UNITED NUCLEAR CORPORATION

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CERTIFIED - RETURN RECEIPT REQUESTED

August 25, 2003

Mr. Daniel M. Gillen
U.S. Nuclear Regulatory Commission
Fuel Cycle Safety & Safeguards
Fuel Cycle Licensing Branch
Uranium Recovery Branch
Division of Waste Management
and Safeguards
Mail Stop T-8A33
Washington, DC 20555-0001

Dear Mr Gillen:

In compliance with our Nuclear Regulatory Commission Radioactive Material License No. SUA-1475, Condition 30, the enclosed Semi-Annual Ground Water Monitoring Report for the entire period of January 01, 2003 through June 30, 2003 is being submitted.

Sincerely,

Larry Bush
Manager

LB:drb

Enclosure

Cc: Division of Radiation Safety, Region VI
Mark Purcell, USEPA
Shana Tritsch, US Filter
Roy Blickwedel, GE
Robin Brown, NMED
Diana Malone, NNEPA

NM5501

QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2003

FIELD DATA SHEET OF

FIRST AND SECOND QUARTER

CONTROLS

SW ALLUVIUM

ZONE 1

ZONE 3

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

January MONTH First QUARTER, 2003

SOUTHWEST ALLIVIUM

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
509-D	01/06/03	70.08	6949.5	6879.42	5,600	6.33	11.1
624	01/07/03	48.96	6898.7	6849.74	5,360	6.57	10.8
627	01/07/03	55.43	6892.4	6836.97	5,380	7.01	13.0
632	01/06/03	41.51	6903.6	6862.09	6,640	6.27	13.4
801	01/06/03	48.25	6904.3	6856.05	6,400	6.33	13.4
802	01/06/03	44.50	6907.1	6862.60	7,280	6.42	12.4
803	01/06/03	58.10	6922.6	6864.50	6,510	6.47	11.4
808	01/06/03	45.78	6910.7	6864.92	6,730	6.50	11.1
GW-1	01/06/03	58.85	6916.5	6857.65	5,810	6.57	11.6
GW-2	01/06/03	53.00	6912.9	6859.90	5,560	6.33	10.7
GW-3	01/07/03	50.22	6910.0	6859.78	5,510	6.62	13.3
EPA-23	01/06/03	49.04	6926.5	6877.46	4,360	6.58	11.1
EPA-25	01/07/03	51.32	6903.4	6852.08	4,210	6.89	12.9
EPA-28	01/07/03	60.47	6917.9	6857.43	4,960	6.80	10.3
(QA/QC) 624DUP.	1/07/03	48.94	6898.7	6849.76	5,320	6.54	11.1
(QA/QC)							
805	01/15/03	49.85	6915.6	6865.75			
807	01/15/03	53.70	6923.4	6869.70			

COMMENTS: _____

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

Janaury MONTH First QUARTER, 2003

ZONE 1

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
515-A	01/08/03	99.52	7008.8	6909.28	7,100	5.30	12.8
604	01/08/03	98.37	7006.0	6907.63	6,480	4.75	13.1
614	01/08/03	99.85	7012.0	6912.15	7,220	6.55	12.9
TWQ-142	01/13/03	201.74	6983.4	6781.66	1,573	7.86	13.2
EPA-2	01/14/03	170.36	7019.5	6849.14	2,930	6.73	9.8
EPA-4	01/14/03	202.42	7069.8	6867.38	4,340	6.49	14.0
EPA-5	01/14/03	121.15	7011.5	6890.35	4,870	5.85	14.1
EPA-7	01/14/03	110.57	7011.7	6901.13	7,010	5.90	13.0
(QA/QC)EPA-2DUP.	1/14/03	170.82	7019.5	6848.68	2,930	6.71	11.8
(QA/QC)F.BLANK	1/08/03				17	6.18	9.7
TWQ-143	01/15/03	208.15	6989.6	6781.45			
EPA-8	01/14/03	213.94	7076.4	6862.46			
505-A	01/15/03	114.00	6963.1	6849.10			
502-A	01/15/03	193.48	7025.3	6831.82			
501-A	01/15/03	210.28	7048.0	6837.72			
504-A	01/15/03	202.17	7001.4	6799.23			
412	01/15/03	184.50	6979.4	6794.90			

COMMENTS:

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

January MONTH First QUARTER, 2003

ZONE 3

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
504-B	01/13/03	160.40	7001.8	6841.40	5,180	5.54	10.8
517	01/ 7/03	100.85	6971.75	6870.90	4,260	4.07	13.0
EPA-14	01/07/03	106.95	6965.8	6858.85	4,350	6.27	12.5
420	01/13/03	135.35	6982.6	6847.25	3,460	6.53	12.4
711	01/13/03	179.50	7042.75	6863.25	4,660	4.43	13.1
613	01/07/03	78.20	6961.3	6883.10	10,300	2.81	12.9
708	01/13/03	148.37	7012.0	6863.63	4,880	3.78	14.0
(QA/QC)711 DUP.	1/13/03	180.07			4,620	4.70	13.5
(QA/QC)F.BLANK	1/15/03				17	8.01	8.7
NBL-1	01/15/03	169.40	6988.9	6819.50	3,300	6.43	12.7
EPA-9	1/14/03	169.87	7076.6	6906.73			
EPA-13	1/13/03	165.51	7032.9	6867.39	5,390	5.94	13.2
702	1/15/03	80.80	6974.2	6893.40			
710	1/15/03	157.75	7016.5	6858.75			
712	1/15/03	169.30	7022.2	6852.90			
713	1/15/03	163.90	7024.5	6860.60			
714	1/15/03	95.87	6962.9	6867.03			
701	1/15/03	82.90	6961.3	6878.40			
706	1/15/03	110.80	6972.5	6861.70			
707	1/15/03	148.15	7005.2	6857.05			
717	1/13/03	118.30	6972.3	6854.00	3,580	6.53	13.2
719	1/13/03	156.70	7002.0	6845.30	4,810	3.27	12.6
402	1/15/03	112.77	6968.2	6855.43			
446	1/15/03	156.45	6998.3	6841.85			
424	1/15/03	121.35	6973.1	6851.75			

COMMENTS: _____

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

APRIL MONTH SECOND QUARTER, 2003

SOUTHWEST ALLIVIUM

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
509-D	4/07/03	70.35	6949.5	6879.15	5,920	6.33	11.6
624	4/08/03	48.85	6898.7	6849.85	5,650	6.49	11.8
627	4/08/03	55.70	6892.4	6836.70	5,680	6.98	13.6
632	4/07/03	41.38	6903.6	6862.22	7,190	6.29	12.7
801	4/07/03	48.05	6904.3	6856.25	6,860	6.37	11.7
802	4/07/03	44.30	6907.1	6862.80	7,620	6.43	13.4
803	4/07/03	57.95	6922.6	6864.65	6,950	6.37	11.6
808	4/07/03	45.65	6910.7	6865.05	7,020	6.43	12.6
GW-1	4/07/03	58.65	6916.5	6857.85	6,260	6.57	13.1
GW-2	4/07/03	52.90	6912.9	6860.00	6,040	6.35	10.5
GW-3	4/08/03	50.20	6910.0	6859.80	5,850	6.60	12.8
EPA-23	4/07/03	49.05	6926.5	6877.45	4,500	6.65	12.5
EPA-25	4/08/03	51.42	6903.4	6851.98	4,470	6.89	12.3
EPA-28	4/08/03	60.37	6917.9	6857.53	5,300	6.68	13.2
(QA/QC)GW-1 DUP.	4/07/03	58.69	6916.5	6857.81	6,390	6.60	11.1
(QA/QC)							
805	4/17/03	49.70	6915.6	6865.90			
807	4/17/03	53.59	6923.4	6869.81			

COMMENTS:

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

APRIL MONTH SECOND QUARTER, 20 03

ZONE 1

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
515-A	4/9/03	99.87	7008.8	6908.93	7,410	5.31	13.3
604	4/14/03	98.40	7006.0	6907.60	6,650	4.73	12.8
614	4/9/03	100.15	7012.0	6911.85	7,630	6.44	12.9
TWQ-142	4/14/03	201.42	6983.4	6781.98	1,355	7.98	15.5
EPA-2	4/15/03	169.95	7019.5	6849.55	3,010	6.76	9.3
EPA-4	4/14/03	202.36	7069.8	6867.44	3,530	6.67	13.8
EPA-5	4/14/03	121.20	7011.5	6890.30	3,880	6.00	13.7
EPA-7	4/14/03	110.80	7011.7	6900.90	5,350	6.19	13.2
(QA/QC) EPA-2 DUP.	4/15/03	170.40	7019.5	6849.07	3,250	6.84	9.7
(QA/QC) F.BLANK	4/09/03				28	7.51	14.3
TWQ-143	4/17/03	207.90	6989.6	6781.70			
EPA-8	4/14/03	213.97	7076.4	6862.43			
505-A	4/17/03	113.92	6963.1	6849.18			
502-A	4/17/03	193.20	7025.3	6832.10			
501-A	4/17/03	210.00	7048.0	6838.00			
504-A	4/17/03	201.77	7001.4	6799.63			
412	4/17/03	184.12	6979.4	6795.28			

COMMENTS: _____

GROUND WATER FIELD MONITORING
WATER ELEVATIONS, PH, CONDUCTIVITY, AND TEMPERATURE

APRIL MONTH SECOND QUARTER, 2003

ZONE 3

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (µs/cm)	FIELD pH (units)	FIELD TEMP. (°c)
504-B	4/14/03	160.12	7001.8	6841.60	4,210	5.14	13.7
517	4/08/03	100.94	6971.75	6870.81	4,470	4.12	14.5
EPA-14	4/08/03	107.24	6965.8	6858.56	4,630	5.90	13.3
420	4/15/03	135.23	6982.6	6847.37	3,630	6.44	10.2
711	4/15/03	179.14	7042.75	6863.61	4,860	4.43	10.8
613	4/08/03	78.35	6961.3	6882.95	10,800	2.87	13.6
708	4/15/03	148.10	7012.0	6863.90	5,280	3.31	10.6
(QA/QC) 711 DUP.	4/15/03	179.67	7042.75	6863.08	4,760	4.69	11.0
(QA/QC) F.BLANK	4/15/03				18	5.82	9.0
NBL-1	4/14/03	169.54	6988.9	6819.36	2,650	6.87	13.6
EPA-9	4/14/03	169.80	7076.6	6906.80			
EPA-13	4/15/03	165.30	7032.9	6867.60	5,540	5.87	11.8
702	4/17/03	80.70	6974.2	6893.50			
710	4/17/03	157.62	7016.5	6858.88			
712	4/17/03	169.25	7022.2	6852.95			
713	4/17/03	163.67	7024.5	6860.83			
714	4/17/03	96.50	6962.9	6866.40			
701	4/17/03	83.20	6961.3	6878.10			
706	4/17/03	110.80	6972.5	6861.70			
707	4/17/03	148.17	7005.2	6857.03			
717	4/08/03	118.57	6972.3	6853.73	3,870	6.44	14.7
719	4/15/03	156.42	7002.0	6845.58	5,020	3.26	11.3
402	4/17/03	112.90	6968.2	6855.30			
446	4/17/03	156.75	6998.3	6841.55			
424	4/17/03	121.30	6973.1	6851.80			

