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Petrotomics Company

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X61207

November 29, 1993

RETURN ORIGINAL TO PDR, HQ.

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

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USNRC  
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Reference: Amendment Request, License Condition 11, 41, and 47, Source Material License SUA-551

Dear Mr. Hall:

During the annual inspection conducted by your staff on August 25, 1993, a number of items were discussed with your staff which should be addressed by amendment to Petrotomics' license. We therefore request that the following changes be made in Source Material License SUA-551.

License Condition 11 references a Summary submitted by letter dated November 17, 1987 which is incorporated into our license. Section 5.5-1 deals with occupational exposure - external. In this section, no change out date is stated for the TLD badges being used. Badges are currently changed out on a monthly basis. It was recommended, and hereby proposed, that the change out be made on a quarterly basis.

Sections 5.5-3 and 5.5-4 of the November 17, 1987 Summary deal with occupational exposure - internal and bioassays. The requirements for these programs are now listed in 10 CFR 20, and monitoring under 20.1502(b) would not be required at this site. Sections 5.5-3 and 5.5-4 should be deleted from the license.

License Condition 41 establishes the Environmental and Effluent Monitoring program which was set up while the mill was operating. It was later amended by submittal dated October 26, 1987. The requirements for ground-water monitoring are duplicative of License Condition 47, with minor exceptions. License Condition 41 requires monitoring for Pb-210 and Po-210. Data collected since 1987 show that levels of these two constituents are a small fraction of the 10 CFR 20 Appendix B, Table II, Column 2 values for release to unrestricted areas for water. The highest values reported are less than 10 % of the release limits from the table above. In addition, the NRC staff discussed the deletion of the monitoring requirement for arsenic and barium. Levels of these two constituents are very low, and are almost always reported at less than detectable limits. A summary list of the data for the SC and DC wells for these constituents is attached. In section 4 of the Environmental and Effluent Monitoring program, "monitoring of the surface water in Sand Draw - when water is present" is indicated. Collection of samples to be done on a quarterly basis. Collection

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Certified By *Mary C. York*

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of water samples from Sand Draw have not been performed since 1987 due to the lack of water at sampling times. Any water present in the draw is the result of rainfall or snow melt and soaks into the ground rapidly. It is requested that the water monitoring program be deleted from License Condition 41 and water monitoring be performed under the requirements of License Condition 47. License Condition 47.A. would need to be amended to delete the monitoring of arsenic and barium. The air monitoring program in License Condition 41 also requires the analysis of Pb-210. The maximum amount recorded since 1987 was 0.11 % of the MPC (Maximum Permissible Concentration). This value was recorded in the third quarter of 1990. All other values recorded since 1987 are 0.01% of the MPC or less. It is requested that the requirement for analysis of Pb-210 for the air sampling be deleted. It is suggested that License Condition 41 be rewritten as follows:

License Condition 41:

The licensee shall implement an air monitoring program consisting of one up wind and one down wind site from the tailings at or near the site boundary. The upwind site will be monitored for Radon-220 and direct gamma, the downwind site for U-natural, Th-230, Ra-226, Radon-220, and direct gamma. Monitoring will be continuous with quarterly composites for analysis.

In addition to deletion of the arsenic and barium monitoring requirements from License Condition 47.A., an additional modification needs to be made to the corrective action program. License Condition 47.C., implementing a corrective action program as described in the submittal dated July 6, 1988, and modified by submittals dated July 26 and October 30, 1989, January 30 and May 7, 1992, including, in part, construction of the proposed evaporation pond system described in submittals dated April 6, 1987, and July 26, 1989, did not address the need for pumping interruption for periodic construction, maintenance of the system (pumps, transfer stations, discharge lines, and associated equipment), well redevelopment, seasonal conditions, and low or no production. We request that License Condition 47.C. be modified by adding the following suggested wording.

Pumping from the required wells may be interrupted for periodic construction, maintenance of pumping system, well redevelopment, seasonal conditions, and low or no production. Documentation will be maintained on site indicating when, and the reason, pumping from a well stopped. Pumps will be restarted as soon as possible following interruption of operation.

These items were discussed with Ms. Cynthia Miller-Corbett and

Mr. Ramon Lall  
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Mr. Pete Garcia of your staff during the inspection and subsequent phone conversations.

We respectfully request that License conditions 11, 41, and 47 be amended to reflect the requested changes.

Sincerely,

  
R. A. Juday  
Supervisor

Attachment:  
Petrotoomics Well Water Quality -  
As, Ba, Pb-210, and Po-210

TABLE 1. PETROMONICS "DC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210.

