

UNITED NUCLEAR CORPORATION



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August 25, 2006

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

Re: Semi-Annual Effluent and Environmental Monitoring Report from
January to June 30, 2006

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 January 01, 2006 through June 30, 2006. 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).

- Samples Location Maps



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

Enclosure

Cc: Gary Jonosko, NRC
Paul Michalak, NRC
Roy Blickwedel, GE
Steve Hill, GE

ENVIRONMENTAL INSPECTION REPORTS

ENVIRONMENTAL INSPECTION

DATE: 1-30-06

TIME START: 1414

INSPECTOR: Mal Chiselly J.

TIME END: 1509

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>UNDER 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: 2-28-06

TIME START: 1055

INSPECTOR: Max Chinchilly J.

TIME END: 1200

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>—</u>
3. Radiation Warning Signs	<u>✓</u>	<u> </u>	<u> </u>
4. Locked Gates	<u>✓</u>	<u> </u>	<u> </u>

UNDER RWP IF
NEEDED

ACTION TAKEN: OTHER NOTE: PB-2 and RW Zone 3 extraction wells
were shutoff @ 1200 on 2-24-06 in order to drain and empty the
tailings collection tank and repair the exterior outlet pipe leak.
These wells were restarted today @ 1000 after the repair
work is done.

ENVIRONMENTAL INSPECTION

DATE: 3-28-06

TIME START: 0846

INSPECTOR: Maq Chockly

TIME END: 1000

<u>TAILINGS AREA:</u>	<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>UNDER RWP 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: 4-21-06

TIME START: 1340

INSPECTOR: Mal Chubbly J.

TIME END: 1455

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 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: 5-31-06

TIME START: 1235

INSPECTOR: May Lindley J.

TIME END: 1330

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 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: 6-14-06

TIME START: 1330

INSPECTOR: Maq Chivilly J.

TIME END: 1433

TAILINGS AREA:

	<u>OKAY</u>	<u>PROBLEM</u>	<u>COMMENTS</u>
1. Fences	<u>✓</u>	<u> </u>	<u> </u>
2. Air Monitors	<u>- NA -</u>	<u> </u>	<u>Only under an RWP 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/Gr.</u>	<u>Location</u>	<u>Type</u>	<u>Radionuclide</u>	<u>Concentration</u>		<u>Error Est.</u> <u>μcl/ml</u>	<u>LLD</u> <u>μcl/ml</u>
				<u>Mg/l</u>	<u>μcl/ml</u>		
<u>01/10/06</u>	<u>GW-3</u>	<u>GROUND</u>	U-Nat (dissolved) or total		<u>7.79E-08</u>		<u>2.00E-10</u>
<u>1ST. 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) = 6.65		Pb-210 (dissolved) or total		<u>1.00E⁻⁰⁹</u>		<u>1.00E-09</u>
	Cond. (μ MHOS) = 5,640		Po-210 (dissolved) or total				<u>1.00E-09</u>
	Water Depth (Ft.) = 51.08						
	Temp. (°C) = 12.3						

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>µci/ml</u>		
<u>04/04/06</u>	<u>GW-3</u>	<u>GROUND</u>	U-Nat (dissolved) or total		<u>6.60E-08</u>		<u>2.00E-10</u>
<u>2ND. QR.</u>		<u>WATER WELL</u>	Th-230 (dissolved) or total		<u>2.00E-10</u>		<u>2.00E-10</u>
			Ra-226 (dissolved) or total		<u>2.00E-10</u>		<u>2.00E-10</u>
UNC Field Data:	PH (STD. Units) = 6.55		Pb-210 (dissolved) or total		<u>1.00E-09</u>		<u>1.00E-09</u>
	Cond. (µ MHOS) = 5,680		Po-210 (dissolved) or total				<u>1.00E-09</u>
	Water Depth (Ft.) = 51.00						
	Temp. (°C) = 14.1						

COMMENTS:



LABORATORY ANALYTICAL REPORT

Client: United Nuclear Corporation
 Project: Alluvium
 Lab ID: C06010650-014
 Client Sample ID: GW-3

