

**CAMECO RESOURCES
CROW BUTTE OPERATION**



**86 Crow Butte Road
P.O. Box 169
Crawford, Nebraska 69339-0169**

**(308) 665-2215
(308) 665-2341 – FAX**

May 27, 2008

Mr. Stephen J. Cohen, Project Manager
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
Mail Stop T8-F5
Washington D.C. 20555-0001

Subject: Thirty day response to self identified license violation for missed five-year MIT re-tests (Dated April 29, 2008), Cameco Resources, Crow Butte Operation, Crawford, Nebraska, Source Materials License SUA-1534

Dear Mr. Cohen:

On April 28, 2008 a Mechanical Integrity Test (MIT) Operator was sent out to perform the five-year MIT on production well P3045 in Mine Unit 9. When the Operator arrived at the well he found that it had been abandoned. The operator returned to the main plant to review the Well Database to see why an abandoned well had been scheduled for MIT testing. During this review, the operator discovered that the printed electronic database (MITDATA.xls) did not match the hard copy data for the well. The MIT date listed in the hard copy did not match the date from the computer printout. The MIT operator notified his supervisor, and it was brought to the attention of the Senior Geologist. On April 29, 2008 following a thorough investigation of the data base, it was found that a portion of the MITDATA.xls file, including the dates for nearly all of the Mine Unit 9 wells, had become corrupt. A check of all Mine Unit 9 MIT dates was conducted and it was determined that there were 42 wells that had missed the five-year anniversary date by approximately 1 year. (Attachment A). It states in the site's Nuclear Regulatory Commission Materials License (No. SUA-1534) Section 10.2 that, "... each well shall be retested at least once each five (5) years it is in use. The integrity test shall pressurize the well to 125 percent of maximum operating pressure and shall maintain 90 percent of the pressure for 20 minutes to pass the test". Failure to conduct the five-year MIT's is a violation of the NRC Source Material License.

**CAMECO RESOURCES
CROW BUTTE OPERATION**



Mr. Stephen J. Cohen
May 27, 2008
Page 2

The Mine Manager was notified of the situation, and shortly thereafter, a call was made to Dave Carlson and Dave Miesbach of the NDEQ and Stephen Cohen of the NRC. A call was also placed to CBO's Environmental, Health & Safety Manager, as well as CBO corporate office in Denver, Colorado. A Corporate SHE-20 report was prepared and sent to the Cameco corporate office in Saskatoon, Saskatchewan.

Immediately, resources were directed to prepare the overdue wells for MIT re-test. Pulling units pulled the pumps and stingers from the wells and a concerted effort began to complete testing of the wells as soon as possible. Injection into the affected wells was immediately stopped.

The three MIT units were diverted from their scheduled work plans and sent to test the wells in question. Meanwhile, Geology Dept. personnel began the process of verifying each date in the MITDATA.xls file back to the original MIT (hard copy) form. The MIT tests and database review continued through the following several days. A total of 42 wells were found to be past their anniversary date. The majority of these were in Mine Unit 9 (40), with 2 wells in Mine Unit 8. Mine Unit 8 wells appeared to be mistyped years, as the day and month matched their respective forms.

The last well that required testing successfully passed the MIT test on Monday, May 5, 2008. All wells that were in violation have successfully passed the MIT.

A TapRoot® investigation was conducted to identify the causal factors that led to this event and a root cause analysis was performed to formulate corrective actions to prevent recurrence of this event. A detailed report of the TapRoot® investigation is attached to this report.

If you have any questions, please feel free to contact me at (308) 665-2215 ext 114.

Sincerely,
CAMECO RESOURCES
Crow Butte Operation



Larry Teahon
Manager of Environmental, Health and Safety

**CAMECO RESOURCES
CROW BUTTE OPERATION**



Mr. Stephen J. Cohen
May 27, 2008
Page 3

Attachments: As Stated

cc: David Miesbach, NDEQ
Steve Magnuson, CBO
Jim Stokey, CBO
CBO File

TapRoot® Investigation Report

Mechanical Integrity Test (MIT)

