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GEOLOGICAL REPORT

JUBILEE MOUNTAIN PROSPECT

BRITISH COLUMBIA

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EMPR MAP 62 GSG MEM 369 GSC MAP 12-1957; 1326A GSC OF 481 GSC SUM RPT 1932A GSC P 91-1A, pp. 27-31 Buckley, R.A. (1976): Geological Report - 1975 Work Program, Jubilee Mountain, British Columbia, Dekalb Mining Corp., private report Buckley, R.A. (1977): \*Geological Report, Jubilee Mountain Prospect, British Columbia Dekalb Mining Corp., private report, 24 pages Chuck of Mis is a prof. File Mond. Where is this report?

> R.A. BUCKLEY, P. ENG. MARCH 1976 COPY NINE

INTRODUCTION

As a follow-up to the 1974 exploration program on Jubilee Mountain, additional diamond drilling on the prospect was done in the vicinity of the discovery holes.

The 1974 drilling program had encountered sulfide intersections in two of the 18 drill holes (Reference No. 6). Hole 15 intersected 27.5 feet of lead-silver-barite mineralization, while hole 17 encountered 61 feet of similar mineralization.

The host for the mineralization appears to be a carbonate breccia in the Upper Cambrian Jubilee Mountain Formation, while the control for the brecciation appears to be regional fracturing.

The Jubilee Mountain Formation consists of clean unmetamorphosed carbonates. Outcroppings of the formation indicate that the rock was deposited in a quiet water environment with local areas where reef building had taken place. Associated with the reefing (Figure 4 and Figure 5), such textures as pelletoid carbonates (Figure 6) and breccias (Figure 7) have been mapped.

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## REGIONAL GEOLOGY

Jubilee Mountain is an isolated mountain located immediately west of the Rocky Mountain Trench Fault.

The mountain itself consists of a succession of Upper Cambrian carbonates, Cambro-Ordovician shales and Silurian carbonates.

Regional folding stresses have folded the formations into a gentle syncline mapped by Reesor (Mem. 369 G.S.C.) as the Purcell Boundary Syncline. The prospective horizon, the Jubilee Mountain carbonates, crop out on both the east and west side of the mountain, indicating that the syncline is approximately one mile across.

### GEOLOGY OF THE PROSPECT AREA

Mineral prospecting has been active in the valley since before the turn of the century (1883). The only productive mine within 30 miles of this prospect is the Silver Giant Mine, slightly over one mile to the west on the western limb of the Purcell Boundary Syncline.

The Silver Giant Mine produced small quantities of mineral during the first half of the century, finally going into production in 1947. After producing from nine levels and an open pit, operations for sulfides ceased. Limited mining for barite, both underground and in open pits, and the re-concentration of the mill tailings to recover barite as an additive for drilling mud has continued during the summer months to the present by the Baroid of Canada Company.

Figure 1 is a reproduction of the preliminary geology map of the area (Reference No. 17). Figure 2 is an optical enlargement of the Jubilee Mountain portion of the preliminary map showing details of the syncline and the location of the prospect with respect to the Silver Giant Mine.



The schematic cross section (Figure 3) passes through the Silver Giant Mine, over the mountain peak and through the Jubilee Mountain prospect. By inspection of this cross section, the regional geology and the basis of this prospect can be envisaged.

The same geological features that crop out on the west side of Jubilee Mountain where the Silver Giant Mine is located crops out on the east side of the mountain where this prospect is located.

Various reports (Reference Nos. 2, 3, 4, 5, 11, 16) indicate that the ore bodies of the Silver Giant Mine occur at the top of the Jubilee Mountain Formation carbonate on the contact between the carbonate and the overlying McKay black pyritic shale.

Regional air photo mapping confirms the literature as well as indicating that the mine lies on a major north-south fracture. Although not indicated in the literature, the writer is of the opinion that the ore body of the Silver Giant Mine is associated with a reef system and a major fracture system. This fracture would provide a passageway for mineralizing solutions as well as a location for reef growth. The literature in one instance indicates that the ore body extends upward into the McKay shale which the writer interprets as

being a reef knob or buildup into the shale (McKay) formation.

