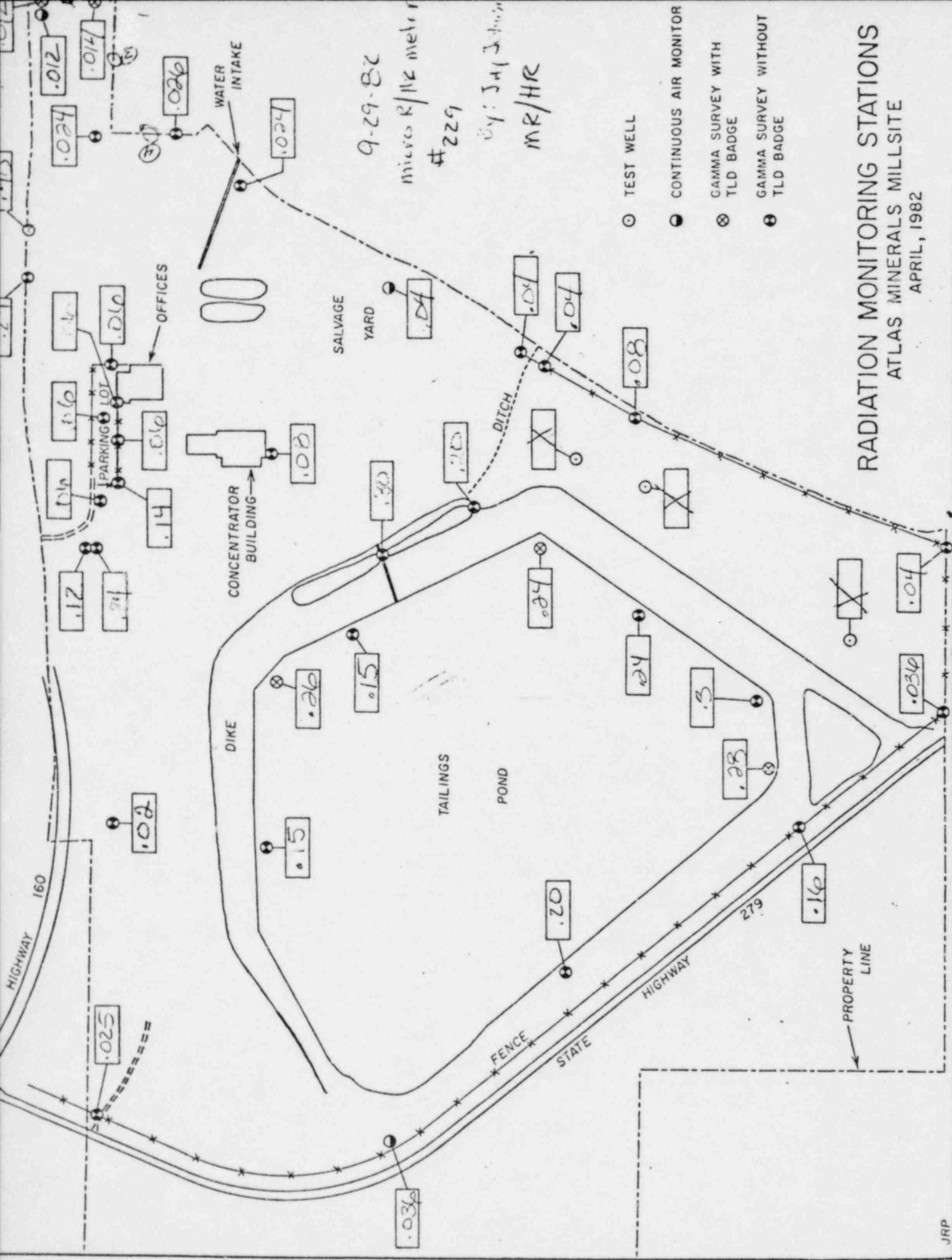


THIRD QUARTER

Gamma Survey of the Tailings
Pond and Perimeter



RADIATION MONITORING STATIONS
 ATLAS MINERALS MILLSITE
 APRIL, 1982

- TEST WELL
- CONTINUOUS AIR MONITOR
- ⊗ GAMMA SURVEY WITH TLD BADGE
- ⊕ GAMMA SURVEY WITHOUT TLD BADGE

9-29-82
 Micro R/HR meter #229
 By: Jay Johnson
 MR/HR

THIRD QUARTER 1982
CONTINUOUS AIR SAMPLES

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #1

Date of Collection September 1982

Location of Sampler North East of Mill

Name of Sampler Collector J. Johnson

Radionuclide	MPC	Concentration uci/ml	Error Estimate	LLD uci/ml	Name & Date of %MPC Assayer
U-235	5×10^{-12} uci/ml	$.03 \times 10^{-12}$	+ .0008	1×10^{-16} uci/ml	.6 VH 10/13/8
RN ²²²	30×10^{-10} uci/ml	3.3×10^{-10}	+ .18	2×10^{-10} uci/ml	11 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.012 \times 10^{-12}$		1×10^{-15} uci/ml	.3
Quarter: _____					
Th-230	8×10^{-14} uci/ml	$.6 \times 10^{-14}$	0	1×10^{-16} uci/ml	7.5 VH 10/14/8
Ra-226	3×10^{-12} uci/ml	$.0037 \times 10^{-12}$	0	1×10^{-16} uci/ml	12 JJ 10/21/8

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #2

Date of Collection September 1982

Location of Sampler Mill Salvage Yard

Name of Sampler Collector J. Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LID uci/ml</u>	<u>Name & Date of Assayer</u>
U-238	5×10^{-12} uci/ml	$.06 \times 10^{-12}$	<u>+ 0</u>	1×10^{-16} uci/ml	1.2 VH 10/13
Rn ²²²	30×10^{-10} uci/ml	2.5×10^{-10}	<u>+.25</u>	2×10^{-10} uci/ml	8 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.014 \times 10^{-12}$		1×10^{-15} uci/ml	.35
Quarter: _____					
Th-230	8×10^{-14} uci/ml	1.05×10^{-14}		1×10^{-16} uci/ml	13 VH 10/14/8
Ra-226	3×10^{-12} uci/ml	$.0058 \times 10^{-12}$		1×10^{-16} uci/ml	.19 JJ 10/21/8

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #3

Date of Collection September 1982

Location of Sampler North West Tails Pond

Name of Sampler Collector J. Johnson

Radionuclide	MPC	Concentration uci/ml	Error Estimate	LLD uci/ml	Name & Date of %MPC Assayer
U-Nat	5×10^{-12} uci/ml	$.03 \times 10^{-12}$	+ .0008	1×10^{-16} uci/ml	.6 VH 10/13/8
Rn ²²²	30×10^{-10} uci/ml	3.6×10^{-10}	+ .22	2×10^{-10} uci/ml	12 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.05 \times 10^{-12}$		1×10^{-15} uci/ml	1.25
Quarter: _____					
Th-230	8×10^{-14} uci/ml	2.83×10^{-14}		1×10^{-16} uci/ml	35 VH 10/14/8
Ra-226	3×10^{-12} uci/ml	$.039 \times 10^{-12}$		1×10^{-16} uci/ml	1.3 JJ 10/21/8

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #4

Date of Collection September 1982

Location of Sampler Arches Headquarters

Name of Sampler Collector J Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>Name & Date of Assayer</u>
U-Nat	5×10^{-12} uci/ml	$.02 \times 10^{-12}$	+ 3	1×10^{-10} uci/ml	.4 VH 10/13/8
Rn ²²²	30×10^{-10} uci/ml	1.8×10^{-10}	.18	2×10^{-10} uci/ml	6 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.016 \times 10^{-12}$		1×10^{-15} uci/ml	.4
	Quarter: _____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	$.83 \times 10^{-14}$		1×10^{-16} uci/ml	10 VH 10/14
Ra-226	3×10^{-12} uci/ml	$.0026 \times 10^{-12}$		1×10^{-16} uci/ml	.09 JJ 10/21

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #5

Date of Collection September 1982

Location of Sampler Moab Sewage Plant

Name of Sampler Collector J. Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>Name & Date of %MPC Assayer</u>
U-235	5×10^{-12} uci/ml	$.005 \times 10^{-12}$	<u>+ .00008</u>	1×10^{-16} uci/ml	<u>.1 VH 10/18/82</u>
Rn-222	30×10^{-10} uci/ml	$.7 \times 10^{-10}$	<u>+ .25</u>	2×10^{-10} uci/ml	<u>2 JJ</u>
Pb-210	4×10^{-12} uci/ml	$.011 \times 10^{-12}$		1×10^{-15} uci/ml	<u>.275</u>
Quarter: _____					
Th-230	8×10^{-14} uci/ml	$.41 \times 10^{-14}$		1×10^{-16} uci/ml	<u>5 .VH 10/14/82</u>
Ra-226	3×10^{-12} uci/ml	$.0008 \times 10^{-12}$		1×10^{-16} uci/ml	<u>.03 JJ 10/21/82</u>

