

UNITED NUCLEAR
C O R P O R A T I O N

970 DEC 18 AM 10 21

MINING AND MILLING DIVISION
WYOMING OPERATIONS
P.O. BOX 2996
CASPER, WYOMING 82602
(307) 265-6447

U.S. NUCLEAR
REGULATORY COMMISSION

REG.
INRC PUBLIC DOCUMENT ROOM

December 12, 1978

40-8602

U. S. Nuclear Regulatory Commission
Fuel Processing and Fabrication Branch
Division of Fuel Cycle and Material Safety
Washington, D. C. 20555

Attention: L. W. Rossbach

Gentlemen:

Attached is a copy of the information telecopied to you on December 11, 1978, with copies of the Radiochemical Analysis sheets as reported to us by Ecology Audits, Inc.

Please advise if further information is desired.

Very truly yours,

UNITED NUCLEAR CORPORATION
Mining and Milling Division

S E Wolff
C. E. Wolff
Plant Superintendent
Wyoming Operations

CEW/mdd

cc: T. O. Hiscox
C. H. Likins
A. S. Chater
D. O. Bender

FEE EXEMPT
info only

11490

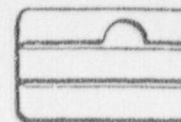
7812280361

UNITED NUCLEAR CORPORATION
MORTON RANCH PROJECT
Casper, Wyoming

Radon-222 Analysis
8/1/78 thru 10/24/78
(pCi/l)

<u>Dates</u>	<u>ASVX-1</u>	<u>ASVX-2</u>	<u>ASVX-3</u>	<u>ASVX-4</u>	<u>Box Creek Ranch</u>	<u>Douglas</u>
8/1 to 8/2	0.43±0.47			0.35±0.37		
8/2 to 8/4						0.81±0.51
8/3 to 8/5	0.72±0.40	2.02±0.66	*		0.19±0.37	
8/5 to 8/7	0.89±0.49	0.36±0.40	0.91±0.57	0.91±0.49		0.35±0.35
8/6 to 8/7						*
8/7 to 8/9	*			*	1.13±0.56	
8/9 to 8/11	0.00±0.28	0.39±0.37	1.45±0.59	0.25±0.30		
8/11 to 8/13		0.08±0.21				
8/13 to 8/15		0.29±0.33				
8/17 to 8/19	0.53±0.30	1.61±0.52	1.29±0.50	0.33±0.25	0.04±0.20	0.22±0.29
9/4 to 9/6		0.04±0.03			0.03±0.03	
9/10 to 9/12	0.23±0.28	0.46±0.32	0.04±0.23	0.26±0.22		
9/17 to 9/19	0.72±0.47	0.68±0.47		0.38±0.39	0.18±0.30	-0.06±0.31
9/22 to 9/26						0.56±0.36
9/23 to 9/25	0.35±0.31	0.90±0.44				
9/28 to 9/30	0.50±0.33	0.41±0.35	1.39±0.52	0.61±0.37	0.66±0.40	
10/4 to 10/6		2.13±0.65	0.45±0.35	0.61±0.41	1.04±0.48	
10/10 to 10/12	2.94±0.74	0.05±0.30	0.50±0.45	0.20±0.34	0.79±0.50	0.06±0.34
10/17 to 10/19		0.50±0.48		0.75±0.63		
10/22 to 10/24	0.05±0.26	0.54±0.37		0.53±0.36	0.26±0.28	0.74±0.38