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Having this understanding of the geology of Jubilee Mountain and the origin of the Giant reef ore body, it seemed natural that exploration should be carried out on the eastern portion of the syncline.

Air photos were examined and an air photo geological map was constructed. Several fractures were mapped in the vicinity of reefoid Jubilee carbonates lying under the Crown Grants. Coincident with these fractures and reefoid rocks, a weak Induced Polarization anomaly had been mapped. A decision was, therefore, made to pattern drill these features to evaluate the sulfide potential on this side of the syncline.

The original thesis was that sulfide mineralization would be associated with reef structures, with the sulfides occurring in the vug or void spaces of the carbonate in a manner similar to the sulfides at Pine Point, N.W.T.

Drilling during the 1974 season indicated, instead, that sulfide mineralization occurred in a carbonate breccia and the reef texture rocks were barren.

# DISCUSSION OF THE PARAGENESIS OF THE SULFIDE MINERALIZATION

In late Cambrian time this region was covered by a shallow sea which deposited relatively clean carbonates mapped today as the Jubilee Formation.

The sea floor, however, did exhibit a pattern of north-south fractures. Movement occurred on some of these fractures, providing escarpments on the sea floor. Reef building began on these escarpments and is mapped today as beds and mats of stromatoidal limestone as photographed in Figure 4 and Figure 5. The back reef environment is represented by pelletoidal limestone as photographed in This rock represents a quiet environment on the Figure 6. ocean floor where lime from the sea water was deposited on small particles. Continued agitation by water currents and wave action gently rolled these fragments around which produced a sub-rounded pellet. The pellet grew in size with additional precipitation, eventually coming to rest and forming a rock unit.

Slight movements continued along the old basement fault structures throughout Jubilee and McKay time keeping channelways open along the fault planes. As time progressed it appears that solutions capable of dissolving the carbonates



were actively creating caverns along the fault zone and within the more porous reefs. As these caverns reached a size where the rock was unable to support such an opening, the cavern caved, resulting in a quantity of broken rock or breccia. The interfragmental space was then infilled with sulfides derived from and precipitated by hydrothermal solutions passing up along the original predepositional fault planes. R

Figure 8 is a photograph of a fracture zone that appeared in one of the diamond drill cores. This represents in a miniature scale the process of a fracture zone being enlarged by solution to the point where a small cavern has been developed. If this process were to continue, eventually a larger cavern aligned with the fracture system would be developed. The collapse of such a cavern would produce a form of Karst topography on the stratigraphic top of the Jubilee Formation. The overlying McKay shale beds would then demonstrate abrupt changes in dip as illustrated in drill holes JM 17, 18, 19 & 20 on the cross section in Figure 9 (back pocket).

An abrupt change in the structural elevation of the Jubilee Formation is illustrated in drill holes JM 15, 16 and 21 as shown in the cross section of Figure 10 (back pocket). This cross section probably best illustrates the possibility of Karst topography with mineralization occurring at the boundary of the subsidence where maximum crushing and

brecciation would occur. The collapse of caverns has been well documented in the Mississippi Valley type deposits of Missouri and Tennessee.

Although carbonate breccias as a rock type appear similar, their geneology is quite different. Collapse breccias as discussed above are the type of breccia most likely to be encountered at Jubilee Mountain. The second most likely type is a reef frontal breccia, formed on the seaward side of reefs as talus. The talus consists of fragments of the adjoining reef that has broken free and rolled down the depositional slope.

Other breccias are formed during the deposition cycle as a result of turbidity currents associated with submarine slides. Tectonic breccias formed during folding and faulting have also been recognized in certain aceas. Examples of the last two breccias are usually small in areal extent and not usually connected with mineralizing solutions. This category, therefore, is not of a size or grade to be of economic interest as a metallic mine.

A structure contour map (Figure 13, back pocket) has been constructed on top of the Jubilee Mountain formation. This map represents today's surface structure on top of the Jubilee Carbonate. The purpose of such a map is to determine

if such features as Karst topography, fault zones, solution collapse, etc., could be mapped.

