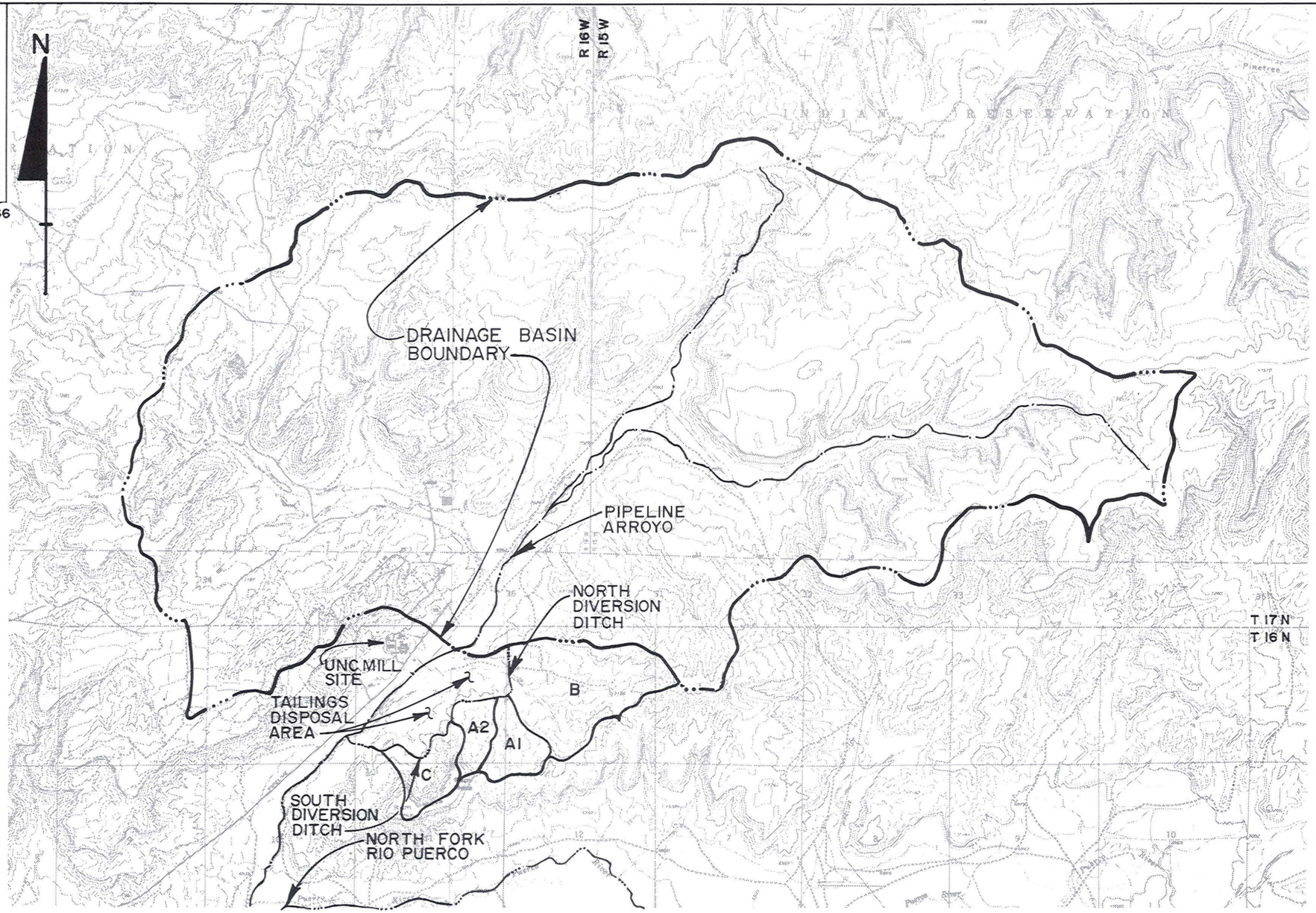
86-060-B566

DRAWING NUMBER 86-060-B568

B566



NOTE:

1. AFTER DRAWING No. RM86-060-B10 (FIGURE 7-3) IN THE 1987 RECLAMATION PLAN (CANONIE 1987b).

SCALE

4000 0 4000 FEET

PIPELINE ARROYO
DRAINAGE BASIN

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

Canonie Environmental

REFERENCE:

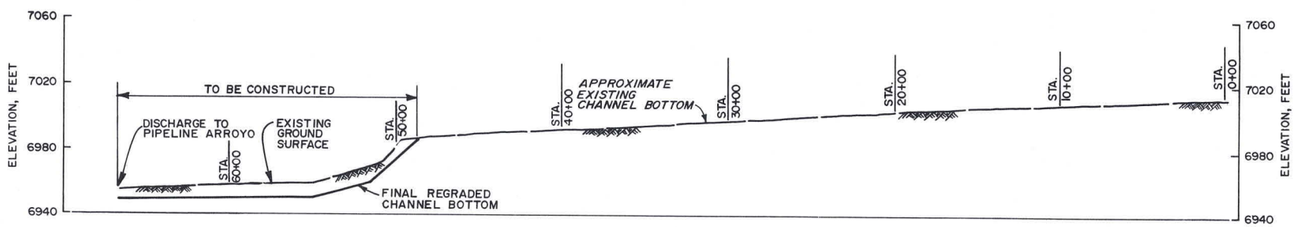
— USGS 7.5 MINUTE SERIES QUADRANGLE MAPS OF HARD GROUND FLATS AND OAK SPRING, NEW MEXICO. DATED: 1963. SCALE: 1" = 2000.'

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

DATE: 6-5-91	FIGURE 5-5	DRAWING NUMBER 86-060-B568
SCALE: AS SHOWN		

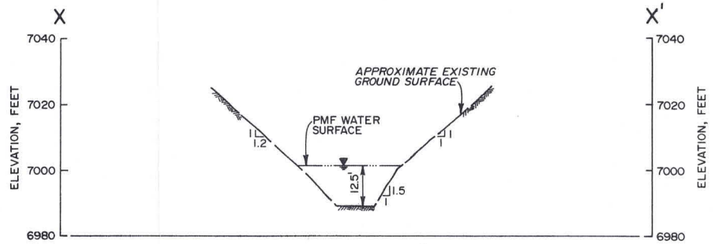
86-060-B566 1

DRAWING NUMBER 86-060-E567

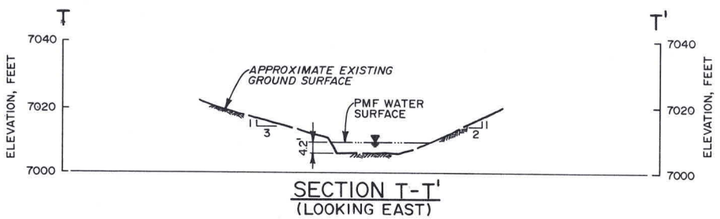


PROFILE
NORTH DIVERSION DITCH
(LOOKING NORTHEAST)

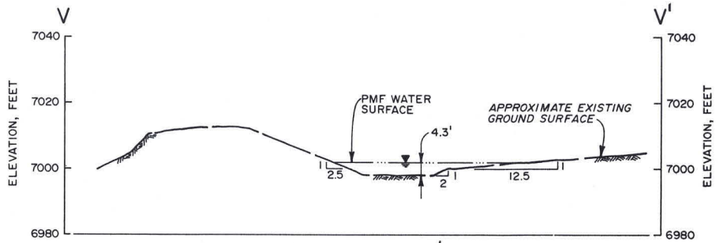
SCALE
400 0 400 800 FEET



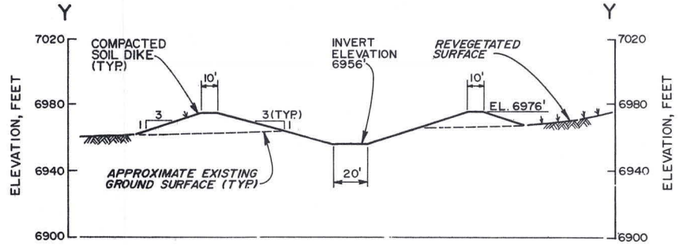
SECTION X-X'
(LOOKING NORTH)



SECTION T-T'
(LOOKING EAST)

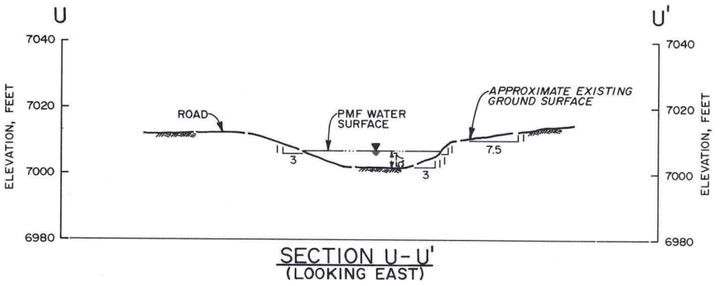


SECTION V-V'
(LOOKING NORTH)

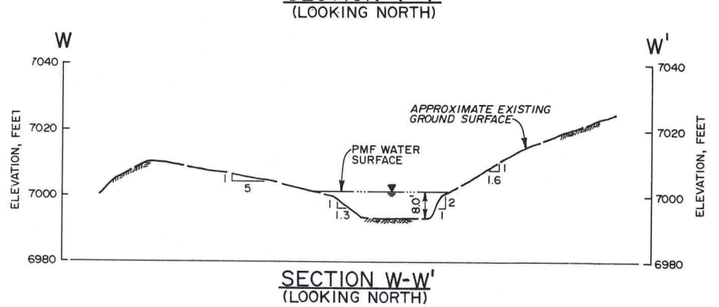


SECTION Y-Y'
NORTH DIVERSION DITCH
(LOOKING NORTHWEST)

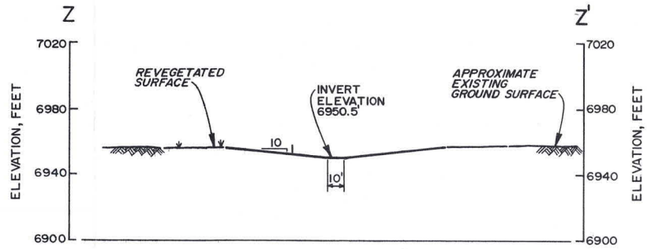
SCALE
40 0 40 80 FEET



SECTION U-U'
(LOOKING EAST)



SECTION W-W'
(LOOKING NORTH)

