REPORT ON
GEOLOGICAL MAPPING AND DIAMOND DRILLING

by

R.E. Meyers and E.P. Moreton

on the

SCOTIA 1 and 2 and Albere 1-4

MINERAL CLAIMS

Situated on the Scotia River

in the Skeena Mining Division

54°05'N; 129°41'W

NTS 103I/4E

owned by

TEXASGULF INC.

(now KIDD CREEK MINES LTD.)

work by

TEXASGULF INC.

(now KIDD CREEK MINES LTD.)

part 1 of 2

April 1982

Vancouver, B.C.

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INTRODUCTION

Location, Access and Terrain

The WEST SCOTIA property (SCOTIA-80 GROUP) is approximately 25 km east of the confluence of the Skeena and Ecstall Rivers (Figure 1) at Latitude 54°05'N and Longitude 129°40'W. Prince Rupert is 50 km NW and Terrace is 80 km NE. The Rupert-Terrace CNR line and Highway 16 follow the north side of the Skeena River, facilitating mobilization of equipment by helicopter from the highway at Telegraph Point, 10 km north of the property. A logging company operating north of the claim group has indicated plans to extend an access road to within 1 km of the main showing.

The claims (Figure 2) are located in the Skeena Mining Division, within the Kitimat Ranges of the Pacific Coast Mountains. Topography is rugged and abrupt with slopes rising from sea level to over 2000 metres. Mineralization is exposed on a steep slope (~ 35°) near a west branch of the Scotia River. Coniferous rainforest covers much of the lower slopes and valleys, while only alpine grasses and scattered shrubs grow above 1000 metres elevation.

The coastal climate is mild and wet with heavy rainfall, low clouds and occasionally high winds. Heavy snow accumulation in winter usually lasts until mid-summer.

Property History and Definition

The presently held claims include the original four two post 50-acre claims (old claims, Albere 1-4), plus two MGS claims, Scotia 1 (20 units) and Scotia 2 (6 units), which were staked in June 1979.

The property was discovered by Texas Gulf Sulphur in 1958 during a regional exploration programme. In 1960, approximately 570 metres of EX and AX diamond drilling was carried out in ten short holes (Figure 3). Geological mapping at a scale of 1:500 was also completed in the

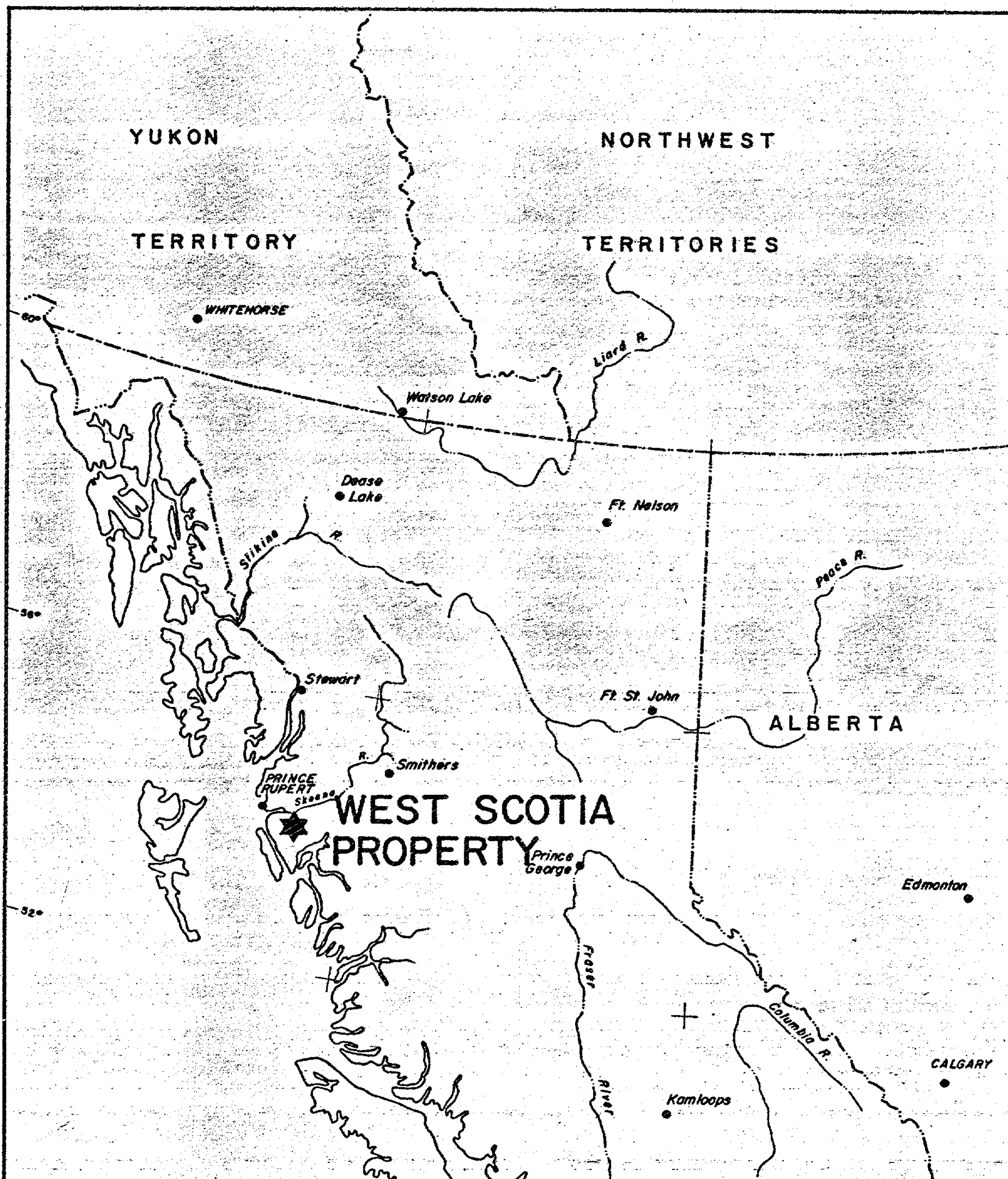
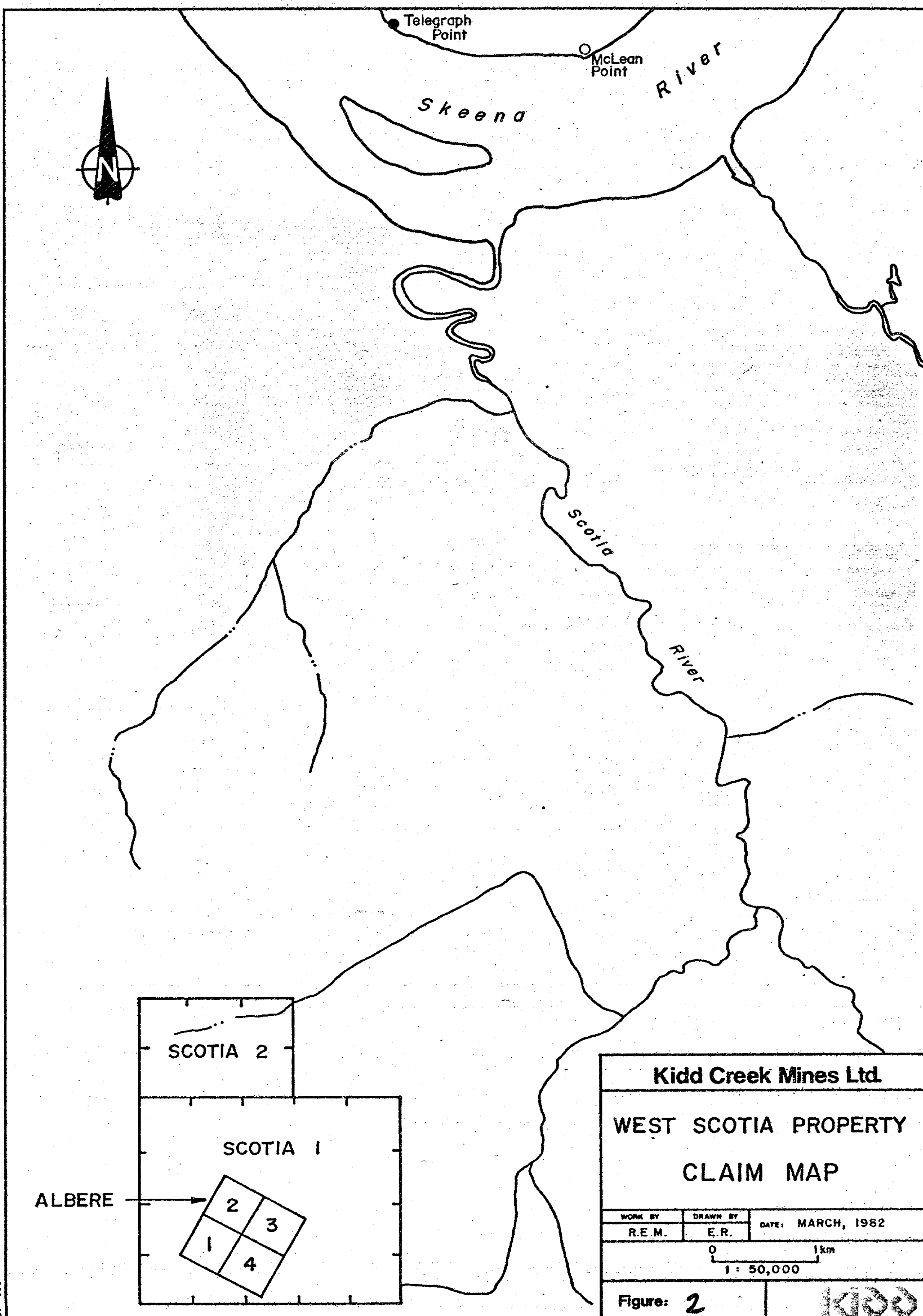


Fig. I

LOCATION MAP

BRITISH COLUMBIA



Kidd Creek Mines Ltd.

