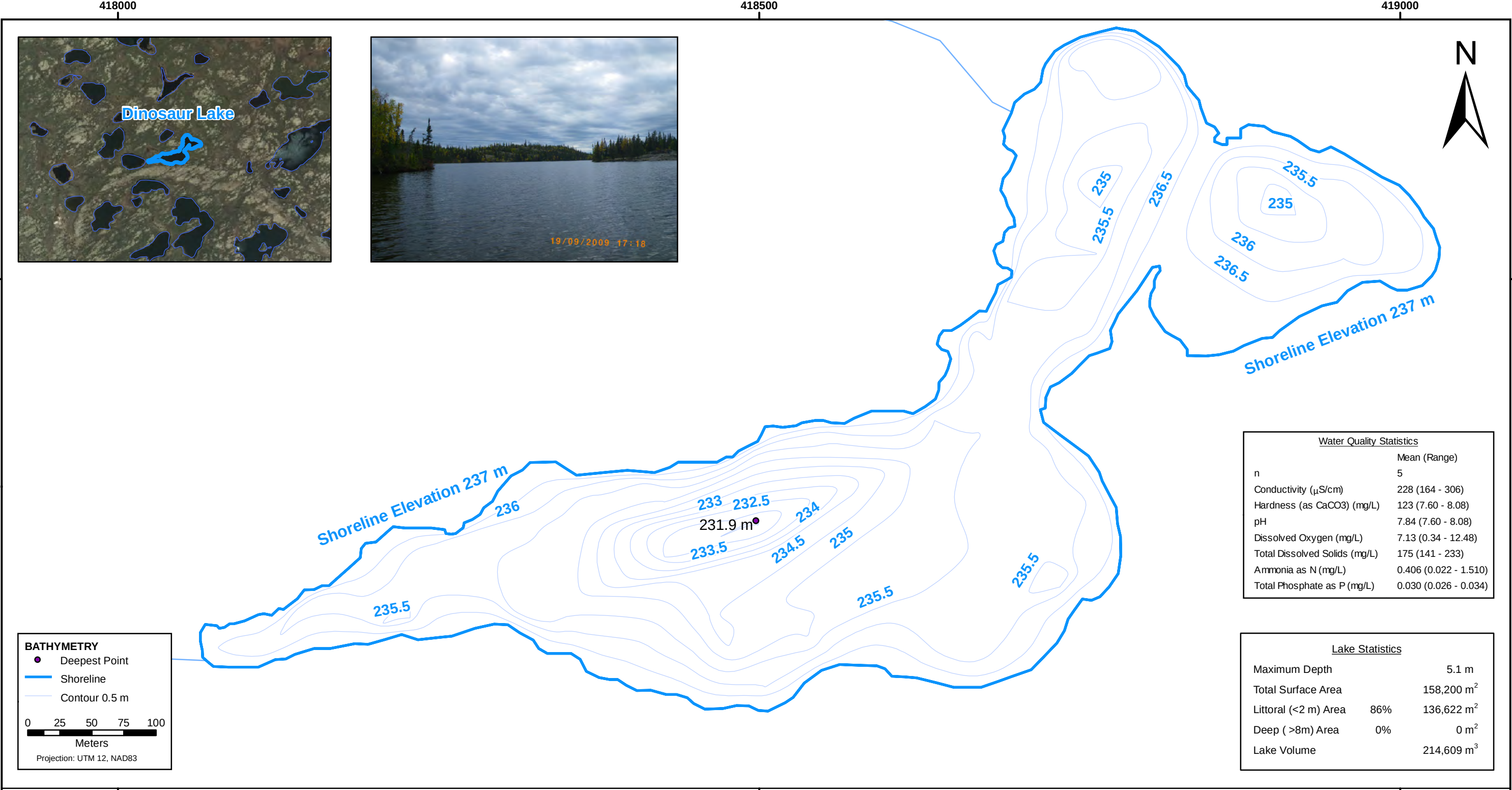




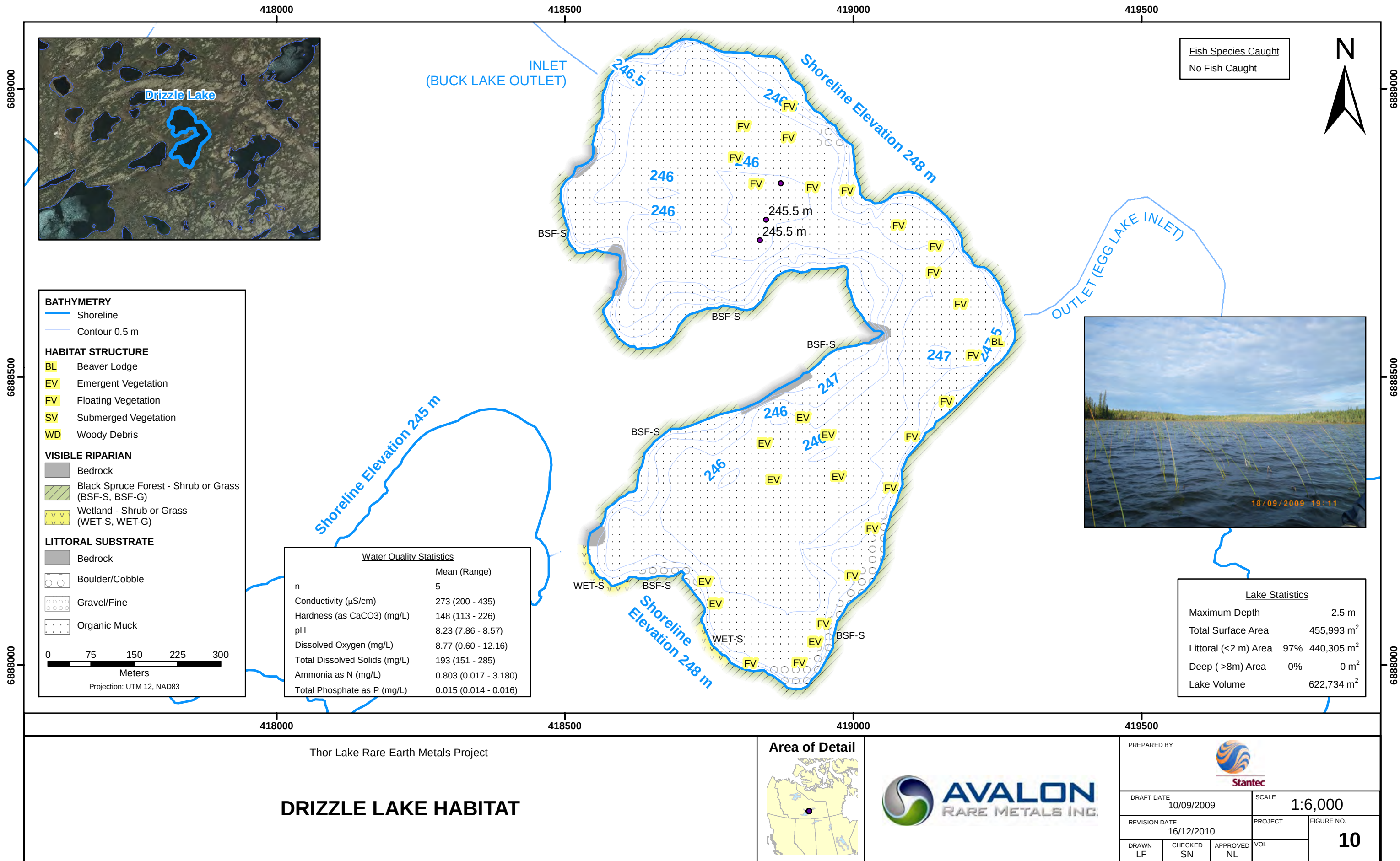
BATHYMETRY

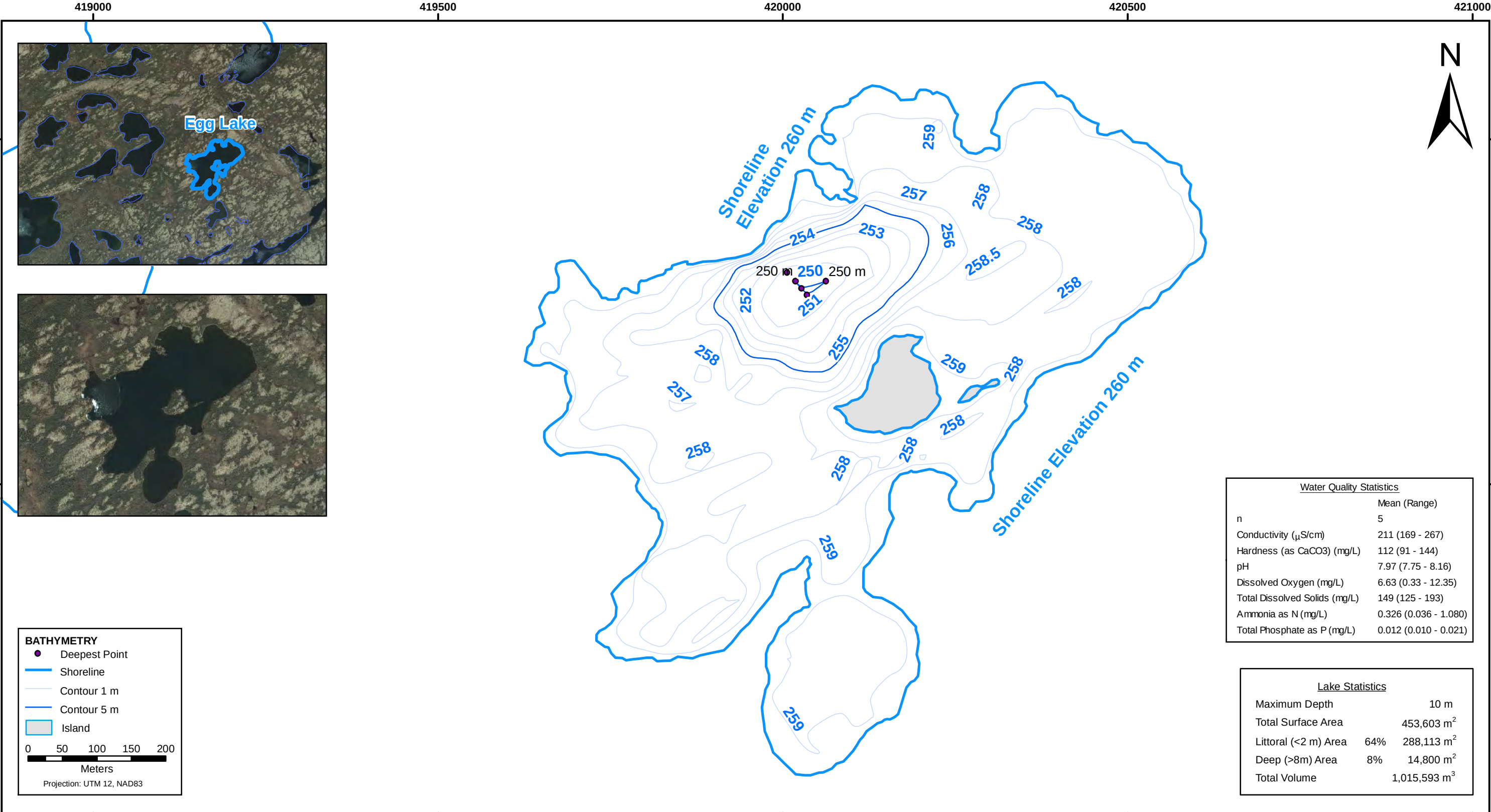
- Deepest Point
- Shoreline
- Contour 0.5 m

0 25 50 75 100
Meters
Projection: UTM 12, NAD83

Water Quality Statistics	
	Mean (Range)
n	5
Conductivity (µS/cm)	228 (164 - 306)
Hardness (as CaCO3) (mg/L)	123 (7.60 - 8.08)
pH	7.84 (7.60 - 8.08)
Dissolved Oxygen (mg/L)	7.13 (0.34 - 12.48)
Total Dissolved Solids (mg/L)	175 (141 - 233)
Ammonia as N (mg/L)	0.406 (0.022 - 1.510)
Total Phosphate as P (mg/L)	0.030 (0.026 - 0.034)

Lake Statistics	
Maximum Depth	5.1 m
Total Surface Area	158,200 m ²
Littoral (<2 m) Area	86% 136,622 m ²
Deep (>8m) Area	0% 0 m ²
Lake Volume	214,609 m ³





Water Quality Statistics	
	Mean (Range)
n	5
Conductivity (µS/cm)	211 (169 - 267)
Hardness (as CaCO3) (mg/L)	112 (91 - 144)
pH	7.97 (7.75 - 8.16)
