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CHEMICAL ANALYTICAL RESULTS FROM ROCKS OF THE GOLDEN DYKE FORMATION, RUM JUNGLE N.T.

by

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CONTENTS

SUMMARY

This Record contains a list of trace-metal analyses obtained during an investigation, by W.M.B. Roberts, of mineral genesis in the Rum Jungle and Waterhouse areas of the Northern Territory.

The results have an acceptable accuracy and precision.

INTRODUCTION

The geochemical analyses reported here were undertaken as part of an investigation, by W.M.B. Roberts, of mineral genesis in the Golden Dyke Formation in the Rum Jungle and Waterhouse areas of the Northern Territory.

All samples analyses consisted of unweathered diamond-drill core, and were mainly from the Golden Dyke Formation, although some were from the Coomalie Dolomite, Celia Dolomite, Burrell Creek Formation and Crater Formation. Rock types analysed were amphibolite, quartzite, shale, dolomitic shale, dolomite, altered impure dolomite, calcareous chloritic schist, calcareous black shale, graphitic chlorite rocks, andalusite schist, and phyllite.

Each sample was analysed for Pb, Zn, Cu, Ni, and Cd. Also included are results for uranium oxide (U_3O_8) which were obtained by the Australian Atomic Energy Commission using the neutron activation method.

The method used to analyse the trace metals was investigated in order to establish the accuracy and precision of the results.

ANALYTICAL METHOD

Basic method

The method used for all analyses was a modification of that described by Bernas (1968 pp 1684, 5). A detailed description of his method is given below:

'Transfer 50 mg (300 mg for vanadium) of a representative-150 mesh size sample portion into the teflon decomposition vessel. Add 0.5 ml aqua regia as a wetting agent, making certain that the sample is thoroughly wetted. Then add 3.0 ml hydrofluoric acid (48%) and close the vessel by hand-tightening the screw cap containing the teflon sealing disc. Place the crucible, without tilting, into a drying oven for 30-40 minutes at 110°C.

'Cool, unscrew the lid, insert the teflon spout, and transfer the decomposed sample solution with the aid of 4-6 ml of distilled water from a wash bottle into a 50 ml polystyrene Spex vial. The volume should not exceed 10 ml. Add 2.8 g of boric acid and stir with a teflon stirring rod to dissolve the boric acid and hasten the slightly exothermic reaction. Add 5-10 ml of distilled water. Any precipitated metal fluorides will dissolve at this stage and upon further dilution to about 40 ml a clear homogeneous sample solution results. Transfer to a 100 ml volumetric flask, adjust to volume, and store in a polythene container. The samples are then ready for analysis by atomic absorption spectrophotometry'.

Table 1 gives the instrument settings and analytical conditions for atomic absorption measurements.

TABLE 1: Instrument settings and analytical conditions for atomic absorption measurements

Element	Pb	Zn	Cu	Ni	Cd
Wavelength (nm)	217.0	213.9	324.8	232.0	228.8
Slitwidth (u)	300	100	100	50	200
Lamp Current (mA)	5	5	3	5	3
Fuel/oxidant	- - - - - - - -	all C_2H_2/air		- - - - - - - -	
NAA measured	yes	yes	no	yes	yes

Modifications to Basic Method

Bernas' method proves satisfactory for major-element determinations; however, the dilution factor of 2000 restricts the detection limits of the trace metals to about 200 ppm for Pb, 40 ppm for Zn, 40 ppm for Cu, 80 ppm for Ni, and 40 ppm for Cd, which is not satisfactory for a normal geochemical survey.

By increasing the sample weight to 1000 mg, and decreasing the final solution volume to 50 ml, resulting in a dilution factor of 50, the detection limits are reduced to 5 ppm for Pb, 1 ppm for Zn, 1 ppm for Cu, 2 ppm for Ni, and 1 ppm for Cd.

The effect of increasing the sample weight is shown in Table 2 (the rock sample used was *CAAS Syenite, Sy-1). It can be seen that increased amounts of hydrofluoric and boric acids necessary do not produce any serious matrix effects.

