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August 14, 2007

United States Nuclear Regulatory Commission Region IV Material Radiation Protection Section 611 Ryan Plaza Drive Suite 400 Arlington, Texas 76011-4005

Subject:

Semiannual Radiological Effluent and Environmental Monitoring Report

Source Materials License No. SUA-1534, Docket No. 40-8943

Dear Sir or Madam:

Enclosed please find one copy of the Semiannual Radiological Effluent and Environmental Monitoring Report for the Crow Butte Uranium Project. The report is provided in accordance with License Condition 12.1 of Source Materials License SUA-1534 and 10 CFR Part 40. This report covers the first and second quarters of 2007.

If you have any questions concerning the report, please feel free to call me at (308) 665-2215.

Sincerely,

CROW BUTTE RESOURCES, INC.

Lany teahon

Larry Teahon

Manager of Environmental, Health and Safety

cc: 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

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CROW BUTTE URANIUM PROJECT

RADIOLOGICAL EFFLUENT AND ENVIRONMENTAL MONITORING REPORT

for -

FIRST AND SECOND QUARTERS, 2007

USNRC Source Materials License SUA 1534



First Half 2007 Semiannual Radiological Effluent and Environmental Monitoring Report

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First Half 2007 Semiannual Radiological Effluent and Environmental Monitoring Report

1 WATER QUALITY MONITORING DATA

1.1 Excursion Monitoring

Biweekly excursion monitoring in the shallow aquifer and perimeter monitor wells was continued in Mine Units 2 through 9 during the first and second quarters of 2007.

PR-8, PR-15, and IJ-13 remain on excursion status. These monitor wells are associated with Mine Units 2 and 3, which are currently undergoing groundwater restoration.

On September 26, 2006, Mine Unit 2 perimeter monitor well PR-15 was placed on excursion status. PR-15 is a baseline restoration well in Mine Unit 1 that was chosen to monitor the boundary of Mine Unit 2 following the approval of restoration. The current restoration activities in Mine Unit 2 adjacent to PR-15 include groundwater transfer and wellfield recirculation. IJ-13 and PR-8, two other baseline restoration wells from Mine Unit 1, have remained on excursion status since December 27, 2002 and December 23, 2003 respectively. Due to the geometry of Mine Units 2 and 3, CBR is of the opinion that PR-15 will continue to exhibit the same trend as IJ-13 and PR-8 until Mine Units 2 and 3 can be fully restored along the perimeter of Mine Unit 1.

Excursion reports have been submitted to NRC as required in License Condition 12.2. Complete excursion monitoring results are available on site for inspection. A summary table for monitor wells on excursion status during the first half of 2007 follows.

Monitor Well ID	Date On Excursion	Date Off Excursion	Biweekly Sampling Resumed	Causal Factor(s)
PR-8	23 Dec 03			Wellfield geometry
IJ-13	27 Dec 03			Wellfield geometry
PR-15	26 Sep 06			Wellfield geometry

1.2 Water Supply Wells and Surface Water



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Summary sheets of quarterly radiological analytical data for the reporting period from all surface waters and water supply wells within one kilometer of the active wellfield boundary are included in Appendix A.

The reported radiological data are within the expected ranges for each well or stream. Samples were obtained from all sample locations with the exceptions noted in Appendix A.

2 OPERATIONAL

2.1 Production Data Summary

Mining operations continued through the first and second quarters of 2007. The average operating production flow rate was 4316 gpm for the first quarter and 4402 gpm for the second quarter. Injection and production totals from the totalizers and the calculated bleed totals for the reporting period are included in Appendix B.

The main injection trunkline is equipped with a continuous pressure sensor. The average and maximum injection pressures for each wellhouse are included in Appendix C in the Wellfield Injection Pressure table.

2.2 Wastewater Summary

The total volume of wastewater discharged to the ponds was 2,683,960 gallons during the first quarter and 2,576,560 gallons during the second quarter. Currently, all five evaporation ponds contain wastewater.

Wastewater that is not disposed of in the evaporation ponds is injected into the Deep Disposal Well (DDW). Currently, the well is operated on a nearly continuous basis and 29,631,017 gallons of wastewater was injected into the well during the first half of 2007. A summary of the total volume of wastewater injected and the average radionuclide content is contained in Appendix D.

2.3 Effluent Release

10 CFR §40.65 requires licensees to report quantities of radionuclides in liquid and gaseous effluent releases to the environment. In the Application for Renewal of Source Materials License SUA-1534, submitted December 1995, Table 7.3(A) presented calculations of the annual radon emissions for the Crow Butte Plant. These calculations assumed a 7.04 x 10⁻⁴ Curies/m³ radon release from leaching operations and the radon release calculations for the first half of 2007 use this release rate estimate.

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During the first quarter production occurred at an average flow rate of 4,316 gpm (16,338 lpm). Production was maintained nearly continuously for 90 days during the first quarter with an operating factor of 99.6%. The production flow for the first quarter results in a calculated radon release of 1,069 Curies. During the second quarter production occurred at an average flow rate of 4,402 gpm (16,663 lpm). Production was maintained nearly continuously for 91 days during the second quarter with an operating factor of 99.9%. The production flow for the second quarter results in a calculated radon release of 1,106 Curies. Calculations for radon release from production operations are shown in Appendix E.

Additional wells were brought on line during the first half of 2007. Calculations for the start-up of 8.8 acres of a new wellfield are shown in Appendix E. The calculated radon released from start-up of 8.8 acres is 11 Curies.

The total radon emission due to leaching operations from the Crow Butte plant for the first half of 2007 was 2,186 Curies. This calculated release rate is comparable with the releases estimated in CBR's License Renewal Application.

Radon gas is also released from restoration activities. For restoration water that is treated by ion exchange only, the radon concentration is 0.697 μ Ci/l. Of the total restoration production flow it is assumed that 25% of the radon is released through wellfield loss and 10% of the remaining radon is released during pressurized ion exchange treatment. For water that is treated by reverse osmosis, it is assumed that 100% of the remaining radon is released. For water treated by reverse osmosis the radon concentration is 0.470 μ Ci/l after adjusting for wellfield loss and ion exchange loss.

