

**GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE MEA 1,2,3,4 CLAIMS**

FORT STEELE MINING DIVISION

MINISTRY OF ENERGY, MINES
& PETROLEUM RESOURCES.
REC'D FEB 24 1994
NELSON, B.C.

NTS MAP SHEET NO 82F/9

SUB-RECORDER
RECEIVED
SEP 13 1993
M.R. # _____ \$ _____
VANCOUVER, B.C.

LATITUDE: 49 deg, 35 min North
LONGITUDE: 116 deg, 20 min West

CLAIM OWNER AND OPERATOR:

FIRESTEEL RESOURCES INC.
800-900 W. HASTINGS STREET
VANCOUVER, B.C.
V6C-1E5

FILMED

REPORT BY:

IAN D. McCARTNEY, P.ENG.
2242 SPRUCE STREET
VANCOUVER, B.C.
V6H-2P3

LOG NO: OCT 04 1993 RD.
ACTION.
FILE NO:

GEOLOGICAL BRANCH
ASSESSMENT REPORT
10 SEPTEMBER, 1993

23,049

I. D. McC. CONSULTING

**GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE MEA 1,2,3,4 CLAIMS**

TABLE OF CONTENTS

1.00 SUMMARY.....2
2.00 INTRODUCTION.....2
3.00 REGIONAL GEOLOGICAL SETTING.....3
4.00 RESULTS OF 1993 GEOLOGICAL MAPPING AND PROSPECTING.....3
5.00 RESULTS OF 1993 CONTOUR SOIL GEOCHEMICAL SURVEYS.....4
6.00 CONCLUSIONS4
7.00 RECOMMENDATIONS.....5
STATEMENT OF QUALIFICATIONS - I.D.McCARTNEY.....6

LIST OF PLATES

- PLATE 1) GEOLOGICAL MAPPING, 1:20,000 Scale
PLATE 2) GEOCHEMICAL SURVEY, 1:20,000 Scale

APPENDICES

- APPENDIX 1) GEOCHEMICAL RESULTS, MIN-EN LABS
APPENDIX 2) STATEMENT OF COSTS

GEOLOGICAL AND GEOCHEMICAL REPORT ON THE MEA 1, 2, 3, 4 CLAIMS

1.00 SUMMARY

The Property consists of 4 Claims (51 Units) and was staked for Firesteel Resources Inc. in August, 1992. The Claims cover a Sullivan-type blind exploration target on the Lower-Middle Aldridge Fm Contact (LMC) in the St. Marys Structural Block. The area is about 30 Km west of the Sullivan Mine. The LMC target is within approx 500m of surface. It is defined by Middle Aldridge Marker Type Laminate (MTL) Horizons, and a regionally extensive gabbro sill, the "Sundown Sill", which intruded the Middle Aldridge Fm about 900m above the LMC.

The 1993 exploration program consisted of geological mapping at 1:20,000 scale, contour soil geochemical surveys, and prospecting. The geological setting of the property was defined and weak to moderate strength Zn soil anomalies were located in the vicinity of a fault cutting the Middle Aldridge Fm.

A program of reconnaissance deep penetrating EM surveys (UTEM or Crone Pulse EM) followed by diamond drilling will be necessary to evaluate the LMC, which is not exposed at surface in the Mea Claims area.

2.00 INTRODUCTION

The MEA Property is located in the Purcell Mountains about 30 Km West of Kimberly B.C., in NTS 82F/9. Latitude is approximately 49 deg, 35 min North, longitude is approximately 116 deg 20 min West. The Property consists of the following 4 claims:

<u>NAME</u>	<u>TENURE NO.</u>	<u>UNITS</u>	<u>1'st ANNIVERSARY DATE</u>
MEA 1	312610	9	AUG 17, 1993
MEA 2	312611	18	AUG 17, 1993
MEA 3	312612	15	AUG 17, 1993
MEA 4	312613	9	AUG 16, 1993

