FYRE LAKE PROJECT
SUMMARY OF 1973 FIELD WORK AND PROPOSED EXPLORATION

N.T.S. 105-G

DYNASTY EXPLORATIONS LIMITED
By: P. Dean Nov. 1973

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DYNASTY EXPLORATIONS LIMITED

November, 1973

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DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

FYRE LAKE PROJECT
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INTRODUCTION

The Fyre Lake Project was conceived to investigate geochemical and geological targets in an area of massive sulphide base metal potential. Selection of areas for detailed work was based on reconnaissance data collected by Atlas Explorations during 1969 and 1970. The general geology of the area, its known showings, exploration history and mineral potential are discussed in detail in a "Proposed Exploration Report" by P. Dean, January, 1973. Geochemical and geological investigations were carried out in 9 target areas during the 1973 season (Figure 1). The field work on the project was terminated prematurely at the end of June, when the crew and budget were transferred to a new and more urgent exploration endeavour in the Mackenzie Mountains. As a result, several of the more promising follow-up areas were not investigated during 1973.

Field work on the Fyre Lake Project was carried out between June 3 and June 26, and on the 6 and 7 of September. The crew consisted of a geologist, a field assistant and two soil samplers. The work was carried out from two base camp locations, the first at Detail Area I, the second at Detail Area 2. Access to other detail areas was provided by a helicopter which based out of Camp I for several days.

Follow-up work done by the project took the form of geochemical sampling, prospecting and sometimes geologic mapping.

Geochemical samples were analyzed at Ross River by Acme Analytical Laboratories, using a total perchloric ($HClO_4$) extraction.

The data collected in each Detail Area is presented on one or more maps at scales of 1 inch = 1320 ft. The locations of the Detail Areas where work was done this year are shown in Figure 1.

SUMMARY AND CONCLUSIONS

1. Due to a reduction in budget, only a portion of the proposed field work was carried out during the 1973 season.

2. Nine geochemical anomalies were investigated using geochemical and geological techniques during the 1973 season. Of these, staking and a $14,000 exploration program is recommended for one, and a total of about one week of additional work is recommended on three others.

3. Additional follow-up and grass-roots exploration to complete the program intended for 1973 will require a budget of approximately $42,000, and can be completed by a crew of four with a contract helicopter in about 45 days. The highest priority portion of this work, on 105-G-1 and 105-G-8, can be completed in two weeks at a cost of $15,000.

DISCUSSION OF EXPLORATION TARGETS

DETAIL AREA #1

Silt sample anomalies in three creeks draining a ridge north of Wolverine Lake were discovered during the 1969 Tintina Project reconnaissance sampling. A spectacular transported gossan is present in one of the anomalous creeks. This area was chosen as the first exploration target for the 1973 season because it had less snow-cover in early June than some of the follow-up areas further south.

The source area of the three anomalous creeks was thoroughly soil sampled on a grid which covered about 3½ square miles. Samples were taken at 200 ft. stations on lines 800 ft. apart. These lines were all chained and stations were marked with plastic flagging. Additional sampling was done off the grid area on paced contour lines which are less accurately located. A total of 538 soil samples were taken, all of which were analyzed for Cu, Pb, and Zn. The results are plotted in Figure 2. In addition to the soil sampling, the grid and surrounding area was mapped geologically and prospected. Rock chip samples analyzed geochemically are plotted on the geologic map (Figure 3) and are summarized below:

Number	Description	Values		
		Cu	Pb	Zn
3FD-1R	Quartzose phyllite	440	60	1440
3FD-6RG	Quartzite with pyrr.	26	24	54
3FD-11R	Quartzose phyllite	400	24	660
3FD-12R	Quartzose phyllite	335	6	450
3FD-16R	Graphitic phyllite	78	14	58
3FD-17R	Graphitic phyllite	58	16	64
3FD-18R	Quartzite	10	11	54
3FD-19R	Quartzite	6	4	22
3FS-4R	Graphitic phyllite	68	30	44

Discussion of Results

Geologic mapping indicates that two main rock units are present: a quartzose and graphitic phyllite unit and an overlying volcanic unit. The phyllite grades into a quartzite in some places and everywhere contains abundant quartz as thin bands conformable to the schistocity and as crosscutting lensy veins of bull quartz. The age of this unit may be Precambrian but more likely it is younger, since it has been only slightly metamorphosed. The overlying volcanics vary from chlorite schists to massive amphibolites, and are probably Devonian-Mississippian in age. Pillow structures could be recognized at one location.

No sulphide showings or alteration were discovered in either rock type. Waxy, blue-green variscite, an aluminum phosphate mineral ($Al(PO_4)\cdot 2H_2O$) occurs occasionally as fracture fillings in the phyllites.

The large transported gossan in one of the anomalous creeks is made up of matted vegetation replaced by iron oxides. One sample of the gossan material contained 120 ppm Cu, 28 ppm Pb, and 215 ppm Zn. Precipitates of hydrous ferric oxides are common in seepages and small streams throughout the area, especially where the pH tends to be slightly more acid than usual. The main gossan has probably resulted from the high iron content in the bedrock, coupled with some peculiarity of ground water or pH conditions, rather than from any anomalous source of iron. The photograph is taken at about the middle of the gossan where it is at least 15 ft. thick.

The soil sample results failed to outline any significantly anomalous zones, although many individual samples scattered over the area are strongly anomalous. Individual values range up to 680 ppm Cu and 2800 ppm Zn, with much lower values in lead. The bedrock geochem results indicate that

the quartzose phyllites often contain copper and zinc in amounts equal to the values obtained from the soil samples. It is interesting that the quartz in these metal-rich phyllites is conformable and appears to be primary in origin. The implication is that the metals associated with the quartz-rich zones may also be syngenetic and elsewhere within the phyllite unit conditions may have favoured the accumulation of economic concentrations of metals.

Recommended Additional Exploration

The anomalous soil geochemical results are interesting but are too spotty and scattered to warrant further work. Sub-economic metal concentrations in quartz-rich phyllite are the source of the anomalous copper and zinc geochemical values in the stream sediments.

DETAIL AREA #2

This area was investigated as a result of strongly anomalous silt geochem values obtained during the Tintina Project in 1969. The anomalous creek flows in a steep walled valley which follows prominent north-south and NW-SE topographic linears. The silt anomalies were followed up with some soil sample lines in 1970, apparently with negative results. However, the values obtained in this 1970 soil sampling appeared to have been lost, and in any case the silt anomalies still required explanation, so additional work in the area was undertaken this year.

Extensive soil sampling was done over the headwaters of the anomalous creek on contour lines and on paced 1600 ft. spaced compas lines. A total of 1,014 soil samples were taken. The resulting values in Cu, Pb and Zn are plotted on separate maps (Figures 5, 6 and 7). The area was mapped geologically at a scale of 1 inch = 1320 ft. (Figure 4). Some rock samples that were analyzed geochemically are summarized below:

Number	Description	Values		
		Cu	Pb	Zn
3FS-25G	Graphitic quartzite with limonite	110	1100	1380
3FS-26	Quartzite	80	32	158
3FS-27R	Quartzite with pyrite	50	60	118
3FS-28R	Ankerite(?) in altered U.B.	20	26	56
3FS-29R	Quartzite w. pyrite	6	20	10
3FD-500RG	Porous, limonitic quartzite	300	800	3500
3FD-502R	Skarny rock w.magnetite	100	24	160
3FD-503R	Limonitic chl-qtz. schist	360	690	4600
3FD-504RM	Pyrite-magnetite qtz.schist	162	26	112
3FD-506R	Magnetite pyrite schist	70	32	132
3FD-515R	Mica qtz. schist	6	104	160
3FD-516R	Limonitic chlorite-quartz schist	86	1140	2050
3FD-517R	Limonitic chlorite-quartz Schist	72	1160	1640

Discussion of Results

Numerous anomalous areas were outlined by the soil sampling, mainly within the canyon of the creek. Most are small, encompassing only two or three adjacent samples. The best anomalous zone, at the upper bend in the creek, has values ranging up to 1400 ppm Pb and 3000 ppm Zinc. Values in copper are anomalous in several areas covered by the survey, but the anomalies in general are of low magnitude, with values of about 100 to 200 ppm. One value of 660 ppm Cu is associated with an outcrop of quartz-carbonate rock which may be an altered ultrabasic. This rock contains finely disseminated pyrite with very minor visible chalcopyrite, but a chunk geochemically analyzed was not anomalous.

Geologic mapping indicates that the area is underlain by a variety of metamorphic rocks, including quartzite, mica schists, chlorite schists and intermediate types. One lithology grades into another and it is not possible at this point to breakdown the metamorphics into mappable sub-units. Several outcrops of a peculiar buff coloured rock composed of quartz and carbonate (dolomite and ankerite?) is interpreted as being the altered remnant of an ultrabasic body. Mariposite occurs in this rock type. This ultrabasic body, if that's what it is, apparently has been completely altered to its quartz-carbonate equivalent, since it has no magnetic expression on the government aeromagnetic map. A granite stock outcrops on the northern fringe of the area.

Small outcrops of an unusual iron-rich schist occur in close proximity to the main anomalous zone. These rocks are composed of about 20% magnetite and pyrite, with about 80% quartz. Pyrite and magnetite are about equally abundant in some samples, in others magnetite predominates. The rock is schistose and the iron minerals occur as persistent, perfectly stratiform bands,

or in some cases as coarser grained, "eye-like" blebs. Somewhat similar pyrite-magnetite-amphibole-quartz rocks were found as float three years ago in a highly anomalous drainage 5 miles south of Detail Area #2. As well, quartz-magnetite-pyrite schists underly and party enclose the copper-zinc sulphide zone at the Fyre Lake property a few miles to the west. A 30-metal spectographic analysis was done on a sample of the quartz-magnetite schist from Detail Area #2 (Sample No. 3FD-506R) and on a sample of the magnetite-amphibole rock from 5 miles south (Sample No. 3FD-518R). The results (Appendix I) indicate that both these rocks are significantly enriched in molybdenum, copper and barite, and Sample 2 is enriched in lead and possibly nickel as well.