Dissolved Oxygen (mg/L)	6.63 (0.33 - 12.35)
Total Dissolved Solids (mg/L)	149 (125 - 193)
Ammonia as N (mg/L)	0.326 (0.036 - 1.080)
Total Phosphate as P (mg/L)	0.012 (0.010 - 0.021)

Lake Statistics	
Maximum Depth	10 m
Total Surface Area	453,603 m ²
Littoral (<2 m) Area	64% 288,113 m ²
Deep (>8m) Area	8% 14,800 m ²
Total Volume	1,015,593 m ³

BATHYMETRY

- Deepest Point
- Shoreline
- Contour 1 m
- Contour 5 m
- Island

050100150200

Meters

Projection: UTM 12, NAD83



- Fish Species Caught
- Lake Cisco
 - Lake Whitefish
 - Northern Pike



BATHYMETRY

- Deepest Point
- Shoreline
- Contour 1 m

HABITAT STRUCTURE

- BL Beaver Lodge
- EV Emergent Vegetation
- FV Floating Vegetation
- SV Submerged Vegetation
- WD Woody Debris

VISIBLE RIPARIAN

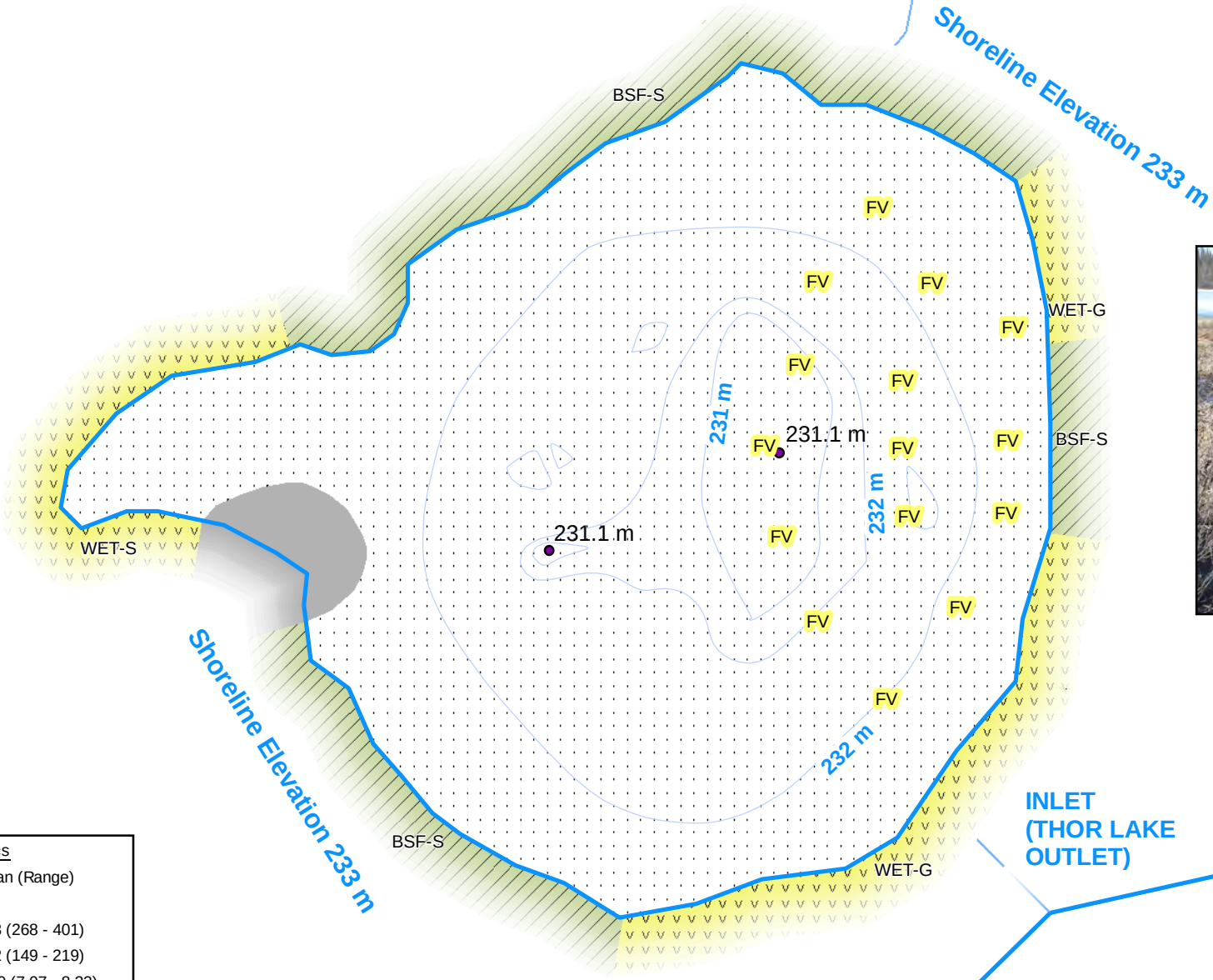
- Bedrock
- Black Spruce Forest - Shrub or Grass (BSF-S, BSF-G)
- Wetland - Shrub or Grass (WET-S, WET-G)

