Tectonic Analysis of Fracture Density

to accompany

Geological Survey Report by Western Geological Services Ltd.

Geochemical Survey Report by D. A. Chapman & Associates Ltd.

Photogeological Report

by

D. A. Chapman & Associates Ltd.

on the

Pageant Mines Limited

Pink, Purple, Jack Supplement,
Jack X Supplement, Yellow
Claim Groups

Latitude 49°45'30"N; Longitude 120°39' W

Map #1 - Topographic Map 1" = 2000' ——— Front
Map #2 - Tectonic Anomaly Map ——— Rear
Map #3 - Geological Map ——— Rear Pocket
Map #4 - Plan of Drill Holes & Geochemical Faults ——— " "
Map #5 - Schematic Map of Geology 1" = 2 miles ——— Rear

D.A. Chapman & Associates Limited
#2 • 515 GRANVILLE STREET • VANCOUVER 2, B.C.

April 24th, 1970

Dept. of Mines & Petroleum Resources,
Parliament Buildings,
Victoria, B. C.

ATTENTION: Mr. R. H. McCrimmon,
Chief Gold Commissioner

Dear Sir,

RE: Photogeological Survey & Follow-up

To enlarge on past work programs and attempt to upgrade the results of the work done to date, aerial exploration methods were used to obtain as complete as possible a concept of the geological and geophysical environment of the entire claims area.

The structural fabric of the rocks underlying the claim area was studied in a tectonic survey using computerized analysis of unit area fracture density. The data used for the computer input is an empiric form of a photogeological interpretation of the tension fracture/joint systems observed in aerial photographs. The rate of visible isostatic traces of the tension joints is analogous to pressure changes in vertical rock columns resulting from fault ruptures or collapsed structures.

The significance of the deformation stress peaks or anomalies is pertinent to ore deposits. These tectonic structural targets are zones of increased fracturing or deformation which offer potential traps for mineral localization.

To follow up this photogeological survey a ground reconnaissance report and geological map for the entire claim area was compiled by Western Geological Services.

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Tectonic anomalies and structural trends were investigated by Geo-X Surveys Ltd. in detail with a high-sensitivity airborne magnetometer survey comprising 241 line miles on 62 flight paths.

Coinciding factors from each survey were used to select the target area for a geochemical survey to test for possible significant mineralization within the structural target.

The above program was recommended and carried out to comply with the regulations regarding photogeological surveys by the Minister of Mines to enable the company to file for work assessment credits for each phase of the property evaluation work program.

The geological reconnaissance report is included with the photogeological report and attached are letters of correspondence re Geo-X Surveys Ltd. and cost analysis of photogeological survey.

Respectfully submitted,
D. A. Chapman & Associates Ltd.

D. A. Chapman

DAC/dm
Enclosures

D.A. Chapman & Associates Limited
#2 • 515 GRANVILLE STREET • VANCOUVER 2, B.C.

April 23rd, 1970

Pageant Mines Ltd.,
#201 - 1836 West 5th Avenue,
Vancouver 9, B. C.

ATTENTION: Mr. D. W. Pringle, P. Eng.

Dear Sir,

RE: Cost Analysis for Tectonic Aerial Survey of Pageant Mines Claim Groups - Pink, Purple, Jack Supplement, Jack X Supplement, and Yellow, Dillard Creek Area, Princeton M. D., B. C.

Service Costs - D. A. Chapman & Associates Limited

1.	Fracture/joint interpretation and annotation of aerial photographs... .....45 Hrs @ $20.00	$ 900.00
2.	Counting procedure and compilation of Empiric Data Input for program analysis.....20 hrs @ $20.00	400.00
3.	Computer data correlation and report including organization expense (liasson, disbursements, etc.)	450.00
4.	Computer Programme charges	500.00
		$ 2,250.00

Received with thanks,

D. A. Chapman & Associates Ltd.

D. A. Chapman

DAC/dm

D.A. Chapman & Associates Limited
#2 • 515 GRANVILLE STREET • VANCOUVER 2, B.C.

April 23rd, 1970

Pageant Mines Ltd.,
#201 - 1836 West 5th Avenue,
Vancouver 9, B. C.

Dear Sirs,

The geochemical survey was carried out during the month of July 1969 on the following claims: Edie 13-20, Edie 25-35, Edie 61-72, and John C 1-4.

The location line was positioned to orient along the strike of a photogeological structure indicated by tectonic analysis of fracture/joint systems observed in aerophotos.

This structural target was coincident with an airborne magnetometer anomaly and the geochem traverses were to determine if significant economic mineralization occurred within the target zone defined.

The baseline (N 70 W) was chained and cut with offset lines every 800 feet. These lines were flagged and soils collected every 200 feet.

The sampled horizon was the "B" zone below the podsol at depths of 3 to 4 inches. Mr. G. Lloyd was in charge and his helpers were S. Wade and D. Falconer. The soils were collected in standard moisture emitting bags using a small spade that was wiped clean after each soil collection. The soil type and description were booked by G. Lloyd. Field notes accompany this report.

A base map of the survey grid was compiled at a scale of 400' = 1" showing the stations and Geochem values ppm.

GEOCHEM TREATMENT - Crest Laboratories (B.C.)

Samples were dried and screened to -35 mesh and .5 gram of the sample was used. A Nitric Perchloric

cont.....

digestion and atomic absorption analytical method was used for Cu ppm determinations.

Respectfully submitted,
D. A. Chapman & Associates Ltd.

D. A. Chapman

DAC/dm

PAGEANT MINES LIMITED

GEOCHEM SURVEY BY D. A. CHAPMAN & ASSOCIATES LTD.

JULY 1969

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
0+00N B.L.	B	Good		Med Brown, Med Loose, Root systems moist
0+00N 2+00E	B	Good		Red Brown, Med Loose, Root systems moist
" 4+00E	B	Good		Med Brown, Med Loose,Roots moist
" 6+00E	B	Fair		Med Brown, Med Loose, Roots moist (edge of road)
" 8+00E	B	Fair		Med Brown, Med Loose, Roots moist
" 10+00E	B	Fair		Med Brown, Med Loose, Roots moist
" 12+00E	B	Fair		Med Brown, Med Loose, Roots moist (edge of road)
" 14+00E	B	Good		Dark Brown, Med Loose, Roots moist (Loc. Line)
" 16+00E	B	Good		Med Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
0+00N 18+00E	B	Fair		Med Brown, Med Loose, Roots moist
" 20+00E	A2	Fair		Red Brown, Partially Decomposed, Rock roots moist
" 22+00	AO	Nil		Very Dark Brown, Roots, Part decomposed, Wet
" 22+10N				Creek
" 24+00N	B	Fair		Med Brown, Med Loose, Roots moist
" 26+00N	B	Poor		Light Brown, Med Loose, Roots moist
" 28+00N	B	Poor		Light Brown, Med Loose, Roots moist
" 30+00N	B	Poor		Light Brown, Med Loose, Roots moist, Pebbles
" 32+00N	B	Poor		Light Brown, Med Loose, Roots moist, Pebbles
" 34+00N	B	Poor		Light Brown, Med Loose, Roots dry, Pebbles
" 36+00N	B	Poor		Light Brown, Med Loose, Roots moist
" 38+00N	B	Poor		Med Brown, Med Loose, Roots moist
" 40+00N	B	Poor		Light Brown, Med Loose, Roots moist
" 2+00W	B	Poor		Med Brown, Med Loose, Root systems damp
" 4+00W	B	Good		Med Brown, Med Loose, Root systems damp