Rock chip samples were taken from rusty outcrops in three areas. The soil anomaly at the upper bend in the creek is related to a prominent knob of rusty soil a couple of hundred feet across. There is no outcrop in the rusty zone, but two limonitic, vuggy quartzite samples from a frost heave averaged 950 ppm Pb and 2440 ppm Zinc. Three thousand feet downstream from this knob, a very gossanous chlorite schist outcrops in the bed of the creek. Three grab samples from this outcrop averaged 996 ppm Pb and 2760 ppm Zinc. The soil samples in this area are not as strongly anomalous as further upstream but all samples were taken upslope from the outcrop. The valley bottom where this outcrop occurs is about 300 ft. wide from talus slope to talus slope, and the creek has cut down through 25 ft. of overburden to reach bedrock. Another slightly anomalous rock chip sample was taken on the base line in an area where a couple of soil samples contained 565 and 800 ppm lead. This rock chip sample contained 104 ppm lead and additional soil samples taken in the same area in September contained a maximum of 148 ppm lead.

Recommended Additional Exploration

Additional work in the area is warranted and should include a magnetometer survey, detailed soil sampling and detailed mapping. ~~Control for this work should be a grid 12,000 ft. long and 6,000 ft. wide, with lines spaced 800 ft. apart on the east half and 400 ft. apart on the west half.~~

Control for this work should be a picket grid with lines spaced 400 ft. apart over the important anomalies near the bend in the creek, and 800 ft. apart over the less anomalous areas downstream. The size of the grid should be approximately 12,000 ft. by 6,000 ft., with a total of 26 miles of picket line. The area of the grid should be staked before the work commences. An exploration program of this magnitude on the anomalous areas will require a budget of $14,000 and would outline targets for trenching or drilling. A less expensive program of exploration perhaps involving more rock or soil geochem, would be unlikely to yield any definitive answers.

DETAIL AREA #3

Work in this area was intended to investigate a silt sample anomaly obtained by the Sheldon Project several years ago. The anomalous creek lies north of the Fyre Lake Project area in a region underlain by Paleozoic rocks.

Bank soil samples were taken at 200-300 ft. intervals along both sides of the anomalous creek up as far as snow conditions permitted and the creek canyon was prospected. The geochemical results are plotted on Figure 8.

Discussion of Results

The creek flows on bedrock for most of its length and in some places has cut a canyon 20 to 30 ft. deep. The bedrock

consists of a sequence of slates and skarny limestones which have been strongly folded and jointed. A Jurassic granite stock outcrops at the top of the cirque which forms the headwaters of the creek.

Occasional float boulders of greyish-green, finely banded skarn with sphalerite and galena occur in the creek. By visual estimate, the best float material appeared to contain a few percent zinc and minor galena, but one chunk which was assayed, returned only trace amounts of zinc and lead. The piece assayed contained 5% sphalerite by visual estimate. The apparent discrepancy cannot be resolved, since the balance of mineralized samples were left in the bush at the Camp 1 location.

The bank sample results are significantly anomalous in both lead and zinc and occasional samples are anomalous in copper as well. Along most of the creek, samples contain more than 300 ppm zinc, and at the top of the creek, values in zinc get as high as 1220 ppm. Values in lead are lower and more scattered.

Recommended Additional Exploration

The geochemical results and the mineralized float occurrences are interesting enough to warrant more work. This should take the form of more soil sampling and prospecting, concentrating in the overburden covered areas to the east and west of the creek. The granite contacts at the top of the creek should be prospected carefully. Structural attitudes in outcrops may be useful, since mineralization could be related to folding or fractures. This work may take 2 or 3 days for a crew of two. On the 15th of June, there was still too much snow to accomplish any useful work at the top of the creek, so the follow-up work must be done at a later date in the season.

DETAIL AREA #4

A single silt sample anomalous in zinc was taken from a creek in this area during Sheldon Project sampling.

Four soil samples and a very brief look at the area was all that was done this year. The soil samples confirm the anomalous silt value (Figure 9). The geochem appears to originate in an area of rusty graphitic phyllites which resemble the rocks at Detail Area #1.

The anomalous values cannot be adequately evaluated on the basis of the meager amount of information we have, but nevertheless, it seems likely that metal-rich black phyllites are the source of the geochem and therefore no more work is probably warranted.

DETAIL AREA #5

The work in this area was intended to investigate a reported galena showing and at the same time sample the area geochemically, since it had not been covered by previous projects.

A line of soil samples were collected at the "base of slope" along both sides of the Finlayson River (Figure 10). In addition, the east side of the river was prospected. Some rock chip samples of phyllite and vein material were analyzed geochemically with the following results:

Number	Description	Values Cu	Pb	Zn
3FD-22R	Lustrous grey phyllite w. pyrite	30	40	102
3FD-23R	Qtz. carbonate vein material	120	38	32
3FD-24R	Phyllite with pyrite	54	76	58
3FD-25R	Graphitic, pyritic phyllite	90	190	186
3FD-26R	Graphitic, pyritic phyllite	144	156	305
3FD-27R	Graphitic, pyritic phyllite	172	40	48
3FD-28R	Graphitic, pyritic phyllite	122	50	106
3FD-29R	Qtz.-carb. altn. of U.B. with mariposite	190	14	140

Ni: 100 Cr: 100 Pt: N.D.

Geology and rock geochemistry are plotted on Figure 11.

Discussion of Results

The outcrop in the area of the reported showings was examined in detail without finding any galena, however, there are some lensey quartz-carbonate veins in the outcrop and these could have contained trace amounts of mineralization. Two samples of black sooty phyllite from a large outcrop 100 yds. downstream from the "showings" contained 190 and 156 ppm Pb. These samples probably contained 50% graphite and several percent pyrite, and the outcrop was encrusted with a whitish efflorescence.

The soil samples from the vicinity of the "showing" are not anomalous, but three samples 1½ miles downstream (north) and on the west bank of the river are anomalous in lead. The highest value is 370 ppm.

Recommended Additional Exploration

One day should be spent investigating the area of the lead anomaly, paying close attention to the outcrop in the river valley and collecting more soil samples upslope from the anomalous ones.

DETAIL AREA #6

A small showing of chalcopyrite was discovered in the canyon of Big Campbell Creek during the work on the Bot asbestos prospect a few years ago. The showing,which occurred in very altered-looking green schist, was never followed up. In addition, the river canyon is cut through a favourable and varied assemblage of rocks, including pyritized sediments and volcanics, serpentine and porphyritic granite.

A line of soil samples was taken at the "base of slope" along each side of Big Campbell Creek (Figure 12). No prospecting or mapping was done in the area this year.

Two general areas of anomalous values were discovered, one on the Bot Claims near the serpentine outcrops, and one on the east bank of Big Campbell Creek at the upstream (south) limit of sampling. Three of the soil samples from the Bot Claims area were analyzed for Ni, Cr and Pt, without obtaining any anomalous results. The samples from the southern area are anomalous in both copper and lead, and correspond approximately to the location of the copper showing previously discovered. Unfortunately, the anomalous lead values occur at the very start of the line, and the anomaly is therefore open upstream.

Recommended Additional Exploration

The base of slope soil sample lines should be continued upstream on both sides of Big Campbell Creek to close out the lead anomaly. The drainage of Big Campbell Creek upstream from the Bot Claims has never previously been covered by reconnaissance geochemical sampling, and should perhaps be silt sampled at the same time, by chopper-hopping or ground traverses. The vicinity of the two known anomalous zones should be prospected.

DETAIL AREA #7

The work on Detail Area #7 was intended to investigate an area of complex geology in which we had no previous geochemical information. Schists and phyllites are intruded by a large elongate body of serpentine and by a stock of diorite a mile in diameter.

Geologic mapping and rock geochem were done in the area, and a line of soil samples were taken downslope from the outcrops of the ultrabasic body (Figure 13). The rock chip sample results are summarized below:

Number	Description	Values					
		Cu.	Pb.	Zn.	Cr.	Ni	Pt.
3FD-33R	Qtz.-carb. altn. of U.B.				2300	900	N.D.
3FS-14R	Diorite	62	20	68			
3FS-15R	Diorite	116	10	48			
3FS-16R	Diorite	68	18	88			
3FS-17R	Graphitic phyllite	254	54	128			
3FS-18R	Serpentine	16	26	50	3000	1600	N.D.
3FS-19R	Serpentine	8	16	28	2000	2500	N.D.
3FS-20R	Biotite schist w. pyrite	88	20	128			
3FS-21R	Serpentine	10	12	28	2300	900	N.D.
3FS-22R	Serpentine	8	26	22	2000	700	N.D.

Discussion of Results

The soil samples are not anomalous in Cu, Pb or Zn. Every fifth sample was run for Cr, Ni and Pt, and none of these are anomalous either.

Rock chip samples in general are not anomalous in Pb or Zn, and only two are marginally anomalous in Cu. One of these is a sample of diorite, the other is a sample of graphitic phyllite. Neither is sufficiently anomalous to warrant more work. Four samples of serpentine or quartz-carbonate alteration which were anlyzed for Ni, Cr, and Pt returned only background values.

No more work is recommended for the area.

DETAIL AREA #8

Silt samples taken from this creek by the Tintina Project were moderately anomalous in zinc. There is an intense magnetic anomaly at the top of the creek.

One day of soil sampling was done in the area this year, as shown in Figure 14. No geology or prospecting was done in the area.

The results confirm the original silt anomaly, and indicate that a geologic investigation of the creek valley is warranted. The area is close to Detail Area #2 and can be covered at the same time as the work in that area is done.

DETAIL AREA #9

This area was checked out briefly as a result of one marginally anomalous zinc silt sample that was taken by the Tintina Project.

The geologic look at the area revealed nothing of interest and some check geochemical samples failed to substantiate the original silt results (Figure 5). No more work is needed in the area.

