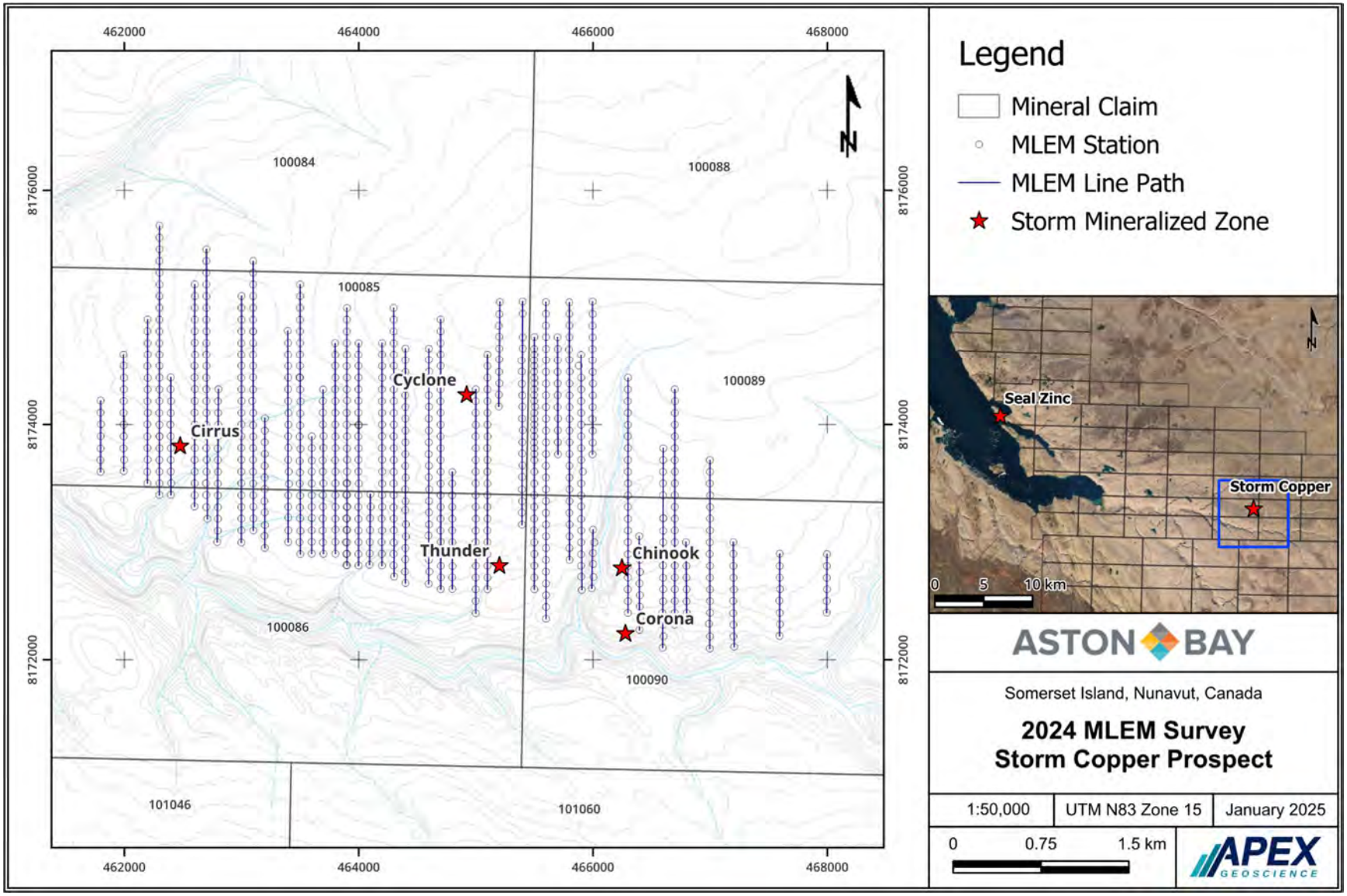


Figure 6. Moving-Loop Electromagnetic Line Path and Stations at Tornado.

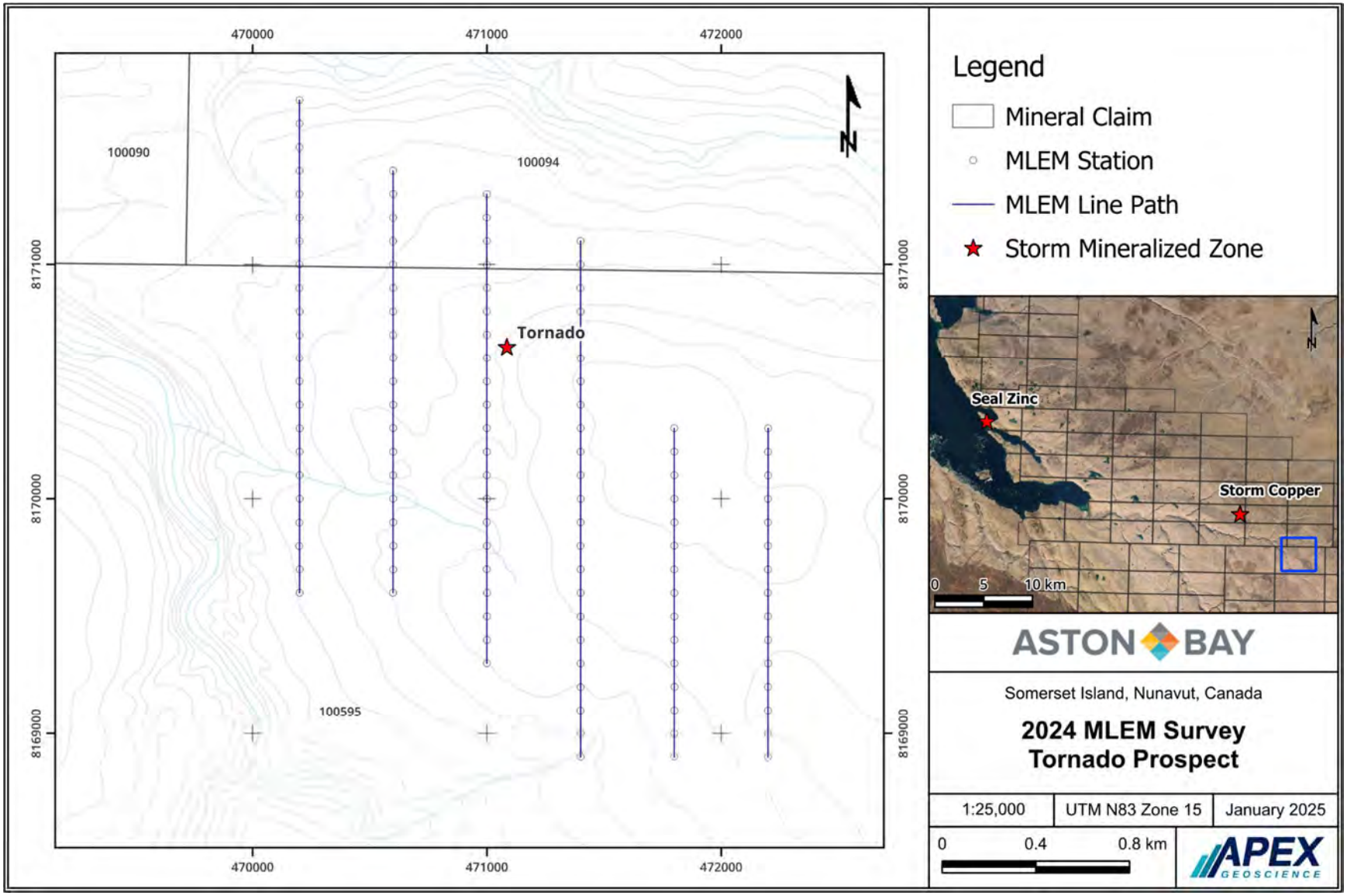


Figure 7. Ground Gravity Line Path and Stations at North Seabreeze.

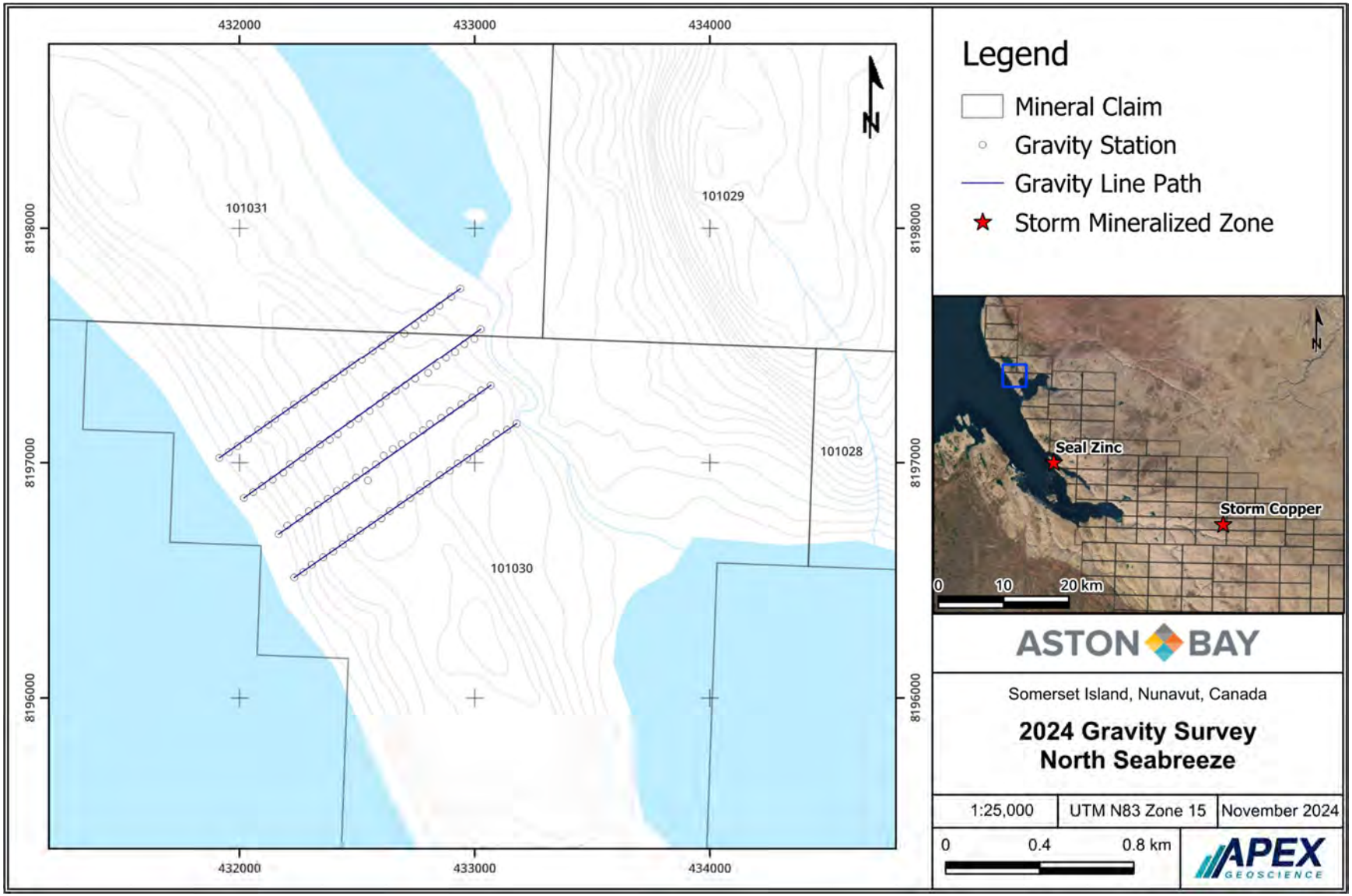
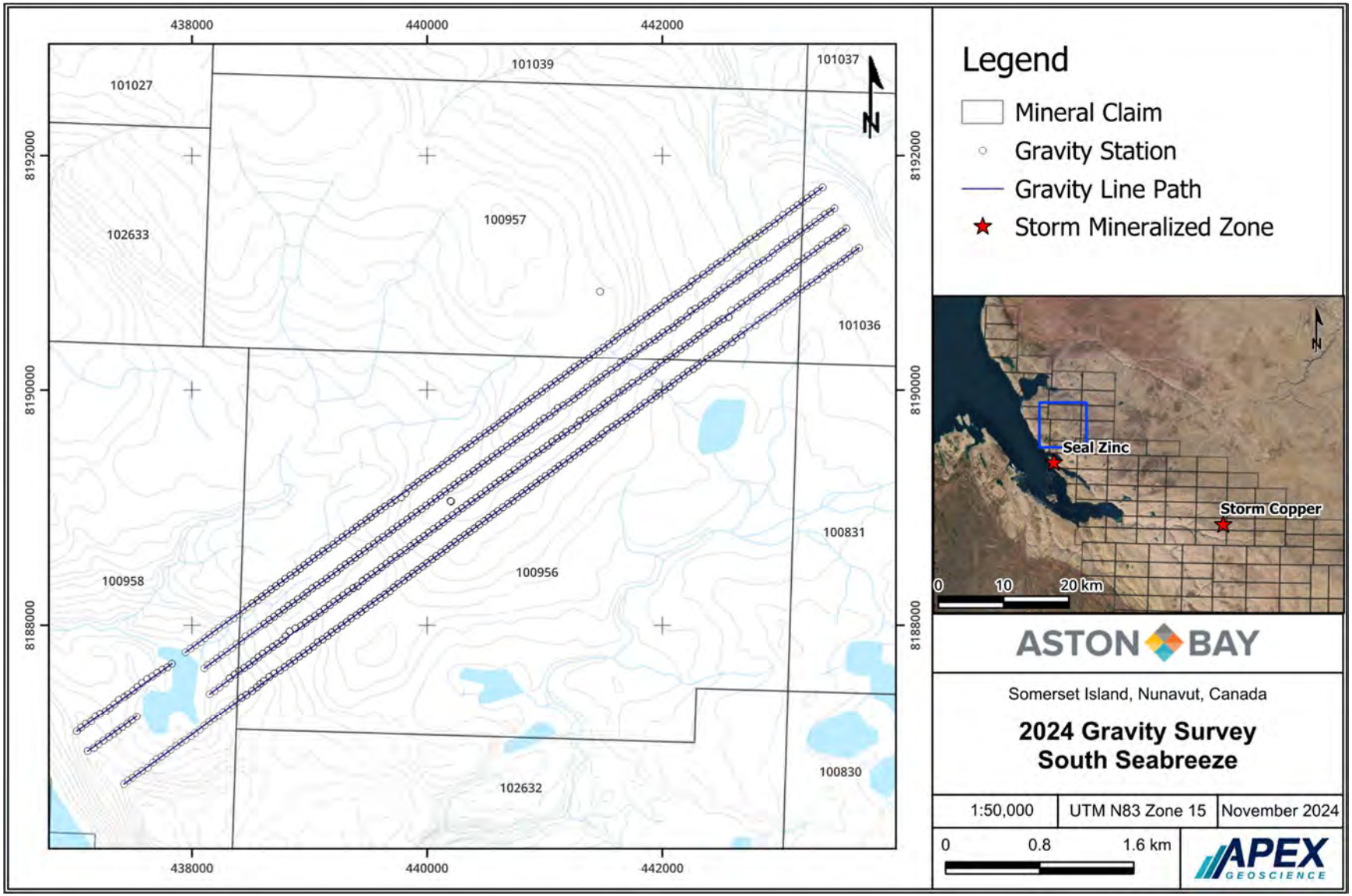


Figure 8. Ground Gravity Line Path and Stations at South Seabreeze.



4.3 Soil and Rock Sampling

The 2024 exploration program included multiple campaigns of soil and rock sampling completed between July 3 and September 9. A total of 211 soil samples were collected across 3 grids, and 71 rock samples were collected across the Property.

Two soil grids (North and South Seabreeze) were located northwest of the Seal Zinc Deposit, and one grid at Hailstorm, located south of the Thunder prospect. The detail soil grids were designed to follow-up on previously identified targets or anomalies.

Twenty-one (21) soil samples from the North Seabreeze grid were collected along two northwest-southeast oriented lines. Line spacing and sample spacing was 400 m, and lines varied from 3 km to 3.7 km (Figure 9). Fifty-five (55) soil samples were collected at the South Seabreeze grid, from seven southwest-northeast oriented lines. Line spacing and sample spacing was 400 m, and lines varied from 300 m to 4 km, topography dependant (Figure 9).

One hundred and thirty-five (135) soil samples were collected from the Hailstorm grid, located south of the Thunder prospect. Lines were oriented east to west, with line spacing and sample spacing of 25 m. Line length was approximately 300 m (Figure 10).

Twenty-nine (29) rock samples were collected north of the Tempest prospect, 13 samples near the Thunder and Chinook prospects, and 29 samples at the Typhoon prospect and surrounds (Figure 11). Rock samples were collected when any promising mineralization or alteration were encountered.

All sampling was conducted by personnel on foot and supported by helicopter.

Figure 9. Soil Sample Locations at Seabreeze.

