

CROW BUTTE RESOURCES, INC.

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



(308) 665-2215
(308) 665-2341 – FAX

June 16, 2000

U.S. Nuclear Regulatory Commission
Attention: Mr. Philip Ting, Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
Mail Stop T&A-33
Washington, D.C. 20555-0001

Re: Source Materials License SUA-1534
Docket No. 40-8943
Evaporation Pond 4 Liner Leak

Dear Mr. Ting:

On May 19, 2000 during routine evaporation pond monitoring of Crow Butte Resources, Inc. (CBR) Evaporation Pond 4, conductivity readings from the northwest underdrain indicated a potential pond liner leak. As required by License Condition 11.4 of SUA-1534, a sample was collected and analyzed for chloride, alkalinity, conductivity, sodium, and sulfate. The results of this sample indicated that the concentration of the indicator analytes in the underdrain were similar to the pond contents. A second sample confirmed these results. Based upon these results, it was determined that a liner leak potentially existed in the northwest corner of Pond 4.

Mr. Bob Stranski of the NRC Operations Center was notified by telephone at 1455 MDT on May 19, 2000 of the liner leak. As required by License Condition 12.3, this report is submitted within 30 days of discovery of a liner leak and discusses analytical data, mitigative actions, and the results of those actions.

Following discovery of the leak, CBR began weekly sampling of the northwest underdrain with analysis for alkalinity, chloride, sodium, conductivity, and sulfate. Attachment 1 contains copies of the Weekly Evaporation Pond Underdrain Analysis forms and the analytical results from the CBR laboratory. Samples were obtained on May 19 and 26 and June 1, 7 and 14, 2000.

In addition to the required weekly analysis for the underdrain, CBR obtained a non-routine sample from pond monitor well CPM-1. CPM-1 is completed in the first aquifer and is located down gradient of Pond 4 at the fenced restricted area boundary. The sample was obtained and analyzed for the indicator analytes on May 24 to ensure that there was no indication of leakage in the secondary

NIMSSOIR/PAIC



Mr. Philip Ting
June 16, 2000
Page 2 of 3

liner. Analytical results were consistent with historical sampling results and are contained in Attachment 2.

Upon confirmation of the liner leak on May 19, CBR began to lower the level of Pond 4 by pumping water to Pond 3. Concurrently, an immediate visual inspection of the liner in the northwest quadrant of the pond was performed. During the inspection, a patch was located that had a poor weld at one corner. The patch was located approximately one foot above the waterline in the pond. It was apparent from staining that recent winds had caused wave action that would cause the patch to be under the waterline at times. The inspection did not locate any other areas of potential leakage.

The contents of Pond 4 were transferred to Pond 3 until the water level was reduced from 6 feet 11 inches to 6 feet 6 inches. A complete visual inspection was repeated, paying particular attention to the waterline. No apparent sources of leaks other than the poorly welded patch were identified.

On June 7, 2000, Serrot International performed repairs on the Pond 4 liner. The following actions were performed:

- The poorly welded patch in the northwest corner at approximately the 8-foot level was cut out. An inspection of the patch indicated a failure where the extrusion weld did not overlap the edge of the patch onto the liner surface sufficiently to bond the patch to the liner. This resulted in a "cold weld" of approximately 3 inches in length. With liner flex, the cold weld area opened to allow pond wave action to push high conductivity water under the patch. A 2-inch cut in the liner that the patch had been designed to seal allowed the contaminated water into the annulus area of the lower liner, affecting the underdrain water quality.

The patch was replaced with a 60-mil high-density polyethylene (HDPE) patch. The patch was welded in place and vacuum tested for integrity. The testing indicated a good seal on the patch.

- An older patch that was located approximately 2 feet east of the repair was vacuum tested for integrity. Another patch located high on the west side of the northwest corner was also vacuum tested for integrity. The testing indicated good seals on the patches.
- Two extrusion beads in the third panel east of the northwest corner were visually inspected and indicated that the edge of the weld was coming loose. Although there was no indication that this area could be a source of liner leakage, a large patch was welded over both beads and vacuum tested for integrity.

