



Department of Energy
Washington, DC 20585

May 18, 2015

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Deputy Director
Mail Stop T8F5
Washington, DC 20555-0001

Subject: DOE-LM Response to U. S. Nuclear Regulatory Commission's (NRC's) Comments
Regarding Water Quality Monitoring at Moenkopi Wash [NRC Letter Dated
March 9, 2015 – Ground Water Treatment Plant Shutdown at the Tuba City, Arizona,
Uranium Mill Tailings Radiation Control Act Site (WM-00073)]

To Whom It May Concern:

Thank you for your letter dated March 9, 2015. The U.S. Department of Energy Office of Legacy Management (DOE-LM) agrees with the statements in your letter; however, we wanted to address the following comment:

"Preferred pathways are difficult to locate; and although the probability of preferred pathway transport to the Wash is low, sampling the Wash slightly upstream and downstream of the Tuba City disposal site, e.g., near sampling locations 902 and 965, would provide additional confidence that contaminants are not entering the Wash at levels threatening public health and safety. Therefore, we request that the DOE sample the Moenkopi Wash upstream and downstream of the disposal site and include the results in your Data Validation Packages and Annual Groundwater Report for the site."

We concur that the possibility of a hydraulic connection between the disposal cell and Moenkopi Wash by way of a continuous fracture or fractures is low, and agree that surface water monitoring in the wash upstream and downstream of the disposal site is warranted. Ongoing water quality monitoring suggests that the groundwater contaminant plume is essentially static at a position more than 1 mile upgradient of Moenkopi Wash. Upstream and downstream locations in Moenkopi Wash from a point in line with the groundwater flow direction have been monitored for water quality since 1986 and show no evidence of site-derived contamination.

Current surface water monitoring locations in Moenkopi Wash include those identified as 0778 (collected upstream of the disposal site directly from the creek), 0759 (collected downstream of the disposal site directly from the creek), and 1568 (collected upstream of the disposal site from seepage in the cliff face along the wash).

The enclosed map shows these and previous surface water monitoring locations, and the current groundwater monitoring locations. These locations are also presented in the September 2014 Annual Groundwater Report and the September 2014 Data Validation Package.



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NM55

May 18, 2015

DOE-LM will continue to monitor surface water quality at locations 0778, 0759, and 1568 according to the current sampling and analysis protocol and schedule (annual). DOE-LM will discontinue water quality monitoring at seep location 1571 (Jimmy Spring West), seep location 1573 (Shonto Well West), and 0965 (far upstream creek location) because the data are redundant with the other sampling locations, and because access to water in concrete cisterns at some locations presents worker health and safety concerns. Eliminating these locations will not compromise monitoring objectives to detect possible impacts on water quality from groundwater discharge to the wash.

We also agree to elaborate on the evaluation of surface water monitoring data in the data validation packages (DVPs) and the annual groundwater reports. This will include adding time-varying concentration plots in the DVPs as is done for groundwater quality data; and including similar plots, maps, and interpretation of surface water monitoring in the annual groundwater reports. We will also review the applicable standards for water quality protection in Moenkopi Wash for comparison to the surface water monitoring results.

Please call me at (970) 248-6073 if you have any questions. Please address any correspondence to:

U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

Sincerely,

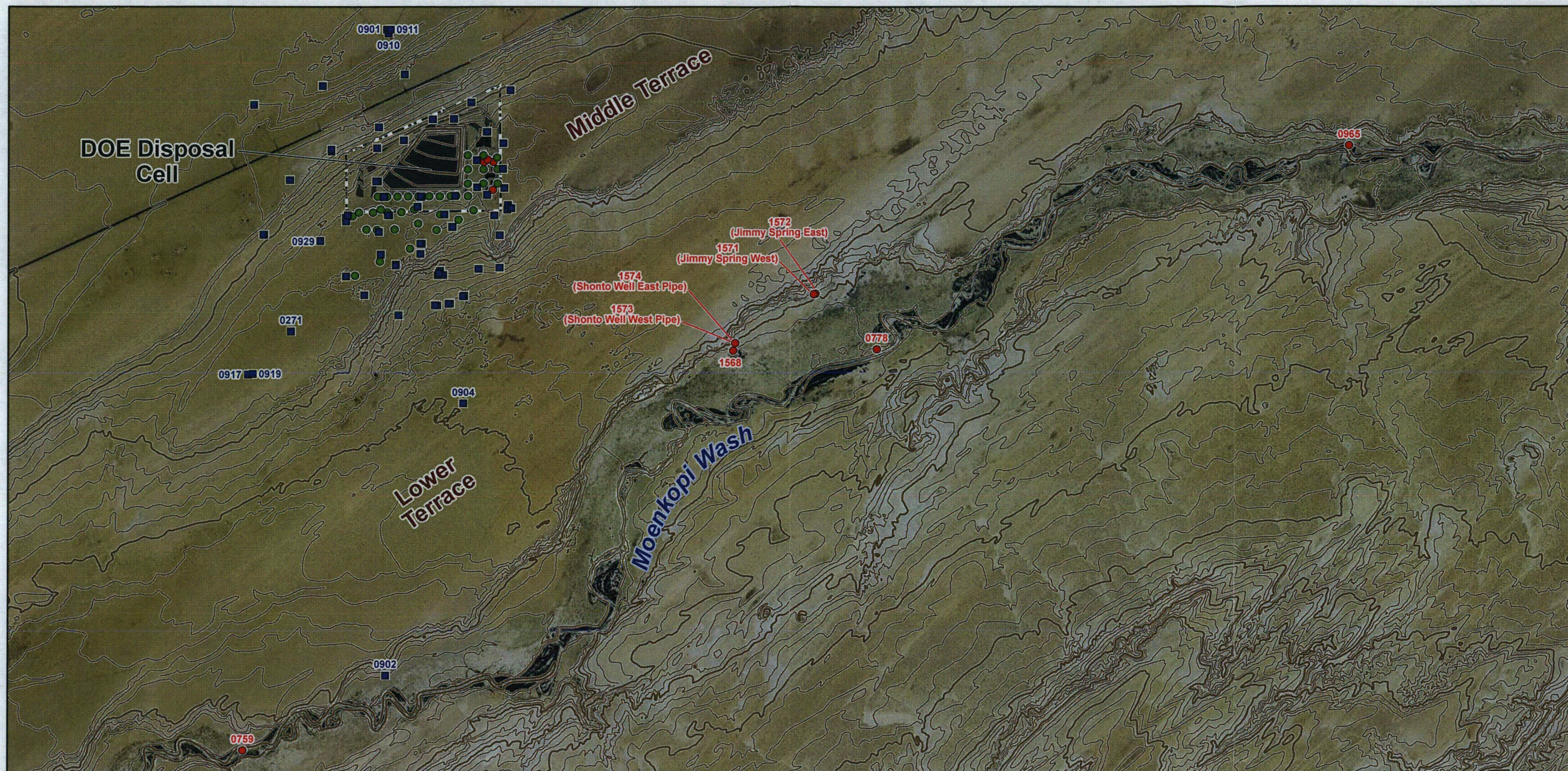


Richard P. Bush
Site Manager

Enclosure

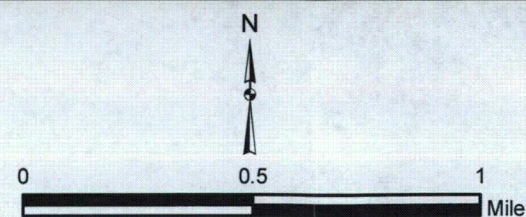
cc:

D. Orlando, NRC
A. Gil, DOE-LM (e)
T. Bartlett, SN3 (e)
C. Carpenter, SN3 (e)
S. Smith, SN3 (e)
File: TUB 0400.02 (rc-grand.junction)



Legend

- Monitoring Well
- Extraction Well
- Surface Location
- - - Site Boundary



U.S. DEPARTMENT OF ENERGY OFFICE OF LEGACY MANAGEMENT	Work Performed by Stoller Newport News Nuclear, Inc. Under DOE Contract Number DE-LM000041
Monitoring Locatons Tuba City, AZ, Disposal Site	
DATE PREPARED: April 14, 2015	FILE NAME: S1285600