WEST SCOTIA PROPERTY

CLAIM MAP

WORK BY	DRAWN BY	DATE: MARCH, 1982
R.E.M.	E.R.	

Figure: 2

NCI - 556

immediate area of the showing. The 1960 drilling results indicated some 30 to 50 thousand tons grading 20% Zn and 2% Pb.

In 1977, work included updated preliminary geological mapping and a soil geochemical survey of limited extent, as well as a general appraisal of previous exploration activities.

In 1980, 960 metres of BQ core were drilled in seven holes. The sulphide zone was extended 150 metres northwest. The programme expanded "reserves" to approximately 187,000 tonnes grading 11.8% Zn, 1.3% Pb and 20.6 g/tonne Ag. Limited surface reconnaissance was also carried out in 1980 (DeLancey 1981).

Summary of Work Completed 1981

In July and August 1981 reconnaissance mapping (Figure 3) was completed on the claims at 1:5000 and detailed mapping of the south-central area, including the mineralized showing, was carried out at 1:~~500~~ 1000 scale (Figure 4).

In August and September of 1981 four BQ diamond drill holes were completed totalling 1104.2 metres. Three of these holes were drilled to intersect the down-dip extension of the ore zone and the fourth hole was drilled to test a pyritic gossan about 1 km to the northwest. Although substantial intersections of the altered host rocks were cut, in holes S-18-81 and S-20-81, no massive sulphides were encountered and the previously indicated "reserves" were not increased.

1981 Drill Holes

S-18-81	065°/-70°	252.1m
S-19-81	065°/-65°	268.2m
S-20-81	025°/-44°	382.4m
S-21-81	065°/-65°	201.5m

GEOLOGY

Regional Geology

The WEST SCOTIA property is in the southern half of the Prince Rupert-Skeena Map Sheet (1472A, Hutchison et.al. 1971), just south of the Skeena River. It lies within a belt of highly metamorphosed late Paleozoic-early Mesozoic rocks of volcano-sedimentary origin referred to as the Ecstall Pendant. Immediately west of the belt is the broad northwest-trending quartz diorite Ecstall Pluton, part of the Coast Crystalline Complex. In general, structural trends are north-northwest defined by gneissic layering, steeply dipping foliations, minor fold axes and lineations. Metamorphic grade in the region ranges from upper greenschist (Prince Rupert area) to amphibolite (WEST SCOTIA area) facies, generally increasing eastward from the coast.

Property Geology

The claims are underlain by a homoclinal sequence of mixed, locally migmatitic hornblende- and biotite-bearing, quartz-feldspar gneisses and amphibolite, all of variable composition, which have a generally consistent NNW strike and steep to moderate westerly dips. The gneisses are intruded by NE-trending pegmatite dykes and minor diorite and lamprophyre dykes. At the northern edge of the property the gneisses are truncated by a massive foliated diorite intrusion.

Mineralization

The main zone of mineralization (Figure 4) consists of thin conformable lenses of Zn-Ag-Pb-bearing massive sulphides of presumed volcanogenic origin. Sphalerite is the most abundant economic sulphide and occurs with accessory amounts of pyrite, galena and chalcopyrite. Peripheral to the massive sulphides sub-conformable sericite-rich (muscovite) rocks partially envelop the sulphide lenses. The rocks have variable sulphide content, are usually pyritic and locally contain significant amounts of disseminated sphalerite, galena, pyrrhotite and minor chalcopyrite.

Several gossanous "rusty" pyrite-and magnetite-bearing outcrops were observed on the property, the most prominent being the area flanking the main sphalerite showing. In most cases the gossans are associated with felsic and "mixed" intermediate gneisses, with minor muscovite and a few weathered out mafic bands. Magnetite is usually at least as abundant as pyrite (py + mt = 5-15%) and, in places, exceeds it. At localities other than the main showing the gossanous zones are of limited stratigraphic thickness (up to 30 m), but some exposures appear to line up along strike, suggesting that specific horizons are Fe-rich and might bear potential for sulphide occurrences.

Lithology

The lithologies have been subdivided into distinct mappable units (Figures 3 and 4) which are outlined as follows:

FELSIC GNEISS
MAFIC GNEISS
INTERMEDIATE GNEISS
FELSIC "TUFF"
- (a) Quartz-Feldspar-Sericite Gneiss
- (b) Quartz-Sericite Schist
- (c) Pyritic Quartz-Sericite Gneiss

AMPHIBOLITE
DYKES
- (a) Pegmatite
- (b) Diorite
- (c) Lamprophyre

FELSIC GNEISS is a medium-to coarse-grained (3-7mm) leucocratic gneiss consisting of quartz, plagioclase ($\pm$ K-feldspar), biotite and amphibole (hornblende) with minor magnetite, epidote, garnet and pyrite.

Mafics (mainly amphibole) may account for up to 25% of the rock, but average 10-15%. Foliation is moderate to well developed and defined by alternating thin mafic and felsic bands 2 to 30 cm thick. The area west of the showing is underlain by a section of felsic gneiss several hundred metres in thickness.

MAFIC GNEISS is a fine to medium grained melanocratic rock, usually with greater than 40% mafics (amphibole $\pm$ biotite). Foliation is defined by mafic mineral alignment rather than compositional banding. Plagioclase, minor quartz and garnet account for up to 50% of the rock. Garnets are generally more common in this unit than in felsic gneisses and usually occur as porphyroblasts (1-7mm) or in garnetiferous bands up to 10 cm thick. The unit varies in composition from amphibole- to biotite-rich gneiss, with amphibole predominating. Schistose biotite-rich bands are usually discontinuous and less than 1 m in width. In general, comparatively thin bands of mafic gneiss are interlayered with greater thicknesses of felsic and intermediate gneiss.

INTERMEDIATE (MIXED) GNEISS is a fine to medium grained, quartz-feldspar gneiss with 25-40% mafic minerals. At some localities this unit is massive and homogeneous in overall appearance, but more commonly it occurs as alternating bands ($\leq$1 m thick) of mafic and felsic gneiss which are not differentiated by mapping. Much of the area north and east of the showing is underlain by this unit.

FELSIC "TUFF" is the name applied to the sericite-rich rocks which are host to the massive sulphides. The tuffaceous connotation is highly interpretive and infers that the unit originally was a hydrothermally altered volcaniclastic rock. The unit is subdivided into three distinct rock types:

(a) QUARTZ-FELDSPAR-SERICITE GNEISS is a fine to medium grained assemblage of quartz (30-40%), plagioclase (30-50%) and sericite ($\leq$20%), commonly containing up to 5% disseminated pyrite and minor sphalerite. Garnets appear rarely as very fine grained (≤2mm) uniformly disseminated "crystalloblasts". Deformation in the unit is not obvious. The main occurrence is a massive, 70 m wide band south of the showing, which narrows and pinches out immediately to the north. Elsewhere on the property minor sections of this rock are associated with the narrow gossanous zones described earlier.

(b) QUARTZ-SERICITE SCHIST is composed of ≥80% coarse grained sericite with 10-15% quartz and accessory plagioclase. Schistosity is well developed and the rock occurs as thin (≤5m) bands up to about 25 m long, strata-bound within the quartz-feldspar-sericite gneiss along strike and south of the sphalerite showing.

(c) PYRITIC QUARTZ-SERICITE GNEISS occurs as thin bands (≤35cm) of gossanous "rusty"-weathering rock which contains up to 20% pyrite. The bands are usually enclosed in, or adjacent to the quartz-sericite schist and are of limited lateral extent (Figure 4).

AMPHIBOLITE is fine to medium grained with ≥75% black amphibole (hornblende) and minor feldspar and quartz. Augen-like leucocratic masses composed of plagioclase, quartz and K-feldspar porphyroblasts (2-7mm) comprise as much as 5% of the amphibolite. Such "zones" are irregularly distributed and are rarely greater than 2 m thick.

DYKES are common throughout the property. Most are unfoliated and have a granitic composition, although diorite and lamprophyre compositions are also noted. Most have steep to vertical dips and trends vary from NE to NW.

(a) PEGMATITE dykes are most heavily concentrated as a 200 m wide branching swarm which cuts across the sericitic zone and massive sulphide showing. The pegmatite consists of very coarse grained (1.0-1.5 cm) K-feldspar, quartz and minor muscovite and form dykes 2.0 cm to 3.5 m wide. At the showing the dykes are spaced from 2 to 7 m apart and trends vary from 010° to 020°. Elsewhere trends range from NE to NW. Another strongly pegmatitic zone occurs just off the SW corner of the property (Figure 3).

(b) DIORITE dykes pre-date the pegmatites and are less common. The rock is a medium grained assemblage of plagioclase, amphibole and quartz and is similar in composition to the felsic gneiss, but lacks foliation. Diorite dykes are generally rare, being most common south and west of the showing, where they intrude quartz-sericite schist and amphibolite.

(c) LAMPROPHYRE was observed in only one locality where a 0.5 m dyke is exposed in "Rusty Creek" (Figure 3). The dyke material is unfoliated and consists of coarse grained biotite (>70%) with associated hornblende (and/or pryroxene?) and minor plagioclase.

Metamorphism

The mineral assemblages observed at WEST SCOTIA appear to result from amphibolite to upper amphibolite facies metamorphism. The felsic and intermediate gneisses consist predominantly of quartz and feldspar with variable biotite and hornblende content, minor garnet, and are notably lacking in cordierite, sillimanite or other highly aluminous phases. They appear, therefore, to most closely resemble acid to intermediate volcanic rock compositions (rhyolite to dacite). Minor garnet-rich zones may represent associated tuffaceous or sedimentary (greywacke) horizons. The mafic gneisses are plagioclase-rich with abundant mafic minerals and accessory quartz and garnet. Their bulk composition most closely resembles a meta-andesite. Given that the difference between metabasites and metagreywackes are subtle, one might expect a substantially higher quartz content in a metagreywacke. The presence of garnet further confuses the issue, as garnets may be present in unmetamorphosed basic volcanic rocks as well as in their meta-equivalents and metagreywackes. Similar comparisons can be made for the amphibolites, which are reasonably interpreted to be metabasalt. The sericite-(muscovite-)rich rocks are not directly comparable to primary volcanic rocks, however, as sericite is a common alteration of felsic volcaniclastic rocks (tuffs, agglomerates), associated with massive sulphides, at lower metamorphic grades, it is conceivable that the sericitic gneisses and schists at WEST SCOTIA represent the remnants of an alteration zone which flanked or enveloped the massive sulphides.

