Table 11. Chemical and radiometric analyses of 137 rock samples from the Lion 1 mine, Fall River County, South Dakota

	Sample Number	U ppm	eU 10-3%	As ppm	Cu ppm	Fe %	Mn %	Pb ppm	pH	TiO_2%	V %	Zn ppm	Remarks
a	D 93019		2	20	20	1.00	0.6	10	7.7	<0.5	0.15	20	Joint face, black with a reddish brown
	D 201596	24	2	10	<20	0.60	0.50				0.20	<20	color beneath. Maximum thickness of color
	D 201597		1	10	<20	3.00	0.30				0.15	<20	penetration into sandstone, 1/8 inch.
b	D 93020		4	20	40	0.75	1.2	< 10	8.3	0.5	0.06	20	
	D 201598	21	3	20	<20	0.30	1.20				0.06	<20	Joint face, black
	D 201599		3	30	<20	0.30	1.00				0.03	<20	
c	D 93021		2	40	20	1.10	0.75	< 10	7.6	0.7	0.08	<20	Joint face, black, reddish beneath.
	D 201600		2	80	<20	0.60	0.60				0.04	<20	Maximum thickness of color penetration
	D 201601	15	2	50	<20	0.60	0.50				0.20	<20	1/3 inch.
d	D 93022		2	10	10	1.35	0.10	10	8.1	<0.5	0.10	20	Joint face, black. Maximum thickness of
	D 201602		5	20	<20	0.50	0.08				0.10	20	color penetration 1/16 inch. Adjacent rocks
	D 201603	33	6	40	<20	0.60	0.08				0.20	<20	spotted reddish brown and black. Roots are near this joint face.
e	D 93023	140	10	150	10	0.70	0.75	10	7.6	0.5	1.+	40	
	D 201604	74	8	30	<20	3.50	0.60				0.30	20	Joint face, dark brown
	D 201605		6	10	<20	3.50	0.50				0.30	20	
e	D 93024		3	20	50	1.50	0.07	10	8.2	<0.5	0.06	20	Sandstone, white, 6 inches from joint
	D 201606		2	< 10	<20	0.40	0.05			-	0.15	20	face, sample numbers: D 93023, D 201604,
	D 201607	15	10	10	<20	0.50	0.03				0.10	<20	and D 201605
f	D 93025		3	80	300	2.65	0.50	50	7.8	<0.5	0.15	200	Joint face, dark brown
	D 201608		5	30	<20	0.60	0.40				0.30	<20	Maximum thickness of color penetration
	D 201609	60	9	40	<20	1.10	0.60				0.30	<20	3/16 inch, adjacent to samples D93029, D201614 and D201615