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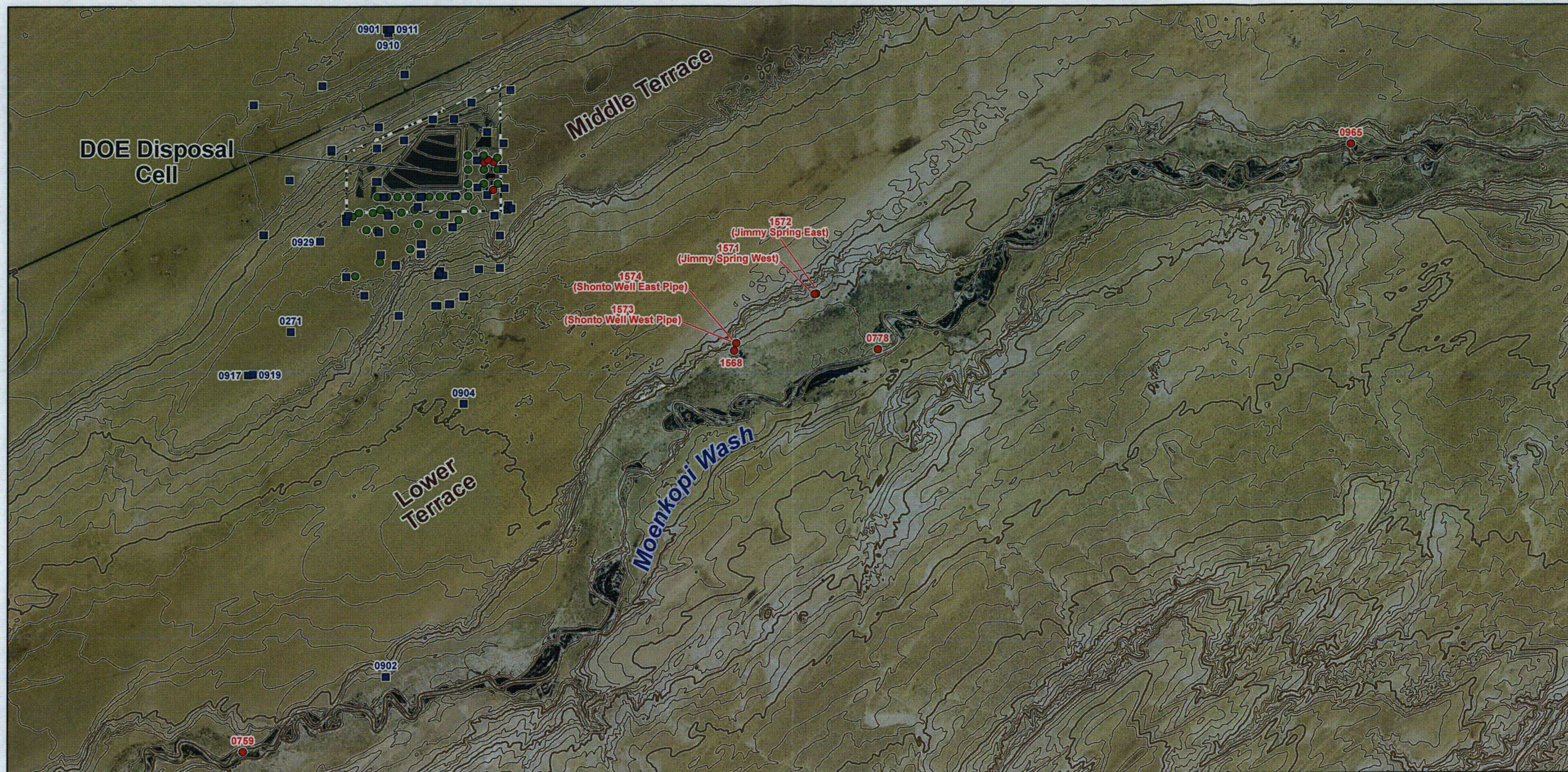


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U.S. DEPARTMENT OF ENERGY
OFFICE OF LEGACY MANAGEMENT

Work Performed by
Stoller Newport News Nuclear, Inc.
Under DOE Contract Number DE-LM0000415

Monitoring Locations
Tuba City, AZ, Disposal Site

DATE PREPARED:
April 14, 2015

FILE NAME:
S1285600