51 Units

Meachen Creek runs through the centre of the Claims, and White Boar Lake is at the south edge of the Claims. The Claims are in the moderately rugged Purcell Mountain range, with elevations ranging from 1300m in Meachen Creek to a peak of 2200m on the N border of MEA 3. The S side of Meachen Creek and the White Boar and Ailso Lake drainages are logged. The claims are almost entirely below the tree line. Access to the Property is by the Meachen Creek logging road which starts on the S side of St Marys Lake and branches off the Hellroaring Creek Road. Secondary logging roads extend up White Boar Creek and Ailso Creek, and provide good access to southern part of the Property. A foot bridge over Meachen Creek exists near the MEA 1-3

boundary.

There is no history of previous property scale exploration, and no significant mineral deposits have been located on the Claims.

The Claims are owned by Firesteel Resources Inc. of Vancouver. A program of geological mapping, prospecting, and contour soil sampling was completed by I.D. McCartney. Field work was conducted from the 7 to 13 of August, 1993. All the main outcrop areas were mapped. Four rock samples, 2 stream silts, and 57 soil samples were taken.

3.00 REGIONAL GEOLOGICAL SETTING

The Claims are underlain by the Aldridge Formation of the Helikian age Purcell Supergroup. The Aldridge Formation contains gabbro sills and dykes of the Moyie Intrusives. The Claims are within the St. Marys structural block, which is bounded on the south by the St. Marys Fault.

Previous exploration work (mainly by Cominco Ltd.) in the St. Marys Block has established the Lower-Middle Aldridge Contact (LMC or "Sullivan Horizon") as the primary target stratigraphy for Sullivan-type sediment hosted stratiform massive sulphide deposits. Large weakly mineralized conglomerate units occur on the LMC at both the Clair and Vulcan properties, located E and NE of MEA. These conglomerates are interpreted as proximal indicators for Sullivan-type deposits.

Although the Middle Aldridge Fmn is well exposed throughout the area, only minor conglomerate and "needle" type tourmaline replacements have been discovered and these do not have associated Pb-Zn mineralization.

More recent work by Kokanee Exploration, Ramrod Gold Corp., and Minnova has established that the Lower Aldridge Formation may also be a favourable host for stratiform Pb-Zn deposits in the St. Marys Lake Area (Horn-Darling Property).

4.00 RESULTS OF 1993 GEOLOGICAL MAPPING AND PROSPECTING

The 1993 mapping defined a steeply dipping NW fault which cuts the Middle Aldridge Formation along the crest of an anticlinal fold (See Plate 1). On the North side of Meachen Creek (on MEA 3 Claim) two prominent gabbro sills have been defined by mapping. A thick and very distinctive series of marker type laminations occurs between these two sills and is believed to be the "Sundown Marker". This marker is associated with a prominent gabbro sill throughout most of the Aldridge Formation, including areas outside the St. Marys Block. The "Sundown Marker" is a true time-stratigraphic marker consisting of light and dark grey varved mudstones which maintain the same varve patterns throughout the basin. The Sundown MTL is located approximately 900m above the LMC. The gabbro sill below this MTL Horizon is locally magnetite rich and often has associated albite alteration (albitite).

No significant mineralization was located by prospecting. Four grab samples were taken and the sample locations are shown on Plate 1. Results are tabulated in Appendix 1. The primary

target (the LMC) is not exposed at surface on the property.

5.00 RESULTS OF 1993 CONTOUR SOIL GEOCHEMICAL SURVEYS

Contour soil geochemical surveys were conducted over the projection of the NW fault which cuts the M. Aldridge Fmn. A total of 57 soil samples were taken. The objective of this sampling was to detect possible leakage anomalies along the fault which might indicate blind Pb-Zn targets at depth. Two stream silt samples were also taken.

Locations of soil and silt samples are shown on Plate 2, and geochemical analyses are presented in Appendix 1. Regional sampling indicates that anomalous levels are about 40ppm Pb and 210 ppm Zn in soils.