Report Date: 02/21/06
 Collection Date: 01/10/06 11:11
 Date Received: 01/13/06
 Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
MAJOR IONS							
Bicarbonate as HCO3	1650	mg/L		1		A2320 B	01/19/06 07:00 / th
Calcium	843	mg/L		0.5		E200.7	01/18/06 16:27 / ts
Chloride	152	mg/L		1		E200.7	01/18/06 16:27 / ts
Magnesium	285	mg/L		0.5		E200.7	01/18/06 16:27 / ts
Nitrogen, Ammonia as N	ND	mg/L		0.05		A4500-NH3 G	01/16/06 10:19 / jal
Nitrogen, Nitrate+Nitrite as N	90	mg/L	D	2		E353.2	01/16/06 15:12 / jal
Potassium	6.4	mg/L		0.5		E200.7	01/18/06 16:27 / ts
Sodium	272	mg/L		0.5		E200.7	01/18/06 16:27 / ts
Sulfate	1940	mg/L	D	3		E200.7	01/18/06 16:27 / ts
PHYSICAL PROPERTIES							
pH	7.62	s.u.		0.01		A4500-H B	01/16/06 11:28 / jc
Solids, Total Dissolved TDS @ 180 C	5100	mg/L		10		A2540 C	01/16/06 14:09 / jc
METALS - TOTAL							
Aluminum	ND	mg/L		0.1		E200.8	01/16/06 17:35 / bws
Beryllium	ND	mg/L		0.01		E200.8	01/17/06 13:57 / bws
Cadmium	ND	mg/L		0.005		E200.8	01/16/06 17:35 / bws
Cobalt	ND	mg/L		0.01		E200.8	01/16/06 17:35 / bws
Lead	ND	mg/L		0.05		E200.8	01/16/06 17:35 / bws
Manganese	1.81	mg/L		0.01		E200.8	01/16/06 17:35 / bws
Molybdenum	ND	mg/L		0.1		E200.8	01/16/06 17:35 / bws
Nickel	ND	mg/L		0.05		E200.8	01/16/06 17:35 / bws
Uranium	0.115	mg/L		0.0003		E200.8	01/16/06 17:35 / bws
Vanadium	ND	mg/L		0.1		E200.8	01/16/06 17:35 / bws
METALS - SPECIATED							
Arsenic-III	ND	mg/L		0.001		A3114 B	01/16/06 11:26 / sji
Selenium-IV	ND	mg/L		0.001		A3114 B	01/16/06 14:48 / sji
RADIONUCLIDES - TOTAL							
Gross Alpha minus Rn & U	ND	pCi/L		1.0		E900.1	01/17/06 16:05 / rs
Lead 210	ND	pCi/L		1.0		NERHL-65-4	01/19/06 10:30 / ph
Radium 226	ND	pCi/L		0.2		E903.0	01/19/06 09:40 / trs
Radium 228	1.1	pCi/L		1.0		RA-05	01/19/06 09:40 / pj
Radium 228 precision (±)	0.8	pCi/L				RA-05	01/19/06 09:40 / pj
Thorium 230	ND	pCi/L		0.2		E907.0	01/26/06 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 Corporation
 Project: Alluvium
 Lab ID: C06010650-014
 Client Sample ID: GW-3

Report Date: 02/21/06
 Collection Date: 01/10/06 11:11
 Date Received: 01/13/06
 Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
DATA QUALITY							
A/C Balance (± 5)	-0.258	%				Calculation	01/25/06 20:45 / smd
Anions	78.0	meq/L				Calculation	01/25/06 20:45 / smd
Cations	77.6	meq/L				Calculation	01/25/06 20:45 / smd
Solids, Total Dissolved Calculated	4720	mg/L				Calculation	01/25/06 20:45 / smd
TDS Balance (0.80 - 1.20)	1.08	dec. %				Calculation	01/25/06 20:45 / smd
VOLATILE ORGANIC COMPOUNDS							
Chloroform	ND	ug/L		1.0		E624	01/21/06 05:17 / jlr
Surr: 1,2-Dichlorobenzene-d4	107	%REC			80-120	E624	01/21/06 05:17 / jlr
Surr: Dibromofluoromethane	104	%REC			70-130	E624	01/21/06 05:17 / jlr
Surr: p-Bromofluorobenzene	100	%REC			75-125	E624	01/21/06 05:17 / jlr
Surr: Toluene-d8	99.6	%REC			80-120	E624	01/21/06 05:17 / jlr

Report Definitions: 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 Corporation
 Project: Alluvium
 Lab ID: C06040330-014
 Client Sample ID: GW-3