Missed Five Year Re-test

Crow Butte Operation

April 29, 2008

Larry Teahon

Walt Nelson

T.J. Jelinek

Crow Butte Operation

May 16, 2008

Table of Contents

1.0	DEFINITIONS:	3
2.0	OVERVIEW OF THE INVESTIGATION PROCESS	6
2.1	INVESTIGATION SCOPE	6
2.2	ROOT CAUSE ANALYSIS PROCESS	6
2.3	INFORMATION COLLECTION	7
2.4	CAUSAL FACTOR (PROBLEM/ISSUE) DEFINITION.....	7
2.5	ROOT CAUSE ANALYSIS	7
2.6	CORRECTIVE ACTION RECOMMENDATIONS	7
3.0	CAUSAL FACTORS AND SUPPORTING INFORMATION	8
3.1	CAUSAL FACTOR #1 – ANNUAL LISTING OF WELLS REQUIRING A MECHANICAL INTEGRITY TEST WAS NOT CROSS CHECKED FOR ACCURACY.	8
3.2	CAUSAL FACTOR #2 – DATA FILE WAS CORRUPTED DURING A SORTING PROCESS.	8
4.0	CORRECTIVE ACTIONS RECOMMENDATION	9
	APPENDIX A	10
	APPENDIX B	11
	APPENDIX C	12

Definitions:

1. Mechanical Integrity Test – the process involves pressurizing the well casing to prove the casing is continuous and can stand the normal operating pressures without failure. Every well is tested after it is completed and before it is put into service, after any workover with a drill rig or servicing equipment, and at least every five years.

1.0 EXECUTIVE SUMMARY

On April 28, 2008 a Mechanical Integrity Test (MIT) Operator was sent out to perform the five-year MIT on production well P3045 in Mine Unit 9. When the Operator arrived at the well he found that it had been abandoned. The operator returned to the main plant to review the Well Database to see why an abandoned well had been scheduled for MIT testing. During this review, the operator discovered that the printed electronic database (MITDATA.xls) did not match the hard copy data for the well. The MIT date listed in the hard copy did not match the date from the computer printout. The MIT operator notified his supervisor, and it was brought to the attention of the Senior Geologist. On April 29, 2008 following a thorough investigation of the data base, it was found that a portion of the MITDATA.xls file, including the dates for nearly all of the Mine Unit 9 wells, had become corrupt. A check of all Mine Unit 9 MIT dates was conducted and it was determined that there were 42 wells that had missed the five-year anniversary date by approximately 1 year. (Attachment A). It states in the site's Nuclear Regulatory Commission Materials License (No. SUA-1534) Section 10.2 that "*... each well shall be retested at least once each five (5) years it is in use. The integrity test shall pressurize the well to 125 percent of maximum operating pressure and shall maintain 90 percent of the pressure for 20 minutes to pass the test*". The sites NDEQ Class III Permit states in Part IX, Section A-2, "*The permittee shall demonstrate mechanical integrity at least once every five years during the life of the well(s) as required herein and in Title 122, Chapter 18 and 20*". Failure to conduct the five-year MIT's is a violation of the NRC Source Material License and the NDEQ Class III Permit.

The Mine Manager was notified of the situation, and shortly thereafter, a call was made to Dave Carlson and Dave Miesbach of the NDEQ and Stephen Cohen of the NRC. A call was also placed to CBO's Environmental, Health & Safety Manager, as well as CBO corporate office in Denver, Colorado. A Corporate SHE-20 report was prepared and sent to the Cameco corporate office in Saskatoon, Saskatchewan. A follow-up report was given to NDEQ personnel on April 29.

Immediately, resources were directed to prepare the overdue wells for MIT re-test. Pulling units pulled the pumps and stingers from the wells and a concerted effort began to complete testing of the wells as soon as possible. Injection into the affected wells was immediately stopped.

The three MIT units were diverted from their scheduled work plans and sent to test the wells in question. Meanwhile, Geology Dept. personnel began the process of verifying each date in the MITDATA.xls file back to the original MIT (hard copy) form. The MIT tests and database review continued through the following several days. A total of 42 wells were found to be past their anniversary date. The majority of these were in Mine Unit 9 (40), with 2 wells in Mine Unit 8. The Mine Unit 8 wells appeared to be mistyped years, as the day and month matched their respective forms.

The last well that required testing successfully passed the MIT test on Monday, May 5, 2008. All wells that were in violation have successfully passed the MIT.

The TapRoot Investigation team identified two causal factors that lead up to this event.