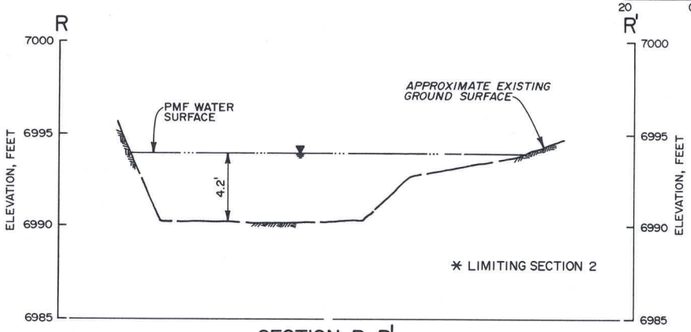


SECTION Z-Z'
NORTH DIVERSION DITCH
(LOOKING WEST)

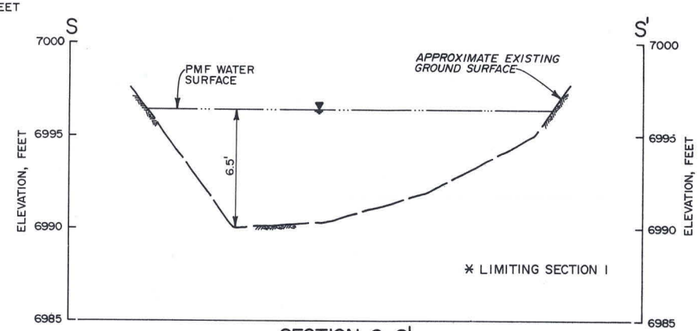
SCALE
40 0 40 80 FEET

NORTH DIVERSION DITCH CHANNEL SECTIONS

SCALE
20 0 20 40 FEET



SECTION R-R'
(LOOKING EAST)
NOT TO SCALE



SECTION S-S'
(LOOKING NORTHEAST)
NOT TO SCALE

SOUTH DIVERSION DITCH CHANNEL SECTIONS

NOTES:
1. LOCATION OF SECTIONS SHOWN ON FIGURES 5-1 AND 5-2.
2. AFTER DRAWING No. RM 86-060-E44 (FIGURE 7-7) IN THE 1987 RECLAMATION PLAN (CANONIE 1987b).

* REFERENCE FOR LIMITING SECTIONS 1 AND 2:
-FROM NATURAL RESOURCES DIVISION SCIENCE APPLICATIONS, INC., 1981, UNC CHURCH ROCK FACILITY DISCHARGE CAPACITY SOUTH DIVERSION DITCH, FOR UNC, 14-17 PAGES.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

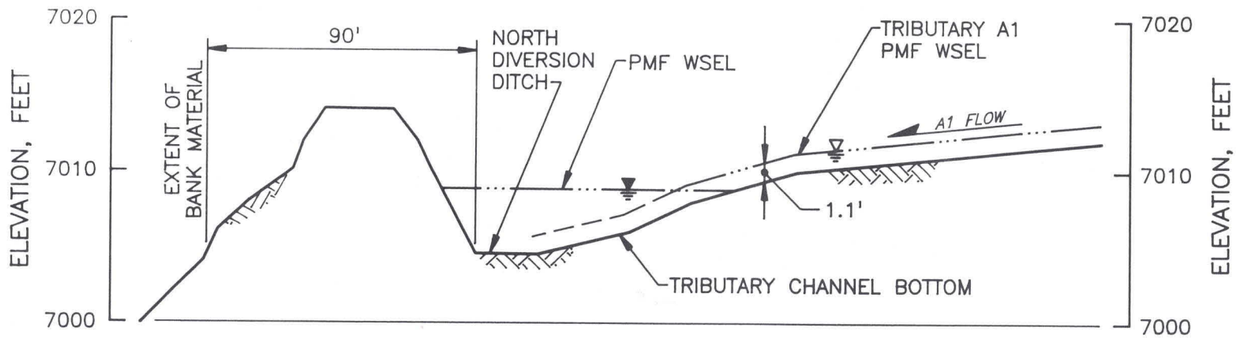
NORTH AND SOUTH DIVERSION DITCH DETAILS
PREPARED FOR
UNC MINING AND MILLING
GALLUP, NEW MEXICO

Canonie Environmental

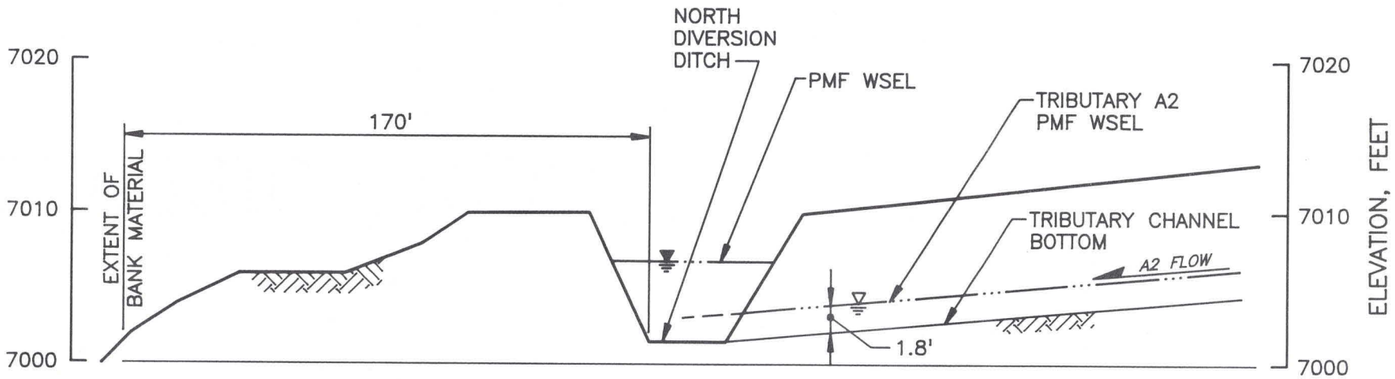
DATE: 6-10-91	FIGURE 5-6	DRAWING NUMBER 86-060-E567
SCALE: AS SHOWN		

1

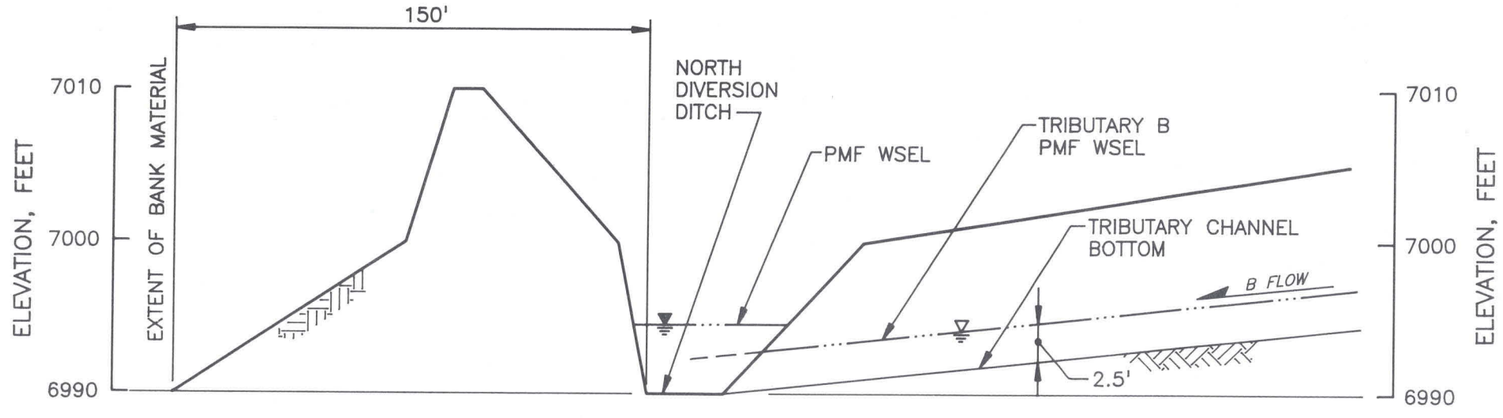
DRAWING NUMBER 86-060-B624



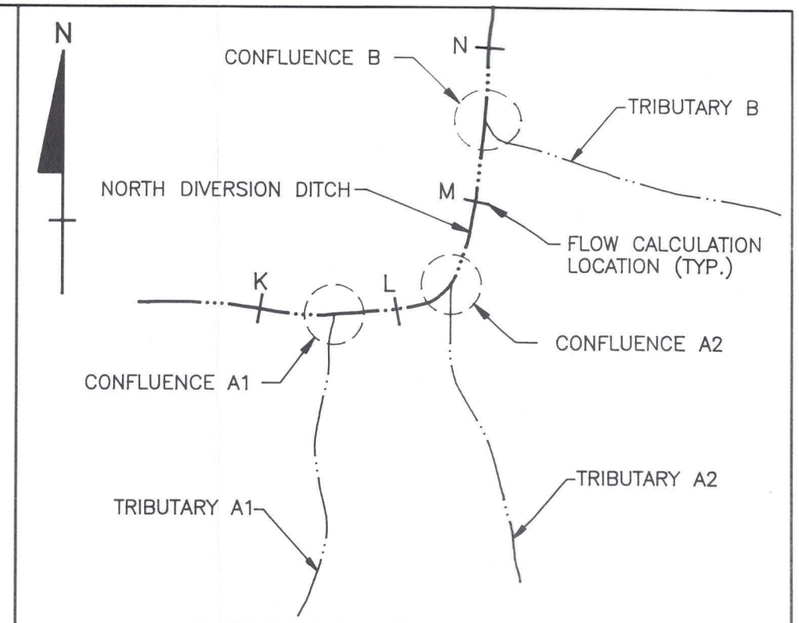
CONFLUENCE A1



CONFLUENCE A2



CONFLUENCE B



SCHEMATIC OF TRIBUTARY CONFLUENCES

(NOT TO SCALE)

LEGEND:

PMF	PROBABLE MAXIMUM FLOOD
WSEL	WATER SURFACE ELEVATION

VERTICAL SCALE

10 0 10 FEET

HORIZONTAL SCALE

50 0 50 FEET

VERTICAL EXAGGERATION = 5x

NOTES:

1. ACTUAL TRIBUTARY LOCATIONS ARE SHOWN ON FIGURE 5-1.
2. AFTER DRAWING No. 86-060-B423 (FIGURE 2-9) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-2A-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