* Indicates insufficient volume for sample analysis



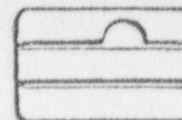
United Nuclear, Inc.
Casper, WY

EA 7818-132
Page 1 of 2

Radiochemical Analyses

<u>Sample I.D.</u>	<u>Start</u>	<u>Stop</u>	<u>pCi/l</u>
Downwind #2	1410 (8/3/78)	1130 (8/5/78)	2.02 ± 0.66
Douglas	1730 (8/2/78)	1400 (8/4/78)	0.81 ± 0.51
Main Access Rd. #4	1215 (8/1/78)	1220 (8/3/78)	0.35 ± 0.37
Box Creek Ranch	1435 (8/3/78)	1100 (8/5/78)	0.19 ± 0.37
Upwind #1	1145 (8/1/78)	1159 (8/3/78)	0.43 ± 0.47
Upwind #1	1159 (8/3/78)	1245 (8/5/78)	0.72 ± 0.40
Box Creek Pit #3	1340 (8/3/78)	1145 (8/5/78)	*
Main Road #4	1220 (8/3/78)	1007 (8/5/78)	*
#1 Upwind	1245 (8/5/78)	1133 (8/7/78)	0.89 ± 0.49
Box Creek Ranch	1100 (8/7/78)	950 (8/7/78)	*
Main Road #4	1011 (8/5/78)	905 (8/7/78)	0.91 ± 0.49
Box Creek Pit #3	1045 (8/5/78)	937 (8/7/78)	0.91 ± 0.57
#2 Downwind	1130 (8/5/78)	1045 (8/7/78)	0.36 ± 0.40
Douglas	1400 (8/5/78)	1915 (8/7/78)	0.35 ± 0.35

* Insufficient volume for sample analysis.



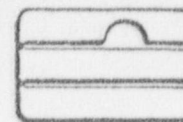
United Nuclear, Inc.
Casper, WY

EA 7818-132
Page 2 of 2

Radiochemical Analyses

<u>Sample I.D.</u>	<u>Start</u>	<u>Stop</u>	<u>pCi/l</u>
Box Creek Ranch	950 (8/7/78)	1115 (8/9/78)	1.13 ± 0.56
Site #1	1133 (8/7/78)	825 (8/9/78)	*
Site #4	905 (8/7/78)	900 (8/9/78)	*
Douglas	1900 (8/6/78)	1800 (8/7/78)	*
Upwind #1	825 (8/9/78)	1045 (8/11/78)	0.00 ± 0.28
#2 Downwind	1040 (8/9/78)	1340 (8/11/78)	0.39 ± 0.37
#4 Main Road	900 (8/9/78)	900 (8/11/78)	0.25 ± 0.30
Box Creek Pit #2 #3 DOB	1010 (8/9/78)	1130 (8/11/78)	1.45 ± 0.59
#2 Downwind	1345 (8/11/78)	1225 (8/13/78)	0.08 ± 0.21

* Insufficient volume for sample analysis.



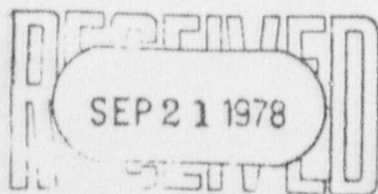
United Nuclear
Casper, Wyoming

EA 7818-132

Radiochemical Analyses

<u>Sample Number</u>	<u>Start Time</u>	<u>Stop Time</u>	<u>Rn-222 pCi/l</u>
ASVX 2 Site 2	1135 8-13-78	1140 8-15-78	0.29 ± 0.33
ASVX 1 S-1	1600 8-17-78	0910 8-19-78	0.53 ± 0.30
ASVX 2 S-2	1415 8-17-78	1010 8-19-78	1.61 ± 0.52
ASVX 3 Site 3	1130 8-17-78	0910 8-19-78	1.29 ± 0.50
ASVX 4 Site 4	1000 8-17-78	0840 8-19-78	0.33 ± 0.25
Boxcreek Ranch	1330 8-17-78	0930 8-19-78	0.04 ± 0.20
Douglas	1100 8-17-78	1105 8-19-78	0.22 ± 0.29

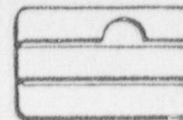
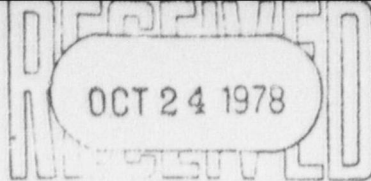
UNITED NUCLEAR CORP.



MINING & MILLING DIV.
CASPER, WYOMING

ECOLOGY AUDITS, INC.

DALLAS, TX • LAKE CHARLES, LA • CASPER, WY



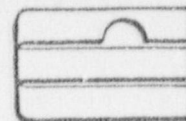
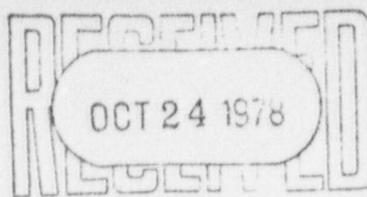
MINING & MILLING DIV.
CASPER, WYOMING

