

October 4, 2001

Mr. Melvin N. Leach, Chief
Fuel Cycle Licensing Branch, FCSS
c/o Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

40-8907

Mr. Greg Lyssy
U.S. Environmental Protection Agency
1445 Ross Avenue (6SF-LT)
Dallas, TX 75202-2733

**Subject: Water Level and Water Quality Maps for the First Half of 2001, Semi-Annual
Ground Water Compliance Monitoring Report dated August 23, 2001
United Nuclear Corporation's Church Rock Site, Gallup, New Mexico**

Dear Messrs. Leach and Lyssy:

Telephone

Enclosed are water level and water quality maps illustrating conditions in the three formations monitored at the Church Rock site. These maps are provided as requested by Mr. Bill von Till of the Nuclear Regulatory Commission (NRC) during the meeting held in Santa Fe, New Mexico, on November 14 and 15, 2000. These maps are to accompany the above-referenced report submitted by United Nuclear Corporation on August 23, 2001. A list of the maps is enclosed.

717-795.8001

Facsimile

717-795.8280

Please contact Roy Blickwedel (General Electric Corporation) at (610) 992-7935 or me at (570) 925-5063 if you have any questions or need additional information.

Very truly yours,
Earth Tech, Inc.



Suzie du Pont
Project Manager

Enclosures

cc: Roy Blickwedel, General Electric Corporation
Larry Bush, United Nuclear Corporation
Ken Hooks, Nuclear Regulatory Commission
Diana Malone, Navajo Superfund
George Padilla, Navajo Superfund
George Schuman, New Mexico Environment Department
Bill von Till, Nuclear Regulatory Commission

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**LIST OF
WATER LEVEL AND WATER QUALITY MAPS

FIRST HALF OF 2001
SEMI-ANNUAL GROUND WATER COMPLIANCE
MONITORING REPORT**

SOUTHWEST ALLUVIUM

(The figures for this formation are copied from *First Quarter Report, Southwest Alluvium Natural Attenuation Test, Church Rock Site* July 2001).

Dwg	Figure	Title
B1208	2	Southwest Alluvium Piezometric Surface Map, April 2001
B1210	4	Approximate Extent of Sulfate Exceeding 2,125 mg/L, April 2001
B1211	5	Approximate Extent of Manganese Exceeding 2.6 mg/L, April 2001
B1212	6	Approximate Extent of Uranium Exceeding 0.3 mg/L, April 2001
B1209	7	Approximate Extent of Chloroform Exceeding 0.001 mg/L, April 2001

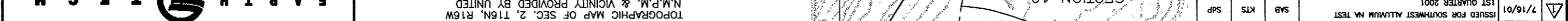
ZONE 3

Dwg	Figure	Title
1216	Z3-1	Zone 3 Piezometric Surface Map, April 2001
1218	Z3-2	Zone 3 pH, April 2001
1221	Z3-3	Approximate Extent of Sulfate Exceeding 2,125 mg/L, April 2001
1217	Z3-4	Approximate Extent of Chloride Exceeding 250 mg/L, April 2001
1214	Z3-5	Approximate Extent of Aluminum Exceeding 5.0 mg/L, April 2001
1219	Z3-6	Approximate Extent of Manganese Exceeding 2.6 mg/L, April 2001
1220	Z3-7	Approximate Extent of Uranium Exceeding 0.3 mg/L, April 2001
1215	Z3-8	Approximate Extent of Combined Ra-226 and Ra-228 Exceeding 5 mg/L, April 2001

ZONE 1

Dwg	Figure	Title
1222	Z1-1	Zone 1 Piezometric Surface Map, April 2001
1223	Z1-2	Zone 1 pH, April 2001
1225	Z1-3	Approximate Extent of Sulfate Exceeding 2,125 mg/L, April 2001
1226	Z1-4	Approximate Extent of Aluminum Exceeding 5.0 mg/L, April 2001
1227	Z1-5	Approximate Extent of Manganese Exceeding 2.6 mg/L, April 2001
1228	Z1-6	Approximate Extent of Uranium Exceeding 0.3 mg/L, April 2001
1229	Z1-7	Approximate Extent of Combined Ra-226 and Ra-228 Exceeding 5.0 mg/L, April 2001
1230	Z1-8	Approximate Extent of Chloroform Exceeding 0.001 mg/L, April 2001

7/16/01	ISSUED FOR SOUTHWEST ALUMINUM NA TEST	SAB	KTS	SAP
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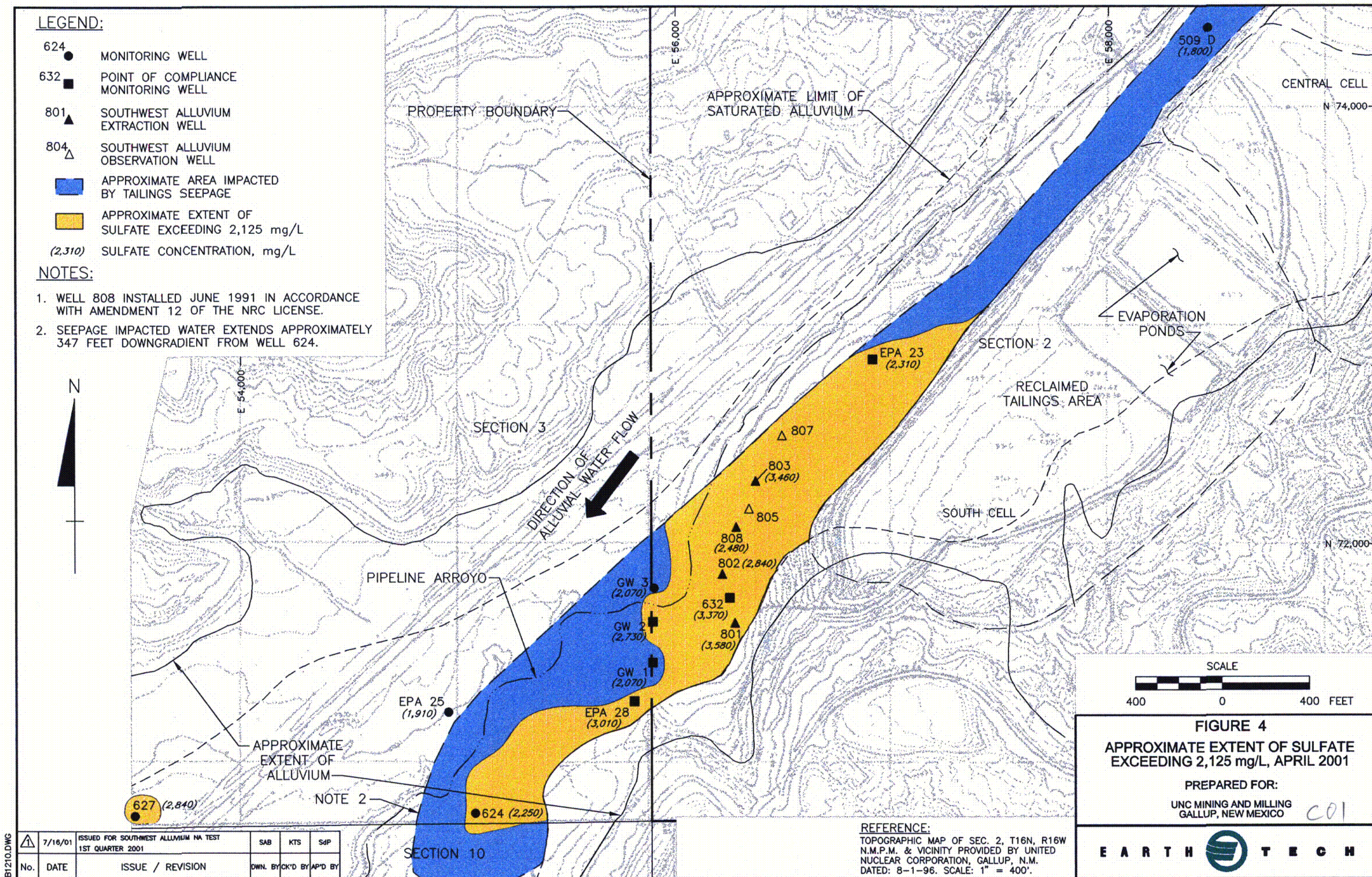


LEGEND:

- 624 ● MONITORING WELL
- 632 ■ POINT OF COMPLIANCE MONITORING WELL
- 801 ▲ SOUTHWEST ALLUVIUM EXTRACTION WELL
- 804 △ SOUTHWEST ALLUVIUM OBSERVATION WELL
- APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- APPROXIMATE EXTENT OF SULFATE EXCEEDING 2,125 mg/L
- (2,310) SULFATE CONCENTRATION, mg/L

NOTES:

1. WELL 808 INSTALLED JUNE 1991 IN ACCORDANCE WITH AMENDMENT 12 OF THE NRC LICENSE.
2. SEEPAGE IMPACTED WATER EXTENDS APPROXIMATELY 347 FEET DOWNGRAIDENT FROM WELL 624.