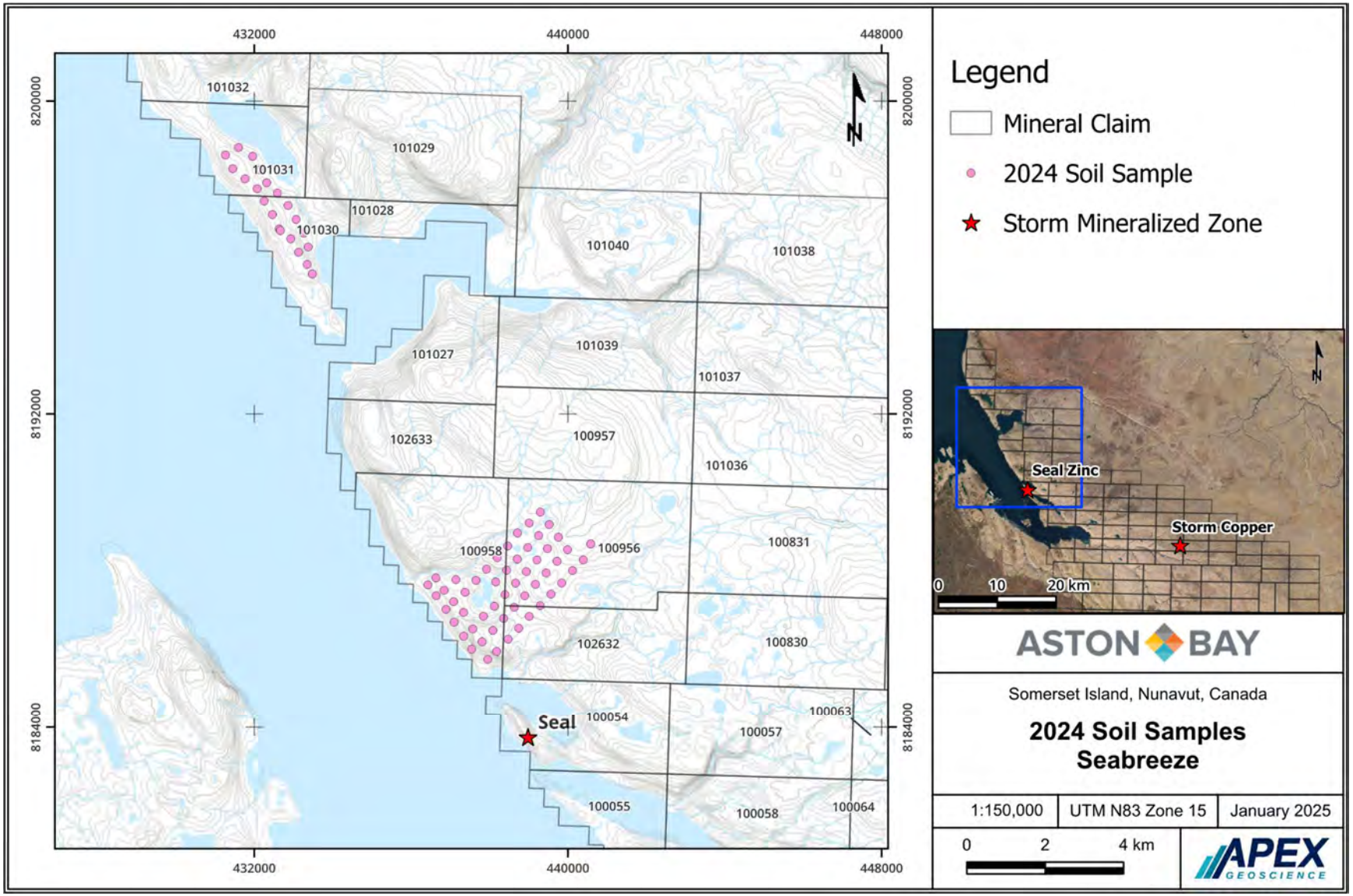


Figure 10. Soil Sample Locations at Hailstorm.

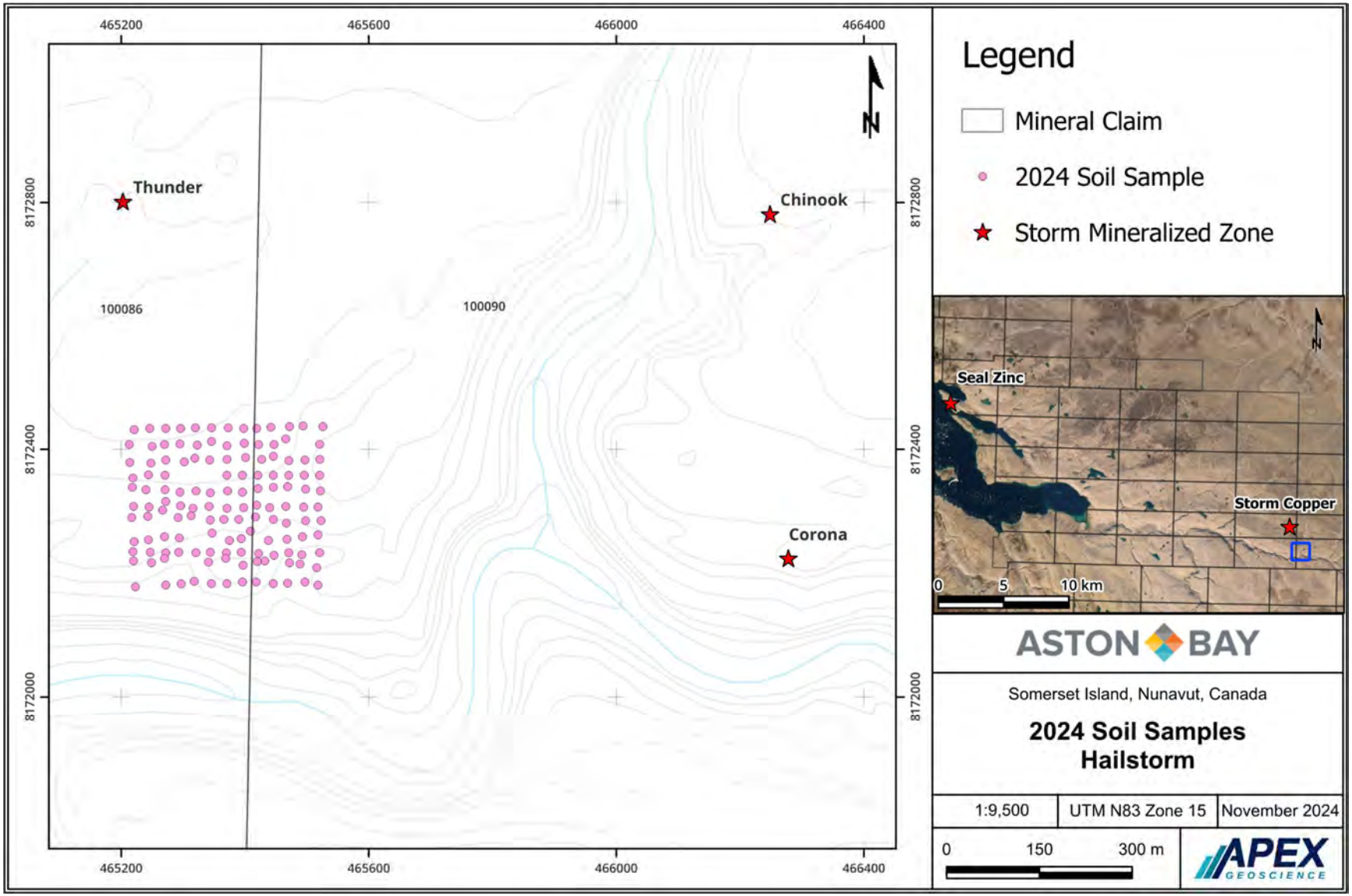
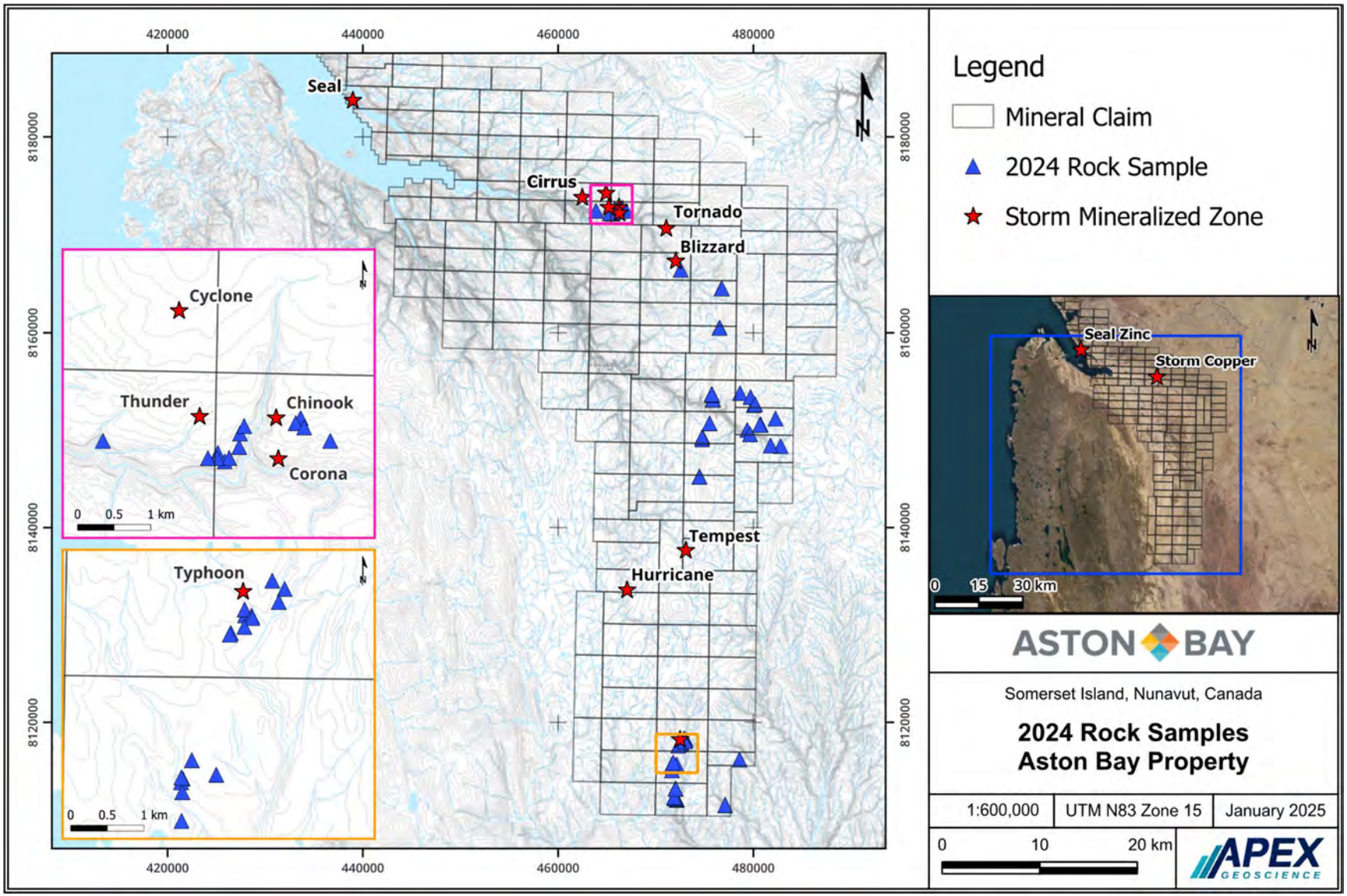


Figure 11. Rock Sample Locations at the Aston Bay Property.



5 Land Use

5.1 Camp & Waste

Storm Camp is located along the Aston River at approximately 73°39’23” N latitude and 94°27’07” W longitude. The camp site is located on an elevated gravel bar in the river valley. It includes an airstrip suitable for landing a Twin Otter. A staging area was established at the east end of the airstrip, approximately 600 metres west of Storm Camp. An additional temporary staging area was established along the Aston Bay coast at approximately 73°41’06” N latitude and 94°43’50” W longitude to support sealift operations. All sealift materials will be relocated to the Storm Camp during the 2025 exploration program.

Storm Camp was constructed during the 2016 and 2018 seasons and was used to support exploration during subsequent years. The camp comprises 34 structures including 24 insulated Weatherport tents built upon wooden floors and 10 plywood structures. Five Weatherport tents were constructed during 2024. One small plywood structure is located at the sealift laydown along the Aston Bay coast, which is currently used to store a skid steer. All tents and plywood buildings at Storm Camp remain in place for future use. The small plywood structure on the coast was designed to fly with the helicopter and will be removed during the 2025 season.

Upon seasonal closure, electronics and communications gear were removed from site. All food and other attractants were also removed. Most other camp equipment was stored on site inside of the tents or plywood buildings. All remaining lumber was stacked under a lean-to beside the generator shack for future use. Tables 3 and 4 list the structures and major equipment left on site at the close of the season on September 26, 2024. Camp and sealift laydown photos are included in Appendix 2.

Table 3. Storm Camp Remaining Structures September 26, 2024.

Quantity	Item
1	15' x 16' Plywood generator shack, includes exhaust piping etc, w/ attached storage lean-to
1	14' x 32' Plywood water tank shack / tool shed, includes water tanks, shelving, tables, various tools and equipment
1	8' x 8' Heli shack, includes shelving
1	9' x 30' Driller storage shack (no flooring)
1	8' x 20' Plywood latrine shack, includes 4 pacto toilets
1	16' x 56' Plywood kitchen building, including stoves, ovens, tables, fridges
1	16' x 16' Plywood kitchen storage shack, includes shelving
1	8' x 16' Plywood kitchen storage shack, includes shelving
1	14' x 48' Plywood core shack, includes core benches, various geological supplies and ATV's
1	12'x 12' Plywood core cutting shack, includes plywood bench and 2 core cutting saws
1	8’ x 16’ Plywood storage shack, located at sealift laydown to store skid steer.
18	14' x 16' Weatherport tents on plywood floor to serve as sleeper tents, includes plywood beds, tables, chairs etc
2	14' x 16' insulated Weatherport tents on plywood floors to serve as drys, includes shower stalls, sink, washing machine, dryer, plumbing etc.
3	14' x 16' Weatherport tents on plywood floors to serve as offices and first aid tent, includes tables, chairs etc.
1	14' x 32' insulated Weatherport dry, includes shower stalls, sink, washing machines, dryers, plumbing etc.

Table 4. Storm Camp Remaining Equipment September 26, 2024.

Quantity	Item
5	Water tanks (350gal, 250gal, 250gal, 220gal, 150gal)
3	Hot water tanks
1	Water supply pump with fish screen and hose line
2	Water pressure pumps
5	Generators (one 14 kVA diesel generator, plus three 5 kW gas backups)
1	Dual chamber-controlled air incinerator
1	Electrified bear fence
7	Refrigerators
5	Chest freezers
3	Cooking stoves
1	Dishwasher
1	Convection oven
1	24" x 24" griddle
4	Washing machines and dryers
4	Pacto toilets
30	Toyotomi heating stoves
12	Oil drip stoves
5	Containment berms for fuel cache & drill equipment
36	Mini berms for tent drums and fuel transfer
3	Herman nelson heaters
2	Survival shacks
1	Skid Steer (sealift laydown) with attachments
2	ATV's with trailers
1	Snowmobile
1	Snowblower
3	Starlink units
	Heavy electrical cables and panel boxes
	Various lumber
	Various office, camp and medical supplies

Camp water was drawn from the Aston River for cooking and cleaning. Drinking water was purchased and flown in from Yellowknife/Resolute in 5-gallon jugs for the spring program. A filtering and UV treatment system was added for the summer program to use the local water for drinking.

During the spring program, the Aston River was frozen through, so water could not be drawn. Water was instead drawn from a lake north of the camp, at approximate coordinates 73°40’05” N latitude and 94°27’17” W longitude. A mesh screen was in place at all times over the pump intake to ensure fish were not entrained. Water was only taken from this location so long as the Aston River was frozen through. Camp supply was drawn from the Aston River for the whole of the summer program. A total of 34.07 m^3 of water

were drawn from the lake and flown to the camp in the spring between April 11 and May 21, 2024, averaging 0.83 m^3 per day.

A total of 344.13 m^3 of water was drawn from the Aston River for camp use between June 21 and September 10, 2024, averaging 4.20 m^3 per day. During operations, running water, laundry and showers were available in camp. Water was drawn from the river using a 5.5 HP gas powered pump or an electric trash pump. The pump intake hose was equipped with a mesh screen to ensure fish were not entrained. When in use, during fueling or in transit, the pump was placed in a plastic spill tray. When not in use, the pump was stored in camp within secondary containment. No fuel was stored at the pump site and all fueling was completed in camp. Water volumes were measured using markings on the water storage tanks at 50-gallon increments. The volumes were recorded in a daily log by the camp foreman (Appendix 3).

5.2 Fuel Storage

During the 2024 program, the existing fuel caches were used, located at the east end of Storm Camp at approximately 73° 39' 23" N latitude and 94° 26' 58" W longitude, and adjacent to the camp airstrip at 73° 39' 24" N latitude, 94° 28' 20" W longitude. A small amount of diesel, gas and jet fuel drums were stored at Storm Camp (Tables 5). Fuel drums delivered by sealift are stored at the sealift laydown during the off season (Table 6). All fuel drums were stored in covered containment berms with rain drain hydrocarbon filters. Remaining propane cylinders were stored securely inside the plywood buildings.