During the first half of 2007, a total of 98,143,118 gallons (371,510,959 l) of restoration water was produced from Mine Units 2, 3 and 4. Based upon an estimated radon concentration of 0.697 μ Ci/l, the total amount of radon in the restoration solution was calculated to be 259 Curies as shown in Appendix E. The estimated release of radon through wellfield loss at 25% of this total was 65 Curies. The plant loss for ion exchange treatment of the restoration water is estimated at 10% of the remaining radon, or 19 Curies.

Of the total amount of restoration water produced in the first half of 2007, 27,242,685 gallons (103,124,460 l) of the water was treated by reverse osmosis. The release of radon from reverse osmosis treatment is estimated to be 100% of the remaining radon, after correction for wellfield and ion exchange losses. These corrections result in an estimated radon concentration of 0.470 μ Ci/l. The total estimated radon release from reverse osmosis treatment was 133 Curies.

Based upon the calculations shown in Appendix E, the total estimated semiannual radon emission for the first half of 2007 from restoration activities was 133 Curies. This resulted in a total estimated radon release from the Crow Butte project during the first half of 2007 of 2,318 Curies.



First Half 2007 Semiannual Radiological Effluent and Environmental Monitoring Report

2.4 Restoration

Restoration activities continued in Mine Units 2, 3, and 4 during the first half of 2007. Restoration injection and production totals are included in Appendix B. Restoration injection pressures are included in Appendix C.

3 ENVIRONMENTAL MONITORING

3.1 Air Monitor Stations

Seven air monitoring stations are used to monitor the Crow Butte Plant. Ambient radon-222 concentrations and radionuclide concentrations in air for each monitoring site are listed in Appendix F. It should be noted that the volume of air sampled during the 1st quarter for stations AM-1 and AM-4 was reduced due to two lost filters. All air monitoring results were within expected historical ranges.

3.2 TLD Monitors

Environmental TLD monitors are located at each air monitoring station. The results of the area TLD monitors fall within the expected ranges and are listed in Appendix G.

Appendix A

Private Well and Surface Water Radiological Monitoring Results

First and Second Quarter, 2007

PRIVATE WELL AND SURFACE WATER RADIOLOGICAL MONITORING RESULTS

FIRST QUARTER, 2007

SAMPLE ID	DATE SAMPLED	URANIUM mg/l	URANIUM μCi/ml	RADIUM-226 pCi/l	RADIUM-226 precision ±
Well #8	3/7/2007	0.016	1.10E-08	0.6	0.2
Well #11	3/12/2007	0.009	6.00E-09	ND .	-
Well #12	3/7/2007	0.004	2.30E-09	ND	
Well #24	<u> </u>	WELL INOPE	RABLE - NO SA	MPLE COLLECTE	ED _
Well #25		WELL INOPE	RABLE - NO SA	MPLE COLLECTE	ED
Well #26	3/12/2007	0.007	4.60E-09	ND	-
Well #28		WELL INOPE	RABLE - NO SA	MPLE COLLECTE	ED .
Well #41	3/12/2007	0.007	4.60E-09	ND	•
Well #63	3/16/2007	0.017	1.20E-08	ND	-
Well #125	3/16/2007	0.006	4.30E-09	ND	-
Well #129	3/16/2007	0.008	5.10E-09	ND	•
Well #131	3/12/2007	0.005	3.40E-09	ND	•
Well #133	3/12/2007	0.009	6.20E-09	ND	-
Well #134	3/16/2007	0.010	6.50E-09	ND	•
Well #135	3/16/2007	0.018	1.20E-08	ND	-
Well #138	3/16/2007	0.021	1.40E-08	ND	•
Well #140					
Well #435	3/12/2007	0.008	5.10E-09	ND	<u>-</u>
Drinking Water Well	3/16/2007	0.008	5.30E-09	ND	•
			***	•	
Stream S-1	3/23/2007	0.005	3.10E-09	ND	-
Stream S-2	3/23/2007	0.005	3.10E-09	ND	
Stream S-5	3/23/2007	0.006	3.80E-09	ND	-
Stream E-1 & E-2	3/23/2007	0.019	1.30E-08	ND	-
Stream E-5	3/23/2007	0.013	8.80E-09	ND	-
Impoundment I-3	3/23/2007	0.110	7.60E-08	ND	<u>-</u>
Impoundment I-4	3/23/2007	0.130	8.80E-08	ND	-
Impoundment I-5	3/23/2007	0.012	7.90E-09	ND	-
Reporting Limit	<u> </u>	0.0003	2.00E-10	0.2	•

PRIVATE WELL AND SURFACE WATER RADIOLOGICAL MONITORING RESULTS

SECOND QUARTER, 2007

	T			<u> </u>	
SAMPLE ID	DATE SAMPLED	URANIUM mg/l	URANIUM µCi/ml	RADIUM-226 pCi/l	RADIUM-226 precision ±
Well #8	6/13/2007	0.016	1.10E-08	ND	-
Well #11	6/15/2007	0.009	6.10E-09	ND	<u>-</u>
Well #12	6/13/2007	0.004	2.90E-09	ND	<u>-</u>
Well #24	·	WELL INOPE	RABLE - NO SA	MPLE COLLECTE	ED
Well #25		WELL INOPE	RABLE - NO SA	MPLE COLLECTE	ED
Well #26	6/15/2007	0.007	4.40E-09	ND	<u> </u>
Well #28	6/15/2007	0,006	4.3E-09	ND	-
Well #41	6/15/2007	0.008	5.10E-09	ND	-
Well #63	6/8/2007	0.017	1.20E-08	ND	<u>.</u>
Well #125	6/15/2007	0.007	4.70E-09	ND	
Well #129	6/13/2007	0.007	4.90E-09	ND	-
Well #131	6/15/2007	0.006	4.10E-09	ND	-
Well #133	6/8/2007	0.009	6.40E-09	ND	-
Well #134	6/8/2007	0.009	6.10E-09	ND	<u>-</u>
Well #135	6/8/2007	0.018	1.20E-08	ND	<u> </u>
Well #138	6/15/2007	0.021	1.40E-08	0.8	0.4
Well #140	6/15/2007	0.012	8.00E-09	ND	•
Well #435	6/15/2007	0.008	5.60E-09	ND	-
Drinking Water Well	6/15/2007	0.008	5.20E-09	ND	-
Stream S-1	6/15/2007	0.004	2.90E-09	ND	-
Stream S-2	6/15/2007	0.004	2.80E-09	ND	
Stream S-5	6/15/2007	0.005	3.10E-09	ND	-
Stream E-1 & E-2	6/15/2007	0.011	7.70E-09	0.5	0.3
Stream E-5	6/8/2007	0.003	2.10E-09	ND	-
Impoundment I-3	6/8/2007	0.020	1.40E-08	ND	•
Impoundment I-4	6/8/2007	0.037	2.50E-08	ND	-
Impoundment I-5	6/8/2007	0.005	3.20E-09	ND	•
Reporting Limit	<u> </u>	0.0003	2.00E-10	0.2	<u> </u>