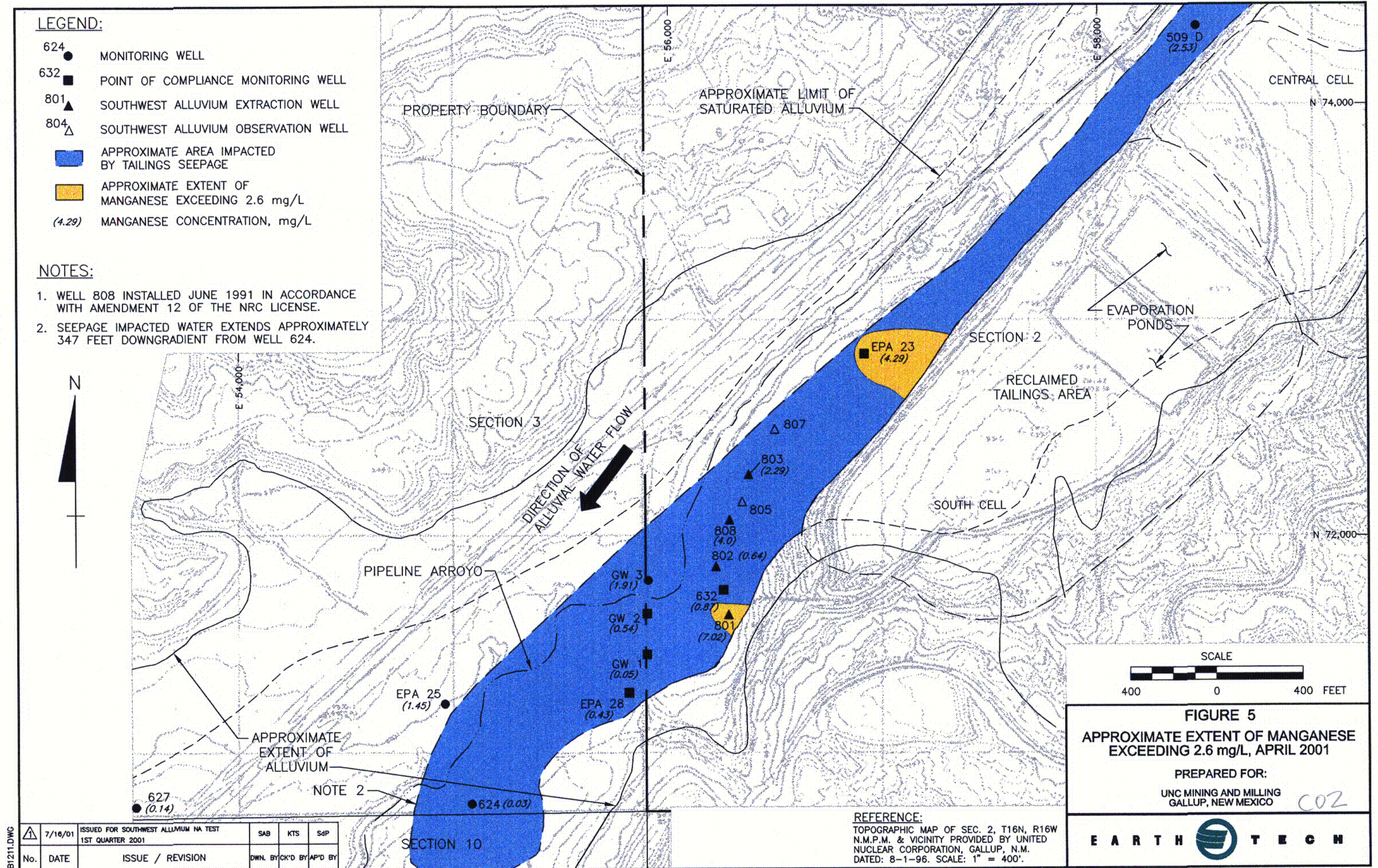


LEGEND:

- 624 ● MONITORING WELL
- 632 ■ POINT OF COMPLIANCE MONITORING WELL
- 801 ▲ SOUTHWEST ALLUVIUM EXTRACTION WELL
- 804 △ SOUTHWEST ALLUVIUM OBSERVATION WELL
- APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- APPROXIMATE EXTENT OF MANGANESE EXCEEDING 2.6 mg/L
- (4.29) MANGANESE CONCENTRATION, mg/L

NOTES:

1. WELL 808 INSTALLED JUNE 1991 IN ACCORDANCE WITH AMENDMENT 12 OF THE NRC LICENSE.
2. SEEPAGE IMPACTED WATER EXTENDS APPROXIMATELY 347 FEET DOWNGRAIDENT FROM WELL 624.



LEGEND:

- 624 ● MONITORING WELL
- 632 ■ POINT OF COMPLIANCE MONITORING WELL
- 801 ▲ SOUTHWEST ALLUVIUM EXTRACTION WELL
- 804 △ SOUTHWEST ALLUVIUM OBSERVATION WELL
- APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- APPROXIMATE EXTENT OF CHLOROFORM EXCEEDING 0.001 mg/L
- (0.00349) CHLOROFORM CONCENTRATION, mg/L
- ND NONDETECT

NOTES:

1. WELL 808 INSTALLED JUNE 1991 IN ACCORDANCE WITH AMENDMENT 12 OF THE NRC LICENSE.
2. SEEPAGE IMPACTED WATER EXTENDS APPROXIMATELY 347 FEET DOWNGRAIENT FROM WELL 624.

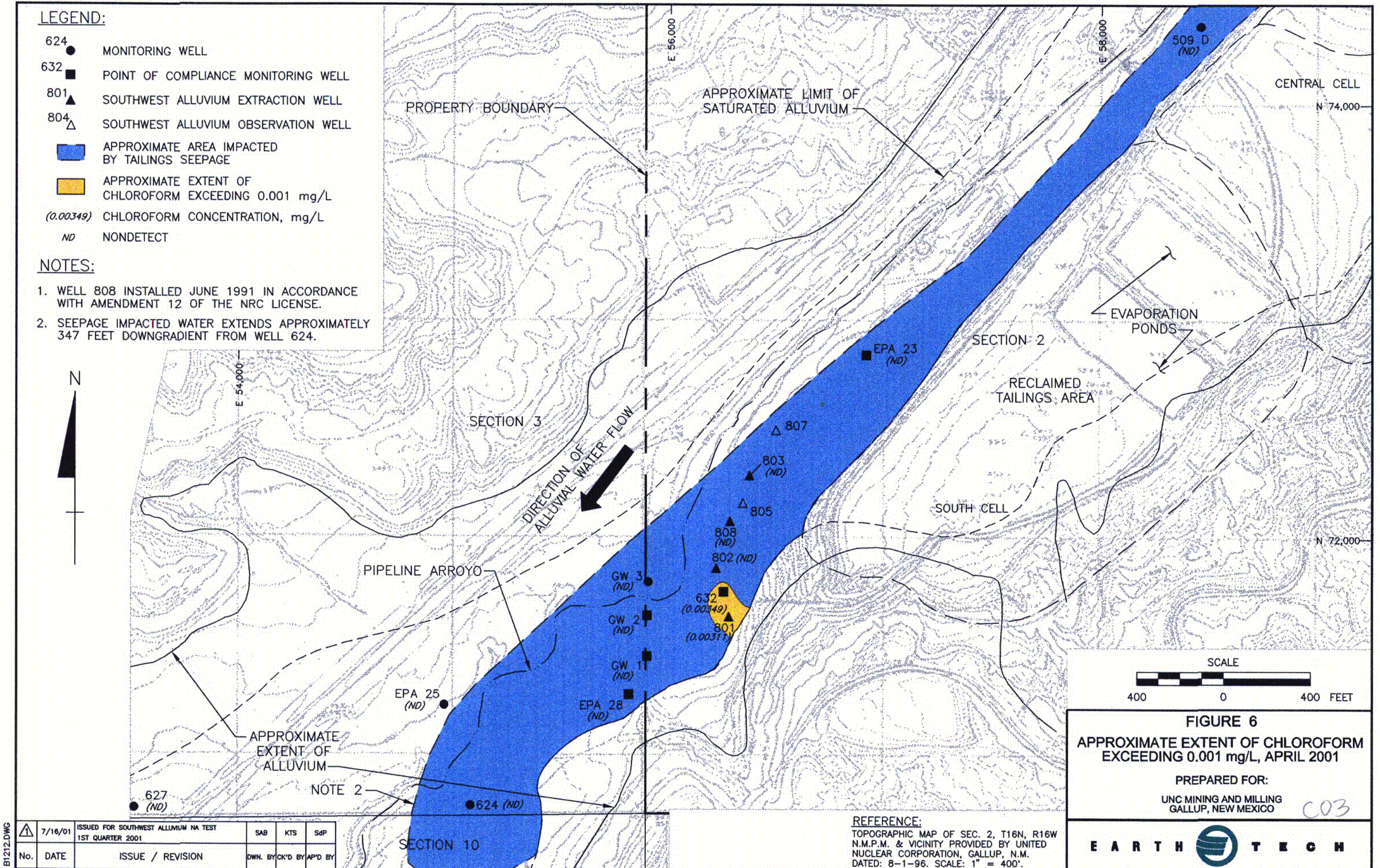


FIGURE 6
APPROXIMATE EXTENT OF CHLOROFORM
EXCEEDING 0.001 mg/L, APRIL 2001

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 UNC MINING AND MILLING
 GALLUP, NEW MEXICO

B1212.DWG	7/16/01	ISSUED FOR SOUTHWEST ALLUVIUM NA TEST 1ST QUARTER 2001	SAB	KTS	SdP
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REFERENCE:
 TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
 N.M.P.M. & VICINITY PROVIDED BY UNITED
 NUCLEAR CORPORATION, GALLUP, N.M.
 DATED: 8-1-96. SCALE: 1" = 400'.

LEGEND:

- 624 ● MONITORING WELL
- 632 ■ POINT OF COMPLIANCE MONITORING WELL
- 801 ▲ SOUTHWEST ALLUVIUM EXTRACTION WELL
- 804 △ SOUTHWEST ALLUVIUM OBSERVATION WELL
- APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- (0.034) URANIUM CONCENTRATION, mg/L

NOTES:

1. WELL 808 INSTALLED JUNE 1991 IN ACCORDANCE WITH AMENDMENT 12 OF THE NRC LICENSE.
2. SEEPAGE IMPACTED WATER EXTENDS APPROXIMATELY 347 FEET DOWNGRAIDENT FROM WELL 624.