Table 5. Storm Camp Fuel Cache Inventory September 26, 2024.

Material	Container	Quantity on Site
Diesel	205 L Drum	29
Gasoline	205 L Drum	1
Jet Fuel (Jet A)	205 L Drum	17
Propane	100 lb Cylinder	10

Table 6. Storm Sealift Laydown Fuel Inventory September 26, 2024.

Material	Container	Quantity on Site
Diesel	205 L Drum	252
Jet Fuel (Jet A)	205 L Drum	500

All fuel caches are located a minimum of 31 metres from the normal high-water mark of any water bodies. The sealift fuel cache is located more than 100 m from the high-water mark.

On June 24, 2024, one 205 L barrel of diesel fell from the slings of a helicopter and broke on impact just outside of camp. The barrel fell onto snow/sand within an inactive channel of the Aston River system, approximately 50-60 m south from the Aston River. Immediate mitigation actions were conducted and booms placed approximately 20 m downstream to trap any fuel from melt water. Contaminated snow and sand were removed and placed into spill barrels. The incident was reported to the NT/NU 24 hr spill line and the CIRNAC inspector via phone and email. A copy of the spill report is appended to this report. On August 29, 2024, surface sediment and surface water samples were collected in the vicinity of the spill location to identify and delineate any impacts the spill had on the environment.

The results indicated that one surface water sample, downstream of the spill site, contained petroleum hydrocarbon fractions above the applicable water quality guidelines for the protection of freshwater aquatic life. It was noted that the samples were not collected in the appropriate laboratory-prepared glassware for these types of analytical samples and the results may be unreliable. The recommendations were to resample each of the samples taken during 2024 and test again for hydrocarbons in the following season. Further remediation will be informed by the results of this testing. The results from the sediment and surface water testing are appended to this report.

No damaged or leaking drums were identified during inspection prior to the end of the 2024 season. Several empty drums remained on site and were stored in the Storm Camp berms. Empty propane bottles were secured together standing upright.

5.3 Flights

All field work completed during 2024 was helicopter supported, using Storm Camp as a base. Astar AS350 B2 and B3 helicopters were contracted from Custom Helicopters Ltd. for the duration of the program. Personnel and gear were transported to and from the field daily using the helicopters. Pilots were instructed, when possible, to avoid landing in areas with soft ground to avoid rutting. Helicopter pads at the camp were situated on firm, level ground a safe distance from camp and work sites. During the spring program, an Astar AS350 B3 helicopter was contracted from Great Slave Helicopters 2018 Ltd. to support the mobilization of drill equipment from Resolute Bay.

A fixed wing Twin Otter aircraft based in Resolute Bay, NU was chartered from Kenn Borek Air Ltd. for the duration of the program. During the summer program, a second fixed wing Twin Otter was contracted from Air Tindi Ltd. to help support the delivery of supplies. The two Twin Otters were used to move personnel, fuel and supplies between Resolute Bay and the Storm Camp airstrip.

5.4 Drilling

One Multi Power Products Discovery II diamond drill, one Zinex A-5 diamond drill, and one heli-portable “Superhornet” reverse circulation drill, including most of the ancillary equipment and consumables, remain on site for future drill programs. All equipment was drained of fuel and oil for off-season storage. Tables 7 and 8 list the drilling equipment and consumables left on site at the close of the season on September 26, 2024. Table 9 lists the drilling equipment brought by sealift and stored at the sealift laydown for the off season. All drilling equipment for the track-based RC drill was removed from Somerset Island at the end of the 2024 exploration program.

Table 7. Remaining Drill Equipment on Site September 26, 2024.

Quantity	Item
1	Zinex A-5 diamond drill with engine, feed frame, control panel, drill head, foot clamp, wireline and drill shack
1	MPP Discovery II diamond drill with engine, feed frame, control panel, drill head, foot clamp, wireline and drill shack
1	Spare engine
1	Spare rotation motor
2	Spare feed cylinders
1	Spare foot clamps
2	Spare winch and pump drive motors
1	Spare wireline winch (2 spare rolls of wireline)
4	5 kW gas generators
1	Welders
5	Supply pumps (1 spare transmission)
3	Trash pumps
3	Spare down hole pumps
2	Mud separators
6	Mud tanks
8	Coil stoves
4	120V burners
6	Fuel tanks
2	Fly baskets
285	3m NQ drill rods
90	1.5m casing
6	Outer tubes
14	Inner tubes
150	water line
4	Spill kits
4	Survival shacks
-	Various fittings & tooling
133	HQ drill rods
28	HW casing
24	Pallets/crates of RC equipment, including broken down drill

Table 8. Remaining Drill Consumables on Site September 26, 2024.

Quantity	Item
87	Various drill muds (5 gal pails)
15	Motor oil (1 gal cans)
11	Hydraulic oil (5 gal pails)
32	Rod grease (5 gal pails)
2	Calcium Chloride pallets (50lb bags)

Table 9. Remaining Drill Equipment at the Sealift Laydown September 26, 2024.

Quantity	Item
4 pallets	Drill Rods
80 crates	Calcium Chloride

5.5 Archaeological Sites

During the 2024 field program, Aston Bay contracted archaeologists from WSP, an international environmental and engineering consulting firm, to conduct an archaeological survey over certain areas of the Property. Several archaeological sites were identified; however, none were identified in any areas of operations. The sealift laydown location was chosen after the completion of the archeological survey and in consultation with the archaeologists to best avoid any potential sites or artifacts.

No archaeological sites were encountered by drilling or field crews during the 2024 exploration program.

5.6 Inuit Owned Land

No work was completed on Inuit Owned Land (“IOL”) during the 2024 Aston Bay Property exploration program.

6 Engagement and Northern Employment

On August 27, 2024, Aston Bay and American West hosted a site visit for Resolute Bay Council members and officials, joined by Government of Nunavut Minister David Akeeagok. The purpose of the visit was to provide stakeholders with a firsthand look at exploration operations at the Property. The feedback from the group was positive.

Aston Bay and American West have made it a priority to hire Inuit personnel to support exploration programs at the Property. In 2024, eleven Inuit individuals, mostly from Resolute Bay, were employed in various roles, including wildlife monitoring, camp setup and maintenance, kitchen support, core cutting, and sampling on the RC drill rig. Inuit personnel collectively contributed 739 working days.

Several northern companies were contracted for the 2024 program, including 953731 NWT Ltd. of Resolute Bay, NU, Atco Structures & Logistics of Resolute Bay, NU, Air Tindi Ltd. of Yellowknife, NT, and Discovery Mining Services Ltd. of Yellowknife, NT.

7 Wildlife and Environment

As a general rule, any interaction with wildlife was discouraged; however, all personnel were instructed on the appropriate action to take when encountering wildlife in the field. Whenever possible, the helicopter pilot was instructed to maintain a minimum altitude of 610 metres above ground level and, when necessary, alter course to avoid disturbing any wildlife spotted during flight. Prior to, and after dropping off field crews, the pilot conducted high altitude (>610 m) reconnaissance in order to identify and locate any wildlife in the area.

A number of preventative measures were employed to avoid wildlife interaction in camp. Storm Camp was equipped with an electrified “bear fence” as a wildlife deterrent and each tent was equipped with an air horn and bear spray. The site supervisors and camp foreman had access to firearms in case of emergency. All food wastes were stored in appropriate bear proof containers and incinerated regularly to remove attractants. Personnel were instructed to avoid bringing food into sleeper tents and to remove waste regularly. The bear fence wire was taken down at the end of the 2024 season to avoid wildlife entanglements.

In 2024, several polar bears were observed near Storm Camp, as well as to the west of the camp, near Aston Bay, and to the east, near the exploration sites. Multiple muskoxen were also seen crossing the Aston Bay delta, east of Storm Camp. At the end of the program, three beluga whales were spotted swimming along the Aston Bay coast.

Overnight on September 2, 2024, a juvenile male polar bear entered Storm Camp between the wires of the electrified bear fence. The camp was alerted by the night shift cook, who spotted the bear through the kitchen window. Despite multiple efforts by wildlife monitors to drive the bear away, the animal was eventually shot and killed just outside the camp. The incident was immediately reported, and on September 3, Government of Nunavut Conservation Officer Tabitha Mullin from Resolute Bay visited the site to assess the situation and retrieve the carcass.

No sensitive wildlife sites are known to exist within the area of the 2024 exploration. Table 10 summarizes the wildlife observations during the 2024 program.

Table 10. Wildlife Observations 2024.

Animal Species	Number	Age	Sex	Animal Activity	Habitat Type	Date	Location Description	Approx. Latitude	Approx. Longitude
Polar Bear	1	Adult	Unk	Walking	Tundra	14 Aug, 2024	At Storm Camp	73.6574	-94.4489
Polar Bear	1	Adult	Unk	Walking	Tundra	15 Aug, 2024	At Storm Airstrip	73.6566	-94.4698
Polar Bear	1	Adult	Unk	Walking	Tundra	20 Aug, 2024	South of Strom Airstrip	73.6552	-94.476
Polar Bear	1	Unk	Unk	Walking	Tundra	22 Aug, 2024	Inland Somerset, 16km E of Storm Camp	73.6344	-93.9475
Polar Bear	3	2 Adult, 1 Juvenile	Unk	Walking	Tundra	23 Aug, 2024	Mouth of Aston River, 5km W of Storm Camp	73.668	-94.6091
Muskox	1	Unk	Unk	Walking	Tundra, rolling hill	23 Aug, 2024	Plateau above Storm Camp, 2km W	73.6564	-94.5223
Polar Bear	1	Unk	Unk	Walking	Tundra	23 Aug, 2024	South of summer airstrip, 1.5km W	73.653	-94.4963
Polar Bear	1	Adult	Unk	Sitting	Tundra	26 Aug, 2024	Above Storm Camp on plateau	73.6594	-94.4661
Polar Bear	1	Unk	Unk	Walking	Tundra	2 Sept, 2024	Inland, 12km E of Storm Camp	73.6424	-94.0777
Polar Bear	1	Juvenile	Unk	Walking	Tundra	2 Sept, 2024	In Storm Camp – killed	73.6566	-94.452
Polar Bear	2	Adult	Unk	Walking / Laying	Tundra	6 Sept, 2024	Spotted from distance by helicopters	73.6814	-94.6197
Muskox	4	Adult	Unk	Walking	Tundra, rolling hill	6 Sept, 2024	Walking across Aston Bay delta	73.6696	-94.5958
Muskox	4	Adult	Unk	Walking	Tundra, rolling hill	7 Sept, 2024	Walking across Aston Bay delta	73.6633	-94.5813
Beluga	4	3 Adult, 1 Juvenile	2 Male,1 Female	Swimming	Ocean	21 Sept, 2024	Swimming along Aston Bay Coast	73.6853	-94.7128

8 Reclamation Work

Progressive reclamation included keeping work areas clean and removing wastes from work sites daily. All wastes were stored in appropriate containers for later incineration or removal. The camp was inspected by the site supervisors for cleanliness and any sign of contamination prior to the close of the field program. All sites were deemed acceptable.

On June 24, 2024, one 205L barrel of diesel fell from the slings of a helicopter and broke on impact just outside of camp. The barrel fell onto snow/sand within an inactive channel of the Aston River system, approximately 50-60 m south from the Aston River. Immediate mitigation actions were conducted and booms placed approximately 20 m downstream to trap any fuel from melt water. Contaminated snow and sand were removed and placed into spill barrels. The incident was reported to the NT/NU 24 hr spill line and the CIRNAC inspector via phone and email. A copy of the spill report is appended to this report. On August 29, 2024, surface sediment and surface water samples were collected in the vicinity of the spill location to identify and delineate any impacts the spill had on the environment.

The results indicated that one surface water sample, downstream of the spill site, contained petroleum hydrocarbon fractions above the applicable water quality guidelines for the protection of freshwater aquatic life. It was noted that the samples were not collected in the appropriate laboratory-prepared glassware for these types of analytical samples and the results may be unreliable. The recommendations were to resample each of the samples taken during 2024 and test again for hydrocarbons in the following season. Further remediation will be informed by the results of this testing. The results from the sediment and surface water testing are appended to this report.

During the 2024 CIRNAC inspection, it was observed that the track-based RC drill had created ruts in some areas of gravel and tundra. The Company is currently working on a plan to remove the any rutting that occurred during the 2024 program and will begin remediation as soon as ground conditions permit.

9 Waste Disposal

All combustible wastes were incinerated on site using a batch feed dual-chamber controlled air incinerator or removed from site for disposal if incineration was not practicable. Any residual waste (ash) was sealed in 5-gallon metal pails for disposal.

Grey water from the kitchen and each dry was piped to excavated sumps behind the buildings and over 100 m from the nearest water body. A grease trap was used for the kitchen sump. The trap was emptied as needed and the contents were sealed in 5-gallon pails for proper disposal. The grease trap was removed from site at the end of the 2024 program. No leaks or overflows were observed in any of the sumps.

Pacto toilets were used to collect sewage. All pacto bags were removed from the camp in sealed 5-gallon plastic pails for disposal. The Company hopes to use the incinerator for disposal of pacto bags during subsequent seasons.

10 Inspections

An inspection was performed by CIRNAC officers Joseph Monteith, Joyce Demars, and Sean Nowdluk Noble on July 22, 2024, with compliments given to numerous improvements from the previous 2023 inspection. Special attention was given to the diesel spill incident which occurred in late June 2024. The inspectors were satisfied with the handling and management of the incident.

During the inspection of the drilling areas, it was observed that the track-based RC drill had created ruts in some areas of gravel and tundra. The inspectors suggested two potential solutions: a formal amendment to the existing land use permit to allow ground-based drill movement, or the development of a remediation plan to address the rutting. The Company is currently working on a plan to remove tany rutting that occurred during the 2024 program and will begin remediation as soon as ground conditions permit.

Additionally, it was decided to remove the track-based drill from site and rely solely on helicopter-based drills for all future exploration activities.

Delivery of the final inspection report is pending.

11 2025 Work Plan

The 2025 Aston Bay Property exploration program is anticipated to include a reverse circulation (RC) drilling program of up to 8,000 metres, utilizing one drill, a diamond drilling program of up to 5,000 metres, utilizing one or two drills, and regional sampling. The drilling program will focus on the Storm Central Graben area. The average hole depth is expected to be approximately 150 m, up to a maximum anticipated length of 700 m. The 2025 exploration program is projected to start as early as June and continue until as late as September. Similar programs are anticipated for three to four subsequent years.

All exploration activities will be helicopter supported and based out of Storm Camp, located along the Aston River at approximately 73°39’23” N latitude and 94°27’07” W longitude. The camp site is located on an elevated gravel bar in the Aston River valley. It includes an airstrip suitable for landing a Twin Otter. Camp infrastructure includes 10 plywood buildings and 24 Weatherport tents, built upon wooden platforms.

Approximately 163,800 L (~799 drums) of fuel will be stored at the current fuel cache locations, adjacent to camp, the airstrip and the sealift laydown. The caches will be primarily diesel and jet fuel, with small quantities of gasoline and propane. All fuel will be stored within secondary containment. All fuel caches will be located a minimum distance of 31 metres from the normal high-water mark of any water body.

With proper design and execution, environmental impacts of the proposed exploration program are expected to be minimal. Plans are continuously being updated for storage and handling of fuel, waste management, reclamation, and wildlife management, all with the goal of ensuring minimal impact on the environment.

