CAMECO RESOURCES, CROW BUTTE OPERATION

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

(308) 665-2215 (308) 665-2341 – FAX

July 9, 2010

Mr. Keith I McConnell, Deputy Director Decommissioning and Uranium Recovery Licensing Directorate Division of Waste Management and Environmental Protection Office of Federal and State Materials and Environmental Management Programs Mailstop T8-F5 U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Re: Source Materials License SUA-1534 Docket No. 40-8943 Commercial Evaporation Pond #3 Liner Leak

Dear Mr. McConnell:

On June 11, 2010 routine evaporation pond monitoring results of Cameco Resources - Crow Butte Operation (CBO) Commercial Evaporation Pond #3, water level readings from the northwest underdrain indicated a potential pond liner leak. A sample was collected from the underdrain 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. Based upon these results, it was determined that a potential liner leak existed in Commercial Evaporation Pond #3.

Mr. Ron Burrows was notified by voice mail and email on June 11, 2010 of the potential liner leak. As required by License Condition 12.3, this report provides analytical data, monitoring results, mitigative actions, and the results of those actions.

Upon confirmation of the potential liner leak, CBO began weekly sampling of the northwest underdrain. These samples were analyzed 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 CBO laboratory. Samples were obtained on June 11, 16, and 23, 2010

In addition to weekly analysis of the underdrain, CBO obtained non-routine samples from pond monitor wells CPM-1 and CPM-2. CPM-1 and CPM-2 are completed in the first aquifer and are located down gradient of Commercial Evaporation Pond #3 at the fenced restricted area boundary. The samples were obtained and analyzed for the indicator analytes on June 11, 17, 23, and 30, 2010 to ensure that there was no indication of leakage in the secondary liner. Analytical results were consistent with historical sampling results and are contained in Attachment #2.

CAMECO RESOURCES, CROW BUTTE OPERATION



Mr. Keith I McConnell July 9, 2010 Page 2 of 2

Upon confirmation of the potential liner leak, CBO began lowering the level of Commercial Evaporation Pond #3 by pumping water to Commercial Evaporation Pond #4. Concurrently, an immediate visual inspection of the pond liner was performed. Initial efforts to locate the leak were unsuccessful. The level of the pond actually increased from 10.8' to 11.1' in the first week following detection of the potential leak due to a large precipitation event during this time period. In the subsequent weeks, the pond level has been lowered to 10'. CBO has performed a number of visual inspections of the Pond#3 liner since the potential leak was detected and has been unable to locate any breach or tear in the upper liner. CBO will continue to monitor the underdrain level and inspect the upper liner for tears.

Attachment #3 contains copies of the Commercial Pond Inspection Forms for the period of June 9, 2010 to July 7, 2010.

If you have any questions or require any further information, please do not hesitate to call me at (308) 665-2215 ext 114.

Sincerely, CAMECO RESOURCES CROW BUTTE OPERATION

havy teahon

Larry Teahon SHEQ Manager

Enclosures: As Stated

cc: Mr. Joe Brister – Cheyenne Office Mr. Ronald Burrows – Program Manager CBO File

Attachment #1

Commercial Evaporation Pond #3 Underdrain Analysis

11**-Jun-**10 SM/LT

,

	<u>Alk</u>	<u>Cl</u>	<u>Cond</u>	<u>SO4</u>	Na
	mg/L	mg/L	μmhos	mg/L	mg/L
Pond 3 NW	2188	36,871	92,400	4635	25,240

16-Jun-10 sm/lt/mo

.

,

.

	<u>Alk</u>	<u>C1</u>	Cond	<u>SO4</u>	Na
	mg/L	mg/L	µmhos	mg/L	mg/L
Pond 3 NW	2650	48,925	103,700	4108	30,585

23-Jun-10

SM/LT/MO

	<u>Alk</u>	<u>C1</u>	<u>Cond</u>	<u>SO4</u>	<u>Na</u>
	mg/L	mg/L	μmhos	mg/L	mg/L
Pond 3	3000	51,644	113,600	5497	37,758
Pond 3 NW	2650	50,580	106,900	4994	33,936

5

.

,

i.

Pond Monitor Well CPM-1 and CPM-2 Analysis

11-June-10

SM/LT/MO

.

.