1. Causal Factor #1 – *Annual listing of wells requiring a Mechanical Integrity Test was not cross checked for accuracy.* During October of each year, a list of wells requiring mechanical integrity testing during the following year is generated by the Senior Geologist. This list is given to the MIT Technicians so they can develop a testing schedule for the wells. This list was not cross checked against the hard copy data to verify accuracy of the testing dates.
2. Causal Factor # 2 – *Data file was corrupted during a sorting process.* How and when the problem with the database occurred, is speculative. It is most likely that the jumbling of the data occurred during a sorting operation that did not include all of the cells in the worksheet. Such a sorting could have sorted the wells by number but not sorted the dates. A subsequent re-sorting of the data could have then sorted the incorrect dates with the wrong wells. It is evident that there was no procedure in place to verify the validity of the dates and data in the computer, and there was not a stand alone double check of the database with the hard copy.

Investigation Conclusions

Based on the information gathered during the investigation, the team identified two (2) root causes. The team also came up with four (4) recommended corrective actions.

2.0 OVERVIEW OF THE INVESTIGATION PROCESS

2.1 Investigation Scope

The Crow Butte Geology Department maintains all information that is pertinent to well construction, installation, and testing in a set of hard copy books. The hard copy data includes: completion date, materials used, footage of casing, amount of screen installed, under-reamed interval, cement weights with return volume, MIT date, and other notes from the installation process. Most of this data is then entered into an Excel computer database. The MIT dates, cement dates, cement weight, depth of each centralizer and driller's name are entered into the DEQ_DATA worksheet (Attached B) within the Geologic Database. This data is used to assist in the preparation of well completion reports and well registration forms with the appropriate regulatory agencies.

The MIT dates listed in the electronic data set are copied into a master file (MITDATA.xls) (Attachment C) that contains a historical record of all MIT test dates for all of the mining wells that have been tested at CBO. New MIT dates are copied from the DEQ_DATA worksheet and pasted into the MITDATA.xls file. Five-year re-test dates are hand entered directly into the MITDATA.xls file. This file contains information such as: well number, depth to the Kpacker (screens), original MIT date, as well as any subsequent five-year re-test dates.

Prior to the beginning of a new year, the MITDATA.xls file is sorted by date to compile a list of those wells that require a five-year re-test during the upcoming year. This data is sorted, printed, and given to the Wellfield Operations Department. Wellfield Operations then schedules the pulling of the wellheads, pumps or injection string. When this work is completed, the MIT operator is notified, and the testing of the well may proceed. The operator completes the necessary paperwork, and passes the completed form to the Geology Department, where the data is hand entered into the MITDATA.xls file.

How and when the problem with the database occurred, is speculative. It is most likely that the jumbling of the data occurred during a sorting operation that did not include all of the cells in the worksheet. Such a sorting could have sorted the wells by number but not sorted the dates. A subsequent re-sorting of the data could have then sorted the incorrect dates with the wrong wells.

The investigation examined all of the relevant events and conditions leading up to and following the April 29, 2008 event where it was discovered that forty two (42) wells had missed their five-year MIT.

Both basic and root causes of the event were identified, as well as corrective action recommendations to significantly lessen the chances of this type of incident occurring in the future.

2.2 Root Cause Analysis Process

The investigation was conducted using the TapRoot® Root Cause Analysis process. This process was developed in 1988 and is internationally recognized and used by

organizations from many different industries. The investigation process consisted of four main steps, namely a determination of:

1. What happened (SnapCharT®);
2. Issues or Problems (called Causal Factors);
3. Why the incident happened (Root Cause Analysis); and
4. Corrective Action Recommendations;

2.3 Information Collection

The individuals associated with the Geology Department and Wellfield Operations were interviewed as to their role in managing well data.

2.4 Causal Factor (Problem/Issue) Definition

Two (2) Causal Factors (CF's) were identified for the incident. Causal Factors are general problems or issues. The Causal Factor numbering reflects their order in time sequence and **NOT** their relative priority. There is no prioritization of Causal Factors. The premise is that if any one Causal Factor had been removed or significantly changed prior to the incident, there would be a good chance the incident would not have occurred or its consequences would have been significantly reduced. A discussion of and basis for each Causal Factor appears in **Section 3** of the report.

Each Causal Factor is associated with, or more accurately the result of, numerous Conditions. The Conditions provide additional information and help to explain why the Causal Factor existed.

