40-8907

UNITED NUCLEAR CORPORATION

P.O. Box 3077
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CERTIFIED-RETURN RECEIPT REQUESTED

August 23, 2001

Branch Chief
U.S. Nuclear Regulatory Commission
Division of Waste Management (MST-7J9)
11555 Rockville Pike
Rockville, MD 20850

Dear Sir:

In compliance with our Nuclear Regulatory Commission Radioactive Materials License No.SUA-1475, Condition 30, the enclosed Semi-Annual Ground Water Monitoring Report for the entire period of January 01, 2001 through June 30, 2001 is being submitted.

Sincerely,

Larry Bush
Manager

LB:drb

Enclosure

Cc: Division of Radiation Safety, Region IV
Greg Lyssy, USEPA
Suzie du Pont, Earth Tech
Steve Cline, GE
Roy Blickwedel, GE
Beiling Liu, NMED
George Padilla, NNEPA

NMSS01 Public

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QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2001

FIELD DATA SHEET OF

FIRST AND SECOND QUARTERS

CONTROLS

ZONE 1

ZONE 3

SW ALLIVIUM

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

JANUARY - 1ST QUARTER, 2001

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	1/10/01	98.4	7008.8	6910.4	7,240	5.62	9.4
604	1/10/01	97.0	7006.0	6909.0	6,420	4.94	10.0
614	1/10/01	98.0	7012.0	6914.0	7,980	7.10	9.8
TWQ-142	1/16/01	202.2	6983.4	6781.2	1,572	8.23	7.1
EPA-2	1/15/01	169.5	7019.5	6850.0	2,980	6.80	11.3
EPA-4	1/9/01	200.85	7069.8	6868.95	4,560	6.73	11.3
EPA-5	1/9/01	119.9	7011.5	6891.6	5,320	6.32	10.8
EPA-7	1/9/01	109.3	7011.7	6902.4	7,140	6.06	10.6
(QA/QC)	EPA-2 Dup. 1-15	169.85	7019.5	6849.65	2,950	6.90	11.5
(QA/QC)	F. Blank 1-16-01				178	6.64	7.2
TWQ-143	1/19/01	209.0	6989.6	6780.6			
EPA-8	1/9/01	212.55	7076.4	6863.85			
505-A	1/19/01	112.3	6963.1	6850.8			
502-A	1/19/01	193.15	7025.3	6832.15			
501-A	1/19/01	210.25	7048.0	6837.75			
504-A	1/18/01	203.0	7001.4	6798.4			
412	1/19/01	185.1	6979.4	6794.3			

OMMENTS:

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

JANUARY - 1ST QUARTER, 2001

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	1/15/01	160.0	7001.8	6841.8	5,040	5.55	11.9
517	1/15/01	100.0	6971.75	6871.75	4,450	4.68	10.3
EPA-14	1/15/01	105.3	6965.8	6860.5	4,440	6.29	10.6
420	1/15/01	133.85	6982.6	6848.75	3,430	6.78	11.5
711	1/15/01	178.9	7042.75	6863.85	4,760	4.78	11.4
613	1/15/01	77.8	6961.3	6883.5	11,340	3.04	9.3
708	1/24/01	148.15	7012.0	6863.85	4,960	8.23	7.1
(QA/QC)	711-Dup. 1-15	179.35	7042.75	6863.4	4,730	4.92	11.6
(QA/QC)							
EPA-9	1/19/01	168.75	7076.6	6907.85			
EPA-13	1/18/01	164.8	7032.9	6868.1			
702	1/18/01	80.15	6974.2	6894.05			
710	1/18/01	157.4	7016.5	6859.1			
712	1/18/01	169.2	7022.2	6853			
713	1/18/01	163.4	7024.5	6861.1			
714	1/19/01	94.2	6962.9	6868.7			
701	1/19/01	81.8	6961.3	6879.5			
706	1/19/01	110.1	6972.5	6862.4			
707	1/18/01	147.65	7005.2	6857.55			
717	1/18/01	117.0	6972.3	6855.3			
719	1/18/01	156.75	7002.0	6845.25			
402	1/19/01	111.1	6968.2	6857.1			
446	1/22/01	157.0	6998.3	6841.3			

COMMENTS: Well #708 is an additional monitoring well.

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

JANUARY - 1ST QUARTER, 2001

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	1/8/01	66.8	6949.5	6882.7	5,850	6.46	11.4
624	1/8/01	48.6	6898.7	6850.1	5,460	6.65	11.2
627	1/9/01	53.85	6892.4	6838.55	5,580	7.23	10.3
632	1/8/01	45.1	6903.6	6858.5	6,350	6.38	12.5
801	1/8/01	51.4	6904.3	6852.9	6,950	6.67	11.3
802	1/8/01	49.6	6907.1	6857.5	7,690	6.43	13.2
803	1/8/01	82.7	6922.6	6839.9	7,350	6.50	14.3
808	1/8/01	57.7	6910.7	6853.0	7,800	6.34	14.4
GW-1	1/8/01	60.5	6916.5	6856.0	4,510	6.73	10.3
GW-2	1/8/01	54.8	6912.9	6858.1	5,210	6.51	10.6
GW-3	1/9/01	52.0	6910.0	6858.0	5,200	6.82	9.0
EPA-23	1/9/01	47.8	6926.5	6878.7	4,470	6.75	9.7
EPA-25	1/9/01	51.3	6903.4	6852.1	4,340	7.12	9.8
EPA-28	1/8/01	61.75	6917.9	6856.15	5,020	6.88	12.1
(QA/QC)	EPA-23 Dup. 1-9	48.1	6926.5	6878.4	4,480	6.76	9.8
(QA/QC)	F. Blank 1-09-01				160	5.15	8.1
805	1/19/01	54.7	6915.6	6860.9			
807	1/19/01	54.5	6923.4	6868.9			

OMMENTS: 802, 803, and 808 extraction pumper wells are shutdown for an indefinite period on 1-08-01. But, these wells will be monitored for water quality on a monthly basis utilizing the low flow purge and sampling method. Also, 801, and 808 wells are an additional monitoring wells.

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

APRIL - 2ND QUARTER, 2001

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	4/3/01	98.5	7008.8	6910.3	6,800	5.85	13.2
604	4/3/01	97.1	7006.0	6908.9	6,160	4.80	12.9
614	4/3/01	98.3	7012.0	6913.7	7,560	6.635	12.5
TWQ-142	4/2/01	202.1	6983.4	6781.3	1,514	8.10	12.1
EPA-2	4/2/01	169.4	7019.5	6850.1	2,800	6.87	15.8
EPA-4	4/3/01	201.0	7069.8	6868.8	4,270	6.70	14.7
EPA-5	4/3/01	120.1	7011.5	6891.4	5,000	6.30	14.1
EPA-7	4/3/01	109.65	7011.7	6902.05	6,710	6.10	13.8
(QA/QC)	EPA-2 Dup. 4-02-01	169.7	7019.5	6849.8	2,780	6.88	15.5
(QA/QC)	F. Blank 4-04-01				21	8.60	12.8
TWQ-143	4/12/01	208.8	6989.6	6780.85			
EPA-8	4/12/01	212.7	7076.4	6863.7			
505-A	4/12/01	112.4	6963.1	6850.7			
502-A	4/12/01	193.0	7025.3	6832.3			
501-A	4/12/01	210.1	7048.0	6837.9			
504-A	4/12/01	202.8	7001.4	6798.6			
412	4/12/01	184.9	6979.4	6794.5			

MMENTS:

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

APRIL - 2ND QUARTER, 2001

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	4/2/01	160.0	7001.8	6841.8	4,800	6.10	13.0
517	4/9/01	100.0	6971.75	6871.75	4,130	4.59	12.9
EPA-14	4/2/01	105.1	6965.8	6860.7	4,160	6.21	14.0
420	4/2/01	133.9	6982.6	6848.7	3,160	6.80	13.0
711	4/2/01	178.9	7042.75	6863.85	4,460	4.57	13.1
613	4/9/01	77.65	6961.3	6883.65	10,520	2.84	13.2
708	4/2/01	147.8	7012.0	6864.2	4,670	4.19	13.9
(QA/QC)	711 Dup. 4-2-01	179.5	7042.75	6863.25	4,450	4.82	13.5
(QA/QC)							
EPA-9	4/12/01	169.0	7076.6	6907.6			
EPA-13	4/9/01	165.0	7032.9	6867.9	5,260	6.65	12.1
702	4/12/01	80.4	6974.2	6893.8			
710	4/12/01	157.3	7016.5	6859.2			
712	4/12/01	169.0	7022.2	6853.2			
713	4/12/01	163.6	7024.5	6860.9			
714	4/12/01	94.5	6962.9	6868.4			
701	4/12/01	81.8	6961.3	6879.5			
706	4/12/01	110.15	6972.5	6862.35			
707	4/12/01	147.45	7005.2	6857.75			
717	4/9/01	116.9	6972.3	6855.4	3,220	6.39	13.0
719	4/9/01	156.5	7002.0	6845.5	5,160	2.81	12.2
402	4/12/01	111.1	6968.2	6857.1			
446	4/12/01		6998.3	Too oily to obtain reading.			
424	4/12/01	119.95	6973.1	6853.15			

COMMENTS: During this period, the additional implementation of water quality monitoring requirement is initated for wells no. 717, 719, and EPA-13. Also on 3/27/01 @ 1400, debris was dislodged about 83' down well no. 424 (total well depth = 155'). After the obstruction clearance, the total steel tape measurement = 137' and water level measurement = 119.7'. This task was under taken via phone call from Suzie du Pont of Earth Tech on 3/27/01 to reconfirm if the well is dry.

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

APRIL - 2ND QUARTER, 2001

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	4/3/01	67.2	6949.5	6882.3	5,430	6.42	14.1
624	4/10/01	48.6	6898.7	6850.1	5,200	7.24	12.1
627	4/10/01	53.8	6892.4	6838.6	5,300	7.52	11.6
632	4/3/01	42.9	6903.6	6860.7	6,360	6.45	14.7
801	4/3/01	49.5	6904.3	6854.8	6,510	6.59	14.7
802	4/9/01	45.5	6907.1	6861.6	6,310	6.86	14.4
803	4/9/01	58.5	6922.6	6864.1	6,290	6.40	14.2
808	4/9/01	46.3	6910.7	6864.4	6,160	6.65	15.0
GW-1	4/4/01	59.8	6916.5	6856.7	4,410	7.00	11.3
GW-2	4/9/01	53.6	6912.9	6859.3	5,050	6.92	13.0
GW-3	4/10/01	50.95	6910.0	6859.05	4,910	7.26	11.4
EPA-23	4/4/01	48.0	6926.5	6878.5	4,310	6.87	11.4
EPA-25	4/10/01	51.15	6903.4	6852.25	4,120	7.41	11.2
EPA-28	4/10/01	61.2	6917.9	6856.7	4,870	7.13	11.3
(QA/QC)	EPA-23 Dup. 4-4-01	48.2	6826.5	6778.3	4,290	6.87	11.4
(QA/QC)	F. Blank 4-10-01				18	8.90	9.7
805	4/12/01	50.8	6915.6	6864.8			
807	4/12/01	54.0	6923.4	6869.4			

MMENTS:

QUARTERLY WATER LEVELS
1st QUARTER 2001

ZONE - 1

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
515-A	1-10-01	0925	98.4	7008.8	6910.4
604	1-10-01	1000	97.0'	7006.0	6909.0
614	1-10-01	0850	98.0'	7012.0	6914.0
EPA-2	1-15-01	0930	169.5'	7019.5	6850.0
EPA-4	1-9-01	1255	200.85'	7069.8	6868.95
EPA-5	1-9-01	1335	119.9'	7011.5	6891.6
EPA-7	1-9-01	1410	109.3'	7011.7	6902.4
EPA-8	1-9-01	1320	212.55'	7076.4	6863.85
TWQ-142	1-16-01	0900	202.2'	6983.4	6781.2
TWQ-143	1-19-01	1415	209.0'	6989.6	6780.6
505-A	1-19-01	1445	112.3'	6963.1	6850.8
502-A	1-19-01	1330	193.15'	7025.3	6832.15
501-A	1-19-01	1340	210.25'	7048.0	6837.75
504-A	1-18-01	1515	203.0'	7001.4	6798.4
412	1-19-01	1550	185.1'	6979.4	6794.3

QUARTERLY WATER LEVELS
1st QUARTER 2001

ZONE - 3

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
420	1-15-01	1410	133.85'	6982.6	6848.75'
711	1-15-01	1245	178.9'	7042.75	6863.85'
504-B	1-15-01	1340	160.0'	7001.8	6841.8'
EPA-9	1-9-01	1315	168.75'	7076.6	6907.85'
EPA-13	1-18-01	1510	164.8'	7032.9	6868.1'
EPA-14	1-15-01	1100	105.3'	6965.8	6860.5'
702	1-18-01	1340	80.15'	6974.2	6894.05'
710	1-18-01	1445	157.4'	7016.5	6859.1'
712	1-18-01	1450	169.2'	7022.2	6853.0'
713	1-18-01	1500	163.4'	7024.5	6861.1'
714	1-19-01	1440	94.2'	6962.9	6868.7
613	1-15-01	0845	77.8'	6961.3	6883.5'
701	1-19-01	1453	81.8'	6961.3	6879.5'
706	1-19-01	1437	110.1'	6972.5	6862.4
707	1-18-01	1440	147.65'	7005.2	6857.55'
717	1-18-01	1530	117.0'	6972.3	6855.3
719	1-18-01	1520	156.75'	7002.0	6845.25'
402	1-19-01	1425	111.1'	6968.2	6857.1'
424	1-19-01	1430	DRY	6973.1	
446	1-22-01	1300	157.0'	6998.3	6841.3'
517	1-15-01	1025	100.0'	6971.75	6871.75'
708	1-24-01	0945	148.15	7012.0	6863.85

QUARTERLY WATER LEVELS
1st QUARTER 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	1-8-01	1445	66.8'	6949.5	6882.7'
632	1-8-01	1410	45.1'	6903.6	6858.5'
GW-1	1-8-01	1020.	60.5'	6916.5	6856.0'
GW-2	1-8-01	1330	54.8'	6912.9	6858.1'
EPA-23	1-9-01	0830	47.8'	6926.5	6878.7'
EPA-28	1-8-01	1150	61.75'	6917.9	6856.15'
624	1-8-01	1110	48.6'	6898.7	6850.1'
627	1-9-01	1055	53.85'	6892.4	6838.55'
805	1-19-01	1545	54.7'	6915.6	6860.9'
807	1-19-01	1510	54.5'	6923.4	6868.9'
EPA-25	1-9-01	1015	51.3'	6903.4	6852.1'
GW-3	1-9-01	0935	52.0'	6910.0	6858.0'
801	1-8-01	0930	51.4'	6904.3	6852.9'
802	1-8-01	0915	49.6'	6907.1	6857.5'
803	1-8-01	0850	82.7'	6922.6	6839.9'
808	1-8-01	0900	57.7'	6910.7	6853.0'

QUARTERLY WATER LEVELS
2ND QUARTER 2001

ZONE - 1

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
515-A	4-3-01	0900	98.5'	7008.8	6910.3
604	4-3-01	0945	97.1	7006.0	6908.9
614	4-3-01	0820	98.3'	7012.0	6913.7
EPA-2	4-2-01	1410	169.4'	7019.5	6850.1
EPA-4	4-3-01	1145	201.0'	7069.8	6868.8
EPA-5	4-3-01	1100	120.1	7011.5	6891.4
EPA-7	4-3-01	1020	109.65'	7011.7	6902.05
EPA-8	4-12-01	1325	212.7'	7076.4	6863.7
TWQ-142	4-2-01	0835	202.1	6983.4	6781.3
TWQ-143	4-12-01	1105	208.75'	6989.6	6780.85
505-A	4-12-01	1212	112.4'	6963.1	6850.7
502-A	4-12-01	1146	193.0'	7025.3	6832.3
501-A	4-12-01	1150	210.1'	7048.0	6837.9
504-A	4-12-01	1130	202.8'	7001.4	6798.6
412	4-12-01	1112	184.9'	6979.4	6794.5

QUARTERLY WATER LEVELS
2ND QUARTER 2001

ZONE - 3

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
420	4-2-01	1005	133.9'	6982.6	6848.7
711	4-2-01	1045	178.9'	7042.75	6863.85
504-B	4-2-01	0920	160.0'	7001.8	6841.8
EPA-9	4-12-01	1320	169.0'	7076.6	6907.6
EPA-13	4-9-01	0840	165.0'	7032.9	6867.9
EPA-14	4-2-01	1250	105.1'	6965.8	6860.7
702	4-12-01	1218	80.4'	6974.2	6893.8
710	4-12-01	1143	157.3'	7016.5	6859.2
712	4-12-01	1138	169.0'	7022.2	6853.2
713	4-12-01	1135	163.6'	7024.5	6860.9
714	4-12-01	1210	94.5'	6962.9	6868.4
613	4-9-01	1105	77.65'	6961.3	6883.65
701	4-12-01	1214	81.8'	6961.3	6879.5
706	4-12-01	1135	110.15'	6972.5	6862.35
707	4-12-01	1140	147.45'	7005.2	6857.75
717	4-9-01	0955	116.9'	6972.3	6855.4
719	4-9-01	0920	156.5'	7002.0	6845.5
402	4-12-01	1201	111.1'	6968.2	6857.1
424	4-12-01	1200	119.95'	6973.1	6853.15
446	4-12-01	1125	COULD NOT GET READING OILY	6998.3	
517	4-9-01	1030	100.0'	6971.75	6871.75
708	4-2-01	1330	147.8'	7012.0	6864.2

QUARTERLY WATER LEVELS

Second QUARTER 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	4-3-01	1335	67.2'	6949.5	6882.3
632	4-3-01	1410	42.9'	6903.6	6860.7
GW-1	4-4-01	0930	59.8'	6916.5	6856.7
GW-2	4-9-01	1445	53.6'	6912.9	6859.3
EPA-23	4-4-01	0830	48.0'	6926.5	6878.5
EPA-28	4-10-01	0910	61.2'	6917.9	6856.7
624	4-10-01	0830	48.6'	6898.7	6850.1
627	4-10-01	1110	53.8'	6892.4	6838.6
805	4-12-01	1230	50.8'	6915.6	6864.8
807	4-12-01	1225	54.0'	6923.4	6869.4
EPA-25	4-10-01	1030	51.15'	6903.4	6852.25
GW-3	4-10-01	0955	50.95'	6910.0	6859.05
801	4-3-01	1445	49.5'	6904.3	6854.8
802	4-9-01	1405	45.5'	6907.1	6861.6
803	4-9-01	1255	58.5'	6922.6	6864.1
808	4-9-01	1330	46.3'	6910.7	6864.4

QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2001

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:	00-34353-8	00-36665-7	01-30301-6	01-31997-7
SAMPLE DATE/TIME:	07/11/2000 09:25	10/03/2000 09:00	01/10/2001 09:25	04/03/2001 09:00
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	458	456	440	512
Magnesium	EPA 200.7	mg/L	0.01	866	906	816	929
Sodium	EPA 200.7	mg/L	0.05	428	432	364	373
Potassium	EPA 200.7	mg/L	0.10	13.4	16.2	12.9	12.3
Bicarbonate	SM 2320-B	mg/L	0.10	242	228	222	225
Sulfate	EPA 200.7	mg/L	1.0	4460	5060	4410	4640
Chloride	EPA 200.7	mg/L	1.0	239	236	258	247
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	4.19	2.56	2.76	2.85
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	86.5	70.1	66.4	68.5
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7740	7550	7610	7580
pH	SM 4500-H-B	std. units	0.10	6.50	6.70	6.61	6.54
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	2.11	2.08	2.70	2.90
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	0.09	0.07	0.08	0.10
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	14.6	11.6	12.5	13.3
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.19	0.15	0.22	0.25
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	0.0021	0.0019	0.0017	0.0011
Radium 226	EPA 903.0	pCi/L	0.2	2.0	2.8	2.6	2.7
Radium Error Estimate ±				0.3	0.3	0.3	0.3
Radium 228	EPA 904.0	pCi/L	1.0	3.6	5.9	6.3	< 1.0
Radium Error Estimate ±				0.2	0.2	1.2	
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	EPA 900.0	pCi/L	1.0	4.6	5.1	3.4	3.1
G. Alpha Error Estimate ±				1.5	1.0	1.3	1.3
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	154	181	141	148

Quality Assurance Data		Target Range				
Anion	meq		110	121	108	112
Cation	meq		115	118	107	120
SM A/C Balance	%	-5 - +5	2.37	-1.04	-0.23	3.56
Calc TDS	mg/L		6988	7545	6722	7146
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	1.00	1.13	1.06

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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:	00-34353-9	00-36665-8	01-30301-8	01-31997-8
SAMPLE DATE/TIME:	07/11/2000 10:15	10/03/2000 09:45	01/10/2001 10:00	04/03/2001 09:45
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	460	455	450	533
Magnesium	EPA 200.7	mg/L	0.01	837	830	790	916
Sodium	EPA 200.7	mg/L	0.05	258	247	222	229
Potassium	EPA 200.7	mg/L	0.10	11.9	13.0	11.6	11.3
Bicarbonate	SM 2320-B	mg/L	0.10	5.0	6.0	7.0	8.0
Sulfate	EPA 200.7	mg/L	1.0	4470	4250	4390	4730
Chloride	EPA 200.7	mg/L	1.0	53.7	48.3	61.7	57.9
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.33	0.23	0.23	0.28
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	90.2	84.9	75.9	75.8
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7380	7220	7280	7260
pH	SM 4500-H-B	std. units	0.10	4.67	4.69	4.74	4.77
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	14.5	10.5	14.0	12.8
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	0.011	0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.31	0.26	0.29	0.32
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	10.1	8.17	9.38	9.52
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	0.23	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.31	0.25	0.35	0.39
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	0.0022	0.0020	0.0019	0.0018
Radium 226	EPA 903.0	pCi/L	0.2	2.5	1.9	2.1	1.9
Radium Error Estimate ±				0.3	0.2	0.3	0.2
Radium 228	EPA 904.0	pCi/L	1.0	6.0	7.5	7.6	7.1
Radium Error Estimate ±				0.2	0.7	1.3	1.4
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 900.0	pCi/L	1.0	4.2	4.3	3.2	3.9
G. Alpha Error Estimate ±				1.4	1.0	1.3	1.4
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	2.4	4.2	2.5	4.1

Quality Assurance Data		Target Range				
Anion	meq		101	96.1	98.7	106
Cation	meq		105	103	98.8	114
SM A/C Balance	%	-5 - +5	1.79	3.70	0.04	3.67
Calc TDS	mg/L		6503	6231	6275	6827
TDS A/C Balance	dec. %	0.80 - 1.20	1.13	1.16	1.16	1.06

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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:	00-34353-7	00-36665-6	01-30301-7	01-31997-6
SAMPLE DATE/TIME:	07/11/2000 08:30	10/03/2000 08:25	01/10/2001 08:50	04/03/2001 08:20
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-1-1-2001	TE -6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	560	548	531	615
Magnesium	EPA 200.7	mg/L	0.01	830	849	762	855
Sodium	EPA 200.7	mg/L	0.05	426	421	349	354
Potassium	EPA 200.7	mg/L	0.10	13.8	17.9	14.7	14.3
Bicarbonate	SM 2320-B	mg/L	0.10	1430	1420	1440	1420
Sulfate	EPA 200.7	mg/L	1.0	3760	4250	3720	3880
Chloride	EPA 200.7	mg/L	1.0	229	241	268	248
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	93.1	98.4	107	118
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	109	104	93.3	101

Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7600	7420	7380	7350
pH	SM 4500-H-B	std. units	0.10	7.53	7.04	7.38	7.28

Trace Metals							
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	0.22	0.20	0.24	0.27
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							
Uranium	EPA 200.8	mg/L	0.0003	0.054	0.053	0.0510	0.0560
Radium 226	EPA 903.0	pCi/L	0.2	0.6	0.7	1.2	0.8
Radium Error Estimate ±				0.3	0.2	0.2	0.2
Radium 228	EPA 904.0	pCi/L	1.0	3.5	3.7	3.9	< 1.0
Radium Error Estimate ±				0.2	0.2	1.1	
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							

Trace Organics							
Chloroform	EPA 601	µg/L	1.0	215	174	199	258

Quality Assurance Data		Target Range				
Anion	meq		116	126	115	118
Cation	meq		123	124	113	126
SM A/C Balance	%	-5 - +5	2.81	-0.83	-0.90	3.23
Calc TDS	mg/L		7137	7624	6916	7276
TDS A/C Balance	dec. %	0.80 - 1.20	1.06	0.97	1.07	1.01

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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:	00-34353-1	00-36665-1	01-30431-7	01-31997-1
SAMPLE DATE/TIME:	07/10/2000 09:00	10/02/2000 08:30	01/16/2001 09:00	04/02/2001 08:35
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	25.8	52.7	20.7	19.4
Magnesium	EPA 200.7	mg/L	0.01	11.8	46.8	9.00	8.80
Sodium	EPA 200.7	mg/L	0.05	318	314	309	314
Potassium	EPA 200.7	mg/L	0.10	3.1	4.9	3.6	2.6
Bicarbonate	SM 2320-B	mg/L	0.10	242	220	242	234
Sulfate	EPA 200.7	mg/L	1.0	543	676	594	544
Chloride	EPA 200.7	mg/L	1.0	19.9	17.7	21.6	18.8
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.28	0.30	0.27	0.37
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	1060	1310	1060	1050
pH	SM 4500-H-B	std. units	0.10	7.99	7.84	7.97	8.01
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	0.75	0.18	0.20	0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	0.003	0.001	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 200.8	mg/L	0.01	0.07	0.39	0.04	0.04
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	0.76	< 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							
Uranium	EPA 200.8	mg/L	0.0003	0.0011	0.0019	0.0004	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	0.9	0.9	0.4	< 0.2
Radium Error Estimate ±				0.2	0.2	0.2	
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	3.0	< 1.0
Radium Error Estimate ±						1.1	
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	EPA 900.0	pCi/L	1.0	1.4	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±				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		15.8	18.2	17.0	15.7
Cation	meq		16.2	20.4	15.3	15.5
SM A/C Balance	%	-5 - +5	1.10	5.61	-5.03	-0.82
Calc TDS	mg/L		1043	1223	1080	1026
TDS A/C Balance	dec. %	0.80 - 1.20	1.02	1.07	0.98	1.02

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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:	00-34353-5	00-36665-4	01-30431-2	01-31997-4
SAMPLE DATE/TIME:	07/10/2000 14:25	10/02/2000 14:30	01/15/2001 09:30	04/02/2001 14:10
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	369	359	360	408
Magnesium	EPA 200.7	mg/L	0.01	166	172	157	182
Sodium	EPA 200.7	mg/L	0.05	192	195	185	173
Potassium	EPA 200.7	mg/L	0.10	5.9	7.8	6.5	6.0
Bicarbonate	SM 2320-B	mg/L	0.10	334	330	350	425
Sulfate	EPA 200.7	mg/L	1.0	1540	1740	1690	1600
Chloride	EPA 200.7	mg/L	1.0	20.4	21.2	25.8	23.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.47	0.42	0.50	0.53
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	2740	2670	2680	2730
pH	SM 4500-H-B	std. units	0.10	7.42	7.49	7.34	7.39
Trace Metals							
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	0.004	< 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	1.27	1.07	1.21	1.14
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							
Uranium	EPA 200.8	mg/L	0.0003	0.0011	0.0011	0.0015	0.0005
Radium 226	EPA 903.0	pCi/L	0.2	1.5	1.8	1.2	1.4
Radium Error Estimate ±				0.2	0.2	0.2	0.3
Radium 228	EPA 904.0	pCi/L	1.0	3.9	< 1.0	2.8	< 1.0
Radium Error Estimate ±				0.2		1.1	
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	EPA 900.0	pCi/L	1.0	1.4	2.6	1.2	2.1
G. Alpha Error Estimate ±				1.0	0.9	1.0	1.2
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		38.1	42.3	41.7	41.0
Cation	meq		40.9	41.0	39.4	43.3
SM A/C Balance	%	-5 - +5	3.47	-1.46	-2.82	2.81
Calc TDS	mg/L		2463	2662	2602	2607
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	1.00	1.03	1.05

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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:	00-34353-12	00-36665-11	01-30301-2	01-31997-11
SAMPLE DATE/TIME:	07/11/2000 13:50	10/03/2000 11:45	01/09/2001 12:55	04/03/2001 11:45
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	574	541	555	651
Magnesium	EPA 200.7	mg/L	0.01	386	372	373	427
Sodium	EPA 200.7	mg/L	0.05	199	193	164	170
Potassium	EPA 200.7	mg/L	0.10	8.4	9.2	8.7	8.1
Bicarbonate	SM 2320-B	mg/L	0.10	171	175	174	177
Sulfate	EPA 200.7	mg/L	1.0	2910	2770	2890	3230
Chloride	EPA 200.7	mg/L	1.0	38.8	36.5	43.4	42.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.97	0.74	0.88	1.01
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	4790	4740	4680	4620
pH	SM 4500-H-B	std. units	0.10	7.07	7.21	7.30	7.06
Trace Metals							
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	0.007	< 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	2.66	3.28	3.37
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							
Uranium	EPA 200.8	mg/L	0.0003	0.0006	0.0005	0.0004	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	1.3	1.5	1.2
Radium Error Estimate ±					0.2	0.2	0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.4	3.5	5.0	3.8
Radium Error Estimate ±				0.2	0.2	1.2	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	EPA 900.0	pCi/L	1.0	1.8	1.4	2.2	1.8
G. Alpha Error Estimate ±				1.0	0.7	1.1	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		64.5	61.6	64.3	71.4
Cation	meq		70.0	66.9	66.4	76.0
SM A/C Balance	%	-5 - +5	4.06	4.10	1.64	3.12
Calc TDS	mg/L		4207	4013	4126	4622
TDS A/C Balance	dec. %	0.80 - 1.20	1.14	1.18	1.13	1.00

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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:	00-34353-11	00-36665-10	01-30301-3	01-31997-10
SAMPLE DATE/TIME:	07/11/2000 13:00	10/03/2000 11:00	01/09/2001 13:35	04/03/2001 11:00
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	496	466	475	563
Magnesium	EPA 200.7	mg/L	0.01	630	594	591	669
Sodium	EPA 200.7	mg/L	0.05	188	171	148	155
Potassium	EPA 200.7	mg/L	0.10	13.5	14.4	12.7	12.0
Bicarbonate	SM 2320-B	mg/L	0.10	415	354	362	353
Sulfate	EPA 200.7	mg/L	1.0	3310	3060	3220	3460
Chloride	EPA 200.7	mg/L	1.0	92.7	85.4	102	96.3
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	23.0	20.0	20.2	17.5
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	42.5	37.5	35.2	36.3
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5720	5500	5560	5510
pH	SM 4500-H-B	std. units	0.10	7.09	6.99	6.81	7.22
Trace Metals							
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	0.08	0.08	0.09	0.10
Lead	EPA 200.8	mg/L	0.05	0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.16	1.09	1.24	1.39
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	0.08	0.11	0.12
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	0.001	0.003	0.003
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	0.022	0.015	0.0160	0.0150
Radium 226	EPA 903.0	pCi/L	0.2	0.7	0.8	1.3	1.2
Radium Error Estimate ±				0.2	0.2	0.2	0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.3	2.7	< 1.0	< 1.0
Radium Error Estimate ±				0.2	0.2		
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	EPA 900.0	pCi/L	1.0	< 1.0	1.4	1.5	< 1.0
G. Alpha Error Estimate ±					0.7	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		81.4	74.6	78.4	83.2
Cation		meq		87.5	82.1	81.3	92.3
SM A/C Balance		%	-5 - +5	3.62	4.76	1.79	5.18
Calc TDS		mg/L		5157	4761	4913	5317
TDS A/C Balance		dec. %	0.80 - 1.20	1.11	1.16	1.13	1.04

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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:	00-34353-10	00-36665-9	01-30301-4	01-31997-9
SAMPLE DATE/TIME:	07/11/2000 11:00	10/03/2000 10:15	01/09/2001 14:10	04/03/2001 10:20
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	488	474	468	551
Magnesium	EPA 200.7	mg/L	0.01	897	889	845	964
Sodium	EPA 200.7	mg/L	0.05	321	309	277	294
Potassium	EPA 200.7	mg/L	0.10	7.5	8.7	7.7	7.1
Bicarbonate	SM 2320-B	mg/L	0.10	399	444	453	456
Sulfate	EPA 200.7	mg/L	1.0	4160	3970	4040	4410
Chloride	EPA 200.7	mg/L	1.0	167	169	180	177
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.75	0.55	0.72	0.71
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	150	135	124	133

Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7630	7540	7580	7590
pH	SM 4500-H-B	std. units	0.10	7.28	6.66	6.83	7.14

Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	3.57	4.37	4.61	2.81
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	0.07	0.06	0.06	0.06
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	9.69	8.27	7.44	6.63
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	0.09	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							
Uranium	EPA 200.8	mg/L	0.0003	0.0026	0.0024	0.0021	0.0020
Radium 226	EPA 903.0	pCi/L	0.2	1.4	0.8	0.9	1.1
Radium Error Estimate ±				0.3	0.2	0.4	0.2
Radium 228	EPA 904.0	pCi/L	1.0	3.4	1.8	2.9	< 1.0
Radium Error Estimate ±				0.2	0.2	1.1	
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	EPA 900.0	pCi/L	1.0	2.8	1.9	< 1.0	1.7
G. Alpha Error Estimate ±				1.2	0.8		1.1

Trace Organics							
Chloroform	EPA 601	µg/L	1.0	1.9	1.1	< 1.0	2.3

Quality Assurance Data		Target Range				
Anion	meq		109	104	106	114
Cation	meq		114	112	107	121
SM A/C Balance	%	-5 - +5	2.36	3.49	0.47	3.16
Calc TDS	mg/L		6915	6648	6602	7228
TDS A/C Balance	dec. %	0.80 - 1.20	1.10	1.13	1.15	1.05

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QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2001

ZONE 3

504-B

*517

EPA-14

420

*711

*613

*708

EPA-13 (SAMPLED 2ND QTR.)