Structure

The most prominent structural characteristics at WEST SCOTIA include a well developed NNW-trending gneissic foliation and schistosity, which is folded along north-south trending axes, possibly refolded about southwest plunging axes, and offset locally by minor normal faults, fractures and at least two main joint sets (Figures 5a,b and c).

Fold amplitudes range from a few centimetres to several hundred metres. The major structural trends are interrupted by a broad, open antiform which closes in the east-central part of the claims and plunges gently to the south. This fold has an amplitude of at least 400 m. Measurements taken on parasitic folds on both limbs and along strike indicate the structure to be slightly overturned to the east, such that the axial plane dips steeply (65°-75°) to the west.

Most minor and mesoscopic folds measured elsewhere on the property appear to be harmonic with the major antiform and are usually tight to isoclinal. There is a reversal of fold plunge directions from SE to NNW (Figures 3 and 5a) along West Ridge and to the north along Rusty Creek. In addition, there are also a few SW-plunging minor folds at various localities which, together with the northerly plunging folds, suggest that later folding may have developed about SW-trending axes.

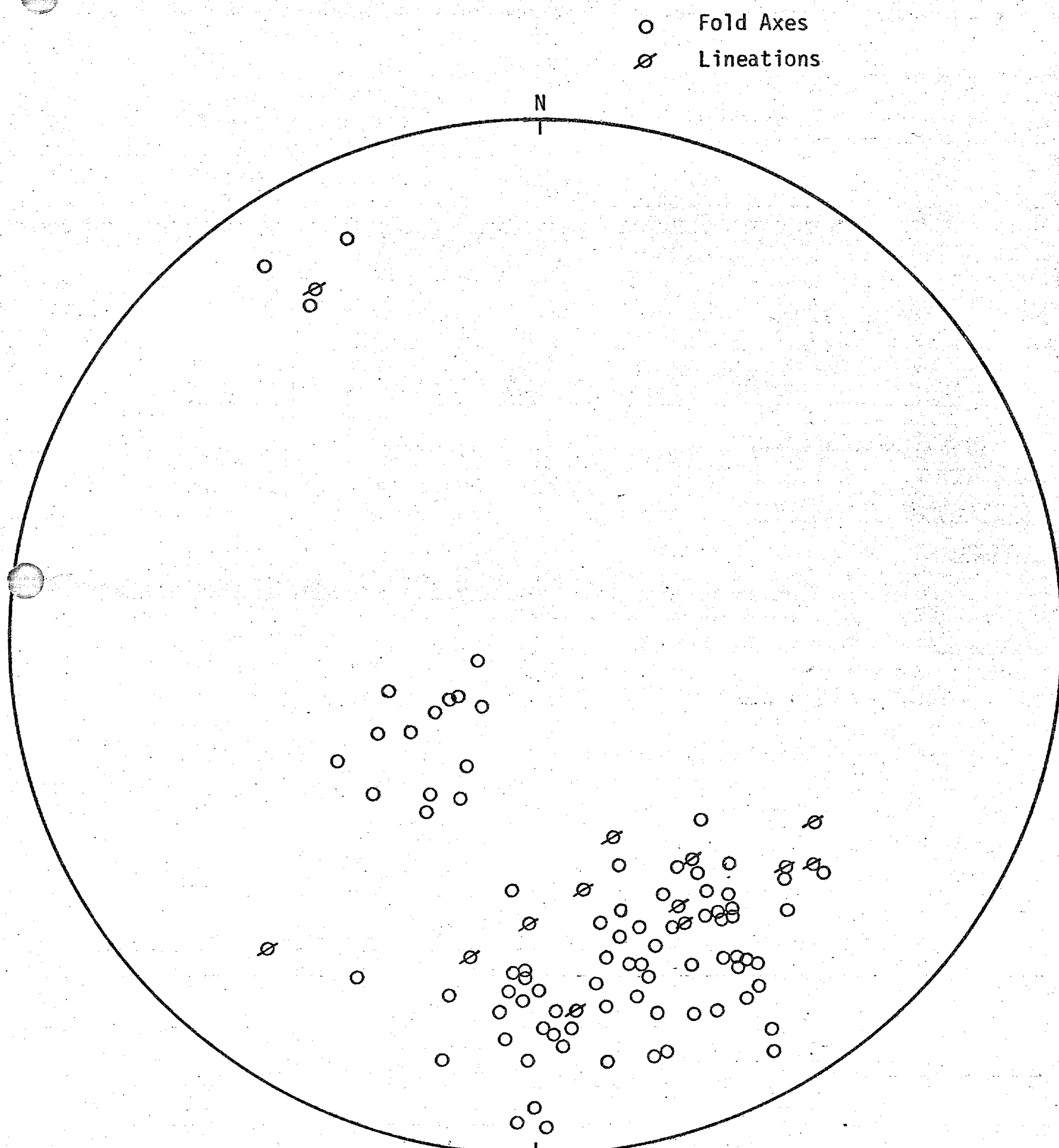


Figure 5(a)

Stereonet representation of various fold axis measurements

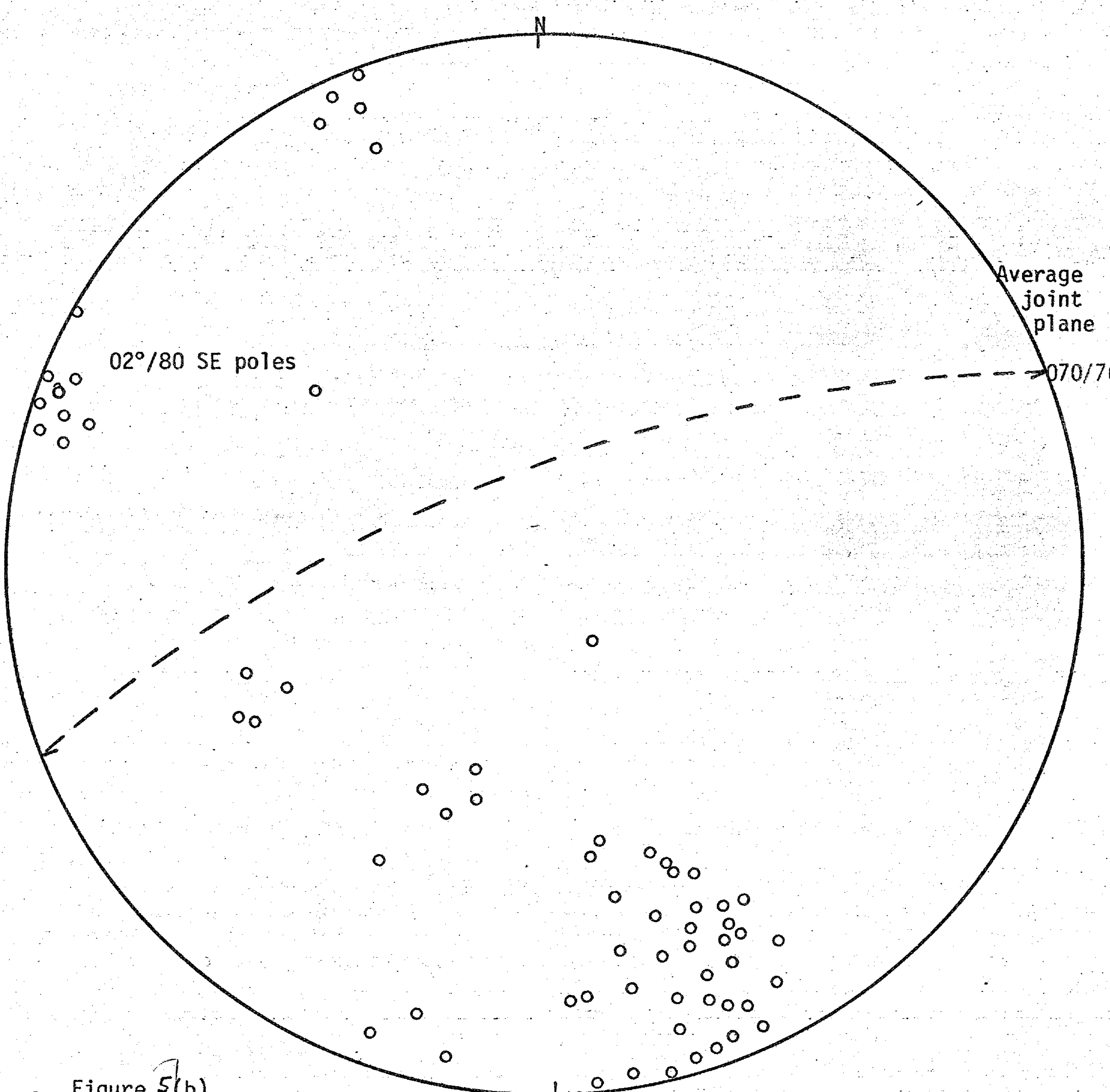


Figure 5(b)

