

REPORT ON
GEOLOGICAL AND GEOCHEMICAL SURVEYS

by

I.G. Sutherland, B.Sc.

on the

MOOSE-81 and SCREE-81 GROUPS

situated on McClair Creek
in the Omenica Mining Division

57°28'N, 127°13'W

NTS 94E/6E

9832

owned by
TEXASGULF CANADA LTD.

work by
TEXASGULF INC.

Dec. 1981

Vancouver, B.C.

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
Location, Access and Terrain	1
Property History and Definition	1
Summary of Work Completed	4
Geological surveys	4
Geochemical surveys	5
Work Distribution	5
GEOLOGY	5
Regional Setting	5
Property Geology	5
Rock types	6
Structure	8
Mineralization and alteration	8
GEOCHEMISTRY	9

APPENDICES

APPENDIX A	Statement of Qualifications
APPENDIX B	Statement of Expenditures
APPENDIX C	Analytical Data

LIST OF FIGURES

<u>Fig. No.</u>	<u>Title</u>	<u>Scale</u>	<u>Page</u>
1	Location Map	c. 1:9,000,000	2
2	Detailed Location Map	1:250,000	3
3a	Geology Map	1:5,000	in pocket
3b	Rock Sample Locations	1:5,000	in pocket
4a	Soil Sample Location	1:5,000	in pocket
4b	Geochemistry-Au	1:5,000	in pocket
4c	Geochemistry-Ag	1:5,000	in pocket
4d	Geochemistry-Cu	1:5,000	in pocket
4e	Geochemistry-Pb	1:5,000	in pocket
4f	Geochemistry-Zn	1:5,000	in pocket

INTRODUCTION

Location, Access and Terrain

The Moose-81 and Scree-81 claim groups are located east of the Stikine River and north of the Toodoggone River in north-central British Columbia (see Figure 1). The nearest supply and transportation centres are Smithers, 300 km due south, and Watson Lake in the Yukon 300 km to the north.

Access to the claims is by a combination of fixed wing aircraft from Smithers or Watson Lake to the Sturdee Valley Airstrip 30 km south-east of the property, and helicopter thereafter. There is no road access although it has been suggested that the Omineca mining road to the south may be extended into the Toodoggone River area in the future.

The claim groups are situated at the eastern boundary of the Spatsizi Plateau and cover moderate to steep ridges between the broad valleys of Moosehorn and McClair Creeks (see Figure 2). Interest in the claims originally focussed on showings of Pb and Zn sulphides hosted in quartz veins near the centre of the Moose 1 claim. Vegetation below 1525 metres consists of spruce, fir and pine forests giving way to extensive willow in the valley bottoms. Above 1525 metres, moss, grasses and alpine flowers predominate. Previously cut lines provide good access through forested ground.

Property History and Definition

Attention was focussed on McClair Creek in 1931 when Chas. McClair was reported to have taken several thousand dollars worth of gold from placer workings.

The original property area of the Moose 1, 2 and 3 mineral claims was staked in 1971 to cover showings discovered by Sullivan and Rodgers, consultants, who were undertaking reconnaissance work for Sumac Mines Ltd.

LOCATION MAP

SCALE 1" = 140 Miles
(approx.)

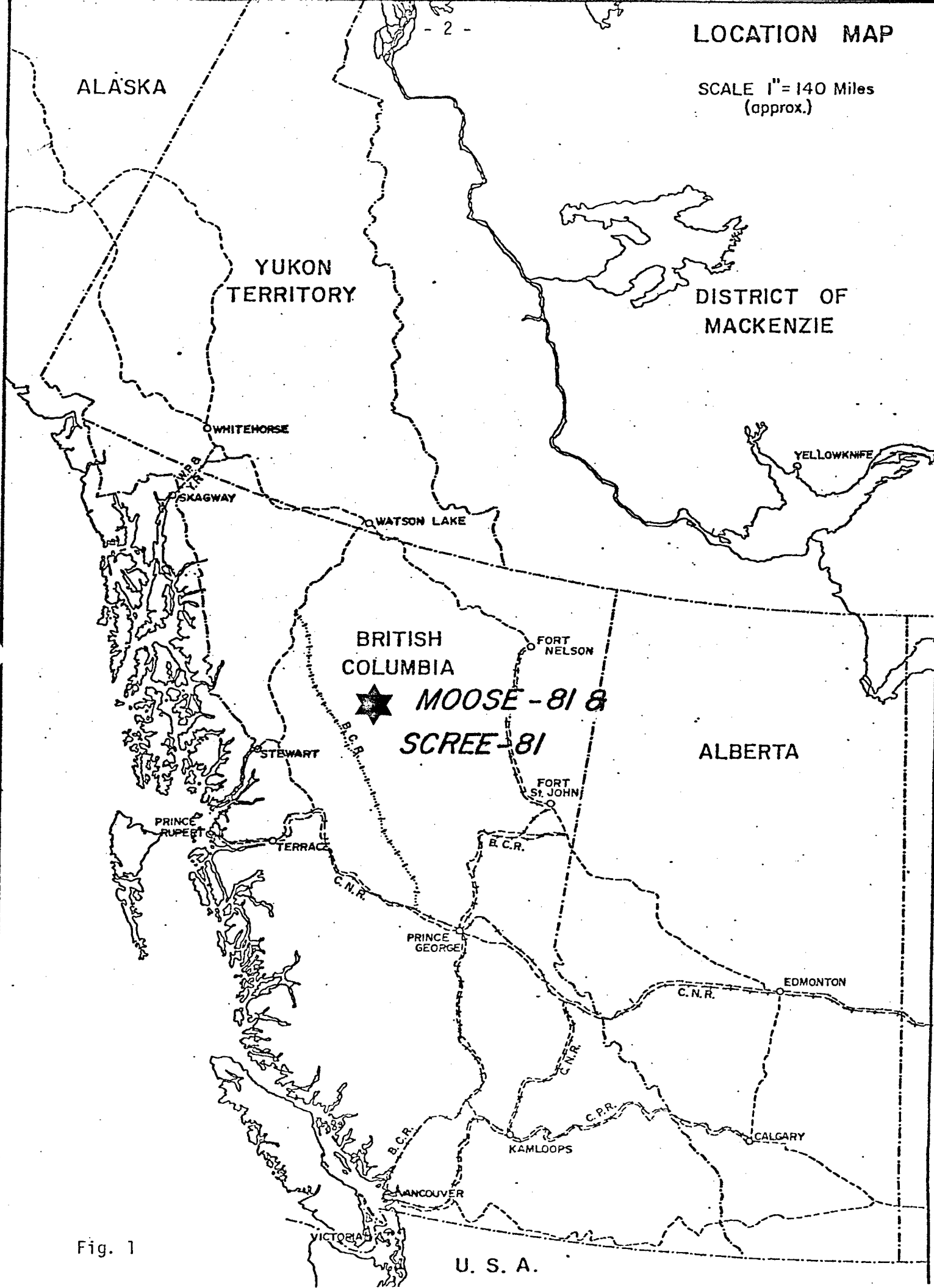
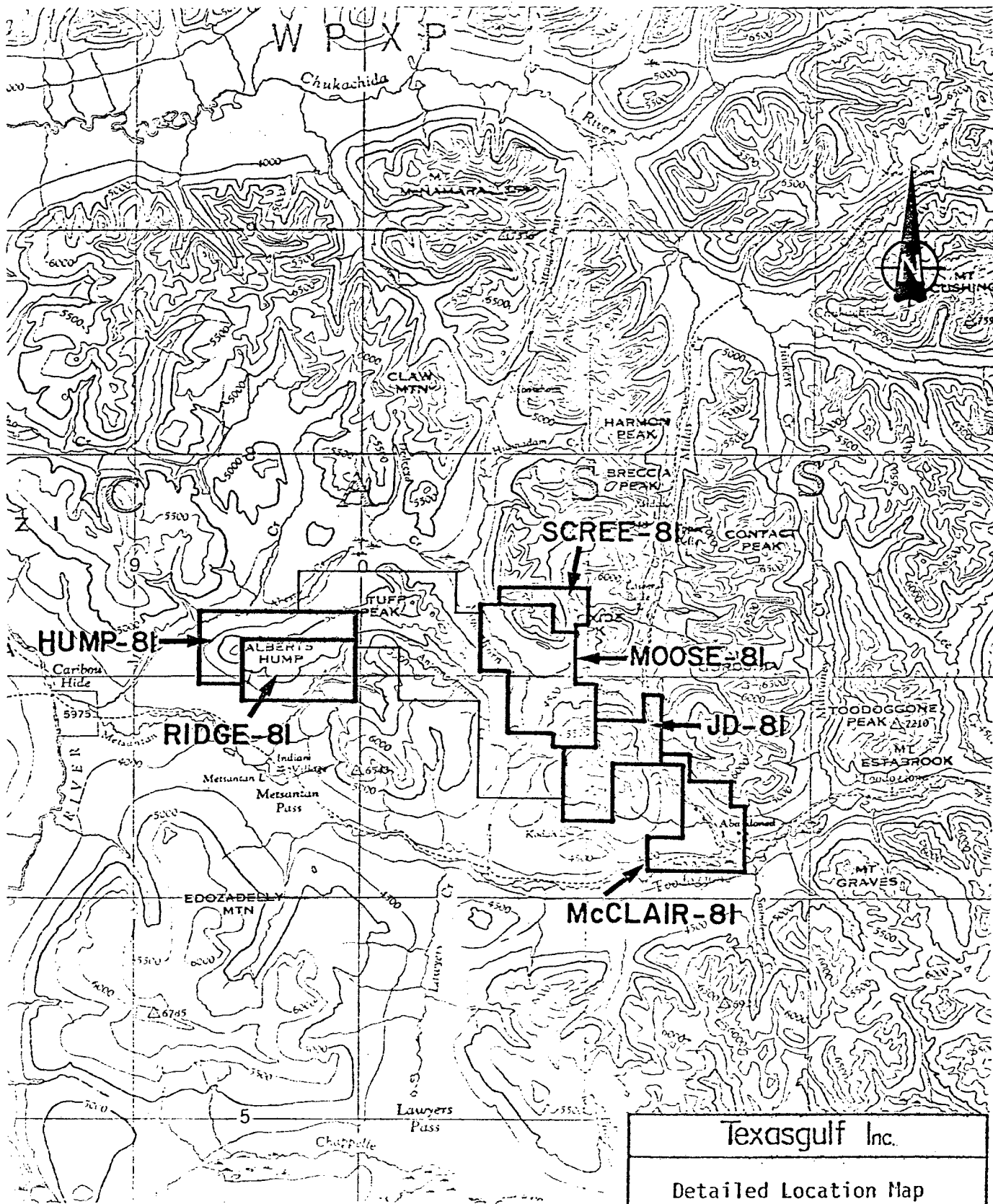


Fig. 1



Texasgulf Inc.