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: September 1982

Sample Number #6

Date of Collection September 1982

Location of Sampler Approx. 2 Mi S Mill

Name of Sampler Collector J. Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>Name & Date of Assayer</u>
U-238	5×10^{-12} uci/ml	$.005 \times 10^{-12}$	<u>+ 0</u>	1×10^{-16} uci/ml	.1 VH 10/13/82
Rn ²²²	30×10^{-10} uci/ml	1.1×10^{-10}	<u>+ .22</u>	2×10^{-10} uci/ml	4 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.01 \times 10^{-12}$		1×10^{-15} uci/ml	.25
	Quarter: _____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	$.16 \times 10^{-14}$		1×10^{-16} uci/ml	2 VH 10/14/82
Ra-226	3×10^{-12} uci/ml	$.0007 \times 10^{-12}$		1×10^{-16} uci/ml	.02 JJ 10/12/82

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: August 1982

Sample Number #1

Date of Collection August 1982

Location of Sampler North East of Mill

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name & Date of Assayer</u>
U-Nat	5×10^{-12} uci/ml	$.02 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.4	VH
Rn ²²²	30×10^{-10} uci/ml	3.3×10^{-10}	$\pm .2$	2×10^{-10} uci/ml	11	JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.008 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____		
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml		
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml		

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: August 1982

Sample Number #2

Date of Collection August 1982

Location of Sampler Mill Salvage Yard

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name & Date of Assay</u>
U-238	5×10^{-12} uci/ml	$.05 \times 10^{-12}$	$\pm .0008$	1×10^{-16} uci/ml	1	VH
Rn-222	30×10^{-10} uci/ml	5.6×10^{-10}	$\pm .20$	2×10^{-10} uci/ml	18.7	JJ
Pb-210	4×10^{-12} uci/ml	$.012 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____		
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml		
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml		

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: August 1982

Sample Number #3

Date of Collection August 1982

Location of Sampler North West Tails Pond

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>Name & Date of Assay</u>
U-238	5×10^{-12} uci/ml	$.02 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.4 VH
Rn-222	30×10^{-10} uci/ml	4.2×10^{-10}	$\pm .25$	2×10^{-10} uci/ml	14 JJ
Pb-210	4×10^{-12} uci/ml	$.01 \times 10^{-12}$		1×10^{-15} uci/ml	
	Quarter: _____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: August 1982

Sample Number #4

Date of Collection August 1982

Location of Sampler Arches Headquarters

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>Name & Date of %MPC Assay</u>
U-238	5×10^{-12} uci/ml	$.01 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.2 VH
Rn ²²²	30×10^{-10} uci/ml	1.3×10^{-10}	$\pm .25$	2×10^{-10} uci/ml	4.3 JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.011 \times 10^{-12}$		1×10^{-15} uci/ml	
	Quarter: _____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLESMonth: August 1982Sample number #5Date of Collection August 1982Location of Sampler Moab Sewage PlantName of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name & Date of Assay</u>
U-238	5×10^{-12} uci/ml	$.004 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.08	VH
Rn-222	30×10^{-10} uci/ml	$.36 \times 10^{-10}$	\pm	2×10^{-10} uci/ml	1.2	JJ
Pb-210	4×10^{-12} uci/ml	$.002 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

VH

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT
CONTINUOUS AIR SAMPLES

Month: August 1982

Sample Number #6

Date of Collection August 1982

Location of Sampler Approx. 2 mi S mill

Name of Sampler Collector Johnson

Radionuclide	MPC	Concentration uci/ml	Error Estimate	LLD uci/ml	%MPC	Name & Date of Assay
U-238	5×10^{-12} uci/ml	$.004 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.08	VH
Rn ²²²	30×10^{-10} uci/ml	54×10^{-10}	$\pm .27$	2×10^{-10} uci/ml	1.87	JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.009 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #1

Date of Collection July 1982

Location of Sampler North East of Mill

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name Date Assay</u>
U-Nat	5×10^{-12} uci/ml	$.01 \times 10^{-12}$	<u>+ 0</u>	1×10^{-16} uci/ml	.2	VH
Rn ²²²	30×10^{-10} uci/ml	3.3×10^{-10}	<u>+ .25</u>	2×10^{-10} uci/ml	11	JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.013 \times 10^{-12}$		1×10^{-15} uci/ml	11	
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

VH

ATLAS MINERALS

VH

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #2

Date of Collection July 1982

Location of Sampler Mill Salvage Yard

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name Date Assay</u>
U-238	5×10^{-12} uci/ml	$.04 \times 10^{-12}$	+ .0008	1×10^{-16} uci/ml	.8	VH
Rn ²²²	30×10^{-10} uci/ml	4.0×10^{-10}	+ .29	2×10^{-10} uci/ml	13.3	JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.018 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

ATLAS MINERALS

MOAB MILL

VH

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #3

Date of Collection July 1982

Location of Sampler North West Tails Pond

Name of Sampler Collector Johnson

Radionuclide	MPC	Concentration uci/ml	Error Estimate	LLD uci/ml	%MPC	Name Date Assay
U-238	5×10^{-12} uci/ml	$.01 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.2	VH
Rn-222	30×10^{-10} uci/ml	2.5×10^{-10}	$\pm .18$	2×10^{-10} uci/ml	8.3	JJ
Pb-210	4×10^{-12} uci/ml	$.023 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #4

Date of Collection July 1982

Location of Sampler Arches Headquarters

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name Date Assay</u>
U-Nat	5×10^{-12} uci/ml	$.009 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.18	VH
Rn ²²²	30×10^{-10} uci/ml	$.7 \times 10^{-10}$	$\pm .22$	2×10^{-10} uci/ml	2.3	JJ
Pb ²¹⁰	4×10^{-12} uci/ml	$.014 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____	_____	_____
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml	_____	_____

VH

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT
CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #5

Date of Collection July 1982

Location of Sampler Moab Sewage Plant

Name of Sampler Collector Johnson

<u>Raionuclide</u>	<u>MPC</u>	<u>Concentration</u> <u>uci/ml</u>	<u>Error</u> <u>Estimate</u>	<u>LLD</u> <u>uci/ml</u>	<u>%MPC</u>	<u>Name</u> <u>Date</u> <u>Assay</u>
U-238	5×10^{-12} uci/ml	$.003 \times 10^{-12}$	+ .00008	1×10^{-16} uci/ml	.06	VH
Rn-222	30×10^{-10} uci/ml	1.1×10^{-10}	+ .22	2×10^{-10} uci/ml	3.7	JJ
Pb-210	4×10^{-12} uci/ml	$.01 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____		
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml		
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml		

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

CONTINUOUS AIR SAMPLES

Month: July 1982

Sample Number #6

Date of Collection July 1982

Location of Sampler Approx 2 Mi S of mill

Name of Sampler Collector Johnson

<u>Radionuclide</u>	<u>MPC</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>LLD uci/ml</u>	<u>%MPC</u>	<u>Name & Date of Assay</u>
U-238	5×10^{-12} uci/ml	$.003 \times 10^{-12}$	± 0	1×10^{-16} uci/ml	.06	VH
Rn ²²²	30×10^{-10} uci/ml	0	± 0	2×10^{-10} uci/ml	0	JT
Pb ²¹⁰	4×10^{-12} uci/ml	$.006 \times 10^{-12}$		1×10^{-15} uci/ml		
	Quarter: _____	_____	_____	_____		
Th-230	8×10^{-14} uci/ml	_____	_____	1×10^{-16} uci/ml		
Ra-226	3×10^{-12} uci/ml	_____	_____	1×10^{-16} uci/ml		

