

40-6659

ENVIRONMENTAL SAMPLE DATA

4th Quarter 1985

PETROTOMICS COMPANY
Shirley Basin, WY

B603280009 B60227
PDR ADOCK 04006659
C PDR

381

1. STACK SAMPLES

Date collected:

Location:

Stack flow rate (m^3/sec):

NO DISCHARGE STACKS PRESENT

2. AIR SAMPLES

Locations: Site 1 - 7800' WNW of yellowcake dryer stack.
 Site 2 - 500' S of yellowcake dryer stack.
 Site 3 - 3200' NE of yellowcake dryer stack. - DISCONTINUED
 Site 4 - 11800' NNE of yellowcake dryer stack.
 Site 5 - 3000' ENE of yellowcake dryer stack.
 Site 6 - 11700' S of yellowcake dryer stack.

DATE COLLECTED:	<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)	<u>%MPC</u>
4th Quarter 1985					
LOCATION: SITE 1	U-Nat	0.37×10^{-15}		1×10^{-16}	.01
	Th-230	5.1×10^{-15}	$\pm 0.3 \times 10^{-15}$	1×10^{-16}	6.4
	Ra-226	0.1×10^{-15}	$\pm 0.05 \times 10^{-15}$	1×10^{-16}	.003
	Pb-210	1.1×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.3
	Rn-222	1.44×10^{-9}	$\pm 0.11 \times 10^{-9}$	0.2×10^{-9}	48.0
DATE COLLECTED:	<u>RADIONUCLIDE</u>				
4th Quarter 1985					
LOCATION: SITE 2	U-Nat	0.94×10^{-15}		1×10^{-16}	.02
	Th-230	4.7×10^{-15}	$\pm 0.3 \times 10^{-15}$	1×10^{-16}	5.9
	Ra-226	0.32×10^{-15}	$\pm 0.09 \times 10^{-15}$	1×10^{-16}	.01
	Pb-210	1.3×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.4
	Rn-222	1.15×10^{-9}	$\pm 0.09 \times 10^{-9}$	0.2×10^{-9}	38.3

2. AIR SAMPLES (CONTINUED)

DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)	<u>ΣMPC</u>
LOCATION: SITE 3	<u>DISCONTINUED</u>				
DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>				
LOCATION: SITE 4	U-Nat	0.79×10^{-15}		1×10^{-16}	.02
	Th-230	0.3×10^{-15}	$\pm 0.1 \times 10^{-15}$	1×10^{-16}	.40
	Ra-226	0.10×10^{-15}	$\pm 0.05 \times 10^{-15}$	1×10^{-16}	.003
	Pb-210	1.3×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.40
	Rn-222	0.71×10^{-9}	$\pm 0.07 \times 10^{-9}$	0.2×10^{-9}	23.6
DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>				
LOCATION: SITE 5	U-Nat	1.27×10^{-15}		1×10^{-16}	.02
	Th-230	6.0×10^{-15}	$\pm 0.3 \times 10^{-15}$	1×10^{-16}	7.5
	Ra-226	1.40×10^{-15}	$\pm 0.20 \times 10^{-15}$	1×10^{-16}	.04
	Pb-210	1.8×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.50
	Rn-222	0.73×10^{-9}	$\pm 0.08 \times 10^{-9}$	0.2×10^{-9}	24.3

2. AIR SAMPLES (CONTINUED)

DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>	<u>IMPC</u>
LOCATION: SITE 6	U-Nat	0.25×10^{-15}		1×10^{-16}	.005
	Th-230	0.10×10^{-15}	$\pm 0.1 \times 10^{-15}$	1×10^{-16}	.10
	Ra-226	0.08×10^{-15}	$\pm 0.04 \times 10^{-15}$	1×10^{-16}	.002
	Pb-210	1.6×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.40
	Rn-222	0.72×10^{-9}	$\pm 0.08 \times 10^{-9}$	0.2×10^{-9}	24.0

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Mill Feed Pond
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	61.61×10^{-9}		
U-nat (Suspended)	5.42×10^{-9}		
Th-230 (Dissolved)	0.21×10^{-9}	$\pm 0.11 \times 10^{-9}$	3.0×10^{-10}
Th-230 (Suspended)	0.17×10^{-9}	$\pm 0.10 \times 10^{-9}$	3.0×10^{-10}
Ra-226 (Dissolved)	4.69×10^{-9}	$\pm 0.65 \times 10^{-9}$	5.4×10^{-10}
Ra-226 (Suspended)	0.70×10^{-9}	$\pm 0.23 \times 10^{-9}$	1.9×10^{-10}
Pb-210 (Dissolved)	0.56×10^{-9}	$\pm 0.72 \times 10^{-9}$	2.0×10^{-9}
Pb-210 (Suspended)	0.23×10^{-9}	$\pm 0.74 \times 10^{-9}$	2.0×10^{-9}
Po-210 (Dissolved)	1.71×10^{-9}	$\pm 1.43 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 0.75 \times 10^{-9}$	0.2×10^{-10}

WESTERN ENVIRONMENTAL SERVICES AND TESTING, INC.
6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
(307) 234-5511

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J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-19

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

MILL FEED POND (17333)

SAMPLE TAKEN 10/15/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	4.0	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	642	FLUORIDE (F)	0.31
TOTAL DISS. SOLIDS (OBS.)	744	IRON (FE)(TOTAL)	0.08
CONDUCTIVITY @25 C.	855	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	146	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	104	MANGANESE (MN)	ND(0.01)
SODIUM (NA) (CALC.)	176	MERCURY (HG)	*
SODIUM (NA) (OBS.)	180	MOLYBDENUM (MO)	*
POTASSIUM (K)	7	NICKEL (NI)	0.01
CALCIUM (CA)	17	NITRATE (AS N)	ND(0.01)
MAGNESIUM (MG)	15	NITRITE (AS N)	*
SULFATE (SO4)	324	PHOSPHORUS (P)	*
CHLORIDE (CL)	10	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	19	SILICA (SiO2)	*
BICARBONATE (HCO3)	143	SILVER (AG)	*
FM, UNITS	8.66	ZINC (ZN)	0.01
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	0.12	URANIUM (U)	0.091
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Himes

3. LIQUID SAMPLES

Date collected: October 15, 1985
Location: Mine Shop Well
Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat (Dissolved)	7.45×10^{-9}		
U-nat (Suspended)	4.06×10^{-9}		
Th-230 (Dissolved)	0.20×10^{-9}	$\pm 0.11 \times 10^{-9}$	1.0×10^{-10}
Th-230 (Suspended)	0.36×10^{-9}	$\pm 0.64 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	1.16×10^{-9}	$\pm 0.43 \times 10^{-9}$	5.8×10^{-10}
Ra-226 (Suspended)	0.18×10^{-9}	$\pm 0.25 \times 10^{-9}$	2.7×10^{-10}
Pb-210 (Dissolved)	0.42×10^{-9}	$\pm 1.8 \times 10^{-9}$	2.0×10^{-9}
Pb-210 (Suspended)	0.40×10^{-9}	$\pm 0.16 \times 10^{-9}$	2.0×10^{-9}
Po-210 (Dissolved)	0.20×10^{-9}	$\pm 1.10 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 1.45 \times 10^{-9}$	1.0×10^{-10}

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WATER ANALYSIS

CLIENT	PETROTOMICS COMPANY	LAB NO.	85-045-20
ADDRESS	SHIRLEY BASIN, WYOMING	DATE RECEIVED	10/17/85
ANALYZED BY	JPM,GH,JH,MJ	DATE	1/7/86
		JOB NO.	8540-411

MINE SHOP WELL (17338)

SAMPLE TAKEN 10/15/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	0.8	COPPER (CU)	0.06
TOTAL DISS. SOLIDS (CALC.)	551	FLUORIDE (F)	0.14
TOTAL DISS. SOLIDS (OBS.)	569	IRON (FE)(TOTAL)	0.08
CONDUCTIVITY @25 C.	790	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	142	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	101	MANGANESE (MN)	0.02
SODIUM (NA) (CALC.)	148	MERCURY (HG)	*
SODIUM (NA) (OBS.)	153	MOLYBDENUM (MO)	ND(0.2)
POTASSIUM (K)	5	NICKEL (NI)	0.01
CALCIUM (CA)	24	NITRATE (AS N)	0.20
MAGNESIUM (MG)	10	NITRITE (AS N)	*
SULFATE (SO4)	268	PHOSPHORUS (P)	*
CHLORIDE (CL)	5	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	174	SILVER (AG)	*
PH, UNITS	8.19	ZINC (ZN)	0.02
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	ND(0.10)	URANIUM (U)	0.011
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	1

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Mary J. Himes

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	94.78×10^{-9}		
U-nat (Suspended)	3.38×10^{-9}		
Th-230 (Dissolved)	0.48×10^{-9}	$\pm 0.14 \times 10^{-9}$	1.0×10^{-10}
Th-230 (Suspended)	0.22×10^{-9}	$\pm 0.56 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	0.66×10^{-9}	$\pm 0.21 \times 10^{-9}$	1.3×10^{-10}
Ra-226 (Suspended)	0.18×10^{-9}	$\pm 0.16 \times 10^{-9}$	1.9×10^{-10}
Pb-210 (Dissolved)	0.24×10^{-9}	$\pm 0.39 \times 10^{-9}$	8.0×10^{-9}
Pb-210 (Suspended)	0.16×10^{-9}	$\pm 0.55 \times 10^{-9}$	1.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 1.77 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.26×10^{-9}	$\pm 1.04 \times 10^{-9}$	4.0×10^{-10}