LITTORAL SUBSTRATE

- Bedrock
- Boulder/Cobble
- Gravel/Fine
- Organic Muck

0 25 50 75 100
Meters
Projection: UTM 12, NAD83

Water Quality Statistics	
	Mean (Range)
n	5
Conductivity (µS/cm)	333 (268 - 401)
Hardness (as CaCO3) (mg/L)	182 (149 - 219)
pH	7.89 (7.07 - 8.33)
Dissolved Oxygen (mg/L)	7.36 (3.31 - 11.47)
Total Dissolved Solids (mg/L)	207 (166 - 249)
Ammonia as N (mg/L)	0.186 (0.010 - 0.698)
Total Phosphate as P (mg/L)	0.008 (0.005 - 0.011)



Lake Statistics	
Maximum Depth	1.9 m
Total Surface Area	49,499 m ²
Littoral (<2 m) Area	100% 49,499 m ²
Deep (>8 m) Area	0% 0 m ²
Lake Volume	39,940 m ³

Thor Lake Rare Earth Metals Project

FRED LAKE HABITAT

Area of Detail



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REVISION DATE
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PROJECT

FIGURE NO.

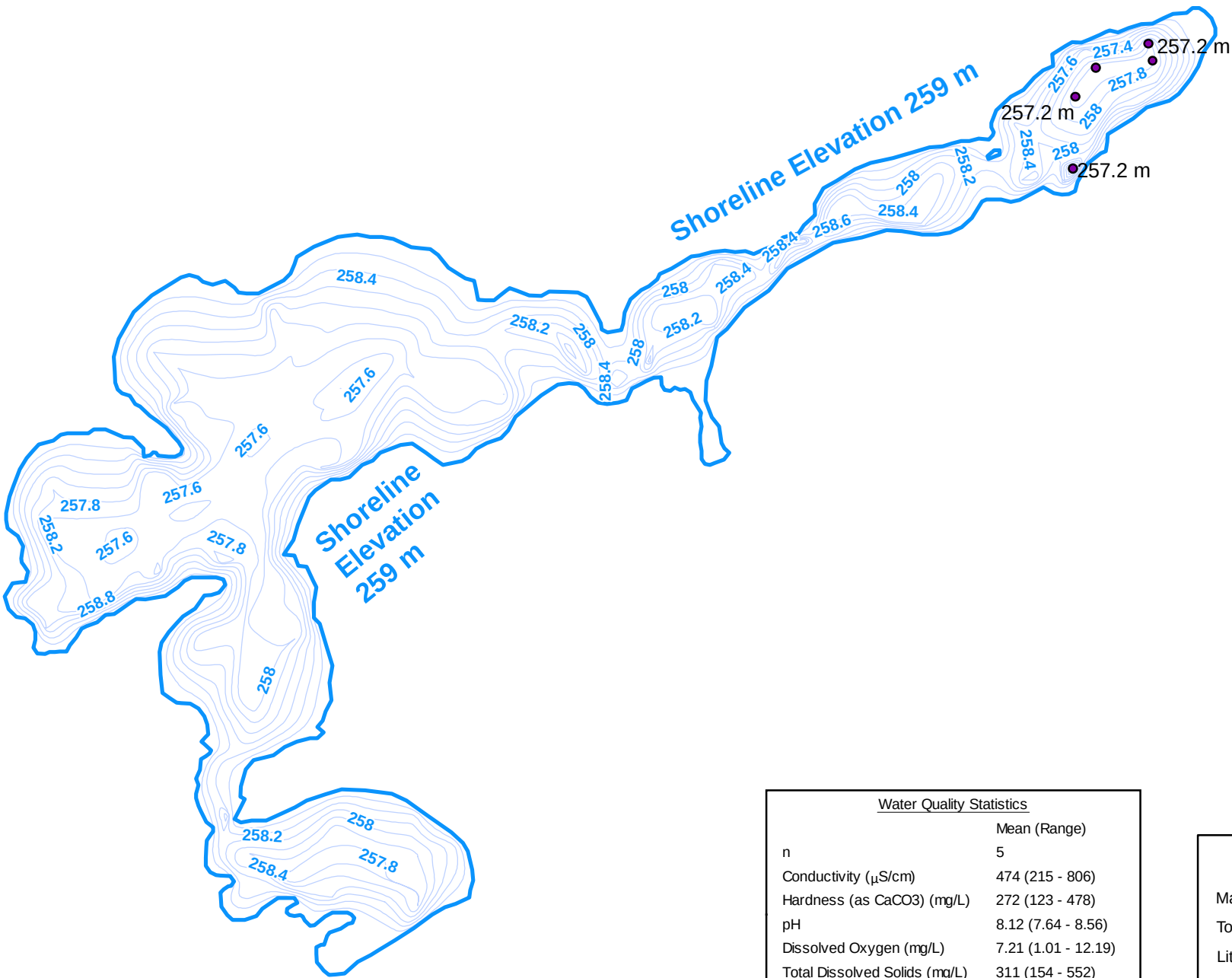
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BATHYMETRY

- Deepest Point
- Shoreline
- Contour 0.2 m

0 40 80 120 160
Meters

Projection: UTM 12, NAD83

Water Quality Statistics	
n	Mean (Range)
Conductivity (µS/cm)	474 (215 - 806)
Hardness (as CaCO3) (mg/L)	272 (123 - 478)
pH	8.12 (7.64 - 8.56)
Dissolved Oxygen (mg/L)	7.21 (1.01 - 12.19)
Total Dissolved Solids (mg/L)	311 (154 - 552)
Ammonia as N (mg/L)	1.344 (0.059 - 4.510)
Total Phosphate as P (mg/L)	0.013 (0.007 - 0.026)

Lake Statistics		
Maximum Depth		1.8 m
Total Surface Area		170,933 m ²
Littoral (<2 m) Area	100%	170,933 m ²
Deep (>8m) Area	0%	0 m ²
Lake Volume		129,289 m ³