Stereonet plot of poles to joint planes and calculated "average" joint plane

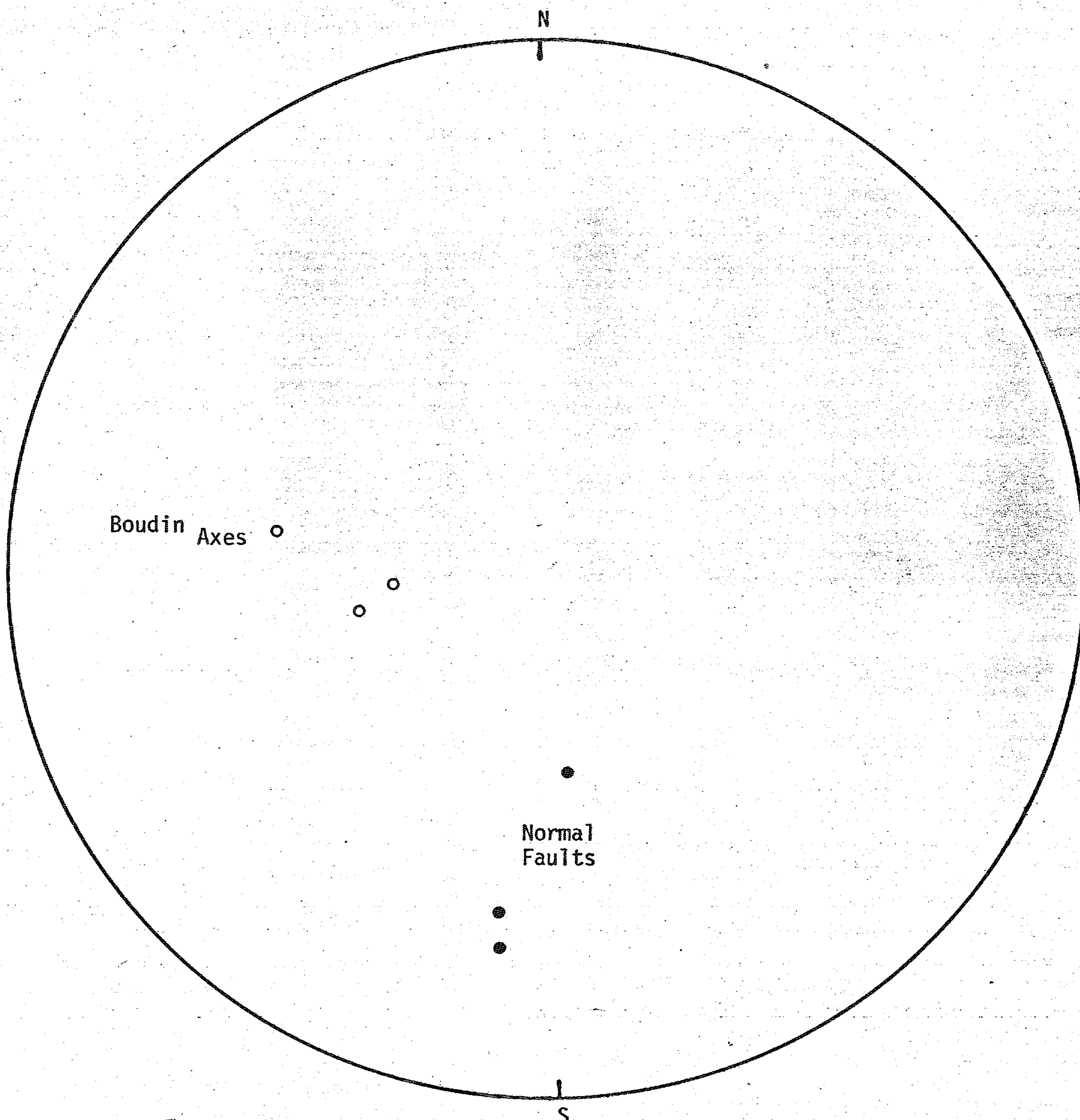


Figure 5(c)

Stereonet Plot of Poles to
Normal Fault Planes and Long axis of Boudins

Detailed mapping in the showing area (Figure 4) reveals that most minor folds are generally open to tight with interlimb angles 30° to 80° and shallow plunges 10° to 30° south. Shear-related folds are developed in the mafic lenses which are enclosed in the quartz-sericite gneiss. Since this area lies between two more competent lithologies (felsic gneiss and intermediate gneiss), intrafolial folds and shears were likely developed in response to differential shearing parallel to the main gneissosity. The mafic lenses formed local shear folds, while the sericitic rocks deformed by intrafolial slip. All fold axis orientations are consistent with measurements of lineations formed by the parallel alignment of amphibole crystals in the plane or foliation.

Two main joint sets observed on the WEST SCOTIA claims are oriented roughly 070°/70N and 020°/80SE (Figure 5b). The 070°/70N joints are the dominant set and are nearly orthogonal to the mean fold axis orientation and lineation direction. From the configuration of parallel fold axes, lineations and orthogonal joints, it is evident that all three features developed during the same extensional regime. The second joint set (020°/80SE) is approximately conformable to the orientation of the pegmatite dykes, most of which have a near vertical dip.

Boudinage is not a common feature on the property, but a few boudins observed in deformed dykes, are oriented with their axes orthogonal to most fold axes (Figure 5c), again suggesting co-axial extension with fold development. A few normal faults, with offsets less than 2 metres, occur in proximity to the boudins. They are also oriented orthogonally to major fold axes are are oriented subparallel to the main 070°/70N joint set.

In general, it appears that ductile deformation, accompanied by folding, lineation development and boudinage was followed by brittle deformation which produced a well developed joint pattern and subsidiary normal faulting.

1981 DIAMOND DRILLING

The primary purpose of the 1981 drilling programme was to follow up and test the down-dip extension of mineralization intersected in the 1980 programme. The geology of each hole is summarized below and illustrated on cross-sections (Figures 6a,b,c, and d). The assays (geochemistry) for selected sections are listed in Appendix A. Three holes were drilled in the main zone and a fourth was drilled 1 km to the northwest to test a pyritic gossanous zone on West Ridge.

S-18-81 (Section A-A'; Figure 6a), was drilled 185 metres west of holes S-11 and 12-80 to test the area beneath the mineralization intersected in these holes. The upper 157 metres cut alternating sections of felsic and mafic gneiss and minor pegmatite. The muscovite-rich alteration zone ("felsic tuff") was intersected from 157.0 to 171.0 m, from 188.0 to 211.0 m and from 228.6 to 235.5 m totalling approximately 44 metres of the zone. Minor amounts of sphalerite were encountered along with up to 20% disseminated pyrite, pyrrhotite and chalcopyrite. The best intersection was from 193.0-199.0 metres, which averaged 0.65% Zn (includes 0.94% Zn from 193.0-196.0 m). The remaining assays averaged less than 0.20% Zn.

S-19-81 (Section B-B'; Figure 6b), was drilled approximately 250 metres due south of S-18-81 to test the down-dip extension of the massive sulphides exposed at surface and intersected in the 1960 drill holes. The hole cut substantial sections of mafic gneiss (including amphibolite), felsic and intermediate gneiss and short sections of pegmatite and migmatite throughout. Although minor pyrite, pyrrhotite and traces of sphalerite were encountered locally, there is no indication that the massive sulphides nor the sericitic "tuff" extends down-dip in this area.

S-20-81 (Section C-C'; Figure 6c), was drilled from the same location as the previous hole (S-19-81). This hole was an attempt to intersect the mineralized horizon midway between holes S-18 and S-19-81. Approximately 10 metres of weakly sulphidic quartz-muscovite schist was cut at 148.8 to 158.0 metres and a 4.4 m section of similar material was encountered at 186.0 to 190.4 metres. The upper zone contained no significant values, but the lower zone averaged 0.6% Zn over 4.4 metres which includes 1.4 metres of 1.04% Zn (189.0-190.4 m) along with anomalous values in Pb and Cu. The remainder of the hole encountered mafic to felsic gneisses and a substantial thickness of garnet-bearing pegmatite at the bottom of the hole.

S-21-81 (Section D-D'; Figure 6d), was drilled approximately 1 km northwest of the main sulphide zone to test a weakly pyritic gossan exposed on West Ridge, just north of camp. Muscovite- and phlogopite-bearing pyritic gneisses were encountered from 136.9 to 157.9 metres. There are notable disseminated sulphides and oxides throughout this section (2-5% locally) which includes pyrite, pyrrhotite, magnetite as well as traces of sphalerite and chalcopyrite. Zn values are low in all sections sampled, however, they are anomalously higher along with Pb, Cu and Ag from 167.0 to 176.4 metres which is predominantly mafic gneiss with minor sections of "cherty" (silicified?) felsic gneiss.

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APPENDIX A

SUMMARY OF ASSAYS AND ANALYSES

PROPERTY: WEST SCOTIA HOLE No.: S-18-81 PAGE 1 of 1

LATITUDE: ______ AZIMUTH: 065 INCLINATION: -63.5° / 056° at 121.9 m

LONGITUDE: ______ DIP: -79° INCLINATION: -55.5° / 053° at 242.9 m

ELEVATION: 945 m INCLINATION: ____ / ____ at ____

SAMPLE No.	METRES		Zn		Pb		Cu		Ag		Au	
	FROM	TO	%	AVG.	ppm	AVG.	ppm	AVG.	ppm	AVG.	ppb	AVG.
61001	156.7	160.0	0.01		5		14		0.2		70	
2	160.0	163.0	0.06		24		117		0.6		30	
3	163.0	166.0	0.02		11		45		0.4		20	
4	166.0	169.0	0.01		4		28		0.2		5	
5	169.0	171.0	0.02		6		86		0.2		10	
6	188.0	190.0	0.08		19		72		1.4		30	
7	190.0	193.0	0.02		4		69		1.3		25	
8	193.0	196.0	0.94		12		230		7.6		90	
9	196.0	199.0	0.36		20		135		2.5		30	
10	199.0	202.0	0.03		24		60		1.8		30	
11	202.0	205.0	0.02		29		112		5.2		30	
12	209.0	211.0	0.74		50		480		3.2		55	