2.5 Root Cause Analysis

The TapRoot® Root Cause Analysis process calls for each Causal Factor to be analyzed for root causes using the TapRoot® Root Cause Tree. The process requires the investigator to identify as many root causes as is supported by the information collected. It is important to note that there is no 'root - root cause' to an incident (or to a Causal Factor). Typically, there are several CF's associated with an incident and for each CF, there are several root causes. The root causes detail **why** the CF was allowed to exist. This incident was typical in that regard. Identification of valid root causes permits the formulation of effective and practical Corrective Action Recommendations (CARs).

2.6 Corrective Action Recommendations

A total of three (3) Corrective Action Recommendations (CARs) were developed to address the root causes stemming from the two identified Causal Factors. These are detailed in a Corrective Action Matrix format in **Section 4** of this report.

3.0 CAUSAL FACTORS AND SUPPORTING INFORMATION

3.1 Causal Factor #1 – Annual listing of wells requiring a Mechanical Integrity Test was not cross checked for accuracy.

Discussion of Causal Factor

This is a causal factor because had the data been crossed checked for accuracy against the hard copy kept on each well the chances of producing a wrong date would have been greatly minimized.

Basis for Causal Factor

- No Standards, Policies, or Administrative Controls were in place to require the MIT data to be crossed checked for accuracy.

3.2 Causal Factor #2 – Data file was corrupted during a sorting process.

Discussion of Causal Factor

This is a causal factor because the corrupted data was a direct cause of the incident.

Basis for Causal Factor

- Once data had been entered into the spreadsheet it was not reviewed for accuracy after it was sorted. It was assumed that the data was being properly sorted.

4.0 CORRECTIVE ACTION RECOMMENDATIONS

Corrective Actions Matrix

Causal Factor #1: <i>Annual listing of wells requiring a Mechanical Integrity Test was not cross checked for accuracy</i>		
CAR #	Corrective Action Recommendation (CAR)	Associated Root Causes
CAR 1-1	The office administrator along with geology staff will build an Access® database containing historical MIT data from current Excel files. New wells will be added as the initial MIT's are performed.	No Standards, Polices, or Administrative Control in place.
CAR 1-2	New entries into the MIT database will be reviewed monthly by the EHS department against the well's hard copy data. EHS staff will also compare the annual MIT list against hard copy data.	Infrequent audits and evaluations.

Corrective Actions Matrix

Causal Factor #2: <i>Data file was corrupted during a sorting process</i>		
CAR #	Corrective Action Recommendation (CAR)	Associated Root Causes
CAR 2-1	New entries into the MIT database will be reviewed MIT unit operators against hard copy data. MIT operators will also compare the annual MIT list against hard copy data.	No inspections.
CAR 2-2	The EHS staff will work with the Geology and Wellfield Operations staff to develop a hard copy binder system that will contain each years five and ten year MIT list. The binders will be able to "roll forward" and will be updated with new wells as the initial MIT's are performed. A method for flagging well work-over MIT's will be developed so that these wells move forward into the appropriate location.	Infrequent audits and evaluations.

APPENDIX A

LIST of WELLS MISSING FIVE YEAR MIT

Well's that Missed the 5 Year Test

Well #	Wellhouse #	Producer/ Injector	Incorrect Original Date	Checked Correct Date	Recent MIT Date	
1	2800	40	I	15-May-04	15-May-02	01-May-08
2	2901	40	P	07-May-04	07-May-02	01-May-08
3	3001Y	42	P	06-Aug-03	30-May-02	01-May-08
4	3002YX	41	I	01-Aug-03	03-Jul-02	01-May-08
5	3004	44	I	09-Sep-03	08-Jul-02	30-Apr-08
6	3005YX	41	I	25-Jul-03	03-Jul-02	01-May-08
7	3008Y	45	I	18-Jul-03	03-Jun-02	30-Apr-08
8	3009Y	47	I	18-Jul-03	28-May-02	29-Apr-08
9	3010	41	I	06-Aug-03	02-Jul-02	29-Apr-08
10	3011	41	P	09-Jul-03	23-May-02	29-Apr-08
11	3012	42	I	17-Jul-03	28-May-02	30-Apr-08
12	3013	42	P	16-Jul-03	01-Jul-02	30-Apr-08
13	3014	42	P	12-Jul-03	18-Jun-02	29-Apr-08
14	3015	43	I	01-Jul-03	29-May-02	01-May-08
15	3016Y	47A	P	01-Aug-03	29-May-02	29-Apr-08
16	3017Y	45	I	30-May-03	10-Jun-02	30-Apr-08
17	3018	42	P	30-May-03	14-Jun-02	28-Apr-08
18	3019	42	P	31-May-03	18-Jun-02	05-May-08
19	3020	41	I	30-May-03	14-Jun-02	28-Apr-08
20	3021	42	I	02-Jul-03	04-Oct-02	29-Apr-08
21	3022	42	I	16-Jul-03	14-Jun-02	29-Apr-08
22	3023	42	I	03-Jun-03	28-Jun-02	30-Apr-08
23	3024	42	P	03-Jun-03	10-Jul-02	30-Apr-08
24	3025	41	I	04-Jun-03	02-Jul-02	30-Apr-08
25	3026	42	I	13-Jun-03	28-Jun-02	29-Apr-08
26	3027	42	P	10-Jun-03	15-Jul-02	29-Apr-08
27	3028	42	P	13-Jun-03	15-Jul-02	30-Apr-08
28	3029	43	P	21-May-03	10-Jul-02	24-Apr-08
29	3030	41	I	13-Jun-03	08-Jul-02	30-Apr-08
30	3031	42	I	04-Jun-03	12-Jul-02	29-Apr-08
31	3032	42	P	11-Jun-03	01-Jul-02	30-Apr-08
32	3033	42	P	01-Aug-03	11-Jul-02	30-Apr-08
33	3034	42	I	24-Jul-03	13-Jun-02	29-Apr-08
34	3035	42	P	11-Jun-03	03-Oct-02	01-May-08
35	3037	42	P	03-Jul-03	11-Jul-02	05-May-08
36	3038	42	I	03-Jul-03	04-Oct-02	01-May-08
37	3039	42	I	11-Jun-03	14-Nov-02	05-May-08
38	3041Y	42	I	03-Jun-03	24-Jul-02	30-Apr-08
39	3042	42	I	28-May-03	03-Oct-02	25-Apr-08
40	3043	42	I	02-Jul-03	11-Oct-02	01-May-08
41	3044	42	P	23-May-03	14-Oct-02	25-Apr-08
42	3046	42	I	01-Jul-03	11-Oct-02	30-Apr-08

APPENDIX B

DEQ_DATA Worksheet

Mine Unit 8 DEQ Data

Sample DEQ_DATA page from Mine Unit 8 Data File

Well Number	Driller	Date Ended	Date Began	Cement Density In	Cement Density Out	Cement Return bbls	Super Gel	Poly mer	LCM	REMARKS	Formation	MIT DATE
2705	T. Piper	9/6/2001	9/4/2001	12.3	11.7	1	2	2			Chadron	10/09/01
2706	T. Piper	9/28/2001	9/26/2001	12.3	11.7	3	2	1			Chadron	11/05/01
2707	T. Piper	9/10/2001	9/7/2001	12.5	9.4 No		4	3		1 Tremied 2 bbls cement to top	Chadron	11/14/01
2708	T. Piper	9/26/2001	9/24/2001	13.1	11.3	3	1	2			Chadron	11/16/01
2709	T. Piper	9/27/2001	9/25/2001	11.9	11.4	2	2	2			Chadron	11/21/01
2710	T. Piper	9/24/2001	9/21/2001	11.8	11.1	3	2	2			Chadron	11/16/01
2711	T. Piper	10/1/2001	9/28/2001	12.1	11.7	3	2	2			Chadron	11/13/01
2714	S. Osmotherly	10/2/2001	9/28/2001	12.3	11.8	3	3	1			Chadron	11/05/01
2715	S. Osmotherly	9/25/2001	9/21/2001	12.1	11.6	1	3	2			Chadron	11/16/01
2716	T. Piper	9/19/2001	9/17/2001	12.2	11.6	3	2	2			Chadron	11/16/01
2717	T. Piper	9/21/2001	9/19/2001	12	11.7	3	2	1			Chadron	11/15/01
2718	S. Osmotherly	10/1/2001	9/28/2001	12	11.6	2	3	1			Chadron	01/24/02
2719	S. Osmotherly	9/17/2001	9/14/2001	12.7	11.7	1	3	1			Chadron	10/12/01
2720	S. Osmotherly	9/14/2001	9/12/2001	11.8	11.5	2	3				Chadron	10/10/01
2721	S. Osmotherly	9/12/2001	9/10/2001	12.5	12	2	5	1			Chadron	10/10/01
2722	T. Piper	10/12/2001	10/10/2001	12.8	11.7	2	2	2			Chadron	11/13/01
2723	T. Piper	9/18/2001	9/14/2001	12.4	8.6 No		7	3		Tremied 2 bbls cement to top	Chadron	11/14/01
2724	T. Piper	10/4/2001	10/2/2001	12.5	11.9	2	2	2			Chadron	11/15/01
2725	T. Piper	9/13/2001	9/11/2001	12.3	11.6	2	2	2			Chadron	10/16/01
2726	S. Osmotherly	9/25/2001	9/21/2001	12	11.4	1	8	1	2		Chadron	11/14/01
2727	S. Osmotherly	9/21/2001	9/19/2001	12.4	11.5	2	6	1	2		Chadron	10/15/01
2728	S. Osmotherly	9/20/2001	9/18/2001	11.7	9.3 No		7	1	2	2 Tremied 2 bbls cement to top	Chadron	11/21/01
2729	S. Osmotherly	9/28/2001	9/26/2001	12.3	11.6	1	3				Chadron	12/04/01
2731	T. Piper	10/24/2001	10/22/2001	11.9	10.5	0.5	3	2			Chadron	11/29/01
2732	T. Piper	10/8/2001	10/5/2001	12.6	12.1	0.5	2	2			Chadron	11/21/01
2733	T. Piper	10/22/2001	10/19/2001	12.3	11.7	2	2	2			Chadron	11/29/01
2734	T. Piper	10/16/2001	10/12/2001	12.7	12.5	1	2	2			Chadron	11/30/01
2735	T. Piper	10/10/2001	10/8/2001	12.5	12	0.5	2	2			Chadron	11/14/01
2736	T. Piper	10/30/2001	10/26/2001	12.6	11.9	3	2	2			Chadron	01/23/02
2737	S. Osmotherly	10/10/2001	10/8/2001	12.4	12.1	2	3	1			Chadron	01/23/02
2739	S. Osmotherly	10/4/2001	10/2/2001	11.9	11	2	5	1			Chadron	11/29/01
2740	S. Osmotherly	10/8/2001	10/5/2001	12.2	11	1	5	1	1		Chadron	12/05/01
2742	S. Osmotherly	10/16/2001	10/12/2001	12.1	11.1	2	3	1			Chadron	02/04/02
2743	S. Osmotherly	10/22/2001	10/19/2001	11.9	11.2	1	2	1			Chadron	01/24/02
2744	S. Osmotherly	10/23/2001	10/19/2001	12.2	11.5	0.5	5	1	1		Chadron	11/29/01
2745	S. Osmotherly	10/18/2001	10/16/2001	12.1	11.5	1	3	1			Chadron	12/04/01
2746	T. Piper	10/18/2001	10/16/2001	12.3	11.4	2	2	2			Chadron	11/30/01
2747	T. Piper	12/17/2001	12/14/2001	12.4	11.7	5	2	1			Chadron	01/25/02
2754	S. Osmotherly	10/30/2001	10/26/2001	11.6	11.4	2	4	1			Chadron	02/04/02
2755	S. Osmotherly	11/12/2001	11/9/2001	12.1	11.8	2	2	1			Chadron	12/04/01
2756	S. Osmotherly	10/25/2001	10/23/2001	12.7	11.9	0.5	2	1			Chadron	11/15/01
2757	S. Osmotherly	11/6/2001	11/2/2001	13	12.2	0.5	2	1			Chadron	01/30/02