A moderate strength Pb anomaly with supporting anomalous zinc values was detected on the north side of Meachen Creek, on the 1500m contour. Anomalous values extend off the W end of the line and are continuous over 250m. A weaker Pb anomaly occurs on the 1600m contour. These anomalies are on the projection of the NW fault. A bedrock source for the anomalous metals was not detected, however they may indicate minor mineralization in the area of the fault. Such mineralization, if present, could be interpreted as a positive indicator for mineralization on the LMC in the vicinity of the fault.

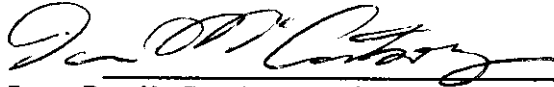
6.00 CONCLUSIONS

- 1) The Lower-Middle Aldridge Contact (Sullivan Horizon) is the preferred site of Sullivan-type mineral indicators in the St. Mary's Block, with significant Fe-sulfide enriched conglomerate/fragmental development and associated weak Pb-Zn-As mineralization.
- 2) The Lower Aldridge Formation may also have stratiform Pb-Zn potential in the Meachen Creek Area.
- 3) The target horizon (LMC) is not exposed on surface in the MEA Claim area.
- 4) Weak Pb-Zn soil anomalies in the vicinity of a fault may be a positive indicator for mineralization on the LMC.

7.00 RECOMMENDATIONS

- 1) Further exploration in the St. Mary's Block should continue to focus on the LMC as a priority target, and consider the Lower Aldridge as a secondary target.
- 2) Additional soil geochemical sampling is required to define the full extent of the Pb-Zn soil anomaly on the N side of Meachen Creek.

Report by:



Ian D. McCartney, P. Eng.
Vice President-Firesteel Resources Inc.
12 September, 1993

a:MEA_ASS.93


STATEMENT OF QUALIFICATIONS

I, Ian Douglas McCartney, of 2242 Spruce Street in the City of Vancouver in the Province of British Columbia, do hereby certify that:

- 1) I am a graduate of Queens University, Kingston, Ontario, with an Engineering Degree (B.Sc.) in Geology (1976).
- 2) I am a Member in good standing of the Association of Professional Engineers of The Province of British Columbia, and a Member of the Institute of Mining and Metallurgy.
- 3) I am an independent consulting geologist and have an aggregate 6 years experience working in the Aldridge Formation of S.E. British Columbia, primarily with Cominco Limited.
- 4) I am the author of the Report entitled "GEOLOGICAL AND GEOCHEMICAL REPORT ON THE MEA 1,2,3,4 CLAIMS" dated September 10, 1993.
- 5) I personally carried out the exploration program described in the above report.
- 6) I do not own or expect to receive any interest (direct, indirect, or contingent) in the Property described herein nor in the securities of Firesteel Resources Inc. in respect of services rendered in the preparation of this report.

Sept, Dated at Vancouver, British Columbia this 11 day of A.D. 1993.

Respectfully submitted,


Ian D. McCartney, P.Eng.

APPENDIX 1

**GEOCHEMICAL RESULTS
MIN-EN LABS, VANCOUVER**

COMP: FIRESTEEL RESOURCES

PROJ:

ATTN: IAN MCCARTNEY

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

(604)980-5814 OR (604)988-4524

FILE NO: 3V-0484-SJ1+2+3

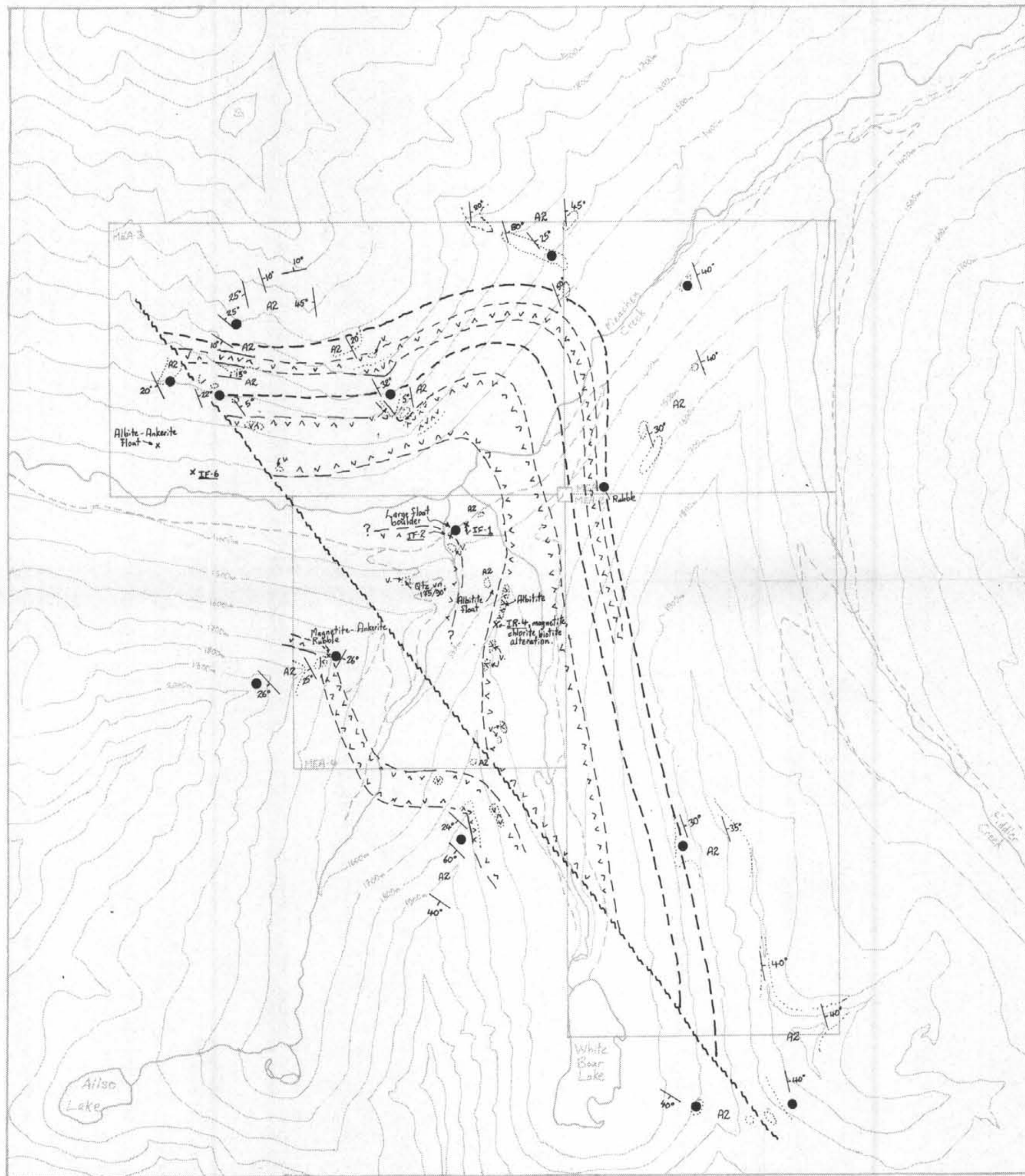
DATE: 93/08/19

* SILT & SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	* *					* SILT & SOIL *						
																					PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
ISS-3	.1	1.73	107	1	71	.8	9	.23	.1	17	39	3.41	.11	15	.62	1249	6	.01	28	740	66	12	16	83	315	20.4	193	17	1	5	18	1
ISS-25	.1	.80	43	1	40	.3	4	.19	.1	14	25	2.64	.09	7	.35	1104	2	.01	14	430	27	5	7	80	276	19.6	70	11	1	2	6	2
IS-07	.1	2.56	1	1	112	.7	9	.14	.1	22	46	3.79	.24	24	.79	765	4	.01	27	710	52	15	13	104	1237	37.4	115	16	1	4	15	1
IS-08	.1	2.54	1	1	100	1.0	8	.16	.1	19	60	4.32	.27	28	.90	361	4	.01	36	440	52	15	13	127	1003	40.5	113	16	1	5	19	14
IS-09	.1	2.33	1	1	148	.6	9	.25	.1	12	26	2.68	.24	20	.51	453	3	.02	17	620	33	16	15	89	1268	34.1	81	12	1	4	13	1
IS-10	.1	2.18	1	1	175	.6	9	.33	.1	13	17	2.73	.28	21	.56	940	2	.02	14	990	33	13	23	72	1190	34.9	94	12	1	4	13	5
IS-11	.1	2.56	1	1	99	.8	9	.16	.1	31	58	4.69	.29	28	.74	1171	4	.01	37	460	85	15	10	125	1073	45.1	175	16	1	4	18	4
IS-12	.1	1.96	1	1	278	.3	9	.51	.1	15	22	2.75	.20	29	.49	1548	3	.02	25	330	55	13	26	88	1210	36.4	167	16	1	3	16	4
IS-13	.1	2.21	1	1	148	.5	9	.26	.1	14	28	2.76	.23	19	.59	430	3	.02	20	570	43	14	15	96	1304	32.5	121	13	1	4	13	3
IS-15	.1	1.98	1	1	223	.5	8	.34	.1	14	34	2.45	.19	17	.46	1675	2	.02	17	1450	42	13	26	62	1164	32.1	171	16	1	3	14	12