Contouring indicates that extreme differences in elevation occur on the Unconformity but the control data is too widely spaced for the contours to delineate such features that would lead to a possible mineral location. With more control points (i.e. more drilling) some of these features could be mapped. By inspection of the cross section (Figure 10) displaying diamond drill holes JM 15, 16 and 21, it is noted that the elevation of the Jubilee Formation changes drastically between JM 15 and JM 21. It would be possible to interpret a collapse zone in the vicinity of these holes based on the structural elevation of the Jubilee Mountain Formation Unconformity. Since the Detrital zone is abnormally thick in the JM 21 hole it could be concluded that the hole does in fact occupy a zone that experienced a higher rate of subsidence (several periods of collapse ?) than the surrounding rock sequence.

The next drill hole to test this structure, JM 23, was drilled to the southwest to examine the rock between JM 15/16 and JM 13/14. This hole encountered several mineralized zones - 135-143 (8 feet), 173-176 (3 feet), 203-212.5 (9.5 feet), and 228.5-238 (9.5 feet). These zones are nearly 100% barite with traces of lead, silver and copper.

#### CONCLUSIONS

The intersections in the JM 23 hole (Figure 12, back pocket) although scattered over a 103 foot zone, probably correlates with the intersection drilled on JM-15. This zone, being much higher in its barite content, is currently not being correlated with the intersections of holes JM 17, 19 and 22, which are primarily lead. It is, therefore, concluded that two exploration targets exist on this prospect, one being the above-described JM 15/23 barite prospect, and the other, the lead-silver-barite JM 17/19/22 prospect.

# SUMMARY OF DRILL HOLES

Le	Azimuth	Dip	Elevation	Latitude	Departure	Length
-1	0420	450	5013.6	1894.6N	937.9E	206
-2	0420	60 <sup>0</sup>	5013.6	1894.6N	937.9E	197
-3	0420	. 45 <sup>0</sup>	5017.7	1968.3N	799.3E	227
- 4	0420	60 <sup>0</sup>	5017.7	1968.3N	799.3E	237
-5	0420	45 <sup>0</sup>	5016.7	2022.0N	719.7E	267
-6	0420	60 <sup>0</sup>	5016.7	2022.ON	719.7E	317
-1	0420	45 <sup>0</sup>	5003.5	1806.6N	1009.0E	217
- 8	0420	60 <sup>0</sup>	5003.5	1806.6N	1009.0E	238
	0420	45 <sup>0</sup>	4995.6	1731.4N	1070.0E	212
-10	0420	60 <sup>0</sup>	4995.6	1731.4N	1070.0E	202
-11	0420	45 <sup>0</sup>	4985.5	1655.9N	1143.5E	217
-12	C420	ن0 <sup>0</sup>	4985.5	1653.9N	1143.5E	237
-13	0420	45 <sup>0</sup>	4980.8	1576.0N	1203.7E	227
-14	0420	60 <sup>0</sup>	4980.8	1576.ON	1203.7E	238
-15	0420	45 <sup>0</sup>	4977.5	1517.1N	1254.9E	221
-16	042 <sup>0</sup>	60 <sup>0</sup>	4977.5	1517.1N	1254.9E	215
-17	0420	45 <sup>0</sup>	4940.0	1142.6N	1449.1E	424
-18	0420	60 <sup>0</sup>	4940.0	1142.6N	1449.lE	396

Total Footage

4,495

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# APPENDIX

# SUMMARY OF DRILL HOLES

HOLE	AZIMUTH	DIP	ELEVATION	LATITUDE	DEPARTURE	LENGTH
JM 19		Vertical Hole	4952.7	1297.5N	1423.6E	422'
JM 20	223 <sup>0</sup>	62 <sup>0</sup>	4933.6	1429.3N	1560.5E	457 <b>'</b>
JM 21		Vertical Hole	4940.1	1595.8N	1354.0E	368'
JM 22	1800	50 <sup>0</sup>	4940.1	1595.8N	1354.0E	373'
JM 23	240 <sup>0</sup>	58 <sup>0</sup>	4960.0	1643.8N	1380.7E	267'

#### DISCUSSION OF DRILL RESULTS

Drill hole JM 19 was drilled to follow up the 1974 intersection of sulfides in JM 17. (Figure 9, back pocket). Although this hole encountered lead sulfides and similar breccia it did not sample the same quantity of lead as intersected in JM 17.

