GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

PEG - 1 TO PEG - 5, ROUS - 1 AND ROUS - 2, JW - 3 AND JW - 4

CLAIMS

Liard Mining District

$94^{M}/12$ E and 12 W

Latitude 59°34' 20"N
Longitude 127° 45' 00"W

Owner: Sulpetro Minerals Limited
Operator: Sulpetro Minerals Limited

D.C. Miller
J.C. Harrison

August 28, 1981

TABLE OF CONTENTS

TABLE OF CONTENTS (cont'd.)

ILLUSTRATIONS cont'd.

INTRODUCTION

Location and Access

The Peg, Rous, and JW Claims (collectively known as the "Kitza" Claims) are located on the south end of Tatisino Mountain, 85 kilometres southeast of Watson Lake, Yukon.

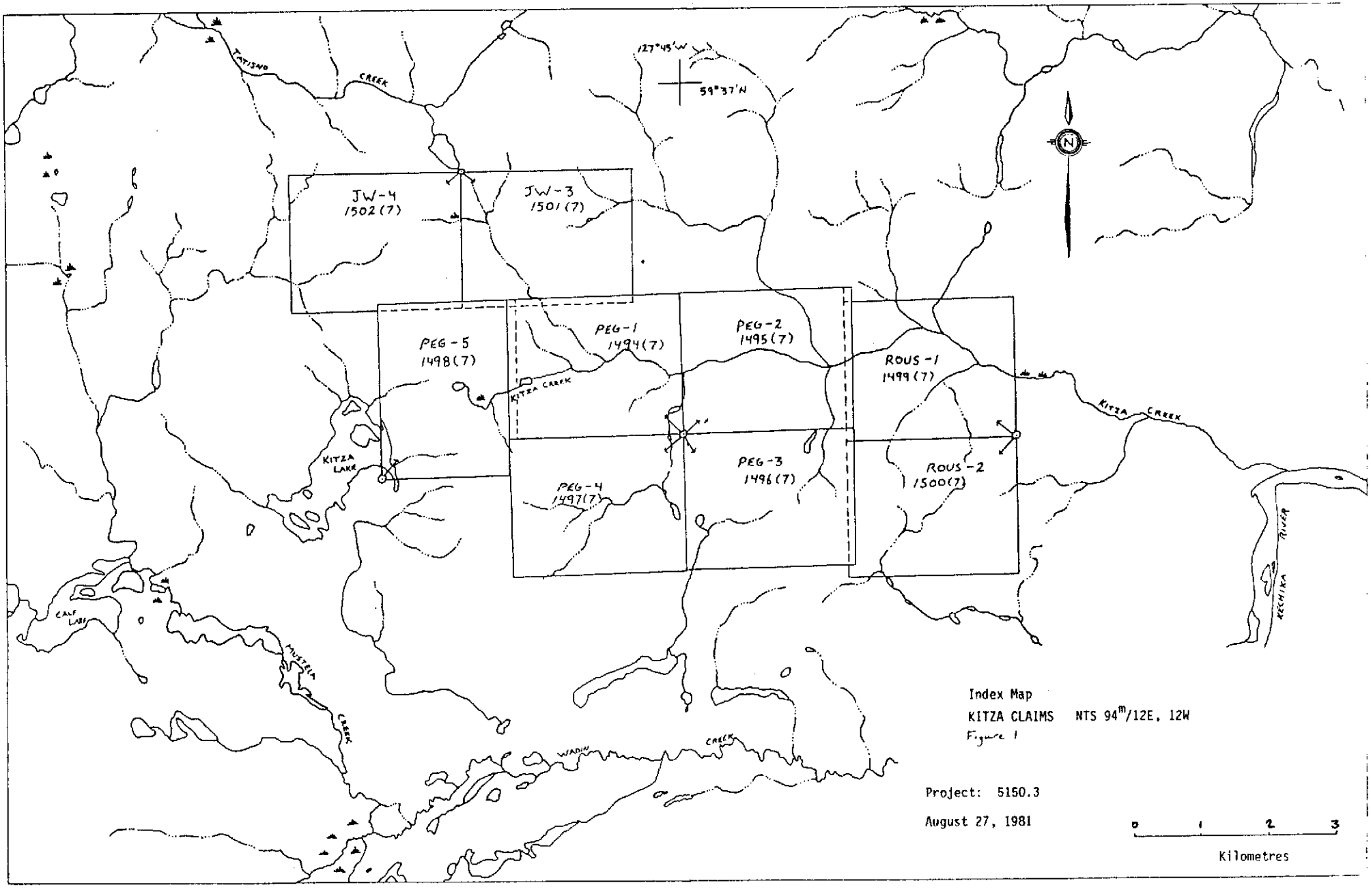
In 1980 a four day fly camp was established on the property and access was made possible by 206 B helicopter from Watson Lake. Line cutting camps in 1980 were serviced by B.C. Yukon float plane loads to Kitza Lake, then helicopter sling loads to the the claims. In 1981, work on the claim block was carried out from a base camp at Aeroplane Lake with a daily crew shuttle by helicopter.

Property Claim Status

The following data describes the 180 unit claim block staked by St. Joseph Explorations Limited between July 6 and July 10, 1980.

Claim	Units	Record #	Anniversary Date
Peg - 1	20	1494	July 28
Peg - 2	20	1495	July 28
Peg - 3	20	1496	July 28
Peg - 4	20	1497	July 28
Peg - 5	20	1498	July 28
Rous - 1	20	1499	July 28
Rous - 2	20	1500	July 28
JW - 3	20	1501	July 28
JW - 4	20	1502	July 28

As a result of a corporate takeover, St. Joseph Explorations Limited became Sulpetro Minerals Limited on June 26, 1981.


TATSMO CREEK
127°45'W
59°37'N
JW-4
1502(7)
JW-3
1501(7)
PEG-5
1498(7)
PEG-1
1494(7)
PEG-2
1495(7)
ROUS-1
1499(7)
KITZA CREEK
KITZA LAKE
PEG-4
1497(7)
PEG-3
1496(7)
ROUS-2
1500(7)
KITZA CREEK
CALF LAKE
MUSTELA CREEK
WADIN CREEK
KECHIKA RIVER
N
Index Map
KITZA CLAIMS NTS 94m/12E, 12W
Figure 1
Project: 5150.3
August 27, 1981
0 1 2 3
Kilometres

Physiography

The claim group is located on a topographically hilly area of the Liard Plain. Relief on the property ranges up to 250 metres (700 to 950 metres a.m.s.l.). Valleys are deeply incised with cliffs on many north facing slopes. Hill tops are rounded and mantled in glacial overburden. Steep south facing slopes are wild grass and hardwood covered, with short stretches of talus and outcrop.

The topographic expression on the Kitza property is dominated by a stratigraphic and fault controlled extinct drainage system (pre-Pleistocene). Valley bottoms now contain strings of dry depressions, ponded stagnant water, or discontinuous trickle.

Previous Work

A generalized geology of the Kitza Lake area has been completed by Gabrielse (1962) based on field work throughout the Rabbit River, 94 M, map sheet in 1958, 1960, and 1961.*

Due to a rarity of outcrop, mineral exploration has been subdued throughout the Rabbit River and Kitza Lake area. In recent years, regional exploration programmes by Texasgulf, St. Joseph Exploration Limited and Cyprus Anvil Mines have been aimed at Selwyn Basin type Pb-Zn-barite targets.

Summary of Present Work

Sixty-six kilometres of line cutting were contracted to Dick Eastman and Associates in the fall of 1980. This included three base lines, and 25 cross lines at four hundred metre intervals.

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*GSC Map 46-1962

The 1981 program from June 2 to July 19, included soil sampling the cut lines at fifty metre stations. The central section of the property was sampled, additionally along 200 metre interval lines. Six soil traverses along drainage valleys were also undertaken.

Geological mapping at 1:10,000 scale by Sulpetro staff included all rock outcrop areas on the Kitza Claim block as well as peripheral areas to the southeast. This work was done simultaneously with the geochemical survey.

DETAILED TECHNICAL DATA AND INTERPRETATION

Geology

A. General

The Kitza Property is underlain by a gently warped sequence of siltstones, limy mudstones, calciturbidites, and distal ash tuffs. A well preserved graptolite locality combined with careful structural measurements suggests that over 1000 metres of deep basin, fan base related sediments ranging from Lower Cambrian to Lower Devonian are represented in the geology of the claim group.

Numerous scattered showings of tetrahedrite, sphalerite, barite, and fluorite have been found within dewatering vein structures associated with Cambrian, and Silurian fetid limy mudstone.

B. "Phyllite Unit"

The base of the stratigraphic section is represented by a structurally complex range of phyllites, slaty phyllites, thin banded brown limy siltstones and grey phyllites. Slaty cleavage is prominent in all outcrops and cuts through all stratigraphic banding. Two

to five percent coarse cubic pyrite is scattered through the unit. Outcrops of the "Phyllite Unit" on Tatisino Mountain include phyllites, calcareous sandstone and quartz pebble paraconglamerate. Base of the sequence is unknown and thickness is difficult to estimate due to structural complexity.

C. Sekwi Formation

Rocks tentatively assigned to the Sekwi Formation (Lower Cambrian) outcrop along the east side of the property. Mapping suggests that this unit may pinch out to the west. It lies with angular unconformity on rocks of the Phyllite Unit, but is conformable with younger Rabbit Kettle Formation.

The lower section includes roughly 60 metres of black mudstone, limy mudstone, and minor pyritic cross laminated siltstone. The upper section includes fissile, red weathering slaty siltstone that may be up to 50 metres thick.

D. Rabbit Kettle Formation

This unit is time-stratigraphically equivalent to the wavy banded limestone of this formational name that has been mapped throughout the eastern Selwyn Basin, Yukon. It has been assigned to the Middle Cambrian.

This formation can be traced for up to 16 or more kilometres in a northwesterly direction through the claim group. It is divided into a lower and upper section. The lower section includes thin to medium bedded, cliff forming mudstone, limy mudstone, fetid limestone, and distal ash tuff (110 metres). The medium bedded limy mudstones are associated with dewatering veins that contain minor quantities of honey brown sphalerite, tetrahedrite, white sparry barite, calcite and quartz.

The upper section of the formation includes thin bedded ash tuff laminated tuff, chert, tuffaceous siltstone, and minor medium bedded limy mudstone (50 m). This is a recessive weathering unit and contains no base metal mineralization.

E. Road River Formation

In the Selwyn Basin, the Road River Formation is composed of various mudstones, shales, cherts and calcareous mudstones. The Road River section on the Kitza property is generally coarser grained especially in the lower part of the section. The formation has been divided into two mappable units.

The lowermost unit is composed of 100 metres of interbedded buff weathering siltstone and grey slaty mudstone grading up into buff weathering greywacke, lithic arthoquartzite, and siltstone.

The middle Road River member includes 75 metres of grey slaty mudstone with minor siltstone.

The upper member includes up to 175 metres of cherty mudstone, mudstone, shale, graptolitic shale, and minor laminated sandstone (90 metres). The formation becomes increasingly calcareous upwards into an upper zone of limy mudstone, limy siltstone, and limestone (85 metres).

Graptolites found in fissile shale beds in the cherty mudstone section of the upper member include Climacograptus sp., Dicellograptus sp. and Orthograptus sp. These graptolite varieties were dominant in the Upper Ordovician (Caradocian).

F. Siluro - Devonian Carbonates

This unit varies significantly in thickness across the map sheet. There is also some indication that it has been structurally thickened by minor thrust faults subparallel to layering. Up to 360 metres of limy mudstone, limestone, fetid micritic and pelletal limestone, calcareous sandstone, and mudstone are represented. Marker beds were not traceable at this scale of mapping (1:10,000). Medium bedded fetid limy mudstones contain patchy occurrences of sphalerite, tetrahedrite, barite, calicite, quartz and fluorite, in vein structures similar to those in the Rabbit Kettle Formation.

G. Besa River Formation

Slaty mudstone, shales, siltstones and cherty mudstones of the Besa River Formation have been mapped southwest of, and conformably overlying the Siluro-Devonion carbonates. Top of this formation has not been observed on the property.

Structure

The "Phyllite Unit" forms an effective basement to the lower Paleozoic stratigraphy towards the north boundary of the property. Burial metamorphism and structural deformation is responsible for the steep north northwest foliation in the unit. Layering appears to strike northwest in this unit, but dips are variable.

The Paleozoic stratigraphy lies with angular unconformity on the "Phyllite" unit. It has been gently warped into a northwest to west striking monocline that dips at angles up to 50 ^{o} to the southwest. The lowermost units appear to be discontinuous across the map sheet.

This may be a primary stratigraphic feature caused by facies pinch outs, or it may have resulted from displacement along a prominent basal thrust.

Low angle thrust planes have been mapped in several large cliff faces and may be responsible for some of the northwest striking topographic linears. North and northeast striking dry valleys that cut the stratigraphy are undoubtedly fault controlled. Outcrops in these valley bottoms often contain collapse brecciation zones with an open, limonitic, siliceous, or calcitic matrix between broken sedimentary fragments. Sparse smithsonite or barite has also been noted as fracture filling materials.

Economic Geology

Sphalerite, tetrahedrite, barite, calcite, and quartz occur in dewatering vein structures associated with medium bedded limy mudstones within the lower member of the Rabbit Kettle Formation. Up to 23 showings of this type have been found over a strike length of twelve kilometres. The veins are found in a density of about one per 100 sq. cm. Base metal grades are low. The limy mudstone beds typically make up 20 percent of the unit. The fissile intebeds are barren.

Similar vein mineralization was located in about ten showings throughout the sequence of Siluro-Devonian carbonates. Grades are lower and many of the showings contain only one of the ore minerals. Pale green fluorite was identified in several showings.

As well as these showings, smithsonite is found in fault related brecciation zones within other formation.

Since there is no evidence of igneous or hydrothermal activity locally or regionally, it must be assumed that the mineralization originated in the enclosing beds. The veins may have been generated during burial, and secondary dewatering of the sedimentary package.

Geochemistry

A. General

A total of 2016 B horizon soil samples were collected in June and July 1981 along cut and picketed 400 metre spaced lines as well as along 200 metre spaced flagged lines. Sample interval was 50 m. and sample depth varied from 30 to 60 cm. Samples were shipped by truck freight to Bondar-Clegg and Co. Ltd. in Whitehorse. The -80 mesh fraction was analyzed for Cu, Pb, Zn, and Ag by atomic absorption. This followed extraction by the hot acid technique. Results have been plotted on histograms and % cumulative frequency graphs to determine the threshold and definitely anomalous limit. Contoured data has been plotted on property grid maps (see back pocket).

The following table gives the calculated thresholds and definitely anomalous (lower) limits for the four analyzed elements.

Element	Threshold	Definitely Anomalous Limit
Cu	60	165 ppm
Pb	22	28 ppm
Zn	200	740 ppm
Ag	0.7	2.5 ppm

B. Interpretation

The distribution of geochemical anomalies is directly tied to the distribution of weathered outcrop and the maturity of the soil profile.

Reddish brown B horizon is often present, except on steeper north slopes. South, southwest, southeast, and west facing steep slopes are aspen covered with low grass or buck brush. Soil profiles have a thin A horizon and a red brown B lying on dry pebbly till or proximal talus. Slopes in the 5 to 20° range are covered in alder, wild rose and immature pine. Here A_0 moss and A_1 humus is moderately thick (10 - 30 cm). The B horizon is well developed (5 to 15 cm.) and rests on a yellow to yellowish brown damp pebbly C horizon.

Flat to gentle hill tops have mature spruce with thin alder and moss undergrowth. The soil profile is well developed.

Solifluction zones are common on the larger hill tops and shoulders. Here, dense blowdown of mature spruce has revealed a water saturated C. horizon in the upturned roots.

Valley sides are steepest low down. Outcrop and cliffs abound on north facing slopes. Here the moss development in spruce cover is very thick (30 to 60 cm.) and covers a thick frozen A horizon resting on C horizon or rock talus.

In general, geochemically anomalous areas are not found on hill tops or shoulders due to the thickness of glacial overburden. Likewise, north facing frozen slopes are also less reponsive due to the lack of weathering. The highest geochemical values occur where Rabbit Kettle Formation or Siluro-Devonian carbonates outcrop or sub-

crop beneath south or west facing slopes. These anomalous zones are best defined by zinc, copper and silver. This reflects the mineralogy of the known showings.

Due to its high geochemical mobility, zinc is highest in valley bottoms or downslope from outcrop or subcrop of mineralization. It is useful because it may indicat the presence of upslope mineralization buried under thick overburden. Soil anomalies in the headwaters of Kitza Creek (on the west grid) might be an example of this.

Copper, like zinc, is very patchy in its distribution. Soil anomalies are restricted to the east grid. Highest values occur in a dry northeast trending valley. Downstream dispersion of soil anomalies is slight, and most elevated soil values are located within a few metres of bedrock tetrahedrite mineralization.

Although silver is paired with copper in tetrahedrite, silver soil anomalies are not necessarily coincident with copper anomalies. Elevated silver values are patchily distributed within two intersecting zones trending north and east-northeast across the east grid. Soil samples, ranging from 6 to 21 ppm. Ag, were invariably collected from talus fines and, hence, reflect the grade of bedrock mineralization.

Compared with the other elements, lead has a low threshold value (22 ppm.) and a small definitely anomalous population. Anomalies are scattered through the soils above Rabbit Kettle Formation A region of high background lead is scattered across a large overburden covered area of the west grid.

Conclusions and Recommendations

Numerous small tetrahedrite , sphalerite and barite vein showings have been located in limy mudstones of Middle Cambrian, and Siluro-Devonian age.

Copper, lead, zinc, and silver soil geochemical anomalies are patchy, and hence reflect the nature of bedrock mineralization. Since large areas of the Kitza property are overburden covered, there is a possibility that showings of economic significance might be indicated by either an induced polarization survey or by a programme of overburden drilling, and basal till sampling.

Respectfully Submitted:

D.C. Miller, P. Eng.

J.C. Harrison, B.Sc.

COST STATEMENT PEG-1-5 ROUS 1-2, JW3-4

August 15, 1980 to July 2, 1981

1. LABOUR

(a) D.C. Miller

Jan 14 - 15, Mar. 6 - 7, June 26, 27, June 30, July 1 - 2, 1981

9 days @ $180/day. . . . . $ 1620.00

(b) J.D. Blanchflower

June 6, 7, 10, 14, 15, 16, 19, 1981

7 days @ $160/day. . . . . $ 1120.00

(c) J.C. Harrison

April 29, May 25, June 4 - 11, 13, 16, 24, 29, July 6, 9, 11, 12, 13, 15, 17, 19, 1981

22 days @ $119/day. . . . . .$ 2618.00

(d) R. Shearing

June 2 - 10, 13, 16, 24, 25, 26, July 1 & 2, 1981

16 days @ $82/day. . . . . $ 1312.00

(e) P. Chung

June 8 - 10, 25, July 1 & 2, 1981

6 days @ $71/day. . . . . .$ 426.00

(f) D. Windsor

June 6 - 7, 10, 1981

3 days @ $90/day. . . . . .$ 270.00

(g) J. Marklund

June 2 - 10, July 1 & 2, 1981

11 days @ $50/day. . . . . $ 550.00

(h) S. Lee

June 2 - 10, 24 - 27, July 1 & 2, 1981

15 days @ $50/day. . . . . $ 750.00

(i) K. MacDonald

June 2 - 10, 16, July 1 & 2, 1981

12 days @ $50/day. . . . . $ 600.00

(j) T. Robinson

June 4 - 10, 24 - 27, July 1 & 2, 1981

Cost Statement Peg-1-5 Rous 1-2, Jw3-4 cont'd.

Labour cont'd.

13 days @ $47/day. . . . . $ 611.00

(k) L. Groat
June 2 - 8, 1981
7 days @ $55/day. . . . . $ 385.00

SUBTOTAL. $10262.00

2. FOOD & ACCOMODATION

127 mandays @ $25/day. . . . . SUBTOTAL. . . . . $ 3175.00

3. HELICOPTER COSTS

Northern Mountain Helicopters, Prince Geroge, B.C.
June 2 - 10, 13, 16, 17, 24 - 26, July 2, 1981
29.9 hours @ $365. . . . . $10913.50
Fuel 29.9 x 22 x 2.10. . . . . $ 1381.38

SUBTOTAL. $12294.88

4. FIXED WING

B.C. Yukon Air Service, Watson Lake
May 28, June 6, 8, 27, & July 2, 1981

SUBTOTAL. . . . . $ 3494.64

5. ANALYSES

2192 analyses of silver, copper, lead and zinc @
$4.35/sample. . . . . $ 9535.20
shipping charges. . . . . $ 82.20

SUBTOTAL. . . . . $ 9617.40

Cost Statement Peg-1-5 Rous 1-2, Jw3-4 cont'd.

6. MISCELLANEOUS COSTS

(a)	Field Supplies Consumable.	$ 781.19
(b)	1:10,000 Topo Maps (Integrated Resources Photography). .	$ 3700.00
(c)	Mylar & Prints.	$ 95.66
(d)	Expediter.	$ 200.36
(e)	Plywood.	$ 966.95
(f)	Truck Rental.	$ 222.60
	SUBTOTAL.	$ 5966.76
	TOTAL.	$44810.68

STATEMENT OF QUALIFICATIONS

I, CHRIS HARRISON, of 970 Laval Crescent, #5, Kamloops, B.C. do hereby certify that:

1. I am a graduate of the University of Toronto and obtained a B.Sc. degree in geology in 1977.
2. I have had 3 years (8 summers) experience in mineral exploration.
3. I have examined the property discussed in this report, and the report dated August 28, 1981 is based on this examination.
4. I have no interest, directly or indirectly in the property.

J. Chris Harrison

J.C. Harrison, B.Sc.

August 28, 1981

STATEMENT OF QUALIFICATIONS

I, David C. Miller of 970 Laval Crescent, #5, Kamloops, B.C. do hereby certify that:

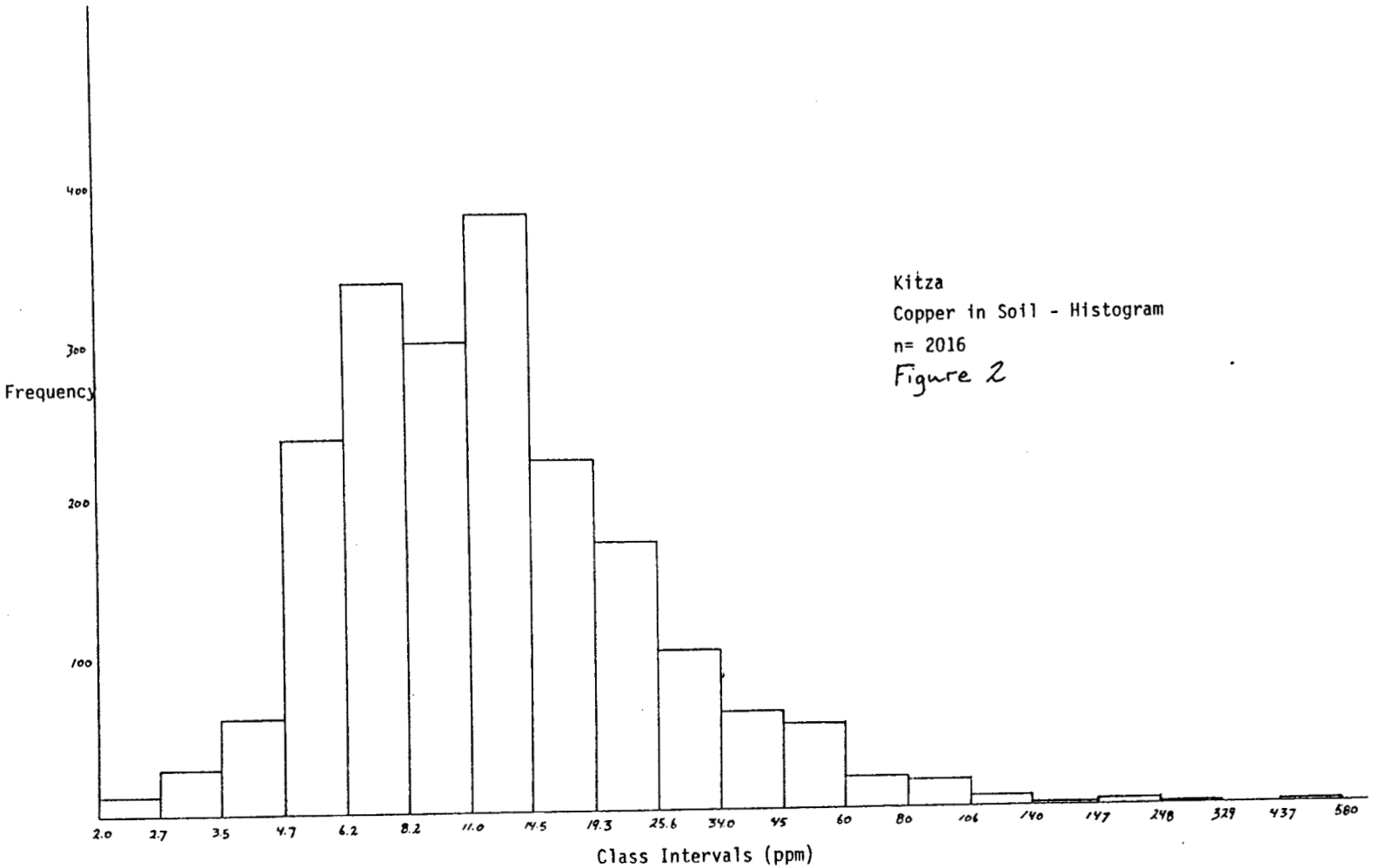
1. I am a graduate of the University of British Columbia and obtained a B.A.Sc. degree in Geological Engineering in 1959.
2. I have had 22 years experience in mining geology and mineral exploration.
3. I am a registered Professional Engineer in the Province of British Columbia.
4. I have done field work on the property discussed in the report.

D.C. Miller, P. Eng.

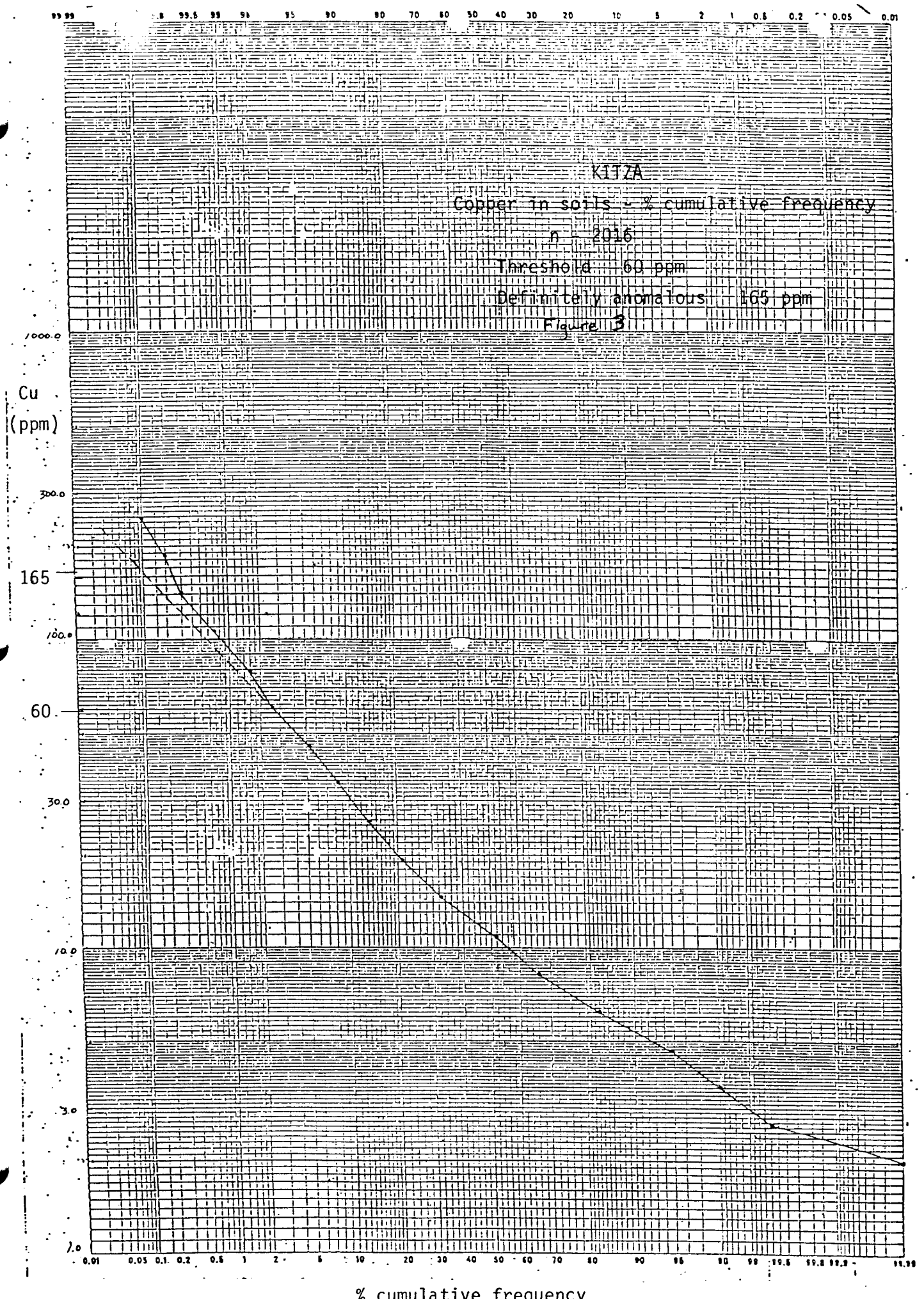
August 28, 1981

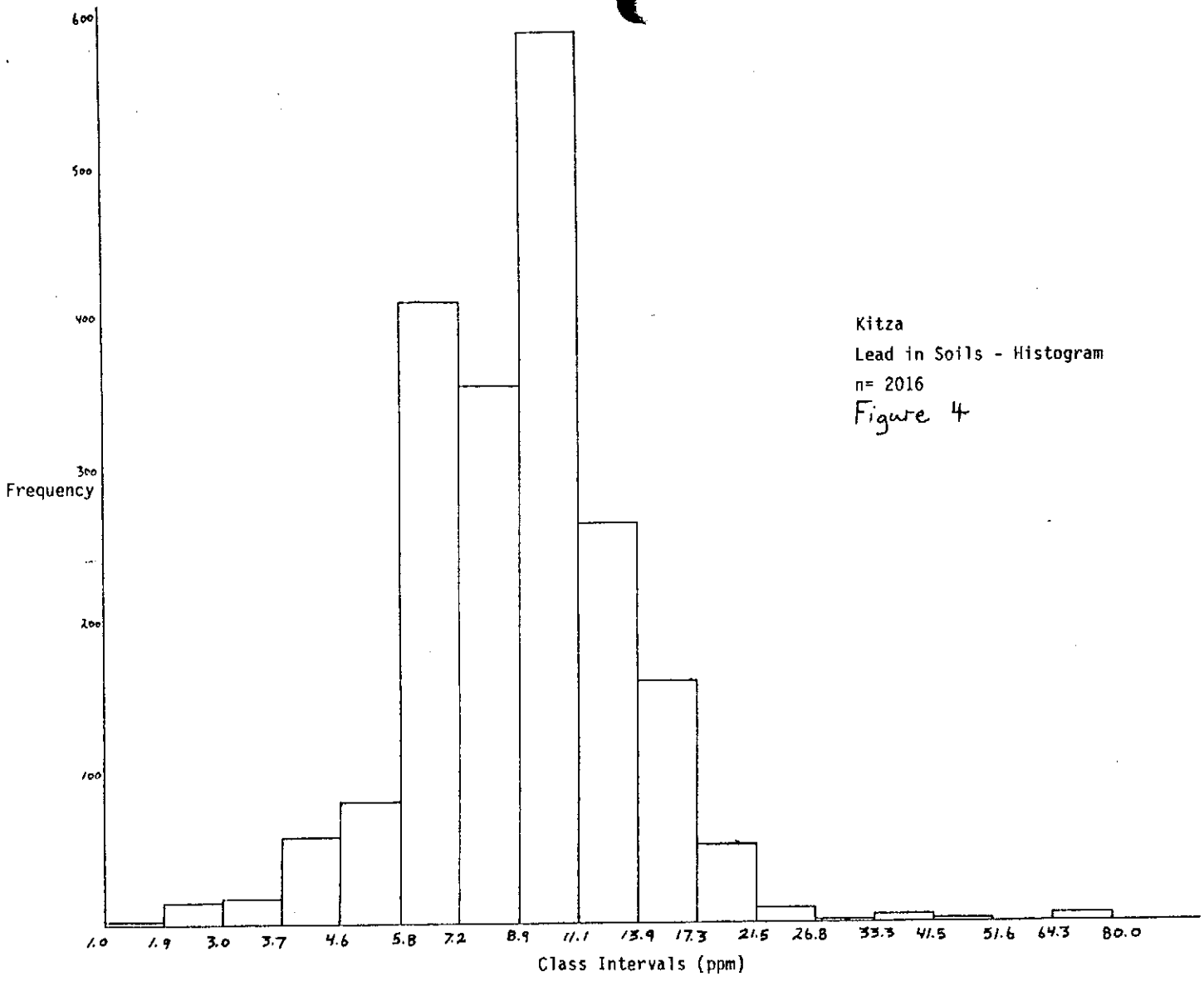
A P P E N D I X 1

HISTOGRAMS & % CUMULATIVE FREQUENCY PLOTS



Kitza
Copper in Soil - Histogram
n= 2016
Figure 2


KITZA
Copper in soils - % cumulative frequency
n = 2016
Threshold 60 ppm
Definitely anomalous 165 ppm
Figure 3
Cu (ppm)
1000.0
300.0
165
100.0
60
30.0
10.0
3.0
1.0
99.99 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99
% cumulative frequency



Kitza

Lead in Soils - Histogram

n= 2016

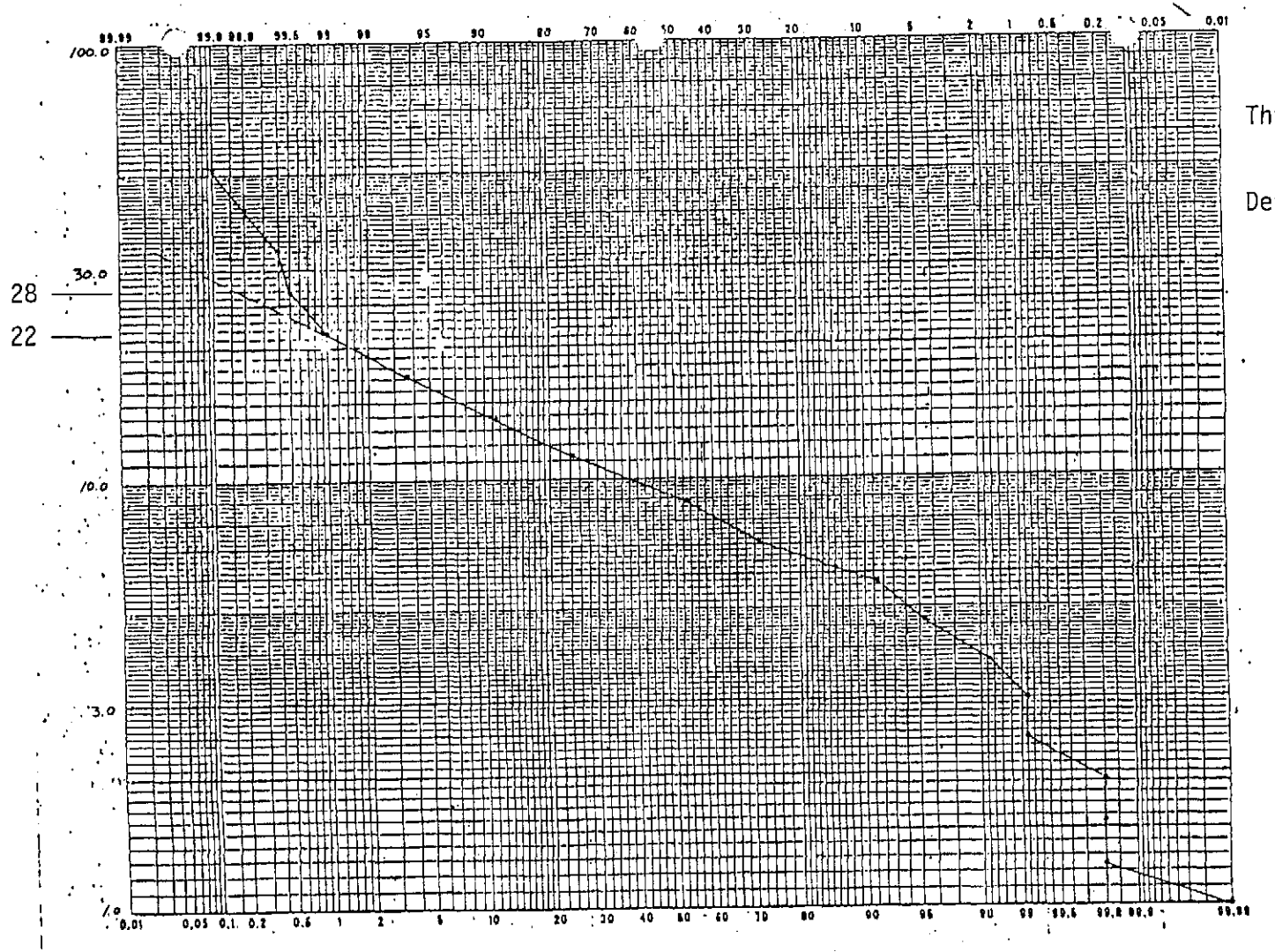
Figure 4

KITZA

Lead in soils - % cumulative frequency

n = 2016

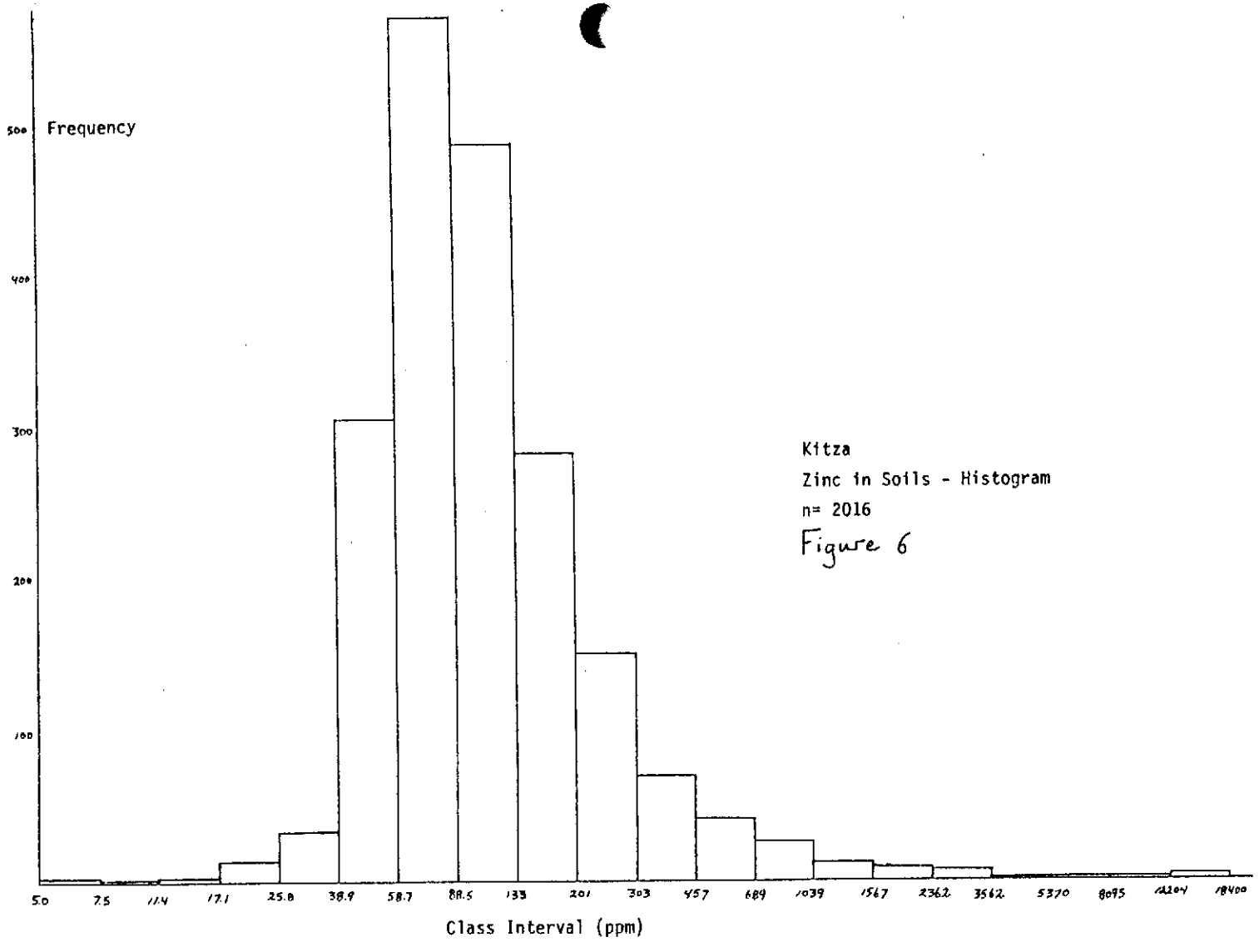
Figure 5



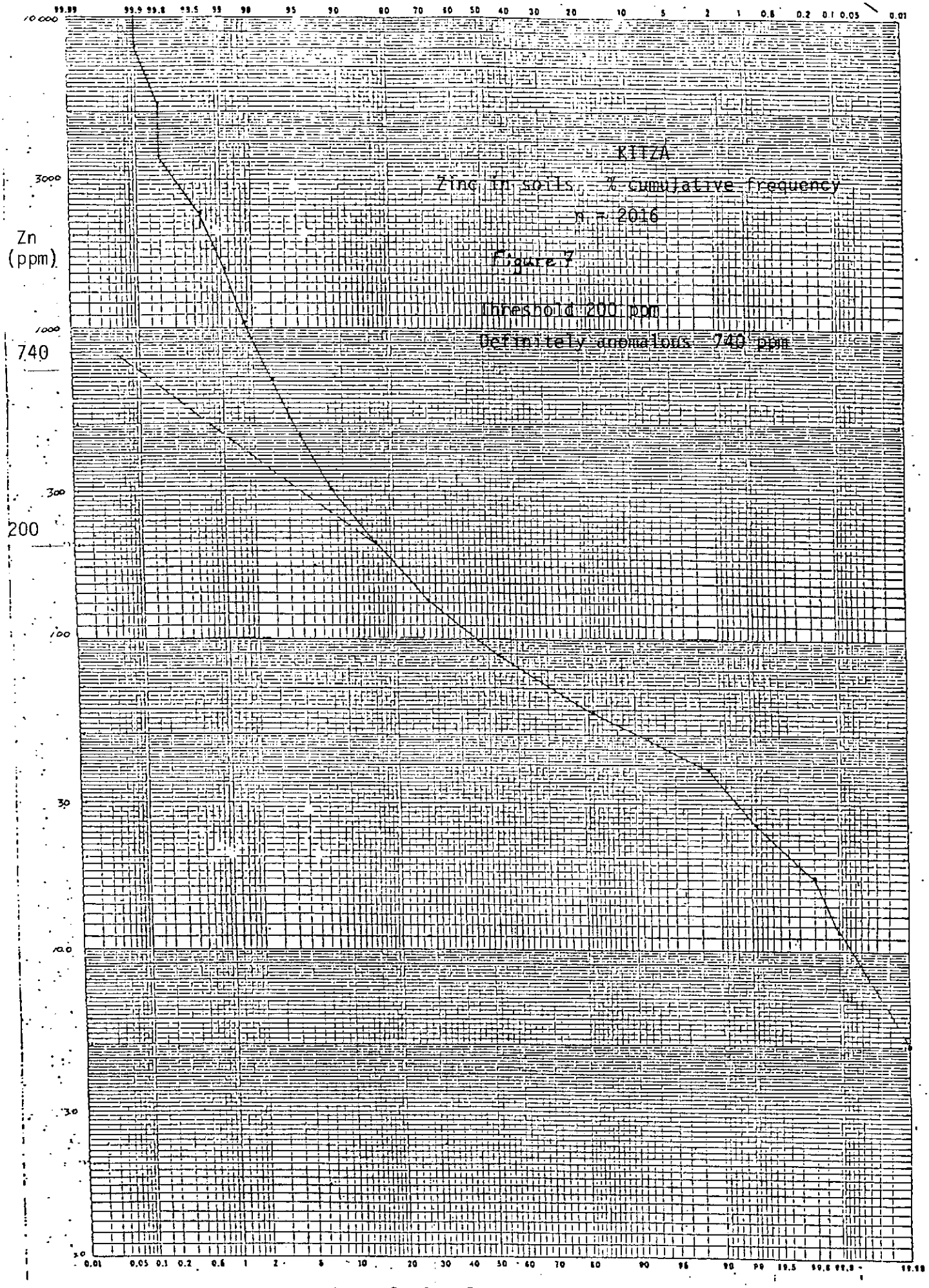
Threshold 22 ppm

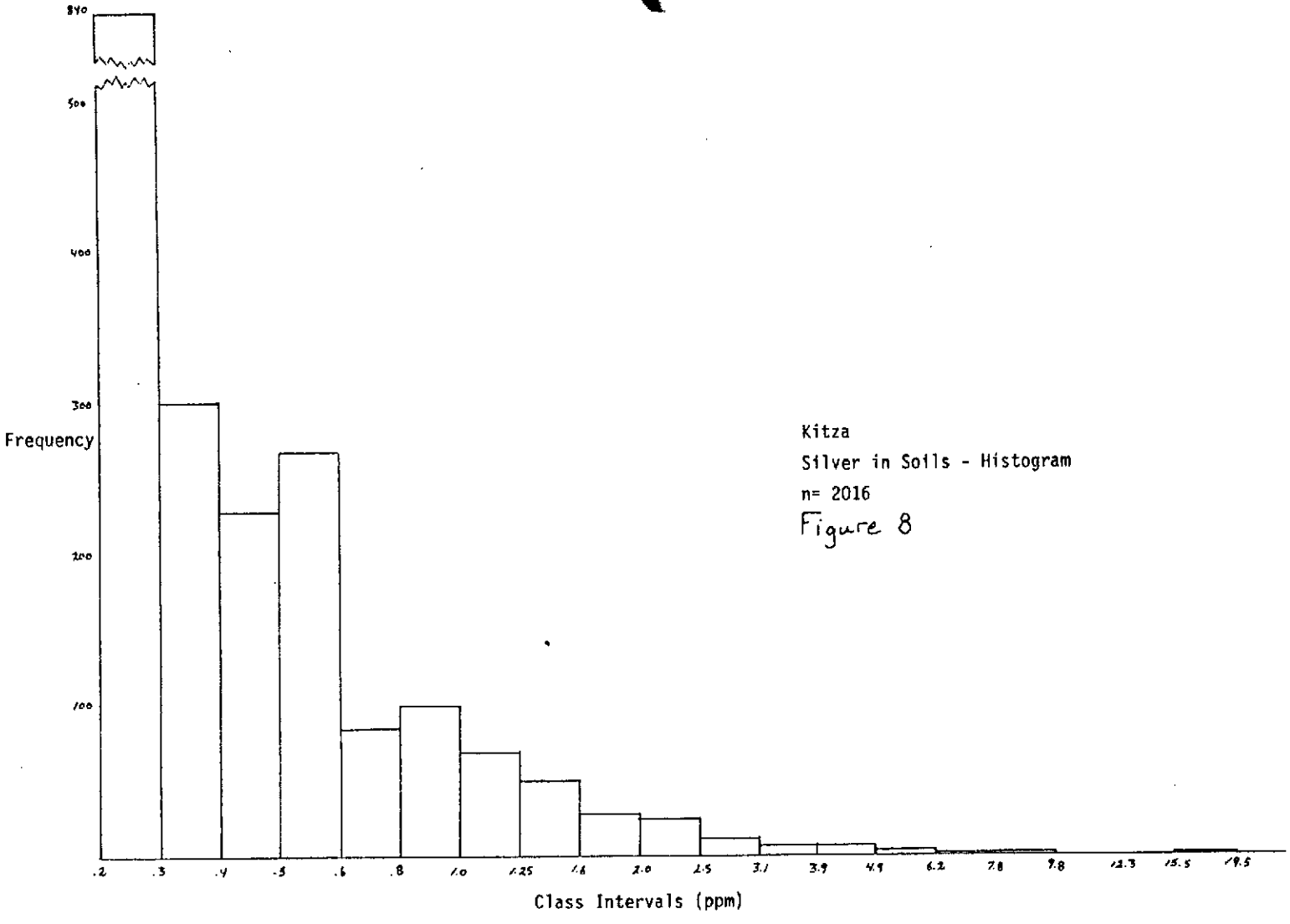
Definitely anomalous

28 ppm



Kitza
Zinc in Soils - Histogram
n= 2016
Figure 6


KITZA
Zinc in soils, % cumulative frequency
n = 2016
Figure 7
Threshold 200 ppm
Definitely anomalous 740 ppm
Zn (ppm)
740
200
% cumulative frequency



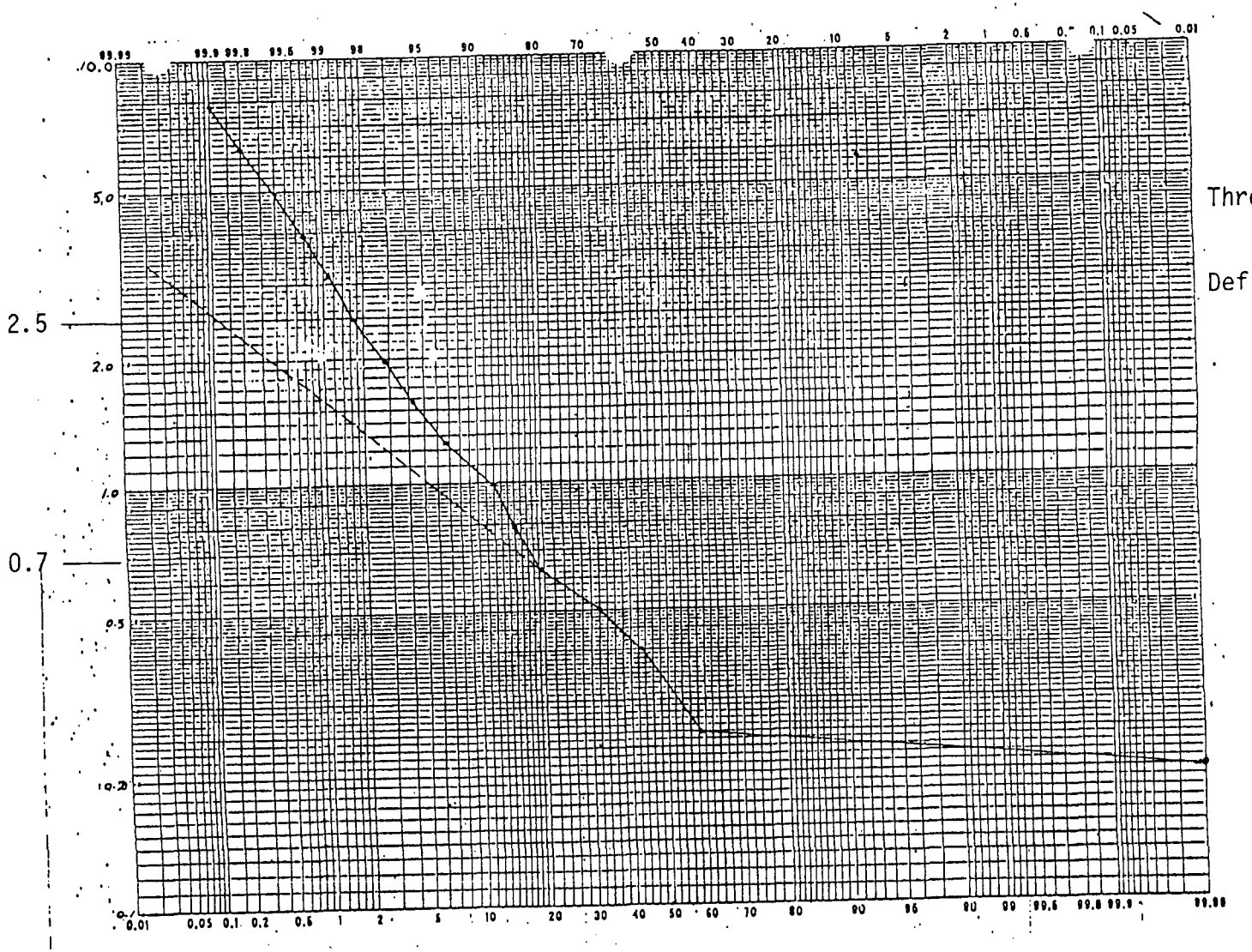
Kitza
Silver in Soils - Histogram
n= 2016
Figure 8

KITZA

Silver in soils - % cumulative frequency

n = 2016

Figure 9



Threshold 0.7 ppm

Definitely anomalous
2.5 ppm

59°36'25"

127°45'00"

127°38'10"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

27°45'00"

59°31'35"

573,000mE

577,000mE

PEG-2
61590

PEG-3
61583

ROUS - 1
61620

ROUS - 2
61619

L78E L80E L82E L84E L86E L88E L90E L92E L94E L96E

BL 100 N

L 100 N L 98 N L 96 N L 94 N L 92 N L 90 N L 88 N L 86 N L 84 N L 82 N L 80 N

BL 100 E

CREEK

KITZA

WADIN

ROCK

LEGEND

COPPER ≥ 50 ppm

≥ 100 ppm

9442

200 0 500 1000 METRES

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

Integrated Resources Photography Ltd.
310 Water Street
Vancouver, B.C. V6B 3W5
(604)681-3505

SULPETRO MINERALS LIMITED

KITZA

MAP SCALE : 1:10,000
CONTOUR INTERVAL : 10m
PHOTO SCALE : 1:30,000
PHOTO DATE : 7-70
DATUM : GEODETIC
MAP REF : 94M/11 N.T.S.
PROJECT No : 81-660
CONTROL BY : Map 3

SHEET 1 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
PPM Copper

Aug. 1981. / A.

N

Decl. 30° E

59°36'25"

127°51'50"

127°45'00"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

559,000mE

59°31'35"

JW-3
61589

JW-4
61588

PEG-1
61591

PEG-5
61585

PEG-4
61584

BL 75 N

L 149 N

L 145 N

L 141 N

L 137 N

L 135 N

L 133 N

L 131 N

L 129 N

L 127 N

L 125 N

L 123 N

L 121 N

BL 100 N

L 70E

L 72E

L 74E

L 76E

KITZA LAKE
W. L.
713 M.

KITZA CREEK

MUSTELA CREEK

WADIN CREEK

LEGEND

COPPER
≥ 50 ppm
≥ 100 ppm

9442

200 0 500 1000 METRES

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

Integrated Resources Photography Ltd.
310 Water Street
Vancouver, B.C. V6B 3W5
(604)681-3505

SULPETRO MINERALS LIMITED

KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/12 N.T.S.
PROJECT No: 81-660
CONTROL BY: Map 4

SHEET 2 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
PPM Copper

Aug. 1981

N
Decl. 30°E

59°36'25"

127°45'00"

127°38'10"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

27°45'00"

59°31'35"

571,000mE

572,000mE

573,000mE

PEG-2
61590

PEG-3
61583

ROUS - 1
61620

ROUS - 2
61619

L78E L80E L82E L84E L86E L88E L90E L92E L94E L96E

100N 98N L96N L94N L92N L90N L88N L86N L84N L82N L80N BL 100E

BL 100 N

KITZA CREEK

WADIN CREEK

ROCK

LEGEND

ZINC ≥ 500 ppm

≥ 1500 ppm

METRES

200 0 500 1000

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

9442

Integrated Resources Photography Ltd.
310 Water Street
Vancouver, B C V6B 3W5
(604)681-3505

SULPETRO MINERALS LIMITED

KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/11 N.T.S.
PROJECT No: 81-660
CONTROL BY: Map 5

SHEET 1 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
PPM Zinc
Aug. 1981

N

Decl. 30°E

59°36'25"

127°51'50"

127°45'00"

JW-3
61589

JW-4
61588

PEG-1
61591

PEG-5
61585

PEG-4
61584

BL 75 N

L 149 N

L 145 N

L 141 N

L 137 N

L 135 N

L 133 N

L 131 N

L 129 N

L 127 N

L 125 N

L 123 N

L 121 N

BL 100 N

L 70E

L 72E

L 74E

L 76E

KITZA

KITZA LAKE
W.L.
713 M.

MUSTELA CREEK

WADIN CREEK

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

565,000mE

585,000mE

59°31'35"

LEGEND

ZINC ≥ 500 ppm
≥ 1500 ppm

9442

METRES
200 0 500 1000

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

Integrated Resources Photography Ltd.
310 Water Street
Vancouver, B.C. V6B 3W5
(604)681-3505

SULPETRO MINERALS LIMITED
KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/12 N.T.S.
PROJECT No: 81-660
CONTROL BY: Map 6

SHEET 2 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
65 PPM Zinc.

Aug. 1981

Decl. 30°E

59°36'25"

127°45'00"

127°38'10"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

PEG-2
61590

PEG-3
61583

ROUS-1
61620

ROUS-2
61619

L 78 E
L 80 E
L 82 E
L 84 E
L 86 E
L 88 E
L 90 E
L 92 E
L 94 E
L 96 E
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N
L 80 N
BL 100 N
BL 100E

CREEK
KITZA
WADIN
ROCK

572,000mE

573,000mE

59°31'35"

LEGEND

LEAD ≥ 15 ppm
≥ 25 ppm

9442

200 0 500 1000 METRES

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SULPETRO MINERALS LIMITED
KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/11 N.T.S.
PROJECT No: 81-660
CONTROL BY:

SHEET 1 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING
SOIL GEOCHEMISTRY
PPM Lead

Map 7
Aug. 1981

Decl. 30°E

59°36'25"

127°51'50"

127°45'00"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

565,000mE

59°31'35"

JW-3
61589

JW-4
61588

PEG-1
61591

PEG-5
61585

PEG-4
61584

BL 75 N

L149N

L145N

L141N

L137N

L135 N

L133N

L131 N

L129 N

L127N

L125 N

L123 N

L121 N

BL 100 N

L70E

L72E

L74E

L76E

KITZA LAKE
W. L.
713 M.

KITZA CREEK

MUSTELA CREEK

WADIN CREEK

LEGEND

LEAD ≥ 15 ppm
≥ 25 ppm

200 0 500 1000 METRES

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

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SULPETRO MINERALS LIMITED
KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/12 N.T.S.
PROJECT No: 81-660
CONTROL BY: Map 8

SHEET 2 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
PPM Lead

Aug/1981/131

N
Decl. 30° E

59°36'25"

127°45'00"

127°38'10"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

PEG-2
61590

PEG-3
61583

ROUS - 1
61620

ROUS - 2
61619

BL 100 N

BL 100E

L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N
L 80 N

L78 E
L80 E
L82E
L84E
L86E
L88E
L90 E
L92 E
L94 E
L96 E

KITZA CREEK

WADIN CREEK

ROCK

36

59°31'35"

571,000mE

573,000mE

575,000mE

LEGEND

SILVER ≥ 2 ppm

≥ 4 ppm

9442

200 0 500 1000 METRES

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

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Vancouver, B.C. V6B 3W5
(604)681-3505

SULPETRO MINERALS LIMITED

KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/11 N.T.S.
PROJECT No: 81-660
CONTROL BY:

SHEET 1 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

SOIL GEOCHEMISTRY
PPM Silver

Map 9
Aug. 1981

N

Decl. 30° E

59°36'25"

127°51'50"

127°45'00"

59°31'35"

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

556,000mE

560,000mE

JW-3
61589

JW-4
61588

PEG-1
61591

PEG-5
61585

PEG-4
61584

BL 75 N

L 149 N

L 145 N

L 141 N

L 137 N

L 135 N

L 133 N

L 131 N

L 129 N

L 127 N

L 125 N

L 123 N

L 121 N

BL 100 N

L 70 E

L 72 E

L 74 E

L 76 E

KITZA LAKE
W. L.
713 M.

KITZA

MUSTELA CREEK

WADIN CREEK

LEGEND

SILVER ≥ 2 ppm

≥ 4 ppm

9442

METRES

200 0 500 1000

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

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SULPETRO MINERALS LIMITED

KITZA

SHEET 2. of 2

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/12 N.T.S.
PROJECT No: 81-660
CONTROL BY: Map 10

NOTES
PRELIMINARY RECONNAISSANCE MAPPING
SOIL GEOCHEMISTRY
PPM Silver

Aug. 1981

N

Decl. 30°E

59°36'25"

127°51'50"

127°45'00"

JW - 3
61589

JW - 4
61588

PEG - 5
61585

PEG - 1
61591

PEG - 4
61584

KITZA LAKE
W. L.
713 M.

KITZA CREEK

MUSTELA CREEK

WADIN CREEK

6,607,000mN

6,605,000mN

6,603,000mN

6,601,000mN

559,000mE

59°31'35"

SYMBOLS

- layering
- lineation
- foliation
- fault - approximate
- geological contact - approximate
- outcrop, float
- fossil locality
- Zn sphalerite
- Ba barite
- Cu tetrahedrite
- Fl fluorite
- brx breccia

200 100 0 200 400 600 800 1000 meters

9442

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

See also - Legend, Map 1

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SULPETRO MINERALS LIMITED

KITZA

MAP SCALE: 1:10,000
CONTOUR INTERVAL: 10m
PHOTO SCALE: 1:30,000
PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/12 W.T.S.
PROJECT No: 81-660
CONTROL BY:

SHEET 2 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

MAP 2:

GEOLOGY

Drf. C.Harrison

Decl. 30° E

59°36'25"
127°45'00"
127°38'10"
6,607,000mN
6,605,000mN
6,603,000mN
6,601,000mN
57,000mE
573,000mE
575,000mE
577,000mE
59°31'35"

PEG-2
61590

ROUS-1
61620

PEG-3
61583

ROUS-2
61619

KITZA CREEK

WADIN CREEK

HCp
mCrl
mCru
lCs
€OSrl
€OSru
€OSr
SDc
Db

LEGEND

FORMATIONS

Devonian

- Db Besa River Fm.

Siluro-Devonian

- SDc various carbonates

Cambro-Ordovician, Silurian

- €OSr Road River Formation
- €OSrl lower member
- €OSru upper member

Middle Cambrian

- m€r Rabbit Kettle Formation
- m€rl lower member
- m€ru upper member

Lower Cambrian

- lCs Sekwi Fm.

Hadrynian or Cambrian

- HCp Phyllite Unit

ROCK TYPES

8 Fetid limestone

7 Waterlain ash tuff

6 Chert
- 6a. Cherty mudstone

5 Limestone
- 5a. Limy mudstone
- 5b. 'Grainy' limestone

4 Sandstone
- 4a. Limy sandstone
- 4b. Pebbly sandstone

3 Siltstone
- 3a. Limy siltstone

2 Mudstone
- 2a. Carbonaceous mudstone
- 2b. Slaty mudstone

1 Slate
- Phyllite

SYMBOLS

- layering
- lineation
- foliation
- fault – approximate
- geological contact – approximate
- outcrop, float
- (F) fossil locality
- Zn sphalerite
- Ba barite
- Cu tetrahedrite
- Fl fluorite
- brx breccia

200 100 0 200 400 600 800 1000 meters

9442

To accompany Geological and Geochemical Report on the Peg 1 - 5, Rous 1 - 2 and JW 3 - 4 Claims by D.C. Miller and J.C. Harrison dated August 28, 1981.

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PHOTO DATE: 7-70
DATUM: GEODETIC
MAP REF: 94M/11 N.T.S.
PROJECT No: 81-660
CONTROL BY:

MAP 1

SHEET 1 of 2

NOTES
PRELIMINARY RECONNAISSANCE MAPPING

GEOLOGY

Drf. C. Harrison

N
Decl. 30°E