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River - Upstream
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	94.78×10^{-9}		
U-nat (Suspended)	4.06×10^{-9}		
Th-230 (Dissolved)	0.24×10^{-9}	$\pm 0.11 \times 10^{-9}$	2.0×10^{-10}
Th-230 (Suspended)	0.22×10^{-9}	$\pm 0.56 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	0.77×10^{-9}	$\pm 0.18 \times 10^{-9}$	1.5×10^{-10}
Ra-226 (Suspended)	0.79×10^{-9}	$\pm 0.20 \times 10^{-9}$	2.3×10^{-10}
Pb-210 (Dissolved)	0.31×10^{-9}	$\pm 0.62 \times 10^{-9}$	1.0×10^{-9}
Pb-210 (Suspended)	0.16×10^{-9}	$\pm 0.55 \times 10^{-9}$	1.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 0.46 \times 10^{-9}$	5.0×10^{-9}
Po-210 (Suspended)	0.19×10^{-9}	$\pm 0.97 \times 10^{-9}$	3.0×10^{-10}

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River - Downstream
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat (Dissolved)	51.45×10^{-9}		
U-nat (Suspended)	3.38×10^{-9}		
Th-230 (Dissolved)	0.06×10^{-9}	$\pm 0.07 \times 10^{-9}$	4.0×10^{-10}
Th-230 (Suspended)	0.19×10^{-9}	$\pm 0.34 \times 10^{-9}$	2.0×10^{-10}
Ra-226 (Dissolved)	0.55×10^{-9}	$\pm 0.18 \times 10^{-9}$	2.6×10^{-10}
Ra-226 (Suspended)	0.83×10^{-9}	$\pm 0.21 \times 10^{-9}$	2.1×10^{-10}
Pb-210 (Dissolved)	0.22×10^{-9}	$\pm 0.54 \times 10^{-9}$	4.0×10^{-9}
Pb-210 (Suspended)	0.10×10^{-9}	$\pm 0.37 \times 10^{-9}$	4.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 1.02 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 2.16 \times 10^{-9}$	3.0×10^{-10}

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 15, 1985
 Location: Townsite
 Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat	3.39×10^{-9}		
Th-230	0.01×10^{-9}	$\pm 0.05 \times 10^{-9}$	2.0×10^{-10}
Ra-226	0.25×10^{-9}	$\pm 0.15 \times 10^{-9}$	2.3×10^{-10}
Pb-210	0.00×10^{-9}	$\pm 0.75 \times 10^{-9}$	7.0×10^{-9}
Po-210	1.01×10^{-9}	$\pm 1.05 \times 10^{-9}$	3.0×10^{-9}

Date collected: October 15, 1985
 Location: RTH-1
 Type of sample: Groundwater - Well plugged - no sample.

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6756 WEST URANIUM ROAD
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WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-26

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

TOWNSITE (17331)

SAMPLE TAKEN 10/15/85

TOTAL SUSPENDED SOLIDS	MG/L	6.8	COPPER (CU)	MG/L	0.18
TOTAL DISS. SOLIDS (CALC.)		357	FLUORIDE (F)		0.80
TOTAL DISS. SOLIDS (OBS.)		406	IRON (FE)(TOTAL)		1.00
CONDUCTIVITY @25 C.		510	IRON (FE)(DISS.)		*
TOTAL ALKALINITY AS CaCO3		98	LEAD (PB)		ND(0.05)
TOTAL HARDNESS AS CaCO3		257	MANGANESE (MN)		0.08
SODIUM (NA) (CALC.)		15	MERCURY (HG)		*
SODIUM (NA) (OBS.)		17	MOLYBDENUM (MO)		ND(0.2)
POTASSIUM (K)		3	NICKEL (NI)		ND(0.01)
CALCIUM (CA)		80	NITRATE (AS N)		ND(0.01)
MAGNESIUM (MG)		14	NITRITE (AS N)		*
SULFATE (SO4)		174	PHOSPHORUS (P)		*
CHLORIDE (CL)		10	SELENIUM (SE)		ND(0.001)
CARBONATE (CO3)		0	SILICA (SiO2)		*
BICARBONATE (HCO3)		120	SILVER (AG)		*
PH, UNITS		7.79	ZINC (ZN)		0.12
ALUMINUM (AL)		*	VANADIUM (V)		ND(0.5)
AMMONIA (AS N)		*	URANIUM (U)		0.005
ARSENIC (AS)		ND(0.001)	EH, MILLIVOLTS		*
BORON (B)		*	PHENOL		*
CATION-ANION BALANCE		*	RADIUM 226, PCI/L		
CADMIUM (CD)		*	(LLD), CI/ML		
CHROMIUM (CR)		*	OIL AND GREASE		*
C.O.D.		*	TOTAL ORG. CARBON		1

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Mary J. Himes

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 15, 1985
 Location: RTH-4
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	6.77×10^{-9}		
Th-230	0.09×10^{-9}	$\pm 0.08 \times 10^{-9}$	3.0×10^{-10}
Ra-226	1.14×10^{-9}	$\pm 0.27 \times 10^{-9}$	3.2×10^{-10}
Pb-210	0.17×10^{-9}	$\pm 0.26 \times 10^{-9}$	3.0×10^{-9}
Po-210	1.16×10^{-9}	$\pm 1.06 \times 10^{-9}$	4.0×10^{-9}

Date collected: October 15, 1985
 Location: RTH-5
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	14.89×10^{-9}		
Th-230	0.20×10^{-9}	$\pm 0.20 \times 10^{-9}$	7.0×10^{-10}
Ra-226	2.67×10^{-9}	$\pm 0.36 \times 10^{-9}$	3.2×10^{-10}
Pb-210	0.42×10^{-9}	$\pm 2.6 \times 10^{-9}$	2.0×10^{-9}
Po-210	1.32×10^{-9}	$\pm 1.14 \times 10^{-9}$	2.0×10^{-9}

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WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-24

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

RTH-4 (17329)

SAMPLE TAKEN 10/16/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	5.2	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	619	FLUORIDE (F)	0.21
TOTAL DISS. SOLIDS (OBS.)	681	IRON (FE)(TOTAL)	0.31
CONDUCTIVITY @25 C.	780	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	58	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	437	MANGANESE (MN)	0.39
SODIUM (NA) (CALC.)	18	MERCURY (HG)	*
SODIUM (NA) (OBS.)	20	MOLYBDENUM (MO)	ND(0.2)
POTASSIUM (K)	5	NICKEL (NI)	0.02
CALCIUM (CA)	119	NITRATE (AS N)	ND(0.01)
MAGNESIUM (MG)	34	NITRITE (AS N)	*
SULFATE (SO4)	400	PHOSPHORUS (P)	*
CHLORIDE (CL)	6	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	71	SILVER (AG)	*
PH, UNITS	7.69	ZINC (ZN)	0.50
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	*	URANIUM (U)	0.010
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	1

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Hines

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WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-25

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

RTH-5 (17330)

SAMPLE TAKEN 10/15/85

TOTAL SUSPENDED SOLIDS	MG/L	2718	COPPER (CU)	MG/L	0.10
TOTAL DISS. SOLIDS (CALC.)		1411	FLUORIDE (F)		0.71
TOTAL DISS. SOLIDS (OBS.)		1546	IRON (FE)(TOTAL)		113
CONDUCTIVITY @25 C.		1450	IRON (FE)(DISS.)		*
TOTAL ALKALINITY AS CaCO ₃		138	LEAD (PB)		0.12
TOTAL HARDNESS AS CaCO ₃		1062	MANGANESE (MN)		5.7
SODIUM (NA) (CALC.)		15	MERCURY (HG)		*
SODIUM (NA) (OBS.)		14	MOLYBDENUM (MO)	ND(0.2)	
POTASSIUM (K)		6	NICKEL (NI)		0.13
CALCIUM (CA)		320	NITRATE (AS N)		1.30
MAGNESIUM (MG)		64	NITRITE (AS N)		*
SULFATE (SO ₄)		919	PHOSPHORUS (P)		*
CHLORIDE (CL)		5	SELENIUM (SE)	ND(0.001)	
CARBONATE (CO ₃)		0	SILICA (SiO ₂)		*
BICARBONATE (HCO ₃)		169	SILVER (AG)		*
PH, UNITS		7.38	ZINC (ZN)		0.81
ALUMINUM (AL)		*	VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)		*	URANIUM (U)		0.022
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS		*
BORON (B)		*	PHENOL		*
CATION-ANION BALANCE		*	RADIUM 226, PCI/L		
CADMIUM (CD)		*	(LLD), CI/ML		
CHROMIUM (CR)		*	OIL AND GREASE		*
C.O.D.		*	TOTAL ORG. CARBON		36

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Hines

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 17, 1985
 Location: Collection Well
 Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)
U-nat	23.69 X 10 ⁻⁹		
Ra-226	0.38 X 10 ⁻⁹	± 0.12 X 10 ⁻⁹	1.3 X 10 ⁻¹⁰

Date collected: October 16, 1985
 Location: 1-AC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)
U-nat	92.75 X 10 ⁻⁹		
Ra-226	2.16 X 10 ⁻⁹	± 0.27 X 10 ⁻⁹	1.7 X 10 ⁻¹⁰