Detailed Location Map
MOOSE and SCREE Claims

WORK BY	DRAWN BY	DATE	C+M.G. NO.

2500 0 2500 5000 7500 10,000
Scale in metres

Map Sheet 94E "Toodoggone River" Figure 2

Geochemical surveys outlined an area 1500 metres long with anomalous silver, lead, zinc and copper in soils. Subsequent geochemical, geophysical, and geological work in 1972 revealed mineralization of several types and confirmed the previous geochemical anomalies. During 1974, 4 BQ holes totalling 493.2 metres were drilled to test selected I.P. anomalies. However, the results proved inconclusive. The claims were allowed to lapse in 1977, but the area was restaked by Energex Minerals Ltd. and Petra Gem Exploration Ltd. interests in 1979. Additional mapping and geochemical surveys were carried out by H.R. Schmitt of Texasgulf Inc. and his assistants in June, 1980 and the results of this and previous surveys can be found in the assessment report for Moose 1 M.C. submitted in June of 1981 (Peatfield, 1981). Work described in this report was undertaken by Texasgulf Inc. on behalf of its wholly owned subsidiary Texasgulf Canada Ltd., the current registered owner of the claims. The Moose-81 and Scree-81 claim groups are portions of a much larger area currently under investigation.

Summary of Work Completed

Geological surveys

Fieldwork on the Moose-81 and Scree-81 groups took place between June 3rd and Sept 11th with most of the work done prior to Sept 1st. D. Piroshco undertook most of the detailed mapping and rock sampling throughout this time. Mapping was carried out at a scale of 1:5000 (see Fig. 3a) on two chain and compass grids which were constructed to cover the majority of the claim areas where previous grids did not exist. The grid lines were spaced 100 m apart with stations every 50 m. A total of 52 rock samples were analysed geochemically from the two claim groups; 29 from the Moose-81 group and 23 from the Scree-81 group. Figure 3b (pocket) shows the sample locations.

Geochemical surveys

A total of 248 soil samples were collected on the westernmost of the two grids and were analysed for Cu, Pb, Zn, Au and Ag. Soil samples of B-horizon material from depths of 15-30 cm were collected at 50 m intervals on the above mentioned grid. All geochemical analyses were carried out by Bondar-Clegg and Co. Ltd. of North Vancouver.

Work Distribution

All work was carried out on the Moose-81 and Scree-81 claim groups. Credit is claimed proportional to the work done on each group.

GEOLOGY

Regional Setting

The property lies near the eastern margin of a Mesozoic volcanic arc assemblage bounded on the west and south by the Sustut and Bowser basin assemblages and to the east by the Omineca Crystalline Belt. Mapping by Gabrielse, et al. from 1971-1975 and a summary by Carter of the geology as understood in 1971 refer to a sequence known informally as the "Toodoggone" volcanic rocks, which underlie much of the region and the property.

Property Geology

The geology of the Moose property was originally mapped at a scale of 1"=400' by T.C. Scott and T. Rodgers in 1972. Mapping by H.R. Schmitt in 1980 at a scale of 1:5000 corroborated and added to the earlier mapping, attempting to define in greater detail some of the lithological variations. Present mapping, also at a scale 1:5000, followed all the previous mapping but reinterpreted the lithologies and their variations in terms of a tuffaceous subaerial volcanic environment. A comprehensive interpretation of the geology is limited above treeline by scarcity of outcrop on most major slopes and by the rapid changes in lithologies characteristic of these subaerial volcanics.

In summary, the claims are underlain by a thick succession of Lower to Middle Jurassic feldspar-hornblende crystal and crystal-lapilli tuffs and tuff breccias, a thin ash-fall tuff and a lesser dacite porphyry flow. Cutting this sequence is a small plug of diorite and diorite porphyry along with scattered, narrow basaltic and andesitic dykes. A broad zone of pervasive silicification and quartz veining with local minor brecciation and shearing is found throughout the lower area of base metals soil geochemical anomalies and contains numerous disseminated and vein occurrences of galena, sphalerite, and chalcopyrite. The small, spotty gold and silver anomalies above this zone are apparently related to small quartz veinlets that cut the rocks throughout.

The following descriptions of rock units are based on fieldwork without the benefit of examining thin sections:

Rock types

Unit 1 This is a thick sequence of the most dominant and widespread rock type and includes andesitic crystal and crystal-lapilli tuffs and tuff breccias with minor interbeds of ash-fall tuff.

Crystal and crystal-lapilli tuffs dominate the stratigraphy and consist of 5 to 40%, white to orangish plagioclase crystal fragments accompanied at times by 0 to 30% broken prismatic hornblende fragments in a fine-grained green to greyish-green tuff matrix. In the western area of the property the matrix is commonly maroon. Lapilli-sized lithic fragments are present sporadically throughout this rock type. They are generally angular, dark grey and fine-grained and only rarely make up more than 20% of the rock.

Within these tuffs are found many irregularly shaped and distributed lenses and pods of tuff breccia. Breccia fragments range from 1 cm to greater than 1 m and are most frequently of the same lithology as the adjacent tuffs. The matrix material is locally hematitic but generally greyish-green like the fragments.

A single exposure of gently dipping thickly bedded ash-fall tuff occurs within a crystal tuff unit just below the peak in the centre of the map sheet. This 1 m unit consists of convoluted dark reddish brown beds up to 3 cm thick with laminations and thin interbeds of light grey, coarser grained tuff.

Unit 2 Occurring primarily in the NE portion of the map-area, this dacite porphyry is typified by its subhedral white plagioclase phenocrysts of up to 5 mm (20-30%), quartz eyes to 2 mm (1-2%), and subhedral biotite crystals to 5 mm (1-15%) all within a fine-grained, maroon groundmass. Contacts with the overlying crystal tuff are gradational over 2 to 5 m. This unit appears to thin towards the north. Another small exposure of dacite porphyry appears as a discontinuous interbed within crystal tuffs in the centre of the western grid area.

Unit 3 A stock-like body of presumably coeval diorite and diorite porphyry intrudes volcanics near the southeast end of the ridge on the eastern grid area. The former phase is a pink to grey, medium-grained rock with equigranular plagioclase (90%), K-feldspar (ca. 4%) and minor quartz eyes. Anhedral, chloritized flakes of biotite appear locally in amounts up to 10%. Occasional potassic alteration is also present.

The porphyritic equivalent of this makes up the bulk of the intrusive and is characteristically grey with a blocky fracture. It consists of up to 40%, subhedral hornblende phenocrysts (3 mm) all in a finer grained groundmass of plagioclase, hornblende, and infrequent K-feldspar and biotite. Disseminated pyrite is present in amounts of 1-15%. Contacts with adjacent volcanics are rarely observed, but are generally marked by evidence of strong quartz-chlorite-pyrite alteration.

Unit 4 Basaltic and andesitic dykes cross-cut most of the rock types on the property, the former being the most dominant. These dykes cross-cut both volcanics and the diorite intrusive.

The basaltic dykes range from 20 cm to 3 m in width, cutting host rocks discontinuously. They are fine-grained, dark grey to greenish-

grey and generally trend from 020° to 050° with steep dips to the west. These trends are consistent with jointing in the country rocks. Calcite- and epidote-filled amygdules are not uncommon.

The less abundant andesite dykes typically consist of fine-grained masses of plagioclase and hornblende phenocrysts in a pinkish to grey groundmass. They vary in their orientation from N-S to 060° and have been observed up to 10 m wide.

Structure

The sequence of volcanic rocks appears to strike predominantly north to northwest with a moderate dip to the east. Some faulting has offset certain units. The most important structural component is an extensive zone of vertical shearing and fracturing extending from southeast to northwest throughout the centre of the western grid area. This zone is presumed to be related to a regional fault or shear that extends from McClair Creek northwest up to Moosehorn Creek.

Mineralization and alteration

Mineralization on the property is of two principal types. Disseminated and vein-type occurrences of sphalerite, galena, pyrite and chalcopyrite were found individually and together mainly in the southeast and south-central part of the western grid area. Typically, pervasive and zonal quartz or, less commonly, carbonate alteration hosts mineralization and has a peripheral zone with traces of disseminated base metal mineralization surrounded by weak to moderate (locally 15%) pyritization. Concentrated zones of 1 mm to 2 cm wide subparallel mineralized veins occur predominantly within sheared, silicified and chlorite (minor epidote) altered feldspar-hornblende crystal tuffs, especially within the area of the previously exposed trenches.

Other important zones of intense alteration and possible potential mineralization are located in the vicinity of the diorite stock.

Greyish quartz-chlorite alteration occurs with up to 10% pyrite at or near the intrusive contact with volcanic rocks, particularly along the northern margin. Elsewhere within the diorite the groundmass and feldspars have been flooded with quartz and clay alteration. Secondary pyrite is disseminated through the rock and is known to partially or completely pseudomorph original acicular hornblende crystals. Chlorite and epidote alteration, accompanied by minor amounts of quartz and pyrite, is also present near the diorite body but is much more accessory in nature.

GEOCHEMISTRY

A total of 241 soil samples were collected on the two claim groups and shipped to Bondar-Clegg and Co. Ltd. of North Vancouver, for analysis. Distribution of soil and rock samples is shown in Figures 4a and 3b respectively. The minus 80 mesh fraction of the soil was analysed for Pb, Zn, Cu, Au and Ag. Rocks were crushed and similarly analysed.

A summary of the extraction and analytical techniques is as follows:

<u>Elements</u>	<u>Extraction</u>	<u>Method of Analysis</u>
Cu, Pb, Zn, Ag	Hot Lefort Aqua Regia	Atomic absorption
Au	Fire assay and hot Aqua Regia	Atomic absorption

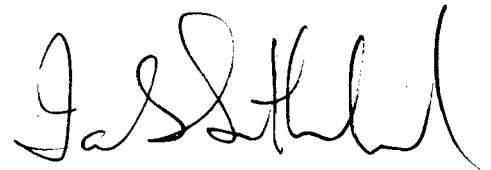
The results of all soil geochemical analyses are plotted in Figure 4b to 4f. Previous survey results are available in the 1981 assessment report for the Moose 1 mineral claim (Peatfield, 1981). Detailed contouring of anomalous zones was undertaken on the current data while attempting to incorporate the results of previous geochemical programmes.

The 1981 soil sampling programme augmented the earlier survey data by showing the apparently sharp limits to the previously outlined base metals anomalies and suggesting weak and erratic anomalies of precious metal values above this zone. The generally poor to moderate correlation between present and past results may be due, in part, to some

uncertainty in previous sample locations or variations in sampling and/or analytical techniques. A further possibility is that the values themselves are highly erratic in the soils due to poor dispersion into the soil environment. Soils here have very little profile development, and lie on steep slopes where downslope movement is likely prevalent. Without the presence of continuous zones of mineralization this type of limited, almost linear dispersion could be responsible for the erratic values observed. Studies into this problem are currently underway and will be followed up in the coming field season.