Appendix 1 2024 Aston Bay Property Mineral Claims and Prospecting Permits

Mineral Claims		
Tenure Number	**Area (ha)**	**Owner Name**
100054	981.46	Aston Bay Holdings Inc. (100%)
100055	600.49	Aston Bay Holdings Inc. (100%)
100056	419.14	Aston Bay Holdings Inc. (100%)
100057	1090.55	Aston Bay Holdings Inc. (100%)
100058	1091.89	Aston Bay Holdings Inc. (100%)
100059	1093.27	Aston Bay Holdings Inc. (100%)
100060	273.53	Aston Bay Holdings Inc. (100%)
100061	602.77	Aston Bay Holdings Inc. (100%)
100062	1133.67	Aston Bay Holdings Inc. (100%)
100063	1090.55	Aston Bay Holdings Inc. (100%)
100064	1091.89	Aston Bay Holdings Inc. (100%)
100065	1093.27	Aston Bay Holdings Inc. (100%)
100066	766.17	Aston Bay Holdings Inc. (100%)
100067	785.38	Aston Bay Holdings Inc. (100%)
100068	1097.05	Aston Bay Holdings Inc. (100%)
100069	999.67	Aston Bay Holdings Inc. (100%)
100070	1000.92	Aston Bay Holdings Inc. (100%)
100071	1002.16	Aston Bay Holdings Inc. (100%)
100072	1003.41	Aston Bay Holdings Inc. (100%)
100073	803.62	Aston Bay Holdings Inc. (100%)
100074	1005.63	Aston Bay Holdings Inc. (100%)
100075	1090.55	Aston Bay Holdings Inc. (100%)
100076	1091.92	Aston Bay Holdings Inc. (100%)
100077	1093.27	Aston Bay Holdings Inc. (100%)
100078	1094.63	Aston Bay Holdings Inc. (100%)
100079	876.67	Aston Bay Holdings Inc. (100%)
100080	1097.05	Aston Bay Holdings Inc. (100%)
100081	1090.55	Aston Bay Holdings Inc. (100%)
100082	1091.93	Aston Bay Holdings Inc. (100%)
100083	1093.27	Aston Bay Holdings Inc. (100%)
100084	1094.63	Aston Bay Holdings Inc. (100%)
100085	876.67	Aston Bay Holdings Inc. (100%)
100086	1097.05	Aston Bay Holdings Inc. (100%)
100087	1002.17	Aston Bay Holdings Inc. (100%)
100088	1003.41	Aston Bay Holdings Inc. (100%)

Mineral Claims		
Tenure Number	**Area (ha)**	**Owner Name**
100089	803.62	Aston Bay Holdings Inc. (100%)
100090	1005.63	Aston Bay Holdings Inc. (100%)
100091	1093.27	Aston Bay Holdings Inc. (100%)
100092	1094.63	Aston Bay Holdings Inc. (100%)
100093	876.67	Aston Bay Holdings Inc. (100%)
100094	1097.05	Aston Bay Holdings Inc. (100%)
100095	1094.63	Aston Bay Holdings Inc. (100%)
100096	1004.64	Aston Bay Holdings Inc. (100%)
100097	804.61	Aston Bay Holdings Inc. (100%)
100098	1095.97	Aston Bay Holdings Inc. (100%)
100099	1097.33	Aston Bay Holdings Inc. (100%)
100100	1091.92	Aston Bay Holdings Inc. (100%)
100588	1412.78	Aston Bay Holdings Inc. (100%)
100589	1325.45	Aston Bay Holdings Inc. (100%)
100595	1428.14	Aston Bay Holdings Inc. (100%)
100604	1428.14	Aston Bay Holdings Inc. (100%)
100624	1103.05	Aston Bay Holdings Inc. (100%)
100674	1416.63	Aston Bay Holdings Inc. (100%)
100708	1193.48	Aston Bay Holdings Inc. (100%)
100709	1101.67	Aston Bay Holdings Inc. (100%)
100723	1430.25	Aston Bay Holdings Inc. (100%)
100724	1320.23	Aston Bay Holdings Inc. (100%)
100828	1179.96	Aston Bay Holdings Inc. (100%)
100829	1179.93	Aston Bay Holdings Inc. (100%)
100830	1179.93	Aston Bay Holdings Inc. (100%)
100831	1413.98	Aston Bay Holdings Inc. (100%)
100956	1486.64	Aston Bay Holdings Inc. (100%)
100957	1176.68	Aston Bay Holdings Inc. (100%)
100958	1324.78	Aston Bay Holdings Inc. (100%)
101027	904.21	Aston Bay Holdings Inc. (100%)
101028	433.29	Aston Bay Holdings Inc. (100%)
101029	1514.81	Aston Bay Holdings Inc. (100%)
101030	650.19	Aston Bay Holdings Inc. (100%)
101031	721.38	Aston Bay Holdings Inc. (100%)
101032	1314.74	Aston Bay Holdings Inc. (100%)
101033	1169.08	Aston Bay Holdings Inc. (100%)
101034	1400.93	Aston Bay Holdings Inc. (100%)
101035	341.45	Aston Bay Holdings Inc. (100%)

Mineral Claims		
Tenure Number	**Area (ha)**	**Owner Name**
101036	1176.68	Aston Bay Holdings Inc. (100%)
101037	1175.21	Aston Bay Holdings Inc. (100%)
101038	1408.33	Aston Bay Holdings Inc. (100%)
101039	1175.21	Aston Bay Holdings Inc. (100%)
101040	1300.0	Aston Bay Holdings Inc. (100%)
101041	1428.14	Aston Bay Holdings Inc. (100%)
101042	1191.72	Aston Bay Holdings Inc. (100%)
101043	1432.0	Aston Bay Holdings Inc. (100%)
101044	1194.97	Aston Bay Holdings Inc. (100%)
101045	1435.9	Aston Bay Holdings Inc. (100%)
101046	1318.28	Aston Bay Holdings Inc. (100%)
101047	1100.05	Aston Bay Holdings Inc. (100%)
101048	1321.85	Aston Bay Holdings Inc. (100%)
101049	1103.05	Aston Bay Holdings Inc. (100%)
101050	1325.45	Aston Bay Holdings Inc. (100%)
101051	1194.97	Aston Bay Holdings Inc. (100%)
101052	1435.9	Aston Bay Holdings Inc. (100%)
101053	1438.01	Aston Bay Holdings Inc. (100%)
101054	1438.01	Aston Bay Holdings Inc. (100%)
101055	1214.25	Aston Bay Holdings Inc. (100%)
101056	1210.95	Aston Bay Holdings Inc. (100%)
101057	1098.71	Aston Bay Holdings Inc. (100%)
101058	1188.77	Aston Bay Holdings Inc. (100%)
101059	1190.23	Aston Bay Holdings Inc. (100%)
101060	1428.13	Aston Bay Holdings Inc. (100%)
101061	1430.25	Aston Bay Holdings Inc. (100%)
101062	1193.48	Aston Bay Holdings Inc. (100%)
101063	1194.97	Aston Bay Holdings Inc. (100%)
101064	1435.9	Aston Bay Holdings Inc. (100%)
101065	1430.23	Aston Bay Holdings Inc. (100%)
101066	1193.48	Aston Bay Holdings Inc. (100%)
101067	1194.95	Aston Bay Holdings Inc. (100%)
101068	1435.89	Aston Bay Holdings Inc. (100%)
101069	1236.53	Aston Bay Holdings Inc. (100%)
101070	1428.12	Aston Bay Holdings Inc. (100%)
101071	1191.72	Aston Bay Holdings Inc. (100%)
101072	1432.0	Aston Bay Holdings Inc. (100%)
101073	1428.12	Aston Bay Holdings Inc. (100%)

Mineral Claims		
Tenure Number	**Area (ha)**	**Owner Name**
101100	1191.72	Aston Bay Holdings Inc. (100%)
101101	1432.0	Aston Bay Holdings Inc. (100%)
101102	1194.95	Aston Bay Holdings Inc. (100%)
101103	1435.9	Aston Bay Holdings Inc. (100%)
101104	1198.2	Aston Bay Holdings Inc. (100%)
101105	1198.2	Aston Bay Holdings Inc. (100%)
102593	1716.87	Apex Geoscience Ltd. (100%)
102594	1714.01	Apex Geoscience Ltd. (100%)
102595	1711.14	Apex Geoscience Ltd. (100%)
102596	1699.66	Apex Geoscience Ltd. (100%)
102597	1212.26	Apex Geoscience Ltd. (100%)
102598	1228.55	Apex Geoscience Ltd. (100%)
102599	1694.73	Apex Geoscience Ltd. (100%)
102600	967.12	Apex Geoscience Ltd. (100%)
102601	1451.57	Apex Geoscience Ltd. (100%)
102602	966.19	Apex Geoscience Ltd. (100%)
102603	1447.52	Apex Geoscience Ltd. (100%)
102604	1686.11	Apex Geoscience Ltd. (100%)
102605	1683.2	Apex Geoscience Ltd. (100%)
102606	1680.34	Apex Geoscience Ltd. (100%)
102607	1702.55	Apex Geoscience Ltd. (100%)
102608	1705.41	Apex Geoscience Ltd. (100%)
102609	1708.28	Apex Geoscience Ltd. (100%)
102619	1224.68	Apex Geoscience Ltd. (100%)
102620	1502.65	Apex Geoscience Ltd. (100%)
102621	1666.56	Apex Geoscience Ltd. (100%)
102622	1664.1	Apex Geoscience Ltd. (100%)
102623	1661.67	Apex Geoscience Ltd. (100%)
102624	1119.01	Apex Geoscience Ltd. (100%)
102625	1568.9	Apex Geoscience Ltd. (100%)
102626	1571.68	Apex Geoscience Ltd. (100%)
102627	1574.22	Apex Geoscience Ltd. (100%)
102628	1576.87	Apex Geoscience Ltd. (100%)
102629	1579.51	Apex Geoscience Ltd. (100%)
102630	677.75	Apex Geoscience Ltd. (100%)
102631	1244.61	Apex Geoscience Ltd. (100%)
102632	907.73	Apex Geoscience Ltd. (100%)
102633	796.64	Apex Geoscience Ltd. (100%)

Mineral Claims		
Tenure Number	**Area (ha)**	**Owner Name**
102890	1364.29	Aston Bay Holdings Inc. (100%)
102891	1809.6	Aston Bay Holdings Inc. (100%)
102892	1812.68	Aston Bay Holdings Inc. (100%)
102893	1815.81	Aston Bay Holdings Inc. (100%)
102894	1633.18	Aston Bay Holdings Inc. (100%)
102895	966.2	Aston Bay Holdings Inc. (100%)
102896	1581.09	Aston Bay Holdings Inc. (100%)
102897	1788.06	Aston Bay Holdings Inc. (100%)
102898	1492.03	Aston Bay Holdings Inc. (100%)
102899	1830.41	Aston Bay Holdings Inc. (100%)
102900	1833.51	Aston Bay Holdings Inc. (100%)
102901	1836.59	Aston Bay Holdings Inc. (100%)
102902	1839.68	Aston Bay Holdings Inc. (100%)
102903	1842.76	Aston Bay Holdings Inc. (100%)
102904	1845.86	Aston Bay Holdings Inc. (100%)
102905	1848.94	Aston Bay Holdings Inc. (100%)
102906	1624.74	Aston Bay Holdings Inc. (100%)
102907	1772.45	Aston Bay Holdings Inc. (100%)
102908	1812.71	Aston Bay Holdings Inc. (100%)
102909	1167.31	Aston Bay Holdings Inc. (100%)
102910	1671.03	Aston Bay Holdings Inc. (100%)
102911	1831.96	Aston Bay Holdings Inc. (100%)
102912	1838.14	Aston Bay Holdings Inc. (100%)
102913	1844.31	Aston Bay Holdings Inc. (100%)
Claims Total:	220,248.74 ha	

Appendix 2 2024 Aston Bay Property Photos

Photo 1. Storm Camp August 2024 (aerial looking west).

Photo 2. Storm Camp fuel cache (looking west).

Photo 3. Storm Camp drilling supplies and second fuel cache (aerial).

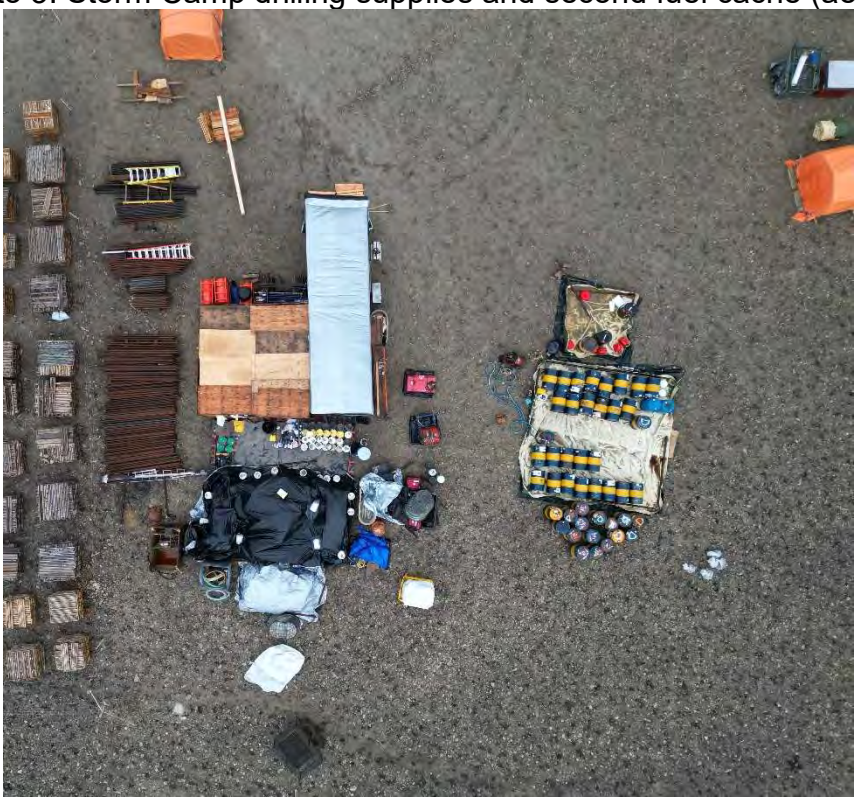


Photo 4. Sealift laydown with covered fuel berms (aerial)

Appendix 3 2024 Storm Camp Water Usage

Date	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Total Use (m^3)
	Volume (gal)	Volume (gal)	Volume (gal)	Volume (m^3)	Volume (m^3)	Volume (m^3)	
11-Apr-24	-	-	540	-	-	2.04	2.04
12-Apr-24	-	-	-	-	-	-	-
13-Apr-24	-	-	-	-	-	-	-
14-Apr-24	-	-	-	-	-	-	-
15-Apr-24	-	-	-	-	-	-	-
16-Apr-24	-	-	720	-	-	2.73	2.73
17-Apr-24	-	-	-	-	-	-	-
18-Apr-24	-	-	-	-	-	-	-
19-Apr-24	-	-	-	-	-	-	-
20-Apr-24	-	-	540	-	-	2.04	2.04
21-Apr-24	-	-	-	-	-	-	-
22-Apr-24	-	-	-	-	-	-	-
23-Apr-24	-	-	540	-	-	2.04	2.04
24-Apr-24	-	-	-	-	-	-	-
25-Apr-24	-	-	360	-	-	1.36	1.36
26-Apr-24	-	-	-	-	-	-	-
27-Apr-24	-	-	540	-	-	2.04	2.04
28-Apr-24	-	-	-	-	-	-	-
29-Apr-24	-	-	540	-	-	2.04	2.04
30-Apr-24	-	-	-	-	-	-	-
1-May-24	-	-	-	-	-	-	-
2-May-24	-	-	-	-	-	-	-
3-May-24	-	-	540	-	-	2.04	2.04
4-May-24	-	-	-	-	-	-	-
5-May-24	-	-	720	-	-	2.73	2.73
6-May-24	-	-	-	-	-	-	-
7-May-24	-	-	720	-	-	2.73	2.73
8-May-24	-	-	-	-	-	-	-
9-May-24	-	-	540	-	-	2.04	2.04
10-May-24	-	-	-	-	-	-	-
11-May-24	-	-	540	-	-	2.04	2.04
12-May-24	-	-	-	-	-	-	-
13-May-24	-	-	-	-	-	-	-
14-May-24	-	-	540	-	-	2.04	2.04

Date	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Total Use (m^3)
	Volume (gal)	Volume (gal)	Volume (gal)	Volume (m^3)	Volume (m^3)	Volume (m^3)	
15-May-24	-	-	-	-	-	-	-
16-May-24	-	-	-	-	-	-	-
17-May-24	-	-	540	-	-	2.04	2.04
18-May-24	-	-	360	-	-	1.36	1.36
19-May-24	-	-	-	-	-	-	-
20-May-24	-	-	-	-	-	-	-
21-May-24	-	-	720	-	-	2.73	2.73
22-May-24	-	-	-	-	-	-	-
21-Jun-24	1500	-	-	5.68	-	-	5.68
22-Jun-24	-	-	-	-	-	-	-
23-Jun-24	-	-	-	-	-	-	-
24-Jun-24	750	-	-	2.84	-	-	2.84
25-Jun-24	1000	-	-	3.79	-	-	3.79
26-Ju-24	-	-	-	-	-	-	-
27-Jun-24	1000	-	-	2.65	-	-	2.65
28-Jun-24	700	-	-	3.79	-	-	3.79
29-Jun-24	1000	-	-	3.79	-	-	3.79
30-Jun-24	2050	-	-	7.76	-	-	7.76
1-Jul-24	710	-	-	2.69	-	-	2.69
2-Jul-24	500	-	-	1.89	-	-	1.89
3-Jul-24	-	-	-	-	-	-	-
4-Jul-24	850	-	-	3.22	-	-	3.22
5-Jul-24	1150	-	-	4.35	-	-	4.35
6-Jul-24	-	-	-	-	-	-	-
7-Jul-24	-	-	-	-	-	-	-
8-Jul-24	900	-	-	3.41	-	-	3.41
9-Jul-24	-	-	-	-	-	-	-
10-Jul-24	-	-	-	-	-	-	-
11-Jul-24	-	-	-	-	-	-	-
12-Jul-24	-	-	-	-	-	-	-
13-Jul-24	-	-	-	-	-	-	-
14-Jul-24	1320	-	-	5.00	-	-	5.00
15-Jul-24	-	-	-	-	-	-	-
16-Jul-24	1150	-	-	4.35	-	-	4.35
17-Jul-24	2070	-	-	7.84	-	-	7.84
18-Jul-24	1320	-	-	5.00	-	-	5.00
19-Jul-24	-	-	-	-	-	-	-