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6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
(307) 234-5511

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J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROATOMICS COMPANY LAB NO. 85-045-1

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

COLLECTION WELL (17350)

SAMPLE TAKEN 10/17/85

TOTAL SUSPENDED SOLIDS	MG/L			
TOTAL DISS. SOLIDS (CALC.)	12.0			
TOTAL DISS. SOLIDS (OBS.)	20745			
CONDUCTIVITY @25 C.	24576			
TOTAL ALKALINITY AS CaCO ₃	12400			
TOTAL HARDNESS AS CaCO ₃	0			
SODIUM (NA) (CALC.)	4649			
SODIUM (NA) (OBS.)	4123			
POTASSIUM (K)	330			
CALCIUM (CA)	8			
MAGNESIUM (MG)	430			
SULFATE (SO ₄)	869			
CHLORIDE (CL)	16300			
CARBONATE (CO ₃)	335			
BICARBONATE (HCO ₃)	0			
PH, UNITS	0			
ALUMINUM (AL)	2.49			
AMMONIA (AS N)	*			
ARSENIC (AS)	129			
BORON (B)	0.006			
CATION-ANION BALANCE	*			
CADMIUM (CD)	*			
CHROMIUM (CR)	*			
C.O.D.	*			
			MG/L	
		COPPER (CU)	1.1	
		FLUORIDE (F)	6.18	
		IRON (FE) (TOTAL)	1730	
		IRON (FE) (DISS.)	*	
		LEAD (PB)	0.29	
		MANGANESE (MN)	90.0	
		MERCURY (HG)	*	
		MOLYBDENUM (MO)	*	
		NICKEL (NI)	3.79	
		NITRATE (AS N)	0.92	
		NITRITE (AS N)	*	
		PHOSPHORUS (P)	*	
		SELENIUM (SE)	ND(0.001)	
		SILICA (SiO ₂)	*	
		SILVER (AG)	*	
		ZINC (ZN)	10.0	
		VANADIUM (V)	32	
		URANIUM (U)	0.035	
		EH, MILLIVOLTS	*	
		PHENOL	*	
		RADIUM 226, PCI/L	0.38±0.12	
		(LLD), µCI/ML	1.3E-10	
		OIL AND GREASE	*	
		TOTAL ORG. CARBON	*	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Harry J. Hines

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6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
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JAN 13 1986

J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-14

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

AC-1 (17349)

SAMPLE TAKEN 10/16/85

TOTAL SUSPENDED SOLIDS	MG/L	482	COPPER (CU)	MG/L	0.13
TOTAL DISS. SOLIDS (CALC.)	1974		FLUORIDE (F)	1.20	
TOTAL DISS. SOLIDS (OBS.)	2139		IRON (FE)(TOTAL)	100	
CONDUCTIVITY @25 C.	2100		IRON (FE)(DISS.)	*	
TOTAL ALKALINITY AS CaCO ₃	0		LEAD (PB)	0.07	
TOTAL HARDNESS AS CaCO ₃	1116		MANGANESE (MN)	11	
SODIUM (NA) (CALC.)	63		MERCURY (HG)	*	
SODIUM (NA) (OBS.)	31		MOLYBDENUM (MO)	*	
POTASSIUM (K)	10		NICKEL (NI)	0.67	
CALCIUM (CA)	340		NITRATE (AS N)	ND(0.01)	
MAGNESIUM (MG)	65		NITRITE (AS N)	*	
SULFATE (SO ₄)	1375		PHOSPHORUS (P)	*	
CHLORIDE (CL)	10		SELENIUM (SE)	ND(0.001)	
CARBONATE (CO ₃)	0		SILICA (SiO ₂)	*	
BICARBONATE (HCO ₃)	0		SILVER (AG)	*	
PH, UNITS	2.63		ZINC (ZN)	3.8	
ALUMINUM (AL)	*		VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)	1.61		URANIUM (U)	0.137	
ARSENIC (AS)	ND(0.001)		EH. MILLIVOLTS	*	
BORON (B)	*		PHENOL	*	
CATION-ANION BALANCE	*		RADIUM 226, PCI/L	2.16±0.27	
CADMIUM (CD)	*		(LLD), PCI/ML	1.7E-10	
CHROMIUM (CR)	*		OIL AND GREASE	*	
C.O.D.	*		TOTAL ORG. CARBON	*	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Henry J. Harris

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 16, 1985
 Location: 3-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	49.42 X 10 ⁻⁹		
Th-230	0.11 X 10 ⁻⁹	± 0.08 X 10 ⁻⁹	1.0 X 10 ⁻¹⁰
Ra-226	4.04 X 10 ⁻⁹	± 0.35 X 10 ⁻⁹	1.8 X 10 ⁻¹⁰
Pb-210	0.48 X 10 ⁻⁹	± 1.4 X 10 ⁻⁹	1.0 X 10 ⁻⁹
Po-210	0.15 X 10 ⁻⁹	± 1.07 X 10 ⁻⁹	3.0 X 10 ⁻⁹

Date collected: October 16, 1985
 Location: 4-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>			
U-nat	33.17 X 10 ⁻⁹		
Th-230	0.04 X 10 ⁻⁹	± 0.03 X 10 ⁻⁹	4.0 X 10 ⁻¹⁰
Ra-226	14.99 X 10 ⁻⁹	± 0.76 X 10 ⁻⁹	1.2 X 10 ⁻¹⁰
Pb-210	0.54 X 10 ⁻⁹	± 0.76 X 10 ⁻⁹	4.0 X 10 ⁻⁹
Po-210	0.18 X 10 ⁻⁹	± 1.08 X 10 ⁻⁹	3.0 X 10 ⁻⁹

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CASPER, WYOMING 82604
(307) 234-5511

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J. H. WHITMAN

WATER ANALYSIS

CLIENT	PETROTOMICS COMPANY	LAB NO.	85-045-15
ADDRESS	SHIRLEY BASIN, WYOMING	DATE RECEIVED	10/17/85
ANALYZED BY	JPM, CH, JH, MJ	DATE	1/7/86
		JOB NO.	8540-411

3 SC (17340)

SAMPLE TAKEN 10/16/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	64	COPPER (CU)	0.03
TOTAL DISS. SOLIDS (CALC.)	5340	FLUORIDE (F)	2.64
TOTAL DISS. SOLIDS (OBS.)	6049	IRON (FE)(TOTAL)	0.53
CONDUCTIVITY @25 C.	4850	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	316	LEAD (PB)	0.08
TOTAL HARDNESS AS CaCO3	3292	MANGANESE (MN)	5.6
SODIUM (NA) (CALC.)	433	MERCURY (HG)	*
SODIUM (NA) (OBS.)	420	MOLYBDENUM (MO)	*
POTASSIUM (K)	33	NICKEL (NI)	0.82
CALCIUM (CA)	610	NITRATE (AS N)	6.91
MAGNESIUM (MG)	430	NITRITE (AS N)	*
SULFATE (SO4)	3240	PHOSPHORUS (P)	*
CHLORIDE (CL)	416	SELENIUM (SE)	0.002
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	386	SILVER (AG)	*
PH, UNITS	7.30	ZINC (ZN)	0.02
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	5.57	URANIUM (U)	0.073
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Himes

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WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-16

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

4 SC (17341)

SAMPLE TAKEN 10/11/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	351	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	4802	FLUORIDE (F)	3.23
TOTAL DISS. SOLIDS (OBS.)	5494	IRON (FE)(TOTAL)	0.86
CONDUCTIVITY @25 C.	5050	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	34	LEAD (PB)	0.07
TOTAL HARDNESS AS CaCO3	3144	MANGANESE (MN)	6.7
SODIUM (NA) (CALC.)	339	MERCURY (HG)	*
SODIUM (NA) (OBS.)	330	MOLYBDENUM (MO)	*
POTASSIUM (K)	21	NICKEL (NI)	0.64
CALCIUM (CA)	650	NITRATE (AS N)	31
MAGNESIUM (MG)	370	NITRITE (AS N)	*
SULFATE (SO4)	2530	PHOSPHORUS (P)	*
CHLORIDE (CL)	880	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	42	SILVER (AG)	*
PH, UNITS	6.04	ZINC (ZN)	0.68
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	2.06	URANIUM (U)	0.049
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Himes

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 17, 1985
 Location: 40-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	6.09×10^{-9}		
Th-230	0.00×10^{-9}	$\pm 0.06 \times 10^{-9}$	4.0×10^{-10}
Ra-226	0.59×10^{-9}	$\pm 0.17 \times 10^{-9}$	1.3×10^{-10}
Pb-210	0.26×10^{-9}	$\pm 0.41 \times 10^{-9}$	4.0×10^{-9}
Po-210	0.05×10^{-9}	$\pm 1.15 \times 10^{-9}$	3.0×10^{-9}

Date collected: October 17, 1985
 Location: 41-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	75.15×10^{-9}		
Th-230	0.15×10^{-9}	$\pm 0.09 \times 10^{-9}$	2.0×10^{-10}
Ra-226	1.00×10^{-9}	$\pm 0.24 \times 10^{-9}$	2.5×10^{-10}
Pb-210	0.37×10^{-9}	$\pm 0.22 \times 10^{-9}$	6.0×10^{-9}
Po-210	1.04×10^{-9}	$\pm 1.13 \times 10^{-9}$	3.0×10^{-9}