COMMENTS: _____

QUARTERLY WATER LEVELS
1ST QUARTER 2003

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	1-6-03	0915	70.08'	6949.5	6879.42
632	1-6-03	1435	41.51'	6903.6	6862.09
GW-1	1-6-03	1400	58.85'	6916.5	6857.65
GW-2	1-6-03	1330	53.00'	6912.9	6859.90
EPA-23	1-6-03	0950	49.04'	6926.5	6877.46
EPA-28	1-7-03	0945	60.47'	6917.9	6857.43
624	1-7-03	0850	48.96'	6898.7	6849.74
627	1-7-03	1310	55.43'	6892.4	6836.97
805	1-15-03	1515	49.85'	6915.6	6865.75
807	1-15-03	1510	53.70'	6923.4	6869.70
EPA-25	1-7-03	1115	51.32'	6903.4	6852.08
GW-3	1-7-03	1030	50.22'	6910.0	6859.78
801	1-6-03	1300	48.25'	6904.3	6856.05
802	1-6-03	1115	44.50'	6907.1	6862.60
803	1-6-03	1020	58.10'	6922.6	6864.50
808	1-6-03	1050	45.78'	6910.7	6864.92

QUARTERLY WATER LEVELS
1ST QUARTER 2003

ZONE - 1

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
515-A	1-8-03	0925	99.52'	7008.8	6909.28
604	1-8-03	1000	98.37'	7006.0	6907.63
614	1-8-03	0840	99.85'	7012.0	6912.15
EPA-2	1-14-03	0850	170.36'	7019.5	6849.14
EPA-4	1-14-03	1130	202.42'	7069.8	6867.38
EPA-5	1-14-03	1045	121.15'	7011.5	6890.35
EPA-7	1-14-03	1015	110.57'	7011.7	6901.13
EPA-8	1-14-03	1205	213.94'	7076.4	6862.46
TWQ-142	1-13-03	1426	201.74'	6983.4	6781.66
TWQ-143	1-15-03	1320	208.15'	6989.6	6781.45
505-A	1-15-03	1445	114.00'	6963.1	6849.10
502-A	1-15-03	1410	193.48'	7025.3	6831.82
501-A	1-15-03	1415	210.28'	7048.0	6837.72
504-A	1-15-03	1340	202.17'	7001.4	6799.23
412	1-15-03	1325	184.50'	6979.4	6794.90

QUARTERLY WATER LEVELS
1ST QUARTER 2003

ZONE - 3

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
420	1-13-03	1010	135.35'	6982.6	6847.25
711	1-13-03	1115	179.50'	7042.75	6863.25
504-B	1-13-03	0900	160.40'	7001.8	6841.40
EPA-9	1-14-03	1200	169.87'	7076.6	6906.73
EPA-13	1-13-03	1310	165.51'	7032.9	6867.39
EPA-14	1-7-03	1505	106.95'	6965.8	6858.85
702	1-15-03	1500	80.80'	6974.2	6893.40
710	1-15-03	1405	157.75'	7016.5	6858.75
712	1-15-03	1355	169.30'	7022.2	6852.90
713	1-15-03	1345	163.90'	7024.5	6860.60
714	1-15-03	1440	95.87'	6962.9	6867.03
613	1-7-03	1355	78.20'	6961.3	6883.10
701	1-15-03	1450	82.90'	6961.3	6878.40
706	1-15-03	1420	110.80'	6972.5	6861.70
707	1-15-03	1400	148.15'	7005.2	6857.05
717	1-13-03	1040	118.30'	6972.3	6854.00
719	1-13-03	0940	156.70'	7002.0	6845.30
402	1-15-03	1435	112.77'	6968.2	6855.43
424	1-15-03	1430	121.35'	6973.1	6851.75
446	1-15-03	1335	156.45'	6998.3	6841.85
517	1-7-03	1435	100.85'	6971.75	6870.90
708	1-13-03	1345	148.37'	7012.0	6863.63
NBL-1	1-15-03	1000	169.40'	6988.9	6819.50

QUARTERLY WATER LEVELS
2ND QUARTER 2003

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	4-7-03	0900	70.35'	6949.5	6879.15
632	4-7-03	1135	41.38'	6903.6	6862.22
GW-1	4-7-03	1420	58.65'	6916.5	6857.85
GW-2	4-7-03	1345	52.90'	6912.9	6860.00
EPA-23	4-7-03	0940	49.05'	6926.5	6877.45
EPA-28	4-8-03	0920	60.37'	6917.9	6857.53
624	4-8-03	0850	48.85'	6898.7	6849.85
627	4-8-03	1140	55.70'	6892.4	6836.70
805	4-17-03	1004	49.70'	6915.6	6865.90
807	4-17-03	0958	53.59'	6923.4	6869.81
EPA-25	4-8-03	1055	51.42'	6903.4	6851.98
GW-3	4-8-03	1010	50.20'	6910.0	6859.80
801	4-7-03	1315	48.05'	6904.3	6856.25
802	4-7-03	1105	44.30'	6907.1	6862.80
803	4-7-03	1010	57.95'	6922.6	6864.65
808	4-7-03	1040	45.65'	6910.7	6865.05

QUARTERLY WATER LEVELS
2ND QUARTER 2003

ZONE - 1

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
515-A	4-9-03	0945	99.87'	7008.8	6908.93
604	4-14-03	0900	98.40'	7006.0	6907.60
614	4-9-03	0900	100.15'	7012.0	6911.85
EPA-2	4-15-03	0950	169.95'	7019.5	6849.55
EPA-4	4-14-03	1125	202.36'	7069.8	6867.44
EPA-5	4-14-03	1040	121.20'	7011.5	6890.30
EPA-7	4-14-03	1000	110.80'	7011.7	6900.90
EPA-8	4-14-03	1158	213.97'	7076.4	6862.43
TWQ-142	4-14-03	1330	201.42'	6983.4	6781.98
TWQ-143	4-17-03	1349	207.90'	6989.6	6781.70
505-A	4-17-03	1056	113.92'	6963.1	6849.18
502-A	4-17-03	1124	193.20'	7025.3	6832.10
501-A	4-17-03	1118	210.00'	7048.0	6838.00
504-A	4-17-03	1152	201.77'	7001.4	6799.63
412	4-17-03	1325	184.12'	6979.4	6795.28

QUARTERLY WATER LEVELS
2ND QUARTER 2003

ZONE - 3

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
420	4-15-03	0915	135.23'	6982.6	6847.37
711	4-15-03	1240	179.14'	7042.75	6863.61
504-B	4-14-03	1500	160.20'	7001.8	6841.60
EPA-9	4-14-03	1151	169.80'	7076.6	6906.80
EPA-13	4-15-03	1330	165.30'	7032.9	6867.60
EPA-14	4-8-03	1425	107.24'	6965.8	6858.56
702	4-17-03	1044	80.70'	6974.2	6893.50
710	4-17-03	1131	157.62'	7016.5	6858.88
712	4-17-03	1140	169.25'	7022.2	6852.95
713	4-17-03	1144	163.67'	7024.5	6860.83
714	4-17-03	1106	96.50'	6962.9	6866.40
613	4-8-03	1320	78.35'	6961.3	6882.95
701	4-17-03	1052	83.20'	6961.3	6878.10
706	4-17-03	1110	110.80'	6972.5	6861.70
707	4-17-03	1135	148.17'	7005.2	6857.03
717	4-8-03	1455	118.57'	6972.3	6853.73
719	4-15-03	0845	156.42'	7002.0	6845.58
402	4-17-03	1314	112.90'	6968.2	6855.30
424	4-17-03	1316	121.30'	6973.1	6851.80
446	4-17-03	1333	156.75'	6998.3	6841.55
517	4-8-03	1355	100.94'	6971.75	6870.81
708	4-15-03	1410	148.10'	7012.0	6863.90
NBL-1	4-14-03	1430	169.54'	6988.9	6819.36

QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2003

SOUTH WEST ALLUVIUM

*509-D

624

627

*632

801

802

803

808

*GW-1

*GW-2

*GW-3

*EPA-23

EPA-25

*EPA-28

LEVELS ONLY

805

807

*POINT OF COMPLIANCE WELLS

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	509-D	509-D	509-D	509-D
LABORATORY ID:	C02070393-001	C02100477-001	C03010389-001	C03040535-001
SAMPLE DATE/TIME:	07/08/2002 09:30	10/07/2002 09:15	01/06/2003 09:15	04/07/2003 9:00
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	925	856	840	887
Magnesium	EPA 200.7	mg/L	0.01	381	333	309	344
Sodium	EPA 200.7	mg/L	0.05	306	254	240	275
Potassium	EPA 200.7	mg/L	0.10	13.4	11.9	12.4	18.6
Bicarbonate	SM 2320-B	mg/L	0.10	2160	2100	2150	2160
Sulfate	EPA 200.7	mg/L	1.0	1900	1750	1640	1700
Chloride	EPA 200.7	mg/L	1.0	308	300	291	330
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	4.08	1.17	1.10	2.10
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	25.0	26.4	23.7	23.3
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5470	4290	5260	5320
pH	SM 4500-H-B	std. units	0.10	7.83	7.82	6.84	6.77
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.34	2.47	2.90	2.45
Molybdenum	EPA 200.8	mg/L	0.10	< 0.30	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.229	0.159	0.190	0.190
Radium 226	EPA 903.0	pCi/L	0.2	0.3	< 0.2	< 0.2	< 0.2
Radium Error Estimate ±				0.2	-	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	1.5	< 1.0
G. Alpha Error Estimate ±				-	-	1.0	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion		meq		85.5	81.2	79.3	81.8
Cation		meq		92.1	82.1	78.7	85.7
SM A/C Balance		%	-5 - +5	3.72	0.55	-0.36	2.36
Calc TDS		mg/L		5032	4676	4517	4743
TDS A/C Balance		dec. %	0.80 - 1.20	1.09	0.92	1.16	1.12