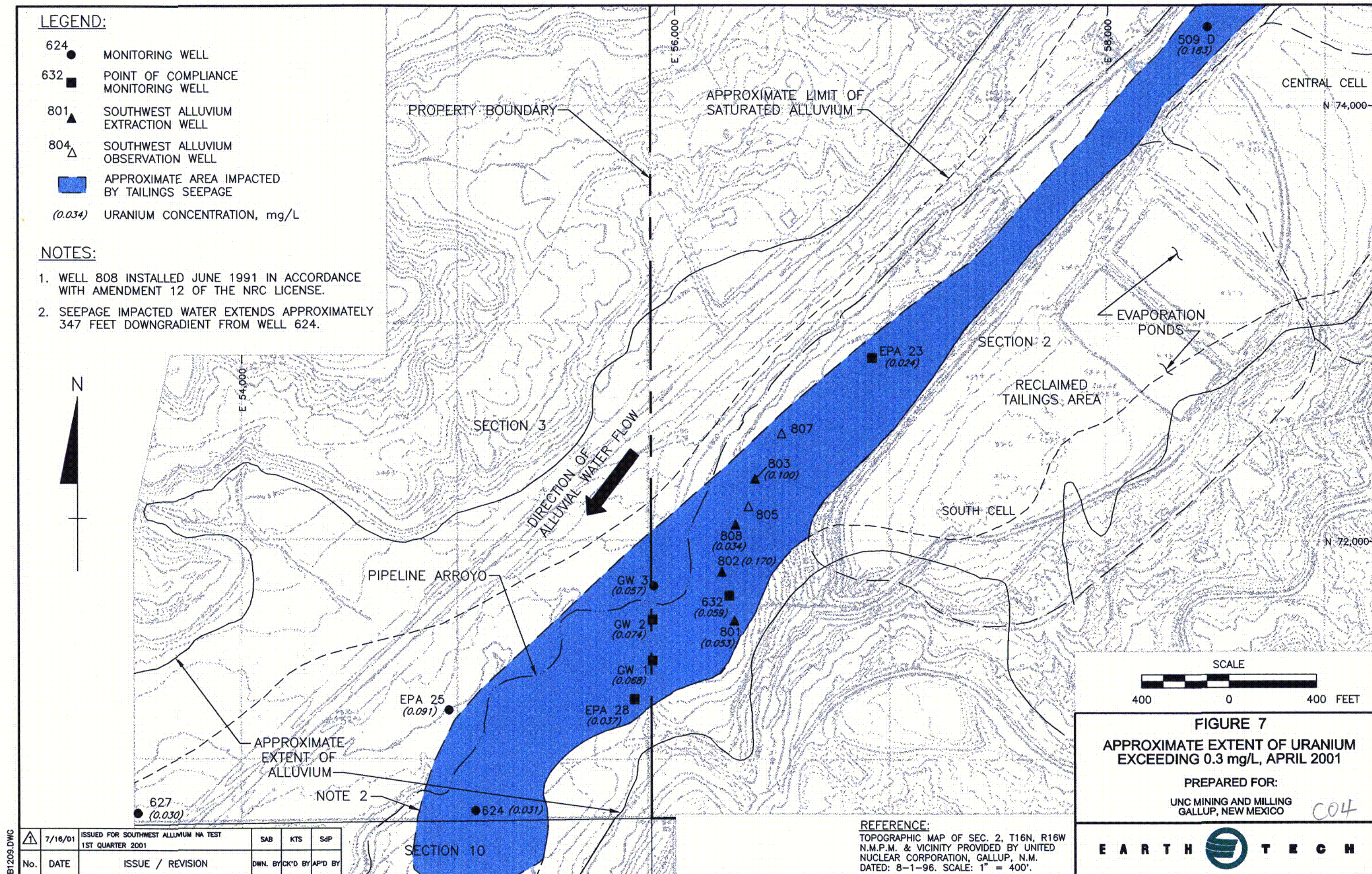


FIGURE 7
APPROXIMATE EXTENT OF URANIUM
EXCEEDING 0.3 mg/L, APRIL 2001

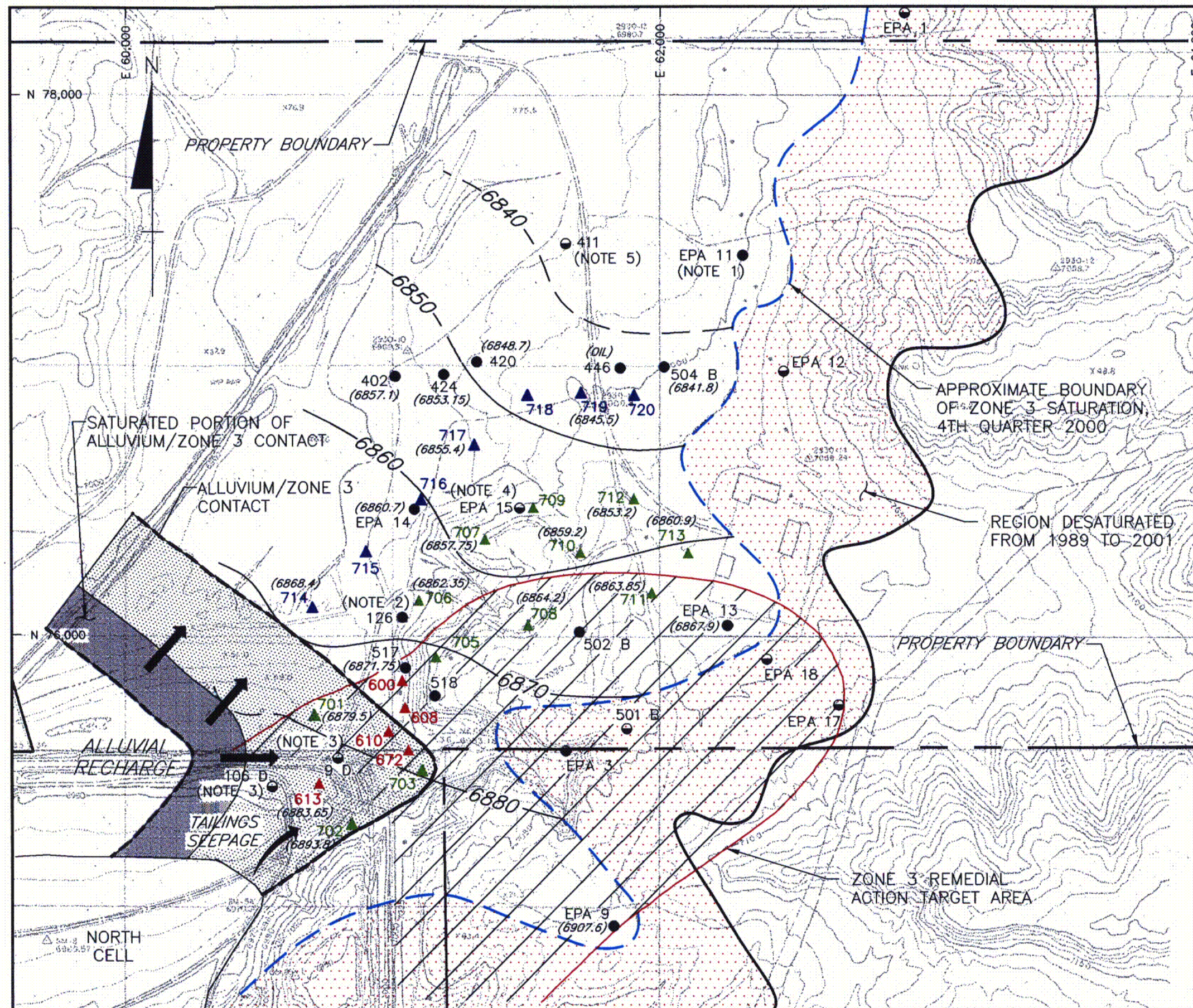
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REFERENCE:
 TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
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LEGEND:

- 608 ▲ NORTHEAST PUMP-BACK WELL LOCATION AND DESIGNATION
- 708 ▲ ZONE 3-STAGE I EXTRACTION WELL LOCATION AND DESIGNATION
- 714 ▲ ZONE 3-STAGE II EXTRACTION WELL LOCATION AND DESIGNATION
- 420 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (CONTAINS WATER)
- EPA 17 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (DRY OR CONTAINS INSUFFICIENT WATER FOR SAMPLE COLLECTION)
- 6880 — CONTOUR OF EQUAL WATER ELEVATION (DASHED WHERE INFERRED)
- (6848.0) WATER LEVEL ELEVATION, FEET (MSL)

NOTES:

1. MONITORING WELL EPA 11 WAS NOT USABLE AS OF THIRD QUARTER 1990. THE WATER LEVEL DROPPED BELOW THE PUMP INTAKE. THE PUMP COULD NOT BE LOWERED BECAUSE IT IS CEMENTED IN THE WELL. THE NRC AND EPA WERE NOTIFIED OF THIS PROBLEM IN TELEPHONE CONVERSATIONS ON JULY 18 AND SEPTEMBER 5, 1990.
2. MONITORING WELL 126 WAS COMPLETED ABOVE THE BOTTOM OF ZONE 3. CONSEQUENTLY MEASUREMENTS OF SATURATED THICKNESS IN THIS WELL ARE LESS THAN ACTUAL CONDITIONS.
3. MONITORING WELLS 9 D AND 106 D APPEAR TO BE COMPLETED ABOVE THE BOTTOM OF ZONE 3. MEASUREMENTS OF SATURATED THICKNESS IN THESE WELLS MAY BE LESS THAN ACTUAL CONDITIONS.
4. THE BOTTOM OF MONITORING WELL EPA 15 IS COMPLETED IN A SHALE LAYER WHICH CONTAINS NO WATER.
5. WELL 411 FILLED WITH OIL AS OF SECOND QUARTER 1998.

FIGURE Z3-1
ZONE 3 PIEZOMETRIC SURFACE
APRIL 2001

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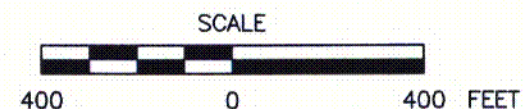
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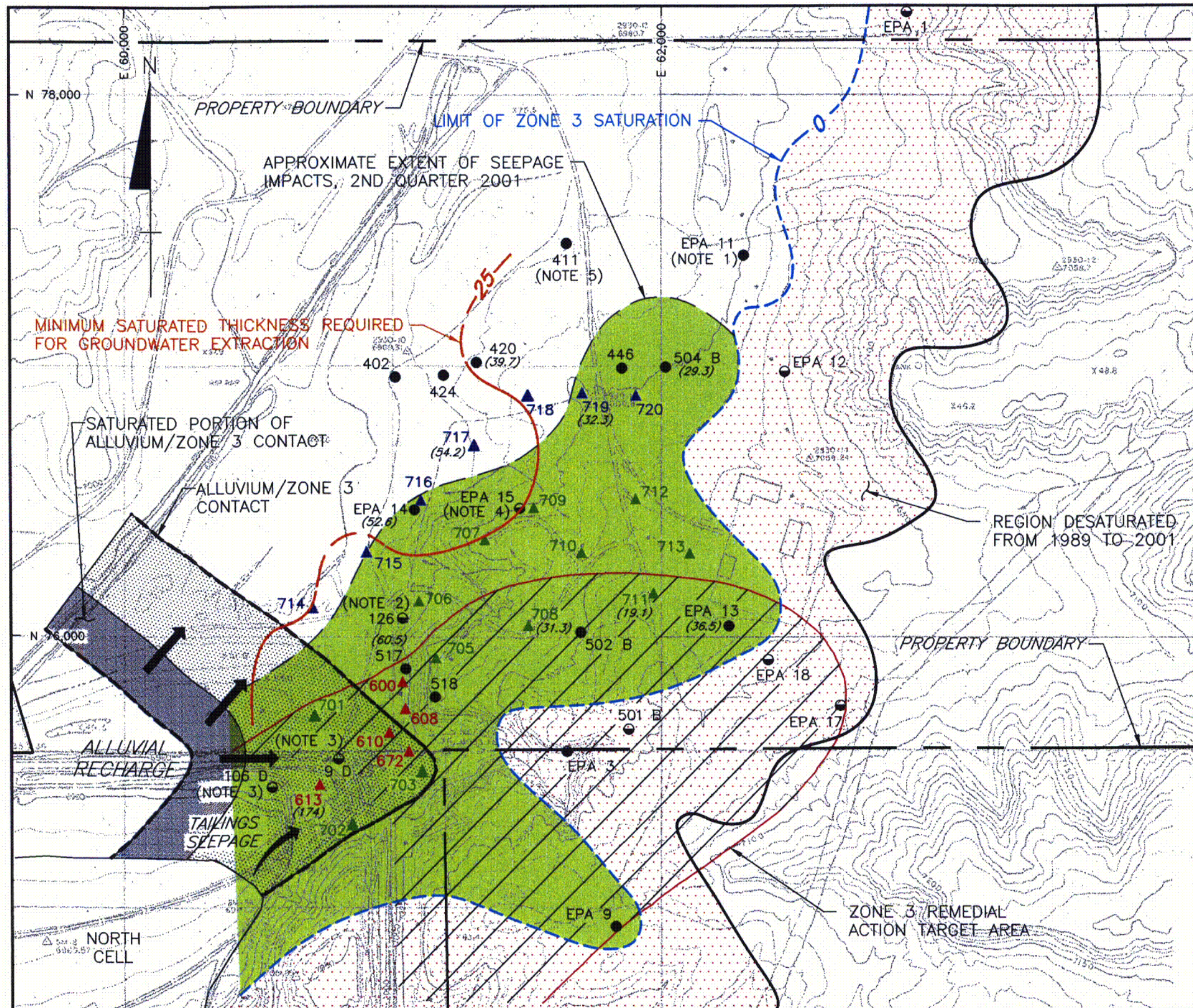


