## Property F. le

Jubilee Maintain
003762

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GEOLOGICAL REPORT
JUBILEE MOUNTAIN PROSPECT

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BRITISH COLUMBIA
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## 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 environmen 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.

## JUBILEE MOUNTAIN <br> bRITISH COLUMBIA

INDEX MAP

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


#### Abstract

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


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 Can=da Corpany.

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.

## FIGURE .I.

REGIONAL GEOIOGY MAP

NTS MAP 82 K EAST

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 biack pyritic shale.

Regional air photo mapping confirms the literature as well as indicating that the mine lies on a major north-south Eracture. 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.

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 carbōnates 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.

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 Figure 6. This rock represents a quiet environment on the ocean floor where lime from the sea water was deposited on mali particles. Continued acitatia: 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

## DEKALB MINING CORPORATION

## A

## CROSS SECTION

$A^{\prime}$

f!GURE . 3.

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.

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 fraginents of the adjoining reef that has broken free and roiled 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 $x \in こ=a i n$ areas. 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) incs 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 2l, it is noted that the elevation of the Jubilee Formation changes drastically between JM 15 and JM 2l. 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 1.5/16 and TM 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 conper.

## 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 DRILI HOLES

| ie | Azimuth | Dip | Elevation | Latitude | Departure | Length |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -1 | $042^{\circ}$ | $45^{\circ}$ | 5013.6 | 1894.6N | 937.9E | 206 |
| -2 | $042^{\circ}$ | $60^{\circ}$ | 5013.6 | 1894.6 N | 937.9E | 197 |
| -3 | $042^{\circ}$ | . $45^{\circ}$ | 5017.7 | 1968.3N | 799.3E | 227 |
| -4 | $042^{\circ}$ | $60^{\circ}$ | 5017.7 | 1968.3N | 799.3E | 237 |
| -5 | $042^{\circ}$ | $45^{\circ}$ | 5016.7 | 2022.0N | 719.7E | 267 |
| -6 | $042^{\circ}$ | $60^{\circ}$ | 5016.7 | 2022.0N | 719.7E | 317 |
| - | $042^{\circ}$ | $45^{\circ}$ | 5003.5 | 1806.6 N | 1009.0E | 217 |
| -8 | $042^{\circ}$ | $60^{\circ}$ | 5003.5 | 1806.6 N | 1009.0E | 238 |
| - | $042^{\circ}$ | $45^{\circ}$ | 4995.6 | 1731.4 N | 1070.0E | 212 |
| $\cdot 10$ | $042^{\circ}$ | $60^{\circ}$ | 4995.6 | $1731.4 N$ | 1070.0E | 202 |
| -11 | $042^{\circ}$ | $45^{\circ}$ | 4985.5 | 1655.9 N | 1143.5 E | 217 |
| -12 | C420 | $60^{\circ}$ | 4985.5 | 1653.9N | 1163.5E | 237 |
| -13 | $042^{\circ}$ | $45^{\circ}$ | 4980.8 | 1576.0 N | 1203.7 E | 227 |
| -14 | $042^{\circ}$ | $60^{\circ}$ | 4980.8 | 1576.0 N | 1203.7E | 238 |
| -13 | $042^{\circ}$ | $45^{\circ}$ | 4977.5 | 1517.1 N | 1254.9E | 221 |
| -16 | $042^{\circ}$ | $60^{\circ}$ | 4977.5 | 1517.1N | 1254.9E | 215 |
| $-17$ | 0420 | $45^{\circ}$ | 4940.0 | 1142.6 N | 1449.1E | 424 |
| -18 | 0420 | $60^{\circ}$ | 4940.0 | 1142.6 N | 1449.1E | 396 |
|  |  |  |  | Total Footage |  | 4,495 |