THIRD QUARTER 1982
SURFACE WATER RESULTS For
The COLORADO RIVER

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler 1 Below
 Date and Time Sample Was Collected 8/19/82 14:07
 Location of Sample 1 mi below mill
 Sampling Method Used (Bailed - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling - ----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name Assayer
Gross Beta-Gamma		8/30	0	0		JJ
U-Nat	3×10^{-5} uci/ml	8/23	$.0003 \times 10^{-5}$	.00008	8×10^{-10} uci/ml	VH
Ra-226	3×10^{-8} uci/ml	8/26	$.028 \times 10^{-8}$	.02	4.9×10^{-10} uci/ml	VH
Th-230	2×10^{-6} uci/ml	9/28	$.0007 \times 10^{-6}$	0	4.9×10^{-10} uci/ml	JJ
Pb-210	1×10^{-7} uci/ml				3.7×10^{-9} uci/ml	
Po-210	7×10^{-7} uci/ml				2.0×10^{-9} uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler 5 below
 Date and Time Sample Was Collected 8/19/82 14:15
 Location of Sample 5 miles below mtl
 Sampling Method Used (Bailed - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling ---
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name Assa</u>
Gross Beta-Gamma		<u>8/30</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-235	<u>3x10⁻⁵ uci/ml</u>	<u>8/23</u>	<u>.0001x10⁻⁵</u>	<u>.00008</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>8/27</u>	<u>.078x10⁻⁸</u>	<u>.02</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>9/28</u>	<u>.0006x10⁻⁶</u>	<u>0</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>				<u>2.0x10⁻⁹ uci/ml</u>	

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+				<u>.001 PPM</u>	
Na+				<u>.001 PPM</u>	
Cl-				<u>.40 PPM</u>	
SO ₄				<u>.21 PPM</u>	
NO ₃				<u>.01 PPM</u>	
Fe				<u>.001 PPM</u>	
Mn				<u>.01 PPM</u>	
As				<u>.10 PPM</u>	
Se				<u>.50 PPM</u>	
Cu				<u>.01 PPM</u>	
TDS				<u>1.0 PPM</u>	
PH				<u>.10 Units</u>	
Conductivity				<u>10 umhos</u>	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler 10 below
 Date and Time Sample Was Collected 8/19/82 14:30
 Location of Sample 10 Mi below mill
 Sampling Method Used (Bailed - Pumped) Bailed
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name Assayer</u>
Gross Beta Gamma		<u>8/30</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-Nat	<u>3x10⁻⁵ uci/ml</u>	<u>8/23</u>	<u>.0005x10⁻⁵</u>	<u>0</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>8/27</u>	<u>.08x10⁻⁸</u>	<u>.03</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>9/28</u>	<u>.0007x10⁻⁸</u>	<u>.0004</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>				<u>2.0x10⁻⁹ uci/ml</u>	

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+				<u>.001 PPM</u>	
Na+				<u>.001 PPM</u>	
Cl-				<u>.40 PPM</u>	
SO ₄				<u>.21 PPM</u>	
NO ₃				<u>.01 PPM</u>	
Fe				<u>.001 PPM</u>	
Mn				<u>.01 PPM</u>	
As				<u>.10 PPM</u>	
Se				<u>.50 PPM</u>	
Cu				<u>.01 PPM</u>	
TDS				<u>1.0 PPM</u>	
PH				<u>.10 Units</u>	
Conductivity				<u>10 umhos</u>	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month September 1982

Name of Sample Above Mill
 Date and Time Sample Was Collected 9-15-82 13:23
 Location of Sample River Above Mill
 Sampling Method Used (Bailed - ~~Hand~~) Bailed
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/21	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	9/23	.0002x10 ⁻⁵	+ .00008	8x10 ⁻¹⁰ uci/ml	VH
Ra-226	3x10 ⁻⁸ uci/ml	9/17	.086x10 ⁻⁸	.008	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0009x10 ⁻⁶	.0004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/13	0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	2.0 PPM	0	.001 PPM	JJ
Na+	10/12	79 PPM	0	.001 PPM	JJ
Cl-	9/16	74 PPM	0	.40 PPM	JJ
SO ₄	9/21	104 PPM	2	.21 PPM	JJ
NO ₃	9/17	.61 PPM	0	.01 PPM	JJ
Fe	10/12	<.001 PPM	0	.001 PPM	JJ
Mn	10/12	<.01 PPM	0	.01 PPM	JJ
As	10/13	<.01 PPM	0	.01 PPM	JJ
Se	10/12	<.01 PPM	0	.01 PPM	JJ
Cu	10/12	<.01 PPM	0	.01 PPM	JJ
TDS	9/17	733 PPM	40	1.0 PPM	JJ
PH	9/15	8.4	0	.10 Units	JJ
Conductivity	9/15	1100 umhos	0	10 umhos	JJ

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month September 1982

Name of Sample 1/4 below
 Date and Time Sample Was Collected 9/15/82 13:35
 Location of Sample 1/4 mi below mill
 Sampling Method Used (Bailed - Pumped) Filtered
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/21	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	9/23	.0003x10 ⁻⁵	+0	8x10 ⁻¹⁰ uci/ml	VH
Ra-226	3x10 ⁻⁸ uci/ml	9/17	.066x10 ⁻⁸	.03	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0008x10 ⁻⁶	0	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/14	0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	2.2 PPM	0	.001 PPM	JJ
Na+	10/12	71 PPM	0	.001 PPM	JJ
Cl-	9/16	72.5 PPM	0	.40 PPM	JJ
SO ₄	9/21	94 PPM	6	.21 PPM	JJ
NO ₃	9/17	.715 PPM	0	.01 PPM	JJ
Fe	10/12	<.001 PPM	0	.001 PPM	JJ
Mn	10/12	<.01 PPM	0	.01 PPM	JJ
As	10/13	<.01 PPM	0	.01 PPM	JJ
Se	10/12	<.01 PPM	0	.01 PPM	JJ
Cu	10/12	<.01 PPM	0	.01 PPM	JJ
TDS	9/17	764 PPM	76	1.0 PPM	JJ
PH	9/15	8.3	0	.10 Units	JJ
Conductivity	9/15	1100 umhos	0	10 umhos	JJ

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month September 1982

Name of Sample 1/2 Below
 Date and Time Sample Was Collected 9/15/82 13:41
 Location of Sample 1/2 Mile Below Mill
 Sampling Method Used (Pailed - Pumped) RAILROAD
 The Amount of Water to be Removed Prior to Sampling -----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/21	0	0		JJ
U-238	3x10 ⁻⁵ uci/ml	9/23	.0003x10 ⁻⁵	+.0008x10 ⁻⁵	8x10 ⁻¹⁰ uci/ml	VH
Ra-226	3x10 ⁻⁸ uci/ml	9/17	.083x10 ⁻⁸	.02	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0021x10 ⁻⁶	.0004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/14	0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	1.8 PPM	0	.001 PPM	JJ
Na+	10/12	75 PPM	0	.001 PPM	JJ
Cl-	9/24	74 PPM	0	.40 PPM	JJ
SO ₄	9/21	122 PPM	10	.21 PPM	JJ
NO ₃	9/17	.715 PPM	0	.01 PPM	JJ
Fe	10/12	<.001 PPM	0	.001 PPM	JJ
Mn	10/12	<.01 PPM	0	.01 PPM	JJ
As	10/13	<.01 PPM	0	.01 PPM	JJ
Se	10/12	<.01 PPM	0	.01 PPM	JJ
Cu	10/12	<.01 PPM	0	.01 PPM	JJ
TDS	9/17	772 PPM	35	1.0 PPM	JJ
PH	9/15	8.1	0	.10 Units	JJ
Conductivity	9/15	1100 umhos	0	10 umhos	JJ

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 RIVER WATER REPORTS
 Month September 1982

Name of Sample 1 Below
 Date and Time Sample Was Collected 9/15/82 13:46
 Location of Sample 1 Mile Below
 Sampling Method Used (Filtered - Pumped) Bailed
 The Amount of Water to be Removed Prior to Sampling -----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		<u>9/21</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-Nat	<u>3x10⁻⁵ uci/ml</u>	<u>9/23</u>	<u>.0003x10⁻⁵</u>	<u>+ .00008</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>9/17</u>	<u>.10 x 10⁻⁸</u>	<u>.04</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>9/29</u>	<u>.0018x10⁻⁶</u>	<u>.0004</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3.7x10⁻⁹ uci/ml</u>	<u>-</u>
Po-210	<u>7x10⁻⁷ uci/ml</u>	<u>10/15</u>	<u>0</u>	<u>0</u>	<u>2.0x10⁻⁹ uci/ml</u>	<u>JJ</u>