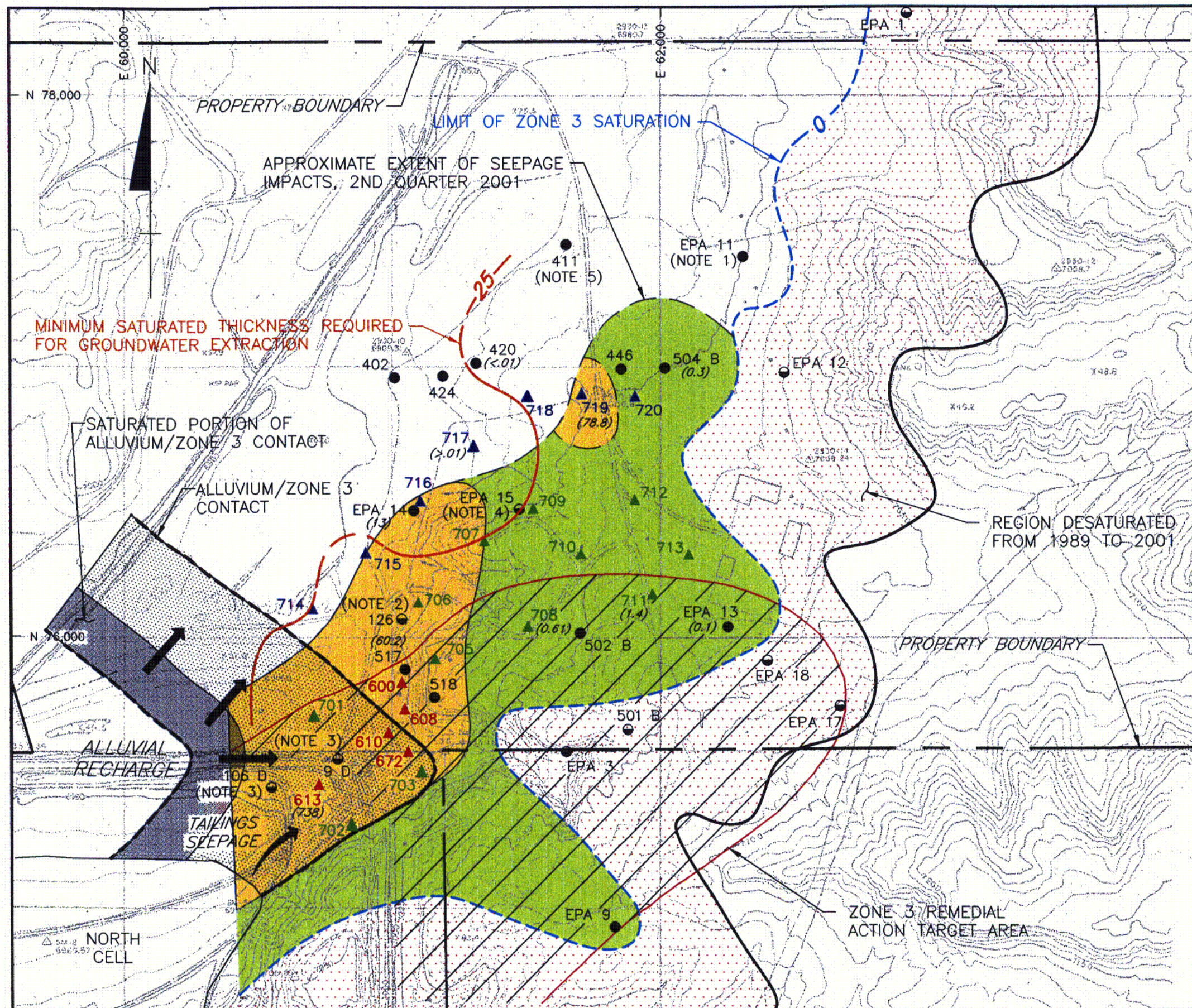
REFERENCE:

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LEGEND:

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- 708 ▲ ZONE 3-STAGE I EXTRACTION WELL LOCATION AND DESIGNATION
- 714 ▲ ZONE 3-STAGE II EXTRACTION WELL LOCATION AND DESIGNATION
- 420 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (CONTAINS WATER)
- EPA 17 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (DRY OR CONTAINS INSUFFICIENT WATER FOR SAMPLE COLLECTION)
- APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- APPROXIMATE EXTENT OF ALUMINUM EXCEEDING 5.0 mg/L
- (0.3) ALUMINUM CONCENTRATION, mg/L

NOTES:

1. MONITORING WELL EPA-11 WAS NOT USABLE AS OF THIRD QUARTER 1990. THE WATER LEVEL DROPPED BELOW THE PUMP INTAKE. THE PUMP COULD NOT BE LOWERED BECAUSE IT IS CEMENTED IN THE WELL. THE NRC AND EPA WERE NOTIFIED OF THIS PROBLEM IN TELEPHONE CONVERSATIONS ON JULY 18 AND SEPTEMBER 5, 1990.
2. MONITORING WELL 126 WAS COMPLETED ABOVE THE BOTTOM OF ZONE 3. CONSEQUENTLY MEASUREMENTS OF SATURATED THICKNESS IN THIS WELL ARE LESS THAN ACTUAL CONDITIONS.
3. MONITORING WELLS 9 D AND 106 D APPEAR TO BE COMPLETED ABOVE THE BOTTOM OF ZONE 3. MEASUREMENTS OF SATURATED THICKNESS IN THESE WELLS MAY BE LESS THAN ACTUAL CONDITIONS.
4. THE BOTTOM OF MONITORING WELL EPA 15 IS COMPLETED IN A SHALE LAYER WHICH CONTAINS NO WATER.
5. WELL 411 FILLED WITH OIL AS OF SECOND QUARTER 1998.

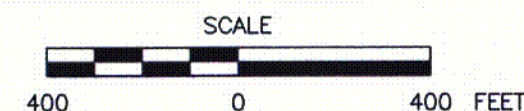
FIGURE Z3-5
APPROXIMATE EXTENT OF ALUMINUM EXCEEDING 5.0 mg/L, APRIL 2001

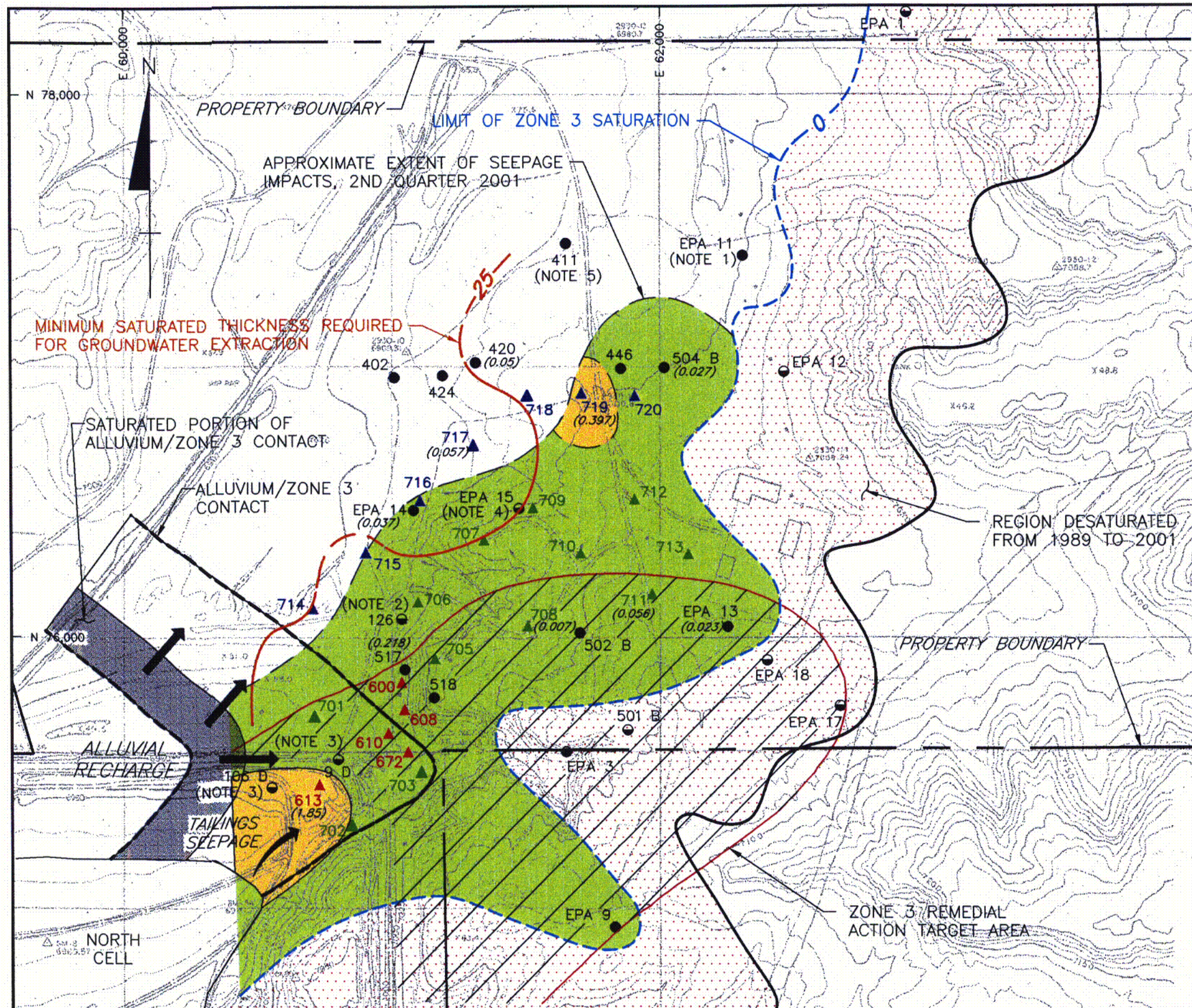
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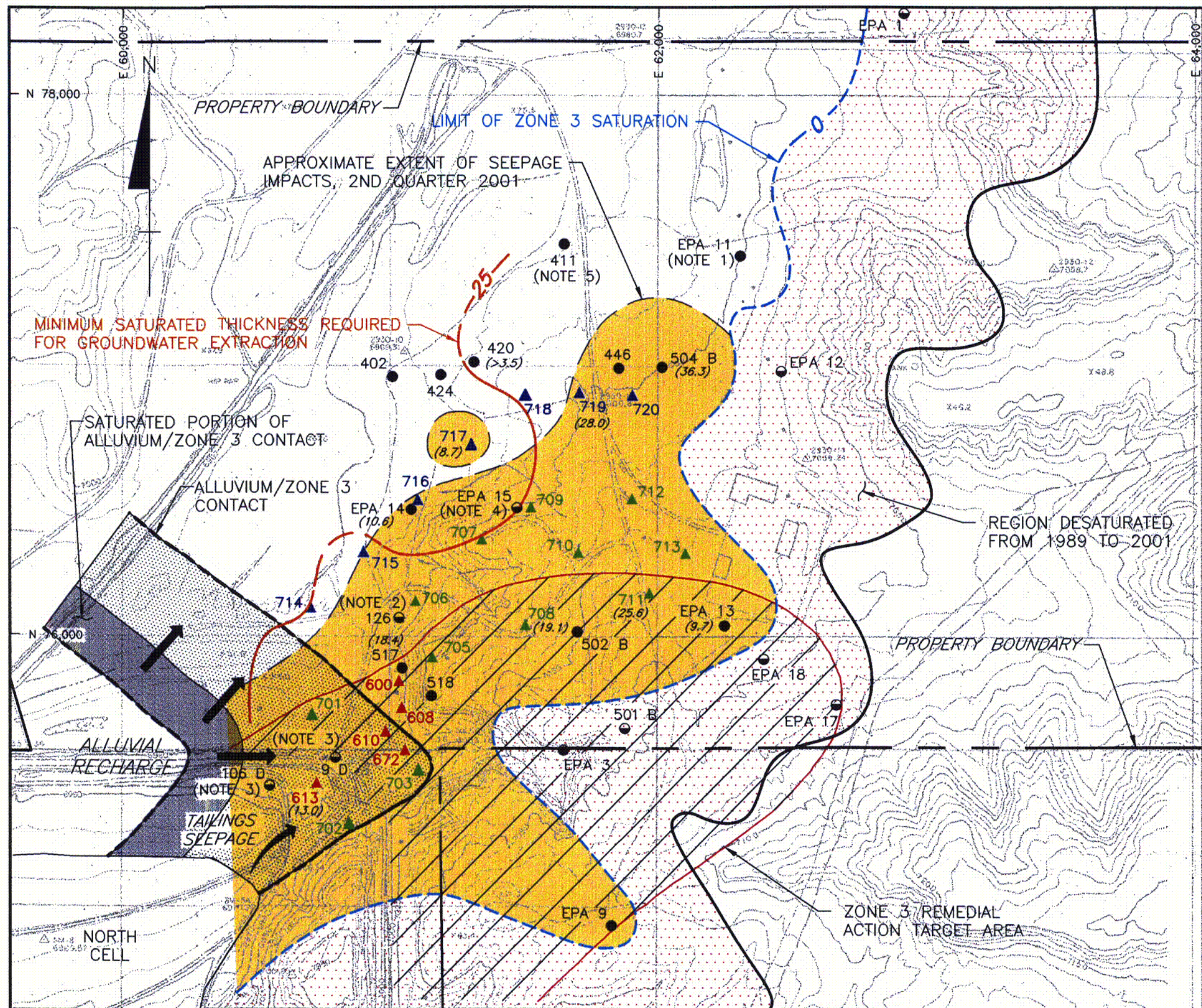