Date	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Total Use (m^3)
	Volume (gal)	Volume (gal)	Volume (gal)	Volume (m^3)	Volume (m^3)	Volume (m^3)	
20-Jul-24	1540	-	-	5.83	-	-	5.83
21-Jul-24	1320	-	-	5.00	-	-	5.00
22-Jul-24	1320	-	-	5.00	-	-	5.00
23-Jul-24	1320	-	-	5.00	-	-	5.00
24-Jul-24	1320	-	-	5.00	-	-	5.00
25-Jul-24	1320	-	-	5.00	-	-	5.00
26-Jul-24	1320	-	-	5.00	-	-	5.00
27-Jul-24	1540	-	-	5.83	-	-	5.83
28-Jul-24	2480	-	-	9.39	-	-	9.39
29-Jul-24	720	-	-	2.73	-	-	2.73
30-Jul-24	1320	-	-	5.00	-	-	5.00
31-Jul-24	570	-	-	2.16	-	-	2.16
1-Aug-24	1250	-	-	4.73	-	-	4.73
2-Aug-24	750	-	-	2.84	-	-	2.84
3-Aug-24	1300	-	-	4.92	-	-	4.92
4-Aug-24	2000	-	-	7.57	-	-	7.57
5-Aug-24	2000	-	-	7.57	-	-	7.57
6-Aug-24	2000	-	-	7.57	-	-	7.57
7-Aug-24	1700	-	-	6.44	-	-	6.44
8-Aug-24	1200	-	-	4.54	-	-	4.54
9-Aug-24	1200	-	-	4.54	-	-	4.54
10-Aug-24	1350	-	-	5.11	-	-	5.11
11-Aug-24	1200	-	-	4.54	-	-	4.54
12-Aug-24	1100	-	-	4.16	-	-	4.16
13-Aug-24	1300	-	-	4.92	-	-	4.92
14-Aug-24	1100	-	-	4.16	-	-	4.16
15-Aug-24	2500	-	-	9.46	-	-	9.46
16-Aug-24	3400	-	-	12.87	-	-	12.87
17-Aug-24	500	-	-	1.89	-	-	1.89
18-Aug-24	1020	-	-	3.86	-	-	3.86
19-Aug-24	1020	-	-	3.86	-	-	3.86
20-Aug-24	1020	-	-	3.86	-	-	3.86
21-Aug-24	1020	-	-	3.86	-	-	3.86
22-Aug-24	750	-	-	2.84	-	-	2.84
23-Aug-24	1020	-	-	3.86	-	-	3.86
24-Aug-24	1020	-	-	3.86	-	-	3.86
25-Aug-24	1320	-	-	5.00	-	-	5.00

Date	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Tank 1 (250 gal)	Tank 2 (350 gal)	Fly Tank (250 gal)	Total Use (m^3)
	Volume (gal)	Volume (gal)	Volume (gal)	Volume (m^3)	Volume (m^3)	Volume (m^3)	
26-Aug-24	2040	-	-	7.72	-	-	7.72
27-Aug-24	1320	-	-	5.00	-	-	5.00
28-Aug-24	1320	-	-	5.00	-	-	5.00
29-Aug-24	1320	-	-	5.00	-	-	5.00
30-Aug-24	1320	-	-	5.00	-	-	5.00
31-Aug-24	1320	-	-	5.00	-	-	5.00
1-Sep-24	1320	-	-	5.00	-	-	5.00
2-Sep-24	1320	-	-	5.00	-	-	5.00
3-Sep-24	1320	-	-	5.00	-	-	5.00
4-Sep-24	1320	-	-	5.00	-	-	5.00
5-Sep-24	2290	-	-	8.67	-	-	8.67
6-Sep24	1320	-	-	5.00	-	-	5.00
7-Sep-24	1320	-	-	5.00	-	-	5.00
8-Sep-24	1320	-	-	5.00	-	-	5.00
9-Sep-24	1320	-	-	5.00	-	-	5.00
10-Sep-24	1320	-	-	5.00	-	-	5.00
TOTAL	90,910	0	9,000	344.21	0	34.02	378.25
Daily Average	751.322	0	74.38	2.85	0	0.28	3.13
Total Used	**99,910 gal / 378.25 m^3**						

Appendix 4 Aston Bay Spill Report 2024

Appendix 5 Fuel Spill Assessment Memo

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS

Northwest Territories · Nunavut · Canada · Inuvialuit Land Administration

NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 ● Email: spills@gov.nt.ca

REPORT LINE USE ONLY

A	Report Date: 06 / 24 / 24	Report Time: 6:30 pm	☐ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	**Report Number:**
B	Occurrence Date: 06 / 24 / 24	Occurrence Time: 4:00 pm		
C	Land Use Permit Number (if applicable): N2021C0004		Water Licence Number (if applicable): 2BE-STO2025	
D	Geographic Place Name or Distance and Direction from the Named Location: Aston Bay, Sommerset Island		Region: ☐ NT ☐ Nunavut ☐ Adjacent Jurisdiction or Ocean	
E	Latitude: 73 Degrees 39 Minutes 23 Seconds		Longitude: 94 Degrees 27 Minutes 7 Seconds	
F	Responsible Party or Vessel Name: Aston Bay Holdings Ltd.		Responsible Party Address or Office Location: 204-80 Richmond Street West, Toronto ON	
G	Any Contractor Involved: Apex Geoscience Ltd		Contractor Address or Office Location: 100-11450 160 St NW, Edmonton AB	
H	Product Spilled: ☐ Potential Spill Diesel	Quantity in Litres, Kilograms or Cubic Metres: 205 L	U.N. Number: 1202	
I	Spill Source: Diesel 205L drum fell from helicopter	Spill Cause: Barrel sling failure	Area of Contamination in Square Metres: 25	
J	Factors Affecting Spill or Recovery:	Describe Any Assistance Required:	Hazards to Persons, Property or Environment: potential contamination of melt water at edges of frozen channel	
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials: One 205L diesel drum fell from barrel slings on snow in inactive channel of the Aston river, ~2m elevation above flowing river, approximatelly 50-60 meters south from the river. Diesel was spilled from the drum, which was damaged on impact. All contaminated snow, ice and soil was removed and placed in spill barrels. Booms were placed 20 m downstream from three spill kits spread across the channel width in case of any melt water at the edges of the channel. The channel is still frozen in the center - a trench was dug through the ice downstream to place the booms.			

L	Reported to Spill Line by: Volodymyr Zhuk	Position: Senior Geologist	Employer: Apex Geoscience Ltd	Location Calling From: Storm Camp Aston Bay	Telephone: (604) 561-9931
M	Any Alternate Contact: Chris Livingstone	Position: Senior Geologist	Employer: Apex Geoscience Ltd	Alternate Contact Location: Vancouver, BC	Alternate Telephone: (778) 847-7450

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:

Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ AANDC ☐ NEB ☐ Other: _____

Significance: ☐ Minor ☐ Major ☐ Unknown

File Status: ☐ Open ☐ Closed

Agency:	**Contact Name:**	**Contact Time:**	**Remarks:**
Lead Agency:			
First Support Agency:			
Second Support Agency:			
Third Support Agency:			

Ausenco Sustainability ULC
401 – 9 Avenue SW, Suite 1430
Calgary, AB T2P 3C5
T: 403.264.0671
F: 403.264.0670
ausenco.com

December 4, 2024
File No. 107431-02

American West Metals
Level 2, Suite 2, 28 Ord Street
West Perth WA 6005

Attention: Rocky Pray, VP Operations

Dear Mr. Pray,

Re: Fuel Spill Assessment Memo

1.0 Background

Ausenco Sustainability ULC. (Ausenco) is pleased to submit the following letter to American West Metals (AWM), which summarizes the results of sampling conducted in August 2024. Following the release of approximately 205 litres (L) of diesel fuel from a drum suspended by a helicopter on June 24, 2024. Ausenco was retained by AWM to characterize the affected soil and surface water.

The fuel spill occurred near the north end of Somerset Island, and is documented in spill report 2024238, included in **Attachment A**. The site of the spill and surrounding area is currently zoned as Natural Areas.

The objective of the soil spill assessment work was to determine if residual hydrocarbon impacts remain in soil and surface water at the site at levels above relevant guideline criteria.

2.0 Regulatory Framework

The Canadian Council of Ministers of the Environment (CCME) Tier 1 Soil Guidelines were used to characterize the sampled soils and sediment. Grain size was determined by field observations and texturization, indicating that the soil at the site is classified as coarse-grained. The current and expected future land use of the site and surrounding area is parkland. As such, the following soil guidelines were considered applicable:

- CCME Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, 2004.
- CCME Canada-Wide Standards for Petroleum Hydrocarbons in Soil, 2001 (Revised 2008).

The following surface water guidelines were considered applicable:

- CCME Water Quality Guidelines for the Protection of Freshwater Aquatic Life, 2024
- Guidelines for Canadian Drinking Water Quality, 2024.

All soil samples were collected above 3.0 metres below ground (mbg) and were therefore categorised as surface soil.

3.0 Summary of Sampling and Analytical Results

Prior to commencing the work, Ausenco prepared a site-specific health and safety plan.

On August 29, 2024, Ausenco personnel sampled in the vicinity of the original spill location to identify and delineate impacts as best as practically possible while the necessary support infrastructure and services remained on Site. Samples were collected from the surface soils and sediment to a maximum depth of 0.1 mbg. Surface water samples were collected from the adjacent waterway. Visual indicators were used to identify areas with suspected impacts in soil and determine samples selected for laboratory submission. The samples were collected by grab sampling directly from the ground and surface water. Photographs of the sampling activities are included in **Attachment B**.

Representative samples collected during the investigation program were submitted to Bureau Veritas Laboratories in Calgary, AB for laboratory analysis. Soil samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), petroleum hydrocarbon (PHC) fractions F1 to F4 and volatile organic compounds (VOCs). Surface water samples were analyzed for BTEX, PHC fractions F1 to F2 and VOCs.

The laboratory analysis indicated that soil BTEX, petroleum hydrocarbon fractions, as well as VOC parameters met the applicable guidelines and concentrations were below the laboratory detection limit for all parameters analysed.

The laboratory analysis indicated that BTEX, petroleum hydrocarbon fractions, as well as VOC parameter concentrations in surface water met the applicable guidelines and concentrations were below the laboratory detection limit for parameters analysed, with the exception of PHC fraction F2. Sample 24-AR-2-DS collected from sediment downstream of the former spill site, which was found to have an F2 concentration of 0.48 mg/L, which exceeded the CCME Water Quality Guidelines for the Protection of Freshwater Aquatic Life concentration of 0.110 mg/L. Analytical results for the August 29, 2024 soil and surface water samples are presented in **Tables 1 and 2 (Attachment C).** The laboratory certificate of analysis is presented in **Attachment D**.

Due to the remote site location, soil samples were collected in soil bags and were not field-preserved using methanol, as is the standard for soil samples intended for BTEX, PHC and VOC analysis. Surface water samples were collected using glass jars available at the site, but not laboratory-prepared glassware. For these reasons, the results are not considered reliable as the parameters analysed may be biased low.

4.0 Conclusions and Recommendations

Analytical results for the soil samples collected on August 29, 2024, were less than the applicable guidelines for coarse-grained Parkland soils. Apart from PHC F2 in sample 24-AR-2-DS, results for the surface water samples collected on August 29, 2024, were less than the applicable water quality guidelines.

It is the opinion of Ausenco that confirmation work be conducted during the 2025 field season to ensure that the 2024 sample results are reliable. CCME standard sampling procedures are recommended, including methanol field preservation of soil samples, use of laboratory-approved bottle ware, and adherence to sample holding time recommendations. Ausenco recommends collecting new soil samples from the five 2024 sampling locations, as well as two surface water samples: one upstream and one downstream of the spill location.

In the future, laboratory supplied soil and water sampling bottles should be available at site in the event of spill incidents. Site geologists should receive training in spill follow-up, especially in the subject area of approved methods of water and soil sample collection for the purpose of hydrocarbon analyses.

This letter has been prepared by Ausenco, based on fieldwork conducted by Ausenco, for sole benefit and use by AWM. In performing this Work, Ausenco has relied in good faith on information provided by others and has assumed that the information provided by those individuals is both complete and accurate. This Work was performed to current industry standard practice for similar environmental work, within the relevant jurisdiction and same locale, with sample preservation procedures altered due to site location and request project timelines as described in the sampling summary above. The findings presented herein should be considered within the context of the scope of work and project terms of reference; further, the findings are time sensitive and are considered valid only at the time the Report was produced. The conclusions and recommendations contained in this Report are based upon the applicable standards, regulations, and legislation existing at the time the Report was produced; any changes in the regulatory regime may alter the conclusions and/or recommendations.

We sincerely appreciate the opportunity to have assisted you with this project. If there are any questions or concerns, please contact either of the undersigned.

Report prepared by:
Ausenco Sustainability ULC

Report reviewed by:
Ausenco Sustainability ULC

REGISTERED PROFESSIONAL GEOSCIENTIST
K.D. MARKVOORT
LICENSEE
L5757
NT/NU
Dec. 12, 2024

Amanda Chalmers, B.Sc., P.Ag.
Director, Projects - SAR
403.542.6326
amanda.chalmers@ausenco.com

Kim Markvoort, P.Geo.
Project Manager
403.801.7263
kim.markvoort@ausenco.com

cc. Sarah Fruin, James Millard

Attachment A

Spill Report

spill-2024238

Monday, June 24, 2024 - 18:10

Spill Status

Lead Agency: CIRNAC - Crown-Indigenous Relations and Northern Affairs Canada
Occurance Date/Time: Monday, June 24, 2024 - 16:00
Received Method: Phone
Involved Parties Type: Other
Potential Spill: No

Spill Information

Spill Region: Baffin
Spill Location Description: Somerset Island
Geolocation: Geolocation is 73.656389, -94.451966292346
Spill Source: Drum or Barrel
Spill Cause: Breakage
Product Spilled: Petroleum - fuel oil (jet A, diesel, turbo A, heat)
Spill Quantity: 205.00
Measurement: Liters
Area of Contamination: 25.00 sq m

Supporting Information

Land Use Permit Number: N2021C0004
Water User Permit Number: 2BE-STO2025
U.N. Number: 1202

Reporter Information

Reporting Date and Time: Monday, June 24, 2024 - 18:10

Attachment B

Site Photographs

Photo 1 24-AR-2-S1 sample site (at marked spill location) on August 29, 2024.

Photo 2 24-AR-2-S2 sample site on August 29, 2024.

Photo 3 24-AR-2-S3 sample site on August 29, 2024.

Photo 4 24-AR-2-S4 sample site on August 29, 2024.

Photo 5 Example of surface discolouration at 24-AR-2-S4 on August 29, 2024.

Photo 6 24-AR-2-S5 sample site on August 29, 2024.

