

Image: Solar evaporation ponds near Moab, Utah

August 10 2017, by Andi Hollier



Credit: NASA

An astronaut aboard the International Space Station took this photograph of solar evaporation ponds outside the city of Moab, Utah. There are 23 colorful ponds spread across 400 acres. They are part of a large



operation to mine potassium chloride—more commonly referred to as muriate of potash (MOP)—from ore buried underground. MOP is in high demand as fertilizer because there are no easy substitutes for potassium, an essential nutrient for plant growth.

Each <u>pond</u> color indicates a different state of evaporation. The deep, royal blue color is due to a dye that is added to a full pond of potash brine and water in order to speed up the rate of heat absorption. The seafoam green colors indicate shallower waters (with less dye) that are well into the evaporation process. The tan colored ponds are nearly dry; salt crystals (the final product) are left over in the pond and ready for collection.

Shadows cast on the landscape show the depth and dimension of the surrounding Utah desert. The Colorado Plateau stands at an average elevation of 1600 meters (5200 feet) above mean sea level, in contrast with the Colorado River Valley, with an average elevation of 1200 meters (3900 feet). The darker areas along the river bank are rich in green desert vegetation. Hatch Point Road leads to a scenic overlook for viewing the Cane Creek Anticline.

Astronaut photograph ISS052-E-8757 was acquired on June 26, 2017, with a Nikon D4 digital camera using an 1150 millimeter lens, and is provided by the ISS Crew Earth Observations Facility and the Earth Science and Remote Sensing Unit, Johnson Space Center. The image was taken by a member of the Expedition 52 crew. The image has been cropped and enhanced to improve contrast, and lens artifacts have been removed.

Provided by NASA

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