United Nuclear Corporation
Casper, WY

EA 7818-143

Radiochemical Analysis

<u>Sample Number</u>	<u>Start Date/Time</u>	<u>Stop Date/Time</u>	<u>Rn-222 pCi/l</u>
ASVX #2	9-4-78/1259	9-6-78/0952	0.04 ± 0.03
<u>Box Creek BC Ranch</u>	9-4-78/1239	9-6-78/0945	0.03 ± 0.03
ASVX #1	9-10-78/0605	9-12-78/1355	0.23 ± 0.28
ASVX #2	9-10-78/1715	9-12-78/1450	0.46 ± 0.32
ASVX #3	9-10-78/1222	9-12-78/0715	0.04 ± 0.23
ASVX #4	9-10-78/1830	9-12-78/1410	0.26 ± 0.22



MINING & MILLING DIV.
CASPER, WYOMING

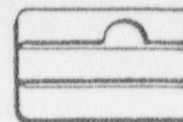
United Nuclear Corporation
Casper, WY

EA 7818-148

Radiochemical Analysis

<u>Sample Number</u>	<u>Start Date/Time</u>	<u>Stop Date/Time</u>	<u>Rn-222 pCi/l</u>
Box Creek Ranch	9-17-78/1745	9-19-78/1505	0.18 ± 0.30
Douglas	9-17-78/1200	9-19-78/1300	-0.06 ± 0.31
<u>ASVX-2</u> Down Wind #2	9-17-78/1986	9-19-78/1450	0.68 ± 0.47
<u>ASVX-1</u> Upwind	9-17-78/1835	9-19-78/1340	0.72 ± 0.47
<u>ASVX-4</u> Access Rd.	9-17-78/1910	9-19-78/1405	0.38 ± 0.39
Douglas LoVol Site	9-22-78/1708	9-26-78/0615	0.56 ± 0.36
ASVX 1	9-23-78/1500	9-25-78/1400	0.35 ± 0.31
ASVX 2	9-23-78/1630	9-25-78/1530	0.90 ± 0.44
Site ASVX 3	9-28-78/1148	9-30-78/0925	1.39 ± 0.52
Site ASVX 4	9-28-78/1300	9-30-78/1100	0.61 ± 0.37
Site Box Creek <u>Ranch</u>	9-28-78/1158	9-30-78/0955	0.66 ± 0.40
Site ASVX 2	9-28-78/1226	9-30-78/1040	0.41 ± 0.35
Site ASVX 1	9-28-78/1246	9-30-78/1040	0.50 ± 0.33

NOV 27 1980
MINING & MILLING DIV.
CASPER, WYOMING



United Nuclear
Casper, WY

EA 7818-131

Radiochemical Analyses

<u>Sample Identification</u>	<u>Start Date/Time</u>	<u>Stop Date/Time</u>	<u>Analysis Barometric Pressure in. Hg</u>	<u>Rn-222 pCi/l</u>
Box Creek Ranch	10-4-78/1405	10-6-78/1550	29.47	1.04 ± 0.48
ASVX #2	10-4-78/1500	10-6-78/1610	29.47	2.13 ± 0.65
ASVX #3	10-4-78/1345	10-6-78/1530	29.47	0.45 ± 0.35
ASVX #4	10-4-78/1315	10-6-78/1400	29.47	0.61 ± 0.41
Douglas Site	10-4-78/1715	10-6-78/1830	29.38	0.06 ± 0.34
Box Creek Ranch	10-10-78/1510	10-12-78/1430	29.45	0.79 ± 0.50
ASVX #1	10-10-78/1640	10-12-78/1540	29.45	2.94 ± 0.74
ASVX #2	10-10-78/1525	10-12-78/1410	29.45	0.05 ± 0.30
ASVX #3	10-10-78/1445	10-12-78/1350	29.45	0.50 ± 0.45
ASVX #4	10-10-78/1550	10-12-78/1510	29.45	0.20 ± 0.34
ASVX #1	10-17-78/1100	10-19-78/1430	29.64	1.50 ± 0.48
ASVX #4	10-16-78/1515	10-18-78/1530	29.64	0.75 ± 0.63
Box Creek Ranch	10-22-78/1430	10-24-78/1345	30.14	0.26 ± 0.28
ASVX #1	10-22-78/1300	10-25-78/1030	30.12	0.05 ± 0.26
ASVX #2	10-22-78/1408	10-24-78/1325	30.14	0.54 ± 0.37
ASVX #4	10-22-78/1210	10-24-78/1530	30.14	0.53 ± 0.36
Douglas Site	10-22-78/1010	10-24-78/1030	30.14	0.74 ± 0.38