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JAN 13 1986

WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-17

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

40 SC (17344)

SAMPLE TAKEN 10/17/85

TOTAL SUSPENDED SOLIDS	MG/L	78	COPPER (CU)	MG/L	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	718		FLUORIDE (F)	0.07	
TOTAL DISS. SOLIDS (OBS.)	804		IRON (FE)(TOTAL)	1.34	
CONDUCTIVITY @25 C.	965		IRON (FE)(DISS.)	*	
TOTAL ALKALINITY AS CaCO3	90		LEAD (PB)	ND(0.05)	
TOTAL HARDNESS AS CaCO3	429		MANGANESE (MN)	0.30	
SODIUM (NA) (CALC.)	56		MERCURY (HG)	*	
SODIUM (NA) (OBS.)	57		MOLYBDENUM (MO)	*	
POTASSIUM (K)	17		NICKEL (NI)	0.02	
CALCIUM (CA)	124		NITRATE (AS N)	ND(0.01)	
MAGNESIUM (MG)	29		NITRITE (AS N)	*	
SULFATE (SO4)	361		PHOSPHORUS (P)	*	
CHLORIDE (CL)	76		SELENIUM (SE)	ND(0.001)	
CARBONATE (CO3)	0		SILICA (SiO2)	*	
BICARBONATE (HCO3)	110		SILVER (AG)	*	
PH, UNITS	7.30		ZINC (ZN)	0.03	
ALUMINUM (AL)	*		VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)	0.12		URANIUM (U)	0.009	
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS	*	
BORON (B)	*		PHENOL	*	
CATION-ANION BALANCE	*		RADIUM 226, PCI/L		
CADMIUM (CD)	*		(LLD), CI/ML		
CHROMIUM (CR)	*		OIL AND GREASE	*	
C.O.D.	*		TOTAL ORG. CARBON	*	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Harris

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JAN 13 1986

J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-18

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

41 SC (17345)

SAMPLE TAKEN 10/17/85

TOTAL SUSPENDED SOLIDS	MG/L	328	COPPER (CU)	MG/L	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	2934		FLUORIDE (F)	0.27	
TOTAL DISS. SOLIDS (OBS.)	3144		IRON (FE)(TOTAL)	8.2	
CONDUCTIVITY @25 C.	3250		IRON (FE)(DISS.)	*	
TOTAL ALKALINITY AS CaCO3	166		LEAD (PB)	0.10	
TOTAL HARDNESS AS CaCO3	500		MANGANESE (MN)	0.15	
SODIUM (NA) (CALC.)	186		MERCURY (HG)	*	
SODIUM (NA) (OBS.)	197		MOLYBDENUM (MO)	*	
POTASSIUM (K)	9		NICKEL (NI)	0.07	
CALCIUM (CA)	580		NITRATE (AS N)	3.83	
MAGNESIUM (MG)	118		NITRITE (AS N)	*	
SULFATE (SO4)	1390		PHOSPHORUS (P)	*	
CHLORIDE (CL)	532		SELENIUM (SE)	ND(0.001)	
CARBONATE (CO3)	0		SILICA (SiO2)	*	
BICARBONATE (HCO3)	203		SILVER (AG)	*	
PH, UNITS	7.11		ZINC (ZN)	0.06	
ALUMINUM (AL)	*		VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)	0.21		URANIUM (U)	0.111	
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS	*	
BORON (B)	*		PHENOL	*	
CATION-ANION BALANCE	*		RADIUM 226, PCI/L		
CADMIUM (CD)	*		(LLD), CI/ML		
CHROMIUM (CR)	*		OIL AND GREASE	*	
C.O.D.	*		TOTAL ORG. CARBON	*	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Sary J. Hines

4. VEGETATION, FOOD, AND FISH SAMPLES

No samples collected this quarter.

5. SOIL AND SEDIMENT SAMPLES

No samples collected this quarter.

6. DIRECT RADIATION MEASUREMENTS

DATE: 1 October 1985 - 1 January 1986

<u>LOCATION</u>	<u>EXPOSURE RATE</u> <u>(mr/qr)</u>	<u>ERROR ESTIMATE</u> <u>(mr/qr)</u>
Site 1	46.2	± 25.7
Site 2	102.5	± 58.2
Site 3	<u>DISCONTINUED</u>	
Site 4	43.2	± 7.9
Site 5	56.7	± 21.1
Site 6	44.0	± 20.4

LOCATIONS: Site 1 - 7800' WNW of yellowcake dryer stack.
 Site 2 - 500' S of yellowcake dryer stack.
 Site 3 - 3200' NE of yellowcake dryer stack.
 Site 4 - 11800' NNE of yellowcake dryer stack.
 Site 5 - 3000' ENE of yellowcake dryer stack.
 Site 6 - 11700' S of yellowcake dryer stack.

DETECTION MONITORING DATA

POINT OF COMPLIANCE WELL(S) 5-SC

POINT OF COMPLIANCE WELL(S) 42-SC

DATE (MO/YR)	INDICATOR SPECIES			DATE (MO/YR)	INDICATOR SPECIES		
	As (mg/l)	Se (mg/l)	pH (units)		As (mg/l)	Se (mg/l)	pH (units)
07-85	-0.005	-0.001	2.9		-0.005	-0.001	3.2
08-85	-0.005	-0.001	3.0		-0.005	-0.001	3.3
09-85	-0.005	-0.001			-0.005	-0.001	
10-85	-0.005	-0.001	3.0		-0.005	-0.001	2.9
11-85	-0.005	0.001	2.9		-0.005	-0.001	3.2
12-85	-0.005	0.001	3.2		-0.005	-0.001	3.4
SAMPLE POPULATION	6	6	5	SAMPLE POPULATION	6	6	5
SAMPLE MEAN	-0.005	-0.001	3.0	SAMPLE MEAN	-0.005	-0.001	3.2
SAMPLE STANDARD DEVIATION	0.0	0.0	.01	SAMPLE STANDARD DEVIATION	0.0	0.0	.03

SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)

SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)

STATISTICAL SIGNIFICANCE TEST: _____

REFERENCE: _____

SAMPLE STATISTICAL CALCULATION:

RESULTS OF STATISTICAL EVALUATION:

DETECTION MONITORING DATA

BACKGROUND WELL(S) 39-SC

BACKGROUND WELL(S) 41-SC

DATE (MO/YR)	INDICATOR SPECIES			DATE (MO/YR)	INDICATOR SPECIES		
	As (mg/l)	Se (mg/l)	pH (units)		As (mg/l)	Se (mg/l)	pH (units)
07-85	-0.005	-0.001	4.3		-0.005	-0.001	6.1
08-85	-0.005	-0.001	4.4		-0.005	-0.001	6.9
09-85	-0.005	-0.001			-0.005	-0.001	
10-85	-0.005	-0.001	6.4		-0.005	-0.001	7.1
11-85	-0.005	-0.001	4.5		-0.005	0.020	6.9
12-85	-0.005	-0.001	4.5		-0.005	0.001	6.1
SAMPLE POPULATION	6	6	5	SAMPLE POPULATION	6	5	5
SAMPLE MEAN	-0.005	-0.001	4.8	SAMPLE MEAN	-0.005	-0.001	6.62
SAMPLE STANDARD DEVIATION	0.0	0.0	.79	SAMPLE STANDARD DEVIATION	0.0	0.0	.23
SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)				SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)			

STATISTICAL SIGNIFICANCE TEST: _____

REFERENCE: _____

SAMPLE STATISTICAL CALCULATION: _____

RESULTS OF STATISTICAL EVALUATION: _____

40-6659

ENVIRONMENTAL SAMPLE DATA

4th Quarter 1985

PETROTOMICS COMPANY
Shirley Basin, WY

1. STACK SAMPLES

Date collected:

Location:

Stack flow rate (m^3/sec):

NO DISCHARGE STACKS PRESENT

2. AIR SAMPLES

Locations: Site 1 - 7800' WNW of yellowcake dryer stack.
 Site 2 - 500' S of yellowcake dryer stack.
 Site 3 - 3200' NE of yellowcake dryer stack. - DISCONTINUED
 Site 4 - 11800' NNE of yellowcake dryer stack.
 Site 5 - 3000' ENE of yellowcake dryer stack.
 Site 6 - 11700' S of yellowcake dryer stack.

DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)	<u>ΣMPC</u>
LOCATION: SITE 1	U-Nat	0.37 X 10 ⁻¹⁵		1 X 10 ⁻¹⁶	.01
	Th-230	5.1 X 10 ⁻¹⁵	± 0.3 X 10 ⁻¹⁵	1 X 10 ⁻¹⁶	6.4
	Ra-226	0.1 X 10 ⁻¹⁵	± 0.05 X 10 ⁻¹⁵	1 X 10 ⁻¹⁶	.003
	Pb-210	1.1 X 10 ⁻¹⁴	± 0.1 X 10 ⁻¹⁴	1 X 10 ⁻¹⁵	.3
	Rn-222	1.44 X 10 ⁻⁹	± 0.11 X 10 ⁻⁹	0.2 X 10 ⁻⁹	48.0
DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>				
LOCATION: SITE 2	U-Nat	0.94 X 10 ⁻¹⁵		1 X 10 ⁻¹⁶	.02
	Th-230	4.7 X 10 ⁻¹⁵	± 0.3 X 10 ⁻¹⁵	1 X 10 ⁻¹⁶	5.9
	Ra-226	0.32 X 10 ⁻¹⁵	± 0.09 X 10 ⁻¹⁵	1 X 10 ⁻¹⁶	.01
	Pb-210	1.3 X 10 ⁻¹⁴	± 0.1 X 10 ⁻¹⁴	1 X 10 ⁻¹⁵	.4
	Rn-222	1.15 X 10 ⁻⁹	± 0.09 X 10 ⁻⁹	0.2 X 10 ⁻⁹	38.3

2. AIR SAMPLES (CONTINUED)

DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)	<u>%MPC</u>
LOCATION: SITE 3	<u>DISCONTINUED</u>				
DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>				
LOCATION: SITE 4	U-Nat	0.79×10^{-15}		1×10^{-16}	.02
	Th-230	0.3×10^{-15}	$\pm 0.1 \times 10^{-15}$	1×10^{-16}	.40
	Ra-226	0.10×10^{-15}	$\pm 0.05 \times 10^{-15}$	1×10^{-16}	.003
	Pb-210	1.3×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.40
	Rn-222	0.71×10^{-9}	$\pm 0.07 \times 10^{-9}$	0.2×10^{-9}	23.6
DATE COLLECTED: 4th Quarter 1985	<u>RADIONUCLIDE</u>				
LOCATION: SITE 5	U-Nat	1.27×10^{-15}		1×10^{-16}	.02
	Th-230	6.0×10^{-15}	$\pm 0.3 \times 10^{-15}$	1×10^{-16}	7.5
	Ra-226	1.40×10^{-15}	$\pm 0.20 \times 10^{-15}$	1×10^{-16}	.04
	Pb-210	1.8×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.50
	Rn-222	0.73×10^{-9}	$\pm 0.08 \times 10^{-9}$	0.2×10^{-9}	24.3

2. AIR SAMPLES (CONTINUED)

DATE COLLECTED: 4th Quarter 1985	<u>RADIOISOTOPE</u>	<u>CONCENTRATION</u> (uCi/ml)	<u>ERROR ESTIMATE</u> (uCi/ml)	<u>LLD</u> (uCi/ml)	<u>%MPC</u>
LOCATION: SITE 6	U-Nat	0.25×10^{-15}		1×10^{-16}	.005
	Th-230	0.10×10^{-15}	$\pm 0.1 \times 10^{-15}$	1×10^{-16}	.10
	Ra-226	0.08×10^{-15}	$\pm 0.04 \times 10^{-15}$	1×10^{-16}	.002
	Pb-210	1.6×10^{-14}	$\pm 0.1 \times 10^{-14}$	1×10^{-15}	.40
	Rn-222	0.72×10^{-9}	$\pm 0.08 \times 10^{-9}$	0.2×10^{-9}	24.0

3. LIQUID SAMPLES

Date collected: October 15, 1985
Location: Mill Feed Pond
Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat (Dissolved)	61.61×10^{-9}		
U-nat (Suspended)	5.42×10^{-9}		
Th-230 (Dissolved)	0.21×10^{-9}	$\pm 0.11 \times 10^{-9}$	3.0×10^{-10}
Th-230 (Suspended)	0.17×10^{-9}	$\pm 0.10 \times 10^{-9}$	3.0×10^{-10}
Ra-226 (Dissolved)	4.69×10^{-9}	$\pm 0.65 \times 10^{-9}$	5.4×10^{-10}
Ra-226 (Suspended)	0.70×10^{-9}	$\pm 0.23 \times 10^{-9}$	1.9×10^{-10}
Pb-210 (Dissolved)	0.56×10^{-9}	$\pm 0.72 \times 10^{-9}$	2.0×10^{-9}
Pb-210 (Suspended)	0.23×10^{-9}	$\pm 0.74 \times 10^{-9}$	2.0×10^{-9}
Po-210 (Dissolved)	1.71×10^{-9}	$\pm 1.43 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 0.75 \times 10^{-9}$	0.2×10^{-10}

WESTERN ENVIRONMENTAL SERVICES AND TESTING, INC.
6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
(307) 234-5511

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J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-19

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,CH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

MILL FEED POND (17333)

SAMPLE TAKEN 10/15/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	4.0	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	642	FLUORIDE (F)	0.31
TOTAL DISS. SOLIDS (OBS.)	744	IRON (FE)(TOTAL)	0.08
CONDUCTIVITY @25 C.	855	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	146	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	104	MANGANESE (MN)	ND(0.01)
SODIUM (NA) (CALC.)	176	MERCURY (HG)	*
SODIUM (NA) (OBS.)	180	MOLYBDENUM (MO)	*
POTASSIUM (K)	7	NICKEL (NI)	0.01
CALCIUM (CA)	17	NITRATE (AS N)	ND(0.01)
MAGNESIUM (MG)	15	NITRITE (AS N)	*
SULFATE (SO4)	324	PHOSPHORUS (P)	*
CHLORIDE (CL)	10	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	19	SILICA (SiO2)	*
BICARBONATE (HCO3)	143	SILVER (AG)	*
PH, UNITS	8.66	ZINC (ZN)	0.01
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	0.12	URANIUM (U)	0.091
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Himes

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Mine Shop Well
 Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	7.45×10^{-9}		
U-nat (Suspended)	4.06×10^{-9}		
Th-230 (Dissolved)	0.20×10^{-9}	$\pm 0.11 \times 10^{-9}$	1.0×10^{-10}
Th-230 (Suspended)	0.36×10^{-9}	$\pm 0.64 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	1.16×10^{-9}	$\pm 0.43 \times 10^{-9}$	5.8×10^{-10}
Ra-226 (Suspended)	0.18×10^{-9}	$\pm 0.25 \times 10^{-9}$	2.7×10^{-10}
Pb-210 (Dissolved)	0.42×10^{-9}	$\pm 1.8 \times 10^{-9}$	2.0×10^{-9}
Pb-210 (Suspended)	0.40×10^{-9}	$\pm 0.16 \times 10^{-9}$	2.0×10^{-9}
Po-210 (Dissolved)	0.20×10^{-9}	$\pm 1.10 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 1.45 \times 10^{-9}$	1.0×10^{-10}

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WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-20

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

MINE SHOP WELL (17338)

SAMPLE TAKEN 10/15/85

TOTAL SUSPENDED SOLIDS	MG/L	0.8	COPPER (CU)	MG/L	0.06
TOTAL DISS. SOLIDS (CALC.)	551		FLUORIDE (F)	0.14	
TOTAL DISS. SOLIDS (OBS.)	569		IRON (FE)(TOTAL)	0.08	
CONDUCTIVITY @25 C.	790		IRON (FE)(DISS.)	*	
TOTAL ALKALINITY AS CaCO3	142		LEAD (PB)	ND(0.05)	
TOTAL HARDNESS AS CaCO3	101		MANGANESE (MN)	0.02	
SODIUM (NA) (CALC.)	148		MERCURY (HG)	*	
SODIUM (NA) (OBS.)	153		MOLYBDENUM (MO)	ND(0.2)	
POTASSIUM (K)	5		NICKEL (NI)	0.01	
CALCIUM (CA)	24		NITRATE (AS N)	0.20	
MAGNESIUM (MG)	10		NITRITE (AS N)	*	
SULFATE (SO4)	268		PHOSPHORUS (P)	*	
CHLORIDE (CL)	5		SELENIUM (SE)	ND(0.001)	
CARBONATE (CO3)	0		SILICA (SiO2)	*	
BICARBONATE (HCO3)	174		SILVER (AG)	*	
PH, UNITS	8.19		ZINC (ZN)	0.02	
ALUMINUM (AL)	*		VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)	ND(0.10)		URANIUM (U)	0.011	
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS	*	
BORON (B)	*		PHENOL	*	
CATION-ANION BALANCE	*		RADIUM 226, PCI/L		
CADMIUM (CD)	*		(LLD), CI/ML		
CHROMIUM (CR)	*		OIL AND GREASE	*	
C.O.D.	*		TOTAL ORG. CARBON	1	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Hines

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	94.78×10^{-9}		
U-nat (Suspended)	3.38×10^{-9}		
Th-230 (Dissolved)	0.48×10^{-9}	$\pm 0.14 \times 10^{-9}$	1.0×10^{-10}
Th-230 (Suspended)	0.22×10^{-9}	$\pm 0.56 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	0.66×10^{-9}	$\pm 0.21 \times 10^{-9}$	1.3×10^{-10}
Ra-226 (Suspended)	0.18×10^{-9}	$\pm 0.16 \times 10^{-9}$	1.9×10^{-10}
Pb-210 (Dissolved)	0.24×10^{-9}	$\pm 0.39 \times 10^{-9}$	8.0×10^{-9}
Pb-210 (Suspended)	0.16×10^{-9}	$\pm 0.55 \times 10^{-9}$	1.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 1.77 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.26×10^{-9}	$\pm 1.04 \times 10^{-9}$	4.0×10^{-10}