*Canadian Association for Applied Spectroscopy

TABLE 2: Effect of increasing sample weight on analytical results for Sy-1

Sample No.	1	2	3	
Sample weight (mg)	250	500	1000	
Solution volume (ml)	50	50	50	
Dilution factor	200	100	50	
Element concentrations (ppm)				*Preferred value
Pb	492	458	472	495
Zn	252	246	241	219
Cu	20	16	17	23
Ni	24	28	30	43
Cd	< 4	< 2	< 1	0.09

*Flanagan, 1973.

(N.B. - Readout errors are proportional to the dilution factor)

Accuracy of Modified Method

Three standard rock samples (G-1, Sy-1 and W-1) were analysed to check the accuracy of the modified method. The results (Table 3) are close to the preferred values.

TABLE 3: Standard rock analyses

	USGS G-1		CAAS Sy-1		USGS W-1	
	*present	found	*present	found	*present	found
und						
Pb	48	45	495	472	7.8	10
Zn	45	45	219	241	86	86
Cu	13	15	23	17	110	115
Ni	1	< 2	43	30	76	70
Cd	0.03	< 1	0.09	< 1	0.15	< 1

* Flanagan, 1973.

Precision of Modified Method

A core sample of apparently homogeneous amphibolite was broken into five pieces. Each piece was ground separately and the five samples were each analysed five times for Zn, Cu and Ni. Table 4 gives the results of these analyses.

TABLE 4: Precision of modified method

Sample	(replicate)	Zn(ppm)	Cu(ppm)	Ni(ppm)
1	(1)	118	66	144
	(2)	118	66	143
	(3)	116	66	142
	(4)	119	64	140
	(5)	118	66	139
2	(1)	140	44	133
	(2)	145	45	135
	(3)	145	45	136
	(4)	142	43	130
	(5)	140	42	126
3	(1)	100	126	149
	(2)	100	129	154
	(3)	99	125	153
	(4)	103	126	152
	(5)	100	124	152

TABLE 4 (continued)

Sample	(replicate)	Zn(ppm)	Cu(ppm)	Ni(ppm)
4	(1)	121	86	155
	(2)	121	84	152
	(3)	125	86	157
	(4)	124	84	148
	(5)	119	82	148
5	(1)	122	50	130
	(2)	119	49	131
	(3)	119	50	129
	(4)	119	50	126
	(5)	119	50	126

Table 5 shows the average metal contents for each of the five samples, and demonstrates that the precision of the method is acceptable.

TABLE 5: Averages of samples (with standard deviations)

Sample	Zn	Cu	Ni
1	118 (0.95%)	66 (1.52%)	142 (1.49%)
2	142 (1.83%)	44 (3.01%)	132 (3.08%)
3	100 (1.58%)	126 (1.48%)	152 (1.23%)
4	122 (2.01%)	84 (2.06%)	152 (2.67%)
5	120 (1.18%)	50 (1.00%)	128 (1.83%)
average	120 (1.51%)	74 (1.81%)	141 (2.06%)

ANALYTICAL RESULTS FROM SELECTED DRILL HOLES

Tables 6(i) to 6(v) give analytical results for core samples taken from selected drill holes in country rocks. There is no information as to what rock units are involved. In tables 6(i) to 6(iv) it is not known what rock units were sampled, because the drill cores are from a company, Territory Enterprises Pty Ltd (TEP). The cores listed in table 6(v) include the following units: Golden Dyke, Beeston's, Burrell Creek, and Crater Formations, and Coomalie and Celia Dolomites.

TABLE 6(i)*: TEP Rum Jungle Creek South DDH 337

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426321	145'6"	< 10	124	95	48	< 2	1.1
322	146'	"	103	115	40	"	1.0
323	148'	"	116	80	40	"	1.6
324	150'	"	88	60	52	"	0.8
325	155'	"	26	13	14	"	5.5
326	162'	"	104	46	42	"	0.6
327	176'	"	61	29	34	"	1.8
328	194'	"	115	123	64	"	1.4
329	202'	"	104	7	44	"	0.8
74426330	219'	"	82	19	50	"	1.4
331	237'	"	82	44	70	"	0.8
332	271'	"	116	30	42	"	1.4
333	275'	"	57	9	30	"	0.9
334	287'	"	72	64	34	"	0.6
335	293'	"	141	51	50	"	0.9
336	294'	"	108	91	26	"	0.8
337	294'(vein)	"	4	8	< 2	"	< 0.4
338	310'	"	105	140	36	"	0.7
339	334'	"	145	110	64	"	1.0
74426340	342'	"	116	71	50	"	1.0
341	349'	"	103	75	40	"	0.8
342	381'	"	114	21	34	"	0.5
343	388'	"	114	89	36	"	0.7
344	411'	"	119	112	36	"	0.4
345	427'	"	92	33	22	"	0.4
346	444'	"	97	20	32	"	0.6
347	460'	"	79	45	30	"	0.6
348	464'	"	54	17	30	"	0.5
349	481'	"	53	10	40	"	0.6
74426350	486'	"	131	22	24	"	< 0.4
351	512'	"	115	69	28	"	0.4