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	<u>10/12</u>	<u>1.8 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Na+	<u>10/12</u>	<u>79 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Cl-	<u>9/24</u>	<u>71 PPM</u>	<u>0</u>	<u>.40 PPM</u>	<u>JJ</u>
SO ₄	<u>9/21</u>	<u>89 PPM</u>	<u>8</u>	<u>.21 PPM</u>	<u>JJ</u>
NO ₃	<u>9/17</u>	<u>.51 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Fe	<u>10/12</u>	<u>.001 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Mn	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
As	<u>10/13</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Se	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Cu	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
TDS	<u>9/17</u>	<u>772 PPM</u>	<u>89</u>	<u>1.0 PPM</u>	<u>JJ</u>
PH	<u>9/15</u>	<u>8.0</u>	<u>0</u>	<u>.10 Units</u>	<u>JJ</u>
Conductivity	<u>9/15</u>	<u>1100 umhos</u>	<u>0</u>	<u>10 umhos</u>	<u>JJ</u>

ATLAS MINERALS

MOAB HILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month September 1982

Name of Sample 5 Below
 Date and Time Sample Was Collected 9/15/82 13:56
 Location of Sample 5 Miles below mill
 Sampling Method Used (Bailed - ~~Wetpack~~) Bailed
 The Amount of Water to be Removed Prior to Sampling -----
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
Gross Beta-Gamma		<u>9/21</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-235	<u>3x10⁻⁵ uci/ml</u>	<u>9/23</u>	<u>.0002x10⁻⁵</u>	<u>+0</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>9/17</u>	<u>.18 x 10⁻⁸</u>	<u>+0</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>9/29</u>	<u>.0017x10⁻⁶</u>	<u>.001</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>	<u>10/15</u>	<u>0</u>	<u>0</u>	<u>2.0x10⁻⁹ uci/ml</u>	<u>JJ</u>

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+	<u>10/12</u>	<u>2.0 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Na+	<u>10/12</u>	<u>74 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Cl-	<u>9/24</u>	<u>71 PPM</u>	<u>0</u>	<u>.40 PPM</u>	<u>JJ</u>
SO ₄	<u>9/21</u>	<u>114 PPM</u>	<u>1</u>	<u>.21 PPM</u>	<u>JJ</u>
NO ₃	<u>9/17</u>	<u>54 PPM</u>	<u>.2</u>	<u>.01 PPM</u>	<u>JJ</u>
Fe	<u>10/12</u>	<u><.001 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Mn	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
As	<u>10/13</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Se	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Cu	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
TDS	<u>9/17</u>	<u>766 PPM</u>	<u>80</u>	<u>1.0 PPM</u>	<u>JJ</u>
PH	<u>9/15</u>	<u>8.0</u>	<u>0</u>	<u>.10 Units</u>	<u>JJ</u>
Conductivity	<u>9/15</u>	<u>1100 umhos</u>	<u>0</u>	<u>10 umhos</u>	<u>JJ</u>

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
RIVER WATER REPORTS
 Month September 1982

Name of Sample 10 Below
 Date and Time Sample Was Collected 9:15 14:10
 Location of Sample 10 Miles Below Mill
 Sampling Method Used (Bailed - Pumped) Bailed
 Line Amount of Water to be Removed Prior to Sampling -----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		<u>9/21</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-235	3×10^{-5} uci/ml	<u>9/23</u>	<u>.0002x10⁻⁵</u>	<u>+ 0</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	3×10^{-8} uci/ml	<u>9/17</u>	<u>.13x10⁻⁸</u>	<u>+ .04</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Th-230	2×10^{-5} uci/ml	<u>9/29</u>	<u>.0020x10⁻⁶</u>	<u>.0004</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Pb-210	1×10^{-7} uci/ml				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	7×10^{-7} uci/ml	<u>10/15</u>	<u>0</u>	<u>0</u>	<u>2.0x10⁻⁹ uci/ml</u>	<u>JJ</u>

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	<u>10/12</u>	<u>2.2 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Na+	<u>10/12</u>	<u>76 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Cl-	<u>9/24</u>	<u>67 PPM</u>	<u>0</u>	<u>.40 PPM</u>	<u>JJ</u>
SO ₄	<u>9/21</u>	<u>104 PPM</u>	<u>4</u>	<u>.21 PPM</u>	<u>JJ</u>
NO ₃	<u>9/17</u>	<u>.51 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Fe	<u>10/12</u>	<u><.001 PPM</u>	<u>0</u>	<u>.001 PPM</u>	<u>JJ</u>
Mn	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
As	<u>10/13</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Se	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
Cu	<u>10/12</u>	<u><.01 PPM</u>	<u>0</u>	<u>.01 PPM</u>	<u>JJ</u>
TDS	<u>9/17</u>	<u>708 PPM</u>	<u>22</u>	<u>1.0 PPM</u>	<u>JJ</u>
PH	<u>9/15</u>	<u>8.0</u>	<u>0</u>	<u>.10 Units</u>	<u>JJ</u>
Conductivity	<u>9/15</u>	<u>1100 umhos</u>	<u>0</u>	<u>10 umhos</u>	<u>JJ</u>

THIRD QUARTER 1982
GROUND WATER RESULTS

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # 1
 Date and Time Sample Was Collected September 21, 1982 11:50
 Location of Sample South West corner of tails pond
 Sampling Method Used (~~drilled~~ Pumped) pumped
 The Amount of Water to be Removed Prior to Sampling 8 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.12x10 ⁻⁶	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.12x10 ⁻⁵	+ 0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/15	.27x10 ⁻⁸	+ .07	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0052x10 ⁻⁶	+ .0005	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/5	.0068x10 ⁻⁶	+ .0002	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	198 PPM	+ 0	.001 PPM	JJ
Na+	10/12	2500 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	3262 PPM	0	.40 PPM	CF
SO ₄	9/24	11221 PPM	440	.21 PPM	CF
NO ₃	9-23	538 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	6.4 PPM	+ 0	.01 PPM	JJ
As	10/13	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.19 PPM	+ 0	.01 PPM	JJ
TDS	9/23	25,047 PPM	+ 644	1.0 PPM	JJ
PH	9/21	7.3		.10 Units	JJ
Conductivity	9/21	26,000 umhos		10 umhos	JJ

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
MONITOR WELL REPORTS
3rd Quarter 1982

Well # 1-R
 Date and Time Sample Was Collected 9-21-82 11:30
 Location of Sample South West corner of tails pond
 Sampling Method Used (Hand - Pumped) pumped
 The Amount of Water to be Removed Prior to Sampling 12 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.038x10 ⁻⁶	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.092x10 ⁻⁵	+ .006	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/15	.47x10 ⁻⁸	+ .04	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0079x10 ⁻⁶	+ .004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/5	.006x10 ⁻⁶	+ .001	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	117 PPM	+ 0	.001 PPM	JJ
Na+	10/12	1250 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	2305 PPM	0	.40 PPM	CF
SO ₄	9/24	8094 PPM	170	.21 PPM	CF
NO ₃	9/23	525 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	5.9 PPM	+ 0	.01 PPM	JJ
As	10/13	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.45 PPM	+ 0	.01 PPM	JJ
TDS	9/23	19,945 PPM	+ 1671	1.0 PPM	JJ
PH	9/21	7.1		.10 Units	JJ
Conductivity	9/21	22,000 umhos		10 umhos	JJ

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # 2
 Date and Time Sample Was Collected 21 September 1982 14:20
 Location of Sample South of Tails Pond
 Sampling Method used (Bailed - ~~Handed~~) Bailed
 The Amount of Water to be Removed Prior to Sampling 4 Gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.56 x 10 ⁻⁵	.3		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.69x10 ⁻⁵	+0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/15	.35x10 ⁻⁸	+0.09	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	10/7	.0041x10 ⁻⁶	+0.004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/6	.0066x10 ⁻⁶	+0.032	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	.81 PPM	+0	.001 PPM	JJ
Na+	10/12	1400 PPM	+0	.001 PPM	JJ
Cl-	9/24	1596 PPM	0	.40 PPM	CF
SO ₄	9/24	9164 PPM	.427	.21 PPM	CF
NO ₃	9/23	.413 PPM	+0	.01 PPM	VH
Fe	10/12	<.001 PPM	+0	.001 PPM	JJ
Mn	10/12	.10.9 PPM	+0	.01 PPM	JJ
As	10/13	<.01 PPM	+0	.01 PPM	JJ
Sr	10/12	<.01 PPM	+0	.01 PPM	JJ
Cu	10/12	.16 PPM	+0	.01 PPM	JJ
TDS	9/23	17,732	+112	1.0 PPM	JJ
PH	9/21	7.3		.10 Units	JJ
Conductivity	9/21	19,000 umhos		10 umhos	JJ