JM 20, collared to the east and drilled back under these intersections, did not encounter any sulfides. The rock under the sulfide zone, however, is extremely porous, exhibiting the highest amount of porosity and permeability of any sections mapped to date (Figure 9, back pocket). It appears that this section would correlate with the lower section of Hole JM 18. A portion of this hole is photographed on page 33 of the 1974 report (Reference 6). These porous stratigraphic sections illustrated in these two holes demonstrates that a carbonate reef has been penetrated. The relationship of the lithology and the overlying sulfides is unclear.

The breccia containing the sulfides of Hole JM 17 and Hole JM 19 is a result of reef collapse or of cavern collapse. Either process could occur near or in a reef and only additional exploration will provide the final answer.

An additional follow-up hole, JM 22, 130 feet to the

northwest, intersected 17 feet of lead-barite mineralization. The lead in this hole occurs as disseminated sulfides associated with barite. Therefore, the relationship of the mineralization in this hole and that encountered in JM 17 and JM 19 is not known. If this mineralization is related to the IP anomaly, then additional intersections can be expected to the northwest and southeast.

Diamond drill hole JM 22 (Figure 11, cross section, back pocket) encountered several possible fault or fracture zones where the drill rods dropped several feet. Air photo mapping places a strong north-south fracture in this region. It was probably encountered in this hole at 252 feet.

A vertical hole, JM 21, was located to evaluate the 27 foot intersection of JM 15 drilled in 1974. Mineralization was not encountered although the hole should have penetrated nearly the same rock as recovered in JM 15.

Two features of these holes are quite diagnostic of the events which occurred in this region.

- The abrupt change in elevation of the Jubilee Mountain Formation.
- The increased thickness of the Detrital
  Zone in the McKay Shale.





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JM 3,4 CROSS SECTION SCALE: 1" = 40'

B





inches	
1	· · · · · · · · · · · · · · · · · · ·
0 1 2 centimetres	JM 7,8
This reference scale bar has been added to the original image. It will scale at the same rate	CROSS SECTION
as the image, therefore it can be used as a reference for the original size.	SCALE: 1" = 40'

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### MINERAL CONTENT

Figures 17 and 18 are a tabulation of the core analysis of the two holes which had significant mineralization. Figure is presented as information only, while several intervals in hole 17 have been selected and weighted averages of the mineral content calculated.

### 1N SUMMARY

If the total 61 foot section were mined, the weighted averages would be as follows:

Lead	3.86%
Copper	.23%
Zinc	.093%
Gold	.012 oz/T
Silver	.72 oz/T
Barite	12.16%

If 35 feet were mined (red interval):