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
0+00N 4+53W				Road
" 6+00W	B	Good		Light Brown, Med Loose, Roots damp
" 8+00W	B	Poor		Grey-brown, Med Loose, Roots moist
" 10+00W	B	Good		Med Brown, Med Loose, Roots damp
" 12+00W	A1	Good		Dark Brown, Compact, Humus, Ex. Moist Roots
" 14+00W	Ao	Nil		
" 16+00W	B	Good		Grey-brown, Med Loose, Roots damp
" 18+00W	B	Good		Med Brown, Med Loose, Roots damp
" 20+00W	B	Good		Med Brown, Med Loose, Roots damp
" 22+00W	B	Fair		Med Brown, Purple, Compact, Clay Moist
" 24+00W	B	Good		Med Brown, Med Loose, Roots moist
" 26+00W	B	Good		Med Brown, Med Loose, Roots moist
" 28+00W	B	Fair		Med Brown, Med Loose, Roots damp, Broken Rock
" 30+00W	B	Good		Med Brown, Med Loose, Roots moist
" 32+00W	B	Good		Red-brown, Med Loose, Roots moist
" 33+50W				
" 34+00	B	Good		Med Brown, Med Loose, Roots moist, Some Humus
" 36+00	B	Good		Med Brown, Med Loose, Roots moist
" 38+00	B	Good		Med Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
0+00N 40+00	B	Good		Med Brown, Med Loose, Roots moist, pebbles
8+00N 40+00W	A2	Poor		Dark Grey, Pebbles, Organic, Loose, Wet
" 38+00W	A2	Poor		Black, Humus, Some Sand, Wet, Loose, Near Creek
" 35+05W				Creek
" 36+00W	A2	Poor		Grey-Brown, Humus, Some sand, Organic, Moist, Loose, near creek
" 34+00W	B	Poor		Grey-Brown, Loose, Some Organic, Roots moist
" 32+00W	B	Poor		Med Brown, Med Loose, Roots moist
" 30+00W	A2	Poor		Brown-Black, Med Loose, Roots moist
" 28+50				Creek
" 28+00	A2	Poor		As A2 Above
" 27+60				Creek
" 26+00	B	Fair		Med Brown, Med Loose, Roots moist
" 25+75				Creek
" 24+00	B	Good		Med Brown, Med Loose, Roots moist
" 22+00W	B	Good		Med Brown, Med Loose, Roots moist
" 20+00W	B	Good		Med Brown, Med Loose, Roots moist
" 18+00W	Ao	Nil		
" 16+00W	B	Good		Med Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
8+00N 15+20W				Creek
" 14+00W	B	Good		Med Brown, Med Loose, Some humus, Root systems moist
" 12+00W	B	Good		Med Brown, Med Loose, Roots moist
" 10+00	B	Good		Med Brown, Med Loose, Roots moist
" 8+00	B	Good		Light Brown, Med Loose, Roots moist
" 6+00	B	Good		Red-brown, Med Loose, Roots moist
" 4+00	B	Good		Med Brown, Med Loose, Roots moist
" 2+00	B	Good		Med Brown, Med Loose, Roots moist
B. L. 18+00N				Upslope, Moderate Timber
" 20+00N				Upslope, Moderate Timber
" 22+00N				Upslope, Moderate Timber, Picket
" 24+00N				Upslope, Moderate Timber, Picket
" 26+00N				Upslope, Moderate Timber, Chainage on Ground
" 28+00N				Upslope, Small conifers, Thick
" 30+00N				Sideslope, Small conifers, Thick
" 32+00N				Sideslope, Small conifers, Thick
" 34+00N				Sideslope, Small conifers, Thick
" 36+00N				Downslope, Small conifers, Thick
" 36+60N				Boggy Draw
" 37+50N				Boggy Draw
" 38+00N				Upslope, Small conifers, Thick

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
B. L. 40+00N				Upslope, Small conifers, Thick
" 42+00N				Sideslope, Small conifers, Thick
" 44+00N				Small Draw, Moderate Timber, Picket
" 46+00N				Sideslope, Moderate Timber, Picket
" 48+00N				Small Draw, Small conifers, Picket
" 50+00N				Sideslope, Small conifers, Picket
" 52+00N				
" 54+00N				
" 55+00N				
B. L. 8+00N	B	Good		Med Brown, MedLoose, Roots moist
8+00N 2+00E	B	Good		Med Brown, Med Loose, Roots moist
" 4+00E	B	Good		Light Brown, Spots of Grey, Roots med loose, Moist
" 6+00E	B	Good		Med Brown, Med Loose, Roots moist
" 6+90E				Road
" 8+00E	B	Good		Dark Brown, Med Loose, Roots moist
" 9+60E				Creek
" 10+00E	A2	Good		Very dark brown, Humus, Roots damp, Loose
" 10+35E				Creek
" 11+90E				Creek
" 12+00E	A2	Good		Very Dark Brown, Humus, Roots wet, Loose

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
8+00N 12+55E				Creek
" 14+00E	B	Good		Light Brown, Med Loose, Root systems, Pebbles, Moist
" 14+50E				Loc. Line
" 16+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 18+00E	Drift			
" 20+00E	B	Good		Light Brown, Med Loose, Roots moist
" 22+00E	B	Good		Light Brown, Med Loose, Roots moist
" 24+00E	B	Good		Light Brown, Med Loose, Roots moist
" 26+00E	B	Good		Light Brown, Med Loose, Roots moist
" 28+00E	B	Good		Light Brown, Med Loose, Roots moist
" 30+00E	B	Good		Med Brown, Med Loose, Roots moist
" 32+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 34+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 36+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 38+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 40+00E	B	Fair		Light Brown, Med Loose, Roots moist
16+00N 40+00E	B	Good		Light Brown, Med Loose, Roots moist
" 38+00E	B	Good		Light Brown, Med Loose, Roots moist
" 36+00E	B	Good		Light Brown, Med Loose, Roots moist
" 34+00E	B	Good		Light Brown, Med Loose, Roots moist
" 32+00E	B	Good		Med Brown, Med Loose, Roots moist
" 30+00E	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
16+00N 28+00E	B	Good		Med Brown, Med Loose, Roots moist
" 26+00E	B	Good		Light Brown, Med Loose, Roots moist
" 24+00E	B	Good		Light Brown, Med Loose, Roots moist
" 22+00E	B	Good		Light Brown, Med Loose, Roots moist
" 20+00E	B	Good		Light Brown, Med Loose, Roots moist
" 18+20E				Deep Draw
" 18+00E	A2			Black, Wet, Humus, Med Loose
" 16+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 15+10E				Road
" 14+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 12+00E	A2			Black, Wet
" 10+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 8+00E	B	Fair		Light Brown, Med Loose, Roots moist
" 6+00E	B	Good		Light Brown, Med Loose, Roots moist
" 4+00E	B	Good		Light Brown, Med Loose, Roots moist
" 2+00E	B	Good		Light Brown, Med Loose, Roots moist
B. L. 16+00N	B	Fair		Light Brown, Med Loose, Roots moist
16+00N 2+00W	B	Good		Med Brown, Med Loose, Roots moist
" 2+65W				Road
" 4+00W	B	Good		Light Brown, Med Loose, Roots moist
" 6+00W	B	Good		Light Brown, Med Loose, Roots moist
" 8+00W	B	Good		Dark Brown, Med Loose, Roots damp

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
16+00N 9+00W				Road on Sharp Bend 20' N
" 9+90W				Creek
" 10+00W	B	Good		Dark Brown, Some sand, Roots, Damp, Loose
" 12+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 14+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 16+00W	B	Good		Light Brown, Med Loose, Roots moist
" 18+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 20+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 22+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 24+00W	B	Fair		Grey Brown, Compact, Roots moist
" 26+00W	B	Fair		Grey Brown, Med Loose, Roots moist
" 28+00W	B	Good		Med Brown, Med Loose, Roots moist
" 30+00W	B	Good		Med Brown, Med Loose, Roots moist
" 31+45W				Small Creek, Steep Draw
" 32+00W	B	Fair		Med Brown, Compact, Roots moist
" 32+88W				Small Creek
" 34+00W	B	Poor		Light Brown, Med Loose, Roots Pebbles, Moist
" 36+00W	B	Fair		Light Brown, Med Loose, Roots, Pebbles, Moist
" 38+00W	B	Poor		Light Brown, Med Loose, Roots, Pebbles, Dry

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
16+00N 40+00W	B	Fair		Light Brown, Med Loose, Roots, Pebbles, Moist
24+00N 40+00W	B	Good		Light Brown, Med Loose, Roots moist
" 38+00W	B	Good		Light Brown, Med Loose, Roots moist
" 36+00W	B	Fair		Light Brown, Med Loose, Root systems moist, pebbles
" 34+00W	B	Good		Light Brown, Med Loose, Roots moist
" 32+00W	B	Good		Light Brown, Med Loose, Roots moist
" 30+20W				Dry Creek, Deep Draw
" 30+00W	B	Good		Med Brown, Med Loose, Roots damp
" 28+00W	B	Good		Light Brown, Med Loose, Roots damp
" 26+00W	B	Good		Grey-Brown, Med Loose, Roots damp
" 24+00W	B	Good		Light Brown, Med Loose, Roots damp
" 23+00W				Loc. Line N - S
" 22+00W	B	Good		Light Brown, Med Loose, Roots damp
" 20+00W	B	Good		Light Brown, Med Loose, Roots damp
" 18+00W	B	Good		Light Brown, Med Loose, Roots damp
" 16+00W	B	Good		Med Brown, Med Loose, Roots damp
" 15+15W				Road
" 14+00W	B	Good		Grey-Brown, Med Loose, Roots moist
" 12+00W	B	Good		Med Brown, Med Loose, Roots moist
" 10+25W				Creek
" 10+00W	B	Poor		Med Brown, Med Loose, Roots damp