IS-16	.1	2.45	1	1	297	.6	9	.45	.1	14	34	2.79	.29	31	.48	780	3	.02	21	1620	50	18	44	89	1239	34.9	204	14	1	4	15	1
IS-17	.1	2.17	1	1	253	.5	8	.48	.1	15	24	2.49	.20	20	.36	1353	2	.03	14	2190	42	14	40	68	1213	33.3	262	14	1	3	13	1
IS-18	.1	2.07	1	1	198	.3	10	.31	.1	18	20	3.09	.20	31	.61	825	3	.02	25	840	52	14	22	84	1324	37.7	212	16	1	4	15	4
IS-19	.1	2.70	1	1	275	.5	10	.44	.1	17	31	3.18	.24	25	.50	1617	3	.03	17	1970	52	18	36	76	1384	47.0	188	17	1	4	17	1
IS-20	.1	1.95	4	1	193	.6	8	.44	.1	21	46	3.78	.23	25	.66	1892	3	.01	22	570	63	12	20	88	939	47.0	125	19	1	4	19	1
IS-21	.1	3.50	1	1	169	.5	12	.47	.1	19	31	3.00	.16	28	.34	846	5	.06	24	1090	54	22	34	72	1853	39.5	228	13	1	4	12	2
IS-22	.1	2.08	1	1	189	.4	10	.34	.1	17	67	2.98	.17	24	.54	431	3	.03	18	590	32	14	19	71	1377	67.9	188	14	1	4	13	1
IS-23	.1	2.78	1	1	193	.5	12	.35	.1	21	56	3.76	.22	31	.54	458	3	.03	20	380	40	18	17	76	1820	80.1	153	15	1	5	13	1
IS-24	.1	2.56	1	1	175	.5	10	.29	.1	18	67	3.27	.19	22	.52	501	2	.02	21	910	48	17	17	84	1417	65.2	106	14	1	4	12	1
IS-26	.2	3.14	1	1	49	.5	8	.11	.1	6	60	2.60	.06	9	.15	169	4	.02	1	820	32	20	11	32	1163	38.3	41	8	1	4	6	4
IS-27	.2	1.45	10	1	56	.4	7	.21	.1	7	135	3.07	.10	6	.19	142	2	.02	4	1150	31	8	11	32	999	42.7	36	8	1	2	6	5
IS-28	.1	1.52	9	1	239	.2	7	.31	.1	11	28	3.23	.12	9	.27	2233	2	.02	7	1390	37	9	12	35	836	49.9	100	17	1	3	13	2