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	624	624	624	624
LABORATORY ID:	C02070393-010	C02100477-012	C03010389-010	C03040535-011
SAMPLE DATE/TIME:	07/09/2002 09:20	10/08/2002 11:30	01/07/2003 08:50	04/08/2003 8:50
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	713	659	733	685
Magnesium	EPA 200.7	mg/L	0.01	463	425	480	422
Sodium	EPA 200.7	mg/L	0.05	223	208	242	230
Potassium	EPA 200.7	mg/L	0.10	7.3	6.2	7.4	8.3
Bicarbonate	SM 2320-B	mg/L	0.10	1500	1490	1490	1450
Sulfate	EPA 200.7	mg/L	1.0	2150	1810	2250	1900
Chloride	EPA 200.7	mg/L	1.0	200	173	175	184
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.05	0.08	0.19	0.11
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	92.4	97.1	92.0	102
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5300	5150	5210	5250
pH	SM 4500-H-B	std. units	0.10	7.42	7.25	7.21	6.85
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.03	0.03	0.04	0.04
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0360	0.0262	0.0348	0.0336
Radium 226	EPA 903.0	pCi/L	0.2	0.3	< 0.2	< 0.2	0.5
Radium Error Estimate ±				0.2	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		81.6	73.9	82.8	75.8
Cation	meq		84.1	77.6	87.4	79.6
SM A/C Balance	%	-5 - +5	1.51	2.40	2.69	2.46
Calc TDS	mg/L		4916	4456	5040	4606
TDS A/C Balance	dec. %	0.80 - 1.20	1.08	1.16	1.03	1.14

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	627	627	627	627
LABORATORY ID:	C02070393-015	C02100477-006	C03010389-015	C03040535-015
SAMPLE DATE/TIME:	07/09/2002 14:10	10/07/2002 15:05	01/07/2003 13:10	04/08/2003 11:40
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	587	543	586	555
Magnesium	EPA 200.7	mg/L	0.01	306	280	315	277
Sodium	EPA 200.7	mg/L	0.05	495	455	556	496
Potassium	EPA 200.7	mg/L	0.10	5.5	4.7	4.6	7.9
Bicarbonate	SM 2320-B	mg/L	0.10	608	611	614	603
Sulfate	EPA 200.7	mg/L	1.0	2590	2160	2710	2280
Chloride	EPA 200.7	mg/L	1.0	76.0	50.1	71.9	58.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.06	0.17	0.11
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	133	139	128	147
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5350	4170	5190	5220
pH	SM 4500-H-B	std. units	0.10	7.90	7.65	7.78	7.50
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.11	0.09	0.10	0.08
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0228	0.0198	0.0291	0.0278
Radium 226	EPA 903.0	pCi/L	0.2	0.3	< 0.2	< 0.2	< 0.2
Radium Error Estimate ±				0.2	-	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		75.6	66.4	77.7	69.5
Cation	meq		76.5	70.4	79.9	72.6
SM A/C Balance	%	-5 - +5	0.63	2.95	1.38	2.18
Calc TDS	mg/L		4953	4414	5118	4627
TDS A/C Balance	dec. %	0.80 - 1.20	1.08	0.94	1.01	1.13

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	632	632	632	632
LABORATORY ID:	C02070393-009	C02100477-015	C03010389-009	C03040535-006
SAMPLE DATE/TIME:	07/08/2002 15:15	10/08/2002 14:20	01/06/2003 14:35	04/07/2003 11:35
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	645	578	637	607
Magnesium	EPA 200.7	mg/L	0.01	761	685	798	744
Sodium	EPA 200.7	mg/L	0.05	292	356	424	388
Potassium	EPA 200.7	mg/L	0.10	11.4	8.70	9.70	12.6
Bicarbonate	SM 2320-B	mg/L	0.10	1710	1700	1660	1670
Sulfate	EPA 200.7	mg/L	1.0	3490	3150	3620	3070
Chloride	EPA 200.7	mg/L	1.0	229	221	232	242
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.36	0.30	0.44	0.40
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	43.3	45.7	45.2	48.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7200	7100	7170	7210
pH	SM 4500-H-B	std. units	0.10	7.75	7.29	7.52	7.15
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.96	1.07	1.04	1.22
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0708	0.0521	0.0636	0.0646
Radium 226	EPA 903.0	pCi/L	0.2	1.0	2.1	1.0	0.8
Radium Error Estimate ±				0.2	0.2	0.3	0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	1.8	< 1.0
G. Alpha Error Estimate ±				-	-	1.0	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	2.4	2.6	2.2	2.4

Quality Assurance Data		Target Range				
Anion	meq		110	103	112	102
Cation	meq		109	102	117	110
SM A/C Balance	%	-5 - +5	-0.71	-0.60	2.06	3.81
Calc TDS	mg/L		6477	6053	6753	6113
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	1.17	1.06	1.18

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	801	801	801	801
LABORATORY ID:	C02070393-006	C02100477-009	C03010389-006	C03040535-007
SAMPLE DATE/TIME:	07/08/2002 13:35	10/08/2002 09:55	01/06/2003 13:00	04/07/2003 13:15
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	552	515	561	542
Magnesium	EPA 200.7	mg/L	0.01	778	699	785	731
Sodium	EPA 200.7	mg/L	0.05	257	328	380	358
Potassium	EPA 200.7	mg/L	0.10	13.8	12.7	14.1	17.4
Bicarbonate	SM 2320-B	mg/L	0.10	1570	1560	1520	1520
Sulfate	EPA 200.7	mg/L	1.0	3570	3260	3600	3170
Chloride	EPA 200.7	mg/L	1.0	194	206	193	226
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	6.30	6.40	6.00	5.60
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	2.04	1.99	1.50	2.80
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7050	6960	6860	6910
pH	SM 4500-H-B	std. units	0.10	7.69	7.58	7.41	7.31
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.85	5.66	5.61	5.08
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0488	0.0343	0.0404	0.0416
Radium 226	EPA 903.0	pCi/L	0.2	0.3	< 0.2	< 0.2	0.6
Radium Error Estimate ±				0.2	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	1.4	< 1.0
G. Alpha Error Estimate ±				-	-	1.0	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	3.0	3.2	3.1	3.1

Quality Assurance Data		Target Range				
Anion	meq		106	99	105	98
Cation	meq		105	99	111	105
SM A/C Balance	%	-5 - +5	-0.47	-0.04	2.60	3.55
Calc TDS	mg/L		6173	5823	6313	5829
TDS A/C Balance	dec. %	0.80 - 1.20	1.14	1.20	1.09	1.19

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	802	802	802	802
LABORATORY ID:	C02070393-005	C02100477-002	C03010389-005	C03040535-005
SAMPLE DATE/TIME:	07/08/2002 13:00	10/07/2002 10:30	01/06/2003 11:15	04/07/2003 11:05
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	830	774	843	759
Magnesium	EPA 200.7	mg/L	0.01	720	710	873	810
Sodium	EPA 200.7	mg/L	0.05	265	317	393	335
Potassium	EPA 200.7	mg/L	0.10	7.7	6.2	12.5	9.20
Bicarbonate	SM 2320-B	mg/L	0.10	2190	2140	2310	2300
Sulfate	EPA 200.7	mg/L	1.0	3150	3060	3620	3050
Chloride	EPA 200.7	mg/L	1.0	227	187	228	210
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.20	0.08	0.16	0.14
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	99.1	95.2	88.0	103
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7470	5680	7840	7890
pH	SM 4500-H-B	std. units	0.10	7.84	7.99	7.52	7.34
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.55	0.65	0.64	0.63
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.248	0.205	0.218	0.240
Radium 226	EPA 903.0	pCi/L	0.2	0.5	< 0.2	< 0.2	0.4
Radium Error Estimate ±				0.3	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	2.6	3.5	4.1	5.0

Quality Assurance Data		Target Range				
Anion	meq		115	111	126	115
Cation	meq		113	112	132	120
SM A/C Balance	%	-5 - +5	-0.76	0.43	2.46	2.46
Calc TDS	mg/L		6735	6547	7515	6780
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	0.87	1.04	1.16

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	803	803	803	803
LABORATORY ID:	C02070393-003	C02100477-008	C03010389-003	C03040535-003
SAMPLE DATE/TIME:	07/08/2002 10:55	10/08/2002 09:20	01/06/2003 10:20	04/07/2003 10:10
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	711	678	630	693
Magnesium	EPA 200.7	mg/L	0.01	725	690	668	732
Sodium	EPA 200.7	mg/L	0.05	214	244	261	269
Potassium	EPA 200.7	mg/L	0.10	10.9	11.3	13.3	15.3
Bicarbonate	SM 2320-B	mg/L	0.10	1890	1880	1870	1860
Sulfate	EPA 200.7	mg/L	1.0	3150	3060	2920	2940
Chloride	EPA 200.7	mg/L	1.0	148	163	143	174
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.78	1.04	0.87	0.74
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	51.3	55.2	54.0	51.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7110	5300	6900	7000
pH	SM 4500-H-B	std. units	0.10	7.60	7.44	7.27	7.13
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.77	1.60	1.94	1.98
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.201	0.132	0.161	0.126
Radium 226	EPA 903.0	pCi/L	0.2	0.4	< 0.2	< 0.2	0.5
Radium Error Estimate ±				0.3	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	1.1	< 1.0	1.2

Quality Assurance Data		Target Range				
Anion	meq		104	103	99	100
Cation	meq		106	102	99	108
SM A/C Balance	%	-5 - +5	0.60	-0.31	-0.18	3.66
Calc TDS	mg/L		6134	6034	5813	5982
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	0.88	1.19	1.17