Levels Only

EPA-9

EPA-13 (1ST QTR. ONLY)

702

710

712

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714

701

706

707

717

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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:	00-34356-1	00-36668-1	01-30433-3	01-31998-1
SAMPLE DATE/TIME:	07/10/2000 10:25	10/02/2000 10:05	01/15/2001 13:40	04/02/2001 09:20
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 25, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	506	510	480	479
Magnesium	EPA 200.7	mg/L	0.01	570	620	564	595
Sodium	EPA 200.7	mg/L	0.05	150	147	135	153
Potassium	EPA 200.7	mg/L	0.10	12.3	13.8	12.5	12.1
Bicarbonate	SM 2320-B	mg/L	0.10	48.0	44.0	43.0	13.0
Sulfate	EPA 200.7	mg/L	1.0	3440	3740	4100	3480
Chloride	EPA 200.7	mg/L	1.0	28.4	33.0	34.6	29.3
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.68	0.53	0.71	0.88
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	5510	5650	5590	5590
pH	SM 4500-H-B	std. units	0.10	6.20	6.28	5.92	6.02
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	0.21	0.20	0.20	0.30
Arsenic III	SM 3114-C	mg/L	0.001	0.025	0.033	0.028	0.026
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	0.008	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.30	0.35	0.29	0.31
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	6.18	6.23	5.99	6.20
Molybdenum	EPA 200.8	mg/L	0.10	13.4	14.3	12.3	12.9
Nickel	EPA 200.8	mg/L	0.05	0.41	0.36	0.44	0.48
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	0.0498	0.0226	0.0310	0.0270
Radium 226	EPA 903.0	pCi/L	0.2	13.4	15.0	15.7	15.5
Radium Error Estimate ±				1.1	1.1	1.7	1.2
Radium 228	EPA 904.0	pCi/L	1.0	20.8	15.8	17.9	20.8
Radium Error Estimate ±				1.5	1.4	1.2	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	EPA 900.1	pCi/L	1.0	21.0	25.0	18.7	15.5
G. Alpha Error Estimate ±				1.8	2.0	1.4	1.3
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	79.6	87.1	73.5
Cation	meq		80.0	84.3	77.6	80.9
SM A/C Balance	%	-5 - +5	4.41	2.88	-5.79	4.76
Calc TDS	mg/L		4738	5093	5355	4763
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	1.11	1.04	1.17

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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:	00-34508-1	00-36668-3	01-30433-1	01-32152-2
SAMPLE DATE/TIME:	07/18/2000 10:00	10/02/2000 11:30	01/15/2001 10:25	04/09/2001 10:30
DATE RECEIVED:	07/20/2000 10:00	10/06/2000 10:00	01/19/2001 10:15	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	May 1, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-8-10-00	TE-2-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	461	467	447	527
Magnesium	EPA 200.7	mg/L	0.01	435	451	396	481
Sodium	EPA 200.7	mg/L	0.05	149	154	145	143
Potassium	EPA 200.7	mg/L	0.10	8.56	9.69	9.00	8.60
Bicarbonate	SM 2320-B	mg/L	0.10	7.00	6.00	3.00	7.00
Sulfate	EPA 200.7	mg/L	1.0	2850	2990	3220	3870
Chloride	EPA 200.7	mg/L	1.0	50.6	48.6	53.2	60.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	12.5	11.5	12.0	40.4
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	3.95	3.05	3.62	4.15
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4800	4720	4640	5180
pH	SM 4500-H-B	std. units	0.10	4.70	4.78	4.60	4.75
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	10.2	9.80	9.00	60.2
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	0.02
Cadmium	EPA 200.8	mg/L	0.005	0.008	0.006	0.005	0.008
Cobalt	EPA 200.8	mg/L	0.01	0.55	0.51	0.54	0.75
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	7.14	6.73	6.43	10.7
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.37	0.40	0.47	0.65
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	0.40
Radiometrics							
Uranium	EPA 200.8	mg/L	0.0003	0.0661	0.0606	0.0605	0.218
Radium 226	EPA 903.0	pCi/L	0.2	9.6	9.8	12.2	7.8
Radium Error Estimate ±				0.6	0.9	1.6	0.8
Radium 228	EPA 904.0	pCi/L	1.0	13.1	9.4	8.9	10.6
Radium Error Estimate ±				1.0	0.7	1.1	1.2
Thorium 230	EPA 907.0	pCi/L	0.2	1.7	< 0.2	< 0.2	46.5
Thorium Error Estimate ±				0.7			4.3
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	26.7	26.4	14.5	24.2
G. Alpha Error Estimate ±				3.7	2.0	1.3	1.5
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	5.1	3.7	3.6	3.7

Quality Assurance Data		Target Range				
Anion	meq		61.2	64.0	68.9	82.7
Cation	meq		67.3	69.1	63.1	76.3
SM A/C Balance	%	-5 - +5	4.74	3.83	-4.39	-4.02
Calc TDS	mg/L		3998	4158	4310	5175
TDS A/C Balance	dec. %	0.80 - 1.20	1.20	1.14	1.08	1.00

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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:	00-34356-3	00-36833-1	01-30433-2	01-31998-3
SAMPLE DATE/TIME:	07/12/2000 08:20	10/09/2000 13:55	01/15/2001 11:00	04/02/2001 12:50
DATE RECEIVED:	07/14/2000 10:20	10/13/2000 00:20	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 10, 2000	February 14, 2001	April 25, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-9-10-2000	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	563	543	507	570
Magnesium	EPA 200.7	mg/L	0.01	368	423	379	439
Sodium	EPA 200.7	mg/L	0.05	161	163	155	153
Potassium	EPA 200.7	mg/L	0.10	8.7	9.5	9.3	8.3
Bicarbonate	SM 2320-B	mg/L	0.10	239	153	113	104
Sulfate	EPA 200.7	mg/L	1.0	2560	3210	3110	2990
Chloride	EPA 200.7	mg/L	1.0	53.1	44.2	55.2	52.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.56	0.35	0.23	0.43
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	23.0	19.3	19.9	18.1
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4410	4440	4550	4570
pH	SM 4500-H-B	std. units	0.10	7.11	7.26	6.55	6.89
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	11.6	8.13	23.7	13.0
Arsenic III	SM 3114-C	mg/L	0.001	0.002	< 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	0.008	0.008	0.008
Cobalt	EPA 200.8	mg/L	0.01	0.18	0.18	0.23	0.26
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.36	3.96	4.65	4.68
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.15	0.15	0.24	0.27
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	0.0530	0.0435	0.0490	0.0370
Radium 226	EPA 903.0	pCi/L	0.2	3.8	3.9	5.2	4.2
Radium Error Estimate ±				0.3	0.3	0.6	0.3
Radium 228	EPA 904.0	pCi/L	1.0	5.9	6.9	< 1.0	6.4
Radium Error Estimate ±				0.6	0.6		1.4
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 900.0	pCi/L	1.0	5.4	10.3	4.5	5.1
G. Alpha Error Estimate ±				1.9	1.3	1.5	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		60.4	72.0	69.6	66.8
Cation	meq		66.3	70.0	64.2	72.2
SM A/C Balance	%	-5 - +5	4.68	-1.43	-4.06	3.93
Calc TDS	mg/L		3940	4559	4365	4350
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	0.97	1.04	1.05

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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:	00-34356-2	00-36668-2	01-30433-4	01-31998-2
SAMPLE DATE/TIME:	07/10/2000 11:20	10/02/2000 10:45	01/15/2001 14:10	04/02/2001 10:05
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 25, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	664	661	617	695
Magnesium	EPA 200.7	mg/L	0.01	151	147	123	139
Sodium	EPA 200.7	mg/L	0.05	141	138	119	126
Potassium	EPA 200.7	mg/L	0.10	5.86	6.97	6.90	5.70
Bicarbonate	SM 2320-B	mg/L	0.10	456	467	474	467
Sulfate	EPA 200.7	mg/L	1.0	1740	1750	1920	1800
Chloride	EPA 200.7	mg/L	1.0	35.0	38.6	42.0	39.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.07	< 0.05	0.10
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	33.2	18.7	12.7	12.5
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3500	3350	3200	3290
pH	SM 4500-H-B	std. units	0.10	7.47	7.24	7.23	7.39
Trace Metals							
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	0.007	0.023	0.006
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01	0.15	< 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	2.03	2.25	2.08	2.28
Molybdenum	EPA 200.8	mg/L	0.10	0.21	0.15	0.24	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							
Uranium	EPA 200.8	mg/L	0.0003	0.0436	0.0392	0.0430	0.0500
Radium 226	EPA 903.0	pCi/L	0.2	2.8	2.9	2.7	2.5
Radium Error Estimate ±				0.3	0.3	0.4	0.3
Radium 228	EPA 904.0	pCi/L	1.0	4.2	2.2	4.0	< 1.0
Radium Error Estimate ±				0.2	0.2	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	EPA 900.1	pCi/L	1.0	2.8	3.6	3.2	3.0
G. Alpha Error Estimate ±				1.5	1.0	1.3	1.3
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		47.1	46.5	49.9	47.2
Cation	meq		52.2	51.6	46.6	52.1
SM A/C Balance	%	-5 - +5	5.14	5.17	-3.41	4.96
Calc TDS	mg/L		3114	3060	3123	3097
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	1.09	1.02	1.06

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

WELL ID:	711	711	711	711
LABORATORY ID:	00-34353-3	00-36665-2	01-30431-4	01-31997-2
SAMPLE DATE/TIME:	07/10/2000 13:10	10/02/2000 12:55	01/15/2001 12:45	04/02/2001 10:45
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	518	503	496	560
Magnesium	EPA 200.7	mg/L	0.01	542	556	495	572
Sodium	EPA 200.7	mg/L	0.05	101	100	93.7	94.9
Potassium	EPA 200.7	mg/L	0.10	10.9	12.6	11.1	10.4
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3490	3990	3900	3560
Chloride	EPA 200.7	mg/L	1.0	20.0	17.9	23.7	19.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.58	0.45	0.59	0.99
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	5400	5310	5260	5310
pH	SM 4500-H-B	std. units	0.10	3.98	4.13	3.57	3.10
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	1.51	1.33	1.40	1.40
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	0.041	0.036	0.035
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	0.42	0.34	0.39	0.40
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	8.39	7.44	8.00	6.98
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.35	0.32	0.34	0.39
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	0.0613	0.0530	0.0568	0.0560
Radium 226	EPA 903.0	pCi/L	0.2	9.6	9.6	10.3	8.7
Radium Error Estimate ±				0.5	0.9	1.1	0.6
Radium 228	EPA 904.0	pCi/L	1.0	18.6	20.9	19.4	16.9
Radium Error Estimate ±				0.2	1.8	1.6	1.4
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 900.0	pCi/L	1.0	14.2	19.3	13.2	12.4
G. Alpha Error Estimate ±				1.3	1.8	1.2	1.2
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	83.6	81.9	74.7
Cation	meq		76.2	76.6	76.5	80.5
SM A/C Balance	%	-5 - +5	1.98	-4.40	* -3.44	3.74
Calc TDS	mg/L		4692	5188	5029	4825
TDS A/C Balance	dec. %	0.80 - 1.20	1.15	1.02	1.05	1.10

* Iron used for balance purposes.

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

WELL ID:	613	613	613	613
LABORATORY ID:	00-34353-13	00-36665-5	01-30431-1	01-32149-3
SAMPLE DATE/TIME:	07/11/2000 14:50	10/02/2000 15:00	01/15/2001 08:45	04/09/2001 11:05
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	May 16, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	426	451	425	411
Magnesium	EPA 200.7	mg/L	0.01	656	709	622	623
Sodium	EPA 200.7	mg/L	0.05	328	350	334	313
Potassium	EPA 200.7	mg/L	0.10	< 0.10	1.5	1.0	0.60
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	8770	8870	10400	8510
Chloride	EPA 200.7	mg/L	1.0	166	175	183	174
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	445	400	423	425
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	16.8	18.0	17.2	18.0
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	13700	13800	13800	13100
pH	SM 4500-H-B	std. units	0.10	3.16	3.08	3.08	3.16
Trace Metals							
Aluminum	EPA 200.7	mg/L	0.10	662	694	810	738
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	0.22	0.21	0.23	0.20
Cadmium	EPA 200.8	mg/L	0.005	0.028	0.030	0.028	0.027
Cobalt	EPA 200.8	mg/L	0.01	1.64	1.56	1.77	1.90
Lead	EPA 200.8	mg/L	0.05	0.23	0.28	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	63.3	60.1	61.0	54.8
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	1.88	1.52	1.60	1.70
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	5.80	5.08	5.40	5.00
Radiometrics							
Uranium	EPA 200.8	mg/L	0.0003	1.98	1.82	2.08	1.85
Radium 226	EPA 903.0	pCi/L	0.2	11.9	13.5	14.6	11.5
Radium Error Estimate ±				0.8	1.1	1.3	1.0
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	1.5
Radium Error Estimate ±							1.0
Thorium 230	EPA 907.0	pCi/L	0.2	317	249	794	592
Thorium Error Estimate ±				9.5	12.0	31.1	16.8
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±							
Gross Alpha	EPA 900.0	pCi/L	1.0	46.6	67.9	44.1	40.0
G. Alpha Error Estimate ±				4.3	6.0	4.1	3.5
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	68.6	49.0	46.4	41.0

Quality Assurance Data		Target Range				
Anion	meq		189	191	223	183
Cation	meq		199	206	211	202
SM A/C Balance	%	-5 - +5	2.70	3.74	-2.73	4.68
Calc TDS	mg/L		11057	11212	12648	10714
TDS A/C Balance	dec. %	0.80 - 1.20	1.24	1.23	1.09	1.22

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

WELL ID:	708	708
LABORATORY ID:	01-30578-1	01-31998-4
SAMPLE DATE/TIME:	01/24/2001 09:45	04/02/2001 13:30
DATE RECEIVED:	01/29/2001 10:00	04/06/2001 10:30
REPORT DATE:	February 20, 2001	April 25, 2001
QUARTER REPRESENTED:	First 2001	Second 2001
UNC SUBMITTAL #:	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results
Calcium	EPA 200.7	mg/L	0.05	491	515
Magnesium	EPA 200.7	mg/L	0.01	556	578
Sodium	EPA 200.7	mg/L	0.05	104	101
Potassium	EPA 200.7	mg/L	0.10	11.2	10.7
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3940	3750
Chloride	EPA 200.7	mg/L	1.0	32.4	31.3
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	2.58	1.81
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10
Non-Metals					
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5620	5520
pH	SM 4500-H-B	std. units	0.10	3.49	3.20
Trace Metals					
Aluminum	EPA 200.8	mg/L	0.10	< 0.10	0.61
Arsenic III	SM 3114-C	mg/L	0.001	0.011	0.004
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.03	0.33
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.67	6.87
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05	0.26
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10
Radiometrics					
Uranium	EPA 200.8	mg/L	0.0003	0.0008	0.0070
Radium 226	EPA 903.0	pCi/L	0.2	2.0	7.4
Radium Error Estimate ±				0.2	0.4
Radium 228	EPA 904.0	pCi/L	1.0	11.2	11.7
Radium Error Estimate ±				1.5	1.5
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2
Thorium Error Estimate ±					
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0
Lead Error Estimate ±					
Gross Alpha	EPA 900.1	pCi/L	1.0	15.1	9.0
G. Alpha Error Estimate ±				2.5	1.0
Trace Organics					
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range		
Anion	meq		83.0	79.0
Cation	meq		75.9	79.1
SM A/C Balance	%	-5 - +5	-4.46	0.05
Calc TDS	mg/L		5139	4996
TDS A/C Balance	dec. %	0.80 - 1.20	1.09	1.10

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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:	99-35992	99-33758-001	30271-1	01-32152-1
SAMPLE DATE/TIME:	07/20/1999	10/12/1999 09:20	01/11/2001 09:10	04/09/2001 08:40
DATE RECEIVED:	-	-	-	04/13/2001 10:00
REPORT DATE:	August 26, 1999	November 24, 1999	February 18, 2000	May 1, 2001
QUARTER REPRESENTED:	Third 1999	Fourth 1999	First 2000	Second 2001
UNC SUBMITTAL #:	TE-6-7-99	TE-8-10-99	TE-2-1-2000	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	476	430	455	522
Magnesium	EPA 200.7	mg/L	0.01	791	726	787	835
Sodium	EPA 200.7	mg/L	0.05	134	133	138	138
Potassium	EPA 200.7	mg/L	0.10	12.8	11.4	12.0	11.6
Bicarbonate	SM 2320-B	mg/L	0.10	77.0	100	92.0	79.0
Sulfate	EPA 200.7	mg/L	1.0	4260	3890	4160	4660
Chloride	EPA 200.7	mg/L	1.0	42.0	40.7	37.5	36.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.53	0.53	0.60	0.62
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	6510	6520	6340	6110
pH	SM 4500-H-B	std. units	0.10	6.94	7.16	7.17	6.43
Trace Metals							
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	0.443	0.347	0.601
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	0.04	0.06	0.06
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.60	5.63	5.89	6.33
Molybdenum	EPA 200.8	mg/L	0.10	0.26	0.30	0.32	0.30
Nickel	EPA 200.8	mg/L	0.05	0.10	< 0.05	0.16	0.15
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	0.0242	0.0237	0.0207	0.0230
Radium 226	EPA 903.0	pCi/L	0.2	4.3	4.5	4.7	4.6
Radium Error Estimate ±				0.3	0.9	0.3	0.5
Radium 228	EPA 904.0	pCi/L	1.0	6.8	6.9	8.5	5.1
Radium Error Estimate ±				0.6	1.0	0.6	1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2	1.7	< 0.2
Thorium Error Estimate ±						0.7	
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead Error Estimate ±							
Gross Alpha	EPA 900.0	pCi/L	1.0	8.6	5.1	6.3	6.9
G. Alpha Error Estimate ±				0.9	0.7	1.2	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		91.20	83.83	89.24	99.4
Cation	meq		96.17	88.43	95.02	102
SM A/C Balance	%	-5 - +5	2.65	2.67	3.14	1.47
Calc TDS	mg/L		5760	5288	5643	6250
TDS A/C Balance	dec. %	0.80 - 1.20	1.13	1.23	1.12	0.98

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QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2001

SW ALLUVIUM

*509-D

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*GW-1

*GW-2

*GW-3

*EPA-23

EPA-25

*EPA-28

LEVELS ONLY

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*Point of Compliance Wells

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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:	00-34352-1	00-36667-1	01-30299-9	01-31999-1
SAMPLE DATE/TIME:	07/12/2000 09:05	10/03/2000 13:00	01/08/2001 14:45	04/03/2001 13:35
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	866	893	924	984
Magnesium	EPA 200.7	mg/L	0.01	306	372	331	366
Sodium	EPA 200.7	mg/L	0.05	228	240	220	211
Potassium	EPA 200.7	mg/L	0.10	10.3	13.5	11.1	11.8
Bicarbonate	SM 2320-B	mg/L	0.10	2110	2050	2200	2080
Sulfate	EPA 200.7	mg/L	1.0	1380	1990	1610	1800
Chloride	EPA 200.7	mg/L	1.0	324	350	317	311
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.24	1.90	0.94	0.82
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	31.3	31.2	30.6	31.8
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4920	5090	5010	5120
pH	SM 4500-H-B	std. units	0.10	7.18	7.14	7.47	6.76
Trace Metals							
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	0.07	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.89	2.05	2.08	2.53
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							
Uranium	EPA 200.8	mg/L	0.0003	0.226	0.184	0.211	0.183
Radium 226	EPA 903.0	pCi/L	0.2	0.6	0.7	0.5	0.5
Radium Error Estimate ±				0.3	0.2	0.3	0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.8	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				0.2			
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		74.7	87.1	80.7	82.6
Cation	meq		79.1	86.7	83.8	89.4
SM A/C Balance	%	-5 - +5	2.85	-0.27	1.88	3.92
Calc TDS	mg/L		4310	5026	4652	4868
TDS A/C Balance	dec. %	0.80 - 1.20	1.14	1.01	1.08	1.05

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

WELL ID:	624	624	624	624
LABORATORY ID:	00-34507-2	00-36828-2	01-30299-5	01-32151-4
SAMPLE DATE/TIME:	07/17/2000 09:25	10/09/2000 09:25	01/08/2001 11:10	04/10/2001 08:30
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 18, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	697	606	707	791
Magnesium	EPA 200.7	mg/L	0.01	456	412	464	497
Sodium	EPA 200.7	mg/L	0.05	194	185	173	238
Potassium	EPA 200.7	mg/L	0.10	6.5	7.6	6.9	7.3
Bicarbonate	SM 2320-B	mg/L	0.10	1480	1440	1480	1470
Sulfate	EPA 200.7	mg/L	1.0	1790	1530	1810	2250
Chloride	EPA 200.7	mg/L	1.0	184	147	177	176
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.10	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	85.1	98.5	104	103
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5170	5090	5100	4910
pH	SM 4500-H-B	std. units	0.10	7.62	7.59	7.40	7.33
Trace Metals							
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	0.02	0.01	0.02	< 0.01
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-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	0.032	0.031	0.0320	0.0031
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	0.4	0.3
Radium Error Estimate ±						0.3	0.2
Radium 228	EPA 904.0	pCi/L	1.0	1.5	< 1.0	< 1.0	< 1.0
Radium Error Estimate ±				0.1			
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		72.8	66.7	74.4	83.3
Cation	meq		81.5	72.9	81.7	91.5
SM A/C Balance	%	-5 - +5	5.60	4.45	4.70	4.70
Calc TDS	mg/L		4444	4044	4539	5151
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	1.26	1.12	0.95

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

WELL ID:	627	627	627	627
LABORATORY ID:	00-34507-9	00-36828-9	01-30299-14	01-32151-8
SAMPLE DATE/TIME:	07/18/2000 09:30	10/10/2000 10:30	01/09/2001 10:55	04/10/2001 11:10
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	567	496	583	656
Magnesium	EPA 200.7	mg/L	0.01	292	261	303	319
Sodium	EPA 200.7	mg/L	0.05	502	512	454	446
Potassium	EPA 200.7	mg/L	0.10	4.3	5.4	5.0	5.3
Bicarbonate	SM 2320-B	mg/L	0.10	590	580	595	590
Sulfate	EPA 200.7	mg/L	1.0	2390	2160	2460	2840
Chloride	EPA 200.7	mg/L	1.0	53.3	44.8	57.9	57.3
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	149	150	160	149
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5320	5100	5170	5020
pH	SM 4500-H-B	std. units	0.10	7.91	7.78	8.03	7.47
Trace Metals							
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	0.11	0.08	0.11	0.01
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-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	< 0.0003	0.024	0.023	0.003
Radium 226	EPA 903.0	pCi/L	0.2	0.6	0.5	0.4	0.4
Radium Error Estimate ±				0.2	0.2	0.3	0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.5	< 1.0	2.5	< 1.0
Radium Error Estimate ±				0.1		1.1	
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		71.6	66.5	74.1	81.1
Cation	meq		74.6	69.0	74.3	78.9
SM A/C Balance	%	-5 - +5	2.07	1.83	0.14	-1.36
Calc TDS	mg/L		4764	4434	4869	5279
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	1.15	1.06	0.95

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

WELL ID:	632	632	632	632
LABORATORY ID:	00-34352-2	00-36667-2	01-30299-8	01-31999-2
SAMPLE DATE/TIME:	07/12/2000 09:50	10/03/2000 14:20	01/08/2001 14:10	04/03/2001 14:10
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	595	622	624	710
Magnesium	EPA 200.7	mg/L	0.01	580	610	612	713
Sodium	EPA 200.7	mg/L	0.05	366	240	347	359
Potassium	EPA 200.7	mg/L	0.10	8.1	9.7	8.7	8.10
Bicarbonate	SM 2320-B	mg/L	0.10	1810	1780	1740	1600
Sulfate	EPA 200.7	mg/L	1.0	2510	2820	3020	3370
Chloride	EPA 200.7	mg/L	1.0	239	230	223	228
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.08	0.07	0.17	0.33
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	2.92	3.17	2.69	21.6
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6070	6020	6180	6800
pH	SM 4500-H-B	std. units	0.10	6.98	7.18	7.38	7.17
Trace Metals							
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	0.06	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.79	0.73	0.85	0.87
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							
Uranium	EPA 200.8	mg/L	0.0003	0.0739	0.0180	0.0640	0.0590
Radium 226	EPA 903.0	pCi/L	0.2	0.9	0.8	0.7	1.1
Radium Error Estimate ±				0.2	0.2	0.3	0.3
Radium 228	EPA 904.0	pCi/L	1.0	2.1	< 1.0	1.9	< 1.0
Radium Error Estimate ±				0.1		1.1	
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	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	1.7
G. Alpha Error Estimate ±							1.0
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	2.0	2.5	3.5	3.49

Quality Assurance Data		Target Range				
Anion	meq		88.9	94.6	97.9	104
Cation	meq		94.3	92.7	97.6	111
SM A/C Balance	%	-5 - +5	2.92	-1.06	-0.18	2.97
Calc TDS	mg/L		5217	5437	5718	6285
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	1.11	1.08	1.08

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

WELL ID:	801	801	801	801
LABORATORY ID:	99-33595-004	30143-5	01-30299-3	01-31999-3
SAMPLE DATE/TIME:	10/05/1999 14:15	01/04/2000 13:48	01/08/2001 09:30	04/03/2001 14:45
DATE RECEIVED:	-	-	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	November 16, 1999	February 18, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Fourth '99	First 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-10-99	TE-1-1-2000	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	594	539	578	615
Magnesium	EPA 200.7	mg/L	0.01	936	1010	820	825
Sodium	EPA 200.7	mg/L	0.05	352	307	359	320
Potassium	EPA 200.7	mg/L	0.10	14.7	16.1	16.6	12.8
Bicarbonate	SM 2320-B	mg/L	0.10	1450	1400	1570	1570
Sulfate	EPA 200.7	mg/L	1.0	4300	4670	3700	3580
Chloride	EPA 200.7	mg/L	1.0	227	205	240	214
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	16.2	20.2	9.07	7.88
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	25.1	11.9	48.9	17.5
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7500	8450	7330	6930
pH	SM 4500-H-B	std. units	0.10	7.53	7.94	7.70	7.37
Trace Metals							
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	0.006	< 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	16.1	23.6	6.52	7.02
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							
Uranium	EPA 200.8	mg/L	0.0003	0.0527	0.0408	0.0870	0.0530
Radium 226	EPA 903.0	pCi/L	0.2	1.1	0.7	< 0.2	0.4
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	EPA 900.0	pCi/L	1.0	1.4	1.3	< 1.0	< 1.0
G. Alpha Error Estimate ±				0.5	0.4		
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	2.3	2.6	2.2	3.11

Quality Assurance Data		Target Range				
Anion	meq		122	127	113	108
Cation	meq		125	128	114	115
SM A/C Balance	%	-5 - +5	1.57	0.30	0.53	3.19
Calc TDS	mg/L		7297	7549	6733	6447
TDS A/C Balance	dec. %	0.80 - 1.20	1.03	1.12	1.09	1.08

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

WELL ID:	802	802	802	802
LABORATORY ID:	00-34352-3	00-36667-4	01-30299-2	01-32151-2
SAMPLE DATE/TIME:	07/12/2000 10:30	10/04/2000 08:50	01/08/2001 09:15	04/09/2001 14:05
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	699	732	751	847
Magnesium	EPA 200.7	mg/L	0.01	700	758	758	671
Sodium	EPA 200.7	mg/L	0.05	297	327	300	263
Potassium	EPA 200.7	mg/L	0.10	12.1	9.0	8.2	6.6
Bicarbonate	SM 2320-B	mg/L	0.10	2020	2050	2180	2050
Sulfate	EPA 200.7	mg/L	1.0	2870	3170	3190	2840
Chloride	EPA 200.7	mg/L	1.0	174	201	203	180
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.91	1.06	1.20	0.06
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	42.0	79.7	89.3	111
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7030	7250	7360	6400
pH	SM 4500-H-B	std. units	0.10	7.33	7.01	7.69	7.24
Trace Metals							
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	1.52	1.97	2.73	0.06
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	0.004	< 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	0.0980	0.168	0.193	0.0170
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	3.6	< 1.0
Radium Error Estimate ±						1.6	
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 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	2.0	2.2	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		101	111	114	106
Cation	meq		107	114	114	110
SM A/C Balance	%	-5 - +5	2.82	1.51	-0.04	1.90
Calc TDS	mg/L		5951	6578	6700	6324
TDS A/C Balance	dec. %	0.80 - 1.20	1.18	1.10	1.10	1.01

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

WELL ID:	803	803	803	803
LABORATORY ID:	00-34352-4	00-36667-3	01-30299-1	01-32151-1
SAMPLE DATE/TIME:	07/12/2000 10:40	10/04/2000 08:45	01/08/2001 08:50	04/09/2001 12:55
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 9, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	712	742	739	798
Magnesium	EPA 200.7	mg/L	0.01	737	750	730	768
Sodium	EPA 200.7	mg/L	0.05	328	296	277	222
Potassium	EPA 200.7	mg/L	0.10	6.8	14.1	12.5	12.1
Bicarbonate	SM 2320-B	mg/L	0.10	2050	2010	1970	1790
Sulfate	EPA 200.7	mg/L	1.0	2890	3260	3240	3460
Chloride	EPA 200.7	mg/L	1.0	184	175	178	149
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.24	0.85	1.06	0.81
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	77.5	45.6	46.3	43.9
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7250	7060	7010	6630
pH	SM 4500-H-B	std. units	0.10	7.40	7.31	7.78	7.01
Trace Metals							
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	0.02	< 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	1.95	1.76	1.91	0.23
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							
Uranium	EPA 200.8	mg/L	0.0003	0.197	0.0841	0.0900	0.0100
Radium 226	EPA 903.0	pCi/L	0.2	0.4	0.5	< 0.2	< 0.2
Radium Error Estimate ±				0.2	0.3		
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	1.3	2.8	< 1.0
Radium Error Estimate ±					0.2	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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	1.7	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		105	109	108	109
Cation	meq		112	113	110	114
SM A/C Balance	%	-5 - +5	3.29	1.77	1.01	2.32
Calc TDS	mg/L		6229	6447	6370	6500
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	1.10	1.10	1.02

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

WELL ID:	808	808
LABORATORY ID:	01-30301-1	01-32149-4
SAMPLE DATE/TIME:	01/08/2001 09:05	04/09/2001 13:30
DATE RECEIVED:	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	February 12, 2001	May 16, 2001
QUARTER REPRESENTED:	First 2001	Second 2001
UNC SUBMITTAL #:	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results
Calcium	EPA 200.7	mg/L	0.05	720	841
Magnesium	EPA 200.7	mg/L	0.01	721	468
Sodium	EPA 200.7	mg/L	0.05	382	312
Potassium	EPA 200.7	mg/L	0.10	14.5	11.6
Bicarbonate	SM 2320-B	mg/L	0.10	2080	2130
Sulfate	EPA 200.7	mg/L	1.0	3400	2480
Chloride	EPA 200.7	mg/L	1.0	233	247
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	16.0	6.39
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	26.0	< 0.10
Non-Metals					
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7470	6030
pH	SM 4500-H-B	std. units	0.10	7.14	7.04
Trace Metals					
Aluminum	EPA 200.7	mg/L	0.10	6.02	0.11
Arsenic III	SM 3114-C	mg/L	0.001	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.13	0.03
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	18.1	4.00
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.09	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10
Radiometrics					
Uranium	EPA 200.8	mg/L	0.0003	0.0820	0.0340
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	0.4
Radium Error Estimate ±					0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0
Radium Error Estimate ±					
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2	< 0.2
Thorium Error Estimate ±					
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0	< 1.0
Lead Error Estimate ±					
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±					
Trace Organics					
Chloroform	EPA 601	µg/L	1.0	1.4	< 1.0

Quality Assurance Data		Target Range		
Anion	meq		113	93.5
Cation	meq		115	95.6
SM A/C Balance	%	-5 - +5	0.81	1.08
Calc TDS	mg/L		6664	5437
TDS A/C Balance	dec. %	0.80 - 1.20	1.12	1.11

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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:	00-34507-1	00-36828-1	01-30299-4	01-31999-6
SAMPLE DATE/TIME:	07/17/200008:35	10/09/200008:45	01/08/200110:20	04/04/2001 09:30
DATE RECEIVED:	07/20/200010:00	10/13/200000:00	01/12/200110:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 18, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	609	517	628	713
Magnesium	EPA 200.7	mg/L	0.01	312	274	316	347
Sodium	EPA 200.7	mg/L	0.05	210	200	196	201
Potassium	EPA 200.7	mg/L	0.10	4.9	5.8	5.2	4.1
Bicarbonate	SM 2320-B	mg/L	0.10	915	905	944	946
Sulfate	EPA 200.7	mg/L	1.0	1720	1520	1830	2070
Chloride	EPA 200.7	mg/L	1.0	125	95.1	112	116
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.77	0.88	0.76	0.79
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	77.5	75.7	79.9	84.7
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4370	4260	4290	4360
pH	SM 4500-H-B	std. units	0.10	7.58	7.53	7.75	7.50
Trace Metals							
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
Beryilium	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	0.03	0.04	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-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	0.057	0.060	0.063	0.0680
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	5.1	< 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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		59.9	54.6	62.5	68.0
Cation	meq		65.8	57.6	66.4	73.5
SM A/C Balance	%	-5 - +5	4.68	2.68	3.09	3.90
Calc TDS	mg/L		3782	3401	3914	4300
TDS A/C Balance	dec. %	0.80 - 1.20	1.16	1.25	1.10	1.01

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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:	00-34507-4	00-36828-6	01-30299-7	01-32151-3
SAMPLE DATE/TIME:	07/17/2000 10:55	10/09/2000 13:15	01/08/2001 13:30	04/09/2001 14:45
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	571	476	599	668
Magnesium	EPA 200.7	mg/L	0.01	536	449	537	568
Sodium	EPA 200.7	mg/L	0.05	213	194	211	220
Potassium	EPA 200.7	mg/L	0.10	9.6	10.5	9.7	10.1
Bicarbonate	SM 2320-B	mg/L	0.10	1400	1370	1420	1420
Sulfate	EPA 200.7	mg/L	1.0	2400	1930	2620	2730
Chloride	EPA 200.7	mg/L	1.0	158	130	159	152
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.05	0.09	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	2.95	4.09	4.04	3.68
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5440	5310	5270	5200
pH	SM 4500-H-B	std. units	0.10	7.65	7.54	7.23	7.26
Trace Metals							
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	0.44	0.34	0.49	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-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	0.060	0.064	0.0630	0.0074
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		77.6	66.6	82.6	84.7
Cation	meq		82.8	69.9	84.2	90.6
SM A/C Balance	%	-5 - +5	3.21	2.44	0.92	3.35
Calc TDS	mg/L		4601	3893	4864	5075
TDS A/C Balance	dec. %	0.80 - 1.20	1.18	1.36	1.08	1.02

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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:	00-34507-7	00-36828-7	01-30299-10	01-32151-6
SAMPLE DATE/TIME:	07/17/2000 14:15	10/10/2000 08:50	01/09/2001 09:35	04/10/2001 09:55
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	809	644	830	945
Magnesium	EPA 200.7	mg/L	0.01	258	210	265	287
Sodium	EPA 200.7	mg/L	0.05	207	179	207	207
Potassium	EPA 200.7	mg/L	0.10	9.1	9.0	8.5	9.1
Bicarbonate	SM 2320-B	mg/L	0.10	1190	1170	1210	1250
Sulfate	EPA 200.7	mg/L	1.0	1710	1320	1850	2070
Chloride	EPA 200.7	mg/L	1.0	125	96.4	125	128
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.10	< 0.05	0.14
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	117	118	115	108
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4800	4680	4660	4680
pH	SM 4500-H-B	std. units	0.10	7.51	7.60	7.62	7.20
Trace Metals							
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	1.78	1.57	1.90	0.19
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							
Uranium	EPA 200.8	mg/L	0.0003	0.056	0.058	0.056	0.0057
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	1.1	3.6	2.4
Radium Error Estimate ±					0.1	1.2	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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	1.3
G. Alpha Error Estimate ±							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		67.0	57.8	70.1	74.9
Cation	meq		71.3	57.8	72.9	80.4
SM A/C Balance	%	-5 - +5	3.10	-0.02	1.95	3.53
Calc TDS	mg/L		4233	3568	4402	4750
TDS A/C Balance	dec. %	0.80 - 1.20	1.13	1.31	1.06	0.99

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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:	00-34507-5	00-36828-4	01-30299-11	01-31999-4
SAMPLE DATE/TIME:	07/17/2000 13:00	10/09/2000 11:00	01/09/2001 08:30	04/04/2001 08:30
DATE RECEIVED:	07/20/2000 10:00	10/13/2000	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	630	531	648	702
Magnesium	EPA 200.7	mg/L	0.01	376	325	391	410
Sodium	EPA 200.7	mg/L	0.05	117	112	114	118
Potassium	EPA 200.7	mg/L	0.10	9.7	10.6	9.2	9.3
Bicarbonate	SM 2320-B	mg/L	0.10	1060	1060	1050	1040
Sulfate	EPA 200.7	mg/L	1.0	1980	1770	2150	2310
Chloride	EPA 200.7	mg/L	1.0	71.1	57.4	67.7	71.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.02	0.96	0.97	1.16
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.51	1.03	1.14	1.41
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4450	4390	4340	4400
pH	SM 4500-H-B	std. units	0.10	7.66	7.45	7.68	7.49
Trace Metals							
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	4.76	4.03	4.77	4.29
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							
Uranium	EPA 200.8	mg/L	0.0003	0.023	0.025	0.0240	0.0240
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	0.3
Radium Error Estimate ±							0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	2.3	< 1.0
Radium Error Estimate ±						1.1	
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		60.7	55.9	64.0	67.3
Cation	meq		68.5	59.1	70.5	75.0
SM A/C Balance	%	-5 - +5	6.01	2.71	4.84	5.40
Calc TDS	mg/L		3727	3346	3916	4152
TDS A/C Balance	dec. %	0.80 - 1.20	1.19	1.31	1.11	1.06

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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:	00-34507-8	00-36828-8	01-30299-13	01-32151-7
SAMPLE DATE/TIME:	07/18/2000 08:30	10/10/2000 09:25	01/09/2001 10:15	04/10/2001 10:30
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	682	557	699	778
Magnesium	EPA 200.7	mg/L	0.01	219	184	234	241
Sodium	EPA 200.7	mg/L	0.05	157	132	155	143
Potassium	EPA 200.7	mg/L	0.10	7.5	7.6	7.0	7.9
Bicarbonate	SM 2320-B	mg/L	0.10	778	761	761	782
Sulfate	EPA 200.7	mg/L	1.0	1600	1240	1760	1910
Chloride	EPA 200.7	mg/L	1.0	67.7	53.0	63.4	71.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.05	< 0.05	0.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	112	121	106	101
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4120	3990	3910	3940
pH	SM 4500-H-B	std. units	0.10	7.70	7.75	7.89	7.34
Trace Metals							
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	0.96	1.11	1.25	0.15
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	0.002	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	0.087	0.095	0.086	0.0091
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	2.0	1.3	2.7	< 1.0
Radium Error Estimate ±				0.1	0.1	1.1	
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		56.0	48.4	58.5	61.8
Cation	meq		59.4	49.2	61.4	65.4
SM A/C Balance	%	-5 - +5	2.97	0.75	2.45	2.81
Calc TDS	mg/L		3619	3091	3770	3990
TDS A/C Balance	dec. %	0.80 - 1.20	1.14	1.29	1.04	0.99

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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:	00-34507-3	00-36828-3	01-30299-6	01-32151-5
SAMPLE DATE/TIME:	07/17/2000 10:05	10/09/2000 10:00	01/08/2001 11:50	04/10/2001 09:10
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/13/2001 10:00
REPORT DATE:	August 21, 2000	November 18, 2000	February 12, 2001	May 15, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	534	460	538	596
Magnesium	EPA 200.7	mg/L	0.01	499	446	512	546
Sodium	EPA 200.7	mg/L	0.05	195	210	179	188
Potassium	EPA 200.7	mg/L	0.10	11.4	13.4	11.4	12.1
Bicarbonate	SM 2320-B	mg/L	0.10	636	637	633	650
Sulfate	EPA 200.7	mg/L	1.0	2570	2500	2850	3010
Chloride	EPA 200.7	mg/L	1.0	119	110	116	117
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05	0.16	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	46.1	52.3	51.0	50.1
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5190	5110	5110	4950
pH	SM 4500-H-B	std. units	0.10	7.70	7.70	7.66	7.42
Trace Metals							
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	0.39	0.37	0.42	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-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	0.038	0.042	0.0390	0.0037
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	0.5
Radium Error Estimate ±							0.2
Radium 228	EPA 904.0	pCi/L	1.0	1.8	1.3	< 1.0	2.0
Radium Error Estimate ±				0.1	0.1		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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		70.6	69.4	76.7	80.2
Cation	meq		77.1	69.7	77.7	83.8
SM A/C Balance	%	-5 - +5	4.39	0.23	0.65	2.17
Calc TDS	mg/L		4451	4290	4749	5016
TDS A/C Balance	dec. %	0.80 - 1.20	1.17	1.19	1.08	0.99

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COMPLETE ANALYTICAL SERVICES

MONTHLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

FEBRUARY, MARCH, MAY, AND JUNE OF 2001

FIELD DATA SHEETS OF

FIRST AND SECOND QUARTERS

<u>CONTROLS</u>

SW ALLUVIUM

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

FEBRUARY - 1ST QUARTER, 2001

SOUTHWEST ALLIVIUM

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (us/cm)	FIELD pH (units)	FIELD TEMP. (c)
509-D	2/5/01	67.15	6949.5	6882.35	5,850	6.50	11.0
624	2/5/01	48.6	6898.7	6850.1	5,530	6.72	12.3
627	2/6/01	53.9	6892.4	6838.5	5,490	7.53	12.5
632	2/5/01	43.8	6903.6	6859.8	6,430	6.55	12.8
801	2/6/01	50.45	6904.3	6853.85	7,220	6.90	10.7
802	2/5/01	46.6	6907.1	6860.5	7,010	6.49	11.9
803	2/5/01	59.25	6922.6	6863.35	6,650	6.38	11.8
808	2/5/01	47.1	6910.7	6863.6	6,100	6.46	11.5
GW-1	2/5/01	60.3	6916.5	6856.2	4,600	6.91	12.6
GW-2	2/6/01	54.25	6912.9	6858.65	5,420	6.79	9.4
GW-3	2/6/01	51.7	6910.0	6858.3	5,020	6.99	13.7
EPA-23	2/6/01	47.9	6926.5	6878.6	4,500	6.80	11.7
EPA-25	2/6/01	51.3	6903.4	6852.1	4,240	7.33	13.0
EPA-28	2/5/01	61.5	6917.9	6856.4	5,081	7.01	12.9
(QA/QC)	EPA-23 Dup. 2-6	48.15	6926.5	6878.35	4,500	6.68	12.2
(QA/QC)	F. Blank 2-06-01				21	8.96	15.0
805	2/7/01	54.8	6915.6	6860.8			
807	2/7/01	54.8	6923.4	6868.6			

)MMENTS:

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

MARCH - 1ST QUARTER, 2001

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	3/5/01	67.4	6949.5	6882.1	5,540	6.65	10.9
624	3/5/01	48.6	6898.7	6850.1	5,270	7.03	13.8
627	3/6/01	54.1	6892.4	6838.3	5,310	7.31	14.0
632	3/6/01	43.4	6903.6	6860.2	6,530	6.51	11.4
801	3/5/01	50.0	6904.3	6854.3	6,700	6.92	14.3
802	3/5/01	46.1	6907.1	6861.0	6,530	6.64	13.8
803	3/5/01	59.0	6922.6	6863.6	6,330	6.67	12.2
808	3/5/01	46.85	6910.7	6863.85	5,910	6.65	13.7
GW-1	3/5/01	60.0	6916.5	6856.5	4,410	7.15	14.2
GW-2	3/6/01	54.1	6912.9	6858.8	5,220	6.86	10.2
GW-3	3/6/01	51.3	6910.0	6858.7	4,840	7.0	12.9
EPA-23	3/6/01	48.0	6926.5	6878.5	4,320	6.93	12.4
EPA-25	3/6/01	51.25	6903.4	6852.15	4,140	7.27	13.0
EPA-28	3/5/01	61.55	6917.9	6856.35	4,840	7.56	14.4
(QA/QC)	EPA-23 Dup. 3-6	48.3	6926.5	6878.2	4,320	7.08	12.3
(QA/QC)	F. Blank 3-06-01				26	8.2	14.1
805	3/12/01	54.8	6915.6	6860.8			
807	3/12/01	54.65	6923.4	6868.75			

MMENTS:

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

MAY - 2ND QUARTER, 2001

SOUTHWEST ALLIVIUM

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (us/cm)	FIELD pH (units)	FIELD TEMP. (c)
509-D	5/7/01	67.6	6949.5	6881.9	5,070	6.46	13.3
624	5/8/01	48.8	6898.7	6849.9	5,500	6.62	13.2
627	5/8/01	54.3	6892.4	6838.1	5,530	7.08	15.5
632	5/7/01	42.7	6903.6	6860.9	6,740	6.30	16.6
801	5/7/01	49.1	6904.3	6855.2	6,700	6.47	15.9
802	5/7/01	45.45	6907.1	6861.65	6,650	6.42	15.6
803	5/7/01	58.65	6922.6	6863.95	6,640	6.43	14.9
808	5/7/01	46.5	6910.7	6864.2	6,710	6.44	14.9
GW-1	5/8/01	59.7	6916.5	6856.8	4,600	6.72	13.8
GW-2	5/7/01	53.7	6912.9	6859.2	5,360	6.46	15.1
GW-3	5/8/01	50.9	6910.0	6859.1	5,070	6.72	14.6
EPA-23	5/7/01	48.1	6926.5	6878.4	4,100	6.97	14.1
EPA-25	5/8/01	51.40	6903.4	6852.0	4,250	7.02	14.8
EPA-28	5/8/01	61.2	6917.9	6856.7	5,040	6.81	15.2
(QA/QC)	EPA-23 Dup. 5-7	48.15	6926.5	6878.35	4,110	6.88	14.5
(QA/QC)	F. Blank 5/08/01				18	8.50	33.9
805	5/11/01	50.5	6915.6	6865.1			
807	5/11/01	53.9	6923.4	6869.5			

OMMENTS:

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

JUNE - 2ND QUARTER, 2001

SOUTHWEST ALLUVIUM

WELL NO.	DEPT REC./ SAMPLE DATE	DEPTH TO WATER (FT.)	REF. ELEV.	TOP OF WATER ELEV.	FIELD COND. (us/cm)	FIELD pH (units)	FIELD TEMP. (c)
509-D	06/04/01	67.4	6949.5	6882.1	5,570	6.46	14.7
624	06/05/01	48.8	6898.7	6849.9	5,330	6.62	15.1
627	06/05/01	54.1	6892.4	6838.3	5,430	7.14	17.6
632	06/04/01	42.4	6903.6	6861.2	6,590	6.36	15.6
801	06/04/01	49.1	6904.3	6855.2	6,520	6.47	16.2
802	06/04/01	45.15	6907.1	6861.95	6,330	6.46	15.8
803	06/04/01	58.2	6922.6	6864.4	6,510	6.45	15.0
808	06/05/01	46.2	6910.7	6864.5	6,700	6.54	15.2
GW-1	06/04/01	59.45	6916.5	6857.05	4,580	6.67	16.1
GW-2	06/04/01	53.35	6912.9	6859.55	5,170	6.47	15.9
GW-3	06/05/01	50.7	6910.0	6859.3	4,960	6.76	15.8
EPA-23	06/04/01	47.7	6926.5	6878.8	4,300	6.67	14.4
EPA-25	06/05/01	51.0	6903.4	6852.4	4,120	7.03	15.9
EPA-28	06/05/01	61.15	6917.9	6856.75	4,910	6.84	15.5
(QA/QC)	EPA-23 DUP. 06/04/01	48.0	6926.5	6878.5	4,270	6.67	14.4
(QA/QC)	FIELD BLANK 06/05/01			0	19	8.89	33.9
808	FILTERED DUP. 06/05/01	46.2	6910.7	6864.5	6,690	6.46	16.1
805	06/06/01	50.4	6915.6	6865.2			
807	06/06/01	53.8	6923.4	6869.6			

OMMENTS:

MONTHLY WATER LEVELS

2 MONTH 1st QUARTER, 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	2-5-01	0845	67.15'	6949.5	6882.35'
632	2-5-01	1145	43.8'	6903.6	6859.8'
GW-1	2-5-01	1320	60.3'	6916.5	6856.2'
GW-2	2-6-01	0920	54.25'	6912.9	6858.65'
EPA-23	2-6-01	1000	47.9'	6926.5	6878.6'
EPA-28	2-5-01	1440	61.5'	6917.9	6856.4'
624	2-5-01	1405	48.6'	6898.7	6850.1'
627	2-6-01	1305	53.9'	6892.4	6838.5'
805	2-7-01	0845	54.8'	6915.6	6860.8'
807	2-7-01	0900	54.8'	6923.4	6868.8'
EPA-25	2-6-01	1200	51.3'	6903.4	6852.1'
GW-3	2-6-01	1125	51.7'	6910.0	6858.3'
801	2-6-01	0845	50.45'	6904.3	6853.85'
802	2-5-01	1105	46.6'	6907.1	6860.5'
803	2-5-01	0925	59.25	6922.6	6863.35'
808	2-5-01	1030	47.1'	6910.7	6863.6'

MONTHLY WATER LEVELS

3RD MONTH 1ST QUARTER, 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	3-5-01	0905	67.4'	6949.5	6882.1'
632	3-6-01	0925	43.4'	6903.6	6860.2'
GW-1	3-5-01	1325	60.0'	6916.5	6856.5'
GW-2	3-6-01	0835	54.1'	6912.9	6858.8'
EPA-23	3-6-01	1005	48.0'	6926.5	6878.5'
EPA-28	3-5-01	1440	61.55'	6917.9	6856.35'
624	3-5-01	1400	48.6'	6898.7	6850.1'
627	3-6-01	1400	54.1'	6892.4	6838.3'
805	3-12-01	0910	54.8'	6915.6	6860.8'
807	3-12-01	0915	54.65'	6923.4	6868.75'
EPA-25	3-6-01	1310	51.25'	6903.4	6852.15'
GW-3	3-6-01	1230	51.3'	6910.0	6858.7'
801	3-5-01	1250	50.0'	6904.3	6854.3'
802	3-5-01	1110	46.1'	6907.1	6861.0'
803	3-5-01	1000	59.0'	6922.6	6863.6'
808	3-5-01	1035	46.85'	6910.7	6863.85'

MONTHLY WATER LEVELS

MAY MONTH 2ND QUARTER, 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	5/7/01	0825	67.6'	6949.5	6881.9
632	5/7/01	1455	42.7'	6903.6	6903.6
GW-1	5/8/01	0830	59.7'	6916.5	6856.8
GW-2	5/7/01	1415	53.7'	6912.9	6859.2
EPA-23	5/7/01	0900	48.1'	6926.5	6878.4
EPA-28	5/8/01	0945	61.2'	6917.9	6856.7
624	5/8/01	0910	48.8'	6898.7	6849.9
627	5/8/01	1255	54.3'	6892.4	6838.1
805	5/11/01	1050	50.5'	6915.6	6865.1
807	5/11/01	1100	53.9'	6923.4	6869.5
EPA-25	5/8/01	1120	51.4'	6903.4	6852.0
GW-3	5/8/01	1040	50.9'	6910.0	6859.1
801	5/7/01	1340	49.1'	6904.3	6855.2
802	5/7/01	1300	45.45'	6907.1	6861.65
803	5/7/01	1030	58.65'	6922.6	6863.95
808	5/7/01	1100	46.5'	6910.7	6864.2

MONTHLY WATER LEVELS

JUNE MONTH 3rd QUARTER, 2001

SOUTHWEST ALLUVIUM

WELL NO.	DATE	TIME	DEPTH TO WATER	REFERENCE ELEVATION	TOP OF WATER ELEVATION
509-D	6-4-01	0840	67.4'	6949.5	6882.1'
632	6-4-01	1300	42.4'	6903.6	6861.2'
GW-1	6-4-01	1455	59.45'	6916.5	6857.05'
GW-2	6-4-01	1420	53.35'	6912.9	6859.55'
EPA-23	6-4-01	0915	47.7'	6926.5	6878.8'
EPA-28	6-5-01	1040	61.15'	6917.9	6856.75'
624	6-5-01	1000	48.8'	6898.7	6849.9'
627	6-5-01	1410	54.1'	6892.4	6838.3'
805	6-6-01	1100	50.4'	6915.6	6865.2'
807	6-6-01	1120	53.8'	6923.4	6869.6'
EPA-25	6-5-01	1325	51.0'	6903.4	6852.4'
GW-3	6-5-01	1245'	50.7'	6910.0	6859.3'
801	6-4-01	1350'	49.1'	6904.3	6855.2'
802	6-4-01	1130	45.15'	6907.1	6861.95'
803	6-4-01	1000	58.2'	6922.6	6864.4'
808	6-4-01	1050	46.2'	6910.7	6864.5'

MONTHLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

FEBRUARY, MARCH, MAY, AND JUNE OF 2001

SW ALLUVIUM

*509-D

624

627

*632

801

802

803

808 (PLUS FILTERED DUPLICATE IN JUNE)

*GW-1

*GW-2

*GW-3
*EPA-23

EPA-25

*EPA-28

LEVELS ONLY

805

807

*Point of Compliance Wells

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

WELL ID:	509-D
LABORATORY ID:	01-30835-1
SAMPLE DATE/TIME:	02/05/2001 08:45
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	1000
Magnesium	EPA 200.7	mg/L	0.01	384
Sodium	EPA 200.7	mg/L	0.05	265
Potassium	EPA 200.7	mg/L	0.10	13.5
Bicarbonate	SM 2320-B	mg/L	0.10	2090
Sulfate	EPA 200.7	mg/L	1.0	1860
Chloride	EPA 200.7	mg/L	1.0	365
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.75
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	29.5
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5090
pH	SM 4500-H-B	std. units	0.10	7.03
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	0.20
Arsenic III	SM 3114-C	mg/L	0.001	0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.20
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.197
Radium 226	EPA 903.0	pCi/L	0.2	0.6
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		85.4
Cation	meq		94.1
SM A/C Balance	%	-5 - +5	4.85
Calc TDS	mg/L		5068
TDS A/C Balance	dec. %	0.80 - 1.20	1.00

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

WELL ID:	509-D
LABORATORY ID:	01-31400-1
SAMPLE DATE/TIME:	03/05/2001 09:05
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	901
Magnesium	EPA 200.7	mg/L	0.01	347
Sodium	EPA 200.7	mg/L	0.05	310
Potassium	EPA 200.7	mg/L	0.10	13.9
Bicarbonate	SM 2320-B	mg/L	0.10	2100
Sulfate	EPA 200.7	mg/L	1.0	1850
Chloride	EPA 200.7	mg/L	1.0	279
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.91
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	28.4
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5110
pH	SM 4500-H-B	std. units	0.10	7.41
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.51
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.186
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	2.3
Radium Error Estimate ±				1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		82.9
Cation	meq		88.0
SM A/C Balance	%	-5 - +5	3.01
Calc TDS	mg/L		4880
TDS A/C Balance	dec. %	0.80 - 1.20	1.05

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

WELL ID:	509-D
LABORATORY ID:	01-32762-1
SAMPLE DATE/TIME:	05/07/2001 08:25
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	864
Magnesium	EPA 200.7	mg/L	0.01	338
Sodium	EPA 200.7	mg/L	0.05	221
Potassium	EPA 200.7	mg/L	0.10	12.5
Bicarbonate	SM 2320-B	mg/L	0.10	2060
Sulfate	EPA 200.7	mg/L	1.0	1700
Chloride	EPA 200.7	mg/L	1.0	322
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.56
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	27.3
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5240
pH	SM 4500-H-B	std. units	0.10	7.01
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.50
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.188
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		80.2
Cation	meq		81.5
SM A/C Balance	%	-5 - +5	0.83
Calc TDS	mg/L		4613
TDS A/C Balance	dec. %	0.80 - 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:	509-D
LABORATORY ID:	01-33406-1
SAMPLE DATE/TIME:	06/04/2001 08:40
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	848
Magnesium	EPA 200.7	mg/L	0.01	336
Sodium	EPA 200.7	mg/L	0.05	232
Potassium	EPA 200.7	mg/L	0.10	12.7
Bicarbonate	SM 2320-B	mg/L	0.10	2070
Sulfate	EPA 200.7	mg/L	1.0	1760
Chloride	EPA 200.7	mg/L	1.0	318
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.92
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	30.2
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4860
pH	SM 4500-H-B	std. units	0.10	6.97
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-B	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.42
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-B	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.186
Radium 226	EPA 903.0	pCi/L	0.2	0.9
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		81.7
Cation	meq		81.1
SM A/C Balance	%	-5 - +5	-0.39
Calc TDS	mg/L		4680
TDS A/C Balance	dec. %	0.80 - 1.20	1.04

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

WELL ID:	624
LABORATORY ID:	01-30835-6
SAMPLE DATE/TIME:	02/05/2001 14:05
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	801
Magnesium	EPA 200.7	mg/L	0.01	510
Sodium	EPA 200.7	mg/L	0.05	171
Potassium	EPA 200.7	mg/L	0.10	7.6
Bicarbonate	SM 2320-B	mg/L	0.10	1480
Sulfate	EPA 200.7	mg/L	1.0	2320
Chloride	EPA 200.7	mg/L	1.0	170
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.21
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	93.9
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5110
pH	SM 4500-H-B	std. units	0.10	7.31
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.02
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0330
Radium 226	EPA 903.0	pCi/L	0.2	0.3
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		84.1
Cation	meq		90.2
SM A/C Balance	%	-5 - +5	3.50
Calc TDS	mg/L		5136
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	624
LABORATORY ID:	01-31400-6
SAMPLE DATE/TIME:	03/05/2001 14:00
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	690
Magnesium	EPA 200.7	mg/L	0.01	457
Sodium	EPA 200.7	mg/L	0.05	148
Potassium	EPA 200.7	mg/L	0.10	8.1
Bicarbonate	SM 2320-B	mg/L	0.10	1450
Sulfate	EPA 200.7	mg/L	1.0	2190
Chloride	EPA 200.7	mg/L	1.0	154
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	101
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4740
pH	SM 4500-H-B	std. units	0.10	7.47
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.02
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0327
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	4.0
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		80.9
Cation	meq		79.2
SM A/C Balance	%	-5 - +5	-1.07
Calc TDS	mg/L		4820
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	624
LABORATORY ID:	01-32762-10
SAMPLE DATE/TIME:	05/08/2001 09:10
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	677
Magnesium	EPA 200.7	mg/L	0.01	444
Sodium	EPA 200.7	mg/L	0.05	181
Potassium	EPA 200.7	mg/L	0.10	6.7
Bicarbonate	SM 2320-B	mg/L	0.10	1450
Sulfate	EPA 200.7	mg/L	1.0	1880
Chloride	EPA 200.7	mg/L	1.0	187
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	99.3
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5150
pH	SM 4500-H-B	std. units	0.10	7.54
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.02
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0340
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		75.3
Cation	meq		78.9
SM A/C Balance	%	-5 - +5	2.34
Calc TDS	mg/L		4541
TDS A/C Balance	dec. %	0.80 - 1.20	1.13

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

WELL ID:	**624**
LABORATORY ID:	**01-33406-10**
SAMPLE DATE/TIME:	**06/05/2001 10:00**
RECEIVED DATE/TIME:	**06/08/2001 10:00**
REPORT DATE:	**July 6, 2001**
UNC SUBMITTAL #:	**TE-9-6-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	683
Magnesium	EPA 200.7	mg/L	0.01	454
Sodium	EPA 200.7	mg/L	0.05	182
Potassium	EPA 200.7	mg/L	0.10	6.50
Bicarbonate	SM 2320-B	mg/L	0.10	1470
Sulfate	EPA 200.7	mg/L	1.0	2000
Chloride	EPA 200.7	mg/L	1.0	182
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.11
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	101
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5050
pH	SM 4500-H-B	std. units	0.10	7.02
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.009
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.065
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		78.1
Cation	meq		80.1
SM A/C Balance	%	-5 - +5	1.24
Calc TDS	mg/L		4690
TDS A/C Balance	dec. %	0.80 - 1.20	1.08

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

WELL ID:	**627**
LABORATORY ID:	**01-30835-14**
SAMPLE DATE/TIME:	**02/06/2001 13:05**
DATE RECEIVED:	**02/09/2001 10:45**
REPORT DATE:	**March 6, 2001**
REVISED REPORT DATE:	**April 30, 2001**
UNC SUBMITTAL #:	**TE-4-2-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	654
Magnesium	EPA 200.7	mg/L	0.01	321
Sodium	EPA 200.7	mg/L	0.05	558
Potassium	EPA 200.7	mg/L	0.10	6.1
Bicarbonate	SM 2320-B	mg/L	0.10	592
Sulfate	EPA 200.7	mg/L	1.0	2780
Chloride	EPA 200.7	mg/L	1.0	52.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	158
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5040
pH	SM 4500-H-B	std. units	0.10	7.48
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.11
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.002
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0239
Radium 226	EPA 903.0	pCi/L	0.2	0.5
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	1.5
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		80.4
Cation	meq		83.9
SM A/C Balance	%	-5 - +5	2.13
Calc TDS	mg/L		5368
TDS A/C Balance	dec. %	0.80 - 1.20	0.94

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

WELL ID:	627
LABORATORY ID:	01-31400-14
SAMPLE DATE/TIME:	03-06-01 14:00
DATE RECEIVED:	03-09-01
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	553
Magnesium	EPA 200.7	mg/L	0.01	286
Sodium	EPA 200.7	mg/L	0.05	552
Potassium	EPA 200.7	mg/L	0.10	6.5
Bicarbonate	SM 2320-B	mg/L	0.10	586
Sulfate	EPA 200.7	mg/L	1.0	2680
Chloride	EPA 200.7	mg/L	1.0	53.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	156
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4770
pH	SM 4500-H-B	std. units	0.10	7.69
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.12
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0240
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		78.1
Cation	meq		75.7
SM A/C Balance	%	-5 - +5	-1.57
Calc TDS	mg/L		5115
TDS A/C Balance	dec. %	0.80 - 1.20	0.93

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

WELL ID:	**627**
LABORATORY ID:	**01-32762-14**
SAMPLE DATE/TIME:	**05/08/2001 12:55**
RECEIVED DATE/TIME:	**05/11/2001 10:00**
REPORT DATE:	**June 13, 2001**
UNC SUBMITTAL #:	**TE-8-5-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	557
Magnesium	EPA 200.7	mg/L	0.01	289
Sodium	EPA 200.7	mg/L	0.05	530
Potassium	EPA 200.7	mg/L	0.10	4.9
Bicarbonate	SM 2320-B	mg/L	0.10	577
Sulfate	EPA 200.7	mg/L	1.0	2320
Chloride	EPA 200.7	mg/L	1.0	60.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	154
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5190
pH	SM 4500-H-B	std. units	0.10	7.68
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.13
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0240
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		70.5
Cation	meq		75.1
SM A/C Balance	%	-5 - +5	3.18
Calc TDS	mg/L		4732
TDS A/C Balance	dec. %	0.80 - 1.20	1.10

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

WELL ID:	627
LABORATORY ID:	01-33406-14
SAMPLE DATE/TIME:	06/05/2001 14:10
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	576
Magnesium	EPA 200.7	mg/L	0.01	304
Sodium	EPA 200.7	mg/L	0.05	521
Potassium	EPA 200.7	mg/L	0.10	3.80
Bicarbonate	SM 2320-B	mg/L	0.10	580
Sulfate	EPA 200.7	mg/L	1.0	2660
Chloride	EPA 200.7	mg/L	1.0	55.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	142
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4950
pH	SM 4500-H-B	std. units	0.10	7.67
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.12
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.003
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.024
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		76.6
Cation	meq		76.9
SM A/C Balance	%	-5 - +5	0.18
Calc TDS	mg/L		5040
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	632
LABORATORY ID:	01-30835-4
SAMPLE DATE/TIME:	02/05/2001 11:45
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	729
Magnesium	EPA 200.7	mg/L	0.01	701
Sodium	EPA 200.7	mg/L	0.05	428
Potassium	EPA 200.7	mg/L	0.10	10.3
Bicarbonate	SM 2320-B	mg/L	0.10	1660
Sulfate	EPA 200.7	mg/L	1.0	3420
Chloride	EPA 200.7	mg/L	1.0	233
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.35
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	5.90
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6410
pH	SM 4500-H-B	std. units	0.10	7.04
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.85
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0660
Radium 226	EPA 903.0	pCi/L	0.2	1.2
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.4
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	2.8

Quality Assurance Data		Target Range	
Anion	meq		105
Cation	meq		114
SM A/C Balance	%	-5 - +5	3.81
Calc TDS	mg/L		6379
TDS A/C Balance	dec. %	0.80 - 1.20	1.00

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

WELL ID:	632
LABORATORY ID:	01-31400-9
SAMPLE DATE/TIME:	03/06/2001 09:25
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	630
Magnesium	EPA 200.7	mg/L	0.01	653
Sodium	EPA 200.7	mg/L	0.05	450
Potassium	EPA 200.7	mg/L	0.10	10.3
Bicarbonate	SM 2320-B	mg/L	0.10	1640
Sulfate	EPA 200.7	mg/L	1.0	3400
Chloride	EPA 200.7	mg/L	1.0	199
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.34
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	12.7
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6100
pH	SM 4500-H-B	std. units	0.10	7.31
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.92
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0601
Radium 226	EPA 903.0	pCi/L	0.2	1.0
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	3.2

Quality Assurance Data		Target Range	
Anion	meq		104
Cation	meq		106
SM A/C Balance	%	-5 - +5	0.76
Calc TDS	mg/L		6220
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	632
LABORATORY ID:	01-32762-8
SAMPLE DATE/TIME:	05/07/2001 14:55
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	625
Magnesium	EPA 200.7	mg/L	0.01	650
Sodium	EPA 200.7	mg/L	0.05	410
Potassium	EPA 200.7	mg/L	0.10	8.7
Bicarbonate	SM 2320-B	mg/L	0.10	1600
Sulfate	EPA 200.7	mg/L	1.0	3000
Chloride	EPA 200.7	mg/L	1.0	244
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.36
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	26.5
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6860
pH	SM 4500-H-B	std. units	0.10	7.41
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.95
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0620
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	1.9

Quality Assurance Data		Target Range	
Anion	meq		97.5
Cation	meq		104
SM A/C Balance	%	-5 - +5	3.01
Calc TDS	mg/L		5857
TDS A/C Balance	dec. %	0.80 - 1.20	1.17

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

WELL ID:	632
LABORATORY ID:	01-33406-6
SAMPLE DATE/TIME:	06/04/2001 13:00
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	622
Magnesium	EPA 200.7	mg/L	0.01	663
Sodium	EPA 200.7	mg/L	0.05	316
Potassium	EPA 200.7	mg/L	0.10	8.90
Bicarbonate	SM 2320-B	mg/L	0.10	1580
Sulfate	EPA 200.7	mg/L	1.0	3180
Chloride	EPA 200.7	mg/L	1.0	246
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.38
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	32.7
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6620
pH	SM 4500-H-B	std. units	0.10	7.22
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.98
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.004
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.060
Radium 226	EPA 903.0	pCi/L	0.2	1.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	3.1
Radium Error Estimate ±				1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	3.1

Quality Assurance Data		Target Range	
Anion	meq		101
Cation	meq		100
SM A/C Balance	%	-5 - +5	-0.50
Calc TDS	mg/L		5970
TDS A/C Balance	dec. %	0.80 - 1.20	1.11

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

WELL ID:	801
LABORATORY ID:	01-30835-8
SAMPLE DATE/TIME:	02/06/2001 08:45
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	642
Magnesium	EPA 200.7	mg/L	0.01	882
Sodium	EPA 200.7	mg/L	0.05	397
Potassium	EPA 200.7	mg/L	0.10	15.8
Bicarbonate	SM 2320-B	mg/L	0.10	1570
Sulfate	EPA 200.7	mg/L	1.0	3970
Chloride	EPA 200.7	mg/L	1.0	226
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	9.46
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	29.9
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7200
pH	SM 4500-H-B	std. units	0.10	7.42
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	7.28
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0710
Radium 226	EPA 903.0	pCi/L	0.2	0.5
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	1.6

Quality Assurance Data		Target Range	
Anion	meq		117
Cation	meq		124
SM A/C Balance	%	-5 - +5	3.06
Calc TDS	mg/L		7070
TDS A/C Balance	dec. %	0.80 - 1.20	1.02

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

WELL ID:	801
LABORATORY ID:	01-31400-4
SAMPLE DATE/TIME:	03/05/2001 12:50
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	550
Magnesium	EPA 200.7	mg/L	0.01	785
Sodium	EPA 200.7	mg/L	0.05	273
Potassium	EPA 200.7	mg/L	0.10	15.1
Bicarbonate	SM 2320-B	mg/L	0.10	1580
Sulfate	EPA 200.7	mg/L	1.0	3660
Chloride	EPA 200.7	mg/L	1.0	203
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	8.34
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	21.9
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6610
pH	SM 4500-H-B	std. units	0.10	7.19
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	7.98
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0582
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	2.3

Quality Assurance Data		Target Range	
Anion	meq		109
Cation	meq		106
SM A/C Balance	%	-5 - +5	-1.50
Calc TDS	mg/L		6392
TDS A/C Balance	dec. %	0.80 - 1.20	1.03

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

WELL ID:	801
LABORATORY ID:	01-32762-6
SAMPLE DATE/TIME:	05/07/2001 13:40
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	541
Magnesium	EPA 200.7	mg/L	0.01	723
Sodium	EPA 200.7	mg/L	0.05	282
Potassium	EPA 200.7	mg/L	0.10	12.6
Bicarbonate	SM 2320-B	mg/L	0.10	1560
Sulfate	EPA 200.7	mg/L	1.0	3120
Chloride	EPA 200.7	mg/L	1.0	229
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	7.71
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	13.3
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7090
pH	SM 4500-H-B	std. units	0.10	7.53
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	8.70
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0490
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	1.9

Quality Assurance Data		Target Range	
Anion	meq		98.0
Cation	meq		101
SM A/C Balance	%	-5 - +5	1.48
Calc TDS	mg/L		5765
TDS A/C Balance	dec. %	0.80 - 1.20	1.23

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

WELL ID:	801
LABORATORY ID:	01-33406-7
SAMPLE DATE/TIME:	06/04/2001 13:50
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	549
Magnesium	EPA 200.7	mg/L	0.01	745
Sodium	EPA 200.7	mg/L	0.05	294
Potassium	EPA 200.7	mg/L	0.10	12.7
Bicarbonate	SM 2320-B	mg/L	0.10	1560
Sulfate	EPA 200.7	mg/L	1.0	3380
Chloride	EPA 200.7	mg/L	1.0	225
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	8.12
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	8.45
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6680
pH	SM 4500-H-B	std. units	0.10	7.33
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	8.24
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.046
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	3.3

Quality Assurance Data		Target Range	
Anion	meq		103
Cation	meq		104
SM A/C Balance	%	-5 - +5	0.36
Calc TDS	mg/L		6040
TDS A/C Balance	dec. %	0.80 - 1.20	1.11

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

WELL ID:	802
LABORATORY ID:	01-30835-3
SAMPLE DATE/TIME:	02/05/2001 11:05
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	739
Magnesium	EPA 200.7	mg/L	0.01	834
Sodium	EPA 200.7	mg/L	0.05	348
Potassium	EPA 200.7	mg/L	0.10	8.2
Bicarbonate	SM 2320-B	mg/L	0.10	2050
Sulfate	EPA 200.7	mg/L	1.0	3160
Chloride	EPA 200.7	mg/L	1.0	200
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.02
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	93.8
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6910
pH	SM 4500-H-B	std. units	0.10	7.10
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	3.34
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.159
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	2.6

Quality Assurance Data		Target Range	
Anion	meq		112
Cation	meq		122
SM A/C Balance	%	-5 - +5	4.39
Calc TDS	mg/L		6734
TDS A/C Balance	dec. %	0.80 - 1.20	1.03

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

WELL ID:	802
LABORATORY ID:	01-31400-3
SAMPLE DATE/TIME:	03/05/2001 11:10
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	737
Magnesium	EPA 200.7	mg/L	0.01	661
Sodium	EPA 200.7	mg/L	0.05	370
Potassium	EPA 200.7	mg/L	0.10	8.0
Bicarbonate	SM 2320-B	mg/L	0.10	2000
Sulfate	EPA 200.7	mg/L	1.0	2850
Chloride	EPA 200.7	mg/L	1.0	158
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.12
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	103
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6120
pH	SM 4500-H-B	std. units	0.10	7.17
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.96
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.165
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	2.9
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	1.5

Quality Assurance Data		Target Range	
Anion	meq		104
Cation	meq		108
SM A/C Balance	%	-5 - +5	2.03
Calc TDS	mg/L		6241
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	802
LABORATORY ID:	01-32762-5
SAMPLE DATE/TIME:	05/07/2001 13:00
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	737
Magnesium	EPA 200.7	mg/L	0.01	608
Sodium	EPA 200.7	mg/L	0.05	257
Potassium	EPA 200.7	mg/L	0.10	6.0
Bicarbonate	SM 2320-B	mg/L	0.10	2020
Sulfate	EPA 200.7	mg/L	1.0	2420
Chloride	EPA 200.7	mg/L	1.0	193
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	102
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6660
pH	SM 4500-H-B	std. units	0.10	7.23
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.60
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.181
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		96.3
Cation	meq		98.9
SM A/C Balance	%	-5 - +5	1.35
Calc TDS	mg/L		5684
TDS A/C Balance	dec. %	0.80 - 1.20	1.17

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

WELL ID:	802
LABORATORY ID:	01-33406-5
SAMPLE DATE/TIME:	06/04/2001 11:30
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	729
Magnesium	EPA 200.7	mg/L	0.01	591
Sodium	EPA 200.7	mg/L	0.05	231
Potassium	EPA 200.7	mg/L	0.10	6.30
Bicarbonate	SM 2320-B	mg/L	0.10	1960
Sulfate	EPA 200.7	mg/L	1.0	2520
Chloride	EPA 200.7	mg/L	1.0	190
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.10
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	101
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6200
pH	SM 4500-H-B	std. units	0.10	7.16
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.62
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.011
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.214
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	1.3

Quality Assurance Data		Target Range	
Anion	meq		97.2
Cation	meq		95.9
SM A/C Balance	%	-5 - +5	-0.65
Calc TDS	mg/L		5700
TDS A/C Balance	dec. %	0.80 - 1.20	1.09

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

WELL ID:	803
LABORATORY ID:	01-30835-2
SAMPLE DATE/TIME:	02/05/2001 09:25
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	826
Magnesium	EPA 200.7	mg/L	0.01	784
Sodium	EPA 200.7	mg/L	0.05	268
Potassium	EPA 200.7	mg/L	0.10	13.0
Bicarbonate	SM 2320-B	mg/L	0.10	1830
Sulfate	EPA 200.7	mg/L	1.0	3380
Chloride	EPA 200.7	mg/L	1.0	163
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.67
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	40.7
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6820
pH	SM 4500-H-B	std. units	0.10	7.11
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.37
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.100
Radium 226	EPA 903.0	pCi/L	0.2	0.6
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		108
Cation	meq		119
SM A/C Balance	%	-5 - +5	4.80
Calc TDS	mg/L		6533
TDS A/C Balance	dec. %	0.80 - 1.20	1.04

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

WELL ID:	803
LABORATORY ID:	01-31400-2
SAMPLE DATE/TIME:	03-05-01 10:00
DATE RECEIVED:	03-09-01
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	726
Magnesium	EPA 200.7	mg/L	0.01	716
Sodium	EPA 200.7	mg/L	0.05	320
Potassium	EPA 200.7	mg/L	0.10	12.4
Bicarbonate	SM 2320-B	mg/L	0.10	1770
Sulfate	EPA 200.7	mg/L	1.0	3320
Chloride	EPA 200.7	mg/L	1.0	129
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.73
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	39.1
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6810
pH	SM 4500-H-B	std. units	0.10	7.14
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.75
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0874
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	2.2
Radium Error Estimate ±				1.0
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		105
Cation	meq		110
SM A/C Balance	%	-5 - +5	2.69
Calc TDS	mg/L		6285
TDS A/C Balance	dec. %	0.80 - 1.20	1.08

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

WELL ID:	803
LABORATORY ID:	01-32762-4
SAMPLE DATE/TIME:	05/07/2001 10:30
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	696
Magnesium	EPA 200.7	mg/L	0.01	713
Sodium	EPA 200.7	mg/L	0.05	217
Potassium	EPA 200.7	mg/L	0.10	11.5
Bicarbonate	SM 2320-B	mg/L	0.10	1760
Sulfate	EPA 200.7	mg/L	1.0	2980
Chloride	EPA 200.7	mg/L	1.0	159
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.74
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	46.9
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	7040
pH	SM 4500-H-B	std. units	0.10	7.30
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.13
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0930
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		98.8
Cation	meq		104
SM A/C Balance	%	-5 - +5	2.64
Calc TDS	mg/L		5867
TDS A/C Balance	dec. %	0.80 - 1.20	1.20

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

WELL ID:	**803**
LABORATORY ID:	**01-33406-4**
SAMPLE DATE/TIME:	**06/04/2001 10:00**
RECEIVED DATE/TIME:	**06/08/2001 10:00**
REPORT DATE:	**July 6, 2001**
UNC SUBMITTAL #:	**TE-9-6-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	700
Magnesium	EPA 200.7	mg/L	0.01	723
Sodium	EPA 200.7	mg/L	0.05	202
Potassium	EPA 200.7	mg/L	0.10	11.6
Bicarbonate	SM 2320-B	mg/L	0.10	1790
Sulfate	EPA 200.7	mg/L	1.0	3280
Chloride	EPA 200.7	mg/L	1.0	164
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.84
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	47.8
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	6750
pH	SM 4500-H-B	std. units	0.10	7.17
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.34
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.004
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.086
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		106
Cation	meq		105
SM A/C Balance	%	-5 - +5	-0.57
Calc TDS	mg/L		6190
TDS A/C Balance	dec. %	0.80 - 1.20	1.09

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

WELL ID:	808
LABORATORY ID:	01-30836-1
SAMPLE DATE/TIME:	02/05/2001 10:30
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 5, 2001
REVISED REPORT DATE:	March 28, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	879
Magnesium	EPA 200.7	mg/L	0.01	489
Sodium	EPA 200.7	mg/L	0.05	295
Potassium	EPA 200.7	mg/L	0.10	13.2
Bicarbonate	SM 2320-B	mg/L	0.10	2040
Sulfate	EPA 200.7	mg/L	1.0	2740
Chloride	EPA 200.7	mg/L	1.0	185
Ammonium as N	SM NH3-G	mg/L	0.05	4.99
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	5820
pH	SM 4500-H-B	std. units	0.10	7.04
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	0.11
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.02
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.61
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0338
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	2.1
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform		µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		95.7
Cation	meq		98.4
SM A/C Balance	%	-5 - +5	1.35
Calc TDS	mg/L		5631
TDS A/C Balance	dec. %	0.80 - 1.20	1.03

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

WELL ID:	808
LABORATORY ID:	01-31404-1
SAMPLE DATE/TIME:	03/05/2001 10:35
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	March 28, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	879
Magnesium	EPA 200.7	mg/L	0.01	482
Sodium	EPA 200.7	mg/L	0.05	377
Potassium	EPA 200.7	mg/L	0.10	12.1
Bicarbonate	SM 2320-B	mg/L	0.10	2100
Sulfate	EPA 200.7	mg/L	1.0	2580
Chloride	EPA 200.7	mg/L	1.0	213
Ammonium as N	SM NH3-G	mg/L	0.05	5.01
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	5480
pH	SM 4500-H-B	std. units	0.10	7.43
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.02
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	3.18
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0338
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		94.2
Cation	meq		101
SM A/C Balance	%	-5 - +5	3.67
Calc TDS	mg/L		5603
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	808
LABORATORY ID:	01-32763-1
SAMPLE DATE/TIME:	05/07/2001 11:00
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 22, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	797
Magnesium	EPA 200.7	mg/L	0.01	577
Sodium	EPA 200.7	mg/L	0.05	359
Potassium	EPA 200.7	mg/L	0.10	8.60
Bicarbonate	SM 2320-B	mg/L	0.10	2210
Sulfate	EPA 200.7	mg/L	1.0	2540
Chloride	EPA 200.7	mg/L	1.0	216
Ammonium as N	SM 4500 NH_3-G	mg/L	0.05	1.66
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	60.2
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	6600
pH	SM 4500-H-B	std. units	0.10	7.40
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.91
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0740
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		99.5
Cation	meq		104
SM A/C Balance	%	-5 - +5	2.19
Calc TDS	mg/L		5873
TDS A/C Balance	dec. %	0.80 - 1.20	1.12

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

WELL ID:	**808**
LABORATORY ID:	**01-33365-1**
SAMPLE DATE/TIME:	**06/05/2001 08:45**
RECEIVED DATE/TIME:	**06/08/2001 10:00**
REPORT DATE:	**July 16, 2001**
UNC SUBMITTAL #:	**TE-9-6-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	843
Magnesium	EPA 200.7	mg/L	0.01	582
Sodium	EPA 200.7	mg/L	0.05	361
Potassium	EPA 200.7	mg/L	0.10	9.20
Bicarbonate	SM 2320-B	mg/L	0.10	2280
Sulfate	EPA 200.7	mg/L	1.0	2790
Chloride	EPA 200.7	mg/L	1.0	238
Ammonium as N	SM 4500 NH_3-G	mg/L	0.05	2.11
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	32.4
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	6680
pH	SM 4500-H-B	std. units	0.10	6.95
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	0.20
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.47
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics, dissolved				
Uranium	EPA 200.8	mg/L	0.0003	0.059
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	1.8