IS-29	.1	2.08	1	1	138	.1	10	.25	.1	12	40	3.40	.10	19	.34	1021	3	.03	1	1340	32	11	11	41	1657	75.7	117	14	1	4	10	4
IS-30	.1	2.75	1	1	119	.4	10	.16	.1	10	28	2.82	.09	12	.28	1425	4	.03	5	1160	36	19	13	37	1182	49.0	81	15	1	4	10	4
IS-31	.1	3.67	1	1	99	.8	19	.24	.1	33	1207	4.55	.11	19	.49	879	3	.02	2	1150	48	26	12	68	1718	86.0	105	16	1	6	5	10
IS-32	.1	2.04	1	1	143	.5	12	.38	.1	19	46	3.61	.09	15	.25	1168	3	.03	1	1470	32	11	9	39	1927	67.5	177	14	1	3	7	2
IS-33	.1	2.48	1	1	108	.8	11	.31	.1	15	48	4.57	.09	21	.41	309	3	.02	1	980	26	12	4	54	1693	106.8	123	13	1	4	5	1
IS-34	.1	2.04	3	1	96	.7	7	.29	.1	14	57	3.44	.10	19	.50	235	3	.02	6	640	29	13	5	71	743	78.4	105	13	1	4	8	2
IS-35	.1	2.59	6	1	125	.8	9	.29	.1	22	280	3.93	.12	18	.65	414	3	.02	21	790	38	18	8	84	659	88.1	83	15	1	5	9	1
IS-36	.1	2.99	5	1	167	1.1	9	.46	.1	22	193	4.19	.12	27	.49	536	3	.02	16	1810	38	19	12	64	820	78.1	135	14	1	5	9	2
IS-37	.1	1.40	18	1	63	.7	5	.20	.1	11	38	2.97	.07	13	.52	208	3	.01	7	380	20	9	2	65	293	63.5	53	12	1	3	6	3
IS-38	.1	1.96	6	1	66	.5	6	.10	.1	9	38	3.00	.06	14	.28	316	3	.01	4	1230	35	14	5	58	596	51.7	60	10	1	3	5	3
IS-39	.4	3.57	1	1	131	1.1	10	.21	.1	19	140	3.45	.09	17	.43	266	5	.02	12	1090	38	26	11	76	947	70.3	81	13	1	5	8	5
IS-40	.1	2.36	1	1	108	.8	7	.17	.1	11	39	3.23	.08	17	.41	196	3	.02	6	880	26	17	5	62	707	67.8	78	12	1	4	7	3
IS-41	.2	4.21	1	1	116	1.2	14	.34	.1	28	200	4.50	.14	22	.72	352	5	.02	11	1040	44	31	13	106	1510	113.4	96	19	1	7	11	4