Lead	6.42%
Copper	.24%
Zinc	.042%
Cold	.012 oz/T
Silver	1.03 oz/T
Barite	16.92%

Core Section	Assay No.	Interval Feet	Assay Cu.	Assay Feet	Assay Pb	Assay Feet	Assay Zn	Assay Feet	Assay Au	Assay Feet	Assay Ag	Assay Feet	Assay Baso,	Assay Feet	Assay Hg ppm
													1	1	1
192.5-193		.5	NA		NA		NA		NA		NA		100.00	50.00	NA
193 -195	0787	2.0	.03.	.06	3.50	7.0	. 01	.02	Tr	.018	.36	.70	14.88	29.76	0.2
195 -197	0788	2.0	.01	.02	.27	.54	.01	.02	.010	.020	Tr	.018	2.81	5.62	0.0
197 -199	C789	2.0	.02	.04	2.71	5.42	.01	.02	.020	.040	Tr	.018	4.19	8.38	0.2
199 -204.5		5.5	NA		NA		NA NA		NA		NA		100.00	550.00	
204.5-205	C790	.5	.11	.055	2.26	1.43	.02	.01	.040	.02	.10	.05	32.40	15.20	0.2
205 -206		1.0	NA		NA		NA.		NA		NA		100.00	100.00	NA
206 -208	0791	2.0	.11	.22	2.08	4.16	.01	.02	Tr	.018	. 42	.84	39.63	79.26	0.3
208 -209	6792	1.0	.15	.15	8.01	8.01	.03	.03	.01	.01	1.49	1.49	24.60	24.60	1.0
209 -209.3	NA	.3	NA		NA		NA		NA		NA		100.00	33.33	NA
209.3-211	0793	1.7	.05	.085	. 87	1.48	.01	.017	Tr	.015	. 34	.58	77.98	132.57	0.2
211 -213	0794	2.0	.07	.14	1.67	3.34	.01	.02	Tr	.018	.18	.36	53.96	107.92	0.3
213 -213.5		.5	NA		NA		NA		NA		NA		100.00	50.00	
213.5-214.5	0795	1.0	.09	.09	.39	.39	.01	.01	Tr	.009	.70	.70	8.10	8.10	0.4
214.5-214.8		• 3	NA		NA		NA		NA		NA		100.00	33.33	
214.8-217	0796	2.2	.03	.07	1.52	3.34	.01	.022	.01	.022	.31	.68	1.93	4.25	0.2
217 -220	0797	3.0	.01	.03	.07	.21	.01	.03	Tr	.027	.04	.12	Tr	Tr	0.1
TOTAL		27.5	.04	.96	1.28	35.32	.008	.219	.008	.217	.20	5.56	44.85	1233.32	

CORE ANALYSIS JUBILIE MOUNTAIN HOLE JM-15

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FIGURE 26

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REFERENCES

1.	B.C. Department Mines	Minister of Mines Report 1927 pp 261-263
2.	B.C. Department Mines	Minister of Mines Report 1949 $\mathrm{pp}$ 200-204
3.	B.C. Department Mines	Minister of Mines Report 1954 pp 148-150
4.	B.C. Department Mines	Minister of Mines Report 1955 pp 72-73
5.	Ditto, A.G.	Engineer's Reports on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd September 9, 1968
6.	Finney, W.A.; Prior, J.W.	IP Survey, Jubilee Mountain Property, 50 -116 NE, for Calix Mines Ltd., Huntec April 1968
7.	Geological Survey of Canada	Summary Report - 1932 Part A II pp 172-176
8.	McKelvie, D.L.	Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd May 17, 1968
9.	McKelvie, D.L.	Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd September 24, 1968
10.	Rawlyk, D.W.	Ceology, Mineralogy and Paragenesis of the Giant Mascot Lead-Zinc Mine. Student mineralogical study, University of Manitoba, April 9,1956
11.	Reesor, J.E.	Map 12 - Pre-publication map of Mem. 369 - 1957
12.	Reesor, J.E.	Geology of the Lardeau Map Area, East Half, B.C. Mem. 369 - 1973
13.	N.T.S.	Map 82K/16
14.	Air Photos	Line A-11111, photo numbers 110-111

# If 31.5 feet were mined (blue interval):

Lead	7.04%	
Copper	·26%	
Zine	.046%	
Gold	.0lloz/T	
Silver	1.12 oz/T	
Bárite	17.22%	

If 28.5 feet were mined (green interval):

Lead	7.26%
Copper	.26%
Zinc	.045%
Gold	.012 oz/T
Silver	1.12 oz/T
Barite	19.03%

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COPE	ANALYSIS	JUBILEE	MOUNTAIN	HOLE	JM-17	

