

**REPORT ON THE 1999 EXPLORATION PROGRAM**

**ON THE TODD CREEK PROPERTY**

**SKEENA MINING DIVISION,**

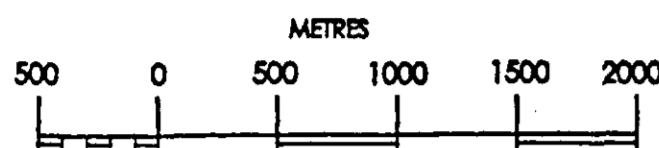
**STEWART GOLD CAMP,**

**NORTHWESTERN BRITISH COLUMBIA**

**APPENDIX A: MAPS**

LIST OF MAPS:

TITLE:	APPENDIX A LOCATION:
1. TODD CREEK PROPERTY MAP WITH MINERAL SHOWINGS.....	POCKET A
2. AIRBORNE GEOPHYSICAL COMPILATION MAP.....	POCKET A
2A. TARGET MAP, TODD CREEK PROPERTY AND AREA.....	POCKET A
3A., 3B. PLAN MAPS, SOUTH ZONE DEPOSIT.....	POCKET B
4. SOUTH ZONE TRENCH AND TARGET MAP.....	POCKET C
5. GEOPHYSICAL LINE, SOUTH ZONE TARGET AREA.....	POCKET C
6. MEXT ZONE.....	POCKET C
7. NEXT ZONE.....	POCKET C
8A., 8B. A, B ZONES, NORTH ZONE, GRID C.....	POCKET D
9. A ZONE, NORTH ZONE, GRID C.....	POCKET D
9A. HIGH GRADE GOLD, COPPER MINERALIZATION, A ZONE.....	POCKET D
10. B ZONE, NORTH ZONE, GRID C.....	POCKET D
11. GEOLOGY AND SAMPLES, AMARILLO ZONE.....	POCKET E
11A. BA1 ZONE, AMARILLO ZONE.....	POCKET E
11B. BA2 ZONE, AMARILLO ZONE.....	POCKET E
11C. SOIL GEOCHEMICAL RESPONSE OVER PROPOSED DDHAZ00-04.....	POCKET E
12. YELLOW BOWL ZONE.....	POCKET F
13A. HAMILA GLACIER TARGET AREA.....	POCKET F
13B. KNOB ZONE TARGET.....	POCKET F