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 DATED: 8-1-96. SCALE: 1" = 400'.







LEGEND:

- 608 ▲ NORTHEAST PUMP-BACK WELL LOCATION AND DESIGNATION
- 708 ▲ ZONE 3-STAGE I EXTRACTION WELL LOCATION AND DESIGNATION
- 714 ▲ ZONE 3-STAGE II EXTRACTION WELL LOCATION AND DESIGNATION
- 420 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (CONTAINS WATER)
- EPA 17 ● ZONE 3 MONITORING WELL LOCATION AND DESIGNATION (DRY OR CONTAINS INSUFFICIENT WATER FOR SAMPLE COLLECTION)
- [Green Shaded Area] APPROXIMATE AREA IMPACTED BY TAILINGS SEEPAGE
- [Yellow Shaded Area] APPROXIMATE EXTENT OF COMBINED RADIUM EXCEEDING 5.0 pCi/L
- (20.8) COMBINED RADIUM-226 & RADIUM-228 CONCENTRATION, pCi/L

NOTES:

1. MONITORING WELL EPA-11 WAS NOT USABLE AS OF THIRD QUARTER 1990. THE WATER LEVEL DROPPED BELOW THE PUMP INTAKE. THE PUMP COULD NOT BE LOWERED BECAUSE IT IS CEMENTED IN THE WELL. THE NRC AND EPA WERE NOTIFIED OF THIS PROBLEM IN TELEPHONE CONVERSATIONS ON JULY 18 AND SEPTEMBER 5, 1990.
2. MONITORING WELL 126 WAS COMPLETED ABOVE THE BOTTOM OF ZONE 3. CONSEQUENTLY MEASUREMENTS OF SATURATED THICKNESS IN THIS WELL ARE LESS THAN ACTUAL CONDITIONS.
3. MONITORING WELLS 9 D AND 106 D APPEAR TO BE COMPLETED ABOVE THE BOTTOM OF ZONE 3. MEASUREMENTS OF SATURATED THICKNESS IN THESE WELLS MAY BE LESS THAN ACTUAL CONDITIONS.
4. THE BOTTOM OF MONITORING WELL EPA 15 IS COMPLETED IN A SHALE LAYER WHICH CONTAINS NO WATER.
5. WELL 411 FILLED WITH OIL AS OF SECOND QUARTER 1998.

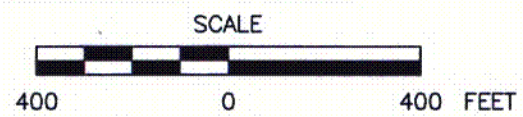
FIGURE Z3-8
APPROXIMATE EXTENT OF COMBINED
RADIUM-226 AND RADIUM-228
EXCEEDING 5.0 pCi/L, APRIL 2001
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C12

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 TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
 N.M.P.M. & VICINITY PROVIDED BY UNITED
 NUCLEAR CORPORATION, GALLUP, N.M.
 DATED: 8-1-96. SCALE: 1" = 400'.



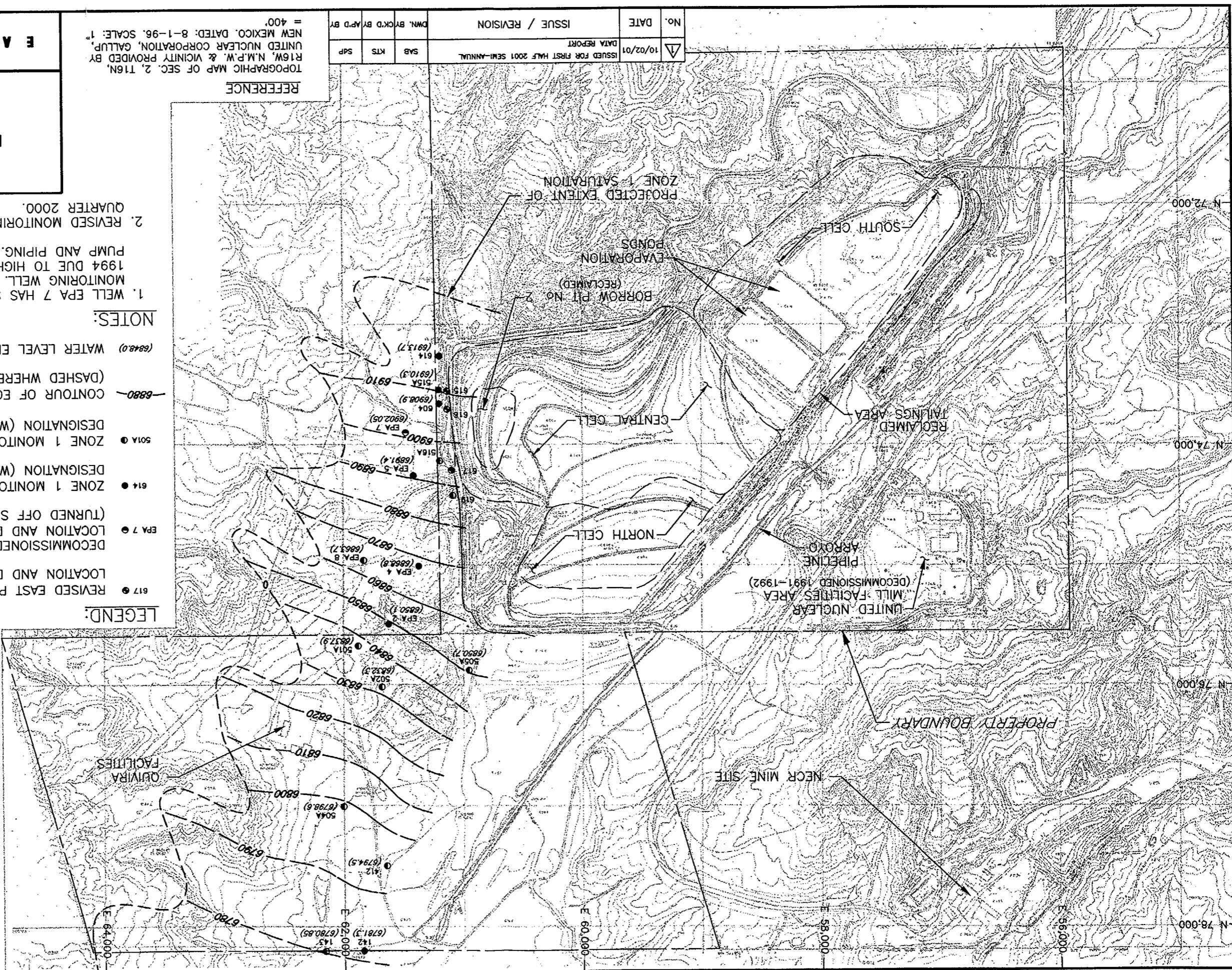
TOPOGRAPHIC MAP OF SEC. 2, T16N,
R16W, N.M.P.W. & VICINITY PROVIDED BY
UNITED NUCLEAR CORPORATION, GALLUP,
NEW MEXICO. DATED: 8-1-96. SCALE: 1" = 400'

