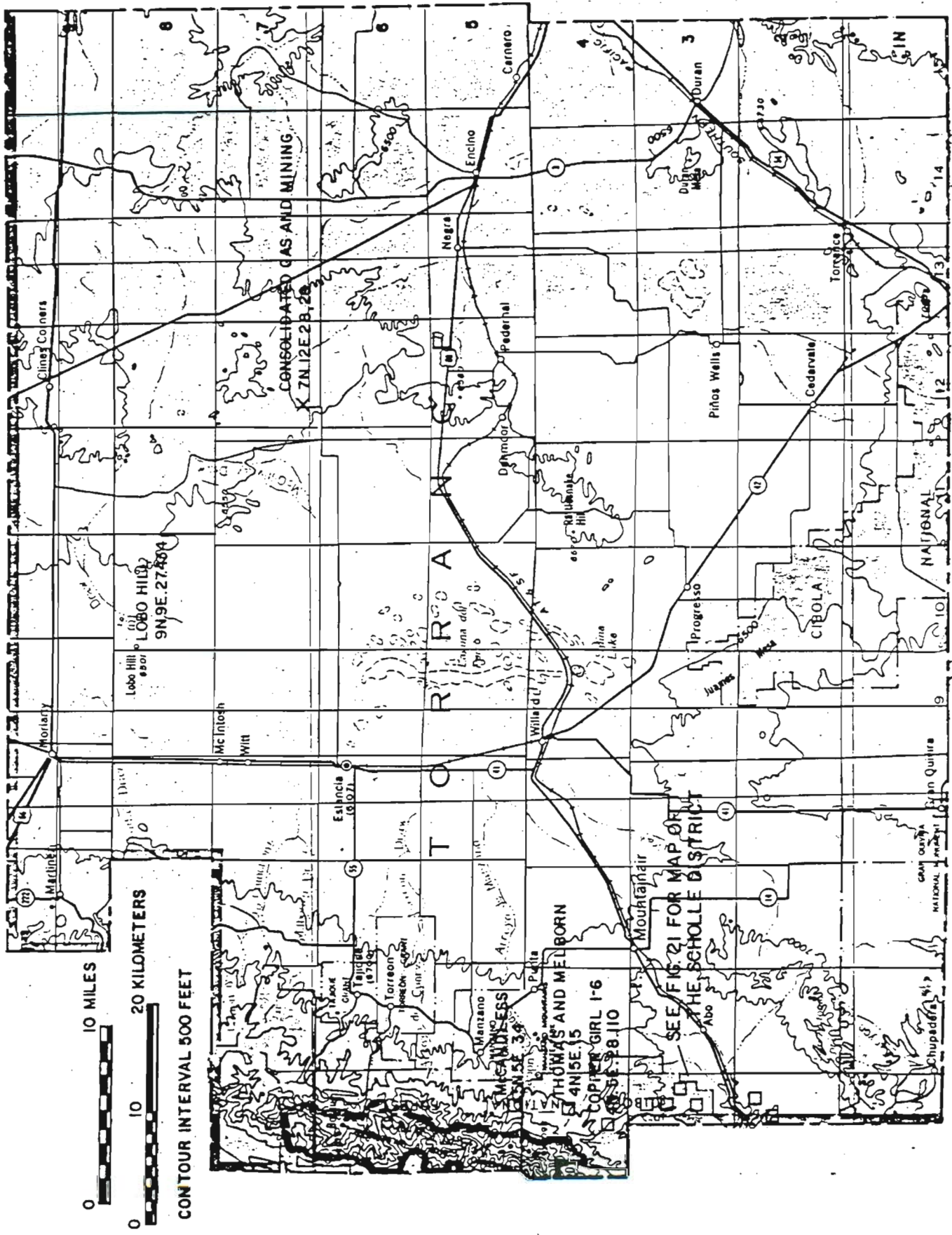


Table 1.A
GROUNDWATER CONTAMINATION

Location	Contami-nants	Source	Estimated Extent	Hydrologic Conditions
Cedar Crest, Bernalillo Co.	Gasoline	LUST	120 ft. (largest dimension)	Shallow alluvial aquifer
10N.5E.29.1 10N.5E.30.2 2.5M.SW of Tijeras, Bernalillo Co.	Leaded gasoline, explosives, solvents, other organics, nitrate	Unknown-landfill, munitions, LUSTs, illegal injection well suspected	1200 ft. X 500 ft.; thickness not determined	Shallow alluvium over fractured granite aquifer at water table conditions
Monticello Subdivision, Tijeras Canyon	Nitrates	Septic Tanks	8 wells contaminated	Shallow alluvium over crystalline bedrock
Town of Carnue	Nitrates	Septic Tanks	32 wells contaminated	Shallow alluvium over crystalline bedrock
Town of Chilili	Nitrates	Septic Tanks	1 well contaminated	Shallow bedrock aquifer
Tijeras Canyon	Gasoline	LUST	Unknown	DTGW 60 to 70 ft. alluvium over fractured bedrock
Tijeras Canyon	Gasoline Diesel Explosives	Multiple; old gasoline station and unknown	1.5 ac. areally thickness not determined	DTG =40 ft. alluvium over fractured bedrock

Source: Ground-water Report, CH2M Hill, February 20, 1990

FIGURE 1-31 - RADIOACTIVE OCCURRENCES IN TORRANCE COUNTY, NEW MEXICO



TORRANCE COUNTY

Alphabetical (14 occurrences)

Abo Mine	2N.5E.3.414