WASTE VOLUME
First Quarter 2007
PLANT TO

I HOL MUNICI TOOL		l e e e e e e e e e e e e e e e e e e e				
TOTALIZER	PLANT TO PONDS	PLANT TO DDW	RESTORATION TO DDW	CLEAN WATER INTO PLANT	DDW TOTAL INJECTED	TRUCKS TO
January	991,000	2,076,824	3,396,474	N/A	5,473,298	38,400
February	711,930	2,039,296	2,670,230	N/A	4,709,526	134,400
March	702,630	1,369,694	3,731,278	N/A	5,100,972	105,600
TOTAL GAL. EOQ	2,405,560	5,485,814	9,797,982	0	15,283,796	278,400

TOTAL1st QTR VOLUME DISCHARGED TO WASTE PONDS =
TOTAL 1st QTR VOLUME DISCHARGED TO DEEP WELL=
TOTAL 1st QTR VOLUME DISCHARGED TO WASTE PONDS + DPWELL =
TOTAL 1st QTR VOLUME WF BLEED FROM WELLFIELDS=

2,683,960 GALLONS 15,283,796 GALLONS 17,967,756 GALLONS 17,689,356 GALLONS

 WELLFIELD BLEED

 First Quarter 2007

 MONTH
 January
 February
 March

 BLEED
 1.6%
 1.6%
 1.1%

PLANT FLOW First Quarter 2007

AVERAGE OPERATING FLOW RATE=
TOTAL GALLONS PRODUCED=
TOTAL GALLONS INJECTED=

4,316 GPM EOQ 559,345,149 GALLONS EOQ 533,056,740 GALLONS EOQ

	TOTAL GALS. PRODUCED	TOTAL GALS. INJECTED	HOURS IN MONTH	HOURS IN PRODUCTION	AVERAGE PROD. GPM	AVERAGE COM INJ GPM	AVERAGE REST INJ GPM	HRS. DOWN TIME
Prev. YTD	0	0	0	0			···	
January	192,469,738	183,437,281	744	743	4,312	4,109	. 293	
February	170,162,755	161,792,713	672	667	4,220	4,013	286	
March	196,712,656	187,826,746	744	742	4,407	4,208	287	·····
EOQ TOTAL	559,345,149	533,056,740	2,160	2,152	4,316	4,113	289	
YTD TOTAL	559,345,149	533,056,740	2,160	2,152	4,316	4,113	289	

	TOTAL MUII GALS PRODUCED	TOTAL MUIII GALS PRODUCED	TOTAL MUIV GALS PRODUCED	TOTAL BRINE GALS PRODUCED	TOTAL PERM GALS PRODUCED	COMM BLEED TO RO FEED	MUIII BLEED TO DDW	MUIV BLEED TO DDW
Prev. YTD	_	0	0	0	0	0	0	. 0
January	1,095,258	8,254,727	8,322,073	1,022,681	6,772,174	0	1,022,681	2,373,793
February	965,329	7,339,629	6,894,629	1,287,772	5,269,842	0	1,287,772	1,382,458
March	1,021,911	8,106,379	8,617,310	1,121,383	5,758,213	0	1,121,383	2,609,895
EOQ TOTAL	3,082,498	23,700,735	23,834,012	3,431,836	17,800,229	0	3,431,836	6,366,146
YTD TOTAL	3,082,498	23,700,735	23,834,012	3,431,836	17,800,229	0	3,431,836	6,366,146

WASTE VOLUME Second Quarter 2007 PLANT TO RESTORATION CLEAN WATER DDW TOTAL TRUCKS TO PLANT TO INTO PLANT POND TOTALIZER PONDS DDW TO DDW INJECTED April May 638,500 1,852,625 2,965,777 4,818,402 176,100 N/A 822,100 1,988,498 2,925,694 N/A 4,914,192 150,300 June N/A 105,100 684,460 2,471,213 2,143,414 4,614,627 6,312,336 TOTAL GAL. EOQ 2,145,060 8,034,885 14,347,221 431,500

•	
TOTAL 2nd QTR VOLUME DISCHARGED TO WASTE PONDS =	2,576,560 GALLONS
TOTAL 2nd QTR VOLUME DISCHARGED TO DEEP WELL=	14,347,221 GALLONS
TOTAL 2nd QTR VOLUME DISCHARGED TO WASTE PONDS + DPWELL =	16,923,781 GALLONS
TOTAL 2nd QTR VOLUME WF BLEED FROM WELLFIELDS=	16,492,281 GALLONS

WELLFIELD BLEED		•	
Second Quarter 2007			
MONTH	April	May	June
BLEED	1.3%	1.4%	1.7%

PLANT FLOW	
Second Quarter 2007	
AVERAGE OPERATING FLOW RATE=	4,402 GPM EOQ
TOTAL GALLONS PRODUCED=	576,846,163 GALLONS EOQ
TOTAL GALLONS INJECTED=	551,964,492 GALLONS EOQ

	TOTAL GALS. PRODUCED	TOTAL GALS. INJECTED	HOURS IN MONTH	HOURS IN PRODUCTION	AVERAGE PROD. GPM	AVERAGE COM INJ GPM	AVERAGE REST INJ GPM	HRS. DOWN TIME
Prev. YTD	559,345,149	533,056,740	2,160	2,152	4,316	4,113	289	8
April	192,529,256	184,758,391	720	720	4,457	4,277	280	. 0
May	198,995,382	190,823,366	744	743	4,458	4,275	276	1
June	185,321,545	176,382,735	720	720	4,290	4,083	269	0
EOQ TOTAL	576,846,163	551,964,492	2,184	2,183	4,402		275	1
YTD TOTAL	1,136,191,312	1,085,021,232	4,344	4,335	4,359	4,163	282	9