APPENDIX C

MITDATA.xls

CROW BUTTE RESOURCES

Mechanical Integrity Test Dates

MITDATA.xls

Sorting Number	Well Number	Mine Unit	Well House	Well Type Designed	Current Status	Kpacker Depth	First MIT Date	5 Year Retest Date	10 Year Retest Date	15 Year Retest Date	Notes and Comments	Last MIT Date
400	P400A	MU4	13	Prod	Cased	615	12/02/94	07/02/99	04/08/04			04/08/04
401	P401A	MU4	13	Prod	Cased	616	12/14/94	07/23/99	03/26/04			03/26/04
402	P402	MU4	13	Prod	Cased	617	10/05/94	07/07/99	10/05/04		2 Sleeves - 55-85 115-145	10/05/04
403	P403	MU4	13	Prod	Cased	585	10/05/94	07/06/99	03/26/04			03/26/04
404	P404A	MU4	13	Prod	Cased	603	12/16/94	07/01/99	05/17/04			05/17/04
405	P405	MU4	13	Prod	Cased	622	11/14/94	08/03/99	05/06/04			05/06/04
406	P406	MU4	13	Prod	Cased	608	11/23/94	07/23/99	05/07/04			05/07/04
407	P407	MU4	13	Prod	Cased	615	11/14/94	07/07/99	04/08/04			04/08/04
408	P408	MU4	13	Prod	Cased	611	11/16/94	07/01/99	04/13/04			04/13/04
409	P409	MU4	13	Prod	Cased	605	09/20/94	08/09/99	05/17/04			05/17/04
410	P410	MU4	13	Prod	Cased	593	10/03/94	07/02/99	04/30/04			04/30/04
411	P411	MU4	12	Prod	Cased	602	08/31/94	06/30/99	03/24/04			03/24/04
412	P412	MU4	12	Prod	Cased	595	09/13/94	06/24/99	05/04/04		Sleeve 475-485	05/04/04
413	P413	MU4	12	Prod	Cased	600	08/30/94	06/29/99	03/25/04			03/25/04
414	P414	MU4	12	Prod	Cased	600	09/06/94	06/28/99	03/24/04			03/24/04
415	P415	MU4	12	Prod	Cased	596	09/12/94	08/27/99	04/29/04			04/29/04
416	P416	MU4	12	Prod	Cased	612	08/25/94	06/30/99	03/15/04			03/15/04
417	P417	MU4	12	Prod	Cased	613	08/22/94	06/30/99	03/12/04			03/12/04
418	P418	MU4	12	Prod	Cased	613	08/17/94	07/02/99	03/15/04			03/15/04
419	P419	MU4	12	Prod	Cased	617	08/22/94	06/30/99	03/18/04			03/18/04
420	P420	MU4	12	Prod	Cased	589	09/19/94	06/30/99	05/21/04		Book	05/21/04
421	P421	MU4	9	Prod	Cased	606	11/17/93	07/01/98	03/17/03			03/17/03
422	P422	MU4	9	Prod	Cased	615	12/09/93	07/01/98	03/06/03			03/06/03
423	P423	MU4	9	Prod	Cased	622	11/16/93	07/01/98	02/10/03			02/10/03
424	P424	MU4	9	Prod	Cased	632	11/05/93	09/24/98	02/05/03			02/05/03
425	P425	MU4	9	Prod	Cased	606	11/10/93	06/30/98	02/19/03			02/19/03
426	P426	MU4	9	Prod	Cased	612	11/09/93	06/30/98	02/19/03			02/19/03
427	P427	MU4	10	Prod	Cased	788	03/01/94	04/12/99	01/21/04			01/21/04
428	P428	MU4	10	Prod	Cased	761	02/15/94	04/09/99	01/20/04			01/20/04
429	P429	MU4	10	Prod	Cased	741	02/15/94	04/07/99	02/02/04			02/02/04
430	P430	MU4	10	Prod	Cased	714	02/22/94	04/12/99	07/16/04			07/16/04
431	P431	MU4	10	Prod	Cased	722	02/23/94	07/29/99	10/16/03			10/16/03
432	P432	MU4	10	Prod	Cased	722	05/11/94	06/21/99	02/25/04		Sleeve 255-265	02/25/04
433	P433	MU4	10	Prod	Cased	701	04/26/94	04/16/99	07/08/04			07/08/04
434	P434	MU4	11	Prod	Cased	677	05/03/94	04/26/99	10/17/03			10/17/03
435	P435	MU4	10	Prod	Cased	732	03/01/94	04/07/99	02/23/04			02/23/04
436	P436	MU4	10	Prod	Cased	738	02/28/94	04/09/99	02/23/04			02/23/04
437	P437	MU4	10	Prod	Cased	745	02/24/94	07/29/99	02/02/04			02/02/04
438	P438	MU4	10	Prod	Cased	766	03/11/94	04/09/99	12/19/03			12/19/03
439	P439	MU4	10	Prod	Cased	778	03/30/94	06/09/99	01/22/04			01/22/04
440	P440	MU4	10	Prod	Cased	752	03/11/94	04/08/99	02/02/04			02/02/04
441	P441	MU4	10	Prod	Cased	754	03/22/94	04/08/99	12/18/03			12/18/03
442	P442	MU4	10	Prod	Cased	750	04/06/94	07/30/99	01/30/04			01/30/04