Following completion of repairs, water was transferred from Pond 1 to increase the Pond 4 water



Mr. Philip Ting
June 16, 2000
Page 3 of 3

level. As of June 15, the level in Pond 4 was 7 feet 5 inches. CBR began flushing the underdrain with clean water to reduce underdrain conductivity. This was performed to allow monitoring of the underdrain to determine whether repairs had been successful. A sample of the underdrain on June 14 was analyzed for alkalinity, chloride, conductivity, sulfate, and sodium. The results of this sampling indicated concentrations well above those noted during the weekly monitoring. CBR is unsure whether these elevated concentrations are due to a pocket of higher conductivity water in the underdrain system that is being flushed out or a liner leak that was not located during inspections and repairs.

CBR is currently pumping the northwest underdrain dry. When this is completed, clean water will be added to flush the underdrain. The underdrain will be pumped dry and allowed to refill. When this flushing process is completed, a sample will be obtained and analyzed for the indicator analytes. If the concentrations remain elevated in the northwest underdrain, the pond level will be lowered and inspections will be performed to determine whether there are other areas of potential liner leakage.

As required in the CBR Evaporation Pond Onsite Inspection Program (CBR, February 1996), the measurement frequency of the water levels in the northwest underdrain was increased to daily. Attachment 3 contains copies of the Commercial Pond Inspection Forms for the period of May 14 to June 10. Water level in the underdrain was constant during this period. Daily underdrain level measurement and weekly analysis of the underdrain contents will be continued in accordance with SUA-1534 until CBR is sure that all leaks have been located and repaired.

If you have any questions or require any further information, please do not hesitate to call me at (308) 665-2215.

Sincerely,
CROW BUTTE RESOURCES, INC.

A handwritten signature in black ink, appearing to read 'M. Griffin', written over a circular stamp or seal.

Michael Griffin
Manager of Environmental and Regulatory Affairs

Attachments: As Stated

cc: Mr. Steve Collings - CBR, Denver
Mr. William Ford - USNRC, Uranium Recovery Branch



Attachment 1

Pond 4 Underdrain Analysis

**CROW BUTTE PROJECT
WEEKLY EVAPORATION POND UNDERDRAIN ANALYSIS**

COMMERCIAL PONDS		UNDERDRAIN WATER DEPTH-INCHES	INSTRUMENT READING	TEMPERATURE °C	TEMPERATURE CORRECTION	CONDUCTIVITY umhos/cm	LAB MEASUREMENT
NORTH POND 1	POND CONTENTS	10' 1"					85800
	N.E. UNDERDRAIN	2"					
	N.M. UNDERDRAIN	2"					
	N.W. UNDERDRAIN	3"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	0"					
	S.W. UNDERDRAIN	1"					
SOUTH POND 3	POND CONTENTS	8' 11"					83200
	N.E. UNDERDRAIN	5"					
	N.M. UNDERDRAIN	9"	700	15	1.24	868	
	N.W. UNDERDRAIN	4"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	5"					
	S.W. UNDERDRAIN	9"	450	12	1.33	599	
POND NUMBER 4	POND CONTENTS	6' 11"					85800
	N.E. UNDERDRAIN	9"	6000	14	1.27	7620	
	N.M. UNDERDRAIN	14"	1900	14	1.27	2413	
	N.W. UNDERDRAIN	2' 11"	*	*	*	*	85800
	S.E. UNDERDRAIN	15"	11500	13	1.30	14950	
	S.M. UNDERDRAIN	9"	1750	13	1.30	2275	
	S.W. UNDERDRAIN	7"	1100	14	1.27	1397	