SUMMARY OF 1973 BUDGET

As was mentioned earlier in this report, most of the $70,000 budgeted for the Fyre Lake Project was redirected into a new project in the Mackenzie Mountains. The actual expenditures of the Fyre Lake Project, to the end of October, 1973, amounted to $25,310. The breakdown of this expenditure is as follows:

Linecutting	$ 378
Geology	5,320
Geochemistry	3,834
Camp Operations	5,205
Freight & Transportation	9,139
Expediting	1,433
Total	$25,310

The camp operations figure of $5,206 includes about $3,500 of capital expenditures for camp equipment. Included in the "Geology" figure are wages and drafting costs for compilation of information and writing of reports during the spring and fall. Since both the equipment and the compilation of information will be used in the continuing project, a more realistic estimate of the cost of the 1973 field work would be about $20,000.

PROPOSED EXPLORATION FOR 1974 FIELD SEASON

Recommended exploration in the Fyre Lake area for 1974 includes continued work in some of the Detail Areas explored in 1973; coverage of some of the 1969 geochemical targets which were not looked at during 1973; and some "grass-roots" geochemical sampling of certain areas which have not been covered previously by Dynasty or Atlas sampling projects.

(a) Continued Work in 1973 Detail Areas

The additional work that is recommended for Detail Areas 2, 3, 5 and 6 has been discussed earlier in the report. The work in Areas 3, 5 and 6 is of low priority and would only be done if there was a helicopter available in the area. The work in those areas could be completed by a crew of two in about one week. The budget estimate for these areas is included with the estimate for part "b" (following). The detailed grid work in Detail Area 2 would require a crew of 4 men, not including the contract linecutting crew. The work would take about 10 days to complete and would require a budget of $14,000.

(b) Exploration Targets not Covered during 1973 Field Season

Several of the areas recommended for detailed follow-up work in the 1973 "Proposed Exploration Report" were not investigated at all during this field season. Exploration in these areas, as recommended, would take about 6 weeks to complete and would require a $43,000 budget. The areas that would be covered include those geochemical targets called Area 4, 5, 6, 7, 8, 9 and part of Area 1. The highest priority area is Area 1, which lies within the north half of 105-G-1 and south part of 105-G-8. This area would require about 10 to 12 days to cover and would account for about $15,000 of the budget.

(c) "Grass-roots" Coverage

Most of Map Sheet 105-H-5 and part of 105-H-4 have never been covered by any previous Atlas-Dynasty geochem program. Rock types outcropping on the map sheets include a variety of volcanic and sedimentary rocks probably of Mississippian age. Vein and skarn-type base metal showings are known to occur in these rock units on the Frances Lake Map Sheet.

The order of priority for the various exploration projects recommended is:

(1) Detail Area #2 - Budget estimate - $14,000

(2) Follow-up Exploration in Area #1 - 105-G-1 and 8 - Budget estimate - $ 15,000

(3) Other follow-up targets and grass-roots sampling - Budget estimate - ~~$28,000~~ 27,000

Total required budget for complete program: ~~$ 57,000~~ $56,000

SUMMARY OF PROPOSED BUDGET

1. Detail Area #2 Grid Work and Staking

Staking	$ 480
Linecutting	3,250
Geology	700
Geophysics	350
Geochemistry	4,480
Camp Operations	1,100
Freight & Transptn.	2,810
	$13,170
Expediting (5%)	680
Total Direct Costs	$13,750
Say: $ 14,000	

2. Balance of Proposed Program, including follow-up Targets and Grass-roots Sampling (Assuming 45 days of field work)

Geology	$ 2,100
Geochemistry	6,900
Camp Operations	4,050
Freight & Transptn.	~~25,050~~ 21,529
Staking (contingent)	4,000
	39,179
	~~$40,153~~
Expediting (5%)	2,000
	41,179
Total Direct Costs	~~$42,153~~
Say:	~~$43,000~~ 42,000

Based on above estimates, the cost of doing only the Area #1, highest priority follow-up, would be about $15,000.

BUDGET DETAILS

(a) Continued work on Detail Area #2

1.	Staking		
	16 claims @ $30/claim		$ 480.00
2.	Linecutting (contract)		
	26 line miles @$125/mile		$ 3,250.00
3.	Geology		
	Wages -$40/day x 15 days =	600.00	
	Supplies - estimate	100.00	$ 700.00
4.	Geophysics (magnetometer survey)		
	Wages -$30/day x 10 days	300.00	
	Supplies - estimate	50.00	$ 350.00
5.	Geochemistry		
	Wages -2 men x $30 x 10 days	600.00	
	Supplies	100.00	
	Analysis -1260 samples x $2.00	3,780.00	$ 4,480.00
6.	Camp Operations		
	Wages -$30 x 10 days	300.00	
	Groceries - 8 men x 10 days x $10	800.00	$ 1,100.00
7.	Freight & Transportation		
	Fixed-wing (Otter) 600 mi. x $1.35	810.00	
	Chopper - 10 hrs. x $200/hr.	2,000.00	$ 2,810.00
			$13,170.00
	Expediting at 5%		680.00
	Total Direct Costs		$13,750.00

Say: $ 14,000

(b) Cost of Balance of Proposed Program

1. Geology		
Wages -60 days x $40/day	2,400.00	
Supplies - estimate	100.00	
Assays & rock geochem - est.	200.00	$ 2,700.00
2. Geochemistry		
Wages - 2 men x 45 days x $30/day	2,700.00	
Supplies - estimate	200.00	
Analysis - 2000 samples x $2.00	4,000.00	$ 6,900.00
3. Camp Operations		
Wages -$30/day x 45 days	1,350.00	
Groceries - 6 men x 45 days x $10	2,700.00	$ 4,050.00
4. Freight & Transportation		
Airfares -4 x $200	800.00	
Fixed-wing:		
Otter (mob/demob) 1100 mi. x $1.35	1,485.00	
Beaver (supply trips) 1000 mi. x $1.00	1,000.00	
110 hrs Chopper- ~~200~~ hrs. x $130	14,300.00	
Fuel haul - ~~45~~ drums		
cost of fuel 2000 gals. x $1.00	2,000.00	
~~45~~ drums ÷ 5 drums =		
9 ~~23~~ rtn. trips with Otter	1944.00	21 529.00
9 ~~23~~ x 160 mi. x $1.35	~~3,808.00~~	~~$23,093.00~~
5. Contingent for claim staking		$ 4,000.00
		39 179.00
		~~$40,743.00~~
Expediting at 5%		2,000.00
		~~$42,743.00~~
Say:	$ 42,000.00	41 179

Respectfully submitted,

November, 1973

Peter Dean

APPENDIX I

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis
6455 Laurel St., Burnaby 2, B.C.

Tel: 299-5242

TO Dynasty Explorations Ltd.
330-355 Burrard St.,
Vancouver 1. B. C.

File No. 2806

We hereby certify that the following are the results of spectrographic analyses made on:

		1	2	3	4	5
Aluminum	Al	1.	0.5			
Antimony	Sb	ND	ND			
Arsenic	As	trace	trace			
Barium	Ba	0.7	0.2			
Beryllium	Be	ND	ND			
Bismuth	Bi	ND	ND			
Boron	B	trace	trace			
Cadmium	Cd	ND	ND			
Calcium	Ca	0.5	0.5			
Chromium	Cr	trace	trace			
Cobalt	Co	trace	trace			
Copper	Cu	0.08	0.1			
Gallium	Ga	ND	ND			
Gold	Au	trace	trace			
Iron	Fe	matrix	matrix			
		13 pcm	5001/m			
Lead	Pb	0.001	0.05			
Magnesium	Mg	0.03	0.2			
Manganese	Mn	0.06	0.1			
Molybdenum	Mo	0.007	0.01			
Niobium	Nb	ND	ND			
Nickel	Ni	0.003	0.1			
Potassium	K	trace	trace			
Silicon	Si	matrix	matrix			
Silver	Ag	trace	0.002			
Sodium	Na	trace	trace			
Strontium	Sr	0.01	0.002			
Tantalum	Ta	ND	ND			
Thorium	Th	ND	ND			
Tin	Sn	ND	ND			
Titanium	Ti	0.4	0.02			
Tungsten	W	ND	ND			
Uranium	U	ND	ND			
Vanadium	V	0.002	0.002			
Zinc	Zn	trace	trace			

SAMPLE No. DESCRIPTION:

1 #3FD 506 R
2 #3FD 518 R
3
4
5

All results expressed as percentages

MATRIX — Major constituent
MAJOR — Above normal spectrographic range
TRACE — Detected but minor amounts
N.D. — Not detected
★ — Suggest assay

NOTES: Rejects retained one month.
Pulps retained three months.
On request pulps and rejects will be stored for a maximum of one year.