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
24+00N 9+80W				Trail
" 8+00W	B	Fair		Grey-Brown, Med Loose, Roots moist
" 6+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 4+75W				Draw
" 4+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 2+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 1+75W				Loc. Line
B. L. 24+00N	B	Good		Light Brown, Med Loose, Roots moist
24+00N 2+00E	B	Good		Light Brown, Compact, Roots moist
" 4+00E	B	Good		Light Brown, Med Loose, Roots moist
" 6+00E	B	Good		Light Brown, Med Loose, Roots moist
" 8+00E	B	Good		Light Brown, Med Loose, Roots moist
" 10+00E	B	Good		Light to Grey-Brown, Med Loose, Root systems moist
" 12+00E	B	Good		Light Brown, Med Loose, Roots, Broken Rock, Moist
" 14+00E	B	Good		Light Brown, Med Loose, Roots, No Rock, Moist
" 16+00E	B	Good		Light Brown, Med Loose, Roots moist
" 18+00E	B	Good		Light Brown, Med Loose, Roots moist
" 20+00E	B	Good		Light Brown, Med Loose, Roots damp, Some sand
" 21+85E				Dry Creek, Draw

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
24+00N 22+00E	B	Good		Med Brown, Med Loose, Roots damp
" 24+00E	B	Good		Light Brown, Med Loose, Roots, Pebbles, moist
" 25+10E				Loc. Line
" 26+00E	B	Good		Light Brown, Med Loose, Roots moist
" 28+00E	B	Good		Light Brown, Med Loose, Roots moist
" 30+00E	B	Good		Med Brown, Med Loose, Roots moist
" 32+00E	B	Good		Med Brown, Med Loose, Roots moist
" 34+00E	A2			Brown-Black, Loose, Humus, Clay, Wet
" 36+00E	B	Good		Light Brown, Med Loose, Roots moist
" 38+00E	B	Good		Light Brown, Med Loose, Roots moist
" 40+00E	B	Good		Light Brown, Med Loose, Roots moist
32+00N 40+00E	B	Good		Light Brown, Med Loose, Root Systems moist
" 38+00E	B	Good		Light Brown, Med Loose, Roots moist
" 36+00E	B	Good		Light Brown, Med Loose, Roots moist
" 34+00E	B	Good		Light Brown, Med Loose, Roots moist
" 32+00E	B	Good		Light Brown, Med Loose, Roots moist
" 30+00E	B	Good		Light Brown, Med Loose, Roots damp
" 28+32				Dry Creek, Draw
" 28+00E	B	Good		Light Brown, Med Loose, Roots damp
" 26+00E	B	Good		Light Brown, Med Loose, Roots damp

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
32+00N 24+00E	B	Good		Light Brown, Med Loose, Roots damp
" 22+41E				Loc. Line
" 22+00E	B	Good		Light Brown, Med Loose, Roots damp
" 20+00E	B	Good		Light Brown, Med Loose, Roots moist
" 18+00E	B	Good		Light Brown, Med Loose, Roots moist
" 16+00E	B	Good		Light Brown, Med Loose, Roots moist
" 14+00E	B	Good		Light Brown, Med Loose, Roots moist
" 12+00E	B	Good		Light Brown, Med Loose, Pebbles, Root systems moist
" 10+00E	B	Good		Light Brown, Med Loose, Roots moist
" 8+00E	B	Good		Light Brown, Med Loose, Roots moist
" 6+00E	B	Good		Light Brown, Med Loose, No Pebbles, Root systems moist
" 4+00E	B	Good		Light Brown, Med Loose, Roots moist
" 2+00E	B	Good		Med Brown, Med Loose, Roots, Clay, Damp
" 18+00W	B	Good		Light Brown, Med Loose, Roots Dry
" 20+00W	B	Good		Light Brown, Med Loose, Roots moist
" 22+00W	B	Good		Light Brown, Med Loose, Roots moist
" 23+10W				Tral Road
" 24+00W	B	Good		Light Brown, Med Loose, Roots moist
" 25+81W				Loc. Line
" 26+00W	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
32+00N 28+00W	B	Good		Light Brown, Med Loose, Roots moist
" 30+00W	B	Good		Light Brown, Med Loose, Roots moist
" 32+00W	B	Good		Light Brown, Med Loose, Roots moist
" 32+13W				Road
" 34+00W	B	Good		Light Brown, Med Loose, Roots moist
" 36+00W	B	Good		Dark Brown, Med Loose, Some Humus, Damp
" 38+00W	B	Good		Light Brown, Med Loose, Roots moist
" 39+34W				Picket Line N 70 W
" 40+00W				
40+00N 40+00W	B	Good		Light Brown, Med Loose, Roots moist
" 38+00W	B	Good		Grey-Brown, Compact, Roots moist
" 36+00W	B	Good		Light Brown, Med Loose, Roots moist
" 34+00W	B	Good		Light Brown, Med Loose, Roots moist
" 32+00W	B	Good		Light Brown, Med Loose, Roots moist
" 30+00W	B	Good		Med Brown, Med Loose, Roots moist
" 28+00W	B	Good		Light Brown, Med Loose, Pebbles, Root systems moist
" 27+81W				Loc. Line
" 26+00W	B	Good		Med Brown, Med Loose, Roots moist
" 24+00W	B	Good		Light Brown, Med Loose, Roots moist
" 22+00W	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
40+00N 20+00W	B	Good		Light Brown, Med Loose, Roots moist
" 18+00W	B	Good		Light Brown, Med Loose, Roots moist
" 17+33W				Road
" 16+00W	B	Good		Light Brown, Med Loose, Roots moist
" 14+00W	B	Good		Med Brown, Med Loose, Pebbles, Root systems moist
" 12+00W	B	Good		Med Brown, Med Loose, Pebbles Root systems moist
" 10+00W	B	Good		Light Brown, Med Loose, Roots moist
" 8+00W	B	Good		Light Brown, Med Loose, Roots moist
" 6+00W	B	Good		Light Brown, Med Loose, Roots damp
" 4+00W	B	Good		Light Brown, Med Loose, Roots moist
" 2+00W	B	Good		Light Brown, Med Loose, Roots moist
" 1+96W				Loc. Line
B.L. 40+00N	B	Good		Light Brown, Med Loose, Root systems damp, Pebbles
40+00N 2+00E	B	Good		Light Brown, Loose, Roots moist
" 4+00E	B	Good		Light Brown, Loose, Roots moist
" 6+00E	B	Good		Light Brown, Loose, Roots moist
" 8+00E	B	Good		Light Brown, Loose, Roots moist
" 10+00E	B	Good		Light Brown, Loose, Roots moist
" 12+00E	B	Good		Light Brown, Loose, Roots moist
" 14+00E	B	Good		Light Brown, Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
40+00N 16+00E	B	Good		Light Brown, Loose, Roots moist
" 18+00E	B	Good		Light Brown, Loose, Roots moist
" 20+00E	B	Good		Light Brown, Loose, Roots moist
" 22+00E	B	Good		Light Brown, Loose, Roots moist
" 22+44E				Loc. Line
" 24+00E	B	Good		Light Brown, Med Loose, Roots moist
" 26+00E	B	Fair		Med Brown, Med Loose, Roots, Some Humus, Damp
" 28+00E	B	Good		Light Brown, Med Loose, Roots moist
" 30+00E	B	Good		Med Brown, Roots, Med Loose, Damp
" 32+00E	B	Good		Light Brown, Med Loose, Roots moist
" 34+00E	B	Good		Light Brown, Med Loose, Roots moist
" 36+00E	B	Good		Light Brown, Med Loose, Roots moist
" 38+00E	B	Good		Light Brown, Med Loose, Roots moist
" 40+00E	B	Good		Grey-Brown, Compact, Roots moist
48+00N 40+00E	B	Poor		Light Brown, Compact, Roots moist
" 38+00E	B	Poor		Light Brown, Compact, Roots moist
" 36+00E	B	Good		Light Brown, Med Loose, Roots moist
" 34+00E	B	Good		Light Brown, Compact, Roots moist
" 32+00E	B	Fair		Light Brown, Compact, Roots moist
" 30+00E	B	Good		Light Brown, Med Loose, Roots moist
" 28+00E	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
48+00N 26+00E	B	Good		Light Brown, Med Loose, Roots moist
" 24+00E	B	Good		Light Brown, Med Loose, Roots moist
" 22+00E	B	Good		Light Brown, Med Loose, Roots damp
" 20+00E	B	Good		Light Brown, Med Loose, Roots moist
" 18+00E	B	Good		Light Brown, Med Loose, Roots moist
" 16+00E	B	Good		Light Brown, Med Loose, Roots moist
" 14+00E	B	Good		Light Brown, Med Loose, Roots moist
" 12+00E	B	Good		Light Brown, Med Loose, Roots moist
" 10+00E	B	Good		Light Brown, Med Loose, Roots moist
" 8+00E	B	Good		Light Brown, Med Loose, Roots moist
" 6+00E	B	Good		Med Brown, Med Loose, Roots moist
" 4+00E	B	Good		Light Brown, Med Loose, Roots moist
" 2+00E	B	Good		Light Brown, Med Loose, Roots moist
B.L. 48+00N	B	Good		Light Brown, Med Loose, Roots moist
48+00N 2+00W	B	Good		Light Brown, Med Loose, Roots moist
" 2+21W				Loc. Line
" 4+00W				
" 6+00W	B	Good		Med Brown, Med Loose, Roots moist
" 8+00W	B	Good		Med Brown, Med Loose, Roots moist
" 10+00W	B	Poor		Light Brown, Med Loose, Roots moist, Sand, Pebbles
" 12+00W	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
48+00N 13+38W				Road
" 14+00W	B	Good		Med Brown, Med Loose, Roots moist
" 16+00W	B	Good		Light Brown, Med Loose, Roots moist
" 18+00W	B	Good		Light Brown, Med Loose, Roots moist
" 20+00W	B	Fair		Light Brown, Mix Grey, Sand, Med Loose, Roots moist
" 22+00W	B	Good		Red-Brown, Med Loose, Roots moist
" 24+00W	B	Good		Light Brown, Med Loose, Roots moist
" 26+00W	B	Good		Light Brown, Med Loose, Roots moist
" 27+72				Road
" 28+00W	B	Good		Light Brown, Med Loose, Roots moist
" 30+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 32+00W	B	Good		Brown-Black, Med Loose, Roots, Humus, Damp
" 34+00W	B	Good		Red-Brown, Med Loose, Roots moist
" 36+00W	B	Good		Med Brown, Med Loose, Roots moist
" 38+00W	B	Good		Light Brown, Med Loose, Roots moist
" 39+33W				
" 40+00W	B	Good		Light Brown, Med Loose, Roots moist
55+00N 40+00W	B	Good		Light Brown, Med Loose, Roots moist
" 39+25W				Road
" 38+00W	B	Good		Light Brown, Med Loose, Roots moist

