

UNC MINING AND MILLING



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

Church Rock Operations
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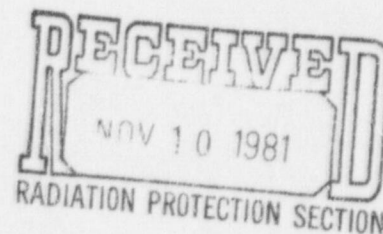
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EID Dir's Office

November 9, 1981

State of New Mexico
Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503



Attention: Mr. Thomas E. Baca
Director

Re: NECR Tailings Impoundment Weekly Report
for the Week November 1 to November 7, 1981

Gentlemen:

To ensure compliance with NMEID's letter dated July 28, 1981, the following documents are submitted herewith relating to the weekly monitoring of conditions at the UNC Northeast Church Rock operations for the week noted above:

Liquid Surface Elevations, Open Well Piezometer
Readings, Evaporation and Precipitation Data

Water Quality Analysis for the 200-Series Wells

Water Level Data In and Around the Tailings
Impoundment Area

Pumping Record for the Seepage Collections Wells

If you should have any questions, please do not hesitate to contact me.

Sincerely,

Satya Deb Misra

Satya Deb Misra
Senior Engineer

SDM/via

Enclosures



LIQUID SURFACE ELEVATIONS, OPEN WELL PIEZOMETER READINGS,
EVAPORATION AND PRECIPITATION DATA

LIQUID SURFACE ELEVATIONS

Liquid Surface Readings and Freeboard in Feet (Reference 6980.00)						
Dates	11/4/81					
South Pond	Mud					
Borrow Pit #1	6967.4					
Borrow Pit #2	6966.1					
Minimum Freeboard	12.6					

OPEN WELL PIEZOMETER READINGS

Piezometric Surface Elevations in Feet						
Dates	11/4/81					
Open Well No.						
SP-1A	16.47					
SP-2A	16.15					
SP-3A	19.73					
NP-1	12.65					
NP-2	12.60					
B-1	Covered with Tailings					
B-2	Covered with Tailings					
B-3	36.43					
B-4	35.36					
B-5	86.53					
B-6	93.70					
B-6A	63.55					
B-7	98.63					
201	47.14					
202	50.80					

EVAPORATION AND PRECIPITATION DATA

Observation Periods	From-11/2 To 11/9	From-To	From-To	From-To	From-To	From-To
Indicated Evaporation	0.327					
Precipitation	.112					
True Evaporation	.439					
Evaporation Per Day	.063					

WATER QUALITY ANALYSIS FOR THE 200-SERIES WELLS

Sample Identification / Sampling Date 11/3/81	Well 201	Well 202	Well 203
Aluminum (mg/l)			
Arsenic (mg/l)			
Barium (mg/l)			
Boron (mg/l)			
Cadium (mg/l)			
Chloride (mg/l)	21.6	301.2	47.4
Chromium (mg/l)			
Cobalt (mg/l)			
Conductivity (μ mhos/cm) 25°C	3100	13600	4210
Salinity (°/00)	1.4	9.8	2.0
Cyanide (mg/l)			
Fluoride (mg/l)			
Iron (mg/l)			
Lead (mg/l)			
Magnesium (mg/l)			
Manganese (mg/l)			
Molybdenum (mg/l)			
Nitrogen (Ammonia) (mg/l)			
Nitrogen (Nitrate) (mg/l)			
Nickel (mg/l)			
pH (mg/l) 25°C	5.20	2.38	3.22
Selenium (mg/l)			
Silver (mg/l)			
Sodium (mg/l)			
Sulfate (mg/l)	2605.6	18010.5	2604.5
Total Dissolved Solids (mg/l)	4016.5	25385.0	4886.5
Total Mercury (mg/l)			
Vanadium (mg/l)			
Zinc (mg/l)			

Sample Identification / Sampling Date	11/3/81	Well 204	Well 205	
Aluminum (mg/l)				
Arsenic (mg/l)				
Barium (mg/l)				
Boron (mg/l)				
Cadium (mg/l)				
Chloride (mg/l)		62.0	108.2	
Chromium (mg/l)				
Cobalt (mg/l)				
Conductivity (μ mhos/cm) 25°C		4200	7000	
Salinity (°/00)		2.1	4.3	
Cyanide (mg/l)				
Fluoride (mg/l)				
Iron (mg/l)				
Lead (mg/l)				
Magnesium (mg/l)				
Manganese (mg/l)				
Molybdenum (mg/l)				
Nitrogen (Ammonia) (mg/l)				
Nitrogen (Nitrate) (mg/l)				
Nickel (mg/l)				
pH (mg/l) 25°C		6.92	3.33	
Selenium (mg/l)				
Silver (mg/l)				
Sodium (mg/l)				
Sulfate (mg/l)		2412.0	8428.3	
Total Dissolved Solids (mg/l)		4896.3	12347.0	
Total Mercury (mg/l)				
Vanadium (mg/l)				
Zinc (mg/l)				