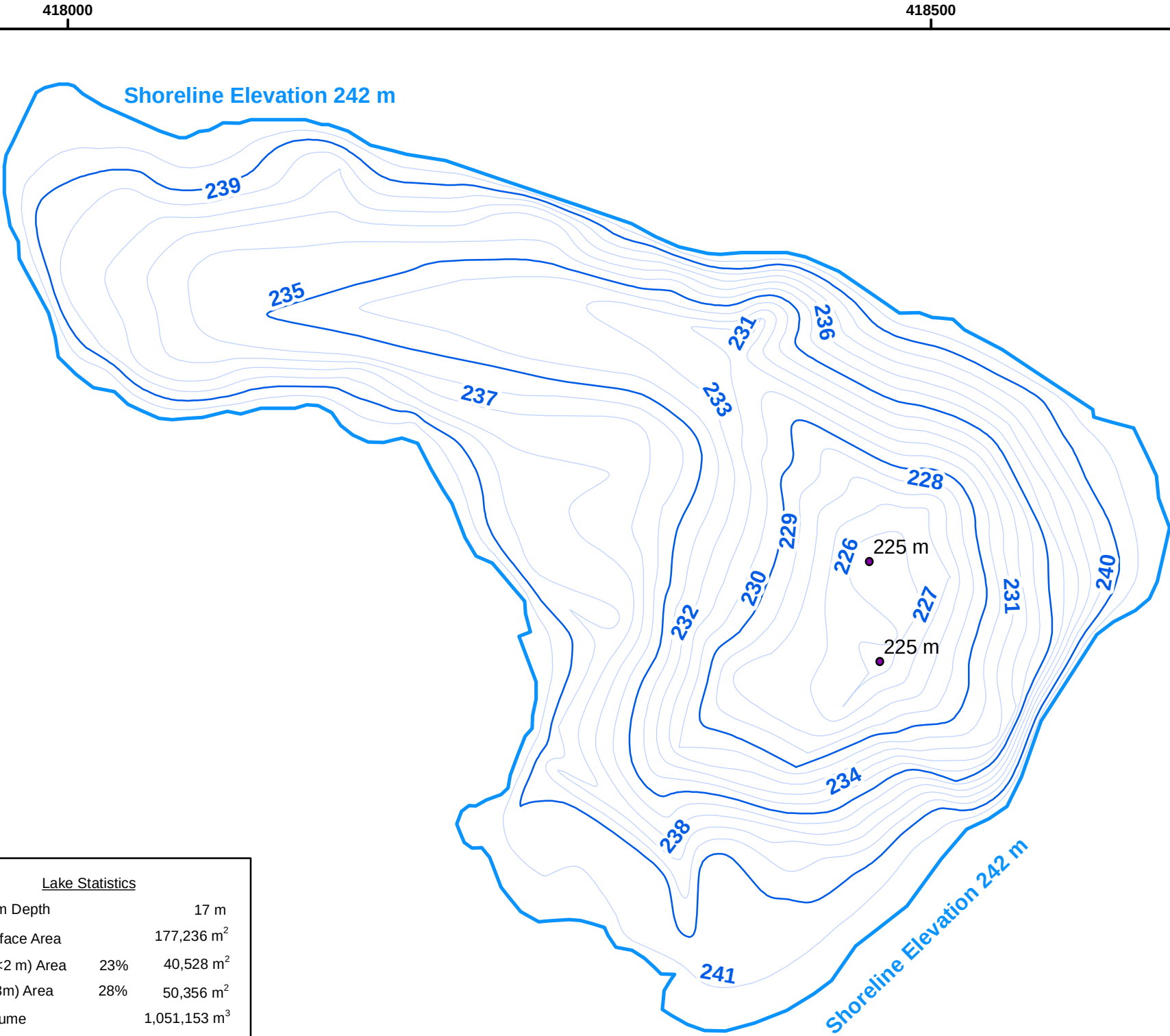
Thor Lake Rare Earth Metals Project

PISTOL LAKE BATHYMETRY

Area of Detail



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REVISION DATE 22/12/2010		PROJECT	FIGURE NO.
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BATHYMETRY

- Deepest Point
- Shoreline
- Contour 1 m
- Contour 5 m

0 20 40 60 80
Meters

Projection: UTM 12, NAD83

Water Quality Statistics		
	n	Mean (Range)
	5	
Conductivity ($\mu\text{S}/\text{cm}$)		259 (239 - 285)
Hardness (as CaCO_3) (mg/L)		144 (133 - 155)
pH		8.11 (7.93 - 8.28)
Dissolved Oxygen (mg/L)		9.36 (8.23 - 11.25)
Total Dissolved Solids (mg/L)		159 (151 - 176)
Ammonia as N (mg/L)		0.019 (0.010 - 0.033)
Total Phosphate as P (mg/L)		0.007 (0.005 - 0.009)

Lake Statistics		
Maximum Depth		17 m
Total Surface Area		177,236 m^2
Littoral (<2 m) Area	23%	40,528 m^2
Deep (>8m) Area	28%	50,356 m^2
Lake Volume		1,051,153 m^3

Thor Lake Rare Earth Metals Project

PORK CHOP LAKE BATHYMETRY

Area of Detail



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REVISION DATE
22/12/2010

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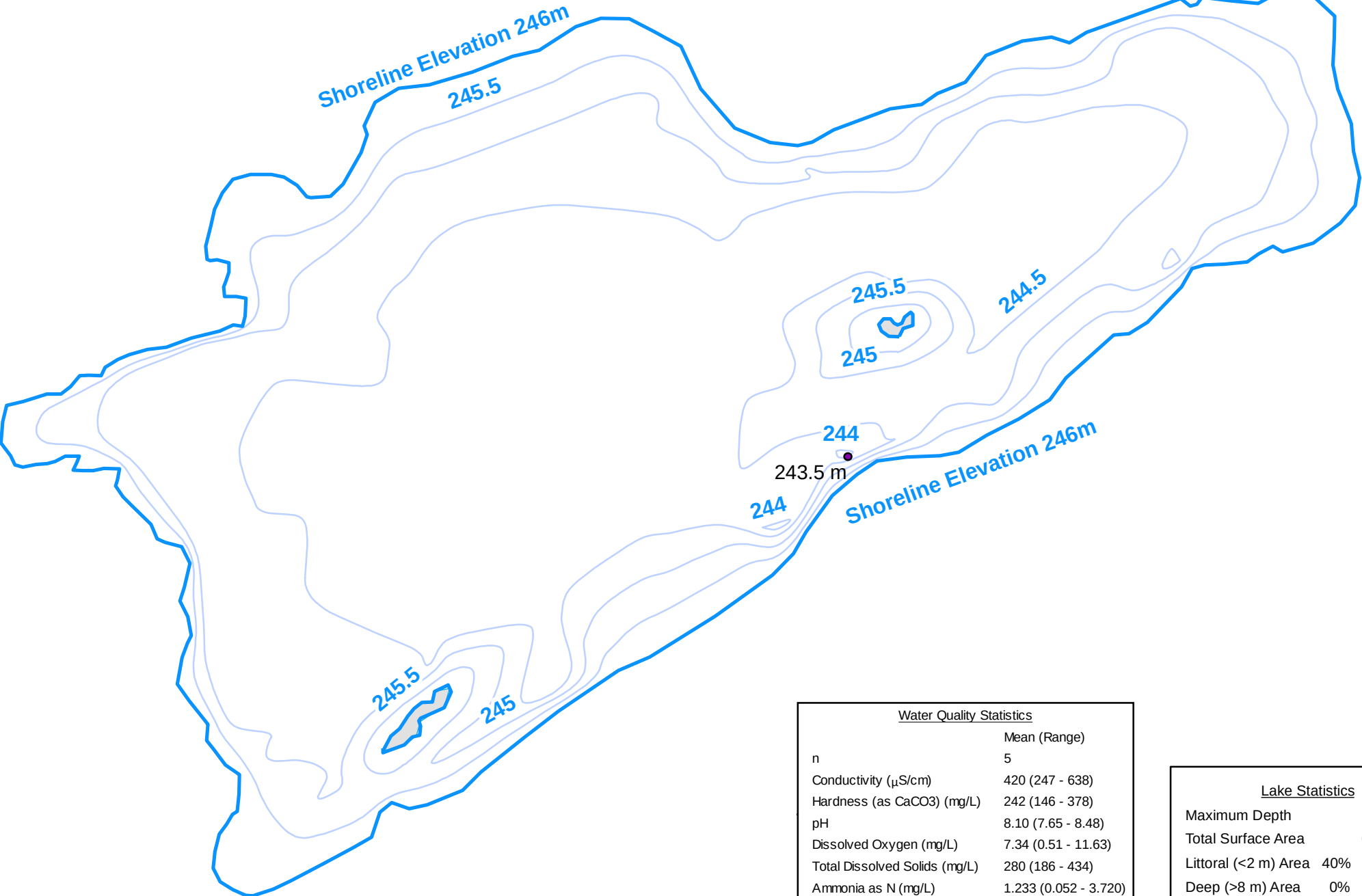
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14