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
55+00N 36+00W	B	Good		Light Brown, Med Loose, Roots moist
" 34+00W				Trench
" 32+00W	B	Good		Light Brown, Med Loose, Roots moist
" 30+00W	B	Good		Grey-Brown, Med Loose, Roots moist
" 28+00W	B	Good		Light Brown, Med Loose, Roots moist
" 26+00W	B	Good		Light Brown, Med Loose, Roots moist
" 24+00W	B	Good		Med Brown, Med Loose, Roots moist
" 22+00W	B	Good		Light Brown, Med Loose, Roots moist
" 21+20W				Road
" 20+00W	B	Fair		Light Brown, Med Loose, Roots moist
" 18+00W	B	Good		Light Brown, Med Loose, Roots moist
" 16+00W	B	Good		Med Brown, Med Loose, Roots moist
" 14+00W	B	Good		Light Brown, Med Loose, Roots moist
" 12+00W	B	Good		Light Brown, Med Loose, Roots moist
" 10+00W	B	Good		Light Brown, Med Loose, Roots moist
" 8+00W	B	Good		Light Brown, Med Loose, Roots moist
" 6+00W	B	Good		Light Brown, Med Loose, Roots moist
" 4+00W	B	Good		Light Brown, Med Loose, Roots moist
" 2+00W				
B. L. 55+00N	B	Good		Light Brown, Med Loose, Roots moist
55+00N 2+00E				
" 4+00E	B	Fair		Grey, Compact, Root systems moist
" 6+00E				

STATION	SOIL LAYER	SOIL HORIZON DEV.	Cu ppm	SOIL REMARKS
55+00N 8+00E	B	Fair		Brown-Black, Sand - Humus, Roots Damp, Edge of Swamp
" 10+00E	B	Good		Light Brown, Med Loose, Roots moist
" 12+00E	B	Good		Light Brown, Med Loose, Roots moist
" 14+00E	B	Good		Light Brown, Med Loose, Roots moist
" 16+00E	B	Good		Light Brown, Med Loose, Roots moist
" 18+00E	B	Good		Light Brown, Med Loose, Roots moist
" 20+00E	B	Good		Light Brown, Med Loose, Roots moist
" 22+00E	B	Good		Light Brown, Med Loose, Roots moist
" 24+00E	B	Good		Light Brown, Med Loose, Roots moist
" 26+00E	B	Good		Light Brown, Med Loose, Roots moist
" 28+00E	B	Good		Light Brown, Med Loose, Roots moist
" 30 +00E	B	Good		Light Brown, Med Loose, Roots moist
" 32+00E	B	Good		Light Brown, Med Loose, Roots moist
" 34+00E	B	Good		Light Brown, Med Loose, Roots moist
" 36+00E	B	Good		Med Brown, Med Loose, Roots moist
" 38+00E	B	Good		Grey-Brown, Med Loose, Roots moist
" 40+00E	B	Good		Light Brown, Med Loose, Roots moist

Western Geological Services Ltd.

Geological Reconnaissance Report

to accompany

Photogeological and Geochemical Report

by

D. A. Chapman & Associates Ltd.

on the

Pageant Mines Limited

Pink, Purple, Jack Supplement,
Jack X Supplement, Yellow
Claim Groups

Latitude 49°45'30" N Longitude 120°39' W

To: Primer Group Minerals Ltd.

From: Western Geological Services Ltd.

Re: Geological Mapping Programme by T.F.Lee, Princeton Area

Introduction:

The following brief report is purely a description of results of geological mapping carried out by T.F.Lee of Western Geological Services Ltd. on the Primer Minerals/Pageant properties straddling Dillard Creek just east of Missezula Lake, Princeton, B.C. Mapping commenced on Thursday, 24th April and continued, with two breaks, until Saturday 7th June, 1969.

Method of Mapping the Area:

The mapping was intended to delimit areas of potential mineralization and was not intended to be detailed. The method adopted was to map geology on all roads in the area, along traverses cutting across tectonic anomalies, and along traverses around mineralized areas or areas considered important on geological grounds. The accompanying 1,000 scale map records the results of the mapping. (For more detail see the 200 scale work sheets).

Rock Types:

Andesite Lavas.

In areas where there is no till cover the country rock has been found to be predominantly of various types of andesite. In the early part of the survey an effort was made to distinguish between flows by recognizing the following lava "types": andesite, hornblende andesite, plagioclase andesite, hornblende-plagioclase andesite. The mineral prefix describes the predominant phenocrysts in the porphyritic types of lavas. However, the distribution of the flows was found to be too obscure to carry out this distinction. The names have been retained, however, as there may be some relationship between rock type and mineralization. A small proportion of the lavas is almost certainly basaltic in composition but because of the difficulty to distinguish between basalt and "basic" andesite the basalts have been in general described as andesite or hornblende (augite?) andesite.

In places lineation of the phenocrysts was sufficiently well developed in prominent exposures to enable its strike to be measured. Strike varied between 320° and 340° with the average strike of 330° being the most common. This coincides with the believed regional strike of the Nicola beds. No dips have been recorded.

Large areas of the andesites appear to be unaltered. Larger areas, however, have been mildly to moderately altered resulting in the formation of epidote. In faulted areas epidotization of the rock becomes very strong. Small, local areas appear to have undergone mild chloritization. This chloritization was chiefly seen at or near the copper mineralized zones.

Diorite.

There are two types of diorite present in the area. One has dioritic texture but shows "diffused" borders between individual crystals. In most cases this is probably re-crystallized andesite. Areas of this type of diorite are small and erratically distributed south of Dillard Creek and in places grade in to andesite. In the far north of the Pageant claims north of Dillard Creek it may be the chief rock type.

