

UNITED NUCLEAR CORPORATION



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CERTIFIED -RETURN RECIEPT REQUESTED

February 8, 2006

Mr. Jack Whitten
U.S. Nuclear Regulatory Commission, Region IV
Division of Radiation Safety & Safeguards
611 Ryan Plaza Drive, Suite # 400
Dallas, TX 76011-4351

Re: Semi-Annual Effluent and Environmental Monitoring Report from
July to December, 2005

Dear Mr. Whitten:

In compliance with our Nuclear Regulatory Commission Radioactive Material License No. SUA-1475, Amendment No. 34, Condition 12 and 30; the attached Effluent and Environmental Monitoring Report is described and presented as listed below. The applicable and available data will specify the concentration of each principle radionuclide released to unrestricted areas in water effluent during the period of July 01, 2005 through December 31, 2005. The data is also reported on the format required in regulatory Guide 4.14.

Available monitoring data in this report are in order as listed below:

- Environmental Inspection Report (continued this procedure to show and maintain the integrity of the restricted tailings area.)
- Ground Water Result (available data on GW-3 Well).
- Sample Location



Presently, our environmental monitoring program is limited and the above reported items are solely based on available data only. The required radiation monitoring and protection program will be under an RWP (Radiation Work Permit) and no RWP was issued during this semi-annual period.

Additionally, our active radiation monitoring instruments are routinely calibrated and the personnel radiation monitoring and protection program under RWP is still in effect but in standby status awaiting the final pond closure reclamation activity.

Sincerely,

A handwritten signature in black ink, reading "Max Chischilly, Jr.", is positioned above the typed name.

Max Chischilly, Jr.
Radiation Safety Officer-UNC

MC:drb

Enclosure

Cc: Gary Jonosko, NRC
Bill Von Till, NRC
Roy Blickwedel, GE
Steve Hill, GE

■ ENVIRONMENTAL INSPECTION REPORTS

ENVIRONMENTAL INSPECTION

DATE: 8-31-05

TIME START: 1040

INSPECTOR: Max Churchill J.

TIME END: 1200

TAILINGS AREA:

	<u>OKAY</u>	<u>PROBLEM</u>	<u>COMMENTS</u>
1. Fences	<u> </u>	<u> ✓ </u>	<u>See below</u>
2. Air Monitors	<u> — </u>	<u>NA</u>	<u>Only under an RWP</u>
3. Radiation Warning Signs	<u> ✓ </u>	<u> </u>	<u>if needed</u>
4. Locked Gates	<u> ✓ </u>	<u> </u>	<u> </u>

ACTION TAKEN: Observed a collection of drainage material debris
against a small fenceline section at the SW perimeter pipeline
array, a bottom fenceline area. Debris removal and the repair
of the slightly downed fenceline will need to be done after
rain storm drainage have subsided for this year. Thus, the
corrective action is pending until the end of the rain
season and no livestock entry has been observed thru
this area.

ENVIRONMENTAL INSPECTION

DATE: 9-27-05

TIME START: 1444

INSPECTOR: May Chindley J.

TIME END: 1540

TAILINGS AREA:

	<u>OKAY</u>	<u>PROBLEM</u>	<u>COMMENTS</u>
1. Fences	<u>✓</u>	<u> </u>	<u> </u>
2. Air Monitors	<u>—</u>	<u>NA —</u>	<u>ONLY UNDER AN RWP</u> <u>IF NEEDED</u>
3. Radiation Warning Signs	<u>✓</u>	<u> </u>	<u> </u>
4. Locked Gates	<u>✓</u>	<u> </u>	<u> </u>

ACTION TAKEN: _____

ENVIRONMENTAL INSPECTION

DATE: 10-24-05

TIME START: 1343

INSPECTOR: Max Chischilly J.