	TOTAL MUII	TOTAL MUIII	TOTAL MUIV	TOTAL BRINE	TOTAL PERM	COMM BLEED	MUIII BLEED	MUIV BLEED
	GALS PRODUCED	TO RO FEED	TO DDW	TO DDW				
Prev. YTD	3,082,498	23,700,735	23,834,012	3,431,836	17,800,229	0	3,431,836	6,366,146
April	976,078	7,811,149	7,908,112	722,742	5,431,578	0	722,742	2,243,035
May	1,001,104	7,729,071	8,019,850	745,495	5,523,113	0	745,495	2,180,199
June	1,131,504	6,538,768	6,610,237	808,093	5,202,527	0	808,093	1,335,321
EOQ TOTAL	_3,108,686	21,878,988	22,538,199	2,276,330	16,157,218	0	2,276,330	5,758,555
YTD TOTAL	6,191,184	45,579,723	46,372,211	5,708,166	33,957,447	0	5,708,166	12,124,701

Appendix C

Wellfield Injection Pressures

First and Second Quarter, 2007

					D INJECTION PRE					
ļ	1 1105 140	OUSE #3	1 105 110	OUSE #4	First Quarter 200	07 DUSE #5	1 ME 110	USE #6	1 105 110	USE #7
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM		
lanuani	O	0	41	46	32	38	25	29	AVERAGE 13	MAXIMUM 15
January February	1 - 6	0	43	47	34	50	24	34	11	15
March	0	0	46	47	35	38	24	29	12	15
	1 0		44	47	34	50	24	34	12	
AVERAGE		USE #8		USE #9		USE #10		USE #11		15 USE #12
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM		MAXIMUM
\		35		98	O	3	O	0	AVERAGE	
January February	17	35	76 78	87	 		 	 	78 80	85 90
March	14	23	74	95		1 0	0	0	74	80
AVERAGE	16	35	76	98	0	3	0	ō	77	90
		USE #13		USE #14		USE #15		USE #16	WF HO!	
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
January	71	79	95	97	0	0	0	0	41	81
February	74	93	92	98	28	89	2	50	0	0
March	69	77	93	97	8	87	3	51	0	0
AVERAGE	71	93	93	98	12	89	2	51	14	81
[WF HO	USE #18	WF HO	USE #19	WF HO	USE #20	WF HO	USE #21	WF HO	JSE #22
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
January	48	95	94	96	89	94	48	98	96	98
February	0	0	95	98	85	95	58	99	96	99
March	0	0	93	96	90	91	39	90	96	99
AVERAGE	17	95	94	98	88	95	48	99	96	99
	WF HO	USE #23	WF HO	USE #24	WF HC	USE #25	WF HO	USE #26	WF HO	JSE #27
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
January	2	62	0.	0	0	0	95	99	0	0
February	2	59	1	25	0	0	93	98	0	0
March	0	0	0	0	. 0	0	97	98	0	0
AVERAGE	1	62	D	25	0	0	95	99	0	D
AVERAGE	1		0	1	0	0 DUSE #30			0_	
AVERAGE	1	62	0	25	0			99	0_	D
AVERAGE January	1 WF HO	62 USE #28	0 WF HO	25 USE #29	0 WF HO	USE #30	WF HO	99 USE #31	0 WF HO	0 USE #32
	1 WF HO AVERAGE	62 USE #28 MAXIMUM	0 WF HO AVERAGE	25 USE #29 MAXIMUM	0 WF HO AVERAGE	MAXIMUM	WF HO	99 USE #31 MAXIMUM	0 WF HOI AVERAGE	D USE #32 MAXIMUM
January	1 WF HO AVERAGE 0	MAXIMUM	0 WF HO AVERAGE 68	25 USE #29 MAXIMUM 70	0 WF HO AVERAGE 60	MAXIMUM 68	WF HO AVERAGE 34	99 USE #31 MAXIMUM 48	0 WF HOI AVERAGE 46	D USE #32 MAXIMUM 48
January February	1 WF HO AVERAGE 0	62 USE #28 MAXIMUM 0	D WF HO AVERAGE 68 64	25 USE #29 MAXIMUM 70 70	0 WF HO AVERAGE 60 57	MAXIMUM 68 66	WF HO AVERAGE 34 29	99 USE #31 MAXIMUM 48 36	0 WF HOI AVERAGE 46 40	D USE #32 MAXIMUM 48 48
January February March	1 WF HO AVERAGE 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0	0 WF HO AVERAGE 68 64 66 66	25 USE #29 MAXIMUM 70 70 72	0 WF HO AVERAGE 60 57 59	MAXIMUM 68 66 65	WF HO AVERAGE 34 29 30 31	99 USE #31 MAXIMUM 48 36 43	0 WF HOI AVERAGE 46 40 40 42	D USE #32 MAXIMUM 48 48 46
January February March	1 WF HO AVERAGE 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0 0	0 WF HO AVERAGE 68 64 66 66	25 USE #29 MAXIMUM 70 70 72 72	0 WF HO AVERAGE 60 57 59	MAXIMUM 68 66 65 68	WF HO AVERAGE 34 29 30 31	99 USE #31 MAXIMUM 48 36 43 48	0 WF HOI AVERAGE 46 40 40 42	D USE #32 MAXIMUM 48 48 46 46
January February March	1 WF HO AVERAGE 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0 0 0 0 USE #33	0 WF HO AVERAGE 68 64 66 66 66	25 USE #29 MAXIMUM 70 70 72 72 USE #34	0 WF HO AVERAGE 60 57 59 59	MAXIMUM 68 66 65 65 68 USE #35	WF HO AVERAGE 34 29 30 31 WF HO	99 USE #31 MAXIMUM 48 36 43 48 USE #36	0 WF HOI AVERAGE 46 40 40 42 WF HOI	D USE #32 MAXIMUM 48 48 46 48 USE #37
January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 0 USE #33	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE	25 USE #29 MAXIMUM 70 70 72 72 USE #34 MAXIMUM	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE	MAXIMUM 68 66 65 65 68 0USE #35 MAXIMUM	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE	D USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM
January February March AVERAGE January	1 WF HO AVERAGE 0 0 0 WF HO AVERAGE 47	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96	25 USE #29 MAXIMUM 70 70 72 72 USE #34 MAXIMUM 99	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96	MAXIMUM 68 66 65 68 0USE #35 MAXIMUM 98 97 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99
January February March AVERAGE January February	1 WF HO AVERAGE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0 0 0 0 USE #33 MAXIMUM 50 50	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97	25 USE #29 MAXIMUM 70 70 72 72 USE #34 MAXIMUM 99 98 99	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95	MAXIMUM 68 66 65 68 NUSE #35 MAXIMUM 98 97 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96	D JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99
January February March AVERAGE January February March	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97	25 USE #29 MAXIMUM 70 70 72 72 USE #34 MAXIMUM 99 98 99	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95	MAXIMUM 68 66 65 68 NUSE #35 MAXIMUM 98 97 99 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99
January February March AVERAGE January February March	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE	25 USE #29 MAXIMUM 70 70 72 72 72 USE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE	WSE #30 MAXIMUM 68 66 65 68 WSE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97 WF HOI AVERAGE	D USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 99 USE #42 MAXIMUM
January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 94 97 95 WF HO AVERAGE 88	25 USE #29 MAXIMUM 70 70 72 72 72 USE #34 MAXIMUM 99 98 99 99 USE #39 MAXIMUM 97	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE	WSE #30 MAXIMUM 68 66 65 68 WSE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 USE #41 MAXIMUM 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97 WF HOI AVERAGE 97 97	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 USE #42 MAXIMUM 99
January February March AVERAGE January February March AVERAGE January February	1 WF HO AVERAGE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93	25 USE #29 MAXIMUM 70 70 70 72 72 72 USE #34 MAXIMUM 99 98 99 USE #39 MAXIMUM 97 97	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97	MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 USE #40 MAXIMUM 95 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94 "WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 USE #41 MAXIMUM 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 USE #42 MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 USE #39 MAXIMUM 97 97	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97	MAXIMUM 68 66 65 68 0USE #35 MAXIMUM 98 97 99 09 0USE #40 MAXIMUM 95 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94 - WF HO AVERAGE 95 94 96	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 USE #41 MAXIMUM 99 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96	D JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 99 USE #42 MAXIMUM 99 99 99 99 99 99 99 99 99 99 99 99 99