The second type of diorite is a true igneous diorite. It is well crystallized and crystals are quite distinct. Ophitic texture can be seen in at least one dyke in the South Zone. The remains of what may be a small stock abuts the Summers Creek Fault on the main access road near the Company's sign board but elsewhere the diorite outcrops have suggested dyke forms up to 60 feet wide. In the South Zone, the only area where the dykes can be traced for any length, the dykes trend between E.N.E. and E.S.E. and are lightly mineralized

although elsewhere where seen they have been barren. There seems to be a concentration of dykes around and to the south-east and east of the South Zone. None have been seen north of Dillard Creek.

"Micro-syenite"

In the far north-western corner of the Pageant claims are extensive areas of rock which have been field classified as micro-syenite. This micro-syenite may be altered (metasomatized) andesite for areas of andesite and "metamorphic" diorite seem to be intimately mixed with it.

Dykes of Intermediate Composition.

Several thin dykes of intermediate composition have been seen south of Dillard Creek. These have been monzonite or syenite dykes. No porphyry dykes have been recorded. Strikes have rarely been recorded due to insufficient exposures but it is felt that their trends on the whole do not coincide with that of the diorite dykes, generally being north-west.

Till.

Much of the Primer and Pageant properties is till-covered. The thickness varies from place to place, large areas being covered by only a few feet. The most widespread and thickest cover is in the north-eastern area of Map 2 and beyond (in Pageant ground north of the north-eastern corner of the Primer property)

where the largest tectonic anomalies are recorded. Thicknesses of more than 100 feet are suggested by till benches abutting Dillard Creek on its north side.

Till also obscures the south-east extension of the South Zone and may be deep in places.

Structure.

General literature of the area describes the Nicola rocks as being broadly folded with folds striking approximately west of north. Lineation of the phenocrysts in the lavas coincides with this direction (330°) but no field evidence was found during the survey to support or refute the folding.

Faulting and jointing appeared to follow four general directions. Most pronounced as regards to frequency of readings was an approximately north-west trend followed by a weaker east-north-east trend. The other two trends, westerly and northerly, were quite weak. It should be remembered that the relative importance of these directions has been based on few-and-far-between readings in the field and may be incorrect. For example the north trend may be much more dominant than it appears.

Field evidence suggests that the North and South Zones lie on a north-west trending fault structure.

One perplexing feature is the Summers Creek fault. This very large fault can be clearly seen in the Dillard Creek gorge

east of the southern end of Missezula Lake. No sign of the fault was recorded in outcrops north of the creek. This does not mean that the fault does not continue north but it seems odd that no sign of the fault was seen in the few outcrops along its extension.

Mineralization.

Excluding a few very small, weak, isolated areas of copper mineralization only two belts of copper mineralization were recorded in the Primer-Pageant area. The most prominent belt was that lying in a north-westerly direction and containing the North and South Zones. Mineralization on this belt is concentrated on the North Zone and South Zone and does not extend between the two zones.

The North Zone of mineralization consists of a "core" of copper-iron mineralization (chiefly chalcopyrite and pyrite) surrounded by a halo of pyritized rock (1-3% pyrite) which often shows propylization, chloritization or epidotization. The areal extent is small, although drill holes suggest depth to the body. A very thin finger of copper mineralization runs south through the halo.

There is some suggestion of post-till faulting with the north-eastern part of the zone being downthrown.

Due to extensive till cover the extent of mineralization in the South Zone is not as clearly known as for the North Zone. However, there is evidence to suggest that the South Zone also consists of a "core" of copper-iron mineralization surrounded by a halo of pyritized rock. The halo is probably not as well developed as the North Zone's but the areal extent of mineralization appears to be greater. It is possible that the mineralization extends under the till cover to as far south-east as the upper dam on the creek passing through the zone, perhaps even a little further. The only deep drill hole drilled in the South Zone indicated considerable depth of mineralization although the copper values were low.

A very weak and thin band of copper mineralization appears to strike west of north from the vicinity of the upper dam previously mentioned to Dillard Creek, decreasing in value to the north. This band may be little more than a few feet wide and low grade.

The impression gained during the survey was that sulphide mineralization was better developed in the hornblende andesites than in the plagioclase andesites, i.e. in the more basic rock. Furthermore, copper mineralization seemed most pronounced in mildly to highly chloritized andesites while pyrite was best developed in epidotized andesites. I cannot say whether

chloritization preceded copper mineralization or whether it was contemporaneous.

In the South Zone there appeared to be a marked increase in copper mineralization in the andesites near the borders of the igneous diorite dykes. This, together with the presence of low copper mineralization in the diorite, suggests that mineralization came with the dykes. An alternative explanation may be that the mineral was introduced at a later date along the altered borders. The latter would explain the quartz veinlets which occasionally bear chalcopyrite.

Conclusions:

1. The area recording the highest tectonic anomaly highs is overlain by thick till so that no conclusions on the mineral potential can be given on the basis of field mapping.

2. The most promising area of economic interest of the Primer-Pageant property based purely on field mapping is that area extending south-east from the South Zone to about just past the upper dam on the creek. This area may be near the intersection of two major faults each showing mineralization. As the area of intersection is overlain by thick till, geophysical methods or drilling will have to be used for investigation.

3. The North Zone appears to be too small in extent and too low grade for economic development at the present time.

Respectfully submitted,

T. F. Lee

Vancouver, B.C.,
June 19, 1969.

TECTONIC SURVEY

OF

DILLARD CREEK AREA

KAMLOOPS MINING DIVISION

BRITISH COLUMBIA

FOR

PAGEANT MINES LIMITED

11th March, 1969

D.A. CHAPMAN & ASSOCIATES LIMITED.

D.A. Chapman & Associates Limited
#2 . 515 GRANVILLE STREET • VANCOUVER 2, B.C.

TECTONIC AERIAL SURVEY

THEORY AND TECHNIQUE.

INTRODUCTION:

The objective of the report is to provide information relating to the major or macro tectonic structures in the area surveyed. This information can be used for ground examination by geological prospecting parties to determine a possible economic significance of the structural targets selected.

NATURE OF SURVEY:

The survey is an empirical study of the effects of pressure variations within the earth's crustal surface.

The condition observed is a horizontal plane of the earth's crust where the relative rate of unloading stresses by fracture tension joints is controlled by the degree of surface tension exerted and inherent rock characteristics (modulii). The horizontal stress components of the pressure gradient must create a balanced condition of forces at the crustal surface since this surface in elastic terms (rock mechanics) represents the boundary condition.

In the survey, a unit area is treated as a cross-section of the vertical column of the earth's crust which at the boundary condition adjusts its cross-sectional area by fracturing (tension) or non-fracturing (compression) at a rate consistent with the amount of stress relief necessary to maintain isostatic equilibrium.

Thus the incidence of fracturing (tension) or nonfracturing (compression) is directly proportional to the total vertical upward pressure exerted within the rock column. This total pressure gradient is a modified vertical elongation effect on the column by the pressure, plus the change of pressure necessary to accomodate the lateral components of the deformation stresses exerted through the column.

The deformation or shearing stresses are induced by changes of pressure as a result of increased or relieved stresses, thus any shearing by rupture must affect the vertical pressure of the lateral vertical columns and hence the horizontal components of surface tension across fracture interfaces. It is this effect which is empirically noted and constitutes the basic observation of the survey. Most of the linear traces (lineaments) observed in aerial photographs are the product of surface tension; as such, they can be used to derive the first empiric quantity required for tectonic analysis of the pressure gradient.

NATURE OF SURVEY: (Cont'd)

It should be clearly defined that a linear trace does not imply a corresponding fault or fracture plane exists on the crustal surface. A linear trace by the nature of the forces creating the visible phenomena (surface tension) is an apparent strike line through a system of tension joints or fracture fault planes that align themselves isostatically along paths parallel and normal to the principal stress directions exerted by the pressure gradient. In the aerial photograph the numerous conjugate sets are quite visible due to physiographic changes controlled by the existence of joints and erosonial effects acting upon them. This advantage of viewing the crustal surface from above at a scale comprehensible in magnitude to see alignment of the systematic orientation of lineal joint sets and shear fracture makes it possible to estimate with reasonable success the incidence rate of tension fracturing within the cross sectional areas of the vertical rock columns relative to the existing pressure gradient.