#### ALIENATIONS

- NO STAKING AREAS
- NO STAKING RESERVES
- PARKS
- ECOLOGICAL RESERVES
- RECREATION AREAS
- INDIAN RESERVES

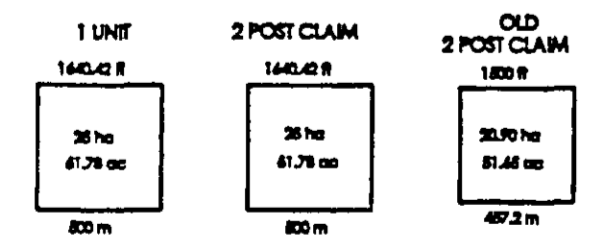
#### CONDITIONAL AREAS

- SUBJECT TO CONDITIONS RESERVES
- SECTION 19 RECREATION AREAS

- 1 POST CLAIM AREAS
- AREAS SUBJECT TO URANIUM / THORIUM REGULATIONS

#### MINERAL TENURE

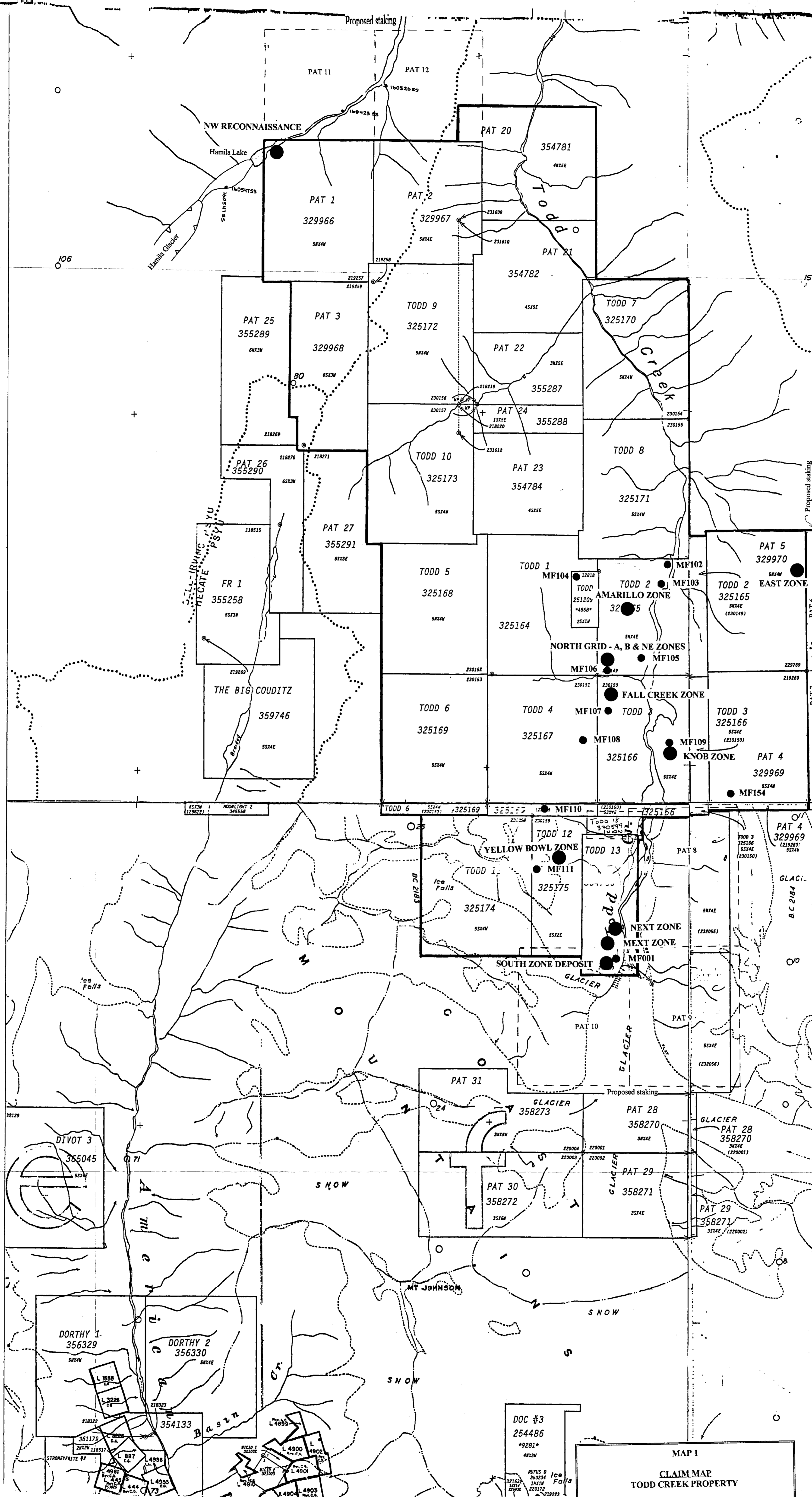
- MINERAL CLAIM
- MINERAL LEASE
- INDUSTRIAL MINERAL CLAIM
- CLAIM NAME
- TITLE NUMBER
- OLD TITLE NUMBER
- TAG NUMBER
- LEGAL POST
- WITNESS POST
- FORFEITED TENURE
- VERIFIED
- SURVEYED
- REVERTED C.G. MINERAL CLAIM
- CROWN GRANTED
- OPEN FOR STAKING



THIS MAP IS PREPARED ONLY AS A GUIDE TO THE LOCATION OF MINERAL TENURE AS SHOWN ON THE LOCATOR'S SKETCHES. FOR CURRENT OR MORE SPECIFIC INFORMATION, APPLICATION SHOULD BE MADE TO THE MINING DIVISION CONCERNED.