NORTH DIVERSION DITCH
CONFLUENCE CROSS SECTIONS

PREPARED FOR

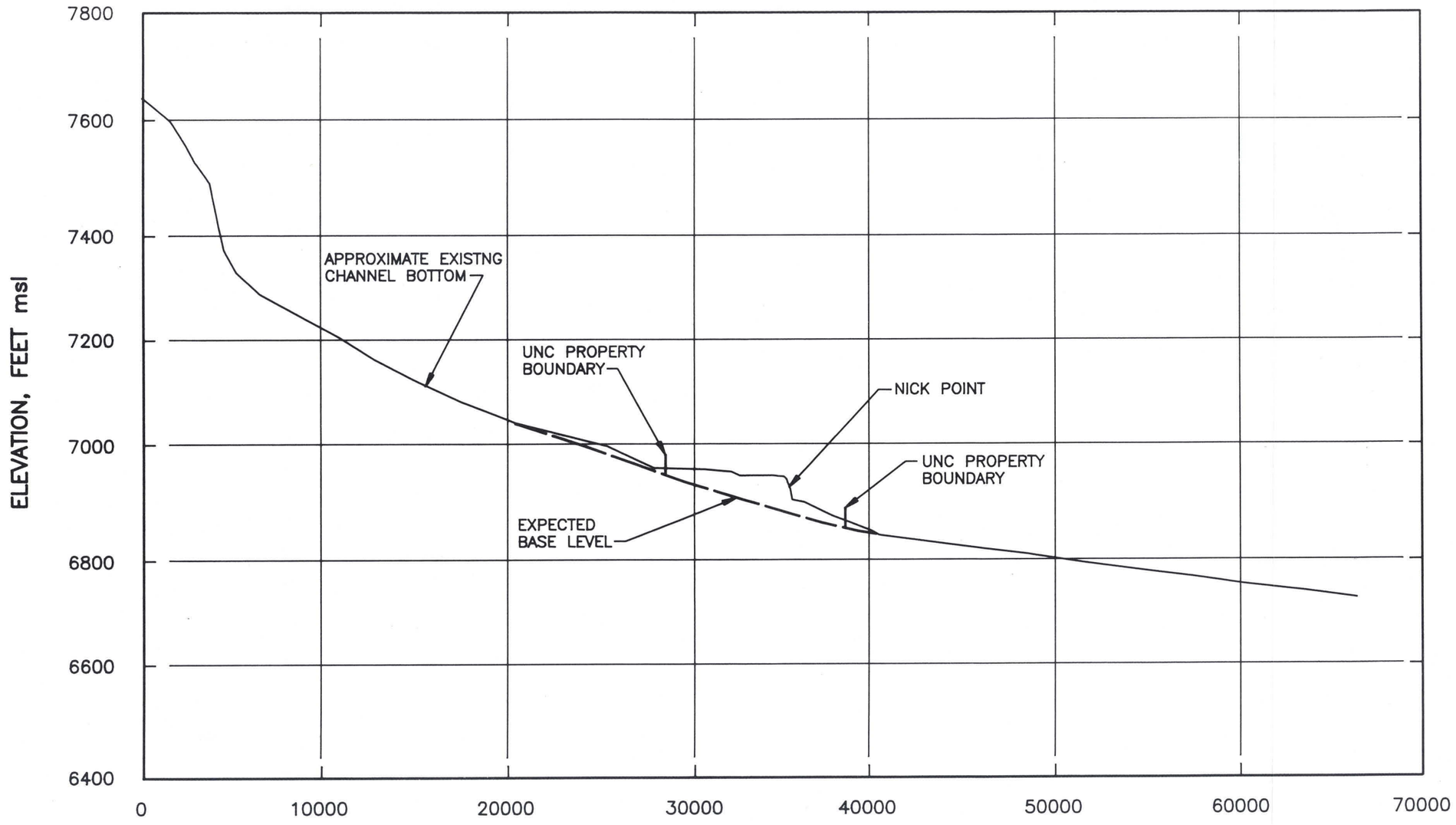
UNC MINING AND MILLING
GALLUP, NEW MEXICO

CanonieEnvironmental

DATE: 5-23-91 SCALE: AS SHOWN	FIGURE 5-7	DRAWING NUMBER 86-060-B624

1

DRAWING NUMBER 86-060-B594



NOTE:

1. AFTER DRAWING No. RM86-060-B11 (FIGURE 7-4) IN THE 1987 RECLAMATION PLAN (CANONIE, 1987b).

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	M.T.H.	DWK	DHG

CHANNEL PROFILE
PIPELINE ARROYO

PREPARED FOR

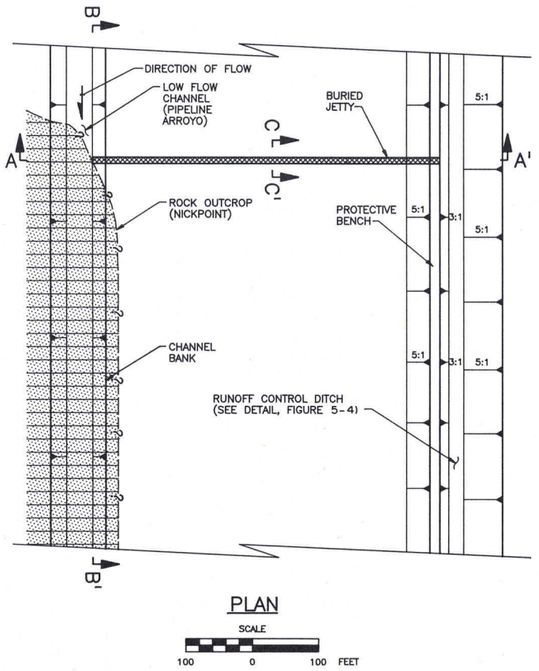
UNC MINING AND MILLING
GALLUP, NEW MEXICO

CanonieEnvironmental

DATE: 6-6-91	FIGURE 5-8	DRAWING NUMBER 86-060-B594
SCALE: AS SHOWN		

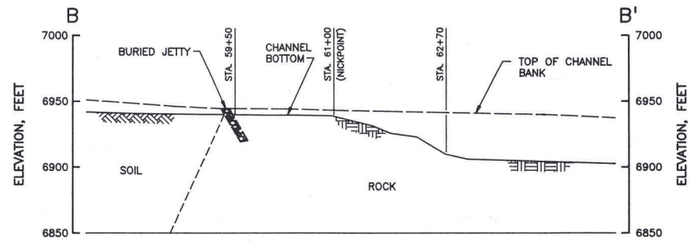
1

DRAWING NUMBER 86-060-E631



PLAN

SCALE
100 0 100 FEET

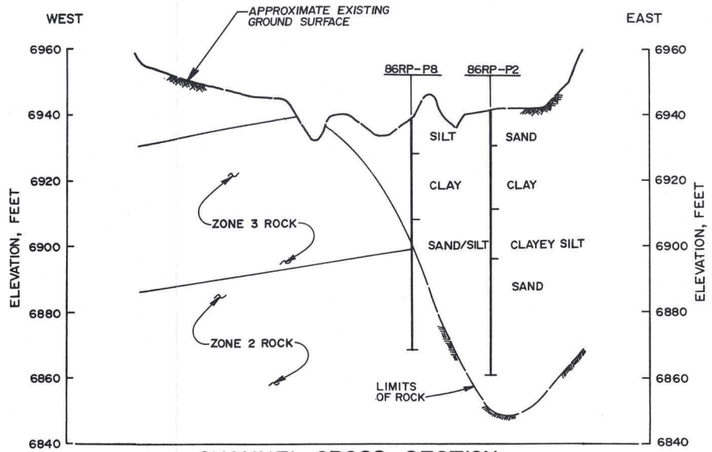


SECTION B–B'
NICKPOINT REINFORCEMENT

VERTICAL SCALE
50 0 50 FEET

HORIZONTAL SCALE
100 0 100 FEET

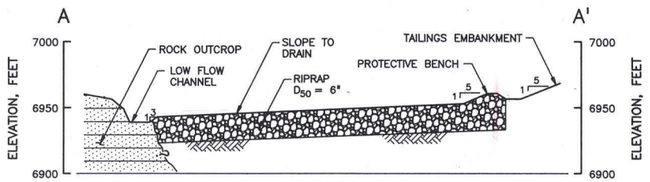
VERTICAL EXAGGERATION = 2X



CHANNEL CROSS SECTION
(LOOKING NORTH)
100 FEET NORTHEAST OF NICKPOINT

VERTICAL SCALE
20 0 20 FEET

HORIZONTAL SCALE
100 0 100 FEET

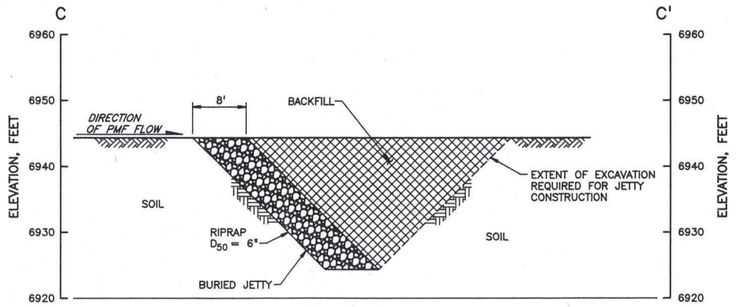


SECTION A–A'

VERTICAL SCALE
50 0 50 FEET

HORIZONTAL SCALE
100 0 100 FEET

VERTICAL EXAGGERATION = 2X



SECTION C–C'

SCALE
10 0 10 FEET

NOTE:

1. AFTER DRAWING No. 86-060-E419 (FIGURE 2-8) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS AND DRAWING No. RM 86-060-E37 (FIGURE 7-5) IN THE 1987 RECLAMATION PLAN (CANONIE 1987b).

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	M.T.H.	DWK	DHG

PIPELINE ARROYO CHANNEL
AND BURIED JETTY DETAILS

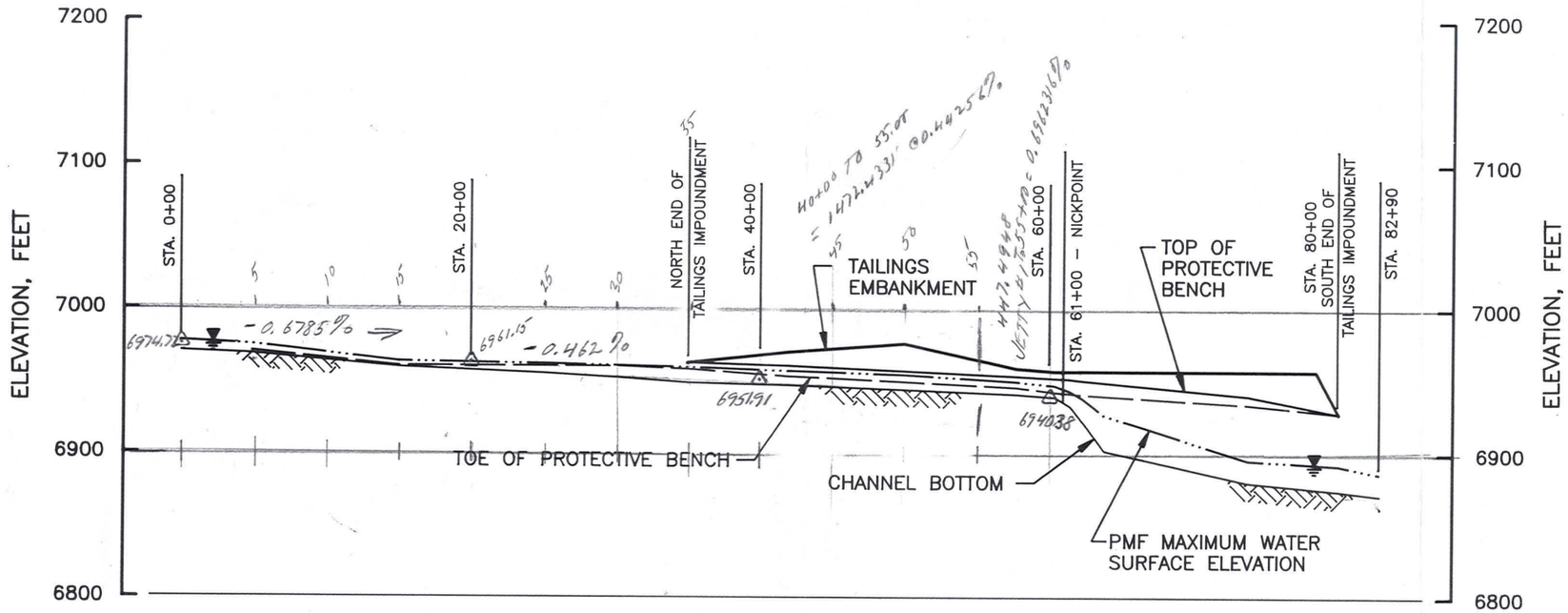
PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

