Appendix A – Vegetation Atlas
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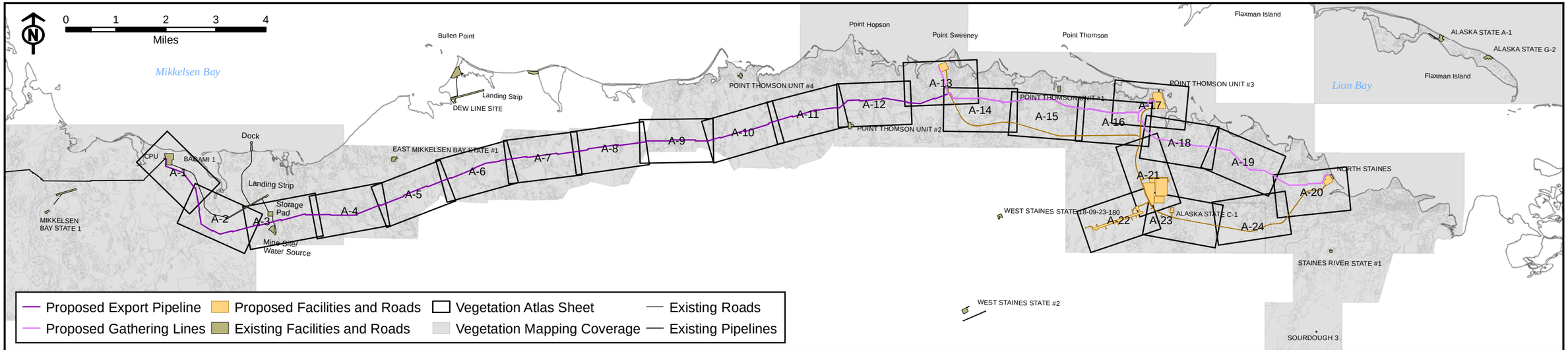
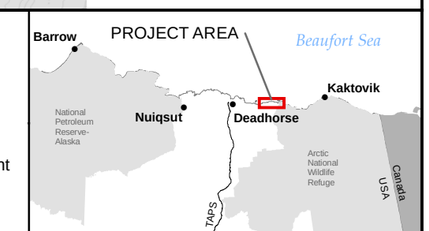


Ia	Ia. Water (ponds, lakes, rivers, streams, saltwater). Estuarine Subtidal (E1UBL), Riverine, Permanently, and Tidally Influenced (R1UBV, R2UBH), and Lacustrine (L1UBH, L2UBH) and PalustrineWater Bodies (PUBH).
IIb	IIb. Aquatic Graminoid Tundra (emergent vegetation). Lacustrine (L2EM2H) and Palustrine (PEM1H) Permanently Flooded Emergent Marshes.
IId	IId. Water/Tundra Complex (inter-connected ponds with emergent vegetation). Lacustrine (L2UB/EM2H) and Palustrine (PUB/EM2H) Complexes of Open Water and Emergent Vegetation.
IIIa	IIIa. Wet Sedge TundraPalustrine (PEM1B, PEM1E) Saturated Wet Sedge Meadows. Wet Sedge Meadows may be Permanently or Semi-Permanently Flooded (PEM1H, PEM1F).
IIIb	IIIb. Wet Graminoid Tundra (wet saline tundra, salt marsh). Estuarine Emergent Intertidal (E2EM1N, E2EM1P).
IIIc	IIIc. Wet Sedge Tundra/Water Complex (inter-connected ponds with no emergent vegetation). Lacustrine (L2EM2/UBH) and Palustrine (PEM1/UBH) Complexes of Emergent Vegetation and Open Water.
IIId	IIId. Wet Sedge/Moist Sedge, Dwarf Shrub Tundra Complex(wet patterned-ground complex). Palustrine Scrub Shrub Complexes, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1B, PEM1E). Wet Sedge Meadows may be Permanently or Semi-Permanently Flooded (PEM1H,PEM1F).
IIIe	IIIe. Wet Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex). Palustrine Scrub Shrub Complexes, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1B, PEM1E). Wet Sedge Meadows may be Permanently or Semi-Permanently Flooded (PEM1H, PEM1F).
IVa	IVa. Moist Sedge, Dwarf Shrub/Wet Graminoid Tundra Complex (moist patterned-ground complex). Palustrine Scrub Shrub Complex, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1E). Wet Sedge Meadows may be Permanently or Semi-Permanently Flooded (PEM1H, PEM1F).
Va	Va. Moist Sedge, Dwarf Shrub Tundra. Palustrine Saturated Shrub Emergent Wetlands (PSS/EM1B).
Vb	Vb. Moist Tussock Sedge, Dwarf Shrub Tundra. Palustrine Saturated Emergent and Scrub Shrub Wetlands (PEM/SS1B).
Vc	Vc. Dry Dwarf Shrub, Crustose Lichen Tundra (Dryas tundra, pingos). Uplands.
Vd	Vd. Dry Dwarf Shrub, Fruticose Lichen Tundra (dry acidic tundra). Upland and Palustrine Emergent Moist/Wet Sedge Meadows. (PEM1B,PEM1E) Wet Sedge Meadows may be Permanently or Semi-Permanently Flooded (PEM1H, PEM1F).
Ve	Ve. Moist Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex). Palustrine Saturated Scrub Shrub Emergent Wetlands (PSS/EM1B).
IXb	IXb. Dry Barren/Dwarf Shrub, Forb Grass Complex (forb-rich river bars) Upland and Palustrine, Temporarily Flooded Riparian Open Shrub (PSS/EM1A).
IXc	IXc. Dry Barren/Forb Complex (river bars in active channels) Palustrine Partially Vegetated Emergent Persistent Well Drained (PEM1/USD).
IXe	IXe. Dry Barren/Grass Complex. Upland.
IXf	IXf. Dry Barren/Dwarf Shrub, Grass Complex (sand dune steppe). Upland.
IXh	IXh. Wet Barren/Wet Sedge Tundra Complex (barren/saline tundra complex, saltmarsh). Estuarine Intertidal, Regularly Flooded Mud Flats (E2USN, E2USP) with Emergent Intertidal (E2EM1P).
IXi	IXi. Dry Barren/Forb, Graminoid Complex (saline coastal barrens).Unknown (Original Vegetation Slat-Killed); Possibly was Saturated Scrub Shrub Emergent Wetlands (PSS/EM1B0.
Xa	Xa. River Gravels. Riverine, Seasonally Flooded Areas (R2USC, R3USC).
Xc	Xc. Barren Gravel Outcrops. Upland/Unknown.
Xe	Xe. Gravel Roads and Pads. Upland/Unkown.
XIa	XIa. Wet Mud (drained lakes and ponds). Exposed Lacustrine (L2USD) and Palustrine Peat (PUSD) and Sediments.
XIc	XIc. Bare Peat. Exposed Lacustrine (L2USD) and Palustrine Peat (PUSD) and Sediments.
BS	BS. Barren Sand/Gravel



MAP SOURCE INFORMATION:

Between Point Thomson Area & Badami Area
Vegetation interpreted from color infrared aerial photography dated July 19, 1997 and July 2, 1994 supplemented by natural color aerial photography dated July 1, 1993.

Point Thomson Area
Vegetation interpreted from color infrared aerial photography dated July 19, 1997 supplemented by natural color aerial photography dated July 1, 1993, and from field observations, 1998. Section 13 of T9N R23E was filled in through hybrid image classification by OASIS Environmental, Inc. August 30, 2009.

Badami Area
Vegetation interpreted from enlarged natural color aerial photography dated July 1, 1993 and supplemented by field observations.

ExxonMobil POINT THOMSON PROJECT

VEGETATION ATLAS OVERVIEW

ENVIRONMENTAL REPORT

NOVEMBER 2009 **APPENDIX A**

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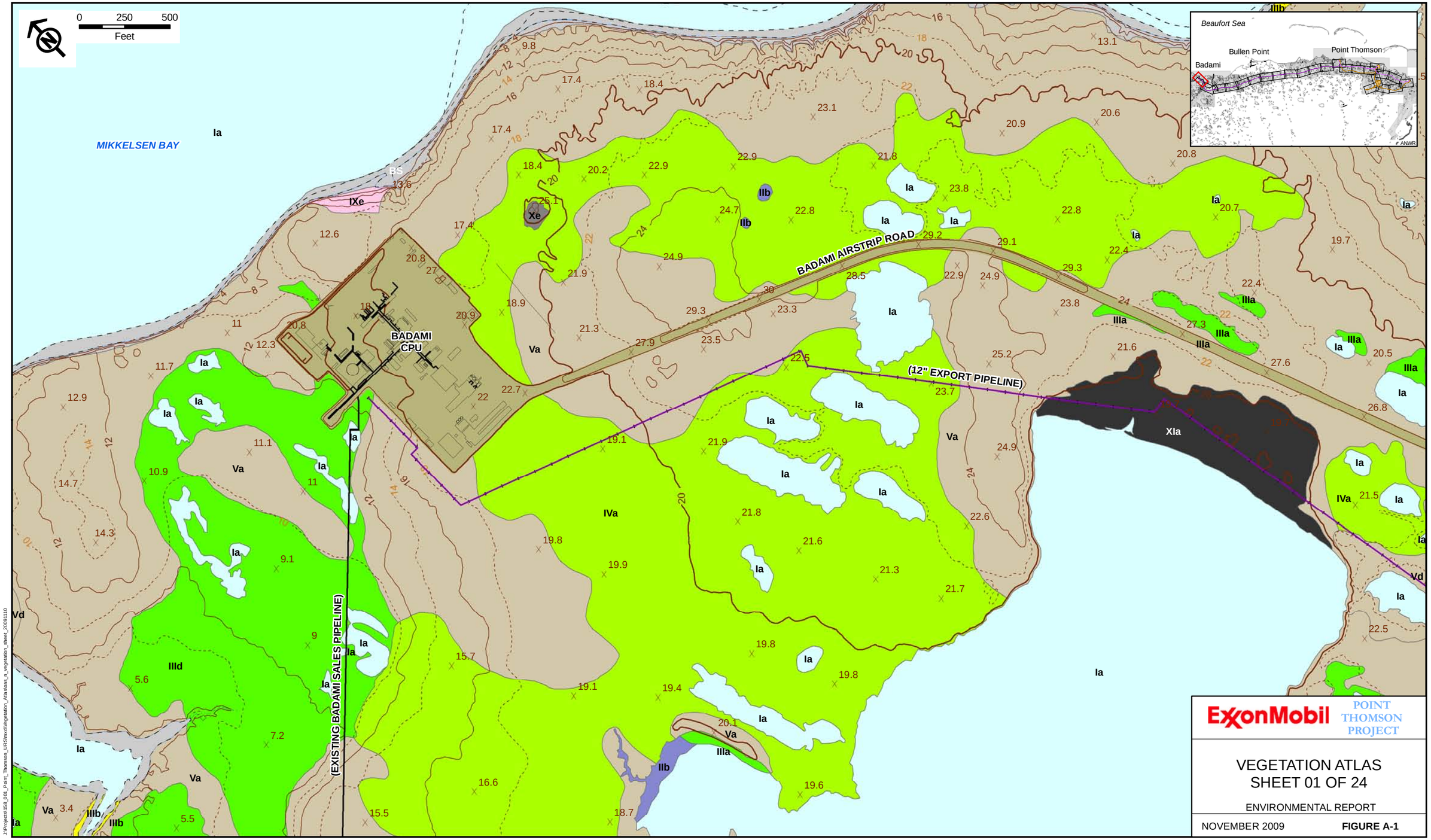