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River - Upstream
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat (Dissolved)	94.78×10^{-9}		
U-nat (Suspended)	4.06×10^{-9}		
Th-230 (Dissolved)	0.24×10^{-9}	$\pm 0.11 \times 10^{-9}$	2.0×10^{-10}
Th-230 (Suspended)	0.22×10^{-9}	$\pm 0.56 \times 10^{-9}$	1.0×10^{-10}
Ra-226 (Dissolved)	0.77×10^{-9}	$\pm 0.18 \times 10^{-9}$	1.5×10^{-10}
Ra-226 (Suspended)	0.79×10^{-9}	$\pm 0.20 \times 10^{-9}$	2.3×10^{-10}
Pb-210 (Dissolved)	0.31×10^{-9}	$\pm 0.62 \times 10^{-9}$	1.0×10^{-9}
Pb-210 (Suspended)	0.16×10^{-9}	$\pm 0.55 \times 10^{-9}$	1.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 0.46 \times 10^{-9}$	5.0×10^{-9}
Po-210 (Suspended)	0.19×10^{-9}	$\pm 0.97 \times 10^{-9}$	3.0×10^{-10}

3. LIQUID SAMPLES

Date collected: October 15, 1985
 Location: Little Medicine Bow River - Downstream
 Type of sample: Surface - Grab

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat (Dissolved)	51.45×10^{-9}		
U-nat (Suspended)	3.38×10^{-9}		
Th-230 (Dissolved)	0.06×10^{-9}	$\pm 0.07 \times 10^{-9}$	4.0×10^{-10}
Th-230 (Suspended)	0.19×10^{-9}	$\pm 0.34 \times 10^{-9}$	2.0×10^{-10}
Ra-226 (Dissolved)	0.55×10^{-9}	$\pm 0.18 \times 10^{-9}$	2.6×10^{-10}
Ra-226 (Suspended)	0.83×10^{-9}	$\pm 0.21 \times 10^{-9}$	2.1×10^{-10}
Pb-210 (Dissolved)	0.22×10^{-9}	$\pm 0.54 \times 10^{-9}$	4.0×10^{-9}
Pb-210 (Suspended)	0.10×10^{-9}	$\pm 0.37 \times 10^{-9}$	4.0×10^{-9}
Po-210 (Dissolved)	0.00×10^{-9}	$\pm 1.02 \times 10^{-9}$	3.0×10^{-9}
Po-210 (Suspended)	0.00×10^{-9}	$\pm 2.16 \times 10^{-9}$	3.0×10^{-10}

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 15, 1985
 Location: Townsite
 Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat	3.39×10^{-9}		
Th-230	0.01×10^{-9}	$\pm 0.05 \times 10^{-9}$	2.0×10^{-10}
Ra-226	0.25×10^{-9}	$\pm 0.15 \times 10^{-9}$	2.3×10^{-10}
Pb-210	0.00×10^{-9}	$\pm 0.75 \times 10^{-9}$	7.0×10^{-9}
Po-210	1.01×10^{-9}	$\pm 1.05 \times 10^{-9}$	3.0×10^{-9}

Date collected: October 15, 1985
 Location: RTH-1
 Type of sample: Groundwater - Well plugged - no sample.

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WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-26

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

TOWNSITE (17331)

SAMPLE TAKEN 10/13/85

TOTAL SUSPENDED SOLIDS	MG/L	6.8	COPPER (CU)	MG/L	0.18
TOTAL DISS. SOLIDS (CALC.)		357	FLUORIDE (F)		0.80
TOTAL DISS. SOLIDS (OBS.)		406	IRON (FE)(TOTAL)		1.00
CONDUCTIVITY @25 C.		510	IRON (FE)(DISS.)		*
TOTAL ALKALINITY AS CaCO3		98	LEAD (PB)		ND(0.05)
TOTAL HARDNESS AS CaCO3		257	MANGANESE (MN)		0.08
SODIUM (NA) (CALC.)		15	MERCURY (HG)		*
SODIUM (NA) (OBS.)		17	MOLYBDENUM (MO)		ND(0.2)
POTASSIUM (K)		3	NICKEL (NI)		ND(0.01)
CALCIUM (CA)		80	NITRATE (AS N)		ND(0.01)
MAGNESIUM (MG)		14	NITRITE (AS N)		*
SULFATE (SO4)		174	PHOSPHORUS (P)		*
CHLORIDE (CL)		10	SELENIUM (SE)		ND(0.001)
CARBONATE (CO3)		0	SILICA (SiO2)		*
BICARBONATE (HCO3)		120	SILVER (AG)		*
PH, UNITS		7.79	ZINC (ZN)		0.12
ALUMINUM (AL)		*	VANADIUM (V)		ND(0.5)
AMMONIA (AS N)		*	URANIUM (U)		0.005
ARSENIC (AS)		ND(0.001)	EH, MILLIVOLTS		*
BORON (B)		*	PHENOL		*
CATION-ANION BALANCE		*	RADIUM 226, PCI/L		
CADMIUM (CD)		*	(LLD), CI/ML		
CHROMIUM (CR)		*	OIL AND GREASE		*
C.O.D.		*	TOTAL ORG. CARBON		1

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Himes

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 15, 1985
 Location: RTH-4
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	6.77×10^{-9}		
Th-230	0.09×10^{-9}	$\pm 0.08 \times 10^{-9}$	3.0×10^{-10}
Ra-226	1.14×10^{-9}	$\pm 0.27 \times 10^{-9}$	3.2×10^{-10}
Pb-210	0.17×10^{-9}	$\pm 0.26 \times 10^{-9}$	3.0×10^{-9}
Po-210	1.16×10^{-9}	$\pm 1.06 \times 10^{-9}$	4.0×10^{-9}

Date collected: October 15, 1985
 Location: RTH-5
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>			
U-nat	14.89×10^{-9}		
Th-230	0.20×10^{-9}	$\pm 0.20 \times 10^{-9}$	7.0×10^{-10}
Ra-226	2.67×10^{-9}	$\pm 0.36 \times 10^{-9}$	3.2×10^{-10}
Pb-210	0.42×10^{-9}	$\pm 2.6 \times 10^{-9}$	2.0×10^{-9}
Po-210	1.32×10^{-9}	$\pm 1.14 \times 10^{-9}$	2.0×10^{-9}

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6756 WEST URANIUM ROAD
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WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-24

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

RTH-4 (17329)

SAMPLE TAKEN 10/16/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	5.2	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	619	FLUORIDE (F)	0.21
TOTAL DISS. SOLIDS (OBS.)	681	IRON (FE)(TOTAL)	0.31
CONDUCTIVITY @25 C.	780	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	58	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	437	MANGANESE (MN)	0.39
SODIUM (NA) (CALC.)	18	MERCURY (HG)	*
SODIUM (NA) (OBS.)	20	MOLYBDENUM (MO)	ND(0.2)
POTASSIUM (K)	5	NICKEL (NI)	0.02
CALCIUM (CA)	119	NITRATE (AS N)	ND(0.01)
MAGNESIUM (MG)	34	NITRITE (AS N)	*
SULFATE (SO4)	400	PHOSPHORUS (P)	*
CHLORIDE (CL)	6	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	71	SILVER (AG)	*
PH, UNITS	7.69	ZINC (ZN)	0.50
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	*	URANIUM (U)	0.010
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	1

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Harry J. Hines

WESTERN ENVIRONMENTAL SERVICES AND TESTING, INC.
6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
(307) 234-5511

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JAN 13 1986

J. H. WHITMAN

WATER ANALYSIS

CLIENT PETRODOMICS COMPANY LAB NO. 85-045-25

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

RTH-5 (17330)

SAMPLE TAKEN 10/15/85

TOTAL SUSPENDED SOLIDS	MG/L	2718	COPPER (CU)	MG/L	0.10
TOTAL DISS. SOLIDS (CALC.)		1411	FLUORIDE (F)		0.71
TOTAL DISS. SOLIDS (OBS.)		1546	IRON (FE)(TOTAL)		113
CONDUCTIVITY @25 C.		1450	IRON (FE)(DISS.)		*
TOTAL ALKALINITY AS CaCO ₃		138	LEAD (PB)		0.12
TOTAL HARDNESS AS CaCO ₃		1062	MANGANESE (MN)		5.7
SODIUM (NA) (CALC.)		15	MERCURY (HG)		*
SODIUM (NA) (OBS.)		14	MOLYBDENUM (MO)	ND(0.2)	
POTASSIUM (K)		6	NICKEL (NI)		0.13
CALCIUM (CA)		320	NITRATE (AS N)		1.30
MAGNESIUM (MG)		64	NITRITE (AS N)		*
SULFATE (SO ₄)		919	PHOSPHORUS (P)		*
CHLORIDE (CL)		5	SELENIUM (SE)	ND(0.001)	
CARBONATE (CO ₃)		0	SILICA (SiO ₂)		*
BICARBONATE (HCO ₃)		169	SILVER (AG)		*
PH, UNITS		7.38	ZINC (ZN)		0.81
ALUMINUM (AL)		*	VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)		*	URANIUM (U)		0.022
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS		*
BORON (B)		*	PHENOL		*
CATION-ANION BALANCE		*	RADIUM 226, PCI/L		
CADMIUM (CD)		*	(LLD), CI/ML		
CHROMIUM (CR)		*	OIL AND GREASE		*
C.O.D.		*	TOTAL ORG. CARBON		36

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Harry J. Harris

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 17, 1985
Location: Collection Well
Type of sample: Groundwater - Pumped

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat	23.69 X 10 ⁻⁹		
Ra-226	0.38 X 10 ⁻⁹	± 0.12 X 10 ⁻⁹	1.3 X 10 ⁻¹⁰