CanonieEnvironmental

DATE: 5-29-91	FIGURE 5-9	DRAWING NUMBER 86-060-E631	1
SCALE: AS SHOWN			

DRAWING NUMBER 86-060-B623



VERTICAL SCALE

100 0 100 FEET

HORIZONTAL SCALE

1000 0 1000 FEET

VERTICAL EXAGGERATION = 10X

NOTES:

1. ALIGNMENT OF PIPELINE ARROYO IS SHOWN ON FIGURES 5-1 AND 5-2.
2. AFTER DRAWING No. 86-060-B420 (FIGURE 2-4) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

PIPELINE ARROYO PROFILE

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

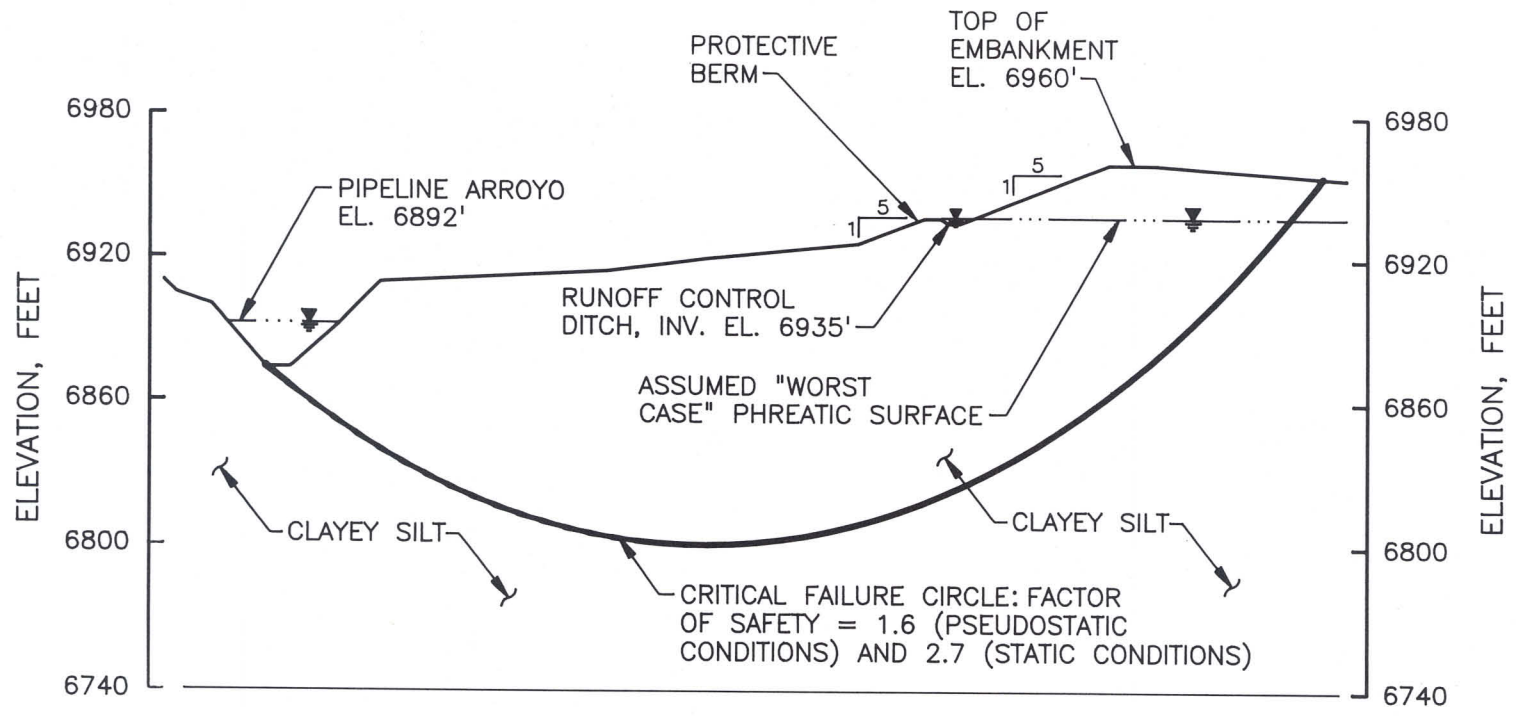
Canonie Environmental

DATE: 5-23-91	FIGURE 5-10	DRAWING NUMBER 86-060-B623
SCALE: AS SHOWN		

ORIGINAL.

1

DRAWING NUMBER 86-060-A606



SOIL PARAMETERS	NATIVE SOIL	EMBANKMENT SOIL
COHESION (psf)	960	1,600
INTERNAL ANGLE OF FRICTION	11°	15°
DRY DENSITY (pcf)	95	95
SATURATED DENSITY (pcf)	120	120

NOTES:

1. MAXIMUM SECTION SHOWN IS TAKEN FROM STATION 80+00.
2. HORIZONTAL ACCELERATION = 0.05 g.

SLOPE STABILITY ANALYSIS

PREPARED FOR

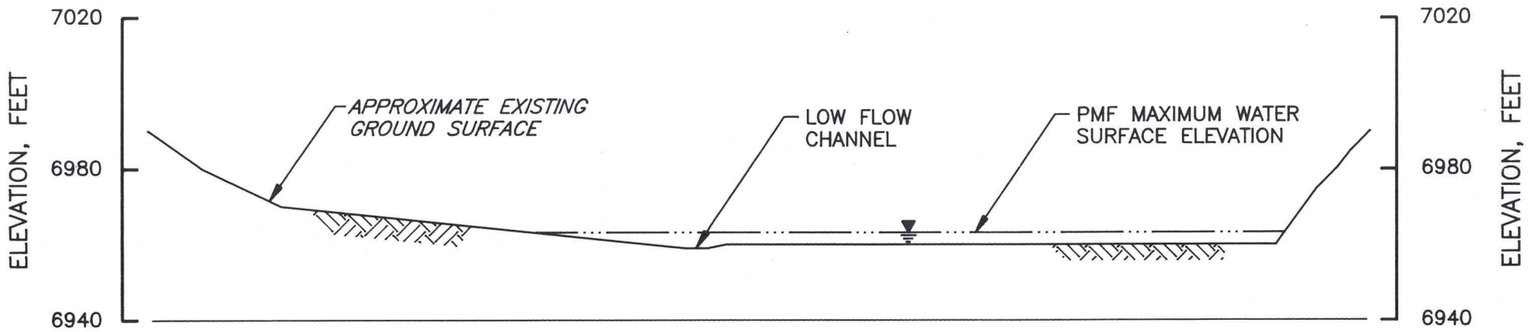
UNC MINING AND MILLING
GALLUP, NEW MEXICO

CanonieEnvironmental

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-29-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

DATE: 8-19-91 SCALE: N.T.S.	FIGURE 5-11	DRAWING NUMBER 86-060-A606

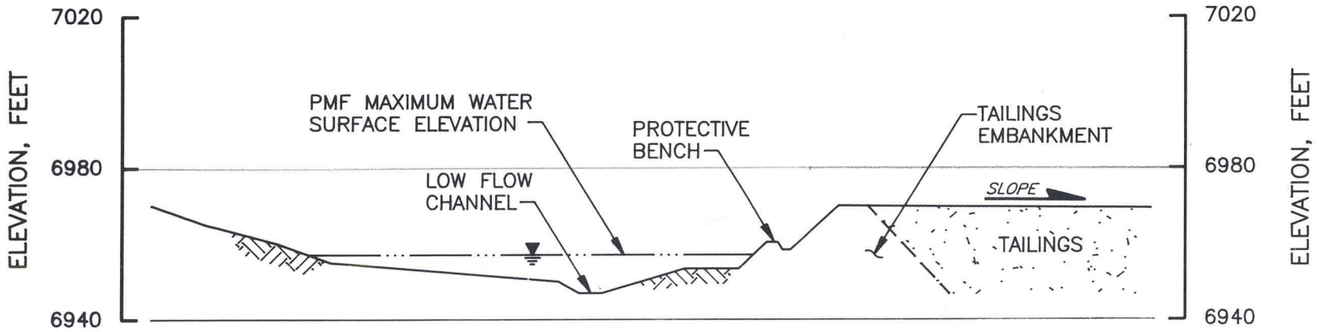
DRAWING NUMBER 86-060-B621



PIPELINE ARROYO CROSS SECTION

STATION 15+05

(LOOKING NORTH)



PIPELINE ARROYO CROSS SECTION

STATION 41+95

(LOOKING NORTH)

NOTES:

1. CROSS SECTION LOCATIONS ARE SHOWN ON FIGURES 5-1 AND 5-2.
2. AFTER DRAWING No. 86-060-B424 (FIGURE 2-5) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS.

