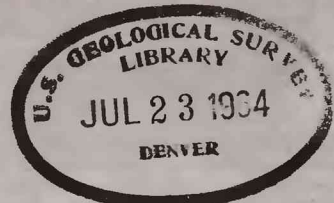


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64-50



Semiquantitative spectrographic and chemical analyses of rocks from the lower plate of the Roberts Thrust,
north-central part of the Cortez quadrangle, Nevada

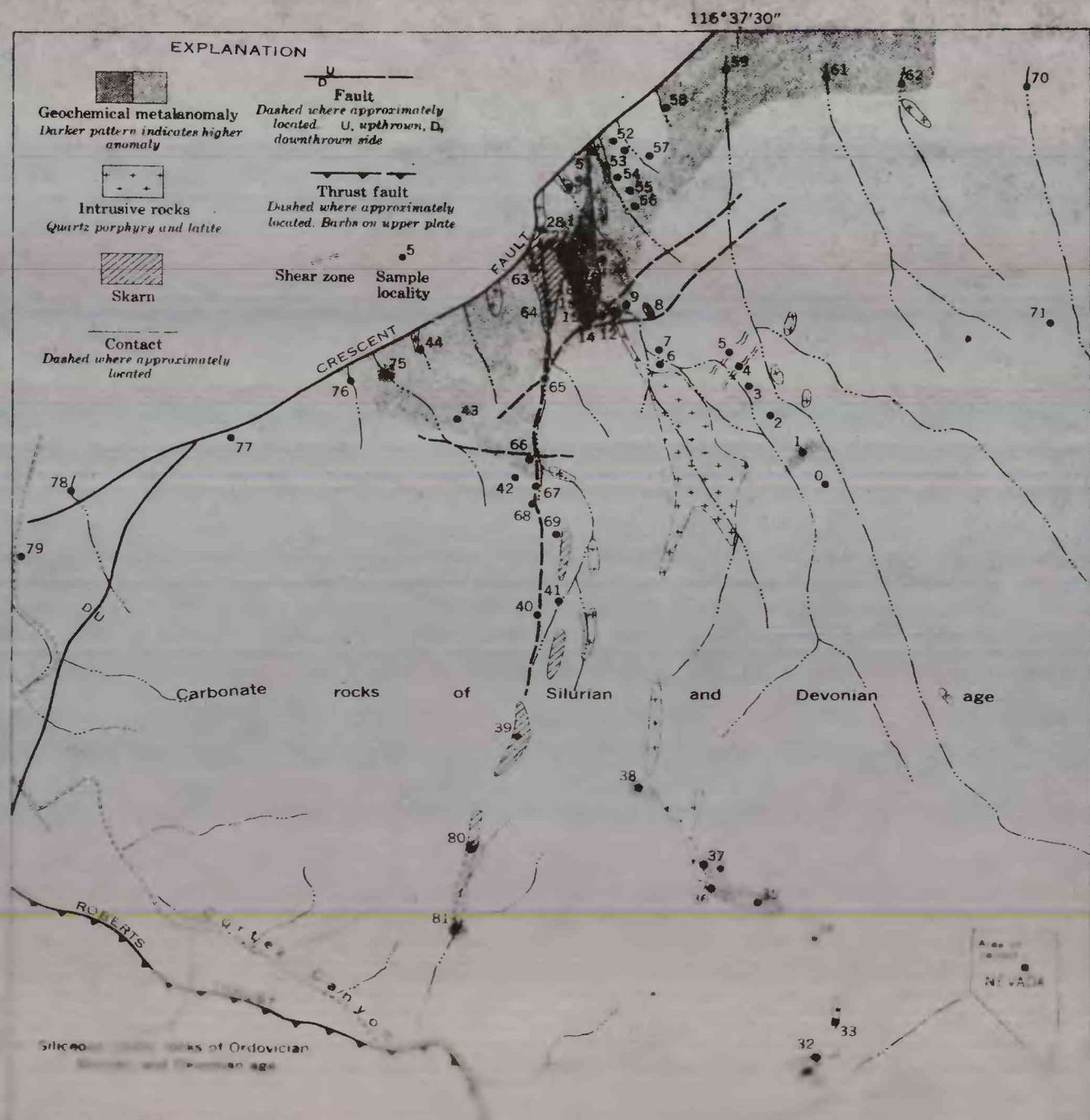
By

R.L.Erickson, Harold Masursky, A.P. Marranzino, Utsana Oda, and W.W. Janes

These analyses are a part of the geochemical study of the Cortez district, Nevada, which led to the detection and definition of an arsenic-antimony-tungsten anomaly reported in U.S. Geological Survey Prof. Paper 501-B. Anomalous amounts of zinc, lead, molybdenum, beryllium, and silver also were detected in a few samples from the most intensely mineralized area.

The location and number of the analyzed samples are shown on the accompanying index map.

Semiquantitative spectrographic analyses were made by Utsana Oda; chemical analyses for arsenic were made by W.W. Janes.



Preliminary geochemical and mineralogical map of the north-central part of the Cortez quadrangle, Nevada, showing the location of the analyzed rocks. The map is based on data from the U.S. Geological Survey, 1967-68.