A P P EN
D I X

## SUMMARY OF DRILL HOLES

| HOLE | AZIMUTH | DIP | ELEVATION | LATITUDE | DEPARTURE | LENGTH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JM 19 | -- | Vertical Hole | 4952.7 | 1297.5 N | 1423.6 E | $422^{\prime}$ |
| JM 20 | 2230 | $62^{\circ}$ | 4933.6 | 1429.3N | 1560.5E | 457 ' |
| JM 21 | -- | Vertical Hole | 4940.1 | 1595.8N | 1354.0E | $368^{\prime}$ |
| JM 22 | $180^{\circ}$ | $50^{\circ}$ | 4940.1 | 1595.8 N | -1354.0E | $373{ }^{\prime}$ |
| JM 23 | $240^{\circ}$ | $58^{\circ}$ | 4960.0 | 1643.8N | 1380.7 E | $267^{\prime}$ |

## DISCUSSION OF DRILL RESULTS

Drill hole JM 19 was drilled to follow up the 1974 intersection of sulfides in JM 17. (Figure 9, back pociket). 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 scratigiaplic 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. Fither 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. TM 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 wis not encountered although's the role 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.

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


| JM 1,2 |  |
| :---: | :---: |
| CROSS | SECTION |
| SCALE: $14=40^{\prime}$ |  |
| SAN | ? 1975 |
| R. BUCKLEY |  |

$$
\text { el. } 5017.7^{\prime}
$$



JM 3,4.
CROSS SECTION
SCALE: $1^{\prime \prime}=40^{\prime}$
el. 5016.7'

el． $5003.5^{\prime}$
ovarburden

： gryftrkgry．Sl，vaggt
Barita veln 2 tonial
Le．gry．mard dan：
－Styolitic groding tomasivo cayomo bari：e in froc．

desse w. ltson've frac.
light eclour simpas in Le，
afr．zoad containiza dzurita，taslazhits，
braccia zons infiliting of tife．colour hes．
ac．ol．drkr．
C dizer
itgry．


JM 7， 8
CROSS SECTION
SCALE： $1^{\prime \prime}=40^{\circ}$
－フ リガロ
el. $4995.6^{\prime}$
JM 10


JM 9,10
CROSS $S E C T I O N$
SCALE: $1 "=40^{\prime}$

el. 4980.8'
JM 14




## MINER AI. 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 1.7 have been selected and weighted averages of the mineral content calculated.

IN SUMMARY

If the total 6] foot section were mined, the weighted averages would be as follows:

| Lead | $3.86 \%$ |
| :--- | :--- |
| Copper | $.23 \%$ |
| Zinc | $.093 \%$ |
| Cold | $.0120 \% / \mathrm{J}$ |
| Silver | $.720 \mathrm{oz} / \mathrm{T}$ |
| Barite | $12.16 \%$ |

If 35 feat were mined (red interval):

| Tread | $6.42 \%$ |
| :--- | :--- |
| Copper | $.24 \%$ |
| zinc | $.042 \%$ |
| Cold | $.01 .2 \mathrm{oz} / \mathrm{T}$ |
| Silver | $1.03 \mathrm{oz} / \mathrm{T}$ |
| Barjete | $1.6 .92 \%$ |