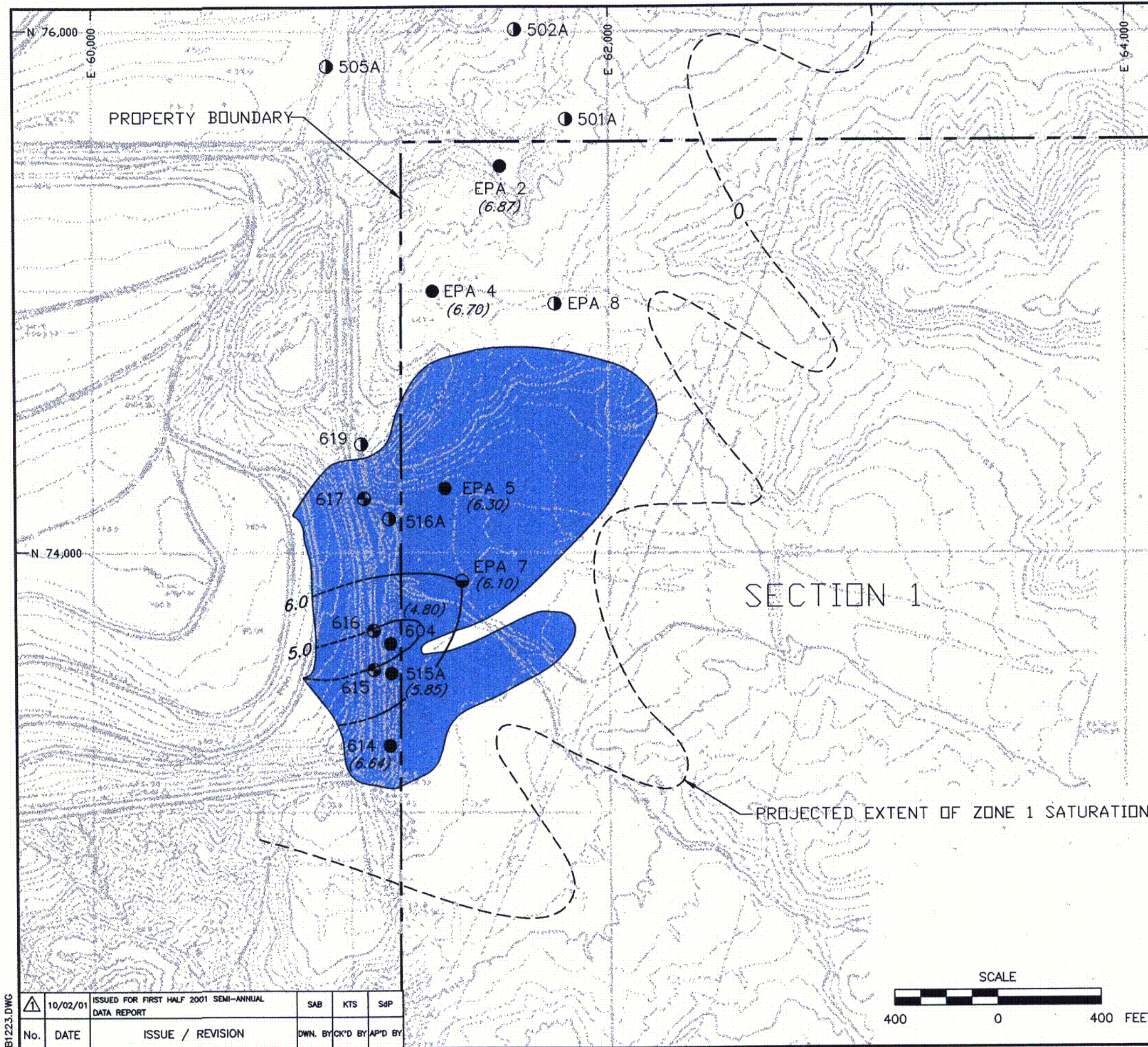
REFERENCE

UNC MINING AND MILLING
GALLUP, NEW MEXICO

NOTES:

LEGEND:





LEGEND:

- 617 ● REVISED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF JULY, 1999)
- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- 6.0— CONTOUR OF EQUAL pH CONCENTRATION
- (6.87) pH READING

NOTES:

1. WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
2. REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
N.M.P.M. & VICINITY PROVIDED BY UNITED
NUCLEAR CORPORATION, GALLUP, N.M.
DATED: 8-1-96. SCALE: 1" = 400'.



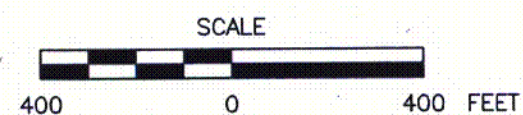
FIGURE Z1-2
ZONE 1 pH, APRIL 2001

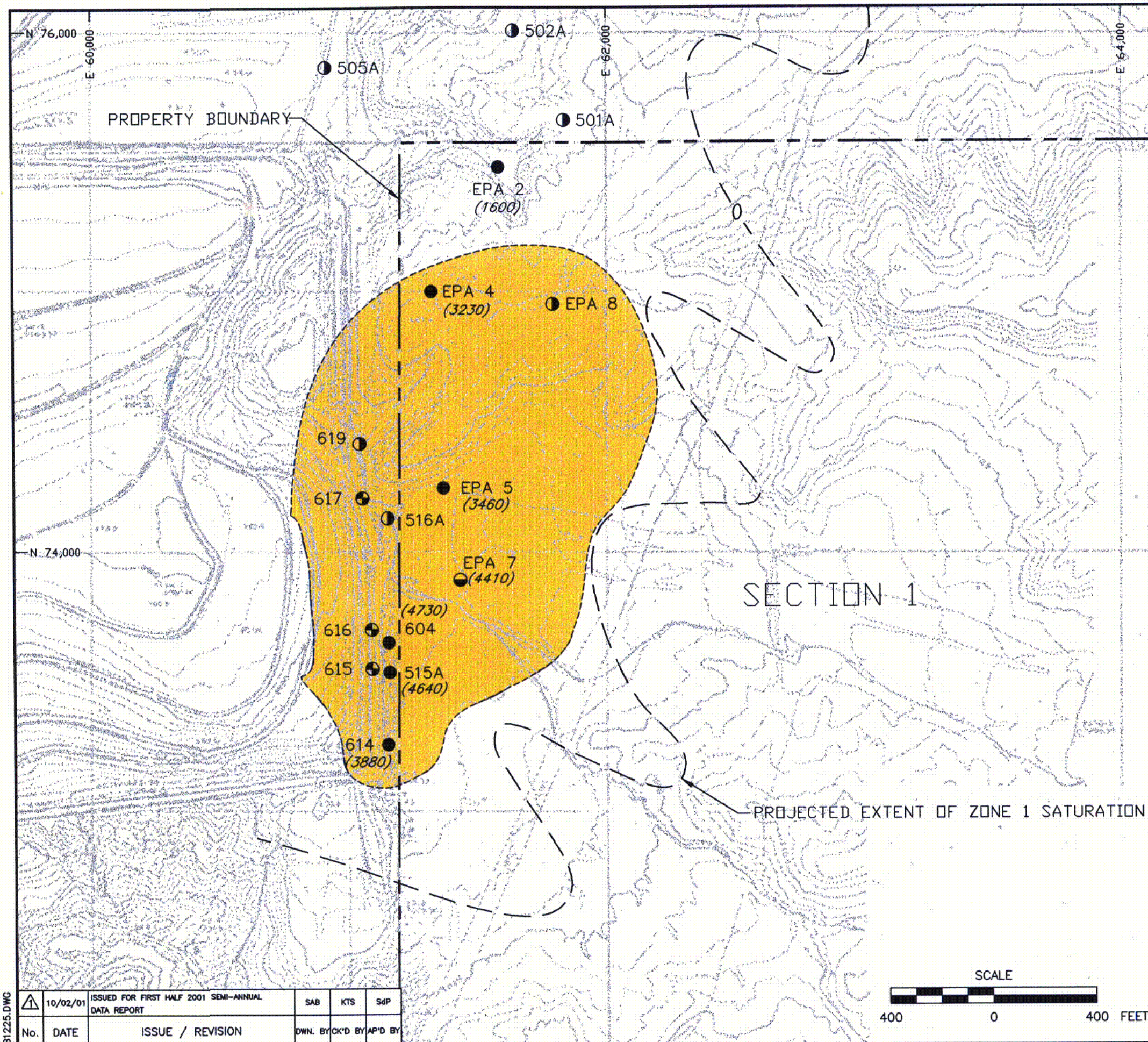
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C13



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LEGEND:

- 617 ● REVISED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF JULY, 1999)
- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- APPROXIMATE EXTENT OF SULFATE EXCEEDING 2,125 mg/L
- (1600) SULFATE CONCENTRATION, mg/L

NOTES:

1. WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
2. REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

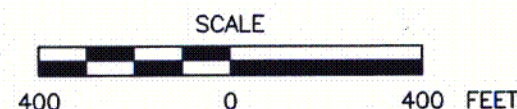
REFERENCE:
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DATED: 8-1-96. SCALE: 1" = 400'.

FIGURE Z1-3
APPROXIMATE EXTENT OF SULFATE
EXCEEDING 2,125 mg/L, APRIL 2001

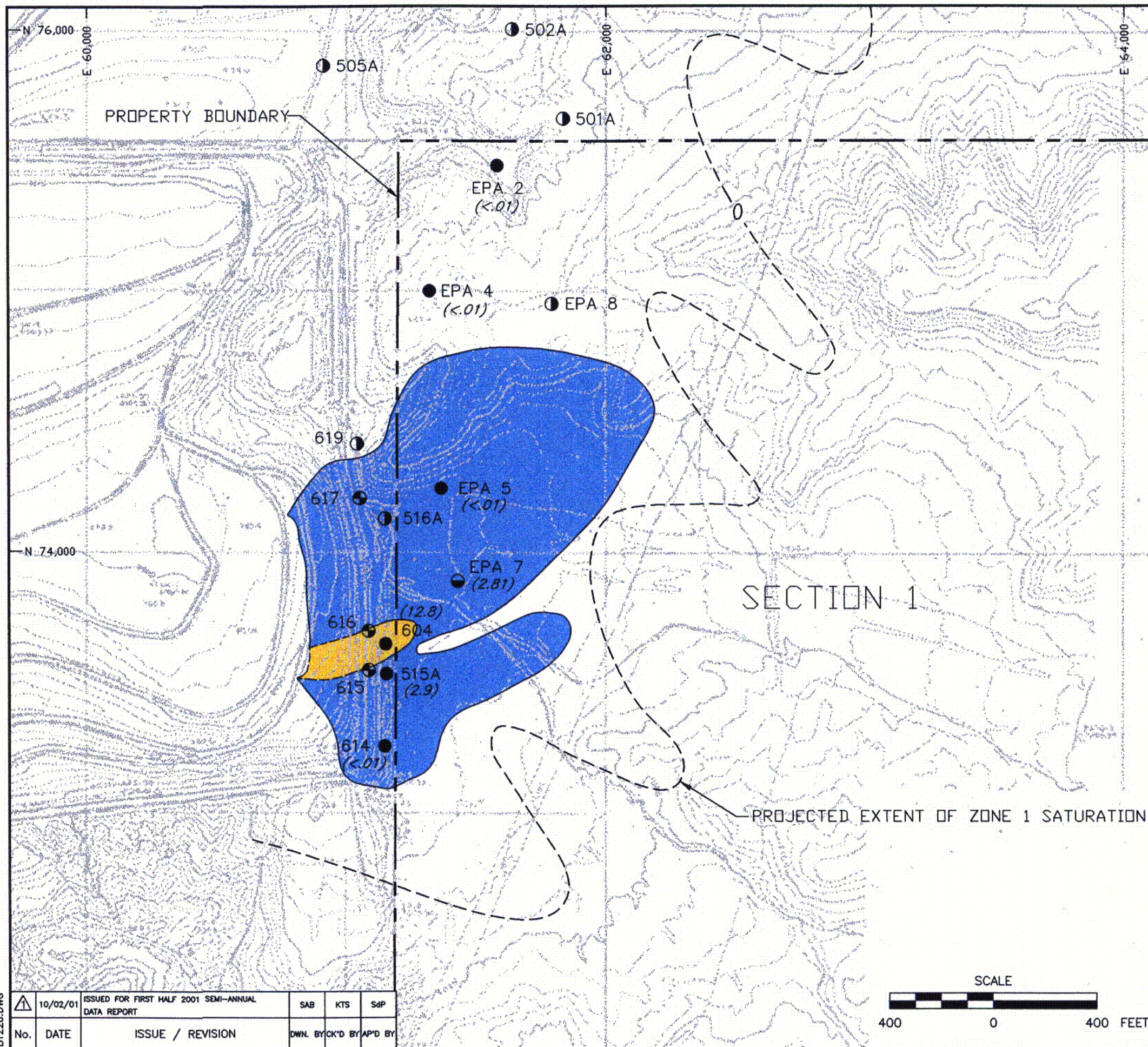
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GALLUP, NEW MEXICO