WATER LEVEL DATA IN AND AROUND THE TAILINGS IMPOUNDMENT AREA

WATER LEVELS FOR MONITORING WELLS

Well No.	Depth to Water Surface from the Top of Pipe					
	11-2-81	11-3-81	11-4-81	11-5-81		
337	30.38			30.41		
338	34.66			34.77		
339	98.75			98.69		
121			73.00			
17-DM	85.24			85.22		
301	85.18			85.00		
302	88.32			88.04		
B-5	86.85			86.73		
303	83.42			82.06		
304	165.03			165.73		
310	87.92			87.35		
B-6	92.10			93.37		
311	81.24			81.19		
312-A	87.74			87.62		
313	80.59			80.54		
B-7	98.80			98.94		
307	104.16			104.02		
306	114.07			114.02		
305						
315	142.72			142.64		
316	62.48			62.52		
317	64.50			64.44		
15-DM	64.36			64.30		
318	61.85			61.82		
B-6A	63.70			63.62		
124		61.10				
126		65.33				
127		98.80				
123	38.00			37.94		
7-D	36.68			36.61		
119	35.04			35.00		
111		44.65				
115		47.66				
116	54.96			54.85		
117	45.89			45.87		
148		142.50				

WATER LEVELS FOR MONITORING WELLS

Well No.	Depth to Water Surface from the Top of Pipe					
		11-2-81	11-3-81	11-4-81	11-5-81	
8-D		38.08			38.02	
9-D		46.84			46.76	
120				85.14		
GL-3		38.01			38.05	
106-D		34.49			34.28	
10-D		52.47			52.63	
100		28.18			28.24	
11-D		46.49			46.58	
12-D		49.27			49.18	
321		44.08			44.00	
320		54.22			54.33	
319		58.14			58.29	
108-D						
201		47.31			47.45	
202		50.91			50.87	
314		43.52			43.43	
322		41.60			41.57	
323		50.08			50.20	
13-D		56.35			56.30	
37-D		34.18			34.22	
36-D		32.17			32.20	
324		39.57			39.48	
325		40.01			40.08	
107-D						
326		38.96			38.87	
327						
14-D						
328						
329		45.71			45.68	
330		44.30			44.41	
331		46.75			46.81	
332		47.65			47.55	
333		50.75			50.58	
334		48.16			48.26	
335		37.61			37.51	
341		34.30			34.28	
336		33.29			33.15	

PUMPING RECORD FOR THE SEEPAGE COLLECTION WELLS

DAILY PUMPING RECORD
FOR SEEPAGE COLLECTION - FOR WEEK ENDING 11-7-81

1981 Date	Well No.	Hours Pumped	Avg. G.P.M.	Total Gallons	Remarks
11/1	304	24	2.85	4104	
	323A	24	3.39	4882	
	340	24	2.94	4234	
			Total Gallons Pumped for the Day =		
11/2	304	24	2.85	4104	
	323A	24	3.39	4882	
	340	24	2.94	4234	
			Total Gallons Pumped for the Day =		
11/3	304	23½	2.88	4061	
	323A	23½	3.48	4907	
	340	23½	2.94	4145	
			Total Gallons Pumped for the Day =		
11/4	304	24	2.71	3902	
	323A	24	3.53	5053	
	340	24	2.96	4262	
			Total Gallons Pumped for the Day =		
11/5	304	24	2.71	3902	
	323A	24	3.47	4997	
	340	24	3.08	4435	
			Total Gallons Pumped for the Day =		
11/6	304	24	2.86	4118	
	323A	24	3.49	5026	
	340	24	3.02	4349	
			Total Gallons Pumped for the Day =		
11/7	304	24	3.29	4738	
	323A	24	3.38	4867	
	340	24	2.91	4190	
			Total Gallons Pumped for the Day =		

Total Gallons pumped for the week..... 93,392

Cumulative Total Gallons since March 23, 1981..... 18,960,569