Date collected: October 16, 1985
Location: 1-AC
Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION</u> <u>(uCi/ml)</u>	<u>ERROR ESTIMATE</u> <u>(uCi/ml)</u>	<u>LLD</u> <u>(uCi/ml)</u>
U-nat	92.75 X 10 ⁻⁹		
Ra-226	2.16 X 10 ⁻⁹	± 0.27 X 10 ⁻⁹	1.7 X 10 ⁻¹⁰

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6756 WEST URANIUM ROAD
CASPER, WYOMING 82604
(307) 234-5511

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JAN 13 1986

J. H. WHITMAN

WATER ANALYSIS

CLIENT	PETROTOMICS COMPANY	LAB NO.	85-045-1
ADDRESS	SHIRLEY BASIN, WYOMING	DATE RECEIVED	10/17/85
ANALYZED BY	JPM,GH,JH,MJ	DATE	1/7/86
		JOB NO.	8540-411

COLLECTION WELL (17350)

SAMPLE TAKEN 10/17/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	12.0	COPPER (CU)	1.1
TOTAL DISS. SOLIDS (CALC.)	20745	FLUORIDE (F)	6.18
TOTAL DISS. SOLIDS (OBS.)	24576	IRON (FE)(TOTAL)	1730
CONDUCTIVITY @25 C.	12400	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	0	LEAD (PB)	0.29
TOTAL HARDNESS AS CaCO3	4649	MANGANESE (MN)	90.0
SODIUM (NA) (CALC.)	4123	MERCURY (HG)	*
SODIUM (NA) (OBS.)	330	MOLYBDENUM (MO)	*
POTASSIUM (K)	8	NICKEL (NI)	3.79
CALCIUM (CA)	430	NITRATE (AS N)	0.92
MAGNESIUM (MG)	869	NITRITE (AS N)	*
SULFATE (SO4)	16300	PHOSPHORUS (P)	*
CHLORIDE (CL)	335	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	0	SILVER (AG)	*
PH, UNITS	2.49	ZINC (ZN)	10.0
ALUMINUM (AL)	*	VANADIUM (V)	32
AMMONIA (AS N)	129	URANIUM (U)	0.035
ARSENIC (AS)	0.006	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	0.38±0.12
CADMIUM (CD)	*	(LLD), µCI/ML	1.3E-10
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Henry J. Harris

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JAN 13 1986

J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-14

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

AC-1 (17349)

SAMPLE TAKEN 10/16/85

TOTAL SUSPENDED SOLIDS	MG/L	482	COPPER (CU)	MG/L	0.13
TOTAL DISS. SOLIDS (CALC.)	1974	FLUORIDE (F)	1.20		
TOTAL DISS. SOLIDS (OBS.)	2139	IRON (FE)(TOTAL)	100		
CONDUCTIVITY @25 C.	2100	IRON (FE)(DISS.)	*		
TOTAL ALKALINITY AS CaCO ₃	0	LEAD (PB)	0.07		
TOTAL HARDNESS AS CaCO ₃	1116	MANGANESE (MN)	11		
SODIUM (NA) (CALC.)	63	MERCURY (HG)	*		
SODIUM (NA) (OBS.)	31	MOLYBDENUM (MO)	*		
POTASSIUM (K)	10	NICKEL (NI)	0.67		
CALCIUM (CA)	340	NITRATE (AS N)	ND(0.01)		
MAGNESIUM (MG)	65	NITRITE (AS N)	*		
SULFATE (SO ₄)	1375	PHOSPHORUS (P)	*		
CHLORIDE (CL)	10	SELENIUM (SE)	ND(0.001)		
CARBONATE (CO ₃)	0	SILICA (SiO ₂)	*		
BICARBONATE (HCO ₃)	0	SILVER (AG)	*		
PH, UNITS	2.63	ZINC (ZN)	3.8		
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)		
AMMONIA (AS N)	1.61	URANIUM (U)	0.137		
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*		
BORON (B)	*	PHENOL	*		
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	2.16±0.27		
CADMIUM (CD)	*	(LLD), uCi/ML	1.7E-10		
CHROMIUM (CR)	*	OIL AND GREASE	*		
C.O.D.	*	TOTAL ORG. CARBON	*		

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Sam J. Harris

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 16, 1985
 Location: 3-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	49.42 X 10 ⁻⁹		
Th-230	0.11 X 10 ⁻⁹	± 0.08 X 10 ⁻⁹	1.0 X 10 ⁻¹⁰
Ra-226	4.04 X 10 ⁻⁹	± 0.35 X 10 ⁻⁹	1.8 X 10 ⁻¹⁰
Pb-210	0.48 X 10 ⁻⁹	± 1.4 X 10 ⁻⁹	1.0 X 10 ⁻⁹
Po-210	0.15 X 10 ⁻⁹	± 1.07 X 10 ⁻⁹	3.0 X 10 ⁻⁹

Date collected: October 16, 1985
 Location: 4-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>			
U-nat	33.17 X 10 ⁻⁹		
Th-230	0.04 X 10 ⁻⁹	± 0.03 X 10 ⁻⁹	4.0 X 10 ⁻¹⁰
Ra-226	14.99 X 10 ⁻⁹	± 0.76 X 10 ⁻⁹	1.2 X 10 ⁻¹⁰
Pb-210	0.54 X 10 ⁻⁹	± 0.76 X 10 ⁻⁹	4.0 X 10 ⁻⁹
Po-210	0.18 X 10 ⁻⁹	± 1.08 X 10 ⁻⁹	3.0 X 10 ⁻⁹

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J. H. WHITMAN

WATER ANALYSIS

CLIENT	PETROTOMICS COMPANY	LAB NO.	85-045-15
ADDRESS	SHIRLEY BASIN, WYOMING	DATE RECEIVED	10/17/85
ANALYZED BY	JPM, GH, JH, MJ	DATE	1/7/86
		JOB NO.	8540-411

3 SC (17340)

SAMPLE TAKEN 10/16/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	64	COPPER (CU)	0.03
TOTAL DISS. SOLIDS (CALC.)	5340	FLUORIDE (F)	2.64
TOTAL DISS. SOLIDS (OBS.)	6049	IRON (FE)(TOTAL)	0.53
CONDUCTIVITY @25 C.	4850	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	316	LEAD (PB)	0.08
TOTAL HARDNESS AS CaCO3	3292	MANGANESE (MN)	5.6
SODIUM (NA) (CALC.)	433	MERCURY (HG)	*
SODIUM (NA) (OBS.)	420	MOLYBDENUM (MO)	*
POTASSIUM (K)	33	NICKEL (NI)	0.82
CALCIUM (CA)	610	NITRATE (AS N)	6.91
MAGNESIUM (MG)	430	NITRITE (AS N)	*
SULFATE (SO4)	3240	PHOSPHORUS (P)	*
CHLORIDE (CL)	416	SELENIUM (SE)	0.002
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	386	SILVER (AG)	*
PH, UNITS	7.30	ZINC (ZN)	0.02
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	5.57	URANIUM (U)	0.073
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Harris

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WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-16

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

4 SC (17341)

SAMPLE TAKEN 10/16/85

TOTAL SUSPENDED SOLIDS	MG/L	351	COPPER (CU)	MG/L	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	4802		FLUORIDE (F)	3.23	
TOTAL DISS. SOLIDS (OBS.)	5494		IRON (FE)(TOTAL)	0.86	
CONDUCTIVITY @25 C.	5050		IRON (FE)(DISS.)	*	
TOTAL ALKALINITY AS CaCO3	34		LEAD (PB)	0.07	
TOTAL HARDNESS AS CaCO3	3144		MANGANESE (MN)	6.7	
SODIUM (NA) (CALC.)	339		MERCURY (HG)	*	
SODIUM (NA) (OBS.)	330		MOLYBDENUM (MO)	*	
POTASSIUM (K)	21		NICKEL (NI)	0.64	
CALCIUM (CA)	650		NITRATE (AS N)	31	
MAGNESIUM (MG)	370		NITRITE (AS N)	*	
SULFATE (SO4)	2530		PHOSPHORUS (P)	*	
CHLORIDE (CL)	880		SELENIUM (SE)	ND(0.001)	
CARBONATE (CO3)	0		SILICA (SiO2)	*	
BICARBONATE (HCO3)	42		SILVER (AG)	*	
PH, UNITS	6.04		ZINC (ZN)	0.68	
ALUMINUM (AL)	*		VANADIUM (V)	ND(0.5)	
AMMONIA (AS N)	2.06		URANIUM (U)	0.049	
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS	*	
BORON (B)	*		PHENOL	*	
CATION-ANION BALANCE	*		RADIUM 226, PCI/L		
CADMIUM (CD)	*		(LLD), CI/ML		
CHROMIUM (CR)	*		OIL AND GREASE	*	
C.O.D.	*		TOTAL ORG. CARBON	*	

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Mary J. Himes

3. LIQUID SAMPLES (CONTINUED)

Date collected: October 17, 1985
 Location: 40-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>	<u>CONCENTRATION (uCi/ml)</u>	<u>ERROR ESTIMATE (uCi/ml)</u>	<u>LLD (uCi/ml)</u>
U-nat	6.09×10^{-9}		
Th-230	0.00×10^{-9}	$\pm 0.06 \times 10^{-9}$	4.0×10^{-10}
Ra-226	0.59×10^{-9}	$\pm 0.17 \times 10^{-9}$	1.3×10^{-10}
Pb-210	0.26×10^{-9}	$\pm 0.41 \times 10^{-9}$	4.0×10^{-9}
Po-210	0.05×10^{-9}	$\pm 1.15 \times 10^{-9}$	3.0×10^{-9}