Abo Mining Claims	3N.5E.23.111
Consolidated Gas and Mining	7N.12E.28,29
Copper Girl 1-6	4N.5E.28.110
Lobo Hill	9N.9E.27.434
McCandless Prospect	5N.5E.34
Old Abo Claims	3N.5E.27.200
Pioneer Mine	3N.5E.15.441
Rattlesnake #1-4	3N.5E.15.233
Scholle-1	3N.5E.10.312
Scholle	2N.5E.10
Thelma	3N.5E.15.423
Thomas and Melborne	4N.5E.15
Unknown	2N.5E.17
Unknown	3N.5E.10.314

<u>Alias</u>	<u>Name</u>	<u>Number</u>
Abel	Abo Mine	2N.5E.3.414
Abo	Thelma	3N.5E.15.423
Abo Claims	Old Abo Claims	3N.5E.27.200
Hannie	Pioneer Mine	3N.5E.15.441
Laurita	Scholle #1	3N.5E.10.312
McTerry	Thelma	3N.5E.15.423
Miners Dream	Thelma	3N.5E.15.423
Pioneer Copper Mine	Pioneer Mine	3N.5E.15.441
Prospect #17	Abo Mine	2N.5E.3.414
Sandstone Copper	Abo Mining Claims	3N.5E.23.111
Scholle	Abo Mine	2N.5E.3.414
Thelma-Ann	Thelma	3N.5E.15.423
Tom Arnett prospect	Abo Mine	2N.5E.3.414
Unknown	Pioneer Mine	3N.5E.15.441
Uranium prospect	Abo Mine	2N.5E.3.414

Numerical

2N.5E.3.414	Abo Mine
2N.5E.10	Scholle
2N.5E.17	Unknown
3N.5E.10.312	Scholle-1
3N.5E.10.314	Unknown
3N.5E.15.233	Rattlesnake #1-4
3N.5E.15.423	Thelma
3N.5E.15.441	Pioneer Mine
3N.5E.23.111	Abo Mining Claims
3N.5E.27.200	Old Abo Claims
4N.5E.15	Thomas and Melborne
4N.5E.28.110	Copper Girl 1-6
5N.5E.34	McCandless Prospect
7N.12E.28,29	Consolidated Gas and Mining
9N.9E.27.434	Lobo Hill