CORE RNALYSIS $\because=3:=E$ OUNTAIN HOLE JM- 25

| Core Section | Assay Yo. | Interval reet | Assay Cu. | Assay Eeet | Assay Pb | A $\approx s$ Eee: |  | Assay Feet | ${ }_{\text {Assay }}^{\text {Au }}$ | Assay Feet | Assay Ag | issay Ecet | $\begin{aligned} & \text { Assay } \\ & \text { Basp } \end{aligned}$ | $\therefore 5 \leq 3$ $E 2 n$ | $\therefore s \leq a y$ $\text { :a } 5=$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 192.5-193 |  | . 5 | NA | -- | NA | -- | 入is | -- | NA | -- | NA | -- | 100.00 | 50.00 | AA |
| $293-295$ | 0787 | 2.0 | . 03 | . 06 | 3.50 | 7.0 | . 02 | . 02 | Tr | . 018 | . 36 | . 70 | 14.88 | 29.75 | 0.2 |
| $195-297$ | -788 | 2.0 | . 01 | . 02 | . 27 | . 54 | . 02 | . 02 | . 010 | . 020 | Tr | . 018 | 2.81 | 5.62 | 0.0 |
| $197-199$ | 6739 | 2.0 | . 02 | . 04 | 2.71 | 5.42 | . 01 | . 02 | . 020 | . 040 | Tr | . 018 | 4.19 | 8.32 | 0.2 |
| $199-204.5$ |  | 5.5 | NA | -- | NA | -- | 二is | -- | NA | -- | NA | -- | 100.00 | 550.00 | -- |
| 204.5-205 | ci90 | . 5 | . 11 | . 055 | 2. 26 | 1.93 | . 02 | . 01 | . 040 | . 02 | . 10 | . 05 | 32.40 | -5.22 | 0.2 |
| 205 -206 |  | 1.0 | NA | -- | NA. | -- | :3 | -- | NA | -- | NA | -- | 100.00 | $\because 2.00$ | NA. |
| $206-208$ | 0791 | 2.0 | . 11 | . 22 | 2.08 | 4.25 | . 01 | . 02 | Tr | . 018 | . 42 | . 84 | 39.63 | 79.25 | 0.3 |
| 208 -209 | c792 | 1.0 | . 15 | . 15 | 8.01 | 8.02 | . 03 | . 03 | . 01 | . 01 | 1.49 | 1.49 | 24.60 | 24.60 | 1.0 |
| 209-209.3 | $\therefore \mathrm{A}$ | . 3 | NA | -- | NA | -- | : A | -- | NA | -- | MA | -- | 100.00 | 33.33 | NA |
| 209.3-211 | 0793 | 1.7 | . 05 | . 085 | . 87 | $\therefore: 5$ | . 02 | . 017 | Tr | . 015 | . 34 | . 58 | 77.98 | :22.57 | 0.2 |
| 211 -213 | 0794 | 2.0 | . 07 | . 14 | 1.67 | 3.34 | . 01 | . 02 | Tr | . 018 | . 18 | . 36 | 53.96 | -07.92 | 0.3 |
| 213-223.5 |  | . 5 | NA | -- | NA | -- | 3 A | -- | NA | -- | NA | -- | 100.00 | 50.00 |  |
| 213.5-214.5 | 0795 | 1.0 | . 09 | . 09 | . 39 | . 29 | . 01 | . 01 | Tr | . 009 | . 70 | . 70 | 8.10 | E. 10 | 0.4 |
| 214.5-214.8 |  | . 3 | NA | -- | NA | -- | : | -- | NA | -- | NA | -- | 100.00 | 33.33 |  |
| 214.8-217 | 2796 | 2.2 | . 03 | . 07 | 1.52 | 3.34 | . 01 | . 022 | . 01 | . 022 | . 31 | . 68 | 2.93 | 4.25 | 0.2 |
| 217-220 | 0797 | 3.0 | . 01 | . 03 | . 07 | . 21 | . 02 | . 03 | Tr | . 027 | . 04 | . 12 | Tr | Tr | 0.1 |
| 20TAL |  | 27.5 | . 04 | . 96 | 1.28 | 35.32 | . 008 | . 219 | . 008 | . 217 | . 20 | 5.56 | 44.85 | 1233.32 |  |

FIGLRE 26

2. B.C. Department rines
3. L.C. Department vinos
4. B.C. Department Miners
5. Ditio, A.G.
6. Finney, W.A.; Prior, J.W.
$\%$ Goological Survey of Canada
8. McKelvie, D.I.
9. McFolvio, D. T.
10. Fawlyk, D.W.
11. Reesor, J.E.
12. Reesor, J.E.
13. N. 'I'S.
14. Ajr Photos

Minister of rimos Roport 1927
Pl: 26.2-263
Minister of Hines Report 1.949 P1 200-204