Quality Assurance Data		Target Range	
Anion	meq		105
Cation	meq		107
SM A/C Balance	%	-5 - +5	1.08
Calc TDS	mg/L		6110
TDS A/C Balance	dec. %	0.80 - 1.20	1.09

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

WELL ID:	**808 Filtered Duplicate**
LABORATORY ID:	**01-33365-2**
SAMPLE DATE/TIME:	**06/05/2001 09:15**
RECEIVED DATE/TIME:	**06/08/2001 10:00**
REPORT DATE:	**July 16, 2001**
UNC SUBMITTAL #:	**TE-9-6-2001**

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	841
Magnesium	EPA 200.7	mg/L	0.01	580
Sodium	EPA 200.7	mg/L	0.05	361
Potassium	EPA 200.7	mg/L	0.10	9.40
Bicarbonate	SM 2320-B	mg/L	0.10	2270
Sulfate	EPA 200.7	mg/L	1.0	2780
Chloride	EPA 200.7	mg/L	1.0	244
Ammonium as N	SM 4500 NH_3-G	mg/L	0.05	2.13
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	34.6
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	6900
pH	SM 4500-H-B	std. units	0.10	6.90
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.7	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.49
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics, dissolved				
Uranium	EPA 200.8	mg/L	0.0003	0.060
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		104
Cation	meq		107
SM A/C Balance	%	-5 - +5	0.99
Calc TDS	mg/L		6110
TDS A/C Balance	dec. %	0.80 - 1.20	1.13

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

WELL ID:	GW-1
LABORATORY ID:	01-30835-5
SAMPLE DATE/TIME:	02/05/200113:20
DATE RECEIVED:	02/09/200110:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	721
Magnesium	EPA 200.7	mg/L	0.01	352
Sodium	EPA 200.7	mg/L	0.05	184
Potassium	EPA 200.7	mg/L	0.10	6.1
Bicarbonate	SM 2320-B	mg/L	0.10	960
Sulfate	EPA 200.7	mg/L	1.0	2110
Chloride	EPA 200.7	mg/L	1.0	114
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.77
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	73.7
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4270
pH	SM 4500-H-B	std. units	0.10	7.44
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.068
Radium 226	EPA 903.0	pCi/L	0.2	0.3
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		68.2
Cation	meq		73.6
SM A/C Balance	%	-5 - +5	3.83
Calc TDS	mg/L		4295
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	GW-1
LABORATORY ID:	01-31400-5
SAMPLE DATE/TIME:	03/05/2001 13:25
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	635
Magnesium	EPA 200.7	mg/L	0.01	323
Sodium	EPA 200.7	mg/L	0.05	166
Potassium	EPA 200.7	mg/L	0.10	6.1
Bicarbonate	SM 2320-B	mg/L	0.10	975
Sulfate	EPA 200.7	mg/L	1.0	2070
Chloride	EPA 200.7	mg/L	1.0	104
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.79
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	74.2
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4080
pH	SM 4500-H-B	std. units	0.10	7.40
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0671
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	3.9
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		67.3
Cation	meq		66.1
SM A/C Balance	%	-5 - +5	-0.93
Calc TDS	mg/L		4121
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	GW-1
LABORATORY ID:	01-32762-9
SAMPLE DATE/TIME:	05/08/2001 08:30
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	628
Magnesium	EPA 200.7	mg/L	0.01	314
Sodium	EPA 200.7	mg/L	0.05	201
Potassium	EPA 200.7	mg/L	0.10	4.7
Bicarbonate	SM 2320-B	mg/L	0.10	944
Sulfate	EPA 200.7	mg/L	1.0	1830
Chloride	EPA 200.7	mg/L	1.0	124
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.79
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	78.2
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4500
pH	SM 4500-H-B	std. units	0.10	7.51
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0750
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		62.7
Cation	meq		66.5
SM A/C Balance	%	-5 - +5	2.95
Calc TDS	mg/L		3921
TDS A/C Balance	dec. %	0.80 - 1.20	1.15

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

WELL ID:	GW-1
LABORATORY ID:	01-33406-9
SAMPLE DATE/TIME:	06/04/2001 14:55
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	635
Magnesium	EPA 200.7	mg/L	0.01	322
Sodium	EPA 200.7	mg/L	0.05	187
Potassium	EPA 200.7	mg/L	0.10	4.70
Bicarbonate	SM 2320-B	mg/L	0.10	944
Sulfate	EPA 200.7	mg/L	1.0	1980
Chloride	EPA 200.7	mg/L	1.0	119
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.83
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	76.4
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4420
pH	SM 4500-H-B	std. units	0.10	6.98
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.05
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.009
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.065
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		65.5
Cation	meq		66.9
SM A/C Balance	%	-5 - +5	1.03
Calc TDS	mg/L		4060
TDS A/C Balance	dec. %	0.80 - 1.20	1.09

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

WELL ID:	GW-2
LABORATORY ID:	01-30835-9
SAMPLE DATE/TIME:	02/06/2001 09:20
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	679
Magnesium	EPA 200.7	mg/L	0.01	578
Sodium	EPA 200.7	mg/L	0.05	230
Potassium	EPA 200.7	mg/L	0.10	10.4
Bicarbonate	SM 2320-B	mg/L	0.10	1410
Sulfate	EPA 200.7	mg/L	1.0	2800
Chloride	EPA 200.7	mg/L	1.0	153
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	3.84
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5290
pH	SM 4500-H-B	std. units	0.10	7.37
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.50
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0650
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		86.0
Cation	meq		92.4
SM A/C Balance	%	-5 - +5	3.58
Calc TDS	mg/L		5173
TDS A/C Balance	dec. %	0.80 - 1.20	1.02

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

WELL ID:	GW-2
LABORATORY ID:	01-31400-8
SAMPLE DATE/TIME:	03/06/2001 08:35
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	586
Magnesium	EPA 200.7	mg/L	0.01	528
Sodium	EPA 200.7	mg/L	0.05	275
Potassium	EPA 200.7	mg/L	0.10	10.6
Bicarbonate	SM 2320-B	mg/L	0.10	1400
Sulfate	EPA 200.7	mg/L	1.0	2680
Chloride	EPA 200.7	mg/L	1.0	140
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	3.36
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5150
pH	SM 4500-H-B	std. units	0.10	7.54
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.50
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0626
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		83.0
Cation	meq		85.6
SM A/C Balance	%	-5 - +5	1.54
Calc TDS	mg/L		4935
TDS A/C Balance	dec. %	0.80 - 1.20	1.04

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

WELL ID:	GW-2
LABORATORY ID:	01-32762-7
SAMPLE DATE/TIME:	05/07/2001 14:15
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	590
Magnesium	EPA 200.7	mg/L	0.01	514
Sodium	EPA 200.7	mg/L	0.05	217
Potassium	EPA 200.7	mg/L	0.10	9.7
Bicarbonate	SM 2320-B	mg/L	0.10	1420
Sulfate	EPA 200.7	mg/L	1.0	2390
Chloride	EPA 200.7	mg/L	1.0	168
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.11
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	3.49
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5330
pH	SM 4500-H-B	std. units	0.10	7.57
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	0.15
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.59
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0670
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		78.1
Cation	meq		82.1
SM A/C Balance	%	-5 - +5	2.50
Calc TDS	mg/L		4615
TDS A/C Balance	dec. %	0.80 - 1.20	1.15

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

WELL ID:	GW-2
LABORATORY ID:	01-33406-8
SAMPLE DATE/TIME:	06/04/2001 14:20
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	583
Magnesium	EPA 200.7	mg/L	0.01	520
Sodium	EPA 200.7	mg/L	0.05	184
Potassium	EPA 200.7	mg/L	0.10	9.50
Bicarbonate	SM 2320-B	mg/L	0.10	1390
Sulfate	EPA 200.7	mg/L	1.0	2460
Chloride	EPA 200.7	mg/L	1.0	164
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	3.80
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4490
pH	SM 4500-H-B	std. units	0.10	7.33
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.51
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.004
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.061
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		78.9
Cation	meq		80.8
SM A/C Balance	%	-5 - +5	1.15
Calc TDS	mg/L		4630
TDS A/C Balance	dec. %	0.80 - 1.20	0.97

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

WELL ID:	GW-3
LABORATORY ID:	01-30835-12
SAMPLE DATE/TIME:	02/06/2001 11:25
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-1-1-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	943
Magnesium	EPA 200.7	mg/L	0.01	290
Sodium	EPA 200.7	mg/L	0.05	183
Potassium	EPA 200.7	mg/L	0.10	9.7
Bicarbonate	SM 2320-B	mg/L	0.10	1220
Sulfate	EPA 200.7	mg/L	1.0	2120
Chloride	EPA 200.7	mg/L	1.0	123
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	110
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4720
pH	SM 4500-H-B	std. units	0.10	7.12
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.91
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.002
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0590
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Polonium 210	RMO-3008 USAEC	pCi/L	1.0	< 1.0
Polonium Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		75.5
Cation	meq		79.6
SM A/C Balance	%	-5 - +5	2.67
Calc TDS	mg/L		4768
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	GW-3
LABORATORY ID:	01-31400-12
SAMPLE DATE/TIME:	03/06/2001 12:30
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	817
Magnesium	EPA 200.7	mg/L	0.01	263
Sodium	EPA 200.7	mg/L	0.05	164
Potassium	EPA 200.7	mg/L	0.10	9.3
Bicarbonate	SM 2320-B	mg/L	0.10	1180
Sulfate	EPA 200.7	mg/L	1.0	2040
Chloride	EPA 200.7	mg/L	1.0	120
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.16
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	112
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4380
pH	SM 4500-H-B	std. units	0.10	7.63
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.87
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0569
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Polonium 210	RMO-3008 USAEC	pCi/L	1.0	< 1.0
Polonium Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		73.2
Cation	meq		70.2
SM A/C Balance	%	-5 - +5	-2.07
Calc TDS	mg/L		4502
TDS A/C Balance	dec. %	0.80 - 1.20	0.97

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

WELL ID:	GW-3
LABORATORY ID:	01-32762-12
SAMPLE DATE/TIME:	05/08/2001 10:40
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	808
Magnesium	EPA 200.7	mg/L	0.01	256
Sodium	EPA 200.7	mg/L	0.05	195
Potassium	EPA 200.7	mg/L	0.10	8.9
Bicarbonate	SM 2320-B	mg/L	0.10	1250
Sulfate	EPA 200.7	mg/L	1.0	1730
Chloride	EPA 200.7	mg/L	1.0	146
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.15
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	107
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4850
pH	SM 4500-H-B	std. units	0.10	7.49
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.96
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0600
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Polonium 210	RMO-3008 USAEC	pCi/L	1.0	< 1.0
Polonium Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		68.3
Cation	meq		70.6
SM A/C Balance	%	-5 - +5	1.63
Calc TDS	mg/L		4245
TDS A/C Balance	dec. %	0.80 - 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-3
LABORATORY ID:	01-33406-12
SAMPLE DATE/TIME:	06/05/2001 12:45
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	847
Magnesium	EPA 200.7	mg/L	0.01	274
Sodium	EPA 200.7	mg/L	0.05	194
Potassium	EPA 200.7	mg/L	0.10	8.60
Bicarbonate	SM 2320-B	mg/L	0.10	1280
Sulfate	EPA 200.7	mg/L	1.0	1940
Chloride	EPA 200.7	mg/L	1.0	136
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.20
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	97.5
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4230
pH	SM 4500-H-B	std. units	0.10	7.25
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	2.06
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.005
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.058
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Polonium 210	RMO-3008 USAEC	pCi/L	1.0	< 1.0
Polonium Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		72.2
Cation	meq		74.0
SM A/C Balance	%	-5 - +5	1.21
Calc TDS	mg/L		4470
TDS A/C Balance	dec. %	0.80 - 1.20	0.95

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

WELL ID:	EPA-23
LABORATORY ID:	01-30835-10
SAMPLE DATE/TIME:	02/06/2001 10:00
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	737
Magnesium	EPA 200.7	mg/L	0.01	429
Sodium	EPA 200.7	mg/L	0.05	118
Potassium	EPA 200.7	mg/L	0.10	10.6
Bicarbonate	SM 2320-B	mg/L	0.10	1060
Sulfate	EPA 200.7	mg/L	1.0	2510
Chloride	EPA 200.7	mg/L	1.0	68.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4380
pH	SM 4500-H-B	std. units	0.10	7.56
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.77
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0250
Radium 226	EPA 903.0	pCi/L	0.2	0.3
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.2
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		71.7
Cation	meq		78.3
SM A/C Balance	%	-5 - +5	4.43
Calc TDS	mg/L		4415
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	EPA-23
LABORATORY ID:	01-31400-10
SAMPLE DATE/TIME:	03/06/2001 10:05
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	636
Magnesium	EPA 200.7	mg/L	0.01	389
Sodium	EPA 200.7	mg/L	0.05	150
Potassium	EPA 200.7	mg/L	0.10	10.2
Bicarbonate	SM 2320-B	mg/L	0.10	1030
Sulfate	EPA 200.7	mg/L	1.0	2410
Chloride	EPA 200.7	mg/L	1.0	65.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4070
pH	SM 4500-H-B	std. units	0.10	7.61
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.00
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0245
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		69.0
Cation	meq		71.4
SM A/C Balance	%	-5 - +5	1.65
Calc TDS	mg/L		4188
TDS A/C Balance	dec. %	0.80 - 1.20	0.97

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

WELL ID:	EPA-23
LABORATORY ID:	01-32762-2
SAMPLE DATE/TIME:	05/07/2001 09:00
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	622
Magnesium	EPA 200.7	mg/L	0.01	371
Sodium	EPA 200.7	mg/L	0.05	113
Potassium	EPA 200.7	mg/L	0.10	10.0
Bicarbonate	SM 2320-B	mg/L	0.10	1040
Sulfate	EPA 200.7	mg/L	1.0	2070
Chloride	EPA 200.7	mg/L	1.0	78.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.28
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4460
pH	SM 4500-H-B	std. units	0.10	7.14
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.74
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0260
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		62.5
Cation	meq		67.6
SM A/C Balance	%	-5 - +5	3.93
Calc TDS	mg/L		3798
TDS A/C Balance	dec. %	0.80 - 1.20	1.17

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

WELL ID:	EPA-23
LABORATORY ID:	01-33406-2
SAMPLE DATE/TIME:	06/04/2001 09:15
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	618
Magnesium	EPA 200.7	mg/L	0.01	371
Sodium	EPA 200.7	mg/L	0.05	107
Potassium	EPA 200.7	mg/L	0.10	9.50
Bicarbonate	SM 2320-B	mg/L	0.10	1040
Sulfate	EPA 200.7	mg/L	1.0	2210
Chloride	EPA 200.7	mg/L	1.0	75.4
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.29
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.67
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4360
pH	SM 4500-H-B	std. units	0.10	7.22
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.11
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.025
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		65.3
Cation	meq		67.1
SM A/C Balance	%	-5 - +5	1.32
Calc TDS	mg/L		3930
TDS A/C Balance	dec. %	0.80 - 1.20	1.11

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

WELL ID:	EPA-25
LABORATORY ID:	01-30835-13
SAMPLE DATE/TIME:	02/06/2001 12:00
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	792
Magnesium	EPA 200.7	mg/L	0.01	251
Sodium	EPA 200.7	mg/L	0.05	135
Potassium	EPA 200.7	mg/L	0.10	8.3
Bicarbonate	SM 2320-B	mg/L	0.10	783
Sulfate	EPA 200.7	mg/L	1.0	1930
Chloride	EPA 200.7	mg/L	1.0	64.3
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.06
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	106
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3970
pH	SM 4500-H-B	std. units	0.10	7.34
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.33
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.002
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0940
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		62.4
Cation	meq		66.7
SM A/C Balance	%	-5 - +5	3.29
Calc TDS	mg/L		4043
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	EPA-25
LABORATORY ID:	01-31400-13
SAMPLE DATE/TIME:	03/06/2001 13:10
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	676
Magnesium	EPA 200.7	mg/L	0.01	224
Sodium	EPA 200.7	mg/L	0.05	186
Potassium	EPA 200.7	mg/L	0.10	8.2
Bicarbonate	SM 2320-B	mg/L	0.10	757
Sulfate	EPA 200.7	mg/L	1.0	1840
Chloride	EPA 200.7	mg/L	1.0	58.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	105

Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3710
pH	SM 4500-H-B	std. units	0.10	7.87

Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.35
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10

Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0911
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	2.4
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				

Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		59.9
Cation	meq		60.8
SM A/C Balance	%	-5 - +5	0.78
Calc TDS	mg/L		3838
TDS A/C Balance	dec. %	0.80 - 1.20	0.97

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

WELL ID:	EPA-25
LABORATORY ID:	01-32762-13
SAMPLE DATE/TIME:	05/08/2001 11:20
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	668
Magnesium	EPA 200.7	mg/L	0.01	222
Sodium	EPA 200.7	mg/L	0.05	148
Potassium	EPA 200.7	mg/L	0.10	7.6
Bicarbonate	SM 2320-B	mg/L	0.10	715
Sulfate	EPA 200.7	mg/L	1.0	1570
Chloride	EPA 200.7	mg/L	1.0	74.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.13
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	108
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3990
pH	SM 4500-H-B	std. units	0.10	7.67
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.42
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0910
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		54.2
Cation	meq		58.6
CM A/C Balance	%	-5 - +5	3.88
Calc TDS	mg/L		3527
TDS A/C Balance	dec. %	0.80 - 1.20	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-25
LABORATORY ID:	01-33406-13
SAMPLE DATE/TIME:	06/05/2001 13:25
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	705
Magnesium	EPA 200.7	mg/L	0.01	236
Sodium	EPA 200.7	mg/L	0.05	132
Potassium	EPA 200.7	mg/L	0.10	7.30
Bicarbonate	SM 2320-B	mg/L	0.10	785
Sulfate	EPA 200.7	mg/L	1.0	1780
Chloride	EPA 200.7	mg/L	1.0	71.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.12
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	94.7
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	3920
pH	SM 4500-H-B	std. units	0.10	7.57
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.53
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.090
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		58.7
Cation	meq		60.9
SM A/C Balance	%	-5 - +5	1.85
Calc TDS	mg/L		3750
TDS A/C Balance	dec. %	0.80 - 1.20	1.05

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

WELL ID:	EPA-28
LABORATORY ID:	01-30835-7
SAMPLE DATE/TIME:	02/05/2001 14:40
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	615
Magnesium	EPA 200.7	mg/L	0.01	567
Sodium	EPA 200.7	mg/L	0.05	178
Potassium	EPA 200.7	mg/L	0.10	12.2
Bicarbonate	SM 2320-B	mg/L	0.10	636
Sulfate	EPA 200.7	mg/L	1.0	3060
Chloride	EPA 200.7	mg/L	1.0	107
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	47.6
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5090
pH	SM 4500-H-B	std. units	0.10	7.56
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	0.60
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.42
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0420
Radium 226	EPA 903.0	pCi/L	0.2	0.5
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		80.6
Cation	meq		86.1
SM A/C Balance	%	-5 - +5	3.29
Calc TDS	mg/L		5069
TDS A/C Balance	dec. %	0.80 - 1.20	1.00

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

WELL ID:	EPA-28
LABORATORY ID:	01-31400-7
SAMPLE DATE/TIME:	03/05/2001 14:40
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	535
Magnesium	EPA 200.7	mg/L	0.01	515
Sodium	EPA 200.7	mg/L	0.05	155
Potassium	EPA 200.7	mg/L	0.10	12.3
Bicarbonate	SM 2320-B	mg/L	0.10	644
Sulfate	EPA 200.7	mg/L	1.0	2910
Chloride	EPA 200.7	mg/L	1.0	103
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	49.4
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4670
pH	SM 4500-H-B	std. units	0.10	7.53
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.45
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0398
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		77.6
Cation	meq		76.7
SM A/C Balance	%	-5 - +5	-0.56
Calc TDS	mg/L		4772
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	EPA-28
LABORATORY ID:	01-32762-11
SAMPLE DATE/TIME:	05/08/2001 09:45
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	520
Magnesium	EPA 200.7	mg/L	0.01	489
Sodium	EPA 200.7	mg/L	0.05	190
Potassium	EPA 200.7	mg/L	0.10	11.5
Bicarbonate	SM 2320-B	mg/L	0.10	647
Sulfate	EPA 200.7	mg/L	1.0	2480
Chloride	EPA 200.7	mg/L	1.0	118
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	53.6
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5120
pH	SM 4500-H-B	std. units	0.10	7.62
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.47
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0420
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		69.4
Cation	meq		75.3
SM A/C Balance	%	-5 - +5	4.08
Calc TDS	mg/L		4370
TDS A/C Balance	dec. %	0.80 - 1.20	1.17

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

WELL ID:	EPA-28
LABORATORY ID:	01-33406-11
SAMPLE DATE/TIME:	06/05/2001 10:40
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	546
Magnesium	EPA 200.7	mg/L	0.01	532
Sodium	EPA 200.7	mg/L	0.05	191
Potassium	EPA 200.7	mg/L	0.10	10.3
Bicarbonate	SM 2320-B	mg/L	0.10	635
Sulfate	EPA 200.7	mg/L	1.0	2870
Chloride	EPA 200.7	mg/L	1.0	113
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.07
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	42.3
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4510
pH	SM 4500-H-B	std. units	0.10	7.35
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	0.47
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.038
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		76.4
Cation	meq		80.2
SM A/C Balance	%	-5 - +5	2.44
Calc TDS	mg/L		4770
TDS A/C Balance	dec. %	0.80 - 1.20	0.95

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CERTIFIED –RETURN RECIEPT REQUESTED

August 23, 2001

Mr. Greg Lyssy
U.S. Environmental Protection Agency
OK/NM Superfund (6EN-HX)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Semi-Annual Quality Assurance Report
Ground Water Monitoring – First Half of 2001

Dear Mr. Lyssy:

In accordance with Section V.A. 15 of the Administrative Order for the Church Rock Site, I have enclosed a report regarding performance of ground water monitoring quality assurance procedures during the entire first half of 2001.

Two quarterly sampling episodes occurred in the first half of 2001 (i.e. January and April). Additionally, four monthly sampling episodes (i.e. February, March, May, and June) occurred in the Southwest Alluvium.

Sincerely,

Larry Bush
Manager

LB:drb

Enclosure
Cc: NRC, Rockville, MD
NRC, Arlington, TX
Steve Cline, GE
Roy Blickwedel, GE
Beiling Liu, NMED
George Padilla, NNEPA

SEMI-ANNUAL QUALITY ASSURANCE
CHURCH ROCK SITE

JANUARY THRU JUNE SAMPLING EVENTS

AUGUST 2001

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1.0 Requirements

2.0 Field Sampling Procedures

3.0 Chain of Custody

4.0 Laboratory Quality Control

5.0 Data Validation

Appendix A: Quarterly and Monthly Field Data Sheet and QA/QC Sample Result

Appendix B: Quarterly and Monthly Chain of Custody

Appendix C: Quarterly and Monthly Laboratory Quality Control and Performance Report

1.0 REQUIREMENTS

The quality assurance and control procedures are contained in Section 3.0 of the Remedial Action Plan of the Church Rock Site Dated April 1989. The procedures address sampling, chain of custody, laboratory quality control, and data validation. These requirements became effective July 3, 1989, when United Nuclear received the Administrative Order on the Church Rock Site from the Environmental Protection Agency (EPA).

2.0 FIELD SAMPLING PROCEDURE

Copies of the 2001 quarterly (1st and 2nd) and monthly (Feb., March, May, and June) Field low flow purging and sampling report sheets, are included in Appendix A. These sheets indicate the field parameters of pH, temperature, conductivity and the water level drop in the well if any, during the sampling. The quarterly and monthly field Blank and Duplicate analysis reports are also included in Appendix A.

3.0 CHAIN OF CUSTODY

Copies of the quarterly and monthly Chain of Custody forms are included as Appendix B. Energy laboratories, Inc., our contact laboratory is located in Casper, Wyoming. Energy Labs inspect the sample shipments upon arrival to verify the information on the Chain of Custody form and to determine if samples arrive at the appropriate temperature.

4.0 LABORATORY CONTROL

Copies of the quarterly and monthly internal Quality Control report prepared by Energy Laboratories and the associated EPA performance evaluations are included in Appendix C.

5.0 DATA EVALUATION

Analytical reports are reviewed by Church Rock Manager and the Radiation Safety Officer after receipt from Energy Labs. Significant increases or decreases and out of range values are identified and the laboratory is requested to recheck the suspect values, the laboratory responds by checking transcription for these items, and where necessary, repeats the analysis. A revised report is then issued for that sample if an error is discovered.

APPENDIX A

QUARTERLY

FIELD DATA SHEETS

GROUND WATER MONITORING FIELD DATA SHEET
1ST QUARTER 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	803	82.7'		1st Cond. 7,350	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 6.50	2nd pH	Stable pH	Ending pH
				1st Temp. 14.3°	2nd Temp.	Stable Temp.	Ending Temp.
	Time 0850	Bubbler Start	Bubbler End	Comments: PUMPER, SATURATION EXTENT, SEEPAGE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	808	57.7'		1st Cond. 7,800	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 6.34	2nd pH	Stable pH	Ending pH
				1st Temp. 14.4°	2nd Temp.	Stable Temp.	Ending Temp.
	Time 0905	Bubbler Start	Bubbler End	Comments: PUMPER, SATURATION EXTENT, SEEPAGE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	802	49.6'		1st Cond. 7,690	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 6.43	2nd pH	Stable pH	Ending pH
				1st Temp. 13.2°	2nd Temp.	Stable Temp.	Ending Temp.
	Time 0915	Bubbler Start	Bubbler End	Comments: PUMPER, SATURATION EXTENT, SEEPAGE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	801	51.4'	52.4'	1st Cond. 7,310	2nd Cond. 7,150	Stable Cond. 7,210	Ending Cond. 6,950
				1st pH 6.65	2nd pH 6.67	Stable pH 6.67	Ending pH 6.67
				1st Temp. 13.1°	2nd Temp. 7.9°	Stable Temp. 8.2°	Ending Temp. 11.3°
	Time 0930	Bubbler Start 10.042'	Bubbler End 8.898'	Comments:			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	GW-1	60.5'	60.5'	1st Cond. 4,550	2nd Cond. 4,630	Stable Cond. 4,650	Ending Cond. 4,510
				1st pH 6.48	2nd pH 6.76	Stable pH 6.73	Ending pH 6.73
				1st Temp. 8.7°	2nd Temp. 9.1°	Stable Temp. 9.4°	Ending Temp. 10.3°
	Time 1020	Bubbler Start 9.991'	Bubbler End 9.949'	Comments:			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	624	48.6'	48.55'	1st Cond. 4,910	2nd Cond. 5,220	Stable Cond. 5,480	Ending Cond. 5,460
				1st pH 6.11	2nd pH 6.67	Stable pH 6.67	Ending pH 6.65
				1st Temp. 10.2°	2nd Temp. 10.2°	Stable Temp. 10.5°	Ending Temp. 11.2°
	Time 1110	Bubbler Start 13.803'	Bubbler End 13.782'	Comments:			

GROUND WATER MONITORING FIELD DATA SHEET
1st QUARTER 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	EPA-28	61.75'	61.9'	1st Cond. 4,680	2nd Cond. 4,970	Stable Cond. 5,040	Ending Cond. 5,020
				1st pH 7.38	2nd pH 7.31	Stable pH 7.16	Ending pH 6.88
				1st Temp. 11.1°	2nd Temp. 10.5°	Stable Temp. 10.6°	Ending Temp. 12.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	1150	8.449'	8.251'				
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	GW-2	54.8'	55.0'	1st Cond. 4,410	2nd Cond. 5,010	Stable Cond. 5,030	Ending Cond. 5,210
				1st pH 6.84	2nd pH 6.77	Stable pH 6.77	Ending pH 6.51
				1st Temp. 14.5°	2nd Temp. 10.1°	Stable Temp. 10.0°	Ending Temp. 10.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1330	15.801'	15.457'				
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	509-D	66.8'	66.8'	1st Cond. 5,660	2nd Cond. 5,780	Stable Cond. 5,800	Ending Cond. 5,850
				1st pH 6.77	2nd pH 6.65	Stable pH 6.57	Ending pH 6.46
				1st Temp. 11.2°	2nd Temp. 11.2°	Stable Temp. 11.1	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	1445	13.377'	13.236'				
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-8-01	632	45.1'	45.3'	1st Cond. 6,000	2nd Cond. 6,100	Stable Cond. 6,170	Ending Cond. 6,350
				1st pH 6.65	2nd pH 6.57	Stable pH 6.49	Ending pH 6.38
				1st Temp. 12.7°	2nd Temp. 12.4°	Stable Temp. 12.2°	Ending Temp. 12.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1410	11.798'	11.249'				
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-23	47.8'	48.1'	1st Cond. 4,230	2nd Cond. 4,320	Stable Cond. 4,370	Ending Cond. 4,470
				1st pH 6.90	2nd pH 6.79	Stable pH 6.76	Ending pH 6.75
				1st Temp. 10.0°	2nd Temp. 9.9°	Stable Temp. 9.9°	Ending Temp. 9.7
	Time	Bubbler Start	Bubbler End	Comments:			
	0830	13.789'	13.512'				
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-23 DUPLICATE	48.1'	48.1'	1st Cond. 4,460	2nd Cond. 4,460	Stable Cond. 4,460	Ending Cond. 4,480
				1st pH 6.73	2nd pH 6.73	Stable pH 6.73	Ending pH 6.76
				1st Temp. 9.8°	2nd Temp. 9.8°	Stable Temp. 9.8°	Ending Temp. 9.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	0910	13.512'	13.520'				

GROUND WATER MONITORING FIELD DATA SHEET
1st QUARTER 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	GW-3	52.0'	52.75'	1st Cond. 4,570	2nd Cond. 4,730	Stable Cond. 4,970	Ending Cond. 5,200
				1st pH 7.14	2nd pH 7.07	Stable pH 6.88	Ending pH 6.82
				1st Temp. 8.6°	2nd Temp. 8.9°	Stable Temp. 9.1°	Ending Temp. 9.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	0935	3.980'	2.847'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-25	51.3'	51.4'	1st Cond. 4,120	2nd Cond. 4,190	Stable Cond. 4,260	Ending Cond. 4,340
				1st pH 7.14	2nd pH 7.15	Stable pH 7.19	Ending pH 7.12
				1st Temp. 7.4°	2nd Temp. 8.1°	Stable Temp. 8.5°	Ending Temp. 9.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1015	9.406'	9.251'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	627	53.85'	53.95'	1st Cond. 3,870	2nd Cond. 5,470	Stable Cond. 5,520	Ending Cond. 5,580
				1st pH 7.84	2nd pH 7.63	Stable pH 7.50	Ending pH 7.23
				1st Temp. 12.9°	2nd Temp. 10.2°	Stable Temp. 10.1°	Ending Temp. 10.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	1055	8.488'	8.366'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-4	200.85'	201.3'	1st Cond. 4,100	2nd Cond. 4,420	Stable Cond 4,420	Ending Cond. 4,560
				1st pH 6.78	2nd pH 6.78	Stable pH 6.77	Ending pH 6.73
				1st Temp. 11.5°	2nd Temp. 10.5°	Stable Temp. 10.7°	Ending Temp. 11.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	1255	21.727'	21.337'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-5	119.9'	120.3'	1st Cond. 5,380	2nd Cond. 5,360	Stable Cond. 5,350	Ending Cond. 5,320
				1st pH 6.91	2nd pH 6.87	Stable pH 6.81	Ending pH 6.32
				1st Temp. 8.9°	2nd Temp. 9.3°	Stable Temp. 9.4°	Ending Temp. 10.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1335	10.447'	10.405'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	EPA-7	109.3'	110.2'	1st Cond. 6,350	2nd Cond. 7,220	Stable Cond. 7,150	Ending Cond. 7,140
				1st pH 7.09	2nd pH 7.09	Stable pH 6.89	Ending pH 6.06
				1st Temp. 9.8°	2nd Temp. 9.0°	Stable Temp. 9.7°	Ending Temp. 10.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1410	17.431'	16.570'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-9-01	FIELD BLANK			1st Cond. 160	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 5.15	2nd pH	Stable pH	Ending pH
				1st Temp. 8.1°	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1500						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-10-01	614			1st Cond. 6,420	2nd Cond. 7,580	Stable Cond. 7,870	Ending Cond. 7,980
				1st pH 7.17	2nd pH 7.13	Stable pH 7.04	Ending pH 7.10
		98.0'	98.35'	1st Temp. 9.8°	2nd Temp. 8.7°	Stable Temp. 9.3°	Ending Temp. 9.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	0850	8.269'	7.798'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-10-01	515-A			1st Cond. 2,940	2nd Cond. 6,410	Stable Cond. 7,300	Ending Cond. 7,240
				1st pH 7.35	2nd pH 7.19	Stable pH 6.50	Ending pH 5.62
		98.4'	100.25'	1st Temp. 14.1°	2nd Temp. 10.2	Stable Temp. 8.5°	Ending Temp. 9.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0925	10.664'	8.514'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-10-01	604			1st Cond. 6,410	2nd Cond. 6,460	Stable Cond. 6,450	Ending Cond. 6,420
				1st pH 5.18	2nd pH 5.16	Stable pH 5.10	Ending pH 4.94
		97.0'	97.5'	1st Temp. 8.7°	2nd Temp. 8.5°	Stable Temp. 8.4°	Ending Temp. 10.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	12.310'	11.709'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	613			1st Cond. 11,080	2nd Cond. 11,030	Stable Cond. 10,920	Ending Cond. 11,340
				1st pH 3.09	2nd pH 3.10	Stable pH 3.10	Ending pH 3.04
		77.8'	78.3'	1st Temp. 6.8°	2nd Temp. 7.5	Stable Temp. 7.8°	Ending Temp. 9.3
	Time	Bubbler Start	Bubbler End	Comments:			
	0845	6.873'	6.210'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	EPA-2			1st Cond. 2,970	2nd Cond. 2,920	Stable Cond. 2,930	Ending Cond. 2980
				1st pH 6.14	2nd pH 6.28	Stable pH 6.65	Ending pH 6.80
		169.5'	169.85'	1st Temp. 8.1	2nd Temp. 8.4°	Stable Temp. 9.3°	Ending Temp. 11.3
	Time	Bubbler Start	Bubbler End	Comments:			
	0930	13.621'	13.132'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	EPA-2 Duplicate	169.85'	170.0'	1st Cond. 2,990	2nd Cond. 2,990	Stable Cond. 2,990	Ending Cond. 2,950
				1st pH 6.78	2nd pH 6.78	Stable pH 6.78	Ending pH 6.90
				1st Temp. 11.3°	2nd Temp. 11.2°	Stable Temp. 11.1°	Ending Temp. 11.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	13.132'	12.932'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	517	100.0'	103.1'	1st Cond. 3,470	2nd Cond. 4,280	Stable Cond. 4,460	Ending Cond. 4,450
				1st pH 5.10	2nd pH 4.93	Stable pH 4.80	Ending pH 4.68
				1st Temp. 11.2°	2nd Temp. 9.2°	Stable Temp. 9.6°	Ending Temp. 10.3
	Time	Bubbler Start	Bubbler End	Comments:			
	1025	6.386'	2.867'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	EPA-14	105.3'	105.2'	1st Cond. 4,100	2nd Cond. 4,400	Stable Cond. 4,410	Ending Cond. 4,440
				1st pH 5.88	2nd pH 5.98	Stable pH 6.08	Ending pH 6.29
				1st Temp. 10.6'	2nd Temp. 9.3'	Stable Temp. 9.1°	Ending Temp. 10.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1100	18.064'	17.932'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	711	178.9'	179.35'	1st Cond. 3,980	2nd Cond. 5,160	Stable Cond. 5,220	Ending Cond. 4,760
				1st pH 2.85	2nd pH 2.86	Stable pH 2.86	Ending pH 4.78
				1st Temp. 21.9°	2nd Temp. 11.1°	Stable Temp. 10.9°	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	1245	12.712'	12.146'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	711 Duplicate	179.35'	179.7'	1st Cond. 4,800	2nd Cond. 4,770	Stable Cond. 4,760	Ending Cond. 4,730
				1st pH 4.78	2nd pH 4.81	Stable pH 4.82	Ending pH 4.92
				1st Temp. 10.5°	2nd Temp. 11.2°	Stable Temp. 11.1	Ending Temp. 11.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1310	12.146'	11.930'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
1-15-01	504-B	160.0'	160.2'	1st Cond. 4,700	2nd Cond. 4,950	Stable Cond. 5,000	Ending Cond. 5,040
				1st pH 5.03	2nd pH 5.03	Stable pH 5.02	Ending pH 5.55
				1st Temp. 11.8°	2nd Temp. 10.7°	Stable Temp. 10.6°	Ending Temp. 11.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1340	6.740'	6.474'				

