

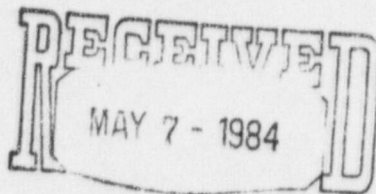
UNC MINING AND MILLING



Division of United Nuclear Corporation
A **UNC RESOURCES** Company

New Mexico Operations
P.O. Drawer QQ

Gallup, New Mexico 87301
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May 1, 1984

RADIATION PROTECTION BUREAU

Mr. Steven Asher, Director
N.M. Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87504

Re: Tailings Neutralization Semi-Monthly Report

Dear Mr. Asher:

In compliance with the reporting proposal of Mr. Nylander's letter of October 25, 1982, the following documents are forwarded for the semi-monthly period from 4-15-84 through 4-28-84:

1. Semi-weekly pH monitoring of neutralized tailings fluids and slurries
2. Laboratory analysis data of the pond fluid samples.

Respectfully submitted,

Marshall E. Fletcher
Resident Engineer

Enclosures

cc: G. A. Swanquist
E. M. Morales
J. R. Velasquez
G. K. Billings

pH MONITORING DATA

Location of pH Measurement Points	FIELD pH DATA									
	Date	pH	Date	pH	Date	pH	Date	pH	Date	pH
B.P. #2 Neut. Chamber Discharge to North Pond	4-22-84	-	4-23-84	-	4-24-84	8.65	4-25-84	-	4-26-84	-
Borrow Pit No. 1 SE Corner			"	3.30						
Borrow Pit No. 2 Barge Station **			"	6.83	"	8.65	"	8.86	"	8.10
North Pond Decant Station **			"	6.80			"	7.70	"	7.41
Pumping Well No. 323-A			"	*					"	*

REMARKS:

*Insufficient water for pumping

**The addition of lime and recirculation of the ponds is being used to maintain pH level.

UNC N.E. CHURCHROCK
ANALYSIS REPORT

PH 6.20 TSS. _____ Gross _____
TDS 13602 Cond. _____ Gross _____
TSS _____ Sal. _____

Lab. No. _____
Sample ID North Pond
Coll. Date 04-16-84
Coll. Time 10:39
Sampler 21

TOTAL ANALYSES

Aliquot _____
Filter dig. acids _____
Parameters

AA METALS

Filtered _____
HNO₃ to pH 2 _____
Aluminum _____
Antimony _____
Arsenic _____
Barium _____
Cadmium _____
Calcium 257

SELECTIVE ION

Nitrate-N 21.9
Ammonia-N 1800
Cyanide _____
Fluoride _____

GRAVIMETRIC or TITRIMETRIC

Chloride 371
Carbonate _____
Bicarbonate 24.4
Alkalinity _____
Sulfate 9250

REMARKS

Field Data _____
PH 6.83
Cond. 12,900
Temp. 11°C

Chromium _____
Cobalt _____
Copper _____
Iron 0.1
Lead 0.19
Magnesium 340
Manganese 5.46
Molybdenum <0.1

COLORIMETRIC

Boron _____
Uranium _____
Phenols _____

Mercury _____
Nickel _____
Potassium _____
Selenium _____
Silver _____
Sodium _____
Vanadium _____
Zinc _____

RADIOMETRIC pCi/L

Thorium-230 _____
Radium-226 _____
Lead-210 _____
Polonium-210 _____
Radium-228 _____

WORK SENT OUT

Aliquot _____
Where _____
For _____

All results are reported in _____

pH MONITORING DATA

Location of pH Measurement Points	FIELD pH DATA									
	Date	pH	Date	pH	Date	pH	Date	pH	Date	pH
B.P. #2 Neut. Chamber Discharge to North Pond	4-15-84	-	4-16-84	-	4-17-84	-	4-18-84	8.61	4-19-84	8.20
Dorow Pit No. 1 SE Corner			"	3.78			"	3.20	"	
Dorow Pit No. 2 Large Station **			"	6.66			"	8.61	"	
North Pond Decant Station **			"	6.83			"	7.24	"	
Pumping Well No. 323-A			"	*			"	*	"	

REMARKS:

*Insufficient water for pumping.

**The addition of lime and recirculation of the ponds is being used to maintain pH level.

UNC N.E. CHURCHROCK
ANALYSIS REPORT

pH 6.48 Gross _____ Lab. No. _____
 TDS 7746 Cond. _____ Gross _____ Sample ID Bonow Pit # 2
 TSS _____ Sal. _____ Coll. Date 14-16-84
 Coll. Time 10:26
 Sampler 71.71.

TOTAL ANALYSES

Aliquot _____
 Filter dig. acids _____
Parameters

AA METALS

Filtered _____
 HNO₃ to pH 2 _____
 Aluminum _____
 Antimony _____
 Arsenic _____
 Barium _____

SELECTIVE ION

Nitrate-N 13.9
 Ammonia-N 540
 Cyanide _____
 Fluoride _____

GRAVIMETRIC or TITRIMETR

Chloride 245
 Carbonate _____
 Bicarbonate 72
 Alkalinity _____
 Sulfate 5630

REMARKS

Field Data _____
 pH 6.27
 Cond. 6800
 Temp. 8°C

Cadmium _____
 Calcium 256
 Chromium _____
 Cobalt _____
 Copper _____
 Iron 0.18
 Lead 0.10
 Magnesium 232
 Manganese 2.67
 Molybdenum <0.1

COLORIMETRIC

Boron _____
 Uranium _____
 Phenols _____

Mercury _____
 Nickel _____
 Potassium _____
 Selenium _____
 Silver _____
 Sodium _____
 Vanadium _____
 Zinc _____

RADIOMETRIC pCi/L

Thorium-230 _____
 Radium-226 _____
 Lead-210 _____
 Polonium-210 _____
 Radium-228 _____

WORK SENT OUT

Aliquot _____
 Where _____
 For _____

All results are reported in _____