Date collected: October 17, 1985
 Location: 41-SC
 Type of sample: Groundwater - Bailed

<u>RADIONUCLIDE</u>			
U-nat	75.15×10^{-9}		
Th-230	0.15×10^{-9}	$\pm 0.09 \times 10^{-9}$	2.0×10^{-10}
Ra-226	1.00×10^{-9}	$\pm 0.24 \times 10^{-9}$	2.5×10^{-10}
Pb-210	0.37×10^{-9}	$\pm 0.22 \times 10^{-9}$	6.0×10^{-9}
Po-210	1.04×10^{-9}	$\pm 1.13 \times 10^{-9}$	3.0×10^{-9}

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WATER ANALYSIS

J. H. WHITMAN

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-17

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

40 SC (17344)

SAMPLE TAKEN 10/17/85

	MG/L		MG/L
TOTAL SUSPENDED SOLIDS	78	COPPER (CU)	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)	718	FLUORIDE (F)	0.07
TOTAL DISS. SOLIDS (OBS.)	804	IRON (FE)(TOTAL)	1.34
CONDUCTIVITY @25 C.	965	IRON (FE)(DISS.)	*
TOTAL ALKALINITY AS CaCO3	90	LEAD (PB)	ND(0.05)
TOTAL HARDNESS AS CaCO3	429	MANGANESE (MN)	0.30
SODIUM (NA) (CALC.)	56	MERCURY (HG)	*
SODIUM (NA) (OBS.)	57	MOLYBDENUM (MO)	*
POTASSIUM (K)	17	NICKEL (NI)	0.02
CALCIUM (CA)	124	NITRATE (AS N)	ND(0.01)
MAGNESIUM (MG)	29	NITRITE (AS N)	*
SULFATE (SO4)	361	PHOSPHORUS (P)	*
CHLORIDE (CL)	76	SELENIUM (SE)	ND(0.001)
CARBONATE (CO3)	0	SILICA (SiO2)	*
BICARBONATE (HCO3)	110	SILVER (AG)	*
PH, UNITS	7.30	ZINC (ZN)	0.03
ALUMINUM (AL)	*	VANADIUM (V)	ND(0.5)
AMMONIA (AS N)	0.12	URANIUM (U)	0.009
ARSENIC (AS)	ND(0.001)	EH, MILLIVOLTS	*
BORON (B)	*	PHENOL	*
CATION-ANION BALANCE	*	RADIUM 226, PCI/L	
CADMIUM (CD)	*	(LLD), CI/ML	
CHROMIUM (CR)	*	OIL AND GREASE	*
C.O.D.	*	TOTAL ORG. CARBON	*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Larry J. Harris

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J. H. WHITMAN

WATER ANALYSIS

CLIENT PETROTOMICS COMPANY LAB NO. 85-045-18

ADDRESS SHIRLEY BASIN, WYOMING DATE RECEIVED 10/17/85

ANALYZED BY JPM,GH,JH,MJ DATE 1/7/86 JOB NO. 8540-411

41 SC (17345)

SAMPLE TAKEN 10/17/85

TOTAL SUSPENDED SOLIDS	MG/L	328	COPPER (CU)	MG/L	ND(0.03)
TOTAL DISS. SOLIDS (CALC.)		2934	FLUORIDE (F)		0.27
TOTAL DISS. SOLIDS (OBS.)		3144	IRON (FE)(TOTAL)		8.2
CONDUCTIVITY @25 C.		3250	IRON (FE)(DISS.)		*
TOTAL ALKALINITY AS CaCO3		166	LEAD (PB)		0.10
TOTAL HARDNESS AS CaCO3		500	MANGANESE (MN)		0.15
SODIUM (NA) (CALC.)		186	MERCURY (HG)		*
SODIUM (NA) (OBS.)		197	MOLYBDENUM (MO)		*
POTASSIUM (K)		9	NICKEL (NI)		0.07
CALCIUM (CA)		580	NITRATE (AS N)		3.83
MAGNESIUM (MG)		118	NITRITE (AS N)		*
SULFATE (SO4)		1390	PHOSPHORUS (P)		*
CHLORIDE (CL)		532	SELENIUM (SE)		ND(0.001)
CARBONATE (CO3)		0	SILICA (SiO2)		*
BICARBONATE (HCO3)		203	SILVER (AG)		*
PH, UNITS		7.11	ZINC (ZN)		0.06
ALUMINUM (AL)		*	VANADIUM (V)		ND(0.5)
AMMONIA (AS N)		0.21	URANIUM (U)		0.111
ARSENIC (AS)	ND(0.001)		EH, MILLIVOLTS		*
BORON (B)		*	PHENOL		*
CATION-ANION BALANCE		*	RADIUM 226, PCI/L		
CADMIUM (CD)		*	(LLD), CI/ML		
CHROMIUM (CR)		*	OIL AND GREASE		*
C.O.D.		*	TOTAL ORG. CARBON		*

* = TESTS NOT REQUESTED

ND = NOT DETECTED AT LEVEL GIVEN
IN PARENTHESES.

Gary J. Hines

4. VEGETATION, FOOD, AND FISH SAMPLES

No samples collected this quarter.

5. SOIL AND SEDIMENT SAMPLES

No samples collected this quarter.

6. DIRECT RADIATION MEASUREMENTS

DATE: 1 October 1985 - 1 January 1986

<u>LOCATION</u>	<u>EXPOSURE RATE</u> <u>(mr/qr)</u>	<u>ERROR ESTIMATE</u> <u>(mr/qr)</u>
Site 1	46.2	± 25.7
Site 2	102.5	± 58.2
Site 3	<u>DISCONTINUED</u>	
Site 4	43.2	± 7.9
Site 5	56.7	± 21.1
Site 6	44.0	± 20.4

LOCATIONS: Site 1 - 7800' WNW of yellowcake dryer stack.
 Site 2 - 500' S of yellowcake dryer stack.
 Site 3 - 3200' NE of yellowcake dryer stack.
 Site 4 - 11800' NNE of yellowcake dryer stack.
 Site 5 - 3000' ENE of yellowcake dryer stack.
 Site 6 - 11700' S of yellowcake dryer stack.

DETECTION MONITORING DATA

POINT OF COMPLIANCE WELL(S) 5-SC		POINT OF COMPLIANCE WELL(S) 42-SC	
DATE (MO/YR)	INDICATOR SPECIES	DATE (MO/YR)	INDICATOR SPECIES
	As (mg/l) Se (mg/l) pH (units)		As (mg/l) Se (mg/l) pH (units)
07-85	-0.005 -0.001 2.9		-0.005 -0.001 3.2
08-85	-0.005 -0.001 3.0		-0.005 -0.001 3.3
09-85	-0.005 -0.001 3.0		-0.005 -0.001 2.9
10-85	-0.005 -0.001 2.9		-0.005 -0.001 3.2
11-85	-0.005 0.001 3.2		-0.005 -0.001 3.4
12-85	-0.005 0.001 3.2		-0.005 -0.001 3.4
SAMPLE POPULATION	6 6 5	SAMPLE POPULATION	6 6 5
SAMPLE MEAN	-0.005 -0.001 3.0	SAMPLE MEAN	-0.005 -0.001 3.2
SAMPLE STANDARD DEVIATION	0.0 0.0 .01	SAMPLE STANDARD DEVIATION	0.0 0.0 .03
SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)		SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)	

STATISTICAL SIGNIFICANCE TEST: _____

SAMPLE STATISTICAL CALCULATION: _____

RESULTS OF STATISTICAL EVALUATION: _____

DETECTION MONITORING DATA

BACKGROUND WELL(S) 39-SC

<u>DATE (MO/YR)</u>	<u>INDICATOR SPECIES</u>		
	<u>As (mg/l)</u>	<u>Se (mg/l)</u>	<u>pH (units)</u>
07-85	-0.005	-0.001	4.3
08-85	-0.005	-0.001	4.4
09-85	-0.005	-0.001	
10-85	-0.005	-0.001	6.4
11-85	-0.005	-0.001	4.5
12-85	-0.005	-0.001	4.5
SAMPLE POPULATION	6	6	5
SAMPLE MEAN	-0.005	-0.001	4.8
SAMPLE STANDARD DEVIATION	0.0	0.0	.79
SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)			

STATISTICAL SIGNIFICANCE TEST: _____

SAMPLE STATISTICAL CALCULATION:

RESULTS OF STATISTICAL EVALUATION:

BACKGROUND WELL(S) 41-SC

<u>DATE (MO/YR)</u>	<u>INDICATOR SPECIES</u>		
	<u>As (mg/l)</u>	<u>Se (mg/l)</u>	<u>pH (units)</u>
	-0.005	-0.001	6.1
	-0.005	-0.001	6.9
	-0.005	-0.001	
	-0.005	-0.001	7.1
	-0.005	0.020	6.9
	-0.005	0.001	6.1
SAMPLE POPULATION	6	5	5
SAMPLE MEAN	-0.005	-0.001	6.62
SAMPLE STANDARD DEVIATION	0.0	0.0	.23
SAMPLE DISTRIBUTION (NORMAL, POISSON, OTHER)			

REFERENCE: _____