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CLEAR AS ICE?

A look at the world below the surface of ice and water

By

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THESIS

Submitted in partial fulfillment of the requirements

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With a Major in Digital Photography

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ABSTRACT

Clear as Ice? – a look at the world below the surface of ice and water. When we think of ice we think of something that is cold with a clear or blue color that can be seen in most photographs of snow and ice. When ice melts, it becomes liquid and then it is gone. No one wonders or even gives it a thought; it is simply something that happens.

For my thesis project, I photographed ice from various types of water: tap water (water softener had been added), rainwater, and bottled mountain spring water. All of the photos were taken using a macro lens that enabled the ability to capture the evolution of the ice from its frozen state to its liquid form. The use of the macro lens captured the unseen world of ice which is not the clear, colorless image one would imagine, instead, it captured images with deep blues, browns, grays, greens and more. The images themselves did not turn out to be common photographs of cold, frozen water, rather they became abstract images that caused viewers to stop and question what they were viewing. And the viewer's responses to the photographs were as interesting as the photos themselves, since viewers expressed a great variety of subjective interpretations for the images. The ongoing observations of the photographed objects during the project also let this artist to profoundly reflect on the nature of change.

KEYWORDS

Macro-lens photography

Ice

Water

Abstract art

Inkblots

INTRODUCTION

My thesis will explore how *Clear as Ice?* photographs proved similar to Rorschach inkblots and abstract art in the way that they allow people to express themselves freely. The Rorschach inkblots consist of 15 inkblots, with common and popular answers for each inkblot. The personality and psychological well-being of the patient are determined by what they see in the inkblot. There are common responses for each of the images, so deviating from those responses could be an indicator of psychological problems. See Image 1.

Abstract art, while it doesn't determine the personality or psychological well-being of the viewer, it does give insight into their lives. For some viewers, it might trigger memories, while others might be influenced by favorite television shows or books. Allowing the viewer the freedom to interpret the image without any suggestions or prompting is key with both the Rorschach tests and abstract art.

WHAT CAUSES THE BLUE COLOR IN ICE AND WATER?

Many of my photos show ice and water in the expected blues and greens that are the most commonly seen colors. However, the vivid colors led to a curiosity about the science behind the colors. The scientific explanation for the blue color is that the blue is caused by both the red and yellow light being absorbed, leaving only the light at the blue end of the visible light spectrum as seen in Image 2.

According to Braun and Smirnov (1993, p. 612) "water has an intrinsic color, and that this color has a unique origin". They say the intrinsic blueness in the water is due to the "selective absorption in the red part of its visible spectrum". They proved that the blue color could easily be seen by the naked eye taking a 3-m long by 4-cm tube of aluminum that had a

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plexiglass window glued to one end, and having people look through the tube at a piece of white paper which was illuminated by sunlight. As to why the water looks blue when looking at it, but not through it, requires light scattering by suspended matter so that the blue light produced by water's absorption can return to the surface where it will be observed. They go on to say that "such scattering also can shift the spectrum of the emerging photons toward the green, a color often seen when water laden with suspended particles is observed" (Braun & Smirnov, 1993, p. 612-).

ICE PREPARATION PROCESS

The process of preparing the ice for photographing was quite easy, the materials needed were water, 2 plastic bowls (1 large and 1 medium) (Image 3) and a place for freezing the water. I photographed the ice on a glass stovetop, kitchen countertop, garbage can lid (outside) and on a wrought iron table (outside). The medium bowl needed to be small enough to fit inside the larger one with a gap in-between the sides of both bowls. The only lighting I used was that which was available, i.e. the light coming in from the window, overhead ceiling light (fluorescent energy saving light) or the natural sunlight.

The size of the plastic bowls I used determined the size of the ice bowls and ice blocks that I photographed. Larger bowls produced a larger piece of ice and smaller bowls produced smaller pieces of ice. As I photographed the ice it melted and the surface of the ice changed from a frosted look to a smoother and sometimes clear look (Image 4). The speed at which the ice melted was influenced by different environmental factors such as the temperature of the room, the number of lights that are turned on and the proximity of the light to the ice. When photographing outdoors the same factors came into play, with additional factors such

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as direct sunlight and the direction and/or the strength of the breezes. Wind moving over the ice will increase the evaporation of the ice.

Another factor to take into consideration was storing ice in the freezer in between photo shoots. Ice continues to evaporate as it is stored in the freezer; in addition, the air that's circulated in the freezer, what ensures an even freezing process, helps speed evaporation. There is also the possibility of ice crystals and frost building on the ice. Was this something to worry about? No, this would change the physical appearance of the ice but it would not affect the resulting photographs. If anything it would add a new dimension to the resulting photographs.

THE HISTORY OF THE INKBLOT

An article by John T. E. Richardson discusses the early beginnings of inkblots. In the 1800's children in Europe played a game called *Klecksography*, "a name that probably originated in the title of a book containing inkblots and their interpretations that were published by Justinus Kerner in Tubingen in 1854" (Richardson, 2004, p. 334). In North America, another game described in the 1896 book *Gobolinks, or Shadow Pictures for Young and Old* "provided around 100 examples of how to construct inkblots and use them as prompts for making up an imaginative verse" (Richardson, 2004, p. 334).

It wasn't until 1896 that psychologists Binet and Henri thought that the interpretation of inkblots could be used to study "involuntary imagination" (Richardson, 2004, p. 334). At the same time, several psychologists in the United States were suggesting that inkblots might be used for the study of "experiments on perception, memory, and imagination" and "to demonstrate the interpretative nature of perception" (Richardson, 2004, p. 334).

