UNC MINING AND MILLING

Division of United Nuclear Corporation
A UNC RESOURCES Company

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February 24, 1981

Cubia L. Clayton
NM Environmental Improvement Division
P. O. Box 968
Santa Fe, NM 87503

Dear Mr. Clayton:

RE: NECR TAILINGS IMPOUNDMENT - WEEKLY REPORT
February 15, 1980 to February 21, 1981

To ensure compliance with NMEID letters dated October 23 and 31, 1979, the NRC Order dated October 26, 1979, and the State Engineer's letter dated February 29, 1980, the following documents are forwarded for the week of operations from February 15th through February 21st.

Sincerely,

Thomas M. Hill

Thomas M. Hill
Director, Tailings Management

TMH:jb

cc: Fred R. Allen, State Engineer
John D. Nelson

UNC MINING AND MILLING

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer QQ

Gallup, New Mexico 87301
Telephone 505/722-6651

February 23, 1981

State of New Mexico
Natural Resources Dept.
Water Resources Division
Bataan Memorial Building
Santa Fe, New Mexico 87501

Attention: Mr. S. E. Reynolds

Re: NECR Tailings Impoundment Weekly Report;
February 15, 1981 to February 21, 1981

Gentlemen:

The following documents are submitted herewith relating to the weekly monitoring of conditions at the UNC Northeast Church Rock operations for the week ending February 21, 1981.

Section 1. Liquid Surface Elevations

Section 2. Open Well Piezometer Readings

Section 3. Survey Measurements

Section 4. Hall Piezometer Readings

Section 5. Freeboard Readings

Section 6. Freeboard Summary Sheet for levels in the northern and southern cells and the borrow pit area

Section 7. Water Quality Analysis for monitoring wells 201, 202, 203, 204, and 205

Section 8. Operators Inspection Sheets for starter dam, north and south cross-dikes

Section 9. Evaporation and Precipitation Data

The monitoring survey (UNC monitor Run #8) which provides slope distances and vertical measurements to monitoring stations placed on the existing tailings dam and cross-dikes was conducted using the same five primary control monuments and known bench marks in the vicinity of the dam as in the past. Elevations were based on measurements from a precise automatic level and the distances from electronic distance meters which give an accuracy of plus or minus three-hundredths (±0.03) of a foot or better. The survey and other measurements and computation works were done in part by me and in total under my direct supervision, and I believe that the monitoring survey is sufficient to measure any movement of the dam.

If you should have any question regarding this weekly report, please don't hesitate to contact me.

Sincerely,

Satya Deb Misra

Satya Deb Misra, P.E.
Sr. Engineer, Tailings

SDM:bjm
Enclosures

SECTION 1

Liquid Surface Elevations

POND LIQUID SURFACE ELEVATIONS

DATE	NORTH POND	CENTRAL POND	SOUTH POND	WEST BORROW PIT #1	EAST BORROW PIT #2	OBSERVER
LAST READING PREVIOUS REPORT	Dry	*	6942.12	6964.40	6964.00	C.T.
2/16/81	Dry	*	6942.10	6964.60	6964.20	G.O.
2/17/81	Dry	*	6942.10	6964.65	6964.17	C.T.
2/18/81	Dry	*	6942.09	6964.91	6963.89	G.O.
2/19/81	Dry	*	6941.99	6964.95	6963.80	C.T.
2/20/81	Dry	*	6941.95	6963.75	6964.95	G.O.

NOTES *Indicator boards in sands. No standing liquid.

Solution level increase to elevation 6965.00 has been permitted in the east and west borrow pits.

SECTION 2

Piezometer Readings

OPEN WELL PIEZOMETER READINGS

PIEZOMETER NO. / ELEVATION	SP-1A	SP-2A	SP-3A	SP-4A	NP-1	NP-2	B-1	B-2	B-3	B-4	B-5	B-6	B-6A	B-7
TOP OF PIPE	6980.89	6981.71	6981.47	Dry	6969.37	6969.49	6976.02	6976.38	6979.93	6977.78	7010.51	7011.35	6998.00	7010.59
2/13/81 LAST REPORTED	6961.91	6962.66	6960.06	Dry	6954.28	6955.69	6946.93	6963.63	6944.31	6942.30	6919.89	6921.01	6935.02	6908.29
2/16/81	6961.91	6963.00	6960.04	Dry	6954.51	6955.89	6947.07	6964.03	6944.37	6942.67	6920.11	6921.05	6934.97	6908.20
2/17/81	6961.94	6963.0[illegible]	960.13	Dry	6954.63	6955.87	6947.03	6964.06	6944.34	6943.23	6919.84	6921.02	6934.98	6908.28
2/18/81	6961.96	6962.97	6 .0.07	Dry	6954.57	6955.89	6946.92	6964.00	6944.28	6942.59	6920.02	6921.05	6934.89	6908.25
2/19/81	6961.94	6962.87	6960.02	Dry	6954.43	6955.82	6946.89	6963.97	6944.14	6942.30	6919.88	6921.01	6934.65	6908.10
[illegible]20/81	6961.97	6963.16	6960.06	Dry	6954.66	6955.99	6947.08	6964.38	6944.33	6942.92	6920.22	6921.05	6934.14	6908.05

NOTES: Pumping of groundwater seepage extractions wells going on in the vicinity of open wells.

OPEN WELL PIEZOMETER READINGS

PIEZOMETER NO. / ELEVATION	201	202												
TOP OF PIPE	6987.34	6989.59												
LAST REPORTED	--	--												
2/16/81	6940.04	6938.87												
2/17/81	6940.07	6938.88												
2/18/81	6940.01	6938.68												
2/19/81	6939.90	6938.56												
2/20/81	6940.11	6938.84												

NOTES: Pumping of groundwater seepage extraction wells going on in the vicinity of open wells.