DATE SAMPLES RECEIVED _____

DATE REPORTS MAILED Nov 26, 1973

ANALYST Dean Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

FIGURES 1 - 16
FYRE LAKE PROJECT

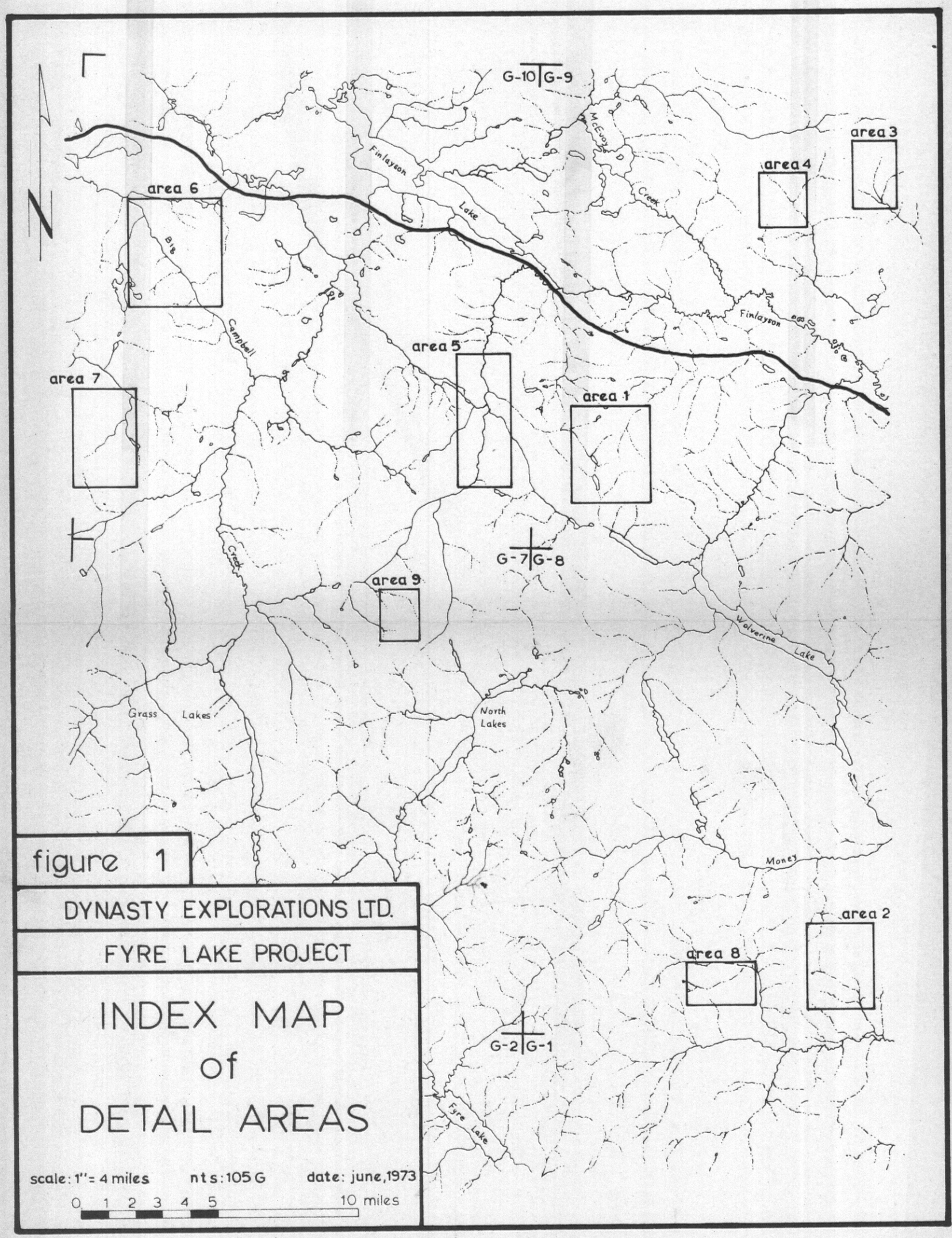

figure 1

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

INDEX MAP of DETAIL AREAS

scale: 1" = 4 miles nts: 105 G date: june, 1973

0 1 2 3 4 5 10 miles

inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

figure 2

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 1: 105G-9

GEOCHEMICAL VALUES

•4,4,22 SOIL SAMPLE WITH COPPER, LEAD, & ZINC VALUE

• SILT SAMPLE

SAMPLERS: P. MASER
P. DEAN
P. SIHOTA

inches
0 1 2
0 1 2 3 4 5
centimetres

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YUKON GEOLOGICAL SURVEY

SCALE: 1 inch = 1/4 mile

JUNE, 1973

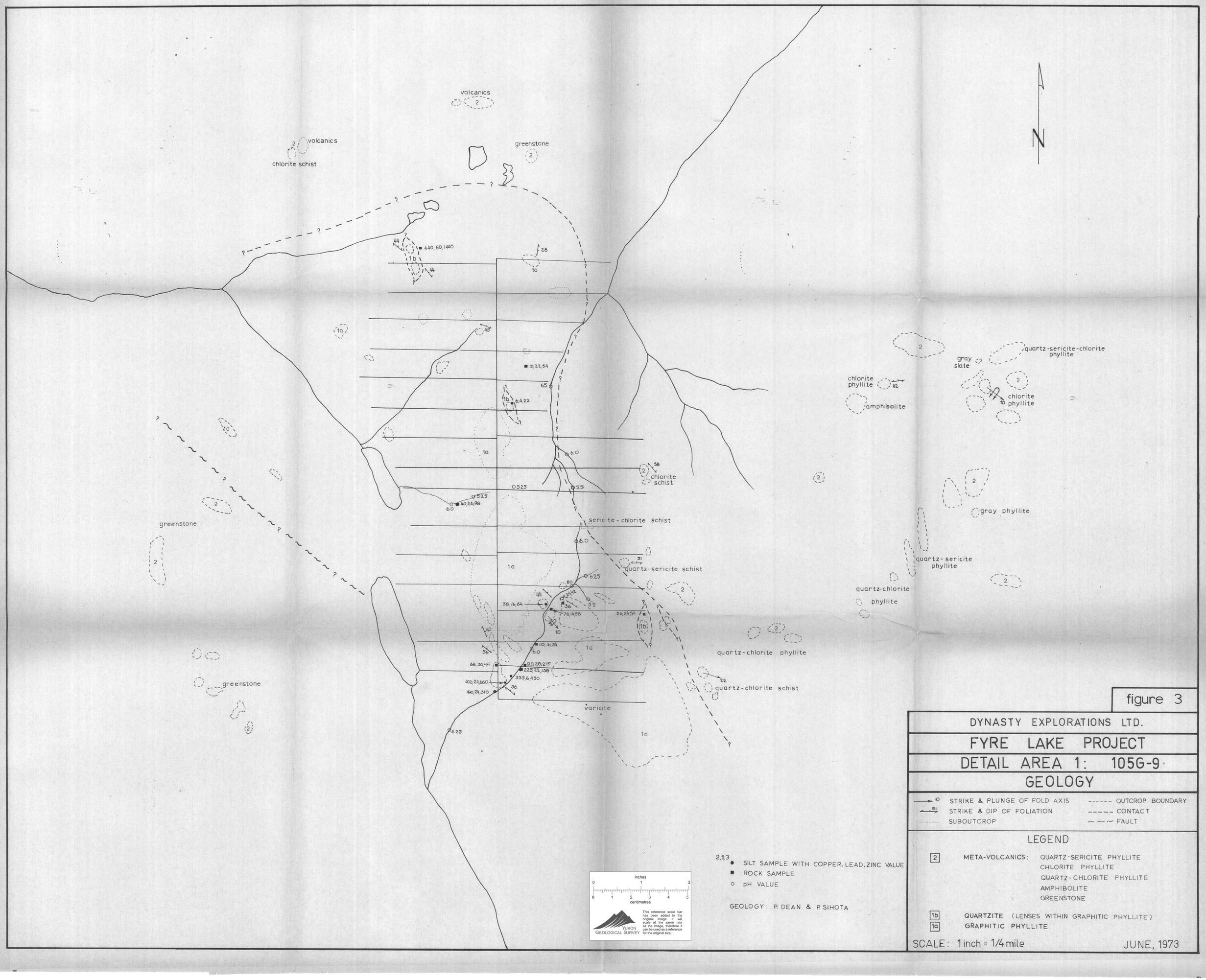


figure 3

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 1: 105G-9

GEOLOGY

10 STRIKE & PLUNGE OF FOLD AXIS
51 STRIKE & DIP OF FOLIATION
SUBOUTCROP
OUTCROP BOUNDARY
CONTACT
FAULT

LEGEND

2 META-VOLCANICS: QUARTZ-SERICITE PHYLLITE
CHLORITE PHYLLITE
QUARTZ-CHLORITE PHYLLITE
AMPHIBOLITE
GREENSTONE

1b QUARTZITE (LENSES WITHIN GRAPHITIC PHYLLITE)

