HSWA LANL 3/1082/16/16-003(k) & 16-021(c) 11/20/98 #1

TL

NOU 1798

Presentation Materials:

Possible Sources of Water and HE at TA-16

Dated

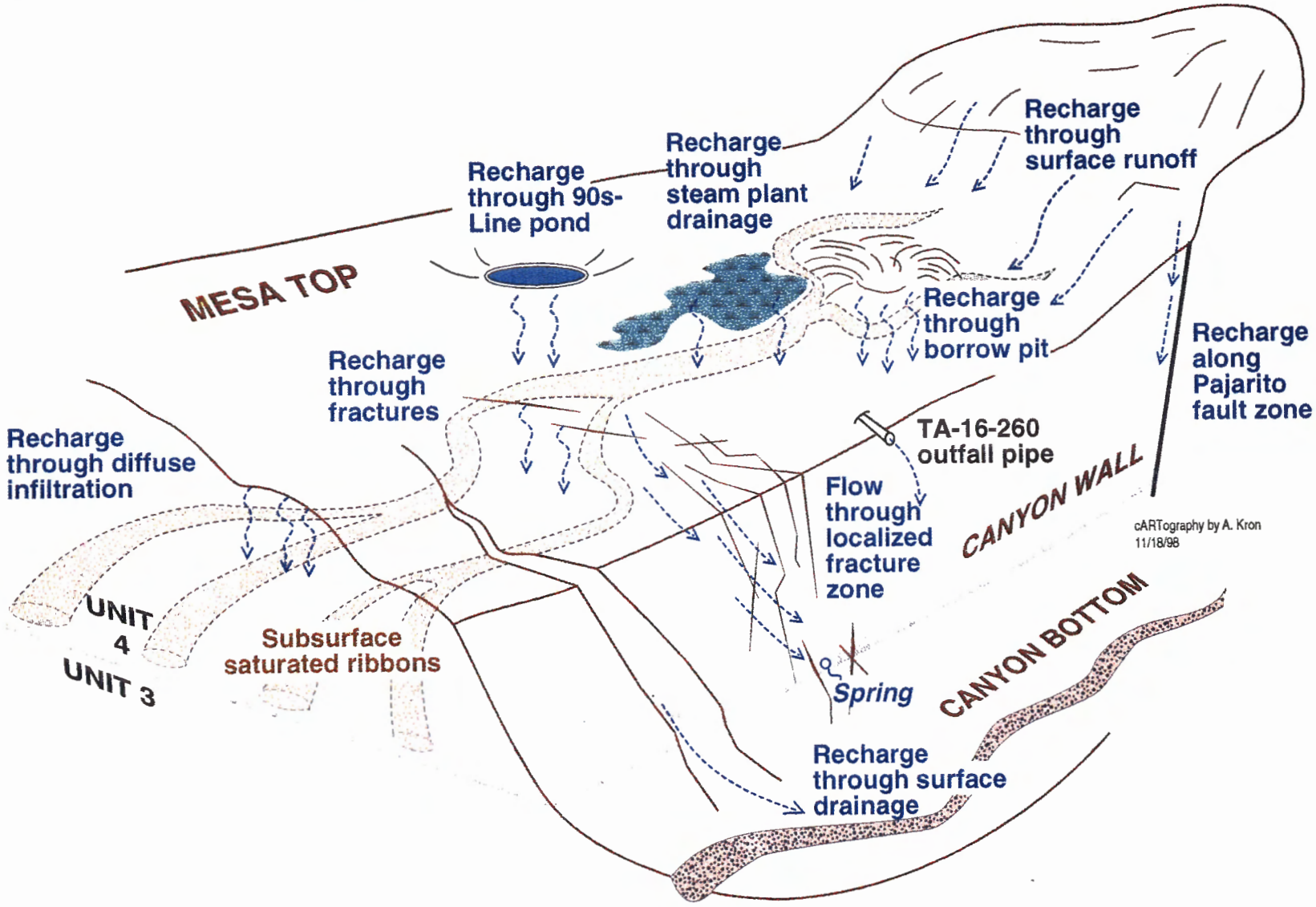
11/17/98

6129

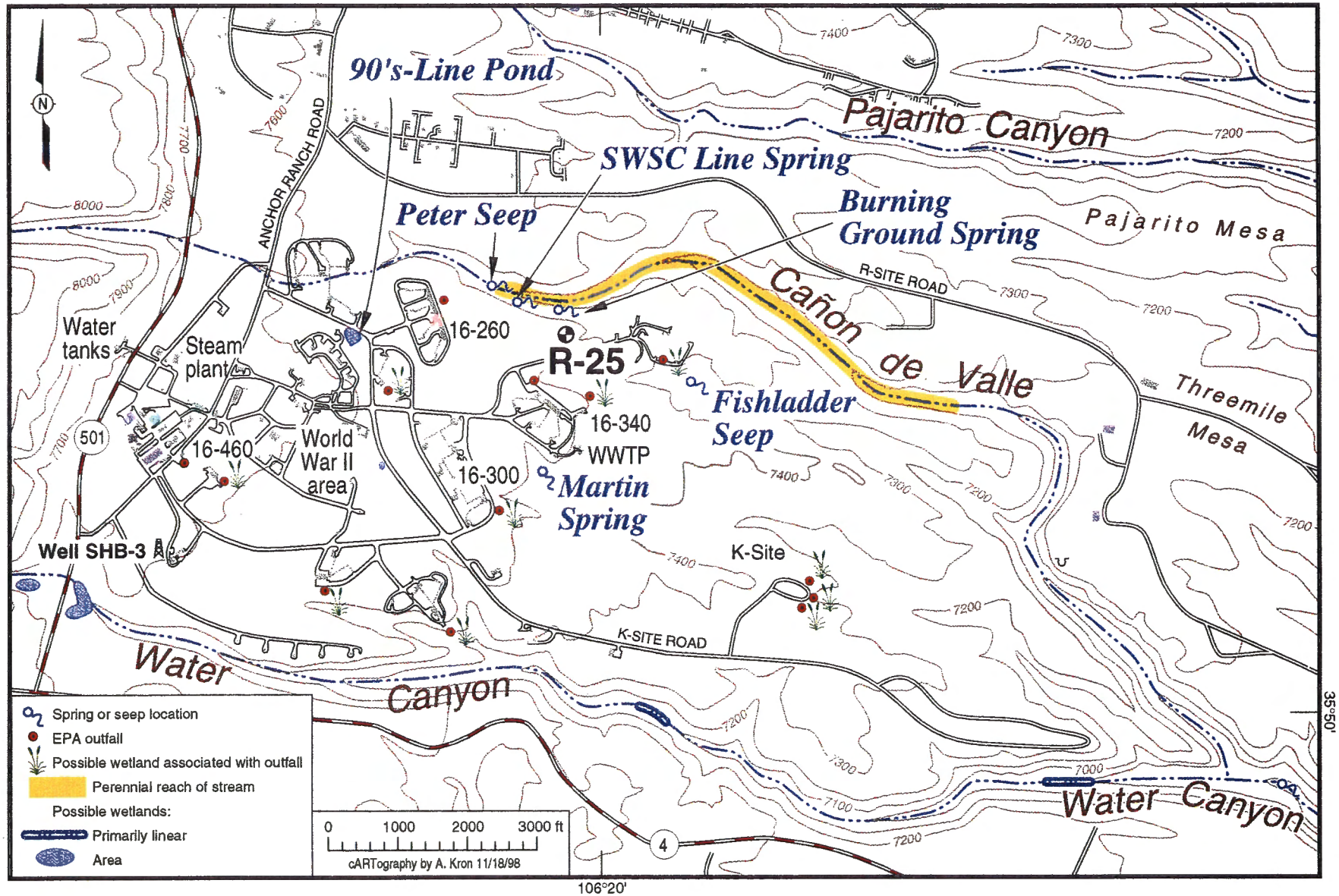
Los Alamos National Laboratory
Environmental Restoration Project

VG-97-000(1)

Conceptual model of TA-16 hydrogeology



Spring, surface water and other water sources



Historic Flow Rates for Major TA-16 Water Sources

Site	Flow (M gpy)	Year	Active
• WWTP	~ 6.6	Avg.	No
• TA-16-300*	5.3	1994	No
• TA-16-460*	3.9	1994	No
• TA-16-340*	3.6	1994	No
• Steam Plant	~ 3.1	Avg.	No
• TA-16-260***	2.5	1994	No
• Water tanks	??	NA	??
• WWII area*	??	NA	90s Ln Pd

* Potential HE source

How Would We Trace Sources?

Site	Chemical signature
• WWTP	High B, phosphates, ammonium, low tritium
• TA-16-300, 460*	Low tritium
• TA-16-340*	Low tritium, solvents
• Steam Plant	High B, other fouling additives
• TA-16-260***	Low tritium, RDX/HMX RATIO MAY PROVIDE SIGNATURE
• Water tanks	Low tritium
• WWII area*	Stable isotopes, RDX/HMX

* Potential HE source

50s TNT & RDX
60s RDX INCR.