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Date 1-15-01	Well Number 420	WL w/Probe Pre-Sample 133.85'	WL w/Probe Post Sample 134.1'	Reading 1st Cond. 2,980	Reading 2nd Cond. 3,430	Reading Stable Cond. 3,500	Reading Ending Cond. 3,430
				1st pH 6.44	2nd pH 6.52	Stable pH 6.61	Ending pH 6.78
				1st Temp. 6.5°	2nd Temp. 6.2°	Stable Temp. 7.2°	Ending Temp. 11.5°
	Time 1410	Bubbler Start 15.184'	Bubbler End 14.835'	Comments:			
Date 1-16-01	Well Number FIELD BLANK	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond. 178	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH 6.64	2nd pH	Stable pH	Ending pH
				1st Temp. 7.2°	2nd Temp.	Stable Temp.	Ending Temp.
	Time 0830	Bubbler Start	Bubbler End	Comments:			
Date 1-16-01	Well Number TWQ-142	WL w/Probe Pre-Sample 202.2'	WL w/Probe Post Sample 202.3'	Reading 1st Cond. 15,330	Reading 2nd Cond. 15,700	Reading Stable Cond. 15,960	Reading Ending Cond. 15,720
				1st pH 7.60	2nd pH 7.62	Stable pH 7.63	Ending pH 8.23
				1st Temp. 7.2°	2nd Temp. 6.7°	Stable Temp. 6.5°	Ending Temp. 7.1°
	Time 0930	Bubbler Start 18.675'	Bubbler End 18.320'	Comments:			
Date 1-24-01	Well Number 708	WL w/Probe Pre-Sample 148.15'	WL w/Probe Post Sample 148.95'	Reading 1st Cond.	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time 0945	Bubbler Start 10.079'	Bubbler End 9.156'	Comments:			
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond. 2,450	Reading 2nd Cond. 4,660	Reading Stable Cond. 4,820	Reading Ending Cond. 4,960
				1st pH 3.85	2nd pH 3.72	Stable pH 3.70	Ending pH 8.23
				1st Temp. 17.6	2nd Temp. 11.8	Stable Temp. 11.2°	Ending Temp. 7.1
	Time	Bubbler Start	Bubbler End	Comments:			
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond.	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	TWQ142	202.1'	202.7'	1st Cond. 15,730	2nd Cond. 15,730	Stable Cond. 15,460	Ending Cond. 15,140
				1st pH 8.26	2nd pH 8.16	Stable pH 8.05	Ending pH 8.10
				1st Temp. 11.7°	2nd Temp. 11.5°	Stable Temp. 11.4°	Ending Temp. 12.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	0835	18.709'	17.810'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	504-B	160.0'	160.1'	1st Cond. 3,240	2nd Cond. 3,220	Stable Cond. 4,560	Ending Cond. 4,800
				1st pH 8.09	2nd pH 7.69	Stable pH 7.50	Ending pH 6.10
				1st Temp. 12.4°	2nd Temp. 11.8°	Stable Temp. 11.9°	Ending Temp. 13.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	0920	6.839'	6.575'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	420	133.9'	134.1'	1st Cond. 2,360	2nd Cond. 3,050	Stable Cond. 3,150	Ending Cond. 3,160
				1st pH 6.49	2nd pH 6.54	Stable pH 6.59	Ending pH 6.80
				1st Temp. 13.4°	2nd Temp. 12.8°	Stable Temp. 13.1°	Ending Temp. 13.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1005	15.165'	14.792'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	711	178.9'	179.5'	1st Cond. 3,350	2nd Cond. 4,660	Stable Cond. 4,770	Ending Cond. 4,460
				1st pH 3.09	2nd pH 2.96	Stable pH 2.92	Ending pH 4.57
				1st Temp. 13.5°	2nd Temp. 13.4°	Stable Temp. 13.2°	Ending Temp. 13.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	1045	12.699'	12.047'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	711 DUPLICATE	179.5'	179.75'	1st Cond. 4,460	2nd Cond. 4,470	Stable Cond. 4,480	Ending Cond. 4,450
				1st pH 4.57	2nd pH 4.61	Stable pH 4.46	Ending pH 4.82
				1st Temp. 13.1°	2nd Temp. 13.1°	Stable Temp. 13.1	Ending Temp. 13.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1120	12.047'	11.772'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	EPA-14	105.1'	105.2'	1st Cond. 3,450	2nd Cond. 4,040	Stable Cond. 4,120	Ending Cond. 4,160
				1st pH 5.72	2nd pH 5.83	Stable pH 5.90	Ending pH 6.21
				1st Temp. 14.9°	2nd Temp. 14.7°	Stable Temp. 14.0°	Ending Temp. 14.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1250	18.051'	17.977'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	708	147.8'	148.6'	1st Cond. 3,990	2nd Cond. 4,660	Stable Cond. 4,850	Ending Cond. 4,670
				1st pH 2.80	2nd pH 2.86	Stable pH 2.82	Ending pH 4.19
				1st Temp. 15.6°	2nd Temp. 14.7°	Stable Temp. 14.1°	Ending Temp. 13.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1330	10.458'	9.477'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	EPA-2	169.4'	169.7'	1st Cond. 2,660	2nd Cond. 2,900	Stable Cond. 3,140	Ending Cond. 2,800
				1st pH 6.23	2nd pH 6.33	Stable pH 6.49	Ending pH 6.87
				1st Temp. 17.0°	2nd Temp. 16.5°	Stable Temp. 17.3°	Ending Temp. 15.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1410	13.657'	13.189'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-2-01	EPA-2 DUPLICATE	169.7'	169.8'	1st Cond. 2,800	2nd Cond. 2,810	Stable Cond. 2810	Ending Cond. 2,780
				1st pH 6.87	2nd pH 6.85	Stable pH 6.83	Ending pH 6.88
				1st Temp. 15.8°	2nd Temp. 15.5°	Stable Temp. 15.5°	Ending Temp. 15.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1450	13.189'	13.091'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-3-01	614	98.3'	98.65'	1st Cond. 6,260	2nd Cond. 7,070	Stable Cond. 7,500	Ending Cond. 7,560
				1st pH 6.99	2nd pH 7.02	Stable pH 6.98	Ending pH 6.65
				1st Temp. 11.4°	2nd Temp. 11.6°	Stable Temp. 11.8°	Ending Temp. 12.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	0820	7.993'	7.526'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-3-01	515-A	98.5'	100.3'	1st Cond. 5,340	2nd Cond. 6,710	Stable Cond. 6,980	Ending Cond. 6,800
				1st pH 7.20	2nd pH 7.11	Stable pH 6.91	Ending pH 5.85
				1st Temp. 12.9°	2nd Temp. 12.7°	Stable Temp. 12.5°	Ending Temp. 13.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0900	10.597'	8.557'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-3-01	604	97.1'	97.6'	1st Cond. 6,050	2nd Cond. 6,160	Stable Cond. 6,200	Ending Cond. 6,160
				1st pH 5.05	2nd pH 4.98	Stable pH 4.93	Ending pH 4.80
				1st Temp. 12.2°	2nd Temp. 12.3°	Stable Temp. 12.4°	Ending Temp. 12.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	0945	11.973'	11.500'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	E.P.A.-7	109.65'	110.2'	1st Cond.	6,070	2nd Cond.	6,330	Stable Cond.	6,750	Ending Cond.	6,710
				1st pH	5.74	2nd pH	5.88	Stable pH	6.07	Ending pH	6.10
				1st Temp.	13.3°	2nd Temp.	13.2	Stable Temp.	13.1°	Ending Temp.	13.8°
	Time	Bubbler Start	Bubbler End	Comments:							
	1020	17.238'	16.433'								

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	EPA-5	120.1'	120.5'	1st Cond.	5,500	2nd Cond.	6,600	Stable Cond.	6,540	Ending Cond.	5,000
				1st pH	6.50	2nd pH	6.51	Stable pH	6.51	Ending pH	6.30
				1st Temp.	15.0°	2nd Temp.	15.2°	Stable Temp.	14.9°	Ending Temp.	14.1°
	Time	Bubbler Start	Bubbler End	Comments:							
	1100	10.447'	9.921'								

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	EPA-4	201.0'	201.4'	1st Cond.	4,150	2nd Cond.	4,200	Stable Cond.	4,260	Ending Cond.	4,270
				1st pH	6.40	2nd pH	6.41	Stable pH	6.43	Ending pH	6.70
				1st Temp.	13.9°	2nd Temp.	13.6°	Stable Temp.	13.7°	Ending Temp.	14.7°
	Time	Bubbler Start	Bubbler End	Comments:							
	1145	21.571'	21.032'								

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	509-D	67.2'	67.25'	1st Cond.	4,920	2nd Cond.	5,320	Stable Cond.	5,470	Ending Cond.	5430
				1st pH	6.89	2nd pH	6.76	Stable pH	6.65	Ending pH	6.42
				1st Temp.	14.9°	2nd Temp.	14.3°	Stable Temp.	14.0°	Ending Temp.	14.1°
	Time	Bubbler Start	Bubbler End	Comments:							
	1325	12.704'	12.702'								

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	632	42.9'	43.1'	1st Cond.	5,390	2nd Cond.	5,790	Stable Cond.	6,200	Ending Cond.	6,360
				1st pH	6.68	2nd pH	6.64	Stable pH	6.51	Ending pH	6.45
				1st Temp.	15.3°	2nd Temp.	15.3°	Stable Temp.	14.8°	Ending Temp.	14.7
	Time	Bubbler Start	Bubbler End	Comments:							
	1410	14.892'	13.512'								

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample		Reading		Reading		Reading		Reading
4-3-01	801	49.5'	50.45'	1st Cond.	6,250	2nd Cond.	6,600	Stable Cond.	6,610	Ending Cond.	6,510
				1st pH	6.94	2nd pH	6.90	Stable pH	6.82	Ending pH	6.59
				1st Temp.	15.5°	2nd Temp.	15.5°	Stable Temp.	14.8°	Ending Temp.	14.7°
	Time	Bubbler Start	Bubbler End	Comments:							
	1445	11.779'	10.831'								

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-4-01	EPA-23	48.0'	48.2'	1st Cond. 4,600	2nd Cond. 4,450	Stable Cond. 4,380	Ending Cond. 4,310
				1st pH 7.67	2nd pH 7.52	Stable pH 7.32	Ending pH 6.87
				1st Temp. 11.9°	2nd Temp. 11.1°	Stable Temp. 11.2°	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0830	13.718'	13.338'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-4-01	EPA-23 DUPLICATE	48.2'	48.25'	1st Cond. 4,310	2nd Cond. 4,300	Stable Cond. 4,310	Ending Cond. 4,290
				1st pH 6.87	2nd pH 6.80	Stable pH 6.78	Ending pH 6.87
				1st Temp. 11.4°	2nd Temp. 11.3°	Stable Temp. 11.3°	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0900	13.338'	13.342'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-4-01	GW-1	59.8'	59.85'	1st Cond. 4,050	2nd Cond. 4,170	Stable Cond. 4,240	Ending Cond. 4,410
				1st pH 7.09	2nd pH 7.05	Stable pH 7.00	Ending pH 7.00
				1st Temp. 10.9°	2nd Temp. 10.9°	Stable Temp. 10.9°	Ending Temp. 11.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	0930	10.725'	10.553'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-4-01	FIELD BLANK			1st Cond. 21	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 8.60	2nd pH	Stable pH	Ending pH
				1st Temp. 12.8°	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1020						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-9-01	EPA-13	165.0'	165.75'	1st Cond. 4,080	2nd Cond. 5,020	Stable Cond. 5,290	Ending Cond. 5,260
				1st pH 7.48	2nd pH 7.40	Stable pH 7.19	Ending pH 6.65
				1st Temp. 10.4°	2nd Temp. 10.5°	Stable Temp. 10.7°	Ending Temp. 12.1
	Time	Bubbler Start	Bubbler End	Comments:			
	0840	7.578'	6.714'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-9-01	719	156.5'	156.9'	1st Cond. 4,510	2nd Cond. 4,850	Stable Cond. 5,070	Ending Cond. 5,160
				1st pH 3.13	2nd pH 3.03	Stable pH 2.94	Ending pH 2.81
				1st Temp. 11.3°	2nd Temp. 11.3°	Stable Temp. 11.3°	Ending Temp. 12.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0920	8.367'	7.756'				

GROUND WATER MONITORING FIELD DATA SHEET
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Date 4-9-01	Well Number 717	WL w/Probe Pre-Sample 116.9'	WL w/Probe Post Sample 116.95'	Reading 1st Cond. 3,350	Reading 2nd Cond. 3,440	Reading Stable Cond. 3,490	Reading Ending Cond. 3,220
				1st pH 5.48	2nd pH 5.57	Stable pH 5.65	Ending pH 6.39
				1st Temp. 12.5°	2nd Temp. 12.5°	Stable Temp. 12.4°	Ending Temp. 13.0°
	Time 0955	Bubbler Start 14.358'	Bubbler End 14.125'	Comments:			
Date 4-9-01	Well Number 517	WL w/Probe Pre-Sample 100.0'	WL w/Probe Post Sample 103.3'	Reading 1st Cond. 3,800	Reading 2nd Cond. 4,150	Reading Stable Cond. 4,200	Reading Ending Cond. 4,130
				1st pH 5.17	2nd pH 5.02	Stable pH 4.90	Ending pH 4.59
				1st Temp. 12.2°	2nd Temp. 12.2°	Stable Temp. 12.2°	Ending Temp. 12.9°
	Time 1030	Bubbler Start 6.663'	Bubbler End 2.924'	Comments:			
Date 4-9-01	Well Number 613	WL w/Probe Pre-Sample 77.65'	WL w/Probe Post Sample 78.9'	Reading 1st Cond. 9,960	Reading 2nd Cond. 10,000	Reading Stable Cond. 10,090	Reading Ending Cond. 10,520
				1st pH 2.99	2nd pH 2.97	Stable pH 2.96	Ending pH 2.84
				1st Temp. 13.7°	2nd Temp. 13.8°	Stable Temp. 14.2°	Ending Temp. 13.2°
	Time 1105	Bubbler Start 6.512'	Bubbler End 3.304'	Comments:			
Date 4-9-01	Well Number 803	WL w/Probe Pre-Sample 58.5'	WL w/Probe Post Sample 58.6'	Reading 1st Cond. 4,660	Reading 2nd Cond. 5,760	Reading Stable Cond. 6,130	Reading Ending Cond. 6,290
				1st pH 5.91	2nd pH 6.04	Stable pH 6.10	Ending pH 6.40
				1st Temp. 15.5°	2nd Temp. 15.1°	Stable Temp. 14.8°	Ending Temp. 14.2°
	Time 1255	Bubbler Start 18.179'	Bubbler End 17.797'	Comments:			
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond.	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp. °	2nd Temp. °	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
Date 4-9-01	Well Number 808	WL w/Probe Pre-Sample 46.3'	WL w/Probe Post Sample 46.25'	Reading 1st Cond. 5,460	Reading 2nd Cond. 5,760	Reading Stable Cond. 5,750	Reading Ending Cond. 6,160
				1st pH 6.95	2nd pH 6.86	Stable pH 6.67	Ending pH 6.65
				1st Temp. 14.1°	2nd Temp. 14.0°	Stable Temp. 14.0°	Ending Temp. 15.0°
	Time 1330	Bubbler Start 17.058'	Bubbler End 17.008'	Comments:			

GROUND WATER MONITORING FIELD DATA SHEET
SECOND QUARTER 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-9-01	802	45.5'	45.65'	1st Cond. 6,060	2nd Cond. 6,310	Stable Cond. 6,350	Ending Cond. 6,310
				1st pH 7.07	2nd pH 6.96	Stable pH 6.82	Ending pH 6.86
				1st Temp. 14.3°	2nd Temp. 13.9°	Stable Temp. 13.8°	Ending Temp. 14.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	1405	22.051'	21.825'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-9-01	GW-2	53.6'	53.85'	1st Cond. 5,050	2nd Cond. 5,070	Stable Cond. 5,080	Ending Cond. 5,050
				1st pH 6.84	2nd pH 6.81	Stable pH 6.80	Ending pH 6.92
				1st Temp. 13.3°	2nd Temp. 13.3°	Stable Temp. 13.4°	Ending Temp. 13.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1445	17.002'	16.560'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-10-01	624	48.6'	48.65'	1st Cond. 4,510	2nd Cond. 4,870	Stable Cond. 5,160	Ending Cond. 5,200
				1st pH 7.78	2nd pH 7.58	Stable pH 7.28	Ending pH 7.24
				1st Temp. 11.5°	2nd Temp. 11.5°	Stable Temp. 11.5°	Ending Temp. 12.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	0830	13.704'	13.613'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-10-01	EPA-28	61.2'	61.3'	1st Cond. 4,850	2nd Cond. 4,900	Stable Cond. 4,910	Ending Cond. 4,870
				1st pH 7.49	2nd pH 7.44	Stable pH 7.38	Ending pH 7.13
				1st Temp. 11.1°	2nd Temp. 11.2°	Stable Temp. 11.3°	Ending Temp. 11.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	0910	9.017'	8.760'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-10-01	GW-3	50.95'	51.55'	1st Cond. 4,520	2nd Cond. 4,600	Stable Cond. 4,670	Ending Cond. 4,910
				1st pH 7.36	2nd pH 7.30	Stable pH 7.01	Ending pH 7.26
				1st Temp. 11.1°	2nd Temp. 11.3°	Stable Temp. 11.8°	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0955	4.502'	3.713'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
4-10-01	EPA-25	51.15'	51.3'	1st Cond. 4,040	2nd Cond. 4,070	Stable Cond. 4,080	Ending Cond. 4,120
				1st pH 7.48	2nd pH 7.45	Stable pH 7.41	Ending pH 7.41
				1st Temp. 11.9°	2nd Temp. 11.8°	Stable Temp. 11.7°	Ending Temp. 11.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	1030	9.612'	9.294'				

GROUND WATER MONITORING FIELD DATA SHEET
SECOND QUARTER 2001
SAMPLING

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond. 5,010	2nd Cond. 5,150	Stable Cond. 5,260	Ending Cond. 5,300
	627	Pre-Sample	Post Sample	1st pH 7.69	2nd pH 7.65	Stable pH 7.61	Ending pH 7.52
4-10-01		53.8'	53.9'	1st Temp. 12.5°	2nd Temp. 12.5°	Stable Temp. 12.5°	Ending Temp. 11.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1110	8.551'	8.304'				

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond. 18	2nd Cond.	Stable Cond.	Ending Cond.
	FIELD BLANK	Pre-Sample	Post Sample	1st pH 8.90	2nd pH	Stable pH	Ending pH
4-10-01				1st Temp. 9.7°	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1250						

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
		Pre-Sample	Post Sample	1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
		Pre-Sample	Post Sample	1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
		Pre-Sample	Post Sample	1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

				Reading	Reading	Reading	Reading
Date	Well Number	WL w/Probe	WL w/Probe	1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
		Pre-Sample	Post Sample	1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

APPENDIX A

QUARTERLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

JANUARY AND APRIL OF 2001

QA AND QC CONTROLS

FIELD BLANK

EPA-2 and EPA-2 DUPLICATE FOR ZONE 1

711 AND 711 DUPILCATE FOR ZONE 3

EPA-23 AND EPA-23 DUPLICATE FOR SW ALLIVIUM

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

WELL ID:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
LABORATORY ID:	00-32840-2	00-34509-1	00-36832-2	01-30301-5
SAMPLE DATE/TIME:	05/15/2000 00:00	07/17/00 14:00	10/10/2000 10:05	01/09/2001 15:00
DATE RECEIVED:	05/18/2000 00:00	07/20/00	10/13/2000 00:20	01/12/2001 10:20
REPORT DATE:	June 20, 2000	August 21, 2000	November 10, 2000	February 12, 2001
QUARTER REPRESENTED:	Second 2000	Third 2000	Fourth 2000	First 2001
UNC SUBMITTAL #:	TE-5-5-2000	TE-7-7-2000	TE-8-10	TE-1-1-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	0.18	0.20	0.18	0.09
Magnesium	EPA 200.7	mg/L	0.01	0.07	0.50	0.23	0.05
Sodium	EPA 200.7	mg/L	0.05	4.98	5.00	5.43	3.20
Potassium	EPA 200.7	mg/L	0.10	0.63	0.10	0.77	0.60
Bicarbonate	SM 2320-B	mg/L	0.10	9.00	9.00	9.00	7.00
Sulfate	EPA 200.7	mg/L	1.0	1.3	2.9	1.4	1.0
Chloride	EPA 200.7	mg/L	1.0	5.2	2.7	1.6	< 1.0
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	0.06	< 0.05	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.17	0.38	0.14	0.11
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	45.5	26.7	1.0	< 1.0
pH	SM 4500-H-B	std. units	0.10	6.76	6.32	6.70	6.56
Trace Metals							
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	0.012	< 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	< 0.01	< 0.01	< 0.01	< 0.01
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-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	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	3.6	< 0.2	< 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	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		0.33	0.31	0.23	0.17
Cation	meq		0.25	0.28	0.29	0.17
SM A/C Balance	%	-5 - +5	* -14.0	* -6.1	* 10.82	* -1.27
Calc TDS	mg/L		18	18	15	10
TDS A/C Balance	dec. %	0.80 - 1.20	* 2.56	* 1.51	* 0.07	* 0.10

*Balance inappropriate for "blank" samples.

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

WELL ID:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
LABORATORY ID:	00-32840-2	00-34509-1	00-36832-2	01-30431-6
SAMPLE DATE/TIME:	05/15/2000 nst	07/17/00 14:00	10/10/2000 10:05	01/16/2001 08:30
DATE RECEIVED:	05/18/2000 nst	07/20/00	10/13/2000 00:20	01/19/2001 10:15
REPORT DATE:	June 20, 2000	August 21, 2000	November 10, 2000	February 14, 2001
QUARTER REPRESENTED:	Second 2000	Third 2000	Fourth 2000	First 2001
UNC SUBMITTAL #:	TE-5-5-2000	TE-7-7-2000	TE-8-10	TE-2-1-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	0.18	0.20	0.18	0.09
Magnesium	EPA 200.7	mg/L	0.01	0.07	0.50	0.23	0.04
Sodium	EPA 200.7	mg/L	0.05	4.98	5.00	5.43	4.20
Potassium	EPA 200.7	mg/L	0.10	0.63	0.10	0.77	1.00
Bicarbonate	SM 2320-B	mg/L	0.10	9.00	9.00	9.00	8.00
Sulfate	EPA 200.7	mg/L	1.0	1.3	2.9	1.4	3.6
Chloride	EPA 200.7	mg/L	1.0	5.2	2.7	1.6	< 1.0
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	0.06	< 0.05	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.17	0.38	0.14	0.12
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	45.5	26.7	1.0	9.6
pH	SM 4500-H-B	std. units	0.10	6.76	6.32	6.70	6.68
Trace Metals							
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	0.012	< 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	< 0.01	< 0.01	< 0.01	< 0.01
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-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	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	3.6	< 0.2	< 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	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform		µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion		meq		0.33	0.31	0.23	0.24
Cation		meq		0.25	0.28	0.29	0.22
SM A/C Balance		%	-5 - +5	* -14.0	* -6.1	* 10.82	* -4.90
Calc TDS		mg/L		18	18	15	15
TDS A/C Balance		dec. %	0.80 - 1.20	* 2.56	* 1.51	* 0.07	* 0.66

*Balance inappropriate for "blank" samples.

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

WELL ID:	FIELD BLANK
LABORATORY ID:	01-31997-12
SAMPLE DATE/TIME:	04/04/2001 10:20
DATE RECEIVED:	04/06/2001 10:30
REPORT DATE:	April 24, 2001
QUARTER REPRESENTED:	Third 2001
UNC SUBMITTAL #:	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	
Calcium	EPA 200.7	mg/L	0.05	< 0.05
Magnesium	EPA 200.7	mg/L	0.01	0.03
Sodium	EPA 200.7	mg/L	0.05	2.00
Potassium	EPA 200.7	mg/L	0.10	0.50
Bicarbonate	SM 2320-B	mg/L	0.10	8.00
Sulfate	EPA 200.7	mg/L	1.0	2.1
Chloride	EPA 200.7	mg/L	1.0	< 1.0
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.11

Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	17
pH	SM 4500-H-B	std. units	0.10	6.71

Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	< 0.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10

Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				

Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

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R-2

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

WELL ID:	FIELD BLANK
LABORATORY ID:	01-32149-5
SAMPLE DATE/TIME:	04/10/2001 12:50
DATE RECEIVED:	04/13/2001 10:00
REPORT DATE:	May 16, 2001
QUARTER REPRESENTED:	Second 2001
UNC SUBMITTAL #:	TE-7-4-2001

Major Ions	Method	Units	Reporting Limit	
Calcium	EPA 200.7	mg/L	0.05	< 0.05
Magnesium	EPA 200.7	mg/L	0.01	0.10
Sodium	EPA 200.7	mg/L	0.05	< 0.05
Potassium	EPA 200.7	mg/L	0.10	0.30
Bicarbonate	SM 2320-B	mg/L	0.10	9.00
Sulfate	EPA 200.7	mg/L	1.0	< 1.0
Chloride	EPA 200.7	mg/L	1.0	< 1.0
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.14
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	< 10
pH	SM 4500-H-B	std. units	0.10	6.72
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	< 0.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

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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:	00-34353-5	00-36665-4	01-30431-2	01-31997-4
SAMPLE DATE/TIME:	07/10/2000 14:25	10/02/2000 14:30	01/15/2001 09:30	04/02/2001 14:10
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	369	359	360	408
Magnesium	EPA 200.7	mg/L	0.01	166	172	157	182
Sodium	EPA 200.7	mg/L	0.05	192	195	185	173
Potassium	EPA 200.7	mg/L	0.10	5.9	7.8	6.5	6.0
Bicarbonate	SM 2320-B	mg/L	0.10	334	330	350	425
Sulfate	EPA 200.7	mg/L	1.0	1540	1740	1690	1600
Chloride	EPA 200.7	mg/L	1.0	20.4	21.2	25.8	23.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.47	0.42	0.50	0.53
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	2740	2670	2680	2730
pH	SM 4500-H-B	std. units	0.10	7.42	7.49	7.34	7.39
Trace Metals							
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	0.004	< 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	1.27	1.07	1.21	1.14
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							
Uranium	EPA 200.8	mg/L	0.0003	0.0011	0.0011	0.0015	0.0005
Radium 226	EPA 903.0	pCi/L	0.2	1.5	1.8	1.2	1.4
Radium Error Estimate ±				0.2	0.2	0.2	0.3
Radium 228	EPA 904.0	pCi/L	1.0	3.9	< 1.0	2.8	< 1.0
Radium Error Estimate ±				0.2		1.1	
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	EPA 900.0	pCi/L	1.0	1.4	2.6	1.2	2.1
G. Alpha Error Estimate ±				1.0	0.9	1.0	1.2
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		38.1	42.3	41.7	41.0
Cation	meq		40.9	41.0	39.4	43.3
SM A/C Balance	%	-5 - +5	3.47	-1.46	-2.82	2.81
Calc TDS	mg/L		2463	2662	2602	2607
TDS A/C Balance	dec. %	0.80 - 1.20	1.11	1.00	1.03	1.05

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

WELL ID:	EPA-2 DUPLICATE	EPA-2 DUPLICATE	EPA-2 DUPLICATE
LABORATORY ID:	00-36832-1	01-30431-3	01-31997-5
SAMPLE DATE/TIME:	10/09/2000 14:35	01/15/2001 10:00	04/02/2001 14:50
DATE RECEIVED:	10/13/2000 00:20	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	November 10, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	327	358	407
Magnesium	EPA 200.7	mg/L	0.01	153	156	181
Sodium	EPA 200.7	mg/L	0.05	187	185	170
Potassium	EPA 200.7	mg/L	0.10	6.54	6.50	5.90
Bicarbonate	SM 2320-B	mg/L	0.10	330	330	333
Sulfate	EPA 200.7	mg/L	1.0	1380	1680	1610
Chloride	EPA 200.7	mg/L	1.0	18.1	26.3	24.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.50	0.50	0.46
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	<0.10	< 0.10	< 0.10
Non-Metals						
Total Dissolved Solids	SM 2540-C	mg/L	1.0	2560	2560	2780
pH	SM 4500-H-B	std. units	0.10	7.47	7.47	7.26
Trace Metals						
Aluminum	EPA 200.8	mg/L	0.10	<0.1	< 0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	0.001
Beryllium	EPA 200.8	mg/L	0.01	<0.01	< 0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	<0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	<0.01	< 0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	<0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	1.15	1.15	1.24
Molybdenum	EPA 200.8	mg/L	0.10	<0.1	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	<0.05	< 0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	<0.1	< 0.10	< 0.10
Radiometrics						
Uranium	EPA 200.8	mg/L	0.0003	0.0013	0.0013	0.0006
Radium 226	EPA 903.0	pCi/L	0.2	1.4	1.4	1.4
Radium Error Estimate ±				0.2	0.2	0.2
Radium 228	EPA 904.0	pCi/L	1.0	4.6	4.6	< 1.0
Radium Error Estimate ±				0.2	1.2	
Thorium 230	EPA 907.0	pCi/L	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
Lead Error Estimate ±						
Gross Alpha	EPA 900.1	pCi/L	1.0	1.5	1.1	1.4
G. Alpha Error Estimate ±				0.8	1.0	1.1
Trace Organics						
Chloroform		µg/L	1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range			
Anion	meq		34.7	41.2	39.7
Cation	meq		37.4	39.2	43.1
SM A/C Balance	%	-5 - +5	3.83	-2.43	4.10
Calc TDS	mg/L		2237	2579	2567
TDS A/C Balance	dec. %	0.80 - 1.20	1.14	0.99	1.08

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

WELL ID:	711	711	711	711
LABORATORY ID:	00-34353-3	00-36665-2	01-30431-4	01-31997-2
SAMPLE DATE/TIME:	07/10/2000 13:10	10/02/2000 12:55	01/15/2001 12:45	04/02/2001 10:45
DATE RECEIVED:	07/14/2000 10:20	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-6-7-2000	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	518	503	496	560
Magnesium	EPA 200.7	mg/L	0.01	542	556	495	572
Sodium	EPA 200.7	mg/L	0.05	101	100	93.7	94.9
Potassium	EPA 200.7	mg/L	0.10	10.9	12.6	11.1	10.4
Bicarbonate	SM 2320-B	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3490	3990	3900	3560
Chloride	EPA 200.7	mg/L	1.0	20.0	17.9	23.7	19.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.58	0.45	0.59	0.99
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	5400	5310	5260	5310
pH	SM 4500-H-B	std. units	0.10	3.98	4.13	3.57	3.10
Trace Metals							
Aluminum	EPA 200.8	mg/L	0.10	1.51	1.33	1.40	1.40
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001	0.041	0.036	0.035
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	0.42	0.34	0.39	0.40
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	8.39	7.44	8.00	6.98
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.35	0.32	0.34	0.39
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	0.0613	0.0530	0.0568	0.0560
Radium 226	EPA 903.0	pCi/L	0.2	9.6	9.6	10.3	8.7
Radium Error Estimate ±				0.5	0.9	1.1	0.6
Radium 228	EPA 904.0	pCi/L	1.0	18.6	20.9	19.4	16.9
Radium Error Estimate ±				0.2	1.8	1.6	1.4
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 900.0	pCi/L	1.0	14.2	19.3	13.2	12.4
G. Alpha Error Estimate ±				1.3	1.8	1.2	1.2
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	83.6	81.9	74.7
Cation	meq		76.2	76.6	76.5	80.5
SM A/C Balance	%	-5 - +5	1.98	-4.40	* -3.44	3.74
Calc TDS	mg/L		4692	5188	5029	4825
TDS A/C Balance	dec. %	0.80 - 1.20	1.15	1.02	1.05	1.10

* Iron used for balance purposes.

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

WELL ID:	711-DUPLICATE	711 DUPLICATE	711-DUPLICATE
LABORATORY ID:	00-36665-3	01-30431-5	01-31997-3
SAMPLE DATE/TIME:	10/02/2000 13:30	01/15/2001 13:10	04/02/2001 11:20
DATE RECEIVED:	10/06/2000 10:00	01/19/2001 10:15	04/06/2001 10:30
REPORT DATE:	November 9, 2000	February 14, 2001	April 24, 2001
QUARTER REPRESENTED:	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-8-10-00	TE-2-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	503	501	557
Magnesium	EPA 200.7	mg/L	0.01	555	501	569
Sodium	EPA 200.7	mg/L	0.05	104	93.0	92.7
Potassium	EPA 200.7	mg/L	0.10	12.9	11.2	10.3
Bicarbonate	SM 2320-B	mg/L	0.10	11.0	10.0	< 0.10
Sulfate	EPA 200.7	mg/L	1.0	3970	3860	3640
Chloride	EPA 200.7	mg/L	1.0	15.7	23.3	20.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	0.39	0.60	0.83
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10	< 0.10	0.11
Non-Metals						
Total Dissolved Solids	SM 2540-C	mg/L	1.0	5310	5270	5370
pH	SM 4500-H-B	std. units	0.10	5.36	5.31	3.77
Trace Metals						
Aluminum	EPA 200.8	mg/L	0.10	1.33	1.40	1.40
Arsenic III	SM 3114-C	mg/L	0.001	0.042	0.038	0.034
Beryllium	EPA 200.8	mg/L	0.01	< 0.01	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005	< 0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.36	0.40	0.41
Lead	EPA 200.8	mg/L	0.05	< 0.05	< 0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	7.93	7.65	7.12
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10	0.10	0.10
Nickel	EPA 200.8	mg/L	0.05	0.34	0.38	0.43
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001	< 0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10	< 0.10	< 0.10
Radiometrics						
Uranium	EPA 200.8	mg/L	0.0003	0.050	0.049	0.054
Radium 226	EPA 903.0	pCi/L	0.2	9.0	10.4	8.1
Radium Error Estimate ±				0.9	1.1	0.6
Radium 228	EPA 904.0	pCi/L	1.0	19.7	19.9	12.6
Radium Error Estimate ±				1.8	1.6	1.3
Thorium 230	EPA 907.0	pCi/L	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
Lead Error Estimate ±						
Gross Alpha	EPA 900.0	pCi/L	1.0	22.9	11.8	10.9
G. Alpha Error Estimate ±				1.9	1.2	1.1
Trace Organics						
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range			
Anion	meq		83.3	81.2	76.4
Cation	meq		76.7	71.6	80.0
SM A/C Balance	%	-5 - +5	-4.14	* -6.32	2.30
Calc TDS	mg/L		5175	5003	4898
TDS A/C Balance	dec. %	0.80 - 1.20	1.03	1.05	1.10

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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:	00-34507-5	00-36828-4	01-30299-11	01-31999-4
SAMPLE DATE/TIME:	07/17/2000 13:00	10/09/2000 11:00	01/09/2001 08:30	04/04/2001 08:30
DATE RECEIVED:	07/20/2000 10:00	10/13/2000	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	630	531	648	702
Magnesium	EPA 200.7	mg/L	0.01	376	325	391	410
Sodium	EPA 200.7	mg/L	0.05	117	112	114	118
Potassium	EPA 200.7	mg/L	0.10	9.7	10.6	9.2	9.3
Bicarbonate	SM 2320-B	mg/L	0.10	1060	1060	1050	1040
Sulfate	EPA 200.7	mg/L	1.0	1980	1770	2150	2310
Chloride	EPA 200.7	mg/L	1.0	71.1	57.4	67.7	71.0
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.02	0.96	0.97	1.16
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.51	1.03	1.14	1.41
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4450	4390	4340	4400
pH	SM 4500-H-B	std. units	0.10	7.66	7.45	7.68	7.49
Trace Metals							
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	4.76	4.03	4.77	4.29
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							
Uranium	EPA 200.8	mg/L	0.0003	0.023	0.025	0.0240	0.0240
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2	< 0.2	< 0.2	0.3
Radium Error Estimate ±							0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0	< 1.0	2.3	< 1.0
Radium Error Estimate ±						1.1	
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		60.7	55.9	64.0	67.3
Cation	meq		68.5	59.1	70.5	75.0
SM A/C Balance	%	-5 - +5	6.01	2.71	4.84	5.40
Calc TDS	mg/L		3727	3346	3916	4152
TDS A/C Balance	dec. %	0.80 - 1.20	1.19	1.31	1.11	1.06

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

WELL ID:	EPA-23(DUP)	EPA-23(DUP)	EPA-23(DUP)	EPA-23 DUPLICATE
LABORATORY ID:	00-34507-6	00-36828-5	01-30299-12	01-31999-5
SAMPLE DATE/TIME:	07/17/2000 13:35	10/09/2000 11:30	01/09/2001 09:10	04/04/2001 09:00
DATE RECEIVED:	07/20/2000 10:00	10/13/2000 00:00	01/12/2001 10:20	04/06/2001 10:30
REPORT DATE:	August 21, 2000	November 20, 2000	February 12, 2001	May 8, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-9-10-2000	TE-1-1-2001	TE-6-4-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	630	528	650	711
Magnesium	EPA 200.7	mg/L	0.01	377	325	392	414
Sodium	EPA 200.7	mg/L	0.05	120	111	119	114
Potassium	EPA 200.7	mg/L	0.10	9.6	10.4	9.3	9.2
Bicarbonate	SM 2320-B	mg/L	0.10	1050	1050	1060	1040
Sulfate	EPA 200.7	mg/L	1.0	2030	1740	2380	2350
Chloride	EPA 200.7	mg/L	1.0	68.9	56.1	69.7	73.9
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.03	0.92	1.05	1.20
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.54	1.01	1.14	1.42
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4450	4380	4370	4410
pH	SM 4500-H-B	std. units	0.10	7.55	7.55	7.63	7.51
Trace Metals							
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	4.61	4.00	4.65	4.19
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							
Uranium	EPA 200.8	mg/L	0.0003	0.025	0.025	0.0240	0.0230
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	EPA 900.0	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform	EPA 601	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0

Quality Assurance Data		Target Range				
Anion	meq		61.6	55.1	69.0	68.2
Cation	meq		68.7	58.9	70.9	75.6
SM A/C Balance	%	-5 - +5	5.49	3.29	1.36	5.12
Calc TDS	mg/L		3773	3305	4161	4204
TDS A/C Balance	dec. %	0.80 - 1.20	1.18	1.33	1.05	1.05

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APPENDIX A

MONTHLY

FIELD DATA SHEETS

MONTHLY
GROUND WATER MONITORING FIELD DATA SHEET
2 Month 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	509-D	67.15'	67.2'	1st Cond. 5,530	2nd Cond. 5,840	Stable Cond. 5,920	Ending Cond. 5,850
				1st pH 6.90	2nd pH 6.80	Stable pH 6.71	Ending pH 6.50
				1st Temp. 9.1°	2nd Temp. 9.4°	Stable Temp. 9.3°	Ending Temp. 11.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	0845	13.061'	12.807'	bubbler battery weak, not reading accurate			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	803	59.25'	59.35'	1st Cond. 6,370	2nd Cond. 6,250	Stable Cond. 6,130	Ending Cond. 6,650
				1st pH 5.91	2nd pH 6.07	Stable pH 6.12	Ending pH 6.38
				1st Temp. 11.2°	2nd Temp. 10.9°	Stable Temp. 10.0°	Ending Temp. 11.8
	Time	Bubbler Start	Bubbler End	Comments:			
	0925	17.431'	17.181'	bubbler battery weak, not reading accurate			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	808	47.1'	47.2'	1st Cond. 5,680	2nd Cond. 6,240	Stable Cond. 6,160	Ending Cond. 6,100
				1st pH 6.16	2nd pH 6.69	Stable pH 6.62	Ending pH 6.46
				1st Temp. 14.2°	2nd Temp. 11.2°	Stable Temp. 10.8°	Ending Temp. 11.5
	Time	Bubbler Start	Bubbler End	Comments:			
	1030	16.406'	16.254'	bubbler battery weak, not reading accurate			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	802	46.6'	46.7'	1st Cond. 5,390	2nd Cond. 6,880	Stable Cond. 6,950	Ending Cond. 7,010
				1st pH 6.46	2nd pH 6.45	Stable pH 6.43	Ending pH 6.49
				1st Temp. 13.2°	2nd Temp. 10.5°	Stable Temp. 10.5°	Ending Temp. 11.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1105	20.702'	20.777'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	632	43.8'	44.3	1st Cond. 6,340	2nd Cond. 6,430	Stable Cond. 6,430	Ending Cond. 6430
				1st pH 6.75	2nd pH 6.65	Stable pH 6.58	Ending pH 6.55
				1st Temp. 12.1°	2nd Temp. 12.0°	Stable Temp. 12.1°	Ending Temp. 12.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1145	12.959'	12.385'	Bubbler battery weak, not reading accurate			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-5-01	GW-1	60.3'	60.25'	1st Cond. 4,480	2nd Cond. 4,650	Stable Cond. 4,680	Ending Cond. 4,600
				1st pH 7.40	2nd pH 7.35	Stable pH 7.27	Ending pH 6.91
				1st Temp. 12.9°	2nd Temp. 12.3°	Stable Temp. 12.3°	Ending Temp. 12.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	[illegible]	[illegible]	[illegible]				