SECTION 3

Survey Measurements

SECTION A

Slope Distances

INSTRUMENT STATION A

RUN NO.	2(18)	#7	#8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/11/81	2/17/81				
TIME		2:50 pm	10:00 am				
H. M.	7029.46	7029.45	7029.45				
WEATHER		Cloudy, windy	Cloudy				
TEMP.		38°	40°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
"0"	4012.272	4012.164	4012.177				
S1	(2718.420)	2718.511	2718.503				
S2	(2623.197)	2623.143	2623.157				
S3	(2431.743)	2431.780	2431.772				
S4	(2244.637)	2244.597	2244.612				
S5	(2061.726)	--	--				
S6	(1867.090)	1866.891	1866.902				
S7	(1677.429)	1677.351	1677.360				
S8	1491.480	1491.422	1491.441				
S9	1308.081	1308.119	1308.132				
S10	1130.135	1130.061	1130.063				
S11	960.648	960.652	960.663				
S12	807.554	807.522	807.537				
S13	(736.948)	736.247	736.270				
S14	Destroyed	--	--				
"M"	2096.941	2096.841	2096.847				
Set 1	○ 495.974	496.032	496.027				
Set 2	○ 550.044	550.091	550.117				
S5A	◇ 2073.617	2073.577	2073.573				
S6A	◇ 1864.055	1864.007	1864.017				
S14A	◇ 615.605	615.623	615.651				
S15	◇ 471.874	471.901	471.921				

NOTE: Slope distances shown in parenthesis are from Run #18
○ indicates data from Run #40
◇ indicates data from Run #42

INSTRUMENT STATION M

RUN NO.	2(18)	7	#8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/12/81	2/17/81				
TIME		9:20 am	10:45 am				
H. M.	6995.40	6995.40	6995.40				
WEATHER		Clear	Cloudy				
TEMP.		30°F	48°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
"0"	2054.627	2054.590	2054.602				
S1	(1322.378)	1322.463	1322.471				
S2	(1283.611)	1283.533	1283.540				
S3	(1227.335)	1227.269	1227.277				
S4	(1202.218)	1202.130	1202.121				
S5	(1210.775)	Destroyed	Destroyed				
S6	(1226.372)	1226.022	1226.011				
S7	(1275.581)	1275.441	1275.437				
S8	1353.278	1353.281	1353.261				
S9	1453.494	1453.607	1453.603				
S10	1571.923	1571.711	1571.707				
S11	1706.932	1706.910	1706.893				
S12	1853.415	1853.572	1853.562				
S13	(1929.882)	1930.022	1930.023				
S14	Destroyed	--	--				
"A"	2096.810	2096.793	2096.782				
Set 1	●2089.822	2089.842	2089.843				
Set 2	●2081.023	2081.063	2081.067				
S5A	◊1209.319	1209.293	1209.287				
S6A	◊1226.954	1226.907	1226.911				
S14A	◊2007.298	2007.309	2007.313				
S15	◊2025.497	2025.472	2025.472				

NOTE: Slope distances shown in parenthesis are from Run #18
● indicates data from Run #40
◊ indicates data from Run #42

INSTRUMENT STATION 0

RUN NO.	2(18)	7	8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/11/81	2/16/81				
TIME		1:35 pm	1:55 pm				
H. M.	7012.52	7012.51	7012.51				
WEATHER		Clear	Cloudy				
TEMP.		35°F	53°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
"M"	•2054.677	2054.633	2054.642				
N1	1229.761	Destroyed	--				
N2	1061.802	Destroyed	--				
N3	914.250	Destroyed	--				
N4	788.729	788.770	788.773				
N5	700.835	700.732	700.741				
N6	661.875	661.771	661.782				
N7	683.191	683.089	683.101				
N8	757.347	757.189	757.201				
N9	758.289	758.161	758.172				
N10	761.800	761.742	761.753				
N11	817.498	817.433	817.449				
N12	861.120	861.069	861.069				
N13	918.335	918.283	918.291				
N14	977.672	977.612	977.619				
N15	1032.741	1032.681	1032.697				
N16	1068.282	1068.243	1068.251				
SD1	1286.044	Destroyed	--				
SD2	1256.808	Destroyed	--				
SD3	1249.167	Destroyed	--				
SD4	1283.270	Destroyed	--				
SD5	1351.283	Destroyed	--				
ND1	689.000	689.071	689.079				
ND2	598.257	598.361	598.361				

NOTE: • indicates data from Run #21

INSTRUMENT STATION 0 (cont.)

RUN NO.	2(18)	7	8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/11/81	2/16/81				
TIME		1:35 pm	1:55 pm				
H. M.	7012.52	7012.51	7012.51				
WEATHER		Clear	Cloudy				
TEMP.		35°F	53°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
ND3	428.277	See HV-8	--				
B1	(595.694)	595.701	595.697				
B2	(399.045)	398.982	398.991				
B3	(1084.119)	1084.113	1084.122				
B4	(1021.513)	1021.422	1021.427				
B5	(1653.002)	1652.963	1652.983				
B6	(1509.193)	1508.980	1508.983				
B7	(1376.785)	1376.761	1376.762				
"P"	1032.911	1033.011	1033.013				
SET-3	o 1107.086	1107.113	1107.117				
N1A	◇1283.838	1283.807	1283.820				
N2A	◇1131.088	1131.079	1131.089				
N3A	◇ 990.864	990.863	990.872				
N4A	◇ 899.889	899.882	899.891				
ND1A	◇ 700.015	700.052	700.062				
ND2A	◇ 611.892	611.912	611.922				
ND3A	◇ 467.119	467.123	467.120				
SD1A	◇1412.989	1412.912	1412.911				
SD2A	◇1374.134	1374.043	1374.052				
SD3A	◇1334.341	1334.242	1334.251				
SD4A	◇1363.918	1363.873	1363.892				
SD5A	◇1429.673	1429.631	1429.643				

NOTE: Slope distances shown in parenthesis are from Run #18
o indicates data from Run #40
◇ indicates data from Run #42

INSTRUMENT STATION P

RUN NO.	2(18)	7	8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/11/81	2/16/81				
TIME		10:10 am	10:20 am				
H. M.	7052.63	7052.62	7052.62				
WEATHER		Clear	Cloudy				
TEMP.		28°F	42°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
"A"	•4940.490	4940.363	4940.363				
N1	•2262.601	Destroyed	--				
N2	•2091.145	Destroyed	--				
N3	•1931.480	Destroyed	--				
N4	•1778.866	1778.923	1778.917				
N5	•1638.150	1638.071	1638.072				
N6	1509.554	1509.432	1509.427				
N7	1399.075	1398.953	1398.972				
N8	1308.721	1308.521	1308.527				
N9	1142.196	1142.092	1142.093				
N10	959.552	959.501	959.502				
N11	785.950	785.889	785.901				
N12	703.712	703.662	703.667				
N13	631.029	630.989	630.991				
N14	561.711	561.680	561.679				
N15	492.325	492.311	492.317				
N16	412.296	412.261	412.270				
SD1	•2317.484	Destroyed	--				
SD2	•2283.601	Destroyed	--				
SD3	•2254.810	Destroyed	--				
SD4	•2254.999	Destroyed	--				
SD5	•See HV-8	Destroyed	--				
ND1	•1698.671	1698.643	1698.663				
ND2	•1616.920	1616.702	1616.972				

NOTE: • indicates data from Run #21

INSTRUMENT STATION P (cont.)