IS-42	.1	1.75	18	1	91	.8	8	.27	.1	19	126	3.59	.07	15	.53	250	2	.02	9	660	28	11	3	76	739	105.2	77	14	1	5	9	8
IS-43	.1	2.51	1	1	135	.5	11	.28	.1	15	106	3.33	.06	19	.19	301	3	.03	6	620	23	17	8	51	1497	97.6	99	12	1	4	8	6
IS-44	.1	1.74	14	1	87	.8	6	.18	.1	15	85	3.26	.07	16	.48	1623	3	.01	12	470	34	11	2	74	444	62.7	91	16	1	4	12	7
IS-45	.1	1.95	2	1	97	.8	7	.15	.1	12	28	3.28	.06	19	.29	214	3	.01	4	720	26	13	4	65	643	54.4	82	12	1	4	8	1
IS-46	.1	1.78	2	1	69	.7	5	.08	.1	10	15	3.28	.06	19	.33	342	3	.01	2	810	28	11	3	69	354	32.1	71	10	1	3	8	2
IS-47	.1	1.75	14	1	71	.8	6	.09	.1	11	45	3.67	.07	19	.51	245	3	.01	9	500	30	11	3	93	223	31.5	82	11	1	3	9	1
IS-48	.1	1.80	1	1	76	.6	5	.11	.1	7	14	2.46	.08	17	.31	164	3	.01	4	1190	31	12	7	75	336	35.1	80	10	1	3	11	3
IS-49	.1	1.54	7	1	58	.6	5	.05	.1	6	13	2.59	.06	17	.39	141	3	.01	5	450	25	10	3	80	199	29.5	64	12	1	3	11	2
IS-50	.1	1.83	5	1	74	.9	4	.06	.1	9	24	2.93	.08	17	.46	264	4	.01	8	470	34	12	3	90	186	35.6	72	11	1	4	12	4
IS-51	.1	2.45	2	1	118	.8	7	.10	.1	10	13	2.34	.06	16	.24	875	4	.02	9	1850	34	19	10	58	614	27.0	105	12	1	3	9	3
IS-52	.1	1.11	20	1	54	.6	5	.02	.1	7	18	2.77	.05	12	.38	182	3	.01	5	360	25	8	1	88	59	16.3	60	9	1	2	6	2
IS-53	.1	1.56	17	1	103	.8	6	.15	.1	10	26	2.97	.08	15	.46	378	3	.01	9	640	30	11	4	74	253	43.2	80	13	1	3	11	6
IS-54	.1	2.41	12	1	80	.9	7	.46	.1	12	60	3.10	.08	17	.43	271	4	.01	13	450	52	17	15	84	561	32.8	69	13	1	4	10	5
IS-55	.1	3.72	15	1	67	1.2																										