Inkblots seemed to be part of psychiatrist Hermann Rorschach's life even in his youth. His nickname during his teenage years was Klex, a name given to him for his painting skills. In German, the word Kleckschen mean daubing and the word Klecks means inkblot. In his study of inkblots, he discovered that certain inkblots were better at "eliciting strange perceptions that might be used clinically" (Gregory, 2000, p. 19). Some of the characteristics of good inkblots were that the images be simple, as complicated images can make the test more difficult. The composition of the inkblot itself is important, if the composition isn't right the inkblot will just look like an inkblot and not elicit a response. The composition he preferred was symmetrical as it makes the image the same for left handed and right handed viewers. Using symmetry also "makes possible the interpretation of whole scenes" (Gregory, 2000, p. 19). The disadvantage is that it can lead to stereotypical answers. Inkblots that are in color evoked different responses than black and white inkblots, color inkblots caused kinesthetic movement responses.

For most people seeing the inkblot alone was enough for the patient to be able to come up with an interpretation. "The subject searches among his visual memories for that one which in form, especially in outline, most closely resembles the entire figure nor one of its details" (Gregory, 2000, p. 19). The subject's memories may be from when they were growing up or they may be more recent and influenced by current events.

COMPARISON OF INKBLOTS WITH ABSTRACT ART

Throughout my project, it became clear that my photos elicited responses similar to what people have experienced with inkblots and abstract art. Inkblots and abstract art are both subjective to the memories, and likes and dislikes of the viewer. In both cases, the subject

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searches their visual memories for the one thing in the image that triggers a memory. In both abstract art and inkblots, the composition plays a part in the viewer experience. If the composition is too simple it might not hold the viewer's attention, too complicated and the viewer might become frustrated and not know how they are supposed to respond. Another similarity between the two is that some abstract art and inkblots can be rotated in different directions to give the viewer multiple viewing options. By rotating the images the angles and lines change which will trigger different memories or emotions. As the viewer is looking at inkblots and abstract art their brain kicks into action and searches for that one thing it can relate to. Therapists will use this information to make a psychological assessment. They will assign scores based on their answers and determine courses of treatment for psychological conditions. Abstract art, while not being used as a diagnostic tool, can also give you great insight into the lives of the viewer if one takes the time to listen. What they see in abstract art can be related to the genre of literature that they like, their television and movie viewing preferences as well as triggered memories. The key is to listen without influencing the viewer with our own preconceived thoughts of what we see.

MY CONNECTION WITH ICE

I started photographing ice simply because it was an assignment for class. It quickly turned into much more than an assignment. Once I discovered the world that was hidden just below the surface of ice I knew I wanted to continue. Ice and the resulting melted water looks so simple, clean and clear until you examine it more closely. By photographing ice with a magnified and unique perspective, I realized that there was so much more to ice and it became my goal to share what I saw with everyone. Others may look at the photographs and

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see zombie's, the solar system, alien planets or just plain ice and water, but I see much more. To me, each photograph is a split second frozen in time, caught at a cusp where the future is not yet determined. Because ice and water are fluid in nature the image that I captured was gone the second the shutter clicked. But for that split second the future was still an unknown and the possibilities were endless.

In 2011, I personally learned firsthand that time is precious and fleeting, and in a split second everything can change and there is no way of knowing when it will happen. One day I was fine and 12 days later I woke up from a coma without the ability to move a muscle. For the next year, I struggled to reclaim my life as I had known it. This changed my view of things, I no longer took things at face value or dismissed things as quickly. Instead of just glancing at things and dismissing them quickly I take time to look and appreciate what I see. I also tend to be more reflective and look beyond the surface to see what is hidden just below because after I was released from the hospital people looked at me and made assumptions based on my outside appearance. I looked fine so therefore I must be back to normal, however the outside appearance does not always reflect what is truly happening below the surface.

It is because of my personal history that I am drawn to photographing ice. Ice like humans is in a constant state of change. The minute we are born we start to age, the minute ice is frozen it too begins to change. The elements are constantly shaping and changing the ice much like the people and events in our lives shape us. Most of the time we are not even aware of the changes we are going through or how we are being influenced, sometimes it takes a life-changing event in our lives. With my macro lens, I can capture forever something

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that is changing even as I am taking the photograph. I can capture something beautiful and fleeting, then share it with others so that they too may experience the joy and wonder I see.

MY WORK INTERPRETED

After showing a longtime friend and co-worker Images 5 and 6 she told me that she saw zombies. She went on to describe where the zombies were and as I was listening she said it was like a scene from *The Walking Dead* television show. I've known her a long time but never knew she was a huge *Walking Dead* fan. Others have said it reminded them of a vacation where the steam rose up from the water. *I see the dawn of a new day on an alien world.* When looking at the preferred design for inkblots we will notice that it matches most of the criteria. It is fairly symmetrical and the image is not overly complicated.

Image 7 has been described as an alien planet and as a world made of water as well as the birth of a new galaxy. All of the viewers were big fans of science fiction and one person has a great interest in science. They have studied the cosmos and read a great deal across a multitude of genres. I would have known none of this if I would not have listened to them as they talked about what they saw in the photos. *In Image 7 I see the birth of a new galaxy, I wonder about planets and if any of them hold life.* As with Images 3 and 4, it is symmetrical and the image is not overly complicated.

People find Image 8 to be very calm and soothing, they have expressed a desire to relax and meditate while viewing the photo. Many of the people that relate to this photo tell me of happy times spent on the water or on the beach. The photo is symmetrical and simple in design, which would put it in consideration for an inkblot.