1a GRAPHITIC PHYLLITE

SCALE: 1 inch = 1/4 mile

JUNE, 1973

figure 5

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 2: 105G-8

GEOCHEM: COPPER VALUES

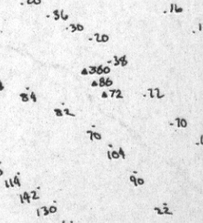
· SOIL SAMPLE

▲ ROCK SAMPLE

SAMPLERS: B. HOWARD
P. MASER
P. DEAN
P. SIHOTA

SCALE: 1 inch = 1/4 mile

JUNE, 1973



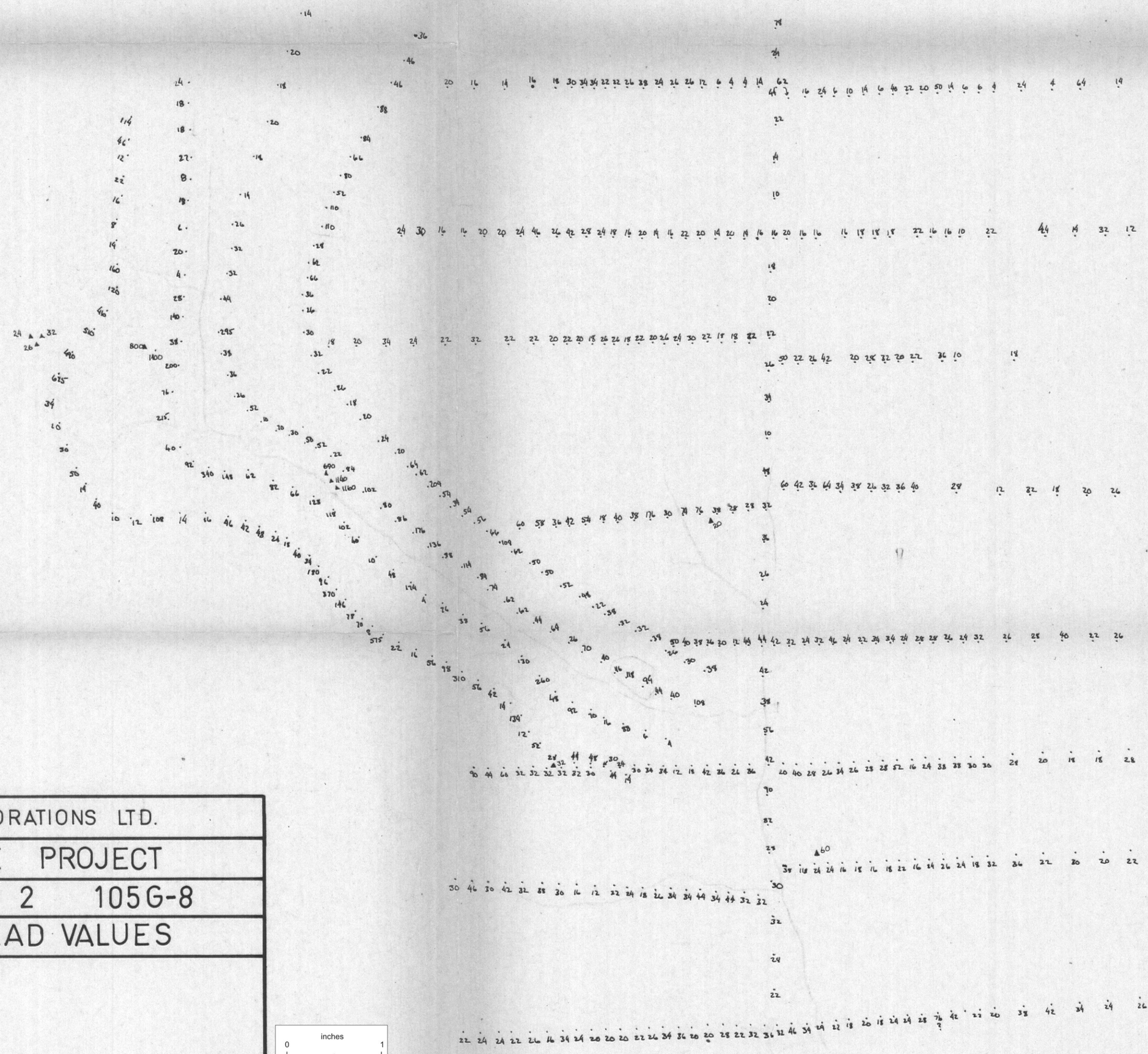


figure 6

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 2 105G-8

GEOCHEM: LEAD VALUES

. SOIL SAMPLE

▲ ROCK SAMPLE

SAMPLERS: B. HOWARD
P. MASER
P. DEAN
P. SIHOTA

SCALE: 1 inch = 1/4 mile

JUNE, 1973

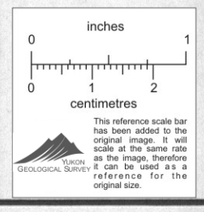


figure 7

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 2: 105G-8

GEOCHEM: ZINC VALUES

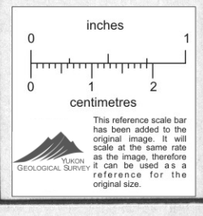
· SOIL SAMPLE

▲ ROCK SAMPLE

SAMPLERS: B. HOWARD
P. MASER
P. DEAN
P. SIHOTA

SCALE: 1 inch = 1/4 mile

JUNE, 1973



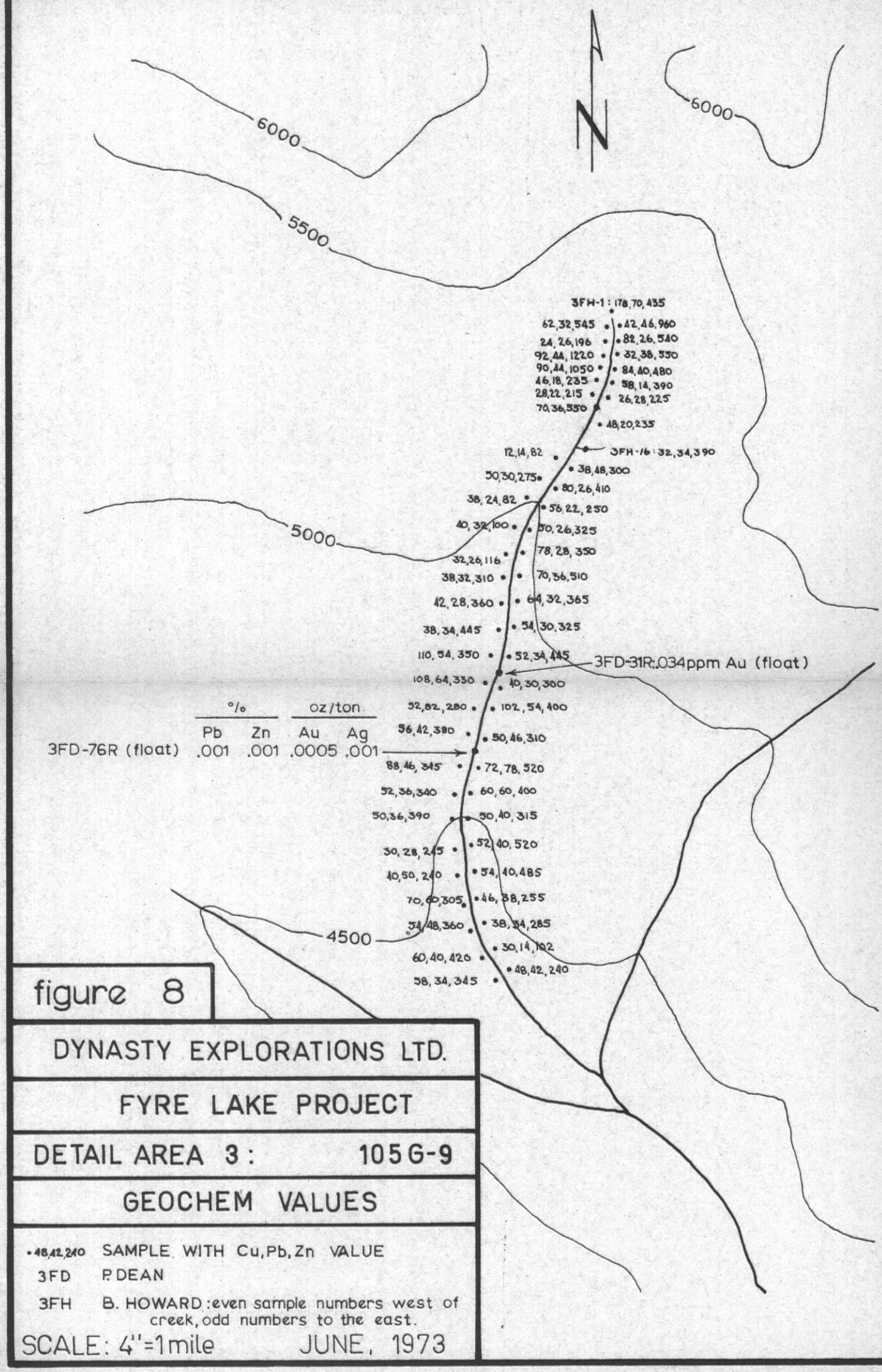


figure 8

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 3: 105G-9

GEOCHEM VALUES

•48,42,240 SAMPLE WITH Cu, Pb, Zn VALUE

3FD P. DEAN

3FH B. HOWARD: even sample numbers west of creek, odd numbers to the east.