TABLE 6(i) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426352	536'	< 10	103	49	28	< 2	0.4
353	554'	"	107	34	26	"	0.4
354	574'	"	92	89	30	"	0.5
353	599'	"	112	89	40	"	0.4
356	630'	"	101	1	38	"	0.6
357	649'	"	107	20	38	"	0.6
358	672'	"	119	73	20	"	0.5
359	684'	"	100	4	38	"	1.3
74426360	772'	"	76	11	34	"	0.4
361	773'	< 20	157	92	30	< 6	0.7
362	782'	"	156	51	35	"	0.8
363	813' (a)	"	95	58	35	"	0.6
364	813' (b)	"	74	30	10	"	0.5
365	831'	"	109	31	40	"	0.6
366	850'	"	173	58	25	"	n.d.
367	871'	"	147	74	25	"	0.6
368	896'	"	133	35	20	"	0.6
369	917'	"	125	136	40	"	0.4
74426370	939'	"	148	51	30	"	1.0
371	946'	"	74	12	25	"	0.7
372	966'	"	121	8	10	"	0.8
373	984'	"	154	16	10	"	0.6
374	1011' (a)	"	126	24	10	"	0.4
375	1012'	"	124	148	35	6	0.4
376	1031'	"	6	12	10	6	2.1
377	1036'	"	14	8	10	6	1.2
378	1037' (a) A	"	11	11	10	6	1.0
379	1037' (a) B	"	8	12	10	6	8.4
74426380	1037' (b)	"	6	11	15	10	0.5
381	1056'	"	144	68	10	< 6	0.5
382	1082' (a)	"	126	12	10	"	0.5
383	1082' (b)	"	137	12	35	"	0.4
384	1095'	"	105	59	35	"	0.5
385	1101'	"	101	380	90	"	< 0.4
386	1101' (vein)	"	10	340	245	"	< 0.4

TABLE 6(i) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426387	1131'	"	58	9	35	"	0.6
388	1152'	"	46	12	30	"	0.9
389	1175'	"	100	12	25	"	0.4
74426390	1196'	"	48	8	35	"	0.6
391	1234'	"	134	43	10	"	0.4
392	1241' (a)	"	129	19	10	"	0.6
393	1267'	"	143	129	10	"	0.5
394	1300'	"	156	59	10	"	< 0.4
395	1342'	"	161	118	15	"	0.4

TABLE 6(ii) : <u>BMR Waterhouse No. 2 Prospect DDH 4</u>

396	82'	<20	83	46	55	< 6	3.6
397	92'	"	107	73	75	"	6.1
398	102'	60	715	42	10	10	12.0
399	107'	40	58	18	60	< 6	3.2
74426400	112'3"	< 20	98	9	50	"	9.3
401	112'8"	"	330	9	10	"	16.4
402	117'	"	99	31	10	"	7.7
403	134'6"	"	139	12	35	"	1.9
404	144'	"	157	286	240	"	2.3
405	144' (vein)	"	136	208	235	"	1.1
406	164'	"	169	110	650	"	0.4
407	194'3"	"	125	82	725	"	1.1
408	239'4"	"	147	109	870	"	2.7

TABLE 6(iii): <u>TEP Browns DDH 60-B-49</u>

74426454	150' (a)	< 10	108	17	38	< 2	1.0
455	150' (b)	"	126	19	39	"	1.1
456	160'	"	144	24	34	"	0.7
457	170'	"	129	34	48	"	0.9
458	180'	"	203	22	50	"	1.3
459	190' (a)	"	162	105	84	"	1.3