WELL	DATE	As	Ba	Pb210	Po210
5DC	870331	-0.001	--	1.0	0.010
	870430	-0.001	-0.05	0.41	0.010
	870818	-0.001	-0.05	0.22	0.21
	871019	0.010	--	0.25	0.00
	880115	-0.001	--	6.3	0.31
	880504	-0.001	-0.05	0.44	0.00
	880926	-0.001	-0.05	--	--
	881116	0.002	-0.05	1.3	0.25
	890301	0.002	--	2.2	0.47
	890510	0.001	-0.05	1.5	0.18
	890830	0.001	--	5.8	0.56
	891121	0.004	-0.05	3.1	0.39
	900305	-0.001	-0.05	4.7	0.61
	900613	0.002	-0.05	1.6	0.29
	900830	0.0003	-0.05	3.3	0.38
	900830	-0.001	-0.10	-1.0	-1.0
	910227	-0.001	-0.05	4.1	0.45
	910612	0.001	--	2.8	0.34
	910923	-0.001	--	4.3	0.47
	911127	-0.001	-0.05	2.4	0.33
	920220	-0.001	-0.05	3.8	0.44
	920604	0.03	--	1.3	0.22
	920826	0.004	-0.05	2.5	0.49
	921202	-0.001	-0.05	2.8	0.59
	930209	-0.001	-0.05	3.1	0.0
	930518	-0.001	--	2.3	0.33
	8DC	920504	-0.001	-0.10	--
920826		0.002	-0.05	--	--
921215		-0.001	-0.05	--	--
930303		--	-0.05	--	--
930519		-0.001	--	2.1	0.08
9DC	920501	0.001	-0.10	--	--
	920826	0.002	-0.05	--	--
	921215	-0.001	-0.05	--	--
	930308	--	0.20	--	--
	930519	-0.001	--	2.0	0.15
10DC	920428	0.002	-0.10	--	--
	920826	0.002	-0.05	--	--
	921216	-0.001	-0.05	--	--
	930308	-0.001	0.09	--	--
	930621	-0.001	-0.05	--	--

TABLE 1. PETROBRONICS "DC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
11DC	920428	0.003	-0.10	--	--
	920520	-0.001	-0.05	--	--
	920826	0.002	-0.05	--	--
	921215	-0.001	-0.05	--	--
	930308	-0.001	0.13	--	--
	930519	-0.001	--	0.80	0.10
12DC	920501	0.003	-0.10	--	--
	920826	0.002	-0.05	--	--
	921202	-0.001	-0.05	--	--
	930209	-0.005	-0.05	--	--
	930518	0.001	--	3.1	0.02
	13DC	930304	-0.001	-0.05	--
930621		-0.001	-0.05	--	--
52SC	870331	-0.001	--	2.1	0.0
	870430	-0.001	-0.05	1.8	0.15
	870818	-0.001	-0.05	0.83	0.14
	871015	-0.001	-0.05	4.5	0.47
	880115	-0.001	0.03	--	--
	880115	-0.001	0.03	--	--
	880115	-0.001	0.010	--	--
	880115	-0.001	-0.005	--	--
	880504	0.001	-0.05	2.0	0.41
	880926	-0.001	-0.05	--	--
	881121	-0.001	-0.05	1.1	0.08
	890301	-0.001	--	0.67	0.06
	890510	-0.001	-0.05	1.3	0.33
	890830	-0.001	--	1.8	0.29
	891207	0.002	-0.05	1.4	1.4

## NOTES:

"-" sign before a value indicates that the value is less than the detection limit. Value shown is lower detection limit.

All values are in MG/L except as otherwise noted and the following:

Po210 = Polonium-210, in pci/l.

Pb210 = Lead-210, in pci/l.

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210.

WELL	DATE	As	Ba	Pb210	Po210
1SC	870611	0.001	--	0.11	0.00
	870914	-0.001	-0.05	0.56	0.31
	871203	0.001	--	1.5	0.18
	880113	-0.001	0.05	--	--
	880113	-0.001	0.14	--	--
	880113	-0.001	0.06	--	--
	880113	-0.001	0.07	--	--
	880614	-0.001	--	0.33	0.21
	880928	-0.001	-0.05	--	--
	881122	-0.001	-0.05	1.8	0.35
	890308	-0.001	--	0.47	0.02
	890511	0.003	-0.05	1.4	0.29
	890926	0.003	--	0.75	0.00
	891121	0.003	-0.05	1.1	0.07
	900305	0.007	-0.05	0.67	0.12
	900613	-0.001	-0.05	0.32	0.00
	900910	0.003	-0.05	1.2	0.18
	901211	0.002	-0.05	1.4	0.22
	910211	-0.001	-0.05	0.49	0.06
	910612	-0.001	--	1.0	0.09
	910926	-0.001	--	0.88	0.17
	911127	-0.001	-0.05	0.93	0.12
	920220	-0.001	-0.05	1.1	0.21
	920604	-0.001	--	1.2	0.06
	920826	-0.001	-0.05	1.6	0.33
	921202	-0.001	--	1.8	0.35
	930209	-0.005	-0.05	1.6	0.0
	930518	0.001	--	1.3	0.0
2SC	870611	-0.001	--	0.96	0.02
	870914	-0.001	-0.05	1.0	0.07
	871203	0.001	--	1.7	0.19
	880928	-0.001	-0.05	--	--
	881122	0.004	-0.05	1.5	0.29
	890330	0.001	--	1.6	0.0
	890511	0.001	-0.05	1.2	0.30
	890926	0.003	--	0.66	0.09
	891121	0.003	-0.05	1.0	0.0
	900305	0.001	-0.05	1.3	0.22
	900613	-0.001	-0.05	0.79	0.13
	900910	0.003	-0.05	1.1	0.07
	901211	0.001	-0.05	1.7	0.11