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	808	808	808	808
LABORATORY ID:	C02070393-004	C02100477-003	C03010389-004	C03040535-004
SAMPLE DATE/TIME:	07/08/2002 11:25	10/07/2002 11:00	01/06/2003 10:50	04/07/2003 10:40
DATE/TIME RECEIVED:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	782	705	655	753
Magnesium	EPA 200.7	mg/L	1.0	682	620	609	657
Sodium	EPA 200.7	mg/L	1.0	230	290	283	308
Potassium	EPA 200.7	mg/L	1.0	7.3	5.2	9.7	7.9
Bicarbonate	SM 2320-B	mg/L	0.10	1960	1970	1910	1910
Sulfate	EPA 200.7	mg/L	1.0	2850	2630	2510	2600
Chloride	EPA 200.7	mg/L	1.0	173	168	144	194
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.15	< 0.05	0.12	0.13
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	115	113	131	125
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6950	5260	6900	6870
pH	SM 4500-H-B	std. units	0.10	7.63	7.19	7.32	6.71
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.64	0.65	0.65	0.68
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.169	0.115	0.138	0.126
Radium 226	EPA 903.0	pCi/L	0.2	0.3	< 0.2	< 0.2	< 0.2
Radium Error Estimate ±				0.2	-	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 624	µg/L	1.0	4.2	5.0	5.0	5.1

Quality Assurance Data		Target Range				
Anion	meq		105	100	97	100
Cation	meq		106	100	96	106
SM A/C Balance	%	-5 - +5	0.75	-0.10	-0.48	3.00
Calc TDS	mg/L		6215	5905	5747	6029
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	0.89	1.20	1.14

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	GW-1	GW-1	GW-1	GW-1
LABORATORY ID:	C02070393-008	C02100477-011	C03010389-008	C03040535-009
SAMPLE DATE/TIME:	07/08/2002 14:40	10/08/2002 11:05	01/06/2003 14:00	04/07/2003 14:20
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-10-12-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	753	708	768	704
Magnesium	EPA 200.7	mg/L	0.01	454	460	544	504
Sodium	EPA 200.7	mg/L	0.05	190	241	302	288
Potassium	EPA 200.7	mg/L	0.10	6.6	4.0	6.7	5.9
Bicarbonate	SM 2320-B	mg/L	0.10	1200	1300	1390	1360
Sulfate	EPA 200.7	mg/L	1.0	2500	2320	2620	2280
Chloride	EPA 200.7	mg/L	1.0	140	170	166	209
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.54	0.42	0.94	0.41
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	99.9	113	119	124
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5630	5850	5980	6050
pH	SM 4500-H-B	std. units	0.10	7.80	7.72	7.61	7.27
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.04	0.04	0.05	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.128	0.0930	0.116	0.0963
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	0.6	< 0.2	< 0.2
Radium Error Estimate ±				-	0.3	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		82.8	82.5	90.5	84.5
Cation	meq		84.0	84.3	97.1	89.9
SM A/C Balance	%	-5 - +5	0.67	1.10	3.50	3.08
Calc TDS	mg/L		5087	5054	5630	5221
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	1.16	1.06	1.16

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	GW-2	GW-2	GW-2	GW-2
LABORATORY ID:	C02070393-007	C02100477-010	C03010389-007	C03040535-008
SAMPLE DATE/TIME:	07/08/2002 14:10	10/08/2002 10:30	01/06/2003 13:30	04/07/2003 13:45
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	648	619	705	678
Magnesium	EPA 200.7	mg/L	0.01	530	494	571	518
Sodium	EPA 200.7	mg/L	0.05	178	228	276	267
Potassium	EPA 200.7	mg/L	0.10	11.3	9.70	8.60	14.3
Bicarbonate	SM 2320-B	mg/L	0.10	1600	1690	1750	1810
Sulfate	EPA 200.7	mg/L	1.0	2430	2260	2580	2210
Chloride	EPA 200.7	mg/L	1.0	208	185	196	214
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.16	0.10	0.18	0.12
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	22.5	30.1	27.5	26.7
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5470	5550	5640	5760
pH	SM 4500-H-B	std. units	0.10	7.67	7.52	7.52	7.12
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.48	0.51	0.56	0.47
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0821	0.0640	0.0829	0.0886
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 2.0	< 0.2	0.7
Radium Error Estimate ±				-	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	4.2	< 1.0
Radium Error Estimate ±				-	-	1.0	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		84.3	82.1	89.9	83.6
Cation	meq		84.6	82.3	95.1	89.1
SM A/C Balance	%	-5 - +5	0.18	0.10	2.80	3.14
Calc TDS	mg/L		4906	4775	5334	4925
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	1.16	1.06	1.17

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	GW-3	GW-3	GW-3	GW-3
LABORATORY ID:	C02070393-013	C02100477-005	C03010389-013	C03040535-013
SAMPLE DATE/TIME:	07/09/2002 11:00	10/07/2002 14:10	01/07/2003 10:30	04/08/2003 10:10
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	953	884	981	940
Magnesium	EPA 200.7	mg/L	0.01	302	276	312	282
Sodium	EPA 200.7	mg/L	0.05	157	223	274	256
Potassium	EPA 200.7	mg/L	0.10	8.8	8.0	9.6	10.9
Bicarbonate	SM 2320-B	mg/L	0.10	1560	1620	1710	1680
Sulfate	EPA 200.7	mg/L	1.0	2170	2030	2210	1900
Chloride	EPA 200.7	mg/L	1.0	127	150	154	165
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.24	0.22	0.24	0.23
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	93.2	83.8	86.0	98.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5430	4510	5530	5540
pH	SM 4500-H-B	std. units	0.10	7.38	7.35	7.39	7.30
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.79	1.95	2.05	2.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0934	0.0713	0.111	0.106
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	0.4
Radium Error Estimate ±				-	-	-	0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	4.0
Radium Error Estimate ±				-	-	-	1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion	meq			81.0	79.1	84.6	78.8
Cation	meq			80.0	77.2	87.3	82.0
SM A/C Balance	%		-5 - +5	-0.64	-1.18	1.62	2.03
Calc TDS	mg/L			4913	4754	5179	4830
TDS A/C Balance	dec. %		0.80 - 1.20	1.11	0.95	1.07	1.15

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	EPA-23	EPA-23	EPA-23	EPA-23
LABORATORY ID:	C02070393-002	C02100477-007	C03010389-002	C03040535-002
SAMPLE DATE/TIME:	07//08/2002 10:20	10/08/2002 08:45	01/06/2003 09:50	04/07/2003 9:40
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	656	628	602	635
Magnesium	EPA 200.7	mg/L	0.01	395	372	369	365
Sodium	EPA 200.7	mg/L	0.05	119	118	116	122
Potassium	EPA 200.7	mg/L	0.10	10.2	9.50	10.3	13.4
Bicarbonate	SM 2320-B	mg/L	0.10	1070	1080	1060	1080
Sulfate	EPA 200.7	mg/L	1.0	2320	2010	2180	2100
Chloride	EPA 200.7	mg/L	1.0	78.2	75.6	83.4	86.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.34	1.47	1.50	1.20
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.91	0.98	0.90	1.30
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4520	4280	4510	4490
pH	SM 4500-H-B	std. units	0.10	7.55	7.59	7.23	7.31
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.62	4.67	5.04	4.80
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0291	0.0197	0.0240	0.0232
Radium 226	EPA 903.0	pCi/L	0.2	0.6	-	< 0.2	< 0.2
Radium Error Estimate ±				0.2	-	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	-	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		68.1	61.8	65.2	64.0
Cation	meq		71.5	68.1	66.5	68.2
SM A/C Balance	%	-5 - +5	2.40	4.89	1.01	3.17
Calc TDS	mg/L		4124	3764	3902	3874
TDS A/C Balance	dec. %	0.80 - 1.20	1.10	1.14	1.16	1.16

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	EPA-25	EPA-25	EPA-25	EPA-25
LABORATORY ID:	C02070393-014	C02100477-004	C03010389-014	C03040535-014
SAMPLE DATE/TIME:	07/09/2002 11:50	10/07/2002 12:10	01/07/2003 11:15	04/08/2003 10:55
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	719	647	699	679
Magnesium	EPA 200.7	mg/L	0.01	230	212	230	207
Sodium	EPA 200.7	mg/L	0.05	165	160	168	169
Potassium	EPA 200.7	mg/L	0.10	6.6	6.9	7.5	10.2
Bicarbonate	SM 2320-B	mg/L	0.10	850	802	819	802
Sulfate	EPA 200.7	mg/L	1.0	1760	1560	1770	1570
Chloride	EPA 200.7	mg/L	1.0	106	70.0	87.6	86.9
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.20	0.16	0.27	0.25
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	92.5	82.1	88.0	105
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4130	3510	4030	4060
pH	SM 4500-H-B	std. units	0.10	7.84	7.67	7.67	7.52
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.45	1.62	1.74	1.72
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0870	0.0778	0.1080	0.1080
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Radium Error Estimate ±				-	-	-	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		60.2	53.5	59.1	55.8
Cation	meq		62.6	57.3	61.7	58.9
SM A/C Balance	%	-5 - +5	1.92	3.40	2.21	2.72
Calc TDS	mg/L		3823	3422	3764	3590
TDS A/C Balance	dec. %	0.80 - 1.20	1.08	1.03	1.07	1.13

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LABORATORY ANALYSIS REPORT
UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	EPA-28	EPA-28	EPA-28	EPA-28
LABORATORY ID:	C02070393-012	C02100477-014	C03010389-012	C03040535-012
SAMPLE DATE/TIME:	07/09/2002 10:15	10/08/2002 13:40	01/07/2003 09:45	04/08/2003 09:20
RECEIVED DATE/TIME:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	July 24, 2002	November 8, 2002	February 4, 2003	May 1, 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	549	504	554	529
Magnesium	EPA 200.7	mg/L	0.01	524	480	536	480
Sodium	EPA 200.7	mg/L	0.05	202	192	218	205
Potassium	EPA 200.7	mg/L	0.10	13.1	11.2	9.9	15.5
Bicarbonate	SM 2320-B	mg/L	0.10	683	675	694	695
Sulfate	EPA 200.7	mg/L	1.0	2850	2680	2900	2500
Chloride	EPA 200.7	mg/L	1.0	120	113	135	131
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.05	0.05	0.12	0.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	43.4	45.3	41.8	46.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5250	5190	5130	5230
pH	SM 4500-H-B	std. units	0.10	7.58	7.60	7.46	7.02
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.41	0.44	0.50	0.48
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0464	0.0329	0.0503	0.0464
Radium 226	EPA 903.0	pCi/L	0.2	0.8	< 0.2	0.8	< 0.2
Radium Error Estimate ±				0.2	-	0.3	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	3.7	5.3
Radium Error Estimate ±				-	-	1.0	1.7
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn&U	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				-	-	-	-
Trace Organics							
Chloroform	EPA 8260	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		77.1	73.3	78.6	70.5
Cation	meq		80.3	73.9	82.1	75.8
SM A/C Balance	%	-5 - +5	2.04	0.37	2.21	3.65
Calc TDS	mg/L		4792	4519	4886	4412
TDS A/C Balance	dec. %	0.80 - 1.20	1.10	1.15	1.05	1.19