This first empiric is treated analytically to derive parameters (the mathematical equivalent of related rock mechanic postulates that control the data). By determining analogous changes in pressure occuring at a point relative to all surrounding points, a coefficient of the induced tangential (shear) stress can be calculated. Again by analogy with the significance of the parameters used a coefficient of Poisson's Ratio is calculated. This result is iso contoured to show the relative loading or unloading of stresses in lateral rock columns as result of the shearing or deformative stresses occuring within the area. This isogram is the effect on the pressure gradient due to shear faulting. Therefore by assuming a probable zone of shearing where the optimum failure zone should occur due to maximum opposing forces, a probability isograd can be mapped by conversion of deformation values to percent values of prediction.

TECHNIQUE OF DATA COMPILATION:

A clear film overlay is placed over the photograph and the isostatic linear traces are annotated to it.

Since only lineal features are annotated, a stereographic photo pair is not always necessary and interpretation can be done under a direct light and magnification. Stereo experience is a prerequisite so that the observations of leaching, foliage alignment, pot holes at fracture intersections, slumping along fractures and drainage patterns are recongnizable by the person annotating the photograph.

Straight line annotation from point to point is used until a sufficient number of lineal sets create an isostatic web or grid across the surface viewed. A cadence or frequency interval of incidence will become apparent as continued interpretation removes the interference to the eye of one conjugate pattern superimposed on the other.

This method requires a minimal interpretive quality by the person carrying out the survey, but demands a constant observation at the pencil point as linears are traced out. The experience required, is as pointed out earlier, a knowledge of physiography rather than geology.

TECHNIQUE OF DATA COMPILATION: (Cont'd)

Secondly, there are no preferential criterias other than a lineal control, i.e., planar fractures which dip in differing directions across topography are eliminated automatically, since their strike will vary with the dip and intersection of the topography. Surface tension is the only control sought and it is left to the treatment of the data to eliminate inconsistencies, rather than elimination by the interpreter.

The myriad of intersecting lineal sets annotated to the clear overlay is removed from the photograph and placed over a grid system. This allows the organization of the data to a empirical form by a count or estimate of the number of intercepts around the peripheal boundary of the unit area examined.

INTERPOLATION OF LAKE AREAS:

In areas where lakes of small and medium size are situated, interpolation of the net is projected through with reasonable ease. The control used is the frequency and linearity of the surrounding areas and these are projected across from lake shore to lake shore. This is a reasonable interpolation where the lake size does not exceed three grid intervals in width and shoreline control exists around the entire lake area.

PROPOGATION OF LINEAL SYSTEMS THROUGH AREAS OF OVERBURDEN:

Surface tension effects exert a definite control on the surface denudation processes of nature and as a result control to great extent the physiography of the earth's crust.

The tension across fracture interfaces is constantly oscillated by earth tides which result from the earth's motion. In areas where a mantle of relatively unconsolidated detritus has accumulated, continual destruction and removal of the soil directly over the fracture/joint interface occurs at a more rapid rate than the adjacent areas. The granular flow of the material is analogous to grain in a bin where the flow due to gravitation is down the centre of the bin.

The result is leached areas in the soil, water courses, potholes, and lakes which align themselves to the underlying linear controls. All drainage is to a major extent controlled by this phenomena of surface tension and natural foliage avails itself of the required nourishment provided by accumulation within and along the natural sumps created. Trees, when viewed from above, and in the natural state, align themselves in a near uniform orientation to lineal systems.

A second analogy that is pertinent to areas of deep overburden is the increased amplitude of the wave motion of earth tidal forces at the surface, similar to the way that water waves are of greatest amplitude at surface and are dampened at depth under the ocean. This increase of amplitude on surface assures the continued propogation to surface of linear phenomena by intensification of the erosion processes.

GEOPHYSICAL ASPECTS OF SURVEY:

Geologically, the phenomena of fractures is planar strain created by the adjustment of the crustal surface to a volumetric change. This

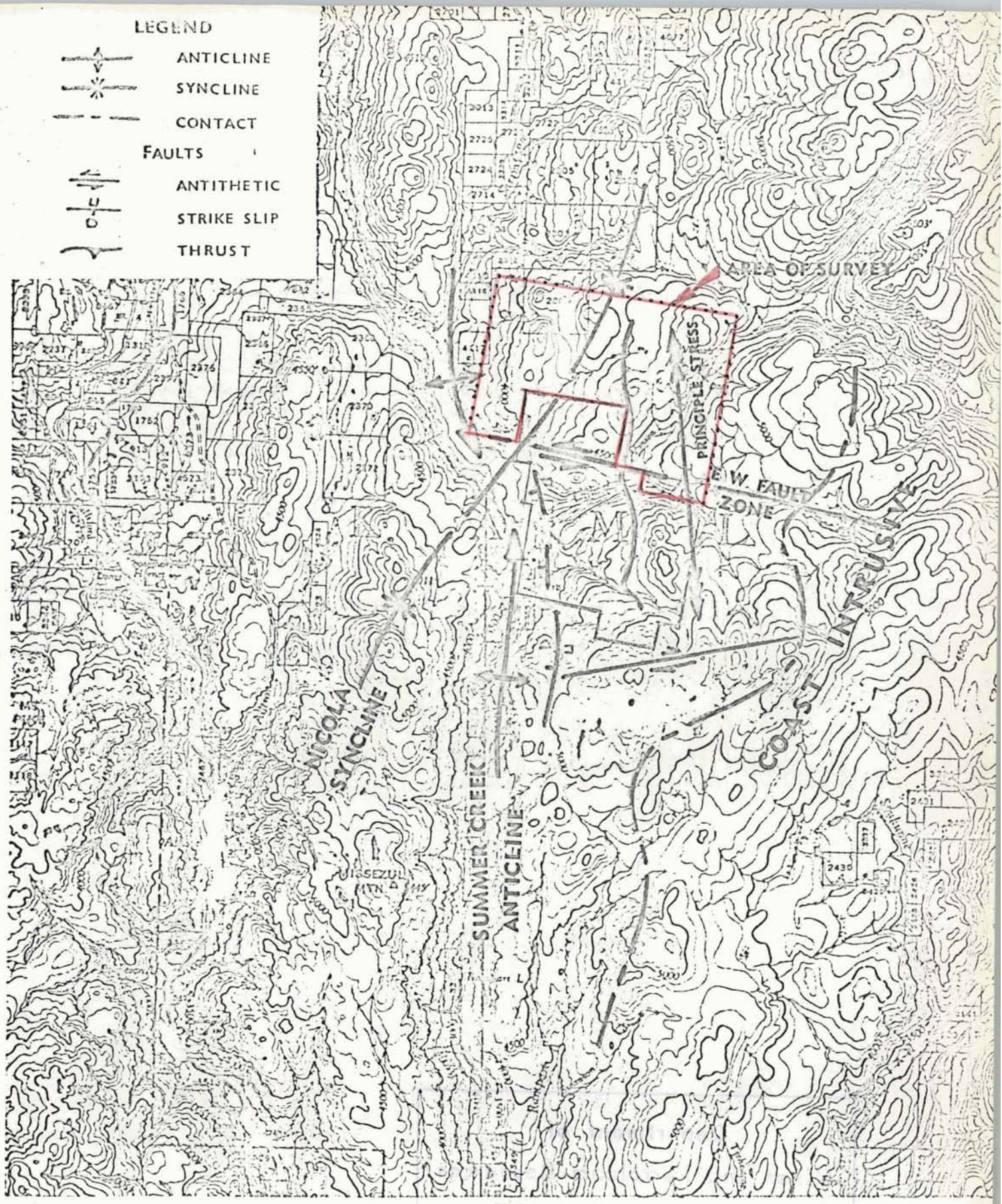
Addendum - D. W. Pringle, P. Eng.

This report is intended to assist in the field exploration of the claims studied. The isogradients are useful for the correlation of ground and airborne geophysical surveys and the planning of related field programs. The tectonic structural targets are zones of faulting which offer potential traps for mineral localization. Mineralization, if present, would more likely take advantage of areas of increased fracturing or deformation, thus focusing attention to those areas most favourable should reduce exploration costs.

I have personally collaborated and discussed the material contained herein with the author, D. A. Chapman.

Signed this 23 day of April, 1970.

D. W. Pringle, P. Eng.



SCHEMATIC MAP OF GEOLOGY & INTERPRETED STRUCTURE

PAGEANT MINES LTD.

SCALE 1" = 2 MILES

DIORITE COMPLEX

NICOLA GROUP

AIR PHOTO INTERPRETATION

D.A. CHAPMAN & ASSOC. LTD.

