



OFFICE OF THE
GENERAL COUNSEL

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DOCKETED
11/16/98

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November 13, 1998

Johanna Matanich, Esq.
New Mexico Environmental Law Center
1405 Luisa St., Suite 5
Santa Fe, NM 87505

CONFIDENTIAL
ADMINISTRATIVE

In the Matter of
HYDRO RESOURCES, INC (HRI)
Docket No. 40-8968-ML

Dear Ms. Matanich:

By letter dated September 29, 1998, you forwarded a request, on behalf of Intervenor ENDAUM and SRIC, that additional documents be added to the hearing file in the above-captioned proceeding and that the Staff provide certain information. See Letter from J. Matanich to J. Hull and M. Young, dated September 29, 1998. See also Letter from J. Hull, NRC, to Administrative Judges, dated June 11, 1998 (forwarding Hearing File). Intervenor's request for information and documents has been submitted in the above-captioned 10 C.F.R. Part 2, Subpart L proceeding where discovery is prohibited, but the Presiding Officer may rule on issues regarding appropriate materials for the hearing file. See 10 C.F.R. § 2.1231. Further, even when discovery is permitted under NRC regulations, the Staff is not required to respond to interrogatories or requests for documents in a formal, trial-type NRC proceeding unless (1) the presiding officer determines that the interrogatory answer is necessary to a proper decision in the proceeding and (2) that the document is not publicly available. See 10 C.F.R. §§ 2.720(h)(2)(ii), 2.744, 2.790.

While the Staff views the September 29 letter as being beyond the scope of 10 C.F.R. § 2.1231 and contrary to the discovery regulations cited above, without waiving these objections, the Staff response is provided below.

1. **Structural cross-sections and structural contour maps for all three sites.**

Structural cross-sections submitted to the NRC are included in the applications or environmental reports for the sites and are part of the hearing file. See Letter from Mark S. Pelizza, HRI, to Bob Carlson, NRC, dated October 16, 1998 (Pelizza Letter) (attached), at 1.

2. **Driller's logs for all Crownpoint monitoring wells (n=10) at the Crownpoint site.**

This request apparently seeks "driller's logs" that record what a driller found when drilling a bore hole. The Staff did not use these logs, but used the geophysical logs with stratigraphic interpretations on cross sections submitted with the application. These logs are all part of the hearing file. See Pelizza Letter at 1.

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3. **Maps of ore bodies at each site, including those depicted in three dimensions.**

Maps of ore bodies, such as depicted at FEIS, pages 3-16 (Fig. 3.6) and 3-20 (Fig. 3.8) were submitted with the application and are part of the hearing file. Three-dimensional maps were not submitted to the NRC. *See Pelizza Letter at 2.*

4. **Surface elevations for all boreholes at all three sites.**

Surface elevations were not submitted to the NRC. *See Pelizza Letter at 2.*

5. **Excursion scenario modeling done by HRI staff for all three sites.**

HRI excursion scenario modeling was not submitted to the NRC. *See Pelizza Letter at 2.*

6. **Supplement aquifer modeling for the Church Rock and Crownpoint sites** [provide "Church Rock and Crownpoint Aquifer Modeling Supplement," dated October 19, 1993, cited in the Mark Pelizza affidavit of September 8, 1998].

The Staff has not been able to locate the requested document in its files, but notes that the document requested is listed as a reference in Appendix A of the HRI License. Documents believed to be similar to the October 19, 1993 supplement are attached to the Pelizza Letter. *See Pelizza Letter at 2 and attachment.* The Crownpoint worksheet was also submitted as part of an October 15, 1996, HRI response that is already part of the hearing record. *See id.*

7. **Description and findings of an NRC Staff solute-transport for radium-226 concentrations at Town of Crownpoint water wells supporting FEIS** [Was the FEIS discussion of groundwater impacts at pages 4-47 through 4-49 based on the information in William Ford's memorandum to Robert Carlson, dated March 11, 1997?]

Yes. Please note that the Staff does not agree with the assertion in item 7 that "[t]he NRC staff doubts that radium-226 concentrations will meet federal drinking water standards, let alone baseline, following restoration at the Crownpoint site. *See* Joe Holonich letter to Susan Jordan (July 17, 1997) at 2-3."

8. **Copies of three documents pertaining to restoration and license termination at the Mobil Section 9 Pilot Project** [referenced by NRC Staff Hydrologist William Ford in his February 20, 1998 affidavit]

R. **[Mobil Alternative Energy, Inc., 1986]** Letter from J. F. Cullen, Mobil Alternative Energy, Inc., to Felix R. Miera, New Mexico Radiation Protection Bureau, dated January 22, 1986, Restoration Progress Report, Crownpoint Section 9 Pilot, In Situ Leach Plant [AN. 9808120141]

S. **[Mobil Mining and Minerals Company, 1986]** Letter from J. F. Cullen, Mobil Mining and Minerals Company, to Gary Konwinski, NRC, dated November 14, 1986, forwarding Mobil Pilot In-Situ Leach Uranium Project restoration declaration with four attachments. [AN. 8702060301]

V. **[NRC Environmental Assessment for SUA-1479, Feb. 4, 1988]** Letter to Jim Analla, BIA, from Edward Hawkins, URFO, Reg. IV, NRC, dated February 4,

1988 [AN. 8802230395], transmitting *Draft Finding of No Significant Impact Regarding A Termination of the Source and Byproduct Material License and Environmental Assessment in Consideration of the Release of Source Material License SUA-1479 for Mobil Oil Corporation, Crownpoint, Section 9, In Situ Test Project* [AN. 8802230437]

Copies of the three documents are attached and will be added to the hearing file. (These documents are part of the HRI docket and also available from the PDR.)

9. **Post-restoration water quality data for Mobil Section 9 Pilot Project and Teton Section 13 Pilot Test.**

Documents "S" and "V" in item 8, above, contain the requested data. Reference 13 in document "V" identifies "Mobil Oil Corporation, September 1987. Groundwater Restoration Stability Results," however, the Staff could not locate that reference. The Staff did locate and is providing the following document (in Docket No. 40-8911) that contains data from stability samples collected from November 1986 to April 1987 (and the document will be added to the hearing file):

Letter from J. F. Cullen, Mobil Coal Producing Inc., to Thomas T. Olsen, NRC, dated June 2, 1987. [AN. 8708240360]

10. **Any NRC Staff, NRC contractor or licensee reports that evaluate the asserted efficiency of the vacuum drier/bag filter emission control system for the yellowcake drier/bag filter emission control system for the yellowcake drier at the central processing plant.**

The only information the NRC used to evaluate the HRI vacuum dryer was provided with the application. See FEIS at 4-74; Pelizza Letter at 2.

Attachment 2 is a supplemental HRI Hearing File Index, which includes the documents identified above and updates the index to include other documents enclosed herewith.

Sincerely,


Mitzi A. Young
Counsel for NRC Staff

Enclosures: As stated

cc w/encls:	Peter Bloch, Presiding Officer	OCAA
	Thomas Murphy, Special Assistant	PDR
	Anthony Thompson	SECY
	Roderick Ventura	ASLB Panel
	Diane Curran	Adjudicatory File

cc: w/o encls: Remainder of Service List

HRI, INC.

(A Subsidiary of Uranium Resources, Inc.)

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Fax: (972) 387-7779

P.O. Box 777
Crownpoint, New Mexico 87313
Telephone: (505) 786-5845
Fax: (505) 786-5555

October 16, 1998

Mr. Bob Carlson
Project Manager
Office of Nuclear Material Safety & Safeguards
U.S. Nuclear Regulatory Commission
2 White Flint North
11545 Rockville, Pike
Mail Stop T-7J9
Washington, D.C. 20852

RE: New Mexico Environmental Law Center Information Request

Dear Mr. Carlson:

To follow-up on our telephone conversation of yesterday, I believe that most of the information requested by NMELC can be found in the record as follows:

1. Structural cross-sections and structural contour maps - The cross sections described in the Geraghty and Miller "Hydrodynamic Control" report are the same cross sections labeled as Figures 2.6-6 through 2.6-10 of the *Churchrock Revised Environmental Report*, March 1993 (Updated October 11, 1993), and labeled Figure 2.2-7 through 2.2-10 within the *Crownpoint Project In-Situ Mining Technical Report*, June 12, 1992. Cross sections for the Unit 1 location, not referenced by Geraghty and Miller, are within Appendix D-1 of the *Unit 1 UIC Application and Technical Report*, October 9, 1992. All of these reports are part of the hearing record. No structure contour maps have been required or provided.
2. Driller's logs - Monitor wells drilled at Churchrock Section 8 are CR1 through CR8 (n=8). Monitor wells drilled at Crownpoint Section 24 are CP1 through CP10 (n=10). Geophysical logs of monitor wells CR1 through CR6 along with logs from select exploration holes are duplicated on Figures 2.6-6 through 2.6-8 of the *Churchrock Revised Environmental Report*, March 1993. Geophysical logs of monitor wells CP1 through CP10 along with logs from select exploration holes are duplicated on Figure 2.2-7 through 2.2-13 within the *Crownpoint Project In-Situ Mining Technical Report*, June 12, 1992. Both of these reports are part of the hearing record. By having these cross-sections, Petitioners have log copies that have photographically have been reduced to equal scale and will provide a more ready comparison of geologic data than will full size logs of different scale.

Any more detailed analysis of exploration data as closely guarded proprietary information and will not be made available. Additionally, as described in Section 8 of the COP, the geological analysis and hydrological testing that is submitted after the wellfield installation is provided to regulators as positive proof that the mine unit will perform as specified in the license. An infinite amount of drill holes could not replace the confidence that is derived from the actual wellfield testing.

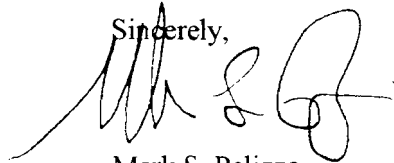
3. Orebody maps – This information is not required by NRC and is not part of the hearing record. In addition, as stated in #2 above, details of the subsurface orebody is not public information.
4. Surface elevation of boreholes – This information is not part of the hearing record and as stated in #2 above, HRI will not agree to provide the exploration database. Therefore borehole surface elevations serve no purpose.
5. Excursion scenario modeling - Petitioners have requested a copy of the software that has been licensed to HRI to perform a variety of types of multiple well subsurface analysis at ISL locations. This software is not part of the hearing record and is not available to the public unless they are willing to pay license fees.

The software simply provides a user-friendly interface to conduct millions of calculations and provide instantaneous visual results using well-known reservoir theory specified for ISL. The user provides a given combination of input parameters such as well numbers, well patterns, well spacing, permeability, formation thickness, flow rates, etc. HRI will provide licensing information so Petitioners can purchase the software directly.

6. Supplement aquifer modeling for Churchrock and Crownpoint Sites dated October 19, 1993 – I have searched my files and have not been able to locate a copy of this correspondence. To the best of my recollection the “Supplement” that Petitioners request are the mining sequence work sheets that were referenced on page 4 of the Geraghty and Miller study that was transmitted to NRC the previous day. I know of no other supplementary aquifer modeling that was done at that time. The mining sequence work sheets are attached hereto. Note that the Crownpoint worksheet is also within the October 15, 1996 (Response to NRC Comments) Q2/78 that is part of the hearing record.
7. NRC solute-transport model – I understand that this information is to be distributed by NRC.
8. Copies of three Mobil references – I understand that this information is to be distributed by NRC.
9. Teton and Mobil water quality data – I understand that this information is to be distributed by NRC.
10. Vacuum drier/bag filter emission control system – HRI has described the Vacuum dryer that is proposed for the Crownpoint project initially in § 3.2 of the Churchrock Project Environmental Report dated 4-88 and most recently in the COP Rev. 2.0 § 2.5. Both of these reports are part of the hearing record. The Vacuum dryer is widely used, off the shelf, zero emission technology. Petitioners, however, they may wish to contact vendors and get additional information.

Please feel free to contact me with questions pertaining to this matter.

Sincerely,



Mark S. Pelizza
Vice President
Health, Safety and Environmental Affairs

Cc: Tony Thompson

REVISED SCHEDULE

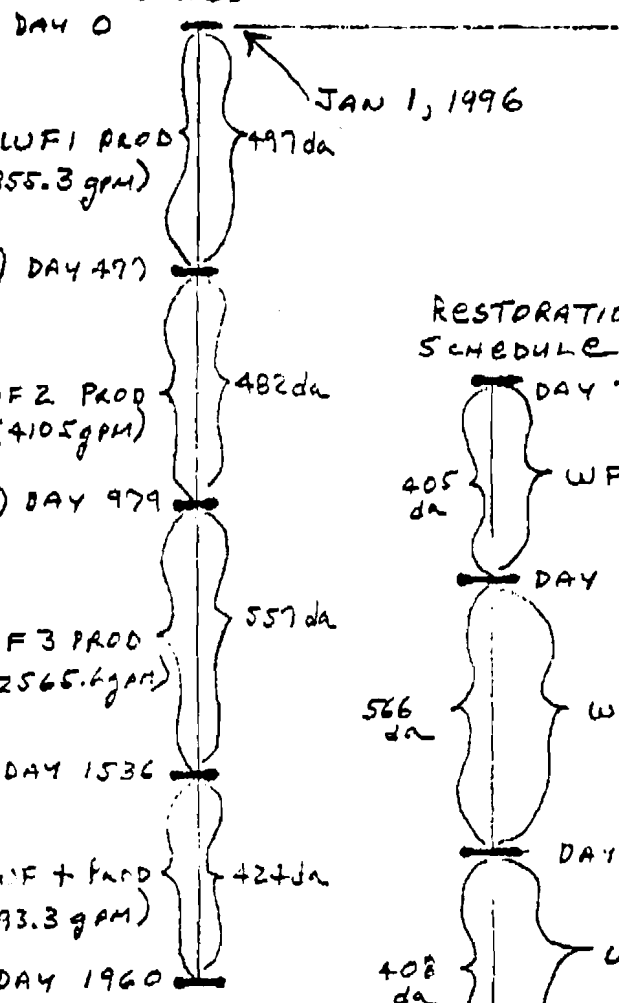
REVISED
8-14-93

HLA/CSB

CROWNPOINT PRODUCTION + RESTORATION (REVISION #3)

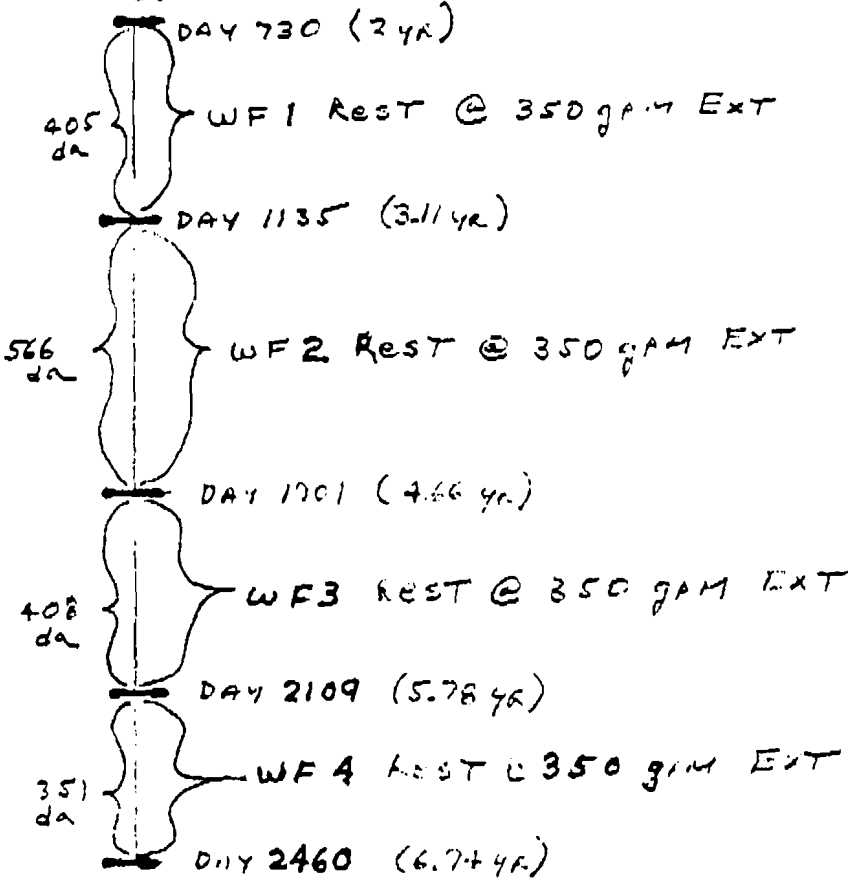
WF = WELLFIELD
PROD = PRODUCTION
REST = RESTORATION

PRODUCTION SCHEDULE



Avg PROD = 490 DAYS
1.34 YRS

RESTORATION SCHEDULE



Avg REST = 432 DAYS
1.18 YRS

8-19-93 COPY TO Geraghty + Miller
(JACK COLLINS)

8-16-93 COPY TO HARRY, PAUL, FRANK
8-16-93 FAX TO MARK

8-18-93 COPY OF FIVE PAGES
TO HARRY, PAUL,
RON, JIM, MARK,
MIKE, FRANK, ADRIAN

CROWNPOINT WellFIELDS

8-12-13
CSB

(REVISION #3)

WELLFIELD	WELLS	MAX I/E GPM	PRODUCTION			RESTORATION			
			BLEED	EXT GPM	INJ GPM	AVG I/E GPM	BLEED	EXT GPM	INJ GPM
1	188	35	1%	2855.3	2826.7	4.30	17%	350.0	-346.5
2	285	}	}	4105.0	4063.9	2.99	17%	350.0	-346.5
3	172			2565.4	2539.9	4.78	17%	349.8	-346.3
+	196			2893.3	2864.3	4.24	17%	349.9	-346.4
	<u>861</u>			<u>12419.2</u>	<u>12294.8</u>	4.15	5%	350.2	-332.7
				4.08	8%	350.1	-322.0		
				4.04	10%	350.4	-315.4		
				<u>3.98</u>	<u>12.5%</u>	<u>349.7</u>	<u>-306.0</u>		

ZONE	TOTAL EXT GPM	TOTAL INJ GPM	TOTAL WELLS
1 VUA	323.3	320.1	23
2 VULA	1083.6	1072.8	78
3 VMLA	878.5	869.8	57
4 VULB	556.9	551.3	35
5 VLB	597.5	591.5	39
6 VUUC	1929.5	1910.2	140
7 VUC	1143.5	1132.1	76
8 VMC	1986.8	1967.0	145
9 VULC	2458.0	2433.5	172
10 VMLC	70.7	70.0	5
11 VLLC	1390.7	1376.8	91
	<u>12,419.0</u>	<u>12,295.1</u>	<u>861</u>

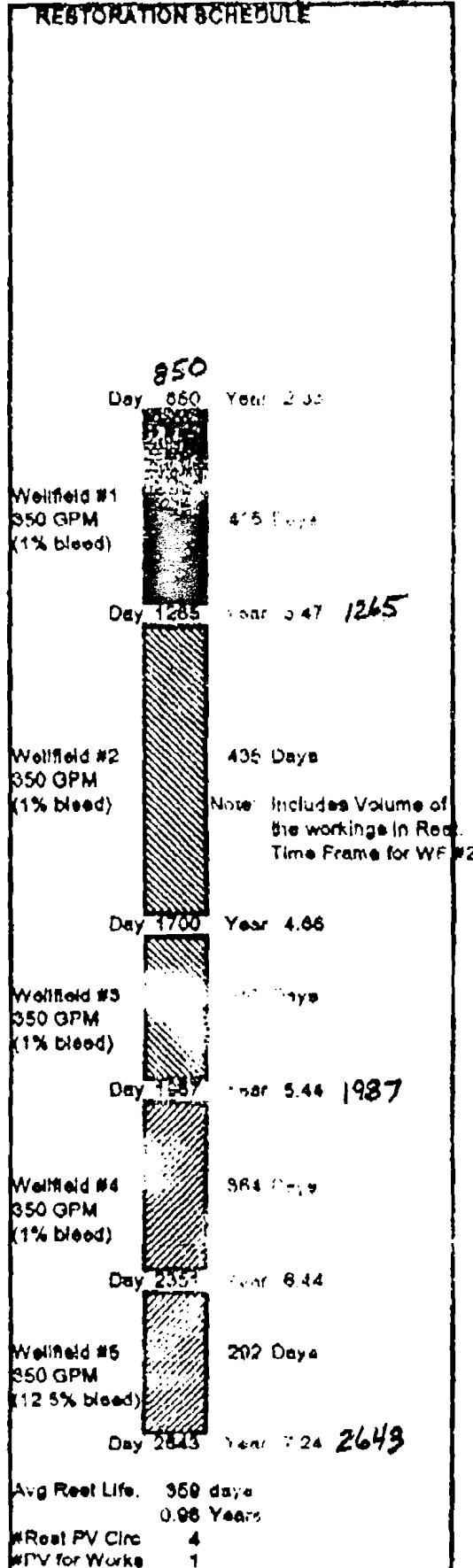
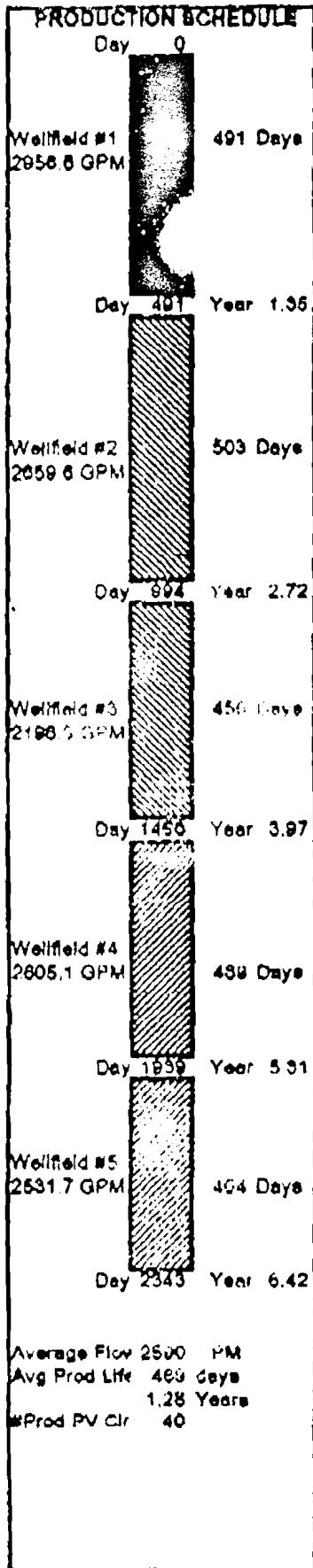
ALL WF 4 REST.

USED THIS TO ACHIEVE DD IN MON WELLS

SUMS CHECK W/ ABOVE

PRODUCTION & RESTORATION SCHEDULE FOR THE CHURCHROCK WELLFIELDS

NW/alon #8 by WPO
September 20, 1993



URI Mine Schedule
CHURCHROCK revision 6

9-29-93 1008 AM
 CC

	Pre Prod	Prod	Pre Rest	Rest	Post Rest	
WF1	—	491	359	415	1378	2643
WF2	491	503	271	425	943	2643
WF3	994	456	250	287	656	2643
WF4	1450	489	48	364	292	2643
WF5	1939	404	8	292	—	2643

end of production times (days)

- WF1 491 ✓
- WF2 994 ✓
- WF3 1450 ✓
- WF4 1939 ✓
- WF5 2343 ✓

end of Rest time

WF5 2643

**HRI HEARING FILE INDEX
October 1998 Supplement**

<u>DATE</u>	<u>NRC PDR Accession Number</u>	<u>DESCRIPTION</u>
1/22/86	9808120141	Letter from J.F. Cullen, Mobil Alternative Energy, Inc., to Felix R. Miera, New Mexico Radiation Protection Bureau re: Restoration Progress Report, Crownpoint Section 9 Pilot, In Situ Leach Plant
11/14/86	8702060301	Letter from J. F. Cullen, Mobil Mining and Minerals Company, to Gary Konwinski, NRC, forwarding Mobil Pilot In-Situ Leach Uranium Project restoration declaration with four attachments.
6/2/87	8708240360	Letter from J. F. Cullen, Mobil Coal Producing Inc., to Thomas T. Olsen, NRC, dated June 2, 1987, regarding restoration stability analyses.
2/4/88	8802230437	Letter to Jim Analla, BIA, from Edward Hawkins, URFO, Reg. IV, NRC, [AN. 8802230385], transmitting Draft Finding of No Significant Impact Regarding A Termination of the Source and Byproduct Material License and Environmental Assessment in Consideration of the Release of Source Material License SUA-1479 for Mobil Oil Corporation, Crownpoint, Section 9, In Situ Test Project
5/1/98		Letter from Joseph J. Holonich, NRC, to Rennie Cohoe, Navajo Nation Environmental Protection Agency [response to NNEPA comments on FEIS]
5/20/98		Letter from Joseph J. Holonich, NRC, to Lynne Sebastian, State Historic Preservation Officer, [re: Determination of Effect for the Church Rock Section 8 and Crownpoint Section 12 Portion Historic Properties on Portions of the Crownpoint, New Mexico Project]
5/20/98		Letter from Joseph J. Holonich, NRC, to James Copeland, BLM [re: Historic Properties on Portions of the HRI Uranium Mining Project Areas] enclosing 5/20/98 letter to Lynne Sebastian (above)

5/20/98 Letter from Joseph J. Holonich, NRC, to Alan S. Downer, Navajo Nation Historic Preservation Dept. [re: HRI's Uranium Mining Project, Church Rock Section 17 - No Historic Properties Found] enclosing 5/20/98 letter to Lynne Sebastian

5/20/98 Letter from Joseph J. Holonich, NRC, to Jenni Denetson, BIA [re: Historic Properties on Portions of the HRI Uranium Mining Project Areas] enclosing 5/20/98 letter to Lynne Sebastian

6/1/98 Letter from Jerrold E. Crockford, BLM, to Robert Carlson, NRC [re: effect on cultural resources]

6/3/98 Letter from Glenna Dean, NM Office of Cultural Affairs, to Joseph Holonich, NRC [re: effect on cultural resources]

6/24/98 Letter from Peter T. Noyes, Navajo Historic Preservation Department, to Joseph J. Holonich, NRC [re: approval per Navajo Nation Cultural Resources Protection Act for Navajo Lands]

7/10/98 Letter from Joseph J. Holonich, NRC, to Richard F. Clement, HRI [Responses to Staff's National Historic Preservation Letters Dated May 20, 1998]