Report Date: 05/12/06
 Collection Date: 04/04/06 12:37
 Date Received: 04/07/06
 Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
MAJOR IONS							
Bicarbonate as HCO3	1460	mg/L		1		A2320 B	04/10/06 20:53 / slb
Calcium	977	mg/L	D	0.6		E200.7	04/17/06 17:44 / ts
Chloride	183	mg/L		1		E200.7	04/17/06 17:41 / ts
Magnesium	337	mg/L	D	0.5		E200.7	04/17/06 17:44 / ts
Nitrogen, Ammonia as N	0.24	mg/L		0.05		A4500-NH3 G	04/11/06 12:12 / jal
Nitrogen, Nitrate+Nitrite as N	94	mg/L	D	2		E353.2	04/12/06 10:41 / jal
Potassium	9.0	mg/L		0.5		E200.7	04/17/06 17:41 / ts
Sodium	258	mg/L		0.5		E200.7	04/17/06 17:41 / ts
Sulfate	2150	mg/L	D	8		E200.7	04/17/06 17:44 / ts
PHYSICAL PROPERTIES							
pH	7.14	s.u.		0.01		A4500-H B	04/10/06 14:02 / th
Solids, Total Dissolved TDS @ 180 C	5300	mg/L		10		A2540 C	04/10/06 14:54 / jc
METALS - TOTAL							
Aluminum	ND	mg/L		0.1		E200.8	04/13/06 04:31 / bws
Beryllium	ND	mg/L		0.01		E200.8	04/13/06 15:12 / bws
Cadmium	ND	mg/L		0.005		E200.8	04/13/06 04:31 / bws
Cobalt	0.01	mg/L		0.01		E200.8	04/13/06 04:31 / bws
Lead	ND	mg/L		0.05		E200.8	04/12/06 05:28 / bws
Manganese	1.79	mg/L		0.01		E200.8	04/13/06 04:31 / bws
Molybdenum	ND	mg/L		0.1		E200.8	04/13/06 04:31 / bws
Nickel	ND	mg/L		0.05		E200.8	04/13/06 04:31 / bws
Uranium	0.0975	mg/L	D	0.0004		E200.8	04/12/06 05:28 / bws
Vanadium	ND	mg/L		0.1		E200.8	04/13/06 04:31 / bws
METALS - SPECIATED							
Arsenic-III	ND	mg/L		0.001		A3114 B	04/10/06 16:40 / sjl
Selenium-IV	ND	mg/L		0.001		A3114 B	04/10/06 14:39 / sjl
RADIONUCLIDES - TOTAL							
Lead 210	ND	pCi/L		1.0		NERHL-65-4	04/18/06 12:30 / df
Gross Alpha minus Rn & U	ND	pCi/L		1.0		E900.1	04/19/06 16:30 / rs
Radium 226	ND	pCi/L		0.2		E903.0	04/18/06 15:30 / trs
Radium 228	2.3	pCi/L		1.0		RA-05	04/18/06 12:00 / pj
Radium 228 precision (±)	0.9	pCi/L				RA-05	04/18/06 12:00 / pj
Thorium 230	ND	pCi/L		0.2		E907.0	04/26/06 09:30 / df

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 Corporation
 Project: Alluvium
 Lab ID: C06040330-014
 Client Sample ID: GW-3

Report Date: 05/12/06
 Collection Date: 04/04/06 12:37
 Date Received: 04/07/06
 Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
DATA QUALITY							
A/C Balance (± 5)	4.49	%				Calculation	04/19/06 13:00 / cp
Anions	80.5	meq/L				Calculation	04/19/06 13:00 / cp
Cations	88.1	meq/L				Calculation	04/19/06 13:00 / cp
Solids, Total Dissolved Calculated	5060	mg/L				Calculation	04/19/06 13:00 / cp
TDS Balance (0.80 - 1.20)	1.05	dec. %				Calculation	04/19/06 13:00 / cp
VOLATILE ORGANIC COMPOUNDS							
Chloroform	ND	ug/L		1.0		E624	04/14/06 02:41 / jlr
Surr: 1,2-Dichlorobenzene-d4	101	%REC			80-120	E624	04/14/06 02:41 / jlr
Surr: Dibromofluoromethane	98.0	%REC			70-130	E624	04/14/06 02:41 / jlr
Surr: p-Bromofluorobenzene	98.0	%REC			75-125	E624	04/14/06 02:41 / jlr
Surr: Toluene-d8	100	%REC			80-120	E624	04/14/06 02:41 / jlr