TABLE 2. PYROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
2SC	910211	-0.001	-0.05	1.0	0.04
	910612	-0.001	--	1.1	0.0
	910926	-0.001	--	1.5	0.06
	911127	-0.001	-0.05	1.3	0.14
	920220	-0.001	-0.05	1.2	0.17
	920604	0.001	--	0.82	0.22
	920826	0.006	-0.05	1.3	0.21
	921202	-0.001	--	1.5	0.29
	930209	-0.005	-0.05	0.00	0.13
	930518	-0.001	--	0.000	0.55
	3SC	870611	-0.001	--	0.84
870914		-0.001	-0.05	0.82	0.02
871203		0.002	--	1.3	0.74
880114		-0.001	0.01	--	--
880114		-0.001	0.02	--	--
880114		-0.001	0.010	--	--
880114		-0.001	0.02	--	--
880614		-0.001	--	0.77	0.00
880928		-0.001	-0.05	--	--
881122		-0.001	-0.05	1.5	0.0
890300		-0.001	--	0.91	0.07
890511		0.001	-0.05	1.6	0.15
890926		0.001	--	2.4	0.24
891121		0.003	-0.05	2.0	0.09
900305		-0.001	-0.05	1.1	0.21
900613		-0.001	-0.05	2.0	0.07
900910		0.009	-0.05	2.1	0.16
901211		0.001	-0.05	1.9	0.21
910211		-0.001	-0.05	1.6	0.17
910613		0.001	--	2.3	0.11
910926		-0.001	--	2.0	0.19
911127		-0.001	-0.05	2.0	0.23
920220		-0.001	-0.05	2.1	0.14
920604		-0.001	--	1.3	0.07
920826		-0.001	-0.05	1.7	0.12
921202		-0.001	--	1.5	0.27
930301		-0.001	0.07	1.6	0.0
930518		-0.001	--	1.9	0.16

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
4SC	870611	-0.001	--	1.8	0.15
	870914	-0.001	-0.05	0.98	0.12
	871203	0.002	--	2.0	0.42
	880115	-0.001	-0.005	--	--
	880115	-0.001	0.01	--	--
	880115	--	0.04	--	--
	880115	-0.001	0.006	--	--
	880614	-0.001	--	1.3	0.21
	880928	-0.001	-0.05	--	--
	881122	-0.001	-0.05	3.4	0.62
	890308	-0.001	--	2.5	0.57
	890511	-0.001	-0.05	2.3	0.49
	890926	0.001	--	2.8	0.66
	891121	0.003	-0.05	9.3	3.3
	900305	0.001	-0.05	3.0	0.97
	900613	-0.001	-0.05	1.6	0.22
	900910	0.007	-0.05	1.8	0.21
	901211	-0.001	-0.05	3.2	0.50
	910211	-0.001	-0.05	2.6	0.46
	910612	-0.001	--	3.1	0.48
	910926	-0.001	--	2.3	0.33
	911127	-0.001	-0.05	2.7	0.42
	920220	-0.001	-0.05	3.0	0.45
	920604	0.001	--	3.3	0.37
	920826	-0.001	-0.05	2.3	0.31
	921202	-0.001	--	3.4	0.62
	930302	-0.001	-0.05	2.0	0.05
	930518	-0.001	--	2.0	0.33



TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
55C	870121	-0.001	--	--	--
	870507	-0.001	-0.05	1.0	0.23
	870611	-0.001	--	0.90	0.18
	870916	-0.001	-0.05	0.14	0.00
	871203	0.002	--	0.000	0.000
	880114	-0.001	-0.005	--	--
	880114	-0.001	-0.005	--	--
	880114	-0.001	-0.005	--	--
	880114	-0.001	-0.005	--	--
	880614	-0.001	--	0.90	0.15
	880928	-0.001	-0.05	--	--
	881122	0.001	-0.05	0.06	0.05
	890308	-0.001	--	0.21	0.39
	890511	0.002	-0.05	0.00	0.00
	890926	-0.001	--	0.69	0.07
	091121	0.003	-0.05	0.38	0.09
	900305	0.002	-0.05	0.07	0.12
	900612	0.001	-0.05	1.0	0.03
	900831	-0.001	-0.05	0.68	0.22
	900831	-0.001	-0.10	2.6	17.4
	901211	-0.001	-0.05	0.09	0.05
	910211	-0.001	-0.05	0.29	0.17
	910613	0.001	--	0.000	0.000
	910926	-0.001	--	0.05	0.02
	911127	-0.001	-0.05	0.42	0.02
	920218	-0.001	-0.05	0.16	0.06
	920604	0.003	-0.05	1.1	0.29
	920604	-0.001	-0.10	-1.0	26
	920826	0.001	-0.05	1.5	0.30
	921202	-0.001	--	0.69	0.12
	930301	-0.001	-0.05	0.37	0.00
	930518	-0.001	--	0.47	0.00

TABLE 2. PHYTOXOMICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued)

WELL	DATE	As	Ba	Pb210	Po210
85C	871203	0.002	--	4.0	1.3
	881122	0.006	-0.05	1.7	0.23
	890308	0.002	--	1.1	0.30
	890511	0.002	-0.05	0.72	0.21
	890926	0.03	--	1.1	0.37
39SC	870121	-0.001	--	--	--
	870611	-0.001	--	3.3	0.13
	870914	-0.001	-0.05	2.8	0.24
	871203	-0.001	--	4.2	1.1
	880112	-0.001	0.10	--	--
	880112	-0.001	0.11	--	--
	880112	-0.001	0.07	--	--
	880112	-0.001	0.08	--	--
	880614	-0.001	--	3.1	0.17
	880928	-0.001	-0.05	--	--
	881122	0.002	-0.05	2.7	0.41
	890308	-0.001	--	2.9	0.27
	890511	0.002	-0.05	4.0	0.30
	890926	0.002	--	3.0	0.28
	891121	0.003	-0.05	2.3	0.18
	900305	0.00	-0.06	4.0	0.44
	900613	-0.001	-0.05	2.7	0.25
	900910	0.007	-0.05	2.6	0.30
	901211	-0.001	-0.05	2.3	0.32
	910211	-0.001	-0.05	2.0	0.22
	910612	-0.001	--	3.2	0.40
	910926	0.001	--	3.6	0.45
	911127	-0.001	-0.05	2.9	0.29
	920220	-0.001	-0.05	2.6	0.47
	920604	-0.001	--	2.0	0.22
	920826	0.002	-0.05	3.1	0.33
	921202	-0.001	--	3.7	0.41
	930301	-0.001	-0.05	2.1	0.46
	930518	-0.001	--	2.7	0.0

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
40SC	870611	-0.001	--	0.62	0.04
	870914	-0.001	-0.05	0.66	0.07
	871203	-0.001	--	1.8	0.37
	880113	-0.001	0.14	--	--
	880113	-0.001	0.04	--	--
	880113	-0.001	0.05	--	--
	880113	-0.001	0.05	--	--
	880614	-0.001	--	0.56	0.00
	880928	-0.001	-0.05	--	--
	881122	0.002	-0.05	0.69	0.10
	890308	-0.001	--	0.72	0.05
	890511	0.002	-0.05	0.33	0.00
	890926	0.002	--	0.51	0.12
	891121	0.003	-0.05	0.42	0.03
	900305	0.001	-0.05	0.31	0.09
	900613	0.001	-0.05	0.45	0.19
	900910	0.009	-0.05	0.29	0.00
	901211	0.001	-0.05	1.4	0.05
	910211	-0.001	-0.05	0.41	0.11
	910612	-0.001	--	0.39	0.09
	910926	-0.001	--	0.31	0.11
	911127	0.004	-0.05	0.42	0.04
	920220	0.002	-0.05	0.19	0.00
	920604	0.001	--	0.36	0.19
	920826	0.002	-0.05	0.53	0.06
	921202	-0.001	--	0.17	0.00
	930209	-0.005	0.05	0.68	0.00
	930518	0.001	--	0.36	0.33

TABLE 2. PHYTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
41SC	870121	0.001	--	--	--
	870331	0.001	--	1.6	0.07
	870914	0.001	-0.05	0.98	0.28
	871016	-0.001	-0.05	0.00	0.00
	871203	-0.001	--	1.8	9.0
	880112	-0.001	0.07	--	--
	880112	-0.001	0.05	--	--
	880112	-0.001	0.05	--	--
	880113	-0.001	0.04	--	--
	880614	0.002	--	1.2	0.31
	880928	-0.001	-0.05	--	--
	881122	0.002	-0.05	2.3	0.49
	890308	0.002	--	1.3	0.66
	890511	0.003	-0.05	1.0	0.31
	890926	0.003	--	1.0	0.26
	891121	0.005	-0.05	1.4	0.21
	900305	0.003	-0.05	1.2	0.19
	900613	0.002	-0.05	1.7	0.35
	900910	0.004	-0.05	1.2	0.17
	901211	-0.001	-0.05	2.0	0.40
	910211	-0.001	-0.05	1.3	0.22
	910612	-0.001	--	1.6	0.16
	910926	-0.001	--	2.0	0.06
	911127	0.001	-0.05	0.99	0.08
	920219	0.002	-0.05	1.0	0.18
	920604	0.001	--	2.0	0.25
	920826	0.005	-0.05	2.0	0.23
	921202	-0.001	--	2.3	0.11
	930209	-0.005	-0.05	1.1	0.85
	930518	0.001	--	1.5	0.0

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
42SC	870121	-0.001	--	--	--
	870331	0.002	--	4.2	0.17
	870916	-0.001	-0.05	2.2	0.18
	871203	-0.001	--	2.2	0.06
	880114	-0.001	0.14	--	--
	880114	-0.001	0.11	--	--
	880114	-0.001	0.11	--	--
	880114	-0.001	0.14	--	--
	880614	-0.001	--	2.0	0.24
	880928	-0.001	-0.05	--	--
	881122	0.003	-0.05	3.7	0.37
	890308	0.001	--	2.0	0.17
	890511	0.005	-0.05	3.9	0.11
	890926	0.002	--	4.0	0.29
	891121	0.004	-0.05	3.9	0.33
	900305	-0.001	-0.05	4.1	0.27
	900611	0.001	-0.05	4.7	0.45
	900910	0.004	-0.05	4.3	0.39
	901211	-0.001	-0.05	3.8	0.29
	910211	-0.001	-0.05	3.2	0.42
	910612	-0.001	--	2.0	0.26
	910926	0.002	--	3.2	0.17
	911127	0.003	-0.05	3.8	0.25
	920219	0.001	-0.05	4.1	0.47
	920604	0.001	-0.05	3.0	0.46
	920604	-0.001	-0.10	3.3	2.7
	920826	0.003	-0.05	4.3	0.31
	921202	0.005	--	3.3	0.0
	930301	-0.001	-0.05	2.4	0.0
	930518	0.001	--	3.2	0.0

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
43SC	870331	0.002	--	2.0	0.13
	870430	-0.001	-0.05	1.7	0.06
	870818	-0.001	-0.05	1.0	0.18
	871019	0.005	--	2.0	0.35
	880113	-0.001	0.03	--	--
	880113	-0.001	0.04	--	--
	880113	-0.001	0.03	--	--
	880114	-0.001	0.03	--	--
	880504	0.002	-0.05	2.4	2.0
	880926	0.001	-0.05	--	--
	881122	0.005	-0.05	2.2	0.72
	890301	0.002	--	3.0	0.88
	890511	0.005	-0.05	2.1	0.69
	890828	0.005	--	1.6	0.0
	891206	0.006	-0.05	--	--
	900227	0.001	-0.05	3.3	0.78
	900612	0.003	-0.05	2.0	0.29
	900831	--	-0.05	2.0	0.05
	901031	0.003	-0.05	1.9	0.44
	910211	0.002	-0.05	3.2	0.17
	910515	0.003	--	--	--
	910612	0.002	--	3.1	0.25
	911127	0.010	-0.05	--	--
44SC	870331	0.008	--	1.9	0.26
	870914	0.008	-0.05	2.0	0.32
	871203	0.005	--	2.3	1.1
	880113	0.006	0.005	--	--
	880113	0.006	0.008	--	--
	880113	0.007	-0.005	--	--
	880113	0.007	-0.005	--	--
	880614	0.001	--	2.0	0.25
	880926	0.006	-0.05	--	--
	881122	0.007	-0.05	2.0	0.20
	890308	0.005	--	2.6	0.41
	890511	0.005	-0.05	1.6	0.06
	890926	0.003	--	2.3	0.22
	891121	0.004	-0.05	2.0	0.26
	900305	-0.001	-0.05	1.8	0.45
	900613	0.002	-0.05	2.0	0.37
	900910	-0.001	-0.05	1.2	0.12
	901211	0.005	-0.05	1.7	0.35
	910211	0.004	-0.05	1.2	0.07
	910612	0.004	--	1.5	0.19
	910926	0.004	--	2.0	0.28
	911127	0.02	-0.05	1.3	0.30
	920220	0.008	-0.05	1.9	0.22
	920604	0.005	--	2.3	0.40
	920826	0.003	-0.05	1.5	0.08
	921202	-0.001	--	1.0	0.02
	930301	-0.001	-0.05	0.95	0.56
	930518	0.007	--	1.4	0.65

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
455C	870331	-0.001	--	2.4	0.27
	870914	-0.001	-0.05	2.6	0.25
	871203	-0.001	--	2.9	0.52
	880114	-0.001	0.010	--	--
	880114	-0.001	0.010	--	--
	880114	-0.001	-0.005	--	--
	880114	-0.001	0.006	--	--
	880614	-0.001	--	2.3	0.31
	880928	-0.001	-0.05	--	--
	881122	0.003	-0.05	2.0	0.48
	890308	0.002	--	1.6	0.23
	890511	0.001	-0.05	1.2	0.06
	890926	0.008	--	1.9	0.38
	891121	0.003	-0.05	0.95	0.29
	900306	-0.001	-0.05	2.3	0.12
	900613	-0.001	-0.05	2.0	0.0
	900910	0.01	-0.05	1.8	0.07
	901211	0.003	-0.05	2.1	0.21
	910211	0.001	-0.05	1.8	0.0
	910613	-0.001	--	1.1	0.27
	910926	-0.001	--	2.1	1.2
	911127	0.005	-0.05	2.0	0.31
	920220	0.002	-0.05	2.3	0.40
	920604	0.003	-0.05	2.6	0.47
	920604	0.001	-0.10	3.0	34
	920826	0.004	-0.05	1.9	0.32
	921202	-0.001	--	1.3	0.06
	930301	-0.001	-0.05	2.2	0.0
	930518	0.004	--	1.2	0.61

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
49SC	870331	-0.001	--	0.97	0.15
	870430	-0.001	-0.05	1.1	0.36
	870818	-0.001	-0.05	1.9	0.65
	871019	0.005	--	1.6	0.54
	880115	-0.001	0.010	--	--
	880115	-0.001	0.006	--	--
	880115	-0.001	0.010	--	--
	880115	-0.001	-0.005	--	--
	880504	-0.01	-0.05	2.6	0.62
	880926	-0.001	-0.05	--	--
	881122	0.003	-0.05	0.89	0.29
	890301	-0.001	--	1.5	0.06
	890511	-0.001	-0.05	1.1	0.33
	890831	0.002	--	0.98	0.54
	891207	0.004	-0.05	1.5	0.42
	900227	-0.001	-0.05	2.0	0.39
	900613	-0.001	-0.05	2.7	0.12
	900831	-0.001	-0.05	2.0	0.29
	901031	0.006	-0.05	2.3	0.33
	910209	-0.001	-0.05	1.9	0.33
	910613	-0.001	--	2.2	0.31
	910926	-0.001	--	2.5	0.25



TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 & Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
51SC	870331	-0.001	--	2.5	0.34
	870430	-0.001	-0.05	2.6	0.16
	870818	-0.001	-0.05	2.1	0.08
	871015	0.004	--	3.7	0.66
	880114	-0.001	0.006	--	--
	880114	-0.001	-0.005	--	--
	880114	-0.001	-0.005	--	--
	880114	-0.001	0.010	--	--
	880504	-0.001	-0.05	0.00	0.00
	880926	-0.001	-0.05	--	--
	881122	0.002	-0.05	2.0	0.21
	890330	0.001	--	1.7	0.27
	890511	0.002	-0.05	0.98	0.19
	890830	0.001	--	2.6	0.49
	891207	0.002	-0.05	1.9	0.17
	900305	0.002	-0.05	3.2	0.33
	900613	-0.001	-0.05	2.8	0.51
	900830	-0.001	-0.05	1.5	0.49
	910211	-0.001	-0.05	3.0	0.65
	910613	0.001	--	3.5	0.57
	910926	-0.001	--	3.6	0.41
	911127	0.005	-0.05	2.7	0.36
	920220	-0.001	-0.05	2.1	0.17
	920604	0.002	-0.05	3.7	0.60
	920604	-0.001	-0.10	3.3	12.3
	920826	0.003	-0.05	2.7	0.28
	921202	-0.001	--	2.1	0.49
	930302	-0.001	-0.05	1.8	0.0
	930516	0.001	--	3.0	0.0

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
53SC	870331	-0.001	--	1.5	0.15
	870910	-0.001	-0.05	2.0	0.09
	871203	-0.001	--	1.6	0.22
	880115	-0.001	0.02	--	--
	880614	-0.001	--	1.5	0.09
	880928	-0.001	-0.05	--	--
	881122	0.003	-0.05	1.5	0.30
	890308	0.002	--	1.1	0.0
	890511	0.004	-0.05	1.1	0.40
	890926	0.003	--	1.3	0.21
	891121	0.004	-0.05	0.89	0.19
	900305	-0.001	-0.05	2.5	0.40
	900613	-0.001	-0.05	1.1	0.36
	900910	0.003	-0.05	1.2	0.31
	901211	-0.001	-0.05	--	--
	910211	-0.001	-0.05	1.0	0.16
	910515	-0.001	--	2.0	0.23
	910924	-0.001	--	1.6	0.37
	911125	-0.001	-0.05	0.37	0.28
	920220	-0.001	-0.05	1.0	0.19
	920604	0.002	--	1.4	0.27
	920826	0.002	-0.05	0.82	0.21
	921202	-0.001	--	1.1	0.29
	930302	-0.001	-0.05	0.07	0.00
	930518	-0.001	--	0.47	0.45

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
54SC	870331	-0.001	--	1.5	0.14
	870430	-0.001	-0.05	0.76	0.00
	870618	-0.001	-0.05	1.1	0.06
	871015	0.007	--	0.63	0.21
	880115	-0.001	0.07	--	--
	880115	-0.001	0.11	--	--
	880115	-0.001	0.08	--	--
	880115	-0.001	0.06	--	--
	880504	0.001	-0.05	1.3	0.25
	880926	-0.001	-0.05	--	--
	881122	-0.001	-0.05	1.3	0.19
	890301	-0.001	--	0.98	0.00
	890511	0.001	-0.05	0.05	0.16
	890831	-0.001	--	1.1	0.27
	891121	0.003	-0.05	1.5	0.09
	900305	-0.001	-0.05	1.6	0.29
	900613	-0.001	-0.05	2.3	0.31
	900830	-0.001	-0.05	0.99	0.39
	900830	-0.001	-0.10	-1.0	12.5
	910211	-0.001	-0.05	2.9	0.56
	910613	-0.001	--	1.9	0.22
	910926	-0.001	--	2.2	0.37
	911127	-0.001	-0.05	1.6	0.16
	920220	0.002	-0.05	2.1	0.46
	920604	-0.001	-0.05	2.1	0.43
	920604	-0.001	-0.10	-1.0	-1.0
	920826	0.002	-0.05	2.0	0.51
	921202	-0.001	--	1.9	0.37
	930209	-0.005	-0.05	1.2	0.01
	930519	-0.001	--	2.3	0.0
55SC	890831	0.004	0.47	2.9	0.39
	891220	-0.001	-0.05	2.3	0.27
	900227	-0.001	-0.05	3.3	0.26
	900613	0.001	-0.05	3.5	0.49
	900831	-0.001	-0.05	1.8	0.21

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
56SC	890831	0.005	0.47	3.7	0.57
	891207	0.004	-0.05	2.1	0.22
	900227	0.002	-0.05	3.0	0.37
	900613	-0.001	-0.05	3.2	0.48
	900831	0.002	-0.05	2.3	0.22
	901031	0.002	-0.05	4.0	0.47
	910209	-0.001	-0.05	3.1	0.44
	910507	0.003	--	3.7	0.19
	910923	-0.001	--	3.3	0.31
	911125	-0.001	-0.05	2.5	0.39
	920220	0.003	-0.05	--	--
	920522	-0.001	-0.05	--	--
	920604	-0.001	--	2.7	0.52
	920824	0.004	-0.05	2.1	0.61
	921202	-0.001	--	1.4	0.27
	930302	-0.001	-0.05	1.3	0.33
	930519	-0.001	--	1.6	0.02
57SC	890920	0.007	-0.05	2.0	0.17
	891220	-0.001	-0.05	1.3	0.09
	900227	0.001	-0.05	1.7	0.13
	900613	0.001	-0.05	1.0	0.10
	900831	0.003	-0.05	3.0	0.27
	900831	-0.001	-0.10	-1.0	-1.0
	901031	0.001	-0.05	2.8	0.19
	910209	-0.001	-0.05	1.8	0.13
	910507	0.004	--	2.2	0.07
	910613	-0.001	--	2.0	0.25
	910923	-0.001	--	2.3	0.32
	911125	-0.001	-0.05	2.8	0.29
	920220	0.001	-0.05	--	--
	920522	-0.001	-0.05	--	--
	920604	-0.001	--	2.3	0.24
	920824	0.005	-0.05	1.9	0.16
	921202	-0.001	--	2.0	0.49
	930302	-0.001	-0.05	1.8	0.0
	930519	-0.001	--	1.3	0.0

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
585C	900227	0.001	-0.05	1.2	0.39
	900613	-0.001	-0.05	2.0	0.69
	900830	0.002	-0.05	3.0	0.75
	910117	0.003	-0.05	3.2	0.66
	910211	-0.001	-0.05	3.0	0.81
	910613	0.001	--	3.1	0.57
	910926	-0.001	--	2.6	0.76
	911127	0.002	-0.05	2.0	0.68
	920220	0.003	-0.05	--	--
	920604	0.003	--	3.0	0.59
	920826	0.02	-0.05	1.5	0.36
	921202	0.002	--	2.2	0.77
	930209	-0.005	-0.05	0.12	0.00
595C	900227	-0.001	-0.05	1.4	0.45
	900613	-0.001	-0.05	2.3	0.59
	900830	-0.001	-0.05	2.6	0.65
	910117	-0.001	-0.05	3.0	0.60
	910211	0.001	-0.05	2.4	0.57
	910613	-0.001	--	1.2	0.41
	910926	-0.001	--	2.8	0.59
	911127	0.001	-0.05	2.2	0.68
	920220	-0.001	-0.05	--	--
	920604	0.002	--	2.5	0.48
	920826	-0.001	-0.05	1.2	0.21
	921202	-0.001	--	2.6	0.17
	930301	-0.001	0.05	1.2	0.03
	930510	0.001	--	2.5	0.0
605C	900329	0.005	-0.05	2.3	0.36
	900613	0.002	-0.05	3.0	0.61
	900830	0.002	-0.05	3.0	0.68
	910211	-0.001	-0.05	3.3	0.70
	910507	0.004	--	2.2	0.41
	910613	0.002	--	2.1	0.32
	910924	0.002	--	2.5	0.51
	911125	-0.001	-0.05	3.2	0.49
	920220	0.006	-0.05	--	--
	920604	0.008	--	2.2	0.31
	920824	0.09	-0.05	1.2	0.00
	921210	0.002	--	2.7	0.52
	930302	-0.001	-0.05	1.3	0.16
	930519	-0.001	--	1.0	0.10

TABLE 2. PYROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
61SC	901031	0.002	-0.05	1.2	0.07
	910613	-0.001	--	2.6	0.33
	910926	-0.001	--	2.4	0.35
	911127	0.003	-0.05	1.4	0.18
	920220	-0.001	-0.05	--	--
62SC	901031	0.01	-0.05	2.3	0.25
	910209	0.004	-0.05	2.0	0.17
	910613	-0.001	--	1.2	0.19
	910926	0.001	--	2.2	0.29
	911127	0.001	-0.05	2.0	0.32
	920220	0.002	-0.05	--	--
	920604	0.001	--	2.4	0.06
	920826	0.003	-0.05	3.7	0.37
	921202	-0.001	--	3.0	0.42
	930301	-0.001	0.07	1.0	0.0
	930518	-0.001	--	3.1	0.0
63SC	901114	0.005	-0.05	2.0	0.35
	910209	0.004	-0.05	2.1	0.39
	910612	0.003	--	1.8	0.30
	910926	0.006	--	2.4	0.45
	911127	0.009	-0.05	1.5	0.29
	920220	0.01	-0.05	--	--
	920604	0.01	--	1.5	0.33
	920826	0.010	-0.05	2.1	0.49
	921202	0.005	--	1.3	0.16
	930301	-0.001	-0.05	0.80	0.00
	930518	0.006	--	2.0	0.57

TABLE 2. PETROTONICS "SC" WELL WATER QUALITY - As, Ba, Pb210 &amp; Po210(continued).

WELL	DATE	As	Ba	Pb210	Po210
64SC	901114	-0.001	-0.05	0.79	0.06
	910209	0.002	-0.05	0.62	0.14
	910612	0.003	--	0.87	0.17
	910926	0.008	--	0.92	0.16
	911127	0.010	-0.05	0.58	0.25
	920220	0.009	-0.05	--	--
	920604	0.007	--	0.47	0.09
	920826	0.009	-0.05	1.1	0.38
	921202	0.006	--	2.0	0.06
	930209	-0.005	-0.05	1.0	0.0
	930518	0.001	--	1.3	0.0
66SC	930311	-0.001	0.18	0.22	0.72
67SC	930310	0.004	-0.05	0.07	0.98
68SC	930315	0.006	0.45	0.37	0.00

## NOTES:

"-" sign before a value indicates that the value is less than the detection limit. Value shown is lower detection limit.

All values are in MG/L except as otherwise noted and the following:

Po210 = Polonium-210, in pci/l.

Pb210 = Lead-210, in pci/l.