MARCH 1969

D.A. CHAPMAN & ASSOCIATES LIMITED
#2 - 515 Granville Street,
Vancouver 2, B.C.

Telephone 685 - 3281

March 10, 1969

Pageant Mines Ltd.
201 - 1836 West 5th Avenue
Vancouver 9, B.C.

Attention: Mr. D.W. Pringle, P. Eng.
Mining Consultant for
Pageant Mines Ltd.

Dear Sirs:

At the request of the directors of Pageant Mines Ltd., I have completed the tectonic analysis of a fracture density survey from aerial photographs of approximately 100 claims enclosing the Primer Group Mineral Claims on their northern and eastern boundaries which are situated in the Dillard Creek area, Kamloops, M.D. British Columbia.

The objective of this exploration report was to delineate probable geological structures and targets for ground follow-up by geological and geochemical traverses.

MAP STANDARD

Mapping of the isograms was compiled from B.C. aerial photographs, scale 1" = 2640'. This dictates the scanning interval of fracture incidence readings.

The grid most practical for this scale is 3/8" or every 990' at ground scale. This grid on this scale of photograph is a reconnaissance standard in relation to the magnitude of fracture length visible and the physical limitations imposed on interpretation of fracture traces, and tends to enlarge the anomaly area.

Pageant Mines Ltd.

OBSERVATIONS

1. Three possible periods of tectonic structures may exist on the property. They are:

a) Structures which originated with the fault systems of which Summer's Creek is a part. This system of faulting is probably older than the Nicola system of folds.

b) Structures that originated with the folding of the Nicola Volcanics.

c) Structures syntectonic with the intruding batholith.

2. The deforming stresses resulting from the complex of folds, faulting and intrusions dominate the area of the claims and are responsible for the targets selected.

3. Two distinct structural and geological environments are present on the claims.

a) The Missezula Lake fault-fold complex on the western boundary.

b) A thermal-pressure contact zone of interlying diorized rock with the batholith on the eastern boundary and the Nicola greenstones on the western boundary.

4. A third structural zone of extreme importance is a near E-W shear zone striking across the claims. Considerable movements along this shear must have occured as a result of the Nicola Fold System and throughout the epoch of the intruding batholith to the east.

CONCLUSIONS

1. Target Area No. 1 should be given first priority since all of the aforementioned observations coalesce at this

Conclusions cont'd

juncture. The converving loci are:

a) The E-W fault pre-tectonic and syn-tectonic with the batholith; by nature of the forces acting across the fault a deep seated channelway for ascending mineralizers throughout the evolution of the batholith would be available.

b) The target is within the mesothermal-pressure zone of the intrusion where dioritization, dyking and brecciation associated to the intrusive is most likely to have occured.

c) The axis of principle stress of the target is parallel to the pressure fold wave front of the rebound stresses from the batholith indicating a tangential association vertical and parallel with the batholith and a possible collapse structure. i.e. breccia fault.

2. Target No. 2 for similar reasons could be a breccia zone or pipe structure.

3. Target No. 3 may only relate to the contact stresses along the batholith contact and could be post mineralization.

4. Target No. 4 lies along what may be a contact of dioritic rocks with the greenstones and volcanics of the Nicola group. It is my opinion that this stress failure contact represents a possible thermal boundary between mesothermal mineralization and epithermal mineralization except where inversion of the thermal gradient from lower to higher temperature is possible through access to deep seated fault zones. (i.e. E-W shear fault referred to previously.)

5. Target 5 lies beyond the contact described and may be

beyond the temperature ranges for the minerals being sought.

6. A diagramatic structural illustration of the interpretation accompanies this report.

RECOMMENDATIONS

1. Geochemical and geological prospecting traverses as indicated on the accompanying map.

2. The contact zones of the batholith and the stress contact with the diorite complex and Nicola Volcanics would respond well to the proton type magnetometer.

An airborne survey in conjunction with the "Primer Claims" would be an economical and practical method of checking structural targets and projecting geology across the area.

3. If steps 1 and 2 are carried out, then wherever coinciding targets show good geochemical response detail work should follow.

An explanation of the theory of Tectonic Analysis as a method of selecting favourable structural and geological exploration targets is attached as an appendix to the report.

Respectfully submitted,

D.A. Chapman & Associated.

GEOPHYSICAL ASPECTS OF SURVEY: (Cont'd)

volumetric change of an elastic body involves elastic modulii which will vary with inherent characteristics of differing rock units, they in turn vary with differing pressures or loads, thus any treatment of the data must cope with these variable factors. In this tectonic analysis the data is compensated mechanically by the sampling methods used, and mathematically by geological analogy to produce the deformation isograms.

Common to all geologic structural classifications are the deforming stress effects by pressure changes on the physical characteristics of lateral vertical rock columns during the folding processes. In this sense, physical characteristics of the rock relative to the lateral effect of the deforming stresses are a geophysical measurement, i.e., potential geologic structures associated to pressure/stress zones. These empiric measurements should conform to similar associations of electromagnetic variations that are affected by the same rock characteristics and stresses, and in particular where a thermal/stress flow has been induced.

This link between rock stresses and other geophysical sciences should prove extremely useful in filter processing and evaluation of geophysical surveys by geophysicists, especially where airborne methods are used.

February, 1970.

D.A. CHAPMAN & AASOCIATES LTD.

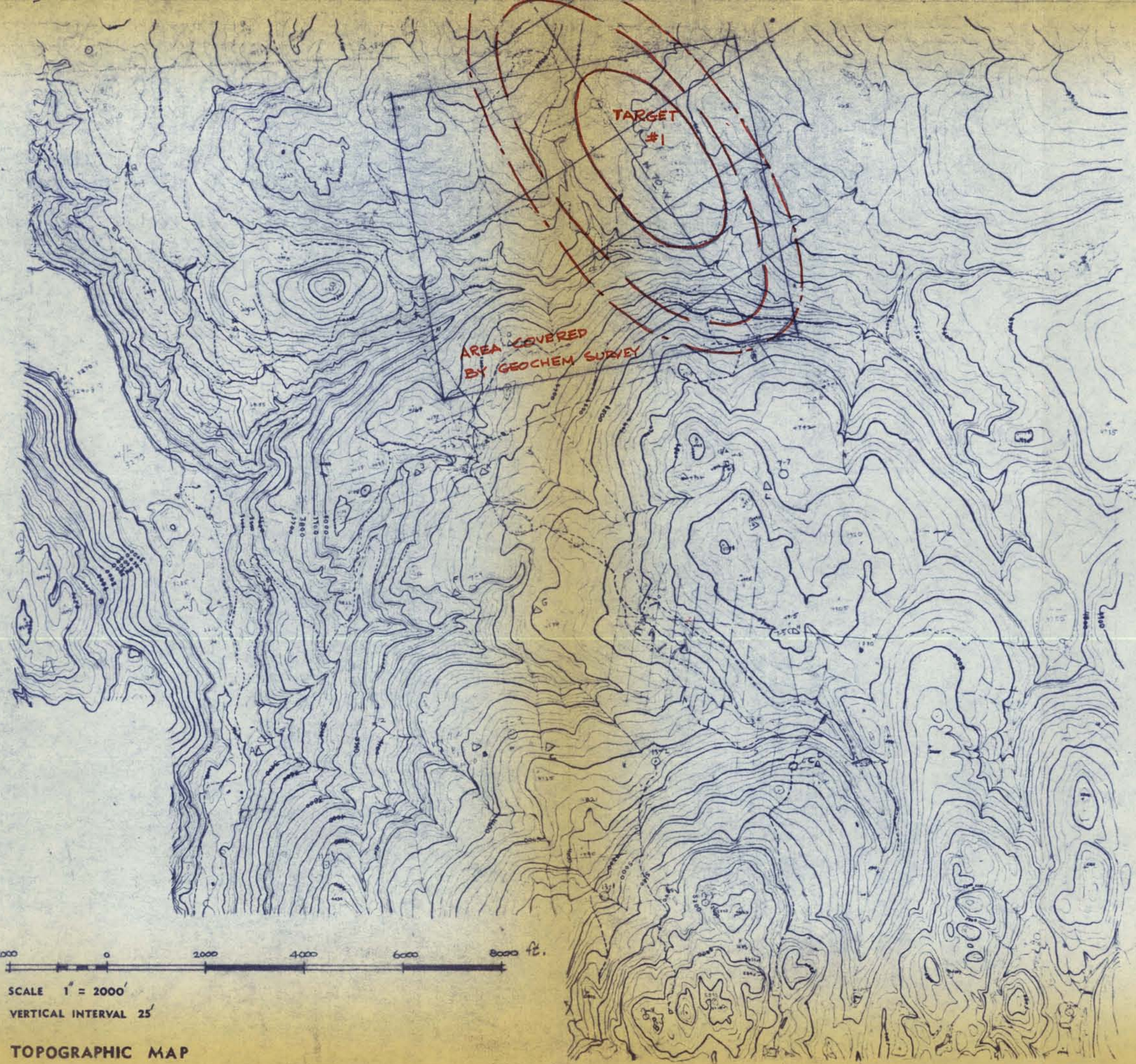
D. A. Chapman,
President

DAC:fk

FEB. 69.