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QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2003

ZONE 1

515-A

*604

*614

TWQ-142

EPA-2

*EPA-4

*EPA-5

*EPA-7

LEVELS ONLY

TWQ-143

EPA-8

505-A

502-A

501-A

504-A

412

*POINT OF COMPLIANCE WELLS

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	515-A	515-A	515-A	515-A
LABORATORY ID:	C02070401-002	C02100484-002	C03010390-002	C03040537-002
SAMPLE DATE/TIME:	07/10/2002 09:20	10/09/2002 09:30	01/08/2003 09:25	04/09/2003 9:45
DATE RECEIVED:	07/12/2002 09:20	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 9, 2002	November 5, 2002	February 4, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	470	428	385	443
Magnesium	EPA 200.7	mg/L	1.0	850	778	720	816
Sodium	EPA 200.7	mg/L	1.0	401	386	392	402
Potassium	EPA 200.7	mg/L	1.0	13.4	12.5	13.1	18.9
Bicarbonate	SM 2320-B	mg/L	0.10	211	210	209	198
Sulfate	EPA 200.7	mg/L	1.0	4420	4270	3810	4050
Chloride	EPA 200.7	mg/L	1.0	250	228	223	270
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	2.39	2.95	3.16	2.81
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	61.5	63.0	57.0	58.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7750	6900	7640	7680
pH	SM 4500-H-B	std. units	0.10	6.33	6.61	6.74	6.37
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	2.40	3.10	2.40	2.40
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.09	0.08	0.09	0.09
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	12.4	13.3	14.8	13.8
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.18	0.20	0.21	0.22
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0013	0.0020	0.0012	0.0011
Radium 226	EPA 903.0	pCi/L	0.2	3.6	3.5	4.0	3.3
Radium Error Estimate ±				0.4	0.3	0.1	0.9
Radium 228	EPA 904.0	pCi/L	1.0	6.8	3.1	5.4	7.0
Radium Error Estimate ±				1.6	1.0	1.0	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Ra & U	EPA 900.0	pCi/L	1.0	8.0	9.3	5.0	3.5
G. Alpha Error Estimate ±				1.7	1.1	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	162	203	162	166
Quality Assurance Data			**Target Range**				
Anion		meq		107	103	93	99
Cation		meq		113	104	98	109
SM A/C Balance		%	-5 - +5	2.72	0.46	2.36	4.65
Calc TDS		mg/L		6798	6504	5919	6373
TDS A/C Balance		dec. %	0.80 - 1.20	1.14	1.06	1.29	1.21

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	604	604	604	604
LABORATORY ID:	C02070704-004	C02100484-003	C03010390-003	C03040793-001
SAMPLE DATE/TIME:	07/16/2002 13:30	10/09/2002 10:10	01/08/2003 10:00	04/14/2003 09:00
DATE RECEIVED:	07/22/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 5, 2002	February 4, 2003	May 12, 2003
QUARTER REPRESENTED:	Thrid 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-1-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	439	431	423	454
Magnesium	EPA 200.7	mg/L	1.0	805	775	783	860
Sodium	EPA 200.7	mg/L	1.0	271	258	230	293
Potassium	EPA 200.7	mg/L	1.0	13.5	11.4	10.7	15.3
Bicarbonate	SM 2320-B	mg/L	0.10	6.7	7.3	6.7	6.7
Sulfate	EPA 200.7	mg/L	1.0	4460	4380	4250	4690
Chloride	EPA 200.7	mg/L	1.0	65.0	56.5	48.4	55.8
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.66	0.64	0.88	0.78
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	71.7	68.6	61.0	71.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7500	5790	7440	7360
pH	SM 4500-H-B	std. units	0.10	4.78	4.79	4.76	4.64
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	11.4	14.6	12.9	11.8
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	0.006	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.28	0.26	0.29	0.26
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	10.4	9.67	10.9	9.91
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.28	0.30	0.32	0.28
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0018	0.0019	0.0019
Radium 226	EPA 903.0	pCi/L	0.2	2.9	3.3	3.6	2.8
Radium Error Estimate ±				0.3	0.3	0.5	0.4
Radium 228	EPA 904.0	pCi/L	1.0	3.5	5.6	6.8	15.3
Radium Error Estimate ±				1.3	1.1	1.1	2.2
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	5.3	9.6	4.7	8.4
G. Alpha Error Estimate ±				1.0	1.1	1.0	1.6
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	3.2	3.8	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		100	98	94	104
Cation	meq		102	98	97	108
SM A/C Balance	%	-5 - +5	0.89	0.18	1.54	1.71
Calc TDS	mg/L		6386	6230	6031	6697
TDS A/C Balance	dec. %	0.80 - 1.20	1.17	0.93	1.23	1.10

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	614	614	614	614
LABORATORY ID:	C02070401-001	C02100484-001	C03010390-001	C03040537-001
SAMPLE DATE/TIME:	07/10/2002 08:30	10/09/2002 08:50	01/08/2003 08:40	04/09/2003 9:00
DATE RECEIVED:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 9, 2002	November 5, 2002	February 4, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-10-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	577	520	519	559
Magnesium	EPA 200.7	mg/L	1.0	599	621	598	640
Sodium	EPA 200.7	mg/L	1.0	413	400	465	434
Potassium	EPA 200.7	mg/L	1.0	14.0	12.4	12.1	16.5
Bicarbonate	SM 2320-B	mg/L	0.10	1430	1440	1470	1450
Sulfate	EPA 200.7	mg/L	1.0	3360	3080	3020	2918
Chloride	EPA 200.7	mg/L	1.0	286	286	247	334
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	100	87.0	81.0	76.0
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	82.0	79.2	74.0	72.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6980	5220	6680	6840
pH	SM 4500-H-B	std. units	0.10	7.31	7.66	7.60	7.13
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	0.23	0.32	0.25	0.22
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0508	0.0439	0.0573	0.0536
Radium 226	EPA 903.0	pCi/L	0.2	1.1	0.9	1.2	< 0.2
Radium Error Estimate ±				0.2	0.2	0.2	-
Radium 228	EPA 904.0	pCi/L	1.0	2.3	< 1.0	< 1.0	4.0
Radium Error Estimate ±				1.4	-	-	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	2.2	1.3	2.1	1.6
G. Alpha Error Estimate ±				1.1	1.0	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	222	228	222	248
Quality Assurance Data			**Target Range**				
Anion		meq		107	101	99	99
Cation		meq		104	102	102	106
SM A/C Balance		%	-5 - +5	-1.47	0.10	1.42	3.37
Calc TDS		mg/L		6456	6103	6029	6044
TDS A/C Balance		dec. %	0.80 - 1.20	1.08	0.86	1.11	1.13

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	TWQ-142	TWQ-142	TWQ-142	TWQ-142
LABORATORY ID:	C02070704-001	C02100686-001	C03010599-001	C03040793-005
SAMPLE DATE/TIME:	07/15/2002 09:30	10/14/2002 08:30	01/13/2003 14:26	04/14/2003 13:30
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	18.6	20.4	24.1	22.5
Magnesium	EPA 200.7	mg/L	1.0	8.50	8.70	8.60	8.70
Sodium	EPA 200.7	mg/L	1.0	313	308	313	315
Potassium	EPA 200.7	mg/L	1.0	4.5	3.1	3.3	5.6
Bicarbonate	SM 2320-B	mg/L	0.10	239	237	255	245
Sulfate	EPA 200.7	mg/L	1.0	607	536	526	555
Chloride	EPA 200.7	mg/L	1.0	18.6	17.7	21.3	18.4
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.15	0.11	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	0.20
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	1060	998	1060	1080
pH	SM 4500-H-B	std. units	0.10	8.06	8.00	7.93	7.76
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	< 0.10	< 0.10	1.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	0.004	0.003	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	0.02	0.02	0.03	0.02
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0003	0.0004	0.0003
Radium 226	EPA 903.0	pCi/L	0.2	0.3	0.8	1.0	< 0.2
Radium Error Estimate ±				0.2	0.2	0.2	-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	1.9	1.1
G. Alpha Error Estimate ±				-	-	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion		meq		17.1	15.6	15.7	16.1
Cation		meq		15.4	15.2	15.6	15.7
SM A/C Balance		%	-5 - +5	-5.30	-1.08	-0.40	-1.31
Calc TDS		mg/L		1090	1013	1024	1049
TDS A/C Balance		dec. %	0.80 - 1.20	0.97	0.99	1.03	1.03

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	EPA-2	EPA-2	EPA-2	EPA-2
LABORATORY ID:	C02070704-002	C02100686-002	C03010599-002	C03040793-006
SAMPLE DATE/TIME:	07/16/2002 11:15	10/15/2002 09:20	01/14/2003 08:50	04/14/2003 09:50
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

4/15/03

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	352	398	345	328
Magnesium	EPA 200.7	mg/L	1.0	161	178	154	141
Sodium	EPA 200.7	mg/L	1.0	188	189	172	194
Potassium	EPA 200.7	mg/L	1.0	6.0	5.9	6.4	9.0
Bicarbonate	SM 2320-B	mg/L	0.10	448	432	409	448
Sulfate	EPA 200.7	mg/L	1.0	1510	1700	1410	1550
Chloride	EPA 200.7	mg/L	1.0	24.6	21.0	19.6	23.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.60	0.50	0.59	0.60
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	2760	2630	2700	2740
pH	SM 4500-H-B	std. units	0.10	7.54	7.72	7.62	7.51
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	0.002	0.002	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	1.28	1.12	1.23	1.28
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0009	0.0014	0.0010
Radium 226	EPA 903.0	pCi/L	0.2	1.7	1.7	3.0	1.8
Radium Error Estimate ±				0.2	0.3	0.4	0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	3.0	< 1.0	10.1
Radium Error Estimate ±				-	1.0	-	2.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	1.7	< 1.0	2.2	2.1
G. Alpha Error Estimate ±				1.0	-	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		39.5	43.1	36.6	40.3
Cation	meq		39.5	43.2	37.8	36.9
SM A/C Balance	%	-5 - +5	-0.06	0.12	1.61	-4.38
Calc TDS	mg/L		2468	2710	2314	2472
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	0.97	1.17	1.11

