

Umetco Minerals Corporation



WHITE MESA MILL • RD. BOX 888 • BLANDING, UTAH 84511
☎ (801) 678-2221

04008681500R

40-8681

RETURN ORIGINAL TO PDR, HQ.

January 24, 1991

Mr. Ramon E. Hall, Director
U. S. Nuclear Regulatory Commission
Region IV
Uranium Recovery Field Office
Box 25325
Denver, CO 80225

DOCKETED
JAN 29 1991
USNRC
MAIL SECTION
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91 JAN 29 11:12

PIV DOKA

Re: Umetco Minerals Corporation
SUA-1358: Docket No. 40-8681
White Mesa Mill, Utah
License Condition 48 D

Dear Mr. Hall:

Attached are the results of sampling monitor wells 5, 12, 14, and 15, as per License Condition 48 and 48 D. Even though the results from sampling monitor well 11 are included as specified by the license condition, no groundwater protection standards are needed for this well. Cell 4A construction has resulted in this well being dropped from a Point of Compliance designation.

If I can answer any questions that you may have, please feel free to contact me.

Sincerely yours,

John S. Hamrick
Site Environmental Coordinator

9102260284 910124
REG 4 LIC 40 PDR
SUA-1358

DESIGNATED ORIGINAL

Certified By *Mary C. Hood*
259060

91-0211 *DOKA*

MONITOR WELL 5

Parameters	Units	10/31/89	11/29/89	12/18/89	1/25/90
DATE					
CaCO3	mg/l	326	322	314	300
NH4	mg/l	0.7	0.7	0.7	0.5
As	mg/l	0.003	0.007	0.006	0.003
Cd	mg/l	<.005	<.005	<.005	<.005
Cl	mg/l	52	54	54	54
Cr	mg/l	<0.01	<0.01	<0.01	<0.01
CN	mg/l	0.01	<0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	<0.01	<0.01	<0.01	<0.01
Ni	mg/l	<0.01	<0.01	<0.01	<0.01
TDS	mg/l	1980	2090	2070	2070
SO4	mg/l	1160	1180	1170	1220
v	mg/l	<0.01	<0.01	<0.01	<0.01
Be	mg/l	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5
Gross Alpha	pCi/l	7.0	6.3	7.0	0.0
Gross Beta	pCi/l	12	18	19	13
Ra-226	pCi/l	0.1	0.1	0.2	0.2
Ra-228	pCi/l	1.3	1.3	1.4	1.9
Th-230	pCi/l	0.0	0.0	0.0	0.0
U-nat.	pCi/l	0.3	0.4	0.7	0.7

MONITOR WELL 11

Parameters	Units	10/31/89	11/29/89	12/18/89	1/25/90
DATE					
CaCO3	mg/l	316	301	304	300
NH4	mg/l	0.6	0.6	0.6	0.5
As	mg/l	0.003	0.002	0.003	0.001
Cd	mg/l	<.005	<.005	0.007	0.007
Cl	mg/l	32	34	35	31
Cr	mg/l	<0.01	<0.01	<0.01	<0.01
CN	mg/l	0.01	<0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	<0.01	<0.01	<0.01	<0.01
Ni	mg/l	<0.01	<0.01	<0.01	<0.01
TDS	mg/l	1660	1860	1780	1740
SO4	mg/l	986	993	1010	1040
V	mg/l	<0.01	<0.01	<0.01	<0.01
Be	mg/l	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5
Gross Alpha	pCi/l	42.0	17.0	13.0	0.0
Gross Beta	pCi/l	21	7	16	10
Ra-226	pCi/l	0.1	0.2	0.1	0.3
Ra-228	pCi/l	1.0	0.7	0.5	1.3
Th-230	pCi/l	0.0	0.0	0.0	0.2
U-nat.	pCi/l	0.7	0.6	0.5	0.7

MONITOR WELL 12

Parameters	Units	10/31/89	11/29/89	2/18/89	1/25/90
DAT					
CaCO ₃	mg/l	346	342	324	319
NH ₄	mg/l	0.2	0.1	0.1	<0.1
As	mg/l	0.004	0.003	0.002	0.007
Cd	mg/l	<0.005	<0.005	0.006	0.007
Cl	mg/l	60	63	64	60
Cr	mg/l	<0.01	<0.01	<0.01	<0.01
CN	mg/l	0.01	<0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	0.02	0.02	0.02	<0.01
Ni	mg/l	0.03	0.02	0.02	<0.01
TDS	mg/l	3750	3900	3930	3930
SO ₄	mg/l	2420	2510	2500	2450
V	mg/l	<0.01	<0.01	<0.01	<0.01
Be	mg/l	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5
Gross Alpha	pCi/l	47.0	27.0	62.0	16.0
Gross Beta	pCi/l	30	34	44	29
Ra-226	pCi/l	0.1	0.1	0.1	0.3
Ra-228	pCi/l	1.5	2.7	1.9	0.9
Th-230	pCi/l	0.0	0.0	0.0	0.4
U-nat.	pCi/l	9.5	5.6	12.0	12.0