MONTH
GROUND WATER MONITORING FIELD DATA SHEET
2 Month 2001
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	624			1st Cond. 4880	2nd Cond. 5240	Stable Cond. 5490	Ending Cond. 5530
				1st pH 6.72	2nd pH 6.70	Stable pH 6.67	Ending pH 6.72
2-5-01		48.6'	46.65'	1st Temp. 13.5°	2nd Temp. 12.0	Stable Temp. 11.9°	Ending Temp. 12.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	1405	13.785'	13.642'	BUBBLER NOT READ ACCURATE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	EPA-28			1st Cond. 3660	2nd Cond. 5050	Stable Cond. 5100	Ending Cond. 5081
				1st pH 7.29	2nd pH 7.27	Stable pH 7.24	Ending pH 7.01
2-5-01		61.5'	61.8'	1st Temp. 14.7°	2nd Temp. 12.8°	Stable Temp. 12.4°	Ending Temp. 12.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1440	7.662'	8.291'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	801			1st Cond. 7090	2nd Cond. 7320	Stable Cond. 7350	Ending Cond. 7220
				1st pH 7.62	2nd pH 7.55	Stable pH 7.49	Ending pH 6.90
2-6-01		50.45'	51.5'	1st Temp. 9.3°	2nd Temp. 8.8°	Stable Temp. 9.0°	Ending Temp. 10.7
	Time	Bubbler Start	Bubbler End	Comments:			
	0845	11.036'	9.904	BUBBLER BATTERY WEAK, NOT READING ACCURATE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	EPA-23			1st Cond. 4370	2nd Cond. 4460	Stable Cond. 4490	Ending Cond. 4500
				1st pH 6.80	2nd pH 6.79	Stable pH 6.76	Ending pH 6.80
2-6-01		47.9'	48.15'	1st Temp. 10.5°	2nd Temp. 10.4°	Stable Temp. 10.8°	Ending Temp. 11.7°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	13.036'	13.520'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	GW-2			1st Cond. 5550	2nd Cond. 5610	Stable Cond. 5580	Ending Cond. 5420
				1st pH 7.28	2nd pH 7.24	Stable pH 7.19	Ending pH 6.79
2-6-01		54.25'	54.6'	1st Temp. 6.7°	2nd Temp. 6.3°	Stable Temp. 6.2°	Ending Temp. 9.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0920	16.363'	15.913'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
	EPA-23			1st Cond. 4500	2nd Cond. 4510	Stable Cond. 4510	Ending Cond. 4500
	DUPLICATE			1st pH 6.80	2nd pH 6.74	Stable pH 6.73	Ending pH 6.68
2-6-01		48.15'	48.1'	1st Temp. 11.7°	2nd Temp. 11.7°	Stable Temp. 11.6°	Ending Temp. 12.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	1030	[illegible]	[illegible]				

MONTHLY
GROUND WATER MONITORING FIELD DATA SHEET
2 Month 20 01
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-6-01	GW-3	51.7'	52.45'	1st Cond. 4,800	2nd Cond. 4,950	Stable Cond. 5,060	Ending Cond. 5,020
				1st pH 7.22	2nd pH 7.17	Stable pH 7.09	Ending pH 6.99
				1st Temp. 13.2°	2nd Temp. 12.2°	Stable Temp. 12.2°	Ending Temp. 13.7°
	Time	Bubbler Start	Bubbler End	Comments:			
	1125	3.724'	2.989'	BUBBLER BATTERY WEAK, NOT READING ACCURATE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-6-01	EPA-25	51.3'	51.4'	1st Cond. 3,750	2nd Cond. 4,200	Stable Cond. 4,280	Ending Cond. 4,240
				1st pH 7.34	2nd pH 7.32	Stable pH 7.30	Ending pH 7.33
				1st Temp. 17.5°	2nd Temp. 13.0°	Stable Temp. 12.2°	Ending Temp. 13.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1200	9.366'	9.232'	BUBBLER BATTERY WEAK, NOT READING ACCURATE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-6-01	627	53.9'	53.9'	1st Cond. 5,210	2nd Cond. 5,500	Stable Cond. 5,600	Ending Cond. 5,490
				1st pH 7.79	2nd pH 7.78	Stable pH 7.76	Ending pH 7.53
				1st Temp. 14.5°	2nd Temp. 12.5°	Stable Temp. 12.0°	Ending Temp. 12.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1305	8.496'	8.336'	BUBBLER BATTERY WEAK, NOT READING ACCURATE			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
2-6-01	FIELD BLANK			1st Cond. 21	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 8.96	2nd pH	Stable pH	Ending pH
				1st Temp. 1500	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1355						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
				1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
				1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

MONTHLY GROUND WATER MONITORING FIELD DATA SHEET

3rd Month 20 01
SAMPLING

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	509-D	67.4'	67.4'	1st Cond. 5,650	2nd Cond. 5,620	Stable Cond. 5590	Ending Cond. 5,540
				1st pH 6.93	2nd pH 6.83	Stable pH 6.76	Ending pH 6.65
				1st Temp. 10.2°	2nd Temp. 10.3°	Stable Temp. 10.4°	Ending Temp. 10.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	0905	12.843'	12.729'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	803	59.0'	59.15'	1st Cond. 4,140	2nd Cond. 6,330	Stable Cond. 6400	Ending Cond. 6,330
				1st pH 6.94	2nd pH 6.92	Stable pH 6.88	Ending pH 6.67
				1st Temp. 14.2°	2nd Temp. 11.5°	Stable Temp. 11.5°	Ending Temp. 12.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	17.669'	17.329'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	808	46.85'	46.9'	1st Cond. 5,200	2nd Cond. 5,770	Stable Cond. 5,910	Ending Cond. 5910
				1st pH 7.00	2nd pH 6.95	Stable pH 6.87	Ending pH 6.65
				1st Temp. 16.5°	2nd Temp. 11.7°	Stable Temp. 11.4°	Ending Temp. 13.7°
	Time	Bubbler Start	Bubbler End	Comments:			
	1035	16.696'	16.423'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	802	46.1'	46.2'	1st Cond. 5,900	2nd Cond. 6,600	Stable Cond. 6,640	Ending Cond. 6,530
				1st pH 7.0	2nd pH 6.93	Stable pH 6.88	Ending pH 6.64
				1st Temp. 16.5°	2nd Temp. 14.0°	Stable Temp. 13.4°	Ending Temp. 13.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1110	21.463'	21.243'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	801	50.0'	51.0'	1st Cond. 6,090	2nd Cond. 6,580	Stable Cond. 6,600	Ending Cond. 6,700
				1st pH 6.68	2nd pH 6.67	Stable pH 6.63	Ending pH 6.92
				1st Temp. 17.5°	2nd Temp. 15.6°	Stable Temp. 15.2°	Ending Temp. 14.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	1250	11.497'	10.305'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	GW-1	60.0'	60.1'	1st Cond. 4,210	2nd Cond. 4,610	Stable Cond. 4,580	Ending Cond. 4,410
				1st pH 7.29	2nd pH 7.25	Stable pH 7.19	Ending pH 7.15
				1st Temp. 17.0°	2nd Temp. 14.9°	Stable Temp. 14.5°	Ending Temp. 14.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	1325	10.519'	10.341'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	624	48.6'	48.65'	1st Cond. 4,650	2nd Cond. 5,130	Stable Cond. 5,270	Ending Cond. 5,270
				1st pH 7.14	2nd pH 7.07	Stable pH 6.99	Ending pH 7.03
				1st Temp. 17.8°	2nd Temp. 14.4°	Stable Temp. 13.9°	Ending Temp. 13.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1400	13.711'	13.596'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-5-01	EPA-28	61.55'	61.6'	1st Cond. 4,740	2nd Cond. 4,780	Stable Cond. 4,840	Ending Cond. 4,840
				1st pH 7.41	2nd pH 7.43	Stable pH 7.43	Ending pH 7.56
				1st Temp. 19.5°	2nd Temp. 17.2°	Stable Temp. 15.2°	Ending Temp. 14.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	1440	8.713'	8.454'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	GW-2	54.1'	54.3'	1st Cond. 4,690	2nd Cond. 5,200	Stable Cond. 5,220	Ending Cond. 5,220
				1st pH 7.88	2nd pH 7.78	Stable pH 7.66	Ending pH 6.86
				1st Temp. 13.1°	2nd Temp. 8.2°	Stable Temp. 8.2°	Ending Temp. 10.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0835	16.456'	16.164'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	632	43.4'	43.7'	1st Cond. 5,730	2nd Cond. 6,120	Stable Cond. 6,400	Ending Cond. 6,530
				1st pH 6.76	2nd pH 6.69	Stable pH 6.59	Ending pH 6.51
				1st Temp. 10.9°	2nd Temp. 10.6°	Stable Temp. 10.8°	Ending Temp. 11.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0925	13.457'	12.995'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	EPA-23	48.0'	48.3'	1st Cond. 4,240	2nd Cond. 4,320	Stable Cond. 4,330	Ending Cond. 4,320
				1st pH 6.92	2nd pH 6.85	Stable pH 6.80	Ending pH 6.93
				1st Temp. 11.9°	2nd Temp. 11.7°	Stable Temp. 11.8°	Ending Temp. 12.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	1005	13.635'	13.321'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	EPA-23 Duplicate	48.3'	48.3'	1st Cond. 4,320	2nd Cond. 4,330	Stable Cond. 4,330	Ending Cond. 4,320
				1st pH 6.93	2nd pH 6.86	Stable pH 6.82	Ending pH 7.08
				1st Temp. 12.4°	2nd Temp. 12.4°	Stable Temp. 12.4°	Ending Temp. 12.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	1040	[illegible]	[illegible]				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	FIELD BLANK			1st Cond. 26	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 8.20	2nd pH	Stable pH	Ending pH
				1st Temp. 14.1°	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1130						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	GW-3			1st Cond. 4,240	2nd Cond. 4,560	Stable Cond. 4,760	Ending Cond. 4,840
		51.3'	52.0'	1st pH 6.93	2nd pH 6.89	Stable pH 6.84	Ending pH 7.0
				1st Temp. 15.1°	2nd Temp. 13.5°	Stable Temp. 12.9°	Ending Temp. 12.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1230	4.081'	3.374'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	EPA-25			1st Cond. 3,920	2nd Cond. 4,040	Stable Cond. 4,110	Ending Cond. 4,140
		51.25'	52.0'	1st pH 6.90	2nd pH 6.93	Stable pH 6.95	Ending pH 7.27
				1st Temp. 14.1°	2nd Temp. 13.5°	Stable Temp. 13.0°	Ending Temp. 13.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1310	9.337'	9.092'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
3-6-01	627			1st Cond. 4,760	2nd Cond. 5,180	Stable Cond. 5,300	Ending Cond. 5,310
		54.1'	54.15'	1st pH 6.88	2nd pH 6.95	Stable pH 6.97	Ending pH 7.31
				1st Temp. 17.3°	2nd Temp. 14.2°	Stable Temp. 13.8°	Ending Temp. 14.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1400	8.251'	8.057'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
				1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
				1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	509-D	67.6'	67.7'	1st Cond. 4,700	2nd Cond. 4,990	Stable Cond. 5,170	Ending Cond. 5,707
				1st pH 7.47	2nd pH 7.29	Stable pH 7.05	Ending pH 6.46
				1st Temp. 12.9°	2nd Temp. 12.8°	Stable Temp. 12.6°	Ending Temp. 13.3°
	Time	Bubbler Start	Bubbler End	Comments:			
	0825	12.616'	11.754'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	EPA-23	48.1'	48.15'	1st Cond. 4,320	2nd Cond. 4,170	Stable Cond. 4,140	Ending Cond. 4,100
				1st pH 7.18	2nd pH 7.16	Stable pH 7.08	Ending pH 6.97
				1st Temp. 14.2°	2nd Temp. 13.6°	Stable Temp. 13.6°	Ending Temp. 14.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	0900	12.879'	12.185'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	EPA-23 DUPLICATE	48.15'	48.4'	1st Cond. 4,100	2nd Cond. 4,190	Stable Cond. 4,170	Ending Cond. 4,110
				1st pH 6.97	2nd pH 6.86	Stable pH 6.84	Ending pH 6.88
				1st Temp. 14.1°	2nd Temp. 13.9°	Stable Temp. 13.9°	Ending Temp. 14.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	0930	12.185'	12.191				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	803	58.65'	58.75'	1st Cond. 5,620	2nd Cond. 6,320	Stable Cond. 6,400	Ending Cond. 6,640
				1st pH 6.77	2nd pH 6.64	Stable pH 6.55	Ending pH 6.43
				1st Temp. 15.2°	2nd Temp. 14.8°	Stable Temp. 14.4°	Ending Temp. 14.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1030	17.994'	17.747'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	808	46.5'	46.5'	1st Cond. 5,680	2nd Cond. 6,020	Stable Cond. 6,320	Ending Cond. 6,710
				1st pH 7.01	2nd pH 6.84	Stable pH 6.67	Ending pH 6.44
				1st Temp. 16.9°	2nd Temp. 16.7°	Stable Temp. 16.4°	Ending Temp. 14.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1100	17.057'	16.883'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	802	45.45'	45.5'	1st Cond. 3,460	2nd Cond. 5,020	Stable Cond. 6,480	Ending Cond. 6,650
				1st pH 6.45	2nd pH 6.41	Stable pH 6.40	Ending pH 6.42
				1st Temp. 20.6°	2nd Temp. 18.5°	Stable Temp. 16.4°	Ending Temp. 15.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1300	21.954'	17.395'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	801	49.1'	50.3'	1st Cond. 6,890	2nd Cond. 6,770	Stable Cond. 6,740	Ending Cond. 6,700
				1st pH 6.41	2nd pH 6.68	Stable pH 6.61	Ending pH 6.47
				1st Temp. 21.1°	2nd Temp. 16.4°	Stable Temp. 16.1°	Ending Temp. 15.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1340	11.543'	11.143'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	GW-2	53.7'	53.95'	1st Cond. 5,200	2nd Cond. 5,420	Stable Cond. 5,400	Ending Cond. 5,360
				1st pH 6.64	2nd pH 6.60	Stable pH 6.56	Ending pH 6.46°
				1st Temp. 15.0°	2nd Temp. 14.4°	Stable Temp. 13.8°	Ending Temp. 15.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	1415	16.704'	16.457'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-7-01	632	42.7'	42.9'	1st Cond. 5,630	2nd Cond. 6040	Stable Cond. 6,560	Ending Cond. 6,740
				1st pH 6.92	2nd pH 6.69	Stable pH 6.47	Ending pH 6.30
				1st Temp. 19.1°	2nd Temp. 18.4°	Stable Temp. 17.3°	Ending Temp. 16.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1455	13.904'	13.813'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	GW-1	59.7'	59.7'	1st Cond. 4,100	2nd Cond. 4,800	Stable Cond. 4,670	Ending Cond. 4,600
				1st pH 7.61	2nd pH 7.39	Stable pH 7.02	Ending pH 6.72
				1st Temp. 13.9°	2nd Temp. 13.7°	Stable Temp. 13.0°	Ending Temp. 13.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	0830	10.888'	10.741'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	624	48.8'	48.8'	1st Cond. 5340	2nd Cond. 5,420	Stable Cond. 5,470	Ending Cond. 5,500
				1st pH 6.78	2nd pH 6.74	Stable pH 6.70	Ending pH 6.62
				1st Temp. 13.4°	2nd Temp. 13.2°	Stable Temp. 12.9°	Ending Temp. 13.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0910	13.621'	13.473'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	EPA-28	61.2'	61.35'	1st Cond. 4,400	2nd Cond. 4,820	Stable Cond. 5,030	Ending Cond. 5,040
				1st pH 7.30	2nd pH 7.16	Stable pH 7.01	Ending pH 6.81
				1st Temp. 16.0°	2nd Temp. 15.6°	Stable Temp. 14.7°	Ending Temp. 15.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0945	9.010'	8.740'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	GW-3	50.9'	51.55'	1st Cond. 4,500	2nd Cond. 4,670	Stable Cond. 4,950	Ending Cond. 5,070
				1st pH 7.16	2nd pH 7.03	Stable pH 6.77	Ending pH 6.72
				1st Temp. 15.4°	2nd Temp. 14.9°	Stable Temp. 14.3°	Ending Temp. 14.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1040	4.157'	3.795'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	EPA-25	51.4'	51.6'	1st Cond. 4,040	2nd Cond. 4,100	Stable Cond. 4,140	Ending Cond. 4250
				1st pH 7.14	2nd pH 7.13	Stable pH 7.11	Ending pH 7.02
				1st Temp. 16.5°	2nd Temp. 15.4°	Stable Temp. 15.1°	Ending Temp. 14.8°
	Time	Bubbler Start	Bubbler End	Comments:			
	1120	9.267'	9.005'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	627	54.3'	54.4'	1st Cond. 5,000	2nd Cond. 5,320	Stable Cond. 5,410	Ending Cond. 5,530
				1st pH 7.65	2nd pH 7.52	Stable pH 7.35	Ending pH 7.08
				1st Temp. 16.7°	2nd Temp. 18.0°	Stable Temp. 17.5°	Ending Temp. 15.5°
	Time	Bubbler Start	Bubbler End	Comments:			
	1255	7.924'	7.888'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-8-01	FIELD BLANK			1st Cond. 18	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH 8.50	2nd pH	Stable pH	Ending pH
				1st Temp. 33.9°	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1335						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-11-	805	50.5'		1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			
	1050						

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
5-11-01	807	53.9'		1st Cond.	2nd Cond.	Stable Cond.	Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	509-D	67.4'	67.5'	1st Cond. 4,400	2nd Cond. 5,270	Stable Cond. 5,500	Ending Cond. 5,570
				1st pH 7.07	2nd pH 6.91	Stable pH 6.75	Ending pH 6.46
				1st Temp. 22.8°	2nd Temp. 14.9°	Stable Temp. 14.4°	Ending Temp. 14.7°
	Time	Bubbler Start	Bubbler End	Comments:			
	0840	12.643'	12.588'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	EPA-23	47.7'	48.0'	1st Cond. 4,160	2nd Cond. 4,340	Stable Cond. 4,330	Ending Cond. 4,300
				1st pH 7.05	2nd pH 6.94	Stable pH 6.81	Ending pH 6.67
				1st Temp. 14.8°	2nd Temp. 14.5°	Stable Temp. 14.2°	Ending Temp. 14.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0915	13.895'	13.555'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	EPA-23 DUPLICATE	48.0'	48.0'	1st Cond. 4,300	2nd Cond. 4,310	Stable Cond. 4,310	Ending Cond. 4,270
				1st pH 6.67	2nd pH 6.65	Stable pH 6.65	Ending pH 6.67
				1st Temp. 14.4°	2nd Temp. 14.0°	Stable Temp. 14.0°	Ending Temp. 14.4°
	Time	Bubbler Start	Bubbler End	Comments:			
	0940	13.555'	13.534'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	803	58.2'	58.35'	1st Cond. 3,480	2nd Cond. 5,720	Stable Cond. 6,350	Ending Cond. 6,510
				1st pH 6.48	2nd pH 6.47	Stable pH 6.48	Ending pH 6.45
				1st Temp. 16.7°	2nd Temp. 15.9°	Stable Temp. 15.2°	Ending Temp. 15.0°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	18.434'	18.134'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	802	45.15'	45.20'	1st Cond. 6,100	2nd Cond. 6,390	Stable Cond. 6,520	Ending Cond. 6,330
				1st pH 6.55	2nd pH 6.52	Stable pH 6.50	Ending pH 6.46
				1st Temp. 16.6°	2nd Temp. 16.2°	Stable Temp. 15.7°	Ending Temp. 15.8
	Time	Bubbler Start	Bubbler End	Comments:			
	1130	22.416'	22.211'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	632	42.4'	42.6'	1st Cond. 5,450	2nd Cond. 6,310	Stable Cond. 6,550	Ending Cond. 6,590
				1st pH 6.99	2nd pH 6.65	Stable pH 6.46	Ending pH 6.36
				1st Temp. 18.0°	2nd Temp. 17.2°	Stable Temp. 16.0°	Ending Temp. 15.6°
	Time	Bubbler Start	Bubbler End	Comments:			
	1300	14.329'	14.075'				

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Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	801	49.1'	50.0'	1st Cond. 6,150	2nd Cond. 6,430	Stable Cond. 6,510	Ending Cond. 6,520
				1st pH 6.79	2nd pH 6.68	Stable pH 6.61	Ending pH 6.47
				1st Temp. 17.4°	2nd Temp. 16.9°	Stable Temp. 16.4°	Ending Temp. 16.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	1350	12.369'	11.407'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	GW-2	53.35'	53.75'	1st Cond. 5,060	2nd Cond. 5,310	Stable Cond. 5,380	Ending Cond. 5,170
				1st pH 6.68	2nd pH 6.60	Stable pH 6.57	Ending pH 6.47
				1st Temp. 17.3°	2nd Temp. 17.1°	Stable Temp. 16.5°	Ending Temp. 15.9°
	Time	Bubbler Start	Bubbler End	Comments:			
	1420	17.134'	16.802'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-4-01	GW-1	59.45'	59.5'	1st Cond. 4,350	2nd Cond. 4,430	Stable Cond. 4,440	Ending Cond. 4,580
				1st pH 7.28	2nd pH 7.21	Stable pH 7.10	Ending pH 6.67
				1st Temp. 18.5°	2nd Temp. 18.0°	Stable Temp. 17.6°	Ending Temp. 16.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	1455	11.087'	10.901'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-5-01	808	46.2'	46.2'	1st Cond. 6,560	2nd Cond. 6,620	Stable Cond. 6,700	Ending Cond. 6,700
				1st pH 6.54	2nd pH 6.54	Stable pH 6.51	Ending pH 6.54
				1st Temp. 14.9°	2nd Temp. 14.6°	Stable Temp. 14.4°	Ending Temp. 15.2°
	Time	Bubbler Start	Bubbler End	Comments:			
	0845	17.390'	17.234'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-5-01	808 FILTERED DUPLICATE	46.2'	46.25'	1st Cond. 6,020	2nd Cond. 6,230	Stable Cond. 6,450	Ending Cond. 6,690
				1st pH 6.45	2nd pH 6.46	Stable pH 6.46	Ending pH 6.46
				1st Temp. 16.9°	2nd Temp. 16.6°	Stable Temp. 16.2°	Ending Temp. 16.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	0915	17.234'	17.175'				

Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading	Reading	Reading	Reading
6-5-01	624	48.8'	48.85'	1st Cond. 5,360	2nd Cond. 5,390	Stable Cond. 5,510	Ending Cond. 5,330
				1st pH 7.05	2nd pH 6.88	Stable pH 6.75	Ending pH 6.62
				1st Temp. 16.6°	2nd Temp. 15.8°	Stable Temp. 15.4°	Ending Temp. 15.1°
	Time	Bubbler Start	Bubbler End	Comments:			
	1000	13.682'	13.493'				

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JUNE Month 2001
SAMPLING

Date 6-5-01	Well Number ERA-28	WL w/Probe Pre-Sample 61.15'	WL w/Probe Post Sample 61.25'	Reading 1st Cond. 4,530	Reading 2nd Cond. 4,820	Reading Stable Cond. 4,940	Reading Ending Cond. 4,910
				1st pH 7.36	2nd pH 7.27	Stable pH 7.09	Ending pH 6.84
				1st Temp. 16.2°	2nd Temp. 15.9°	Stable Temp. 15.5°	Ending Temp. 15.5°
	Time 1040	Bubbler Start 9.111'	Bubbler End 8.827'	Comments:			
Date 6-5-01	Well Number GW-3	WL w/Probe Pre-Sample 50.7'	WL w/Probe Post Sample 51.4'	Reading 1st Cond. 4,720	Reading 2nd Cond. 4,870	Reading Stable Cond. 4,980	Reading Ending Cond. 4,960
				1st pH 6.81	2nd pH 6.73	Stable pH 6.67	Ending pH 6.76
				1st Temp. 17.8°	2nd Temp. 17.2°	Stable Temp. 16.3°	Ending Temp. 15.8°
	Time 1245	Bubbler Start 4.699'	Bubbler End 3.890'	Comments:			
Date 6-5-01	Well Number EPA-25	WL w/Probe Pre-Sample 51.0'	WL w/Probe Post Sample 51.5'	Reading 1st Cond. 3,780	Reading 2nd Cond. 3,960	Reading Stable Cond. 4,070	Reading Ending Cond. 4,120
				1st pH 7.29	2nd pH 7.27	Stable pH 7.21	Ending pH 7.03
				1st Temp. 17.0°	2nd Temp. 16.4°	Stable Temp. 15.7°	Ending Temp. 15.9°
	Time 1325	Bubbler Start 9.350'	Bubbler End 8.635'	Comments:			
Date 6-5-01	Well Number 627	WL w/Probe Pre-Sample 54.1'	WL w/Probe Post Sample 54.3'	Reading 1st Cond. 4,910	Reading 2nd Cond. 5,200	Reading Stable Cond. 5,310	Reading Ending Cond. 5,430
				1st pH 7.60	2nd pH 7.44	Stable pH 7.29	Ending pH 7.14
				1st Temp. 18.8°	2nd Temp. 17.7°	Stable Temp. 17.3°	Ending Temp. 17.6°
	Time 1410	Bubbler Start 8.009'	Bubbler End 7.934'	Comments:			
Date 6-5-01	Well Number FIELD BLANK	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond. 19	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH 8.89	2nd pH	Stable pH	Ending pH
				1st Temp. 33.9°	2nd Temp.	Stable Temp.	Ending Temp.
	Time 1455	Bubbler Start	Bubbler End	Comments:			
Date	Well Number	WL w/Probe Pre-Sample	WL w/Probe Post Sample	Reading 1st Cond.	Reading 2nd Cond.	Reading Stable Cond.	Reading Ending Cond.
				1st pH	2nd pH	Stable pH	Ending pH
				1st Temp.	2nd Temp.	Stable Temp.	Ending Temp.
	Time	Bubbler Start	Bubbler End	Comments:			

APPENDIX A

MONTHLY SAMPLING

SEMI-ANNUAL GROUND WATER MONITORING REPORT

FEBRUARY, MARCH, MAY, AND JUNE OF 2001

QA AND QC CONTROLS

FIELD BLANK

EPA-23 AND EPA-23 DUPLICATE FOR SW ALLIVIUM

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

WELL ID:	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
LABORATORY ID:	00-34509-1	00-36832-2	01-30431-6	01-30836-2
SAMPLE DATE/TIME:	07/17/00 14:00	10/10/2000 10:05	01/16/2001 08:30	02/06/2001 13:55
DATE RECEIVED:	07/20/00	10/13/2000 00:20	01/19/2001 10:15	02/09/2001 10:45
REPORT DATE:	August 21, 2000	November 10, 2000	February 14, 2001	March 5, 2001
QUARTER REPRESENTED:	Third 2000	Fourth 2000	First 2001	Second 2001
UNC SUBMITTAL #:	TE-7-7-2000	TE-8-10	TE-2-1-2001	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results	Results	Results	Results
Calcium	EPA 200.7	mg/L	0.05	0.20	0.18	0.09	0.07
Magnesium	EPA 200.7	mg/L	0.01	0.50	0.23	0.04	0.10
Sodium	EPA 200.7	mg/L	0.05	5.00	5.43	4.20	1.40
Potassium	EPA 200.7	mg/L	0.10	0.10	0.77	1.00	0.10
Bicarbonate	SM 2320-B	mg/L	0.10	9.00	9.00	8.00	7.00
Sulfate	EPA 200.7	mg/L	1.0	2.9	1.4	3.6	< 1.0
Chloride	EPA 200.7	mg/L	1.0	2.7	1.6	< 1.0	1.1
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.38	0.14	0.12	0.15
Non-Metals							
Total Dissolved Solids	SM 2540-C	mg/L	10	26.7	1.0	9.6	< 10
pH	SM 4500-H-B	std. units	0.10	6.32	6.70	6.68	6.63
Trace Metals							
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	0.012	< 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	< 0.01	< 0.01	< 0.01	< 0.01
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-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	< 0.0003	< 0.0003	< 0.0003	< 0.0003
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	EPA 900.1	pCi/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
G. Alpha Error Estimate ±							
Trace Organics							
Chloroform		µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Quality Assurance Data			**Target Range**				
Anion		meq		0.31	0.23	0.24	0.18
Cation		meq		0.28	0.29	0.22	0.08
SM A/C Balance		%	-5 - +5	* -6.14	* 10.82	* -4.90	* -38.1
Calc TDS		mg/L		17.7	14.8	14.5	8.01
TDS A/C Balance		dec. %	0.80 - 1.20	* 1.51	* 0.07	* 0.66	* 1.25

*Balance inappropriate for "blank" samples.

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

WELL ID:	FIELD BLANK
LABORATORY ID:	01-31404-2
SAMPLE DATE/TIME:	03/06/2001 11:30
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	March 29, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	0.10
Magnesium	EPA 200.7	mg/L	0.01	0.10
Sodium	EPA 200.7	mg/L	0.05	3.90
Potassium	EPA 200.7	mg/L	0.10	0.40
Bicarbonate	SM 2320-B	mg/L	0.10	8.00
Sulfate	EPA 200.7	mg/L	1.0	1.5
Chloride	EPA 200.7	mg/L	1.0	< 1.0
Ammonium as N	SM 4500-NH_3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.22
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	< 10
pH	SM 4500-H-B	std. units	0.10	6.54
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	< 0.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.1	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		0.21
Cation	meq		0.20
SM A/C Balance	%	-5 - +5	-2.23
Calc TDS	mg/L		12.05
TDS A/C Balance	dec. %	0.80 - 1.20	0.83

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

WELL ID:	Field Blank
LABORATORY ID:	01-32763-2
SAMPLE DATE/TIME:	05/08/2001 13:55
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 22, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	0.10
Magnesium	EPA 200.7	mg/L	0.01	< 1.00
Sodium	EPA 200.7	mg/L	0.05	< 1.00
Potassium	EPA 200.7	mg/L	0.10	< 0.10
Bicarbonate	SM 2320-B	mg/L	0.10	6.00
Sulfate	EPA 200.7	mg/L	1.0	< 1.0
Chloride	EPA 200.7	mg/L	1.0	< 1.0
Ammonium as N	SM 4500 NH_3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	0.10
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	< 10
pH	SM 4500-H-B	std. units	0.10	6.54
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	< 0.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		0.2
Cation	meq		0
SM A/C Balance	%	-5 - +5	-5.46
Calc TDS	mg/L		8
TDS A/C Balance	dec. %	0.80 - 1.20	1.30

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

WELL ID:	Field Blank
LABORATORY ID:	01-33365-3
SAMPLE DATE/TIME:	06/05/2001 14:55
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	June 22, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	< 0.05
Magnesium	EPA 200.7	mg/L	0.01	< 0.01
Sodium	EPA 200.7	mg/L	0.05	< 0.05
Potassium	EPA 200.7	mg/L	0.10	< 0.10
Bicarbonate	SM 2320-B	mg/L	0.10	7.00
Sulfate	EPA 200.7	mg/L	1.0	< 1.0
Chloride	EPA 200.7	mg/L	1.0	< 1.0
Ammonium as N	SM 4500 NH_3-G	mg/L	0.05	< 0.05
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	< 0.10
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	10	1010
pH	SM 4500-H-B	std. units	0.10	6.60
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	< 0.01
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	< 0.0003
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	1.0
G. Alpha Error Estimate ±				1.0
Trace Organics				
Chloroform	EPA 624	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		0.2
Cation	meq		0
SM A/C Balance	%	-5 - +5	* -86.7
Calc TDS	mg/L		6
TDS A/C Balance	dec. %	0.80 - 1.20	* 162

* Balances inappropriate for near blank samples
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UNC MINING AND MILLING: CHURCHROCK OPERATIONS
GROUNDWATER MONITORING PROGRAM: SOUTHWEST ALLUVIUM MONITOR WELLS

WELL ID:	EPA-23
LABORATORY ID:	01-30835-10
SAMPLE DATE/TIME:	02/06/2001 10:00
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	737
Magnesium	EPA 200.7	mg/L	0.01	429
Sodium	EPA 200.7	mg/L	0.05	118
Potassium	EPA 200.7	mg/L	0.10	10.6
Bicarbonate	SM 2320-B	mg/L	0.10	1060
Sulfate	EPA 200.7	mg/L	1.0	2510
Chloride	EPA 200.7	mg/L	1.0	68.5
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4380
pH	SM 4500-H-B	std. units	0.10	7.56
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.77
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0250
Radium 226	EPA 903.0	pCi/L	0.2	0.3
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.2
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		71.7
Cation	meq		78.3
SM A/C Balance	%	-5 - +5	4.43
Calc TDS	mg/L		4415
TDS A/C Balance	dec. %	0.80 - 1.20	0.99

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

WELL ID:	EPA-23 DUPLICATE
LABORATORY ID:	01-30835-11
SAMPLE DATE/TIME:	02/06/2001 10:30
DATE RECEIVED:	02/09/2001 10:45
REPORT DATE:	March 6, 2001
REVISED REPORT DATE:	April 30, 2001
UNC SUBMITTAL #:	TE-4-2-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	729
Magnesium	EPA 200.7	mg/L	0.01	424
Sodium	EPA 200.7	mg/L	0.05	111
Potassium	EPA 200.7	mg/L	0.10	10.5
Bicarbonate	SM 2320-B	mg/L	0.10	1060
Sulfate	EPA 200.7	mg/L	1.0	2500
Chloride	EPA 200.7	mg/L	1.0	67.1
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.08
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.30
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4380
pH	SM 4500-H-B	std. units	0.10	7.56
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	4.85
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0250
Radium 226	EPA 903.0	pCi/L	0.2	0.3
Radium Error Estimate ±				0.2
Radium 228	EPA 904.0	pCi/L	1.0	2.3
Radium Error Estimate ±				1.1
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		71.4
Cation	meq		77.2
SM A/C Balance	%	-5 - +5	3.89
Calc TDS	mg/L		4384
TDS A/C Balance	dec. %	0.80 - 1.20	1.00

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

WELL ID:	EPA-23
LABORATORY ID:	01-31400-10
SAMPLE DATE/TIME:	03/06/2001 10:05
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	636
Magnesium	EPA 200.7	mg/L	0.01	389
Sodium	EPA 200.7	mg/L	0.05	150
Potassium	EPA 200.7	mg/L	0.10	10.2
Bicarbonate	SM 2320-B	mg/L	0.10	1030
Sulfate	EPA 200.7	mg/L	1.0	2410
Chloride	EPA 200.7	mg/L	1.0	65.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.09
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4070
pH	SM 4500-H-B	std. units	0.10	7.61
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.00
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0245
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		69.0
Cation	meq		71.4
SM A/C Balance	%	-5 - +5	1.65
Calc TDS	mg/L		4188
TDS A/C Balance	dec. %	0.80 - 1.20	0.97

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

WELL ID:	EPA-23 DUPLICATE
LABORATORY ID:	01-31400-11
SAMPLE DATE/TIME:	03/06/2001 10:40
DATE RECEIVED:	03/09/2001 09:45
REPORT DATE:	April 5, 2001
UNC SUBMITTAL #:	TE-5-3-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	637
Magnesium	EPA 200.7	mg/L	0.01	389
Sodium	EPA 200.7	mg/L	0.05	150
Potassium	EPA 200.7	mg/L	0.10	10.1
Bicarbonate	SM 2320-B	mg/L	0.10	1030
Sulfate	EPA 200.7	mg/L	1.0	2420
Chloride	EPA 200.7	mg/L	1.0	64.7
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.12
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.20
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4110
pH	SM 4500-H-B	std. units	0.10	7.78
Trace Metals				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.03
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	0.07
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium	EPA 200.8	mg/L	0.0003	0.0252
Radium 226	EPA 903.0	pCi/L	0.2	0.4
Radium Error Estimate ±				0.3
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		69.2
Cation	meq		71.4
SM A/C Balance	%	-5 - +5	1.56
Calc TDS	mg/L		4198
TDS A/C Balance	dec. %	0.80 - 1.20	0.98

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

WELL ID:	EPA-23
LABORATORY ID:	01-32762-2
SAMPLE DATE/TIME:	05/07/2001 09:00
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	622
Magnesium	EPA 200.7	mg/L	0.01	371
Sodium	EPA 200.7	mg/L	0.05	113
Potassium	EPA 200.7	mg/L	0.10	10.0
Bicarbonate	SM 2320-B	mg/L	0.10	1040
Sulfate	EPA 200.7	mg/L	1.0	2070
Chloride	EPA 200.7	mg/L	1.0	78.6
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.28
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.25
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4460
pH	SM 4500-H-B	std. units	0.10	7.14
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	< 0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.74
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0260
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		62.5
Cation	meq		67.6
SM A/C Balance	%	-5 - +5	3.93
Calc TDS	mg/L		3798
TDS A/C Balance	dec. %	0.80 - 1.20	1.17

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

WELL ID:	EPA-23 DUPLICATE
LABORATORY ID:	01-32762-3
SAMPLE DATE/TIME:	05/07/2001 09:30
RECEIVED DATE/TIME:	05/11/2001 10:00
REPORT DATE:	June 13, 2001
UNC SUBMITTAL #:	TE-8-5-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	620
Magnesium	EPA 200.7	mg/L	0.01	371
Sodium	EPA 200.7	mg/L	0.05	109
Potassium	EPA 200.7	mg/L	0.10	10.0
Bicarbonate	SM 2320-B	mg/L	0.10	1030
Sulfate	EPA 200.7	mg/L	1.0	2060
Chloride	EPA 200.7	mg/L	1.0	79.4
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.21
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.27
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4450
pH	SM 4500-H-B	std. units	0.10	7.21
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.75
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.0250
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 601	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		62.1
Cation	meq		67.3
SM A/C Balance	%	-5 - +5	4.00
Calc TDS	mg/L		3777
TDS A/C Balance	dec. %	0.80 - 1.20	1.18

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

WELL ID:	EPA-23
LABORATORY ID:	01-33406-2
SAMPLE DATE/TIME:	06/04/2001 09:15
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	618
Magnesium	EPA 200.7	mg/L	0.01	371
Sodium	EPA 200.7	mg/L	0.05	107
Potassium	EPA 200.7	mg/L	0.10	9.50
Bicarbonate	SM 2320-B	mg/L	0.10	1040
Sulfate	EPA 200.7	mg/L	1.0	2210
Chloride	EPA 200.7	mg/L	1.0	75.4
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.29
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.67
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4360
pH	SM 4500-H-B	std. units	0.10	7.22
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.11
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.025
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		65.3
Cation	meq		67.1
SM A/C Balance	%	-5 - +5	1.32
Calc TDS	mg/L		3930
TDS A/C Balance	dec. %	0.80 - 1.20	1.11

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

WELL ID:	EPA-23 DUPLICATE
LABORATORY ID:	01-33406-3
SAMPLE DATE/TIME:	06/04/2001 09:40
RECEIVED DATE/TIME:	06/08/2001 10:00
REPORT DATE:	July 6, 2001
UNC SUBMITTAL #:	TE-9-6-2001

Major Ions	Method	Units	Reporting Limit	Results
Calcium	EPA 200.7	mg/L	0.05	617
Magnesium	EPA 200.7	mg/L	0.01	372
Sodium	EPA 200.7	mg/L	0.05	102
Potassium	EPA 200.7	mg/L	0.10	9.80
Bicarbonate	SM 2320-B	mg/L	0.10	1020
Sulfate	EPA 200.7	mg/L	1.0	2240
Chloride	EPA 200.7	mg/L	1.0	76.2
Ammonia as N	SM 4500-NH3-G	mg/L	0.05	1.33
Nitrate + Nitrite as N	EPA 353.2	mg/L	0.10	1.60
Non-Metals				
Total Dissolved Solids	SM 2540-C	mg/L	1.0	4020
pH	SM 4500-H-B	std. units	0.10	7.24
Trace Metals, dissolved				
Aluminum	EPA 200.8	mg/L	0.10	< 0.10
Arsenic III	SM 3114-C	mg/L	0.001	< 0.001
Beryllium	EPA 200.8	mg/L	0.01	< 0.01
Cadmium	EPA 200.8	mg/L	0.005	< 0.005
Cobalt	EPA 200.8	mg/L	0.01	0.01
Lead	EPA 200.8	mg/L	0.05	< 0.05
Manganese	EPA 200.8	mg/L	0.01	5.15
Molybdenum	EPA 200.8	mg/L	0.10	< 0.10
Nickel	EPA 200.8	mg/L	0.05	< 0.05
Selenium IV	SM 3114-C	mg/L	0.001	< 0.001
Vanadium	EPA 200.8	mg/L	0.10	< 0.10
Radiometrics				
Uranium, dissolved	EPA 200.8	mg/L	0.0003	0.024
Radium 226	EPA 903.0	pCi/L	0.2	< 0.2
Radium Error Estimate ±				-
Radium 228	EPA 904.0	pCi/L	1.0	< 1.0
Radium Error Estimate ±				-
Thorium 230	EPA 907.0	pCi/L	0.2	< 0.2
Thorium Error Estimate ±				-
Lead 210	NERHL-65-4	pCi/L	1.0	< 1.0
Lead Error Estimate ±				-
Gross Alpha	EPA 900.0	pCi/L	1.0	< 1.0
G. Alpha Error Estimate ±				-
Trace Organics				
Chloroform	EPA 8260	µg/L	1.0	< 1.0

Quality Assurance Data		Target Range	
Anion	meq		65.6
Cation	meq		66.9
SM A/C Balance	%	-5 - +5	0.95
Calc TDS	mg/L		3940
TDS A/C Balance	dec. %	0.80 - 1.20	1.02

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APPENDIX B

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505-722-6651

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Energy Laboratories, Inc.
Laboratory

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Casper WY 82601
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307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 1-1-2001 (Pg. 1 of 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
803	1-8-01	0850		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3,
808		0905								K, Mg, Mn, Na, NH_3, Ni,
802		0915								NO_3, Pb, Pb-210, pH, Se,
801		0930								SO_4, TDS, Th-230, U, V,
GW-1		1020								Chloroform, Gross
624		1110								Alpha (-) U & Rn,
EPA-28		1150								Combined Ra-226 & Ra-228, Al,
GW-2		1330								Co, Mo
632		1410						NA		
509-D		1445								
GW-3	1-9-01	0935								
EPA-23		0830								
EPA-23 DUPLICATE		0910								
EPA-25		1015								
627		1055								

Sampled by: [illegible] Date: 1-8-01 1-9-01 Time: 1230, 1530 1145

Dispatched by: R Bucenti Date: 1/10/00 Time: 2:00PM

Received by: Mark Chischilly Jr. Date: 1-12-01 Time: 1030

Lab Receipt Signature: [illegible]

Carrier: UPS

Method of Shipment: 4 ICED COOLER

The above analysis to be performed is authorized by:

Signature: [illegible]

Date: 1-10-2001

TRACKING NO. PAGE NO.