VERTICAL SCALE

40 0 40 FEET

HORIZONTAL SCALE

200 0 200 FEET

VERTICAL EXAGGERATION = 5X

PIPELINE ARROYO CROSS SECTIONS
15+05 AND 41+95

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

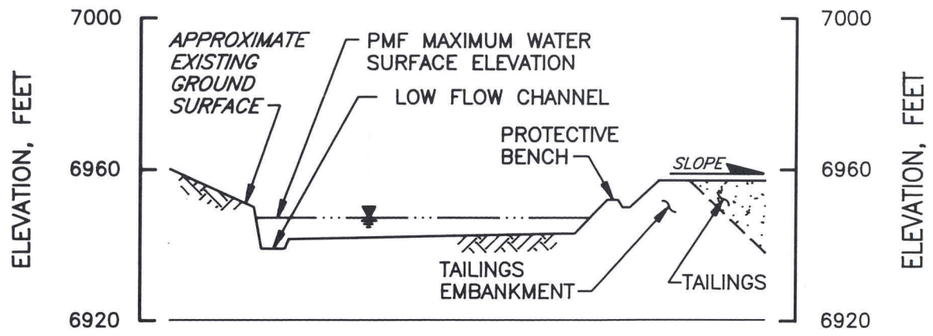
CanonieEnvironmental

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-29-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

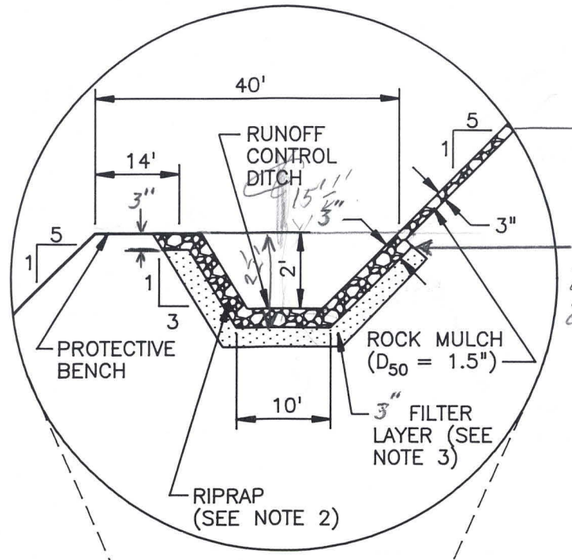
DATE: 5-23-91	FIGURE 5-12	DRAWING NUMBER 86-060-B621
SCALE: AS SHOWN		

1

DRAWING NUMBER 86-060-B622

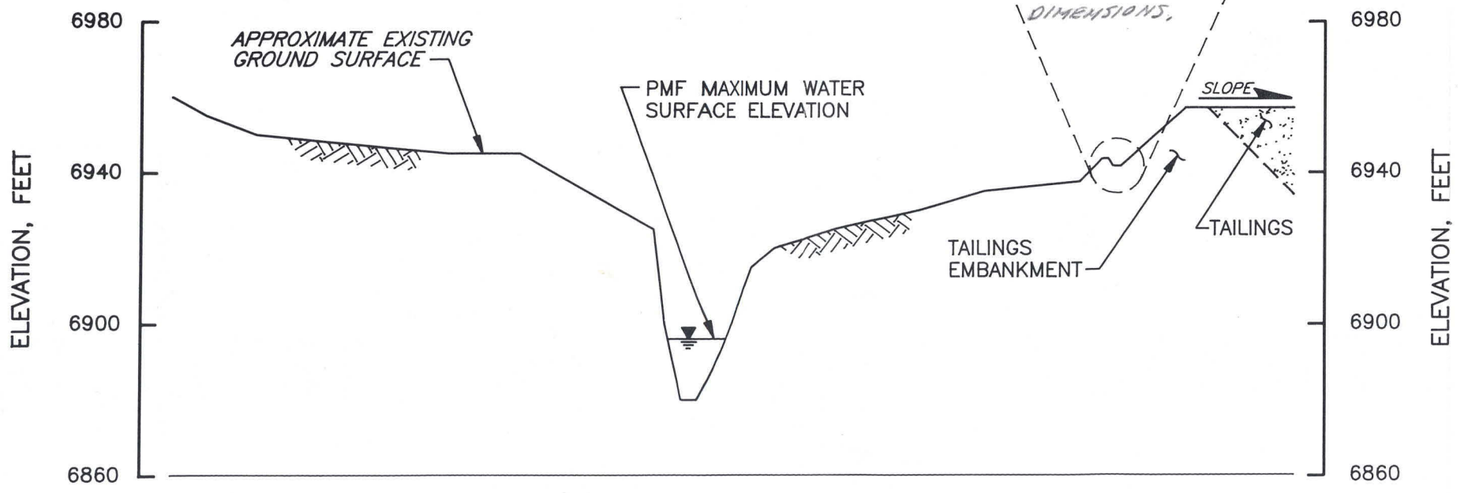


PIPELINE ARROYO CROSS SECTION
STATION 60+40
(LOOKING NORTH)



RUNOFF CONTROL DITCH
NOT TO SCALE
REVISED TO SHOW UPPER REACH DIMENSIONS.

NOTES:
1. CROSS SECTION LOCATIONS ARE SHOWN ON FIGURES 5-1 AND 5-2.
2. RIPRAP D_{50} = 1.5" IN UPPER REACH OF RUNOFF CONTROL DITCH. D_{50} = 3.0" IN LOWER REACH OF RUNOFF CONTROL DITCH.
3. FILTER LAYER REQUIRED ONLY FOR LOWER REACH OF RUNOFF CONTROL DITCH. NOTE CHANGE 3"of D_{50} 1½" ROCK 3" FILTER LAYER FOR UPPER REACH.
4. AFTER DRAWING No. 86-060-B421 (FIGURE 2-6) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS.



PIPELINE ARROYO CROSS SECTION
STATION 73+80
(LOOKING NORTH)

VERTICAL SCALE
40 0 40 FEET

HORIZONTAL SCALE
200 0 200 FEET

VERTICAL EXAGGERATION = 5X

PIPELINE ARROYO CROSS SECTIONS
60+40 AND 73+80
PREPARED FOR
UNC MINING AND MILLING
GALLUP, NEW MEXICO
CanonieEnvironmental

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8-24-91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DWK	DHG

DATE: 5-23-91	FIGURE 5-13	DRAWING NUMBER 86-060-B622
SCALE: AS SHOWN		

1

86-060-B428
86-060-B429

DRAWING NUMBER 86-060-B620

R17W | R16W

R16W | R15W

T 18 N

T 17 N

T 16 N

N

INDIAN RESERVATION

WATERSHED BOUNDARY (TYP.)

HARD GROUND CANYON WATERSHED

PIPELINE ARROYO WATERSHED

HARD GROUND CANYON CHANNEL

PIPELINE ARROYO

NICK POINT LOCATION

UNITED NUCLEAR TAILINGS DISPOSAL SITE

NICK POINT LOCATION

R17W | R16W

R16W | R15W

SCALE
5000 0 5000 FEET

PIPELINE ARROYO AND HARD GROUND CANYON WATERSHEDS

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

CanonieEnvironmental

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	B-24-91	ISSUED FOR 1991 RECLAMATION PLAN	RH	DWK	DHG

REFERENCE:

COMPOSITE OF 7.5' USGS TOPOGRAPHIC QUADRANGLE MAPS OF HARD GROUND FLATS AND OAK SPRING, NEW MEXICO.
SCALE: 1"= 2000'. DATED: 1963. PHOTOREVISED: 1979.

NOTE:

1. AFTER DRAWING No. 86-060-B430 (FIGURE 2-7) IN THE DECEMBER 4, 1990 RESPONSE TO NRC COMMENTS.

86-060-B428

DATE: 5-23-91	FIGURE 5-14	DRAWING NUMBER 86-060-B620
SCALE: AS SHOWN		

86-060-B429 1

86-060-B633

DRAWING NUMBER 86-060-B583

B633

N

NECR MINE SITE

MILL FACILITIES

QUIVIRA FACILITIES

ZONE 3 REMEDIAL ACTION TARGET AREA

NORTH CELL

NORTH CROSS-DIKE PUMP-BACK WELLS

CENTRAL CELL

ZONE 1 REMEDIAL ACTION TARGET AREA

SECTION NUMBER (TYP.)

EAST PUMP-BACK WELLS

SOUTH CELL

BORROW PIT No. 2

TAILINGS DISPOSAL AREA

BORROW PIT No. 1

SOUTHWEST ALLUVIUM REMEDIAL ACTION TARGET AREA.

PROPERTY BOUNDARY

35

36

10

11

12

N 78,000

N 74,000

N 72,000

E 58,000

E 60,000

E 62,000

E 64,000

E 66,000

ARROYO

PIPELINE

NOTE:

1. AFTER DRAWING No. 86-060-B223 (FIGURE 1-1) IN THE RD (CANONIE 1989d).

SCALE

400 0 400 800 FEET

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T. 16 N., R. 16 W., N.M.P.M. & VICINITY, PROVIDED BY UNITED NUCLEAR CORPORATION, GALLUP, NEW MEXICO. DATED: MAY 1, 1978. SCALE: 1" = 400'.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	[illegible]	DHG

CHURCH ROCK SITE ORIENTATION MAP AS OF APRIL 1989

PREPARED FOR

UNC MINING AND MILLING GALLUP, NEW MEXICO

Canonie Environmental

DATE: 5-23-91
SCALE: AS SHOWN

FIGURE 6-1

DRAWING NUMBER 86-060-B583

86-060-B633 1

86-060-8633

DRAWING NUMBER 86-060-B582

B633

N

MINE SHAFT

A

E 58,000

E 60,000

E 62,000

E 64,000

N 78,000

EPA-1

INDIAN WELL LOCATED APPROXIMATELY 6076 FEET FURTHER NORTHEAST IN DIRECTION SHOWN. TOTAL DISTANCE FROM TAILINGS AREA TO WELL IS 1.7 MILES.

36-05/10

GALLUP-1

601

672

A'

501A

EPA-17
(REPORTED DRY WHEN DRILLED)

GEOTECHNICAL BORING SHB76-2W (1976)

NORTH CELL

CENTRAL CELL

BORROW PIT NO. 2

BORROW PIT NO. 1

SOUTH CELL

GEOTECHNICAL BORING HL-5 (1968)

N 74,000

N 72,000

LEGEND:

601 ● WELL LOCATION AND DESIGNATION

NOTES:

1. SEE FIGURE 6-3 FOR SECTION A-A'.
2. AFTER DRAWING No. 86-060-B240 (FIGURE 2-1) IN THE RD (CANONIE 1989d).

SCALE
400 0 400 800 FEET

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T 16 N., R 16 W., N.M.P.M. & VICINITY, PROVIDED BY UNITED NUCLEAR CORPORATION, GALLUP, NEW MEXICO. DATED: MAY 1, 1978. SCALE: 1" = 400'.

