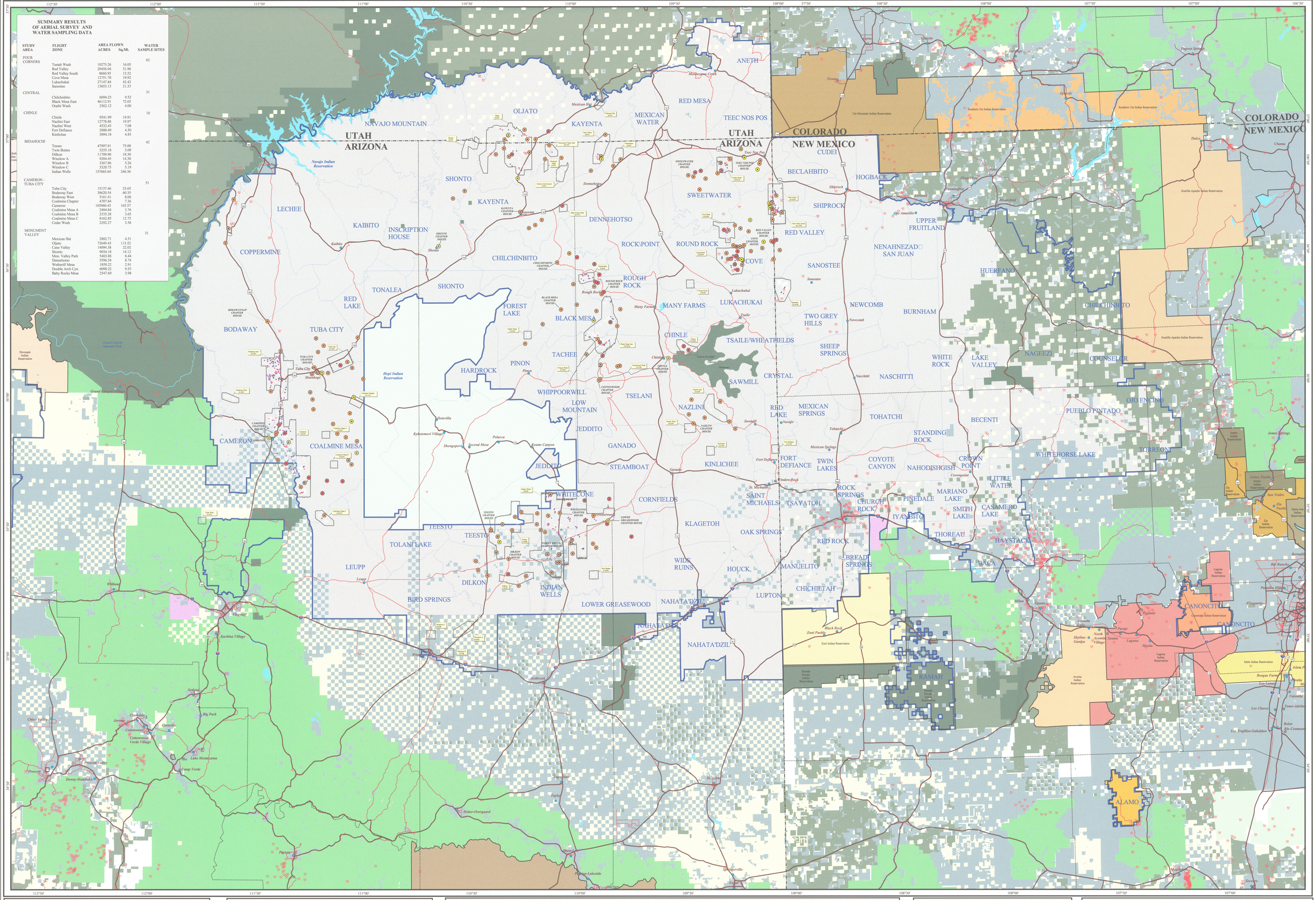

SUMMARY RESULTS OF AERIAL SURVEY AND WATER SAMPLING DATA

STUDY AREA	FLIGHT ZONE	AREA FLOWN ACRES	AREA FLOWN Sq.MI.	WATER SAMPLE SITES
FOUR CORNERS				62
	Tsetah Wash	10273.26	16.05	
	Red Valley	20456.04	31.96	
	Red Valley South	8660.95	13.52	
	Cove Mesa	12751.70	19.92	
	Lukachukai	27147.84	42.42	
	Sanostee	13653.13	21.33	
CENTRAL				31
	Chilchinbito	6094.23	9.52	
	Black Mesa East	46112.91	72.05	
	Oraibi Wash	2562.12	4.00	
CHINLE				10
	Chinle	9541.99	14.91	
	Nazlini East	12778.88	19.97	
	Nazlini West	4532.43	7.08	
	Fort Defiance	2880.49	4.50	
	Kinlichee	3094.18	4.83	
BIDAHOCHI				42
	Teesto	47997.91	75.00	
	Twin Buttes	3255.18	5.09	
	Dilkon	11709.90	18.30	
	Winslow A	9204.45	14.38	
	Winslow B	3367.86	5.26	
	Winslow C	3320.75	5.19	
	Indian Wells	157665.64	246.36	
CAMERON - TUBA CITY				51
	Tuba City	15137.46	23.65	
	Bodaway East	38620.54	60.35	
	Bodaway West	5161.41	8.06	
	Coalmine Chapter	4707.84	7.36	
	Cameron	105960.43	165.57	
	Coalmine Mesa A	2404.84	3.76	
	Coalmine Mesa B	2335.28	3.65	
	Coalmine Mesa C	8162.85	12.75	
	Cedar Wash	2292.27	3.58	
MONUMENT VALLEY				31
	Mexican Hat	2882.71	4.51	
	Oljato	72649.43	113.52	
	Cane Valley	14094.38	22.02	
	Shonto	9034.18	14.12	
	Mon. Valley Park	5403.88	8.44	
	Dennehotso	5596.54	8.74	
	Wetherill Mesa	1859.22	2.91	
	Double Arch Cyn.	6098.22	9.53	
	Baby Rocks Mesa	2547.69	3.98	

Projection ..... TRANSVERSE MERCATOR
Grid, 1000-Meter Universal Transverse Mercator ..... Zone 12,
UTM Grid Declination ..... 1 DEGREE 10 MINUTES EAST 1980 Magnetic North Declination ..... 13 DEGREES EAST
Vertical Datum ..... NATIONAL GEODETIC VERTICAL DATUM 1929
Horizontal Datum ..... 1927 NORTH AMERICAN DATUM.
Scale 1:500,000

This map was produced by CH2M HILL Inc., for the U.S. Environmental Protection Agency (EPA).
For more information contact:
US EPA Region 9 San Francisco
Superfund Division, Mail Code SFD-8
95 Hawthorne Street, Suite 403
San Francisco, CA 94105
(415) 536-2000

5 0 5 10 15 Miles

10 0 10 20 30 Kilometers

MAP FEATURES LEGEND

POPULATED PLACE
U.S. Interstate
U.S. Highway
State Highway
Local Arterial Road
State Boundary
County Boundary

Highways, roads, county and state boundary data from Environmental Systems Research Institute, Redlands, CA.

Land Ownership
Navajo Nation
Navajo Chapter
Hopi Nation
State Land
Private Land
BLM
BOR
DOD
FS
FWS
NPS
Unclassified

Native American Lands
Acoma
Alamo
Camp Verde
Cannonite
Fort Apache
Havasupai
Hualapai
Isleta
Jemez
Jicarilla
Kaibab
Paiute
Laguna