Ministor of Mines Report 1954 pp 148-150

Minister of Mines Report 1955 pr 72-73

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Ip Survey', Jubilee Mountain Property, $50^{\circ}-116^{\circ} \mathrm{NE}$, for Calix Mines Ltd., IIuntec April 1968

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Enginoer's Report on Jubilee Monntain Property for Calix Mines Itct. Alrac Jxploration I.tcl. - May 17 , 1968

Engincor's Beport on Jubilee Nountain Property for Calix Fincs Tite, Alrac Exploxation Ltd. - September 24, 1968

Geology, Mineralogy and Paragenesis of the Giant Mascot Lead-Zinc Mine. student mineralogical study, University of Manitoba, April 9,1956

Map 12-Pre-publication map of Mon. 369 - 1957

Geology of the Lardeau Map Area, Fast Half, B.C. Mem. 369-1973

Map 82.K/16
Line $A-11111$, photo numbers 110-111
ir 3.l. frod wro minod (bluo irntorval):

| Incad | $7.04 \%$ |
| :---: | :---: |
| copper | . $26 \%$ |
| zinc: | . 0.460 |
| Cold | . $01.1 \mathrm{LOz/L}$ |
| Sjlver | $1.12 \mathrm{oz} / \mathrm{T}$ |
| Barito | 17.22\% |

Tf 28.5 feet were mined (green interval):

| Lead | $7.26 \%$ |
| :--- | :--- |
| Copper | $.26 \%$ |
| Zinc | $.045 \%$ |
| Gold | $.0120 \mathrm{O} / \mathrm{T}$ |
| Silver: | $1.120 \mathrm{O} / \mathrm{I}^{\prime}$ |
| Barite | $19.03 \%$ |