BATHYMETRY

- Deepest Point
- Shoreline
- Contour 0.5 m
- Island

0 25 50 75 100
Meters

Projection: UTM 12, NAD83

Water Quality Statistics	
	Mean (Range)
n	5
Conductivity (µS/cm)	420 (247 - 638)
Hardness (as CaCO3) (mg/L)	242 (146 - 378)
pH	8.10 (7.65 - 8.48)
Dissolved Oxygen (mg/L)	7.34 (0.51 - 11.63)
Total Dissolved Solids (mg/L)	280 (186 - 434)
Ammonia as N (mg/L)	1.233 (0.052 - 3.720)
Total Phosphate as P (mg/L)	0.038 (0.010 - 0.123)

Lake Statistics	
Maximum Depth	2.5 m
Total Surface Area	64,366 m ²
Littoral (<2 m) Area	40% 25,672 m ²
Deep (>8 m) Area	0% 0 m ²
Lake Volume	211,756 m ³

Thor Lake Rare Earth Metals Project

WASP LAKE BATHYMETRY

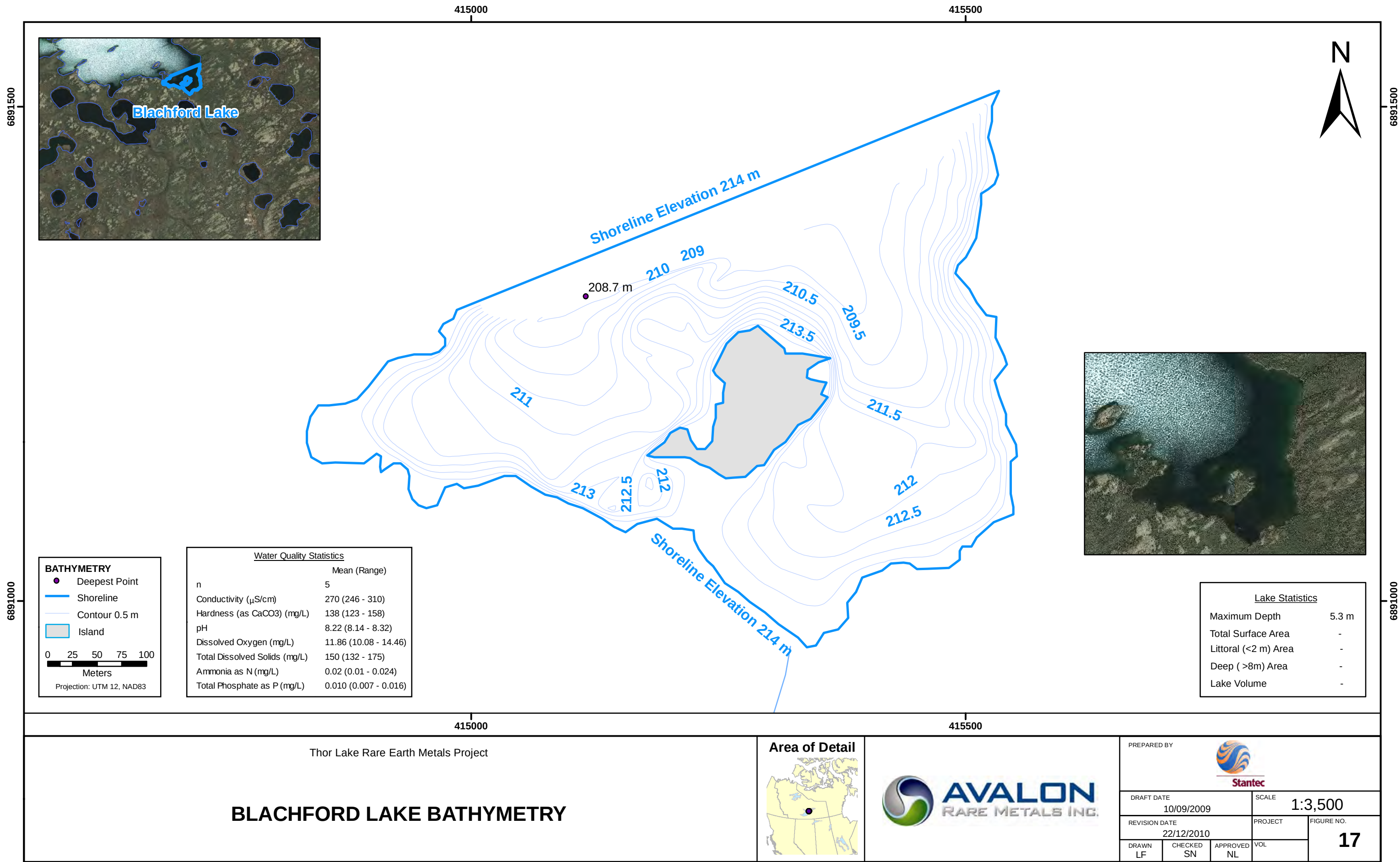
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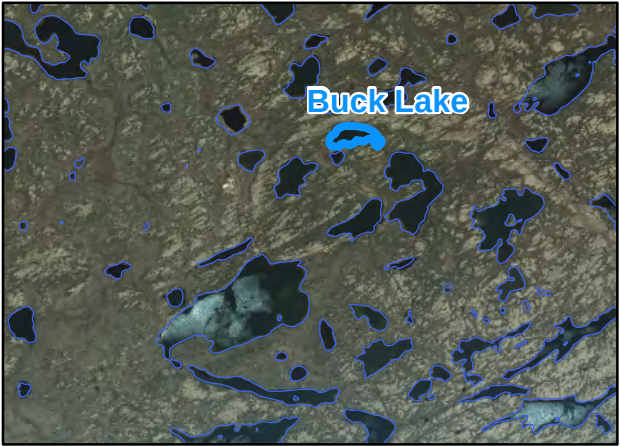


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Water Quality Statistics	
	Mean (Range)
n	5
Conductivity (µS/cm)	263 (192 - 441)
Hardness (as CaCO3) (mg/L)	150 (112 - 245)
pH	8.11 (7.68 - 8.28)
Dissolved Oxygen (mg/L)	8.68 (1.13 - 12.10)
Total Dissolved Solids (mg/L)	201 (153 - 318)
Ammonia as N (mg/L)	0.807 (0.014 - 2.890)
Total Phosphate as P (mg/L)	0.021 (0.018 - 0.024)