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # 2-R
 Date and Time Sample Was Collected 21 September 1982 13:45
 Location of Sample South of Tails Pond
 Sampling Method Used (Drilled - Pumped) Pumped
 The Amount of Water to be Removed Prior to Sampling 4.5 Gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.93x10 ⁻⁶	.04		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.76x10 ⁻⁵	+0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/15	.21x10 ⁻⁸	+0.04	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	10/7	.0041x10 ⁻⁶	+0.004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/6	.0067x10 ⁻⁶	+ .003	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	100 PPM	+ 0	.001 PPM	JJ
Na+	10/12	1450 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	1702 PPM	0	.40 PPM	CF
SO ₄	9/24	8094 PPM	392	.21 PPM	CF
NO ₃	9/23	520 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	3.9 PPM	+ 0	.01 PPM	JJ
As	10/13	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.12 PPM	+ 0	.01 PPM	JJ
TDS	9/23	18,977 PPM	+ 161	1.0 PPM	JJ
PH	9/21	7.4		.10 Units	JJ
Conductivity	9/21	19,000 umhos		10 umhos	JJ

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # Arches
 Date and Time Sample Was Collected 9/21/82 15:00
 Location of Sample Arches Headquarters
 Sampling Method used (~~Drilled~~ - Pumped) Pumped
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	0	0		JJ
U-238	3x10 ⁻⁵ uci/ml	10/25	.00004x10 ⁻⁵	0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/6	.088x10 ⁻⁸	+ .004	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0019x10 ⁻⁶	+ .0008	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/12	0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	1.2 PPM	+ 0	.001 PPM	JJ
Na+	10/12	50 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	57 PPM	+ 0	.40 PPM	CF
SO ₄	9/24	104 PPM	+ 17	.21 PPM	CF
NO ₃	9/23	2.02 PPM	+ 0	.01 PPM	VH
Fe	10/12	< .001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	< .01 PPM	+ 0	.01 PPM	JJ
As	10/13	< .01 PPM	+ 0	.01 PPM	JJ
Se	10/12	< .01 PPM	+ 0	.01 PPM	JJ
Si	10/12	.01 PPM	+ 0	.01 PPM	JJ
TDS	9/23	551 PPM	+ 13	1.0 PPM	JJ
PH	9/21	8.2		.10 Units	JJ
Conductivity	9/21	900 umhos		10 umhos	JJ

ATLAS MINERALS
 MDAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # ATP-3
 Date and Time Sample Was Collected 9/21/82 15:30
 Location of Sample North of Tails Pond
 Sampling Method Used (Filter) Pumped
 The Amount of Water to be Removed Prior to Sampling 40 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	0	0		JJ
U-Nat	3×10^{-5} uci/ml	10/15	$.0028 \times 10^{-5}$	+ .0002	8×10^{-10} uci/ml	JJ
Ra-226	3×10^{-8} uci/ml	10/6	$.11 \times 10^{-8}$	+ 0	4.9×10^{-10} uci/ml	VH
Th-230	2×10^{-6} uci/ml	9/29	$.0014 \times 10^{-6}$	+ .0004	4.9×10^{-10} uci/ml	VH
Pb-210	1×10^{-7} uci/ml				3.7×10^{-9} uci/ml	
Po-210	7×10^{-7} uci/ml	10/12	0	0	2.0×10^{-9} uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	8 PPM	+ 0	.001 PPM	JJ
Na+	10/12	190 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	511 PPM	+ 0	.40 PPM	CF
SO ₄	9/24	304 PPM	+ 4	.21 PPM	CF
NO ₃	9/23	.72 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	.57 PPM	+ 0	.01 PPM	JJ
As	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.01 PPM	+ 0	.01 PPM	JJ
TDS	9/23	1481 PPM	+ 98	1.0 PPM	JJ
PH	9/21	7.9		.10 Units	JJ
Conductivity	9/21	2,300 umhos		10 umhos	JJ

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
MONITOR WELL REPORTS
3rd Quarter 1982

Well # ATP-3
 Date and Time Sample Was Collected 9/21/82 15:30
 Location of Sample North of Tails Pond
 Sampling Method Used (Filter - Pumped)
 The Amount of Water to be Removed Prior to Sampling 40 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.0028x10 ⁻⁵	+ .0002	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/6	.11x10 ⁻⁸	+ 0	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/29	.0014x10 ⁻⁶	+ .0004	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/12	0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	8 PPM	+ 0	.001 PPM	JJ
Na+	10/12	190 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	511 PPM	+ 0	.40 PPM	CF
SO ₄	9/24	304 PPM	+ 4	.21 PPM	CF
NO ₃	9/23	.72 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	.57 PPM	+ 0	.01 PPM	JJ
As	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.01 PPM	+ 0	.01 PPM	JJ
TDS	9/23	1481 PPM	+ 98	1.0 PPM	JJ
PH	9/21	7.9		.10 Units	JJ
Conductivity	9/21	2.300 umhos		10 umhos	JJ

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JAJ

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
MONITOR WELL REPORTS
August 1982

Well # ATP-3
Date and Time Sample Was Collected 30 August 1982
Location of Sample North of Tails Pond
Sampling Method Used (Bailed - Pumped) Bailed
The Amount of Water to be Removed Prior to Sampling 32
Name of Sampler _____

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma			0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	9/10	.00015x10 ⁻⁵	.000015	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	8/30	.049x10 ⁻⁸	.01	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	9/1	.00046x10 ⁻⁶	.00003	4.9x10 ⁻¹⁰ uci/ml	JJ
Pb-210	1x10 ⁻⁷ uci/ml		1.0x10 ⁻⁹		3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml		0	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-	9/7	509 PPM	13	.40 PPM	JJ
SO ₄	9/7	283 PPM	6	.21 PPM	JJ
NO ₃	8/31	.02 PPM	+ 0	.01 PPM	JJ
Fe				.001 PPM	
Mn				.01 PPM	
As	9/8	<.01 PPM	0	.01 PPM	JJ
Se	9/8	<.01 PPM	0	.01 PPM	JJ
Cu				.01 PPM	
TDS	8/31	1750 PPM	0	1.0 PPM	JJ
PH	8/30	7.8	0	.10 Units	JJ
Conductivity	8/30	2200 umhos	0	10 umhos	JJ

24 Feet of Water in Well
Removed 32 gallons before sampling
(60' Well)

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SAS

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
MONITOR WELL REPORTS
July 1982

Well # ATP-3
Date and Time Sample Was Collected 7-26-82
Location of Sample _____
Sampling Method Used (bailed - Pumped) Bailed
The Amount of Water to be Removed Prior to Sampling 31.7 gal.
Name of Sample Dale Edwards

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/12	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	7/30	.0001x10 ⁻⁵	.00005	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	8/18	.12x10 ⁻⁸	0	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	8/10	.00084x10 ⁻⁶	.0003	4.9x10 ⁻¹⁰ uci/ml	JJ
Pb-210	1x10 ⁻⁷ uci/ml		1.x10 ⁻⁹	4	3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	8/30	.012x10 ⁻⁷	0	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-	7/29	479 PPM	16	.40 PPM	JJ
SO ₄	7/29	320 PPM	25	.21 PPM	JJ
NO ₃	7/29	.13 PPM	.02	.01 PPM	JJ
Fe				.001 PPM	
Mn				.01 PPM	
As	8/13	<.01	0	.01 PPM	JJ
Se	8/13	<.01	0	.01 PPM	JJ
Cu				.01 PPM	
TDS	7/29	1475 PPM	49	1.0 PPM	
PH	7/28	7.9	0	.10 Units	JJ
Conductivity	7/28	2300 umhos	0	10 umhos	JJ