January February March AVERAGE January February March AVERAGE January February	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #58 MAXIMUM 99 99 99	0 WF HO AVERAGE 68 64 66 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 USE #39 MAXIMUM 97 97 95	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97	WSE #30 MAXIMUM 68 66 65 68 WSE #35 MAXIMUM 98 97 99 99 WSE #40 MAXIMUM 95 99 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94 WF HO AVERAGE 95 94 96 95	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 USE #41 MAXIMUM 99 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97 WF HOI AVERAGE 98 95 96 96	D JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 99 JSE #42 MAXIMUM 99 99 99 99 99 99 99 99 99 99 99 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 USE #43	0 WF HO AVERAGE 68 64 66 66 66 AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO	25 USE #29 MAXIMUM 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 USE #39 MAXIMUM 97 97 95 97 USE #44	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97	MAXIMUM 68 66 65 68 NUSE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 99	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 USE #41 MAXIMUM 99 99 99 USE #41 MAXIMUM 99 99 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97 WF HOI AVERAGE 98 95 96 96 96	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 USE #42 MAXIMUM 99 99 99 USE #42 MAXIMUM 99 99 99 USE #46A
January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 USE #43 MAXIMUM	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 USE #39 MAXIMUM 97 97 95 97 USE #44 MAXIMUM	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	MAXIMUM 68 66 65 68 NUSE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 99 USE #45 MAXIMUM	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 99 99 USE #41 MAXIMUM 99 99 99 99 USE #46 MAXIMUM	0 WF HON AVERAGE 46 40 40 42 WF HON AVERAGE 97 96 97 97 WF HON AVERAGE 98 95 96 96 96 WF HON AVERAGE	0 USE #32 MAXIMUM 48 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 99 99 99 USE #42 MAXIMUM 99 99 99 99 99 99 USE #46A MAXIMUM
January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 99 USE #43 MAXIMUM 94	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 USE #39 MAXIMUM 97 97 97 97 95 97 USE #44 MAXIMUM 45	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 97 WF HOI AVERAGE 98 95 96 96 WF HOI AVERAGE	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 USE #42 MAXIMUM 99 99 USE #46A MAXIMUM 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 USE #43 MAXIMUM 94 95	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 97 95 197 USE #44 MAXIMUM 45 80	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94 WF HO AVERAGE 95 94 96 95 WF HO AVERAGE	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 98 97 WF HOI AVERAGE 98 95 96 96 VF HOI AVERAGE	0 USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 USE #42 MAXIMUM 99 99 99 USE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 99 USE #43 MAXIMUM 94 95	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 99 99 99 JSE #42 MAXIMUM 99 99 99 99 JSE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE 90 81 87	62 USE #28 MAXIMUM 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 USE #43 MAXIMUM 99 99 99 USE #43 MAXIMUM 94 95 97	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38	25 USE #29 MAXIMUM 70 70 70 72 72 USE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 97 95 197 USE #44 MAXIMUM 45 80	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94 WF HO AVERAGE 95 94 96 95 WF HO AVERAGE	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 98 97 WF HOI AVERAGE 98 95 96 96 VF HOI AVERAGE	0 USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 USE #42 MAXIMUM 99 99 99 USE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE 90 B1 87 86 WF HO	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 99 99 99 99 99 USE #43 MAXIMUM 94 95 97 97 USE #47	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 99 99 99 JSE #42 MAXIMUM 99 99 99 99 JSE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE 90 81 87 86 WF HO AVERAGE	62 USE #28 MAXIMUM 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 99 USE #43 MAXIMUM 94 95 97 USE #47 MAXIMUM	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	0 JSE #32 MAXIMUM 48 48 46 48 JSE #37 MAXIMUM 99 99 99 99 99 99 JSE #42 MAXIMUM 99 99 99 99 JSE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE January January January January January January January January January March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE 60 81 87 86 WF HO AVERAGE 18	62 USE #28 MAXIMUM 0 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #58 MAXIMUM 99 99 99 99 99 USE #43 MAXIMUM 94 95 97 USE #47 MAXIMUM 24	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	D USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 99 USE #42 MAXIMUM 99 99 99 99 USE #46A MAXIMUM 99 99
January February March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 97 WF HO AVERAGE 98 96 97 WF HO AVERAGE 90 81 87 86 WF HO AVERAGE 18 16	62 USE #28 MAXIMUM 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #38 MAXIMUM 99 99 99 USE #43 MAXIMUM 94 95 97 USE #47 MAXIMUM 24 25	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	D USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 99 USE #42 MAXIMUM 99 99 99 99 USE #46A MAXIMUM 99 99
January February March AVERAGE January February March AVERAGE January February March AVERAGE January February March AVERAGE January January January January January January January January January March AVERAGE	1 WF HO AVERAGE 0 0 0 0 0 WF HO AVERAGE 47 41 40 43 WF HO AVERAGE 96 98 96 97 WF HO AVERAGE 60 81 87 86 WF HO AVERAGE 18	62 USE #28 MAXIMUM 0 0 0 0 0 0 USE #33 MAXIMUM 50 50 46 50 USE #58 MAXIMUM 99 99 99 99 99 USE #43 MAXIMUM 94 95 97 USE #47 MAXIMUM 24	0 WF HO AVERAGE 68 64 66 66 WF HO AVERAGE 96 94 97 95 WF HO AVERAGE 88 93 92 91 WF HO AVERAGE 40 38 83	25 USE #29 MAXIMUM 70 70 70 72 72 VSE #34 MAXIMUM 99 98 99 99 99 USE #39 MAXIMUM 97 97 97 95 95 USE #44 MAXIMUM 45 80 88	0 WF HO AVERAGE 60 57 59 59 WF HO AVERAGE 96 92 95 94 WF HO AVERAGE 92 97 97 97 95 WF HO AVERAGE	USE #30 MAXIMUM 68 66 65 68 USE #35 MAXIMUM 98 97 99 99 USE #40 MAXIMUM 95 99 99 USE #45 MAXIMUM 95 84 85	WF HOI AVERAGE 34 29 30 31 WF HOI AVERAGE 97 96 91 94	99 USE #31 MAXIMUM 48 36 43 48 USE #36 MAXIMUM 99 99 99 99 USE #41 MAXIMUM 99 99 99 USE #46 MAXIMUM 98 99	0 WF HOI AVERAGE 46 40 40 42 WF HOI AVERAGE 97 96 97 WF HOI AVERAGE 98 95 96 WF HOL AVERAGE 89 94	D USE #32 MAXIMUM 48 48 46 48 USE #37 MAXIMUM 99 99 99 99 99 USE #42 MAXIMUM 99 99 99 99 USE #46A MAXIMUM 99 99