PROPERTY: WEST SCOTIA HOLE No.: S-19-81 PAGE 1 of 1

LATITUDE: ______ AZIMUTH: 065° INCLINATION: -53° / 063° at 182.9 m

LONGITUDE: ______ DIP: -65° INCLINATION: ___ / ___ at ___

ELEVATION: 795 m INCLINATION: ___ / ___ at ___

SAMPLE No.	METRES FROM	METRES TO	Zn %	Zn AVG.	Pb ppm	Pb AVG.	Cu ppm	Cu AVG.	Ag ppm	Ag AVG.	Au ppb	Au AVG.
E1013	156.7	160.0	0.03		13		36		0.4		15	
14	160.0	163.5	0.01		5		48		0.6		15	
15	163.5	166.0	0.01		3		34		0.2		10	
16	166.0	169.4	0.01		5		27		0.2		10	
17	170.0	173.0	0.01		4		13		0.2		5	
18	173.0	176.0	0.01		2		11		0.2		5	
19	176.0	179.0	0.01		4		22		0.2		10	
20	179.0	182.0	0.01		ND		11		0.2		10	
21	182.0	184.2	0.01		6		28		0.2		5	

PROPERTY: WEST SCOTIA   HOLE No.: S-20-81   PAGE 1 of 1

LATITUDE: ______   AZIMUTH: 025°   INCLINATION: -42.5° / - at 234.7 m

LONGITUDE: ______   DIP: -44°   INCLINATION: -37° / 047 at 350.5 m

ELEVATION: 795 m   INCLINATION: ____ / ____ at ____

SAMPLE No.	METRES FROM	METRES TO	Zn %	Zn AVG.	Pb ppm	Pb AVG.	Cu ppm	Cu AVG.	Ag ppm	Ag AVG.	Au ppb	Au AVG.
61022	43.9	46.0	0.01		ND		17		0.2		ND	
23	46.0	47.0	< 0.01		ND		22		0.2		5	
24	48.1	50.4	0.02		5		16		0.2		10	
25	51.2	52.9	0.01		2		12		0.2		5	
26	54.2	57.0	< 0.01		ND		6		0.2		5	
27	57.0	60.0	< 0.01		ND		13		0.2		5	
28	60.0	63.1	< 0.01		3		34		0.2		10	
29	118.1	119.4	0.02		ND		390		0.2		15	
30	141.1	144.0	0.01		7		22		0.2		10	
31	147.0	150.0	0.02		13		60		0.6		10	
32	150.0	153.0	0.02		18		77		0.7		15	
33	153.0	156.0	0.02		7		110		0.2		15	
34	156.0	159.0	0.01		3		93		0.2		15	
35	159.0	161.2	< 0.01		3		130		0.2		15	
36	170.9	173.6	0.04		10		42		0.6		15	
37	174.5	177.5	0.02		5		14		0.5		15	
38	177.5	180.0	0.01		7		18		0.4		15	
39	180.0	183.0	0.04		18		24		1.0		25	
40	183.0	186.0	0.07		16		43		0.8		15	
41	186.0	189.0	0.39		176		300		2.6		15	
42	189.0	190.4	1.04		1320		415		4.4		25	

PROPERTY: WEST SCOTIA HOLE No.: S-21-81 PAGE 1 of 1

LATITUDE: ______ AZIMUTH: 065 INCLINATION: -58.5° / 064 at 192.0 m

LONGITUDE: ______ DIP: -65 INCLINATION: ____ / ____ at ____

ELEVATION: ______ INCLINATION: ____ / ____ at ____

SAMPLE No.	METRES FROM	METRES TO	Zn %	Zn AVG.	Pb ppm	Pb AVG.	Cu ppm	Cu AVG.	Ag ppm	Ag AVG.	Au ppb	Au AVG.
61043			0.04		58		50		0.6		10	
44			<0.01		3		20		0.2		5	
45			0.03		10		23		0.2		75	
46			0.02		12		40		0.5		15	
47			0.01		12		13		0.3		15	
48			0.02		21		52		0.4		25	
49			0.14		17		86		1.0		20	
50			0.02		2		145		0.2		10	
51			<0.01		ND		73		0.2		10	
52			0.02		ND		47		0.2		10	
53	161.0	164.0	0.02		4		17		0.2		10	
54	164.0	167.0	0.07		7		83		0.8		25	
55	167.0	170.0	0.20		70		230		1.2		30	
56	170.0	173.0	0.15		680		270		2.0		55	
57	173.0	176.4	0.18		690		166		2.0		55	

APPENDIX B

DIAMOND DRILL LOGS

(under separate cover as Vol. II)

APPENDIX C

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

SCOTIA-80 GROUP

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

R.E. Meyers - Geologist Period July ~~6~~ 12 - Sept.28; 62 days @ $165.	$10,320.00	
E.P. Moreton - Geologist Period July ~~6~~ 12 - Aug. 27; 53 days @ $75.	3,975.00	
G. Cooper - Geologist Period ~~June 24~~ 12 - Sept.18; 10 days @ $95.	950.00	
M. Stanley - Assistant Period July ~~6~~ 12 - Aug. 25; 41 days @ $55.	2,255.00	
P. Mouldey - Assistant Period ~~June 24~~ 12 - Aug. 21; 49 days @ $60.	2,940.00	
F. Renaudat - Assistant Period ~~June 24~~ 12 - July 21; 8 days @ $65.	520.00	
J. Gosselin - Assistant Period ~~June 24~~ 12 - July 21; 8 days @ $60.	480.00	
G. Ruckle - Assistant Period Aug.15 - Sept. 18; 35 days @ $40.	1,400.00	
E. Potsepp - Cook Period Aug.7 - Sept. 18; 43 days @ $105.	4,515.00	
J. Etzkorn - Cook Period ~~June 24~~ 12 - Aug.7; 41 days @ $80.	3,280.00	
	30,635.00	30,635.00

ROOM AND BOARD

Tg Personnel; 350 days @ $70.	24,500.00	
Longyear Personnel; 124 days @ $70.	8,680.00	
BEMA Industries Personnel; 18 days @ $70.	1,260.00	
	34,440.00	34,440.00

Note
Dates corrected May 4/82
REM

HELICOPTER SUPPORT

Invoice totals; Okanagon Helicopters (206B, 206L)	42,809.63	
Invoice totals; Northern Mountain Helicopter (206B)	1,120.00	
Invoice totals; Vancouver Island Helicopter (206B, 206L)	16,634.40	
Texasgulf Leased A-Star 38.1 hrs @ $550.	20,955.00	
	81,519.03	81,519.03

DIAMOND DRILLING

Longyear Canada Invoices for drilling, surveys core boxes, supplies and equipment, moving, mobilization and demobilization	93,947.60	
Rental of Sperry-Sun survey instrument	1,800.00	
Drill site preparation (BEMA Industries Ltd.)	5,592.98	
	101,340.58	101,340.58

ANALYTICAL COSTS

57 Zn Assays @ $6.50	370.50	
57 Cu, Pb, Ag analyses @ $3.25	185.25	
57 Au analyses @ $5.25	299.25	
57 Sample preparation @ $2.50	142.50	
57 Storage and handling of rejects @ $.25	14.25	
Shipping charges	145.21	
	1,156.96	1,156.96

REPORT PREPARATION

R.E. Meyers; 5 days @ $165.00	825.00	
Drafting	1,500.00	
Secretarial, Reproductions, etc.	500.00	
	2,825.00	2,825.00