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1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DHG	

LOCATION MAP FOR PRE-MINING AND PRE-MILLING WATER LEVEL DATA

PREPARED FOR

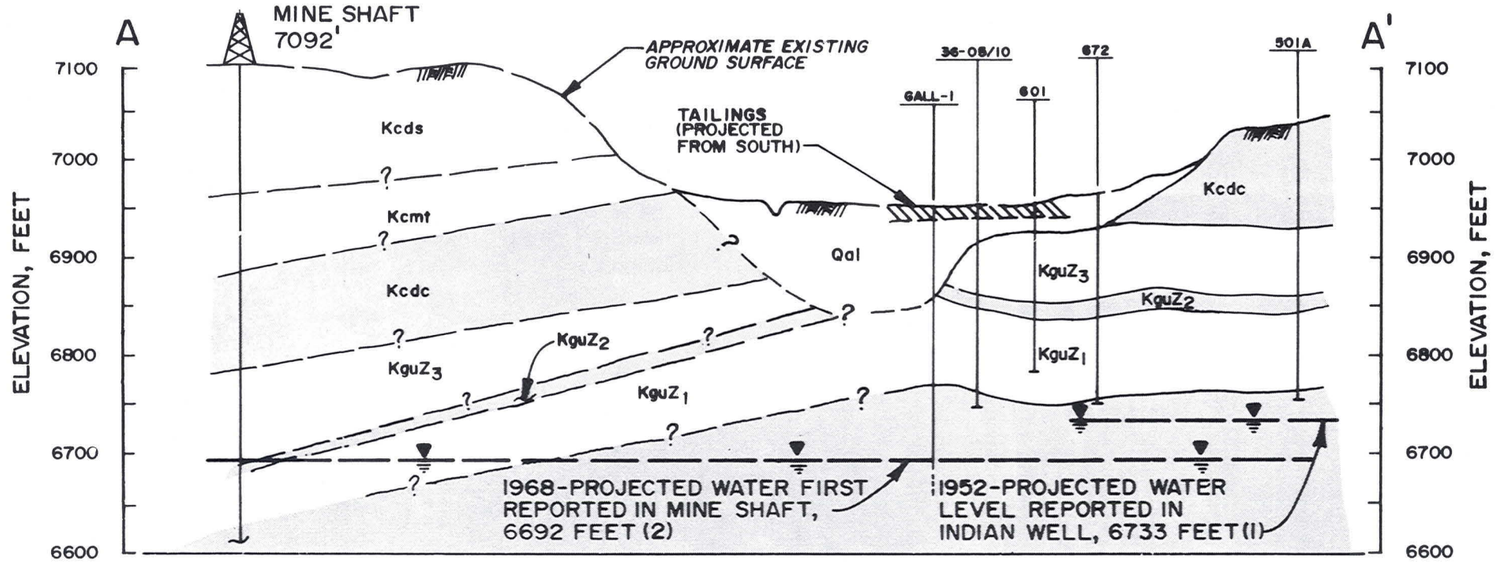
UNC MINING AND MILLING
GALLUP, NEW MEXICO

Canonie Environmental

DATE: 5-23-91	FIGURE 6-2	DRAWING NUMBER
SCALE: AS SHOWN		86-060-B582

86-060-8633 1

DRAWING NUMBER 86-060-B576



SECTION A-A'
(LOOKING NORTH)

VERTICAL SCALE
100 0 100 200 FEET

HORIZONTAL SCALE
400 0 400 800 FEET

VERTICAL EXAGGERATION = 4X

NOTES:

1. AFTER DRAWING No. 86-060-B232 (FIGURE 2-2) IN THE RD (CANONIE, 1989d).
2. WATER LEVEL REPORTED IN TABLE I OF, UNC-ER-1, 1975 APPLICANT'S ENVIRONMENTAL REPORT ON CHURCH ROCK, NEW MEXICO URANIUM MILL AND MINE, VOLUME II, APPENDICES.
3. WATER REPORTED INFLOWING AT 30 gpm ON THE N.E.C.R. MINE SHAFT LOG COMPILED BY UNC.
4. SEE FIGURE 6-2 FOR LOCATION OF CROSS SECTION.

LEGEND:

Qal	ALLUVIUM
Kcds	CREVASSE CANYON FORMATION DALTON SANDSTONE MEMBER
Kcmt	CREVASSE CANYON FORMATION MULLATTO TONGUE MEMBER
Kcdc	CREVASSE CANYON FORMATION DILCO COAL MEMBER
K_{guZ_3}	UPPER GALLUP SANDSTONE - ZONE 3
K_{guZ_2}	UPPER GALLUP SANDSTONE - ZONE 2
K_{guZ_1}	UPPER GALLUP SANDSTONE - ZONE 1
Kmdu	MANCOS SHALE UPPER D CROSS TONGUE MEMBER

PROJECTED PRE-MINING AND PRE-MILLING WATER LEVEL

PREPARED FOR

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1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.	DHG	

DATE: 5-23-91	FIGURE 6-3	DWG. NO. 86-060-B576
SCALE: AS SHOWN		

1

86-060-B634

DRAWING NUMBER 86-060-B535

B634

N

LEGEND:

- ▲ 7011 70 — SURVEY CONTROL POINT
- ⊕EPA-13 — WELL
- ▲76SHB-12E — GEOTECHNICAL BOREHOLE
- ▲KM-9 — DEEP BOREHOLE
- —7— ISOCONCENTRATION LINES OF pH, DASHED WHERE INFERRED
- 7.4 SAMPLE POINT AND pH VALUE FOR ZONE I

NOTE:

1. AFTER DRAWING No. 86-060-E211 (FIGURE 2-3) IN THE RD (CANONIE 1989d).

SCALE
400 0 400 800 FEET

REFERENCE:

-COMPOSITE OF TOPOGRAPHIC MAPS PROVIDED BY UNITED NUCLEAR CORP DRAWING NOS. 1798-A, AND C-1797-B. DATED: MAY 1, 1985. SCALE: 1" = 200'.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.		D.H.G

ZONE 3 REFINED TARGET AREA FOR 1989 REMEDIAL DESIGN

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

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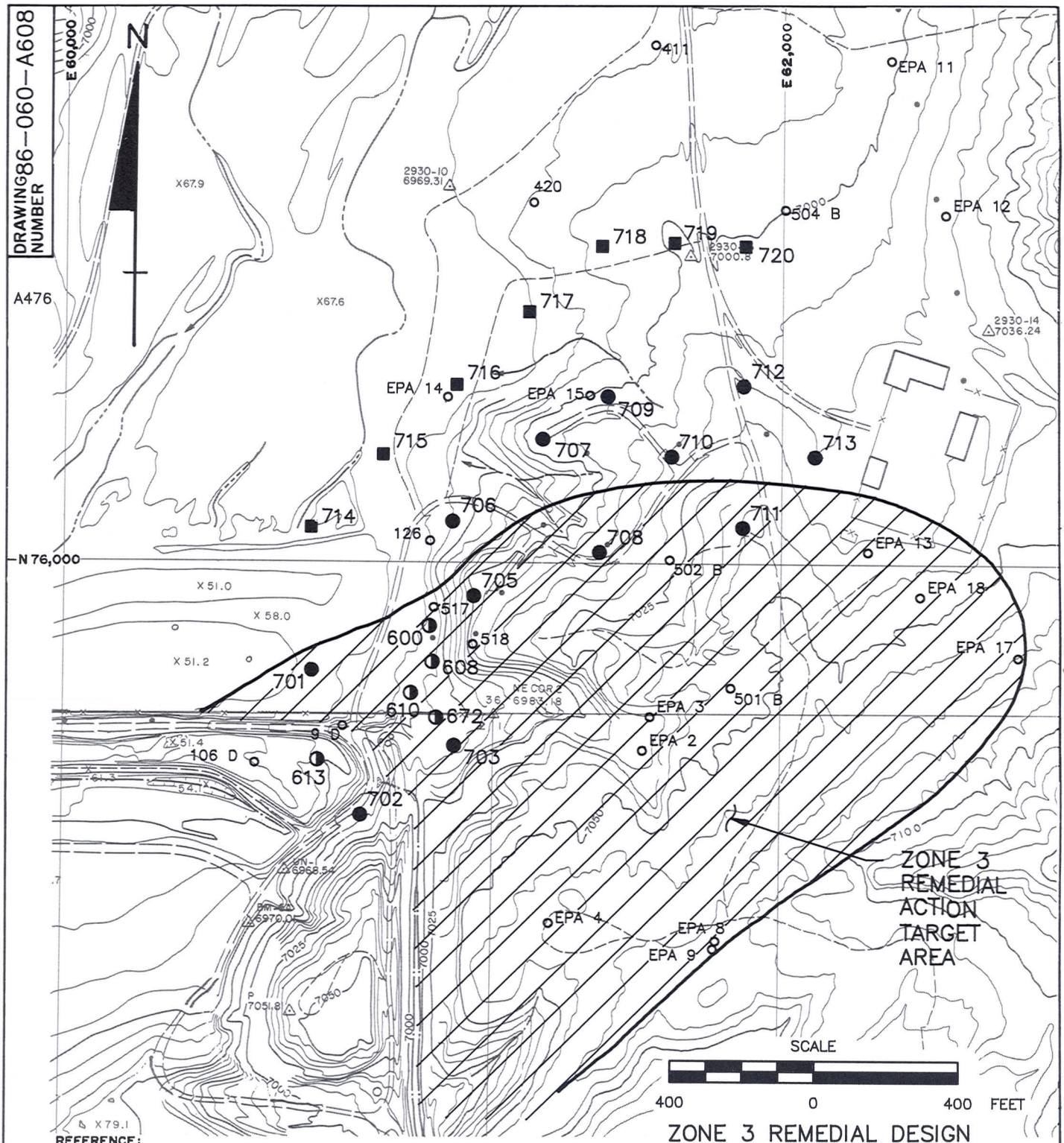
DATE: 5-30-91	FIGURE 6-4	DRAWING NUMBER 86-060-B535
SCALE: AS SHOWN		

86-060-B634

1



REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T16N, R16W, N.M.P.M. & VICINITY, PROVIDED BY UNITED NUCLEAR CORP., GALLUP, NEW MEXICO. DATED: 9-29-89. SCALE: 1"=200'.