24.29 Feet of Water in Well
Removed 31.7 gallons before sampling
(60' well)

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well #
 Date and Time Sample Was Collected 21 September 1982 11:00
 Location of Sample South east of Tail Pond
 Sampling Method Used (Dipped, Pumped) pumped
 The Amount of Water to be Removed Prior to Sampling 14 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.065x10 ⁻⁶	± .02		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.12x10 ⁻⁵	± .003	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/19	.21x10 ⁻⁸	± .04	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	10/7	.0059x10 ⁻⁶	± .0008	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/7	.0029x10 ⁻⁶	± .001	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	200 PPM	+ 0	.001 PPM	JJ
Na+	10/12	2500 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	3227 PPM	+ 0	.40 PPM	JJ
SO ₄	9/24	9097 PPM	+ 454	.21 PPM	CF
NO ₃	9/23	128 PPM	+ 0	.01 PPM	VH
Fe	10/12	1.2 PPM	+ 0	.001 PPM	JJ
Mn	10/12	5.8 PPM	+ 0	.01 PPM	JJ
As	10/13	< .01 PPM	+ 0	.01 PPM	JJ
Se	10/12	< .01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.10 PPM	+ 0	.01 PPM	JJ
TDS	9/23	19,045 PPM	+ 27	1.0 PPM	JJ
PH	9/21	7.3		.10 Units	
Conductivity	9/21	22,000 umhos		10 umhos	JJ

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
MONITOR WELL REPORTS
3rd Quarter 1982

Well # 25
 Date and Time Sample Was Collected 21 September 1982 13:20
 Location of Sample South of Tails Pond
 Sampling Method Used (Bailed - Pumped) pumped
 The Amount of Water to be Removed Prior to Sampling 11 gal
 Name of Sampler J Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.046x10 ⁻⁶	.03		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.095x10 ⁻⁵	± 0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/19	.28x10 ⁻⁸	± .04	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	10/7	.0065x10 ⁻⁶	± 0	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/7	.0033x10 ⁻⁶	± .002	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	130 PPM	± 0	.001 PPM	JJ
Na+	10/12	1400 PPM	± 0	.001 PPM	JJ
Cl-	9/24	837 PPM	± 0	.40 PPM	CF
SO ₄	9/24	7307 PPM	± 426	.21 PPM	CF
NO ₃	9/23	205 PPM	± 0	.01 PPM	VH
Fe	10/12	<.001 PPM	± 0	.001 PPM	JJ
Mn	10/12	4.7 PPM	± 0	.01 PPM	JJ
As	10/12	<.01 PPM	± 0	.01 PPM	JJ
Se	10/12	<.01 PPM	± 0	.01 PPM	JJJ
Cu	10/12	.02 PPM	± 0	.01 PPM	JJ
TDS	9/23	12,313 PPM	± 795	1.0 PPM	JJ
PH	9/21	7.3		.10 Units	JJ
Conductivity	9/21	15,000 umhos		10 umhos	JJ

ATLAS MINERALS
 MOAB MILL
 REGULATORY AFFAIRS DEPARTMENT
 MONITOR WELL REPORTS
 3rd Quarter 1982

Well # 20
 Date and Time Sample Was Collected 9/21/ 82 13:00
 Location of Sample South of tails pond
 Sampling Method Used (Drilled - Pumped) pumped
 The Amount of Water to be Removed Prior to Sampling 30 gal
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		9/30	.19x10 ⁻⁶	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	10/15	.086x10 ⁻⁵	+ .004	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	10/15	.14x10 ⁻⁸	+ .09	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	10/7	.0053x10 ⁻⁶	- .001	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml	10/8	.0069x10 ⁻⁶	+ .001	2.0x10 ⁻⁹ uci/ml	JJ

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+	10/12	100 PPM	+ 0	.001 PPM	JJ
Na+	10/12	4000 PPM	+ 0	.001 PPM	JJ
Cl-	9/24	2255 PPM	+ 0	.40 PPM	CF
SO ₄	9/24	15912 PPM	+ 368	.21 PPM	CF
NO ₃	9/23	231 PPM	+ 0	.01 PPM	VH
Fe	10/12	<.001 PPM	+ 0	.001 PPM	JJ
Mn	10/12	3.8 PPM	+ 0	.01 PPM	JJ
As	10/13	<.01 PPM	+ 0	.01 PPM	JJ
Se	10/12	<.01 PPM	+ 0	.01 PPM	JJ
Cu	10/12	.03 PPM	+ 0	.01 PPM	JJ
TDS	9/23	27,988 PPM	+ 350	1.0 PPM	JJ
PH	9/21	7.6		.10 Units	JJ
Conductivity	9/21	32,000 umhos		10 umhos	JJ

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month July 1982

Name of Sampler Above mill
 Date and Time Sample Was Collected 7/21/82 14:10
 Location of Sample Above mill
 Sampling Method Used (Bailed - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name Assa</u>
Gross Beta-Gamma		<u>8/12</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-Nat	<u>3x10⁻⁵ uci/ml</u>	<u>7/30</u>	<u>.00008x10⁻⁵</u>	<u>0</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>8/17</u>	<u>.09x10⁻⁸</u>	<u>.09</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>8/10</u>	<u>.00029x10⁻⁶</u>	<u>.00008</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>				<u>2.0x10⁻⁹ uci/ml</u>	

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+				<u>.001 PPM</u>	
Na+				<u>.001 PPM</u>	
Cl-				<u>.40 PPM</u>	
SO ₄				<u>.21 PPM</u>	
NO ₃				<u>.01 PPM</u>	
Fe				<u>.001 PPM</u>	
Mn				<u>.01 PPM</u>	
As				<u>.10 PPM</u>	
Se				<u>.50 PPM</u>	
Cu				<u>.01 PPM</u>	
TDS				<u>1.0 PPM</u>	
PH				<u>.10 Units</u>	
Conductivity				<u>10 umhos</u>	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month July 1982

Name of Sampler 1/4 below
 Date and Time Sample Was Collected 7/21/82 14:17
 Location of Sample 1/4 ml below mill
 Sampling Method Used (Bailed - ~~Pumped~~) Bailed
 The Amount of Water to be Removed Prior to Sampling ---
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/12	0	0		JJ
U-238	3×10^{-5} uci/ml	7/30	$.00008 \times 10^{-5}$	0	8×10^{-10} uci/ml	JJ
Ra-226	3×10^{-8} uci/ml	8/17	$.09 \times 10^{-8}$	.05	4.9×10^{-10} uci/ml	JJ
Th-230	2×10^{-6} uci/ml	8/10	$.00037 \times 10^{-6}$	.0002	4.9×10^{-10} uci/ml	VH
Pb-210	1×10^{-7} uci/ml				3.7×10^{-9} uci/ml	
Po-210	7×10^{-7} uci/ml				2.0×10^{-9} uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month July 1982

Name of Sampler 1/2 below
 Date and Time Sample Was Collected 7/21/82 14:22
 Location of Sample 1/2 mi. below mill
 Sampling Method Used (Bailed - Pumped) Bailed
 The Amount of Water to be Removed Prior to Sampling ---
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/12	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	7/30	.00008x10 ⁻⁵	0	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	8/17	.12x10 ⁻⁸	.04	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	8/10	.00066x10 ⁻⁶	.0002	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml				2.0x10 ⁻⁹ uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
RIVER WATER REPORTS
 Month July 1982

Name of Sample 1 below
 Date and Time Sample Was Collected 7/21/82 14:27
 Location of Sample 1 mi below mill
 Sampling Method Used (Bailed - Pumped) Bailed
 The Amount of Water to be Removed Prior to Sampling ---
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/12	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	7/30	.0002x10 ⁻⁵	.00004	8x10 ⁻¹⁰ uci/ml	JJ
Ra-226	3x10 ⁻⁸ uci/ml	8/17	.063x10 ⁻⁸	.02	4.9x10 ⁻¹⁰ uci/ml	JJ
Th-230	2x10 ⁻⁶ uci/ml	8/10	.00048x10 ⁻⁶	.0002	4.9x10 ⁻¹⁰ uci/ml	VH
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml				2.0x10 ⁻⁹ uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS
MOAB MILL
REGULATORY AFFAIRS DEPARTMENT
RIVER WATER REPORTS
 Month July 1982

Name of Sample 5 Below
 Date and Time Sample Was Collected 7/21/82 14:35
 Location of Sample 5 mi below mill
 Sampling Method Used (Pailer - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling ---
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		<u>8/12</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-Nat	<u>3x10⁻⁵ uci/ml</u>	<u>7/30</u>	<u>.0001x10⁻⁵</u>	<u>.00005</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>8/18</u>	<u>.09x10⁻⁸</u>	<u>.07</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>8/10</u>	<u>.00053x10⁻⁶</u>	<u>.0004</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>				<u>2.0x10⁻⁹ uci/ml</u>	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				<u>.001 PPM</u>	
Na+				<u>.001 PPM</u>	
Cl-				<u>.40 PPM</u>	
SO ₄				<u>.21 PPM</u>	
NO ₃				<u>.01 PPM</u>	
Fe				<u>.001 PPM</u>	
Mn				<u>.01 PPM</u>	
As				<u>.10 PPM</u>	
Se				<u>.50 PPM</u>	
Cu				<u>.01 PPM</u>	
TDS				<u>1.0 PPM</u>	
PH				<u>.10 Units</u>	
Conductivity				<u>10 umhos</u>	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month July 1982