TOTAL EXPENDITURES		$251,916.57

APPENDIX D

STATEMENTS OF QUALIFICATION

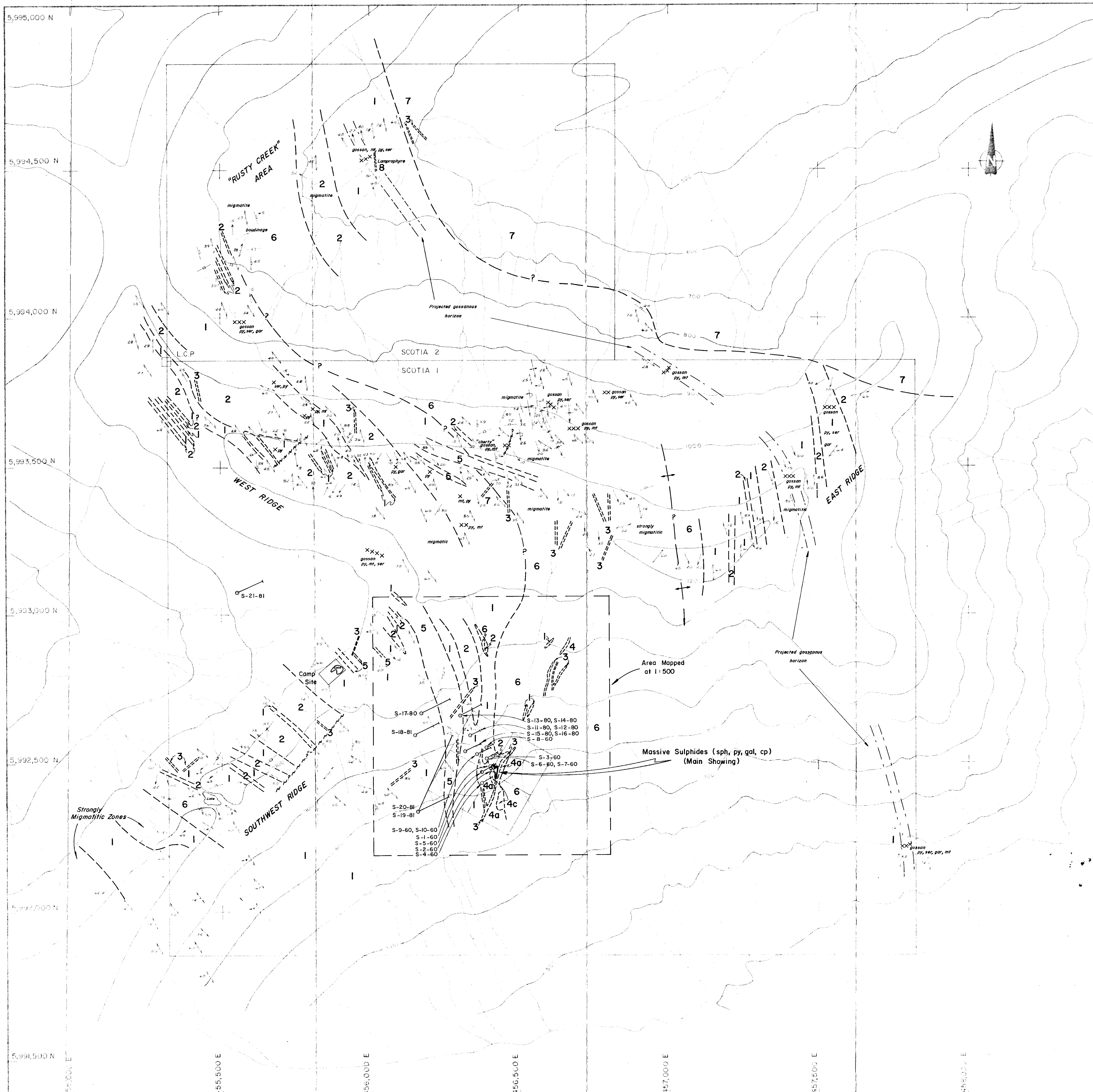
STATEMENTS OF QUALIFICATION

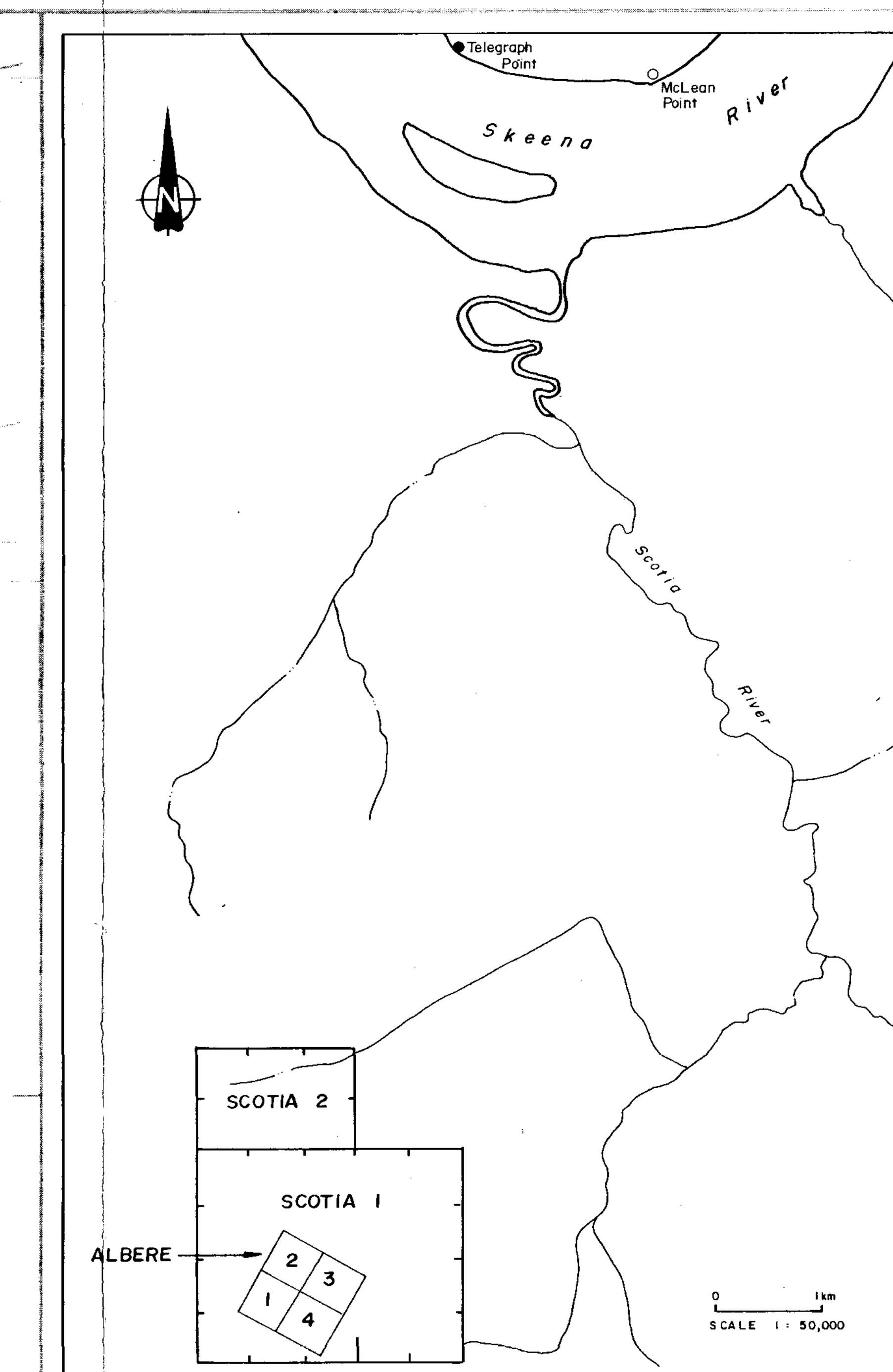
R.E. Meyers - Geologist

R.E. Meyers holds an M.Sc. degree in Geology from McGill University, granted in 1979. He has been employed by Texasgulf since December, 1979, based in Vancouver.

E.P. Moreton - Geologist

E.P. Moreton holds a B.Sc. in Geology (Queen's) and is presently enrolled in an M.Sc. programme at Queen's University at Kingston. He was employed by Texasgulf from May 9 to August 30, 1981.





LEGEND

1	Felsic gneiss
2	Mafic gneiss
3	Pegmatite
4	Felsic "Tuff" (a) Quartz-Feldspar Sericite gneiss (b) Quartz Sericite Schist (c) Pyritic Quartz-Sericit Gneiss
5	Amphibolite
6	Intermediate gneiss
7	Diorite Gneiss
8	Lamprophyre

SYMBOLS

- Gneissosity, foliation
- Joints
- Fold axis, trend and plunge
- Fault, assumed
- Contact, assumed
- × Gossan
- Antiform
- Synform

mt	magnetite
py	pyrite
sph	sphalerite
cp	chalcopyrite
gal	galena
ser	sericite
gar	garnet

part 1 of 2

ASSESSMENT REPORT 10,332

Kidd Creek Mines Ltd.

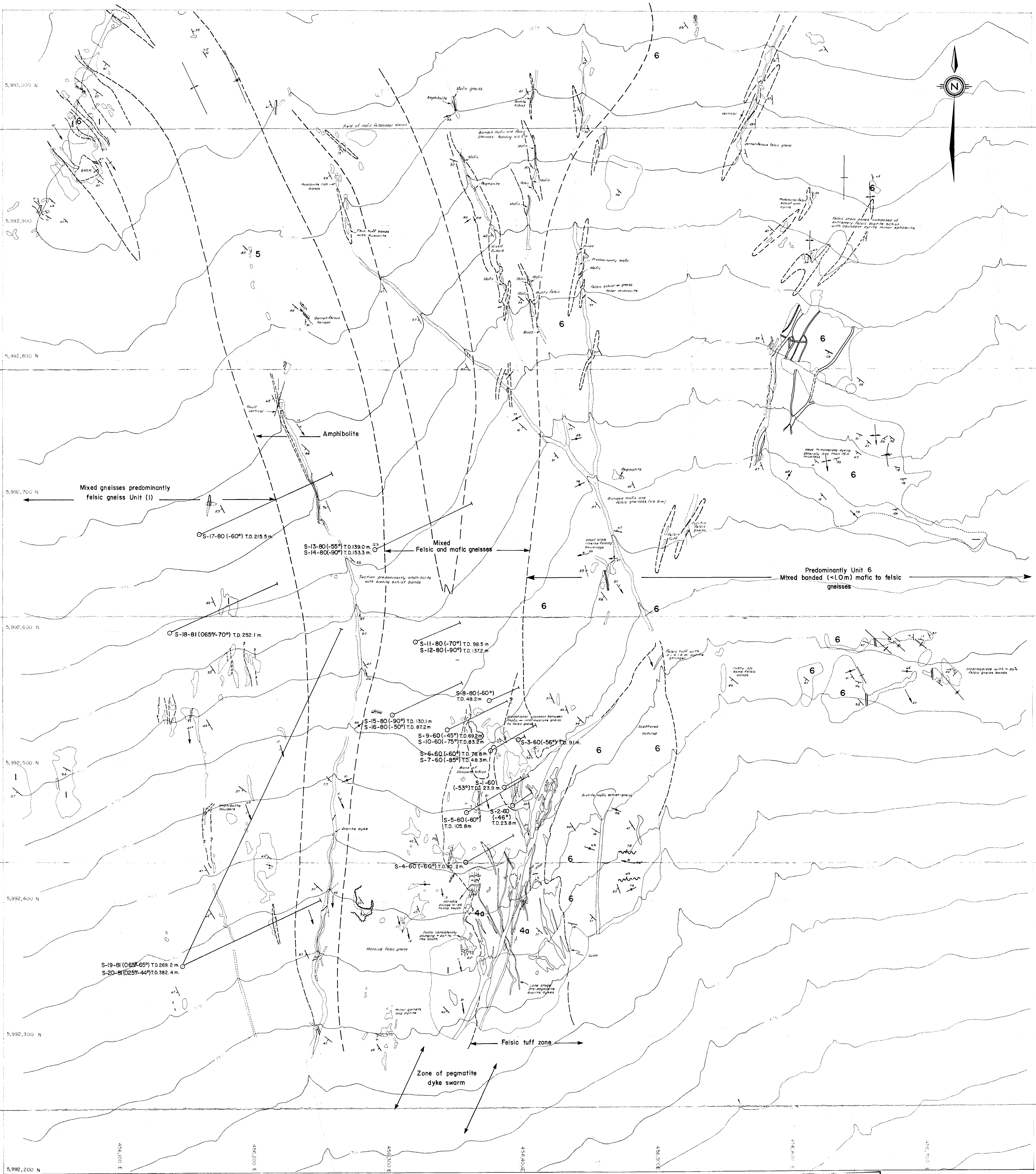
WEST SCOTIA CLAIMS

RECONNAISSANCE GEOLOGY

WORK BY	DRAWN BY	DATE: MARCH 24, 1982
R.E.M.	E.R.	

