

## **Necessary data before the stomach X-rays contrasting inspection**

March 06 2011

s u r r o u n d i n g s   s u p e r s o n i c w a v e   l o b o r a t o r y  
s h u z o   a r a k a k i   U R L   <http://syuzou.awk.jp/>

### 1 Preface

The inspection that is stability security promptness is enforcement difficulty if I do not know need and an important use device and the many characteristics of the medicine well on inspecting two folds of stomach X-rays barium contrasting. Because I conduct an investigation into an item before starting they inspection and inspect it and analyzed it, I report it

### 2 An experiment method

#### 2 –①An examination of barium Viscosity

A drug prepares for two kinds of barium (HD200vw%) of compounding stable enough after compounding and a drug doing a drug just before use of the maker recommendation for dozens of hours and I use an adhesion examination to the finger and the stomach of the Neothunnus macropterus and perform an adhesion examination and radiography data analysis

Three times of adhesion examinations to the finger performed a naked eye judgment of the application

I take each radiography at a photography top horizontal position, 30 degrees slant position, and the tuna stomach application examination of the analyzes evaluation with the image data

#### 2 –②Foaming agents examination

For the inspection of the taking foaming agents method, I performed water, barium, cold water addition method, experiment examination of the warm water addition method

2 –③use device 1G pixel CCD auto iris 12, 9, 6 inches field of vision X-rays television device performance evaluation

I measure the space resolving power of the device and I investigate analog evaluation AD conversion comment on current events value DD conversion pacs transmission of a message compressibility and analyze a fall of a picture. I performed the transparent image (analog) evaluation of the tuna gastric mucosa this time and evaluated the first photography DD conversion image evaluation and a compression image after the pacs transmission of a message

2 - ① A barium drug (BARITOGEN HD) application examination

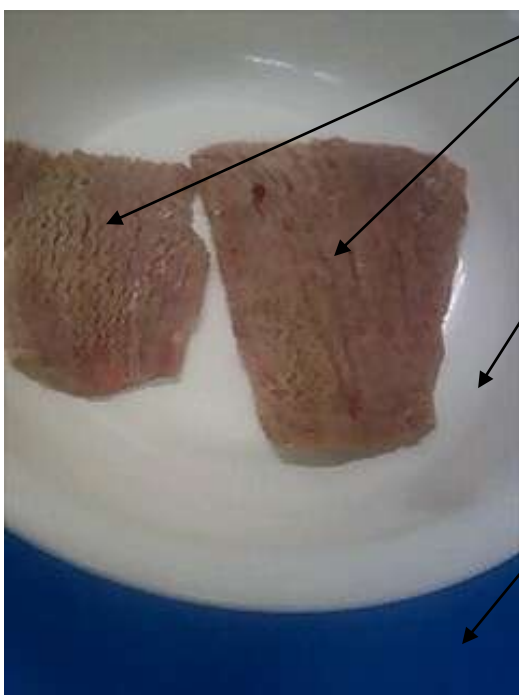
As for the explanation of a not corresponding photograph to actual data, the character has thinned.



A barium drug

Just after compounding pie water cold water addition 200VW10 time churning compounding (Blue label H)

Compounding pie water cold water addition 200VW compounding 120 hours later → 50VW (Yellow label H)