Name of Sampler 10 below
 Date and Time Sample Was Collected 7/21/82 14:47
 Location of Sample 10 mi below mill
 Sampling Method Used (Bailed - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling ----
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/12	0	0		JJ
U-Nat	3×10^{-5} uci/ml	7/30	$.00004 \times 10^{-5}$	.000007	8×10^{-10} uci/ml	JJ
Ra-226	3×10^{-8} uci/ml	8/18	$.082 \times 10^{-8}$	0	4.9×10^{-10} uci/ml	JJ
Th-230	2×10^{-6} uci/ml	8/10	$.00033 \times 10^{-6}$	.0002	4.9×10^{-10} uci/ml	VH
Pb-210	1×10^{-7} uci/ml				3.7×10^{-9} uci/ml	
Po-210	7×10^{-7} uci/ml				2.0×10^{-9} uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler Above Mill
 Date and Time Sample Was Collected 8/19/82 13:41
 Location of Sample Above Mill
 Sampling Method Used (Bailed - ~~Pumped~~) bailed
 The Amount of Water to be Removed Prior to Sampling --
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
Gross Beta-Gamma		8/30	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	8/23	.0002x10 ⁻⁵	0	8x10 ⁻¹⁰ uci/ml	VH
Ra-226	3x10 ⁻⁸ uci/ml	8/26	.093x10 ⁻⁸	.06	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/28	.000x10 ⁻⁶	0	4.9x10 ⁻¹⁰ uci/ml	JJ
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml				2.0x10 ⁻⁹ uci/ml	

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler 1/4 below
 Date and Time Sample Was Collected 8/19/82 13:48
 Location of Sample 1/4 mi below mill
 Sampling Method Used (9' tied - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling --
 Name of Sampler J. Johnson

Radionuclide	M.P.C.	Date of Analysis	Concentration uci/ml	Error Estimate	L.L.D.	Name of Assayer
Gross Beta-Gamma		8/30	0	0		JJ
U-Nat	3x10 ⁻⁵ uci/ml	8/23	.0005x10 ⁻⁵	0	8x10 ⁻¹⁰ uci/ml	VH
Ra-226	3x10 ⁻⁸ uci/ml	8/26	.051x10 ⁻⁸	.05	4.9x10 ⁻¹⁰ uci/ml	VH
Th-230	2x10 ⁻⁶ uci/ml	9/28	.0007x10 ⁻⁶	0	4.9x10 ⁻¹⁰ uci/ml	JJ
Pb-210	1x10 ⁻⁷ uci/ml				3.7x10 ⁻⁹ uci/ml	
Po-210	7x10 ⁻⁷ uci/ml				2.0x10 ⁻⁹ uci/ml	

Common Ion and Trace Metals

	Date of Analysis	Concentration	Error Estimate	L.L.D.	Name of Assayer
K+				.001 PPM	
Na+				.001 PPM	
Cl-				.40 PPM	
SO ₄				.21 PPM	
NO ₃				.01 PPM	
Fe				.001 PPM	
Mn				.01 PPM	
As				.10 PPM	
Se				.50 PPM	
Cu				.01 PPM	
TDS				1.0 PPM	
PH				.10 Units	
Conductivity				10 umhos	

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

RIVER WATER REPORTS

Month August 1982

Name of Sampler 1/2 below
 Date and Time Sample Was Collected 8/19/82 13:58
 Location of Sample 1/2 mi below mill
 Sampling Method Used (Bottle - Pumped) bailed
 The Amount of Water to be Removed Prior to Sampling -----
 Name of Sampler J. Johnson

<u>Radionuclide</u>	<u>M.P.C.</u>	<u>Date of Analysis</u>	<u>Concentration uci/ml</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
Gross Beta-Gamma		<u>8/30</u>	<u>0</u>	<u>0</u>		<u>JJ</u>
U-Nat	<u>3x10⁻⁵ uci/ml</u>	<u>8/23</u>	<u>.0003x10⁻⁵</u>	<u>.00008</u>	<u>8x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Ra-226	<u>3x10⁻⁸ uci/ml</u>	<u>8/26</u>	<u>.062x10⁻⁸</u>	<u>.02</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>VH</u>
Th-230	<u>2x10⁻⁶ uci/ml</u>	<u>9/28</u>	<u>.0007x10⁻⁶</u>	<u>.0004</u>	<u>4.9x10⁻¹⁰ uci/ml</u>	<u>JJ</u>
Pb-210	<u>1x10⁻⁷ uci/ml</u>				<u>3.7x10⁻⁹ uci/ml</u>	
Po-210	<u>7x10⁻⁷ uci/ml</u>				<u>2.0x10⁻⁹ uci/ml</u>	

Common Ion and Trace Metals

	<u>Date of Analysis</u>	<u>Concentration</u>	<u>Error Estimate</u>	<u>L.L.D.</u>	<u>Name of Assayer</u>
K+				<u>.001 PPM</u>	
Na+				<u>.001 PPM</u>	
Cl-				<u>.40 PPM</u>	
SO ₄				<u>.21 PPM</u>	
NO ₃				<u>.01 PPM</u>	
Fe				<u>.001 PPM</u>	
Mn				<u>.01 PPM</u>	
As				<u>.10 PPM</u>	
Se				<u>.50 PPM</u>	
Cu				<u>.01 PPM</u>	
TDS				<u>1.0 PPM</u>	
PH				<u>.10 Units</u>	
Conductivity				<u>10 umhos</u>	

THIRD QUARTER 1982

ISOKINETIC STACK SAMPLING RESULTS FOR:

U^{38} Scrubber

and

U^{38} Dust Collector

THIRD QUARTER 1982

ISOKINETIC STACK SAMPLING RESULTS FOR:

$U^{3.8}$ Scrubber

and

$U^{3.8}$ Dust Collector

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

YC STACKS

3rd Quarter 1982

YC Scrubber

Date Sample was Taken 9/24/82

Name of Sample Collector Dale Edwards

<u>Radionuclide</u>	<u>Date of Sample Assay</u>	<u>Concentration UCI/ML</u>	<u>Error Estimate</u>	<u>L.L.D. UCI/ML</u>	<u>Name of Assayer</u>
U-Nat	<u>10/19</u>	<u>1140×10^{-11}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>JJ</u>
Th-230	<u>10/26</u>	<u>7.82×10^{-12}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>vh</u>
RA-226	<u>10/27</u>	<u>2.21×10^{-12}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>JJ</u>

ATLAS MINERALS

MOAB MILL

REGULATORY AFFAIRS DEPARTMENT

YC STACKS

3rd Quarter 1982

YC Dust Collector

Date Sample was Taken 9/30/82

Name of Sample Collector Dale Edwards

<u>Radionuclide</u>	<u>Date of Sample Assay</u>	<u>Concentration UCI/ML</u>	<u>Error Estimate</u>	<u>L.L.D. UCI/ML</u>	<u>Name of Assayer</u>
U-Nat	<u>10/19</u>	<u>86.8×10^{-11}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>JJ</u>
Th-230	<u>10/26</u>	<u>5.0×10^{-12}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>VH</u>
RA-226	<u>10/27</u>	<u>1.51×10^{-12}</u>	<u> </u>	<u>3.0×10^{-13}</u>	<u>JJ</u>

THIRD QUARTER 1982
WIND SPEED AND DIRECTION

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 9/13/82 Time: 08:00

Speed: 5 mph

Direction: Out of the SE 160⁰

Date: 9/13/82 Time: 15:00

Speed: 10 mph

Direction: Out of the SE 160⁰

Date: 9/14/82 Time: 08:00

Speed: 2 mph

Direction: Out of the N 0-360⁰

Date: 9/14/82 Time: 15:00

Speed: 8 mph

Direction: Out of the N 360⁰

Date: 9/15/82 Time: 08:00

Speed: 1 mph

Direction: Out of the E 90⁰

Date: 9/15/82 Time: 15:00

Speed: 4 mph

Direction: Out of the NW 300⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 9/16/82 Time: 08:00