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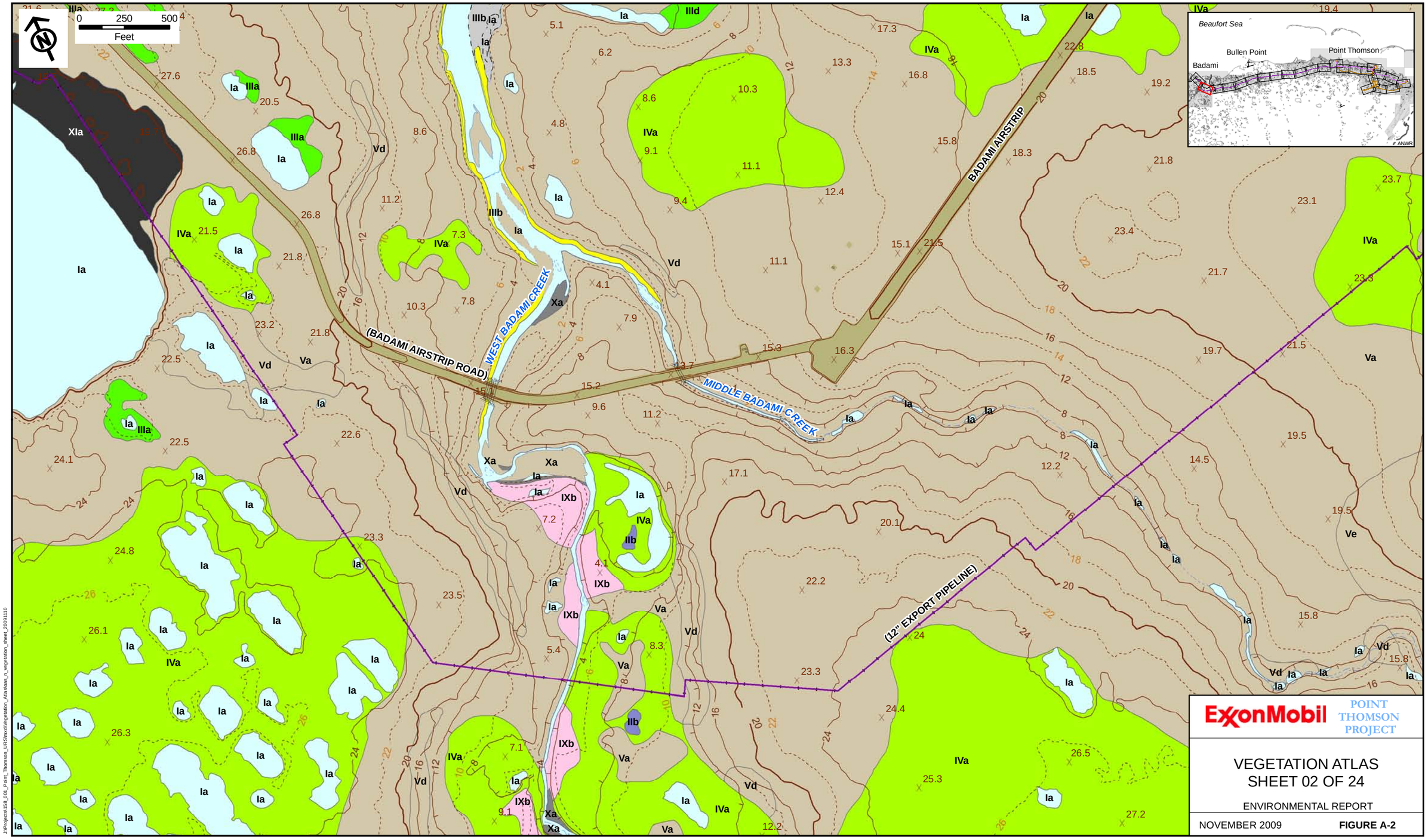
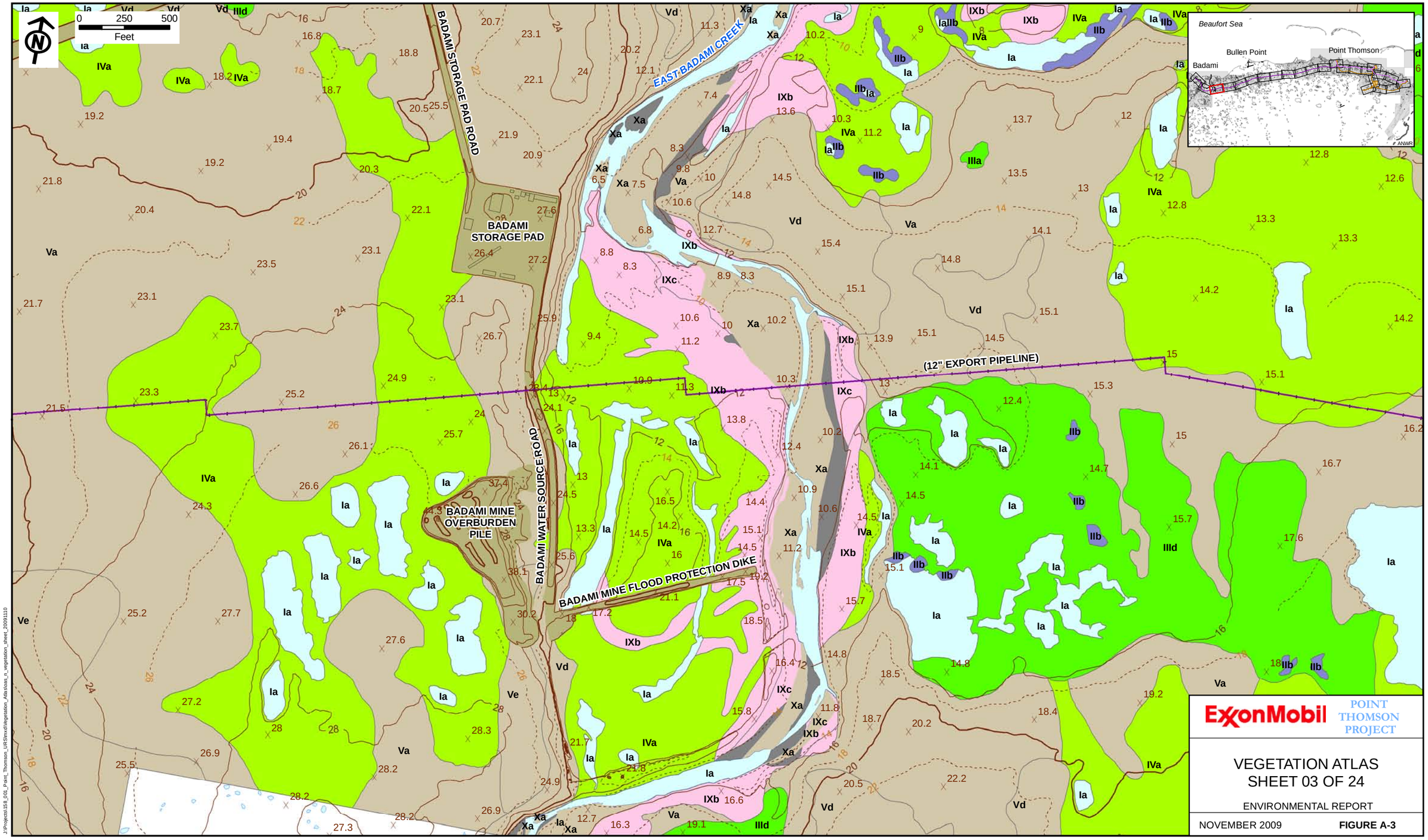

0 250 500
Feet
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
(BADAMI AIRSTRIP ROAD)
BADAMI AIRSTRIP
WEST BADAMI CREEK
MIDDLE BADAMI CREEK
(12" EXPORT PIPELINE)
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 02 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-2



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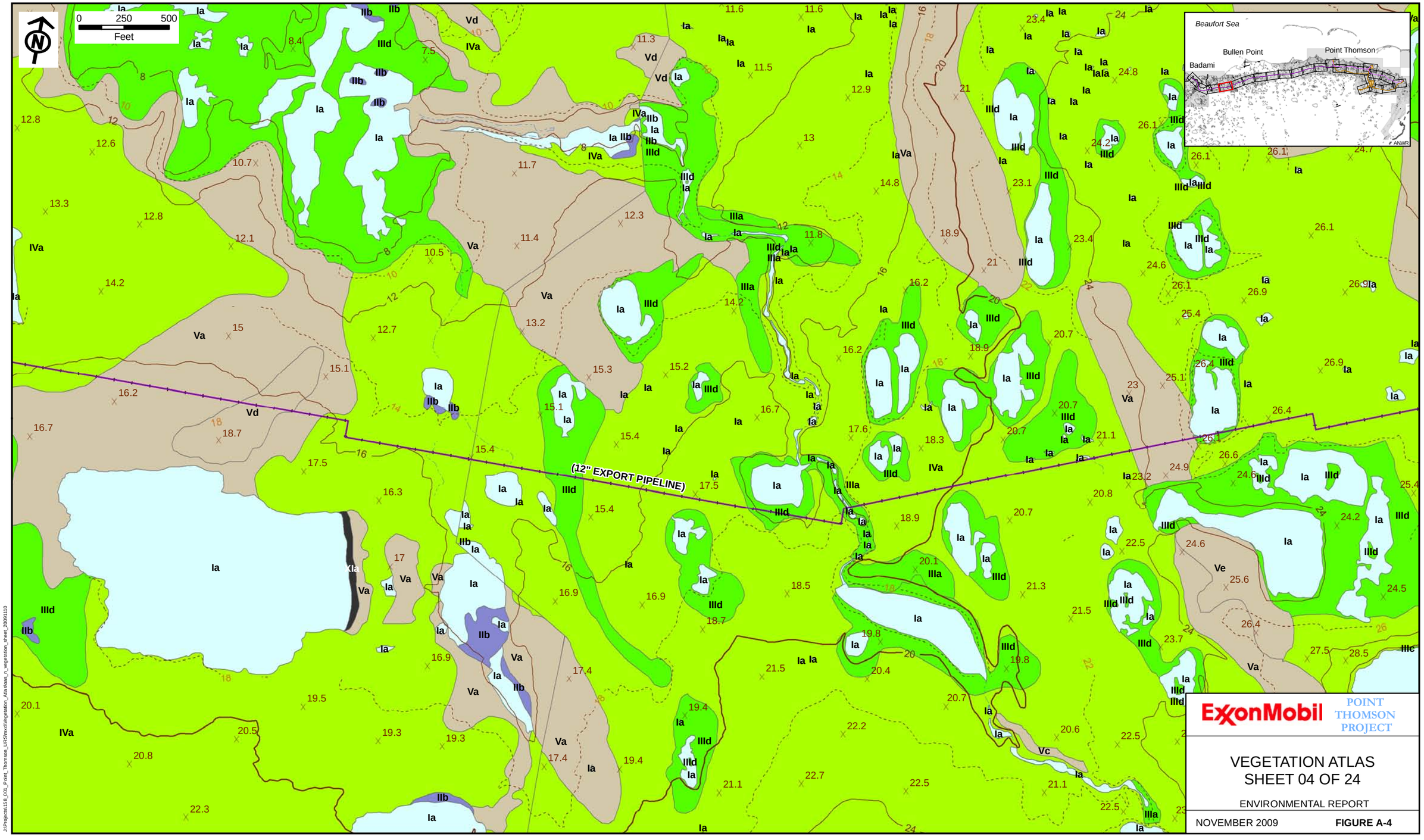
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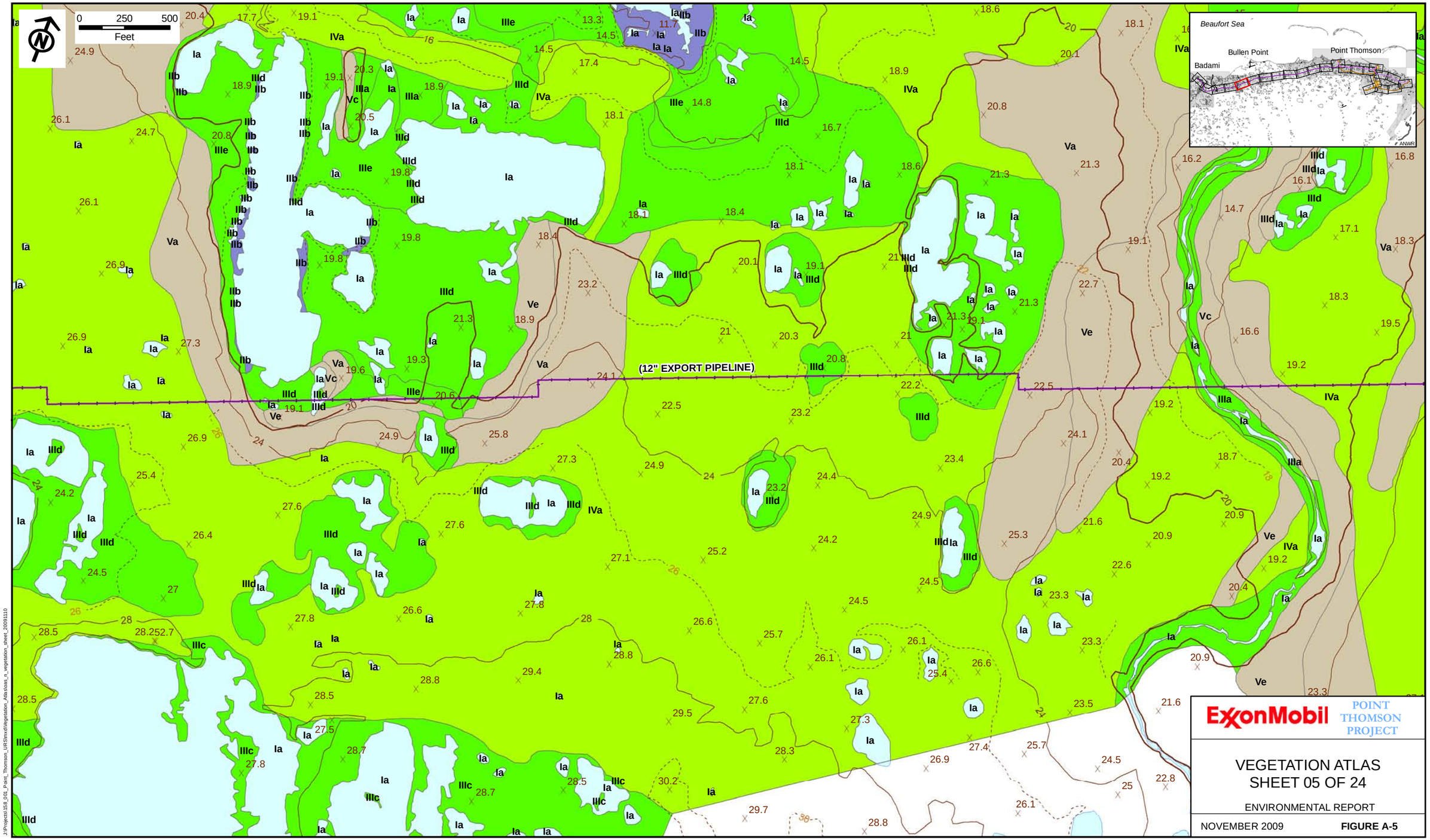
Bullen Point
Point Thomson
Badami
ANWR
(12" EXPORT PIPELINE)
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 04 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-4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Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 05 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-5
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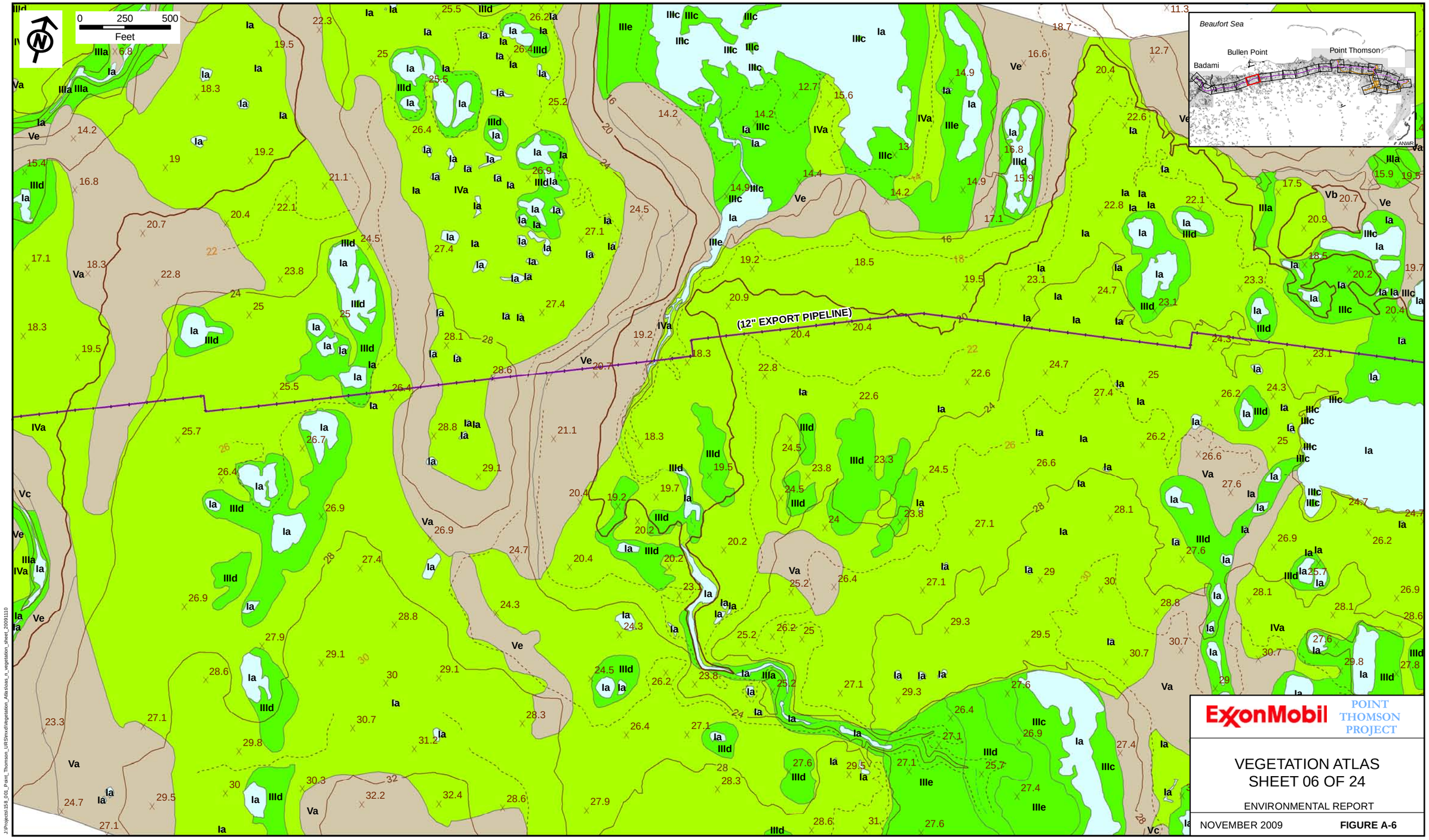
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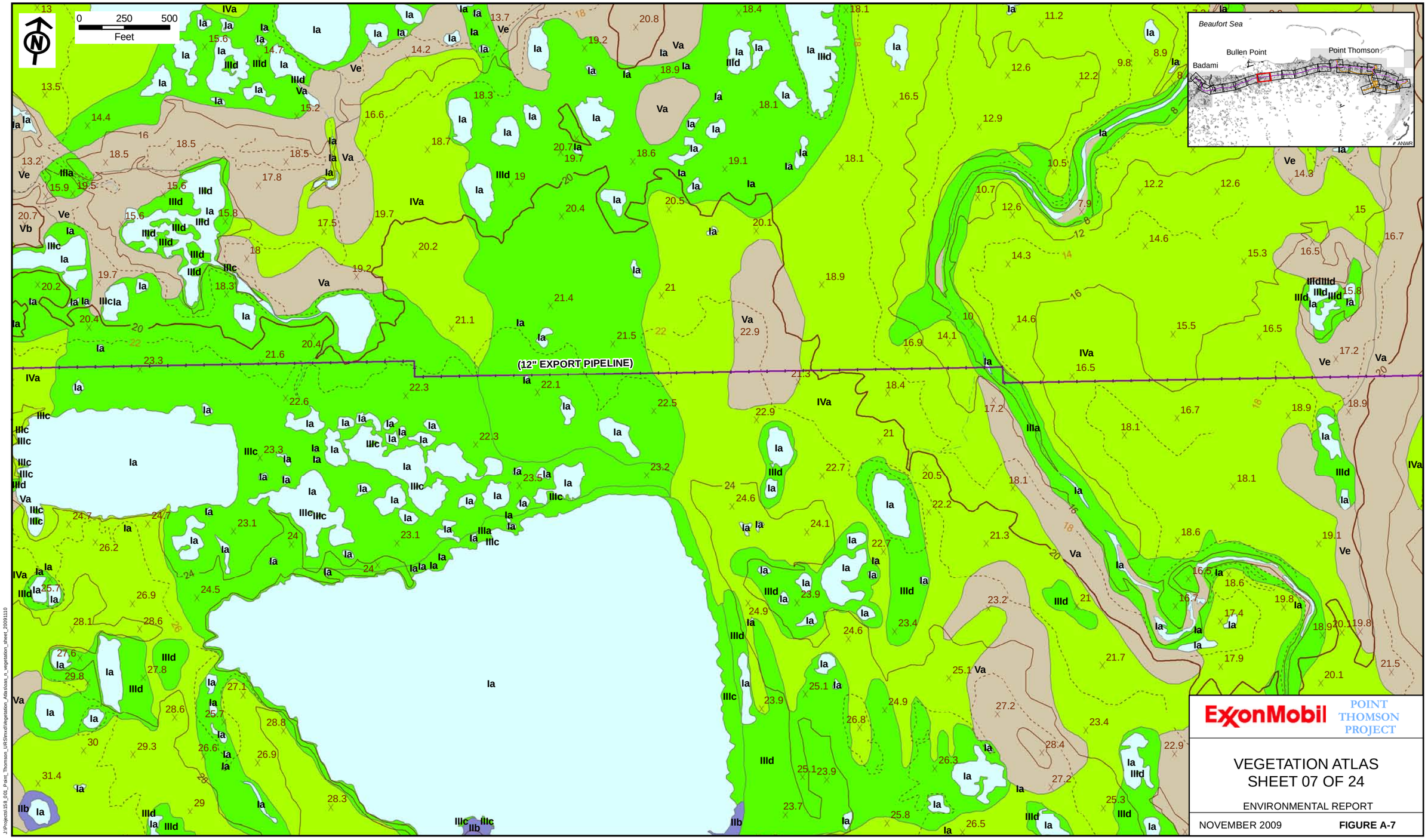
(12" EXPORT PIPELINE)
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 06 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-6



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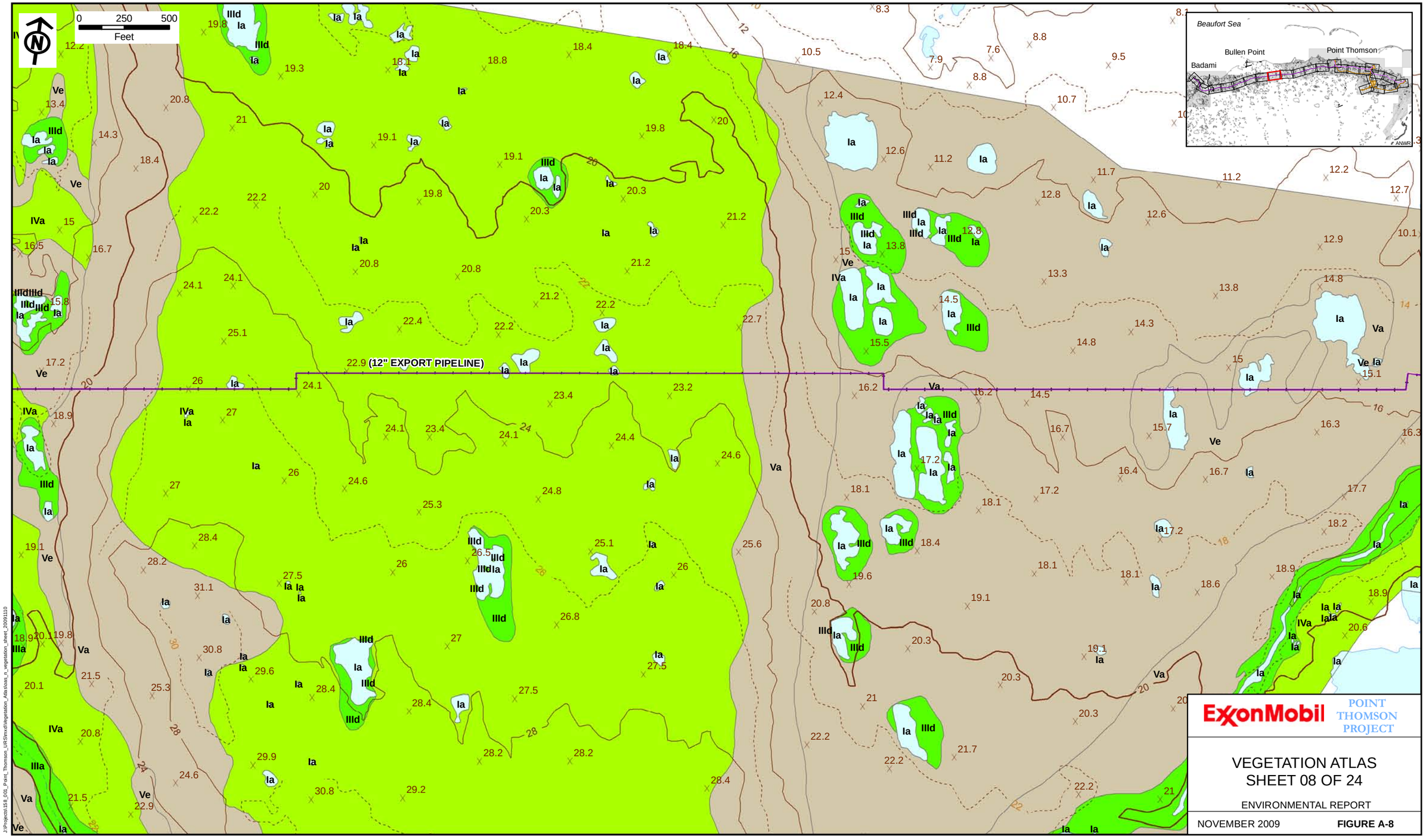
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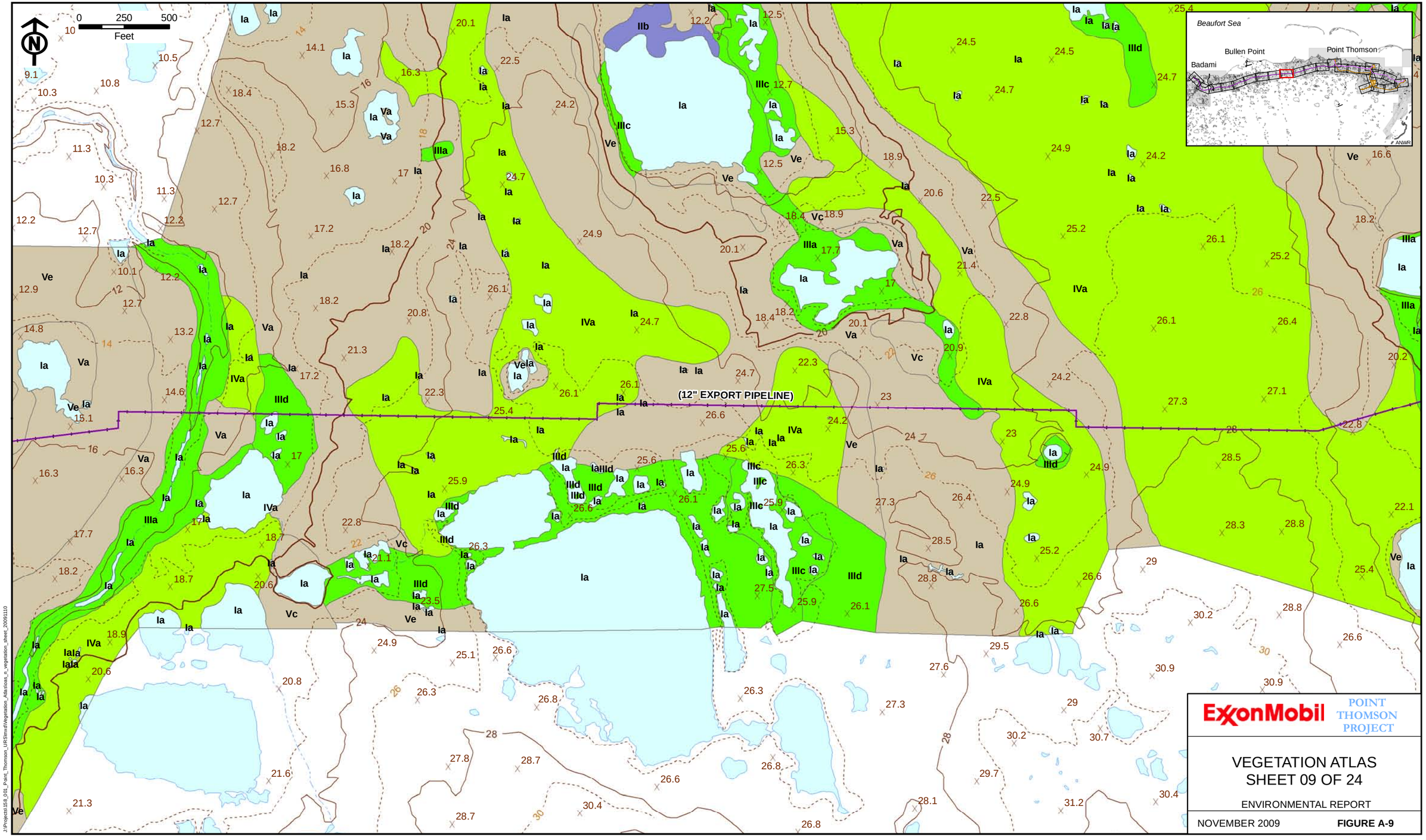
(12" EXPORT PIPELINE)
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 08 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-8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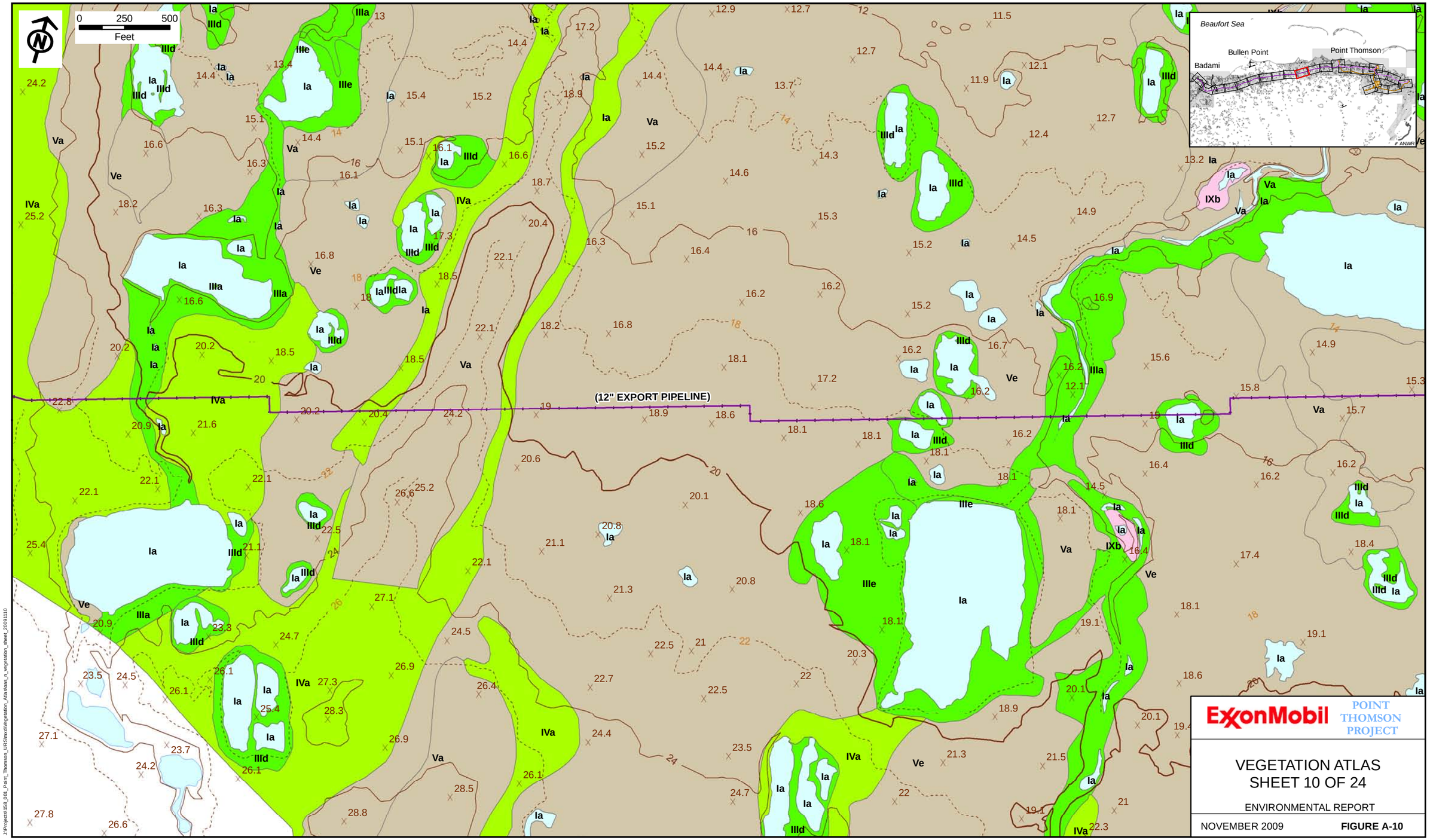
Feet
N
(12" EXPORT PIPELINE)
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 09 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-9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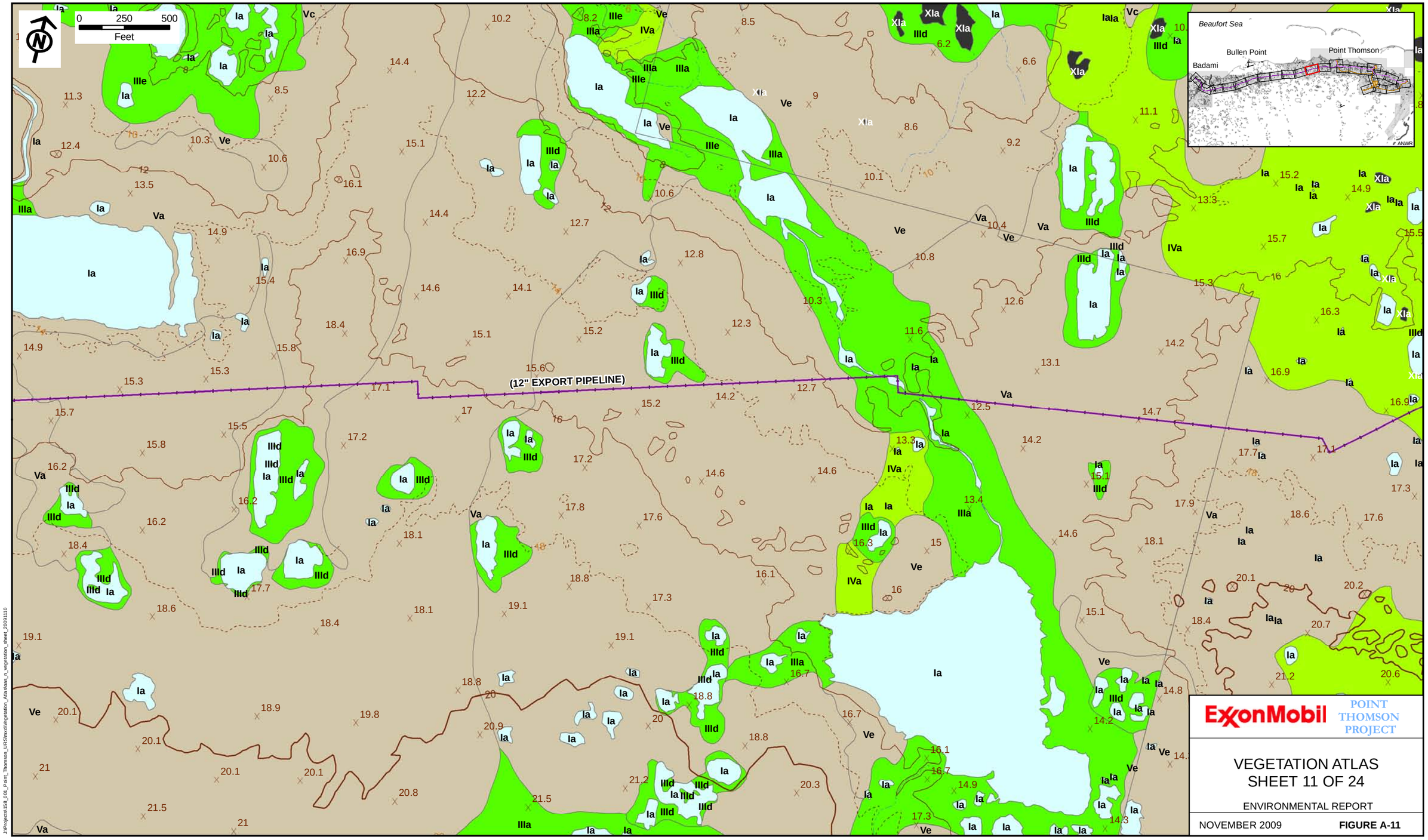
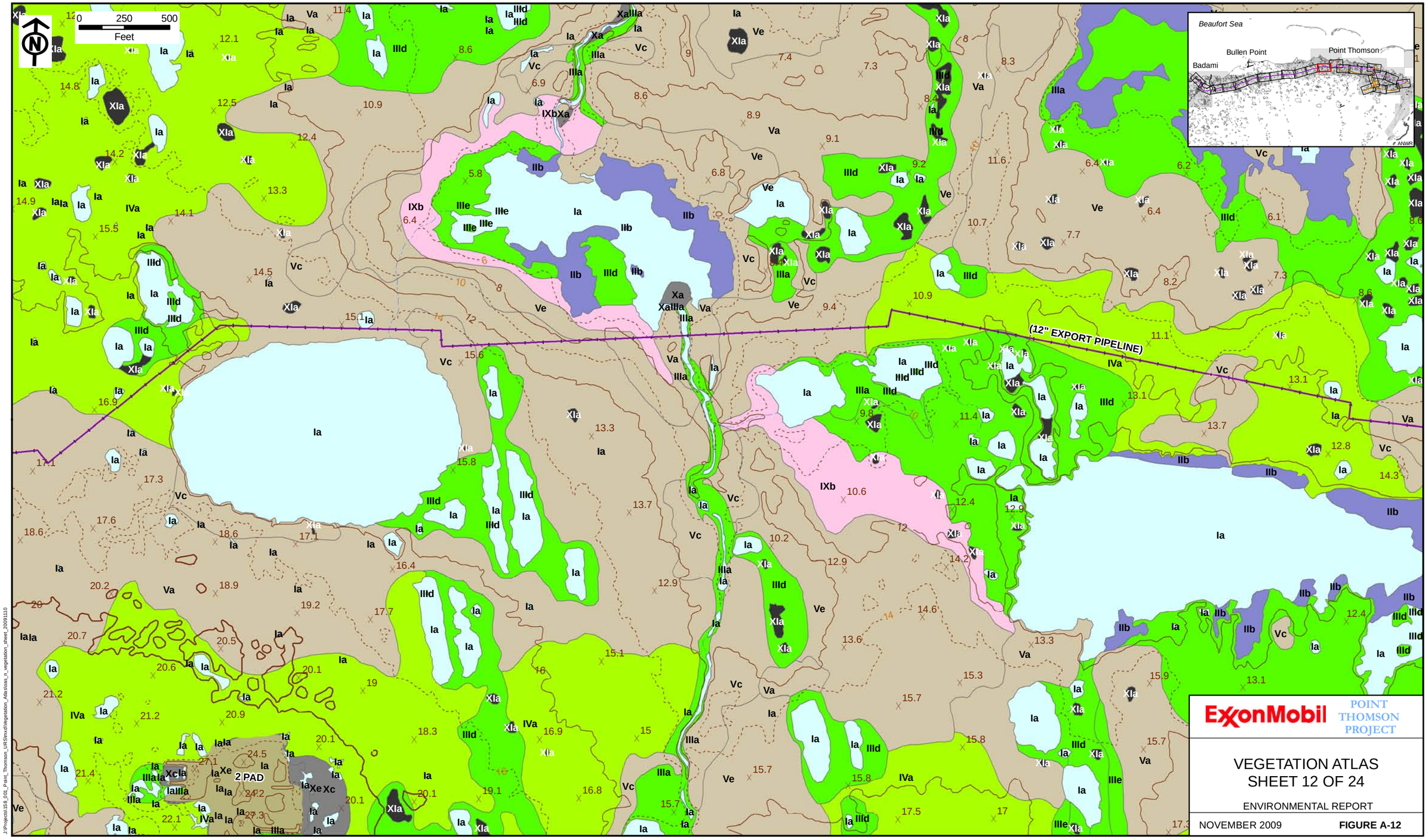
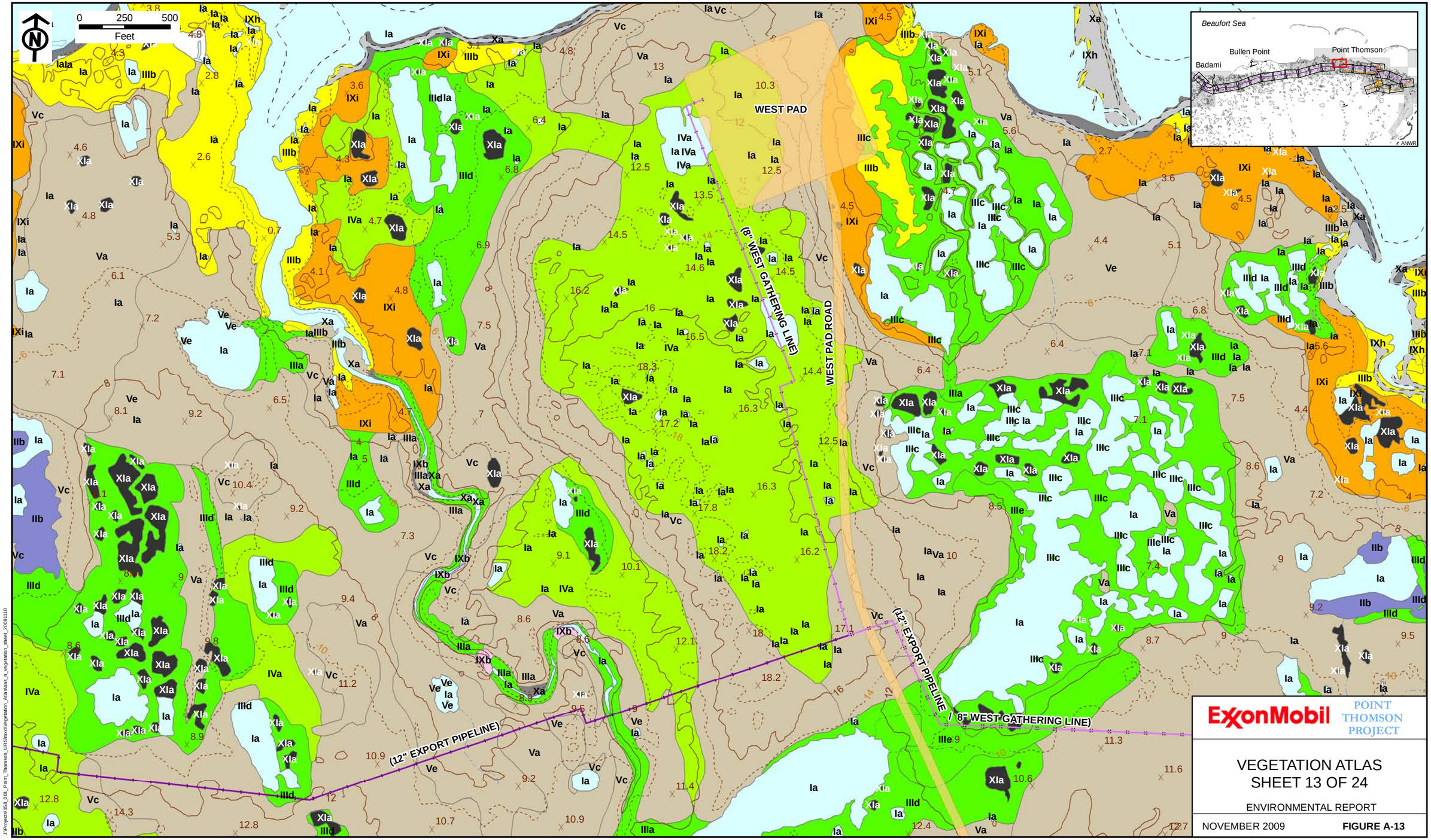
Beaufort Sea
Bullen Point
Point Thomson
Badami
(12" EXPORT PIPELINE)
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 10 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-10


0 250 500
Feet
(12" EXPORT PIPELINE)
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 11 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-11


0 250 500
Feet
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
(12" EXPORT PIPELINE)
2 PAD
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 12 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-12



ExxonMobil POINT THOMSON PROJECT

VEGETATION ATLAS
SHEET 13 OF 24

ENVIRONMENTAL REPORT

NOVEMBER 2009 **FIGURE A-13**

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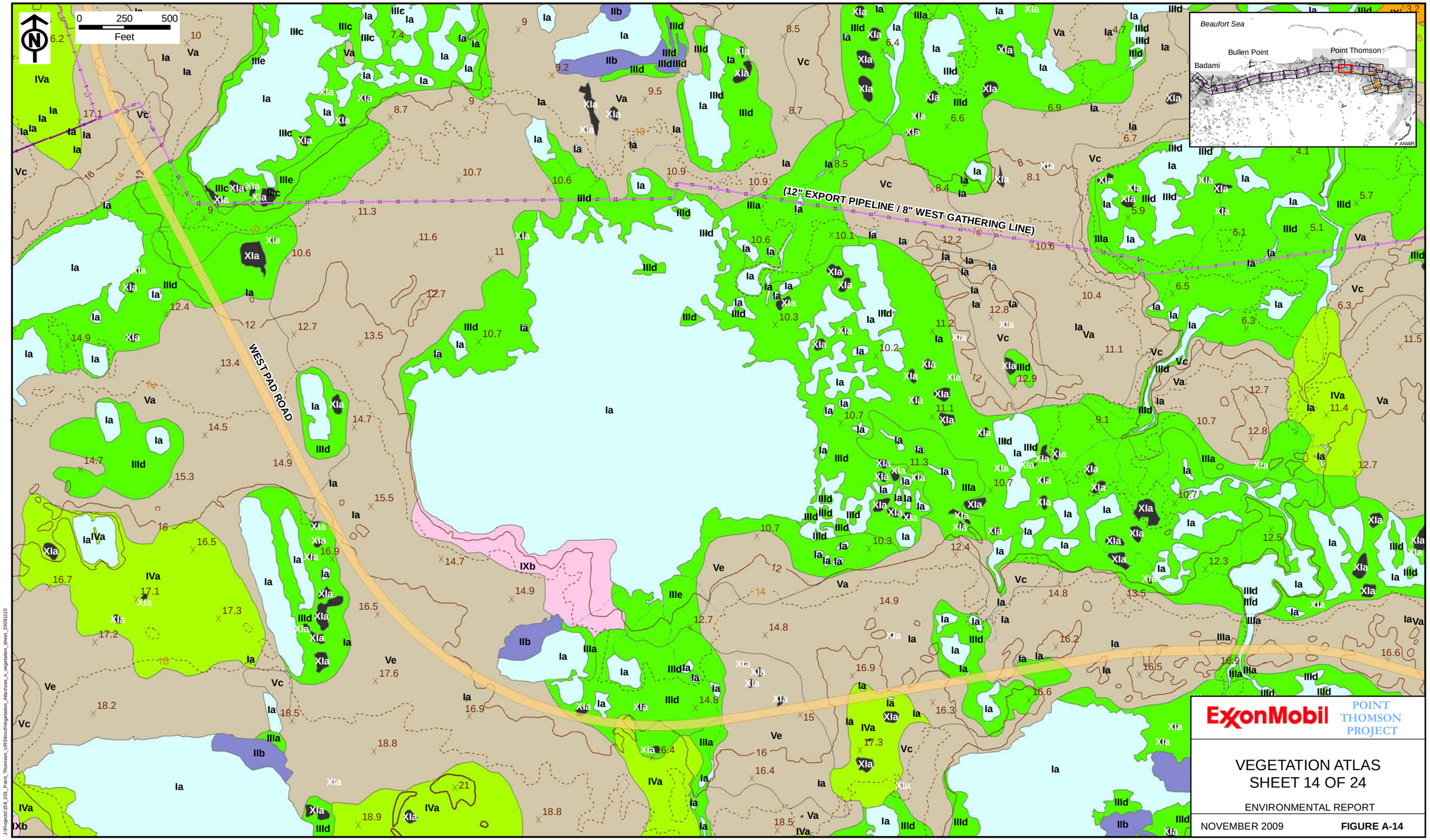

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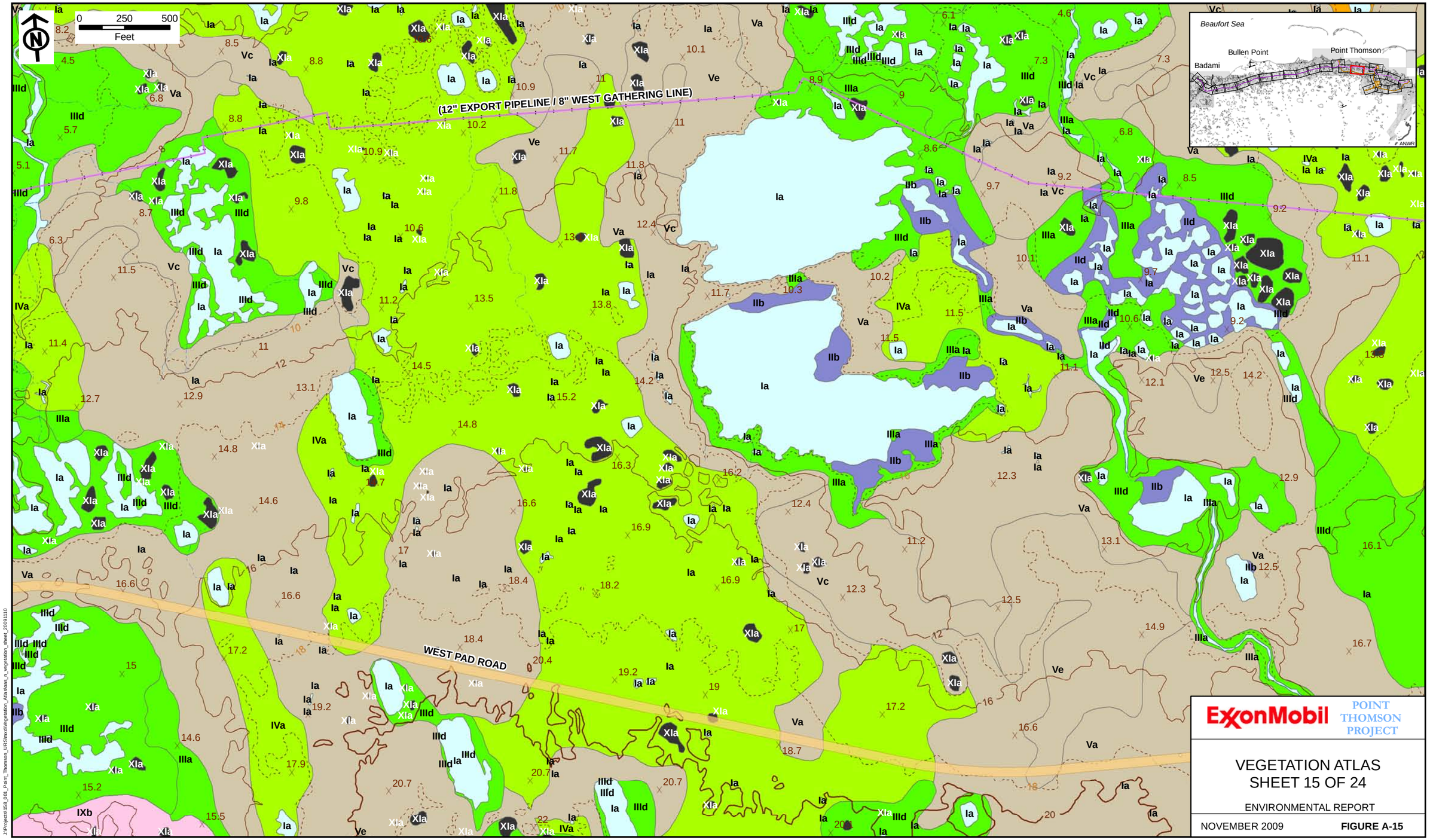
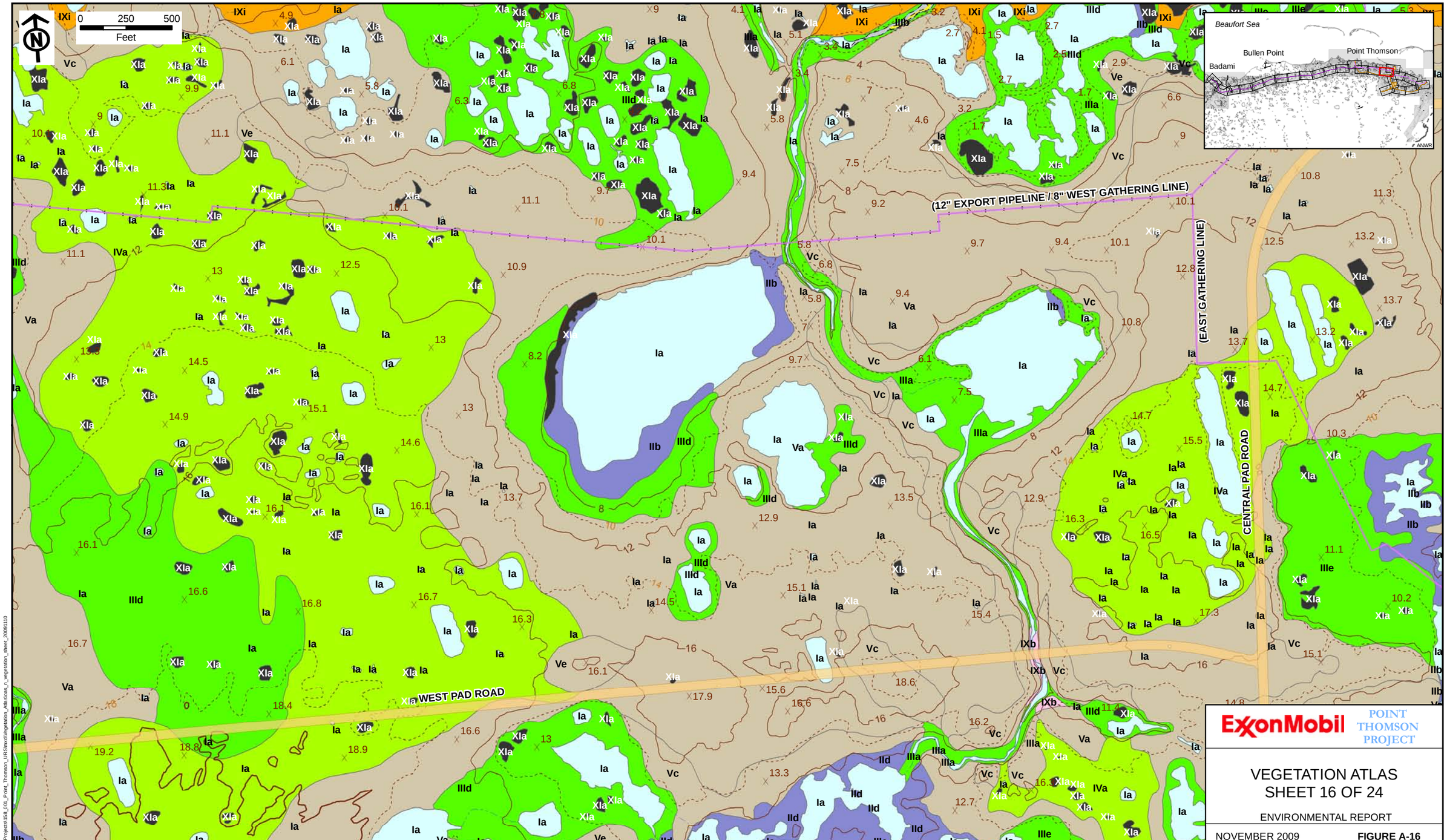

0 250 500
Feet
(12" EXPORT PIPELINE / 8" WEST GATHERING LINE)
WEST PAD ROAD
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 15 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-15



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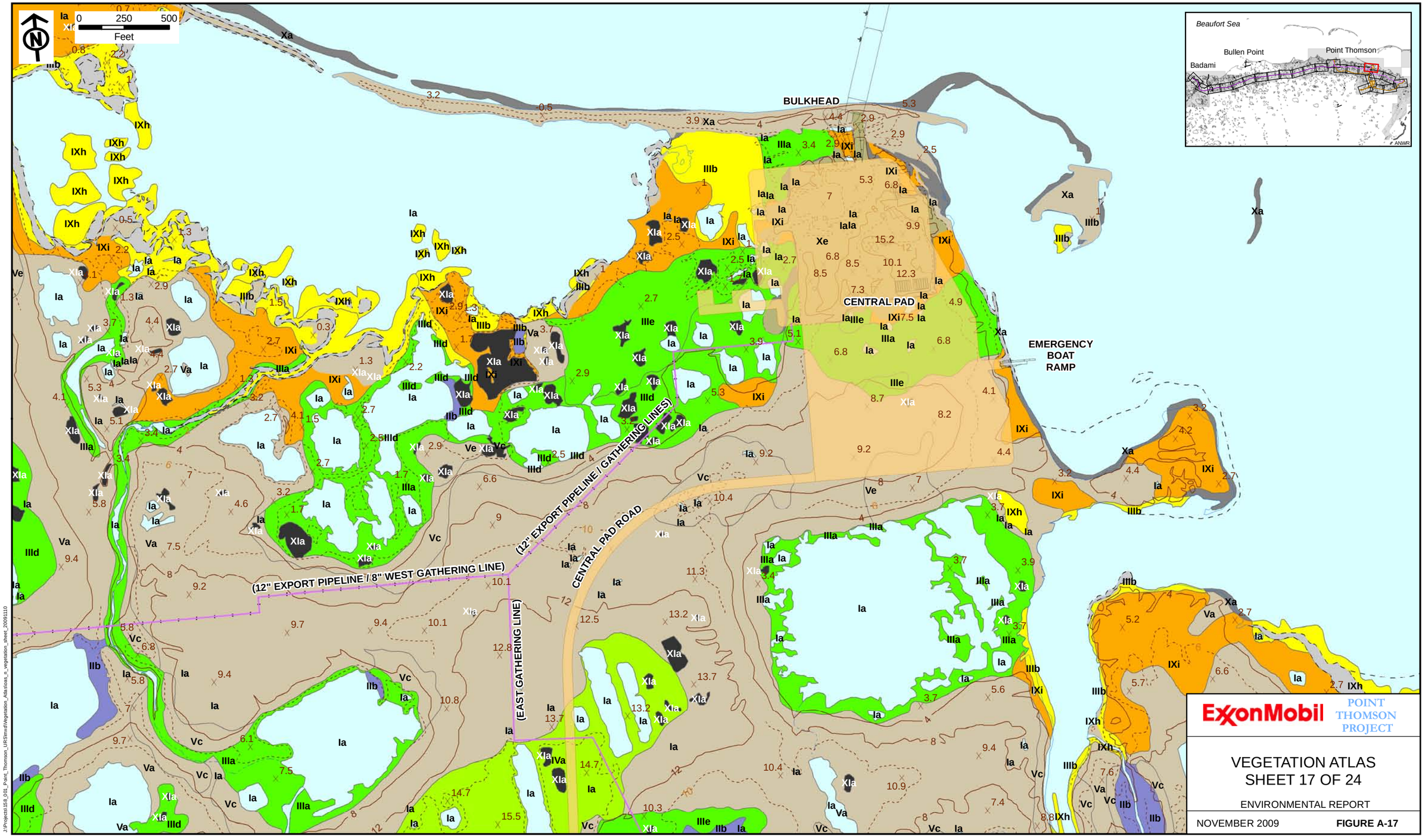
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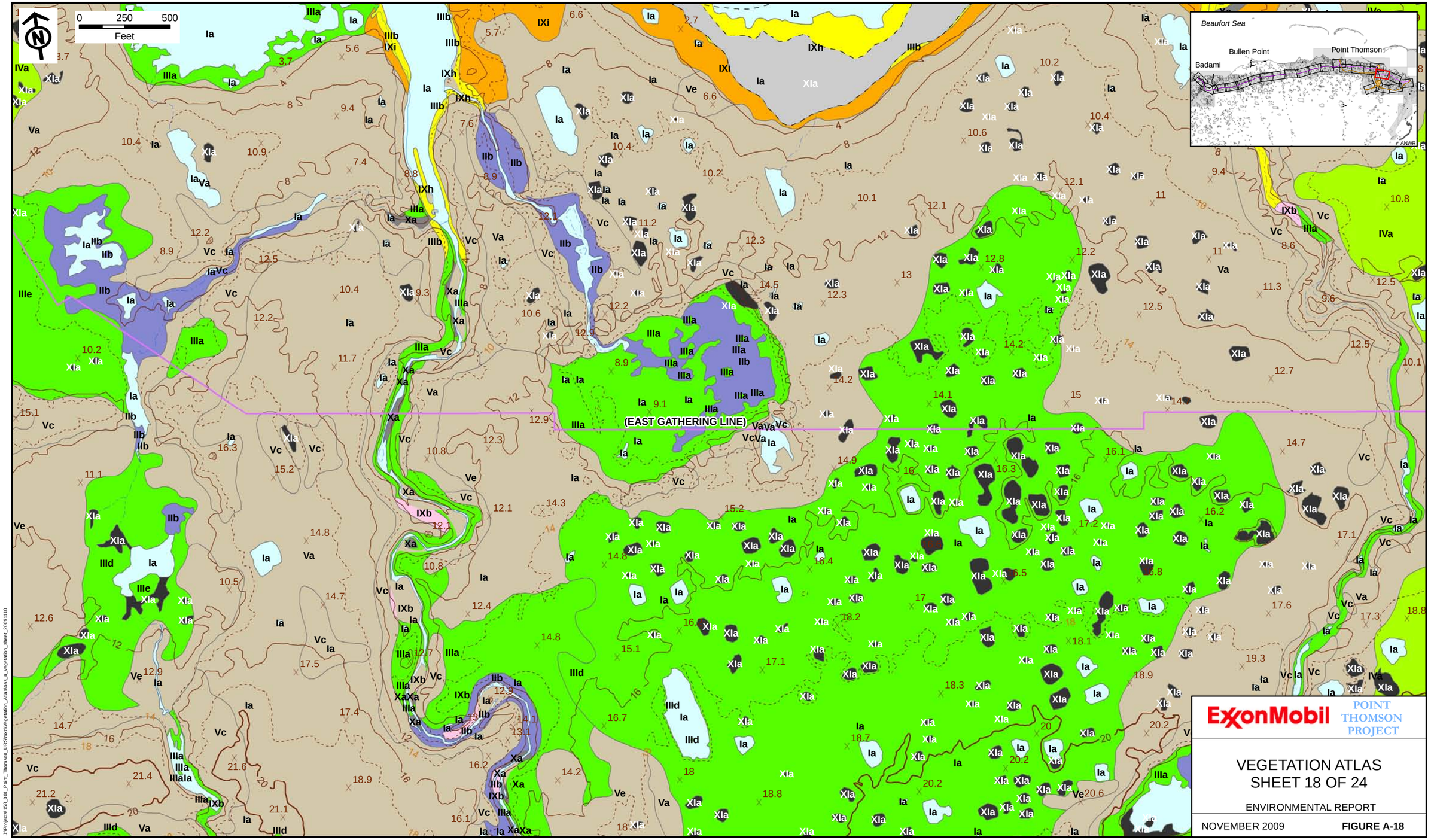
Feet
BULKHEAD
CENTRAL PAD
EMERGENCY BOAT RAMP
(12" EXPORT PIPELINE / GATHERING LINES)
(12" EXPORT PIPELINE / 8" WEST GATHERING LINE)
CENTRAL PAD ROAD
(EAST GATHERING LINE)
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 17 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-17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Feet
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
(EAST GATHERING LINE)
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 18 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-18
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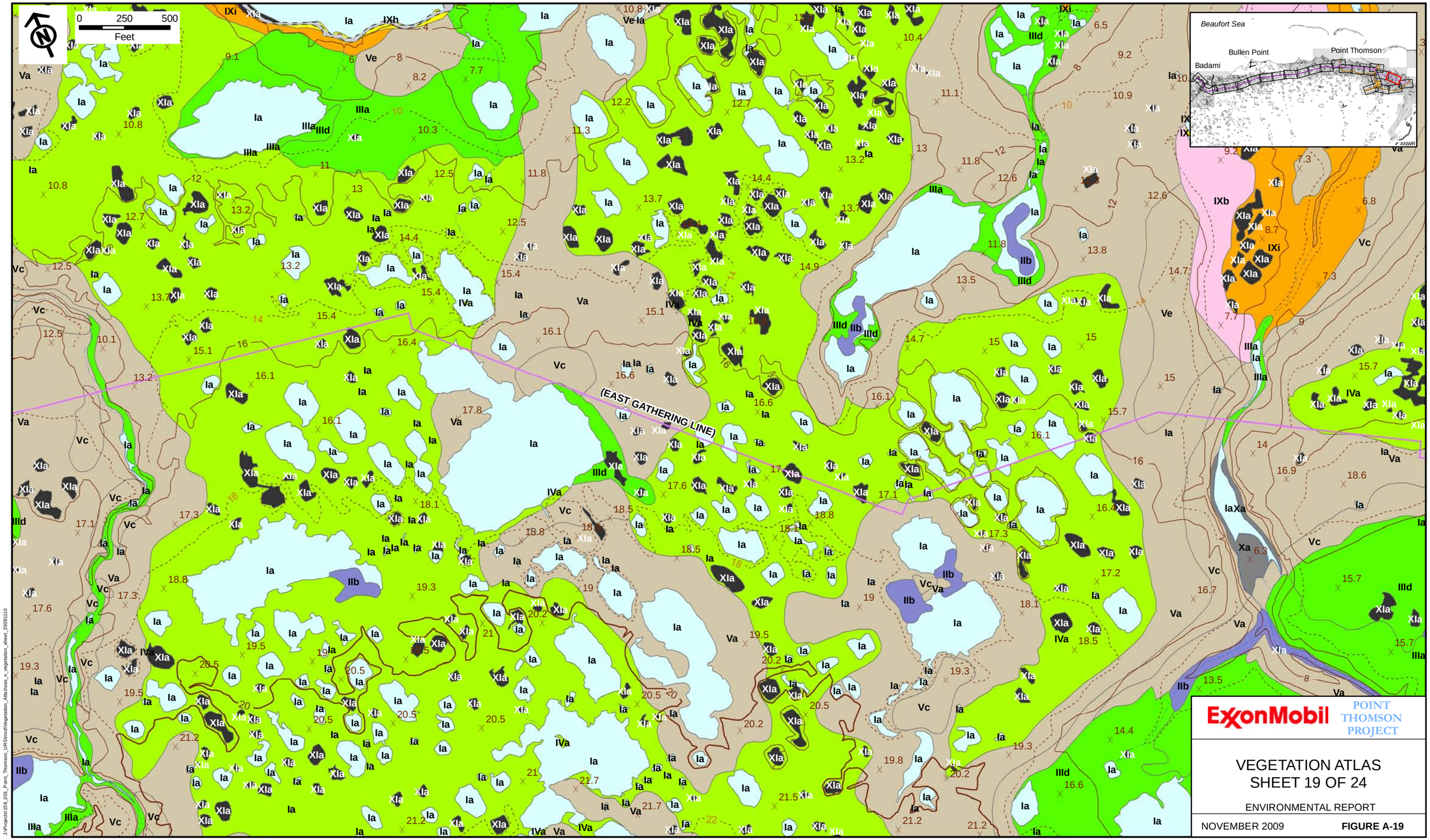
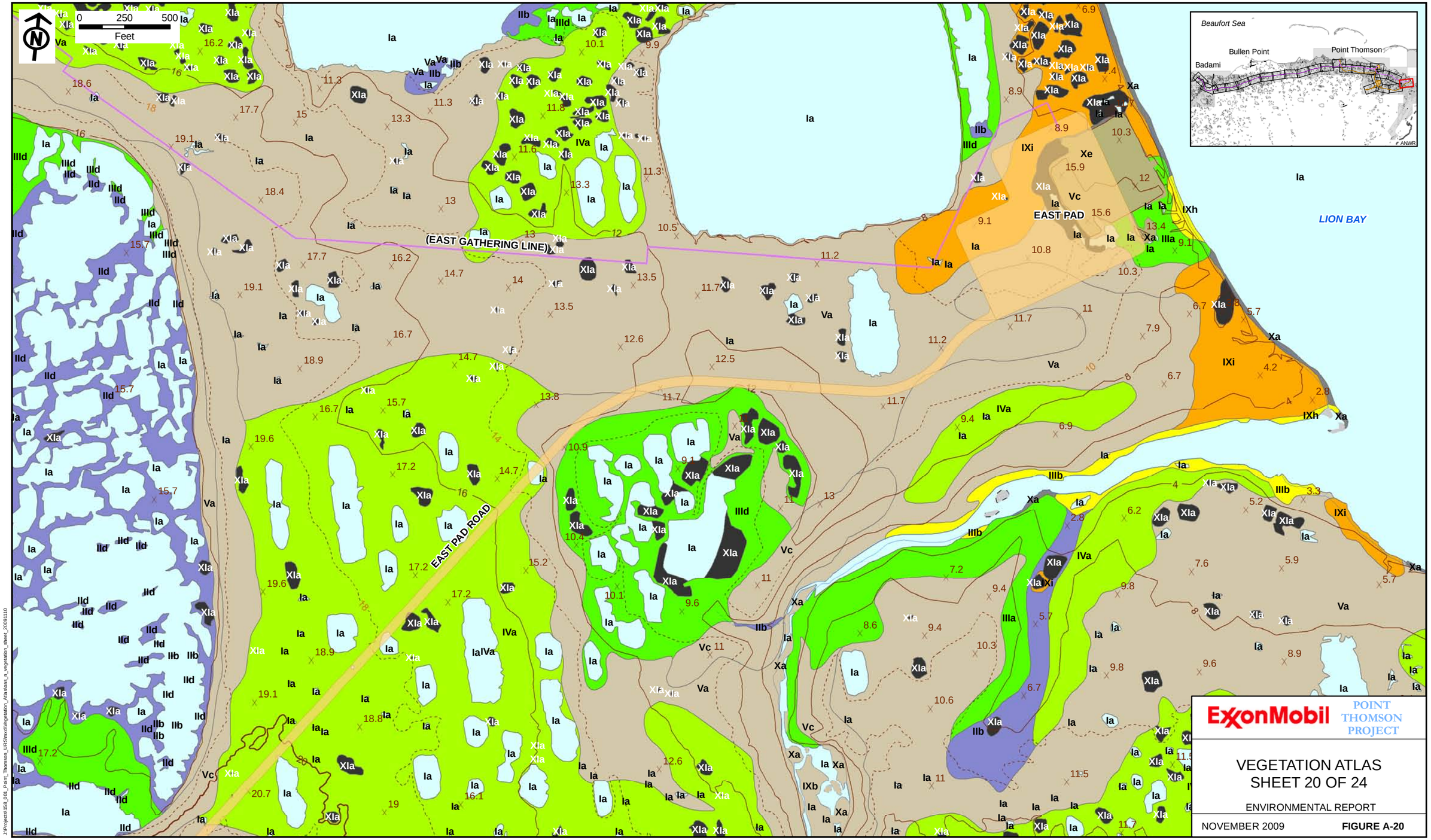
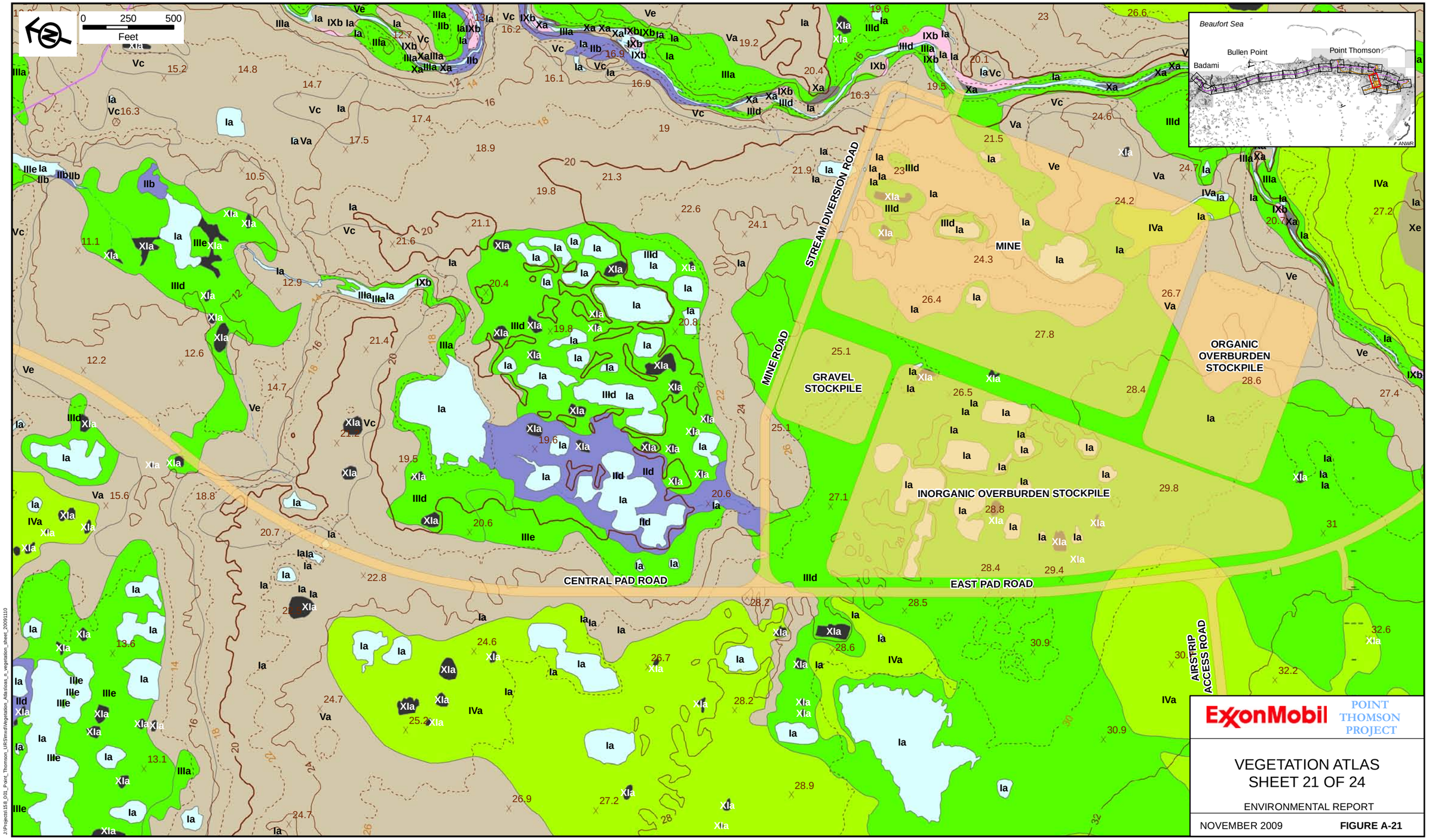
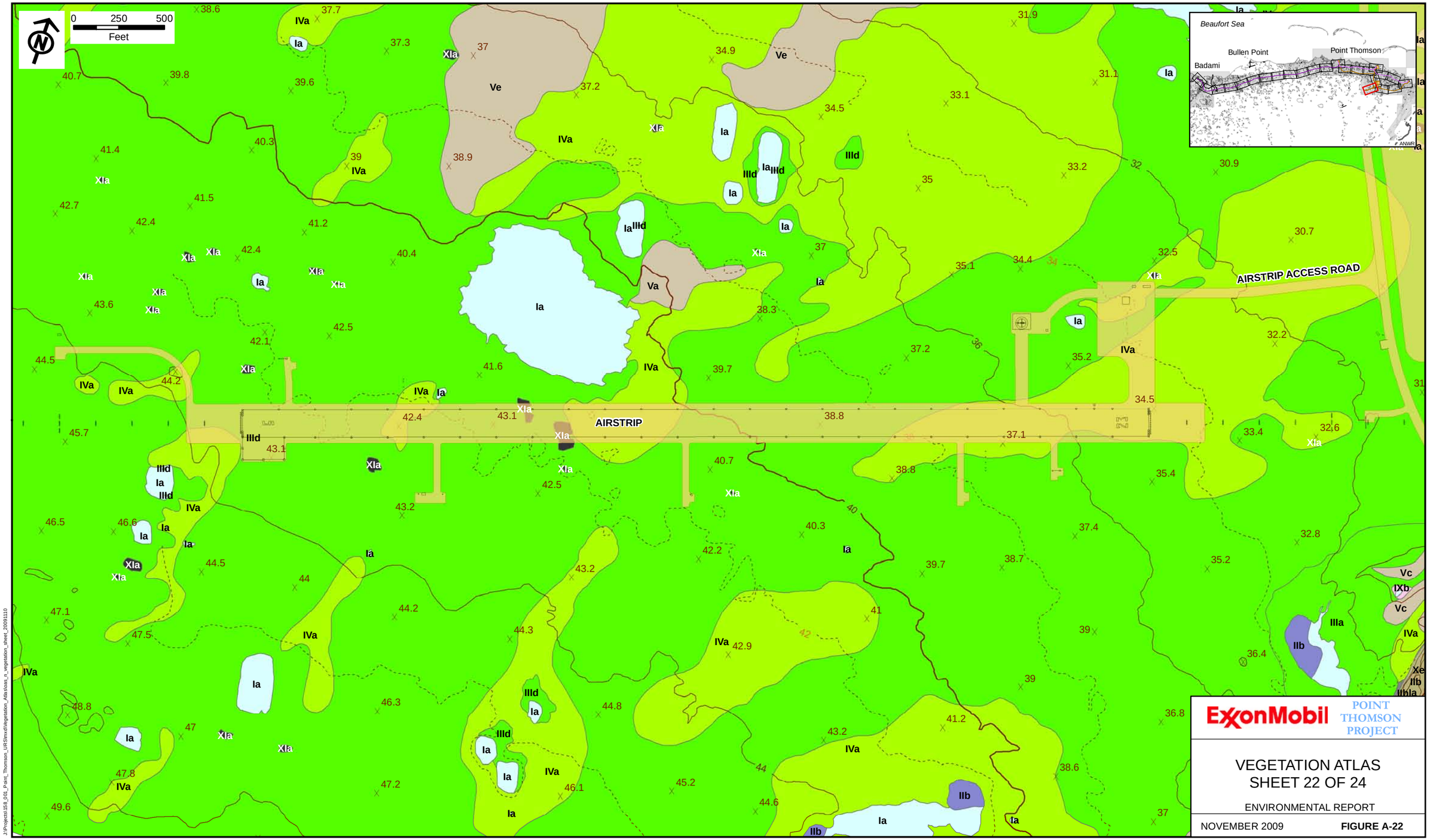

0 250 500
Feet
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
(EAST GATHERING LINE)
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 19 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-19


0 250 500
Feet
N
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
LION BAY
EAST PAD
(EAST GATHERING LINE)
EAST PAD ROAD
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 20 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-20


0 250 500
Feet
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
STREAM DIVERSION ROAD
MINE ROAD
MINE
GRAVEL STOCKPILE
ORGANIC OVERBURDEN STOCKPILE
INORGANIC OVERBURDEN STOCKPILE
CENTRAL PAD ROAD
EAST PAD ROAD
AIRSTRIP ACCESS ROAD
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 21 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-21



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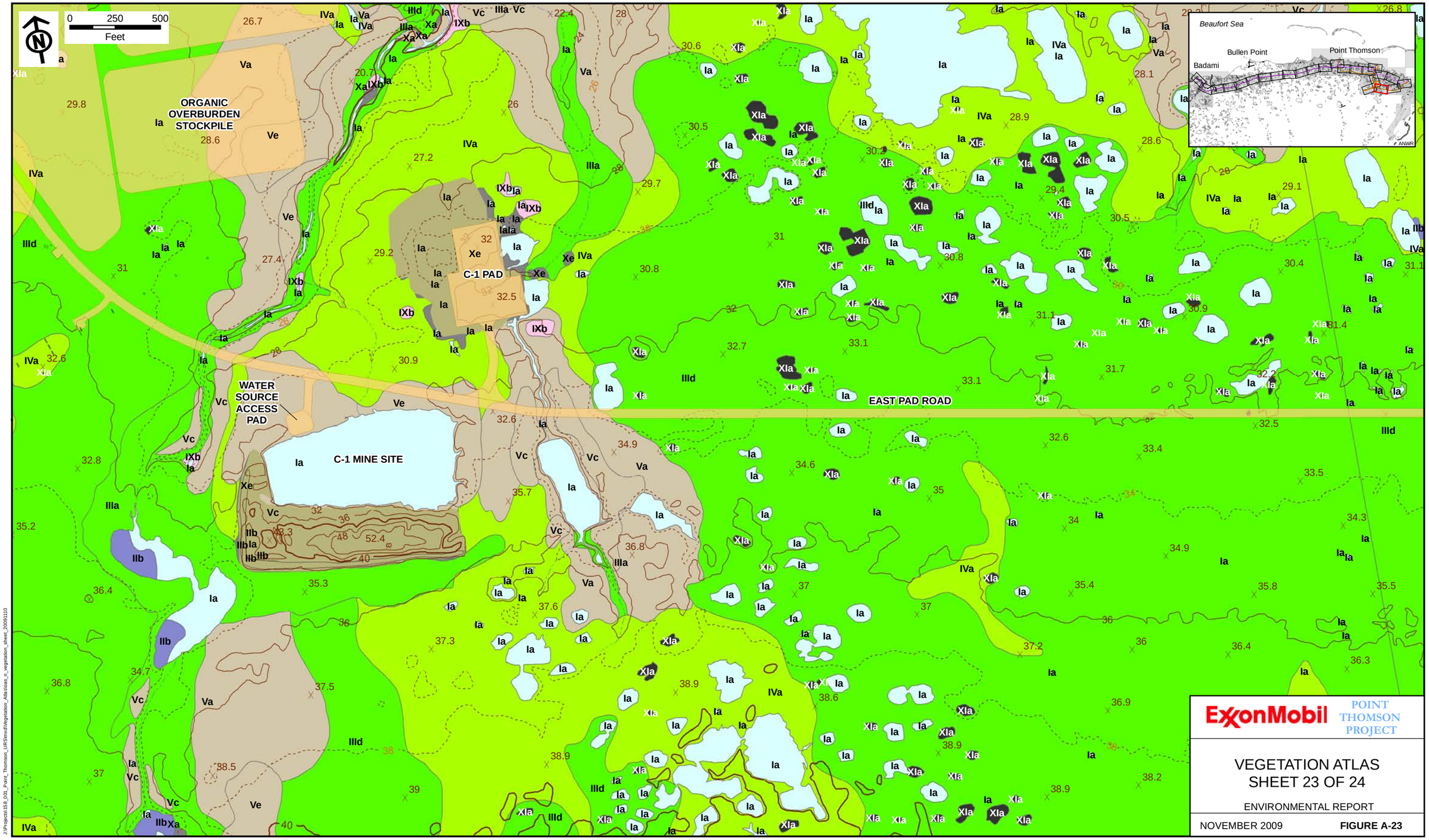
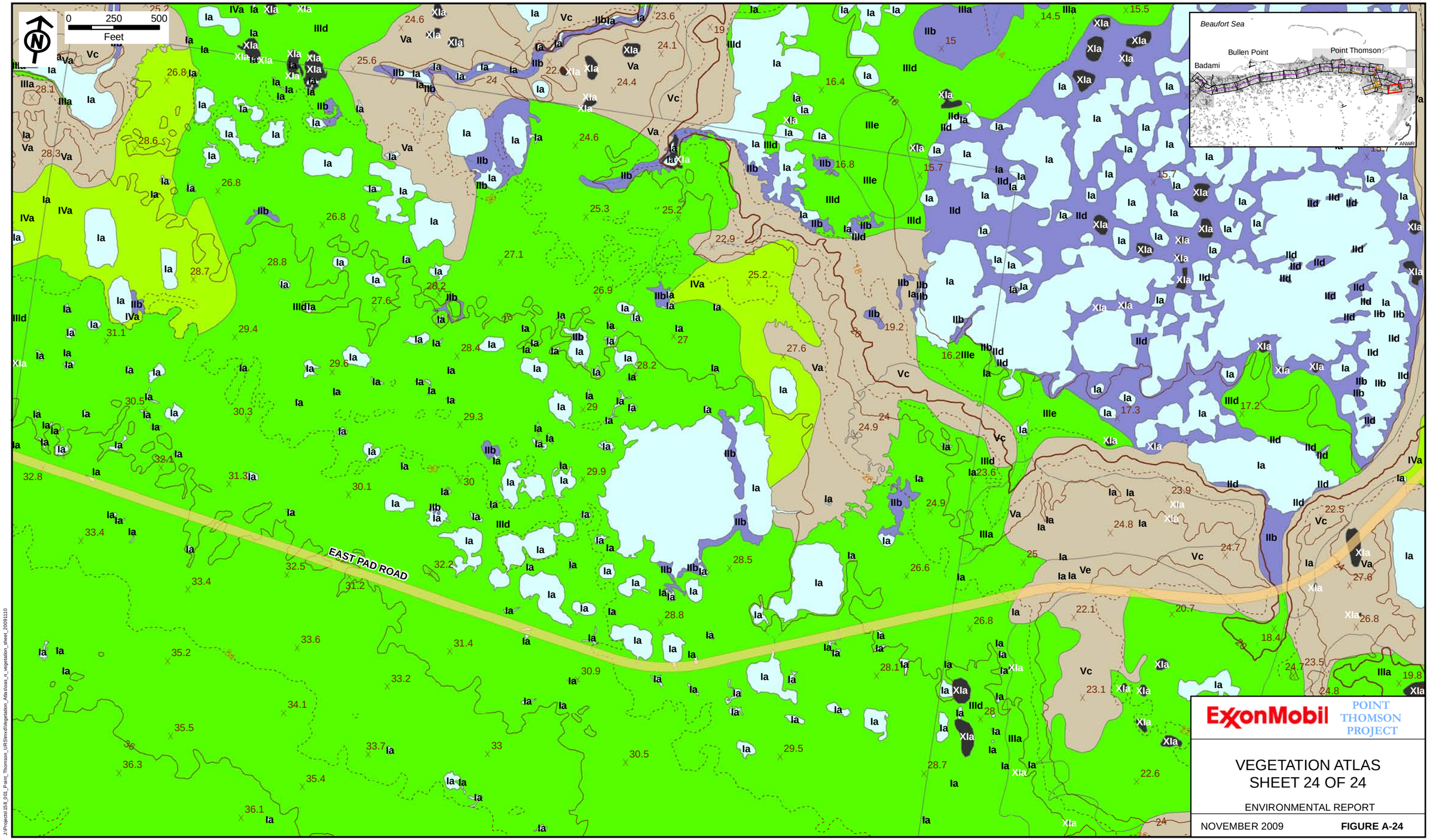

0 250 500
Feet
ORGANIC OVERBURDEN STOCKPILE
C-1 PAD
WATER SOURCE ACCESS PAD
C-1 MINE SITE
EAST PAD ROAD
Beaufort Sea
Bullen Point
Point Thomson
Badami
ANWR
ExxonMobil
POINT THOMSON PROJECT
VEGETATION ATLAS
SHEET 23 OF 24
ENVIRONMENTAL REPORT
NOVEMBER 2009
FIGURE A-23



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