APPENDIX 2

STATEMENT OF COSTS

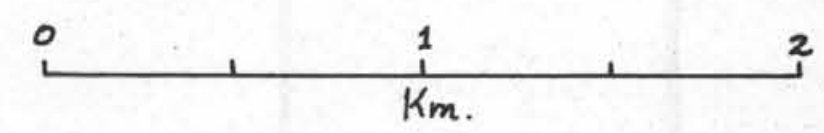
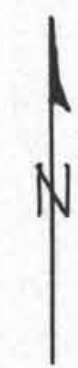


LEGEND

- MTL (Marker-type laminate) Site, showing correlations.
- Outcrop Boundaries.
- /— Bedding Orientation.
- x IG-1 Rock Sample Site (IF - float; IR, IG - in situ). Grabs.
- A2 Middle Aldridge Formation; Quartzitic wacke and wacke turbidites, siltstone, mudstone.
- vA Moyie Intrusives; gabbro sills and dykes.

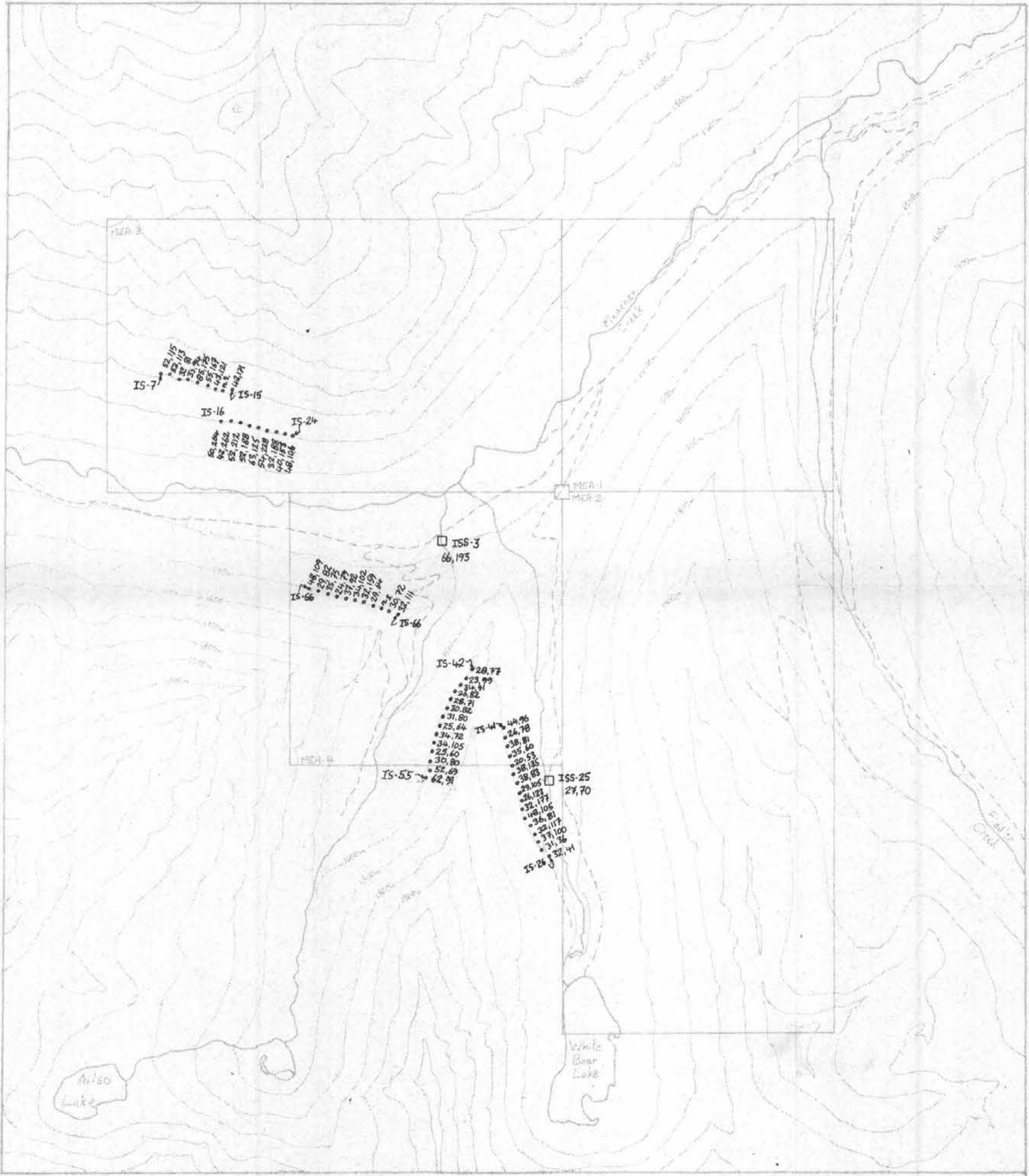
GEOLOGICAL BRANCH ASSESSMENT REPORT

23,049



FIRESTEEL RESOURCES INC.
 MEA PROPERTY, SULLIVAN
 MINE AREA.
 GEOLOGICAL MAPPING

Date: 1 Sept, 1993	Scale: 1:20,000	Plate No:
Drawn by I.D. McCartney		

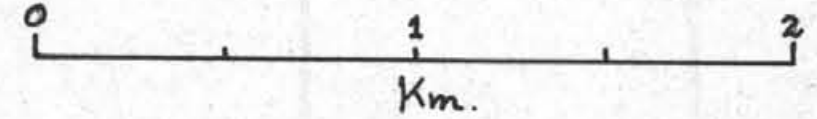
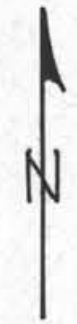


LEGEND

- 
 Soil Sample Site; Pb, Zn (ppm).
- 
 Stream Silt Sample Site; Pb, Zn (ppm).

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

23,049



FIRESTEEL RESOURCES INC.
 MEA PROPERTY, SULLIVAN
 MINE AREA.
 GEOCHEMICAL SURVEY

Date: 1 Sept. 1993	Scale: 1:20,000	Plate No.
Drawn by: I. D. M'Cartney		