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LEGEND:

- 617 ● REVISED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF JULY, 1999)
- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- APPROXIMATE EXTENT OF ALUMINUM EXCEEDING 5.0 mg/L
- (2.9) ALUMINUM CONCENTRATION, mg/L

NOTES:

- WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
- REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:
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N.M.P.M. & VICINITY PROVIDED BY UNITED
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DATED: 8-1-96. SCALE: 1" = 400'.

FIGURE Z1-4
APPROXIMATE EXTENT OF ALUMINUM
EXCEEDING 5.0 mg/L, APRIL 2001

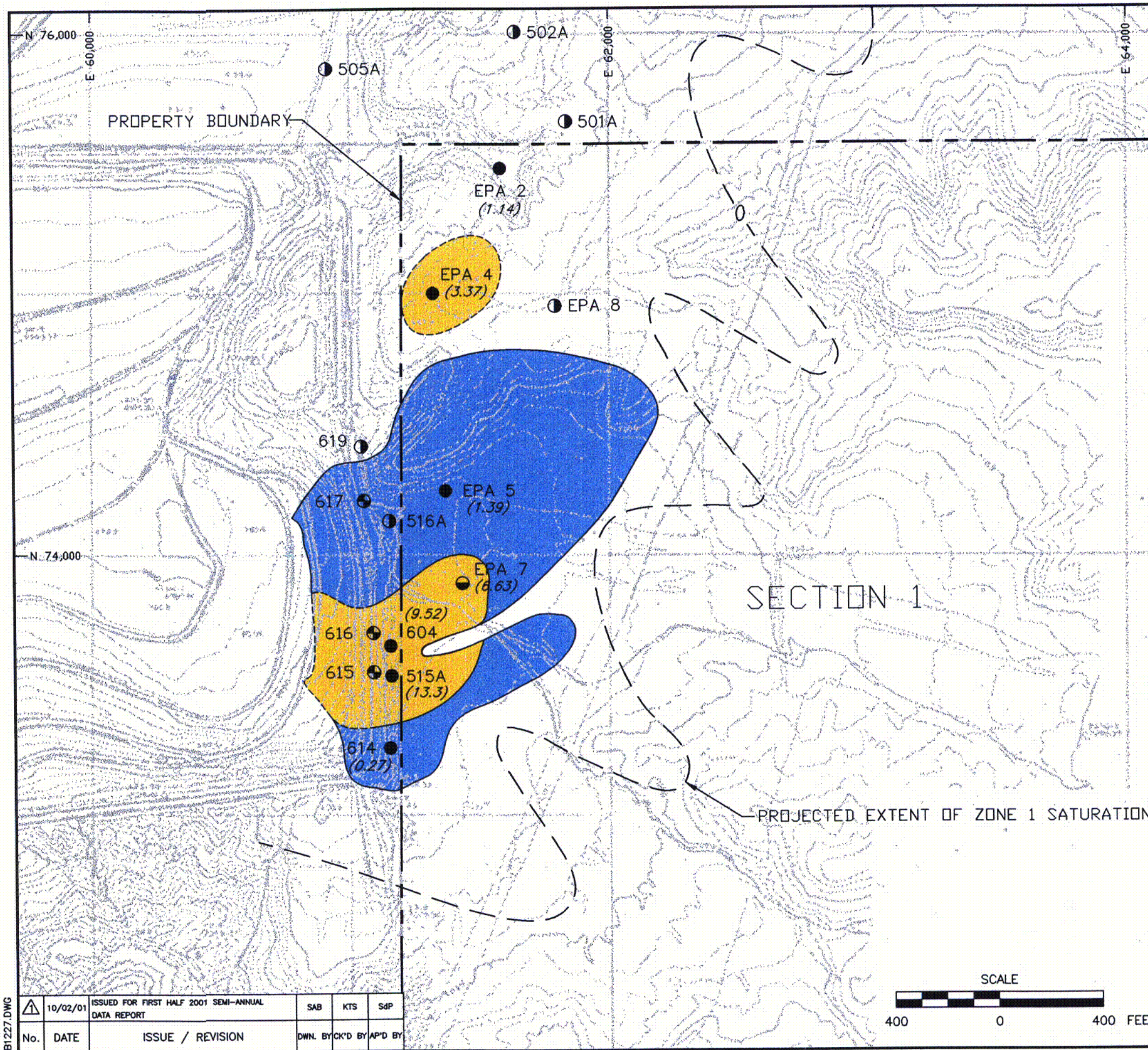
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C15



B1226.DWG

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- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- APPROXIMATE EXTENT OF MANGANESE EXCEEDING 2.60 mg/L
- (1.14) MANGANESE CONCENTRATION, mg/L

NOTES:

1. WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
2. REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:

TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W N.M.P.M. & VICINITY PROVIDED BY UNITED NUCLEAR CORPORATION, GALLUP, N.M. DATED: 8-1-96. SCALE: 1" = 400'.

FIGURE Z1-5
APPROXIMATE EXTENT OF MANGANESE EXCEEDING 2.60 mg/L, APRIL 2001

PREPARED FOR:

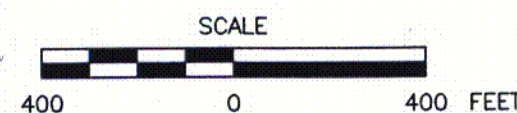
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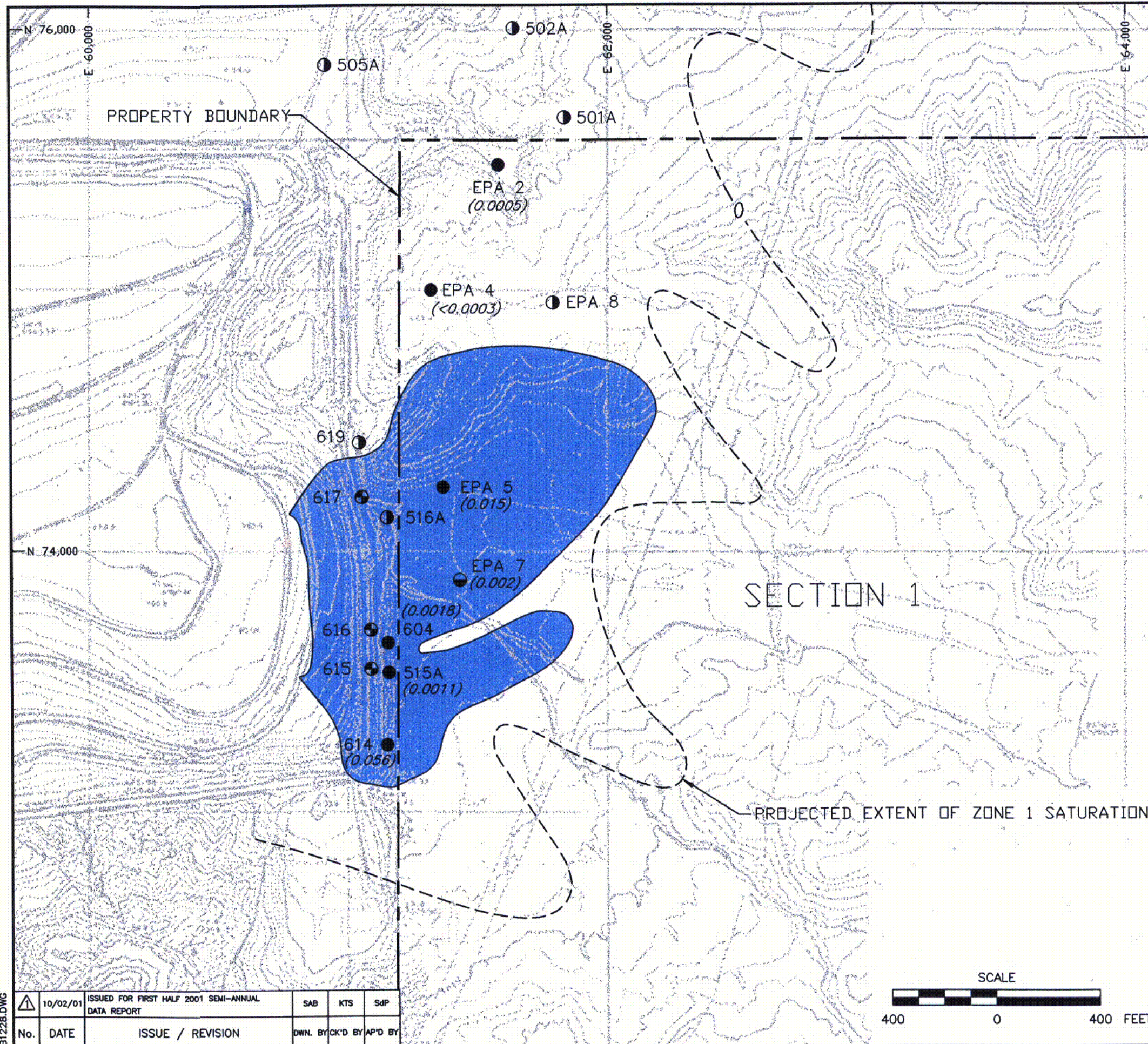
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LEGEND:

- 617 ● REVISED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF JULY, 1999)
- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- (0.0005) URANIUM CONCENTRATION, mg/L

NOTES:

1. WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
2. REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
N.M.P.M. & VICINITY PROVIDED BY UNITED
NUCLEAR CORPORATION, GALLUP, N.M.
DATED: 8-1-96. SCALE: 1" = 400'.

