REPORT

on the

SULLIVAN TWO PROPERTY

Creston Area, B.C.
Nelson Mining Division
NTS 82F/2E
49°03'N Lat., 116°37'W Long.

for

WHITE KNIGHT RESOURCES LTD.

July 25, 1991

T. L. Eldridge
G.P. Leask

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1.0 INTRODUCTION

The Sullivan Two property at Creston, B.C. hosts stratabound lead-zinc-silver mineralization in Middle Aldridge sediments. Geological mapping, soil geochemistry, trenching and drilling have traced the mineralized horizon for about 2000 metres.

The structural setting of the Sullivan Two is similar to the Sullivan Mine at Kimberley, B.C. Distinctive geological elements associated with the Sullivan Mine and found at the Sullivan Two are albite and tourmaline alteration, growth fault pattern, fragmentals and a peripheral lead, zinc and silver apron.

The mineralized horizon on the Sullivan Two closely follows the mountain slope and probably forms a sheet at shallow depths beneath the surface. Lead, zinc and silver mineralization has been found at several points along the trend of the horizon. Visible mineralization consists of galena and sphalerite grading to 4.99% lead, 0.3% zinc and 130 gram/tonne silver. Surface exposures of the mineralized horizon in trenches are highly oxidized and leached, obtaining a true thickness of 6 metres. Fragmentals, tourmaline and albite alteration are concentrated around growth faults along the south and centre of the property.

The 1990 exploration program consisted of an 8 hole 909 metre BQ diamond drilling program. The holes were targeted to intersect the mineralized stratigraphy between the projected graben flanking faults. Ground conditions seriously reduced the success of the drilling program. The BQ size drilling system was frequently not able to recover broken core and blocked. Four of the holes were lost or stopped before intersecting the target stratigraphy and two of the holes appear to have drilled into or through the northern graben flank and therefore out of the target area.

The core was transported to Cranbrook, B.C. in June, 1991 and logged in detail.

2.0 LOCATION AND ACCESS

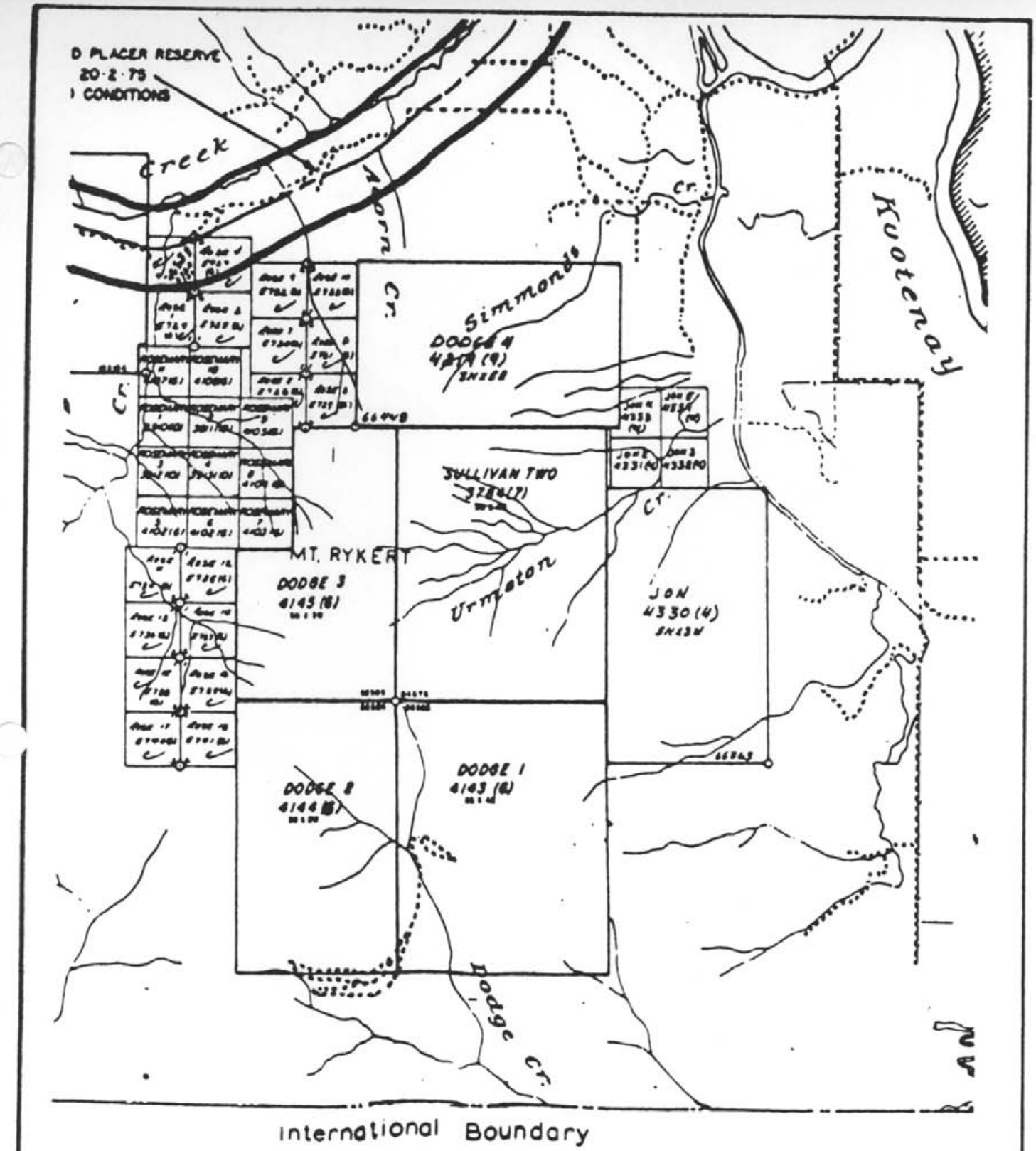
The Sullivan Two property is situated ten kilometres southwest of Creston, B.C. in the Nelson Mining Division. The claims are reached via the Dodge Creek Forest Service Road onto the upper slopes of Mt. Rykert. Logging and exploration roads access the property. The claim group covers most of the valley of Urmston Creek which drains east from Mt. Rykert to the Kootenay River. Elevations on the property range from 730m in the lower valley of Urmston Creek to 1646 m on Mt. Rykert.

The westernmost portion of the property has been logged, leaving only small remnants of the original forest cover of larch and spruce. The central and lower parts are covered by second growth of the same varieties, with alders, as the valley of Urmston Creek was burned in 1928. Water is available from Dodge Creek on the southwest side of the property and from the lower part of Urmston Creek.

The percentage of outcrop is variable; large outcrop areas along the ridge crests of Mt. Rykert are formed by the resistant Moyie sills. Many rock exposures are found along the logging roads and along White Knight's access roads. Natural outcrops occur from place to place. Elsewhere there is a fairly continuous cover of overburden, generally only one to two metres thick, but reaching thicknesses of over five metres in the upper northern part of the Urmston Creek basin.

Figure 1 is the Location Map. Figure 2 is the Claim Map.

WHITE KNIGHT RESOURCES LTD.	
LOCATION MAP SULLIVAN TWO PROPERTY	
DATE: July, 1991	SCALE
NTS: 82F/2W	FIGURE: 1



WHITE KNIGHT RESOURCES LTD.	
SULLIVAN TWO PROPERTY CLAIM MAP	
DATE: Feb. 1991	SCALE: 1:50,000
NTS: 82F/2E	FIGURE: 2

3.0 CLAIMS

The Sullivan Two property consists of the following claims in the Nelson Mining Division:

Table 1 - Claim Data

Name	Record No.	Units	Expiry Date
Sullivan Two	3784	20	July 11, 1991
Jon	4330	15	April 02, 1992
Jon 2	4331	1	April 17, 1993
Jon 3	4332	1	April 17, 1993
Jon 4	4333	1	April 17, 1993
Jon 5	4334	1	April 17, 1993
Dodge 1	4143	20	June 20, 1992
Dodge 2	4144	15	June 20, 1992
Dodge 3	4145	15	June 20, 1992
Dodge 4	4219	15	Sept 12, 1992

White Knight Resources Ltd. owns an 100% interest in the Sullivan Two claim subject to a 15% NPI royalty held by Muirfield Investments Ltd.

White Knight has the right to earn a 100% interest in the Jon claims from F. O'Grady.

White Knight has the right to earn a 100% interest in the Dodge claims from Cominco. Cominco retains the right to earn back a 51% interest in the Dodge claims for a period of 10 years. claims.

The 1990 program was carried out on the Sullivan Two claim.

4.0 REGIONAL GEOLOGY

The property is situated in the Nelson Range of the Selkirk Mountains on the west flank of the Purcell Anticlinorium, extending from the property to Yahk. Regional geology is shown on Figure 3. East-west trending faults and zones of tourmaline alteration appear to delineate an east-west trending sub-basin within an extensive clastic basin extending southward from Canal Flats into Idaho and Montana in which the Belt Supergroup was deposited. Reactivated (growth) faults may have had an influence on deposition of stratiform massive sulphide deposits, such as the Sullivan, North Star, Stemwinder and Kootenay-King deposits in the Cranbrook-Fort Steele area. In the main basin northeast trending faults, such as the Cranbrook and Kimberley faults may have been transform faults which offset crustal spreading centres forming the locus of major sedimentary exhalative lead, zinc and silver deposits accompanied by tourmaline and albite alteration.

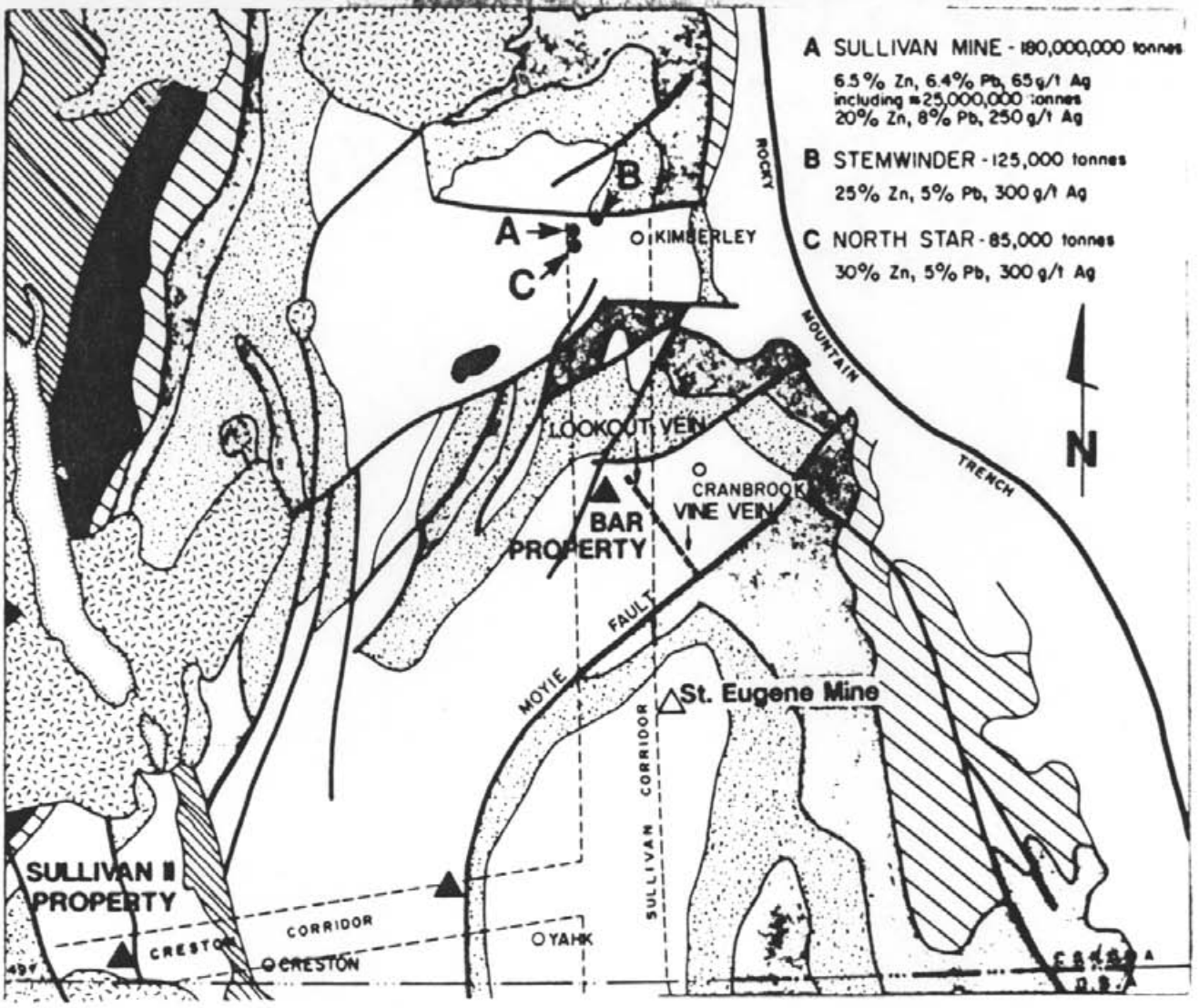
4.1 Stratigraphy

Rocks in the area belong to the Purcell Supergroup of Upper Proterozoic age, and Paleozoic Cambrian to Middle Devonian sedimentary rocks, as shown in the accompanying stratigraphic column (Figure 4) and described briefly below:

The Fort Steele Formation is the oldest unit exposed in the region, comprising at least 2,000 meters of cyclically graded quartzites to thinly laminated siltstones. Near the top of the unit grey siltstone and argillite predominate. The Formation represents braided fluvial (Alluvial fan) deposits derived from a source area to the south. The unit is absent in the claims area but appears north of the Boulder Creek Fault in the Kootenay King-Estella mine area.

The Aldridge Formation is a thick unit (3,500-4,500 meters) of quartzites, siltstones and argillites with graded bedding, rip-up clasts, sole marks, and other characteristics of "turbidite" deposition. The Formation is divided into Lower, Middle and Upper divisions. The lower division has a gradational contact with the Fort Steele Formation below, and consists of dark grey to black argillites, siltstones and quartzites (greywackes). The Middle Aldridge comprises thick grey quartz-wacke units interbedded with laminated siltstone, and intruded by a number of thick, laterally continuous meta-gabbro sills. Varved siltstone - argillite sequences can be correlated for up to 300km along strike, and are important "marker horizons". The Upper Aldridge includes 300-400 meters of rusty weathering grey argillite and laminated siltstone, and in some places two thick shallow-water dolomite horizons.

The Creston Formation is a thick unit (1500 meters) of green, purple, and white quartzite, siltstone and argillite of intertidal to subaerial depositional origin, characterized by mudcracks, ripple marks, rip-up clasts, load casts and scour and fill structures. Contact with the overlying carbonate unit is gradational.



LEGEND

MESOZOIC
- PLUTONIC ROCK

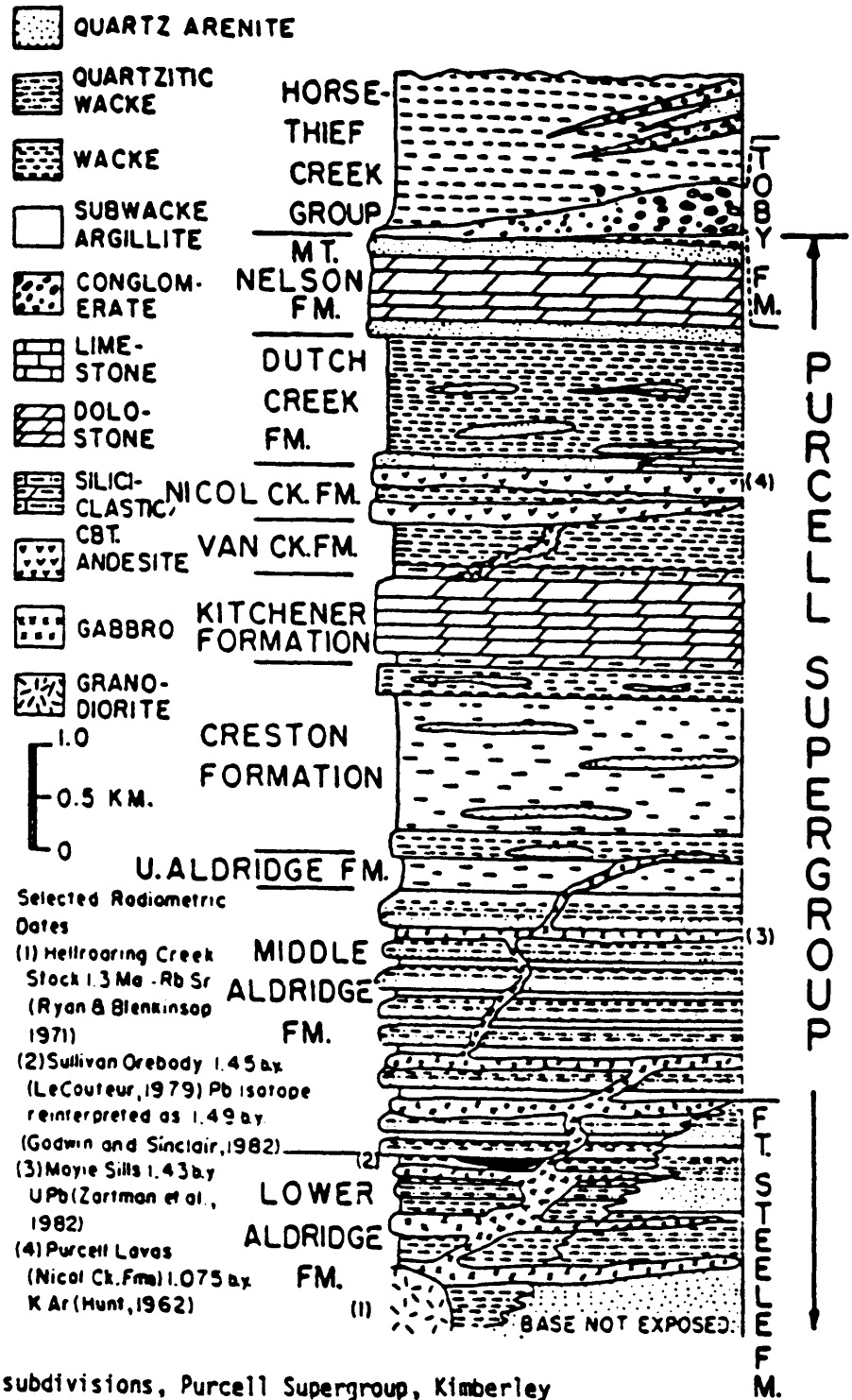
PALEOZOIC
- SEDIMENTARY ROCK

PROTEROZOIC
- HELLROARING CREEK STOCK
- WINDERMERE SUPERGROUP
- PURCELL SUPERGROUP
  - Mt. Nelson Dutch Ck., Gateway Phillips, Roosville
  - Kitchener, Siyeh, Shephard, Purcell Lava
  - Creston; Altyn Waterton Appekunny
  - Aldridge, Fort Steele

SYMBOLS
- FAULT
- A ● SIGNIFICANT DEPOSIT

0 10 20 30
KILOMETRES

WHITE KNIGHT RESOURCES LTD.	
SULLIVAN TWO PROPERTY	
REGIONAL GEOLOGY	
DATE: Feb. 1991	SCALE: 1:
NTS: 82F/2E	FIGURE: 3



Stratigraphic subdivisions, Purcell Supergroup, Kimberley area, southeastern British Columbia.

WHITE KNIGHT RESOURCES LTD.	
SULLIVAN TWO PROPERTY	
STRATIGRAPHIC COLUMN	
DATE: Feb 1991	SCALE: 1:
NTS: 82F/2E	FIGURE: 4

The Kitchener Formation consists of green or grey dolomitic and green non-dolomitic siltite, grey silty dolomite, rare stromatolitic, oolitic sandy dolomite, grey siltite with graded beds and rip-up debris beds. The unit was deposited in an intertidal environment. North of the Dibble Fault and in the Kimberley area, massive to amygdaloidal lavas are present, and are called the Nicol Creek Formation. These are chloritized and sericitized and are accompanied by distinctive volcanic and feldspathic sandstones. This unit separates the Van Formation from the lithologically similar Gateway Formation, including light green to buff siltstone, argillite, silty dolomite, fine grained quartzite, with shallow water depositional features.

Overlying the Nicol Creek and Gateway Formations, (depending on how deeply regional unconformities have eroded), the upper part of the Purcell Group includes the Dutch Creek Formation, about 1200 meters of grey and green argillites and quartzites, the Mt. Nelson Formation, up to 1000 meters of oolitic and stromatolitic dolomites and limestones and argillites.

4.2 Intrusive Activity

Several large sills and dykes of Purcell age are present in the region. These are most common in the Aldridge and Fort Steele Formations, but may also be present in younger Proterozoic strata. The "Moyie Sills", predominantly gabbro in composition, have ages identical to the enclosing Aldridge strata (1433 Ma). Hoy (1983) suggests they were emplaced into uncompacted water-saturated sediments. Sulphide accumulations and veins are common adjacent to sill or dyke margins, and the Moyie intrusions are suggested to be part of a thermal/hydrothermal and mineralizing event accompanying rifting in a graben controlled deep clastic basin.

5.0 HISTORY AND WORK PROGRAM

The first known reference to metallic mineralization in the vicinity of the property is the mention in the B.C.M.M. Annual Report for 1929, page C 360, which reported: "...prospecting by Angus Currie and associates, who staked four claims at the head of Long Creek (Long Creek was later re-named Urmston Creek) following the discovery of a large quantity of float after a forest fire which burned over this area last fall. These claims are about 2 miles west of the Kootenay flats, Long Creek being a small stream between Corn and Boundary Creeks. The float is a milling ore consisting of galena in a quartz gangue and the formation is probably Aldridge. A large granitic dyke is said to cross the ground from north to south."

F.B. Whiting staked the 20 unit Sullivan Two claim in 1984. Cominco subsequently staked the adjoining Dodge 1 to 4 claims and carried out programs of geologic mapping, soil sampling and, reportedly, a geophysical survey. Cominco filed an assessment report, #14,951, for soil geochemistry work done in July and August, 1985. That report gives contoured maps for lead and zinc which show a continuous anomaly for each of the metals extending from an outcrop 650 metres southwest of the LCP of the Sullivan Two, that carries traces of sphalerite, right up to the western boundary of the Sullivan Two. No natural outcrops exist along that 1200m line anomaly, but float of talc-rock and of carbonate were found at four places, and one area of loose galena-bearing carbonate material was located. Widening of a logging road at a point on this coincident anomaly 150m west of the west boundary of the Sullivan Two disclosed the presence of a highly-oxidized manganiferous gossan containing secondary lead minerals in a zone of quartzites, carbonate and massive talc beds totalling over 5m in stratigraphic thickness. Weak fine-grained galena was seen in silty quartzite beds just below the lowermost gossan layer.

A mapping and prospecting program was carried out in 1985 by F.B. Whiting and Orion Resources Ltd. (now Muirfield Investments Ltd.) which had by then purchased a 50% interest in the Sullivan Two.

The Jon and Jon 2 to 5 were staked in 1986 by F.P. O'Grady. Those claims were optioned by White Knight Resources Ltd. in 1987. White Knight Resources Ltd. also acquired options on the two 50% interests in the Sullivan Two from F.B. Whiting and Orion Resources Ltd.

In 1987 work done by White Knight Resources Ltd. consisted of gridding, geological mapping, prospecting, soil sampling, rock sampling, bulldozer trenching and the construction of some four kilometres of access roads. To the end of 1987 White Knight had spent $101,700 on the property.

In 1989 Cominco carried out a UTEM geophysical survey on the Dodge 1 and 2 claims. A crossover type conductor was detected on one loop on the Dodge 1 claims about 1000 metres south of the Sullivan Two claim.

In 1990, Kali Ventures Corp acquired an option to earn a 50% interest in White Knight's interest in the property and carried out a 909 metre BQ diamond drilling program. A summary of the 1990 drilling is presented in Table 3. Kali did not fulfil the terms of the agreement and it was subsequently terminated. Northwest Mining Exploration was the operator of this phase of exploration.

Table 2 - DRILLHOLE SUMMARY

Hole	Coordinates North	Coordinates East	Angle (°)	Azimuth (°)	Depth (m)
90-S-01	0+64	0+80	-60	270	64.92
90-S-02	0+07	3+28	-60	270	172.20
90-S-03	1+50	6+20	-60	270	87.78
90-S-04	1+80	6+00	-60	270	211.22
90-S-05	8+10	0+80	-60	270	95.40
90-S-06	7+80	1+00	-60	270	57.91
90-S-07	8+90	0+80	-60	270	129.53
90-S-08	7+50	3+60	-85	270	90.83
TOTAL					909.79

In November, 1990 White Knight acquired the right to earn a 100% interest in the Dodge claims from Cominco subject to Cominco retaining the right to back in for a 51% interest in the Dodge claims.

The core from the 1990 drilling program on the Sullivan Two was transported to Cranbrook, B.C. in June 1991 and logged in detail. The core is stored in Cranbrook.

6.0 PROPERTY GEOLOGY AND MINERALIZATION

6.1 Stratigraphy

The Sullivan Two claim group is underlain by quartzites and siltstones of the Middle Aldridge Formation. The sequence includes two Moyie gabbro sills. In general the beds strike roughly north and dip east at angles ranging from -20^0 at the west boundary of the property to -85^0 in the far northeast corner of the block. Local flattenings and steepenings result in small folds in the bedding.

Correlations of markers show that the Middle Aldridge stratigraphy is overturned on the property. A major fold with an axis trending north and plunging gently north is visible on the east face of the mountain between Corn Creek and Summit Creek resulting in beds close to the Kootenay River flats dipping shallowly east while the beds farther up the mountain dip at moderate angles to the west. At some point due west of the Sullivan Two property, the general westward dip must prevail as that area holds the western limb of the Purcell Anticlinorium.

To the south of the claim block, a markedly porphyritic granitic rock occurs which has been called the Mt. Rykert granite. By the evidence of definite sedimentary layering preserved in the outer parts of this body, it must be a anatectite-type granitic mass rather than a magmatic intrusion. Its age is Late Cretaceous to early Tertiary.

Figure 5 is the Property Geology map.

6.2 Mineralization

Drillhole 90-S-02 intersected a thin bed of tourmaline altered argillite with minor galena on the fractures at 76.2 m. The target horizon consisting of a manganese stained sediment with albite, chlorite, quartz, pyrite alteration was intersected from 142.3 to 145.0 m. Mineralization consisted of pyrite, pyrrhotite, galena and sphalerite.

Drillhole 90-S-05 intersected massive garnetiferous quartzite with minor galena from 43.8 to 45.0 metres. The highly oxidized and manganese stained target horizon was intersected from 14.3 to 17.3 m and consisted of talc/chlorite altered sediments with visually up to 10% galena and 3% sphalerite. Quartz/chlorite/garnet alteration and tourmaline alteration also occurred in the horizon.

Drillhole 90-S-07 intersected a quartz vein with up to 10% blebs of galena at 66.8 m. A weakly chlorite altered siltstone with strong manganese stains on the fractures was encountered from 73.0 to 73.4m and visually contained up to 15% blebs of galena.

7.0 CONCLUSIONS

The 1990 exploration program carried out by Kali Venture Corp. consisted of an 8 hole 908 metre BQ diamond drilling program. The holes were targeted to intersect the mineralized stratigraphy between the projected graben flanking faults. Ground conditions seriously reduced the success of the drilling program. The BQ size drilling system was frequently not able to recover broken core and blocked. Four of the holes were lost or stopped before intersecting the target stratigraphy and two of the holes appear to have drilled into or through the northern graben flank and thus out of the target area.

The 1990 holes intersected typical Middle Aldridge quartzites, siltstones and wackes. Chloritic alteration of the siltstone beds is common, with garnet commonly occurring within the quartzite beds. Tourmaline is common near and within the projected graben bounding faults and consists of patchy zones and fragments of tourmaline in quartzites to massive black tourmaline totally obliterating the sedimentary textures of the altered rock. Base metal mineralization occurred in highly altered (chlorite, talc, albite, tourmaline, quartz, pyrite) sediments and consisted of disseminations and blebs of massive galena and sphalerite.

With the limited success of completing drillholes during the 1990 exploration program, the main stratigraphic target remains virtually untested. The next phase of exploration should consist of an Induced Polarization geophysical survey within the flanking graben faults, trenching of shallow targets, especially in the area of the galena bearing carbonate float on the Dodge claims, and a HQ size drilling program.

8.0 COST SUMMARY - June, 1991

Personnel

G.P. Leask, B.A.Sc	6 days @ $400/day	$2,400.00
T.L. Eldridge, P.Eng.	2 days @ $400/day	800.00

Expenses

Food/Accommodation	8 mandays @ $60/day	480.00
Vehicle	6 days @ $50/day	300.00
Fuel		75.00
Typing		150.00
Drafting		50.00
TOTAL		$4,255.00

9.0 REFERENCES

B.C.M.M.: Annual Report for 1929 (pp C 360).

Botel, W.G.: (1988) Report on the Sullivan Two Property for White Knight Resources Ltd.

Hoy, T.: (1984) Structural Setting, Mineral Deposits, and Associated Alteration and Magmatism Sullivan Camp, Southeastern British Columbia.

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Parkinson, J.G.: (1989) Geophysical Report on a UTEM Survey on the Dodge Property, Nelson M.D.. B.C.

Pighin, D.L.: (1985) Report on Soil Grid Geochemistry, Dodge Property, Dodge 1 to 3, Nelson Mining Division, Creston Area for Cominco Ltd. Assessment Report 14,951.

Price, B.J.: (1989) Geological Report, Lookout Property, Cranbrook Area, B.C. Internal Report for White Knight Resources Ltd.

Tipper, et al: Tectonic Assemblage Map of the Canadian Cordillera (1981), Geologic Survey of Canada Map 1505A.

Visser, S.J.: (1986) Geophysical Report on the Horizontal Loop EM Magnetic Surveys Dodge 1 to 4 Claims, Nelson Mining Division, B.C.

STATEMENT OF QUALIFICATIONS

I, Gordon P. Leask, do hereby certify that:

1. I am a geologist with resident at 1940 Chestrfield Avenue, North Vancouver, B.C., V7M 2P5.

2. I am a graduate of the University of British Columbia with a Bachelor of Applied Science degree in Geological Engineering (1985).

3. I have been involved in mining exploration since 1979.

Gordon P. Leask

STATEMENT OF QUALIFICATIONS

I, Terry L. Eldridge, do hereby certify that:

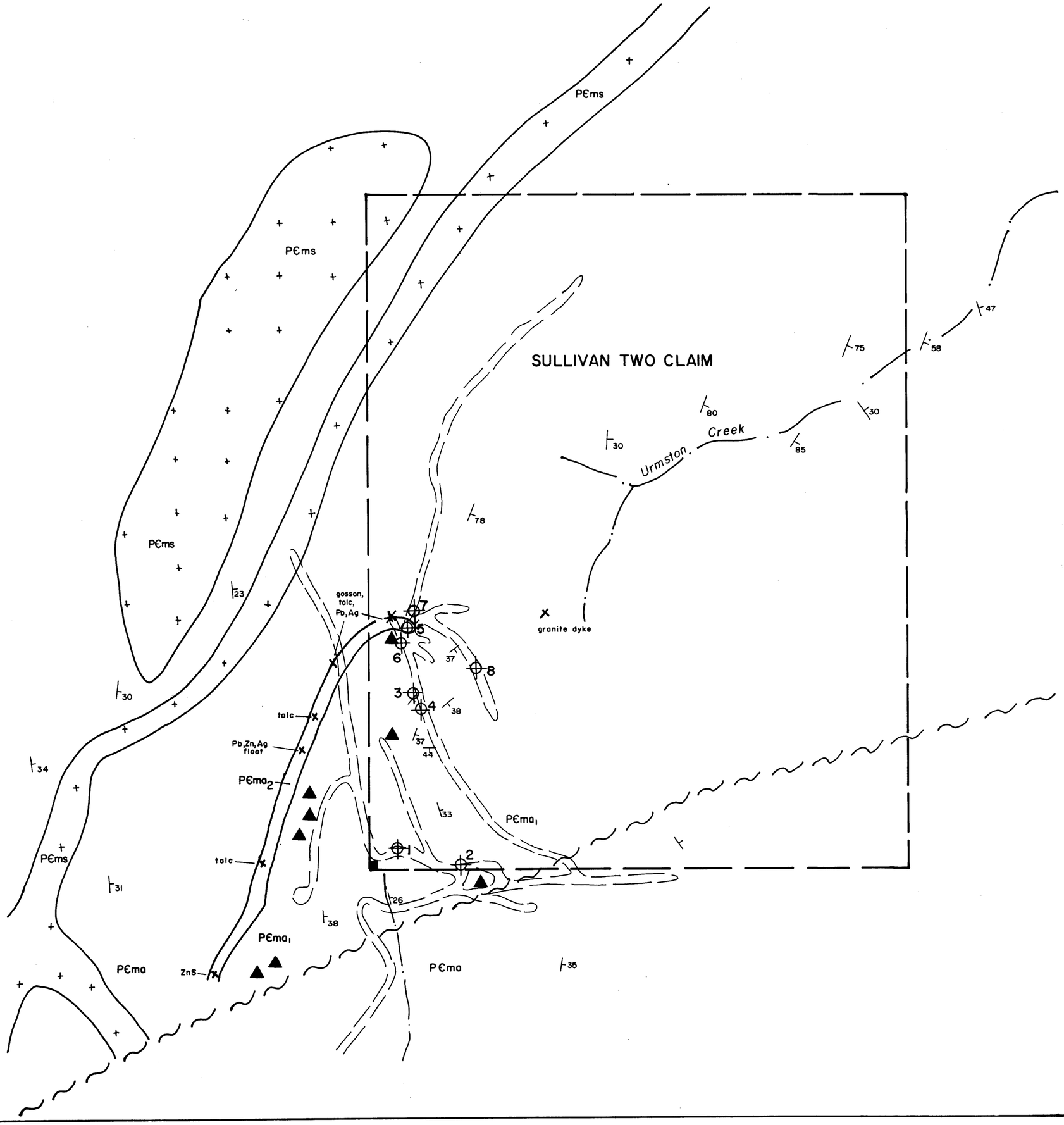
1. I am a geotechnical engineer with resident at 13234 - 81 B Avenue, Surrey, B.C., V3W 8Y4.

2. I am a graduate of the University of British Columbia with a Bachelor of Applied Science degree in Civil Engineering (1980) and a Master of Applied Science degree in Geotechnical Engineering (1983).

3. I have been involved in mining exploration since 1982.

4. I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia.

Terry L. Eldridge



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LEGEND

PRECAMBRIAN
MIDDLE ALDRIDGE FORMATION

- PEma — Medium to massive quartzwacke, minor siltite and argillite
- PEma$_1$ — Flaser bedded quartzite-siltstone, minor Pb-Zn-Ag mineralization
- PEma$_2$ — Calc-silicate siltstone, talc, Mn gossan Host for Pb-Zn-Ag mineralization
- + PEms — Gabbroic Moyie sills
- 17 — Strike and dip of bedding
- Tourmalinite
- Drillhole
- Creek
- Claim boundary

0.5 0.5 km

SCALE 1:10,000

White Knight Resources Ltd.

PROPERTY GEOLOGY

SULLIVAN II PROJECT

CRESTON, B.C.

NTS: 82F/2E

Date July, 1991

Figure: 5

APPENDIX 1

DRILLHOLE LOGS

HOLE DDH 90-S-01

Interval (m)	Description
0.00-25.30	CASING
25.30-64.92	OVERBURDEN - sand, gravel, boulders
64.92	END OF HOLE (lost hole)

HOLE DDH 90-S-02

Interval (m)	Description
0.00-10.97	CASING
10.97-12.00	QUARTZITE
12.00-19.94 to core 87°.	SILTSTONE, chloritic, minor carbonate. Bedding
19.94-29.75	QUARTZITIC SILTSTONE, variable chlorite and carbonate blebs, bedding to core 73°.
29.75-31.30	SILTSTONE
31.30-32.50	QUARTZITE, bedding to core 64°.
32.50-36.62	QUARTZITIC SILTSTONE, minor biotite, 1mm pyrite blebs at 34.0.
36.62-36.84	SILTSTONE, thinly laminated.
36.84-41.00	Interbedded SILTSTONE and QUARTZITE, minor pyrite on fractures, variable garnet and chlorite, bedding to core 84°.
41.00-52.84	Interbedded SILTSTONE, QUARTZITE and QUARTZITIC SILTSTONE, variably chloritic, minor garnet at 42.0. Bedding to core 85° at 42.0, 87° at 47.0, 67° at 51.0
52.84-54.30	QUARTZITE, massive from 53.00-54.30, bedding to core 90°.
54.30-56.10	SILTSTONE
56.10-58.50	QUARTZITE, massive bedded, garnets, 2cm quartz vein at 56.0.
58.50-66.28	SILTSTONE and QUARTZITIC SILTSTONE, 1mm biotite bands 63.13 to 63.42. Bedding to core 89° at 65.0, quartz-carbonate filled fractures, 70-75° to core axis, at 66.0.
66.28-66.56	QUARTZITE
66.56-75.95	Interbedded QUARTZITIC SILTSTONE, QUARTZITE and SILTSTONE. Weak tourmaline alteration 68.0 to 70.0. Moderate to intense fracturing. Bedding to core 80° at 71. Pyrite and sericite in fractures at 75.

DDH 90-S-02 Continued

75.95-81.25	SILTSTONE, Fine grained galena in 1 cm chloritic band at 76.20.
81.25-82.00	QUARTZITIC WACKE
82.00-89.15	SILTSTONE, chloritic, 1-3mm garnets 82.0 to 84.8. Quartzite interbeds.
89.15-94.20	QUARTZITIC SILTSTONE, minor garnets.
94.20-120.82	QUARTZITE. Massive, siltstone interbeds. Weak to moderate tourmaline alteration of siltstone beds at 108.0 and 108.8. Small quartz veins 106.0 to 114.5. Fault gouge at 112.9 and 114.0 to 114.1. Bedding to core 75° at 96.0, 72° at 102.0, 55° at 107.0, 39° at 108.5, 69° at 109.0, 87° at 115.0.
120.82-121.33	GABBRO. Oxidized contacts. Coarser grained towards bottom contact. Contacts 83° and 85° to core axis.
121.33-142.28	QUARTZITE. Massive. Flaser bedded. Siltstone and quartzitic siltstone interbeds. 2-3 mm pyrite bands 124.5 to 124.7. Slump features at 126.0. Tourmaline fragments 131.0 and 132.5. 1-2% pyrite, garnets, trace galena in siltstone bed 139.7 to 140.7. Bedding to core 85° at 140.0.
142.28-142.95	Albitized or silicified sediment. Strong manganese staining on fractures. Alteration increases towards bottom.
142.95-145.00	Chloritic sediment. Fault breccia, calcite cemented at 142.95. Strong chlorite alteration, biotitic, variable carbonate. Fault gouge at 144.0. 4cm quartz vein at 145.0.
145.00-172.20	QUARTZ WACKE, medium to massive with minor siltstone and agrillite interbeds. Siltstone chloritic with minor garnet. Bedding to core 75° at 151.0, 79° at 155.0, 86° at 162.0, 84° at 168.0. Fault gouge at 167.5 and 171.5.
172.20	END OF HOLE

HOLE DDH 90-S-03

Interval (m)	Description
0.00-7.31	CASING
7.31-12.54	SILTSTONE, oxidized and broken.
12.54-12.73	QUARTZITE
12.73-13.51	SILTSTONE. Finely laminated, micaeous partings, minor managanese staining. Bedding to core 72° at 13.0.
13.51-21.04	QUARTZITE. Siltstone interbeds. Bedding to core 86° at 15.0. 5mm quartz vein at 17.1.
21.04-24.00	SILTSTONE. Poor recovery. Bedding to core 78° at 22.0.
24.00-36.02	Interbedded QUARTZITE and SILTSTONE to quartzitic siltstone. 1mm garnets at 24.0. 3cm quartz vein at 25.55. 2mm tourmaline clast at 29.5. 5mm quartz vein with garnet rich selvages at 31.0. Fault gouge 31.3-31.4. Bedding to core 75° at 24.0, 83° at 30.0, 90° at 33.0, 85° at 37.0.
36.02-44.08	SILTSTONE. Chloritic, minor quartzite interbeds. Bedding to core 89° at 41.5.
44.08-52.97	Interbedded SILTSTONE, QUARTZITE and QUARTZITIC SILTSTONE. Siltstone chloritic. Biotite bands at 46.0. Fault gouge at 47.9. 4cm quartz/garnet/chlorite band at 48.4. Minor garnets 51.0. Bedding to core 75° at 46.0, 83° at 51.0.
52.97-55.25	QUARTZITE
55.25-57.40	QUARTZITIC SILTSTONE. 5cm chloritic band at 56.0.
57.40-60.20	Interbedded QUARTZITE and SILTSTONE. Minor garnets. Bedding to core 66° at 58.5
60.20-73.16	QUARTZITE. Massive. Minor siltstone interbeds. Garnet rich 63.0-64.0. 3cm quartz vein at 66. Brecciated 65.8-66.3. Bedding to core 65° at 64.0, 87° at 68.0, 69° at 71.0.
73.16-85.00	FAULT ZONE. Poor core recovery. Quartzite and siltstone.

DDH 90-S-03 Continued

85.00-87.78	QUARTZITE. Minor siltstone. Brecciated zone 85.00-85.17. Tourmalinized fragment at 87.37. Bedding to core 89° at 86.0.
87.78	END OF HOLE. (Lost hole)

HOLE DDH 90-S-04

Interval (m)	Description
0.00-4.72	CASING
4.72-7.00	Broken Zone, poor recovery.
7.00-8.02	QUARTZITE, minor garnet. Bedding to core 85° at 8.0.
8.02-13.07	SILTSTONE. Weak chlorite alteration. Thin quartzite beds. Convoluted bedding at 10.54m. Bedding to core 70° at 11.0, 79° at 12.5.
13.07-17.00	Fault Zone, poor recovery.
17.00-33.57	QUARTZITE. Siltstone and quartzitic siltstone interbeds. 23.7-23.8 small calcite veinlets. Fault gouge 25.43 and 26.56. Disseminated pyrite at 32.2. Bedding to core 72° at 28.0, 83° at 30.2.
33.57-36.36	SILTSTONE. Weak chlorite alteration. Bedding to core 61° at 35.8, 73° at 36.0.
36.36-38.99	QUARTZITE. Siltstone interbeds. Quartz carbonate veinlets 36.7-37.1. Bedding to core 60° at 37.0.
38.99-50.50	Interbedded QUARTZITE, SILTSTONE, and QUARTZITIC WACKE. Siltstone weakly chloritic. Fault gouge 42.26-42.34. 1 cm quartz vein at 45.6. Bedding to core 78° at 40.4, 85° at 41.0, 81° at 43.3, 69° at 45.5, 80° at 48.5.
50.50-51.39	QUARTZITE. Intercalated siltstone.
51.39-51.87	QUARTZ VEIN. Top contact 61° to core axis.
51.87-55.95	QUARTZITE. Chloritic and micaeous partings. Bedding to core 82° at 52.0, 62° at 54.0.
55.95-61.46	WACKE, QUARTZITE and SILTSTONE. Siltstone chloritic with some carbonate, Micaeous partings in quartzite. Bedding to core 78° at 61.0.
61.46-64.57	QUARTZITE. Massive, micaeous partings.
64.57-70.81	QUARTZITE. Micaeous partings. Quartzitic wacke beds. 5cm quartz vein at 67.46. Bedding to core 88° at 66.5.

DDH 90-S-04 Continued

70.81-72.27	SILTSTONE. Finely laminated, crossbedded. Bedding to core 65° at 71.0.
72.27-74.88	QUARTZITE
74.88-75.10	TOURMALINITE
75.10-77.01	QUARTZITE. Micaeous partings.
77.01-80.78	QUARTZITIC WACKE and QUARTZITE. Micaceous and chloritic siltstone beds. Slump features at 78.14. Bedding to core 89° at 79.0.
80.78-98.73	QUARTZITE. Massive bedded. Siltstone interbeds. Matrix supported breccia at 84.2-84.5, 86.2-86.3, 89.5-90.1. Bedding to core 90° at 91.0. Manganese staining on fractures at 97.0.
98.73-99.84	META TUFF. Chloritic schist, up to 10% biotite.
99.84-121.83	QUARTZITE. Massive bedded. Siltstone, argillaceous siltstone and quartzitic wacke interbeds. Fragmental 104.1-104.9. Weak albite alteration 104.9-106.3. Bedding to core 84° at 105.0. Weak tourmaline alteration 108.5-111.1. Bedding to core 67° at 111.0.
121.83-128.27	SILTSTONE. Argillaceous. Bedding to core 85° at 127.5.
128.27-135.00	QUARTZITE. Massive bedded.
135.00-159.30	Interbedded QUARTZITE, SILTSTONE and QUARTZITIC WACKE. Siltstone argillaceous. Occasional garnets. Minor faulting increasing to bottom of section. 1cm quartz vein with pyrite at 148.8. Minor pyrite 151.2. Bedding to core 76° at 143.0, 75° at 150.0.
159.30-163.69	FAULT ZONE.
163.69-167.70	SILTSTONE. Argillaceous. Quartzite and wacke interbeds. Quartzite locally garnetiferous. Bedding to core 85° at 166.0.
167.70-172.17	QUARTZITE and QUARTZITIC WACKE. Argillaceous partings.

DDH 90-S-04 Continued

172.17-178.00	SILTSTONE and QUARTZITIC SILTSTONE. Minor quartzite interbeds. Minor slump features at 175.0. Bedding to core 70° 173.5, 80° at 177.8.
178.00-180.74	QUARTZITE. Massive
180.74-196.80	Interbedded QUARTZITE and SILTSTONE. Banded argillite 181.1-182.1. Broken zone 190.0-193.5. Bedding to core 86° at 187.0, 66° at 196.0. Minor pyrite 195.5.
196.80-211.22	QUARZTITE. Siltsone interbeds. Local chloritic and garnetiferous intervals. Pyrite blebs at 207.7 and 209.5. Bedding to core 86° at 210.0.
211.22	END OF HOLE

HOLE DDH 90-S-05

Interval (m)	Description
0.00-2.74	CASING
2.74-6.31	SILTSTONE. Moderate chlorite alteration. Bedding to core 65° at 3.0.
6.31-6.71	TOURMALINITE. Broken core.
6.71-8.60	QUARTZ VEIN. Contains tourmalinite fragments, minor chlorite and talc masses.
8.60-9.78	QUARTZITE. Intense tourmaline alteration.
9.78-12.62	QUARTZ VEIN. 10% tourmaline, chlorite fragments.
12.62-14.26	QUARTZITE. Intense tourmaline alteration. Chlorite and garnet to 10%.
14.26-15.50	Quartz, Chlorite, Garnet zone. Pyrite blebs to 2%. 14.26-14.42 near massive garnet.
15.50-16.15	Intensely weathered zone. Manganese staining. Minor galena and sphalerite.
16.15-16.70	Talc, chlorite zone. Containing 10% galena with up to 3% sphalerite.
16.70-16.93	Tourmalinite
16.93-17.32	Chloritic zone. Highly weathered.
17.32-23.00	QUARTZITE. Weak to moderate tourmaline alteration. 1cm galena/sphalerite band at 18.04.
23.00-29.96	Intense TOURMALINE alteration zone. Chloritically altered bands. 26.8-27.3 quartz vein with tourmaline fragments.
29.96-34.84	SILTSTONE. Weak tourmaline alteration at top of section. Weak chlorite alteration. Fault gouge 31.32-31.77. Bedding to core 90° at 33.0.
34.84-43.82	SILTSTONE and QUARTZITIC SILTSTONE. Biotite on cleavage planes at top of section. Quartzite bed 40.84-41.12. 1-2% disseminated pyrite 42.0-43.0.