Attachment C

Tables

Table 2 Soil Analytical Results - Petroleum Hydrocarbons BTEX F1-F4

			Field_ID	24-AR-2-S1	24-AR-2-S2	24-AR-2-S3	24-AR-2-S4	24-AR-2-S5
			Sample_Depth_Range	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
			Sample_Date_Time	29-Aug-24	29-Aug-24	29-Aug-24	29-Aug-24	29-Aug-24
Chemical Group	**Chemical Name**	**Units**	**CCME Soil Guidelines Coarse-grained Soil Residential/Parkland Land Use**					
BTEX[1]	Benzene	mg/kg	0.0095	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Toluene	mg/kg	0.37	<0.050	<0.050	<0.050	<0.050	<0.050
	Ethylbenzene	mg/kg	0.082	<0.010	<0.010	<0.010	<0.010	<0.010
	Xylenes	mg/kg	11	<0.045	<0.045	<0.045	<0.045	<0.045
PHCs[2]	F1 (C6-C10)	mg/kg	30	<10	<10	<10	<10	<10
	F2 (>C10-C16)	mg/kg	150	<10	<10	<10	<10	<10
	F3 (>C16-C34)	mg/kg	300	<50	<50	<50	<50	<50
	F4 (>C34)	mg/kg	2800	<50	<50	<50	<50	<50
Volatiles[1]	Bromodichloromethane	mg/kg	-	<0.030	<0.030	<0.030	<0.030	<0.030
	Bromoform	mg/kg	-	<0.050	<0.050	<0.050	<0.050	<0.050
	Bromomethane	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	Carbon tetrachloride	mg/kg	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Chlorobenzene	mg/kg	1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Dibromochloromethane	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	Chloroethane	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	Chloroform	mg/kg	-	<0.010	<0.010	<0.010	<0.010	<0.010
	Chloromethane	mg/kg	-	<0.030	<0.030	<0.030	<0.030	<0.030
	1,2-dibromoethane	mg/kg	-	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	1,2-dichlorobenzene	mg/kg	1	<0.020	<0.020	<0.020	<0.020	<0.020
	1,3-dichlorobenzene	mg/kg	1	<0.020	<0.020	<0.020	<0.020	<0.020
	1,4-dichlorobenzene	mg/kg	1	<0.020	<0.020	<0.020	<0.020	<0.020
	1,1-dichloroethane	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	1,2-dichloroethane	mg/kg	5	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	1,1-dichloroethene	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	cis-1,2-dichloroethene	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	trans-1,2-dichloroethene	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	Dichloromethane	mg/kg	5	<0.030	<0.030	<0.030	<0.030	<0.030
	1,2-dichloropropane	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	cis-1,3-dichloropropene	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	trans-1,3-dichloropropene	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	Methyl methacrylate	mg/kg	-	<0.040	<0.040	<0.040	<0.040	<0.040
	Methyl-tert-butylether (MTBE)	mg/kg	-	<0.030	<0.030	<0.030	<0.030	<0.030
	Styrene	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	1,1,1,2-tetrachloroethane	mg/kg	-	<0.050	<0.050	<0.050	<0.050	<0.050
	1,1,2,2-tetrachloroethane	mg/kg	5	<0.050	<0.050	<0.050	<0.050	<0.050
	Tetrachloroethene	mg/kg	0.01	<0.010	<0.010	<0.010	<0.010	<0.010
	1,2,3-trichlorobenzene	mg/kg	2	<0.040	<0.040	<0.040	<0.040	<0.040
	1,2,4-trichlorobenzene	mg/kg	2	<0.040	<0.040	<0.040	<0.040	<0.040
	1,3,5-trichlorobenzene	mg/kg	2	<0.040	<0.040	<0.040	<0.040	<0.040
	1,1,1-trichloroethane	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	1,1,2-trichloroethane	mg/kg	5	<0.020	<0.020	<0.020	<0.020	<0.020
	Trichloroethene	mg/kg	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Trichlorofluoromethane	mg/kg	-	<0.020	<0.020	<0.020	<0.020	<0.020
	1,2,4-trimethylbenzene	mg/kg	-	<0.50	<0.50	<0.50	<0.50	<0.50
	1,3,5-trimethylbenzene	mg/kg	-	<0.50	<0.50	<0.50	<0.50	<0.50
	Vinyl chloride	mg/kg	-	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030

Notes:
All results expressed in mg/kg (ppm)
< - less than laboratory reportable detection limit
[1] - Canadian Council of Ministers of the Environment, *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health,* 2004
[2] - Canadian Council of Ministers of the Environment, *Canada-Wide Standards for Petroleum Hydrocarbons in Soil* , 2001, Revised 2008

Table 2 Water Analytical Results - Petroleum Hydrocarbons BTEX F1-F4

			Field_ID		24-AR-2-US	24-AR-2-DS
			Sample_Depth_Range		n/a	n/a
			Sample_Date_Time		29-Aug-24	29-Aug-24
Chemical Group	Chemical Name	Units	CCME Water Quality Guidelines for the Protection of Freshwater Aquatic Life[1]	Guidelines for Canadian Drinking Water Quality[2]		
BTEX	Benzene	mg/L	0.370	0.005	<0.00040	<0.00040
	Toluene	mg/L	0.002	0.06	<0.00040	<0.00040
	Ethylbenzene	mg/L	0.090	0.14	<0.00040	<0.00040
	Xylenes	mg/L	0.030	0.09	<0.89	<0.89
PHCs	F1 (C6-C10)	mg/L	0.150	-	<0.10	<0.10
	F2 (>C10-C16)	mg/L	0.110	-	<0.10	**0.48**
Volatiles	Total Trihalomethanes	mg/L	-	0.1	<1.3	<1.3
	Bromodichloromethane	mg/L	-	-	<0.00050	<0.00050
	Bromoform	mg/L	-	-	<0.00050	<0.00050
	Bromomethane	mg/L	-	-	<0.0020	<0.0020
	Carbon tetrachloride	mg/L	0.0133	0.002	<0.00050	<0.00050
	Chlorobenzene	mg/L	0.0013	-	<0.00050	<0.00050
	Dibromochloromethane	mg/L	-	-	<0.0010	<0.0010
	Chloroethane	mg/L	-	-	<0.0010	<0.0010
	Chloroform	mg/L	0.0018	-	<0.00050	<0.00050
	Chloromethane	mg/L	-	-	<0.0020	<0.0020
	1,2-dibromoethane	mg/L	-	-	<0.00020	<0.00020
	1,2-dichlorobenzene	mg/L	0.0007	-	<0.00050	<0.00050
	1,3-dichlorobenzene	mg/L	0.150	-	<0.00050	<0.00050
	1,4-dichlorobenzene	mg/L	0.026	0.005	<0.00050	<0.00050
	1,1-dichloroethane	mg/L	-	-	<0.00050	<0.00050
	1,2-dichloroethane	mg/L	0.100	0.005	<0.00050	<0.00050
	1,1-dichloroethene	mg/L	-	-	<0.00050	<0.00050
	cis-1,2-dichloroethene	mg/L	-	-	<0.00050	<0.00050
	trans-1,2-dichloroethene	mg/L	-	-	<0.00050	<0.00050
	Dichloromethane	mg/L	0.0981	0.05	<0.0020	<0.0020
	1,2-dichloropropane	mg/L	-	-	<0.00050	<0.00050
	cis-1,3-dichloropropene	mg/L	-	-	<0.00050	<0.00050
	trans-1,3-dichloropropene	mg/L	-	-	<0.00050	<0.00050
	Methyl methacrylate	mg/L	-	-	<0.00050	<0.00050
	Methyl-tert-butylether (MTBE)	mg/L	10	0.015	<0.00050	<0.00050
	Styrene	mg/L	0.072	-	<0.00050	<0.00050
	1,1,1,2-tetrachloroethane	mg/L	-	-	<0.0010	<0.0010
	1,1,2,2-tetrachloroethane	mg/L	-	-	<0.0020	<0.0020
	Tetrachloroethene	mg/L	-	-	<0.00050	<0.00050
	1,2,3-trichlorobenzene	mg/L	0.008	-	<0.0010	<0.0010
	1,2,4-trichlorobenzene	mg/L	0.024	-	<0.0010	<0.0010
	1,3,5-trichlorobenzene	mg/L	-	-	<0.00050	<0.00050
	1,1,1-trichloroethane	mg/L	-	-	<0.00050	<0.00050
	1,1,2-trichloroethane	mg/L	-	-	<0.00050	<0.00050
	Trichloroethene	mg/L	-	-	<0.00020	<0.00020
	Trichlorofluoromethane	mg/L	-	-	<0.00050	<0.00050
	1,2,4-trimethylbenzene	mg/L	-	-	<0.00050	<0.00050
	1,3,5-trimethylbenzene	mg/L	-	-	<0.00050	<0.00050
	Vinyl chloride	mg/L	-	0.002	<0.00050	<0.00050

Notes:
All results expressed in mg/L (ppm)
< - less than laboratory reportable detection limit
[1] - Canadian Council of Ministers of the Environment, *Canadian Water Quality Guidelines for the Protection of Aquatic Life* , 2024
[2] - Health Canada, *Guidelines for Canadian Drinking Water Quality Summary Tables* , 2024

Attachment D

Laboratory Certificate

Your Project #: 104371-02
Site Location: ASTON RIVER
Your C.O.C. #: 1OF1

Attention: Laura Pacholski

Ausenco Sustainability Inc.
Suite 1430, 401-9 Avenue
CALGARY, AB
CANADA T2P 3C5

Report Date: 2024/09/17
Report #: R3557162
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C470495
Received: 2024/09/06, 16:15

Sample Matrix: Soil
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1)	5	2024/09/11	2024/09/13	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	5	N/A	2024/09/13		Auto Calc
CCME Hydrocarbons (F2-F4 in soil) (1, 2)	5	2024/09/11	2024/09/12	AB SOP-00036	CCME PHC-CWS m
Moisture (1)	5	N/A	2024/09/12	AB SOP-00002	CCME PHC-CWS m
VOCs in Soil by HS GC/MS (Std List) (1)	5	2024/09/11	2024/09/13	AB SOP-00056	EPA 5021a/8260d m

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 in Water by HS GC/MS/FID (1)	2	N/A	2024/09/11	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	2	N/A	2024/09/12		Auto Calc
CCME Hydrocarbons (F2-F4 in water) (1, 3)	2	2024/09/11	2024/09/11	AB SOP-00037	CCME PHC-CWS m
Total Trihalomethanes Calculation (1)	2	N/A	2024/09/13		Auto Calc
VOCs in Water by HS GC/MS (Std List) (1)	2	N/A	2024/09/11	AB SOP-00056	EPA 5021a/8260d m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Your Project #: 104371-02
Site Location: ASTON RIVER
Your C.O.C. #: 1OF1

Attention: Laura Pacholski

Ausenco Sustainability Inc.
Suite 1430, 401-9 Avenue
CALGARY, AB
CANADA T2P 3C5

Report Date: 2024/09/17
Report #: R3557162
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C470495
Received: 2024/09/06, 16:15

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(3) Silica gel clean up employed.

Encryption Key

Bureau Veritas
17 Sep 2024 11:25:42

Please direct all questions regarding this Certificate of Analysis to:
Danielle Boisvert, Customer Solutions Representative
Email: danielle-andrea.boisvert@bureauveritas.com
Phone# (780)577-7178

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Alberta Environmental laboratory operations.

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Bureau Veritas ID		CUZ594	CUZ595	CUZ596	CUZ597	CUZ598		
Sampling Date		2024/08/29 09:47	2024/08/29 10:01	2024/08/29 10:10	2024/08/29 10:22	2024/08/29 10:40		
COC Number		1OF1	1OF1	1OF1	1OF1	1OF1		
	UNITS	**24-AR-2-S1**	**24-AR-2-S2**	**24-AR-2-S3**	**24-AR-2-S4**	**24-AR-2-S5**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	<10	10	B513166
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	<50	<50	<50	<50	50	B513166
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	<50	<50	<50	50	B513166
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes		B513166
Volatiles								
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	B514370
Toluene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	B514370
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	B514370
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	B514370
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514370
Xylenes (Total)	mg/kg	<0.045	<0.045	<0.045	<0.045	<0.045	0.045	B510231
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	<10	10	B510231
F1 (C6-C10)	mg/kg	<10	<10	<10	<10	<10	10	B514370
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	97	96	98	99	97		B514370
4-Bromofluorobenzene (sur.)	%	92	92	92	92	91		B514370
D10-o-Xylene (sur.)	%	106	108	112	110	110		B514370
D4-1,2-Dichloroethane (sur.)	%	98	97	98	102	101		B514370
O-TERPHENYL (sur.)	%	108	103	104	106	99		B513166

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

AT1 BTEX AND F1-F4 IN WATER (WATER)

Bureau Veritas ID		CUZ592	CUZ593		
Sampling Date		2024/08/29 10:45	2024/08/29 11:07		
COC Number		1OF1	1OF1		
	UNITS	24-AR-2-US	24-AR-2-DS	RDL	QC Batch
Ext. Pet. Hydrocarbon					
F2 (C10-C16 Hydrocarbons)	mg/L	<0.10	0.48	0.10	B511051
F3 (C16-C34 Hydrocarbons)	mg/L	<0.10	<0.10	0.10	B511051
F4 (C34-C50 Hydrocarbons)	mg/L	<0.20	<0.20	0.20	B511051
Volatiles					
Benzene	mg/L	<0.00040	<0.00040	0.00040	B511716
Toluene	mg/L	<0.00040	<0.00040	0.00040	B511716
Ethylbenzene	mg/L	<0.00040	<0.00040	0.00040	B511716
m & p-Xylene	mg/L	<0.00080	<0.00080	0.00080	B511716
o-Xylene	mg/L	<0.00040	<0.00040	0.00040	B511716
Xylenes (Total)	ug/L	<0.89	<0.89	0.89	B510396
F1 (C6-C10) - BTEX	ug/L	<100	<100	100	B510396
F1 (C6-C10)	mg/L	<0.10	<0.10	0.10	B511716
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	98	99		B511716
4-Bromofluorobenzene (sur.)	%	99	98		B511716
D4-1,2-Dichloroethane (sur.)	%	86	87		B511716
O-TERPHENYL (sur.)	%	94	94		B511051
RDL = Reportable Detection Limit					

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

PHYSICAL TESTING (SOIL)

Bureau Veritas ID		CUZ594	CUZ595		CUZ596		CUZ597	CUZ598		
Sampling Date		2024/08/29 09:47	2024/08/29 10:01		2024/08/29 10:10		2024/08/29 10:22	2024/08/29 10:40		
COC Number		1OF1	1OF1		1OF1		1OF1	1OF1		
	UNITS	24-AR-2-S1	24-AR-2-S2	QC Batch	24-AR-2-S3	QC Batch	24-AR-2-S4	24-AR-2-S5	RDL	QC Batch
Physical Properties										
Moisture	%	8.5	12	B513163	20	B513150	13	11	0.30	B513163
RDL = Reportable Detection Limit										

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		CUZ594	CUZ595	CUZ596	CUZ597	CUZ598		
Sampling Date		2024/08/29 09:47	2024/08/29 10:01	2024/08/29 10:10	2024/08/29 10:22	2024/08/29 10:40		
COC Number		1OF1	1OF1	1OF1	1OF1	1OF1		
	UNITS	24-AR-2-S1	24-AR-2-S2	24-AR-2-S3	24-AR-2-S4	24-AR-2-S5	RDL	QC Batch
Volatiles								
Bromodichloromethane	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	B514374
Bromoform	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	B514374
Bromomethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Carbon tetrachloride	mg/kg	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	B514374
Chlorobenzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	B514374
Dibromochloromethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Chloroethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Chloroform	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	B514374
Chloromethane	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	B514374
1,2-dibromoethane	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	B514374
1,2-dichlorobenzene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,3-dichlorobenzene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,4-dichlorobenzene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,1-dichloroethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,2-dichloroethane	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	B514374
1,1-dichloroethene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
cis-1,2-dichloroethene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
trans-1,2-dichloroethene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Dichloromethane	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	B514374
1,2-dichloropropane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
cis-1,3-dichloropropene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
trans-1,3-dichloropropene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Methyl methacrylate	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	B514374
Methyl-tert-butylether (MTBE)	mg/kg	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	B514374
Styrene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,1,1,2-tetrachloroethane	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	B514374
1,1,2,2-tetrachloroethane	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	B514374
Tetrachloroethene	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	B514374
1,2,3-trichlorobenzene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	B514374
1,2,4-trichlorobenzene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	B514374
1,3,5-trichlorobenzene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	B514374

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		CUZ594	CUZ595	CUZ596	CUZ597	CUZ598		
Sampling Date		2024/08/29 09:47	2024/08/29 10:01	2024/08/29 10:10	2024/08/29 10:22	2024/08/29 10:40		
COC Number		1OF1	1OF1	1OF1	1OF1	1OF1		
	UNITS	**24-AR-2-S1**	**24-AR-2-S2**	**24-AR-2-S3**	**24-AR-2-S4**	**24-AR-2-S5**	**RDL**	**QC Batch**
1,1,1-trichloroethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,1,2-trichloroethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
Trichloroethene	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B514374
Trichlorofluoromethane	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B514374
1,2,4-trimethylbenzene	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	B514374
1,3,5-trimethylbenzene	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	B514374
Vinyl chloride	mg/kg	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B514374
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	101	101	102	101	102		B514374
4-Bromofluorobenzene (sur.)	%	96	95	94	96	97		B514374
D10-o-Xylene (sur.)	%	120	122	121	118	118		B514374
D4-1,2-Dichloroethane (sur.)	%	99	99	98	100	98		B514374

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		CUZ592	CUZ593		
Sampling Date		2024/08/29 10:45	2024/08/29 11:07		
COC Number		1OF1	1OF1		
	UNITS	24-AR-2-US	24-AR-2-DS	RDL	QC Batch
Volatiles					
Total Trihalomethanes	ug/L	<1.3	<1.3	1.3	B510134
Bromodichloromethane	mg/L	<0.00050	<0.00050	0.00050	B511722
Bromoform	mg/L	<0.00050	<0.00050	0.00050	B511722
Bromomethane	mg/L	<0.0020	<0.0020	0.0020	B511722
Carbon tetrachloride	mg/L	<0.00050	<0.00050	0.00050	B511722
Chlorobenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
Dibromochloromethane	mg/L	<0.0010	<0.0010	0.0010	B511722
Chloroethane	mg/L	<0.0010	<0.0010	0.0010	B511722
Chloroform	mg/L	<0.00050	<0.00050	0.00050	B511722
Chloromethane	mg/L	<0.0020	<0.0020	0.0020	B511722
1,2-dibromoethane	mg/L	<0.00020	<0.00020	0.00020	B511722
1,2-dichlorobenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,3-dichlorobenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,4-dichlorobenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,1-dichloroethane	mg/L	<0.00050	<0.00050	0.00050	B511722
1,2-dichloroethane	mg/L	<0.00050	<0.00050	0.00050	B511722
1,1-dichloroethene	mg/L	<0.00050	<0.00050	0.00050	B511722
cis-1,2-dichloroethene	mg/L	<0.00050	<0.00050	0.00050	B511722
trans-1,2-dichloroethene	mg/L	<0.00050	<0.00050	0.00050	B511722
Dichloromethane	mg/L	<0.0020	<0.0020	0.0020	B511722
1,2-dichloropropane	mg/L	<0.00050	<0.00050	0.00050	B511722
cis-1,3-dichloropropene	mg/L	<0.00050	<0.00050	0.00050	B511722
trans-1,3-dichloropropene	mg/L	<0.00050	<0.00050	0.00050	B511722
Methyl methacrylate	mg/L	<0.00050	<0.00050	0.00050	B511722
Methyl-tert-butylether (MTBE)	mg/L	<0.00050	<0.00050	0.00050	B511722
Styrene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,1,1,2-tetrachloroethane	mg/L	<0.0010	<0.0010	0.0010	B511722
1,1,2,2-tetrachloroethane	mg/L	<0.0020	<0.0020	0.0020	B511722
Tetrachloroethene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,2,3-trichlorobenzene	mg/L	<0.0010	<0.0010	0.0010	B511722
1,2,4-trichlorobenzene	mg/L	<0.0010	<0.0010	0.0010	B511722

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		CUZ592	CUZ593		
Sampling Date		2024/08/29 10:45	2024/08/29 11:07		
COC Number		1OF1	1OF1		
	UNITS	24-AR-2-US	24-AR-2-DS	RDL	QC Batch
1,3,5-trichlorobenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,1,1-trichloroethane	mg/L	<0.00050	<0.00050	0.00050	B511722
1,1,2-trichloroethane	mg/L	<0.00050	<0.00050	0.00050	B511722
Trichloroethene	mg/L	<0.00020	<0.00020	0.00020	B511722
Trichlorofluoromethane	mg/L	<0.00050	<0.00050	0.00050	B511722
1,2,4-trimethylbenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
1,3,5-trimethylbenzene	mg/L	<0.00050	<0.00050	0.00050	B511722
Vinyl chloride	mg/L	<0.00050	<0.00050	0.00050	B511722
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	102	101		B511722
4-Bromofluorobenzene (sur.)	%	91	91		B511722
D4-1,2-Dichloroethane (sur.)	%	87	87		B511722
RDL = Reportable Detection Limit					

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.3°C

Sample CUZ594 [24-AR-2-S1] : Sample received was not in compliance with CCME sampling requirements for VOC/BTEX/F1 in soil.