TIME END: 1520

TAILINGS AREA:

	<u>OKAY</u>	<u>PROBLEM</u>	<u>COMMENTS</u>
1. Fences	<u>✓</u>	<u> </u>	<u>See below</u>
2. Air Monitors	<u>— NA —</u>	<u> </u>	<u>Only under an RWP</u> <u>if needed</u>
3. Radiation Warning Signs	<u>✓</u>	<u> </u>	<u> </u>
4. Locked Gates	<u>✓</u>	<u> </u>	<u> </u>

ACTION TAKEN: Contract worker (Rick Spitz) removed rainstorm
debris and resecured/repared downed fenceline at two SW
end tailing locations (i.e. bottom of pipeline arroya and
bottom of a small arroya adjacent to a locked entry gate).
This completed and pending corrective action was also noted
on the 8-31-05 inspection.

ENVIRONMENTAL INSPECTION

DATE: 11-29-05

TIME START: 1007

INSPECTOR: Max Chiselly J.

TIME END: 1100

TAILINGS AREA:

	<u>OKAY</u>	<u>PROBLEM</u>	<u>COMMENTS</u>
1. Fences	<u>✓</u>	<u> </u>	<u> </u>
2. Air Monitors	<u>—</u> NA	<u>—</u>	<u>only under an RWP</u> <u>if needed.</u>
3. Radiation Warning Signs	<u>✓</u>	<u> </u>	<u> </u>
4. Locked Gates	<u>✓</u>	<u> </u>	<u> </u>

ACTION TAKEN: _____

GROUNDWATER RESULTS

QUARTERLY LIQUID SAMPLES

<u>Date/Qr.</u>	<u>Location</u>	<u>Type</u>	<u>Radionuclide</u>	<u>Concentration</u>		<u>Error Est.</u>	<u>LLD</u>
				<u>Mg/l</u>	<u>ucl/ml</u>	<u>ucl/ml</u>	<u>ucl/ml</u>
<u>07/12/05</u>	<u>GW-3</u>	<u>GROUND</u>	U-Nat (dissolved) or total	_____	<u>7.24E⁻⁰⁸</u>	_____	<u>2.00E-10</u>
<u>3RD-QR.</u>	_____	<u>WATERWELL</u>	Th-230 (dissolved) or total	_____	<u>2.00E⁻¹⁰</u>	_____	<u>2.00E-10</u>
UNC Field Data: PH (STD. Units) = 6.51 Cond. (μ MHOS) = 5,210 Water Depth (Ft.) = 50.95 Temp. (°C) = 20.4			Ra-266 (dissolved) or total	_____	<u>2.00E⁻¹⁰</u>	_____	<u>2.00E-10</u>
			Pb-210 (dissolved) or total	_____	<u>1.00E⁻⁰⁹</u>	_____	<u>1.00E-09</u>
			Po-210 (dissolved) or total	_____	_____	_____	<u>1.00E-09</u>

COMMENTS:

QUARTERLY LIQUID SAMPLES

<u>Date/Qr.</u>	<u>Location</u>	<u>Type</u>	<u>Radionuclide</u>	<u>Concentration</u>		<u>Error Est.</u>	<u>LLD</u>
				<u>Mg/l</u>	<u>μcl/ml</u>	<u>μcl/ml</u>	<u>μcl/ml</u>
<u>10/04/05</u>	<u>GW-3</u>	<u>GROUND</u>	U-Nat (dissolved) or total		<u>7.99E⁻⁰⁸</u>		<u>2.00E-10</u>
<u>4TH-QR.</u>		<u>WATER WELL</u>	Th-230 (dissolved) or total		<u>2.00E⁻¹⁰</u>		<u>2.00E-10</u>
			Ra-266 (dissolved) or total		<u>2.00E⁻¹⁰</u>		<u>2.00E-10</u>
UNC Field Data: PH (STD. Units) = <u>6.52</u>			Pb-210 (dissolved) or total		<u>1.00E⁻⁰⁹</u>		<u>1.00E-09</u>
Cond. (μ MHOS) = <u>5,350</u>							
Water Depth (Ft.) = <u>51.14</u>			Po-210 (dissolved) or total				<u>1.00E-09</u>
Temp. (°C) = <u>17.2</u>							

COMMENTS:



LABORATORY ANALYTICAL REPORT

Client: United Nuclear Corp
Project: Alluvium
Lab ID: C05070603-014
Client Sample ID: GW-3