SCALE: 4" = 1 mile JUNE, 1973

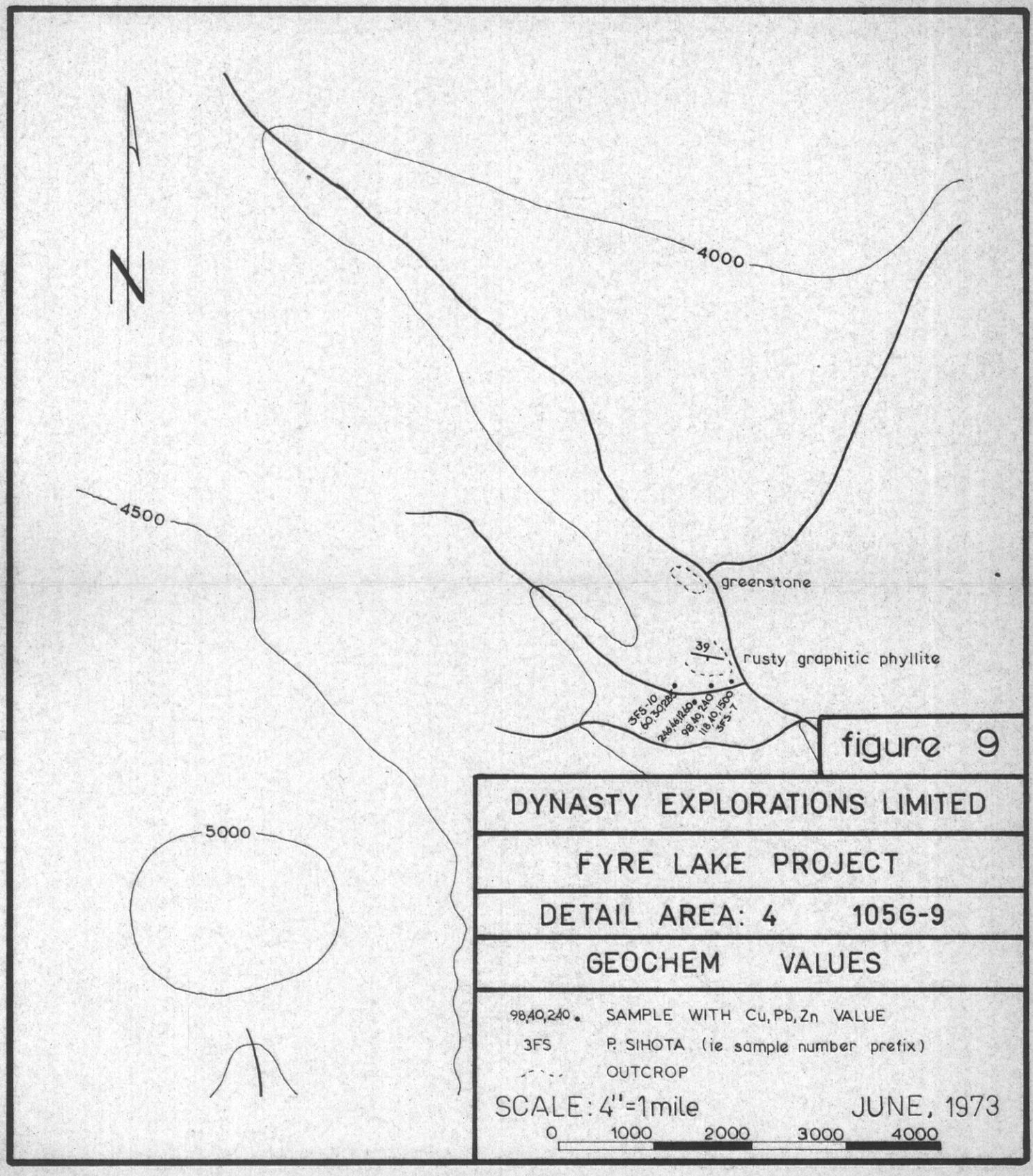


figure 9

DYNASTY EXPLORATIONS LIMITED

FYRE LAKE PROJECT

DETAIL AREA: 4 105G-9

GEOCHEM VALUES

98,40,240 • SAMPLE WITH Cu, Pb, Zn VALUE

3FS P. SIHOTA (ie sample number prefix)

OUTCROP

SCALE: 4"=1mile JUNE, 1973

0 1000 2000 3000 4000

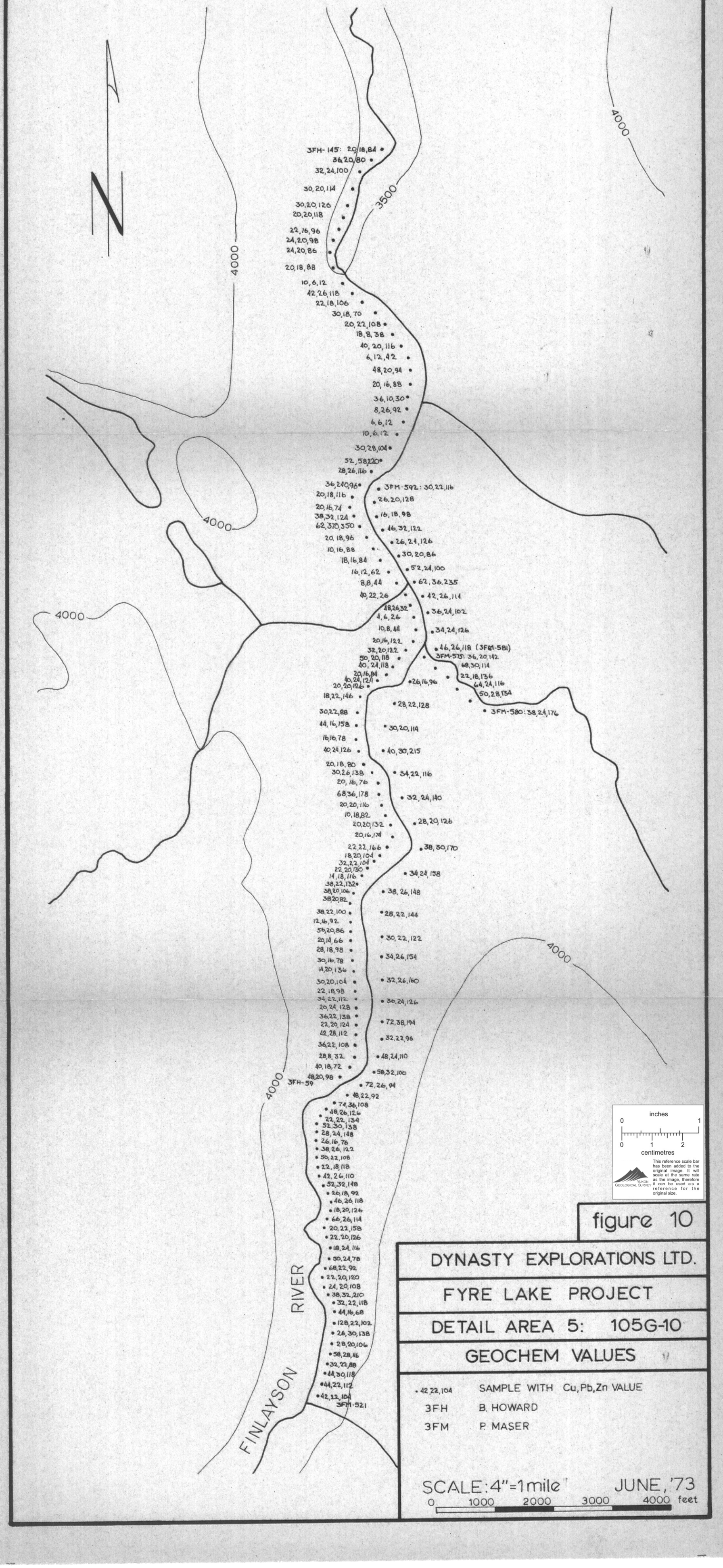


figure 10

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

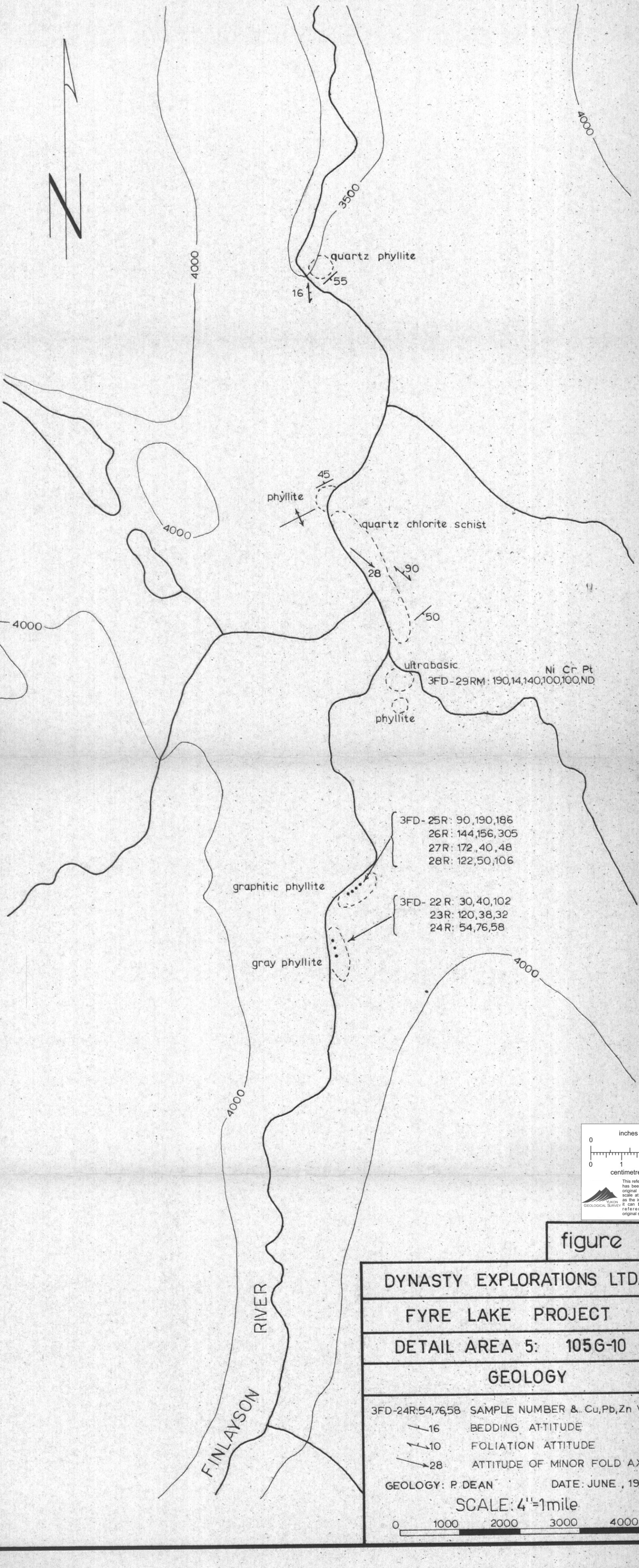
DETAIL AREA 5: 105G-10

GEOCHEM VALUES

• 42,22,104	SAMPLE WITH Cu, Pb, Zn VALUE
3FH	B. HOWARD
3FM	P. MASER

SCALE: 4" = 1 mile JUNE, '73

0 1000 2000 3000 4000 feet


4000
3500
4000
quartz phyllite
55
16
45
phyllite
quartz chlorite schist
28
90
50
4000
4000
ultrabasic
Ni Cr Pt
3FD-29RM: 190,14,140,100,100,ND
phyllite
3FD-25R: 90,190,186
26R: 144,156,305
27R: 172,40,48
28R: 122,50,106
graphitic phyllite
3FD-22R: 30,40,102
23R: 120,38,32
24R: 54,76,58
gray phyllite
4000
4000
FINLAYSON RIVER
inches
0 1
0 1 2
centimetres
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
YUKON GEOLOGICAL SURVEY
figure 11
DYNASTY EXPLORATIONS LTD.
FYRE LAKE PROJECT
DETAIL AREA 5: 105G-10
GEOLOGY
3FD-24R:54,76,58 SAMPLE NUMBER & Cu,Pb,Zn VALUE
16 BEDDING ATTITUDE
10 FOLIATION ATTITUDE
28 ATTITUDE OF MINOR FOLD AXES
GEOLOGY: P. DEAN
DATE: JUNE, 1973
SCALE: 4"=1mile
0 1000 2000 3000 4000 feet