100 0 100 200 300 400
SCALE IN METRES 1:5,000

Figure: 3



LEGEND

LITHOLOGIES

1	Felsic gneiss	
2	Mafic gneiss	(a) Hornblende gneiss (b) Biotite gneiss - schist
3	Pegmatite	
4	Felsic tuff	(a) Qtz - feldspar - sericite gneiss (b) Qtz - sericite schist (c) Pyritic bands
5	Amphibolite	
6	Mixed or intermediate gneiss	
7	Diorite	
8	Massive sphalerite	

SYMBOLS

- Foliation - Attitude and dip
- Joint
- Fold axis - Trend and plunge
- Anticline
- Syncline
- Lineation - Trend and plunge
- Boudinage axis - trend and plunge
- Normal fault
- Outcrop extent
- Contact assured
- Contact assumed

MI... BRANCH
... REPORT

10,332
NO.

part 1
of 2

Texasgulf Inc.

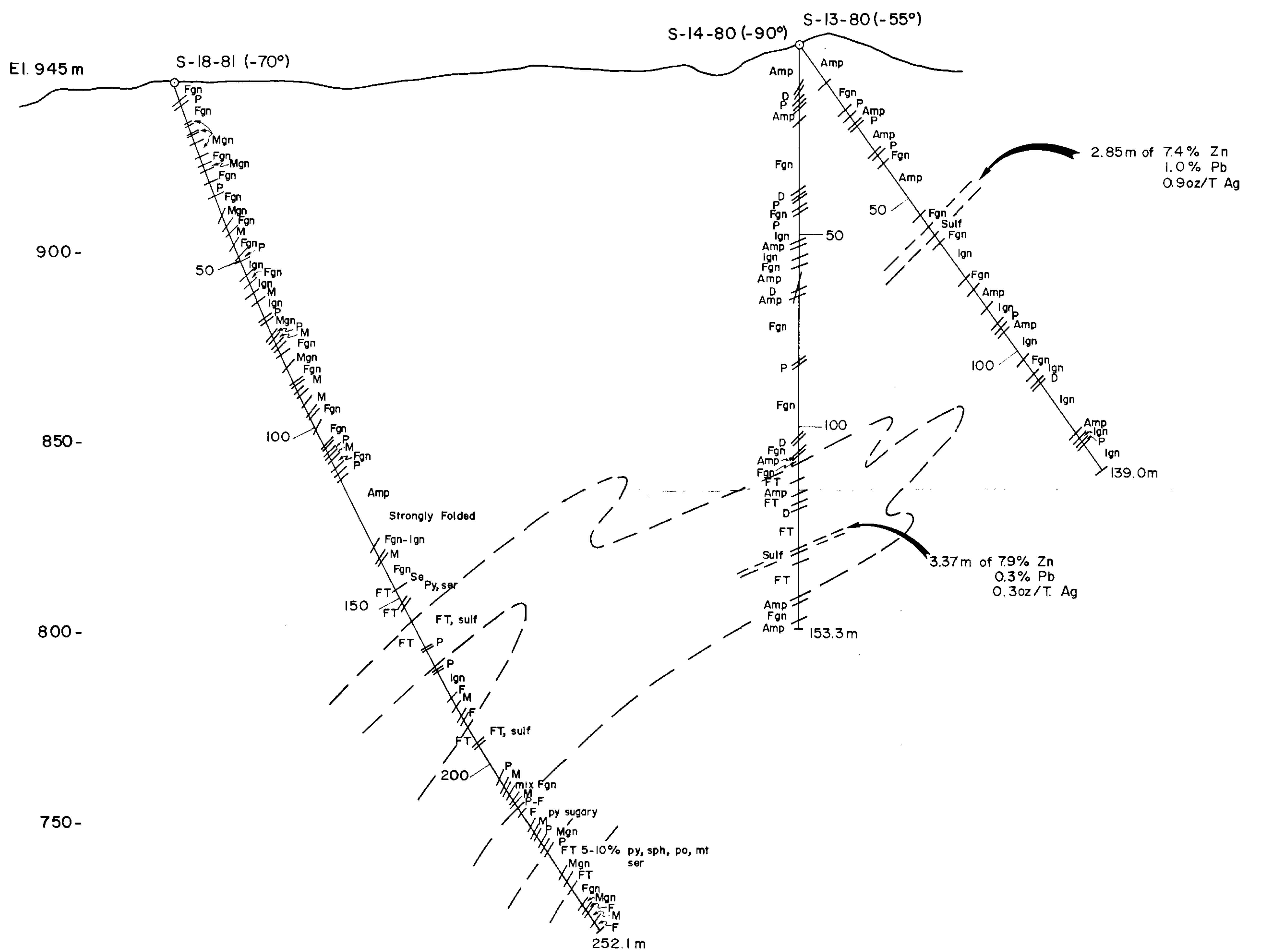
WEST SCOTIA PROPERTY

GEOLOGY

Fig. 4

WORK BY	DRAWN BY	DATE	DRW,G NO.
P.M.	E.R.	FEBRUARY, 1982	

20 0 20 40 60 80
Scale in Metres 1:1,000



LEGEND

Fgn (F)	Felsic Gneiss
Mgn (M)	Mafic Gneiss
Ign (I)	Intermediate (Mixed) Gneiss
Amp (A)	Amphibolite
P	Pegmatite
D	Diorite
FT	Felsic "Tuff"
Sulf	Sulphide

part 1
of 2

Kidd Creek Mines Ltd.

WEST SCOTIA PROPERTY

SECTION A-A'

Oriented through 065°

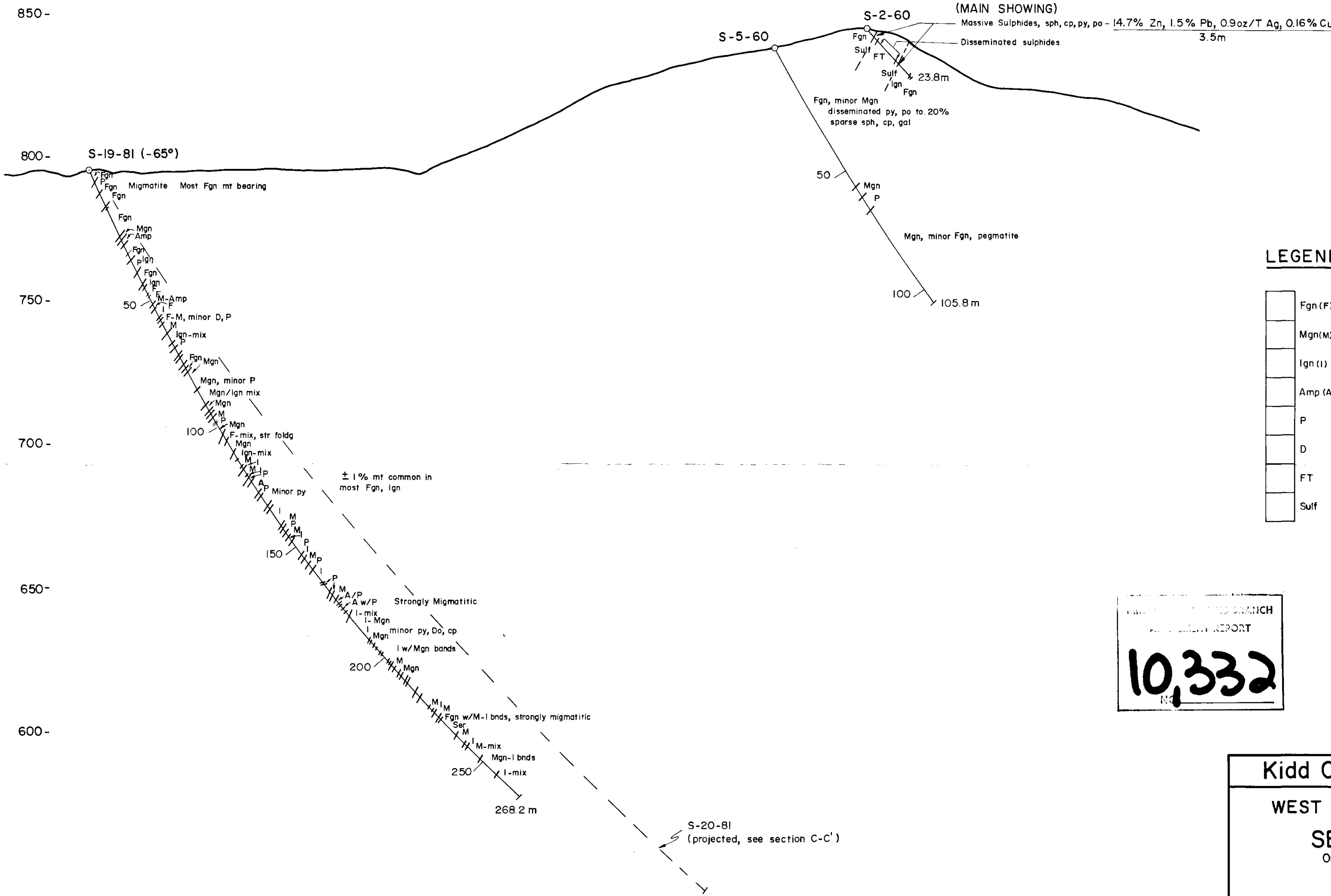
S - 18 - 81
S - 13 - 80
S - 14 - 80

WORK BY	DRAWN BY	DATE
R.E.M.	E.R.	APRIL 2, 1982

20 0 20 40 60 80

SCALE IN METRES 1 : 1,000

Figure No. 6a



LEGEND

Fgn (F)	Felsic Gneiss
Mgn (M)	Mafic Gneiss
Ign (I)	Intermediate (Mixed) Gneiss
Amp (A)	Amphibolite
P	Pegmatite
D	Diorite
FT	Felsic "Tuff"
Sulf	Sulphides

part 1 of 2

Kidd Creek Mines Ltd.