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Image number 9, interestingly enough, is a photograph of the ice block that I would normally photograph close up, but shot from a further distance. The interesting part is that very few people have recognized it as ice and ask what it was that I photographed. They are intrigued by the photo but it doesn't seem to trigger the same reactions as some of the others. The composition of this photo is not symmetrical and it is more complicated, could that explain the lack of inspiration?

Image 10 has been described as a moon or alien planet. They pointed out the craters and dunes on the planet. After talking to them they are usually science fiction fans or into astronomy. *I see a new beginning where everything is fresh and new, anything is possible.* The image is symmetrical and not very complicated, so this fits the criteria for a good inkblot.

Image 11 has been described as a wave caught in action, as well as being recognized as ice. The image is symmetrical but slightly more complicated which makes it less ideal if it were being considered for an inkblot.

Images 12 – 15 is a series of frozen rainwater which when photographed has less color than the other photos and a definite lack of blue color. That being said Image 12 received interesting descriptions. One person saw a shoe and a steak in the photo and they pointed out the shapes in the photo. Other people have seen skulls in the background while others have seen snow covered trees. *For me, it triggers the feeling of being on a mountaintop surrounded by snow covered trees. There are low clouds surrounding me and as I look below I see a valley, which represents a new beginning.* The image is symmetrical and not overly complicated.

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Image 16 has been described as a side of an ice volcano and even a space station. The dark corner opening into space where the space shuttle hurtles into space. *And what do I see? I see something beautiful and fragile suspended in time. I look at it and wonder if time were to restart, would a simple touch cause it to fracture and break into a million pieces? To me, it is representative of the fragility of our existence.* It is also symmetrical and the composition is more simple.

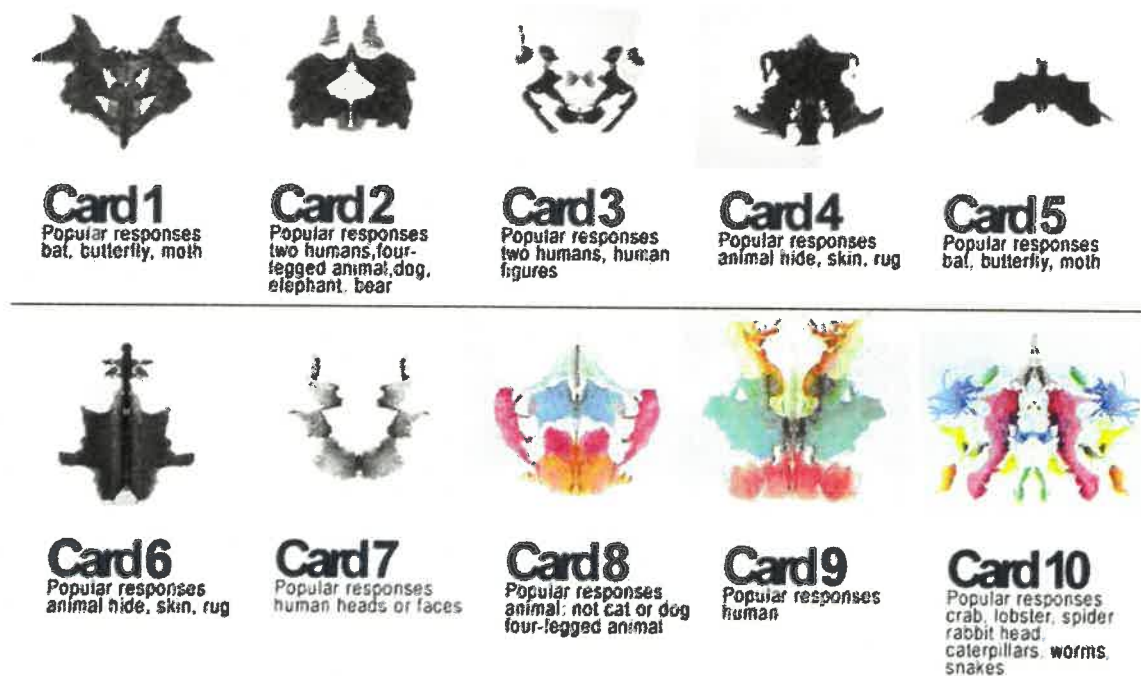
Image 14 been described by several people in many different ways. One person that viewed it described it as a world of water. Some have said they are on the inside gazing out while others have said they are on the outside gazing in. *What I see is the profile of a female face on the left-hand side, from just below the lips down to bottom of the chin. She appears to be blowing out a breath or inhaling. I want to believe she is breathing life into a new world, that I am witnessing the beginning of something with a future limited only by the imagination of those who will inhabit and shape the world.*

Conclusion

In conclusion, by allowing our ourselves to look at the world around us and classify what we see in a matter of seconds we miss out on the beauty that lies just beyond our quick glance. If we were take the time to look and listen, we might learn much more about the world in which we live and the people with whom we share our world.