Sample CUZ595 [24-AR-2-S2] : Sample received was not in compliance with CCME sampling requirements for VOC/BTEX/F1 in soil.

Sample CUZ596 [24-AR-2-S3] : Sample received was not in compliance with CCME sampling requirements for VOC/BTEX/F1 in soil.

Sample CUZ597 [24-AR-2-S4] : Sample received was not in compliance with CCME sampling requirements for VOC/BTEX/F1 in soil.

Sample CUZ598 [24-AR-2-S5] : Sample received was not in compliance with CCME sampling requirements for VOC/BTEX/F1 in soil.

Results relate only to the items tested.

Bureau Veritas Edmonton: 4326 76 Avenue NW T6B 2H8 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
B511051	VP4	Spiked Blank	O-TERPHENYL (sur.)	2024/09/12		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/09/12		99	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/09/12		99	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/09/12		95	%	60 - 140
B511051	VP4	Method Blank	O-TERPHENYL (sur.)	2024/09/11		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/09/11	<0.10		mg/L	
			F3 (C16-C34 Hydrocarbons)	2024/09/11	<0.10		mg/L	
			F4 (C34-C50 Hydrocarbons)	2024/09/11	<0.20		mg/L	
B511716	RSA	Matrix Spike	1,4-Difluorobenzene (sur.)	2024/09/11		96	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		97	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		83	%	50 - 140
			Benzene	2024/09/11		84	%	50 - 140
			Toluene	2024/09/11		91	%	50 - 140
			Ethylbenzene	2024/09/11		94	%	50 - 140
			m & p-Xylene	2024/09/11		93	%	50 - 140
			o-Xylene	2024/09/11		92	%	50 - 140
			F1 (C6-C10)	2024/09/11		104	%	60 - 140
B511716	RSA	Spiked Blank	1,4-Difluorobenzene (sur.)	2024/09/11		95	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		99	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		82	%	50 - 140
			Benzene	2024/09/11		84	%	60 - 130
			Toluene	2024/09/11		92	%	60 - 130
			Ethylbenzene	2024/09/11		97	%	60 - 130
			m & p-Xylene	2024/09/11		96	%	60 - 130
			o-Xylene	2024/09/11		95	%	60 - 130
			F1 (C6-C10)	2024/09/11		114	%	60 - 140
B511716	RSA	Method Blank	1,4-Difluorobenzene (sur.)	2024/09/11		99	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		99	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		86	%	50 - 140
			Benzene	2024/09/11	<0.00040		mg/L	
			Toluene	2024/09/11	<0.00040		mg/L	
			Ethylbenzene	2024/09/11	<0.00040		mg/L	
			m & p-Xylene	2024/09/11	<0.00080		mg/L	
			o-Xylene	2024/09/11	<0.00040		mg/L	
			F1 (C6-C10)	2024/09/11	<0.10		mg/L	
B511716	RSA	RPD	Benzene	2024/09/12	NC		%	30
			Toluene	2024/09/12	NC		%	30
			Ethylbenzene	2024/09/12	NC		%	30
			m & p-Xylene	2024/09/12	NC		%	30
			o-Xylene	2024/09/12	NC		%	30
			F1 (C6-C10)	2024/09/12	NC		%	30
B511722	YPA	Matrix Spike	1,4-Difluorobenzene (sur.)	2024/09/11		102	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		93	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		105	%	50 - 140
			Bromodichloromethane	2024/09/11		97	%	50 - 140
			Bromoform	2024/09/11		109	%	50 - 140
			Bromomethane	2024/09/11		86	%	50 - 140
			Carbon tetrachloride	2024/09/11		95	%	50 - 140
			Chlorobenzene	2024/09/11		99	%	50 - 140
			Dibromochloromethane	2024/09/11		109	%	50 - 140
			Chloroethane	2024/09/11		94	%	50 - 140
			Chloroform	2024/09/11		91	%	50 - 140
			Chloromethane	2024/09/11		78	%	50 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-dibromoethane	2024/09/11		101	%	50 - 140
			1,2-dichlorobenzene	2024/09/11		91	%	50 - 140
			1,3-dichlorobenzene	2024/09/11		91	%	50 - 140
			1,4-dichlorobenzene	2024/09/11		89	%	50 - 140
			1,1-dichloroethane	2024/09/11		89	%	50 - 140
			1,2-dichloroethane	2024/09/11		85	%	50 - 140
			1,1-dichloroethene	2024/09/11		87	%	50 - 140
			cis-1,2-dichloroethene	2024/09/11		96	%	50 - 140
			trans-1,2-dichloroethene	2024/09/11		88	%	50 - 140
			Dichloromethane	2024/09/11		81	%	50 - 140
			1,2-dichloropropane	2024/09/11		92	%	50 - 140
			cis-1,3-dichloropropene	2024/09/11		104	%	50 - 140
			trans-1,3-dichloropropene	2024/09/11		90	%	50 - 140
			Methyl methacrylate	2024/09/11		89	%	50 - 140
			Methyl-tert-butylether (MTBE)	2024/09/11		90	%	50 - 140
			Styrene	2024/09/11		98	%	50 - 140
			1,1,1,2-tetrachloroethane	2024/09/11		104	%	50 - 140
			1,1,2,2-tetrachloroethane	2024/09/11		101	%	50 - 140
			Tetrachloroethene	2024/09/11		95	%	50 - 140
			1,2,3-trichlorobenzene	2024/09/11		86	%	50 - 140
			1,2,4-trichlorobenzene	2024/09/11		87	%	50 - 140
			1,3,5-trichlorobenzene	2024/09/11		92	%	50 - 140
			1,1,1-trichloroethane	2024/09/11		94	%	50 - 140
			1,1,2-trichloroethane	2024/09/11		89	%	50 - 140
			Trichloroethene	2024/09/11		96	%	50 - 140
			Trichlorofluoromethane	2024/09/11		84	%	50 - 140
			1,2,4-trimethylbenzene	2024/09/11		NC	%	50 - 140
			1,3,5-trimethylbenzene	2024/09/11		81	%	50 - 140
			Vinyl chloride	2024/09/11		65	%	50 - 140
B511722	YPA	Spiked Blank	1,4-Difluorobenzene (sur.)	2024/09/11		103	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		92	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		83	%	50 - 140
			Bromodichloromethane	2024/09/11		94	%	60 - 130
			Bromoform	2024/09/11		97	%	60 - 130
			Bromomethane	2024/09/11		74	%	60 - 130
			Carbon tetrachloride	2024/09/11		100	%	60 - 130
			Chlorobenzene	2024/09/11		99	%	60 - 130
			Dibromochloromethane	2024/09/11		101	%	60 - 130
			Chloroethane	2024/09/11		96	%	60 - 130
			Chloroform	2024/09/11		91	%	60 - 130
			Chloromethane	2024/09/11		76	%	60 - 130
			1,2-dibromoethane	2024/09/11		89	%	60 - 130
			1,2-dichlorobenzene	2024/09/11		88	%	60 - 130
			1,3-dichlorobenzene	2024/09/11		90	%	60 - 130
			1,4-dichlorobenzene	2024/09/11		87	%	60 - 130
			1,1-dichloroethane	2024/09/11		87	%	60 - 130
			1,2-dichloroethane	2024/09/11		77	%	60 - 130
			1,1-dichloroethene	2024/09/11		91	%	60 - 130
			cis-1,2-dichloroethene	2024/09/11		91	%	60 - 130
			trans-1,2-dichloroethene	2024/09/11		89	%	60 - 130
			Dichloromethane	2024/09/11		75	%	60 - 130
			1,2-dichloropropane	2024/09/11		86	%	60 - 130
			cis-1,3-dichloropropene	2024/09/11		83	%	60 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			trans-1,3-dichloropropene	2024/09/11		69	%	60 - 130
			Methyl methacrylate	2024/09/11		77	%	60 - 130
			Methyl-tert-butylether (MTBE)	2024/09/11		86	%	60 - 130
			Styrene	2024/09/11		99	%	60 - 130
			1,1,1,2-tetrachloroethane	2024/09/11		103	%	60 - 130
			1,1,2,2-tetrachloroethane	2024/09/11		90	%	60 - 130
			Tetrachloroethene	2024/09/11		102	%	60 - 130
			1,2,3-trichlorobenzene	2024/09/11		85	%	60 - 130
			1,2,4-trichlorobenzene	2024/09/11		87	%	60 - 130
			1,3,5-trichlorobenzene	2024/09/11		94	%	60 - 130
			1,1,1-trichloroethane	2024/09/11		96	%	60 - 130
			1,1,2-trichloroethane	2024/09/11		83	%	60 - 130
			Trichloroethene	2024/09/11		98	%	60 - 130
			Trichlorofluoromethane	2024/09/11		90	%	60 - 130
			1,2,4-trimethylbenzene	2024/09/11		93	%	60 - 130
			1,3,5-trimethylbenzene	2024/09/11		94	%	60 - 130
			Vinyl chloride	2024/09/11		68	%	60 - 130
B511722	YPA	Method Blank	1,4-Difluorobenzene (sur.)	2024/09/11		102	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/11		91	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/11		87	%	50 - 140
			Bromodichloromethane	2024/09/11	<0.00050		mg/L	
			Bromoform	2024/09/11	<0.00050		mg/L	
			Bromomethane	2024/09/11	<0.0020		mg/L	
			Carbon tetrachloride	2024/09/11	<0.00050		mg/L	
			Chlorobenzene	2024/09/11	<0.00050		mg/L	
			Dibromochloromethane	2024/09/11	<0.0010		mg/L	
			Chloroethane	2024/09/11	<0.0010		mg/L	
			Chloroform	2024/09/11	<0.00050		mg/L	
			Chloromethane	2024/09/11	<0.0020		mg/L	
			1,2-dibromoethane	2024/09/11	<0.00020		mg/L	
			1,2-dichlorobenzene	2024/09/11	<0.00050		mg/L	
			1,3-dichlorobenzene	2024/09/11	<0.00050		mg/L	
			1,4-dichlorobenzene	2024/09/11	<0.00050		mg/L	
			1,1-dichloroethane	2024/09/11	<0.00050		mg/L	
			1,2-dichloroethane	2024/09/11	<0.00050		mg/L	
			1,1-dichloroethene	2024/09/11	<0.00050		mg/L	
			cis-1,2-dichloroethene	2024/09/11	<0.00050		mg/L	
			trans-1,2-dichloroethene	2024/09/11	<0.00050		mg/L	
			Dichloromethane	2024/09/11	<0.0020		mg/L	
			1,2-dichloropropane	2024/09/11	<0.00050		mg/L	
			cis-1,3-dichloropropene	2024/09/11	<0.00050		mg/L	
			trans-1,3-dichloropropene	2024/09/11	<0.00050		mg/L	
			Methyl methacrylate	2024/09/11	<0.00050		mg/L	
			Methyl-tert-butylether (MTBE)	2024/09/11	<0.00050		mg/L	
			Styrene	2024/09/11	<0.00050		mg/L	
			1,1,1,2-tetrachloroethane	2024/09/11	<0.0010		mg/L	
			1,1,2,2-tetrachloroethane	2024/09/11	<0.0020		mg/L	
			Tetrachloroethene	2024/09/11	<0.00050		mg/L	
			1,2,3-trichlorobenzene	2024/09/11	<0.0010		mg/L	
			1,2,4-trichlorobenzene	2024/09/11	<0.0010		mg/L	
			1,3,5-trichlorobenzene	2024/09/11	<0.00050		mg/L	
			1,1,1-trichloroethane	2024/09/11	<0.00050		mg/L	
			1,1,2-trichloroethane	2024/09/11	<0.00050		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Trichloroethene	2024/09/11	<0.00020		mg/L	
			Trichlorofluoromethane	2024/09/11	<0.00050		mg/L	
			1,2,4-trimethylbenzene	2024/09/11	<0.00050		mg/L	
			1,3,5-trimethylbenzene	2024/09/11	<0.00050		mg/L	
			Vinyl chloride	2024/09/11	<0.00050		mg/L	
B511722	YPA	RPD	Bromodichloromethane	2024/09/11	NC		%	30
			Bromoform	2024/09/11	NC		%	30
			Bromomethane	2024/09/11	NC		%	30
			Carbon tetrachloride	2024/09/11	NC		%	30
			Chlorobenzene	2024/09/11	NC		%	30
			Dibromochloromethane	2024/09/11	NC		%	30
			Chloroethane	2024/09/11	NC		%	30
			Chloroform	2024/09/11	NC		%	30
			Chloromethane	2024/09/11	NC		%	30
			1,2-dibromoethane	2024/09/11	NC		%	30
			1,2-dichlorobenzene	2024/09/11	NC		%	30
			1,3-dichlorobenzene	2024/09/11	NC		%	30
			1,4-dichlorobenzene	2024/09/11	NC		%	30
			1,1-dichloroethane	2024/09/11	NC		%	30
			1,2-dichloroethane	2024/09/11	1.3		%	30
			1,1-dichloroethene	2024/09/11	NC		%	30
			cis-1,2-dichloroethene	2024/09/11	NC		%	30
			trans-1,2-dichloroethene	2024/09/11	NC		%	30
			Dichloromethane	2024/09/11	NC		%	30
			1,2-dichloropropane	2024/09/11	NC		%	30
			cis-1,3-dichloropropene	2024/09/11	NC		%	30
			trans-1,3-dichloropropene	2024/09/11	NC		%	30
			Methyl methacrylate	2024/09/11	NC		%	30
			Methyl-tert-butylether (MTBE)	2024/09/11	NC		%	30
			Styrene	2024/09/11	NC		%	30
			1,1,1,2-tetrachloroethane	2024/09/11	NC		%	30
			1,1,2,2-tetrachloroethane	2024/09/11	NC		%	30
			Tetrachloroethene	2024/09/11	NC		%	30
			1,2,3-trichlorobenzene	2024/09/11	NC		%	30
			1,2,4-trichlorobenzene	2024/09/11	NC		%	30
			1,3,5-trichlorobenzene	2024/09/11	NC		%	30
			1,1,1-trichloroethane	2024/09/11	NC		%	30
			1,1,2-trichloroethane	2024/09/11	NC		%	30
			Trichloroethene	2024/09/11	NC		%	30
			Trichlorofluoromethane	2024/09/11	NC		%	30
			1,2,4-trimethylbenzene	2024/09/11	NC		%	30
			1,3,5-trimethylbenzene	2024/09/11	NC		%	30
			Vinyl chloride	2024/09/11	NC		%	30
B513150	A1H	Method Blank	Moisture	2024/09/12	<0.30		%	
B513150	A1H	RPD	Moisture	2024/09/12	2.8		%	20
B513163	SIB	Method Blank	Moisture	2024/09/12	<0.30		%	
B513163	SIB	RPD [CUZ597-01]	Moisture	2024/09/12	1.6		%	20
B513166	VP4	Matrix Spike	O-TERPHENYL (sur.)	2024/09/12		90	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/09/12		84	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/09/12		89	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/09/12		87	%	60 - 140
B513166	VP4	Spiked Blank	O-TERPHENYL (sur.)	2024/09/12		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/09/12		98	%	60 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			F3 (C16-C34 Hydrocarbons)	2024/09/12		103	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/09/12		100	%	60 - 140
B513166	VP4	Method Blank	O-TERPHENYL (sur.)	2024/09/12		100	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/09/12	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2024/09/12	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2024/09/12	<50		mg/kg	
B513166	VP4	RPD	F2 (C10-C16 Hydrocarbons)	2024/09/12	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2024/09/12	2.2		%	40
			F4 (C34-C50 Hydrocarbons)	2024/09/12	NC		%	40
B514370	SNA	Matrix Spike	1,4-Difluorobenzene (sur.)	2024/09/13		95	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/13		100	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/13		112	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/13		96	%	50 - 140
			Benzene	2024/09/13		101	%	50 - 140
			Toluene	2024/09/13		113	%	50 - 140
			Ethylbenzene	2024/09/13		114	%	50 - 140
			m & p-Xylene	2024/09/13		114	%	50 - 140
			o-Xylene	2024/09/13		106	%	50 - 140
			F1 (C6-C10)	2024/09/13		97	%	60 - 140
B514370	SNA	Spiked Blank	1,4-Difluorobenzene (sur.)	2024/09/13		94	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/13		98	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/13		106	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/13		92	%	50 - 140
			Benzene	2024/09/13		93	%	60 - 130
			Toluene	2024/09/13		101	%	60 - 130
			Ethylbenzene	2024/09/13		104	%	60 - 130
			m & p-Xylene	2024/09/13		106	%	60 - 130
			o-Xylene	2024/09/13		104	%	60 - 130
			F1 (C6-C10)	2024/09/13		107	%	60 - 140
B514370	SNA	Method Blank	1,4-Difluorobenzene (sur.)	2024/09/13		97	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/13		93	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/13		105	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/13		98	%	50 - 140
			Benzene	2024/09/13	<0.0050		mg/kg	
			Toluene	2024/09/13	<0.050		mg/kg	
			Ethylbenzene	2024/09/13	<0.010		mg/kg	
			m & p-Xylene	2024/09/13	<0.040		mg/kg	
			o-Xylene	2024/09/13	<0.020		mg/kg	
			F1 (C6-C10)	2024/09/13	<10		mg/kg	
B514370	SNA	RPD	Benzene	2024/09/13	NC		%	50
			Toluene	2024/09/13	NC		%	50
			Ethylbenzene	2024/09/13	NC		%	50
			m & p-Xylene	2024/09/13	NC		%	50
			o-Xylene	2024/09/13	NC		%	50
			F1 (C6-C10)	2024/09/13	NC		%	40
B514374	SNA	Matrix Spike [CUZ596-01]	1,4-Difluorobenzene (sur.)	2024/09/12		102	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/12		97	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/12		123	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/12		99	%	50 - 140
			Bromodichloromethane	2024/09/12		82	%	50 - 140
			Bromoform	2024/09/12		87	%	50 - 140
			Bromomethane	2024/09/12		59	%	50 - 140
			Carbon tetrachloride	2024/09/12		75	%	50 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chlorobenzene	2024/09/12		83	%	50 - 140
			Dibromochloromethane	2024/09/12		89	%	50 - 140
			Chloroethane	2024/09/12		68	%	50 - 140
			Chloroform	2024/09/12		84	%	50 - 140
			Chloromethane	2024/09/12		46 (1)	%	50 - 140
			1,2-dibromoethane	2024/09/12		87	%	50 - 140
			1,2-dichlorobenzene	2024/09/12		85	%	50 - 140
			1,3-dichlorobenzene	2024/09/12		79	%	50 - 140
			1,4-dichlorobenzene	2024/09/12		74	%	50 - 140
			1,1-dichloroethane	2024/09/12		74	%	50 - 140
			1,2-dichloroethane	2024/09/12		78	%	50 - 140
			1,1-dichloroethene	2024/09/12		62	%	50 - 140
			cis-1,2-dichloroethene	2024/09/12		79	%	50 - 140
			trans-1,2-dichloroethene	2024/09/12		63	%	50 - 140
			Dichloromethane	2024/09/12		64	%	50 - 140
			1,2-dichloropropane	2024/09/12		78	%	50 - 140
			cis-1,3-dichloropropene	2024/09/12		87	%	50 - 140
			trans-1,3-dichloropropene	2024/09/12		84	%	50 - 140
			Methyl methacrylate	2024/09/12		78	%	50 - 140
			Methyl-tert-butylether (MTBE)	2024/09/12		83	%	50 - 140
			Styrene	2024/09/12		82	%	50 - 140
			1,1,1,2-tetrachloroethane	2024/09/12		90	%	50 - 140
			1,1,2,2-tetrachloroethane	2024/09/12		95	%	50 - 140
			Tetrachloroethene	2024/09/12		73	%	50 - 140
			1,2,3-trichlorobenzene	2024/09/12		99	%	50 - 140
			1,2,4-trichlorobenzene	2024/09/12		88	%	50 - 140
			1,3,5-trichlorobenzene	2024/09/12		81	%	50 - 140
			1,1,1-trichloroethane	2024/09/12		81	%	50 - 140
			1,1,2-trichloroethane	2024/09/12		86	%	50 - 140
			Trichloroethene	2024/09/12		73	%	50 - 140
			Trichlorofluoromethane	2024/09/12		63	%	50 - 140
			1,2,4-trimethylbenzene	2024/09/12		77	%	50 - 140
			1,3,5-trimethylbenzene	2024/09/12		79	%	50 - 140
			Vinyl chloride	2024/09/12		45 (1)	%	50 - 140
B514374	SNA	Spiked Blank	1,4-Difluorobenzene (sur.)	2024/09/12		101	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/12		97	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/12		114	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/12		96	%	50 - 140
			Bromodichloromethane	2024/09/12		87	%	60 - 130
			Bromoform	2024/09/12		89	%	60 - 130
			Bromomethane	2024/09/12		94	%	60 - 130
			Carbon tetrachloride	2024/09/12		97	%	60 - 130
			Chlorobenzene	2024/09/12		102	%	60 - 130
			Dibromochloromethane	2024/09/12		93	%	60 - 130
			Chloroethane	2024/09/12		105	%	60 - 130
			Chloroform	2024/09/12		93	%	60 - 130
			Chloromethane	2024/09/12		83	%	60 - 130
			1,2-dibromoethane	2024/09/12		102	%	60 - 130
			1,2-dichlorobenzene	2024/09/12		98	%	60 - 130
			1,3-dichlorobenzene	2024/09/12		97	%	60 - 130
			1,4-dichlorobenzene	2024/09/12		92	%	60 - 130
			1,1-dichloroethane	2024/09/12		89	%	60 - 130
			1,2-dichloroethane	2024/09/12		91	%	60 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1-dichloroethene	2024/09/12		95	%	60 - 130
			cis-1,2-dichloroethene	2024/09/12		96	%	60 - 130
			trans-1,2-dichloroethene	2024/09/12		96	%	60 - 130
			Dichloromethane	2024/09/12		82	%	60 - 130
			1,2-dichloropropane	2024/09/12		87	%	60 - 130
			cis-1,3-dichloropropene	2024/09/12		97	%	60 - 130
			trans-1,3-dichloropropene	2024/09/12		92	%	60 - 130
			Methyl methacrylate	2024/09/12		86	%	60 - 130
			Methyl-tert-butylether (MTBE)	2024/09/12		88	%	60 - 130
			Styrene	2024/09/12		98	%	60 - 130
			1,1,1,2-tetrachloroethane	2024/09/12		96	%	60 - 130
			1,1,2,2-tetrachloroethane	2024/09/12		94	%	60 - 130
			Tetrachloroethene	2024/09/12		105	%	60 - 130
			1,2,3-trichlorobenzene	2024/09/12		110	%	60 - 130
			1,2,4-trichlorobenzene	2024/09/12		105	%	60 - 130
			1,3,5-trichlorobenzene	2024/09/12		105	%	60 - 130
			1,1,1-trichloroethane	2024/09/12		97	%	60 - 130
			1,1,2-trichloroethane	2024/09/12		88	%	60 - 130
			Trichloroethene	2024/09/12		97	%	60 - 130
			Trichlorofluoromethane	2024/09/12		92	%	60 - 130
			1,2,4-trimethylbenzene	2024/09/12		101	%	60 - 130
			1,3,5-trimethylbenzene	2024/09/12		103	%	60 - 130
			Vinyl chloride	2024/09/12		78	%	60 - 130
B514374	SNA	Method Blank	1,4-Difluorobenzene (sur.)	2024/09/13		102	%	50 - 140
			4-Bromofluorobenzene (sur.)	2024/09/13		96	%	50 - 140
			D10-o-Xylene (sur.)	2024/09/13		120	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2024/09/13		99	%	50 - 140
			Bromodichloromethane	2024/09/13	<0.030		mg/kg	
			Bromoform	2024/09/13	<0.050		mg/kg	
			Bromomethane	2024/09/13	<0.020		mg/kg	
			Carbon tetrachloride	2024/09/13	<0.00050		mg/kg	
			Chlorobenzene	2024/09/13	<0.0050		mg/kg	
			Dibromochloromethane	2024/09/13	<0.020		mg/kg	
			Chloroethane	2024/09/13	<0.020		mg/kg	
			Chloroform	2024/09/13	<0.010		mg/kg	
			Chloromethane	2024/09/13	<0.030		mg/kg	
			1,2-dibromoethane	2024/09/13	<0.0020		mg/kg	
			1,2-dichlorobenzene	2024/09/13	<0.020		mg/kg	
			1,3-dichlorobenzene	2024/09/13	<0.020		mg/kg	
			1,4-dichlorobenzene	2024/09/13	<0.020		mg/kg	
			1,1-dichloroethane	2024/09/13	<0.020		mg/kg	
			1,2-dichloroethane	2024/09/13	<0.0020		mg/kg	
			1,1-dichloroethene	2024/09/13	<0.020		mg/kg	
			cis-1,2-dichloroethene	2024/09/13	<0.020		mg/kg	
			trans-1,2-dichloroethene	2024/09/13	<0.020		mg/kg	
			Dichloromethane	2024/09/13	<0.030		mg/kg	
			1,2-dichloropropane	2024/09/13	<0.020		mg/kg	
			cis-1,3-dichloropropene	2024/09/13	<0.020		mg/kg	
			trans-1,3-dichloropropene	2024/09/13	<0.020		mg/kg	
			Methyl methacrylate	2024/09/13	<0.040		mg/kg	
			Methyl-tert-butylether (MTBE)	2024/09/13	<0.030		mg/kg	
			Styrene	2024/09/13	<0.020		mg/kg	
			1,1,1,2-tetrachloroethane	2024/09/13	<0.050		mg/kg	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,2,2-tetrachloroethane	2024/09/13	<0.050		mg/kg	
			Tetrachloroethene	2024/09/13	<0.010		mg/kg	
			1,2,3-trichlorobenzene	2024/09/13	<0.040		mg/kg	
			1,2,4-trichlorobenzene	2024/09/13	<0.040		mg/kg	
			1,3,5-trichlorobenzene	2024/09/13	<0.040		mg/kg	
			1,1,1-trichloroethane	2024/09/13	<0.020		mg/kg	
			1,1,2-trichloroethane	2024/09/13	<0.020		mg/kg	
			Trichloroethene	2024/09/13	<0.0010		mg/kg	
			Trichlorofluoromethane	2024/09/13	<0.020		mg/kg	
			1,2,4-trimethylbenzene	2024/09/13	<0.50		mg/kg	
			1,3,5-trimethylbenzene	2024/09/13	<0.50		mg/kg	
			Vinyl chloride	2024/09/13	<0.00030		mg/kg	
B514374	SNA	RPD [CUZ596-01]	Bromodichloromethane	2024/09/13	NC		%	50
			Bromoform	2024/09/13	NC		%	50
			Bromomethane	2024/09/13	NC		%	50
			Carbon tetrachloride	2024/09/13	NC		%	50
			Chlorobenzene	2024/09/13	NC		%	50
			Dibromochloromethane	2024/09/13	NC		%	50
			Chloroethane	2024/09/13	NC		%	50
			Chloroform	2024/09/13	NC		%	50
			Chloromethane	2024/09/13	NC		%	50
			1,2-dibromoethane	2024/09/13	NC		%	50
			1,2-dichlorobenzene	2024/09/13	NC		%	50
			1,3-dichlorobenzene	2024/09/13	NC		%	50
			1,4-dichlorobenzene	2024/09/13	NC		%	50
			1,1-dichloroethane	2024/09/13	NC		%	50
			1,2-dichloroethane	2024/09/13	NC		%	50
			1,1-dichloroethene	2024/09/13	NC		%	50
			cis-1,2-dichloroethene	2024/09/13	NC		%	50
			trans-1,2-dichloroethene	2024/09/13	NC		%	50
			Dichloromethane	2024/09/13	NC		%	50
			1,2-dichloropropane	2024/09/13	NC		%	50
			cis-1,3-dichloropropene	2024/09/13	NC		%	50
			trans-1,3-dichloropropene	2024/09/13	NC		%	50
			Methyl methacrylate	2024/09/13	NC		%	50
			Methyl-tert-butylether (MTBE)	2024/09/13	NC		%	50
			Styrene	2024/09/13	NC		%	50
			1,1,1,2-tetrachloroethane	2024/09/13	NC		%	50
			1,1,2,2-tetrachloroethane	2024/09/13	NC		%	50
			Tetrachloroethene	2024/09/13	NC		%	50
			1,2,3-trichlorobenzene	2024/09/13	NC		%	50
			1,2,4-trichlorobenzene	2024/09/13	NC		%	50
			1,3,5-trichlorobenzene	2024/09/13	NC		%	50
			1,1,1-trichloroethane	2024/09/13	NC		%	50
			1,1,2-trichloroethane	2024/09/13	NC		%	50
			Trichloroethene	2024/09/13	NC		%	50
			Trichlorofluoromethane	2024/09/13	NC		%	50
			1,2,4-trimethylbenzene	2024/09/13	NC		%	50
			1,3,5-trimethylbenzene	2024/09/13	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Vinyl chloride	2024/09/13	NC		%	50