DDH 90-S-05 Continued

43.82-45.00	QUARTZITE. Massive, minor garnet. 2cm chloritic band with 3% galena. Trace galena at 44.76.
45.00-52.10	SILTSTONE. Quartzite and quartzitic beds. Highly weathered zones 48.0-49.1 and 49.6-50.3.
52.10-58.73	QUARTZITE. Local garnets. Minor chlorite, pyrite alteration.
58.73-67.14	SILTSTONE. Quartzite interbeds. Local garnets. Bedding to core 85° at 60.0, 82° at 64.9. Pyrite at 61.0, and 62.5-63.5.
67.14-68.86	LAMPROPHYRE. Chilled top contact at 89° to core axis. Quartz veins.
68.86-80.17	Interbedded SILTSTONE and QUARTZITE . Weak chlorite alteration in siltstone. Quartzite with local garnets. Bedding to core 82° at 73.0, 86° at 70.5.
80.17-80.72	QUARTZ VEIN. Bottom contact 39° to core axis.
80.72-94.93	QUARTZITE. Siltstone interbeds. Local garnets. Weak to moderate chlorite alteration of siltstone. Fault gouge 88.48-88.64. Bedding to core 89° at 83.0, 81° at 92.0.
94.93-95.40	QUARTZ VEIN. Chlorite inclusions.
95.40	END OF HOLE

HOLE DDH 90-S-06

Interval (m)	Description
0.00-2.74	CASING
2.74-3.10	QUARTZITIC SILTSTONE
3.10-4.94	QUARTZITE. Local garnets. Bedding to core 81° at 4.0.
4.94-7.48	SILTSTONE. Moderate chlorite alteration. Bedding to core 65° at 6.0.
7.48-8.53	QUARTZITIC SILTSTONE. Abrupt top contact at 59° to core axis.
8.53-9.96	SILTSTONE. Weak chlorite alteration.
9.96-10.98	QUARTZITE. Local garnets.
10.98-12.40	SILTSTONE. Moderate chlorite alteration.
12.40-13.00	QUARTZITE.
13.00-19.95	FAULT ZONE. Broken siltstone, quartzite, quartz wacke. Clay gouge.
19.95-22.48	SILTSTONE. Chloritic. quartzitic wacke at base. Bedding to core 74° at 21.0.
22.48-28.67	QUARTZITE. 22.55-22.70 30% Garnet and chlorite. 27.0 2cm quartz chlorite veinlet with galena.
28.67-29.60	SILTSTONE. Banded. Bedding to core 75° at 29.5.
29.60-30.40	QUARTZITE.
30.40-34.78	SILTSTONE. Weak to strong weathering. Local chlorite. Bedding to core 75° at 32.0.
34.78-43.10	QUARTZITE and QUARTZITIC SILTSTONE. Local chlorite. Trace pyrite a 39.0. Mud chips in quartzite at bottom of section. Bedding to core 86° at 39.0, 80° at 42.0.
43.10-48.54	QUARTZ VEIN. Local chlorite. Fault zone 43.71-44.02.
48.54-49.03	TOURMALINITE.

DDH 90-S-06 Continued

49.03-57.91	QUARTZITE and SILTSTONE. Moderate to intense tourmaline alteration. 53.87-54.34 Quartz vein, top contact 13° to core axis, bottom axis 17° to core axis. Bedding to core 88° at 51.5.
57.91	END OF HOLE

HOLE DDH 90-S-07

Interval (m)	Description
0.00-3.05	CASING
3.05-3.90	QUARTZITE. Garnetiferous. Bedding to core 66° at 3.9.
3.90-7.60	SILTSTONE. Chloritic and quartzitic beds.
7.60-10.80	QUARTZITIC WACKE. Quartzite beds. Garnets at 9.0.
10.80-16.20	Broken Zone. Siltstone and quartzite fragments. Some chloritic siltstone.
16.20-18.80	FAULT. Clay gouge.
18.80-21.63	QUARTZITIC WACKE. Chlorite and garnet at bottom of section. Bedding to core 81° at 21.0.
21.63-43.70	Interbedded QUARTZITE and SILTSTONE. Quartzitic siltstone. Quartzite locally garnetiferous. Moderate to strong chlorite alteration of siltstone. Manganese staining at 31.30. Fault gouge at 38.9. Weak tourmaline alteration at bottom of section. Bedding to core 81° at 24.5, 85° at 36.0.
43.70-70.66	TOURMALINITE. Quartz veins with tourmaline fragments, chlorite inclusions at 50.23-51.63, 61.65-61.85. Quartz vein with chlorite inclusions, minor galena at 66.82-67.15.
70.66-73.04	QUARTZITE. Weak tourmaline alteration, rare mud chips.
73.04-73.35	SILTSTONE. Weak chlorite alteration, strong manganese staining on fractures. 15% blebs of galena.
73.35-109.61	SILTSTONE. Mild tourmaline and chlorite alteration at top of section. Minor quartzite beds. Broken zone, mildly weathered. Disseminated pyrite 86.0 to 109.6. Quartz vein 100.1-100.4 with minor pyrite and sphalerite. Bedding to core 86° at 75.0, 75° at 77.3, 60° at 81.0, 89° at 82.5.
109.61-111.28	LAMPROPHYRE. Chilled lower margin.

DDH 90-S-07 Continued

111.28-121.98	SILTSTONE. A few quartzite beds. Bedding to core 81° at 113.7, 80° at 117.4, 86° at 121.0.
121.98-129.53	QUARTZITIC WACKE and QUARTZITE. Quartz/chlorite/garnet band at 125.45. Small scale slump features at 127. Bedding to core 89° at 126.0, 90° at 129.0.
129.53	END OF HOLE.

HOLE DDH 90-S-08

Interval (m)	Description
0.00-3.66	CASING
3.66-8.85	SILTSTONE. Chloritic with quartzitic intervals. Badly broken.. Bedding to core 57° at 5.0, 43° at 8.5.
8.85-18.52	QUARTZITE. Chloritic siltstone interbeds. Locally garnetiferous. Broken zones. Bedding to core 67° at 11.5, 71° at 13.0.
18.52-39.23	SILTSTONE. Quartzitic intervals and quartzite interbeds. Slump features at top of section. Weak to moderate chlorite alteration. Broken zone at 25.30-28.23. Bedding to core 59 ° at 23.0, 80 ° at 24.0, 59° at 25.0, 65° at 29.0, 45° at 34.0, 76° at 37.0.
39.23-47.20	QUARTZITE. Quartzitic wacke and minor chloritic siltstone interbeds. Bedding to core 60° at 42.0.
47.20-61.60	Interbedded QUARTZITE and SILTSTONE. Chlorite alteration of siltstone intervals. Broken zone with chlorite schist and quartz. Bedding to core 61° at 50.8, 60 ° at 57.0, 56° at 57.5.
61.60-69.30	SILTSTONE. Quartzitic. Broken zones. Weak tourmaline alteration. Bedding to core 64° at 68.0.
69.30-72.53	QUARTZITE. Broken zone at top. Weak tourmaline alteration.
72.53-73.70	QUARTZ VEIN. White sugary. Tourmaline zone 73.16-73.43.
73.70-75.03	QUARTZITE. Tourmalinized.
75.03-77.66	QUARTZ VEIN. Minor chlorite. Fault breccia at 76.0-76.3.
77.66-90.17	QUARTZITE. Weak tourmaline alteration. Badly broken with poor recovery below 83.0. Pyrite in small quartz vein at 83.0.
90.17-90.59	LAMPROPHYRE

DDH 90-S-08 Continued

90.59-90.83	QUARTZITE. Weak tourmaline alteration. Badly broken.
90.83	END OF HOLE (Lost Hole)