Report Date: 08/12/05
Collection Date: 07/12/05 11:23
Date Received: 07/15/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/ RL QCL	Method	Analysis Date / By
MAJOR IONS						
Bicarbonate as HCO ₃	1640	mg/L		1	A2320 B	07/21/05 12:07 / sl
Calcium	970	mg/L	D	0.6	E200.7	07/21/05 14:29 / ts
Chloride	170	mg/L		1	E200.7	07/21/05 14:26 / ts
Magnesium	319	mg/L	D	0.5	E200.7	07/21/05 14:29 / ts
Nitrogen, Ammonia as N	0.09	mg/L		0.05	A4500-NH ₃ G	07/21/05 09:13 / jal
Nitrogen, Nitrate+Nitrite as N	77	mg/L	D	2	E353.2	07/18/05 13:38 / jal
Potassium	7.8	mg/L		0.5	E200.7	07/21/05 14:26 / ts
Sodium	268	mg/L		0.5	E200.7	07/21/05 14:26 / ts
Sulfate	2110	mg/L	D	8	E200.7	07/21/05 14:29 / ts
PHYSICAL PROPERTIES						
pH	7.10	s.u.		0.01	A4500-H B	07/18/05 12:33 / th
Solids, Total Dissolved TDS @ 180 C	5190	mg/L		10	A2540 C	07/18/05 16:00 / th
METALS - TOTAL						
Aluminum	ND	mg/L		0.1	E200.8	07/19/05 21:56 / bws
Beryllium	ND	mg/L		0.01	E200.8	07/19/05 21:56 / bws
Cadmium	ND	mg/L		0.005	E200.8	07/19/05 21:56 / bws
Cobalt	ND	mg/L		0.01	E200.8	07/19/05 21:56 / bws
Lead	ND	mg/L		0.05	E200.8	07/19/05 21:56 / bws
Manganese	1.88	mg/L		0.01	E200.8	07/19/05 21:56 / bws
Molybdenum	ND	mg/L		0.1	E200.8	07/19/05 21:56 / bws
Nickel	ND	mg/L		0.05	E200.8	07/19/05 21:56 / bws
Uranium	0.107	mg/L		0.0003	E200.8	07/19/05 21:56 / bws
Vanadium	ND	mg/L		0.1	E200.8	07/19/05 21:56 / bws
METALS - SPECIATED						
Arsenic-III	ND	mg/L		0.001	A3114 B	07/18/05 14:01 / sml
Selenium-IV	ND	mg/L		0.001	A3114 B	07/19/05 10:09 / sml
RADIONUCLIDES - TOTAL						
Gross Alpha minus Rn & U	ND	pCi/L		1.0	E900.1	07/22/05 12:40 / rs
Lead 210	ND	pCi/L		1.0	NERHL-65-4	07/21/05 10:30 / ph
Radium 226	ND	pCi/L		0.2	E903.0	07/19/05 15:00 / df
Radium 228	ND	pCi/L		1.0	E904.0	07/19/05 15:00 / pj
Thorium 230	ND	pCi/L		0.2	E907.0	07/21/05 10:30 / ph

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: United Nuclear Corp
Project: Alluvium
Lab ID: C05070603-014
Client Sample ID: GW-3

Report Date: 08/12/05
Collection Date: 07/12/05 11:23
Date Received: 07/15/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
DATA QUALITY							
A/C Balance (± 5)	3.28	%				Calculation	07/29/05 14:19 / smd
Anions	81.2	meq/L				Calculation	07/29/05 14:19 / smd
Cations	86.7	meq/L				Calculation	07/29/05 14:19 / smd
Solids, Total Dissolved Calculated	5010	mg/L				Calculation	07/29/05 14:19 / smd
TDS Balance (0.80 - 1.20)	1.04	dec. %				Calculation	07/29/05 14:19 / smd
VOLATILE ORGANIC COMPOUNDS							
Chloroform	ND	ug/L		1.0		E624	07/21/05 07:54 / jlr
Surr: 1,2-Dichlorobenzene-d4	106	%REC			80-120	E624	07/21/05 07:54 / jlr
Surr: Dibromofluoromethane	120	%REC			70-130	E624	07/21/05 07:54 / jlr
Surr: p-Bromofluorobenzene	103	%REC			75-125	E624	07/21/05 07:54 / jlr
Surr: Toluene-d8	99.6	%REC			80-120	E624	07/21/05 07:54 / jlr