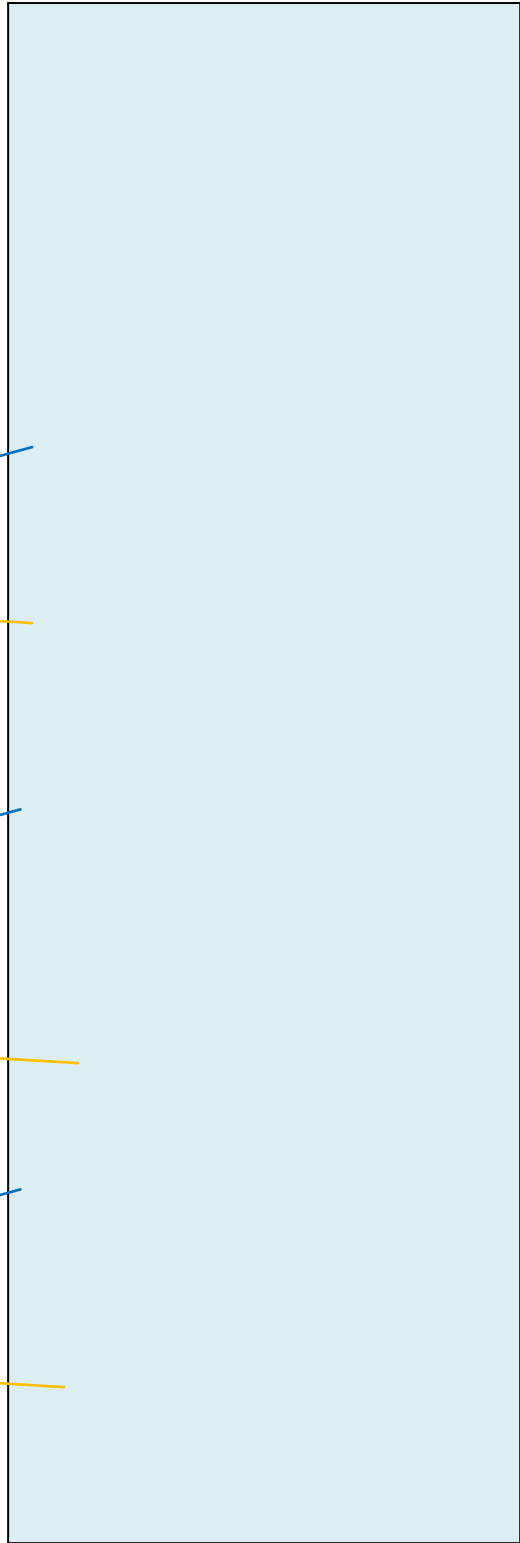
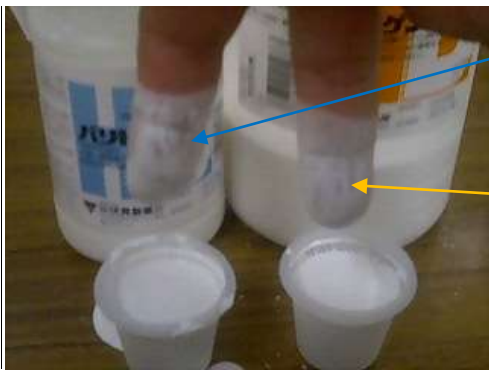
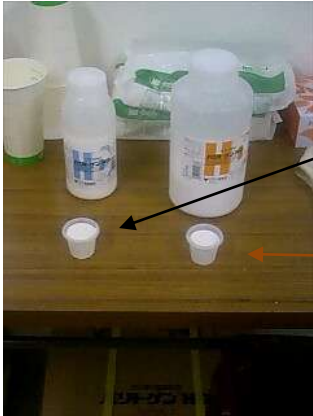


Neothunnus macropterus stomach specimen

A saucer (A plastic washbowl)