Fish Species Caught
No Fish Caught



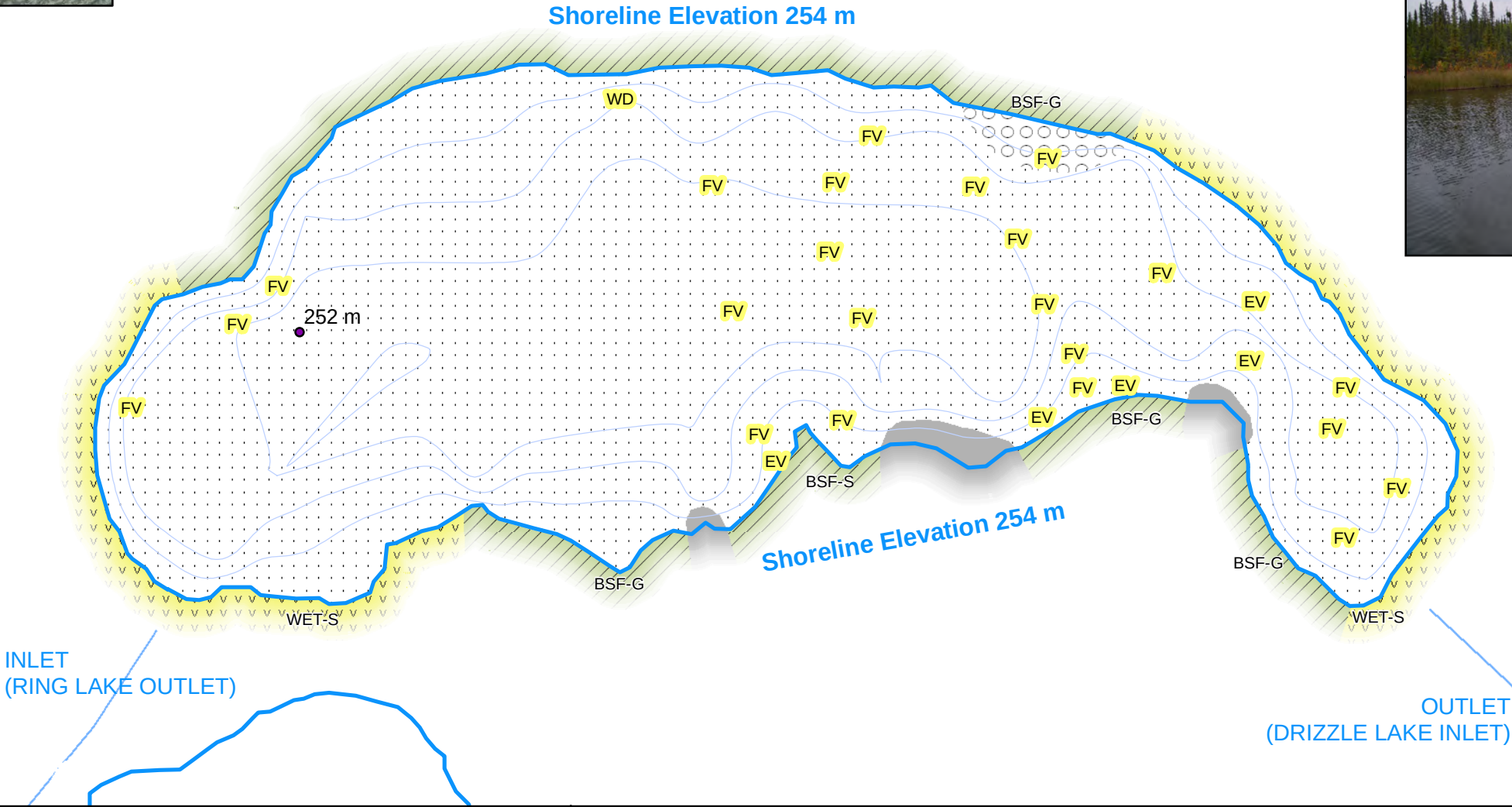
BATHYMETRY
Shoreline
Contour 1 m
Contour 5 m

HABITAT STRUCTURE
BL Beaver Lodge
EV Emergent Vegetation
FV Floating Vegetation
SV Submerged Vegetation
WD Woody Debris

VISIBLE RIPARIAN
Bedrock
Black Spruce Forest - Shrub or Grass (BSF-S, BSF-G)
Wetland - Shrub or Grass (WET-S, WET-G)

LITTORAL SUBSTRATE
Bedrock
Boulder/Cobble
Gravel/Fine
Organic Muck

0 40 80 120 160
Meters
Projection: UTM 12, NAD83



Lake Statistics	
Maximum Depth	2 m
Total Surface Area	122,766 m ²
Littoral (<2 m) Area	100% 122,766 m ²
Deep (>8m)	0% 0 m ²
Lake Volume	137,403 m ³

Thor Lake Rare Earth Metals Project

BUCK LAKE HABITAT

Area of Detail



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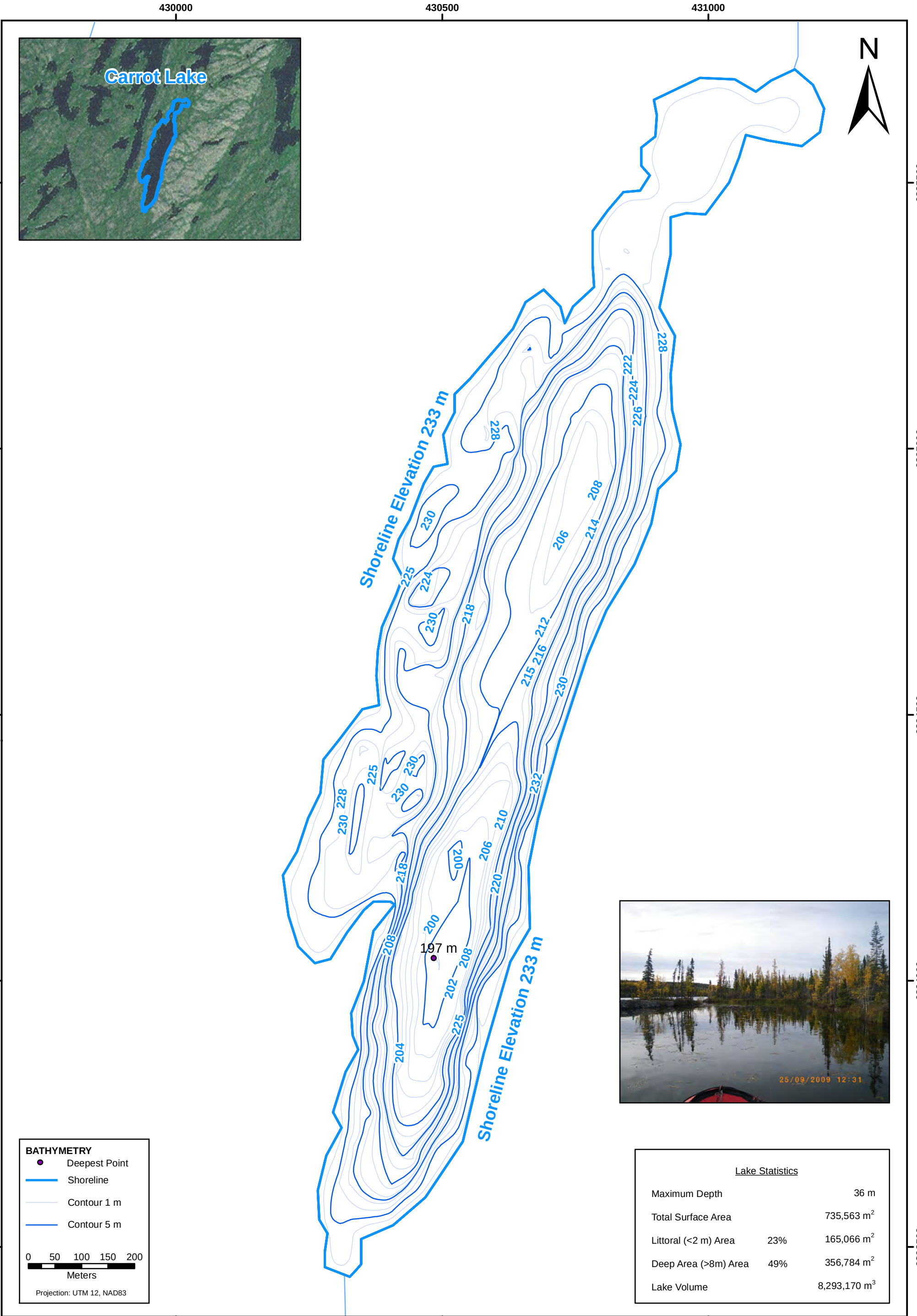
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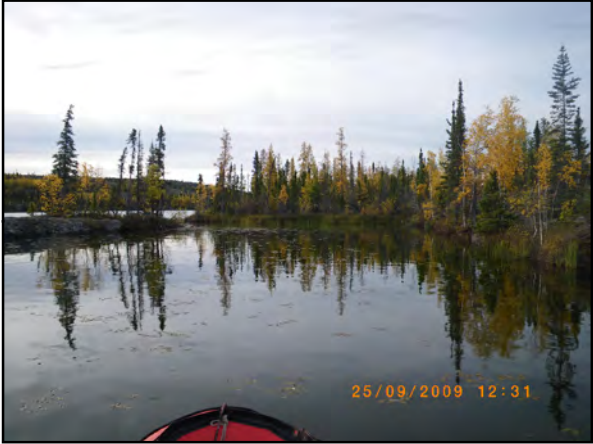