TECTONIC ANOMALY TARGET No. 1

SHOWING BASELINE & TRAVERSES FOR GEOCHEM. & GEOLOGICAL SURVEYS.



2000 0 2000 4000 6000 8000 ft.

SCALE 1" = 2000'

VERTICAL INTERVAL 25'

TOPOGRAPHIC MAP

Department of Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 2356 MAP #1

2356

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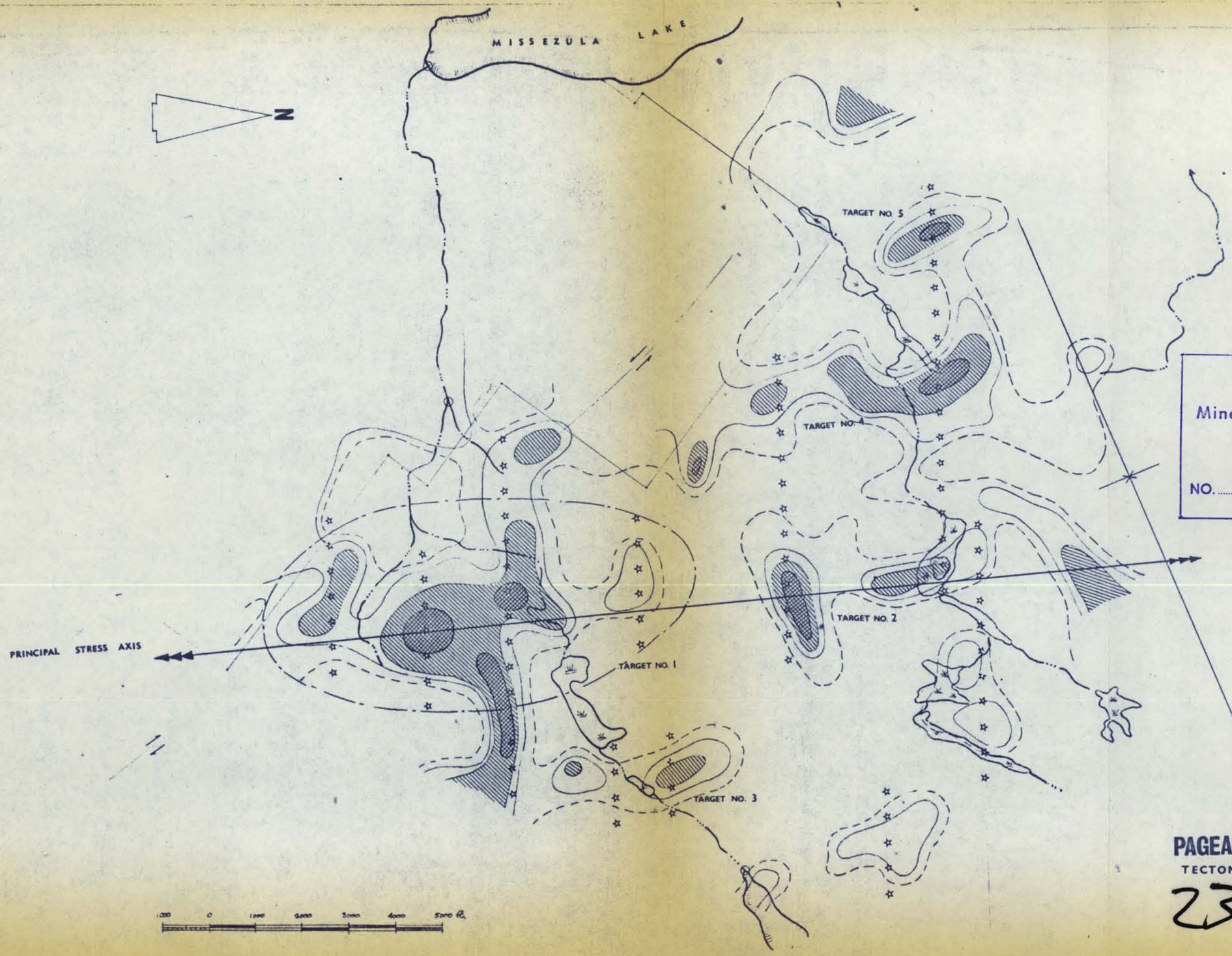

NOTE :

RECCONAISSANCE STANDARD
RELATIVE DEFORMATION STRESS
ISOGRAM MAP

TECTONIC ANOMALY
(ZONE OF MAXIMUM TENSILE SHEAR STRESS)

☆☆☆ RECOMMENDED GEOCHEM AND GEOLOGICAL TRAVERSES

STREAM
MARSH
LAKE

○ TOPO MAP CONTROL

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TECTONIC ANOMALY MAP.

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MARCH 1969

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DILLARD CREEK PROPERTY
PRINCETON, BRITISH COLUMBIA

PLAN OF
DRILL HOLES AND GEOCHEMICAL RESULTS

BY
DONALD W. TULLY, P.Eng.

400 200 0 400 800
SCALE IN FEET

JANUARY, 1970

This map accompanies the
GEOCHEMICAL SURVEY REPORT
by
D. A. CHAPMAN & ASSOCIATES LTD.
on the
PAGEANT MINES LIMITED
Pink, Purple, Jack Supplement, Jack X Supplement, Yellow Claim Groups

Latitude 49°45'30" N Longitude 120°39'W

NOTES:

GEOCHEMICAL VALUES DENOTED THUS - COPPER/MOLYBDENUM
GEOCHEMICAL VALUES OVER 200 ppm GREEN, OVER 400 ppm BLUE, OVER 600 ppm RED-COPPER
DIAMOND DRILL HOLE DIRECTION LINES (APPROXIMATE ONLY)
PERCUSSION DRILL HOLES DENOTED (68 P1, etc.)

SYMBOLS:

INTRUSIVES
- VEINS (QUARTZ-SELENITE-CARB)
- GREY TO BUFF COLOURED DYKES
- QUARTZ-FELDSPAR PORPHYRY
- FELSITE-APLITE-RHYOLITE
- FELDSPAR PORPHYRY
- DARK PHASE OF FELDSPAR PORPHYRY
- HORNBLENDE DIORITE PORPHYRY
- DIORITE
- GABBRO

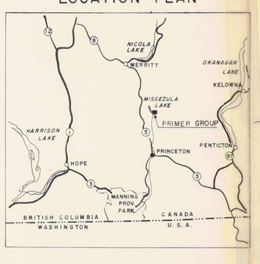
VOLCANICS
- RHYOLITE
- DACITE
- ANDESITE
- BASALT

SEDIMENTS
- GRAYWACKE
- LIMESTONE

ALTERATION
- CHLORITIZED
- CARBONATED
- LEACHED, POROUS, VUGGY
- AUGEN SCHIST
- RUSTY
- COARSE-GRAINED
- FINE-GRAINED, APHANITIC
- FAULT-BLOCKY GROUND

MINERALIZATION
- Cu CHALCOPYRITE
- PY PYRITE
- M MAGNETITE

LOCATION PLAN



2356

LEGEND

GEOLOGY

3 Syenite, monzonite
2 Diorite
1 Andesite

SYMBOLS

- HIGH — Tectonic Anomaly
- Soil Anomaly
- Induced Polarization Anomaly
- Pyrite Halo (center Cu & Fe mineralization)
- Air photo Linears
- Geological contact
- Outcrop areas
- Outcrop
- Jointing
- Faults
- Percussion drill hole

ABBREVIATIONS

A	Andesite
Ah	Hornblende andesite
Ap	Plagioclase andesite
cu	Copper
py	Pyrite
d	Diorite
s	Syenite
m	Monzonite

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GEOLOGICAL MAP

DILLARD CREEK PROPERTY

PRINCETON AREA, B.C.

SCALE
2000 1000 0 1000 2000

W.G.S. JUNE, 1969

Altair drafting