Speed: 4 mph

Direction: Out of the S 180⁰

Date: 9/16/82 Time: 15:00

Speed: 10 mph

Direction: Out of the S 180⁰

Date: 9/17/82 Time: 08:00

Speed: 3 mph

Direction: Out of the SE 150⁰

Date: 9/17/82 Time: 15:00

Speed: 3 mph

Direction: Out of the SE 140⁰

Date: 9/18/82 Time: 08:00

Speed: 1 mph

Direction: Out of the SE 140⁰

Date: 9/18/82 Time: 15:00

Speed: 3 mph

Direction: Out of the S 180⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 9/19/82 Time: 08:00

Speed: 3 mph

Direction: Out of the N 0-360⁰

Date: 9/19/82 Time: 15:00

Speed: 1 mph

Direction: Out of the NW 310⁰

Date: 9/20/82 Time: 08:00

Speed: 8 mph

Direction: Out of the NW 320⁰

Date: 9/20/82 Time: 15:00

Speed: 8 mph

Direction: Out of the NW 320⁰

Date: 9/21/82 Time: 08:00

Speed: 5 mph

Direction: Out of the N 0 - 360⁰

Date: 9/21/82 Time: 15:00

Speed: 2 mph

Direction: Out of the E 90⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 9/22/82 Time: 08:00

Speed: 5 mph

Direction: Out of the NE 50⁰

Date: 9/22/82 Time: 15:00

Speed: 5 mph

Direction: Out of the N 0-360⁰

Date: 9/23/82 Time: 08:00

Speed: 1 mph

Direction: Out of the E 90⁰

Date: 9/23/82 Time: 15:00

Speed: 3 mph

Direction: Out of the NE 60⁰

Date: 9/24/82 Time: 08:00

Speed: 1 mph

Direction: Out of the N 0-360⁰

Date: 9/24/82 Time: 15:00

Speed: 2 mph

Direction: Out of the N 0-360⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 9/25/82 Time: 08:00

Speed: 2 mph

Direction: Out of the E 90°

Date: 9/25/82 Time: 15:00

Speed: 4 mph

Direction: Out of the S 180°

Date: 9/26/82 Time: 08:00

Speed: 5 mph

Direction: Out of the SE 140°

Date: 9/26/82 Time: 5:00

Speed: 6 mph

Direction: Out of the SE 140°

Date: _____ Time: _____

Speed: _____

Direction: _____

Date: _____ Time: _____

Speed: _____

Direction: _____

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 8/16/82 Time: 08:00

Speed: 1 mph

Direction: Out of the NE 50°

Date: 8/16/82 Time: 15:00

Speed: 2 mph

Direction: Out of the SE 140°

Date: 8/17/82 Time: 08:00

Speed: 4 mph

Direction: Out of the NE 300°

Date: 8/17/82 Time: 15:00

Speed: 2 mph

Direction: Out of the N 0-360°

Date: 8/18/82 Time: 08:00

Speed: 2 mph

Direction: Out of the N 0-360°

Date: 8/18/82 Time: 15:00

Speed: 5 mph

Direction: Out of the N 0-360°

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 8/19/82 Time: 08:00

Speed: 2 mph

Direction: Out of the N 0-360°

Date: 8/19/82 Time: 15:00

Speed: 5 mph

Direction: Out of the N 0-360°

Date: 8/20/82 Time: 08:00

Speed: 1 mph

Direction: Out of the N 0-360°

Date: 8/20/82 Time: 15:00

Speed: 5 mph

Direction: Out of the N 0-360°

Date: 8/21/82 Time: 08:00

Speed: 2 mph

Direction: Out of the NE 60°

Date: 8/21/82 Time: 15:00

Speed: 4 mph

Direction: Out of the E 90°

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 8/22/82 Time: 08:00

Speed: 4 mph

Direction: Out of the NE 60⁰

Date: 8/22/82 Time: 15:00

Speed: 10 mph

Direction: Out of the S 180⁰

Date: 8/23/82 Time: 08:00

Speed: 13 mph

Direction: Out of the E 90⁰

Date: 8/23/82 Time: 15:00

Speed: 13 mph

Direction: Out of the W 280⁰

Date: 8/24/82 Time: 08:00

Speed: 4 mph

Direction: Out of the E 90⁰

Date: 8/24/82 Time: 15:00

Speed: 4 mph

Direction: Out of the NE 240⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 8/25/82 Time: 08:00

Speed: 0 mph

Direction: Out of the W 340°

Date: 8/25/82 Time: 15:00

Speed: 1 mph

Direction: Out of the W 350°

Date: 8/26/82 Time: 08:00

Speed: 0 mph

Direction: Out of the S 180°

Date: 8/26/82 Time: 15:00

Speed: 1 mph

Direction: Out of the S 180°

Date: 8/27/82 Time: 08:00

Speed: 0 mph

Direction: Out of the S 180°

Date: 8/27/82 Time: 15:00

Speed: 4 mph

Direction: Out of the E 90°

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 8/28/82 Time: 08:00

Speed: 0 mph

Direction: Out of the E 90°

Date: 8/28/82 Time: 15:00

Speed: 1 mph

Direction: Out of the E 90°

Date: 8/29/82 Time: 08:00

Speed: 0 mph

Direction: Out of the NE 240°

Date: 8/29/82 Time: 15:00

Speed: 5 mph

Direction: Out of the NE 220°

Date: _____ Time: _____

Speed: _____

Direction: _____

Date: _____ Time: _____

Speed: _____

Direction: _____

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 7/8/82 Time: 08:00

Speed: 4 mph

Direction: Out of the S 180°

Date: 7/8/82 Time: 15:00

Speed: 8 mph

Direction: Out of the N 0-360°

Date: 7/9/82 Time: 08:00

Speed: 2 mph

Direction: Out of the N 0-360°

Date: 7/9/82 Time: 15:00

Speed: 2 mph

Direction: Out of the N 0-360°

Date: 7/10/82 Time: 08:00

Speed: 1 mph

Direction: Out of the NE 60°

Date: 7/10/82 Time: 15:00

Speed: 4 mph

Direction: Out of the N 0-360°

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 7/11/82 Time: 08:00

Speed: 3 mph

Direction: Out of the S 180⁰

Date: 7/11/82 Time: 15:00

Speed: 1 mph

Direction: Out of the SE 140⁰

Date: 7/12/82 Time: 08:00

Speed: 1 mph

Direction: Out of the E 90⁰

Date: 7/12/82 Time: 15:00

Speed: 2 mph

Direction: Out of the E 90⁰

Date: 7/13/82 Time: 08:00

Speed: 2 mph

Direction: Out of the NE 50⁰

Date: 7/13/82 Time: 15:00

Speed: 5 mph

Direction: Out of the SE 140⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 7/14/82 Time: 08:00

Speed: 1 mph

Direction: Out of the N 0-360⁰

Date: 7/14/82 Time: 15:00

Speed: 5 mph

Direction: Out of the SE 140⁰

Date: 7/15/82 Time: 08:00

Speed: 0 mph

Direction: Out of the N 0-360⁰

Date: 7/15/82 Time: 15:00

Speed: 12 mph

Direction: Out of the SE 140⁰

Date: 7/16/82 Time: 08:00

Speed: 1 mph

Direction: Out of the N 0-360

Date: 7/16/82 Time: 15:00

Speed: 10 mph

Direction: Out of the SE 150⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 7/17/82 Time: 08:00

Speed: 2 mph

Direction: Out of the N 0-360⁰

Date: 7/17/82 Time: 15:00

Speed: 4 mph

Direction: Out of the E 90⁰

Date: 7/18/82 Time: 08:00

Speed: 1 mph

Direction: Out of the E 90⁰

Date: 7/18/82 Time: 15:00

Speed: 2 mph

Direction: Out of the SE 140⁰

Date: 7/19/82 Time: 08:00

Speed: 0 mph

Direction: Out of the E 90⁰

Date: 7/19/82 Time: 15:00

Speed: 4 mph

Direction: Out of the SE 140⁰

RADON GAS SAMPLE
WIND SPEED AND DIRECTION

Date: 7/20/82 Time: 08:00

Speed: 3 mph

Direction: Out of the N 0-360^o

Date: 7/20/82 Time: 15:00

Speed: 5 mph

Direction: Out of the NE 60^o

Date: 7/21/82 Time: 08:00

Speed: 7 mph

Direction: Out of the S 180^o

Date: 7/21/82 Time: 15:00

Speed: 1 mph

Direction: Out of the NE 60^o

Date: _____ Time: _____

Speed: _____

Direction: _____

Date: _____ Time: _____

Speed: _____

Direction: _____