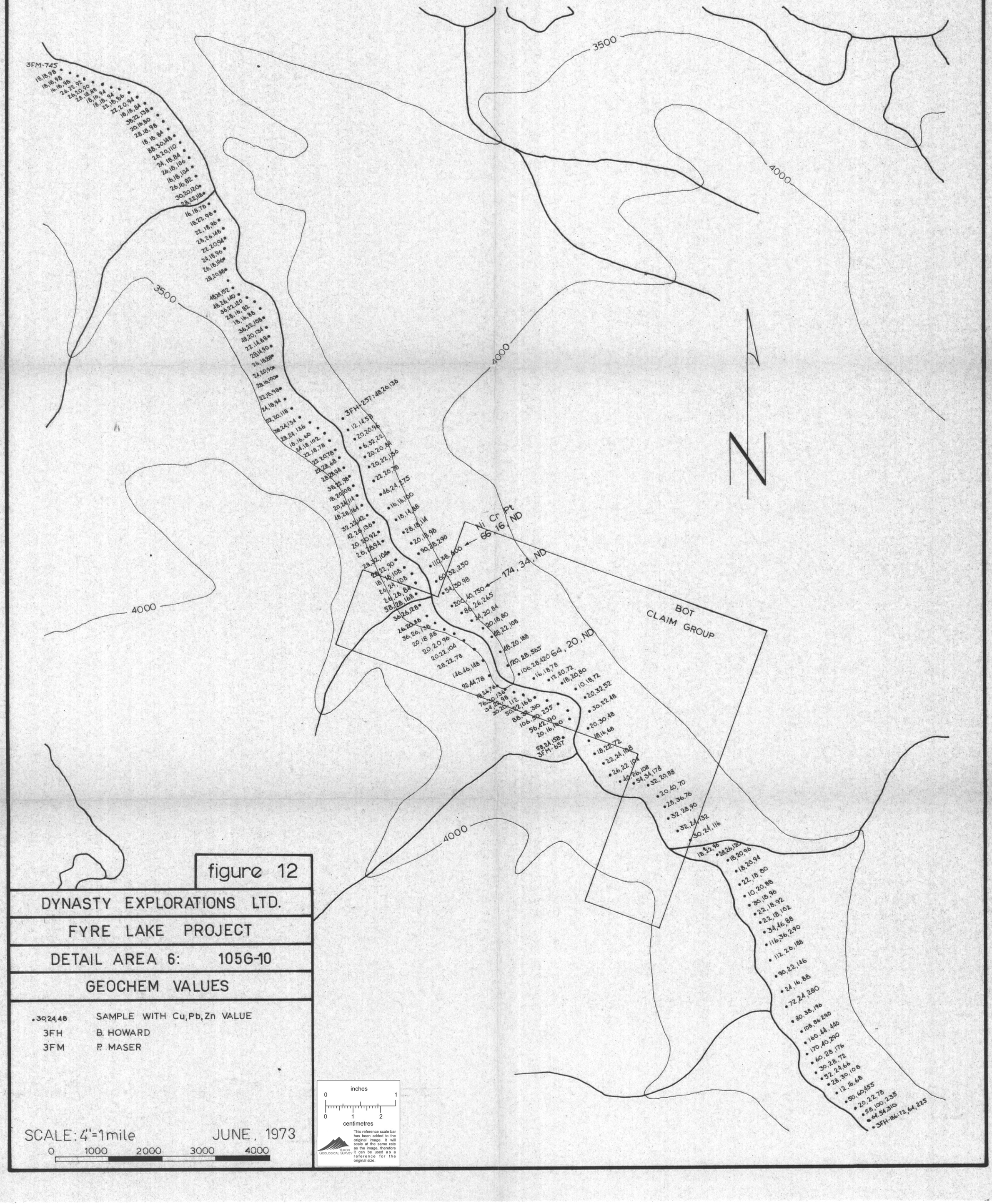


figure 12

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 6: 1056-10

GEOCHEM VALUES

•30,24,48 SAMPLE WITH Cu, Pb, Zn VALUE

3FH B. HOWARD

3FM P. MASER

SCALE: 4"=1mile

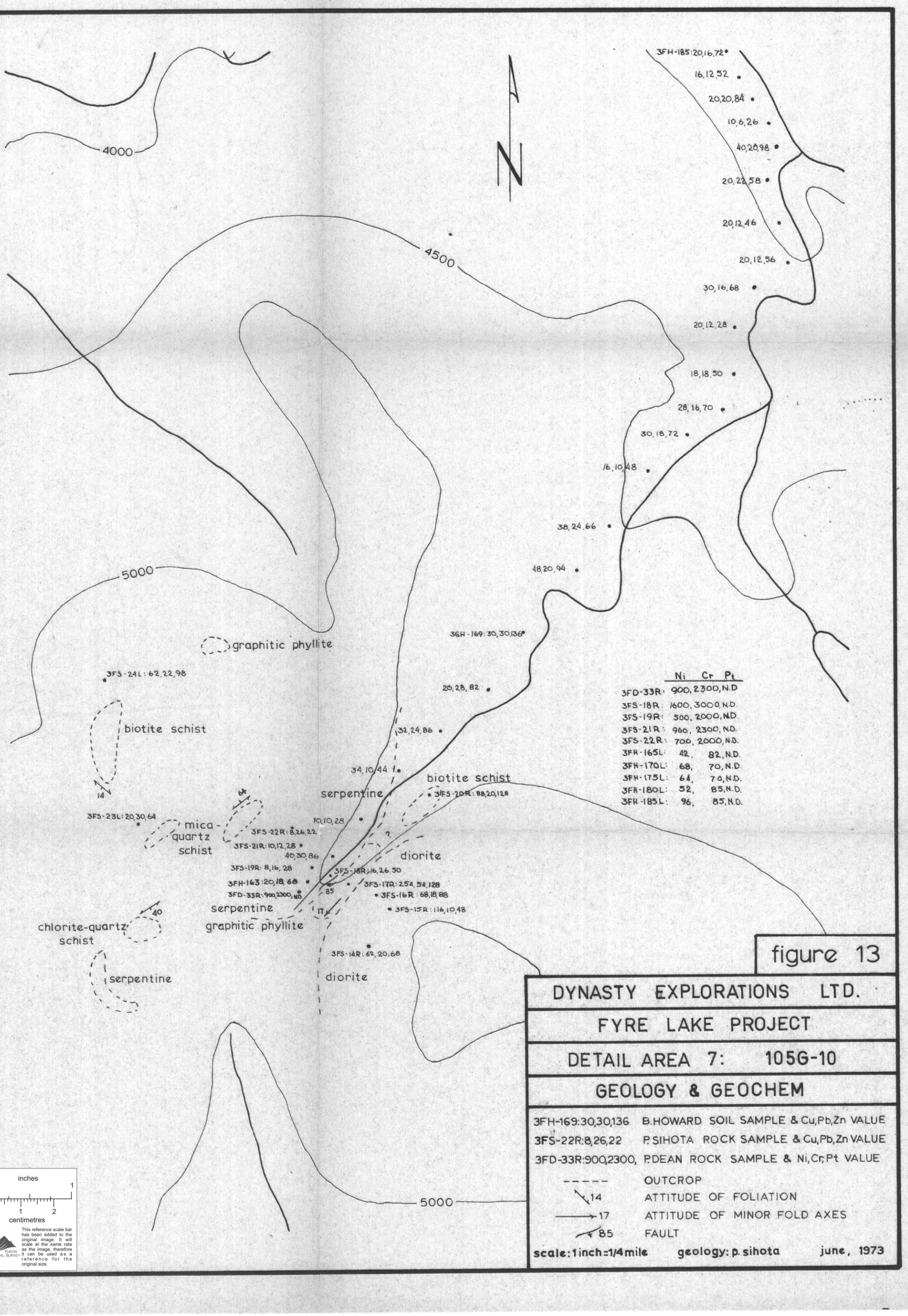
0 1000 2000 3000 4000

JUNE, 1973

inches
0 1
0 1 2
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY


4000
4500
5000
5000
3FH-185:20,16,72
16,12,52
20,20,84
10,6,26
40,20,98
20,22,58
20,12,46
20,12,56
30,16,68
20,12,28
18,18,30
28,16,70
30,18,72
16,10,48
38,24,66
48,20,94
3GH-169:30,30,136
20,28,82
32,24,86
34,10,44
graphitic phyllite
3FS-24L:62,22,98
biotite schist
14
3FS-23L:20,30,64
mica-quartz schist
chlorite-quartz schist
serpentine
3FS-22R:8,26,22
3FS-21R:10,12,28
40,30,86
3FS-19R:8,16,28
3FH-163:20,18,68
3FD-33R:900,2300,ND
10,10,28
serpentine
graphitic phyllite
3FS-18R:16,26,50
3FS-17R:254,54,128
3FS-16R:68,18,88
3FS-15R:116,10,48
3FS-14R:62,20,68
diorite
biotite schist
3FS-20R:88,20,128
diorite
Ni Cr Pt
3FD-33R: 900, 2300, N.D
3FS-18R: 1600, 3000, N.D.
3FS-19R: 500, 2000, N.D.
3FS-21R: 900, 2300, N.D.
3FS-22R: 700, 2000, N.D.
3FH-165L: 42, 82, N.D.
3FH-170L: 68, 70, N.D.
3FH-175L: 64, 70, N.D.
3FH-180L: 52, 85, N.D.
3FH-185L: 96, 85, N.D.
figure 13
DYNASTY EXPLORATIONS LTD.
FYRE LAKE PROJECT
DETAIL AREA 7: 105G-10
GEOLOGY & GEOCHEM
3FH-169:30,30,136 B.HOWARD SOIL SAMPLE & Cu,Pb,Zn VALUE
3FS-22R:8,26,22 P.SIHOTA ROCK SAMPLE & Cu,Pb,Zn VALUE
3FD-33R:900,2300, P.DEAN ROCK SAMPLE & Ni,Cr,Pt VALUE
OUTCROP
14 ATTITUDE OF FOLIATION
17 ATTITUDE OF MINOR FOLD AXES
85 FAULT
scale: 1 inch = 1/4 mile
geology: p. sihota
june, 1973
inches
0 1
0 1 2
centimetres
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YUKON GEOLOGICAL SURVEY