DATE: 5-19-00
 ACTION LIMIT EXCEEDED? Yes
 SAMPLER/ANALYST: GR

REMARKS: 1 water level too low to measure
 * meter didn't go high enough
 took sample to Lab

19-May-00
LG/HD

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/L	mg/L	μmhos	mg/L	mg/L
Pond #4 NW Underdrain					
Pond Underdrain #4 Sample 1	1,575	31,021	85,700	3,807	22,877
Pond #4 NW Underdrain					
Pond Underdrain #4 Sample 2	1,550	30,788	86,600	3,995	23,129

CROW BUTTE MINE

DATE SAMPLED 5-19-00

ANALYST G

ANALYSIS DATE 5-19-00

SAMPLE DESCRIPTION	PRODUCTION COMPOSITE	INJECTION COMPOSITE	WASTE COMPOSITE	COLUMN TAILS	COLUMN TAILS
URANIUM AS U ₃ O ₈ (PPM)					
VANADIUM AS V (PPM)					
TOTAL CARBONATE (PPM)					
pH (UNITS)					
CALCIUM (PPM)					
SODIUM (PPM)					
CHLORIDE (PPM)					
SULFATE (PPM)					
TDS (PPM)					
CONDUCTIVITY (uMHOS)					

SAMPLE DESCRIPTION	PRECIP DECANT	RO FEED	RO BRINE	RO PERMEATE	Pond 4 Sample 1	Pond 4 Sample 2
URANIUM AS U ₃ O ₈ (PPM)						
VANADIUM AS V (PPM)						
TOTAL CARBONATE (PPM)					1890	1860
pH (UNITS)					8.73	8.76
CALCIUM (PPM)						
SODIUM (PPM)					22877	23129
CHLORIDE (PPM)					31021	30788
SULFATE (PPM)					3807	3995
TDS (PPM)						
CONDUCTIVITY (uMHOS)					25700	261000

SAMPLE DESCRIPTION	BARREN ELUENT	INTER. ELUENT	PREG. ELUENT	MU-1	MU-2
URANIUM AS U ₃ O ₈ (PPM)					
VANADIUM AS V (PPM)					
TOTAL CARBONATE (PPM)					
pH (UNITS)					
CALCIUM (PPM)					
SODIUM (PPM)					
CHLORIDE (PPM)					
SULFATE (PPM)					
TDS (PPM)					
CONDUCTIVITY (uMHOS)					

**CROW BUTTE PROJECT
WEEKLY EVAPORATION POND UNDERDRAIN ANALYSIS**

COMMERCIAL PONDS		UNDERDRAIN WATER DEPTH-INCHES	INSTRUMENT READING	TEMPERATURE °C	TEMPERATURE CORRECTION	CONDUCTIVITY umhos/cm	LAB MEASUREMENT
NORTH POND 1	POND CONTENTS	10'					86300
	N.E. UNDERDRAIN	3"					
	N.M. UNDERDRAIN	1"					
	N.W. UNDERDRAIN	3"					
	S.E. UNDERDRAIN	3"					
	S.M. UNDERDRAIN	0"					
	S.W. UNDERDRAIN	1"					
SOUTH POND 3	POND CONTENTS	9'5"					84900
	N.E. UNDERDRAIN	5"					
	N.M. UNDERDRAIN	9"	700	13°	1.30	910	
	N.W. UNDERDRAIN	4"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	5"					
	S.W. UNDERDRAIN	9"	600	13°	1.30	780	
POND NUMBER 4	POND CONTENTS	6'6"					97400
	N.E. UNDERDRAIN	9"	6000	15°	1.24	7440	
	N.M. UNDERDRAIN	14"	1900	13°	1.30	2470	
	N.W. UNDERDRAIN	12"	—	—	—	—	*72100
	S.E. UNDERDRAIN	16"	11500	14°	1.24	14605	
	S.M. UNDERDRAIN	9"	1700	13°	1.30	2210	
	S.W. UNDERDRAIN	7"	1100	15°	1.24	1364	