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ļ	WE NO	OUSE #3	I WE U	OUSE #4		OUSE #5	T WE HO	OUSE #6	T WE DO	OUSE #7
 	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	0 AVERAGE	MAXIMUM 0	46	48	35	38	21	30	13	31
May		12	48	50	38	45	22	24	13	16
	- 2	12	27	48	16	38	27	45	11	15
June										
AVERAGE	1	12	40	50	30	45	23	45	12	31
		OUSE #8		OUSE #9	1	USE #10		USE #11		USE #12
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	11	32	74	78	0	0	ļ <u>o</u>	0	75	80
May	12	15	70	76	0	0	0	0	72	78
June	19	38	59	84	0	0	0	6	60	81
AVERAGE	14	38	67	84	0	0	0	6	69	81
		USE #13		USE #14	1	USE #15		USE #16		USE #17
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	69	75	96	98	23	94	13	99	8	28
May	64	71	96	99 .	0	7	0	0	0	4
June	54	76	83	98	0	0	3	95	0	0
AVERAGE	62	76	91	99	8	94	5	99	3	28
		USE #18		USE #19		USE #20		USE #21		USE #22
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	0	0	93	97	89	95	48	93	97	98
May	41	86	89	95	89	90	22	91	96	99
June	65	85	73	99	84	98	24	84	90	96
AVERAGE	36	86	85	99	87	98	31	93	94	99
	WF HO	USE #23	WF HO	USE #24	WF HO	USE #25	WF HO	USE #26	WF HO	USE #27
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	3	95	0	. 0	0	0	98	99	0	0
May	0	0	0	0	0	0	97	99	0	0
June	65	99	0	Ö	2	12	79	98	2	52
AVERAGE	23	99	0	0	1	12	91	99	1	52
	WF HO	USE #28	WF HO	USE #29	WF HO	USE #30	WF HO	USE #31	WF HO	USE #32
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	0	0	65	69	56	65	28	33	39	46
May	0	0	67	72	58	65	32	40	44	46
June	0	0	63	70	55	60	31	37	44	52
AVERAGE	0	0	65	72	57	65	31	40	42	52
		USE #33		USE #34		USE #35		USE #36		USE #37
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
April	41	97	98	99	97	99	95	99	97	99
May	45	48	97	99	96	99	97	99	97	99
June	45	94	90	99	93	99	89	99	91	99
AVERAGE	44	97	95	99	95	99	93	99	95	99
MAEUVOE		JSE #38		USE #39	1	USE #40		USE #41		USE #42
And)	AVERAGE	MAXIMUM	AVERAGE 90	MAXIMUM 96	AVERAGE 95	MAXIMUM 98	AVERAGE 96	MAXIMUM 99	AVERAGE 97	MAXIMUM 99
April May	96 96	99	85	90	93	98	96	99	97	99
May June	90	99	80	92	88	96	90	99	87	96
AVERAGE	94			96	92		94		94	
AVERAGE		USE #43				USE #45		USE #46	WE UOI	JSE #46A
	AVERAGE	MAXIMUM	AVERAGE	USE #44 MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM
A = -11										
April	86 89	96	87 88	98 99	79 81	90 95	95 94	99	97 96	99
May	92	99	94	99	85	96	97	99	98	99
June										1
AVERAGE	89	99	90	99	82	96	96	99	97	99
		USE #47			-					
A	AVERAGE	MAXIMUM			<u> </u>		ļ		 	
April	47	75	<u> </u>		ļ	ļ	ļ			
May	69	80			ļ		 	[']		ļ
June	68	81	Ī	l	1	1	f '	,	1	1
AVERAGE	61	81								