COPE ANALYE＝E EOEILE YOUTTAIN HOLE UM－17

| Ccre Section | $\begin{gathered} \text { Assay } \\ \text { No. } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Interval } \\ \text { Eeet } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Assay } \\ \text { Cu. } \\ \hline \end{gathered}$ | Assuy Eeot |  | $\begin{gathered} \text { ASSEY } \\ \text { Zn } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Assay } \\ & \text { Fest } \end{aligned}$ | $\begin{gathered} \text { ASSa } y \\ \text { Au } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Rssay } \\ & \text { Zcct } \end{aligned}$ | Assay <br> na | $\begin{aligned} & \text { Assay } \\ & \text { Ecet } \end{aligned}$ | $\begin{aligned} & \text { I:say } \\ & 2 a \quad \end{aligned}$ | $\begin{aligned} & \text { Busay } \\ & \text { Eest } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 343－345 | 0755 | 2.0 | ． 2.8 | .56 | .36 .22 | 2． 59 | 3.18 | .009 | ． 018 | ． 009 | ． 01 | こと | $=$ | 50.3 |
| 545－346 |  | 1.0 | NA | －－ | NA | NA | － | הA | －－ | iv | －－ | 亿ヘิ | －－ |  |
| 3¢－ 348 | 0756 | 2.0 | .10 | ． 20 | 1.77 ミ． 34 | ． 19 | ． 38 | ． 02 | .04 | ． 02 | ． 04 | $\underline{-}$ | Fr | 3.9 |
| 36E－350 | 0757 | 2.0 | ． 02 | ． 04 | ．07 ． 5 | ． 07 | ． 14 | ． 009 | ． 018 | .009 | ． $0 \pm$ | － | T： | 1.2 |
| 350－352 | 0758 | 2.0 | ． 01 | ． 02 | .08 ． 55 | ． 04 | ． 08 | ． 009 | .018 | ． 009 | ． 01 | Er | I2 | 0.0 |
| 352－355 | 0759 | 3.0 | ． 02 | ． 06 | $.47 \quad \therefore .4$ | ． 01 | ． 03 | ． 009 | ． 027 | ． 02 | .06 | － | － | 0.2 |
| 355－ 356.5 | 0760 | 1.5 | ． 07 | ． 105 | $.97 \quad \therefore 6$ | ． 01 | ． 015 | .01 | ． 015 | ． 17 | ． 26 | ＝ | － | 0.2 |
| 355．5－358 |  | 1.5 | NA | －－ | NA | NA | －－ | NA | －－ | NA | －－ | 100.00 | $1 \sum 0.00$ | NA |
| 35 | 0761 | 1.0 | .06 | .05 | 5.01 こ．こさ | ． 01 | ． 01 | ． 01 | .01 | ． 15 | ． 15 | 45.43 | 43.43 | 0.7 |
| 359－361 | 0762 | 2.0 | ． 37 | ． 74 | 14.90 2\％． | ． 02 | ． 04 | mr | ． 018 | ． 98 | 1.96 | 22.88 | 45.76 | 2.0 |
| 35i－363 | 0763 | 2.0 | ． 81 | 1.62 | ． $85 \quad \therefore$－ 0 | ． 01 | ． 02 | Tr | .018 | 1.24 | 2.48 | 6.75 | \＄3．50 | 1.0 |
| 363－364 |  | 1.0 | NA | －－ | NA | NA | －－ | NA | －－ | NA | －－ | こe\％． 00 | 100.00 |  |
| 367－366 | 0764 | 2.0 | ． .33 | ． 56 | 2.58 三．： | ． 02 | ． 04 | $5=$ | ． 018 | ． 78 | 1.55 | 2 2． 05 | 42.12 | 2.0 |
| 365－368 | 0765 | 2.0 | 1.07 | 2.24 | $3.34-53$ | ． 05 | ． 20 | Tr | ． 018 | 4.66 | 9.32 | 23.28 | 45.56 | 1.4 |
| 36E－370 | 0766 | 2.0 | ． 12 | ． 24 | 8.11 E 22 | ． 04 | ． 08 | Tr | ． 018 | 2.64 | 5.23 | 1． 46 | 2.92 | 1.0 |
| 370－370．5 |  | 0.5 | NA | －－ | NA－－ | NA | －－ | NA | －－ | VA | －－ | $=30.00$ | 50.00 | －－ |
| 37c．5－373 | 0767 | 2.5 | ． 09 | ． 22 | 12.79 こ．．3 | ． 02 | ． 05 | ． 02 | ． 05 | ． 64 | 1.60 | 3.21 | 6.03 | 0.9 |