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

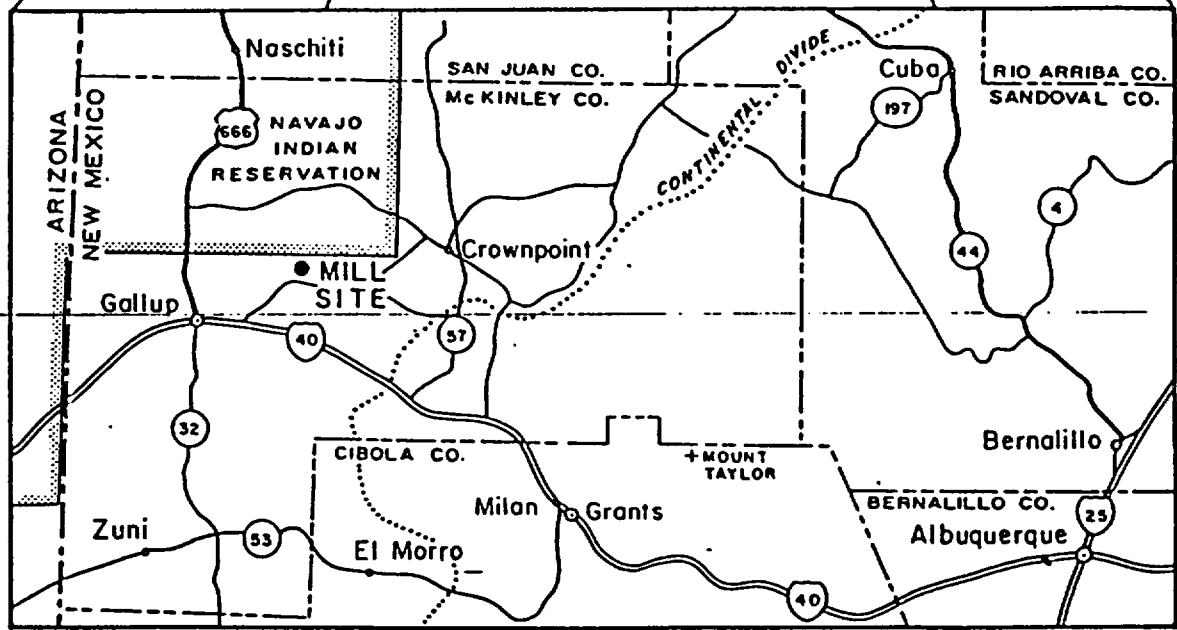
MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Alluvium Monitor Wells					
Well ID:		GW-3	GW-3	GW-3	GW-3
Collection Date:		4/4/2006	1/9/2006	10/4/2005	7/12/2005
Receive Date:		4/7/2006	1/13/2006	10/7/2005	7/15/2005
Report Date:		5/12/2006	2/22/2006	10/31/2005	8/12/2005
Analysis	Units	C06040330-014	C06010650-014	C05100333-014	C05070603-014
Bicarbonate as HCO ₃	mg/L	1460	1650	1680	1640
Calcium	mg/L	977	843	926	970
Chloride	mg/L	183	152	178	170
Magnesium	mg/L	337	285	314	319
Nitrogen, Ammonia as N	mg/L	0.24	ND(0.05)	0.11	0.09
Nitrogen, Nitrate+Nitrite as N	mg/L	94	90	78	77
Potassium	mg/L	9.0	6.4	8.6	7.8
Sodium	mg/L	258	272	275	268
Sulfate	mg/L	2150	1940	2120	2110
pH	s.u.	7.14	7.62	7.26	7.10
Solids, Total Dissolved TDS @ 180 C	mg/L	5300	5100	5270	5190
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
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)	0.01	ND(0.01)
Lead	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	1.79	1.81	1.78	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	0.0975	0.115	0.118	0.107
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)	ND(1.0)
Gross Alpha minus Rn & U Precision (±)	pCi/L				
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)	ND(0.2)
Radium 226 precision (±)	pCi/L				
Radium 228	pCi/L	2.3	1.1	1.4	ND(1.0)
Radium 228 precision (±)	pCi/L	0.9	0.8	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)		4.49	-0.258	1.17	3.28
Anions		80.5	78.0	82.4	81.2
Cations		88.1	77.6	84.3	86.7
Solids, Total Dissolved Calculated		5060	4720	5010	5010
TDS Balance (0.80 - 1.20)		1.05	1.08	1.05	1.04
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.