ZONE 3 REMEDIAL DESIGN SYSTEM AS-BUILT WELL LOCATIONS

NOTE:

1. AFTER DRAWING No. 86-060-A178 (FIGURE 2-4) IN THE RD (CANONIE 1989d).

LEGEND:

- ● 708 ZONE 3- STAGE I EXTRACTION WELLS
- ■ 714 ZONE 3- STAGE II EXTRACTION WELLS
- ◑ 672 NORTHEAST PUMP-BACK WELLS

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1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	P.M.W.		DHG

DATE: 5-23-91	FIGURE 6-5	DRAWING NUMBER 86-060-A608
SCALE: AS SHOWN		

86-060-A476

1

DRAWING NUMBER 86-060-B584

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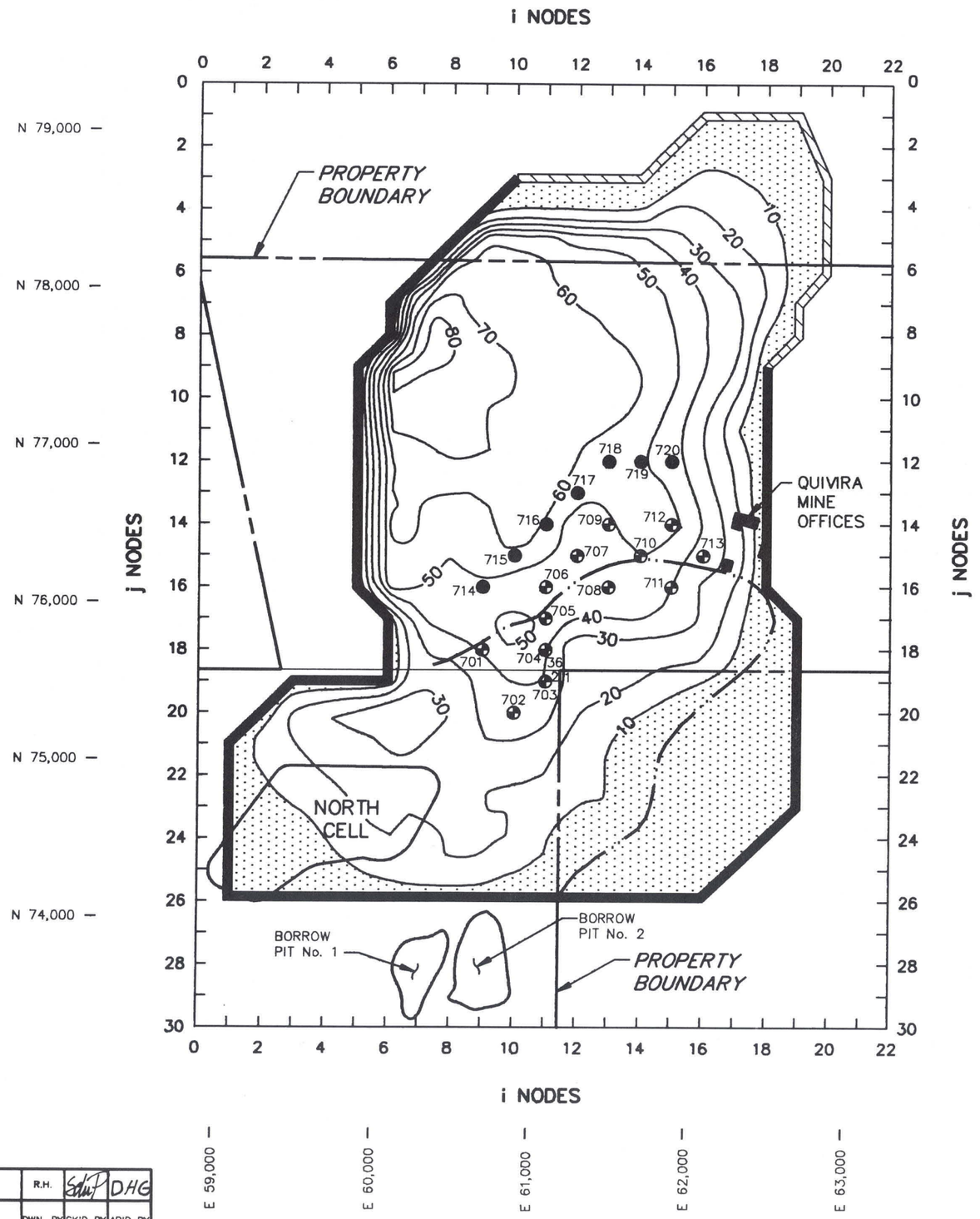

NOTES:

1. NODAL SPACING EQUAL TO 200 FEET.
2. MODEL USED FOR SIMULATION IS PRICKETTE LONNQUIST FINITE DIFFERENCE MODEL.
3. AFTER DRAWING No. 86-060-B179 (FIGURE 2-5) IN THE RD (CANONIE, 1989d).

LEGEND:

- MODEL BOUNDARY: CONSTANT HEAD
- MODEL BOUNDARY: NO FLOW
- 713 — FIRST STAGE WELLS
- 717 — SECOND STAGE WELLS
- 30 — SATURATED THICKNESS OF ZONE 3 BASED ON 1986 DATA, FEET (SEE TABLE 6.5 FOR DATA)
- BOUNDARY OF REMEDIAL ACTION TARGET AREA
- AREAS WHERE ZONE 3 SATURATED THICKNESS IS LESS THAN 10 FEET
- 36 / 2 | 1 — SECTION CORNER AND NUMBERS

SCALE

800 0 800 FEET

ZONE 3 SATURATED THICKNESS
INITIAL CONDITIONS
FOR 1989 REMEDIAL DESIGN

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

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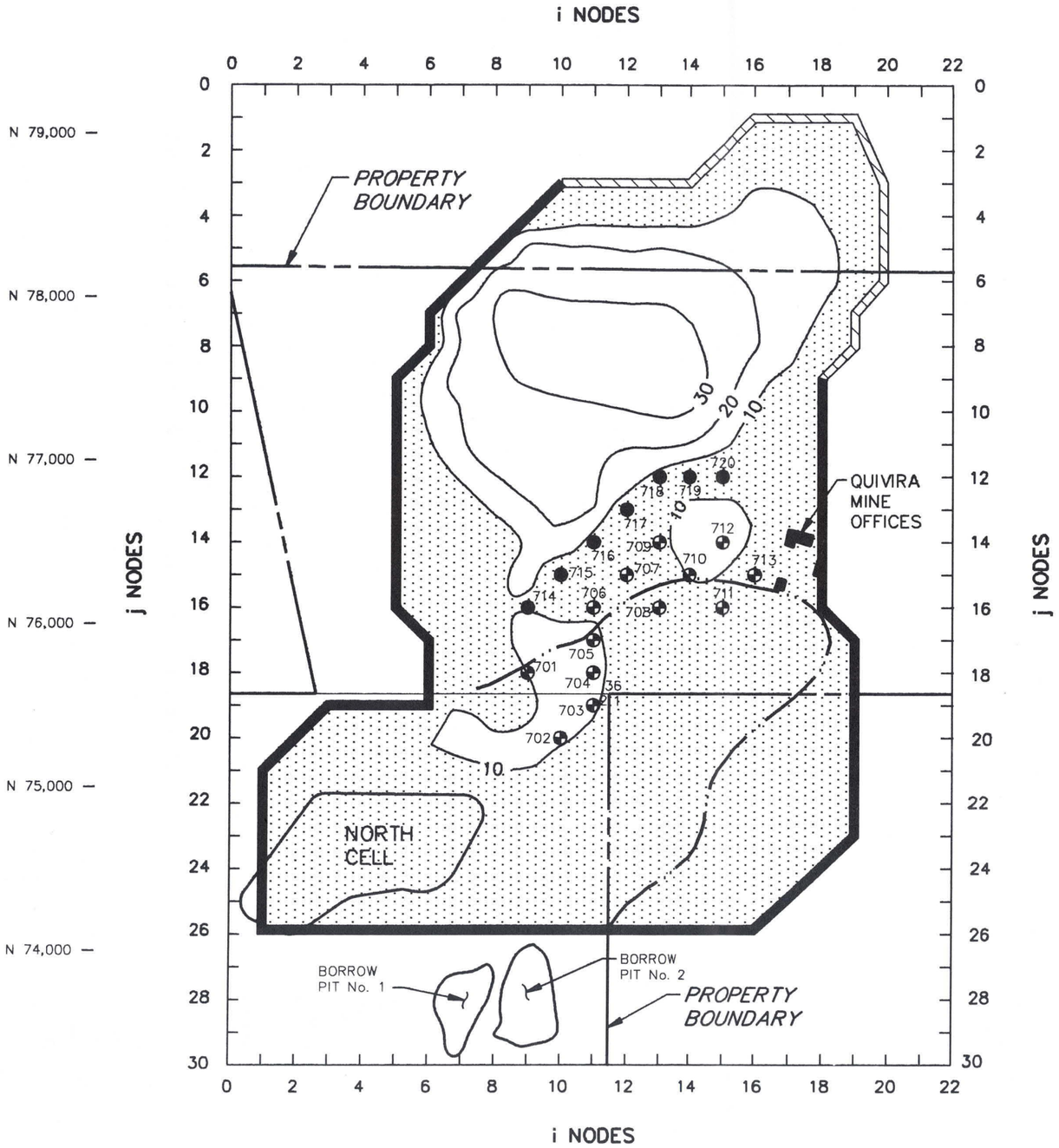
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	R.H.	[illegible]	DHG

DATE: 5-15-91	FIGURE 6-6	DRAWING NUMBER 86-060-B584
SCALE: AS SHOWN		

1

DRAWING NUMBER 86-060-B585

N



NOTES:

1. NODAL SPACING EQUAL TO 200 FEET.
2. MODEL USED FOR SIMULATION IS PRICKETTE LONNQUIST FINITE DIFFERENCE MODEL.
3. AFTER DRAWING No. 86-060-B180 (FIGURE 2-6) IN THE RD (CANONIE 1989d).

LEGEND:

- MODEL BOUNDARY: CONSTANT HEAD
- MODEL BOUNDARY: NO FLOW
- 713 — FIRST STAGE WELLS
- 717 — SECOND STAGE WELLS
- 30 — PREDICTED SATURATED THICKNESS OF ZONE 3, FEET
- BOUNDARY OF REMEDIAL ACTION TARGET AREA
- AREAS WHERE ZONE 3 SATURATED THICKNESS IS LESS THAN 10 FEET
- 36 / 2 | 1 — SECTION CORNER AND NUMBERS