	<u>Alk</u>	<u>Cl</u>	Cond	<u>SO4</u>	<u>Na</u>
	mg/L	mg/L	umhos	mg/L	mg/L
Commercial Pond	190	5.7	440	15	15
Monitor #1 Commercial Pond	190	5.3	420	14	14
Monitor #2	1,0	0.0	.20		

٠?

17-June-10

SM/LT/MO

.

	<u>Alk</u> mg/L	<u>Cl</u> mg/L	Cond umhos	<u>SO4</u> mg/L	<u>Na</u> mg/L
Commercial Pond Monitor #1	195	5.7	450	13	16
Commercial Pond Monitor #2	185	5.3	420	13	13

23-June-10

SM/LT/MO

•

,

	<u>Alk</u> mg/L	<u>Cl</u> mg/L	Cond umhos	<u>SO4</u> mg/L	<u>Na</u> mg/L
		ing D	annios	IIIB/T	шğıг
Commercial Pond	195	5.3	440	14	16
Monitor #1					
Commercial Pond	185	5.7	420	16	14
Monitor #2					

30-June-10 SM/LT/MO

.

,

.

SMV	LT	MO	

	<u>Alk</u>	<u>C1</u>	<u>Cond</u>	<u>SO4</u>	Na
	mg/L	mg/L	umhos	mg/L	mg/L
Commercial Pond Monitor #1	195	5.7	440	14	16
Commercial Pond Monitor #2	185	5.7	420	14	14