SAMPLING LOCATION MAPS

NEW MEXICO



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

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

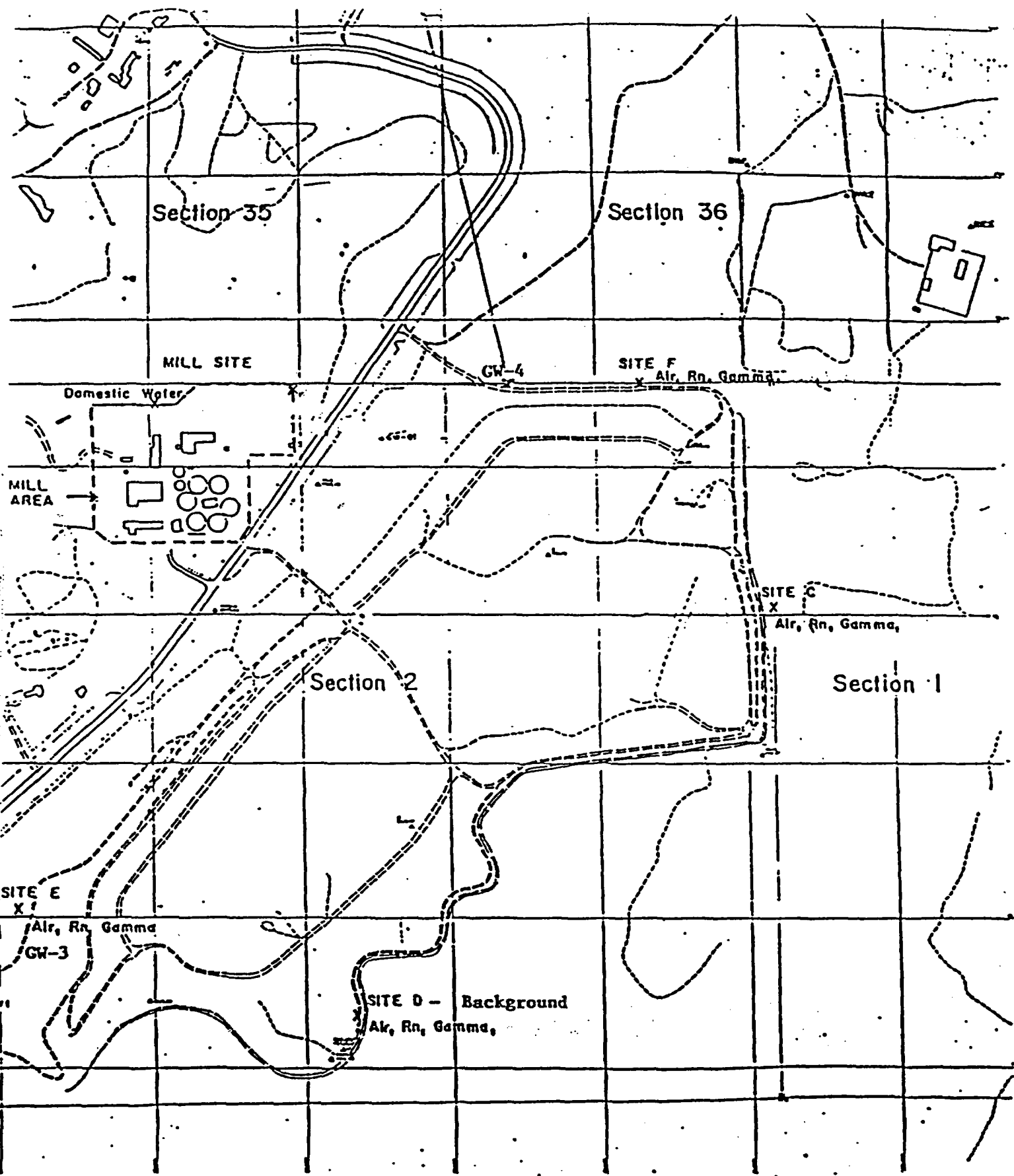


FIGURE 2



UNITED NUCLEAR CORPORATION	
PLANNING MAP	
ENC. 2, EPH 4, R 10 N, S 10 W	
6 INCHES	