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<b></b>	Assay	Interval	Assay	Assay	Assay	Assay	Assay	Assay	Assay	Assay	Assay	Assav	Assav	Assav	Assav
Core Section	No.	Feet	Cu.	Feet	Pb	Feet	Zn	Feet	Au	Feet	Ag	Feet	Da 2	Feet	Ha ppm
											T		1		1 I I I I I I I I I I I I I I I I I I I
343 -345	0755	2.0	.28	.56	.36	. 72	1.59	3.18	.009	.018	.009	.01	Tr	Tr	30.9
345 -346		1.0	NA		NA		NA		NA		NA		SA		
346 - 348	0756	2.0	.10	.20	1.77	3.54	.19	.38	.02	.04	.02	.04	Tr I	Tr	3.9
343 - 350	0757	2.0	.02	.04	.07	.14	.07	.14	.009	.018	.009	.01	) Tr	Tr	1.2
350 - 352	0758	2.0	.01	.02	.08	.15	.04	.08	.009	.018	.009	.01	Tr	Tr	0.8
352 -355	0759	3.0	.02	.06	.47	1.41	.01	.03	.009	.027	.02	.06	1 12	Tr (	0.2
355 -356.5	0760	1.5	.07	,105	.97	1.46	.01	.015	.01	.015	.17	.26	Tr	Tr	0.2
355.5-358		1.5	NA		NA		NA		NA		NA		100.00	150.00	NA
358 -359	0761	1.0	.06	.05	5.01	5.01	.01	.01	.01	.01	.15	.15	45.43	45.43	0.7
359 -361	0762	2.0	.37	.74	14.90	29.8	.02	.04	Tr	.018	.98	1.96	22.88	45.76	2.0
361 -363	0763	2.0	.81	1.62	.85	2.70	.01	.02	Tr	.018	1.24	2.48	6.75	13.50	1.0
363 - 364		1.0	NA		NA		NA		NA		NA		1 100.00	100.00	1
364 -366	0764	2.0	×+33	.66	2.58	5.16	.02	.04	Tr	.018	.78	1.56	21.05	42.12	1.0
365 - 368	0765	2.0	1.07	2.14	3.34	6.58	.05	.10	Tr	.018	4.66	9.32	23.28	46.56	1.4
368 -370	0766	2.0	.12	.24	8.11	15.22	.04	.08	Tr	.018	2.64	5.23	1.46	2.92	1.0
370 - 370.5		0.5	NA		NA		NA		NA	~~	NA		100.00	50.00	
370.5-373	0767	2.5	.09	.22	12.79	31.98	.02	.05	.02	.05	.64	1.60	3.21	8.03	0.9
373 - 374	0768	1.0	.03	.08	.22	.22	.03	.03	.01	.01	.05	.05	Tr	Tr	0.6
374 - 376	0769	2.0	.19	.38	.46	. 32	.03	.06	.01	.02	.23	.46	Tr	Tr	1.0
375 -378	0770	2.0	.29	.58	4.85	9.70	.06	.12	Tr	.018	1.38	2.76	.67	1.34	0.9
3/8 -380	0771	2.0	.24	.48	5.40	10.80	.05	.10	.02	.040	1.82	3.64	1.41	2.82	2.1
	0772	1.5	.01	.02	.05	• 3 8	.01	.02	.02	.03	.009	.01	0.10	0.15	0.1
382.5-382.4	0773	0.9	.04	.04	9.21	5.29	.05	.045	.009	.009	1.18	.16	6.58	5.92	0.5
302.4-304.5	0774	0.1	NA		NA .		NA		NA		NA	~ ~	100.00	10.00	NA
302.54304	0774	1.5	.13	.20	35.45	53.18	.28	• 42	.03	.045	1.19	1.78	10.80	16.20	5.0
395 -396	0775	1. <u>1.</u> 0	09	09	27.07	27.07	.15	.15	Tr	.009	.72	.72	.50	.50	1.9
306 - 288	0777	1.0	.04	.04	1.95	1.95	.02	.02	Tr	.009	.16	.16	.05	-05	0.7
388 -389	0778	1 0			6.55	13:10 .		• 14	.010	.020	1.63	3.26	1 Tr	Tr	2.1
389 - 390	0779	1 1 0	00.		. 62	. 34	.01	.01	010	.010	.01	•Ui	1 10 70	10 70	
390 - 393	0780	3.0		•02			1 .01	• 0.4	0.70	.040	1.34 m~	.34	43.70	43.70	0.0
393 - 394	0781	1.0	.02	.05	/	• <del>4</del> ± 1 4	.01	.03	.030	.030		.047	-49 Tr	1.4/ Tr	
394 -396.5	0782	2:5	. 33	. 22	70	•	06	.01	1.020	023	1 1 18	2 95	7 15	17 87	1 8
396.5-398.5	0783	2.0	- 87	1.74	10		.00	.12	7~	018	1 54	3 08	56 99	113 96	1.0
398.5-400	0784	1.5	. 50	.75	68	• 12	07	.00	Tr	.014	68	1.02	3.86	5 79	2.1
400 -402	0785	2.0	.64	1.28	.14	.78	.02	.04	.010	.020	. 41	. 82	5.37	10.74	0.2
402 -404	0786	2.0	.03	.06	.03	.06	.01	.02	Tr	.018	Tr	.018	Tr	Tr	0.1
LATOT		61.0	.23	14.00	3.86	235.20	.093	5.65	.012	.75	. 72	44.01	12.16	741.91	
Ped Interval		35.0	.24	8.40	6.42	224.79	.042	1.48	.012	.425	1.03	35.96	16.92	592.08	]
Blue Interval		31.5	,26	8.17	7.04	221.25	.045	1.44	.011	.360	1.12	35.35	17.22	542.38	
Green Interva	7	28.5	.26	7.55	7.26	206.81	.045	1.28	.012	.331	1.12	31.93	19.03	542.33	l