Ramah
Sandia
Santa Ana
Southern Ute
Ute Mountain
Zia
Zuni

Land Ownership Data Source Information:
The Hopi Nation, Navajo Nation, and Navajo chapter boundaries are from the Navajo Nation, Division of Transportation, 1997. All other data is from National Atlas of the United States of America, produced by the U.S. Geological Survey.
State and private land information is from BLM. No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data. For more information contact: Mary Beth Stolz (505)256-6185.
The BLM and USGS land classification data do not necessarily reflect land status in all areas. These areas are shown in white as unclassified.

United States Environmental Protection Agency

ABANDONED URANIUM MINES PROJECT
NAVAJO NATION REGIONAL PROJECT VIEW
Data Summarization Phase

AERIAL SURVEY ZONE
Flight Date

Water Sample Sites

More Risk
Total cancer risk is greater than 65-04 , or Hazard Index is greater than 1.5 , or Lead is greater than 15 , and total Uranium equal to or greater than 30.

Some Risk
Total cancer risk is less than or equal to 65-04 , but greater than 10-05, or Hazard Index is less than 1.0 but greater than 1. , or Lead is less than 15 but greater than 4, and total Uranium less than 30.

Less Risk
Total cancer risk is less than or equal to 10-05 , or Hazard Index is less than or equal to 1. , Lead is less than 4, and Uranium less than 30 .

Historical Mine Locations

Mine
Mine within Flight Survey
Deposit within flight survey

Data Source information:
Mine locations and production values or occurrences are approximate and were compiled by the Department of Energy - micro-Roentgens per hour. Normals 2.5 photopeak at 1760 KeV. At the survey altitude of 150 feet, the footprint of the detection system is a circle approx. 300 feet in diameter. The data shown on this map averages over this footprint at ground level.

Aerial Radiation Peaks

Derived centroy-level Bismuth 214 photo-peak (excess counts per second)	Estimated exposure rate Bismuth 214 (micro-R/hour)
80	3.5
170	7.4
250	10.9
800	34.9
1200	52.4

Aerial radiation symbols are indicative of uranium concentrations higher than the regional levels. Derived and estimated values were compiled by: Mr. Thane Hendricks, Department of Energy - Nevada Operations Office, Aerial Measuring Laboratory, Las Vegas, Nevada.

United States
Environmental Protection Agency
Abandoned Uranium Mines Project

NAVAJO NATION
REGIONAL PROJECT VIEW
Data Summarization Phase

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