Winterfield Stud

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May 10, 2002

Letter No. AIC02-410

ExxonMobil Production Company
3301 C Street, Suite 400
Anchorage, Alaska 99503

Attention: Mr. D. Michael Barker
Senior Staff Environmental Scientist

Reference: Work Order No. C56423-2

Subject: Results of Water Source Investigation - Badami to Flaxman Island

Mr. Barker

Alaska Interstate Construction LLC is pleased to present the results of the water source investigation that we conducted between Badami and Flaxman Island. In the week prior to the investigation, AIC worked with Mr. Ken Ambrosius of Aeromap, U.S. to obtain detailed maps of each lake under investigation. Mr. Ambrosius reviewed the aerial photographs of the lakes and shaded the deeper areas with dark blue on each detailed map. We concentrated our search for water in the shaded areas. We have attached the maps of each lake to this letter for your reference.

On May 3, 2002, two AIC personnel, Mr. Jim Smith, RLS and Mr. Damon Hansen, Mechanic, mobilized to the Badami Development to conduct a water source investigation at specific lakes between Badami and Flaxman Island. The next morning Messrs. Smith and Hansen drove in separate Tucker snowcats to the easternmost lake, Lake #17, to begin their search for water. Mr. Smith drilled three locations in Lake #17. He found that there was 7-feet of natural ice underlain by a up to 6-inches of muddy water. He was unable to use the conductivity meter to measure the salinity of the mud. The remaining lakes were also drilled and the ice thickness and bottom conditions were recorded.

Table 1, attached, presents the results of the water source investigation. In short, all 17 lakes that we investigated were frozen to the lakebed, with the exception of Lake #17. Lake #17 had 7-feet of ice with 6-inches water/mud beneath it. We did not recover any water to test for conductivity or observe for turbidity.

Mr. Smith used a Trimble Pathfinder Pro XR GPS unit to determine the exact location of each ice boring to within one meter of accuracy.

The conclusion that we have drawn from the information gathered is that of the 17 lakes that we investigated only Lake #17 has the potential to produce water early in the ice road construction season. The 7-feet of natural ice thickness that we encountered is well above the average of 5-feet typical on the North Slope. It is safe to assume that since the lake was frozen to the ground this late in the year that no fish live in the lake, therefore all of the water in the lake is available for use. This lake should be kept in mind for an early season water source. The remaining lakes are too shallow

to be seriously considered as water sources for ice road construction no matter how early they are accessed.

AIC appreciates the opportunity to work with ExxonMobil on this interesting project and we look forward to assisting you in your future development efforts in the Point Thomson area. If you have any questions or require further information, please do not hesitate to contact me at 907-562-2792.

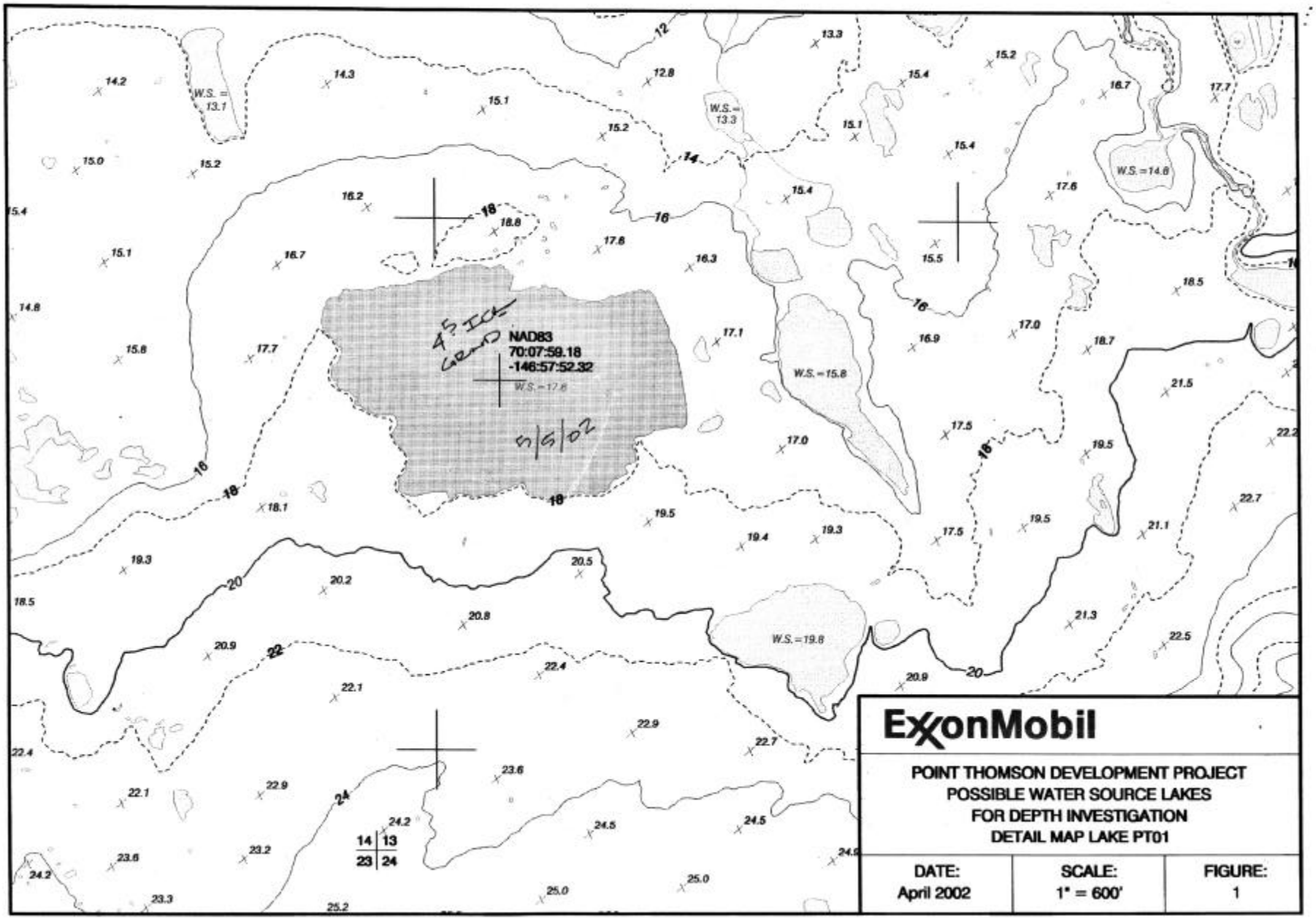
Sincerely,
Alaska Interstate Construction, LLC