Attachment #3

• •

Commercial Pond Inspection Forms

POND LEVEL Q_{i} / YREEBOARD B_{i} 0' NE UNDERDRAIN 1 If		COMMERCIAL PONDS	UNDERDRAIN WATER DEPTH / INCHES	METER READING	TEMP °C	CONDUCTIVITY µmhos/cm	LAB RESULTS µmhos/cm
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		POND LEVEL	9,0'				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		*FREEBOARD					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	ep	NE UNDERDRAIN		······································			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		NM UNDERDRAIN	0				
SM UNDERDRAIN O SW UNDERDRAIN q $6\partial_1 5 m_5$ $\parallel . q$ POND LEVEL $D_1 S'$ \sim \sim *FREEBOARD $G_1 T$ \circ \circ NE UNDERDRAIN 5 \sim \circ NW UNDERDRAIN 5 \circ \circ NW UNDERDRAIN 10 $ld_0 \partial T$ cost $ll_0 d$ NW UNDERDRAIN 11 $SD_1 3 m_5$ $b_0 3$ SE UNDERDRAIN 14 $sd_0 3$ $b_0 3$ SW UNDERDRAIN 12 $sd_0 3$ $b_0 3$ SW UNDERDRAIN 5 12 $b_0 3$ SW UNDERDRAIN 5 12 $b_0 3$ POND LEVEL $d_0 0^{1}$ $f_0 5$ $f_0 4$ "FREEBOARD $(l_1 5')$ $f_0 4$ $f_0 4$ NW UNDERDRAIN 32 1388 cros 17.5 $f_0 4$ NW UNDERDRAIN 16 85.6 $m_1 4$ $f_0 4$ $f_0 4$ SE UNDERDRAIN 12 $sf_0 4$ 14.4 $f_0 4$ $f_0 4$ $f_0 4$ $f_0 4$		# NW UNDERDRAIN	3	,			
SW UNDERDRAIN 9 $6\partial \cdot 5 m_5$ 11.9 POND LEVEL $1D.S'$ 10 10 10 10 *FREEBOARD $6.7'$ 30.3 30.3 30.3 30.3 NM UNDERDRAIN 5 10 10 $10 \cdot \partial 7 m_5$ 11.6 NW UNDERDRAIN 10 $10 \cdot \partial 7 m_5$ 11.6 30.3 30.3 SE UNDERDRAIN 10 $10 \cdot \partial 7 m_5$ 11.6 30.3 SW UNDERDRAIN 10 $10 \cdot \partial 7 m_5$ 11.6 SW UNDERDRAIN 10 $10 \cdot \partial 7 m_5$ 11.8 SW UNDERDRAIN 5 $10 \cdot \partial 7$ $10 \cdot \partial 7$ SW UNDERDRAIN 5 $10 \cdot \partial 7$ $10 \cdot \partial 7$ NE UNDERDRAIN 5 $10 \cdot \partial 7$ $10 \cdot \partial 7$ NE UNDERDRAIN $30 \cdot 2$ $138.8 \cdot 75$ 17.5 $10 \cdot \partial 7$ NM UNDERDRAIN $30 \cdot 2$ $138.8 \cdot 75$ 17.5 $10 \cdot 9$ NW UNDERDRAIN $10 \cdot 2^{-1}$ $30 \cdot 2^{-1}$ $10 \cdot 9^{-1}$ $10 \cdot 9^{-1}$ SE UNDERDRAIN $10 \cdot 2^{-1}$ $10 \cdot 2^{-1}$	feet	SE UNDERDRAIN					
POND LEVEL D_1S' D_1S' *FREEBOARD G_17' G_17' NE UNDERDRAIN 5 1160 NW UNDERDRAIN 10 1607 ms 1160 NW UNDERDRAIN 10 1607 ms 1160 SE UNDERDRAIN 10 1607 ms 1160 SW UNDERDRAIN 10 1607 ms 1323 SW UNDERDRAIN 10 1937 ms 1323 SW UNDERDRAIN 5 1000 1000 1000 SW UNDERDRAIN 5 1000 1150 1000 SW UNDERDRAIN 5 1000 1150 1000 10000 SW UNDERDRAIN 5 10000 11500 100000 1150000 SW UNDERDRAIN $1000000000000000000000000000000000000$			······				
	<u> </u>	╧╡┝═══╧╩╦╤╤╬╗╌╗╗╗╗╗╗╗╗╗╗╗╗	9	62.5 ms	11.9		
$E_{main formula fo$							
Image: Second system NMUNDERDRAIN ID Ider 77 ms II.12 NWUNDERDRAIN II Strate Strate Strate Strate Second strate Second strate II.2 Strate Strate Strate Strate Second strate Second strate	۵d						
Image: Second secon	pth PC	NE UNDERDRAIN					
interminant interminant interminant interminant interminant $interminant interminant interminant interminant interminant interminant interminant interminant interminant interminant interminant interminant interminant interminant intermina$	ž	NM UNDERDRAIN	D	16,27 ms	11.6		