| 375－374 | 0768 | 1.0 | ． 03 | .08 | .22 .22 | ． 03 | ． 03 | .01 | ． 01 | ． 05 | ． 05 | － | Tr | 0.6 |
| 374－376 | 0769 | 2.0 | ． 19 | ． 33 | .46 ． 22 | ． 03 | ． 06 | ． 01 | ． 02 | ． 23 | ． 46 | Tr | Tr | 1.0 |
| 375－378 | 0770 | 2.0 | ． 29 | ． 53 | 4.85 9．70 | ． 06 | ． 12 | Tr | ． 018 | 1.38 | 2.76 | ． 67 | 2． 34 | 0.9 |
| 375－380 | 0771 | 2.0 | ． 24 | ． 48 | 5.40 1． 80 | ． 05 | ． 10 | ． 02 | ． 040 | 1.82 | 3.54 | $\pm .41$ | 2.82 | 2.1 |
| 3Eへ－381．5 | 0772 | 1.5 | ． 01 | ． 02 | $.05 \quad 23$ | ． 01 | ． 02 | ． 02 | ． 03 | ． 009 | ． 01 | 0.10 | 0.15 | 0.1 |
| 3¢：．5－382．4 | 0773 | 0.9 | ． 04 | .04 | 9.21 E．29 | ． 05 | ． 045 | ． 009 | ． 009 | ． 18 | .16 | 6.58 | 5.92 | 0.5 |
| 332．4－382．5 |  | 0.1 | NA | －－ | NA | ？：A | －－ | NA | －－ | NA | －－ | $=00.00$ | 10.00 | NA |
| 322．5－384 | 0774 | 1.5 | ． 13 | ． 20 | 35.45 52．：2 | ． 28 | ． 42 | ． 03 | ． 045 | 1.19 | 1.78 | 10.30 | 16.20 | 5.0 |
| 364－385 | 0775 | 1.0 | ． 09 | .09 | 27.07 25．07 | ． 12 | ． 15 | Tr | ． 009 | ． 72 | ． 72 | ． 50 | ． .50 | 1.3 |
| 385－386 | 0776 | 1.0 | ． 04 | ． 04 | 1.95 －．55 | ． 02 | ． 02 | Tr | ． 009 | ． 16 | .16 | ． 05 | ． 05 | 0.7 |
| 286－388 | 0777 | 2.0 | －．．． 29 | ． 58 | 6.55 15．50 | ． 07 | ． 24 | ． 010 | ． 020 | 1.63 | 3.26 | Ir | ir | 2.7 |
| こ58－309 | 0778 | 1.0 | －． 03 | ． 23 | ． 82 ．${ }^{\text {2 }}$ | ． 01 | .01 | ． 010 | ． 010 | ． 01 | ． 01 | E | I－ | 0.2 |
| 289－390 | 0779 | 1.0 | ．． 09 | ． 69 | ． 65 ． 5 | ． 01 | ． 01 | ． 040 | ． 040 | ． 34 | ． 34 | 49.70 | 49.70 | 0.6 |
| 390－393 | 0780 | 3.0 | ． 02 | ． 05 | .07 ． 21 | ． 01 | ． 03 | .030 | .090 | Tr | ． 027 | ． 49 | 1． 47 | 0.3 |
| 393－394 | 0781 | 1.0 | ． 01 | ． 01 | .14 ． 14 | ． 01 | ． 01 | ． 020 | ． 02 | Tr | ． 009 | Tr | TI | 0.1 |
| 394－396．5 | 0782 | $2 \cdot 5$ | ． 33 | ． 82 | $.70-.75$ | ． 06 | ． 15 | Tr | ． 023 | 1.18 | 2.95 | 7.15 | 17.87 | 1.8 |
| 39E．5－398．5 | 0783 | 2.0 | ． 87 | 1.74 | .49 .93 | ． 04 | ． 08 | T： | ． 018 | 1.54 | 3.08 | 56.92 | 113.96 | 3.1 |
| 302．5－400 | 0784 | 1.5 | ． 50 | ． 75 | .68 －． 32 | ． 02 | ． 03 | Tr | ． 014 | ． 68 | 1.02 | 3.85 | 5.79 | 2.1 |
| 400－402 | 0785 | 2.0 | ． 64 | 1． 28 | .14 ． 28 | ． 02 | ． 04 | ． 010 | ． 020 | ． 41 | ． 82 | 5.37 | 10.74 | 0.2 |
| 402－404 | 0786 | 2.0 | ． 03 | ． 06 | $.03 \quad .25$ | ． 01 | ． 02 | Tr | ． 018 | Ir | ． 018 | $\square$ | T2 | C． |
| ＇C．s．i， |  | 6.10 | ． 23 | 14.00 | $3.86 \quad 235.20$ | ． 093 | 5.65 | ． 012 | ． 75 | 72 | 44.01 | 32.16 | 741.91 |  |
| Pec Interval |  | 35.0 | ． 24 | 8． 40 | $6.422^{26} 97$ | ． 042 | 1.48 | ． 012 | ． 425 | 1． 3 | 35.96 | 15．92 | 54\％．15 |  |
| BIue Interval |  | 31.5 | ． 25 | 8．$\times 7$ | 7.04220 .6 | ． 045 | $\underline{1}+44$ | ． 011 | ． 360 | 1.12 | 35.35 | 17.22 | 542．38 |  |
| Crean Interyal |  | 28.5 | ． 26 | 7.55 | 7.26206 .31 | ． 045 | 1.28 | ． 012 | ． 331 | 1.12 | 31.93 | 19.03 | 542.33 |  |

REFERENCES