FIGURE Z1-6
APPROXIMATE EXTENT OF URANIUM
EXCEEDING 0.3 mg/L, APRIL 2001

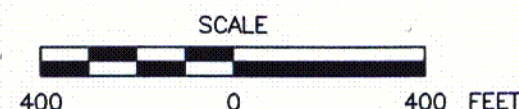
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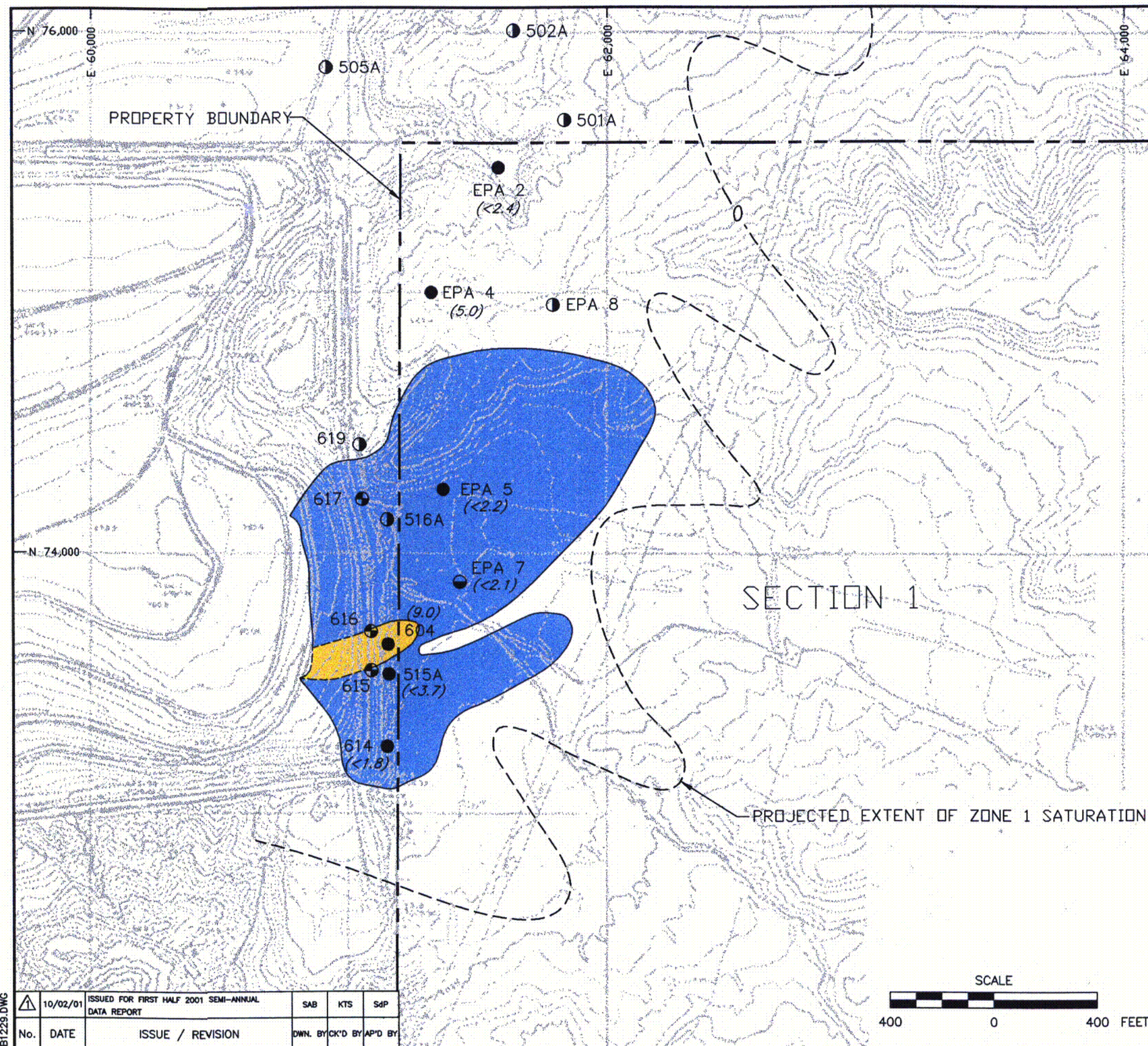
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LEGEND:

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- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- APPROXIMATE EXTENT OF COMBINED RADIUM-226 AND RADIUM-228 EXCEEDING 5.0 mg/L
- (<2.4) COMBINED RADIUM CONCENTRATION, mg/L

NOTES:

1. WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
2. REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
N.M.P.M. & VICINITY PROVIDED BY UNITED
NUCLEAR CORPORATION, GALLUP, N.M.
DATED: 8-1-96. SCALE: 1" = 400'.

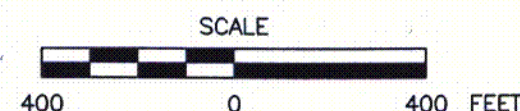
FIGURE Z1-7
APPROXIMATE EXTENT OF COMBINED
RADIUM-226 AND RADIUM-228
EXCEEDING 5.0 mg/L, APRIL 2001

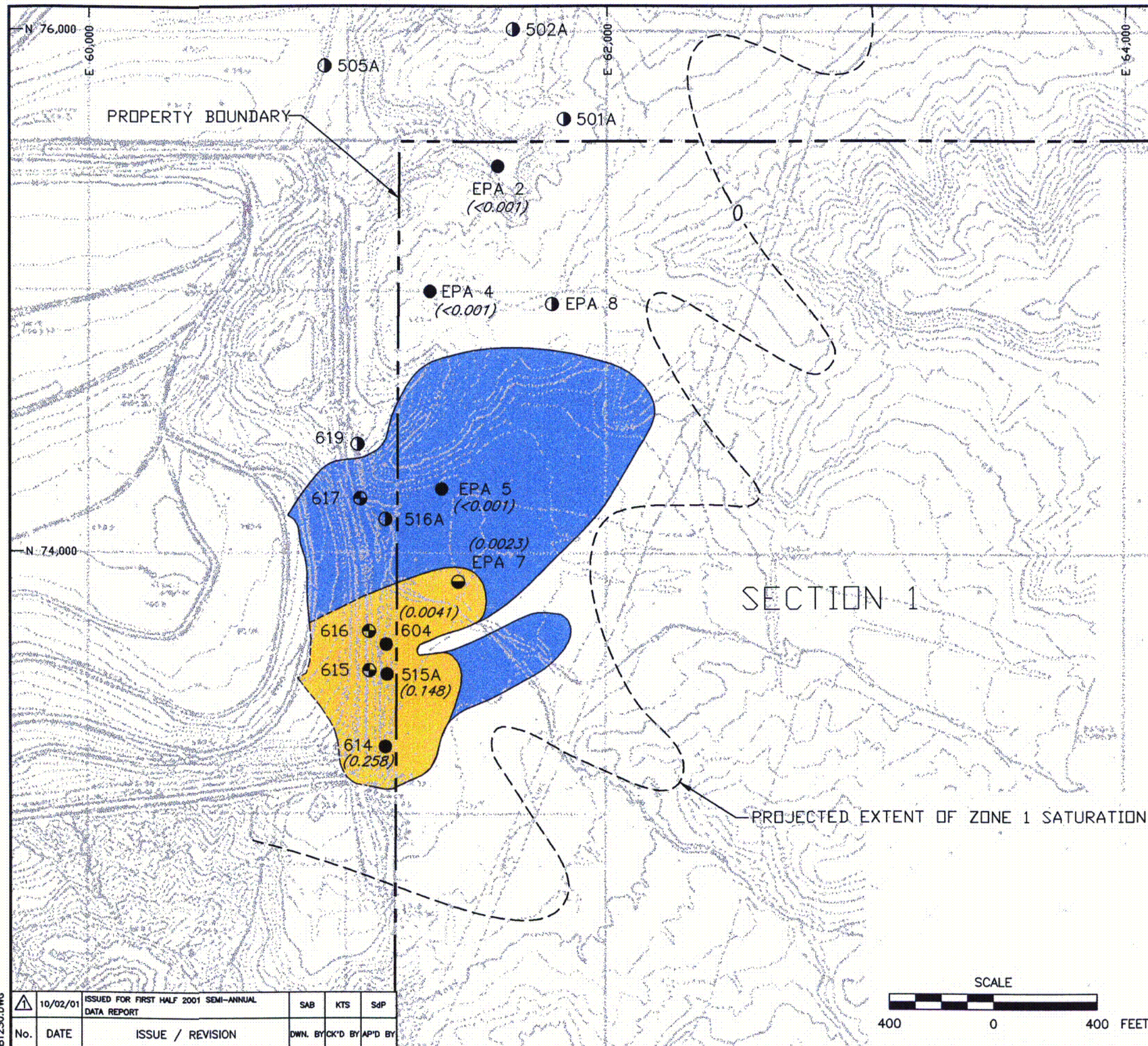
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LEGEND:

- 617 ● REVISED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF JULY, 1999)
- EPA 7 ● DECOMMISSIONED EAST PUMP - BACK SYSTEM WELL, LOCATION AND DESIGNATION (TURNED OFF SEPTEMBER, 1990)
- 614 ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER QUALITY AND WATER LEVEL)
- 501A ● ZONE 1 MONITORING WELL, LOCATION AND DESIGNATION (WATER LEVEL ONLY)
- APPROXIMATE EXTENT OF ZONE 1 SEEPAGE IMPACTS (DELINEATED BY CHLORIDE >50 mg/L)
- APPROXIMATE EXTENT OF CHLOROFORM EXCEEDING 0.001 mg/L
- (0.0023) CHLOROFORM CONCENTRATION, mg/L

NOTES:

- WELL EPA 7 HAS SERVED AS BOTH A PUMP-BACK AND MONITORING WELL. THE PUMP WAS SHUT OFF OCTOBER 1994 DUE TO HIGH LEVELS OF PRECIPITATION IN THE PUMP AND PIPING.
- REVISED MONITORING PROGRAM IMPLEMENTED IN SECOND QUARTER 2000.

REFERENCE:
 TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W
 N.M.P.M. & VICINITY PROVIDED BY UNITED
 NUCLEAR CORPORATION, GALLUP, N.M.
 DATED: 8-1-96. SCALE: 1" = 400'.

FIGURE Z1-8
 APPROXIMATE EXTENT OF CHLOROFORM
 EXCEEDING 0.001 mg/L, APRIL 2001

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