DATE: 5-26-00

ACTION LIMIT EXCEEDED? _____

SAMPLER/ANALYST: BZ

REMARKS:

Water level too low to measure
* Lab

26-May-00
SM/LG

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/L	mg/L	µmhos	mg/L	mg/L
Pond #4	1112	25,657	72,100	3,264	17,826
NW Underdrain					

R.D. 46
10

CROW BUTTE PROJECT
WEEKLY EVAPORATION POND UNDERDRAIN ANALYSIS

COMMERCIAL PONDS		UNDERDRAIN WATER DEPTH-INCHES	INSTRUMENT READING	TEMPERATURE °C	TEMPERATURE CORRECTION	CONDUCTIVITY umhos/cm	LAB MEASUREMENT
NORTH POND 1	POND CONTENTS	10'					*
	N.E. UNDERDRAIN	3"					
	N.M. UNDERDRAIN	1"					
	N.W. UNDERDRAIN	3"					
	S.E. UNDERDRAIN	3"					
	S.M. UNDERDRAIN	0"					
	S.W. UNDERDRAIN	1"					
SOUTH POND 3	POND CONTENTS	9' 3"					
	N.E. UNDERDRAIN	5"					
	N.M. UNDERDRAIN	9"	700	14°	1.27	889	
	N.W. UNDERDRAIN	4"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	5"					
	S.W. UNDERDRAIN	9"	650	13°	1.30	845	
POND NUMBER 4	POND CONTENTS	6' 6"					
	N.E. UNDERDRAIN	10"	6000	15°	1.24	7440	
	N.M. UNDERDRAIN	14"	1900	14	1.27	2413	
	N.W. UNDERDRAIN	12"	Lab			71200	
	S.E. UNDERDRAIN	15"	11500	15°	1.24	14260	
	S.M. UNDERDRAIN	9"	1700	15°	1.24	2108	
	S.W. UNDERDRAIN	7"	1200	16°	1.21	1452	

DATE: 6-1-00
 ACTION LIMIT EXCEEDED?
 SAMPLER/ANALYST:

REMARKS: 1 water level too low to measure
 * didn't get contents

01-Jun-00
SM/LG

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/L	mg/L	μmhos	mg/L	mg/L
Pond #4	1075	25,190	71,000	3,052	18,938
NW Underdrain					

**CROW BUTTE PROJECT
WEEKLY EVAPORATION POND UNDERDRAIN ANALYSIS**

COMMERCIAL PONDS		UNDERDRAIN WATER DEPTH-INCHES	INSTRUMENT READING	TEMPERATURE °C	TEMPERATURE CORRECTION	CONDUCTIVITY umhos/cm	LAB MEASUREMENT
NORTH POND 1	POND CONTENTS	10"					X 86500
	N.E. UNDERDRAIN	3"					
	N.M. UNDERDRAIN	0"					
	N.W. UNDERDRAIN	4"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	0"					
	S.W. UNDERDRAIN	5"					
SOUTH POND 3	POND CONTENTS	9.5"					X 85000
	N.E. UNDERDRAIN	3"					
	N.M. UNDERDRAIN	9"	700	14°	1.27	889	
	N.W. UNDERDRAIN	4"					
	S.E. UNDERDRAIN	1"					
	S.M. UNDERDRAIN	5"					
	S.W. UNDERDRAIN	9"	700	14°	1.27	889	
POND NUMBER 4	POND CONTENTS	6' 6"					X 10500
	N.E. UNDERDRAIN	10"	10000	16°	1.21	12100	
	N.M. UNDERDRAIN	14"	2000	15°	1.24	2480	
	N.W. UNDERDRAIN	10"	38000	15°	1.24	47120	
	S.E. UNDERDRAIN	16"	12000	15°	1.24	14780	
	S.M. UNDERDRAIN	8.5"	1700	16°	1.21	2057	
	S.W. UNDERDRAIN	5.5"	1100	17°	1.18	1298	