Report
Conditions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: United Nuclear Corp
Project: Alluvium
Lab ID: C05100333-014
Client Sample ID: GW-3

Report Date: 11/01/05
Collection Date: 10/04/05 13:35
Date Received: 10/07/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
MAJOR IONS							
Bicarbonate as HCO3	1680	mg/L		1		A2320 B	10/13/05 17:00 / th
Calcium	926	mg/L	D	0.6		E200.7	10/18/05 15:00 / ts
Chloride	178	mg/L		1		E200.7	10/18/05 13:24 / ts
Magnesium	314	mg/L	D	0.5		E200.7	10/18/05 15:00 / ts
Nitrogen, Ammonia as N	0.11	mg/L		0.05		A4500-NH3 G	10/10/05 16:45 / jal
Nitrogen, Nitrate+Nitrite as N	78	mg/L	D	2		E353.2	10/10/05 12:13 / jal
Potassium	8.6	mg/L		0.5		E200.7	10/18/05 13:24 / ts
Sodium	275	mg/L		0.5		E200.7	10/18/05 13:24 / ts
Sulfate	2120	mg/L	D	8		E200.7	10/18/05 15:00 / ts
PHYSICAL PROPERTIES							
pH	7.26	s.u.		0.01		A4500-H B	10/10/05 16:47 / jc
Solids, Total Dissolved TDS @ 180 C	5270	mg/L		10		A2540 C	10/10/05 13:31 / jc
METALS - TOTAL							
Aluminum	ND	mg/L		0.1		E200.7	10/18/05 13:24 / ts
Beryllium	ND	mg/L		0.01		E200.8	10/21/05 01:14 / sml
Cadmium	ND	mg/L		0.005		E200.8	10/21/05 01:14 / sml
Cobalt	0.01	mg/L		0.01		E200.8	10/21/05 01:14 / sml
Lead	ND	mg/L		0.05		E200.8	10/21/05 01:14 / sml
Manganese	1.78	mg/L		0.01		E200.7	10/18/05 13:24 / ts
Molybdenum	ND	mg/L		0.1		E200.7	10/18/05 13:24 / ts
Nickel	ND	mg/L		0.05		E200.8	10/21/05 01:14 / sml
Uranium	0.118	mg/L		0.0003		E200.8	10/21/05 01:14 / sml
Vanadium	ND	mg/L		0.1		E200.7	10/18/05 13:24 / ts
METALS - SPECIATED							
Arsenic-III	ND	mg/L		0.001		A3114 B	10/12/05 11:50 / sl
Selenium-IV	ND	mg/L		0.001		A3114 B	10/12/05 15:01 / sl
RADIONUCLIDES - TOTAL							
Gross Alpha minus Rn & U	ND	pCi/L		1.0		E900.1	10/14/05 13:00 / rs
Lead 210	ND	pCi/L		1.0		NERHL-65-4	10/14/05 10:30 / ph
Radium 226	ND	pCi/L		0.2		E903.0	10/12/05 14:40 / df
Radium 228	1.4	pCi/L		1.0		RA-05	10/12/05 14:40 / pj
Radium 228 precision (±)	0.9	pCi/L				RA-05	10/12/05 14:40 / pj
Thorium 230	ND	pCi/L		0.2		E907.0	10/11/05 10:30 / ph

Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: United Nuclear Corp
Project: Alluvium
Lab ID: C05100333-014
Client Sample ID: GW-3