\overline{e} SE UNDERDRAIN I_o $ 9.54 \text{ as}$ 13.2 SM UNDERDRAIN 4 SW UNDERDRAIN 5 POND LEVEL $I_{a,0}$ *FREEBOARD $II_{1,5}$ NE UNDERDRAIN 32 138.8 rrs NW UNDERDRAIN 32 138.8 rrs NW UNDERDRAIN 16 86.8 14.4 NW UNDERDRAIN 18 87.0 rrs SE UNDERDRAIN 18 87.0 rrs SW UNDERDRAIN 19 SW UNDERDRAIN 19 SW UNDERDRAIN 27 $I29.7$ rrs $I2.9$ $IarraySW UNDERDRAIN27I29.7rrsIarrayIarr$	1.5 #	NW UNDERDRAIN		- 80.3 ms	12.3		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	feet	SE UNDERDRAIN		19,54 ms			
POND LEVEL l_{α} , δ' *FREEBOARD l_{1} , s' *FREEBOARD l_{1} , s' NE UNDERDRAIN $3a$ 138.8 rrs NM UNDERDRAIN l_{6} 89.0 l_{4} , 4 NW UNDERDRAIN l_{6} 89.0 ms 14.9 l_{4} , 4 NW UNDERDRAIN l_{8} 89.0 ms 14.9 l_{4} , q 99.0 l_{4} , q							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-						
$\frac{2}{5} \frac{7}{5} \frac{NE \text{ UNDERDRAIN}}{NM \text{ UNDERDRAIN}} \frac{3}{16} \frac{1388 \text{ ms}}{1888 \text{ ms}} \frac{17.5}{14.4}$ $\frac{1388 \text{ ms}}{14.4} \frac{14.4}{144} 1$				····			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	De						
i_{5} i_{8} i_{8} i_{8} i_{9} i_{6} SE UNDERDRAIN q $q_{4,3}$ m_{2} $i_{2,8}$ SM UNDERDRAIN $1q$ $i_{33,0}$ m_{2} $i_{2,9}$ SW UNDERDRAIN 27 $i_{32,0}$ m_{2} $i_{2,9}$ SW UNDERDRAIN 27 $i_{29,7}$ m_{2} $i_{20,9}$ R & D POND LEVELS (Depth = 15 ft)REMARKS: $\omega_{i_{10}}\omega_{1}$ MR EAST LEVEL: $q_{,1}$ m_{2} $\omega_{i_{10}}\omega_{1}$ MR west Level: $q_{,1}$ m_{2} m_{2} m_{2} West Level: $ D_{,0}$ m_{2} m_{2} m_{2}	PO]]			17.5		
i_{5} *NW UNDERDRAIN1889.0ms16.9SE UNDERDRAIN994.3ms12.8SM UNDERDRAIN19123.0ms12.9SW UNDERDRAIN27129.7ms16.9R & D POND LEVELS (Depth = 15 ft)REMARKS:16.9EAST LEVEL:9.1'129.7ms**EAST FREEBOARD:5.910.0EAST UNDERDRAIN:1WEST LEVEL:10.0WEST LEVEL:10.0	I J	[]			14.4		·
SM UNDERDRAIN1912.9SW UNDERDRAIN 27 129.7 ms 12.9 R & D POND LEVELS (Depth = 15 ft) 129.7 ms 10.9 EAST LEVEL: 9.1° 129.7 ms 10.9 **EAST FREEBOARD: 5.9 129.7 ms 10.9 EAST UNDERDRAIN: 129.7 ms 10.9 WEST LEVEL: 0.0 129.7 msWEST LEVEL: 10.0 129.7 ms** R&D POND FREEBOARD = 3 FT MAX	7.5				16.9		
SM UNDERDRAIN1912.9SW UNDERDRAIN 27 129.7 ms 12.9 R & D POND LEVELS (Depth = 15 ft) 129.7 ms 10.9 EAST LEVEL: 9.1° 129.7 ms 10.9 **EAST FREEBOARD: 5.9 129.7 ms 10.9 EAST UNDERDRAIN: 129.7 ms 10.9 WEST LEVEL: 0.0 129.7 msWEST LEVEL: 10.0 129.7 ms** R&D POND FREEBOARD = 3 FT MAX	feet	╎┝╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍╍	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	94.3 ms	12.8	· · · · · · · · · · · · · · · · · · ·	
R & D POND LEVELS (Depth = 15 ft) REMARKS: $Uindy$ $ight$ NR EAST LEVEL: $9,1^{\circ}$ $with$ $with$ $with$ $with$ NR **EAST FREEBOARD: $5,9$ $with$ $west$ $s,9$ $*COMMERCIAL POND FREEBOARD = 5 FT$ WEST LEVEL: D_1D $*R&D$ POND FREEBOARD = 3 FT MAX		╎┝╼╾┶╼╾┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉┉			12.9		
EAST LEVEL: 9,1' **EAST FREEBOARD: 5,9 EAST UNDERDRAIN: 1 WEST LEVEL: 10,0	╞╼╼╼┙┙	SW UNDERDRAIN		129,7 ms	16.9		
EAST LEVEL: 9,1 **EAST FREEBOARD: 5,9 EAST UNDERDRAIN: ////////////////////////////////////		R&DPONDLEVE	T S (Donth - 15 ft)				
**EAST FREEBOARD: 5.9 EAST UNDERDRAIN: 1 WEST LEVEL: 10.0 ** R&D POND FREEBOARD = 3 FT MAX						y, light raine N	LC went
EAST UNDERDRAIN: *COMMERCIAL POND FREEBOARD = 5 FT WEST LEVEL: /D,D ** R&D POND FREEBOARD = 3 FT MAX				. ·	fusite me.	- 	
WEST LEVEL: 10:0 ** R&D POND FREEBOARD = 3 FT MAX			1		*COMMEDCIAL DO		F MAY
			10.0				
		**WEST FREEBOARD:	5.0				
WEST UNDERDRAIN: 0			المعالية المراجع المحافظ المحافظ والمتحافظ والمحافظ المحافظ الم		1). <i>2</i> (-	
	Ľ.		<u> </u>		<u> </u>		