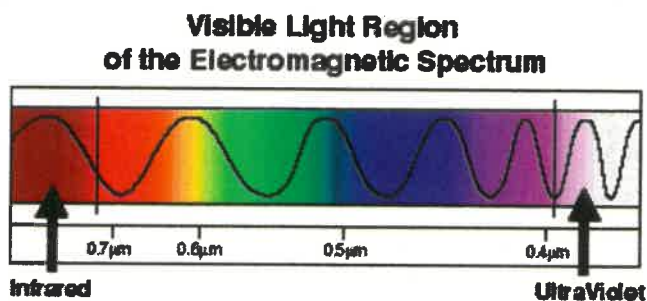
IMAGE LIST

Image 1



<http://alfalfastudio.com/wp-content/uploads/2013/12/Rorschach1.jpg>

Image 2



<https://s-media-cache->

<ak0.pinimg.com/originals/4b/07/59/4b0759ef0dfc6d5d0b53a96da00920e6.jpg>

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Image 3



Image 4

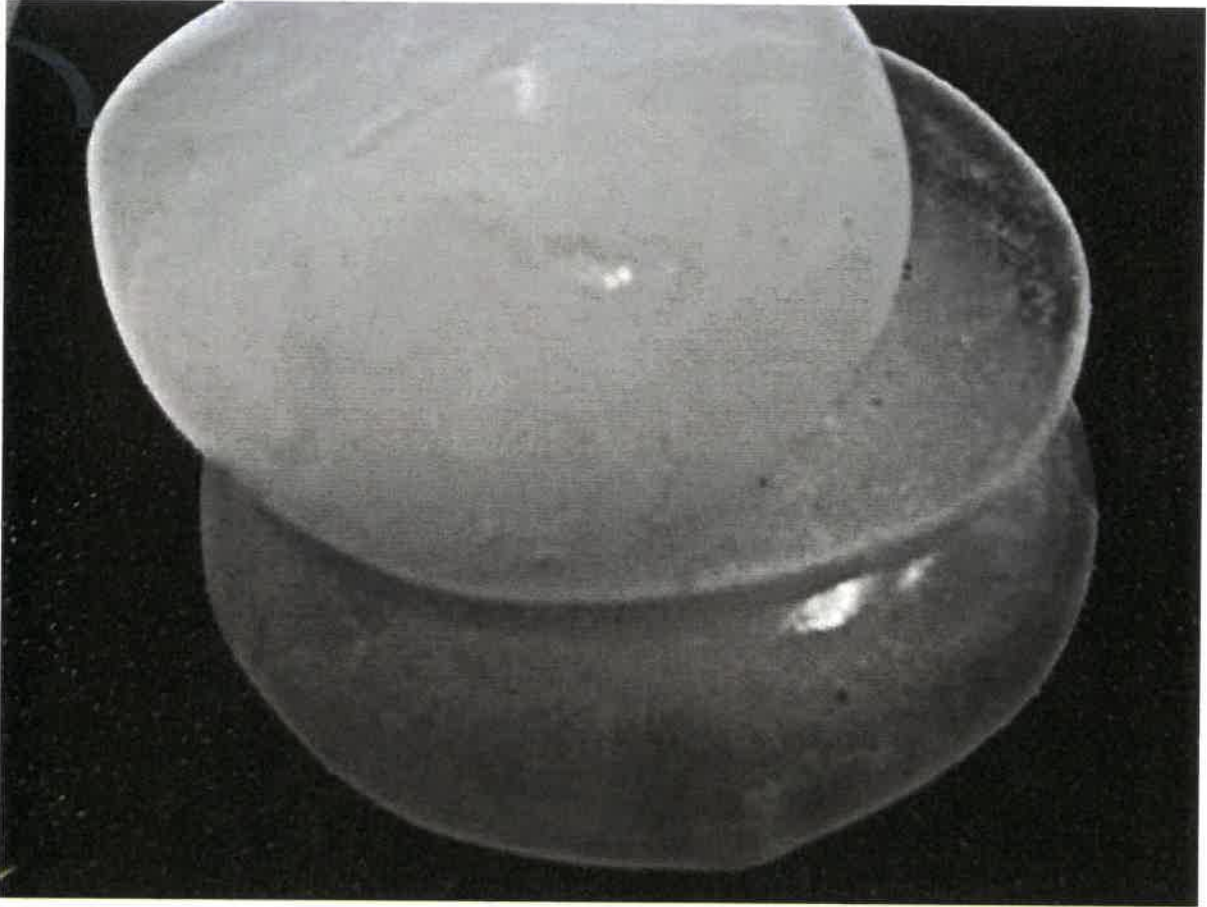


Image 5