WEST SCOTIA PROPERTY

SECTION B-B'

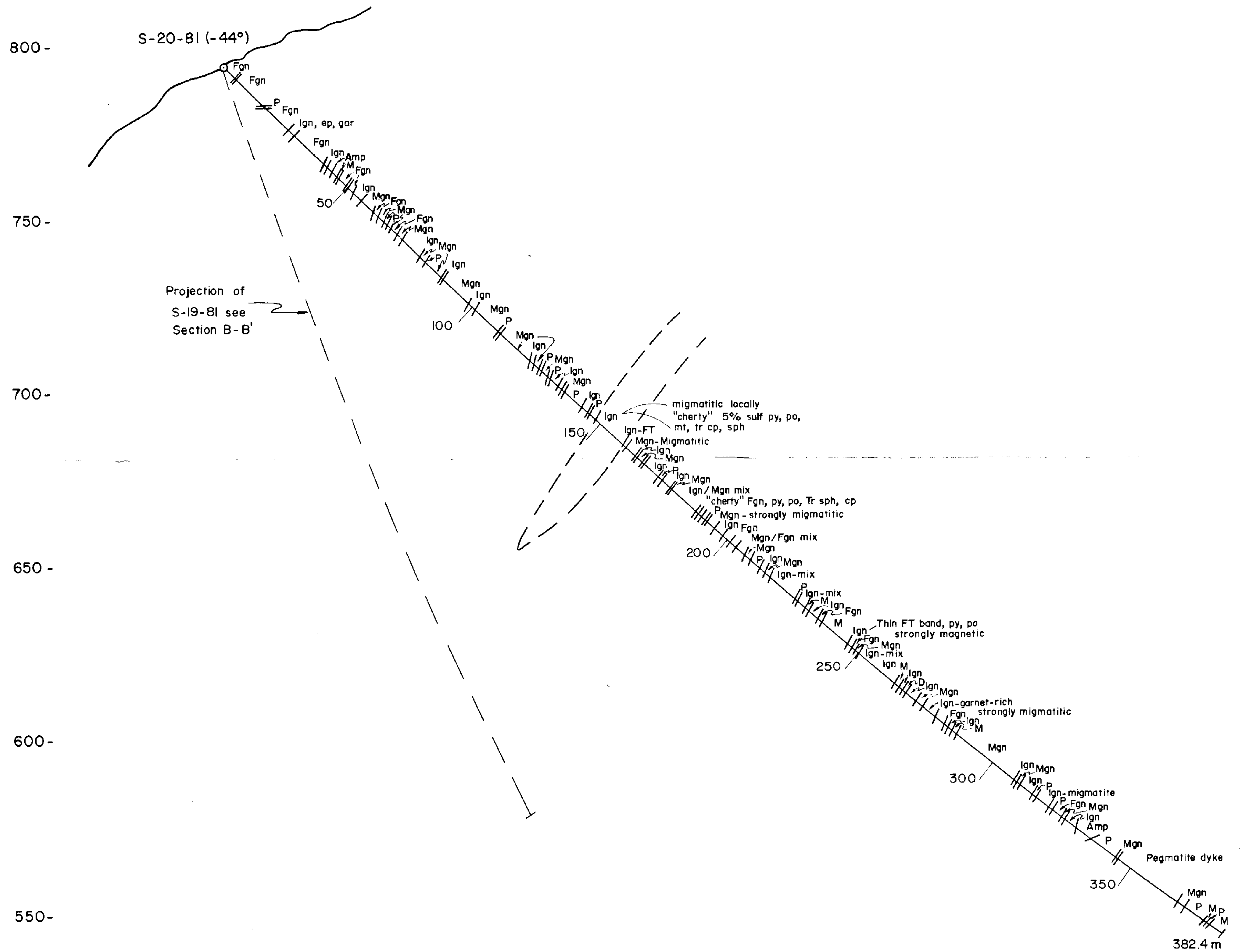
Oriented through 065°

S-19-81
S- 5-60(projected)
S-2-60

WORK BY	DRAWN BY	DATE
R.E.M.	E.R.	APRIL 2, 1982

SCALE IN METRES 1 : 1,000

Figure No. 6b



LEGEND

	Fgn (F)	Felsic Gneiss
	Mgn (M)	Mafic Gneiss
	Ign (I)	Intermediate (Mixed) Gneiss
	Amp (A)	Amphibolite
	P	Pegmatite
	D	Diorite
	FT	Felsic "Tuff"
	Sulf	Sulphide

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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part 1
of 2

Kidd Creek Mines Ltd.

WEST SCOTIA PROPERTY

SECTION C-C'

Oriented through 025°

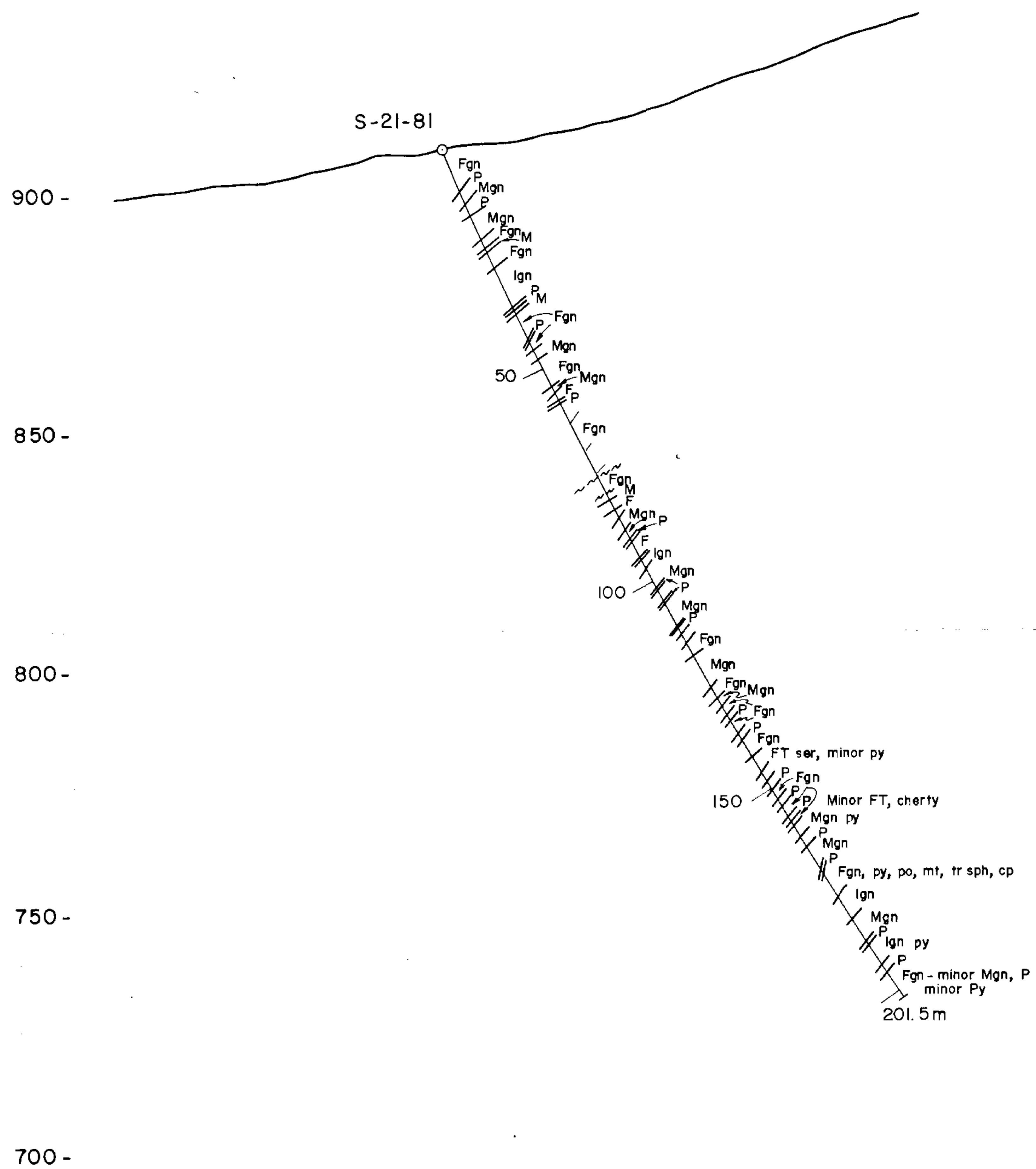
S-20-81

WORK BY	DRAWN BY	DATE
R.E.M.	E.R.	APRIL 2, 1982

20 0 20 40 60 80

SCALE IN METRES 1 : 1,000

Figure No. 6 C



LEGEND

Fgn (F)	Felsic Gneiss
Mgn (M)	Mafic Gneiss
Ign (I)	Intermediate (Mixed) Gneiss
Amp (A)	Amphibolite
P	Pegmatite
D	Diorite
FT	Felsic "Tuff"
Sulf	Sulphide

part 1 of 2

Kidd Creek Mines Ltd.

WEST SCOTIA PROPERTY

SECTION D-D'

Oriented through 065°

S-21-81

WORK BY	DRAWN BY	DATE
R.E.M.	E.R.	APRIL 2, 1982

20 0 20 40 60 80
SCALE IN METRES 1 : 1,000

Figure No. 6d