TABLE 6(iii) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426460	190' (b)	"	288	120	95	"	1.3
461	190' (c)	"	168	48	38	"	1.1
462	200'	"	178	36	18	"	n.d.
463	210'	"	91	31	36	"	1.3
464	220' (a)	"	184	65	45	"	1.3
465	220' (b)	"	117	20	7	"	0.9
466	230'	"	103	14	16	"	1.0
467	240'	"	76	9	18	"	n.d.
468	250' (a)	"	100	47	32	"	1.1
469	250' (b)	"	100	53	29	"	1.2
74426470	260'	"	160	63	11	"	0.9
471	272'	20	168	83	43	"	n.d.
472	287'	< 10	575	199	353	"	4.6
473	301'	10	49	49	31	"	3.1
474	316'	< 10	35	83	122	"	3.1
475	330'	25	229	48	73	"	2.1
476	340'	< 10	140	83	100	"	2.4
477	348'	"	164	100	95	"	1.6
478	352'	"	174	118	125	"	1.9
479	357'	20	168	126	139	"	1.9
74426480	362'	25	158	80	125	"	2.0
481	367'	< 10	150	122	179	"	n.d.
482	372'	"	255	116	142	"	1.5
483	391'	"	156	217	200	"	1.2
484	410'	"	110	128	185	"	0.8
485	420'	"	103	295	220	"	1.2
486	430'	"	131	94	101	"	0.8
487	440'	"	101	4	139	"	n.d.
488	450'	"	125	109	187	"	0.7
489	460'	"	129	76	165	"	0.9
74426490	479'	"	62	59	150	"	n.d.
491	480'	"	587	53	204	"	1.0
492	490'	"	144	116	148	"	1.0
493	500'	"	184	92	181	"	< 0.4
494	510'	10	142	43	84	"	n.d.

TABLE 6(iii) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426495	520'	< 10	159	118	171	"	1.4
496	530'	"	42	77	90	"	n.d.
497	542'	"	138	96	146	3	4.1
498	553'	"	79	68	96	< 2	2.7
499	563'	"	688	356	261	5	n.d.
74426500	574'	"	275	147	171	< 2	n.d.
501	583'(a)	"	179	112	180	"	1.2
502	583'(b)	"	282	90	180	"	1.5
503	595'	"	92	99	180	"	1.4
504	609'	"	159	60	112	"	5.2
505	619'	70	498	122	2270	3	6.4
506	629'	< 10	189	96	143	< 2	6.6
507	639'	"	80	109	121	"	7.3
508	649'	"	155	122	102	"	5.6
509	659'	30	125	128	121	"	5.9
74426510	670'	70	131	127	106	"	5.1
511	677'	20	90	152	149	"	6.3
512	689'	20	13	119	124	"	5.0
513	1487'	40	52	82	124	"	3.9
514	1489'	45	98	29	65	"	n.d.
515	1491'	20	183	53	22	"	1.3
516	1493'	< 10	161	43	9	"	1.4
517	1500'	30	161	21	16	"	n.d.
518	1506'	< 10	129	18	18	"	n.d.
519	1512'	20	208	8	22	"	1.2
74426520	1522'	< 10	163	37	< 2	"	1.4
521	1526'	"	26	24	"	"	1.4
522	1532'	60	400	54	43	"	3.8
523	1537'	25	65	27	56	"	4.3
524	1542'	20	67	104	53	"	n.d.
525	1547'	35	177	36	25	"	1.0
526	1552'	< 10	189	157	18	"	n.d.
527	1562'	"	165	37	2	"	1.6
528	1572'	"	171	29	53	"	n.d.
529	1582'	"	173	7	12	"	n.d.

TABLE 6(iii) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
74426530	1587'	< 10	175	26	18	< 2	1.3
531	1592'	"	129	26	25	"	1.2
532	1595'	"	138	21	< 2	"	1.4
533	1597'	15	161	69	25	"	1.6
534	1597'6" (A)	15	18	74	56	"	4.0
535	1597'6" (B)	15	36	34	43	"	n.d.
536	1597'6" (C)	< 10	34	28	40	"	4.5
537	1602'	"	49	76	47	"	6.5
538	1612'	20	22	82	84	"	n.d.