TORRANCE COUNTY

- 1: 2N.5E.3.414
- 2: Abo Mine (Prospect #17, Uranium prospect, Abel, Scholle, Tom Arnett Prospect)
- 3: SE1/4 3 T2N R5E 34°25'29"N 106°24'30"W
- 4: Scholle 7-1/2 Elevation 5,910 ft
- 5: Scholle district-Manzano Mountains
- 6: Cu, Ag, Au, U, V
- 7: 2 shafts (one 75-ft deep), dumps, open pit, 40-ft decline
- 8: no uranium production
- 9: bkgd 30 cps, high 200 cps
- 10: Permian Abo Formation
- 11: radioactive minerals associated with copper minerals and organic debris in red and gray (bleached) sandstone
- 12: secondary uranium minerals reported, 0.014-0.107% U₃O₈ (Gibson, 1952)
- 13: Sandstone-tabular
- 14: site of mill and leaching operation
- 15: FN 7/2/80; Pierson and others (1981, #59); Myers (1977); U.S. Atomic Energy Commission (1970, p. 219); Hilpert (1969); Phillips (1960); Collins and Nye (1957b); Soule (1956); Hilpert and Corey (1955, #84, 86); Gibson (1952, #2); Gott and Erickson (1952; 1951, #17, 18); PRR D-245 (1951); RG-1-51 (1951); USAEC files (1953)
- 16: figure 21

- 1: 3N.5E.23.111
- 2: Abo Mining Claims (Sandstone copper)
- 3: NE1/4 22, NW1/4 23 T3N R5E 34°28'30"N 106°24'00"W
- 4: Scholle 7-1/2 Elevation 6,240 ft
- 5: Scholle district-Manzano Mountains
- 6: Cu, U, V
- 7: 40-ft adit, open cut, dumps
- 8: radium ore shipped in 1916 (USBM), copper production
- 9: bkgd 30-50 cps, adit 50-100 cps, along face of outcrop 300-400 cps, along boulders in pit 700 cps
- 10: Permian Abo Formation
- 11: radioactive minerals associated with copper oxides and organic debris in red and bleached gray limy conglomerates
- 12: 0.001%, 0.002% U₃O₈; 6.36%, 11.11% Cu (NMBMMR chem lab, 11/30/81, #1527, 1528), 2-inch seam of 13% U₃O₈ reported
- 13: Sandstone-tabular
- 14: claim post south of workings-SW corner Abo #5
- 15: FN 6/24/81; Pierson and others (1981, #60, 62); Myers (1977); U.S. Atomic Energy Commission (1970, p. 215); Hilpert (1969); Hilpert and Corey (1955, #84); PRR DEB-RRA-569 (1955); DEB-RRA-1401 (1954), 1 supplement; NMBMMR files (1954); USBM files (1949)
- 16: figure 21

- 1: 7N.12E.28,29
- 2: Consolidated Gas and Mining
- 3: 28, 29 T7N R12E
- 4: Pedernal Mountain 7-1/2
- 5: Pedernal Hills
- 6: U
- 7: pits
- 8: no uranium production
- 9: bkgd 50 cps, high 150-200 cps
- 10: Paleozoic syenite intruding Precambrian schists
- 11: radioactive fracture zone, N 78 W
- 13: Hydrothermal-vein
- 15: FN 9/21/83; Loring and Armstrong (1980); U.S. Atomic Energy Commission (1970, p. 217)

- 1: 4N.5E.28.110
- 2: Copper Girl #1-6
- 3: NW1/4 28 T4N R5E 34°32'55"N 106°25'55"W
- 4: Torreon 15' Elevation 6,820 ft
- 5: Scholle district-Manzano Mountains
- 6: Cu, U, V
- 7: 2 open cuts (decline-adit), decline adit, 30- to 50-ft deep
- 8: no uranium production
- 9: bkgd 20-30 cps, high 150-225 cps, average 50-100 cps
- 10: Permian Abo Formation
- 11: radioactive minerals associated with copper oxides in fractured red and bleached bluff conglomerate and arkose, 1 to 2-ft thick
- 12: uraninite with chalcocite reported; 0.005% U₃O₈, 0.83% Cu (NMBMMR, chem lab, 11/30/81, #1526)
- 13: Sandstone-tabular
- 14: mine map fig. this report
- 15: FN 6/17/81, 6/26/81; Anderson, O.J. (1980); Pierson and others (1981, #65); Myers and McKay (1974); U.S. Atomic Energy Commission (1970, p. 218); Phillips (1960); Collins and Nye (1957b); Lovering (1956); USAEC files (1955)
- 16: figure 21, 22