Rock samples were taken selectively over the property with a major focus on silicification zones with possible precious metals potential. Results are tabulated in Appendix C and, on the whole, were very disappointing.

In summary, geochemical sampling to date has outlined an extensive area containing significant values in lead, zinc and silver, coincident with observed widespread disseminated and vein-type mineralization.

A handwritten signature in black ink, appearing to read 'I.G. Sutherland', written in a cursive style.

I.G. Sutherland

BIBLIOGRAPHY

CARTER, N.C. 1972. Toodoggone River Area. in Geology, Exploration and Mining in British Columbia 1971. British Columbia Department of Mines and Petroleum Resources, Victoria, pp. 63-64.

GABRIELSE, H., DODDS, C.J., AND MANSY, J.L. 1975. Geology - Toodoggone River (94E). Geological Survey of Canada, Open File 306.

PEATFIELD, G.R., Geological and Geochemical Surveys on the Moose 1 Mineral Claim. British Columbia Department of Mines and Petroleum Resources, Assessment Report, June, 1981.

APPENDIX A

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I.G. Sutherland - Geologist

Ian Sutherland obtained his B.Sc. (Hons) degree in Geology from the University of Western Ontario in 1976. He has held various geological positions in Industry and Government (Ontario Geological Survey) and joined Texasgulf in Vancouver in March 1981.

G. R. Peatfield
08/12/81

APPENDIX B

Statement of Expenditures

STATEMENT OF EXPENDITURES

SCREE-81 GROUP

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

G. Cooper - Geologist Period June 22-27	4 1/2 days @ \$95	427.50	
D. Piroshco - Geologist Period June 14-July 19	16 days @ \$75	1,200.00	
A. Costigan - Assistant June 17	1 day @ \$60	60.00	
P. Edwards - Assistant July 28	1 day @ \$40	40.00	
J. Etzkorn - Assistant Period June 15-17	2 1/2 days @ \$65	162.50	
L. Haering - Assistant Period June 16-July 29	5 1/2 days @ \$50	275.00	
J. Leigh - Assistant Period July 28, 29	2 days @ \$45	90.00	
P. Mouldey - Assistant Period June 13-27	6 days @ \$60	360.00	
F. Renaudat - Assistant Period June 9-18	4 1/2 days @ \$65	<u>292.50</u>	
		2,907.50	2,907.50

ROOM AND BOARD

43 man-days @ \$70 3,010.00

HELICOPTER

Texasgulf Bell 206B 4 hrs @ \$400 1,600.00

ANALYTICAL COSTS

120 soils @ \$ 9.85	1,182.00	
23 rocks @ \$11.75	270.25	
share of shipping, etc.	<u>180.25</u>	
	1,632.50	<u>1,632.50</u>

\$9,150.00

G.R. Peatfield
08/12/81

STATEMENT OF EXPENDITURES
MOOSE-81 GROUP

SALARIES AND FRINGE BENEFITS - TEXASGULF INC.

I.G. Sutherland - Supervision Period June 3-Sept 11, 3 days @ \$140	420.00	
G. Cooper - Geologist Period June 9-25 5 days @ \$ 95	475.00	
D. Piroshco - Geologist Period June 9-Sept 11 9 days @ \$ 75	675.00	
A. Costigan - Assistant Period June 10-15 2 days @ \$ 60	120.00	
J. Etzkorn - Assistant Period June 3-19 3 days @ \$ 65	195.00	
J. Gosselin - Assistant Period June 3-Sept 7 4 days @ \$ 60	240.00	
L. Haering - Assistant Period June 5-July 28 3 days @ \$ 50	150.00	
P. Mouldey - Assistant Period June 8-12 3 days @ \$ 60	180.00	
F. Renaudat - Assistant Period June 5-10 3 days @ \$ 65	195.00	
	2,650.00	2,650.00

ROOM AND BOARD

35 man-days @ \$70		2,450.00
--------------------	--	----------

HELICOPTER

Texasgulf Bell 206B 4.3 hrs @ \$400		1,720.00
-------------------------------------	--	----------

ANALYTICAL COSTS

128 soils @ \$ 9.85	1,260.80	
29 rocks @ \$11.75	340.75	
share of shipping, etc.	198.45	
	1,800.00	1,800.00

REPORT PREPARATION

I.G. Sutherland 2 1/2 days @ \$140	350.00	
Drafting, secretarial, etc.	250.00	
	600.00	600.00
		9,220.00

Note: Of this total, \$2,850.00 has been claimed for assessment credit, as of Sept. 1, 1981. The remaining \$6,370.00 will be claimed at a later date.

G. R. Peatfield
08/12/81

APPENDIX C

Analytical Data

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPM
GC-1-04-81	SOIL	10	16	85	0.2	80
GC-02		7	15	95	0.3	75
GC-03		10	30	104	1.5	80
GC-04		10	41	72	0.7	275
GC-05		9	39	87	3.8	5
GC-06		8	27	65	0.6	5
GC-07		10	21	80	2.0	5
GC-08		10	32	52	1.1	30
GC-09		12	22	44	2.5	10
GC-10		6	27	76	1.4	10
GC-11		7	12	60	0.7	10
GC-12		6	6	45	1.0	15
GC-13		4	8	36	0.9	ND
GC-14		20	25	60	6.6	5
GC-15		9	22	44	1.7	20
GC-16		15	40	76	7.8	ND
GC-17		7	17	44	2.6	ND
GC-18		6	9	40	0.2	ND
GC-19		6	11	45	1.8	ND
GC-20		10	16	60	2.7	10
GC-21		8	10	24	2.8	5
GC-22		10	17	50	2.7	ND
GC-23		10	10	44	0.8	ND
GC-24		13	11	56	2.6	15
GC-25		10	14	52	1.2	15
GC-26		15	38	78	0.3	140
GC-27		8	13	66	0.2	240
GC-28		10	34	86	0.3	20
GC-29		9	12	56	0.2	50
GC-30		10	8	64	0.2	20
GC-31		11	43	72	2.3	20
GC-32		13	24	65	2.1	10
GC-33		6	8	52	0.6	70
GC-34		10	14	84	0.7	10
GC-35		9	14	50	0.5	75
GC-36		7	8	53	2.0	270
GC-37		5	12	32	0.4	ND

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
JL-01-04-81		7	9	38	0.2	ND
JL-02		8	7	68	0.2	ND
JL-03		11	10	87	0.2	ND
JL-04		7	6	88	0.2	ND
JL-05		7	7	40	0.3	ND
JL-06		6	8	108	0.2	ND
JL-07		5	8	85	0.3	ND
JL-08		8	27	109	2.3	10
JL-09		10	14	80	0.2	20
JL-10		14	17	64	0.5	15
JL-11		9	10	50	0.5	ND
JL-12		8	9	70	0.2	10
JL-13		8	9	74	0.5	5
JL-14		9	15	171	0.7	15
JL-15		8	4	65	0.2	125
JL-16		8	13	100	0.2	ND
JL-17		10	31	112	0.3	20
JL-18		12	67	125	0.3	10
JL-19		12	86	145	9.6	5
JL-20		8	24	78	0.6	5
JL-21		20	195	590	7.4	5
JL-22		9	9	91	0.8	ND
JL-23		13	13	115	0.5	ND
JL-24		7	8	135	0.2	ND
JL-25		7	12	106	0.4	15
JL-26		8	11	112	0.2	ND
JL-27		9	20	135	0.3	ND
JL-28		9	6	68	0.2	ND
JL-29		8	6	110	0.2	ND
JL-30		9	7	90	0.4	ND
JL-31		7	4	90	0.2	ND
JL-32		5	4	80	0.2	5
JL-33		6	8	86	0.2	ND
JL-34		7	10	130	0.2	ND
JL-35		10	4	135	0.2	ND
JL-36		8	7	130	0.2	ND
JL-37		8	8	80	0.2	ND
JL-38		8	15	96	0.2	ND
JL-39		7	77	124	0.2	15
JL-40		7	33	185	0.2	10
JL-41		10	19	155	0.3	5
JL-42		8	105	212	0.6	10
JL-43		6	20	121	0.4	30
JL-44		9	49	280	0.2	10
JL-45		8	53	145	0.3	ND

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
JL-46		7	50	105	0.3	ND
JL-47		8	23	141	0.2	ND
JL-48		8	13	105	0.7	ND
JL-49		6	23	115	0.2	10
JL-50		8	13	138	0.3	ND
JL-51		8	40	169	0.4	5
JL-52		10	29	125	0.3	ND
JL-53		11	70	175	1.2	ND
JL-54		10	38	105	1.2	10
JL-55		19	391	135	4.2	ND
JL-56		12	100	248	1.0	ND
JL-57		14	19	115	0.8	20
JL-58		9	33	103	0.9	ND
JL-59		11	24	100	0.4	ND
JL-60		7	13	95	0.3	ND
JL-61		11	10	113	0.2	ND
JL-62		13	5	105	0.2	10
JL-63		12	7	98	0.2	ND
JL-64		11	6	104	0.2	ND
JL-65		22	6	129	0.2	10
JL-66		9	4	98	0.2	ND
LH-01-04-81		15	55	144	1.6	210
LH-02		7	27	65	2.1	25
LH-03		9	53	80	3.2	45
LH-04		13	43	195	1.1	15
LH-05		7	20	65	0.3	ND
LH-06		13	37	110	1.9	5
LH-07		13	153	196	11.0	10
LH-08		17	363	195	45.0	40
LH-09		6	17	70	0.4	40
LH-10		6	21	84	0.4	10
LH-11		7	21	75	0.9	80
LH-12		7	37	85	0.8	140
LH-13		8	16	83	0.2	20
LH-14		6	4	46	0.3	10
LH-15		9	13	50	0.4	60
LH-16		4	6	55	0.2	25
LH-17		8	12	65	0.4	40
LH-18		5	5	50	0.2	60
LH-19		6	11	60	0.3	25
LH-20		6	23	78	0.4	25
LH-21		7	47	112	0.5	20
LH-22		9	11	64	0.4	85
LH-23		9	6	72	0.2	210
LH-24		17	12	40	1.0	20

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
LH-25		8	13	52	1.3	75
LH-26		6	13	64	0.9	320
LH-27		6	10	36	0.8	150
LH-28		4	40	100	0.4	15
LH-29		6	83	228	0.3	20
LH-30		12	47	95	2.4	160
LH-31		22	236	190	2.2	320
LH-32-04-81		8	122	155	2.5	115
LH-33-04-81		10	6	130	0.2	ND
LH-34		6	10	99	0.2	ND
LH-35		7	7	100	0.2	ND
LH-36		21	9	74	0.2	ND
LH-37		76	6	138	1.2	ND
LH-38		10	8	90	0.2	ND
LH-39		5	5	55	0.2	5
LH-40		11	6	71	0.2	10
LH-41		8	5	72	0.2	5
LH-42		6	5	76	0.4	ND
LH-43		20	398	580	1.6	ND
LH-44		10	300	530	0.4	ND
LH-45		12	420	540	0.2	ND
LH-46		9	174	640	0.2	ND
LH-47		10	378	660	0.4	ND
LH-48		36	274	620	1.4	ND
LH-49		14	76	290	0.4	ND
LH-50		11	210	130	0.2	ND
LH-51		7	118	180	0.2	ND
LH-52		10	147	253	1.0	10
LH-53		12	11	120	0.3	ND
LH-54		16	13	112	0.6	ND
LH-55		13	21	112	1.6	ND
LH-56		15	26	110	0.4	10
LH-57		17	328	340	9.5	ND
LH-58		21	450	1095	3.5	5
LH-59		16	1360	700	2.2	ND
LH-60		10	76	116	0.9	ND
LH-61		7	30	115	0.4	ND
LH-62		11	56	142	9.5	ND
LH-63		7	58	124	0.6	ND
LH-64		8	23	116	0.2	ND
LH-65		8	11	155	0.2	ND
LH-66		8	13	100	0.2	ND

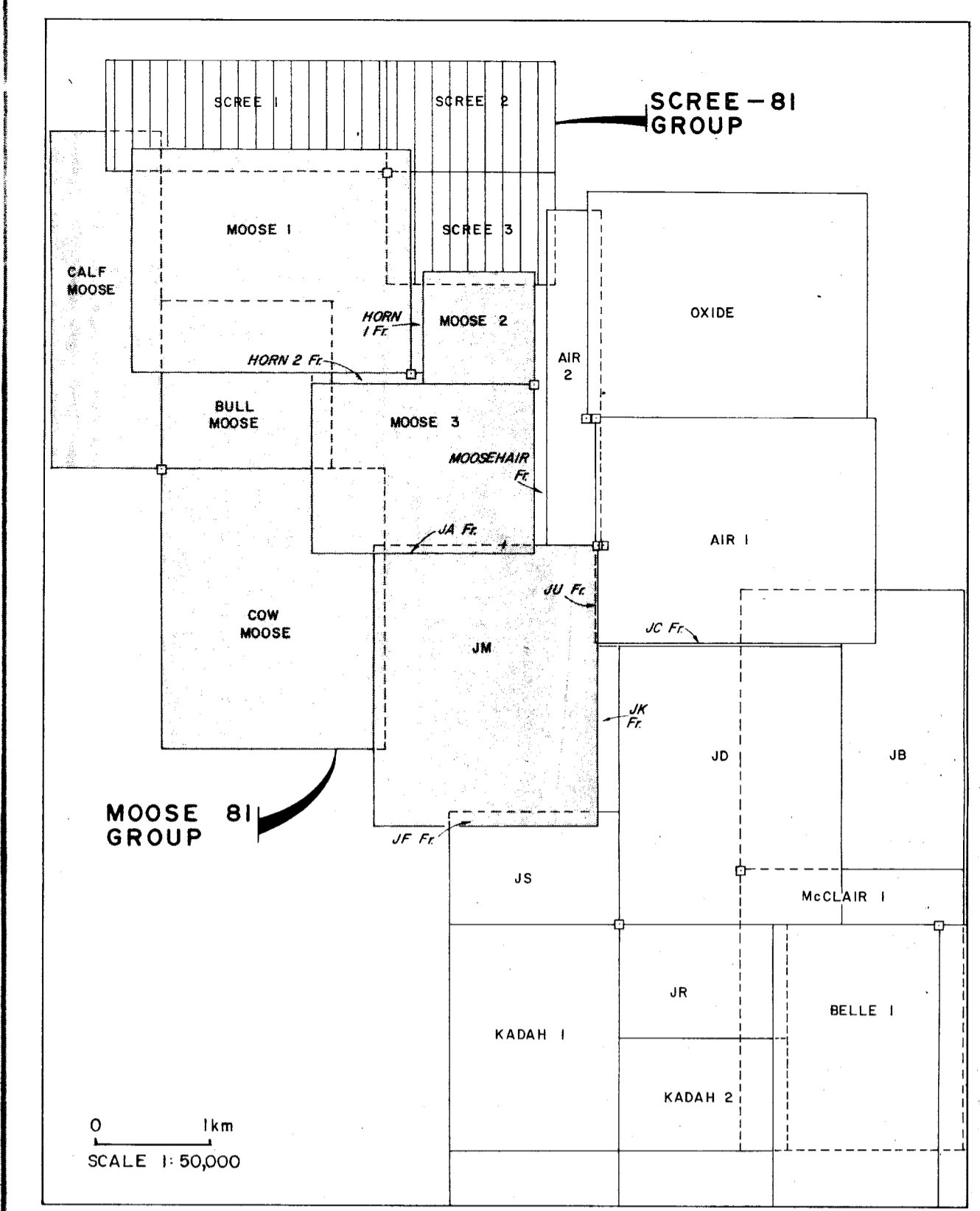
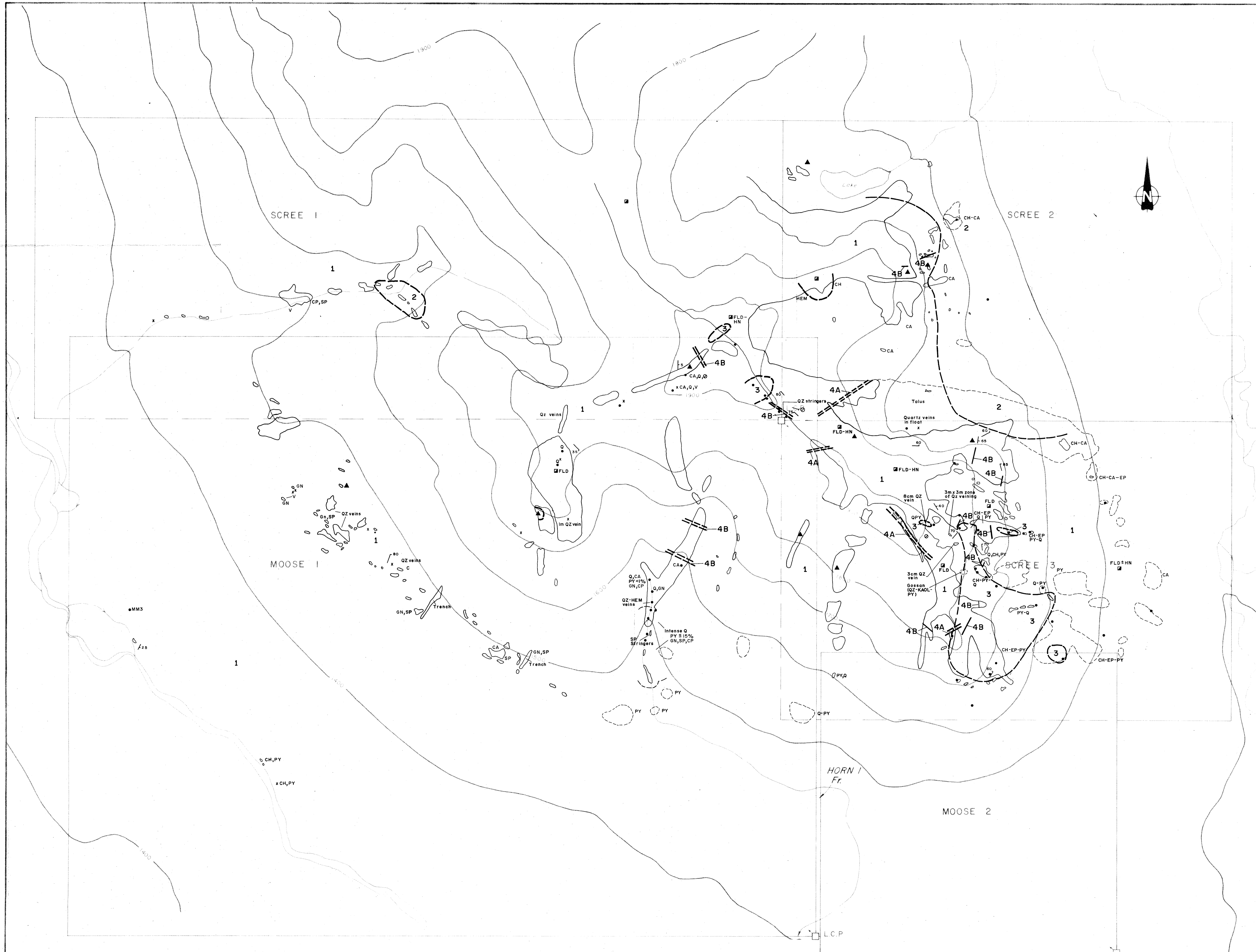
SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB
PE-01-04-81		9	5	75	0.2	ND
PE-02		7	3	60	0.2	ND
PE-03		9	6	80	0.2	ND
PE-04		6	3	97	0.2	ND
PE-05		7	5	82	0.2	5
PE-06		6	8	94	0.2	ND
PE-07		7	7	75	0.2	ND
PE-08		8	15	80	1.6	5
PE-09		11	54	80	3.7	25
PE-10		11	30	105	2.0	25
PE-11		8	2	50	0.4	ND
PE-12		9	4	74	0.4	ND
PE-13		9	4	74	0.2	5
PE-14		10	11	80	0.7	15
PE-15		10	12	82	0.2	ND
PE-16		11	36	95	0.4	5
PE-17		10	17	105	1.4	ND
PE-18		5	4	76	0.2	ND
PE-19		5	8	120	0.2	ND
PE-20		4	6	115	0.2	ND
PE-21		6	7	132	0.2	ND
PE-22		8	12	120	0.2	ND
PE-23		7	12	102	0.2	ND
PE-24		8	8	114	0.3	ND
PE-25		8	14	85	0.2	ND
PE-26		6	5	90	0.2	ND
PE-27		8	7	70	0.2	5
PE-28		11	3	85	0.2	ND
PE-29		6	6	99	0.2	ND
PE-30		8	6	136	0.2	ND
PE-31		8	5	134	0.2	ND
PE-32		7	5	115	0.2	ND
PE-33		5	5	50	0.2	ND
PE-34		8	222	300	0.7	5
PE-35		12	66	265	0.9	5
PE-36		7	30	155	0.3	ND
PE-37		11	278	710	0.2	ND

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PFB
PM-04-81-01	SOIL	5	9	13	0.2	ND
PM-04-81-02		7	10	30	0.5	1155
PM-04-81-03		13	8	38	0.3	280
PM-04-81-04		16	9	47	0.2	ND
PM-04-81-05		8	12	47	0.8	115
PM-04-81-06		13	14	47	1.8	370
PM-04-81-07		18	24	58	0.6	555
PM-04-81-08		11	13	52	0.2	155
PM-04-81-09		12	47	98	0.2	370
PM-04-81-10		8	20	83	0.5	20
PM-04-81-11		10	10	47	1.0	35
PM-04-81-12		4	8	26	0.2	165
PM-04-81-13		9	26	58	0.3	5
PM-04-81-14		8	18	60	0.5	5
PM-04-81-15		10	30	83	0.2	55
PM-04-81-16		9	28	65	0.2	10
PM-04-81-17		10	15	61	0.5	415
PM-04-81-18		10	10	44	0.2	115
PM-04-81-19		17	10	68	1.8	20
PM-04-81-20		4	6	35	0.2	ND
PM-04-81-21		6	6	40	0.3	ND
PM-04-81-22		22	6	33	0.8	ND
PM-04-81-23		6	4	38	0.3	ND
PM-04-81-24		6	4	33	0.2	ND
PM-04-81-25		6	6	53	0.2	ND
PM-04-81-26		7	6	56	0.2	ND
PM-04-81-27		5	7	42	0.2	ND
PM-04-81-28		11	8	66	0.2	10
PM-04-81-29		9	9	64	0.2	ND
PM-04-81-30		9	8	48	0.2	5
PM-04-81-31		7	6	37	0.2	ND
PM-04-81-32		8	8	29	0.2	10
PM-04-81-33		7	25	60	2.0	45
PM-04-81-34		9	79	87	2.3	50
PM-04-81-35		9	24	57	1.3	30
PM-04-81-36		7	16	45	0.3	10
PM-04-81-37		8	16	71	0.7	5
PM-04-81-38		11	16	69	0.2	35
PM-04-81-39		8	17	60	0.2	ND
PM-04-81-40		9	20	76	0.2	15
PM-04-81-41		20	80	103	7.2	340
PM-04-81-42		21	102	221	10.0	125

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPM
DP-04-81-005		2	4	57	0.2	< 5
DP-04-81-011		2	4	62	0.2	ND
DP-04-81-013		9	14	75	0.2	ND
DP-04-81-015		2	4	68	0.2	ND
DP-04-81-016		20	4	47	0.2	ND
DP-04-81-018		4	7	50	0.2	ND
DP-04-81-019		17	2	33	0.2	65
DP-04-81-022		7	8	38	0.2	ND
DP-04-81-023		4	2	94	0.2	ND
DP-04-81-025		6	8	76	0.2	ND
DP-04-81-027		20	9	133	0.2	ND
DP-04-81-028		50	10	274	0.2	ND
DP-04-81-029		8	12	47	0.2	10
DP-04-81-030		45	12	48	0.2	ND
DP-04-81-031A		11	5	122	0.2	ND
DP-04-81-031B		84	250	353	4.0	15
DP-04-81-037	RX	6	18	20	1.6	55
DP-04-81-038		108	2	800	0.2	55
DP-04-81-039		11	ND	95	0.2	20
DP-04-81-040		12	4	155	0.4	ND
DP-04-81-041		5	6	72	0.6	80
DP-04-81-042		3	ND	56	0.2	ND
DP-04-81-048		5	29	162	0.2	ND
DP-04-81-049		4	20	135	0.2	10
DP-04-81-050		6	82	361	0.9	15
DP-04-81-051		3	ND	74	0.2	ND
DP-04-81-052	A	15	2	80	0.2	15
DP-04-81-054		3	27	41	2.2	25
DP-04-81-055		5	22	129	0.8	ND
DP-04-81-059	B	1	ND	51	0.2	ND
DP-04-81-061		7	4	85	0.2	10

SAMPLE NUMBER	Cu PPM	Pb PPM	Zn PPM	As PPM	Mn PPM	Hs PPB	Au PPB
DP-292	18	56	104	0.3	1600	30	55
DP-293	16	87	90	2.0	385	25	90
DP-294	160	145	80	24.0	485	25	345
DP-296	21	30	50	5.5	470	70	140
DP-297	12	20	43	5.2	390	25	65
DP-298	45	122	167	8.7	865	30	335
DP-299	3	7	8	0.3	145	20	20
DP-300	3	5	18	0.3	1510	15	5
DP-301	2	6	9	0.2	840	10	5
DP-302	2	51	10	0.2	410	15	ND

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	As PPM	Au PPB
DP-307		7	14	38	0.6	ND
DP-308		5	15	66	0.9	75
DP-310A		19	6430	103	2.9	50
DP-310B		74	44	128	0.6	ND
DP-311		4	109	6	4.1	190
DP-312		7	8	22	0.3	ND
DP-313		8	380	950	0.3	ND
DP-314		10	247	695	0.4	ND
DP-315		5	114	269	0.3	ND
DP-316		8	224	1090	0.7	ND
DP-317		6	18	174	0.3	ND
DP-319		17	77	345	1.2	75
DP-320		4	25	107	0.2	



- LEGEND**
- LOWER TO MIDDLE JURASSIC
- 4 A) Andesitic dykes
 - 4 B) Basaltic dykes
 - 3 Medium crystalline grey diorite and hornblende diorite porphyry
 - 2 Maroon feldspar-biotite-quartz dacite porphyry flow
 - 1 Grey green feldspar + hornblende andesite crystal tuff and minor ash tuff
- Grey green to maroon crystal lapilli tuff; lenses and zones defined by crystals and lithic fragments of size 3mm-1cm
▲ Grey to maroon tuff breccia; occurs as lenses within crystal tuff.

- SYMBOLS**
- Observed geological contact
 - - - Inferred geological contact
 - x ○ Outcrop
 - Subcrop
 - Bedding
 - Joints; inclined
 - Joints; vertical
 - Vuggy quartz
 - v Quartz veinlets

- MINERAL ABBREVIATIONS**
- FLD Feldspar
 - HN Hornblende
 - PY Pyrite
 - CP Chalcopyrite
 - Gn Galena
 - SP Sphalerite

- ALTERATION**
- Q Silicification
 - CH Chlorite
 - EP Epidote
 - CA Calcite
 - HEM Hematite
 - QZ Quartz
 - KAOL Kaolinite

9832

Figure No. 3a

Texasgulf Inc.

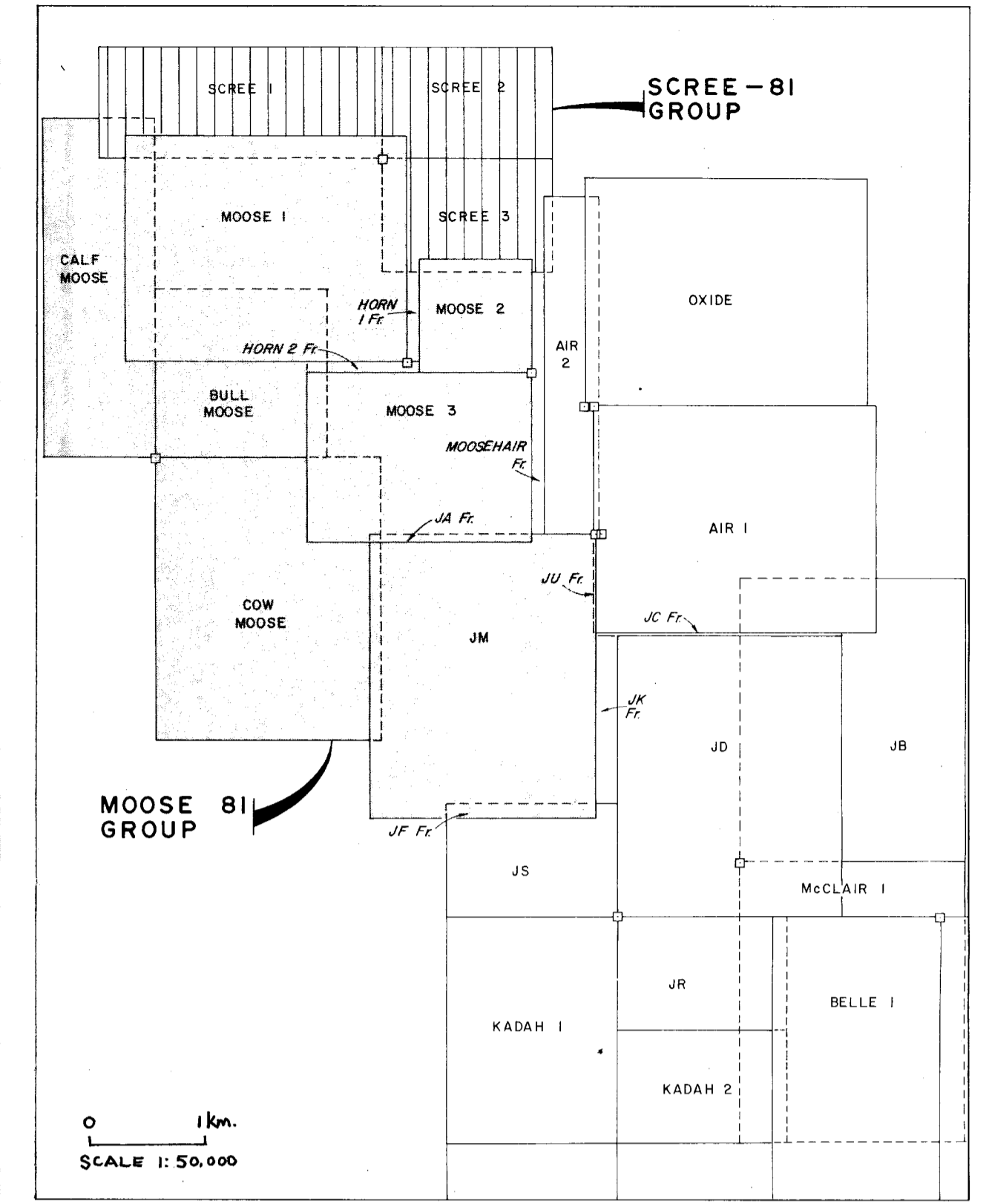
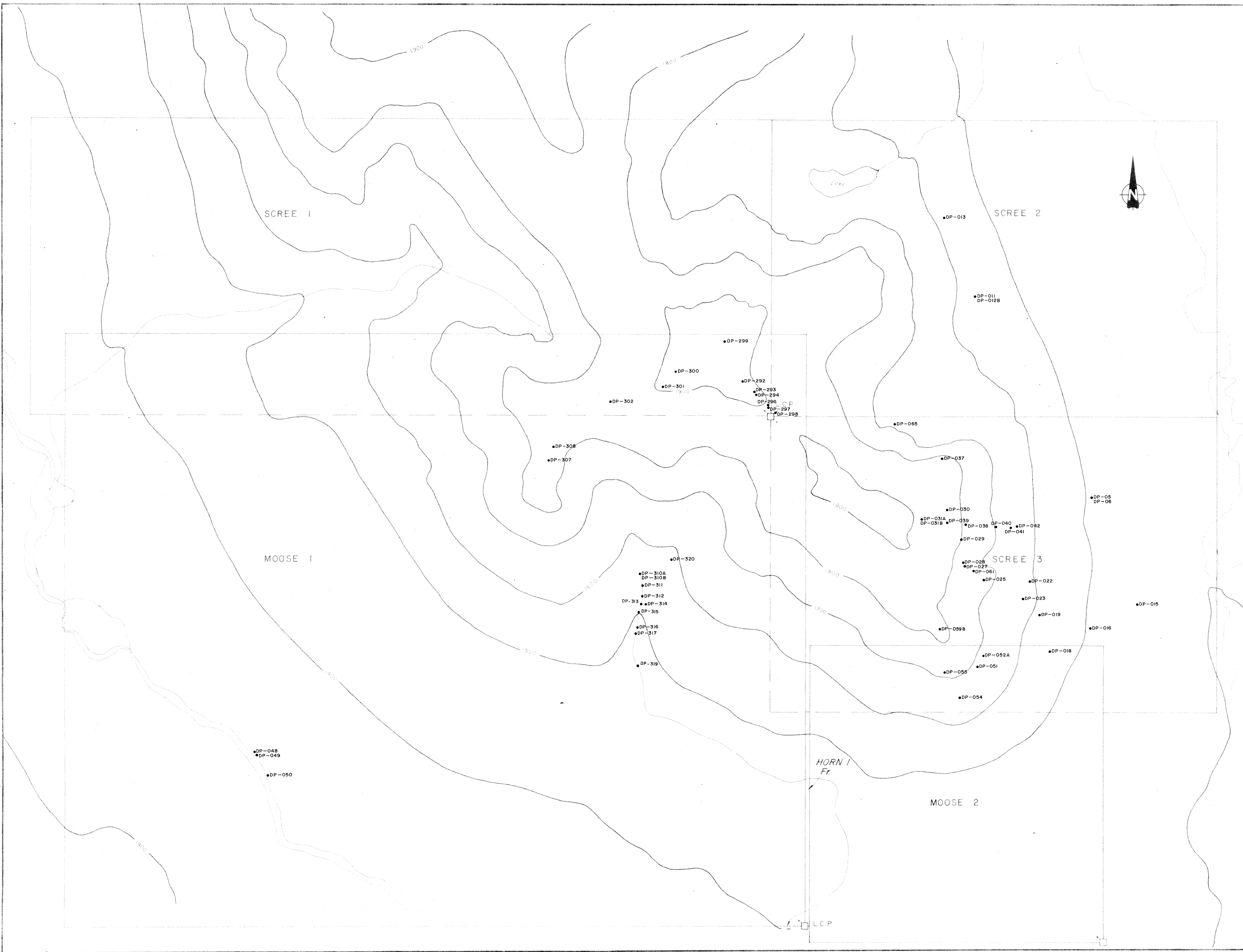
MOOSE & SCREE GROUPS

GEOLOGY

NTS 94E/6E

WORK BY	DRAWN BY	DATE	DRWG. NO.
I.S.	T.M.	NOV. 1981	

100 50 0 100 200 300 400
Scale in Metres 1 : 5,000



9832

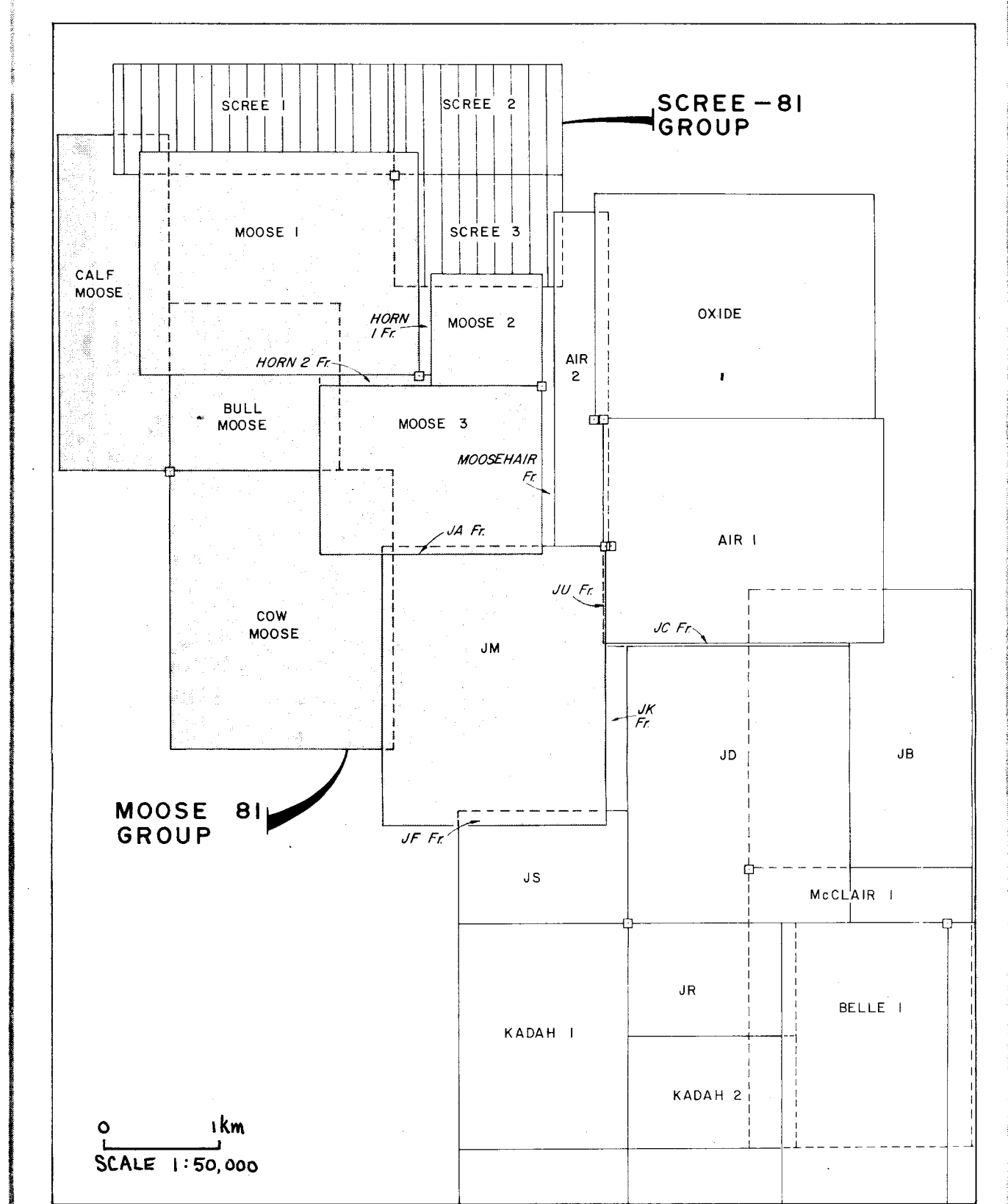
Figure No. 3b

Texasgulf Inc.

**MOOSE & SCREE GROUPS
ROCK SAMPLE
LOCATIONS**

NTS 94E/6E			
WORK BY	DRAWN BY	DATE	DRWG NO.
I.S.	T.M.	NOV 1981	

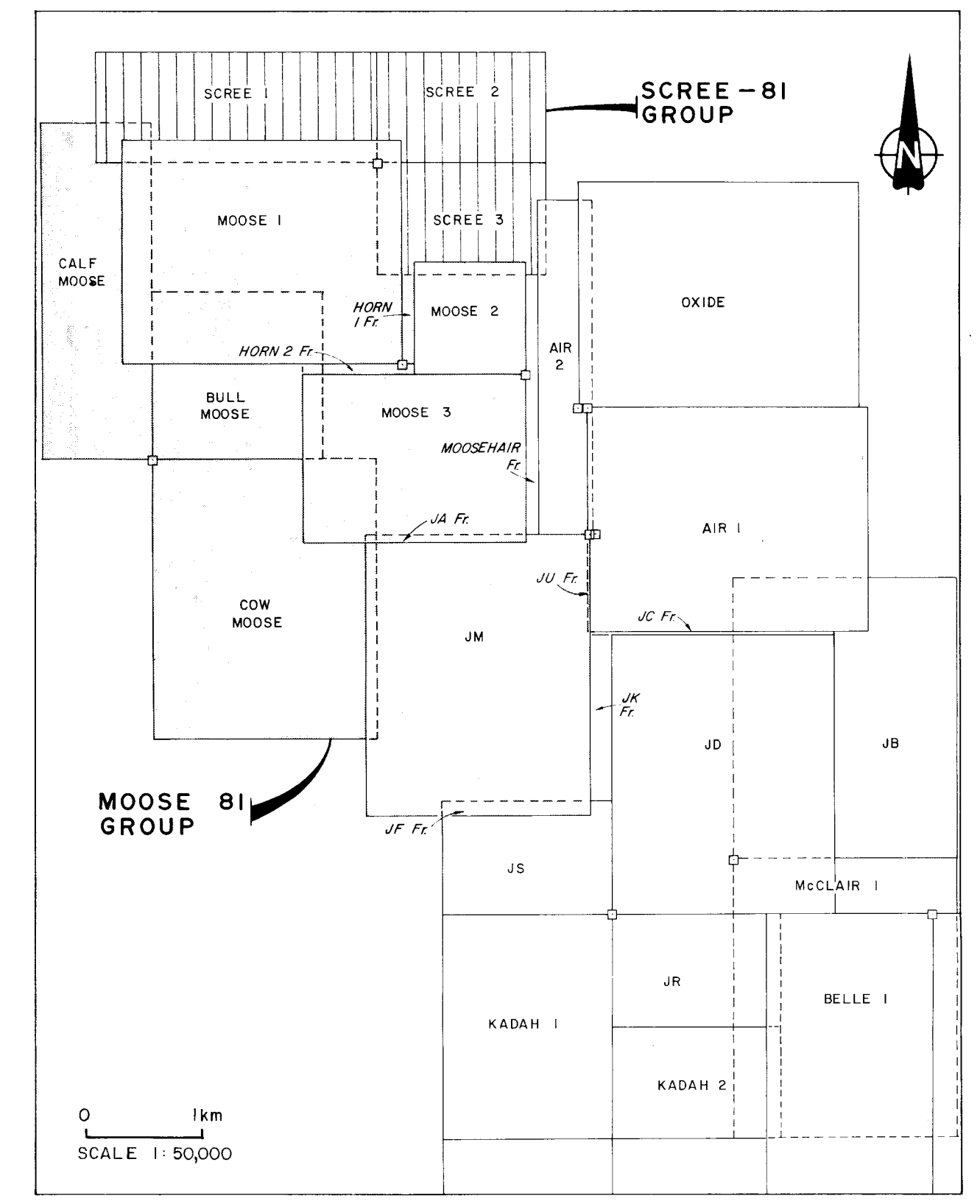
Scale in Metres 1:5,000



9832

Figure No. 4a

Texasgulf Inc.			
SOIL SAMPLE LOCATIONS			
WORK BY	DRAWN BY	DATE	DRWG NO.
I.S.	T.M.	NOV. 1981	
 Scale in Metres 1:5000			



LEGEND
 CONTOUR INTERVAL
 0-25 ppb
 25-50 ppb
 50-100 ppb
 100-200 ppb
 200-400 ppb
 400-800 ppb
 +800 ppb

— Not detected

9832

Figure No. 4b

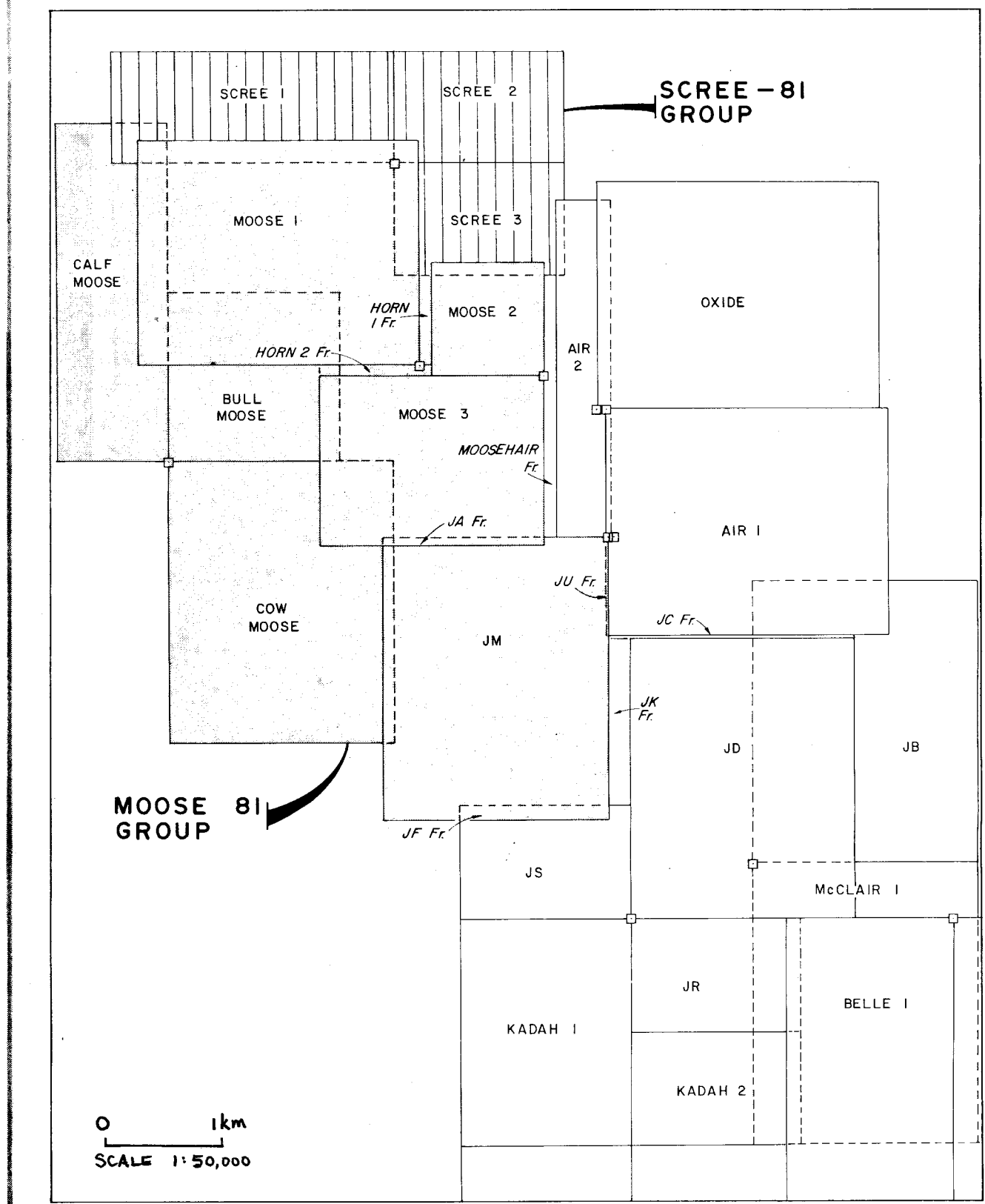
Texasgulf Inc.

**MOOSE & SCREE GROUPS
 GEOCHEMISTRY
 Au in SOILS**

NTS 94E/6E

WORK BY	DRAWN BY	DATE	DRWG. NO.
I.S.	T.M.	NOV 1981	

100 50 0 100 200 300 400
 Scale in Metres 1:5,000



LEGEND
 CONTOUR INTERVAL
 0 - 2.4 ppm
 2.5 - 4.9 ppm
 5.0 - 9.9 ppm
 + 10.0 ppm

9832

Figure No. 4c

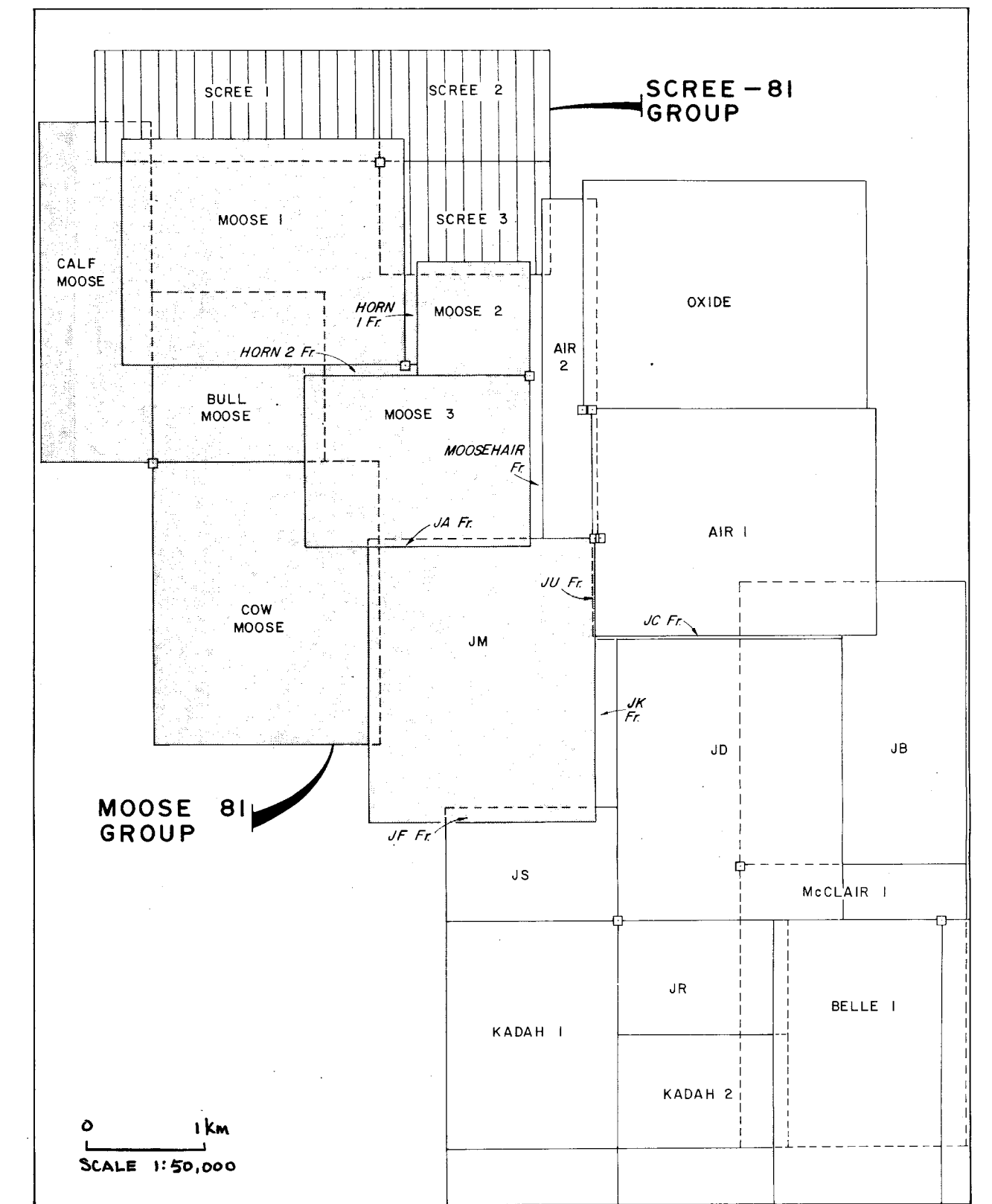
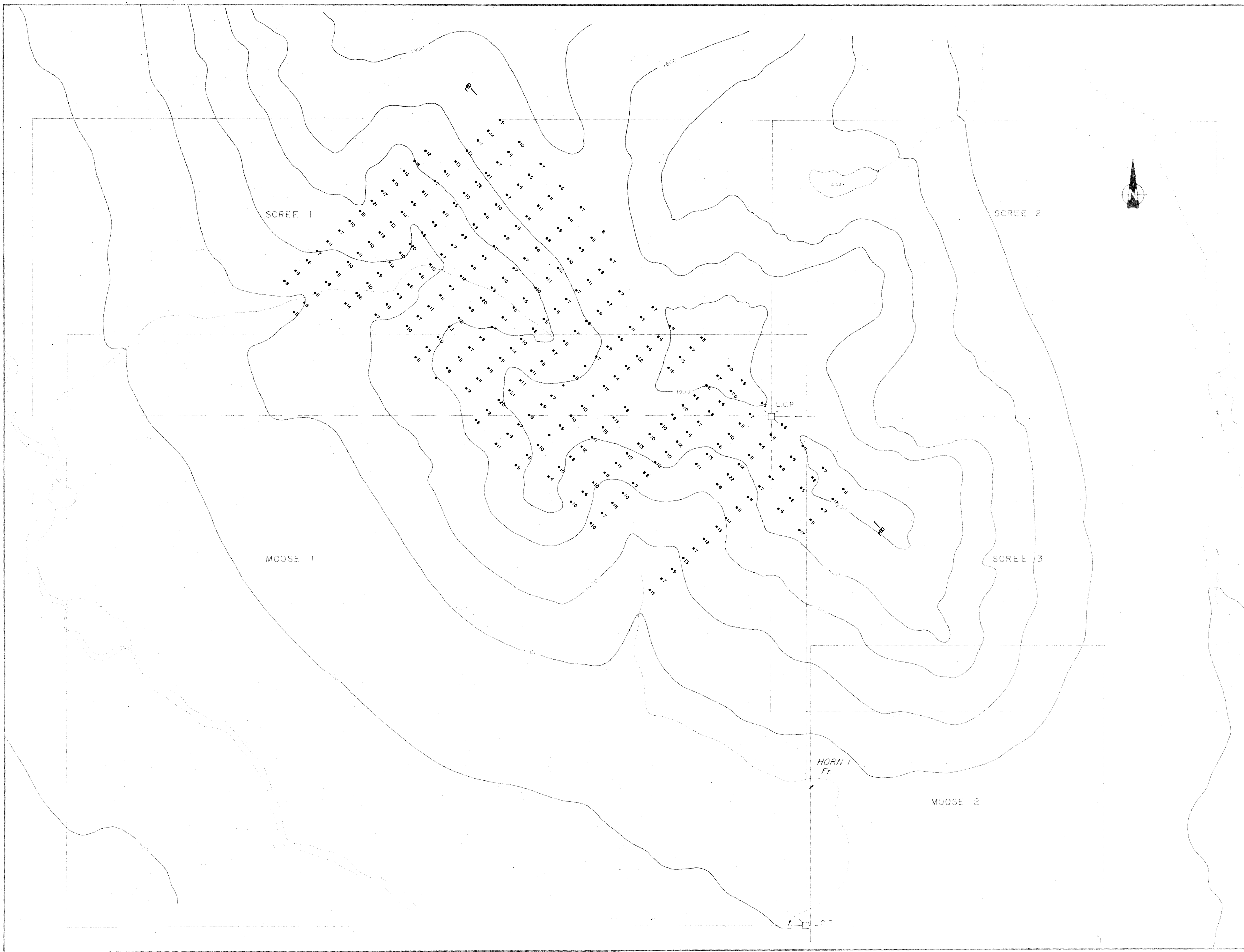
Texasgulf Inc.

MOOSE & SCREE GROUPS
GEOCHEMISTRY
Ag in SOILS

NTS 94E/6E

WORK BY	DRAWN BY	DATE	DRWG NO.
I.S.	T.M.	NOV. 1981	

Scale in Metres 1:5,000



9832

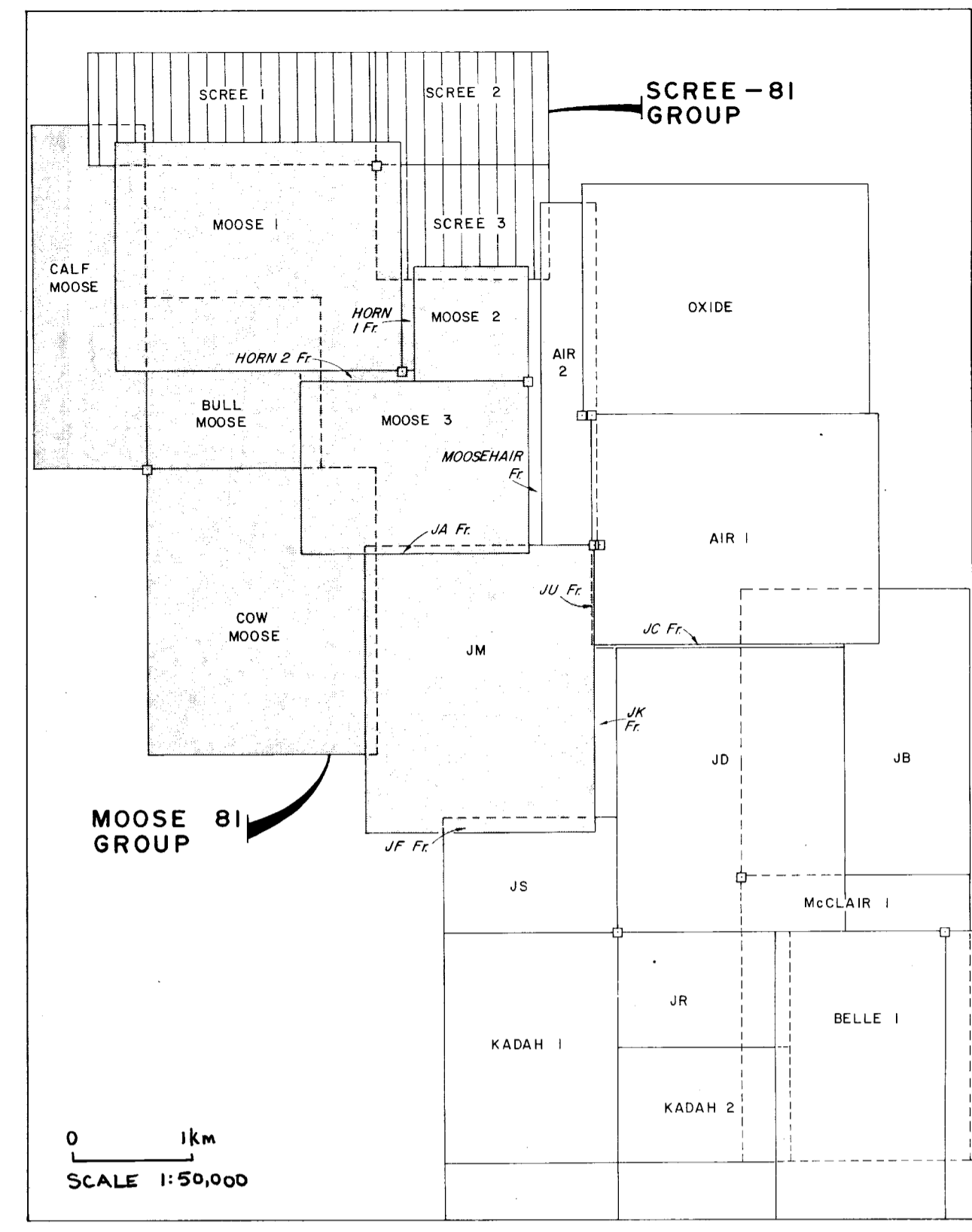
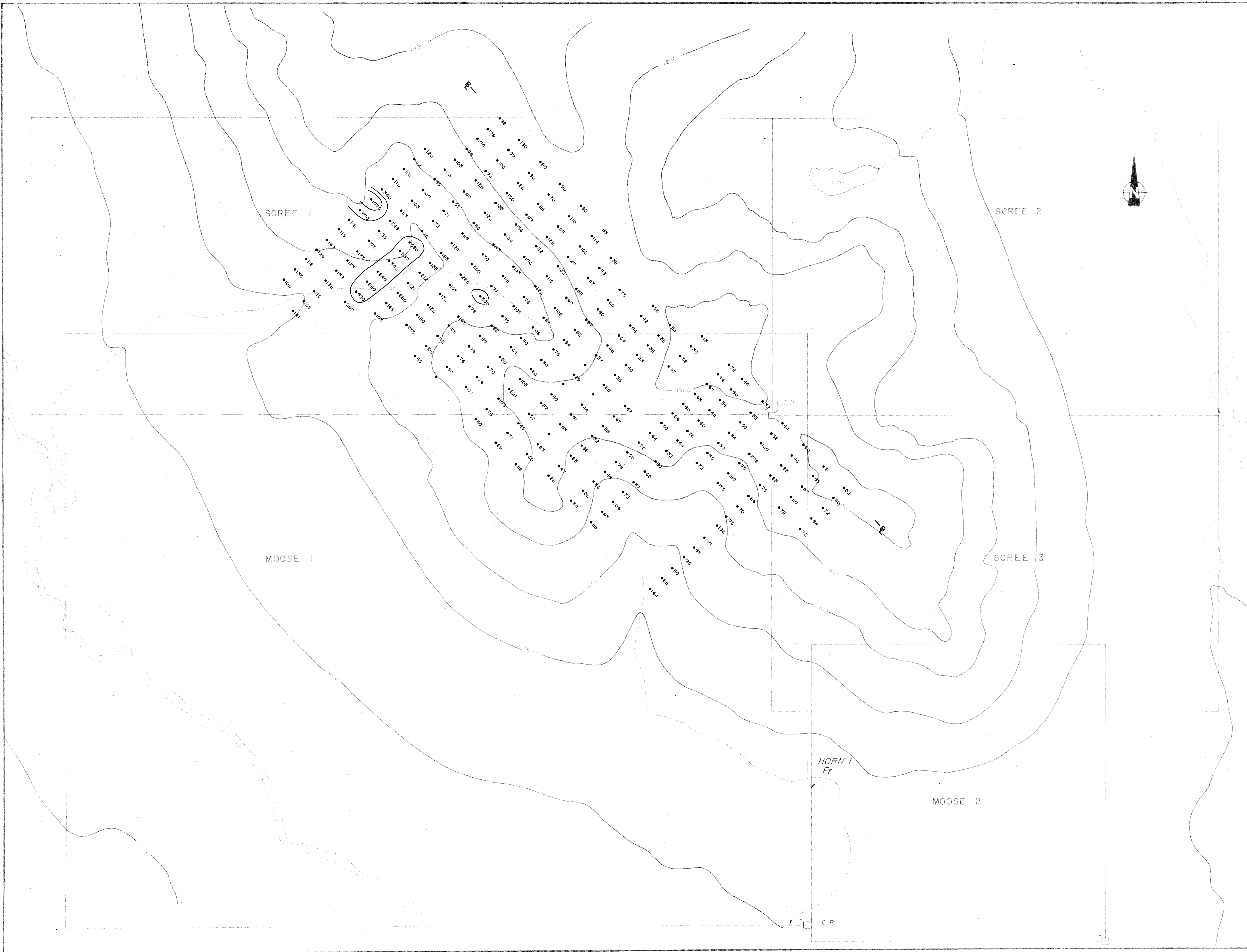
Figure No. 4d

Texasgulf Inc.
MOOSE & SCREE GROUPS
GEOCHEMISTRY
Cu in SOILS

NTS 94E/6E

WORK BY	DRAWN BY	DATE	DRWG NO.
I.S.	T.M.	NOV 1981	

Scale in Metres 1:5,000



LEGEND
 CONTOUR INTERVAL
 0-400 ppm
 400-800 ppm
 +800 ppm

9832

Figure No. 4f

Texasgulf Inc.

**MOOSE & SCREE GROUPS
 GEOCHEMISTRY
 Zn in SOILS**

NTS 94E/6E

WORK BY	DRAWN BY	DATE	DRWG NO.
I. S.	T. M.	NOV. 1981	

100 50 0 100 200 300 400
 Scale in Metres 1:5,000