Kenneth E. Yockey, P.E.
Engineering Manager

CC: Mr. Al Maki, Phd.
ExxonMobil

ExxonMobil Point Thomson Development Water Source Investigation

LAKE #	LONGITUDE	LATITUDE	ICE/WATER CONDITIONS
#1	146° 57' 52.319845060"	70° 07' 59.180554962"	4.5' Ice - Grounded to Lake Bottom
#2	146° 52' 31.120210190"	70° 08' 04.341104389"	3.0' Ice - Grounded to Lake Bottom
#3	146° 48' 19.879983180"	70° 09' 03.928699234"	4.5' Ice - Grounded to Lake Bottom
#4 East	146° 47' 00.480058610"	70° 09' 00.600006543"	3.8' Ice - Grounded to Lake Bottom
#4 West	146° 47' 38.640154740"	70° 08' 53.899590967'	4.0' Ice - Grounded to Lake Bottom
#5	146° 41' 22.939708410"	70° 09' 12.181275299"	3.0' Ice - Grounded to Lake Bottom
#6	146° 40' 09.099899330"	70° 09' 46.799064577"	1.7' Ice - Grounded to Lake Bottom
#7	146° 40' 13.569660500"	70° 10' 01.908809059"	2.0' Ice - Grounded to Lake Bottom
#8	146° 35' 02.140184350"	70° 09' 58.509423909"	3.0' Ice - Grounded to Lake Bottom
#9	146° 30' 53.350373080"	70° 10' 08.498575570"	3.6' Ice - Grounded to Lake Bottom
#10 East	146° 24' 28.340037390"	70° 10' 04.960879089"	3.5' Ice - Grounded to Lake Bottom
#10 West	146° 25' 01.360330800"	70° 10' 03.408718601"	4.2' Ice - Grounded to Lake Bottom
#11	146° 20' 47.030382340"	70° 10' 10.729998372"	4.0' Ice - Grounded to Lake Bottom
#12	146° 20' 50.780156200"	70° 10' 03.030667630"	3.0' Ice - Grounded to Lake Bottom
#13	146° 21' 07.529658340"	70° 09' 08.188688220"	5.0' Ice - Grounded to Lake Bottom
#14	146° 16' 52.950749480"	70° 09' 55.629474646"	3.3' Ice - Grounded to Lake Bottom
#15	146° 11' 32.990537820"	70° 09' 14.769233975"	3.5' Ice - Grounded to Lake Bottom
#16	146° 08' 26.010523440"	70° 09' 00.990351854"	4.0' Ice - Grounded to Lake Bottom
#17 North	146° 15' 42.219871760"	70° 07' 16.497678312"	7.0' Ice - Grounded to Lake Bottom
#17 East	146° 14' 38.430686050"	70° 07' 07.470558795"	7.0' Ice - 6" Muddy water
#17 South	146° 14' 57.989445000"	70° 06' 55.938467401"	6.0' Ice - Muddy bottom



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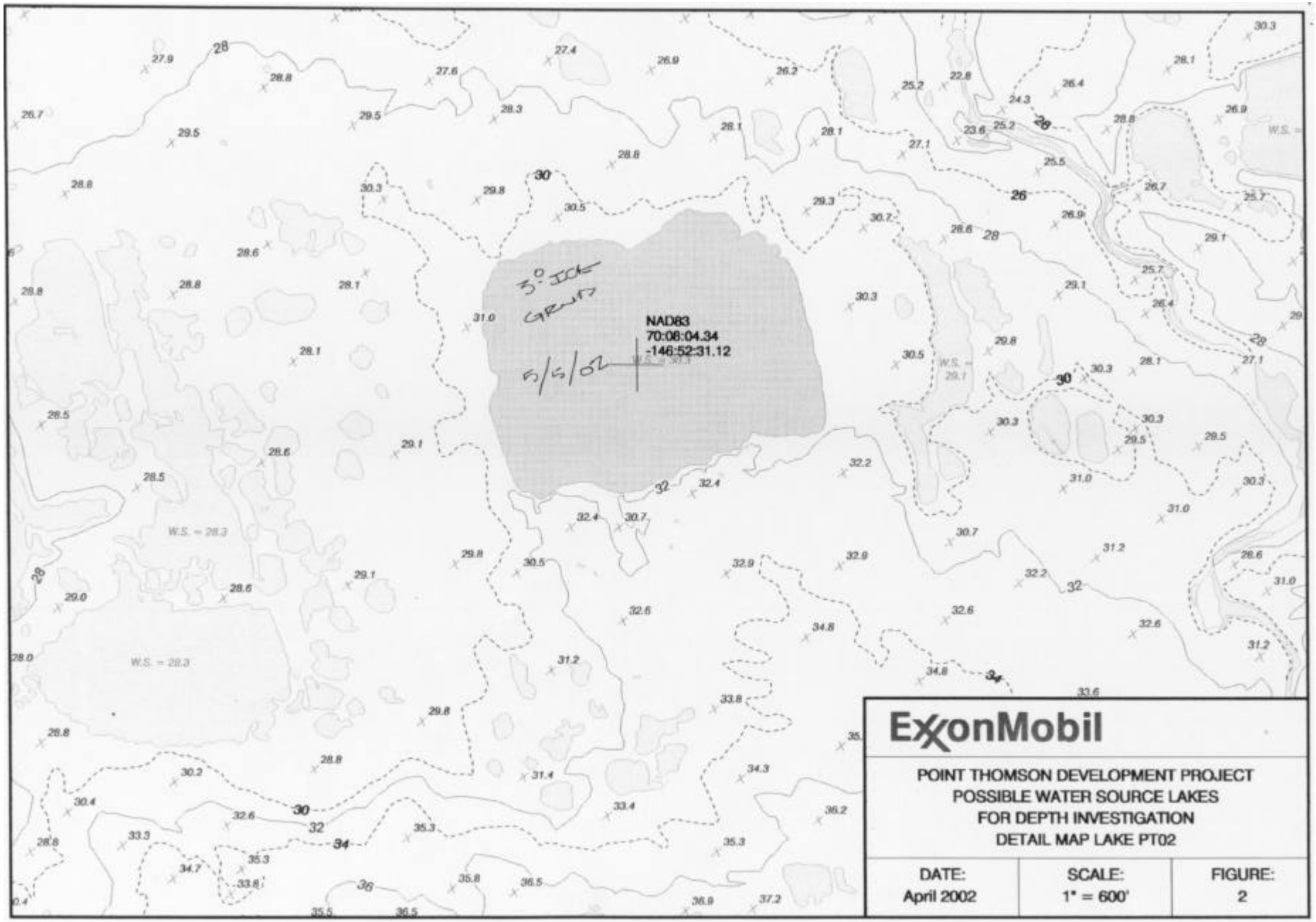
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT01

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	1

ex1446dwg, scr1.dgn



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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT02

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	2

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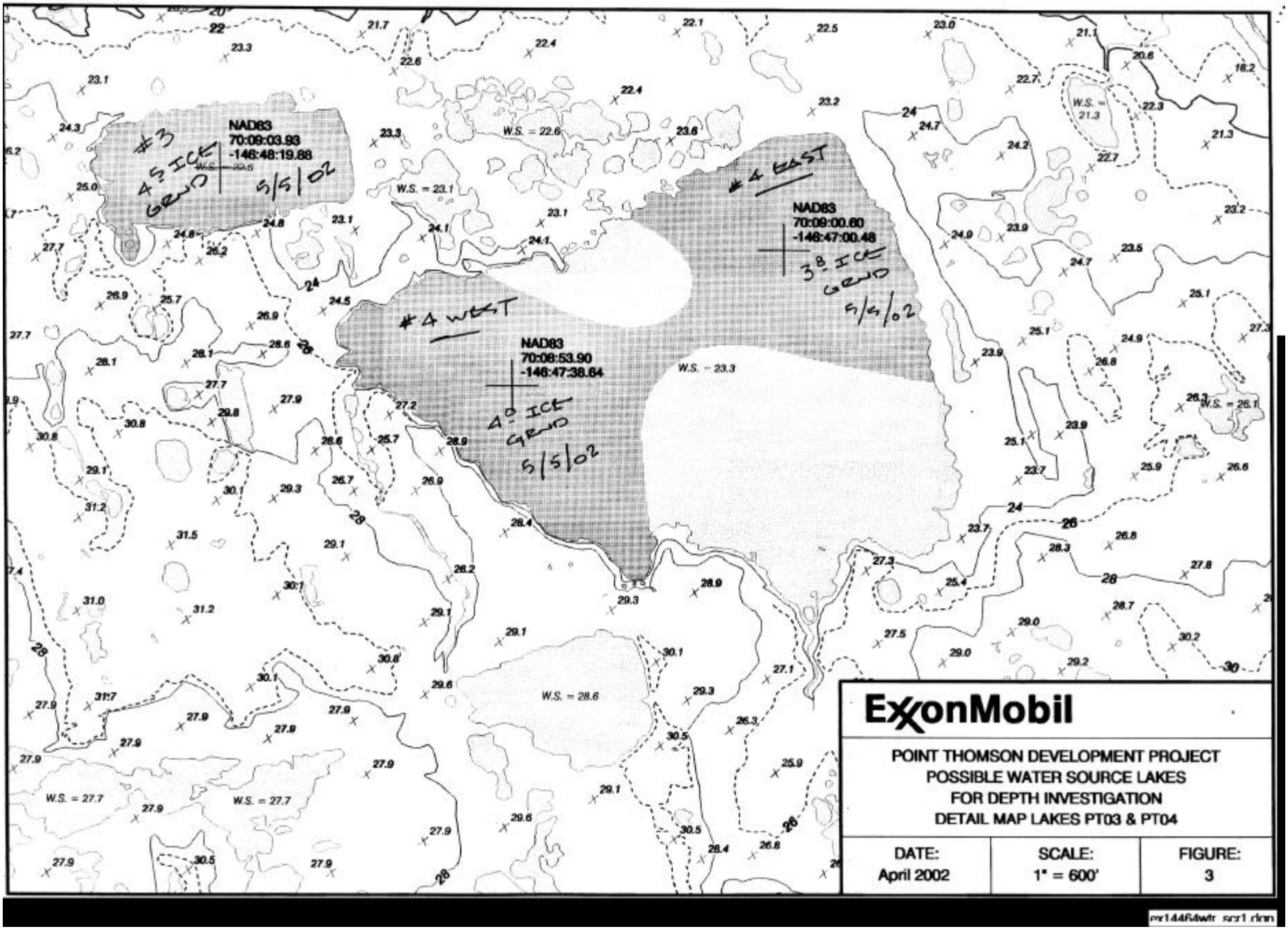

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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKES PT03 & PT04

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	3

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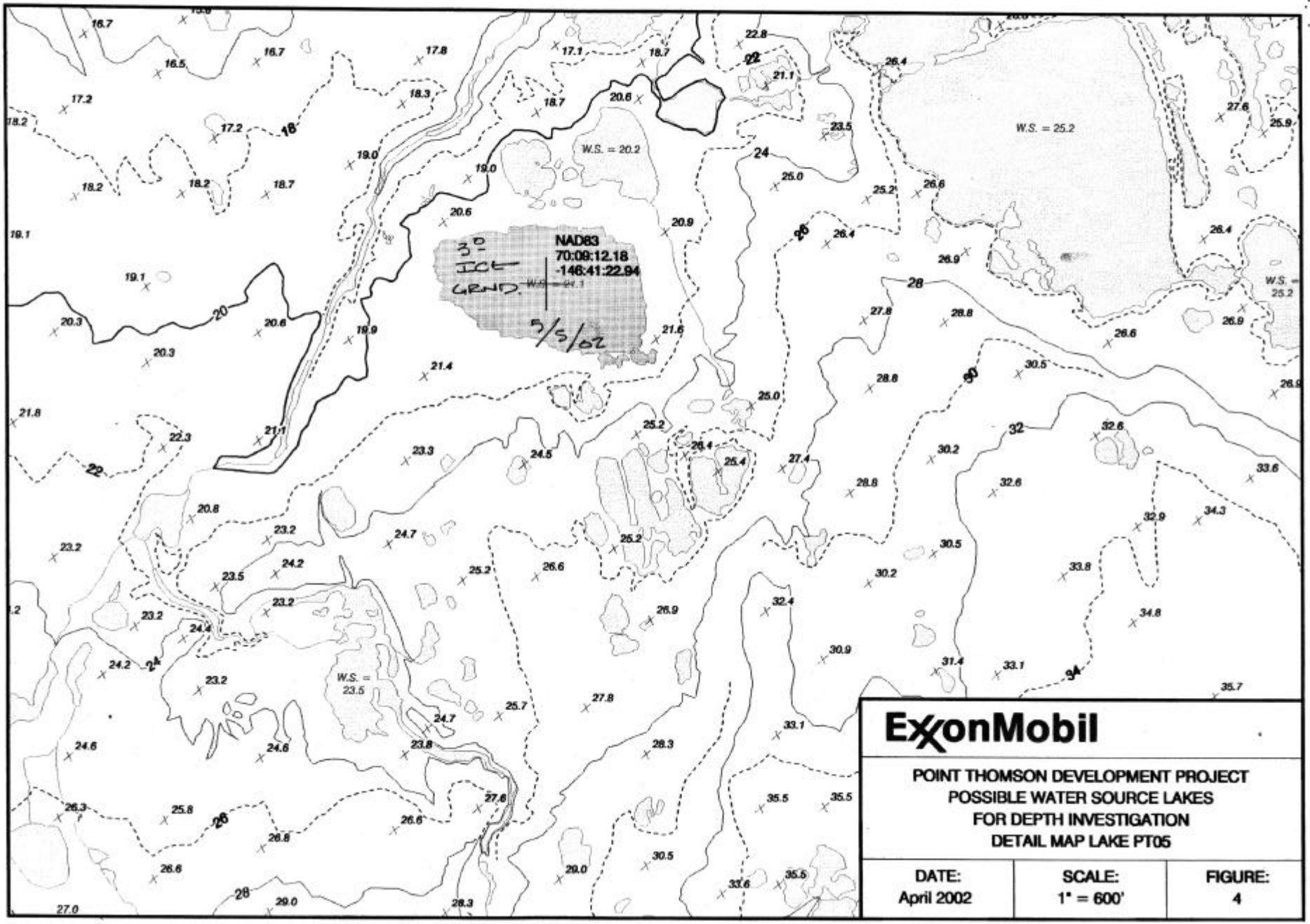

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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT05

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	4

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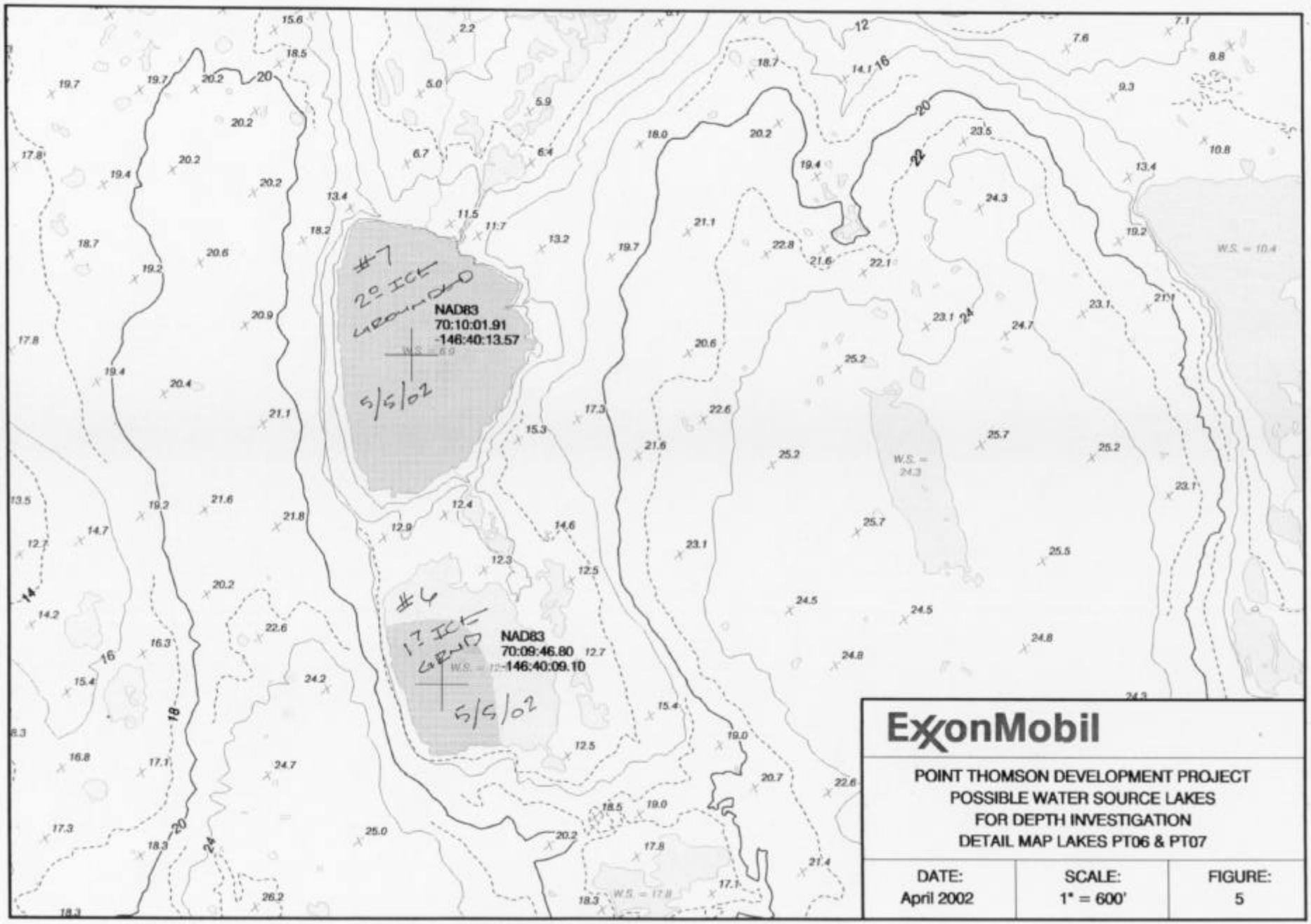

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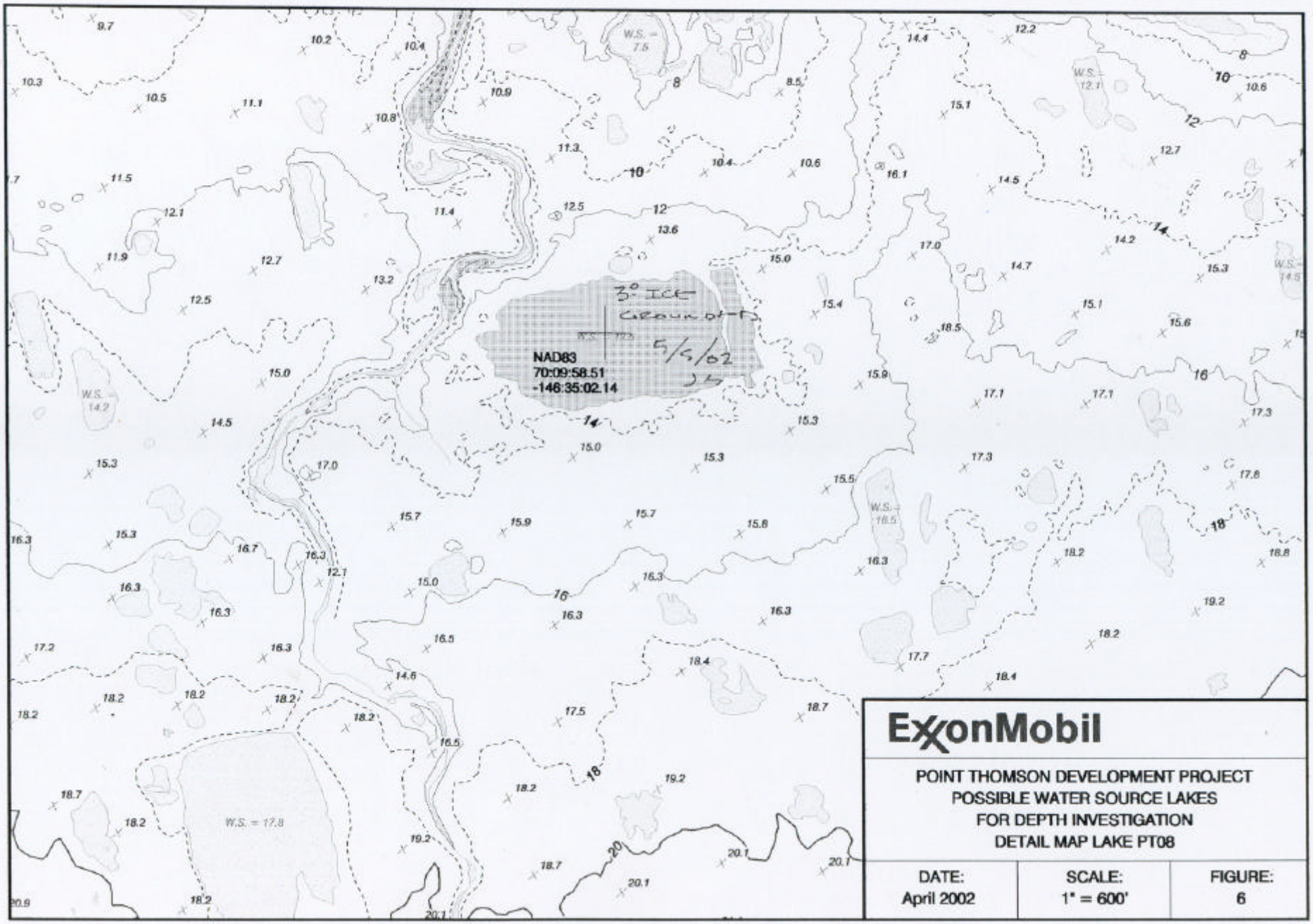
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKES PT06 & PT07

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	5

ex14464wtr scr1.dgn



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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT08

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	6

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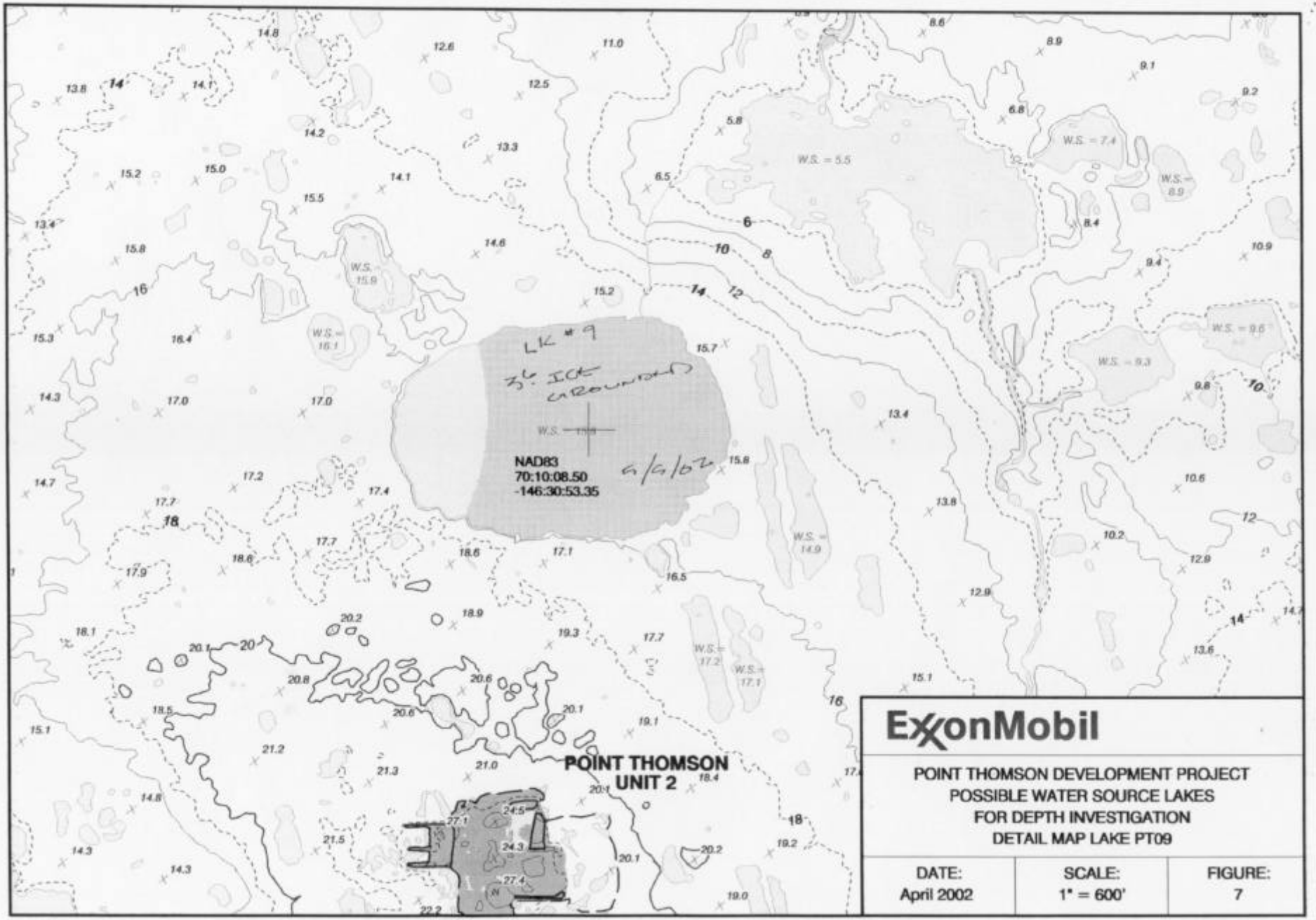

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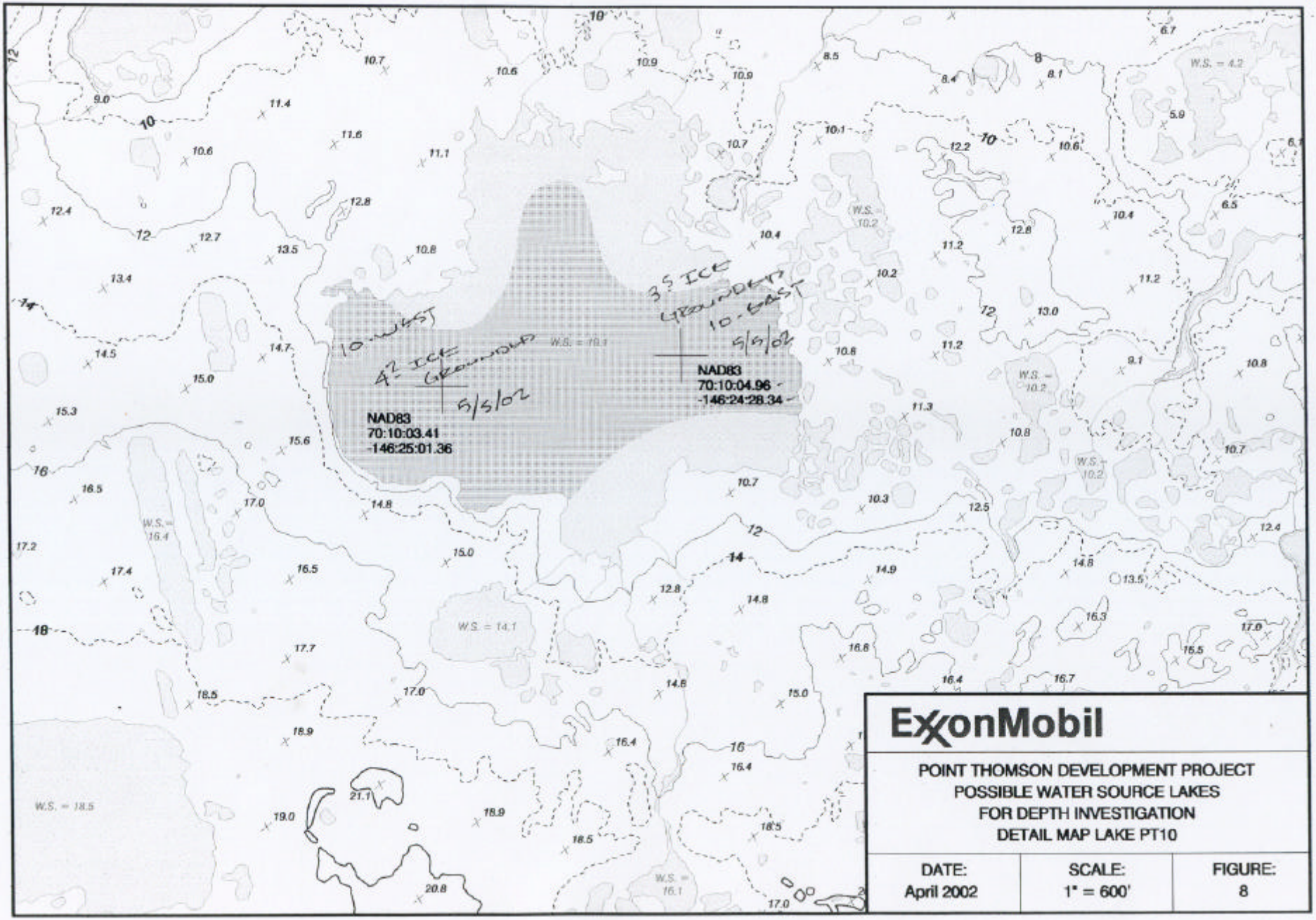
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT09

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	7

ex14464wtr scr1.dgn



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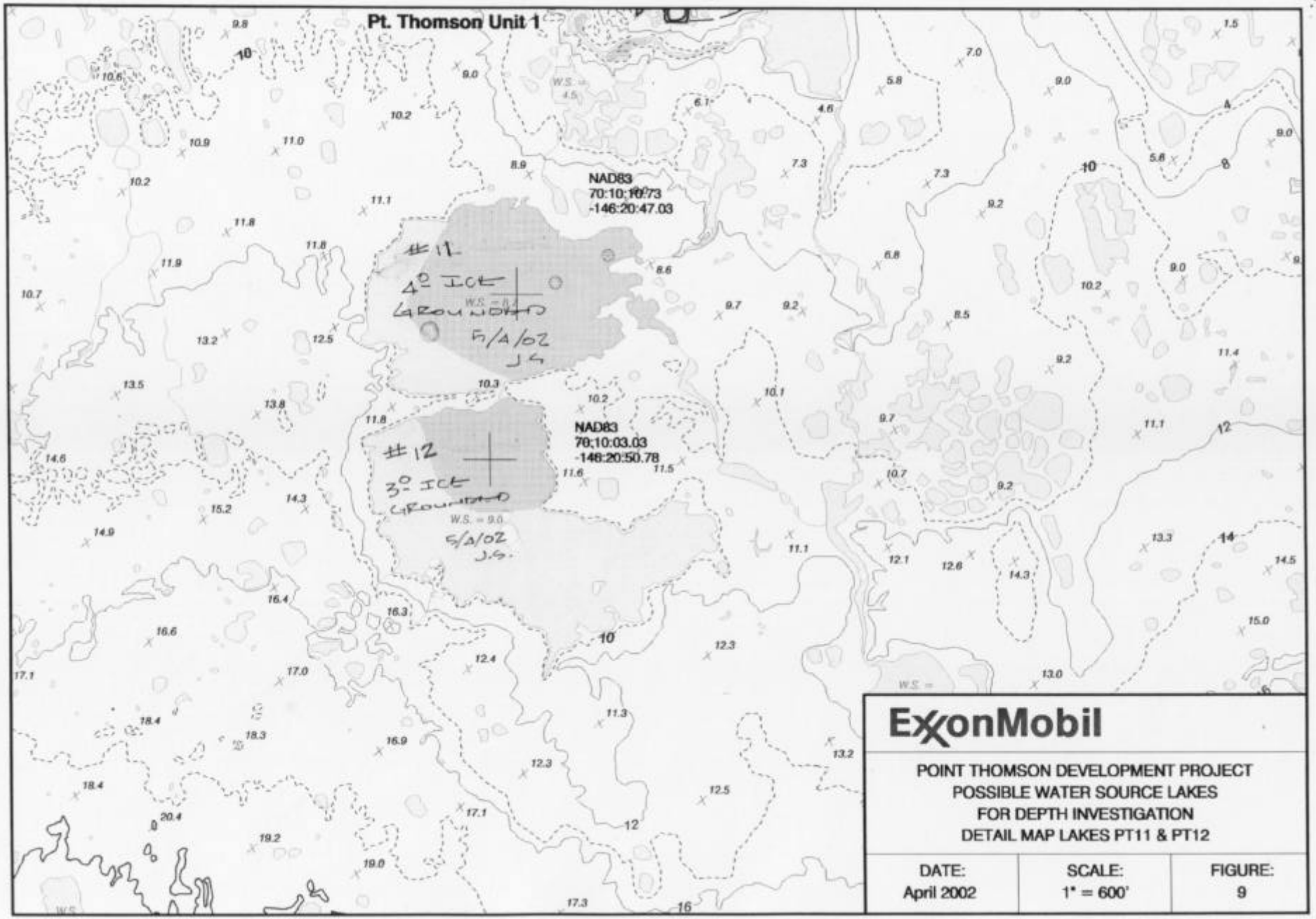
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT10

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	8

ex1446f4wtr_scr1.dgn



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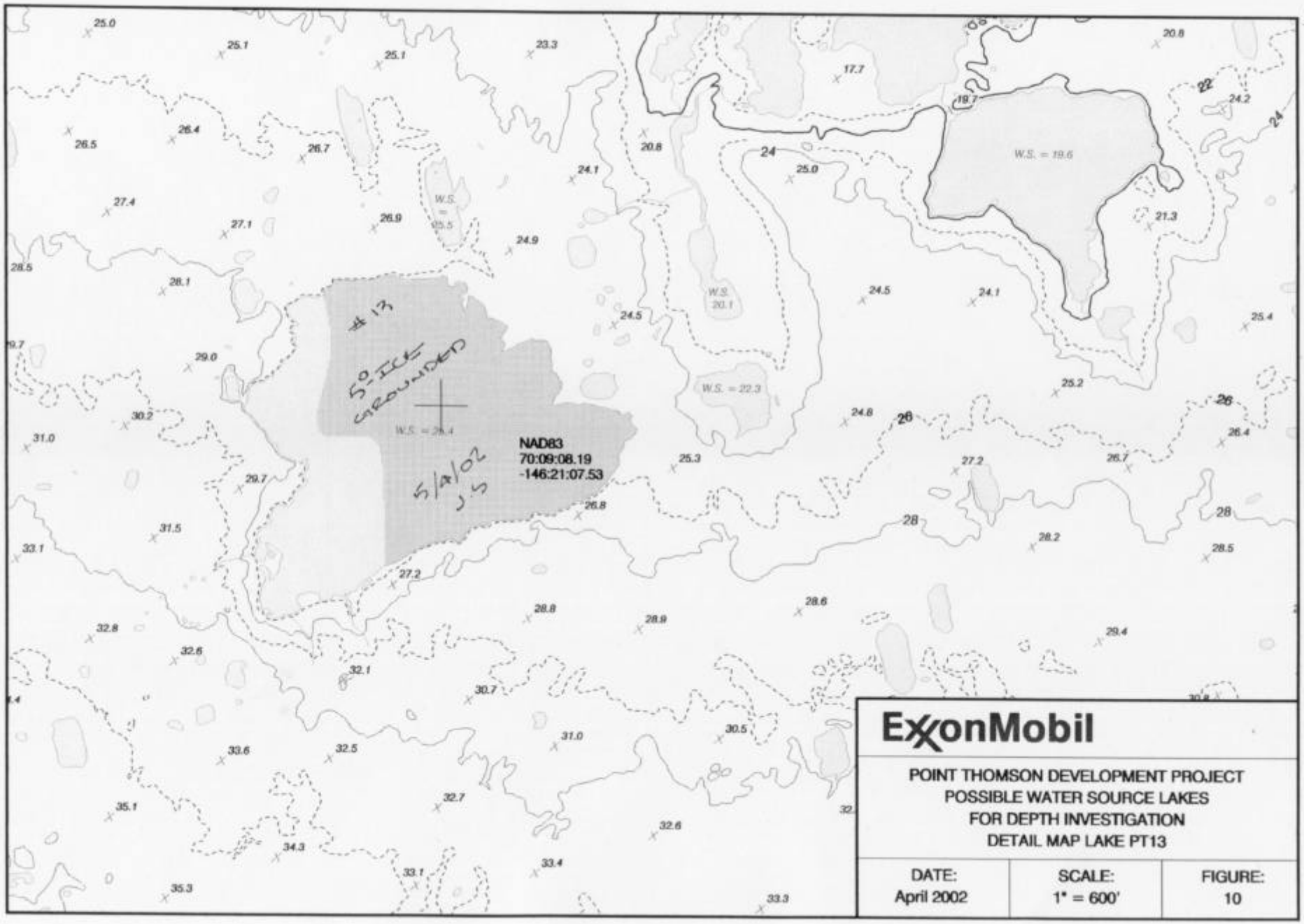
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKES PT11 & PT12

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	9



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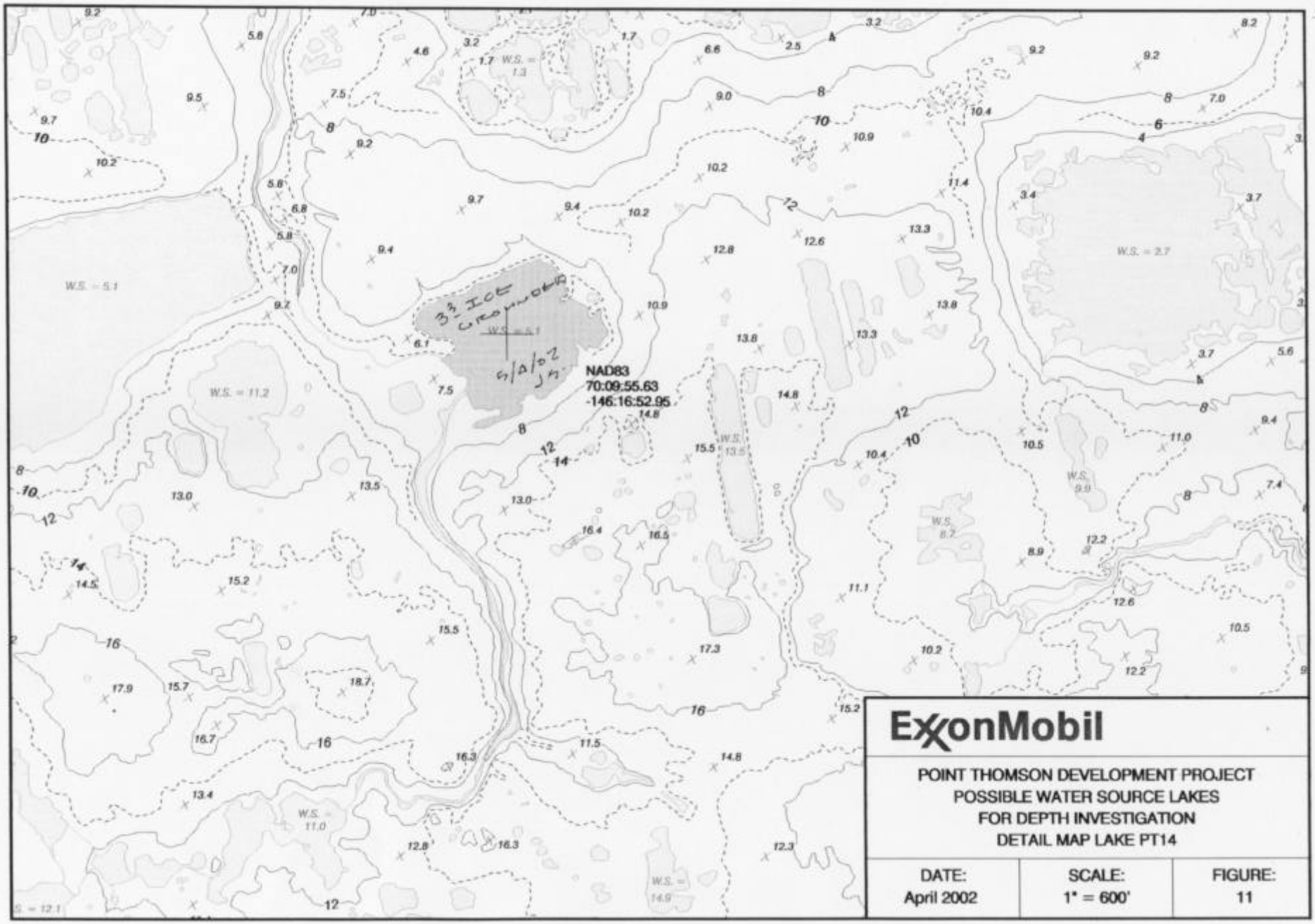
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT13

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	10



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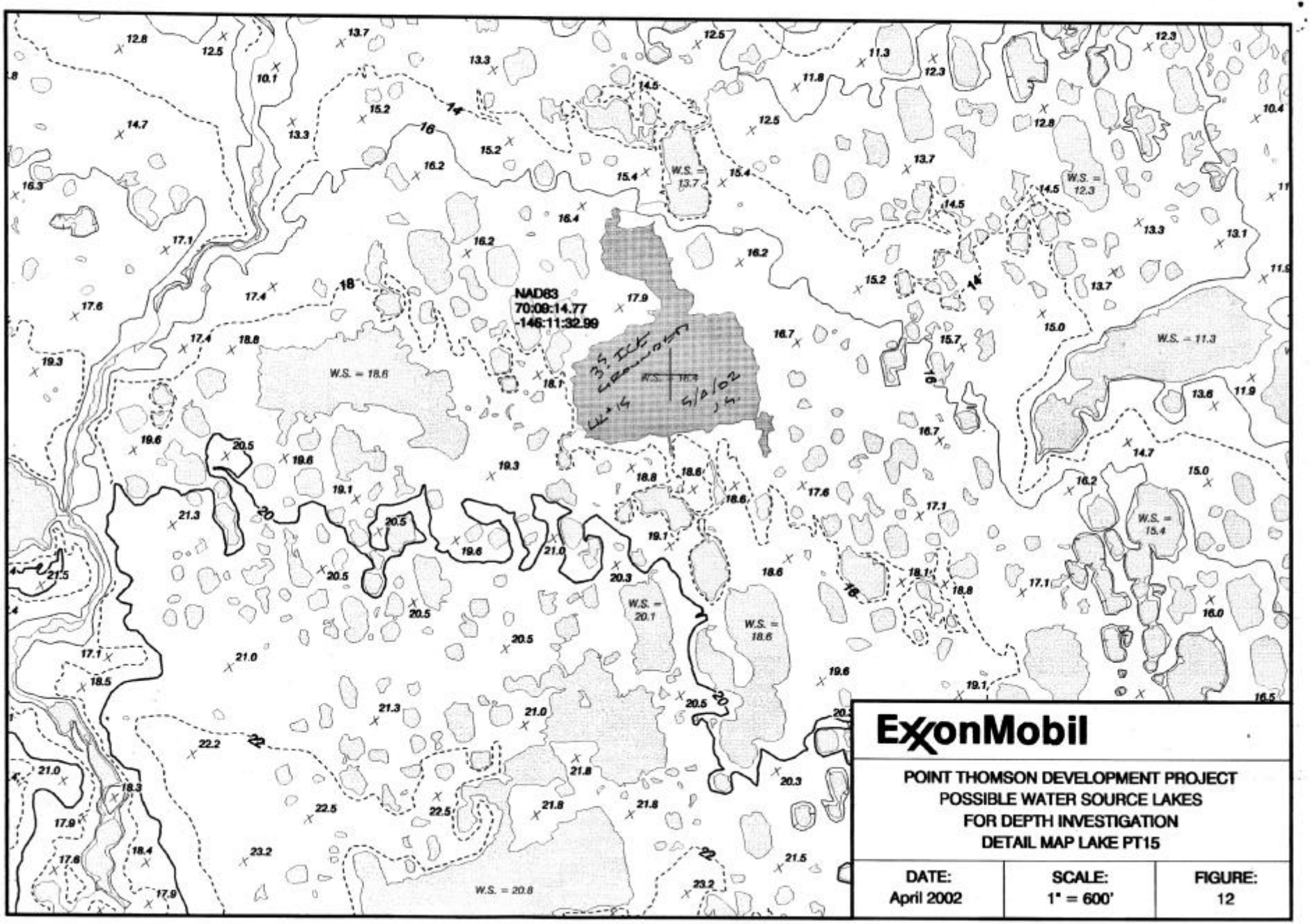
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT14