TABLE 6 (iv): <u>TEP Mount Burton DDH 351</u>

539	441'	< 10	16	58	102	< 2	n.d.
74426540	442'	"	10	19	< 2	"	1.1
541	472'	"	30	98	22	"	1.1
542	472' (vein)	"	3	5	500	"	< 0.4
543	473'	"	43	60	62	"	7.8
544	476'	"	20	80	120	"	6.1
545	479'	"	77	95	90	"	5.6
546	481'	"	20	19	15	2	1.7
547	486'	"	71	42	45	< 2	n.d.
548	494'	"	36	16	20	"	7.4
549	494' (vein)	"	8	224	535	"	< 0.4
74426550	501'	"	127	40	45	2	n.d.
551	510'	"	895	84	70	10	5.4
552	517'	"	30	32	30	< 2	7.2
553	517' (vein)	"	6	100	118	"	< 0.4
554	527'	"	54	54	55	"	7.2
555	536'	"	112	59	48	"	8.9
556	537'	"	89	59	55	"	7.9
557	556'	"	33	50	35	"	9.7
558	567'	"	31	18	8	"	n.d.
559	576'	"	55	36	30	"	7.2
74426560	584'	"	43	37	35	"	6.3
561	597'	"	53	26	12	"	6.7
562	607'	10	51	28	22	"	7.9

TABLE 6(iv) (continued)

Sample	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
553	615'	15	56	40	30	"	8.5
564	617'	< 10	38	19	10	"	6.2
565	619'	"	7	1	< 2	2	6.2
566	623'	"	6	2	"	2	< 0.4
567	630'6"	"	58	19	15	< 2	3.7
568	631'	"	17	6	< 2	"	5.3
569	632'	"	54	28	15	"	3.0
74426570	632'6"	"	28	20	12	"	3.5
571	633' (a)	"	30	10	5	"	2.6
572	633' (b)	"	12	48	38	"	3.5
573	633' (c)	"	12	16	12	"	2.6
574	653'	"	36	44	30	"	n.d.
575	669'	"	117	38	30	2	5.8
576	677'	"	65	15	8	< 2	n.d.
577	684'	"	35	60	32	"	3.5
578	686'	"	18	11	< 2	"	1.8
579	688' (a)	"	15	10	8	2	1.0
74426580	688' (b)	"	25	24	8	< 2	3.7
581	703' (a)	"	29	10	< 2	"	8.1
582	703' (b)	"	10	11	18	"	2.8
583	703' (c)	10	7	1	5	"	9.1
584	707'	< 10	10	7	< 2	2	2.1
585	712'	20	14	56	8	< 2	52.0
586	718'	< 10	18	5	2	"	9.7
587	719'	15	15	2	8	"	35.7

Table 6(y): Rum Jungle Special Sheet BMR stratigraphic drilling samples

Sample	Hole	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
1973 Series								
409	R3/73	75'-80'	< 10	46	3	32	< 2	1.1
74426410		85'-90'	"	28	4	43	"	1.9
411		95'-100'	"	55	4	39	"	1.3
412		105'-110'	"	42	11	32	"	1.1
413		115'-120'	"	31	5	25	"	n.d.
414		125'-130'	"	58	71	36	"	n.d.
415		135'-140'	10	42	10	22	3	0.8
416		145'-150'	< 10	58	23	41	< 2	2.2
417		155'-160'	"	56	10	39	"	2.3
418		165'-170'	"	33	10	31	2	1.2
419		175'-180'	"	32	134	133	< 2	1.8
74426420		185'-190'	10	32	55	102	"	2.4
421		195'-200'	< 10	11	53	16	3	0.9
422		205'-210'	"	5	10	9	< 2	n.d.
423	R4/73	16'2"	"	42	42	32	"	1.9
424		40'-45'	"	50	23	34	"	3.1
425		50'-55'	"	43	19	29	"	2.3
426		60'-65'	"	32	30	31	"	17.6
427		70'-75'	"	40	32	31	"	3.5
428		80'-85'	"	36	26	25	"	7.7
429		90'-95'	345	37	31	31	"	4.9
74426430		100'-105'	40	41	6	31	"	11.5
431	R5/73	55'-60'	< 20	29	10	35	< 6	4.0
432		65'-70'	60	31	7	24	"	3.4
433		75'-80'	< 20	26	8	35	"	3.6
434		85'-90'	"	40	10	41	10	4.6
435		95'-100'	"	53	11	61	< 6	5.4
436		105'-110'	"	33	18	22	"	4.6
437		115'-120'	40	40	6	30	"	5.3
438		125'-130'	< 20	29	10	24	"	3.3
439		135'-140'	"	40	8	56	"	4.8