Sample No.	Description	Percent				Part per million																	
		Ca	Mg	Fe	Ti	Mn	Ag	As	B	Ba	Be	Cr	Cu	Mo	Ni	Pb	Sb	Sr	V	Zn	Y	Zr	
S-500	Limestone, dark-gray; red																						
	films on fractures-----	>20	1	1	500	50	<1	25	<10	150	<1	20	5	<2	5	<10	<50	2,000	20	<50	10	<200	70
1	Jasperoid, vuggy; black																						
	stain-----	5	.15	.15	1,000	150	2	400	50	200	<1	20	20	100	150	<10	<50	50	300	<50	20	<200	150
2	Calcite, iron-stained;																						
	fracture filling-----	>20	.7	.7	700	100	<1	10	10	70	<1	70	10	<2	10	<10	<50	1,500	300	<50	20	200	100
3	Do-----	>20	.3	.3	20	<10	<1	10	<10	10	<1	<10	5	<2	<5	<10	<50	700	10	<50	<10	<200	10
4	Limestone breccia, calcite-																						
	cemented-----	>20	5	5	300	70	<1	25	<10	100	<1	10	5	<2	5	<10	<50	2,000	20	<50	<10	<200	70
5	Do-----	20	1	1	2,000	200	<1	75	70	200	2	50	15	<2	20	<10	<50	100	150	<50	20	<200	100
6	Calcite, iron-stained;																						
	fracture filling-----	>20	.7	.5	1,000	300	<1	25	50	200	<1	50	5	10	30	15	<50	300	200	<50	20	<200	200
7	Do-----	>20	5	.5	500	200	<1	25	50	300	<1	20	5	2	20	15	<50	1,500	150	<50	20	<200	200
8	Quartz porphyry dike rock----	2	.2	1	3,000	300	<1	20	30	2,000	2	<10	5	<2	10	20	<50	70	70	50	20	<200	300
9	Limestone; brown, coarse-																						
	grained, crumbly-----	20	5	.7	700	700	<1	100	20	1,000	2	30	5	<2	30	20	<50	200	150	<50	20	<200	150
9-A	Limestone; yellow to brown,																						
	altered-----	20	.7	2	2,000	700	<1	75	70	700	2	70	7	15	50	10	<50	700	200	50	30	<200	200
10	Do-----	20	.7	1.5	3,000	500	<1	75	100	700	5	70	15	10	70	20	50	150	300	<50	15	<200	300
11	Limestone, dolomitic,																						
	partially silicified-----	10	5	2	2,000	1,500	5	600	50	1,500	2	300	50	7	100	<10	150	300	150	<50	20	<200	150
12	Quartz latite porphyry dike--	.7	.3	.5	300	500	<1	10	15	1,000	2	<10	10	<2	<5	30	<50	150	<10	<50	10	<200	50
13	Fracture coating, red-brown--	>20	1.5	3	1,500	200	<1	600	50	300	1	50	10	<2	50	20	<50	200	200	<50	15	<200	100
14	Fracture filling, chocolate-																						
	brown-----	.7	.15	20	2,000	150	<1	1,600	70	300	5	20	15	70	500	50	1,000	20	100	150	20	200	200
14-A	Fracture coating, brilliant																						
	orange-----	>20	3	1.5	1,500	30	<1	160	50	100	<1	20	7	7	20	<10	50	200	200	<50	20	<200	100
15	Limestone, purplish to																						
