

Table 4-13. Groundwater analysis results for NTS groundwater monitoring well SM-23-1 in 2004

Contaminant/Parameter	NDWS Limit ^(a)	Results
		pCi/L ± Uncertainty ^(b)
Adjusted Gross Alpha	15	5.2 ± 1.33
Gross Beta/photon emitter	50	5.8 ± 1.07
Tritium	20,000	764 ± 267 ^(c)
		mg/L
Arsenic	0.05	0.0137
Cadmium	0.005	< 0.0004
Chloride	400	103
Chromium	0.1	0.0035
Copper	1.3	< 0.0012
Fluoride	4	1.1
Iron	0.6	0.0195
Lead	0.015	< 0.0020
Magnesium	150	26.5
Manganese	0.1	0.0007
Mercury	0.002	< 0.0001
Nitrate (Nitrogen)	10	5.8
pH (Hydrogen Ion Activity)	6.5 – 8.5 SU	7.44
Selenium	0.05	0.0036
Sulfate	500	103
Zinc	5	< 0.0004

(a) Source: NDWS (NAC 445A.144)

(b) ± 2 standard deviations

(c) Results of un-enriched tritium analyses from General Engineering Laboratories. This value differs from the enriched tritium analysis result of -13 ± 12 pCi/L (see Table 4-4) from Sanford, Cohen, and Associates Laboratory.

4.2.3.4 Sewage System Inspections

The sewage system operators inspect active systems weekly and inactive lagoon systems quarterly. State inspections of active and inactive lagoon systems are conducted annually. Operators inspect for abnormal conditions, weeds, algae blooms, pond color, abnormal odors, dike erosion, burrowing animals, discharge from ponds or lagoons, depth of staff gauge, crest level, excess insect population, maintenance/repairs needed, and general conditions.

In 2004, there was one notable inspection finding at each active lagoon. Each lagoon had problems related to the flow meters located at the influent headworks. The problems were investigated and determined to be caused by several electrical storms that caused power outages at the NTS during the month of September.

NDEP conducted an annual inspection of active and inactive sewage lagoon systems on April 27 and 28, 2004. The inspection found no problems with the field maintenance program in keeping the lagoons, sites, and access roads functional.