30299R00018

1st Quarter 2001

UNITED NUC 'R CORPORATION
(State Road 566 - (Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 1-1-2001 (Pg. 2 of 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
EPA-4	1-9-01	1255		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3,
EPA-5	↓	1335		↓	↓	↓	↓			K, Mg, Mn, Na, NH_3, Ni,
EPA-7	↓	1410		↓	↓	↓	↓			NO_3, Pb, Pb-210, pH, Se,
FIELD BLANK	↓	1500		↓	↓	↓	↓			SO_4, TDS, Th-230, U, V,
515-A	1-10-01	0925		↓	↓	↓	↓			Chloroform, Gross
614	↓	0850		↓	↓	↓	↓			Alpha (-) U & Rn,
604	↓	1000		↓	↓	↓	↓			Combined Ra-226 & Ra-228, Al,
										Co, Mo
								N A		

Sampled by: [illegible]
Dispatched by: R Bucenti
Carrier: UPS
4 ICED COOLER
Method of Shipment

Received by Max Chisholm Jr.
1/10/00 1:00PM
Date Time

1-9-01 1145, 1500
1-10-01 1100
Date Time

Lab Receipt Signature

Date Time

The above analysis to be performed is authorized by:

Signature

1-10-2001
Date

UNITED NU R CORPORATION
(State Road 566 - Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

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Laboratory

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Address

Casper — WY — 82601
City — State — Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 2-1-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
613	1-15-01	0845		✓ JHB	✓ MC	✓ MC	✓ JHB			As, Be, Ca, Cd, Cl, HCO_3,
EPA-2	↓	0930		↓	↓	↓	↓			K, Mg, Mn, Na, NH_3, Ni,
EPA-2 DUPLICATE		1000								NO_3, Pb, Pb-210, pH, Se,
517		1025								SO_4, TDS, Th-230, U, V,
EPA-14		1100								Chloroform, Gross
711		1245								Alpha (-) U & Rn,
711 DUPLICATE		1310								Combined Ra-226 & Ra-228, Al,
504-B		1340								Co, Mo
420	↓	1410						N A		
FIELD BLANK	1-16-01	0830								
TWQ-142	1-16-01	0900		↓	↓	↓	↓			

Sampled by: Jesse H Boyd
Dispatched by: R Becenti
Carrier: UPS
Method of Shipment: ICED COOLER

Received by: Mary Chischilly Jr.
Date: 1.16.00 Time: 2:00PM

Date: 1-15-01 1-16-01 Time: 1140, 1500 1040
Lab Receipt Signature: Tabitha Tassel
Date: 19-Jan-01 Time: 10:15

The above analysis to be performed is authorized by:
Signature:
Date: 1-16-2001

TRACKING NO. PAGE NO.

30431R00010

19 JAN 01

UNITED NUC R CORPORATION
(State Road 566 - Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 3-1-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
708	1-24-01	0945		✓ SHB	✓ ne	✓ ne	✓ SHB			As, Be, Ca, Cd, Cl, HCO_3, K, Mg, Mn, Na, NH_3, Ni, NO_3, Pb, Pb-210, pH, Se, SO_4, TDS, Th-230, U, V, Chloroform, Gross Alpha (-) U & Rn, Combined Ra-226 & Ra-228, Al, Co, Mo
								N A		

Sampled by: [illegible]
Dispatched by: R Bucenti
Carrier: UPS
Method of Shipment: 1 ICED COOLER

Received by May Chischilly Jr. 1-24-01 1000
Date Time
1/24/01 2:00 PM
Date Time
Lab Receipt Signature: Martha Tassee
29 Jan 01 10:00
Date Time

The above analysis to be performed is authorized by:
Signature
1-24-2001
Date

TRACKING NO. 30578000004
PAGE NO.

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated sample custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30299-1 Thru 01-30299-14** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **12-JAN-01 1020** Date&Time Col'd: **08-JAN-01 0850**
Received by: **Linda Spicer** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**N/A**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**6C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 14-21 P F HNO3(A),14-1L P F NP(B),14-12OZ P NF NP(C),14-120ML P F H2SO4(D),28-40ML VOA NF NA2S203(EF)

Comments:

TRACKING NO. PAGE NO

30299R00021

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **509-D** is associated to Lab ID: **01-30299-9**
Client ID: **624** is associated to Lab ID: **01-30299-5**
Client ID: **627** is associated to Lab ID: **01-30299-14**
Client ID: **632** is associated to Lab ID: **01-30299-8**
Client ID: **801** is associated to Lab ID: **01-30299-3**
Client ID: **802** is associated to Lab ID: **01-30299-2**
Client ID: **803** is associated to Lab ID: **01-30299-1**
Client ID: **EPA-23** is associated to Lab ID: **01-30299-11**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: **01-30299-12**
Client ID: **EPA-25** is associated to Lab ID: **01-30299-13**
Client ID: **EPA-28** is associated to Lab ID: **01-30299-6**
Client ID: **GW-1** is associated to Lab ID: **01-30299-4**
Client ID: **GW-2** is associated to Lab ID: **01-30299-7**
Client ID: **GW-3** is associated to Lab ID: **01-30299-10**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: Cathy Forsting, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30299R00022

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated ample custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30301-1 Thru 01-30301-12** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **12-JAN-01 1020** Date&Time Col'd: **08-JAN-01 0905**
Received by: **Linda Spicer** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**N/A**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**6C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 8-2L P F HNO3(A),8-1L P F NP(B),8-12OZ P NF NP(C),8-120ML P F H2SO4(D),16-40ML VOA NF NA2S203(EF)

Comments:

TRACKING NO. PAGE NO.
30301R00014

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016316** is associated to Lab ID: **01-30301-12**
Client ID: **1ZE818320610016325** is associated to Lab ID: **01-30301-10**
Client ID: **1ZE818320610016334** is associated to Lab ID: **01-30301-11**
Client ID: **1ZE818320610016343** is associated to Lab ID: **01-30301-9**
Client ID: **515-A** is associated to Lab ID: **01-30301-6**
Client ID: **604** is associated to Lab ID: **01-30301-8**
Client ID: **614** is associated to Lab ID: **01-30301-7**
Client ID: **808** is associated to Lab ID: **01-30301-1**
Client ID: **EPA-4** is associated to Lab ID: **01-30301-2**
Client ID: **EPA-5** is associated to Lab ID: **01-30301-3**
Client ID: **EPA-7** is associated to Lab ID: **01-30301-4**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-30301-5**

Approved By: [illegible] Reviewed By: Cathy Forsting
Cathy Forsting
Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30301R00015

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s ple custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30431-1 Thru 01-30431-7** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **19-JAN-01 1015** Date&Time Col'd: **15-JAN-01 0845**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**N/A**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**2C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 7-2L P F HNO3(A),7-16OZ P F NP(B),7-12OZ P NF NP(C),7-120ML F H2SO4(D),14-40ML VOA NF NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.
30431R00012

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **613** is associated to Lab ID: **01-30431-1**
Client ID: **711** is associated to Lab ID: **01-30431-4**
Client ID: **711 DUPLICATE** is associated to Lab ID: **01-30431-5**
Client ID: **EPA-2** is associated to Lab ID: **01-30431-2**
Client ID: **EPA-2 DUPLICATE** is associated to Lab ID: **01-30431-3**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-30431-6**
Client ID: **TWQ-142** is associated to Lab ID: **01-30431-7**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: Cathy Forsting, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30431R00013

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30433-1 Thru 01-30433-6** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **19-JAN-01 1015** Date&Time Col'd: **15-JAN-01 1025**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**N/A**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**2C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 4-2L P F HNO3(A),4-16OZ P F NP(B),4-12OZ P NF NP(C),4-120ML P F H2SO4(D),8-40ML VOA NF NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

30433R00009

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016290** is associated to Lab ID: **01-30433-6**
Client ID: **1ZE818320610016307** is associated to Lab ID: **01-30433-5**
Client ID: **420** is associated to Lab ID: **01-30433-4**
Client ID: **504-B** is associated to Lab ID: **01-30433-3**
Client ID: **517** is associated to Lab ID: **01-30433-1**
Client ID: **EPA-14** is associated to Lab ID: **01-30433-2**

Approved By: STEVEN E. CARLSTON ORGANICS SUPERVISOR

Reviewed By: SHERYL GARLING ADMINISTRATIVE SUPERVISOR

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30433R00010

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30578-1 Thru 01-30578-2** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **29-JAN-01 1000** Date&Time Col'd: **24-JAN-01 0945**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**0C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 1-2L P F HNO3(A),1-16OZ P NF NP(B),1-12OZ P NF NP(C),1-120ML P F H2SO4(D),1-40ML VOA NF NA2S2O3(E)

Comments: 1-40ML VOA RECIEVED BROKEN AT LAB.

TRACKING NO. PAGE NO.

30578R00006

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
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ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016281** is associated to Lab ID: **01-30578-2**
Client ID: **708** is associated to Lab ID: **01-30578-1**

Approved By: Steven S. Gardner, Organics Supervisor

Reviewed By: Cathy Forsting, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30578R00007

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505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 6-4-2001 (PG. 1 OF 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
TWQ-142	4-2-01	0835		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3, K, Mg, Mn, Na, NH_3, Ni, NO_3, Pb, Pb-210, pH, Se, SO_4, TDS, Th-230, U, V, Chloroform, Gross Alpha (-) U & Rn, Combined Ra-226 & Ra-228, Al, Co, Mo
504-B		0920								
420		1005								
711		1045								
711- DUPLICATE		1120								
EPA-14		1250								
708		1330								
EPA-2		1410								
EPA-2 DUPLICATE		1450	N A					N A		
614	4-3-01	0820								
515-A		0900								
604		0945								
EPA-7		1020								
EPA-5		1100								
EPA-4		1145								

Sampled by: Jane H Bogart
Dispatched by: K. Bocenti
Carrier: UPS
Method of Shipment: 4 ICED COOLER

Received by: Max Chischilly Jr.
Date: 4.4.01 Time: 2:00 pm

Date: 4/2-4/3/2001 Time: 1200-1530
Lab Receipt Signature: Tabitha Fassett
Date: 04 Apr 01 Time: 10:30

The above analysis to be performed is authorized by:
Signature:
Date: 4-4-2001

TRANSMITTAL PAGE NO.

3197R00016

UNITED NUC R CORPORATION
(State Road 566 - Miles.NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
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Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 6-4-2001 (PG. 2 OF 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
509-D	4-3-01	1335		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3,
632		1410								K, Mg, Mn, Na, NH_3, Ni,
801	↓	1445								NO_3, Pb, Pb-210, pH, Se,
EPA-23	4-4-01	0830								SO_4, TDS, Th-230, U, V,
EPA-23 DUPLICATE		0900								Chloroform, Gross
GW-1		0930								Alpha (-) U & Rn,
FIELD BLANK	↓	1020		↓	↓	↓	↓			Combined Ra-226 & Ra-228, Al,
										Co, Mo
			N A					N A		

Sampled by: [illegible]
Dispatched by: K Buccenti
Carrier: UPS
4 ICED COOLER
Method of Shipment

Received by [illegible]
4.04.01 2:00pm
Date Time

4/3/01 1530
4/4/01 1030
Date Time

[illegible]
Lab Receipt Signature

06 Apr 01 10:30
Date Time

The above analysis to be performed is authorized by:
Signature
4-4-2001
Date

PAGE NO.
3197R00017

32151-1-8

UNITED NUC R CORPORATION
(State Road 566 - Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

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Laboratory

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Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 7-4-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
EPA -13	4-9-01	0840		✓ JHB	✓	✓	✓ JHB			As, Be, Ca, Cd, Cl, HCO_3,
719		0920								K, Mg, Mn, Na, NH_3, Ni,
717		0955								NO_3, Pb, Pb-210, pH, Se,
517		1030								SO_4, TDS, Th-230, U, V,
613		1105								Chloroform, Gross
803		1255								Alpha (-) U & Rn,
808		1330								Combined Ra-226 & Ra-228, Al,
802		1405								Co, Mo
GW-2		1445	N A					N A		
624	4-10-01	0830								
EPA-28		0910								
GW-3		0955								
EPA-25		1030								
627		1110								
FIELD BLANK		1250								

Sampled by: Tracy H Begaye
Dispatched by: R Becenti
Carrier: UPS
ICED COOLERS
Method of Shipment

Received by May Chischilly Jr.
4.11.01 2:00pm
Date Time

4-9-2001 1200 & 1530
4-10-2001 1209
Date Time

Lab Receipt Signature
13 Apr 01 10:00
Date Time

The above analysis to be performed is authorized by:
Signature
4-11-2001
Date

13 APR 01

32151R00011

TRANSMITTAL NO. PAGE NO.

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s ple custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-31997-1 Thru 01-31997-16** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **06-APR-01 1030** Date&Time Col'd: **02-APR-01 0835**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 24-40ML VOA NF NA2S2O3(AB),12-120ML P F H2SO4(C),12-350ML P NF NP(D),12-500ML P F NP(E),12-2 P F HNO3(F)

Comments:

TRACKING NO. PAGE NO.
31997R00019

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016183** is associated to Lab ID: **01-31997-16**
Client ID: **1ZE818320610016192** is associated to Lab ID: **01-31997-15**
Client ID: **1ZE818320610016209** is associated to Lab ID: **01-31997-14**
Client ID: **1ZE818320610016218** is associated to Lab ID: **01-31997-13**
Client ID: **515-A** is associated to Lab ID: **01-31997-7**
Client ID: **604** is associated to Lab ID: **01-31997-8**
Client ID: **614** is associated to Lab ID: **01-31997-6**
Client ID: **711** is associated to Lab ID: **01-31997-2**
Client ID: **711-DUPLICATE** is associated to Lab ID: **01-31997-3**
Client ID: **EPA-2** is associated to Lab ID: **01-31997-4**
Client ID: **EPA-2 DUPLICATE** is associated to Lab ID: **01-31997-5**
Client ID: **EPA-4** is associated to Lab ID: **01-31997-11**
Client ID: **EPA-5** is associated to Lab ID: **01-31997-10**
Client ID: **EPA-7** is associated to Lab ID: **01-31997-9**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-31997-12**
Client ID: **TWQ-142** is associated to Lab ID: **01-31997-1**

Approved By: STEVEN E. CARLSTON ORGANICS SUPERVISOR

Reviewed By: CATHY FORSTING PROJECT MANAGER

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
31997R00020

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated sample custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-31998-1 Thru 01-31998-4** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **06-APR-01 1030** Date&Time Col'd: **02-APR-01 0920**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 8-40ML VOA NF NA2S2O3(AB),4-120ML P F H2SO4(C),4-350ML P NF NP(D),12-500ML P F NP(E),12-2L P F HNO3(F)

Comments:

TRACKING NO. PAGE NO.
31998R00010

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **420** is associated to Lab ID: **01-31998-2**
Client ID: **504-B** is associated to Lab ID: **01-31998-1**
Client ID: **708** is associated to Lab ID: **01-31998-4**
Client ID: **EPA-14** is associated to Lab ID: **01-31998-3**

Approved By: Steven E. Carlson, Organics Supervisor

Reviewed By: Cathy Foster, Client Services Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
31998R00011

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-31999-1 Thru 01-31999-6** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **06-APR-01 1030** Date&Time Col'd: **03-APR-01 1335**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 12-40ML VOA NF NA2S2O3(AB),6-120ML P F H2SO4(C),6-350ML P NF NP(D),6-500ML P F NP(E),6-2L P HNO3(F)

Comments:

TRACKING NO. PAGE NO.

31999R00012

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **509-D** is associated to Lab ID: **01-31999-1**
Client ID: **632** is associated to Lab ID: **01-31999-2**
Client ID: **801** is associated to Lab ID: **01-31999-3**
Client ID: **EPA-23** is associated to Lab ID: **01-31999-4**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: 01-31999-5
Client ID: **GW-1** is associated to Lab ID: **01-31999-6**

A roved By: Steven E. Capleton, Organics Supervisor

Reviewed By: Cathy Forsting, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
31999R00013

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated sa le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-32152-1 Thru 01-32152-5** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **13-APR-01 1000** Date&Time Col'd: **09-APR-01 0840**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**4C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 2-1L P F HNO3(A),2-16OZ P F NP(B),2-12OZ P NF NP(C),2-120ML P F H2SO4(D),4-40ML VOA NF NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

32152R00007

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016174** is associated to Lab ID: **01-32152-4**
Client ID: **1ZE818320610082469** is associated to Lab ID: **01-32152-3**
Client ID: **1ZE818320610082478** is associated to Lab ID: **01-32152-5**
Client ID: **517** is associated to Lab ID: **01-32152-2**
Client ID: **EPA-13** is associated to Lab ID: **01-32152-1**

Approved By: Steven E. Carleton, Organics Supervisor

Reviewed By: Cathy Forstner, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
32152R00008

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s ple custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-32149-1 Thru 01-32149-5** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **13-APR-01 1000** Date&Time Col'd: **09-APR-01 0920**
Received by: **Tabitha Fassett** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 5-2L P F HNO3(A),5-16OZ P F NP(B),5-12OZ P NF NP(C),5-120ML P F H2SO4(D),10-40ML VOA NF NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

32149R00010

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **613** is associated to Lab ID: **01-32149-3**
Client ID: **717** is associated to Lab ID: **01-32149-2**
Client ID: **719** is associated to Lab ID: **01-32149-1**
Client ID: **808** is associated to Lab ID: **01-32149-4**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-32149-5**

A -oved By: Steven E. Carlston, Organics Supervisor

Reviewed By: Cathy Forstner, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
32149R00011

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-32151-1 Thru 01-32151-8** Matrix: **Liquid**
Delivered by: **ups** Date&Time Rec'd: **13-APR-01 1000** Date&Time Col'd: **09-APR-01 1255**
Received by: **Sara Hawken** Logged In by: **Sara Hawken**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**4C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 8-2L P F HNO3 (A),8-16OZ P F NP (B),8-12OZ P NF NP (C),8-120ML P F H2SO4 (D),16-40ML VOA HCL (EFG)

Comments:

TRACKING NO. PAGE NO.
32151R00013

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **624** is associated to Lab ID: **01-32151-4**
Client ID: **627** is associated to Lab ID: **01-32151-8**
Client ID: **802** is associated to Lab ID: **01-32151-2**
Client ID: **803** is associated to Lab ID: **01-32151-1**
Client ID: **EPA-25** is associated to Lab ID: **01-32151-7**
Client ID: **EPA-28** is associated to Lab ID: **01-32151-5**
Client ID: **GW-2** is associated to Lab ID: **01-32151-3**
Client ID: **GW-3** is associated to Lab ID: **01-32151-6**

Approved By: STEVEN E. CARLSTON ORGANICS SUPERVISOR

Reviewed By: JAMES YOCUM QUALITY ASSURANCE DIRECTOR

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
32151R00016

APPENDIX B

MONTHLY

CHAIN OF CUSTODY FORMS

UNITED NU[illegible]AR CORPORATION
(State Road 566 [illegible] Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper — WY — 82601
City — State — Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 4-2-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
509-D	2-5-01	0845		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3, K, Mg, Mn, Na, NH_3, Ni, NO_3, Pb, Pb-210, pH, Se, SO_4, TDS, Th-230, U, V, Chloroform, Gross Alpha (-) U & Rn, Combined Ra-226 & Ra-228, Al, Co, Mo
803		0925								
808		1030								
802		1105								
632		1145								
GW-1		1320								
624		1405						N A		
EPA-28		1440	N A							
801	2-6-01	0845								
GW-2		0920								
EPA-23		1000								
EPA-23 DUPLICATE		1030								
GW-3		1125								
EPA-25		1200								
627		1305								
FIELD BLANK		1355								

Sampled by: [illegible] Received by Mary Chischilly Jr. 2/5,6/01 Date 1200/1530 & 1200/1400 Time

The above analysis to be performed is authorized by:

Dispatched by: UPS [illegible] 2/7/01 Date Time

Lab Receipt Signature

Signature

Carrier: UPS

2-9-01 Date 1045 Time

2-07-2001 Date

Method of Shipment: ICED COOLER

TRACKING NO. PAGE NO.

08835R00018

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s- le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30836-1 Thru 01-30836-5** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **09-FEB-01 1045** Date&Time Col'd: **05-FEB-01 1030**
Received by: **Linda Spicer** Logged In by: **Linda Spicer**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**1C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 2-16OZP F NP(A),2-120MLP NF H2SO4(B),2-2L P F HNO3(C),2-12OZP NFNFP(D),8-40ML VOA NA2S2O3(EF

Comments:

TRACKING NO. PAGE NO.

30836R00006

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016254** is associated to Lab ID: **01-30836-5**
Client ID: **1ZE818320610016263** is associated to Lab ID: **01-30836-3**
Client ID: **1ZE818320610016272** is associated to Lab ID: **01-30836-4**
Client ID: **808** is associated to Lab ID: **01-30836-1**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-30836-2**

Approved By: Steven E. Carleton, Organics Supervisor

Reviewed By: C. James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30836R00007

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-30835-1 Thru 01-30835-14** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **09-FEB-01 1045** Date&Time Col'd: **05-FEB-01 0845**
Received by: **Linda Spicer** Logged In by: **Tabitha Fassett**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**1C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 14-2L P F HNO3(A),14-16OZ P F NP(B),14-12OZ P NF NP(C),14-120ML P F H2SO4(D),28-40ML VOA NF NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

30835R00019

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **509-D** is associated to Lab ID: **01-30835-1**
Client ID: **624** is associated to Lab ID: **01-30835-6**
Client ID: **627** is associated to Lab ID: **01-30835-14**
Client ID: **632** is associated to Lab ID: **01-30835-4**
Client ID: **801** is associated to Lab ID: **01-30835-8**
Client ID: **802** is associated to Lab ID: **01-30835-3**
Client ID: **803** is associated to Lab ID: **01-30835-2**
Client ID: **EPA-23** is associated to Lab ID: **01-30835-10**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: **01-30835-11**
Client ID: **EPA-25** is associated to Lab ID: **01-30835-13**
Client ID: **EPA-28** is associated to Lab ID: **01-30835-7**
Client ID: **GW-1** is associated to Lab ID: **01-30835-5**
Client ID: **GW-2** is associated to Lab ID: **01-30835-9**
Client ID: **GW-3** is associated to Lab ID: **01-30835-12**

Approved By: Roger Gabling, Laboratory Supervisor

Reviewed By: James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
30835R00020

UNITED NU[illegible]R CORPORATION
(State Road 566 - [illegible] Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 5-3-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
509-D	3-5-01	0905		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3,
803		1000								K, Mg, Mn, Na, NH_3, Ni,
808		1035								NO_3, Pb, Pb-210, pH, Se,
802		1110								SO_4, TDS, Th-230, U, V,
801		1250								Chloroform, Gross
GW-1		1325								Alpha (-) U & Rn,
624		1400								Combined Ra-226 & Ra-228, Al,
EPA-28		1440	N A					N A		Co, Mo
GW-2	3-6-01	0835								
632		0925								
EPA-23		1005								
EPA-23 DUPLICATE		1040								
FIELD BLANK		1130								
GW-3		1230								
EPA-25		1310								
627		1400								

Sampled by: [illegible]
Dispatched by: R. Becenti
Carrier: UPS
30 ICED COOLERS
Method of Shipment

Received by Max Chischilly Jr.
3/7/01 2:00 pm
Date Time

3/5, 6/01 1200/1530 & 1130/1500
Date Time
Lab Receipt Signature
3-9-01 0945
Date Time

The above analysis to be performed is authorized by:
Signature
3-7-2001
Date

BILL OF LADING NO. 8100018

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-31400-1 Thru 01-31400-16** Matrix: **Liquid,Misc**
Delivered by: **UPSY** Date&Time Rec'd: **09-MAR-01 0945** Date&Time Col'd: **05-MAR-01 0905**
Received by: **Linda Spicer** Logged In by: **Linda Spicer**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 14-16OZP F NP(A),14-120ML P F H2SO4(B),14-2L P F HNO3(C),14-12OZ P NFNP(D),28-40ML VOA NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

31400R00020

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016227** is associated to Lab ID: **01-31400-15**
Client ID: **1ZE818320610016245** is associated to Lab ID: **01-31400-16**
Client ID: **509-D** is associated to Lab ID: **01-31400-1**
Client ID: **624** is associated to Lab ID: **01-31400-6**
Client ID: **627** is associated to Lab ID: **01-31400-14**
Client ID: **632** is associated to Lab ID: **01-31400-9**
Client ID: **801** is associated to Lab ID: **01-31400-4**
Client ID: **802** is associated to Lab ID: **01-31400-3**
Client ID: **803** is associated to Lab ID: **01-31400-2**
Client ID: **EPA-23** is associated to Lab ID: **01-31400-10**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: **01-31400-11**
Client ID: **EPA-25** is associated to Lab ID: **01-31400-13**
Client ID: **EPA-28** is associated to Lab ID: **01-31400-7**
Client ID: **GW-1** is associated to Lab ID: **01-31400-5**
Client ID: **GW-2** is associated to Lab ID: **01-31400-8**
Client ID: **GW-3** is associated to Lab ID: **01-31400-12**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
31400R00021

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-31404-1 Thru 01-31404-3** Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: **09-MAR-01 0945** Date&Time Col'd: **05-MAR-01 1035**
Received by: **Linda Spicer** Logged In by: **Linda Spicer**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**5C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 2-16OZOP F NP(A),2-120ML P NF H2SO4(B),2-2L -P F HNO3(C),2-12OZP NFNP(D),4-40ML VOA NA2S2O3(EF)

Comments:

TRACKING NO. PAGE NO.

31404R00007

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610016236** is associated to Lab ID: **01-31404-3**
Client ID: **808** is associated to Lab ID: **01-31404-1**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-31404-2**

Approved By: R. A. Garling
ROGER GARLING
LABORATORY SUPERVISOR

Reviewed By: Cathy Forsting
CATHY FORSTING
PROJECT MANAGER

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
31404R00008

UNITED NU[illegible]R CORPORATION
(State Road 566 - [illegible] Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 8-5-2001

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
509-D	5-7-01	0825		✓ JKB	✓ MC	✓ MC	✓ JKB			As, Be, Ca, Cd, Cl, HCO_3,
EPA-23	↓	0900		↓	↓	↓	↓			K, Mg, Mn, Na, NH_3, Ni,
EPA-23 DUPLICATE	↓	0930		↓	↓	↓	↓			NO_3, Pb, Pb-210, pH, Se,
803	↓	1030		↓	↓	↓	↓			SO_4, TDS, Th-230, U, V,
808	↓	1100		↓	↓	↓	↓			Chloroform, Gross
802	↓	1300		↓	↓	↓	↓			Alpha (-) U & Rn,
801	↓	1340		↓	↓	↓	↓			Combined Ra-226 & Ra-228, Al,
GW-2	↓	1415	N A	↓	↓	↓	↓	N A		Co, Mo
632	↓	1455		↓	↓	↓	↓			
GW-1	5-8-01	0830		↓	↓	↓	↓			
624	↓	0910		↓	↓	↓	↓			
EPA-28	↓	0945		↓	↓	↓	↓			
GW-3	↓	1040		↓	↓	↓	↓			
EPA-25	↓	1120		↓	↓	↓	↓			
627	↓	1255		↓	↓	↓	↓			
FIELD BLANK	↓	1355		↓	↓	↓	↓			

Sampled by: [signature] Received by: May Chacklly Jr. 5/7, 8/01 12 00/1530 & 1200/1500
Date Time

Dispatched by: R Bechtel 5/9/01 2:00pm
Date Time

Lab Receipt Signature: [signature]

Carrier: UPS

Method of Shipment: 3 ICED COOLER

5-11-01 1000
Date Time

The above analysis to be performed is authorized by: [signature]
Signature

5-9-2001
Date

32-62 2000013 TRACKING NO. PAGE NO.

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-32762-1 Thru 01-32762-16** Matrix: **Liquid,Misc**
Delivered by: **ups** Date&Time Rec'd: **11-MAY-01 1000** Date&Time Col'd: **07-MAY-01 0825**
Received by: **Linda Spicer** Logged In by: **Sara Hawken**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**15C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 14-2L P F HNO3 (A),14-16OZ P F NP (B),14-12OZ P NF NP (C),14-120ML P F H2SO4 (D),28-40ML VOA NA2S2O3 (EF)

Comments: Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.Sample hno3 container "GW-2" arrived w/ hole, transfered containers. LS

TRACKING NO. PAGE NO.
32762R00019

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610082503** is associated to Lab ID: **01-32762-15**
Client ID: **1ZE818320610082549** is associated to Lab ID: **01-32762-16**
Client ID: **509-D** is associated to Lab ID: **01-32762-1**
Client ID: **624** is associated to Lab ID: **01-32762-10**
Client ID: **627** is associated to Lab ID: **01-32762-14**
Client ID: **632** is associated to Lab ID: **01-32762-8**
Client ID: **801** is associated to Lab ID: **01-32762-6**
Client ID: **802** is associated to Lab ID: **01-32762-5**
Client ID: **803** is associated to Lab ID: **01-32762-4**
Client ID: **EPA-23** is associated to Lab ID: **01-32762-2**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: **01-32762-3**
Client ID: **EPA-25** is associated to Lab ID: **01-32762-13**
Client ID: **EPA-28** is associated to Lab ID: **01-32762-11**
Client ID: **GW-1** is associated to Lab ID: **01-32762-9**
Client ID: **GW-2** is associated to Lab ID: **01-32762-7**
Client ID: **GW-3** is associated to Lab ID: **01-32762-12**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
32762R00020

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-32763-1 Thru 01-32763-3** Matrix: **Liquid,Misc**
Delivered by: **ups** Date&Time Rec'd: **11-MAY-01 1000** Date&Time Col'd: **07-MAY-01 1100**
Received by: **Linda Spicer** Logged In by: **Sara Hawken**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**15C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 2-2L P F HNO3 (A),2-16OZ P F NP (B),2-12OZ P NF NP (C),2-120ML P F H2SO4 (D),4-40ML VOA NA2S2O3 (EF)

Comments: Temperature of samples received may not be considered properly preserved by accepted standards.

Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

TRACKING NO. PAGE NO.

32763R00007

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City,South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610082512** is associated to Lab ID: **01-32763-3**
Client ID: **808** is associated to Lab ID: **01-32763-1**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-32763-2**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: Cathy Forsting, Project Manager

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
32763R00008

UNITED NU[illegible]R CORPORATION
(State Road 566 - [illegible] Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper — WY — 82601
City — State — Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE-9-6-2001 (PG. 1 OF 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
509-D	6-4-01	0840		✓	✓	✓	✓			As, Be, Ca, Cd, Cl, HCO_3,
EPA-23	↓	0915								K, Mg, Mn, Na, NH_3, Ni,
EPA-23 DUPLICATE		0940								NO_3, Pb, Pb-210, pH, Se,
803		1000								SO_4, TDS, Th-230, U, V,
802		1130								Chloroform, Gross
632		1300								Alpha (-) U & Rn,
801		1350								Combined Ra-226 & Ra-228, Al,
GW-2		1420								Co, Mo
GW-1		1455						NA		
808	6-5-01	0845								
808 FILTERED DUPLICATE		0915	✓							
624		1000								
EPA-28		1040								
GW-3		1245								
EPA-25	↓	1325		↓	↓	↓	↓			

Sampled by: Lesle A Bogart
Dispatched by: Vivian Mason
Carrier: UPS.
Method of Shipment: ICED COOLER

Received by: Mac Chischilly Jr.
Date: 6/06/01 Time: 1200

6-4-01 @ 1200 & 1530
6-5-01 @ 1200 & 1530
Date Time

Lab Receipt Signature: Fabiola Fasset
Date: 08 Jun 01 Time: 10:00

The above analysis to be performed is authorized by:
Signature
Date: 6-6-2001

TRACKING NO. 33405R00018
PAGE NO.

UNITED NU R CORPORATION
(State Road 566 - Miles NE of Gallup)
P.O. Box 3077
Gallup, NM 87305-3077
505-722-6651

CHAIN OF CUSTODY

Energy Laboratories, Inc.
Laboratory

2393 N. Salt Creek Highway
Address

Casper WY 82601
City State Zip

307-235-0515
Phone No.

All analysis will be performed in accordance with EPA approved procedures and/or 15th Edition of Standard Methods

UNC Submittal No. TE- 9-6-2001 (PG. 2 OF 2)

Sample Description	Date	Time	Filter 0.45u	PRESERVATION plain	HNO_3	H_2SO_4	$Na_2S_2O_3$	NaOH	Preserved By	Analysis Required (For all samples listed)
627	6-5-01	1410		✓ LHB	✓	✓	✓ LHB			As, Be, Ca, Cd, Cl, HCO_3,
FIELD BLANK	6-5-01	1455		✓ LHB	✓	✓	✓ LHB			K, Mg, Mn, Na, NH_3, Ni,
										NO_3, Pb, Pb-210, pH, Se,
										SO_4, TDS, Th-230, U, V,
										Chloroform, Gross
										Alpha (-) U & Rn,
										Combined Ra-226 & Ra-228, Al,
										Co, Mo
								N A		

Sampled by: Leslie J Bagard

Dispatched by: Urvin Mason

Carrier: UPS

ICED COOLER
Method of Shipment

Received by Mary Chischilly Jr.
6/06/01 Date 1200 Time

6-5-01 @ 1530
Date Time

Lab Receipt Signature

Date Time

The above analysis to be performed is authorized by:

Signature

6-6-2001
Date

TRACKING PAGE NO.

33406R00019

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): **01-33406-1 Thru 01-33406-14** Matrix: **Liquid**
Delivered by: **UPS** Date&Time Rec'd: **08-JUN-01 1000** Date&Time Col'd: **04-JUN-01 0840**
Received by: **Tabitha Fassett** Logged In by: **Sara Hawken**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**17C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 14-2L P F HNO3 (A),14-16OZ P F NP (B),14-12OZ P NF NP (C),14-120ML P F H2SO4 (D),28-40ML VOA NF NA2S2O3 (EF)

Comments: Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

TRACKING NO. PAGE NO.
33406R00021

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **509-D** is associated to Lab ID: **01-33406-1**
Client ID: **624** is associated to Lab ID: **01-33406-10**
Client ID: **627** is associated to Lab ID: **01-33406-14**
Client ID: **632** is associated to Lab ID: **01-33406-6**
Client ID: **801** is associated to Lab ID: **01-33406-7**
Client ID: **802** is associated to Lab ID: **01-33406-5**
Client ID: **803** is associated to Lab ID: **01-33406-4**
Client ID: **EPA-23** is associated to Lab ID: **01-33406-2**
Client ID: **EPA-23 DUPLICATE** is associated to Lab ID: **01-33406-3**
Client ID: **EPA-25** is associated to Lab ID: **01-33406-13**
Client ID: **EPA-28** is associated to Lab ID: **01-33406-11**
Client ID: **GW-1** is associated to Lab ID: **01-33406-9**
Client ID: **GW-2** is associated to Lab ID: **01-33406-8**
Client ID: **GW-3** is associated to Lab ID: **01-33406-12**

Approved By: Steven E. Carlston, Organics Supervisor

Reviewed By: James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
33406R00022

Energy Laboratories, Inc.
SAMPLE CONDITION REPORT

This report provides information about the condition of the sample(s), and assocated s le custody information on receipt at the laboratory.