BATHYMETRY

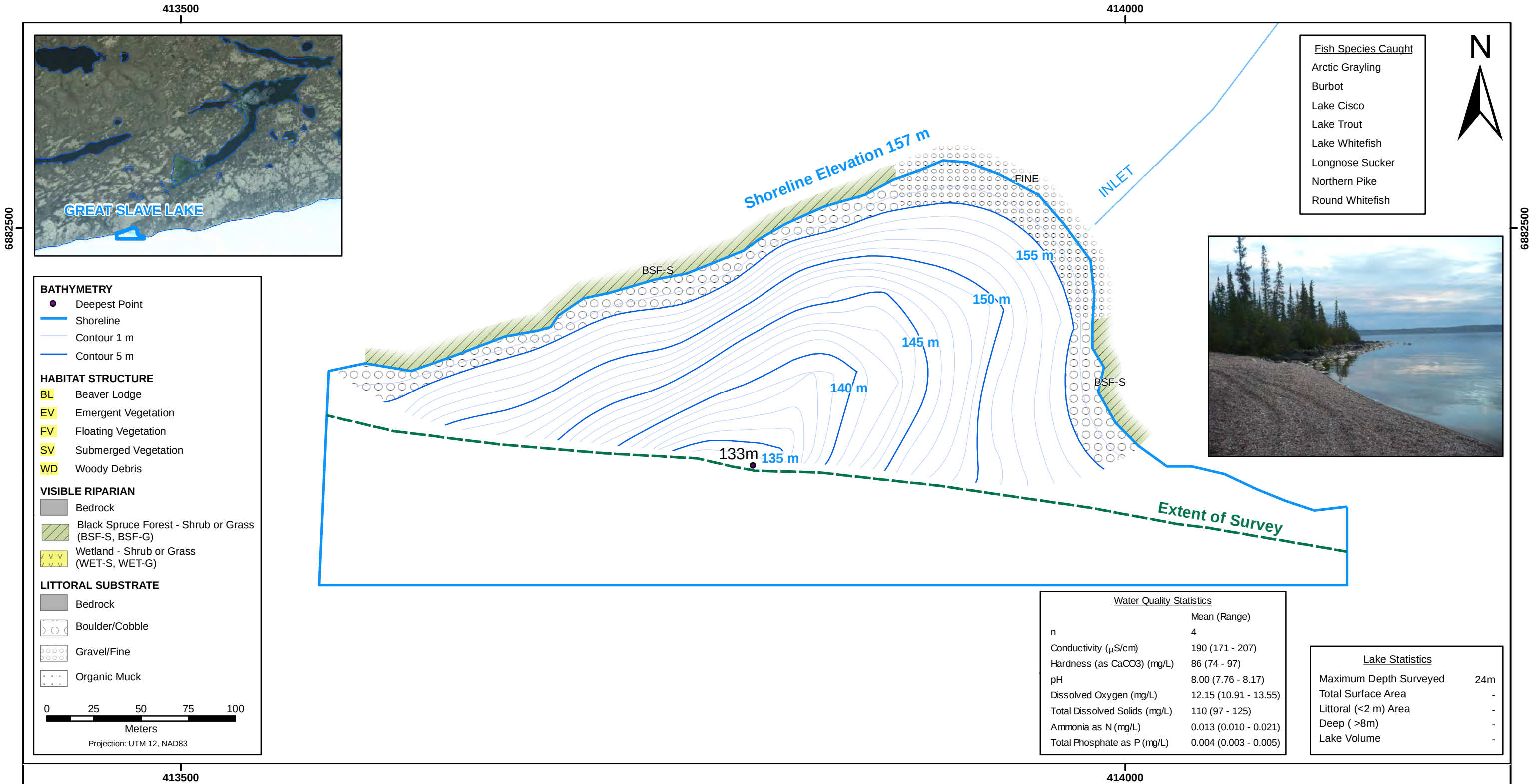
- Deepest Point
- Shoreline
- Contour 1 m
- Contour 5 m

0 50 100 150 200
Meters

Projection: UTM 12, NAD83



Lake Statistics		
Maximum Depth		36 m
Total Surface Area		735,563 m ²
Littoral (<2 m) Area	23%	165,066 m ²
Deep Area (>8m) Area	49%	356,784 m ²
Lake Volume		8,293,170 m ³



Thor Lake Rare Earth Metals Project

GREAT SLAVE LAKE HABITAT

Area of Detail



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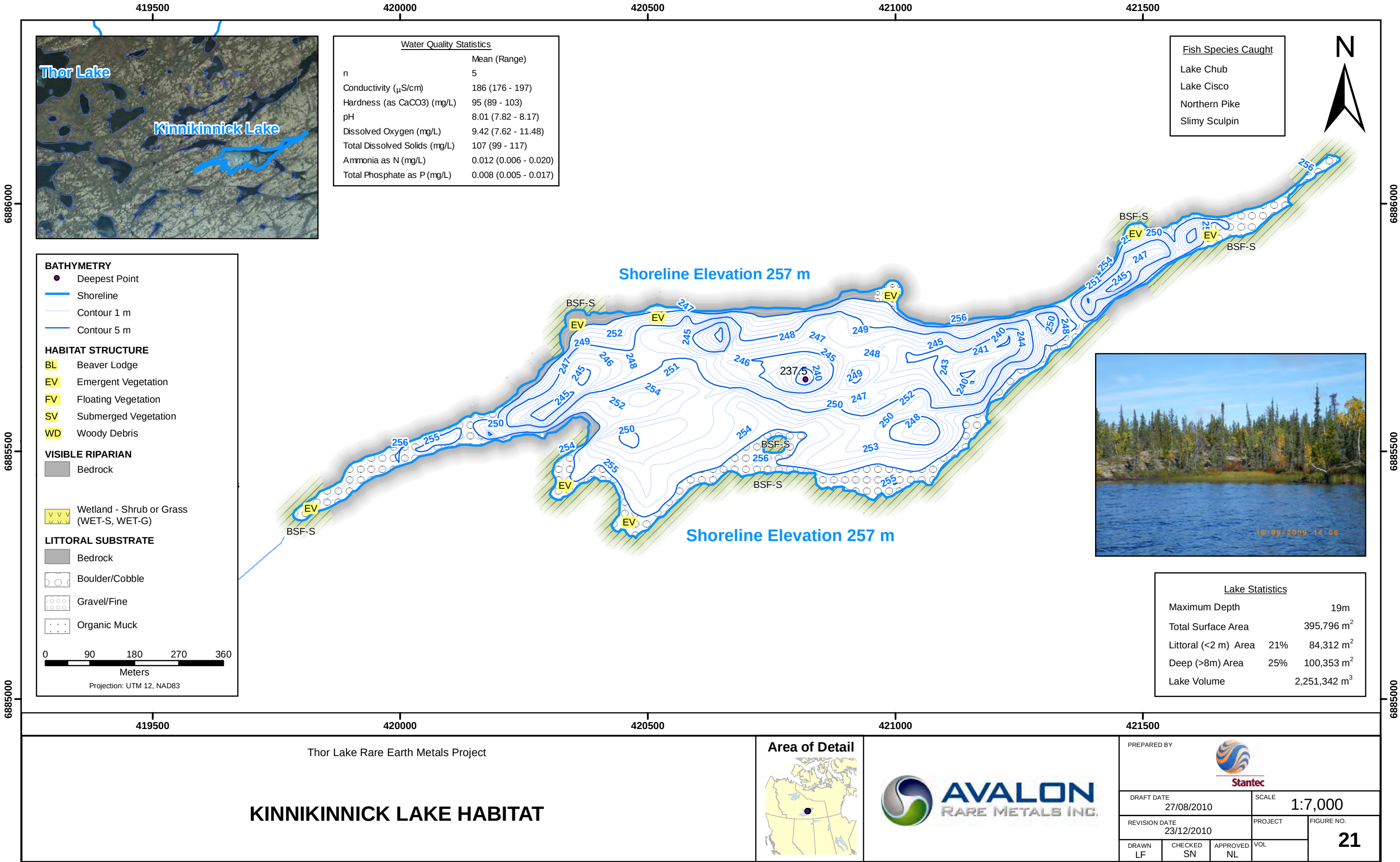
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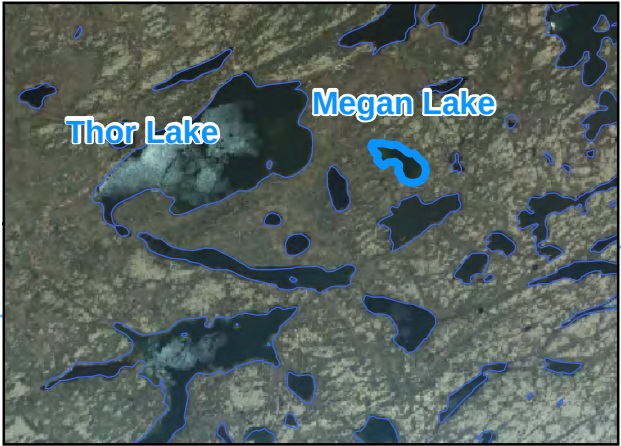
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20