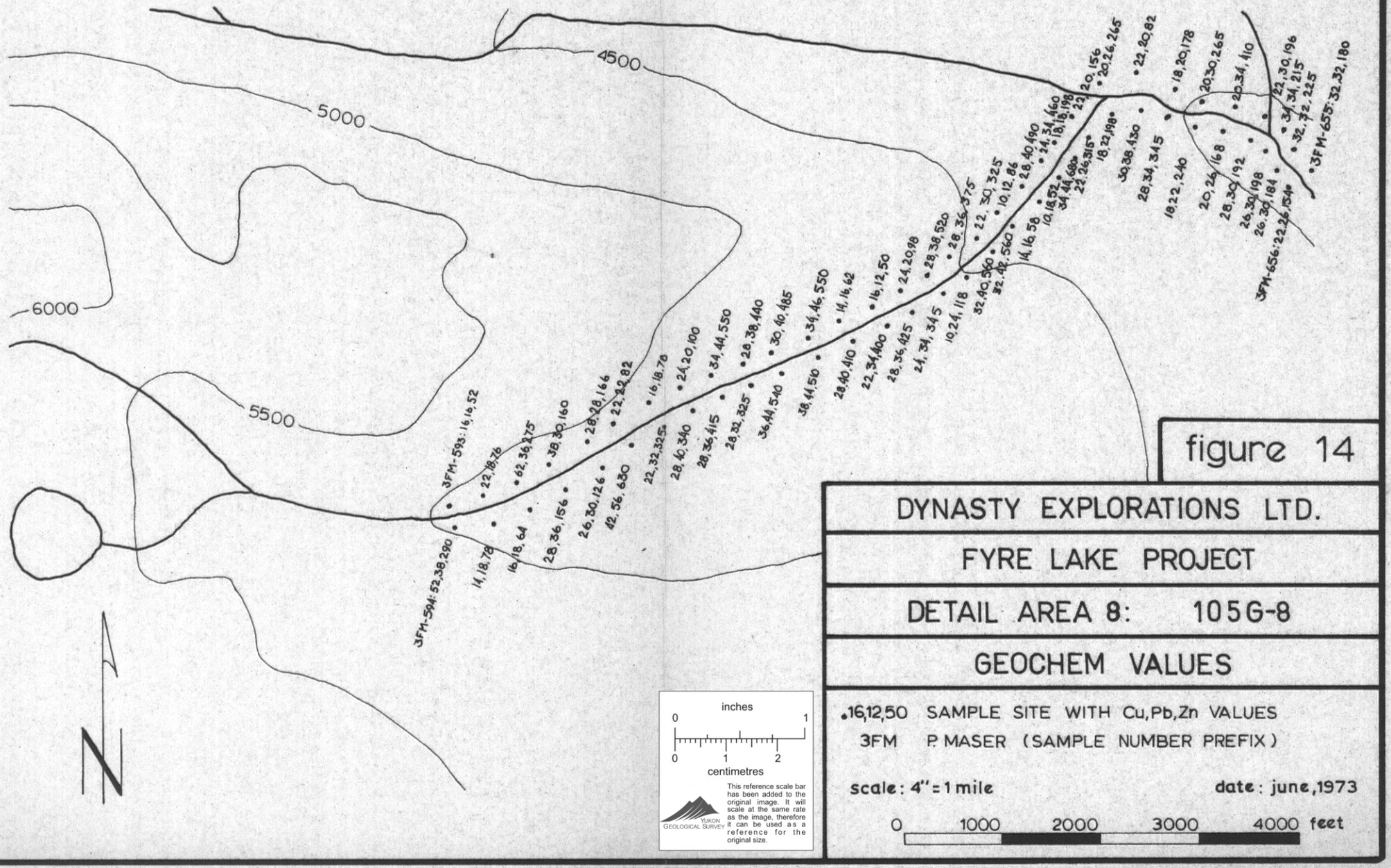

figure 14

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 8: 105G-8

GEOCHEM VALUES

•16,12,50 SAMPLE SITE WITH Cu, Pb, Zn VALUES

3FM P. MASER (SAMPLE NUMBER PREFIX)

scale: 4" = 1 mile

date: june, 1973

0 1000 2000 3000 4000 feet

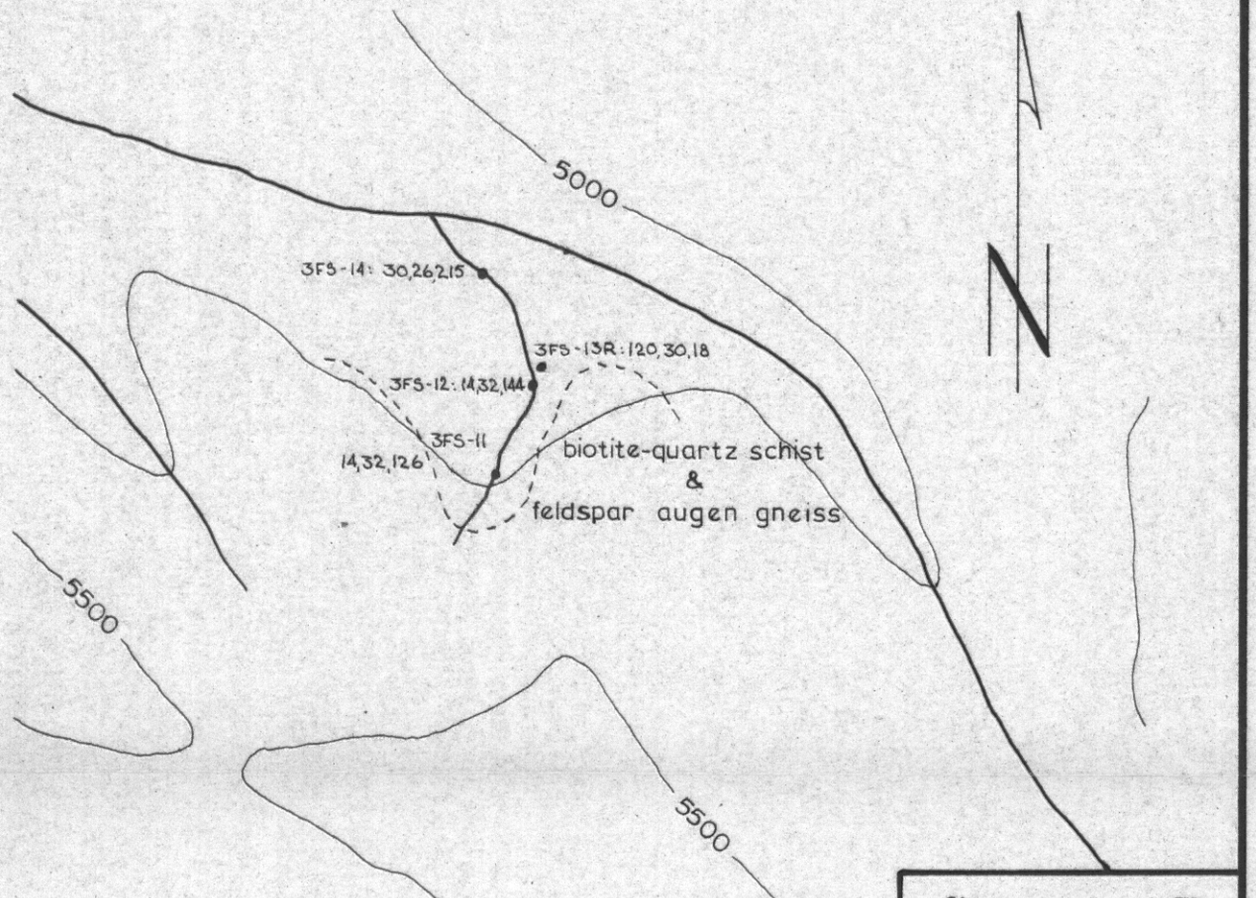

figure 15

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 9: 105G-7

GEOLOGY & GEOCHEM

3FS-11:14,32,126 SAMPLE NUMBER WITH Cu, Pb, Zn VALUE

------ OUTCROP BOUNDARY

SAMPLER: P. SIHOTA

GEOLOGY: P. DEAN

scale: 4"=1 mile **date: june,1973**

0 1000 2000 3000 4000 feet

granite stock

gtz schist (3FD-515R)

SWAMP

(poor geochem)

quartz-magnetite-pyrite schist (3FD-502R, 504R, 506R)

vuggy, limonitic quartzite outcrop (3FS-25G, 3FD-500R)

limonitic, altered-looking chlorite schist (3FD-503R, 3FD-516R, 517R)

OUTLINE OF PROPOSED GRID

3FS-29R

3FS-26R

quartz carbonate altered ultrabasic?

pyrite & minor chalcopyrite in quartz-carbonate rock (S-150, 3FS-28R)

3FS-27R

figure 16

DYNASTY EXPLORATIONS LTD.

FYRE LAKE PROJECT

DETAIL AREA 2: 105G-8

INTERPRETATION MAP

GRADING OF GEOCHEM VALUES IN SOILS:

Cu: over 100 ppm, 1 point
over 500 ppm, 2 points

Pb: over 100 ppm, 1 point
over 500 ppm, 2 points

Zn: over 500 ppm, 1 point
over 1000 ppm, 2 points

Symbol at sample site represents sum of points: nothing, not anomalous
• 1 point ○ 2 pts ⊙ 3 pts ◯ 4 pts ⊕ 5 pts

△ rock geochem site

inches
0 1
0 1 2
centimetres

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