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Crow Butte Uranium Mine
Deep Disposal Well Injection Radiological Data

Month	Total Gallons Injected	Average Natural Uranium (mg/l)	Total Natural Uranium Injected (mg)	Total Natural Uranium Injected (uCi)	Average Radium- 226 (pCi/l)	Total Radium- 226 Injected (uCi)
January-07	5,473,298	4.9	1.02E+08	6.87E+04	1,060	2.20E+04
February-07	4,709,526	1.6	2.85E+07	1.93E+04	1,200	2.14E+04
March-07	5,100,972	2	3.86E+07	2.61E+04	1,030	1.99E+04
April-07	4,818,402	1	1.82E+07	1.23E+04	1,090	1.99E+04
. Мау-07	4,914,192	3	5.58E+07	3.78E+04	918	1.71E+04
June-07	4,614,627	4.23	7.39E+07	5.00E+04	1,000	1.75E+04
Totals	29,631,017		3.17E+08	2.14E+05		1,18E+05

Appendix E

Radon Release Calculations

First and Second Quarter, 2007

			First Quarter 2001	7 Radon Release from	m Leaching (Operations:	-	
Curies/M3	Production Flow (liters)	Radon-222 Decay Constant	Operating Days	Operating Factor	M3/liter conversion	Hours/Day Conversion	Minutes/Hour Conversion	Total Radoi Release froi Leaching
7.04E-04	16,338	0.72	90	99.6%	0.001	24	60	1,069
		S	econd Quarter 200	07 Radon Release fro	om Leaching	Operations:		
Curies/M3	Production Flow (liters)	Radon-222 Decay Constant	Operating Days	Operating Factor	M3/liter conversion	Hours/Day Conversion	Minutes/Hour Conversion	Total Rado Release fro Leaching
7.04E-04	16,663	0.72	91	99.9%	0.001	24	60	1,106
			First Half	2007 Radon Release	From Starti	ıp:		<u>-</u>
	Curies/M3	Total Acres of New Wellfield	Meter3/Acre Conversion	Orebody Thickness (meters)	Porosity			Total Rado Release froi Startup
	7.04E-04	8.8	4,074	1.52	0.29			11
		Tot	al Estimated Rad	ion Release from Pi	oduction:			2,186

		Radon Effluen	t Release Calcula	ation (Restora	ition)					
		First Half 20	007 Radon Release F	From Restoration	:					
Total										
Restoration Flo (liters)	w Microcuries/liter	Curies/Microcurie	Production Potential							
371,510,959	0.697	1.00E-06	259							
Wel	lfield Loss (25% of Pro	duction Potential):				65				
Ion Exchange Lo	ss (10% of Production F	otential minus Wellfie	eld Loss):			19				
Reverse Osmosis Lo	Reverse Osmosis Loss (100% of remaining activity at 0.470 microcuries/liter)									
	Total Reverse	•								
	Osmosis Flow (liters)	Microcuries/liter	Curies/Microcurie							
	103,124,460	0.470	1.00E-06							
	F	irst Half 2007 Rad	on Release From Sta	rtup of New Res	toration:					
		· · · · · · · · · · · · · · · · · · ·				Total Rado				
CuriesM3	Total Acres of New Wellfield	Meter3/Acr e Conversion	Orebody Thickness (meters)	Porosity		Release fro Startup				
7.04E-04	0.0	4074	1.52	0.29		0				
	Tot	he A hatemits T le	on Release from Re	storation:		133				

Total Estimated Radon Release, First Half 2007:

2.318



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-1

Quarter/Date Sampled Air Volume	Radionuclide	С	oncentration μCi/mL	Error Estìmate μCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	l l	% Effluent oncentration
C07040233-001	nat U	<	1.00E-16	N/A	1.00E-16	9.00E-14	<	1.11E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.83E-14	1.16E-15	2.00E-15	6.00E-13		3.04E+00
3.35E+09								

C07070204-001	nat U		1.15E-16	N/A	1.00E-16	9.00E-14		1.28E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.35E-14	1.38E-15	2.00E-15	6.00E-13		2.25E+00
5.21E+09								

Final prep volume is 0.95 liter

LLD's are from Reg. Guide 4.14

Year for Natural Uranium

Week for Radium-226

^{*}Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-2

Quarter/Date Sampled Air Volume	Radionuclide		Concentration µCi/mL	Error Estimate . μCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	1	% Effluent Concentration	
C07040233-002	^{nat} U	<	1.00E-16	N/A	1.00E-16	9.00E-14	<	1.11E-01	
01/02/2007 - 04/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02	
Air Volume in mLs	²¹⁰ Pb	<	2.00E-15	8.25E-18	2.00E-15	6.00E-13	<	3.33E-01	
4.97E+11									

C07070204-002	nat U		4.66E-16	N/A	1.00E-16	9.00E-14		5.18E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.52E-14	1.46E-15	2.00E-15	6.00E-13		2.53E+00
5.15E+09			-					

Final prep volume is 0.95 liter LLD's are from Reg. Guide 4.14

*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Year for Natural Uranium Week for Radium-226 Day for Lead-210



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-3

Quarter/Date Sampled Air Volume	Radionuclide	Concentration μCi/mL	Error Estimate µCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C07040233-003	^{nat} U	1.36E-16	N/A	1.00E-16	9.00E-14	1.52E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	< 1.00E-16	N/A	1.00E-16	9.00E-13	< 1.11E-02
Air Volume in mLs	²¹⁰ Pb	1.57E-14	8.58E-16	2.00E-15	6.00E-13	2.61E+00
5.13E+09						

C07070204-003	^{nat} U		1.32E-16	N/A	1.00E-16	9.00E-14		1.47E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.16E-14	1.30E-15	2.00E-15	6.00E-13		1.93E+00
5.30E+09								

Final prep volume is 0.95 liter

LLD's are from Reg. Guide 4.14

*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Year for Natural Uranium

Week for Radium-226



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-4

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Error Estimate µCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C07040233-004	U ^{tan}	1.41E-16	N/A	1.00E-16	9.00E-14	1.56E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	< 1.00E-16	N/A	1.00E-16	9.00E-13	< 1.11E-02
Air Volume in mLs	²¹⁰ Pb	1.41E-14	9.86E-16	2.00E-15	6.00E-13	2.34E+00
3.55E+09						