÷

619/10

-----1923

> - 166 1. -

	COMMERCIAL PONDS	UNDERDRAIN WATER DEPTH / INCHES	METER READING	TEMP °C	CONDUCTIVITY µmhos/cm	LAB RESULTS umbos/cm
	POND LEVEL	19.3 ,				
	*FREEBOARD	7.7'	· · · · · · · · · · · · · · · · · · ·			
Dep	NE UNDERDRAIN	1				
	ME UNDERDRAIN	0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
17	NW UNDERDRAIN	3	,,			
17 feet	SE UNDERDRAIN	1			· · · · ·	
	SM UNDERDRAIN	0				
	SW UNDERDRAIN	10	86.4 ms	13.6		
ll l	POND LEVEL	11-1'		1	1	
U U	*FREEBOARD	6.4				
PO Depth	NE UNDERDRAIN	4				
1 2	NM UNDERDRAIN	10	16.46 ms	12.4		
11: #	I THE OTOMANDAALLY	10	82.2	14.9		
3 5 feet	SE UNDERDRAIN	0				
#	SM UNDERDRAIN	4				
<u> </u>	SW UNDERDRAIN	5				
1	POND LEVEL	6.81		1		
U	*FREEBOARD	10.7-				
epti Po	NE UNDERDRAIN	36	138.2 ms	17.7		
POND # 4 Depth = 17.5 feet	NM UNDERDRAIN	14	85.7 ms	14.6		
D #	NW UNDERDRAIN	17	138.6 ms	16.7		
fer 4	SE UNDERDRAIN	32	103.1 ms	18.1		
et .	SM UNDERDRAIN	11	96,3 ms	14.4		
	SW UNDERDRAIN	33	129.8 ms	17:5		
न						
	R & D POND LEVE		:	REMARKS: VORI	windy	
1	EAST LEVEL: 9.7	1				
	**EAST FREEBOARD:		·			
L.	EAST UNDERDRAIN:	1		*COMMERCIAL PON	D FREEBOARD = 5 FT	MAX
L	WEST LEVEL: 10.4	Ľ		** R&D POND FREEB		(
* -	*WEST FREEBOARD:			SAMPLER: R. Pelt	an	
	WEST UNDERDRAIN: 1	0	,	DATE: 6-16-10)	
			Ŀ			

÷

6/16/10

C	OMMERCIAL PONDS	UNDERDRAIN WATER DEPTH / INCHES	METER READING	TEMP °C	CONDUCTIVITY µmhos/cm	LAB RESULTS µmhos/cm
	POND LEVEL	191				
	*FREEBOARD	8.0				
Depth	NE UNDERDRAIN	1				
r_{OND}	NM UNDERDRAIN	1				
` 」 #	NW UNDERDRAIN	3	· · · · · · · · · · · · · · · · · · ·			
1 feet	SE UNDERDRAIN	0			· [
	SM UNDERDRAIN	0				
	SW UNDERDRAIN	8	87.9 ms	14.4	1	<u></u>
	POND LEVEL	10'8				
Þ	*FREEBOARD	6.7'				
PO	NE UNDERDRAIN	5				
Z	NMUNDERDRAIN	10	1657 ms	12.9		
2'≭≿	NW UNDERDRAIN	13	84.6 ms	13.8		·····
- ω	SE UNDERDRAIN	0				
	SM UNDERDRAIN	4				
	SWUNDERDRAIN	5				
· ·]	POND LEVEL	7'			. [
	*FREEBOARD	10.5'				
PO		36	132.7	17.5		
POND	NM UNDERDRAIN	16	96.1	14.8		
#	NW UNDERDRAIN	17	137.6	17.4		
*	SE UNDERDRAIN	45	104.0	17.9		
	SMUNDERDRAIN	16	889	14.4		
	SW UNDERDRAIN	18	129.9	17.4	· · · · · · · · · · · · · · · · · · ·	
F	R & D POND LEVE	CLS (Denth = 15 ft)		REMARKS: B		***
F	EAST LEVEL: 9,5			REMARKS: BLD	24	
 *	*EAST FREEBOARD: L	5		l	- (
ľ	EAST UNDERDRAIN:			+COMMERCIAL POR		
	WEST LEVEL: /0, -			** R&D POND FREE	$\frac{\text{ND FREEBOARD} = 5 \text{ FT}}{\text{POARD} = 3 \text{ FT} MAY}$	MAX
*:	*WEST FREEBOARD: 4	<				
╟	WEST UNDERDRAIN:			SAMPLER: R. Per		
Ľ_		<u> </u>	1	DATE: 6-23-10		