Report Date: 11/01/05
Collection Date: 10/04/05 13:35
Date Received: 10/07/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
DATA QUALITY							
A/C Balance (± 5)	1.17	%				Calculation	10/21/05 16:53 / smd
Anions	82.4	meq/L				Calculation	10/21/05 16:53 / smd
Cations	84.3	meq/L				Calculation	10/21/05 16:53 / smd
Solids, Total Dissolved Calculated	5010	mg/L				Calculation	10/21/05 16:53 / smd
TDS Balance (0.80 - 1.20)	1.05	dec. %				Calculation	10/21/05 16:53 / smd
VOLATILE ORGANIC COMPOUNDS							
Chloroform	ND	ug/L		1.0		E624	10/14/05 06:54 / jlr
Surr: 1,2-Dichlorobenzene-d4	100	%REC			80-120	E624	10/14/05 06:54 / jlr
Surr: Dibromofluoromethane	111	%REC			70-130	E624	10/14/05 06:54 / jlr
Surr: p-Bromofluorobenzene	103	%REC			75-125	E624	10/14/05 06:54 / jlr
Surr: Toluene-d8	95.6	%REC			80-120	E624	10/14/05 06:54 / jlr

Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

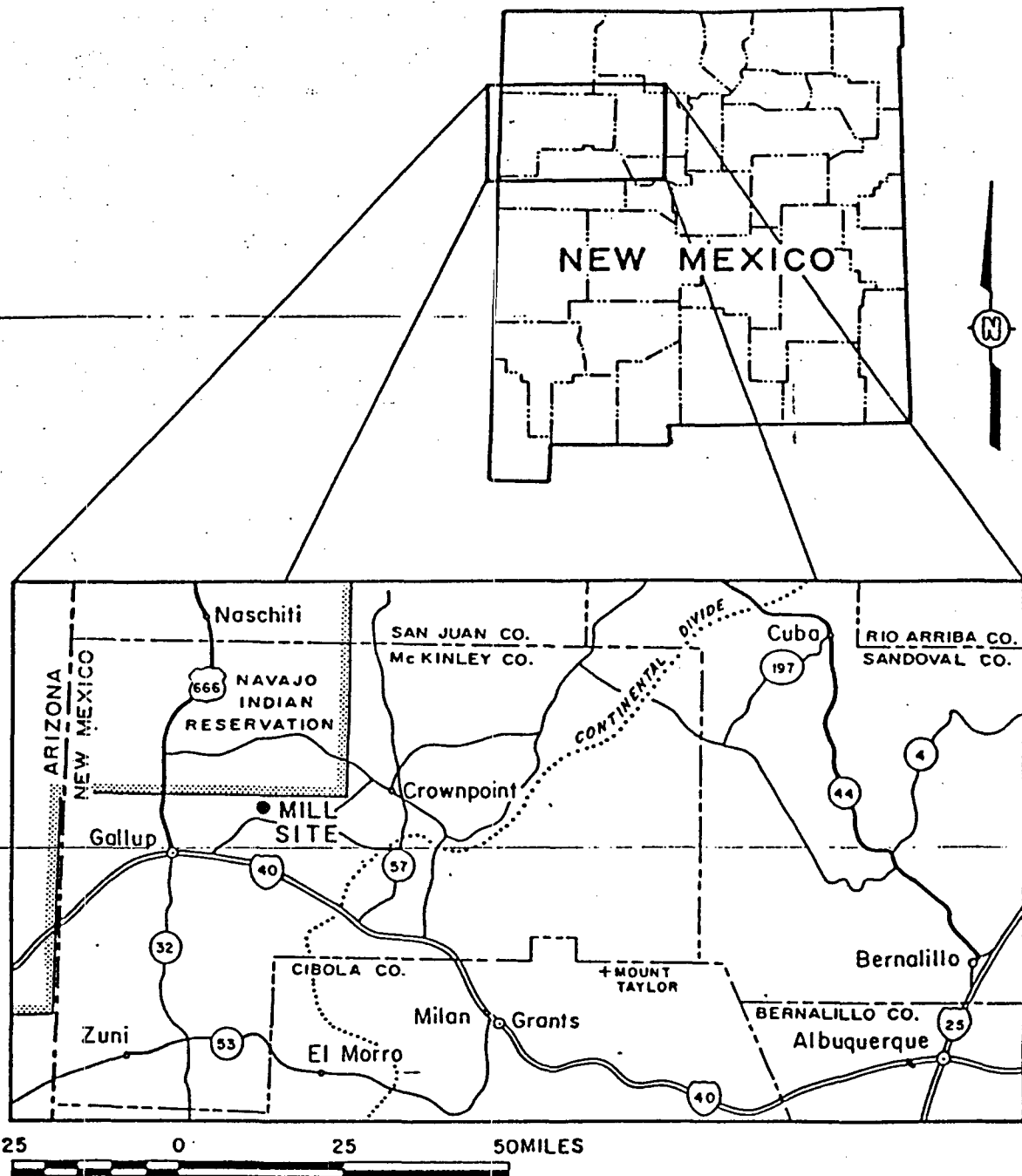
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