	reddish brown, altered-----	70	1	1	1,500	150	<1	40	30	300	<1	70	10	10	30	<10	<50	200	50	20	10	100	10
16	Limestone breccia, stained																						
	red-----	15	.7	2	500	300	1	1,200	10	700	5	20	10	10	70	20	500	150	150	50	30	<200	70
17	Fracture coating, red-----	1	.2	1.5	1,500	100	<1	200	100	150	<1	30	10	20	50	20	300	20	300	<50	<10	<100	100
18	Breccia vein, red-brown,																						
	porous-----	1.5	.15	15	2,000	3,000	<1	1,200	70	>10,000	10	50	30	100	300	150	1,000	1,500	700	300	70	200	200
19	Fracture filling, orange-																						
	brown-----	>20	.5	1	700	300	<1	60	10	200	<1	30	5	5	20	15	<50	200	150	<50	20	<200	30
20	Jasperoid, yellow to red-																						
	brown, vuggy-----	7	1.5	.5	700	2,000	<1	80	50	1,000	1	20	7	2	30	<10	<50	100	200	70	<10	<200	70
21	Jasperoid, fracture filling--	1	.1	1.5	1,500	150	<1	600	50	>10,000	3	30	15	20	50	30	500	200	150	50	50	200	300
22	Calcite, red-stained, banded;																						
	fracture filling-----	>20	.3	.3	20	500	<1	50	<10	100	<1	<10	5	2	20	<10	<50	500	70	<50	20	<200	10
23	Skarn, orange-brown, earthy--	15	.2	10	700	700	<1	6,000	10	300	50	50	100	10	150	50	1,500	500	1,000	1,500	30	2,000	50
24	Do-----	15	.15	1	5,000	300	<1	200	<10	1,000	1	100	20	15	50	<10	50	1,000	500	150	20	<200	200
25	Skarn, brick-red, earthy----	1.5	.3	2	5,000	300	<1	600	70	200	2	70	30	30	70	10	100	150	150	100	<10	<200	300
26	Limestone, red-stained, in																						
	skarn-----	>20	.15	.7	3,000	300	<1	100	<10	70	<1	70	5	<2	20	<10	<50	700	700	70	50	<200	200
27	Limestone, altered, red,																						
	earthy-----	15	.1	.7	1,000	70	<1	400	<10	50	<1	70	2	2	30	<10	<50	500	200	50	20	<200	100
28	Quartz latite porphyry dike--	.15	.1	.15	300	200	<1	25	10	700	1	<10	5	<2	<5	70	<50	30	<10	<50	<10	<200	70
31	Biotite latite dike-----	.7	.2	1.5	700	300	<1	25	15	1,500	2	<10	7	<2	5	20	<50	70	<10	<50	<10	<200	100
32	Calcite vein, white-----	>20	.1	.2	100	200	<1	100	<10	30	<1	15	3	<2	5	<10	<50	200	20	<50	<10	<200	10
32-A	Calcite vein, brown-----	>20	.1	.3	50	1,000	<1	100	<10	100	<1	10	1	5	5	<10	<50	200	50	<50	15	<200	10
32-B	Calcite, yellow-brown,																						
	earthy-----	20	.2	1.5	1,500	500	<1	600	200	100	2	150	5	5	7	10	<50	300	200	<50	10	<200	70
33	Biotite quartz latite																						
	porphyry-----	1	.3	1.5	2,000	200	<1	10	20	2,000	1	<10	2	<2	50	20	<50	200	30	<			