wi G~23

• *****/2

. in -

	co	OMMERCIAL PONDS	UNDERDRAIN WATER DEPTH / INCHES	METER READING	TEMP °C	CONDUCTIVITY µmhos/cm	LAB RESULTS µmhos/cm
8		POND LEVEL	8.91		1.		1
		*FREEBOARD	18.1'		·		
Depth	P	NE UNDERDRAIN	1				·····
	POND	NM UNDERDRAIN	1				
17	#	NW UNDERDRAIN	3				
feet		SE UNDERDRAIN	0				
	ĺ	SM UNDERDRAIN	0				
<u> </u>]	SW UNDERDRAIN	10	88.4.ms	14.9		
		POND LEVEL	10.41				
p	1	*FREEBOARD	7.1				
Depth	⊻∥	NE UNDERDRAIN	4				
H	POND	NM UNDERDRAIN	9	16.74 ms			
1.5	#= [_		14	87.2 MS			
feet	<u>ا</u> «		0				
	∥		4				
	╝		5				
	1		7.01			<u><u></u></u>	
D	.∥		10,5'				
PO	╡╟╴		36	135.0	17.4		
1 3		NM UNDERDRAIN	15	B6,6	15.Z		
1D # 4 17.5 feet		NW UNDERDRAIN	18	140.8	17.8		
fee		SE UNDERDRAIN	45	108.8	5.91		
Ä		SM UNDERDRAIN	25	98.7	14.8		
		SW UNDERDRAIN ;	20	127.0	17.6		
	r====						
		R & D POND LEVE			REMARKS: Ver	y windy -	Monthly
	1	EAST LEVEL: 9,5				9 7	
	(<u> </u>	EAST FREEBOARD:					
	[]	EAST UNDERDRAIN:			*COMMERCIAL PON	D FREEBOARD = 5 FT	MAX
		ويها الجميدة ويجهده والمركبة والتجريب فيشتم المرافقة ويوافعهم والمتحد فالجمل التجر	0.3		** R&D POND FREEP	BOARD = 3 FT MAX	
	**1	WEST FREEBOARD: +	0.3 4.7	· ·	SAMPLER: Pett	5M	
		WEST UNDERDRAIN:	0		DATE: 6-30-10		

W.N 7/1.

> سید میرونی میرونی ایرونی میرونی میرونی میرونی میرونی

С	OMMERCIAL PONDS	UNDERDRAIN WATER DEPTH / INCHES	METER READING	TEMP °C	CONDUCTIVITY µmhos/cm	LAB RESULTS µmhos/cm
POND # 1 $Depth = 17 feet$	POND LEVEL	8.51				
	*FREEBOARD	8.5				
	NE UNDERDRAIN	1"		{	+	
	NM UNDERDRAIN	1.4				
	NW UNDERDRAIN	3"	· · · · · · · · · · · · · · · · · · ·		1	
	SE UNDERDRAIN	0			<u>├</u> ────────────────────────────────────	
	SM UNDERDRAIN	0				
	SW UNDERDRAIN	10 ~	90.3ms	15.1		<u> </u>
POND # 3	POND LEVEL	10'			f======f=	
	*FREEBOARD	7.5				
	NE UNDERDRAIN	4 "				<u></u>
	NM UNDERDRAIN	9"	16.92 ms	136		
	NW UNDERDRAIN	14 "	89.2 ms	14.7		
3	SE UNDERDRAIN	0				
·	SM UNDERDRAIN	5″				
	SW UNDERDRAIN	5″				······································
,	POND LEVEL	7.5'		1		
	*FREEBOARD	10.0'				······
_⊸ ∥	NE UNDERDRAIN	36"	135.0 ms	18.4		
POND # 4	NM UNDERDRAIN	27 "	102.8 ms	/5.3		· ·
	NW UNDERDRAIN		138.8 ms	18.2		<u></u>
A T	SE UNDERDRAIN		109.1 ms	19,		
	SM UNDERDRAIN	28 "	103.1 ms	15.		
	SW UNDERDRAIN		129.3 ms	18.		
				h ainin an an air	and a second	
	R & D POND LEVELS (Depth = 15 ft)			REMARKS: Dery nice & Calm		
IL.	EAST LEVEL: 9.4'					
*	*EAST FREEBOARD: 5.6'					
	EAST UNDERDRAIN: Z			*COMMERCIAL POND FREEBOARD = 5 FT MAX ** R&D POND FREEBOARD = 3 FT MAX SAMPLER: Bass- Polton		
	WEST LEVEL: 10.2					
**	**WEST FREEBOARD: 4.8'					
1	WEST UNDERDRAIN:		11	DATE: 7-7-10		

EU AS

T.