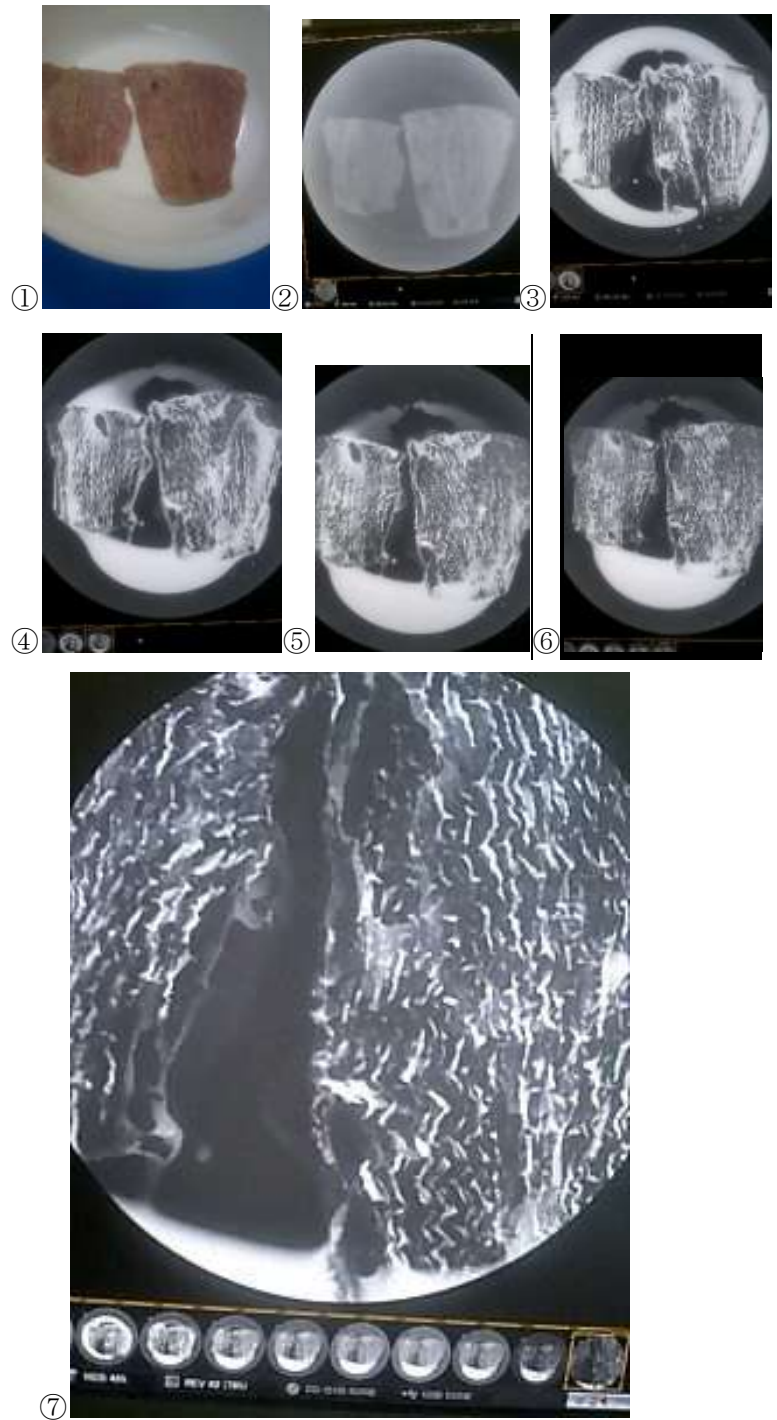
X-rays transmission resistance (X-rays hazmat suit)

A finger adhesion naked eye evaluation examination



I recognize a coating spot to note) both barium attendant, and the blue label is lacking in churning, and the yellow label suggests it with separation

A tuna stomach application radiography image evaluation examination

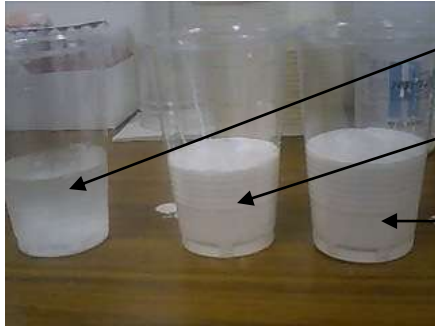


① A tuna stomach specimen  
 ② Photography before barium application  
 ③ Each 5cc scatter application  
 Left specimen barium density 200 Left specimen barium density 50  
 ④ Photography top 30 degrees slant 12 inches photograph  
 It is 9 inches photograph  
 photography top 30 degrees slant one minute later  
 ⑤ It is 9 inches photograph in progress for photograph top 30 degrees slant 10 minutes  
 ⑦ It is 6 inches photograph in progress for photograph top 30 degrees slant 10 minutes

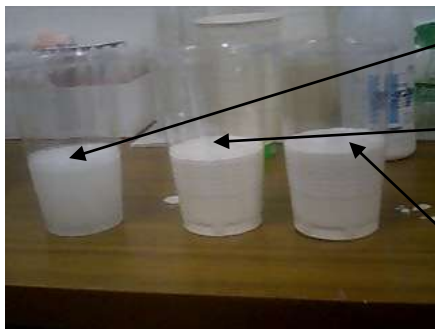
The adhesion is good, and note) Right barium has good falling out. Adhesion was good, and barium 50 of the note) right was seen by uniform application

2 - ②a Foaming agents examination

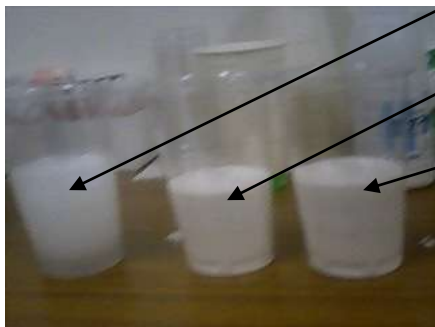
A foaming start



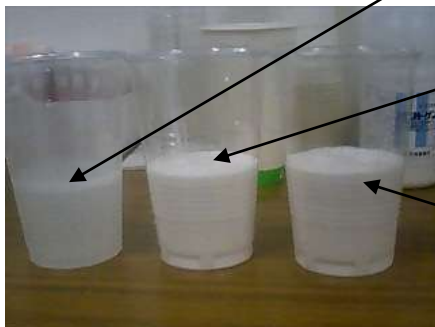
5 秒後



15 秒後



30 秒後



It is cold water pie water 100cc addition to foaming agents of 5g It is blue label barium 100cc addition to foaming agents of 5g It is yellow label barium 100cc addition to foaming agents of 5g