MONITOR WELL 14

Parameters	Units	10/31/89	11/29/89	12/18/89	1/25/90
DATE					
CaCO3	mg/l	428	379	392	382
NH4	mg/l	0.1	<0.01	0.1	<0.01
As	mg/l	0.001	0.003	0.003	0.003
Cd	mg/l	<.005	<.005	<.005	<.005
Cl	mg/l	26	25	24	21
Cr	mg/l	<0.01	<0.01	<0.01	<0.01
CN	mg/l	<0.01	<0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	0.02	0.01	0.02	<.01
Ni	mg/l	0.03	0.02	0.03	0.01
TDS	mg/l	3400	3430	3130	3590
SO4	mg/l	2280	2230	1760	2290
V	mg/l	<0.01	<0.01	<0.01	<0.01
Be	mg/l	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5
Gross Alpha	pCi/l	53.0	68.0	67.0	40.0
Gross Beta	pCi/l	43	40	37	37
Ra-226	pCi/l	0.1	0.1	0.1	0.1
Ra-228	pCi/l	1.1	1.3	0.9	0.0
Th-230	pCi/l	0.0	0.0	0.0	0.0
U-nat.	pCi/l	39.0	27.0	13.0	37.0

MONITOR WELL 15

Parameters	Units	10/31/89	11/29/89	12/18/89	1/25/90
DATE					
CaCO3	mg/l	374	353	355	353
NH4	mg/l	0.1	0.2	0.1	0.09
As	mg/l	0.005	0.006	0.005	0.005
Cd	mg/l	<.005	<.005	<.005	<.005
Cl	mg/l	50	49	47	45
Cr	mg/l	<0.01	<0.01	<0.01	<0.01
CN	mg/l	<0.01	<0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	0.04	0.03	0.03	0.01
Ni	mg/l	0.02	0.02	0.02	<0.01
TDS	mg/l	3970	3990	3860	3890
SO4	mg/l	2600	2560	1250	2540
V	mg/l	0.04	0.03	0.01	0.01
Be	mg/l	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5
Gross Alpha	pCi/l	89.0	81.0	90.0	68.0
Gross Beta	pCi/l	55	29	51	41
Ra-226	pCi/l	0.0	0.1	0.1	0.2
Ra-228	pCi/l	0.3	0.2	0.0	0.1
Th-230	pCi/l	0.1	4.7	0.0	0.1
U-nat.	pCi/l	38.0	44.0	39.0	32.0

MONITOR WELL AVERAGES

Parameters WELL	Units	MW 5	MW 11	MW 12	MW 14	MW 15
CaCO3	mg/l	316	305	332	395	359
NH4	mg/l	0.65	0.58	0.10	0.05	0.12
As	mg/l	0.0048	0.0023	0.0040	0.0025	0.0053
Cd	mg/l	<.005	0.0035	0.0033	<0.005	<.005
Cl	mg/l	53.5	33.0	61.8	24.0	47.8
Cr	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
CN	mg/l	0.01	0.01	0.01	<0.01	<0.01
Hg	mg/l	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mo	mg/l	<0.01	<0.01	0.015	0.015	0.028
Ni	mg/l	<0.01	<0.01	0.0175	0.0225	0.0150
TDS	mg/l	2053	1760	3878	3463	3928
SO4	mg/l	1183	1007	2470	1990	2238
V	mg/l	<0.01	<0.01	<0.01	<0.01	0.0225
Be	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Tl	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
Acetone	ug/l	<10	<10	<10	<10	<10
Methylene Chloride	ug/l	<5	<5	<5	<5	<5
Carbon Disulfide	ug/l	<5	<5	<5	<5	<5
2-Butanone	ug/l	<10	<10	<10	<10	<10
Chloroform	ug/l	<5	<5	<5	<5	<5
Gross Alpha	pCi/l	5	18	38	57	82
Gross Beta	pCi/l	15.5	13.5	34.3	39.3	44.0
Ra-226	pCi/l	0.2	0.2	0.2	0.1	0.1
Ra-228	pCi/l	1.5	0.9	1.8	0.8	0.2
Th-230	pCi/l	0.0	0.1	0.1	0.0	0.1
U-nat.	pCi/l	0.5	0.6	9.8	29.0	38.3