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	EPA-4	EPA-4	EPA-4	EPA-4
LABORATORY ID:	C02070704-007	C02100686-006	C03010599-006	C03040793-004
SAMPLE DATE/TIME:	07/16/2002 15:20	10/15/2002 12:10	01/14/2003 11:30	04/14/2003 11:25
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	533	613	461	538
Magnesium	EPA 200.7	mg/L	1.0	369	414	319	386
Sodium	EPA 200.7	mg/L	1.0	172	196	154	201
Potassium	EPA 200.7	mg/L	1.0	10.4	9.1	9.6	12.5
Bicarbonate	SM 2320-B	mg/L	0.10	163	179	164	162
Sulfate	EPA 200.7	mg/L	1.0	2870	3260	2420	2940
Chloride	EPA 200.7	mg/L	1.0	43.1	40.0	30.5	37.9
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.07	1.15	1.21	1.17
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4740	4240	4720	4770
pH	SM 4500-H-B	std. units	0.10	7.53	7.06	7.13	7.07
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	3.37	3.40	3.29	3.33
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0005	0.0005	0.0004
Radium 226	EPA 903.0	pCi/L	0.2	1.4	1.7	1.9	1.7
Radium Error Estimate ±				0.2	0.3	0.3	0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	7.9
Radium Error Estimate ±				-	-	-	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	2.0	3.0
G. Alpha Error Estimate ±				-	-	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		63.7	72.0	54.0	65.0
Cation	meq		65.4	74.2	56.8	68.4
SM A/C Balance	%	-5 - +5	1.33	1.50	2.59	2.56
Calc TDS	mg/L		4084	4627	3481	4202
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	0.92	1.36	1.14

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	EPA-5	EPA-5	EPA-5	EPA-5
LABORATORY ID:	C02070704-006	C02100686-005	C03010599-005	C03040793-003
SAMPLE DATE/TIME:	07/16/2002 14:40	10/15/2002 11:30	01/14/2003 10:45	04/14/2003 10:40
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	452	513	429	455
Magnesium	EPA 200.7	mg/L	1.0	550	608	524	569
Sodium	EPA 200.7	mg/L	1.0	139	151	145	160
Potassium	EPA 200.7	mg/L	1.0	13.6	12.5	15.1	15.8
Bicarbonate	SM 2320-B	mg/L	0.10	179	168	160	146
Sulfate	EPA 200.7	mg/L	1.0	3170	3580	2930	3210
Chloride	EPA 200.7	mg/L	1.0	77.3	75.1	67.9	80.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	15.7	15.1	13.9	12.6
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	30.7	12.3	28.9	29.8
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5410	4610	5320	5350
pH	SM 4500-H-B	std. units	0.10	7.16	6.77	6.75	6.75
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.10	0.09	0.10	0.11
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.25	1.17	1.22	1.41
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.09	0.10	0.09	0.09
Selenium IV	SM 3114-C	mg/L	0.001	0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0026	0.0030	0.0020
Radium 226	EPA 903.0	pCi/L	0.2	1.5	1.8	1.1	1.5
Radium Error Estimate ±				0.2	0.3	0.2	0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	3.5
Radium Error Estimate ±				-	-	-	1.9
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	2.7	2.7	2.3	3.2
G. Alpha Error Estimate ±				1.0	1.0	1.0	1.1
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data		**Target Range**					
Anion	meq			73.3	80.3	67.6	73.7
Cation	meq			76.0	84.3	72.9	78.5
SM A/C Balance	%	-5 - +5		1.79	2.44	3.72	3.19
Calc TDS	mg/L			4649	5099	4338	4713
TDS A/C Balance	dec. %	0.80 - 1.20		1.16	0.90	1.23	1.14

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 1 MONITOR WELLS

WELL ID:	EPA-7	EPA-7	EPA-7	EPA-7
LABORATORY ID:	C02070704-005	C02100686-004	C03010599-004	C03040793-002
SAMPLE DATE/TIME:	07/16/2002 14:05	10/15/2002 10:50	01/14/2003 10:15	04/14/2003 10:00
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	465	531	435	476
Magnesium	EPA 200.7	mg/L	1.0	841	932	792	892
Sodium	EPA 200.7	mg/L	1.0	303	316	404	325
Potassium	EPA 200.7	mg/L	1.0	9.6	7.9	12.3	12.5
Bicarbonate	SM 2320-B	mg/L	0.10	542	544	545	542
Sulfate	EPA 200.7	mg/L	1.0	3950	4420	3620	4110
Chloride	EPA 200.7	mg/L	1.0	208	180	170	196
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.70	0.64	0.99	0.68
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	131	141	128	132
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7720	6430	7630	7520
pH	SM 4500-H-B	std. units	0.10	7.17	7.13	7.03	6.76
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	1.30	1.70	1.60	1.70
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.04	0.04	0.04	0.04
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	5.32	5.66	4.94	4.94
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	< 0.05	0.07	0.06	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003	0.0024	0.0025	0.0022
Radium 226	EPA 903.0	pCi/L	0.2	1.0	0.9	0.8	1.3
Radium Error Estimate ±				0.2	0.2	0.2	0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	2.7	1.3	2.5	2.8
G. Alpha Error Estimate ±				1.0	1.0	1.0	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		106	116	98	109
Cation	meq		107	119	106	113
SM A/C Balance	%	-5 - +5	0.33	1.01	3.76	1.55
Calc TDS	mg/L		6634	7290	6279	6873
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	0.88	1.22	1.09

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QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2003

ZONE 3

504-B

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EPA-14

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NBL-1

EPA-13

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LEVELS ONLY

EPA-9

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*POINT OF COMPLIANCE WELLS

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	504-B	504-B	504-B	504-B
LABORATORY ID:	C02070696-002	C02100685-001	C03010598-001	C03040794-002
SAMPLE DATE/TIME:	07/15/2002 11:10	10/14/2002 09:40	01/13/2003 09:00	04/14/2003 15:00
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-13-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	561	460	531	626
Magnesium	EPA 200.7	mg/L	1.0	713	605	710	873
Sodium	EPA 200.7	mg/L	1.0	143	144	137	158
Potassium	EPA 200.7	mg/L	1.0	12.3	11.5	11.8	15.2
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	4430	3710	4140	5300
Chloride	EPA 200.7	mg/L	1.0	25.6	26.8	15.6	30.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.23	1.16	1.27	1.30
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6060	4980	5980	6140
pH	SM 4500-H-B	std. units	0.10	3.42	3.80	4.47	3.27
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	< 0.10	0.20	0.20	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.020	0.019	0.025	0.012
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.26	0.27	0.27	0.29
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	6.37	6.96	6.57	7.52
Molybdenum	EPA 200.7	mg/L	0.10	7.10	6.80	7.40	6.10
Nickel	EPA 200.7	mg/L	0.05	0.28	0.36	0.32	0.35
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0296	0.0331	0.0288	0.0243
Radium 226	EPA 903.0	pCi/L	0.2	16.3	12.4	17.3	16.9
Radium Error Estimate ±				1.1	1.4	16.0	0.9
Radium 228	EPA 904.0	pCi/L	1.0	24.7	13.1	4.0	17.4
Radium Error Estimate ±				2.8	1.2	1.2	2.2
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.1	pCi/L	1.0	17.3	18.7	21.6	31.2
G. Alpha Error Estimate ±				2.3	1.5	2.2	2.9
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		93.0	78.1	86.7	111.3
Cation	meq		94.4	80.4	92.4	111.8
SM A/C Balance	%	-5 - +5	0.75	1.50	3.20	0.24
alc TDS	mg/L		5893	4966	5554	7012
DS A/C Balance	dec. %	0.80 - 1.20	1.03	1.00	1.08	0.88

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	517	517	517	517
LABORATORY ID:	C02070696-007	C02100685-010	C03010393-002	C03040536-002
SAMPLE DATE/TIME:	07/15/2002 15:10	10/14/2002 08:40	01/07/2003 14:35	04/08/2003 13:55
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 5, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	544	512	504	468
Magnesium	EPA 200.7	mg/L	1.0	466	447	457	395
Sodium	EPA 200.7	mg/L	1.0	136	142	107	149
Potassium	EPA 200.7	mg/L	1.0	8.40	8.80	6.00	11.2
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3390	3250	3140	2926
Chloride	EPA 200.7	mg/L	1.0	42.6	46.6	34.4	49.4
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	10.5	10.8	10.3	10.1
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	2.49	1.09	2.50	2.70
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4710	4260	4690	4720
pH	SM 4500-H-B	std. units	0.10	4.42	4.12	4.04	3.70
Trace Metals							
Aluminum	EPA 200.7	mg/L	0.10	10.4	8.90	10.7	10.2
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	0.007	0.006	0.006	0.007
Cobalt	EPA 200.7	mg/L	0.01	0.55	0.56	0.61	0.54
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	5.88	6.10	6.58	6.33
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.48	0.50	0.50	0.53
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium	EPA 200.8	mg/L	0.0003	0.0647	0.0660	0.0752	0.0790
Radium 226	EPA 903.0	pCi/L	0.2	11.2	7.6	8.6	10.1
Radium Error Estimate ±				0.9	0.6	0.6	1.3
Radium 228	EPA 904.0	pCi/L	1.0	21.8	9.5	6.6	12.1
Radium Error Estimate ±				2.7	1.2	1.2	2.2
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	0.5	1.2	0.6
Thorium Error Estimate ±				-	0.3	0.6	0.6
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.1	pCi/L	1.0	12.5	17.6	20.5	34.1
G. Alpha Error Estimate ±				2.1	1.4	3.2	3.6
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	5.9	5.3	5.6	5.0

Quality Assurance Data		Target Range				
Anion	meq		72.0	69.1	66.6	62.5
Cation	meq		74.4	71.4	70.4	65.3
SM A/C Balance	%	-5 - +5	1.64	1.61	2.79	2.16
Calc TDS	mg/L		4628	4441	4291	4041
TDS A/C Balance	dec. %	0.80 - 1.20	1.02	0.96	1.09	1.17

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	EPA-14	EPA-14	EPA-14	EPA-14
LABORATORY ID:	C02070696-008	C02100685-005	C03010393-003	C03040536-003
SAMPLE DATE/TIME:	07/16/2002 08:30	10/14/2002 13:10	01/07/2002 15:05	04/08/2003 14:25
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 5, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	606	560	452	516
Magnesium	EPA 200.7	mg/L	1.0	466	425	347	397
Sodium	EPA 200.7	mg/L	1.0	160	165	147	184
Potassium	EPA 200.7	mg/L	1.0	9.4	9.6	8.8	12.4
Bicarbonate	SM 2320-B	mg/L	0.10	95.8	130	140	132
Sulfate	EPA 200.7	mg/L	1.0	3390	3080	2410	3020
Chloride	EPA 200.7	mg/L	1.0	50.6	52.2	41.9	55.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.96	2.85	3.25	2.65
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	14.0	13.9	14.9	14.1
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4830	4160	4730	4800
pH	SM 4500-H-B	std. units	0.10	7.04	7.30	6.88	6.79
Trace Metals							
Aluminum	EPA 200.7	mg/L	0.10	19.2	21.6	26.0	19.4
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.7	mg/L	0.01	0.01	0.02	0.02	0.01
Cadmium	EPA 200.8	mg/L	0.005	0.008	0.006	0.001	0.008
Cobalt	EPA 200.7	mg/L	0.01	0.20	0.17	0.19	0.19
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	4.54	4.78	5.40	5.26
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.22	0.19	0.21	0.21
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.7	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics							
Uranium	EPA 200.8	mg/L	0.0003	0.0387	0.0558	0.0599	0.0490
Radium 226	EPA 903.0	pCi/L	0.2	4.3	4.8	4.6	4.6
Radium Error Estimate ±				0.3	0.5	0.4	1.0
Radium 228	EPA 904.0	pCi/L	1.0	11.7	5.0	5.5	7.5
Radium Error Estimate ±				1.2	1.0	1.2	2.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	7.1	7.2	9.2	10.1
G. Alpha Error Estimate ±				2.1	1.0	1.2	2.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		74.6	68.8	54.7	67.6
Cation	meq		76.7	71.3	58.7	67.7
SM A/C Balance	%	-5 - +5	1.39	1.81	3.45	0.03
Calc TDS	mg/L		4799	4427	3552	4322
TDS A/C Balance	dec. %	0.80 - 1.20	1.01	0.94	1.33	1.11

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	420	420	420	420
LABORATORY ID:	C02070696-005	C02100685-003	C03010598-003	C03040794-004
SAMPLE DATE/TIME:	07/15/2002 14:00	10/14/2002 10:50	01/13/2003 10:10	04/15/2003 09:15
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	642	680	671	657
Magnesium	EPA 200.7	mg/L	1.0	161	151	146	152
Sodium	EPA 200.7	mg/L	1.0	118	123	124	144
Potassium	EPA 200.7	mg/L	1.0	6.10	6.00	6.30	8.60
Bicarbonate	SM 2320-B	mg/L	0.10	515	569	562	566
Sulfate	EPA 200.7	mg/L	1.0	2015	1870	1700	1790
Chloride	EPA 200.7	mg/L	1.0	39.1	52.4	44.8	63.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.19	0.26	0.27	0.28
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	14.6	11.4	14.4	13.7
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3480	3080	3410	3440
pH	SM 4500-H-B	std. units	0.10	7.51	7.65	7.22	7.41
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.001	0.002	0.003	0.002
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	1.87	1.85	1.97	2.26
Molybdenum	EPA 200.7	mg/L	0.10	0.20	0.10	0.20	0.20
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0728	0.0779	0.0903	0.0882
Radium 226	EPA 903.0	pCi/L	0.2	3.1	2.4	3.1	3.4
Radium Error Estimate ±				0.3	0.4	0.4	0.4
Radium 228	EPA 904.0	pCi/L	1.0	3.0	< 1.0	7.8	5.3
Radium Error Estimate ±				1.1	-	1.3	1.8
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.1	pCi/L	1.0	2.7	2.4	3.5	4.0
G. Alpha Error Estimate ±				2.1	1.0	1.0	1.1
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		52.6	50.6	46.9	49.3
Cation	meq		50.9	52.2	51.4	52.1
SM A/C Balance	%	-5 - +5	-1.6	1.6	4.6	2.8
Calc TDS	mg/L		3305	3220	3039	3162
TDS A/C Balance	dec. %	0.80 - 1.20	1.05	0.96	1.12	1.09

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	711	711	711	711
LABORATORY ID:	C02070696-009	C02100685-006	C03010598-005	C03040794-005
SAMPLE DATE/TIME:	07/16/2002 09:30	10/14/2002 13:40	01/13/2003 11:15	04/15/2003 12:40
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	569	516	509	482
Magnesium	EPA 200.7	mg/L	1.0	580	543	558	532
Sodium	EPA 200.7	mg/L	1.0	89.6	104	72.7	110
Potassium	EPA 200.7	mg/L	1.0	10.3	11.0	8.40	13.8
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3990	3730	3300	3540
Chloride	EPA 200.7	mg/L	1.0	11.3	16.4	7.9	17.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.26	1.24	1.40	1.40
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	0.20
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5400	4720	5300	5430
pH	SM 4500-H-B	std. units	0.10	3.10	3.01	3.00	2.85
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	1.40	1.00	1.10	1.00
Arsenic III	SM 3114-C	mg/L	0.001	0.023	0.027	0.027	0.025
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.38	0.41	0.44	0.48
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	6.94	7.73	7.50	8.56
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	0.10	0.10
Nickel	EPA 200.8	mg/L	0.05	0.35	0.39	0.36	0.42
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0462	0.0454	0.0450	0.0420
Radium 226	EPA 903.0	pCi/L	0.2	9.9	8.9	8.8	11.2
Radium Error Estimate ±				0.9	1.2	0.6	0.8
Radium 228	EPA 904.0	pCi/L	1.0	32.5	14.2	7.4	12.9
Radium Error Estimate ±				3.0	1.3	1.3	2.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	12.6	14.4	10.4	18.0
G. Alpha Error Estimate ±				2.1	1.3	1.0	1.2
Trace Organics							
Chloroform	EPA 624	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		83.5	78.2	69.0	74.3
Cation	meq		81.4	76.4	75.8	74.1
SM A/C Balance	%	-5 - +5	-1.24	-1.17	4.73	-0.08
Calc TDS	mg/L		5259	4930	4466	4707
TDS A/C Balance	dec. %	0.80 - 1.20	1.03	0.96	1.19	1.15

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	613	613	613	613
LABORATORY ID:	C02070398-001	C02100483-001	C03010393-001	C03040536-001
SAMPLE DATE/TIME:	07/09/2002 14:55	10/08/2002 15:00	01/07/2003 13:55	04/08/2003 13:20
DATE RECEIVED:	07/12/2002 10:00	10/14/2002 10:00	01/13/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 14, 2002	November 8, 2002	February 5, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-10-7-2002	TI-12-10-2002	TE-1-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	437	398	377	398
Magnesium	EPA 200.7	mg/L	1.0	672	625	611	649
Sodium	EPA 200.7	mg/L	1.0	316	284	264	290
Potassium	EPA 200.7	mg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	8810	8490	7870	8020
Chloride	EPA 200.7	mg/L	1.0	167	165	158	148
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	359	357	341	341
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	15.5	14.2	12.6	13.8
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	13300	11800	13100	13200
pH	SM 4500-H-B	std. units	0.10	3.07	3.04	3.02	3.05
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	725	592	475	473
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	0.07	0.13	0.13	0.16
Cadmium	EPA 200.8	mg/L	0.005	0.026	0.031	0.031	0.038
Cobalt	EPA 200.8	mg/L	0.01	0.62	1.81	1.66	1.37
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	69.4	56.5	49.6	41.9
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	1.15	1.63	1.63	1.62
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	1.10	2.30	2.40	2.00
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	2.48	1.79	1.96	1.91
Radium 226	EPA 903.0	pCi/L	0.2	19.9	16.6	17.6	12.0
Radium Error Estimate ±				1.6	1.4	1.6	1.7
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				-	-	-	-
Thorium 230	EPA 907.0	pCi/L	0.2	509	543	568	588
Thorium Error Estimate ±				13.2	11.1	10.0	12.7
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	40.3	52.1	69.9	52.4
G. Alpha Error Estimate ±				3.6	4.5	5.6	4.4
Trace Organics							
Chloroform	EPA 624	µg/L	1.0	39.7	166	137	142

Quality Assurance Data		Target Range				
Anion	meq		189	183	169	172
Cation	meq		202	179	161	166
SM A/C Balance	%	-5 - +5	3.13	-1.06	-2.48	-1.90
Calc TDS	mg/L		11004	10543	9826	10049
TDS A/C Balance	dec. %	0.80 - 1.20	1.21	1.12	1.33	1.31

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	708	708	708	708
LABORATORY ID:	C02070696-011	C02100685-009	C03010598-008	C03040794-008
SAMPLE DATE/TIME:	07/16/2002 10:30	10/14/2002 15:05	01/13/2003 13:45	04/15/2003 14:10
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	540	485	529	460
Magnesium	EPA 200.7	mg/L	1.0	610	571	632	574
Sodium	EPA 200.7	mg/L	1.0	99.5	116	98.0	113
Potassium	EPA 200.7	mg/L	1.0	10.2	12.1	9.60	13.5
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	4200	3880	4020	3800
Chloride	EPA 200.7	mg/L	1.0	16.1	25.1	14.9	30.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	2.04	2.14	2.03	2.17
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5760	4840	5740	5860
pH	SM 4500-H-B	std. units	0.10	3.14	3.23	2.98	2.92
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	0.80	0.90	1.00	1.00
Arsenic III	SM 3114-C	mg/L	0.001	0.001	0.002	0.003	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.32	0.29	0.31	0.29
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	8.33	7.57	8.21	8.34
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.24	0.24	0.24	0.22
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0117	0.0118	0.0120	0.0158
Radium 226	EPA 903.0	pCi/L	0.2	6.5	8.8	7.1	9.0
Radium Error Estimate ±				0.7	1.2	0.5	0.7
Radium 228	EPA 904.0	pCi/L	1.0	15.2	5.7	4.3	10.3
Radium Error Estimate ±				2.5	1.1	1.3	1.9
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha	EPA 900.1	pCi/L	1.0	8.3	9.8	10.1	13.4
G. Alpha Error Estimate ±				2.1	1.1	1.5	1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		88.0	81.5	84.2	80.0
Cation	meq		83.0	77.8	84.2	76.7
SM A/C Balance	%	-5 - +5	-2.89	-2.38	0.02	-2.12
Calc TDS	mg/L		5487	5100	5315	5002
TDS A/C Balance	dec. %	0.80 - 1.20	1.05	0.95	1.08	1.17

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	NBL-1	NBL-1	NBL-1	NBL-1
LABORATORY ID:	C02070696-001	C02100685-011	C03010598-009	C03040794-001
SAMPLE DATE/TIME:	07/15/2002 10:10	10/15/2002 14:30	01/15/2003 10:00	04/14/2003 14:30
DATE/TIME RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	516	631	620	566
Magnesium	EPA 200.7	mg/L	1.0	185	176	178	168
Sodium	EPA 200.7	mg/L	1.0	123	121	101	125
Potassium	EPA 200.7	mg/L	1.0	7.1	6.3	5.1	7.6
Bicarbonate	SM 2320-B	mg/L	0.10	339	330	335	338
Sulfate	EPA 200.7	mg/L	1.0	1810	2070	1930	1960
Chloride	EPA 200.7	mg/L	1.0	26.0	31.4	20.1	35.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.43	0.45	0.47	0.48
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3310	3120	3290	3360
pH	SM 4500-H-B	std. units	0.10	7.68	7.48	7.29	7.14
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.728	0.776	0.955	0.688
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.05	0.06	0.07	0.07
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.78	2.01	2.04	2.21
Molybdenum	EPA 200.8	mg/L	0.10	2.80	2.20	2.50	2.40
Nickel	EPA 200.8	mg/L	0.05	0.09	0.10	0.10	0.10
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.261	0.251	0.256	0.210
Radium 226	EPA 903.0	pCi/L	0.2	4.5	6.4	6.9	6.7
Radium Error Estimate ±				0.3	0.6	0.5	0.6
Radium 228	EPA 904.0	pCi/L	1.0	4.5	3.1	5.4	< 1.0
Radium Error Estimate ±				1.1	1.0	1.3	-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	5.4	5.6	7.9	9.4
G. Alpha Error Estimate ±				2.1	1.0	1.3	1.7
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		44.0	49.4	46.3	47.4
Cation	meq		46.9	51.8	50.5	48.1
SM A/C Balance	%	-5 - +5	3.2	2.3	4.4	0.8
Calc TDS	mg/L		2839	3204	3025	3034
TDS A/C Balance	dec. %	0.80 - 1.20	1.17	0.97	1.09	1.11

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	EPA-13	EPA-13	EPA-13	EPA-13
LABORATORY ID:	C02070696-004	C02100685-008	C03010598-007	C03040794-007
SAMPLE DATE/TIME:	07/15/2002 13:20	10/14/2002 14:30	01/13/2003 13:10	04/15/2003 13:30
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	519	502	626	449
Magnesium	EPA 200.7	mg/L	1.0	840	832	973	784
Sodium	EPA 200.7	mg/L	1.0	126	142	121	142
Potassium	EPA 200.7	mg/L	1.0	10.9	12.3	10.5	14.2
Bicarbonate	SM 2320-B	mg/L	0.10	85.4	86.6	78.7	84.2
Sulfate	EPA 200.7	mg/L	1.0	4660	4650	5220	4210
Chloride	EPA 200.7	mg/L	1.0	30.3	42.3	26.7	39.9
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.86	0.80	0.86	1.03
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6450	5770	6190	6360
pH	SM 4500-H-B	std. units	0.10	6.59	6.70	6.66	6.62
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.313	0.290	0.345	0.310
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.06	0.06	0.06	0.05
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.72	6.56	6.07	6.60
Molybdenum	EPA 200.8	mg/L	0.10	0.30	0.30	0.30	0.30
Nickel	EPA 200.8	mg/L	0.05	0.12	0.15	0.14	0.13
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.0179	0.0173	0.0167	0.0161
Radium 226	EPA 903.0	pCi/L	0.2	4.7	4.2	5.8	5.7
Radium Error Estimate ±				0.3	0.5	0.5	0.5
Radium 228	EPA 904.0	pCi/L	1.0	6.6	4.8	3.9	13.6
Radium Error Estimate ±				1.1	1.1	1.2	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	2.2	0.5
Thorium Error Estimate ±				-	-	1.3	0.5
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	4.9	5.7	5.8	8.2
G. Alpha Error Estimate ±				2.1	1.0	1.1	1.5
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		99.3	99.5	110.8	90.2
Cation	meq		102	101	118	95
SM A/C Balance	%	-5 - +5	1.36	0.92	3.28	2.45
Calc TDS	mg/L		6237	6233	7025	5690
TDS A/C Balance	dec. %	0.80 - 1.20	1.03	0.93	0.88	1.12

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	717	717	717	717
LABORATORY ID:	C02070696-006	C02100685-004	C03010598-004	C03040536-004
SAMPLE DATE/TIME:	07/15/2002 14:30	10/14/2002 11:25	01/13/2003 10:40	04/08/2003 14:55
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/11/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 1, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-3-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	791	720	621	697
Magnesium	EPA 200.7	mg/L	1.0	147	144	130	147
Sodium	EPA 200.7	mg/L	1.0	125	125	104	143
Potassium	EPA 200.7	mg/L	1.0	5.90	6.30	6.20	9.90
Bicarbonate	SM 2320-B	mg/L	0.10	740	704	731	705
Sulfate	EPA 200.7	mg/L	1.0	1886	1780	1440	1615
Chloride	EPA 200.7	mg/L	1.0	48.4	68.3	47.2	71.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.22	0.21	0.24	0.27
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	16.2	15.6	21.5	22.9
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3420	3130	3530	3620
pH	SM 4500-H-B	std. units	0.10	7.52	7.61	7.05	7.19
Trace Metals, dissolved							
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	0.002	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	1.60	1.77	1.96	1.85
Molybdenum	EPA 200.7	mg/L	0.10	0.20	0.20	0.20	0.20
Nickel	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.118	0.115	0.120	0.133
Radium 226	EPA 903.0	pCi/L	0.2	3.1	2.2	5.4	2.8
Radium Error Estimate ±				0.3	0.3	0.5	0.8
Radium 228	EPA 904.0	pCi/L	1.0	7.3	3.2	8.6	11
Radium Error Estimate ±				1.2	1.0	1.4	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Thorium Error Estimate ±				-	-	-	-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	3.2	4.8	4.9	8.1
G. Alpha Error Estimate ±				2.1	1.0	1.1	1.8
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion	meq			53.9	51.7	44.8	48.8
Cation	meq			57.5	53.7	46.7	53.7
SM A/C Balance	%		-5 - +5	3.2	1.9	2.0	4.7
Calc TDS	mg/L			3447	3267	2811	3139
TDS A/C Balance	dec. %		0.80 - 1.20	0.99	0.96	1.26	1.15

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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: ZONE 3 MONITOR WELLS

WELL ID:	719	719	719	719
LABORATORY ID:	C02070696-003	C02100685-002	C03010598-002	C03040794-003
SAMPLE DATE/TIME:	07/15/2002 11:45	10/14/2002 10:20	01/13/2003 09:40	04/15/2003 08:45
DATE RECEIVED:	07/22/2002 10:00	10/18/2002 10:00	01/20/2003 10:00	04/18/2003 10:00
REPORT DATE:	August 13, 2002	November 8, 2002	February 11, 2003	May 12, 2003
QUARTER REPRESENTED:	Third 2002	Fourth 2002	First 2003	Second 2003
UNC SUBMITTAL #:	TE-11-7-2002	TE-12-10-2002	TE-2-1-2003	TE-4-4-2003

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	1.0	563	514	531	477
Magnesium	EPA 200.7	mg/L	1.0	517	491	509	477
Sodium	EPA 200.7	mg/L	1.0	123	134	120	149
Potassium	EPA 200.7	mg/L	1.0	7.60	10.5	11.0	15.7
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	4020	3720	3610	3460
Chloride	EPA 200.7	mg/L	1.0	33.9	33.4	25.2	38.8
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	3.59	3.76	3.40	3.60
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5420	4630	5340	5350
pH	SM 4500-H-B	std. units	0.10	3.00	3.06	3.05	2.88
Trace Metals, dissolved							
Aluminum	EPA 200.7	mg/L	0.10	35.4	25.0	26.9	25.8
Arsenic III	SM 3114-C	mg/L	0.001	0.005	0.005	0.004	0.002
Beryllium	EPA 200.7	mg/L	0.01	0.04	0.05	0.04	0.04
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	0.59	0.65	0.66	0.72
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.7	mg/L	0.01	6.70	7.89	7.67	8.54
Molybdenum	EPA 200.7	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.7	mg/L	0.05	0.73	0.90	0.84	0.96
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Radiometrics, dissolved							
Uranium	EPA 200.8	mg/L	0.0003	0.191	0.0856	0.0691	0.0604
Radium 226	EPA 903.0	pCi/L	0.2	6.8	5.4	7.6	8.3
Radium Error Estimate ±				0.7	0.5	0.6	0.6
Radium 228	EPA 904.0	pCi/L	1.0	4.6	2.0	< 1.0	9.7
Radium Error Estimate ±				1.1	1.0	-	2.0
Thorium 230	EPA 907.0	pCi/L	0.2	9.0	< 0.2	1.2	0.7
Thorium Error Estimate ±				1.5	-	0.6	0.6
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±				-	-	-	-
Gross Alpha-Rn & U	EPA 900.0	pCi/L	1.0	14.9	11.5	10.0	23.3
G. Alpha Error Estimate ±				2.2	1.2	1.5	1.3
Trace Organics							
Chloroform	EPA 624	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		84.7	78.4	75.9	73.2
Cation	meq		81.4	76.2	78.1	74.1
SM A/C Balance	%	-5 - +5	-2.02	-1.44	1.44	0.62
alc TDS	mg/L		5276	4916	4819	4631
DS A/C Balance	dec. %	0.80 - 1.20	1.03	0.94	1.11	1.16

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