SCALE

800 0 800 FEET

PREDICTED ZONE 3 SATURATED THICKNESS AFTER 2.5 YEARS OF PUMPING

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

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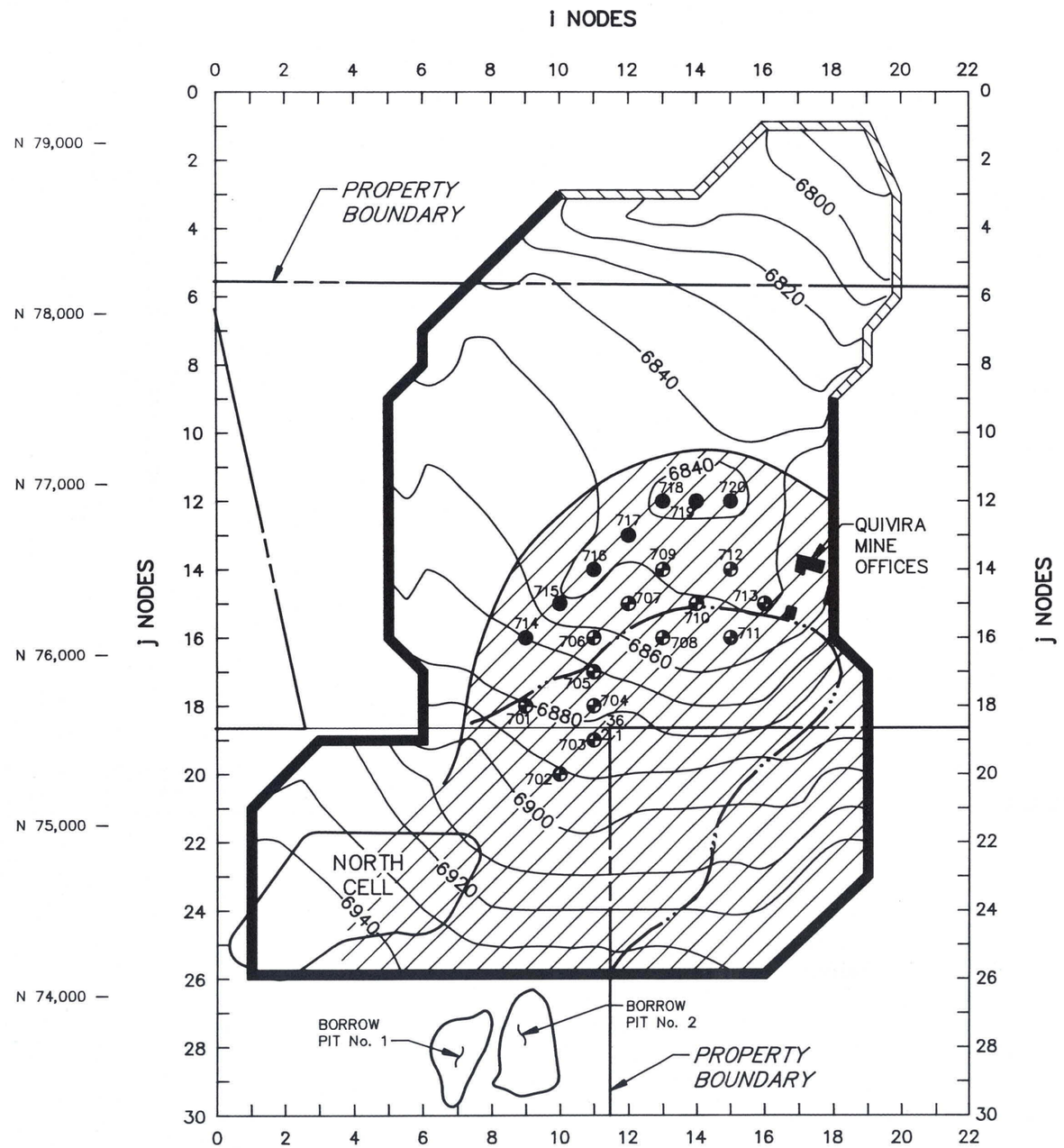
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	R.H.	SAH	DHG

DATE: 5-15-91	FIGURE 6-7	DRAWING NUMBER 86-060-B585
SCALE: AS SHOWN		

1

DRAWING NUMBER 86-060-B586

N



NOTES:

1. NODAL SPACING EQUAL TO 200 FEET.
2. MODEL USED FOR SIMULATION IS PRICKETTE LONNQUIST FINITE DIFFERENCE MODEL.
3. AFTER DRAWING No. 86-060-B186 (FIGURE 2-7) IN THE RD (CANONIE 1989d).

LEGEND:

- MODEL BOUNDARY: CONSTANT HEAD
- MODEL BOUNDARY: NO FLOW
- 713 — FIRST STAGE WELLS
- 717 — SECOND STAGE WELLS
- 6900 — WATER LEVEL ELEVATION CONTOURS, FEET
- BOUNDARY OF REMEDIAL ACTION TARGET AREA
- ZONE OF CAPTURE
- 36 / 2 | 1 — SECTION CORNER AND NUMBERS

SCALE

800 0 800 FEET

PREDICTED ZONE 3 WATER TABLE SURFACE AFTER 2.5 YEARS OF EXTRACTION ILLUSTRATING THE ZONE OF CAPTURE

PREPARED FOR

UNC MINING AND MILLING
GALLUP, NEW MEXICO

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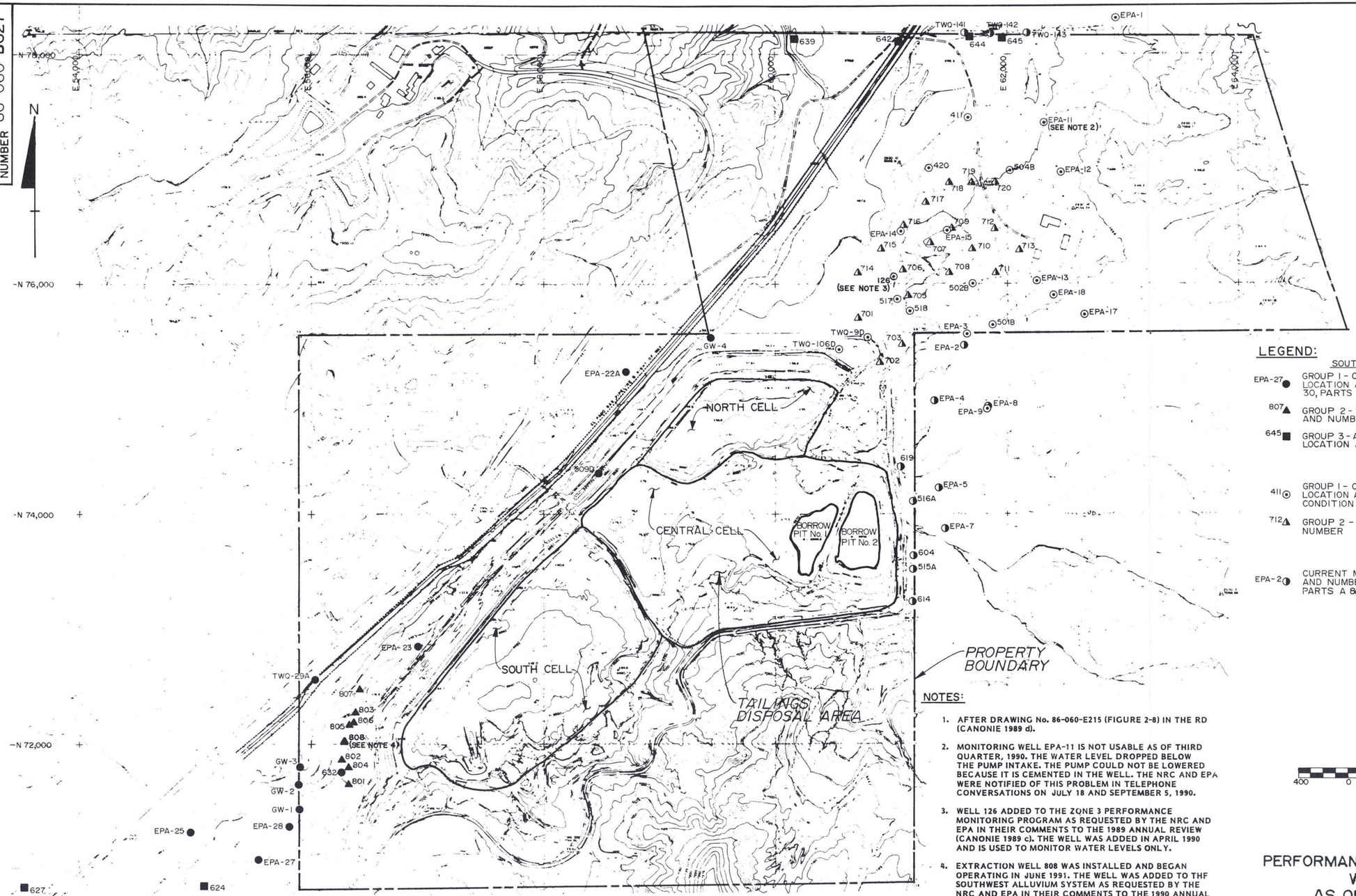
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	R.H.	DHG	

DATE: 5-15-91	FIGURE 6-8	DRAWING NUMBER 86-060-B586
SCALE: AS SHOWN		

1

DRAWING NUMBER 86-060-B627



LEGEND:

SOUTHWEST ALLUVIUM

- EPA-27● GROUP 1 - CURRENT MONITORING WELL LOCATION AND NUMBER, LICENSE CONDITION 30, PARTS A & B CRITERIA
- 807▲ GROUP 2 - SYSTEM WELL LOCATION AND NUMBER
- 645■ GROUP 3 - ADDITIONAL ALLUVIAL WELL LOCATION AND NUMBER

ZONE 3

- 411⊙ GROUP 1 - CURRENT MONITORING WELL LOCATION AND NUMBER, LICENSE CONDITION 30, PARTS A & B CRITERIA
- 712▲ GROUP 2 - SYSTEM WELL LOCATION AND NUMBER

ZONE 1

- EPA-2◑ CURRENT MONITORING WELL LOCATION AND NUMBER, LICENSE CONDITION 30, PARTS A & B CRITERIA

NOTES:

1. AFTER DRAWING No. 86-060-E215 (FIGURE 2-8) IN THE RD (CANONIE 1989 d).
2. MONITORING WELL EPA-11 IS 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.
3. WELL 126 ADDED TO THE ZONE 3 PERFORMANCE MONITORING PROGRAM AS REQUESTED BY THE NRC AND EPA IN THEIR COMMENTS TO THE 1989 ANNUAL REVIEW (CANONIE 1989 c). THE WELL WAS ADDED IN APRIL 1990 AND IS USED TO MONITOR WATER LEVELS ONLY.
4. EXTRACTION WELL 808 WAS INSTALLED AND BEGAN OPERATING IN JUNE 1991. THE WELL WAS ADDED TO THF SOUTHWEST ALLUVIUM SYSTEM AS REQUESTED BY THE NRC AND EPA IN THEIR COMMENTS TO THE 1990 ANNUAL REVIEW (CANONIE 1990 a).

SCALE
400 0 400 800 FEET

PERFORMANCE MONITORING WELLS AS OF JULY 1991

PREPARED FOR

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Canonie Environmental

REFERENCE:
TOPOGRAPHIC MAP OF SEC. 2, T 16 N., R 16 W., N.M.P.M. & VICINITY, PROVIDED BY UNITED NUCLEAR CORPORATION, GALLUP, NEW MEXICO. DATED MAY 1, 1985. SCALE: 1" = 400'.

No.	DATE	ISSUE / REVISION	DWN. BY	CK'D BY	AP'D BY
1	8/24/91	ISSUED FOR 1991 RECLAMATION PLAN	B.K.R.	DHG	

DATE: 5-31-91	FIGURE 6-9	DRAWING NUMBER 86-060-B627
SCALE: AS SHOWN		

1