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Bureau Veritas Job #: C470495
Report Date: 2024/09/17

Ausenco Sustainability Inc.
Client Project #: 104371-02
Site Location: ASTON RIVER
Sampler Initials: JN

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Gita Pokhrel, Laboratory Supervisor

Luba Shymushovska, B.Sc., QP, Senior Analyst, Organics

Qiliang (Alex) Wu, Senior Analyst

Rahul Suryawanshi, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

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C470495
2024/09/06 16:15

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CHAIN OF CUSTODY RECORD

ENV COC - 00015v3

MCAL-2024-09-590

Invoice Information		Report Information (if differs from invoice)		Project Information	
Invoice to (requires report) ☐					
Company :	Ausenco Sustainability	Company:		Quotation #:	
Contact Name:	Accounts Payable	Contact Name:	Laura Pacholski	P.O. #/ AFE#:	
Street Address:	Suite 1430, 401 9 Ave NE	Street Address:		Project #:	104371-02
City: Calgary Prov: AB Postal Code: T2P 3C5		City: Prov: Postal Code:		Site #:	
Phone:		Phone:		Site Location:	Aston River
Email:	procure2pay@ausenco.com	Email:	laura.pacholski@ausenco.com	Site Location Province:	NU
Copies:		Copies:	sara.fruin@ausenco.com	Sampled By:	JN, SB

Regulatory Criteria

☐ BC CSR ☐ CCME ☐ Drinking Water
☐ YUKON CSR ☐ BC Water Quality ☐ Other: _____

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)
☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply
☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEXS/VPH	5 VOCs	6 MTBE	7 BTEX/F1	8 PAHs	9 LEPH/HEPH	10 F2-F4	11 TEH	12 Dissolved metals	13 Dissolved mercury	14 Total metals	15 Total mercury	16	17	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE
1	24-AR-2-US	24	08	29	10	45	Water					X		X			X											1	
2	24-AR-2-DS	24	08	29	11	07	Water					X		X			X											1	
3	24-AR-2-S1	24	08	29	09	47	Soil					X		X			X											1	
4	24-AR-2-S2	24	08	29	10	01	Soil					X		X			X											1	
5	24-AR-2-S3	24	08	29	10	10	Soil					X		X			X											1	
6	24-AR-2-S4	24	08	29	10	22	Soil					X		X			X											1	
7	24-AR-2-S5	24	08	29	10	40	Soil					X		X			X											1	
8																													
9																													
10																													
11																													
12																													

Received in Yellowknife
By: J. Mercado
@ 16:15
SEP 06 2024
ICE-YKS ICS-N
Temp: 5/7/7

LAB USE ONLY	Yes	No	°C				LAB USE ONLY	Yes	No	°C				LAB USE ONLY	Yes	No	°C				Temperature reading by:
Seal present	✓						Seal present							Seal present							
Seal Intact	✓						Seal Intact							Seal Intact							
Cooling media present	✓			6.1	7.0	6.9	Cooling media present				1	2	3	Cooling media present				1	2	3	

	Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special Instructions
1	Jess Newman	24	08	29	13	00	1 Mayone Lawler	2024	09	09	15	20	
2							2						