

CASE NUMBER: 04F-20-P3-11

DATE: Mar 6, 2004

HISTOPATHOLOGY:

Slide 29, P3-11-1:

1). Kidney: Nephrocalcinosis, moderate to marked, multifocal, subacute

There are no significant lesions within the liver, corpuscle of Stannius, heart, peripheral vasculature, peripheral nerves, or spleen.

Slide 30, P3-11-2:

1). Kidney: Nephrocalcinosis, severe, diffuse, subacute to chronic

There are no significant lesions within the liver, pancreas, adipose tissue, heart, peripheral vasculature, peripheral nerves, or spleen.

Slide 31, P3-11-3:

There are no significant lesions within the kidney, liver, pancreas, adipose tissue, heart, peripheral vasculature, peripheral nerves, or spleen.

Slide 32, P3-11-4:

1). Kidney: Nephrocalcinosis, severe, diffuse, subacute to chronic

There are no significant lesions within the liver, heart, peripheral vasculature, peripheral nerves, or spleen.

Slide 33, P3-11-5:

1). Kidney: Nephrocalcinosis, severe, diffuse, subacute to chronic

There are no significant lesions within the liver, pancreas, adipose tissue, heart, peripheral vasculature, peripheral nerves, or spleen.

COMMENTS:

The nephrocalcinosis noted in 4 of 5 sections would have been sufficiently severe to have contributed at least moderately to antemortem morbidity. The precise pathogenesis of this condition is unknown; however, nephrocalcinosis has been associated with elevated ambient partial pressure of carbon dioxide and review of current husbandry (stocking rates, water flow, aeration) and site design may be considered. Due to the relatively high prevalence within this group of sections, if representative of the overall stock, the prognosis for recovery and satisfactory performance post introduction to salt water is unknown. Generally once the offending insult has been removed and as fish grow, the extent of renal involvement diminishes and the impact on growth in salt water should not be significantly affected. Follow up weighs (for comparison with growth from unaffected fish) and sampling of kidneys from 10-20 fish 1-2 months post salt water introduction for histopathologic grading may be considered. As elevated dietary

selenium has experimental induced similar nephrocalcinosis, trace mineral analysis of select liver samples may also be considered.

FINAL REPORT