DATE: 6-7 00

REMARKS: 1 Water level too low to measure

ACTION LIMIT EXCEEDED? _____

SAMPLER/ANALYST: Dominic Kennedy

08-Jun-00
SM/LG

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/L	mg/L	µmhos	mg/L	mg/L
Pond #4 NW Underdrain	975	20,059	58,600	2,790	14,847

**CROW BUTTE PROJECT
WEEKLY EVAPORATION POND UNDERDRAIN ANALYSIS**

COMMERCIAL PONDS		UNDERDRAIN WATER DEPTH-INCHES	INSTRUMENT READING	TEMPERATURE °C	TEMPERATURE CORRECTION	CONDUCTIVITY umhos/cm	LAB MEASUREMENT
NORTH POND 1	POND CONTENTS	8' 11"	\	\	\	\	
	N.E. UNDERDRAIN	3"	\	\	\	\	
	N.M. UNDERDRAIN	1"	\	\	\	\	
	N.W. UNDERDRAIN	3"	\	\	\	\	
	S.E. UNDERDRAIN	1"	\	\	\	\	
	S.M. UNDERDRAIN	0"	\	\	\	\	
	S.W. UNDERDRAIN	3"	\	\	\	\	62400
SOUTH POND 3	POND CONTENTS	9' 5"	\	\	\	\	
	N.E. UNDERDRAIN	5"	\	\	\	\	
	N.M. UNDERDRAIN	9"	650	16°	1.21	786	
	N.W. UNDERDRAIN	4"	\	\	\	\	
	S.E. UNDERDRAIN	1"	\	\	\	\	
	S.M. UNDERDRAIN	5"	\	\	\	\	
	S.W. UNDERDRAIN	9"	600	12	1.33	798	
POND NUMBER 4	POND CONTENTS	7'	\	\	\	\	
	N.E. UNDERDRAIN	9"	8000	18°	1.15	9200	
	N.M. UNDERDRAIN	14"	2100	15°	1.24	2604	
	N.W. UNDERDRAIN	9"	\	\	\	\	101800
	S.E. UNDERDRAIN	16"	12500	15°	1.24	15500	
	S.M. UNDERDRAIN	8"	1800	16°	1.21	2178	
	S.W. UNDERDRAIN	6"	1300	18°	1.15	1495	

DATE: 6-14-00

REMARKS: Water level too low to measure

ACTION LIMIT EXCEEDED? _____

SAMPLER/ANALYST: B

14-Jun-00
LG\HD

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/l.	mg/l.	µmhos	mg/L	mg/L
Pond #4	2200	38,489	101,800	5135	28,280
NW Underdrain					



Attachment 2

Pond Monitor Well CPM-1 Analysis

24-May-00
LG/HD

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO₄</u>	<u>Na</u>
	mg/L	mg/L	µmhos	mg/L	mg/L
Commercial Pond Monitor #1	198	3.1	456	12	17