OUTLET

BATHYMETRY

- Deepest Point
- Shoreline
- Contour 1 m
- Contour 5 m

HABITAT STRUCTURE

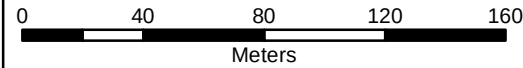
- BL Beaver Lodge
- EV Emergent Vegetation
- FV Floating Vegetation
- SV Submerged Vegetation
- WD Woody Debris

VISIBLE RIPARIAN

- Bedrock
- Black Spruce Forest - Shrub or Grass (BSF-S, BSF-G)
- Wetland - Shrub or Grass (WET-S, WET-G)

LITTORAL SUBSTRATE

- Bedrock
- Boulder/Cobble
- Gravel/Fine
- Organic Muck



Projection: UTM 12, NAD83



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Fish Species Caught
No Fish Caught



Lake Statistics

Maximum Depth	6.6 m
Total Surface Area	96,912 m ²
Littoral (<2 m) Area	58% 56,302 m ²
Deep (>8 m) Area	0% 0 m ²
Lake Volume	241,419 m ³

Water Quality Statistics

	Mean (Range)
n	5
Conductivity (μS/cm)	493 (419 - 582)
Hardness (as CaCO ₃) (mg/L)	288 (252 - 335)
pH	8.35 (8.09 - 8.62)
Dissolved Oxygen (mg/L)	5.90 (0.23 - 11.51)
Total Dissolved Solids (mg/L)	301 (274 - 355)
Ammonia as N (mg/L)	0.415 (0.037 - 1.190)
Total Phosphate as P (mg/L)	0.019 (0.007 - 0.037)

Thor Lake Rare Earth Metals Project

MEGAN LAKE HABITAT

Area of Detail



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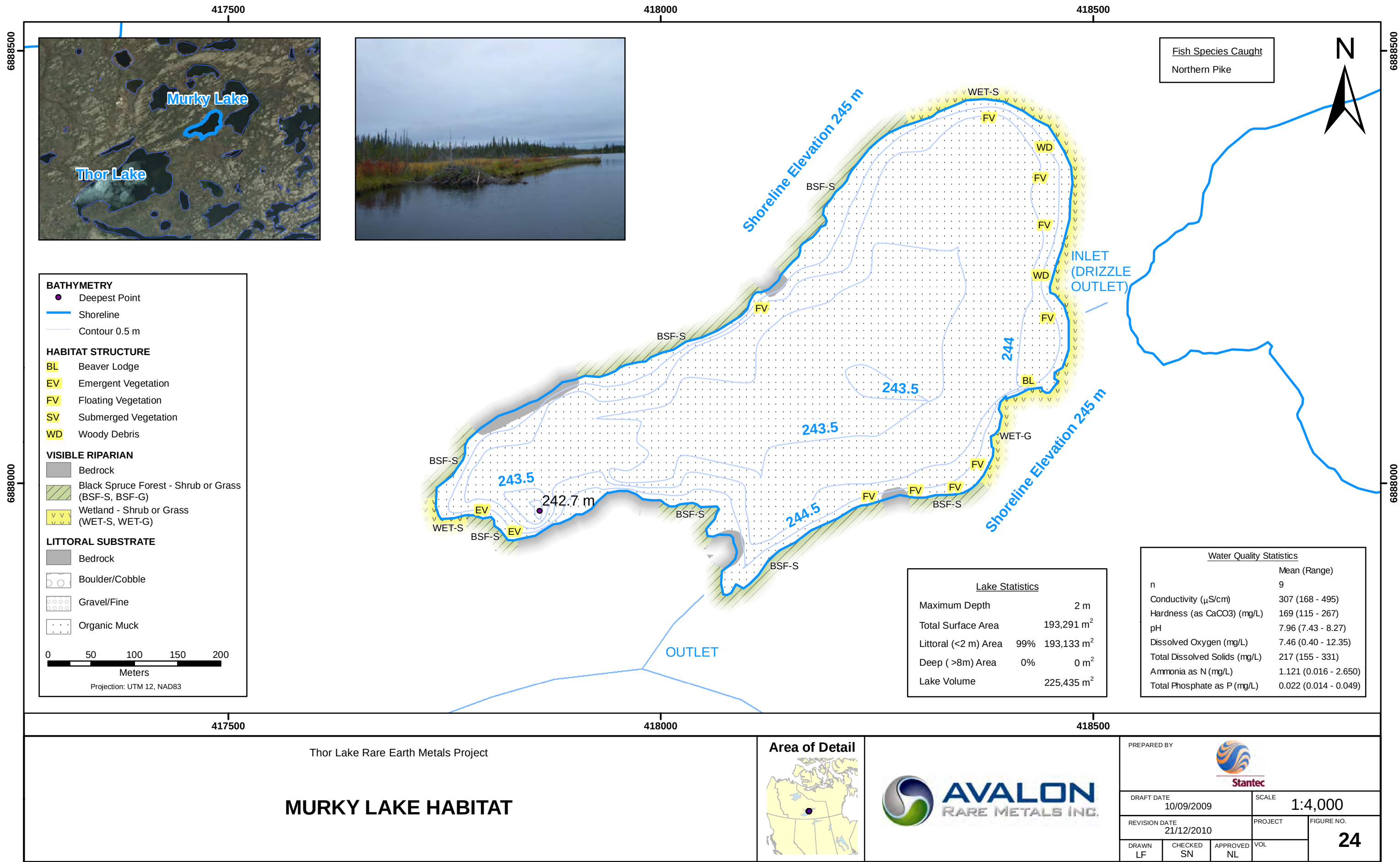
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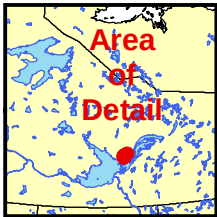
23





Hydrology Technical Data Report
Thor Lake Project, Nechalacho Deposit

FISH BEARING STATUS



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