- 1: 9N.9E.27.434
- 2: Lobo Hill
- 3: 27, 34 T9N R9E
- 4: Lobo Hill 15
- 5: Estancia Basin
- 6: U, Th
- 7: pits
- 8: no uranium production
- 9: bkgd 50 cps, high 1,000 cps
- 10: syenite intruding Precambrian schists
- 11: vein trending N40E
- 13: Hydrothermal-vein
- 15: FN 9/20/83; Loring and Armstrong, 1980

1: 5N.5E.34
2: McCandless Prospect
3: 34 T5N R5E
4: Scholle 7-1/2
5: Manzano district
6: Cu, U
7: no workings found, 3 ft x 4 ft x 3 ft pit reported
8: no production
9: no anomalous radioactivity on 7/2/80, twice background reported
10: Permian Abo Formation
12: malachite, azurite
13: Sandstone-tabular
14: could not locate on 7/2/80
15: FN 7/2/80; U.S. Atomic Energy Commission (1970, p. 214)
16: figure 21

1: 3N.5E.27.200
2: Old Abo Claims (Abo Claims)
3: NE1/4 27 T3N R5E 34°27'30"N
4: Scholle 7-1/2 Elevation 6,180 ft
5: Scholle district-Manzano Mountains
6: Cu, U, V
7: several shallow prospect pits, open stope
8: no production
9: no anomalous radioactivity found on 6/24/81
10: Permian Abo Formation
12: 0.046 - 13% U₃O₈ reported in PRR supplement
13: Sandstone-tabular
14: ore may occur at depth
15: FN 6/24/81; Myers (1977); U.S. Atomic Energy Commission (1970, p. 195) plus supplement (DEB-RRA-1401(1954)); Collins and Nye (1957b)
16: figure 21

1: 3N.5E.15.441
2: Pioneer Mine (Hannie, Pioneer Copper Mine, Unknown)
3: SE1/4 15 T5N R5E 34°29'10"N 106°24'00"W
4: Scholle 7-1/2 Elevation 6,200 ft
5: Scholle district-Manzano Mountains
6: Cu, U, V
7: 20-ft adit, pits
8: no uranium production
9: bkgd 30-50 cps, high 150 cps
10: Permian Abo Formation
11: uranium minerals associated with copper minerals and organic debris in bleached sandstones and conglomerates
12: carnotite or tyuyamunite reported, 0.002% U₃O₈, 4.18% Cu (NMBMMR chem lab, 11/30/81, #1525)
13: Sandstone-tabular
15: FN 6/24/81; Pierson and others (1981, #64); Myers (1977); Collins and Nye (1957b); PRR DEB-RRA-569 (1953); DEB-RR-464 (1953)
16: figure 21

1: 3N.5E.15.233
2: Rattlesnake #1-4
3: SW1/4 NE1/4 15 T3N R5E 34°29'10"N 106°24'30"W
4: Scholle 7-1/2 Elevation 6,090 ft
5: Scholle district-Manzano Mountains
6: Cu, U, V
7: pit, trench, dumps
8: no uranium production
9: bkgd 30-50 cps, high on dumps 130 cps
10: Permian Abo Formation
11: radioactive minerals associated with copper oxides in arkosic conglomerate (bleached)
12: yellow-green uranium mineral reported
13: Sandstone-tabular
15: FN 6/24/81; Pierson and others (1981, #63); Myers (1977); Hilpert (1969); Hilpert and Corey (1955, #84); PRR DEB-RRA-1180 (1954)
16: figure 21

1: 3N.5E.10.312
2: Scholle-1 (Laurita)
3: SW1/4 10 T3N R5E 34°30'00"N 106°24'55"W
4: Scholle 7-1/2 Elevation 5,900 ft
5: Scholle district-Manzano Mountains
6: Cu, U, V
7: pits, adits, tunnels (one reported to be 70-ft long)
8: no uranium production
9: bkgd 30 cps, high 80 cps
10: Permian Abo Formation
11: radioactive minerals associated with copper oxides and organic debris in bleached red-bed sandstones
13: Sandstone-tabular
14: north of claim post-SW corner Laurita
15: FN 7/2/80, 6/26/81; Pierson and others (1981, #56); Myers (1977); Phillips (1960); Soule (1956); Lovering (1956); Gibson (1952, p. 28, #6); PRR RG-6-51 (1951)
16: figure 21

1: 2N.5E.10
2: Scholle
3: 10 T2N R5E 34°24'30"N 106°24'30"W
4: Scholle 7-1/2 Elevation 5,900 ft
5: Scholle district-Manzano Mountains
6: U, Cu
7: pits
8: no production
10: Permian Abo Formation (red beds)
12: 0.008% U reported
13: Sandstone-tabular
14: could not locate on 3/2/82
15: FN 3/2/82; Pierson and others (1981, #56); Bachman, Baltz, and O'Sullivan (1953)
16: figure 21

- 1: 3N.5E.15.423
- 2: Thelma (Miners Dream, McTerry, Thelma-Ann, Abo)
- 3: SE1/4 15, NE1/2 22 T3N R5E 34°29'00"N 16°24'10"W
- 4: Scholle 7-1/2 Elevation 6,400 ft
- 5: Scholle district-Manzano Mountains
- 6: Cu, U, V
- 7: 30-ft adit
- 8: no uranium production
- 9: bkgd 30-50 cps, adit walls 100 cps, high in fracture 150 cps
- 10: Permian Abo Formation
- 11: radioactive minerals associated with copper oxides in red and bleached gray arkose
- 13: Sandstone
- 14: north of claim post-SW corner Thelma
- 15: FN 6/24/81; Pierson and others (1981, #60, 61); Myers (1977); PRR DEB-RRA-569 (1953)
- 16: figure 21

- 1: 4N.5E.15
- 2: Thomas and Melbourn
- 3: 15 T4N R5E 34°34'20"N 106°24'30"W
- 4: Torreon 15'
- 5: Scholle district-Manzano Mountains
- 6: U, Cu, Au
- 7: no workings found
- 8: no production
- 9: no anomalous radioactivity
- 10: Permian Abo Formation
- 12: 2.15% U reported
- 13: Sandstone
- 14: could not be located on 6/17/81
- 15: FN 6/17/81; Pierson and others (1981, #66)
- 16: figure 21

- 1: 2N.5E.17
- 2: Unknown
- 3: 17 T2N R5E
- 4: Scholle 7-1/2
- 5: Scholle district-Los Pinos Mountains
- 6: Cu, U
- 7: pits
- 8: no production
- 10: Permian Abo Formation
- 11: radioactive carbonized woody hydrocarbon
- 12: 0.014% U reported
- 13: Sandstone
- 14: could not be located on 3/2/82
- 15: FN 3/2/82; Lovering (1956)
- 16: figure 21

1-595

1-596

- 1: 3N.5E.10.314
- 2: Unknown
- 3: SW1/4 10 T3N R5E 34°20'00"N 106°24'55"W
- 4: Scholle 7-1/2
- 5: Scholle district-Manzano Mountains
- 6: Cu, U, V
- 7: pits
- 8: no uranium production
- 9: bkgd 30 cps, high 80 cps
- 10: Permian Abo Formation
- 13: Sandstone-tabular
- 15: FN 7/2/80, 6/26/81; Myers (1977); Phillips (1960); Soule (1956)
- 16: figure 21