Attachment 3

Commercial Pond Inspection Forms

CROW BUTTE MINE

COMMERCIAL POND INSPECTION FORM

For The Week Of 5-14-00 through 5-20-00

CHECK ACCORDINGLY: | = OK X = NEEDS ATTENTION OR REPAIRS

LOCATION	FREQUENCY	SUN	MON	TUE	WED	THU	FRI	SAT
POND 1-DEPTH	Daily	10'	10'	10'	10'	10 1/2"	10 1/2"	10' 1"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					2"		
N.M. UNDERDRAIN	Weekly					2"		
N.W. UNDERDRAIN	Weekly					3"		
S.E. UNDERDRAIN	Weekly					1"		
S.M. UNDERDRAIN	Weekly					0"		
S.W. UNDERDRAIN	Weekly					1"		
POND 3-DEPTH	Daily	8'10"	8'10"	8'10"	8'10"	8'11"	8'11"	9'
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					5"		
N.M. UNDERDRAIN	Weekly					9"		
N.W. UNDERDRAIN	Weekly					4"		
S.E. UNDERDRAIN	Weekly					1"		
S.M. UNDERDRAIN	Weekly					5"		
S.W. UNDERDRAIN	Weekly					9"		
POND 4-DEPTH	Daily	6'7"	6'8"	6'8"	6'9"	6'11"	6'11"	6'11"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					9"		
N.M. UNDERDRAIN	Weekly					14"		
N.W. UNDERDRAIN	Weekly Daily	—————>				12"	11"	12"
S.E. UNDERDRAIN	Weekly					15"		
S.M. UNDERDRAIN	Weekly					9"		
S.W. UNDERDRAIN	Weekly					5"		
INSPECTED INLET PIPING	Weekly					✓		
PERIMETER FENCE	Weekly					✓		
INSPECTED LINERS	Weekly					✓		
INSPECTED DIVERSION DITCHES	Monthly							
INSPECTED WASTE PIPELINE	Monthly							
OTHER (EXPLAIN BELOW)								
INSPECTOR INITIAL HERE ▶		JE	Q	Q	Q	Q	Q	SH

COMMENTS: 5/19 - LEAK in NW underdrain of Pond #4.

CROW BUTTE MINE

COMMERCIAL POND INSPECTION FORM

For The Week Of 5-21-00 through 5-27-00

CHECK ACCORDINGLY: I=OK X=NEEDS ATTENTION OR REPAIRS

LOCATION	FREQUENCY	SUN	MON	TUE	WED	THU	FRI	SAT
POND 1-DEPTH	Daily	10'1"	10'1"	10'1"	10'1"	10'1"	10'	10'
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly						3"	
N.M. UNDERDRAIN	Weekly						1"	
N.W. UNDERDRAIN	Weekly						3"	
S.E. UNDERDRAIN	Weekly						3"	
S.M. UNDERDRAIN	Weekly						0"	
S.W. UNDERDRAIN	Weekly						1"	
POND 3-DEPTH	Daily	9'2"	9'4"	9'5"	9'5"	9'5"	9'5"	9'5"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly						5"	
N.M. UNDERDRAIN	Weekly						9"	
N.W. UNDERDRAIN	Weekly						4"	
S.E. UNDERDRAIN	Weekly						1"	
S.M. UNDERDRAIN	Weekly						5"	
S.W. UNDERDRAIN	Weekly						9"	
POND 4-DEPTH	Daily	6'10"	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly						9"	
N.M. UNDERDRAIN	Weekly						14"	
N.W. UNDERDRAIN	Daily	12"	12"	12"	12"	12"	12"	12"
S.E. UNDERDRAIN	Weekly						15"	
S.M. UNDERDRAIN	Weekly						9"	
S.W. UNDERDRAIN	Weekly						5"	
INSPECTED INLET PIPING	Weekly						✓	
PERIMETER FENCE	Weekly						✓	
INSPECTED LINERS	Weekly						✓	
INSPECTED DIVERSION DITCHES	Monthly							
INSPECTED WASTE PIPELINE	Monthly							
OTHER (EXPLAIN BELOW)				X			X	
INSPECTOR INITIAL HERE		SH	RL	RL	RL	RL	RL	SH

COMMENTS: Pumped NW Underdrain Pond # 4 Approx 1hr. (5:23:00)
 Inspected Complete Pond liner At Water level in The boat
 5-26-00 Sampled NW Underdrain Pond # 4

CROW BUTTE MINE

COMMERCIAL POND INSPECTION FORM

For The Week Of 5/28/00 through 6/3/00.