Table 6(v) (continued)

Sample	Hole	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
1973 Series								
74426440		145'-150'	"	33	7	22	"	4.0
441		155'-160'	"	28	10	33	"	5.4
442		165'-170'	"	28	22	35	"	4.6
443	R6/73	78'1"	170	19	1	9	< 2	< 0.4
444	R10/73	80'1"	120	37	4	54	"	1.6
446	R14/73	114'3"	15	3	5	12	"	2.8
447		115'	< 10	2	2	2	"	1.7
448	R15/73	66'	"	93	107	30	"	n.d.
449		82'	10	95	472	103	"	0.6
450	R16/73	70'-71'	10	107	94	21	< 2	< 0.4
451		77'	< 10	101	121	24	"	< 0.4
445		79'	"	132	26	48	"	< 0.4
452		80'	"	125	102	30	"	< 0.4
453		82'	"	70	164	21	"	1.6
1974 Series								
588	R7/74	170'	24	89	15	30	< 1	8.6
589		177'	< 5	39	19	22	"	6.7
74426590	R9/74	57'	25	61	77	44	"	4.4
591		71'	30	90	180	45	"	5.4
592		80'	15	88	44	550	"	9.7
593		87'	10	49	27	27	"	6.5
594		90'	13	61	50	45	"	8.7
595		92'	13	47	16	46	"	7.9
596	R14/74	82'	< 5	73	58	105	"	n.d.
597	R17/74	86'	"	25	20	15	"	0.4
598		98'	"	92	155	73	"	< 0.4
599		103'	"	76	14	58	"	"
74426600		119'	"	97	75	82	"	"
601		128'	"	115	94	78	"	"
602		131'	11	45	640	320	"	n.d.
603		137'	< 5	41	5	49	"	n.d.
604		137'(vein)	"	11	5	4	"	n.d.

Table 6(v) (continued)

Sample	Hole	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
1974 Series								
605		139'	"	100	5	94	"	n.d.
606		142'	"	105	67	59	"	< 0.4
607		150'	"	106	190	69	"	< 0.4
608	R23/74	126'	7	18	130	112	"	10.7
609		129'	< 5	20	235	500	"	4.1
74426610		132'	"	33	7	55	"	3.9
611		137'	"	9	6	< 2	"	< 0.4
612		143'	"	23	8	30	"	3.7
613		150'	"	9	4	6	"	< 0.4
614		159'	"	7	4	5	"	n.d.
615		167'	"	53	4	74	"	2.8
616		171'	"	23	4		"	1.2
617	R24/74	33'	< 5	10	5	< 2	< 1	< 0.4
618		37'	61	66	38	4	"	0.6
619		60'	51	32	31	32	"	0.5
74426620	R32/74	30'	< 5	5	4	< 2	"	n.d.
621		32'	"	3	3	"	"	0.5
622		37'	10	3	4	"	"	1.7
623	R35/74	116'	< 5	90	72	345	"	n.d.
624		120'	"	81	150	202	"	n.d.
625	R37/74	114'	"	92	5	41	"	3.4
626		118'	"	32	3	29	"	n.d.
627		120'	"	22	3	26	"	5.6
628		137'	"	20	3	25	"	14.5
629	R38/74	98'	51	115	225	380	"	3.9
74426630	R39/74	60'	845	1210	78	18	5	4.1
631		63'	21	73	62	20	1	5.2
632		66'	620	1670	155	38	3	9.0
633		72'	29	228	76	24	< 1	3.3
634	R42/74	44'	< 5	6	3	42	"	n.d.
635		48'	"	1	2	4	"	2.8
636	R43/74	135'	"	3	3	7	"	1.7
637		140'	"	5	31	12	"	1.5

Table 6(v) (continued)

Sample	Hole	Core Depth	Pb	Zn	Cu	Ni	Cd	U_3O_8
<u>1974 Series</u>								
638		145'	"	5	6	< 2	"	1.3
639	R48/74	88'	"	62	4	17	"	1.5
74426640	R49/74	43'	"	86	68	40	"	< 0.4
641	R50/74	32'	"	79	69	106	"	< 0.4

REFERENCES

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