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Image 6



Image 7

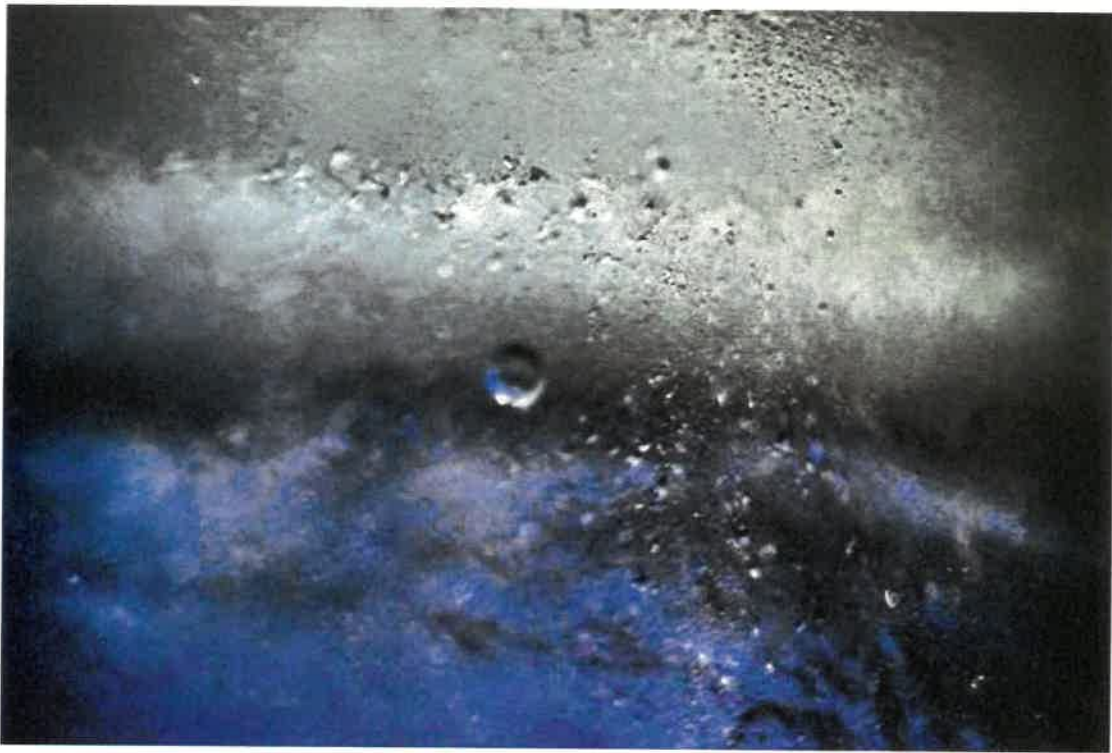


Image 8

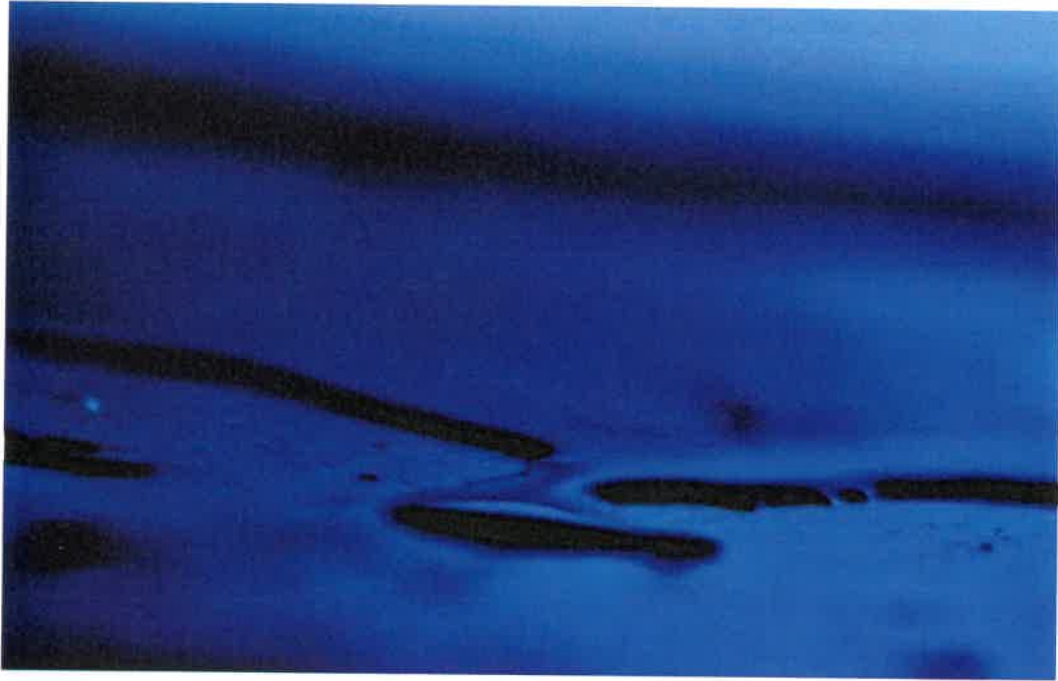


Image 9

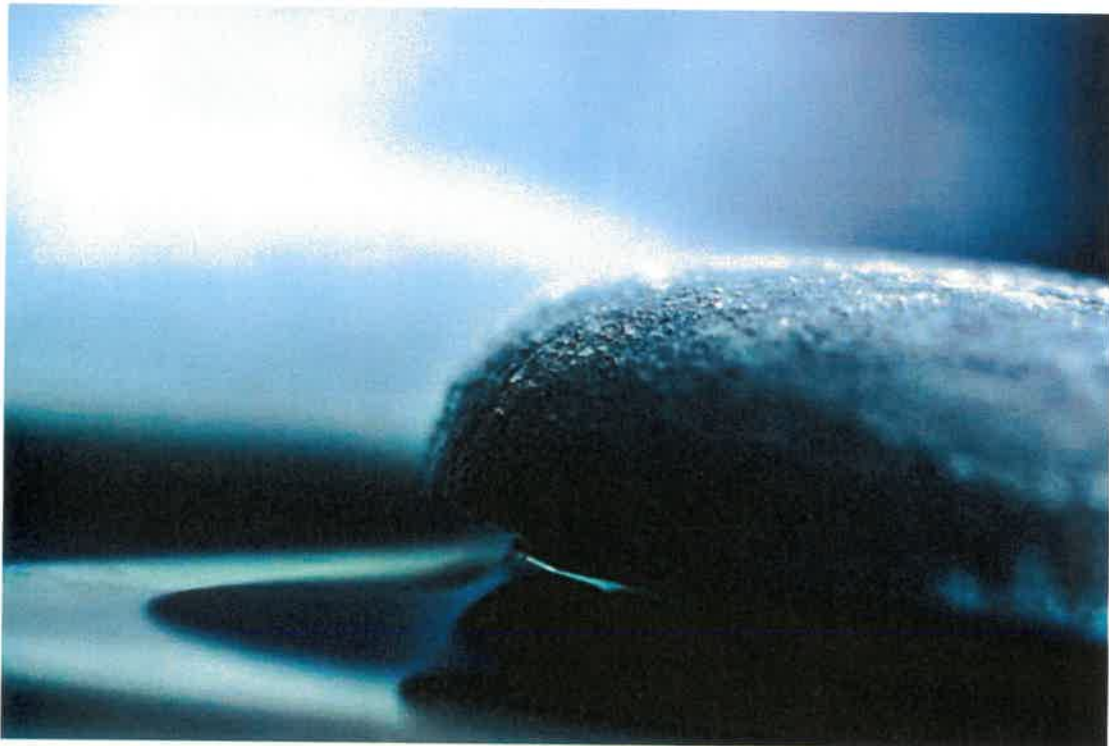


Image 10



Image 11



Image 12

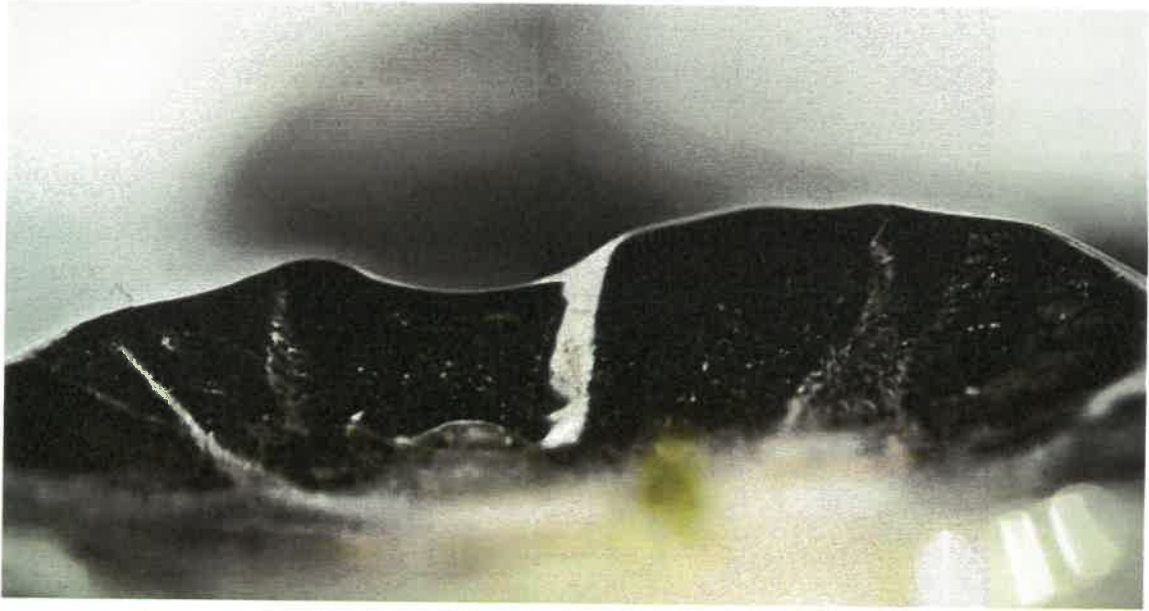


Image 13

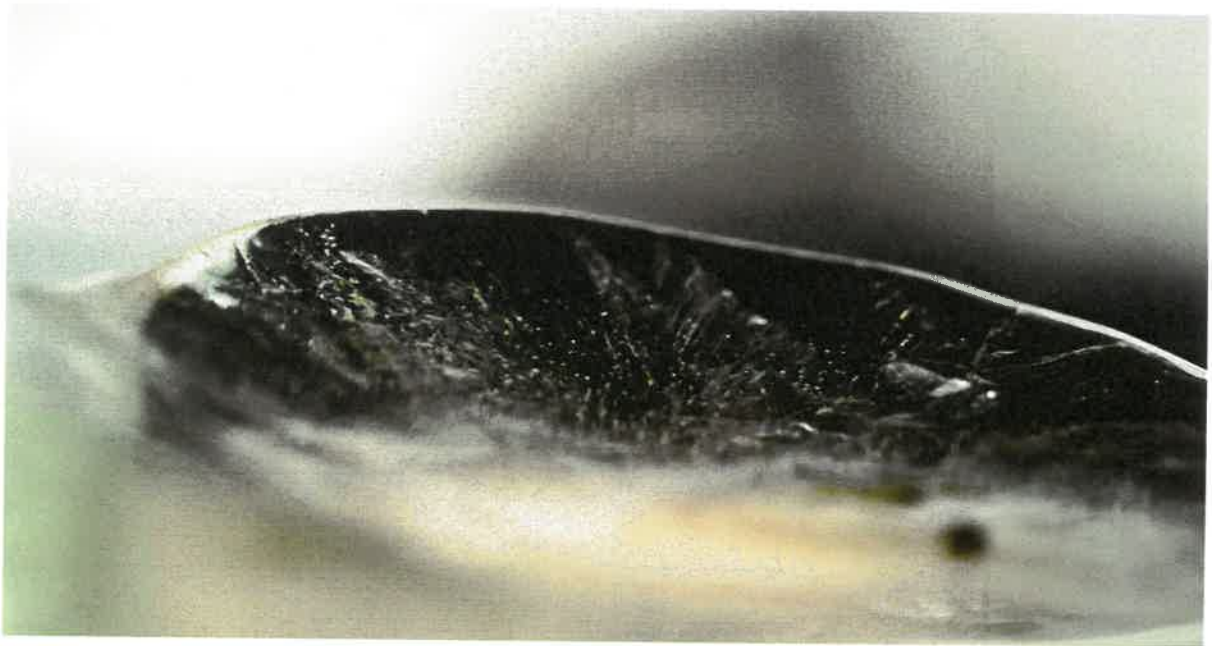


Image 14

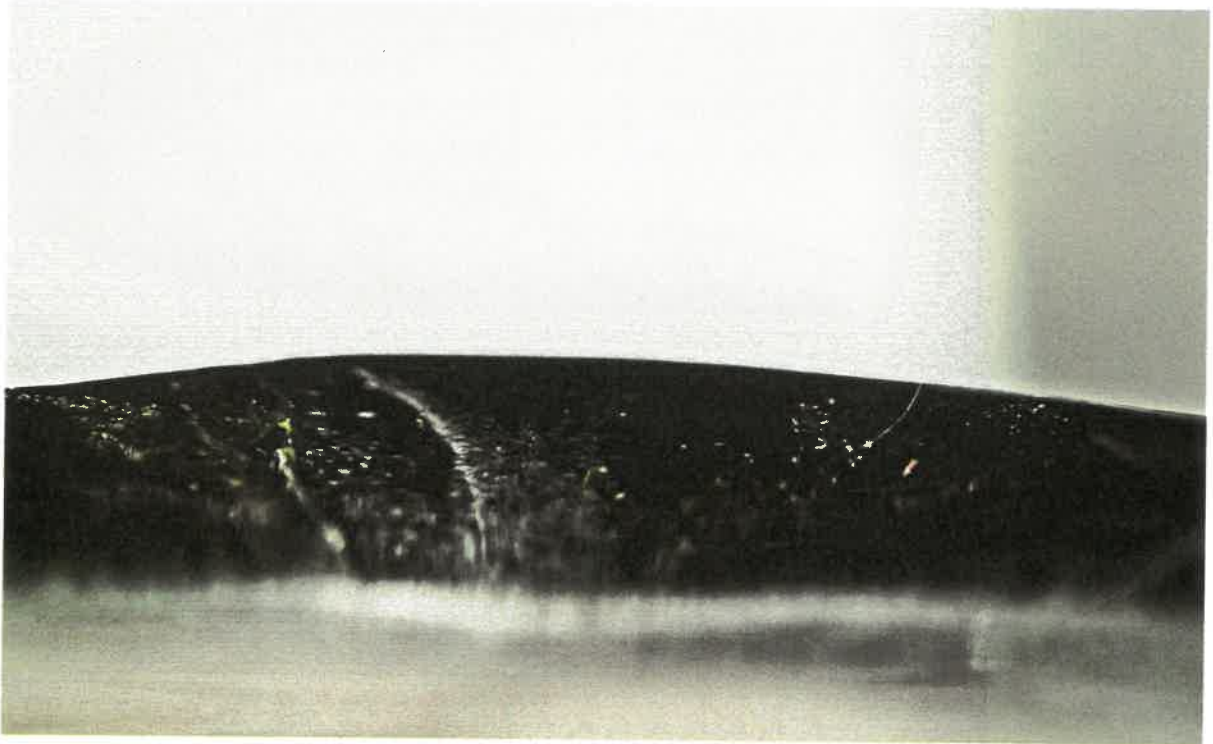


Image 15

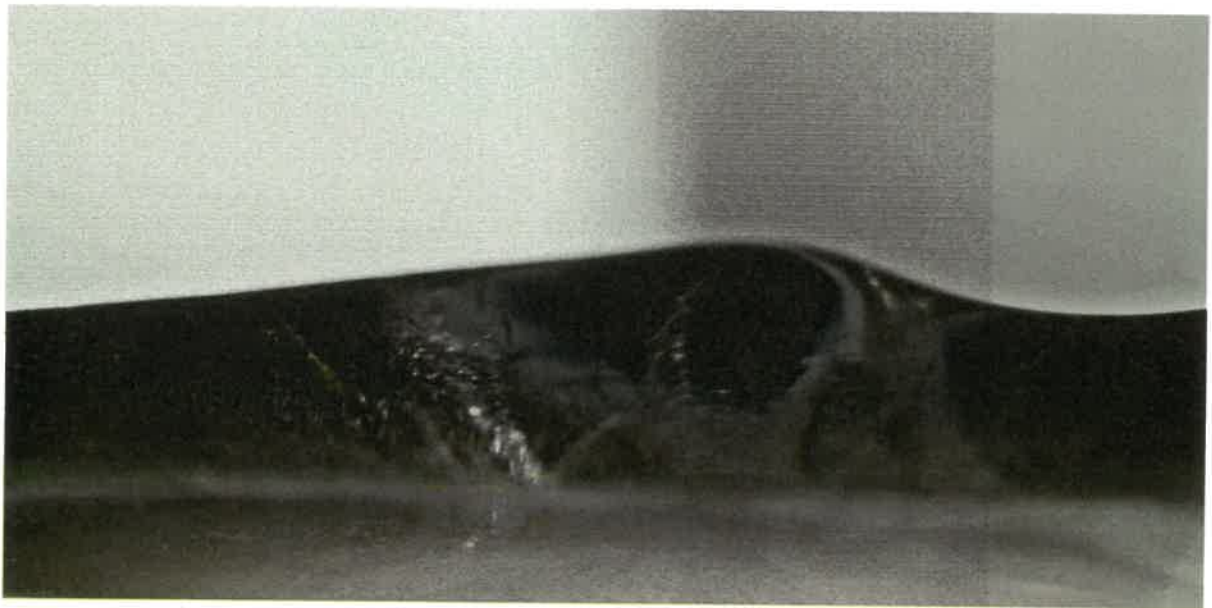


Image 16

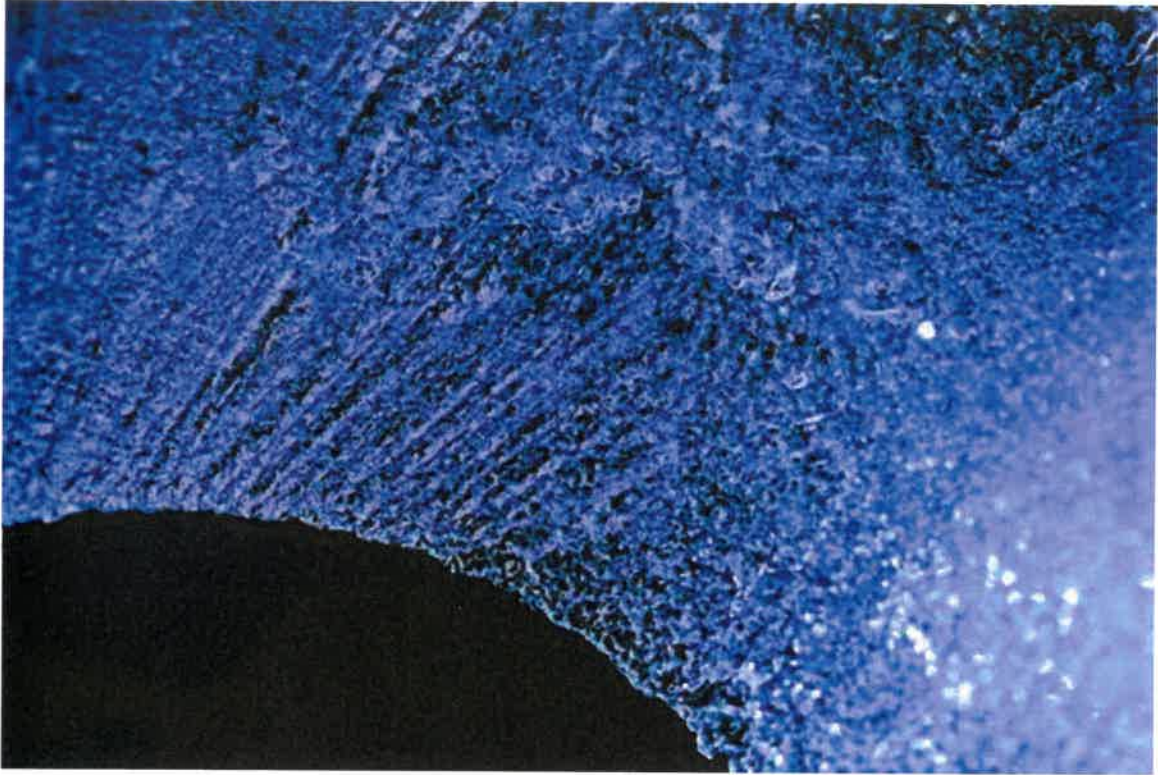
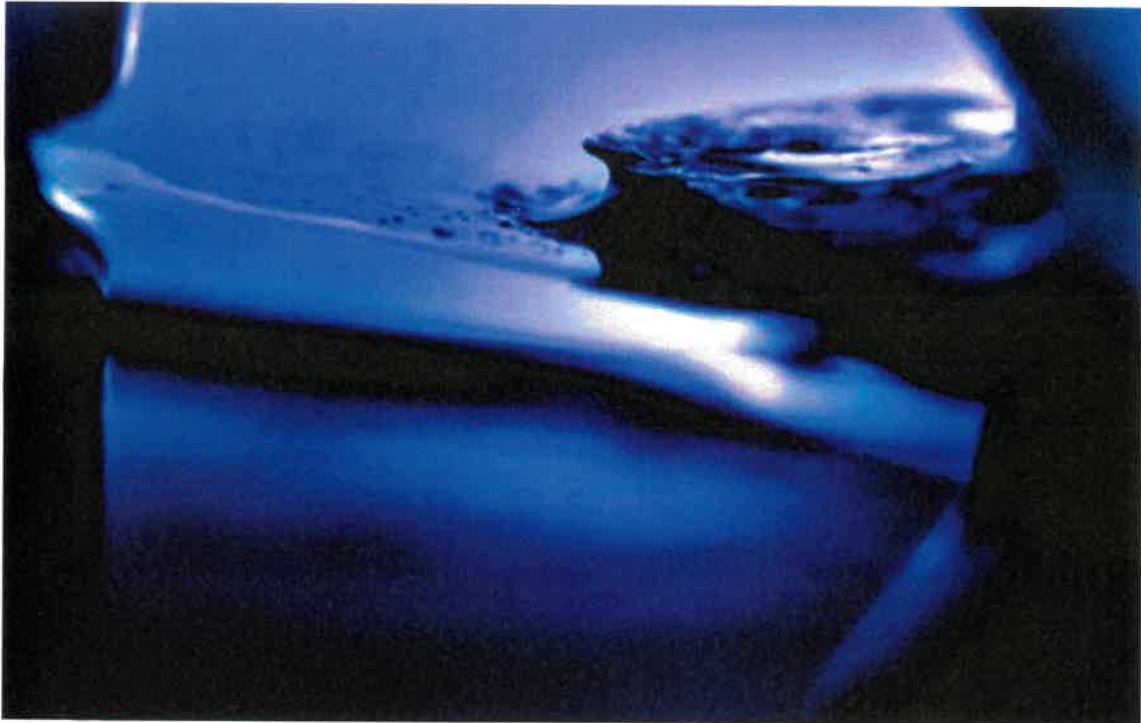


Image 17



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