CHECK ACCORDINGLY: I=OK X=NEEDS ATTENTION OR REPAIRS

LOCATION	FREQUENCY	SUN	MON	TUE	WED	THU	FRI	SAT
POND 1-DEPTH	Daily	10'	10'	10'	10'	10'	10'	10'
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					3"		
N.M. UNDERDRAIN	Weekly					1"		
N.W. UNDERDRAIN	Weekly					3"		
S.E. UNDERDRAIN	Weekly					3"		
S.M. UNDERDRAIN	Weekly					0"		
S.W. UNDERDRAIN	Weekly					1"		
POND 3-DEPTH	Daily	9'5"	9'5"	9'5"	9'5"	9'5"	9'5"	9'5"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					5"		
N.M. UNDERDRAIN	Weekly					9"		
N.W. UNDERDRAIN	Weekly					4"		
S.E. UNDERDRAIN	Weekly					1"		
S.M. UNDERDRAIN	Weekly					5"		
S.W. UNDERDRAIN	Weekly					9"		
POND 4-DEPTH	Daily	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly					10"		
N.M. UNDERDRAIN	Weekly					14"		
N.W. UNDERDRAIN	Weekly	12"	12"	12"	12"	12"	12"	12"
S.E. UNDERDRAIN	Weekly					15"		
S.M. UNDERDRAIN	Weekly					9"		
S.W. UNDERDRAIN	Weekly					7"		
INSPECTED INLET PIPING	Weekly					✓		
PERIMETER FENCE	Weekly					✓		
INSPECTED LINERS	Weekly					✓		
INSPECTED DIVERSION DITCHES	Monthly							
INSPECTED WASTE PIPELINE	Monthly							
OTHER (EXPLAIN BELOW)								
INSPECTOR INITIAL HERE ▶		SH	TC	TC	TC	BL	ban	ban

COMMENTS:

CROW BUTTE MINE

COMMERCIAL POND INSPECTION FORM

For The Week Of 7 Jan '00 through 10 Jan '00

CHECK ACCORDINGLY: OK X=NEEDS ATTENTION OR REPAIRS

LOCATION	FREQUENCY	SUN	MON	TUE	WED	THU	FRI	SAT
POND 1-DEPTH	Daily	10'	10'	10'	10'	10'	10'	9'10"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓	✓	✓
N.E. UNDERDRAIN	Weekly				3"			
N.M. UNDERDRAIN	Weekly				0"			
N.W. UNDERDRAIN	Weekly				4"			
S.E. UNDERDRAIN	Weekly				1"			
S.M. UNDERDRAIN	Weekly				0"			
S.W. UNDERDRAIN	Daily				5"			8"
POND 3-DEPTH	Daily	9'6"	9'5"	9'5"	9'5"	9'5"	9'5"	7'5"
EMBANKMENTS	Daily	✓	✓	✓	✓	✓		✓
N.E. UNDERDRAIN	Weekly				3"			
N.M. UNDERDRAIN	Weekly				9"			
N.W. UNDERDRAIN	Weekly				4"			
S.E. UNDERDRAIN	Weekly				1"			
S.M. UNDERDRAIN	Weekly				5"			
S.W. UNDERDRAIN	Weekly				9"			
POND 4-DEPTH	Daily	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"	6'6"
EMBANKMENTS	Daily	✓	✓	✓	✓			✓
N.E. UNDERDRAIN	Weekly				10"			
N.M. UNDERDRAIN	Weekly				14"			
N.W. UNDERDRAIN	Daily	7'7"	11"	12"	10"	11"	11"	11"
S.E. UNDERDRAIN	Weekly				16"			
S.M. UNDERDRAIN	Weekly				8.5"			
S.W. UNDERDRAIN	Weekly				5.5"			
INSPECTED INLET PIPING	Weekly				✓			
PERIMETER FENCE	Weekly				✓			
INSPECTED LINERS	Weekly				✓			
INSPECTED DIVERSION DITCHES	Monthly							
INSPECTED WASTE PIPELINE	Monthly							
OTHER (EXPLAIN BELOW)								
INSPECTOR INITIAL HERE		um	um	vc	OK	R	R	um

COMMENTS: