

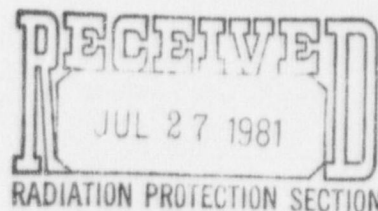
Mobil Oil Corporation

P.O. BOX 5444
DENVER, COLORADO 80217

July 22, 1981

URANIUM/MINERALS DIVISION

Mr. Gerald W. Stewart
Environmental Program Manager
Uranium Licensing Section
Radiation Protection Bureau
Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503



MOLYBDENUM ANALYSES - CORE DATA
CROWNPOINT SECTION 9 AND
MONUMENT SECTION 28

Dear Mr. Stewart:

The purpose of this letter is to provide you with data concerning the relative abundance of molybdenum (as discerned in analysis of cores) at the Crownpoint Section 9 Pilot In Situ Leach Site and the Monument Section 28 Proposed Pilot In Situ Leach Site.

The identified molybdenum mineral occurring in the Westwater Canyon Member of the Morrison Formation is Jordesite (MoS_2). The distribution of jordesite/molybdenum is somewhat erratic both areally and with depth in the uranium ore bearing sands of the Westwater Canyon Member.

The attached tables contain the results of the molybdenum analyses performed on cores taken at Section 9 and Section 28. Table 1 contains the analytical results of 21 ore zone core samples taken from 4 wells at the Crownpoint Section 9 Site. Table 2 contains the analytical results of 26 ore zone core samples taken from 2 wells at the Monument Section 28 Site.

As can be seen in reviewing the data in Tables 1 and 2 the weight percent of molybdenum in the cores at the Crownpoint Section 9 Site was as high as 0.055%, while the maximum value found at the Monument Section 28 Site was only 0.003%, with the vast majority of values being less than 0.001%. Based on the available ore zone core data and laboratory leaching and restoration tests on cores from Section 28 (Pages B 119 - 122 and Table B 2.1.2.2.2 - 3 in the Monument application), it is not anticipated that the leaching operations to be conducted at the Monument Section 28 Pilot Test Site will encounter significant levels of dissolved molybdenum in the leaching solution.

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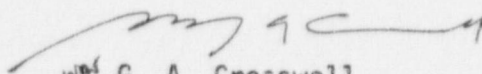
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Mr. Gerald W. Stewart
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We trust that the information provided in our Monument Application and in this letter will suffice to demonstrate the relative abundance of molybdenum when comparing Mobil's Section 9 and Section 28 Pilot In Situ Leach Sites.

If you have any questions concerning this information please contact W. A. Steingraber at (303) 572-5764.

Sincerely yours,



^{WAS} G. A. Cresswell
Manager
Hydrological and Environmental
Affairs

WAS:steingraber/st

Attachments

cc: D. B. Cooper, Nufuels
W. L. Luthy, Nufuels
P. W. Richardson, Nufuels

P. F. 1.A.1.4.7
P. F. 1.2.1.4.7

*DAVE BOYER RECEIVED COPY ON 27 JULY 81, CHECKED WITH HIM,
HE'LL BE WORKING ON MOBILE APPLICATION THIS WEEK. (27 JULY 81)
ARK*

TABLE 1

MOLYBDENUM ANALYSES FROM CORES AT CROWNPOINT SECTION 9 TEST SITE

<u>Well Number</u>	<u>Sample I. D.</u>	<u>Mo (wt. %)</u>
9U-210	1	0.055
	2	0.005
	3	0.006
9U-213	4	0.039
	5	0.033
	6	0.017
	7	0.003
	8	0.001
	9	<0.001
9U-214	10	<0.001
	11	0.018
	12	0.003
	13	0.003
9U-220	14	0.049
	15	0.010
	16	0.005
	17	0.003
	18	0.055
	19	0.002
	20	0.003
	21	0.002

TABLE 2

MOLYBDENUM ANALYSES FROM CORES AT MONUMENT SECTION 28 TEST SITE

<u>Well Number</u>	<u>Sample I. D.</u>	<u>Mo (wt. %)</u>
28U-321	1	0.001
	2	0.001
	3	<0.001
	4	<0.001
	5	<0.001
	6	0.002
	7	<0.001
	8	<0.001
	9	<0.001
28U-325	10	<0.001
	11	0.003
	12	<0.001
	13	0.002
	14	<0.001
	15	<0.001
	16	<0.001
	17	<0.001
	18	<0.001
	19	<0.001
	20	<0.001
	21	<0.001
	22	<0.001
	23	<0.001
	24	<0.001
	25	<0.001
	26	<0.001