I foam intensely in several seconds and start

I slightly accept foaming

I slightly accept foaming

I foam more intensely 15 seconds later

The foaming is slow and the bubble is uniform finely

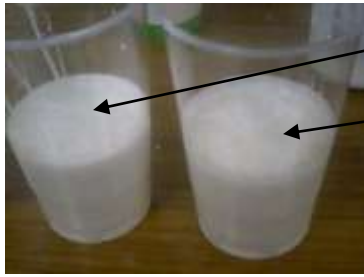
The foaming is slow and, as for the bubble, big things and small things are heterogeneous

I foam, and it is completely finished in 30 seconds

The surface that continues foaming slowly is smooth

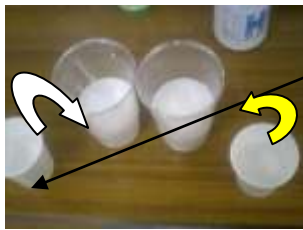
The surface undulation irregularity that continues foaming slowly

2 – ②bA foaming promotion examination at the time of barium taking



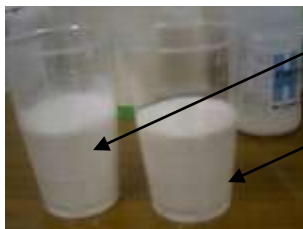
The surface that continues foaming slowly is smooth

The surface undulation irregularity that continues foaming slowly



I add it according to pie water 80 degrees Celsius 50cc white arrow

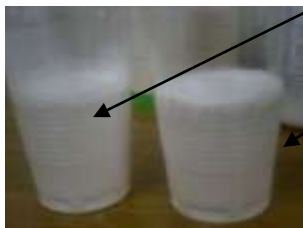
I add it according to pie water 10 degrees Celsius 50cc yellow arrow



I foam intensely, and it is started by the direct next

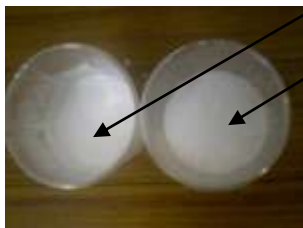
I foam from relaxing slightly early and start

I foam in 30 seconds and am finished



Foaming is on the way

I almost accept the disappearance of the bubble one minute later



I recognize a lot big things and small things heterogeneity bubble in the surface and I smolder and do not readily split open

I can match the taking foaming agents method with the state of the person of undergoing an examination to be able to guess by an experiment and must concentrate a device enough. Foaming agents taking had better assume it taboo with plain hot water

2 – ③View X-ray television of use device 1G pixel CCD auto iris 12, 9, and 6 inches device performance evaluation

2 – 3 a Spatial resolution of device

View = 30cm<sup>2</sup> 1G pixel = 12 inches in 3<sup>2</sup> × 10<sup>2</sup> pixel the space resolution (..simplified calculation.. ..length and breadth.. ..3 × 10<sup>6</sup> power.. pixel)/ 30cm = 30 × 10<sup>6</sup> power/cm  
30 × 10<sup>6</sup> power ÷ 3 × 10<sup>6</sup> In 10 μm pixel 6 inches in 3<sup>2</sup> × 10<sup>2</sup> pixel = the space resolution (..simplified calculation.. ..length and breadth.. ..3 × 10<sup>6</sup> power.. pixel)/  
15cm = 30 × 10<sup>6</sup> power/cm 30 × 10<sup>6</sup> power ÷ 3 × 10<sup>6</sup> 5 μm pixel size FPD is meter pixel sizes of 124 μm dot in the high-resolution for [mammo use FPD]

2 – 3 b Analog evaluation

As for the analogue, only seeing through can be evaluated. Volume of data rises inscrutably because basically the afterimage phenomenon is caused in the fluorescent plate, it takes advantage of it, and the accumulation of space information in man's retina and brain is performed to animation.

2 – 3 c AD Conversion comments on current events value

Unevaluation

2 – 3 d Compressed image evaluation after pacs is transmitted

Unevaluation