### REFERENCES

- 1. Agarwal, R.G. Electromagnetic Survey, Vertical Loop, Jubilee Mountain, B.C., Company Report, July 1974
- 2. B.C. Department Minister of Mines Report 1927, Mines pp 261-263
- 3. B.C. Department Minister of Mines Report 1949, Mines pp 200-204
- 4. B.C. Department Minister of Mines Report 1954, Mines pp 148-150

5.

8.

Mines

- Minister of Mines Report 1955, B.C. Department pp 72-73
- Evaluation of the Jubilee Mountain 6. Buckley, R.A. Prospect, B.C., Company Internal Report, February 1975
- Geochemical Survey, Jubilce Mountain, 7. Buckley, R.A. B.C., Company Internal Report, March 1976
  - Collins, Jon A., Zinc Deposits Related to Diagenesis and Smith, Leigh Intrakastic Sedimentation in the Lower Ordovician St. George Formation, Western Newfoundland. Bull. Cdn. Pet. Geol., Vol. 23, No. 3, September 1975, pp 393-427
- 9. Ditto, A.G. Engineer's Reports on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., September 9, 1968
- 10. IP\_Survey, Jubilee Mountain Property, Finney, W.A., 50°-116° NE, for Calix Mines Ltd., Prior, J.W. Huntec, April 1968
- 11. Geological Survey Summary Report 1932, Part A II, of Canada pp 172-176
- 12. Evaluation of Jubilee Mountain, B.C. Hendry, K.N. Horizontal Loop EM Survey, Kenting Exploration Service Ltd., Company Report, October 23, 1975

## REFERENCES Continued

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13.	Lepeltier, Claude	A Simplified Statistical Treatment of Geochemical Data by Graphical Representation, Ec. Geol., Vol. 64 1969, pp 538-550
14.	McKelvie, D.L.	Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., May 17, 1968
15.	McKelvie, D.L.	Engineer's Report on Jubilee Mountain Property for Calix Mines Ltd., Alrae Exploration Ltd., September 24, 1968
16.	Rawlyk, D.W.	Geology, Mineralogy and Paragenesis of the Giant Mascot Lead-Zinc Mine. Student mineralogical study, University of Manitoba, April 9, 1956
17.	Reesor, J.E.	Map 12 - Pre-publication map of Mem. 369 - 1957
18.	Reesor, J.E.	Geology of the Lardeau Map Area, East Half, B.C. Mem 369 - 1973
19.	N.T.S.	Map 82 K/16
20.	Air Photos	Line A-11111, photo numbers 110-111

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