UNC Mining and Milling ChurchRock Operations						
GroundWater Monitoring Summary: Alluvium Monitor Wells						
Well ID:		GW-3	GW-3	GW-3	GW-3	
Collection Date:		10/4/2005	7/12/2005	4/5/2005	1/4/2005	
Receive Date:		10/7/2005	7/15/2005	4/8/2005	1/7/2005	
Report Date:		10/31/2005	8/12/2005	4/29/2005	1/28/2005	
Analyte	Units	C05100333-014	C05070603-014	C05040333-014	C05010240-013	
Bicarbonate as HCO ₃	mg/L	1680	1640	1550	1730	
Calcium	mg/L	926	970	968	960	
Chloride	mg/L	178	170	168	171	
Magnesium	mg/L	314	319	328	316	
Nitrogen, Ammonia as N	mg/L	0.11	0.09	0.09	0.17	
Nitrogen, Nitrate+Nitrite as N	mg/L	78	77	71	86	
Potassium	mg/L	8.6	7.8	8.2	8.9	
Sodium	mg/L	275	268	283	281	
Sulfate	mg/L	2120	2110	2130	2050	
pH	s.u.	7.26	7.10	7.10	7.05	
Solids, Total Dissolved TDS @ 180 C	mg/L	5270	5190	5270	5560	
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	0.4	
Beryllium	mg/L	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	
Cobalt	mg/L	0.01	ND(0.01)	ND(0.01)	ND(0.01)	
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	
Manganese	mg/L	1.78	1.88	1.84	1.88	
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	
Uranium	mg/L	0.118	0.107	0.112	0.116	
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	
Gross Alpha minus Rn & U	pCi/L	ND(1.0)	ND(1.0)	ND(1.0)	2.6	
Gross Alpha minus Rn & U Precision (±)	pCi/L				1.6	
Lead 210	pCi/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	
Lead 210 precision (±)	pCi/L					
Radium 226	pCi/L	ND(0.2)	ND(0.2)	ND(0.2)	0.2	
Radium 226 precision (±)	pCi/L				0.2	
Radium 228	pCi/L	1.4	ND(1.0)	ND(1.0)	ND(1.0)	
Radium 228 precision (±)	pCi/L	0.9				
Thorium 230	pCi/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	
Thorium 230 precision (±)	pCi/L					
A/C Balance (± 5)		1.17	3.28	5.00	2.75	
Anions		82.4	81.2	79.5	81.9	
Cations		84.3	86.7	87.9	86.6	
Solids, Total Dissolved Calculated		5010	5010	4980	5030	
TDS Balance (0.80 - 1.20)		1.05	1.04	1.06	1.11	
Chloroform	ug/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	

**Note: The data presented on this form is intended for summary purposes only. Laboratory approved data is contained within the attached database reports.

kls: r:\clients\2005\unc_mining\unc_gallup-4th2005_final.xls

SAMPLING LOCATION MAPS



SOURCE:

URANIUM MILL LICENSE
RENEWAL APPLICATION-
ENVIRONMENTAL REPORT.
LICENSE NO. NM-UNC-ML.
JNC 1981

SKETCH I-1
CHURCH ROCK PROJECT
SITE LOCATION PLAN
16674-000

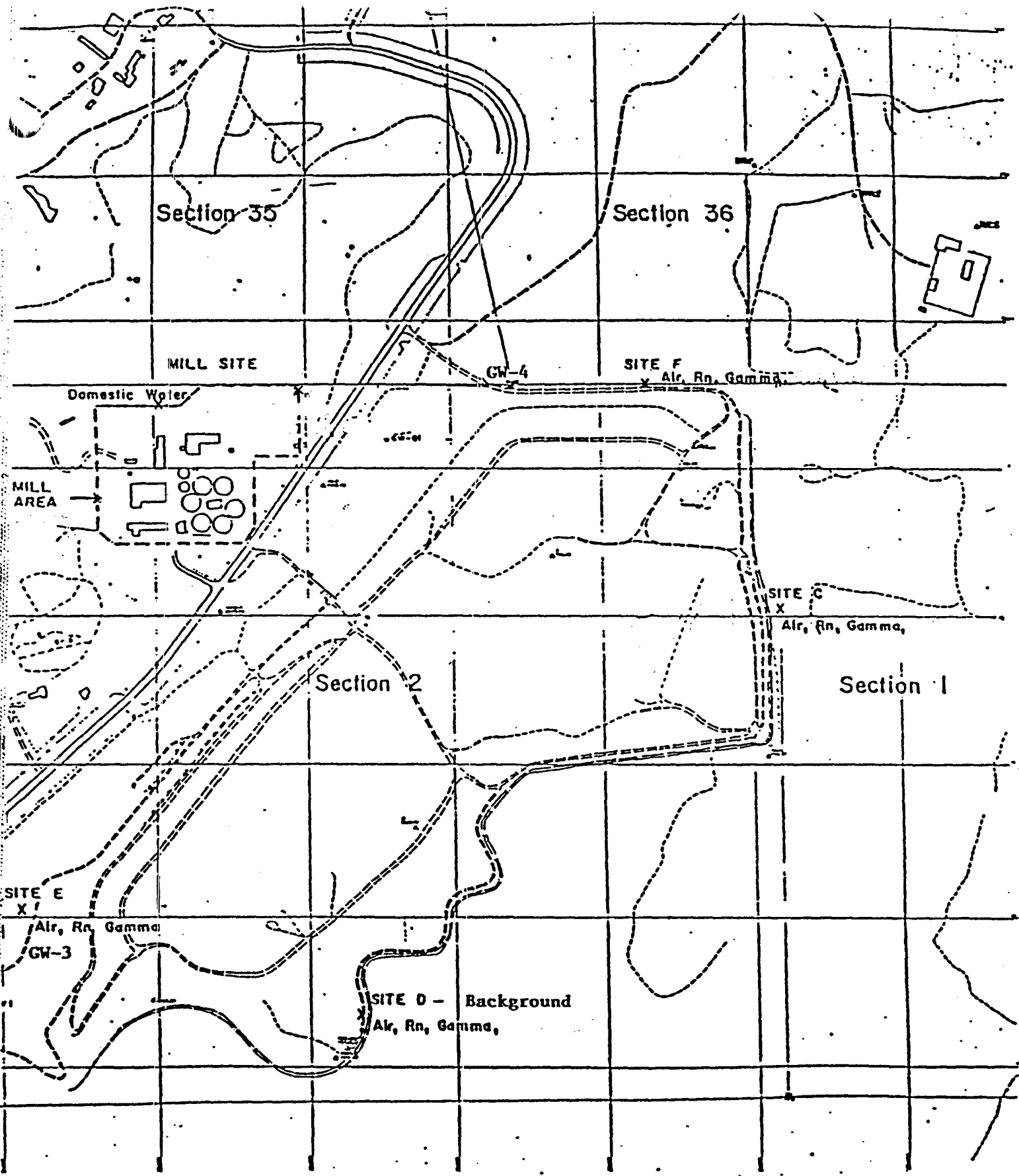


FIGURE 2



Scale of measurement 1:10,000
and other measurements shown

UNITED NUCLEAR CORPORATION	
PLANNING MAP	
SHEET 2 OF 4, 10% SCALE	
6 VERT	