C07070204-004	nat U		4.43E-16	N/A	1.00E-16	9.00E-14		4.92E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.29E-14	1.26E-15	2.00E-15	6.00E-13		2.16E+00
5 87F+00								

Final prep volume is 0.95 liter

LLD's are from Reg. Guide 4.14

*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Year for Natural Uranium

Week for Radium-226



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-5

Quarter/Date Sampled Air Volume	Radionuclide	Concentration μCi/mL	Error Estimate μCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C07040233-005	natU	1.21E-16	N/A	1.00E-16	9.00E-14	1.34E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	< 1.00E-16	N/A	1.00E-16	9.00E-13	< 1.11E-02
Air Volume in mLs	²¹⁰ Pb	1.22E-14	7.86E-16	2.00E-15	6.00E-13	2.03E+00
4.96E+09				•		•

C07070204-005	^{nat} U		2.34E-16	N/A	1.00E-16	9.00E-14		2.60E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1,00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		9.53E-15	1.27E-15	2.00E-15	6.00E-13		1.59E+00
5.12E+09								

Final prep volume is 0.95 liter

LLD's are from Reg. Guide 4.14

*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Year for Natural Uranium

Week for Radium-226



CLIENT:

CROW BUTTE RESOURCES

REPORT DATE:

August 04, 2007

SAMPLE ID:

AM-6

Quarter/Date Sampled Air Volume	Radionuclide	C	oncentration μCi/mL	Error Estimate μCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	1	% Effluent oncentration
C07040233-006	nat U	<	1.00E-16	N/A	1.00E-16	9.00E-14	<	1.11E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		1.22E-14	7.60E-16	2.00E-15	6.00E-13		2.03E+00
5.13E+09								_

C07070204-006	^{nat} U	<	1.00E-16	N/A	1.00E-16	9.00E-14	<	1.11E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		8.29E-15	1.19E-15	2.00E-15	6.00E-13		1.38E+00
5.20E+09								

Final prep volume is 0.95 liter LLD's are from Reg. Guide 4.14

*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Year for Natural Uranium Week for Radium-226 Day for Lead-210



CLIENT:

CROW BUTTE RESOURCES

REPORT:DATE:

August 04, 2007

SAMPLE ID:

AM-8

Quarter/Date Sampled Air Volume	Radionuclide	Concentration μCi/mL	Error Estimate µCi/mL	L.L.D. μCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C07040233-007	nat U ·	4.06E-16	N/A	1.00E-16	9.00E-14	4.51E-01
01/02/2007 - 04/02/2007	²²⁶ Ra	< 1.00E-16	N/A	1.00E-16	9.00E-13	< 1.11E-02
Air Volume in mLs	²¹⁰ Pb	1.64E-14	9.19E-16	2.00E-15	6.00E-13	2.73E+00
4.68E+09						

C07070204-007	nat U		3.81E-16	N/A	1.00E-16	9.00E-14		4.24E-01
04/02/2007 - 07/02/2007	²²⁶ Ra	<	1.00E-16	N/A	1.00E-16	9.00E-13	<	1.11E-02
Air Volume in mLs	²¹⁰ Pb		7.24E-15	1.30E-15	2.00E-15	6.00E-13	1	1.21E+00
4.46E+09							-	

Final prep volume is 0.95 liter

LLD's are from Reg. Guide 4.14

Year for Natural Uranium

Week for Radium-226

^{*}Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2

Crow Butte Resources

Attn: Rhonda Grantham

PO Box 169

Crawford, NE 69339

LANDAUER

SPHERICAL X9 ENVIRONMENTAL REPORT

Account Number:	306192	
Process Number:	X9SP ES009	
Received Date:	5-Apr-07	
Report Date:	11-Apr-07	
Released by:	LCC_	

Net Values after control subtraction

								Mean Ambient	G4 1 4	95%
							Dose	Dose		Confidence
		Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Equivalent	Equivalent	Deviation	Interval
Participant No.	Name/Description	(mrem)	(mrem)	(mrem)	(mrem)	· (mrem)	(mrem)	(mrem)	(mrem)	(mrem)
Quarterly Monito	oring Period starting:		Jan	uary 1, 200	7	•				
Control	•	32	34	33	34	32	33		1.0	1.2
1001	AM-1	40	37	39	40	39	39	6	1.2	1.5
1002	AM-2	37	42	44	37	40	40	7	3.1	3.8
1003	AM-6	42	39	37	36 ·	38	38	5 .	2.3	2.9
1008	AM-8	43	41	41	39	41	. 41	8	1.4	1.8
1009	AM-3	38	39	41	38	39	39	6	1.2	1.5
1010	AM-4	39	37	38	39	41	39	6	1.5	1.8
1011	AM-5	38	40	38	37	42	39	6	2.0	2.5

95% Confidence Interval is based on the standard error of the mean

Crow Butte Resources

Attn: Rhonda Grantham

PO Box 169

Crawford, NE 69339

LANDAUER

SPHERICAL X9 ENVIRONMENTAL REPORT

Account Number:	306192	
Process Number:	X9SP ES017	
Received Date:	6-Jul-07	
Report Date:	16-Jul-07	
Released by:	LCC	

Net Values after control subtraction

							Mean Ambient	M	ean Ambient		95%
							Dose	٠. *	Dose	Standard	Confidence
		Reading 1	Reading 2	Reading 3	Reading 4	Reading 5	Equivalent		Equivalent	Deviation	Interval
Participant No.	Name/Description	(mrem)	(mrem)	(mrem)	(mrem)	(mrem)	(mrem)	÷	(mrem)	(mrem)	(mrem)
Quarterly Monit	toring Period starting:		Ar	oril 1, 2007							
Control	•	23	24	28	22	23	24			2.3	2.9
1001	AM-1	25	32	30	27	31	29		5	2.9	3.6
1002	AM-2	30	30	30	30	28	30	1.	6	0.9	1.1
1003	AM-6	30	33	28	31	29	30		6	1.9	2.4
1008	AM-8	27	27	25	32	34	29		5	3.8	4.7
1009	AM-3	26	28	30	30	30	29		5	1.8	2.2
1010	AM-4	29	41	28	21	23	28		4	7.8	9.7
1011	AM-5	28	26	28	32	22	27		3	3.6	4.5