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	11



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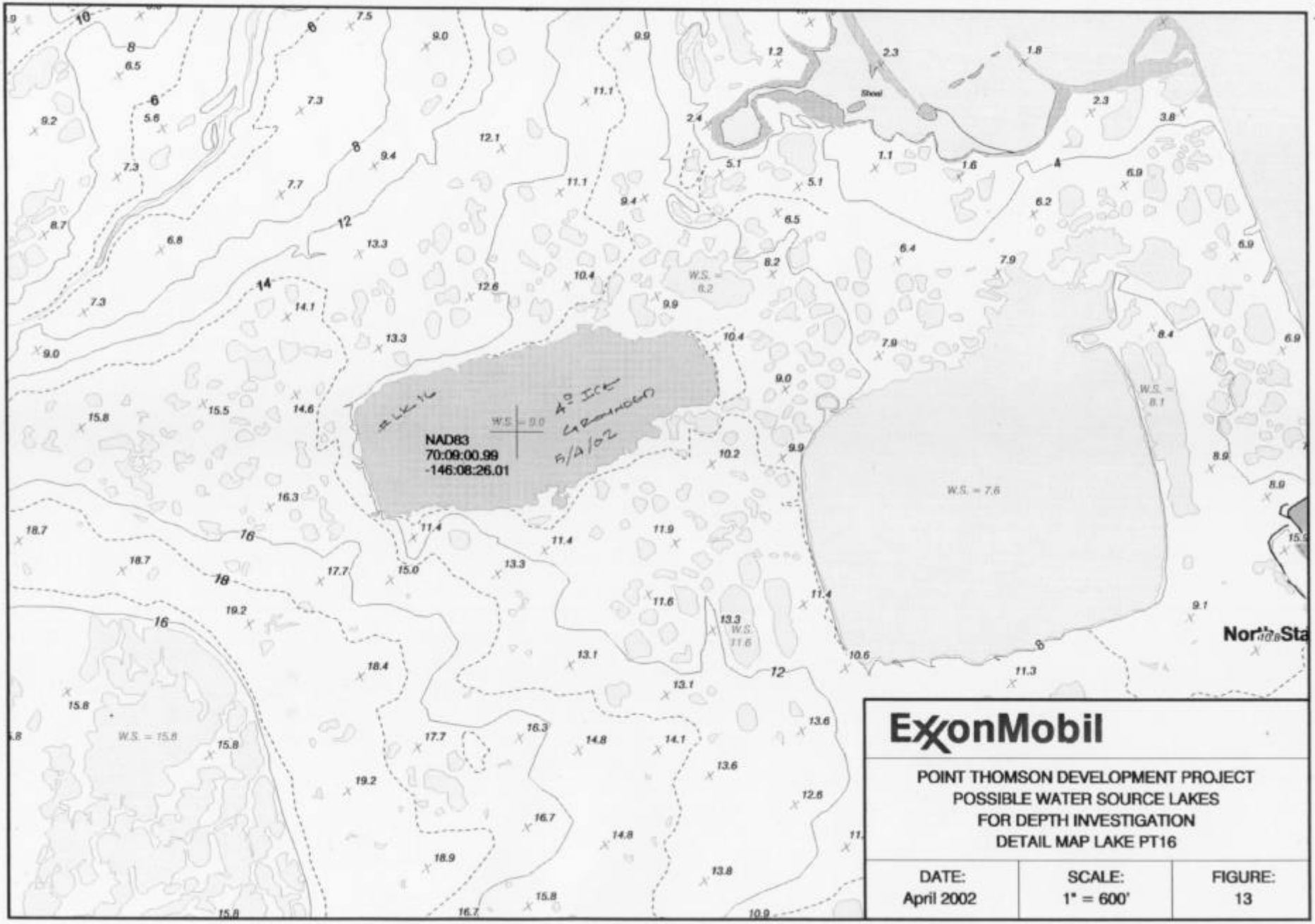
POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT15

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	12

pt144fawtr_scr1.dgn



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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT16

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	13

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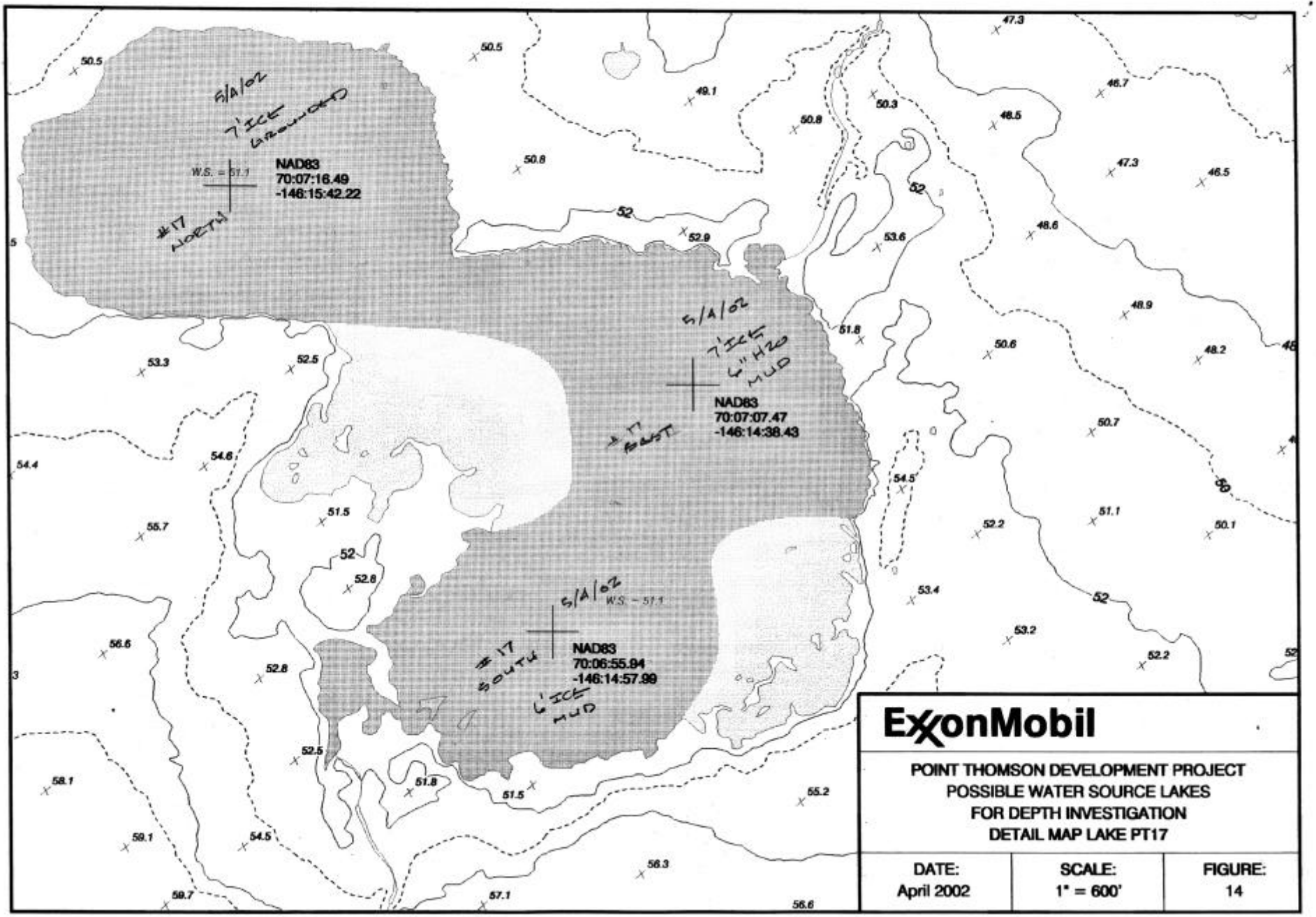

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POINT THOMSON DEVELOPMENT PROJECT
POSSIBLE WATER SOURCE LAKES
FOR DEPTH INVESTIGATION
DETAIL MAP LAKE PT17

DATE:	SCALE:	FIGURE:
April 2002	1" = 600'	14

pt144fdwtr_scr1.dgn