Client: **United Nuclear Corporation** Description: **WATER**
Lab ID(s): 01-33365-1 Thru 01-33365-6 Matrix: **Liquid,Misc**
Delivered by: **UPS** Date&Time Rec'd: 08-JUN-01 1000 Date&Time Col'd: 05-JUN-01 0845
Received by: **Tabitha Fassett** Logged In by: **Kerri Schroeder**

Chain of custody form completed & signed:	**Yes**	Comments:
Chain of custody seal:	**No**	Comments:
Chain of custody seal intact:	**N/A**	Comments:
Signature match, chain of custody vs. seal:	**N/A**	Comments:
Sample received Temperature:	**17C**	Comments:
Samples received within holding time:	**Yes**	Comments:
Samples received in proper containers:	**Yes**	Comments:
Samples Properly Preserved:	**Yes**	Comments:

Bottle Types Received: 3-2L P F HNO3 (F),3-16OZ P F NP (E),3-12OZ P NF NP (D),3-120ML P F H2SO4 (C),6-40ML VOA NF NA2S2O3 (AB)

Comments: Temperature of samples received may not be considered properly preserved by accepted standards.

Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

TRACKING NO. PAGE NO.
33365R00009

Energy Laboratories, Inc.

REPORT PACKAGE SUMMARY - FINAL PAGE

Acronyms and Definitions

ELI-B Energy Laboratories, Inc. - Billings, Montana
ELI-G Energy Laboratories, Inc. - Gillette, Wyoming
ELI-H Energy Laboratories, Inc. - Helena, Montana
ELI-R Energy Laboratories, Inc. - Rapid City, South Dakota

co - Carry over from previous sample
ip - Insufficient parameters
N/A - Not Applicable
NA - Not Analyzed
ND - Analyte Not Detected at Stated Limit of Detection
NR - Analyte Not Requested
NST - No Sample Time Given
NSD - No Sample Date Given

This Package Contains the following Client ID(s) and Lab ID(s)

Client ID: **1ZE818320610082585** is associated to Lab ID: **01-33365-4**
Client ID: **1ZE818320610082585** is associated to Lab ID: **01-33365-5**
Client ID: **1ZE818320610082594** is associated to Lab ID: **01-33365-6**
Client ID: **808** is associated to Lab ID: **01-33365-1**
Client ID: **808 FILTERED DUPLICATE** is associated to Lab ID: **01-33365-2**
Client ID: **FIELD BLANK** is associated to Lab ID: **01-33365-3**

Approved By: Steven E. Carlatch, Organics Supervisor

Reviewed By: James Yocum, Quality Assurance Director

This is the last page of the Laboratory Analysis Report.
Additional QC is available upon request.
The report contains the number of pages indicated by the last 4 digits.

TRACKING NO. PAGE NO.
33365R00010

APPENDIX C

QUARTERLY

LABORATORY QUALITY CONTROL AND PERFORMANCE REPORT

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Zone 1 1st Quarter
Laboratory ID Range: 01-30301-1-8
Report Date: February 12, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.2	97	jal	01-19-01
Magnesium	EPA 200.7	0.2	97	jal	01-19-01
Sodium	EPA 200.7	0.8	92	jal	01-19-01
Potassium	EPA 200.7	0.9	90	jal	01-19-01
Bicarbonate	SM 2320 B.	0.5	-	nlm	01-16-01
Sulfate	EPA 200.7	4.8	94	jal	01-19-01
Chloride	EPA 200.7	4.0	99	jal	01-19-01
Ammonia	SM 4500-NH_3-G	0.0	108	rwk	01-15-01
Nitrite + Nitrate	EPA 353.2	1.4	91	rwk	01-17-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.5	-	nlm	01-16-2001 10:16

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.5	103	jlr	01-16-01

Trace Metals					
Aluminum	EPA 200.8	2.4	110	smd	01-11-01
Arsenic III	SM 3114-C	2.1	96	jl	01-16-01
Beryllium	EPA 200.8	0.5	105	smd	01-11-01
Cadmium	EPA 200.8	1.1	111	smd	01-11-01
Cobalt	EPA 200.8	0.7	108	smd	01-11-01
Lead	EPA 200.8	0.3	118	smd	01-11-01
Manganese	EPA 200.8	0.2	93	smd	01-11-01
Molybdenum	EPA 200.8	0.8	118	smd	01-11-01
Nickel	EPA 200.8	0.2	107	smd	01-11-01
Selenium IV	SM 3114-C	0.0	102	jl	01-17-01
Vanadium	EPA 200.8	0.2	114	smd	01-11-01

Radiometrics					
Uranium	EPA 200.8	0.5	119	smd	01-11-01
Radium 226	EPA 903.0	10.6	88	rs	01-31-01
Radium 228	EPA 904.0	15.2	100	lmh	02-07-01
Thorium 230	EPA 907.0	5.3	95	ph	01-29-01
Lead 210	NERHL-65-4	0.0	91	lmh	02-05-01
Gross Alpha	EPA 900.0	5.1	117	rs	02-02-01

Trace Organics					
Chloroform	EPA 601	3.5	87	rlo	01-20-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Zone 1 1st Quarter
Laboratory ID Range: 01-30431-1-7
Report Date: February 14, 2001

Major Ions	Method	RPD[1]	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	1.1	100	jal	01-24-01
Magnesium	EPA 200.7	0.5	95	jal	01-24-01
Sodium	EPA 200.7	0.4	91	jal	01-24-01
Potassium	EPA 200.7	0.4	90	jal	01-24-01
Bicarbonate	SM 2320 B.	0.0	-	nlm	01-23-01
Sulfate	EPA 200.7	2.0	92	jal	01-24-01
Chloride	EPA 200.7	2.8	102	jal	01-24-01
Ammonia	SM 4500-NH_3-G	1.7	107	rwk	01-22-01
Nitrite + Nitrate	EPA 353.2	1.7	115	rwk	01-24-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.0	-	nlm	01-23-2001 10:15

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.2	101	jlr	01-23-01

Trace Metals					
Aluminum	EPA 200.7	0.0	104	jal	01-24-01
Aluminum	EPA 200.8	0.2	122	ts	01-31-01
Arsenic III	SM 3114-C	0.0	100	jl	01-22-01
Beryllium	EPA 200.8	1.6	110	ts	01-31-01
Cadmium	EPA 200.8	0.2	99	ts	01-31-01
Cobalt	EPA 200.8	0.4	103	ts	01-31-01
Lead	EPA 200.8	0.0	112	ts	01-31-01
Manganese	EPA 200.8	0.3	98	ts	01-31-01
Molybdenum	EPA 200.8	1.1	109	ts	01-31-01
Nickel	EPA 200.8	0.5	112	ts	01-31-01
Selenium IV	SM 3114-C	1.9	102	jl	01-22-01
Vanadium	EPA 200.8	1.5	107	ts	01-31-01

Radiometrics					
Uranium	EPA 200.8	0.1	111	ts	01-31-01
Radium 226	EPA 903.0	10.6	88	rs	02-01-01
Radium 228	EPA 904.0	15.2	100	lmh	02-07-01
Thorium 230	EPA 907.0	5.3	95	ph	01-29-01
Lead 210	NERHL-65-4	0.0	91	lmh	02-06-01
Gross Alpha	EPA 900.0	0.0	98	rs	02-02-01

Trace Organics					
Chloroform	EPA 601	-	-	rlo	02-01-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Zone 1
Laboratory ID Range: 01-31997-1-12
Report Date: April 30, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.5	98	jal	04-10-01
Magnesium	EPA 200.7	0.4	94	jal	04-10-01
Sodium	EPA 200.7	0.5	98	jal	04-10-01
Potassium	EPA 200.7	0.0	96	jal	04-10-01
Bicarbonate	SM 2320 B.	0.5	-	nlm	04-10-01
Sulfate	EPA 200.7	1.2	96	jal	04-10-01
Chloride	EPA 200.7	1.9	96	jal	04-10-01
Ammonia	SM 4500-NH_3-G	2.7	101	rwk	04-09-01
Nitrite + Nitrate	EPA 353.2	4.7	106	rwk	04-11-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.5	-	nlm	04-10-2001 9:55

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	102	jms	04-11-01

Trace Metals					
Aluminum	EPA 200.8	0.4	111	ts	04-11-01
Arsenic III	SM 3114-C	0.0	80	jl	04-09-01
Beryllium	EPA 200.8	2.7	106	ts	04-11-01
Cadmium	EPA 200.8	0.3	104	ts	04-11-01
Cobalt	EPA 200.8	1.0	103	ts	04-11-01
Lead	EPA 200.8	1.0	105	ts	04-11-01
Manganese	EPA 200.8	0.2	104	ts	04-11-01
Molybdenum	EPA 200.8	0.8	103	ts	04-11-01
Nickel	EPA 200.8	0.8	104	ts	04-11-01
Selenium IV	SM 3114-C	2.2	92	jl	04-09-01
Vanadium	EPA 200.8	2.0	105	ts	04-11-01

Radiometrics					
Uranium	EPA 200.8	0.9	108	ts	04-11-01
Radium 226	EPA 903.0	0.0	93	rs	04-21-01
Radium 228	EPA 904.0	0.0	130	db	04-24-01
Thorium 230	EPA 907.0	4.2	97	ph	04-18-01
Lead 210	NERHL-65-4	-	111	db	04-25-01
Gross Alpha	EPA 900.0	3.1	113	rs	04-26-01

Trace Organics					
Chloroform	EPA 601	-	-	rlo	04-13-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Zone 1
Laboratory ID Range: 01-32149-1-5
Report Date: May 16, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.3	107	jal	04-16-01
Magnesium	EPA 200.7	0.2	105	jal	04-16-01
Sodium	EPA 200.7	0.2	101	jal	04-16-01
Potassium	EPA 200.7	0.0	99	jal	04-16-01
Bicarbonate	SM 2320 B	0.1	-	nlm	04-17-01
Sulfate	EPA 200.7	5.0	92	jal	04-16-01
Chloride	EPA 200.7	3.1	92	jal	04-16-01
Ammonia	SM 4500-NH_3-G	2.5	107	rwk	04-16-01
Nitrite + Nitrate	EPA 353.2	5.6	91	rwk	04-18-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.1	-	nlm	04-17-2001 8:29

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	100	jms	04-16-01

Trace Metals					
Aluminum	EPA 200.7	0.2	99	ts	04-17-01
Arsenic III	SM 3114-C	0.0	100	jl	04-17-01
Beryllium	EPA 200.8	0.8	100	ts	04-17-01
Cadmium	EPA 200.8	0.9	102	ts	04-17-01
Cobalt	EPA 200.8	0.0	102	ts	04-17-01
Lead	EPA 200.8	0.1	103	ts	04-17-01
Manganese	EPA 200.8	0.8	101	ts	04-17-01
Molybdenum	EPA 200.8	0.2	102	ts	04-17-01
Nickel	EPA 200.8	0.0	100	ts	04-17-01
Selenium IV	SM 3114-C	2.1	94	jl	04-17-01
Vanadium	EPA 200.8	0.2	102	ts	04-17-01

Radiometrics					
Uranium	EPA 200.8	0.5	102	ts	04-17-01
Radium 226	EPA 903.0	8.2	93	rs	04-28-01
Radium 228	EPA 904.0	16.9	101	db	05-03-01
Thorium 230	EPA 907.0	4.9	101	ph	04-24-01
Lead 210	NERHL-65-4	13.0	102	db	05-09-01
Gross Alpha	EPA 900.0	0.0	95	rs	05-07-01

Trace Organics					
Chloroform	EPA 601	0.2	80	rlo	04-19-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Zone 3 1st Quarter
Laboratory ID Range: 01-30433-1-4
Report Date: February 14, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	1.1	100	jal	01-24-01
Magnesium	EPA 200.7	0.5	95	jal	01-24-01
Sodium	EPA 200.7	0.4	91	jal	01-24-01
Potassium	EPA 200.7	0.4	90	jal	01-24-01
Bicarbonate	SM 2320 B.	0.3	-	rwk	01-23-01
Sulfate	EPA 200.7	2.0	92	jal	01-24-01
Chloride	EPA 200.7	2.8	102	jal	01-24-01
Ammonia	SM 4500-NH_3-G	1.7	107	rwk	01-22-01
Nitrite + Nitrate	EPA 353.2	1.7	115	rwk	01-24-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.3	-	rwk	01-23-2001 11:44

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.2	101	jlr	01-23-01

Trace Metals					
Aluminum	EPA 200.8	0.2	122	ts	01-31-01
Arsenic III	SM 3114-C	1.4	98	jl	01-22-01
Beryllium	EPA 200.8	1.6	110	ts	01-31-01
Cadmium	EPA 200.8	0.2	99	ts	01-31-01
Cobalt	EPA 200.8	0.4	103	ts	01-31-01
Lead	EPA 200.8	0.0	112	ts	01-31-01
Manganese	EPA 200.8	0.3	98	ts	01-31-01
Molybdenum	EPA 200.8	1.1	109	ts	01-31-01
Nickel	EPA 200.8	0.5	112	ts	01-31-01
Selenium IV	SM 3114-C	1.8	108	jl	01-22-01
Vanadium	EPA 200.8	1.5	89	ts	01-31-01

Radiometrics					
Uranium	EPA 200.8	0.1	118	ts	01-31-01
Radium 226	EPA 903.0	10.6	88	rs	01-31-01
Radium 228	EPA 904.0	15.2	100	lmh	02-07-01
Thorium 230	EPA 907.0	16.6	100	ph	02-01-01
Lead 210	NERHL-65-4	0.0	91	lmh	02-06-01
Gross Alpha	EPA 900.0	0.0	98	rs	02-02-01

Trace Organics					
Chloroform	EPA 601	-	-	rlo	02-02-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Zone 3 1st Quarter
Laboratory ID Range: 01-30578-1
Report Date: February 20, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.7	103	jal	02-01-01
Magnesium	EPA 200.7	1.2	108	jal	02-01-01
Sodium	EPA 200.7	1.3	111	jal	02-01-01
Potassium	EPA 200.7	1.6	109	jal	02-01-01
Bicarbonate	SM 2320 B.	0.2	107	nlm	01-31-01
Sulfate	EPA 200.7	3.0	93	jal	02-01-01
Chloride	EPA 200.7	1.6	106	jal	02-01-01
Ammonia	SM 4500-NH_3-G	6.0	103	rwk	02-05-01
Nitrite + Nitrate	EPA 353.2	0.0	93	rwk	01-31-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.2	-	nlm	01-31-2001 11:56

Non-Metals					
Total Dissolved Solids	SM 2540-C	2.8	103	jlr	01-30-01

Trace Metals					
Aluminum	EPA 200.8	14.1	103	ts	02-07-01
Arsenic III	SM 3114-C	3.1	104	jl	02-07-01
Beryllium	EPA 200.8	0.0	106	ts	02-07-01
Cadmium	EPA 200.8	0.0	106	ts	02-07-01
Cobalt	EPA 200.8	0.0	105	ts	02-07-01
Lead	EPA 200.8	3.4	105	ts	02-07-01
Manganese	EPA 200.8	3.5	106	ts	02-07-01
Molybdenum	EPA 200.8	0.3	104	ts	02-07-01
Nickel	EPA 200.8	-	104	ts	02-07-01
Selenium IV	SM 3114-C	0.0	102	jl	02-07-01
Vanadium	EPA 200.8	0.2	105	ts	02-07-01

Radiometrics					
Uranium	EPA 200.8	0.7	106	ts	02-07-01
Radium 226	EPA 903.0	0.1	88	rs	02-12-01
Radium 228	EPA 904.0	0.0	55*	lmh	02-15-01
Thorium 230	EPA 907.0	16.6	100	ph	02-01-01
Lead 210	NERHL-65-4	0.0	97	lmh	02-15-01
Gross Alpha	EPA 900.0	0.0	98	rs	02-02-01

Trace Organics					
Chloroform	EPA 601	-	-	rlo	02-02-01

* Recovery low due to sample matrix interference.

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Zone 3
Laboratory ID Range: 01-32152-1-2
Report Date: May 1, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.3	107	jal	04-16-01
Magnesium	EPA 200.7	0.2	105	jal	04-16-01
Sodium	EPA 200.7	0.2	101	jal	04-16-01
Potassium	EPA 200.7	0.0	99	jal	04-16-01
Bicarbonate	SM 2320 B.	0.1	-	nlm	04-17-01
Sulfate	EPA 200.7	5.0	92	jal	04-16-01
Chloride	EPA 200.7	3.1	92	jal	04-16-01
Ammonia	SM 4500-NH_3-G	0.0	107	rwk	04-16-01
Nitrite + Nitrate	EPA 353.2	0.0	105	rwk	04-18-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.1	-	nlm	04-17-2001 11:25

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	99	jms	04-16-01

Trace Metals					
Aluminum	EPA 200.8	10.6	107	ts	04-19-01
Arsenic III	SM 3114-C	2.1	96	jl	04-17-01
Beryllium	EPA 200.8	2.7	95	ts	04-19-01
Cadmium	EPA 200.8	0.3	97	ts	04-19-01
Cobalt	EPA 200.8	0.1	100	ts	04-19-01
Lead	EPA 200.8	1.4	98	ts	04-19-01
Manganese	EPA 200.8	0.4	100	ts	04-19-01
Molybdenum	EPA 200.8	1.7	100	ts	04-19-01
Nickel	EPA 200.8	0.4	100	ts	04-19-01
Selenium IV	SM 3114-C	0.0	96	jl	04-17-01
Vanadium	EPA 200.8	1.6	100	ts	04-19-01

Radiometrics					
Uranium	EPA 200.8	0.3	110	ts	04-19-01
Radium 226	EPA 903.0	8.2	93	rs	04-28-01
Radium 228	EPA 904.0	16.9	101	db	05-03-01
Thorium 230	EPA 907.0	4.2	97	ph	04-18-01
Lead 210	NERHL-65-4	-	111	db	04-25-01
Gross Alpha	EPA 900.0	0.6	87	rs	04-20-01

Trace Organics					
Chloroform	EPA 601	0.2	80	rlo	04-20-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Zone 3
Laboratory ID Range: 01-31998-1-4
Report Date: May 7, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	3.1	92	jal	04-12-01
Magnesium	EPA 200.7	2.9	85	jal	04-12-01
Sodium	EPA 200.7	2.3	96	jal	04-12-01
Potassium	EPA 200.7	3.4	92	jal	04-12-01
Bicarbonate	SM 2320 B.	0.5	-	nlm	04-10-01
Sulfate	EPA 200.7	0.7	99	jal	04-12-01
Chloride	EPA 200.7	3.2	85	jal	04-12-01
Ammonia	SM 4500-NH_3-G	1.0	108	rwk	04-09-01
Nitrite + Nitrate	EPA 353.2	0.6	115	rwk	04-11-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.5	-	nlm	04-10-2001 12:41

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	100	jms	04-11-01

Trace Metals					
Aluminum	EPA 200.8	0.4	102	ts	04-11-01
Arsenic III	SM 3114-C	0.0	100	jl	04-09-01
Beryllium	EPA 200.8	5.4	122	ts	04-11-01
Cadmium	EPA 200.8	6.9	116	ts	04-11-01
Cobalt	EPA 200.8	6.1	111	ts	04-11-01
Lead	EPA 200.8	5.9	119	ts	04-11-01
Manganese	EPA 200.8	13.4	112	ts	04-11-01
Molybdenum	EPA 200.8	6.5	114	ts	04-11-01
Nickel	EPA 200.8	4.8	104	ts	04-11-01
Selenium IV	SM 3114-C	2.2	92	jl	04-09-01
Vanadium	EPA 200.8	5.3	117	ts	04-11-01

Radiometrics					
Uranium	EPA 200.8	4.9	122	ts	04-11-01
Radium 226	EPA 903.0	0.0	93	rs	04-21-01
Radium 228	EPA 904.0	0.0	130	db	04-24-01
Thorium 230	EPA 907.0	4.2	103	ph	04-18-01
Lead 210	NERHL-65-4	0.0	109	db	05-02-01
Gross Alpha	EPA 900.0	3.1	113	rs	04-26-01

Trace Organics					
Chloroform	EPA 601	-	-	rlo	04-14-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Alluvium 1st Quarter
Laboratory ID Range: 01-30299-1-14
Report Date: February 12, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.5	98	jal	01-18-01
Magnesium	EPA 200.7	0.2	95	jal	01-18-01
Sodium	EPA 200.7	0.4	91	jal	01-18-01
Potassium	EPA 200.7	0.0	88	jal	01-18-01
Bicarbonate	SM 2320 B.	0.5	-	nlm	01-17-01
Sulfate	EPA 200.7	0.9	99	jal	01-18-01
Chloride	EPA 200.7	4.6	103	jal	01-18-01
Ammonia	SM 4500-NH_3-G	1.7	110	rwk	01-15-01
Nitrite + Nitrate	EPA 353.2	0.0	108	rwk	01-17-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.5	-	nlm	01-16-2001 13:40

Non-Metals					
Total Dissolved Solids	SM 2540-C	1.0	103	jlr	01-16-01

Trace Metals					
Aluminum	EPA 200.8	2.4	110	smd	01-11-01
Arsenic III	SM 3114-C	0.0	96	jl	01-16-01
Beryllium	EPA 200.8	0.5	105	smd	01-11-01
Cadmium	EPA 200.8	1.1	111	smd	01-11-01
Cobalt	EPA 200.8	0.7	108	smd	01-11-01
Lead	EPA 200.8	0.3	118	smd	01-11-01
Manganese	EPA 200.8	0.2	93	smd	01-11-01
Molybdenum	EPA 200.8	0.8	118	smd	01-11-01
Nickel	EPA 200.8	0.2	107	smd	01-11-01
Selenium IV	SM 3114-C	11.8	106	jl	01-16-01
Vanadium	EPA 200.8	0.2	114	smd	01-11-01

Radiometrics					
Uranium	EPA 200.8	0.5	119	smd	01-11-01
Radium 226	EPA 903.0	0.0	92	rs	01-30-01
Radium 228	EPA 904.0	0.1	106	lmh	02-06-01
Thorium 230	EPA 907.0	3.5	103	ph	01-24-01
Lead 210	NERHL-65-4	0.0	97	lmh	02-01-01
Gross Alpha	EPA 900.0	5.1	1.7	rs	02-01-01

Trace Organics					
Chloroform	EPA 601			rlo	

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Alluvium
Laboratory ID Range: 01-31999-1-6
Report Date: May 8, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	3.1	92	jal	04-12-01
Magnesium	EPA 200.7	2.9	85	jal	04-12-01
Sodium	EPA 200.7	2.3	96	jal	04-12-01
Potassium	EPA 200.7	3.4	92	jal	04-12-01
Bicarbonate	SM 2320 B.	0.5	-	nlm	04-10-01
Sulfate	EPA 200.7	0.7	99	jal	04-12-01
Chloride	EPA 200.7	3.2	85	jal	04-12-01
Ammonia	SM 4500-NH_3-G	0.0	91	rwk	04-09-01
Nitrite + Nitrate	EPA 353.2	0.6	115	rwk	04-11-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.5	-	nlm	04-10-2001 14:26

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	100	jms	04-11-01

Trace Metals					
Aluminum	EPA 200.8	0.2	99	ts	04-17-01
Arsenic III	SM 3114-C	0.0	100	jl	04-09-01
Beryllium	EPA 200.8	2.0	88	ts	04-17-01
Cadmium	EPA 200.8	0.4	97	ts	04-17-01
Cobalt	EPA 200.8	0.7	99	ts	04-17-01
Lead	EPA 200.8	1.7	99	ts	04-17-01
Manganese	EPA 200.8	0.6	94	ts	04-17-01
Molybdenum	EPA 200.8	0.3	103	ts	04-17-01
Nickel	EPA 200.8	0.2	98	ts	04-17-01
Selenium IV	SM 3114-C	2.1	94	jl	04-09-01
Vanadium	EPA 200.8	0.5	96	ts	04-17-01

Radiometrics					
Uranium	EPA 200.8	1.9	120	ts	04-17-01
Radium 226	EPA 903.0	0.0	96	rs	04-20-01
Radium 228	EPA 904.0	0.0	103	db	04-27-01
Thorium 230	EPA 907.0	3.4	109	ph	04-23-01
Lead 210	NERHL-65-4	0.0	109	db	05-03-01
Gross Alpha	EPA 900.0	0.0	95	rs	05-03-01

Trace Organics					
Chloroform	EPA 601	1.2	109	rlo	04-14-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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ELI

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Southwest Alluvium
Laboratory ID Range: 01-32151-1-8
Report Date: May 15, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.3	107	jal	04-12-01
Magnesium	EPA 200.7	0.2	105	jal	04-12-01
Sodium	EPA 200.7	0.2	101	jal	04-12-01
Potassium	EPA 200.7	0.0	99	jal	04-12-01
Bicarbonate	SM 2320 B.	0.1	-	nlm	04-17-01
Sulfate	EPA 200.7	5.0	92	jal	04-12-01
Chloride	EPA 200.7	3.1	92	jal	04-16-01
Ammonia	SM 4500-NH_3-G	2.5	107	rwk	04-16-01
Nitrite + Nitrate	EPA 353.2	5.6	105	rwk	04-18-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.1	-	nlm	04-17-2001 9:14

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.3	100	jms	04-16-01

Trace Metals					
Aluminum	EPA 200.8	0.2	88	ts	04-17-01
Arsenic III	SM 3114-C	0.0	100	jl	04-09-01
Beryllium	EPA 200.8	1.0	100	ts	04-17-01
Cadmium	EPA 200.8	0.9	105	ts	04-17-01
Cobalt	EPA 200.8	3.6	108	ts	04-17-01
Lead	EPA 200.8	2.1	109	ts	04-17-01
Manganese	EPA 200.8	6.3	103	ts	04-17-01
Molybdenum	EPA 200.8	3.0	110	ts	04-17-01
Nickel	EPA 200.8	3.8	103	ts	04-17-01
Selenium IV	SM 3114-C	2.1	94	jl	04-09-01
Vanadium	EPA 200.8	2.8	112	ts	04-17-01

Radiometrics					
Uranium	EPA 200.8	3.5	113	ts	04-17-01
Radium 226	EPA 903.0	8.2	93	rs	04-28-01
Radium 228	EPA 904.0	16.9	101	db	05-03-01
Thorium 230	EPA 907.0	0.3	97	ph	04-26-01
Lead 210	NERHL-65-4	13.0	94	db	05-09-01
Gross Alpha	EPA 900.0	11.5	99	rs	05-06-01

Trace Organics					
Chloroform	EPA 601	0.2	80	rlo	04-20-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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APPENDIX C

MONTHLY

LABORATORY QUALITY CONTROL AND PERFORMANCE REPORT

QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Alluvium 2nd Quarter
Laboratory ID Range: 01-30835-1-14
Report Date: March 6, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	3.9	104	jal	02-14-01
Magnesium	EPA 200.7	1.9	104	jal	02-14-01
Sodium	EPA 200.7	5.8	99	jal	02-14-01
Potassium	EPA 200.7	3.7	97	jal	02-14-01
Bicarbonate	SM 2320 B.	0.2	-	nlm	02-13-01
Sulfate	EPA 200.7	2.7	106	jal	02-14-01
Chloride	EPA 200.7	2.3	95	jal	02-14-01
Ammonia	SM 4500-NH_3-G	1.7	111	rwk	02-12-01
Nitrite + Nitrate	EPA 353.2	3.7	100	rwk	02-14-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.2	-	nlm	02-13-2001 16:25

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.3	100	jlr	02-13-01

Trace Metals					
Aluminum	EPA 200.8	0.2	124	smd	02-15-01
Arsenic III	SM 3114-C	2.6	98	jl	02-12-01
Beryllium	EPA 200.8	2.9	89	smd	02-15-01
Cadmium	EPA 200.8	0.8	104	smd	02-15-01
Cobalt	EPA 200.8	0.3	93	smd	02-15-01
Lead	EPA 200.8	0.7	111	smd	02-15-01
Manganese	EPA 200.8	0.3	96	smd	02-15-01
Molybdenum	EPA 200.8	0.6	104	smd	02-15-01
Nickel	EPA 200.8	0.7	92	smd	02-15-01
Selenium IV	SM 3114-C	2.0	100	jl	02-13-01
Vanadium	EPA 200.8	0.4	110	smd	02-15-01

Radiometrics					
Uranium	EPA 200.8	0.0	115	smd	02-15-01
Radium 226	EPA 903.0	0.0	99	rs	02-20-01
Radium 228	EPA 904.0	0.0	91	lmh	02-28-01
Thorium 230	EPA 907.0	1.7	99	ph	02-20-01
Lead 210	NERHL-65-4	2.0	98	lmh	02-20-01
Polonium 210	RMO-3008 USAEC	0.0	78	rs	02-16-01
Gross Alpha	EPA 900.0	0.0	93	rs	02-16-01

Trace Organics					
Chloroform	EPA 601	6.7	95	rlo	02-17-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Alluvium
Laboratory ID Range: 01-31400-1-14
Report Date: April 5, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	1.4	115	jal	03-12-01
Magnesium	EPA 200.7	1.5	119	jal	03-12-01
Sodium	EPA 200.7	0.8	114	jal	03-12-01
Potassium	EPA 200.7	1.2	112	jal	03-12-01
Bicarbonate	SM 2320 B.	0.7	101	nlm	03-14-01
Sulfate	EPA 200.7	0.8	106	jal	03-12-01
Chloride	EPA 200.7	0.0	104	jal	03-12-01
Ammonia	SM 4500-NH_3-G	0.5	104	rwk	03-12-01
Nitrite + Nitrate	EPA 353.2	1.0	94	rwk	03-15-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.7	-	nlm	03-14-2001 13:41

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.2	98	jlr	03-13-01

Trace Metals					
Aluminum	EPA 200.8	2.1	98	smd	03-24-01
Arsenic III	SM 3114-C	0.0	100	jl	03-14-01
Beryllium	EPA 200.8	3.8	79	smd	03-24-01
Cadmium	EPA 200.8	1.0	105	smd	03-24-01
Cobalt	EPA 200.8	0.6	111	smd	03-24-01
Lead	EPA 200.8	1.3	109	smd	03-24-01
Manganese	EPA 200.8	0.2	109	smd	03-24-01
Molybdenum	EPA 200.8	0.8	114	smd	03-24-01
Nickel	EPA 200.8	3.9	107	smd	03-24-01
Selenium IV	SM 3114-B	0.0	96	jl	03-14-01
Vanadium	EPA 200.8	1.5	110	smd	03-24-01

Radiometrics					
Uranium	EPA 200.8	0.0	115	smd	03-24-01
Radium 226	EPA 903.0	0.0	104	rs	03-26-01
Radium 228	EPA 904.0	0.0	73	lmh	04-02-01
Thorium 230	EPA 907.0	6.4	107	ph	03-27-01
Lead 210	NERHL-65-4	0.0	87	lmh	03-20-01
Polonium 210	RMO-3008 USAEC	0.0	96	rs	03-27-01
Gross Alpha	EPA 900.0	7.0	95	rs	03-22-01

Trace Organics					
Chloroform	EPA 601	2.4	124	rlo	03-16-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Alluvium
Laboratory ID Range: 01-32762-1-14
Report Date: June 13, 2001

Major Ions	Method	RPD[1]	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.5	97	jal	05-17-01
Magnesium	EPA 200.7	0.4	99	jal	05-17-01
Sodium	EPA 200.7	0.9	97	jal	05-17-01
Potassium	EPA 200.7	0.4	93	jal	05-17-01
Bicarbonate	SM 2320 B.	0.3	100	nlm	05-17-01
Sulfate	EPA 200.7	2.1	92	jal	05-17-01
Chloride	EPA 200.7	0.3	90	jal	05-17-01
Ammonia	SM 4500-NH_3-G	1.3	111	rwk	05-14-01
Nitrite + Nitrate	EPA 353.2	2.0	99	rwk	05-16-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.3	-	nlm	05/17/2001 12:40

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.0	103	jl	05-13-01

Trace Metals, dissolved					
Aluminum	EPA 200.8	2.8	95	ts	05-18-01
Arsenic III	SM 3114-C	2.1	96	jl	05-21-01
Beryllium	EPA 200.8	5.6	87	ts	05-18-01
Cadmium	EPA 200.8	0.8	102	ts	05-18-01
Cobalt	EPA 200.8	1.2	102	ts	05-18-01
Lead	EPA 200.8	1.0	105	ts	05-18-01
Manganese	EPA 200.8	0.9	108	ts	05-18-01
Molybdenum	EPA 200.8	0.3	101	ts	05-18-01
Nickel	EPA 200.8	0.1	99	ts	05-18-01
Selenium IV	SM 3114-B	1.9	102	jl	05-21-01
Vanadium	EPA 200.8	2.3	110	ts	05-18-01

Radiometrics					
Uranium	EPA 200.8	1.0	111	ts	05-18-01
Radium 226	EPA 903.0	0.0	104	rs	05-25-01
Radium 228	EPA 904.0	0.0	129	db	06-01-01
Thorium 230	EPA 907.0	10.3	101	ph	06-01-01
Lead 210	NERHL-65-4	0.0	80	db	06-07-01
Polonium 210	RMO-3008 USAEC	0.0	105	rs	05-31-01
Gross Alpha	EPA 900.0	0.1	103	rs	06-01-01

Trace Organics					
Chloroform	EPA 601	4.4	82	rlo	05-18-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: Alluvium
Laboratory ID Range: 01-33406-1-14
Report Date: July 6, 2001

Major Ions	Method	RPD_1	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.2	99	jal	06-12-01
Magnesium	EPA 200.7	0.2	99	jal	06-12-01
Sodium	EPA 200.7	0.9	90	jal	06-12-01
Potassium	EPA 200.7	1.1	92	jal	06-12-01
Bicarbonate	SM 2320 B.	0.4	-	nlm	06-13-01
Sulfate	EPA 200.7	0.7	91	jal	06-12-01
Chloride	EPA 200.7	0.4	93	jal	06-12-01
Ammonia	SM 4500-NH_3-G	0.8	117	rwk	06-11-01
Nitrite + Nitrate	EPA 353.2	4.4	119	rwk	06-13-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.4	102	nlm	06/13/2001 13:21

Non-Metals					
Total Dissolved Solids	SM 2540-C	4.4	104	ldr	06-12-01

Trace Metals, dissolved					
Aluminum	EPA 200.8	1.4	105	ts	06-21-01
Arsenic III	SM 3114-C	2.1	94	jl	06-11-01
Beryllium	EPA 200.8	1.1	111	ts	06-21-01
Cadmium	EPA 200.8	1.0	107	ts	06-21-01
Cobalt	EPA 200.8	2.2	103	ts	06-21-01
Lead	EPA 200.8	0.8	110	ts	06-21-01
Manganese	EPA 200.8	1.6	102	ts	06-21-01
Molybdenum	EPA 200.8	0.3	108	ts	06-21-01
Nickel	EPA 200.8	1.3	99	ts	06-21-01
Selenium IV	SM 3114-B	2.2	94	jl	06-11-01
Vanadium	EPA 200.8	1.1	107	ts	06-21-01

Radiometrics, dissolved					
Uranium	EPA 200.8	0.1	116	ts	06-21-01
Radium 226	EPA 903.0	0.0	92	rs	06-14-01
Radium 228	EPA 904.0	0.0	106	es	06-22-01
Thorium 230	EPA 907.0	6.8	104	ph	07-03-01
Lead 210	NERHL-65-4	0.0	107	db	06-21-01
Gross Alpha	EPA 900.0	8.9	98	rs	06-30-01

Trace Organics					
Chloroform	EPA 8260	5.9	117	rlo	06-13-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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QUALITY ASSURANCE REPORT
UNC MINING & MILLING

Project: 808
Laboratory ID Range: 01-33365-1-2
Report Date: July 16, 2001

Major Ions	Method	RPD[1]	Spike	Analyst	Date Analyzed
Calcium	EPA 200.7	0.2	99	jal	06-12-01
Magnesium	EPA 200.7	0.2	99	jal	06-12-01
Sodium	EPA 200.7	0.9	90	jal	06-12-01
Potassium	EPA 200.7	1.1	92	jal	06-12-01
Bicarbonate	SM 2320-B	0.4	-	nlm	06-13-01
Sulfate	EPA 200.7	0.7	91	jal	06-12-01
Chloride	EPA 200.7	0.4	93	jal	06-12-01
Ammonia	SM 4500-NH_3-G	0.5	95	rwk	06-11-01
Nitrite + Nitrate	EPA 353.2	6.3	116	rwk	06-13-01

PARAMETERS with 48 hour holding time					Date/Time Analyzed
pH	SM 4500-H-B	0.4	-	nlm	06-03-2001 12:51

Non-Metals					
Total Dissolved Solids	SM 2540-C	0.6	101	ldr	06-12-01

Trace Metals, dissolved					
Aluminum	EPA 200.8	0.7	117	smd	06-21-01
Arsenic III	SM 3114-C	2.1	94	jl	06-11-01
Beryllium	EPA 200.8	1.9	-	smd	06-21-01
Cadmium	EPA 200.8	0.1	109	smd	06-21-01
Cobalt	EPA 200.8	1.8	104	smd	06-21-01
Lead	EPA 200.8	0.8	110	smd	06-21-01
Manganese	EPA 200.8	1.0	104	smd	06-21-01
Molybdenum	EPA 200.8	0.6	104	smd	06-21-01
Nickel	EPA 200.8	1.2	102	smd	06-21-01
Selenium IV	SM 3114-C	2.2	94	jl	06-11-01
Vanadium	EPA 200.8	0.4	105	smd	06-21-01

Radiometrics					
Uranium	EPA 200.8	0.6	111	smd	06-21-01
Radium 226	EPA 903.0	1.1	99	es	06-29-01
Radium 228	EPA 904.0	0.0	0	es	07-05-01
Thorium 230	EPA 907.0	8.2	93	ph	07-02-01
Lead 210	NERHL-65-4	0.0	113	db	07-10-01
Gross Alpha	EPA 900.0	20.8	78	rs	06-29-01

Trace Organics					
Chloroform	EPA 624	5.92	117	rlo	06-14-01

NOTES:

(1) These values are an assessment of analytical precision. The acceptance range is 0-20% for sample results above 10 times the reporting limit. This range is not applicable to samples with results below 10 times the reporting limit.

(2) These values are an assessment of analytical accuracy. They are a percent recovery of the spike addition. ELI performs a matrix spike on 10 percent of all samples for each analytical method.

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