RUN NO.	2(18)	7	8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/11/81	2/16/81				
TIME		10:10 am	10:20 am				
H. M.	7052.63	7052.62	7052.62				
WEATHER		Clear	Cloudy				
TEMP.		28°F	42°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
ND3	See HV-8	--	--				
B1	(1339.226)	1339.152	1339.157				
B2	(1265.791)	1265.547	1265.557				
B3	• 1096.893	1096.779	1096.801				
B4	• 889.331	889.301	889.313				
B5	• 1299.618	1299.583	1299.591				
B6	• 1019.000	1018.783	1018.797				
B7	• 736.843	736.842	736.847				
"O"	1033.229	1033.047	1033.049				
SET-3	○ 2129.907	2129.902	2129.903				
N1A	◊ 2313.778	2313.723	2313.727				
N2A	◊ 2153.270	2153.243	2153.261				
N3A	◊ 1995.854	1995.840	1995.833				
N4A	◊ 1870.321	1870.271	1870.273				
ND1A	◊ 1714.299	1714.309	1714.317				
ND2A	◊ 1634.704	1634.702	1634.701				
ND3A	◊ 1499.444	1499.413	1499.422				
SD1A	◊ 2441.485	2441.401	2441.417				
SD2A	◊ 2397.480	2397.372	2397.372				
SD3A	◊ 2340.719	2340.633	2340.623				
SD4A	◊ 2338.629	2338.563	2338.567				
SD5A	◊ 2362.090	2362.022	2362.023				

NOTE: Slope distances shown in parenthesis are from Run #18
• indicates data from Run #21
○ indicates data from Run #40
◊ indicates data from Run #42

INSTRUMENT STATION HV-8

RUN NO.	24(30)	7	8				
INSTRUMENT		HP-3805A	HP-3805A				
DATE		2/12/81	2/17/81				
TIME		10:00 am	11:30 am				
H. M.	7007.81	7007.81	7007.81				
WEATHER		Cloudy, windy	Cloudy				
TEMP.		32°F	54°F				
PRESSURE							
	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.	SLOPE DIST.
"0"	1626.289	1626.257	1626.260				
S1	1061.588	See "M"	See M				
S2	1123.016	See "M"	See M				
"A"	3616.584	3616.501	3616.502				
ND3	(1282.442)	1282.421	1282.411				
N3	(837.122)	Destroyed	--				
SD5	(1723.901)	Destroyed	--				

SECTION B

Relative Distance Change

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION A

RUN NO.	2(18)	7	8				
DATE		2/11/81	2/17/81				
MONITOR I. D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
"0"	4012.272	-0.108	-0.095				
S1	(2718.420)	+0.091	+0.083				
S2	(2623.197)	-0.054	-0.040				
S3	(2431.743)	+0.037	+0.029				
S4	(2244.637)	-0.040	-0.025				
S5	(2061.726)	Destroyed	--				
S6	(1867.090)	-0.199	-0.188				
S7	(1677.429)	-0.078	-0.069				
S8	1491.480	-0.060	-0.039				
S9	1308.081	+0.038	+0.051				
S10	1130.135	-0.074	-0.072				
S11	960.648	+0.004	+0.015				
S12	807.554	-0.032	-0.017				
S13	(736.948)	-0.701	-0.678				
S14	Destroyed	--	--				
"M"	2096.941	-0.100	-0.094				
SET-1	○ 495.974	+0.058	+0.053				
SET-2	○ 550.044	+0.047	+0.073				
S5A	◇ 2073.617	-0.040	-0.043				
S6A	◇ 1864.055	-0.048	-0.038				
S14A	◇ 615.605	+0.018	+0.046				
S15	◇ 471.874	+0.027	+0.047				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Base reference distances shown in parenthesis are from Run #18
○ indicates data from Run #40
◇ indicates data from Run #42

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION M

RUN NO.	2(18)	7	8				
DATE		2/12/81	2/17/81				
MONITOR I. D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
"0"	2054.627	-0.037	-0.025				
S1	(1322.378)	+0.085	+0.093				
S2	(1283.611)	-0.078	-0.071				
S3	(1227.335)	-0.066	-0.058				
S4	(1202.218)	-0.088	-0.097				
S5	(1210.775)	Destroyed	--				
S6	(1226.372)	-0.350	-0.361				
S7	(1275.581)	-0.140	-0.144				
S8	1353.278	+0.003	-0.017				
S9	1453.494	+0.113	+0.109				
S10	1571.923	-0.212	-0.216				
S11	1706.932	-0.022	-0.039				
S12	1853.415	+0.157	+0.147				
S13	(1929.882)	+0.140	+0.141				
S14	Destroyed	--	--				
"A"	2096.810	-0.017	-0.028				
SET-1	○ 2089.822	+0.020	+0.021				
SET-2	○ 2081.023	+0.040	+0.044				
S5A	◇ 1209.319	-0.026	-0.032				
S6A	◇ 1226.954	-0.047	-0.043				
S14A	◇ 2007.298	+0.011	+0.015				
S15	◇ 2025.497	-0.025	-0.025				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Base reference distances shown in parenthesis are from Run #18
○ indicates data from Run #40
◇ indicates data from Run #42

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION 0

RUN NO.	2(18)	7	8				
DATE		2/11/81	2/16/81				
MONITOR I. D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
"M"	•2054.677	-0.044	-0.035				
N1	1229.761	Destroyed	--				
N2	1061.802	Destroyed	--				
N3	See HV-8	Destroyed	--				
N4	788.729	+0.041	+0.044				
N5	700.835	-0.103	-0.094				
N6	661.875	-0.104	-0.093				
N7	683.191	-0.102	-0.090				
N8	757.347	-0.158	-0.146				
N9	758.289	-0.128	-0.117				
N10	761.800	-0.058	-0.047				
N11	817.498	-0.065	-0.049				
N12	861.120	-0.051	-0.051				
N13	918.335	-0.052	-0.044				
N14	977.672	-0.060	-0.052				
N15	1032.741	-0.060	-0.044				
N16	1068.282	-0.039	-0.031				
SD1	1286.044	Destroyed	--				
SD2	1256.808	Destroyed	--				
SD3	1249.167	Destroyed	--				
SD4	1283.270	Destroyed	--				
SD5	1351.283	Destroyed	--				
ND1	689.000	+0.071	+0.079				
ND2	598.257	+0.104	+0.104				
ND3	428.277	See HV-8	See HV-8				
B1	(595.694)	+0.007	+0.003				
B2	(399.045)	-0.063	-0.054				
B3	(1084.119)	-0.006	+0.003				
B4	(1021.513)	-0.091	-0.085				
B5	(1653.002)	-0.039	-0.019				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Base reference distances shown in parenthesis are from Run #18
• indicates data from Run #21

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION 0 (cont.)

RUN NO.	2(18)	7	8				
DATE		2/11/81	2/16/81				
MONITOR I.D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
B6	(1509.193)	-0.213	-0.210				
B7	(1376.785)	-0.024	-0.023				
"P"	1032.911	+0.100	+0.102				
SET-3	◊1107.086	+0.027	+0.031				
N1A	◊1283.838	-0.031	-0.018				
N2A	◊1131.088	-0.009	+0.001				
N3A	◊ 990.864	-0.001	+0.008				
N4A	◊ 899.889	-0.007	+0.002				
ND1A	◊ 700.015	+0.037	+0.047				
ND2A	◊ 611.892	+0.020	+0.030				
ND3A	◊ 467.119	+0.004	+0.001				
SD1A	◊1412.989	-0.077	-0.078				
SD2A	◊1374.134	-0.091	-0.082				
SD3A	◊1334.341	-0.099	-0.090				
SD4A	◊1363.918	-0.045	-0.026				
SD5A	◊1429.673	-0.042	-0.030				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Base reference distances shown in parenthesis are from Run #18
◊ indicates data from Run #40
◊ indicates data from Run #42

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION P

RUN NO.	2(18)	7	8				
DATE		2/11/81	2/16/81				
MONITOR I. D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
"A"	•4940.490	-0.127	-0.127				
N1	•2262.601	Destroyed	--				
N2	•2091.145	Destroyed	--				
N3	•1931.480	Destroyed	--				
N4	•1778.866	+0.057	+0.051				
N5	•1638.150	-0.079	-0.078				
N6	1509.554	-0.122	-0.127				
N7	1399.075	-0.122	-0.103				
N8	1308.721	-0.200	-0.194				
N9	1142.196	-0.104	-0.103				
N10	959.552	-0.051	-0.050				
N11	785.950	-0.061	-0.049				
N12	703.712	-0.050	-0.045				
N13	631.029	-0.040	-0.038				
N14	561.711	-0.031	-0.032				
N15	492.325	-0.014	-0.008				
N16	412.296	-0.035	-0.026				
SD1	•2317.484	Destroyed	--				
SD2	•2283.601	Destroyed	--				
SD3	•2254.810	Destroyed	--				
SD4	•2254.999	Destroyed	--				
SD5	See HV-8	Destroyed	--				
ND1	•1698.671	-0.028	-0.008				
ND2	•1616.920	-0.027	+0.052				
ND3	See HV-8	--	--				
B1	(1339.226)	-0.074	-0.069				
B2	(1265.791)	-0.244	-0.234				
B3	•1096.89	-0.114	-0.092				
B4	• 889.331	-0.030	-0.018				
B5	•1299.618	-0.035	-0.027				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Base reference distance shown in parenthesis are from Run #18
• indicates data from Run #21

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION P (cont.)

RUN NO.	2(18)	7	8				
DATE		2/11/81	2/16/81				
MONITOR I. D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
B6	•1019.000	-0.217	-0.203				
B7	736.843	-0.001	+0.004				
"0"	•1033.229	-0.182	-0.180				
SET-3	◦2129.907	-0.005	-0.004				
N1A	◊2313.778	-0.055	-0.051				
N2A	◊2153.270	-0.027	-0.009				
N3A	◊1995.854	-0.014	-0.021				
N4A	◊1870.321	-0.050	-0.048				
ND1A	◊1714.299	+0.010	+0.018				
ND2A	◊1634.704	-0.002	-0.003				
ND3A	◊1499.444	-0.031	-0.022				
SD1A	◊2441.485	-0.084	-0.068				
SD2A	◊2397.480	-0.108	-0.108				
SD3A	◊2340.719	-0.086	-0.096				
SD4A	◊2338.629	-0.066	-0.062				
SD5A	◊2362.090	-0.068	-0.067				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: •indicates data from Run #21
◦indicates data from Run #40
◊[illegible] from Run #42

MONITOR STATION RELATIVE CHANGE
INSTRUMENT STATION HV-8

RUN NO.	24(30)	7	8				
DATE		2/12/81	2/17/81				
MONITOR I.D. NO.	BASE REF. DISTANCE	RELATIVE CHANGE (FEET)					
"O"	1626.289	-0.032	-0.029				
S1	1061.588	See "M"	See M				
S2	1123.016	See "M"	See M				
"A"	3616.584	-0.083	-0.082				
ND3	(1282.442)	-0.02[illegible]	-0.031				
N3	(837.122)	Destroyed	--				
SD5	(1723.901)	Destroyed	--				

Plus indicates distance away from instrument location; minus indicates distance toward instrument location.

NOTE: Slope distances shown in parenthesis are from Run #30

SECTION C

Elevations

MONITOR STATION ELEVATIONS

RUN NO.	2(18)	7	8				
DATE		2/10/81					
MONITOR I. D. NO.	BASE REF. ELEVATION	ELEVATION					
N-1	6968.973	Destroyed	**				
N-2	*68.690	Destroyed'					
N-3	68.837	Destroyed					
N-4	67.964	67.472					
N-5	69.373	69.325					
N-6	69.380	69.310					
N-7	69.900	69.810					
N-8	69.000	68.865					
N-9	70.433	70.287					
N-1	69.060	68.925					
N-11	68.070	67.972					
N-12	67.637	67.512					
N-13	68.117	67.995					
N-14	68.580	68.432					
N-15	68.103	68.032					
N-16	68.927	68.907					
ND1	68.201	67.500					
ND2	68.401	67.755					
ND3	72.911	72.858					
SD1	68.563	--					
SD2	o9.926	--					
SD3	69.116	--					
SD4	67.823	--					
SD5	68.710	--					
S1	(67.152)	66.893					
S2	(66.708)	66.619					
S3	(67.062)	67.024					
S4	(66.985)	66.924					
S5	(65.555)	--					
S6	(65.332)	65.195					

NOTE: Elevations shown in parenthesis are from Run #18
*Base reference from Run #11 due to station having been hit
**Leveling could not be performed as the level was lost through theft. Replacement level is due shortly and leveling will resume next week.

MONITOR STATION ELEVATIONS

RUN NO.	2(18)	7	8				
DATE		2/10/81					
MONITOR I. D. NO.	BASE REF. ELEVATION	ELEVATION					
S7	(6965.078)	6964.949	**				
S8	64.955	64.814					
S9	64.561	64.249					
S10	63.668	63.549					
S11	64.048	63.899					
S12	64.348	64.074					
S13	(63.645)	63.136					
S14	(65.768)	--					
B1	(74.661)	74.245					
B2	(74.005)	73.581					
B3	(76.392)	76.077					
B4	(74.018)	73.948					
B5	(7010.658)	7010.655					
B6	(7010.378)	7010.180					
B7	(7009.641)	7009.643					
SET-1	○6965.609	6965.491					
SET-2	○ 65.692	65.610					
SET-3	○ 82.595	82.358					
N1A	◇ 81.843	81.634					
N2A	◇ 82.226	82.018					
N3A	◇ 82.233	82.023					
N4A	◇ 74.926	74.788					
ND1A	◇ 81.887	81.765					
ND2A	◇ 81.658	81.551					
ND3A	◇ 83.063	83.053					
SD1A	◇ 81.354	82.212					
SD2A	◇ 82.311	82.212					
SD3A	◇ 82.413	82.202					
SD4A	◇ 82.442	82.389					
SD5A	◇ 82.244	82.220					

NOTE: Elevations shown in parenthesis are from Run #18
○ indicates data from Run #40
◇ indicates data from Run #42

**Leveling could not be performed as the level was lost through theft. Replacement level is due shortly and leveling will resume next week.

MONITOR STATION ELEVATIONS

RUN NO.	42	7	8				
DATE		2/10/81					
MONITOR I. D. NO.	BASE REF. ELEVATION	ELEVATION					
S5A	6967.681	6967.652	**				
S6A	67.094	67.072					
S14A	66.718	66.610					
S15	66.308	66.259					

**Leveling could not be performed as the level was lost through theft. Replacement level is due shortly and leveling will resume next week.

POND WATER SURFACE ELEVATIONS
AND INDICATOR BOARD READINGS

RUN NO.	3	7	8				
DATE		2/11/80	2/17/81				
MONITOR I. D. NO.							
N. POND WATER ELEV.	6954.60	**	**				
S. BD. (O)		**	**				
S. BD. (N)		**	**				
CTR. POND WATER ELEV.	6953.10	*	*				
N.E. BD.		Destroyed	Destroyed				
S. POND WATER ELEV.	6951.80	6942.16	N				
N.E. BD.		6942.15	6942.10				
S.E. BD.		**	**				
CENTER BD.		6942.15	6942.10				
W. BORROW WATER ELEV.	(6)6942.12	6964.26	N				
S. BD.		Destroyed	--				
S.E. BD.		Destroyed	--				
PUMP BD.		*	*				
WEIR BD.		6964.21	6964.65				
E. BORROW WATER ELEV.	6933.22	6963.93	N				
N.W. BD. (N)		6963.87	6963.89				
N.W. BD. (O)		Illegible	--				
S.W. BD. (N)		6963.87	6963.89				
S.W. BD. (O)		Illegible	--				

**Dry *Sands N - liquid elevations could not be measured as the leveling instrument was lost through theft. Leveling will be resumed next week.

SECTION D

Relative Elevation Change

MONITOR STATION ELEVATIONS
RELATIVE CHANGE

RUN NO.	2(18)	7	8				
DATE		2/10/81					
MONITOR I.D. NO.	BASE REF. ELEVATION	RELATIVE CHANGE (FEET)					
N1	6968.973	Destroyed	**				
N2	*68.690	Destroyed					
N3	68.837	Destroyed					
N4	67.964	-0.492					
N5	69.373	-0.048					
N6	69.380	-0.070					
N7	69.900	-0.090					
N8	69.000	-0.135					
N9	70.433	-0.146					
N10	69.060	-0.135					
N11	68.070	-0.098					
N12	67.637	-0.125					
N13	68.117	-0.122					
N14	68.580	-0.148					
N15	68.103	-0.071					
N16	68.927	-0.020					
ND1	68.201	-0.701					
ND2	68.401	-0.646					
ND3	72.911	-0.053					
SD1	68.563	Destroyed					
SD2	69.926	Destroyed					
SD3	69.116	Destroyed					
SD4	67.823	Destroyed					
SD5	68.710	Destroyed					
S1	(67.152)	-0.259					
S2	(66.708)	-0.089					
S3	(67.062)	-0.038					
S4	(66.985)	-0.061					
S5	(65.555)	--					
S6	(65.332)	-0.137					

Elevations shown in parenthesis are from Run #18
*Base reference from Run #1 due to station having been hit.
**Leveling could not be performed as the level was lost through theft.
Replacement level is due shortly and leveling will resume next week.

MONITOR STATION ELEVATIONS
RELATIVE CHANGE

RUN NO.	2(18)	7	8				
DATE		2/10/81					
MONITOR I.D. NO.	BASE REF. ELEVATION	RELATIVE CHANGE (FEET)					
S7	(6965.078)	-0.129	**				
S8	64.955	-0.141					
S9	64.561	-0.312					
S10	63.668	-0.119					
S11	64.048	-0.149					
S12	64.348	-0.274					
S13	(63.645)	-0.509					
S14	Destroyed	--					
B1	(74.661)	-0.416					
B2	(74.005)	-0.424					
B3	(76.392)	-0.315					
B4	(74.018)	-0.070					
B5	(7010.678)	-0.003					
B6	(7010.378)	-0.198					
B7	(7009.641)	+0.002					
SET-1	o 6965.609	-0.118					
SET-2	o 65.692	-0.082					
SET-3	o 82.595	-0.237					
N1A	◇ 81.843	-0.209					
N2A	◇ 82.226	-0.208					
N3A	◇ 32.233	-0.210					
N4A	◇ 74.926	-0.138					
ND1A	◇ 81.887	-0.122					
ND2A	◇ 81.658	-0.107					
ND3A	◇ 83.063	-0.010					
SD1A	◇ 81.354	-0.142					
SD2A	◇ 82.311	-0.099					
SD3A	◇ 82.413	-0.211					
SD4A	◇ 82.442	-0.053					
SD5A	◇ 82.244	-0.024					

NOTE: Elevations shown in parenthesis are from Run #18
o indicates data from Run #40
◇ indicates data from Run #42

**Leveling could not be performed as the level was lost through theft. Replacement level is due shortly and leveling will resume next week.

MONITOR STATION ELEVATIONS
RELATIVE CHANGE

RUN NO.	42	7	8				
DATE		2/10/8.					
MONITOR I.D. NO.	BASE REF. ELEVATION	RELATIVE CHANGE (FEET)					
55A	6967.681	-0.029	**				
56A	67.094	-0.022					
S14A	66.718	-0.108					
S15	66.308	-0.049					

**Leveling could not be performed as the level was lost through theft. Replacement level is due shortly and leveling will resume next week.

POND WATER SURFACE ELEVATIONS
AND INDICATOR BOARD READINGS
Relative Change

RUN NO.	3	7	8				
DATE		2/11/81	2/17/81				
MONITOR I. D. NO.							
N. POND WATER ELEV.	6954.60	See Sec C	--				
S. BD. (O)							
S. BD. (N)							
CTR. POND WATER ELEV.	6953.10	See Sec C	--				
N.E. BD.							
S. POND WATER ELEV.	6951.80	- 9.64	N				
N.E. BD.			- 9.70				
S.E. BD.							
CENTER BD.			- 9.70				
W. BORROW WATER ELEV.	(6)6942.12	+22.14	N				
S. BD.							
S.E. BD.							
PUMP BD.							
WEIR BD.			+22.53				
E. BORROW WATER ELEV.	6933.22	+30.71	N				
N.W. BD. (N)			+30.67				
N.W. BD. (O)							
S.W. BD. (N)			+30.67				
S.W. BD. (O)							

N - elevations could not be measured as the level was lost through theft.

SECTION E

Coordinates

CONTROL DATA

CONTROL STATION	NORTH	EAST	STATION ELEVATION	BOOK	PAGE	METER ELEVATION	PLATE ELEVATION
HV-8	74879.0857	58109.5529	7002.700				
HV-9	74597.8898	60728.0014	7052.595				
UN-1	75142.4300	60625.4400	6968.539				
"J"	73784.8820	57211.5465	6958.80				
"K"	72951.0275	56465.3355	6941.78				
"L"	72192.9313	55641.5765	6915.41				
"A"	71448.7365	56964.1401	7028.68	#3	9	7029.45	7028.640
"M"	72588.2574	58724.0426	6990.772	#3	11	6995.40	
"N"	73479.8944	59697.6297	6996.271	#3	14	7000.85	
"O"	74413.3084	59667.7009	7011.74	#3	12	7012.51	7011.700
"P"	74743.1061	60645.8649	7051.85	#3	22	7052.02	7051.81
"Q"	73600.32	60139.11	6970.27	SP1	16		
"R"	72281.8246	60034.7495	7108.481				7108.448
BM-1			6958.870	#3	5		
BM-2			6970.328	#5	7		Destroyed
BM-2A	71783.63	56959.75	6968.245	#11	22		
BM-3C	72898.20	58843.38	6967.477	#7	3		
BM-3D	72883.46	58851.31	6976.567	E-20	11		
BM-4	74485.48	59492.75	6973.068	#3	30		
BM-4A	74279.99	59565.31	6973.018	#12	17		
BM-5			6970.842	#3	29		
BM-5A	74988.66	60526.61	6970.012	#11	23		
BM-6			6963.03	SP3	17		
BM-6A	74190.48	60605.39	6965.10	SP2	24		
BM-7A	74265.42	60587.36	6973.705	E-19	32		
BM-8	74505.20	60862.85	7009.638	#12	8		
BM-9	73051.66	61093.48	7013.428	#12	12		
BM-10	73421.73	60327.26	6980.218	#12	14		
BM-GW1	71452.96	55880.38	6914.31	A-1	11		

CONTROL DATA

RUN NO.	1	1	1 (18)				
DATE	8-16-79	8-16-79	8-17-79	SGL./TRPL.			
MONITOR I.D. NO.	NORTH	EAST	ELEVATION	HEIGHT OF REFLECTOR	DEPTH OF STA CONC./ BAR		
N1	74050.6170	58493.4593	6966.967	0.21'/0.36'	4'/8'		
N2	74195.6817	58629.2949	69.260	0.21'/0.36'	4.5'/8'		
N3	74349.6125	58756.7309	68.830	0.21'/0.36'	4'/8'		
N4	74502.7248	58885.3336	67.960	0.21'/0.36'	4'/8'		
N5	74657.0965	59012.0635	69.360	0.21'/0.36'	4'/8'		
N6	74810.6509	59140.1116	69.370	0.19'/0.34'	6'/10'		
N7	74964.9859	59266.9679	69.887	0.18'/0.33'	6'/10'		
N8	75118.4863	59394.9203	68.990	0.21'/0.36'	4'/8'		
N9	75166.2337	59588.1225	70.427	0.21'/0.36'	5'/8'		
N10	75164.3351	59787.7497	69.047	0.19'/0.34'	7'/10'		
N11	75164.2676	59987.6674	68.057	0.18'/0.33'	6'/10'		
N12	75163.5567	60087.9796	67.630	0.21'/0.36'	5'/8'		
N13	75168.8476	60187.8037	68.103	0.21'/0.36'	5.5'/8'		
N14	75167.7843	60287.9114	68.580	0.18'/0.33'	8'/10'		
N15	75153.1887	60386.8324	68.090	0.18'/0.33'	8'/12'		
N16	75109.6713	60476.6512	68.910	0.17'/0.32'	7.5'/12'		
ND1	74421.1261	58980.1738	68.217	0.21'/0.36'	4.5'/3'		
ND2	74382.8670	59071.8514	68.413	0.21'/0.36'	5'/8'		
ND3	74304.2753	59255.4255	72.886	0.21'/0.36'	5'/8'		
SD1	73914.2072	58483.2785	68.580	0.21'/0.36'	4'/8'		
SD2	73840.6627	58549.7613	69.960	0.21'/0.36'	5'/8'		
SD3	73672.1307	58663.1109	69.160	0.21'/0.36'	4'/8'		
SD4	73502.6784	58764.5408	67.913	0.21'/0.36'	4'/8'		
SD5	73328.8795	58862.6641	68.723	0.21'/0.36'	4'/8'		
S1	73830.8218	58272.4978	(67.152)				
S2	73760.6123	58202.1304	(66.708)				
S3	73619.2823	58058.8317	(67.062)				
S4	73479.7116	57917.9329	(66.985)				
S5	73342.3236	57777.2044	(66.555)				
S6	73183.2930	57652.1104	(65.332)				

NOTE: ELEVATIONS SHOWN IN PARENTHESES ARE FROM BENCH [illegible]

CONTROL DATA

RUN NO.	1	1	1 (18)				
DATE	8-16-79	8-16-79	8-17-79	SGL./TRPL.			
MONITOR I.D. NO.	NORTH	EAST	ELEVATION	HEIGHT OF REFLECTOR	DEPTH OF STA CONC./ BAR		
S7	73027.6515	57526.9059	(6965.078)				
S8	72873.2051	57401.4738	64.980	0.21'/0.36'	4'/8'		
S9	72717.2815	57276.6467	64.610	0.21'/0.36'	4'/8'		
S10	72561.0944	57152.7013	63.690	0.21'/0.36'	4'/8'		
S11	72405.0916	57027.2799	64.090	0.21'/0.36'	4'/8'		
S12	72251.2639	56901.8319	64.417	0.18'/0.33'	6'/10'		
S13	72172.1599	56839.8032	(63.645)				
S14	72078.4995	56800.1353	(65.768)				
B1	73818.9014	59679.7637	(74.661)				
B2	74020.3316	59609.6531	(74.005)				
B3	73666.0868	60452.3507	(76.392)				
B4	73865.0085	60528.7523	(74.018)				
B5	73509.1235	61051.4926	(7010.658)				
B6	73808.8896	61050.5782	(7010.378)				
B7	74103.4697	61009.1626	(7009.641)				
N1A	74130.7314	58415.7092	6981.843				
N2A	74272.4539	58545.8182	6982.226				
N3A	74421.5577	58677.3166	6982.233				
N4A	74580.4681	58784.2454	6974.926				
ND1A	74395.9766	58968.3535	6981.887				
ND2A	74355.7475	59059.2764	6981.658				
ND3A	74292.1203	59217.5179	6983.063				
SD1A	73802.3176	58394.0199	6981.354				
SD2A	73747.4861	58466.0397	6982.311				
SD3A	73629.7511	58588.0801	6982.413				
SD4A	73462.4874	58690.2976	6982.442				
SD5A	73287.7005	58786.7442	6982.244				
S5A	73351.4241	57786.3203	6967.681				
S6A	73180.9301	57650.0623	6967.094				
S14A	72037.1145	56794.0738	6966.718				
S15	71[illegible]1072	56821.3768	6966.308				

SECTION F

Settlement Plate Readings

VERTICAL SETTLEMENT READINGS

SET - 1

INCREMENT No.	2/4/81	2/13/81	2/19/81						
1	7.10	7.10	7.13						
2	18.00	18.00	18.00						
3	27.66	27.66	27.66						
4	37.01	37.01	37.01						
BOTTOM	40.31	40.31	40.31						

ORIGINAL DATE OF READING

SET - 2

INCREMENT No.	2/4/81	2/13/81	2/19/81						
1	7.12	7.12	7.13						
2	18.28	18.28	18.28						
3	27.64	27.64	27.64						
4	37.31	37.31	37.31						
BOTTOM	40.32	40.32	40.32						

SET - 3

INCREMENT No.	2/4/81	2/13/81	2/19/81						
1	6.14	6.14	6.14						
2	17.52	17.52	17.52						

SECTION 4

Hall Piezometer Readings

HALL PIEZOMETER READINGS TAILINGS DAM EMBANKMENT

PIEZOMETER NO.	HP-2211	HP-1905	HP-2236	HP-2235	HP-1841									
SERIAL NO.	2211	1905	2236	2235	1841									
GUAGE READ	15	21	14	14	22									
INDICATED PRESS. (PSI)	.9	1.3	.8	.8	1.3									
ΔP PSI	.9	1.1	.6	.9	1.2									
ACTUAL PRESS. (PSI)	0	.2	.2	0	.1									
PRESS. CELL ELEV. (FT.)	6930.3	6928.7	6931.0	6928.7	6951.6									
PIEZOMETRIC PRESS. (FT.)	0	.5	.5	0	.2									
PIEZOMETRIC ELEV. (FT.)	6930.3	6929.2	6931.5	6928.7	6951.8									

NOTES: INDICATED PRESSURE = GUAGE READING X 0.06
PIEZOMETRIC PRESSURE = ACTUAL PRESSURE X 2.307

REMARKS: Flow - 12
Temp - 48°F
Date - 2/19/81

SECTION 5

Free Board Readings

FREE BOARD READINGS

(REFERENCE 698000)

WEEK ENDING	DATE OF MINIMUM	MINIMUM FREE BOARD (FT.) (BORROW PITS)
OCTOBER 3, 1980	9/30/80	17.24
OCTOBER 10, 1980	10/09/80	17.11
OCTOBER 17, 1980	10/16/80	16.55
OCTOBER 24, 1980	10/23/80	17.09
OCTOBER 31, 1980	10/30/80	17.00
NOVEMBER, 7, 1980	11/05/80	17.03
NOVEMBER 14, 1980	11/11/80	17.01
NOVEMBER 21, 1980	11/19/80	16.54
NOVEMBER 28, 1980	11/26/80	16.63
DECEMBER 5, 1980	12/03/80	17.11
DECEMBER 12, 1980	12/10/80	16.95
DECEMBER 19, 1980	12/17/80	16.20
DECEMBER 26, 1980	12/14/80	16.43
JANUARY 2, 1981	12/29/80	16.72
JANUARY 9, 1981	01/05/81	16.76
JANUARY 16, 1981	01/12/81	16.49
JANUARY 23, 1981	01/24/81	16.76
JANUARY 30, 1981	01/29/81	16.42
FEBRUARY 6, 1981	02/03/81	16.10
FEBRUARY 13, 1981	02/13/81	15.60
FEBRUARY 20, 1981	02/19/81	15.05

SECTION 6

Free Board Summaries : UNC

Daily Summary

Freeboard Gauge Record

1981	South		Pit I	North	Pit II		Operator
FEB.	1	2	5	6	8	9	
8-1	42.2	42.2	63.7	<50.0	63.9	63.9	Ledezna
-2	42.2	42.2	63.7	<50.0	63.9	63.9	Wally
-3	42.2	42 2	63.9	<50.0	63.9	63.9	Conway
9-1	42.2	42.2	63.9	<50.0	63.9	63.9	Ledezna
-2	42.2	42.2	63.8	<50.0	63.9	63.9	Wally
-3	42.2	42.2	64.1	<50.0	63.9	63.9	Conway
10-1	42.2	42.2	64.2	<50.0	63.9	63.9	Romish
-2	42.2	42.2	64.0	<50.0	63.9	63.9	Wally
-3	42.2	42.2	64.3	<50.0	63.9	63.9	Conaway
11-1	42.2	42.2	64.2	<50.0	63.9	63.9	Romish
-2	42.1	42.1	64.5	<50.0	63.9	63.9	Wally
-3	42.1	42.1	64.3	<50.0	63.9	63.9	Conaway
12-1	42.1	42.1	64.0	<50.0	63.9	63.9	Romish
-2	42.1	42.1	63.9	<50.0	64.0	64.0	Wally
-3	42.1	42.1	64.2	<50.0	64.0	64.0	Ledezma
13-1	42.1	42.1	64.3	<50.0	64.0	64.0	Romish
-2	42.1	42.1	64.3	<50.0	64.0	64.0	Wally
-3	42.1	42.1	64.5	<50.0	64.0	64.0	Ledezma
14-1	42.1	42.1	64.5	<50.0	64.1	64.1	Romish
-2	42.1	42.1	64.3	<50.0	64.2	64.2	Conaway
-3	42.1	42.1	64.5	<50.0	64.3	64.3	Ledezma

NOTE: To all readings add 6900 feet for true elevation

1, 2, and 3 indicate operating shifts midnight to 8 am, 8 am to 4 pm, and 4 pm to midnight, respectively.

Freeboard Gauge Record (cont.)

1981	South		Pit I	North	Pit II		Operator
FEB	1	2	5	6	8	9	
15-1	42.1	42.1	64.5	<50.0	64.3	64.3	Mayo
-2	42.1	42.1	64.5	<50.0	64.2	64.2	Conaway
-3	42.1	42.1	64.6	<50.0	64.2	64.2	Ledezma
16-1	42.1	42.1	64.6	<50.0	64.2	64.2	Romish
-2	42.1	42.1	64.6	<50.0	64.2	64.2	Conaway
-3	42.1	42.1	64.6	<50.0	64.2	64.2	Ledezma
17-1	42.1	42.1	64.6	<50.0	64.2	64.2	Wally
-2	42.1	42.1	64.6	<50.0	64.1	64.1	Conaway
-3	42.1	42.1	64.8	<50.0	64.1	64.1	Ledezma
18-1	42.1	42.1	64.9	<50.0	64.0	64.0	Wally
-2	42.1	42.1	64.9	<50.0	63.9	63.9	Conaway
-3	42.1	42.1	64.9	<50.0	63.9	63.9	Ledezma
19-1	42.1	42.1	64.9	<50.0	63.8	63.8	Wally
-2	42.1	42.1	65.0	<50.0	63.8	63.8	Conaway
-3	42.1	42.1	65.0	<50.0	63.8	63.8	Romish
20-1	42.1	42.1	65.0	<50.0	63.8	63.8	Wally
-2	42.1	42.1	65.0	<50.0	63.7	63.7	Conway
-3	42.1	42.1	64.9	<50.0	63.8	63.8	Romish
21-1	42.1	42.1	64.7	<50.0	63.8	63.8	Wally
-2	42.1	42.1	64.4	<50.0	64.0	64.0	Ledezma
-3	42.1	42.1	64.6	<50.0	64.0	64.0	Romish

SECTION 7

Water Quality Analysis: UNC

ANALYSIS REPORT

Sample Identification / Sampling Date 2-17-81	Well 201	Well 202	Well 203
Aluminum (mg/1)			
Arsenic (mg/1)			
Barium (mg/1)			
Boron (mg/1)			
Cadium (mg/1)			
Chloride (mg/1)	28.9	112.5	42.1
Chromium (mg/1)			
Cobalt (mg/1)			
Conductivity (umhos/cm) 25°C	2,640	6,300	3,700
Salinity (parts per thousand)	2.3	3.7	2.0
Cyanide (mg/1)			
Fluoride (mg/1)			
Iron (mg/1)			
Lead (mg/1)			
Magnesium(mg/1)			
Manganese(mg/1)			
Molybdenum (mg/1)			
Nitrogen (Ammonia) (mg/1)			
Nitrogen (Nitrate) (mg/1)			
Nickel (mg/1)			
pH 25°C	6.52	2.93	6.34
Selenium (mg/1)			
Silver (mg/1)			
Sodium (mg/1)			
Sulfate (mg/1)	2,434.5	7,318.4	2,712.7
Total Dissolved Solids (mg/1)	3,711.3	12,205.0	5,048.8
Total Mercury (mg/1)			
Vanadium (mg/1)			
Zinc (mg/1)			

Sample Identification / Sampling Date 2-17-81	Well 204 *	Well 205	
Aluminum (mg/1)			
Arsenic (mg/1)			
Barium (mg/1)			
Boron (mg/1)			
Cadium (mg/1)			
Chloride (mg/1)		84.9	
Chromium (mg/1)			
Cobalt (mg/1)			
Conductivity (µmhos/cm) 25°C		3,960	
Salinity (parts per thousand)		2.1	
Cyanide (mg/1)			
Fluoride (mg/1)			
Iron (mg/1)			
Lead (mg/1)			
Magnesium (mg/1)			
Manganese (mg/1)			
Molybdenum (mg/1)			
Nitrogen (Ammonia) (mg/1)			
Nitrogen (Nitrate) (mg/1)			
Nickel (mg/1)			
pH 25°C		5.62	
Selenium (mg/1)			
Silver (mg/1)			
Sodium (mg/1)			
Sulfate (mg/1)		2,777.4	
Total Dissolved Solids (mg/1)		5,295.0	
Total Mercury (mg/1)			
Vanadium (mg/1)			
Zinc (mg/1)			

*For some time it has been difficult to sample this well as the bailer could not be lowered enough to get a sample. It was assumed by the person taking the samples that there was not a sufficient quantity of water for sampling, until very recently when it was discovered that there is some constriction in the well which prevents the bailer to be lowered enough for sampling. Commencing next week a smaller diameter bailer will be used for this well and sampling will be resumed.

SECTION 8

Operator Inspection Sheets: UNC

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer 00

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 15 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: [signature]

Time: From 0900 A.M./P.M. TO 1100 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer 00

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 16 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: G. A. Swanquist

Time: From 0730 A.M./P.M. TO 0830 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer QQ

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 17 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: G. A. Swanquist

Time: From 0700 A.M./P.M. TO 0800 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark:

General Comments:

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
PO Drawer 00

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 18 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: [signature]

Time: From 0700 A.M./P.M. TO 0800 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer 00

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 19 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: [signature]

Time: From 0730 A.M./P.M. TO 0830 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

UNC MINING AND MILLING

UNC

Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer QQ

Gallup, New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: 20 FEB 81

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: S. Yazzie

Time: From 0730 A.M./P.M. TO 0930 A.M./P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

UNC MINING AND MILLING

UNC
Division of United Nuclear Corporation
A UNC RESOURCES Company

Church Rock Operations
P.O. Drawer 00

Gallup New Mexico 87301
Telephone 505/722-6651

Memorandum

DATE: Feb. 21, 1981

CC: Don Silva (SAI)
Mill File 2.02.10

TO: Tom Bailey, Tom Hill

FROM: G. A. Swanquist

SUBJECT: Daily Inspection - Starter Dam, North & South Cross Dikes

Inspection Conducted by: Mike E. Mayo

Time: From 8:00 (A.M.)/P.M. TO 8:30 (A.M.)/P.M.

Check as applicable

	1. Seepage		2. Cracks		3. Settlement	
	Yes	No	Yes	No	Yes	No
1. Starter Dam		✓		✓		✓
2. North Cross Dike		✓		✓		✓
3. South Cross Dike		✓		✓		✓

Description and qualifying statement to each "Yes" mark: _____

General Comments: _____

SECTION 9

Evaporation & Precipitation Data

DATE	READING BEGINNING	READING ADDED	READING ENDING	INDICATED EVAPORATION	PRECIP-ITATION	TRUE EVAPOR	NUMBER OF DAYS	EVAPOR. PER DAY
Feb. 16,'81	1.589	2.168						
Feb. 23,'81			2.763	.994	none	.994	7	.142
TOTALS	1.589	2.168	2.763	.994	none	.994	7	.142

All readings in INCHES

Method of calculation: Indicated Evaporation: 1 + 2 - 3 = 4

True Evaporation: 4 + 5 = 6

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