10400E	10400W	10400E
10401E	10401W	10401E
10402E	10402W	10402E

INDEX TO ADJOINING MAPS



**MAP 1**  
**CLAIM MAP**  
**TODD CREEK PROPERTY**

MF102 B.C. Minfile 102

South Zone mineralized zone

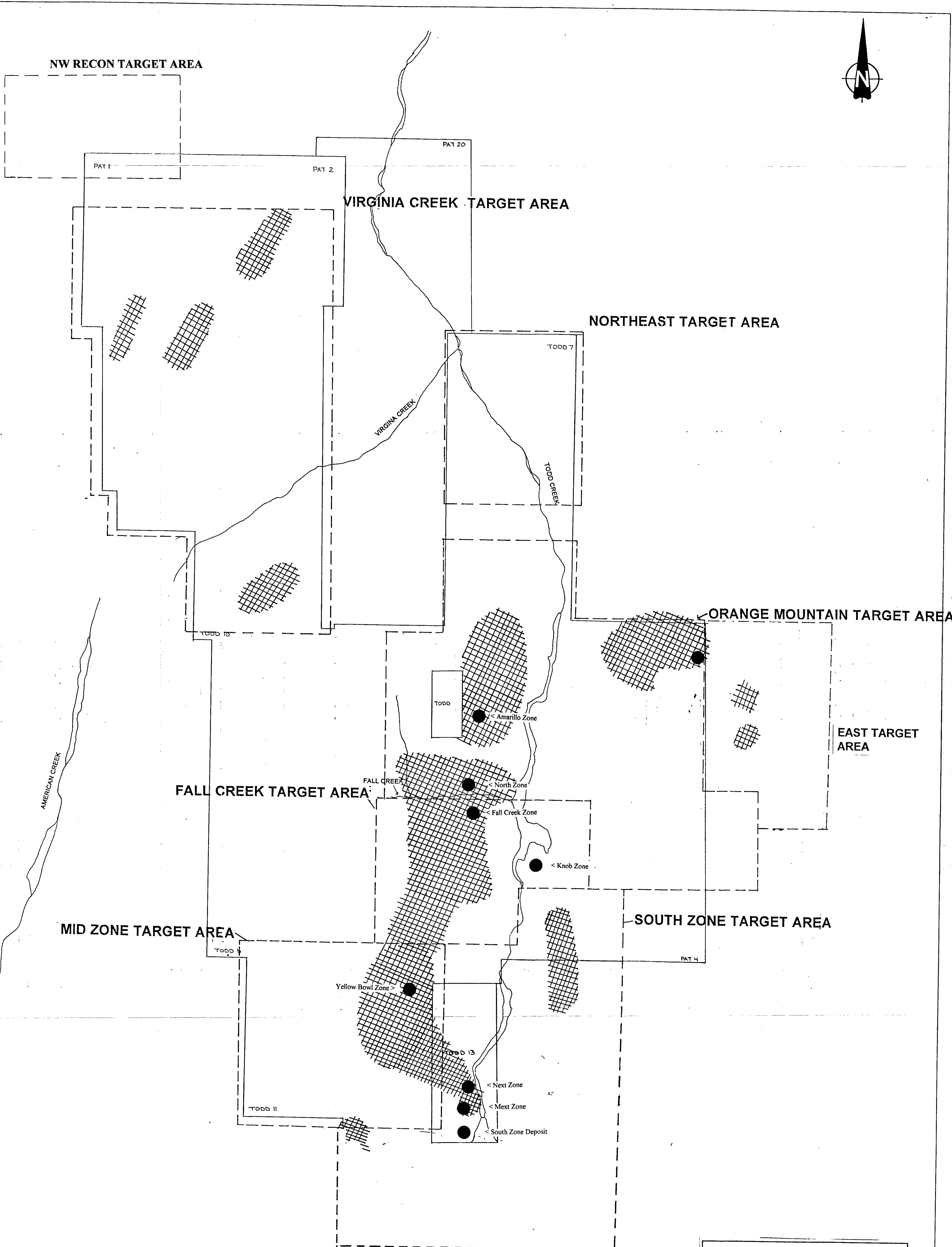
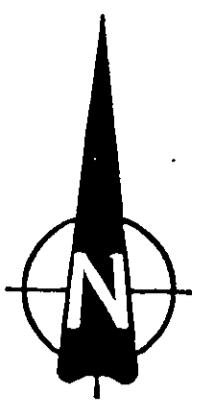
GEOLOGICAL SURVEY BRANCH  
property outline

proposed claim staking

Scale 1:31 680

Geofine Exploration Oct 1999

26,285

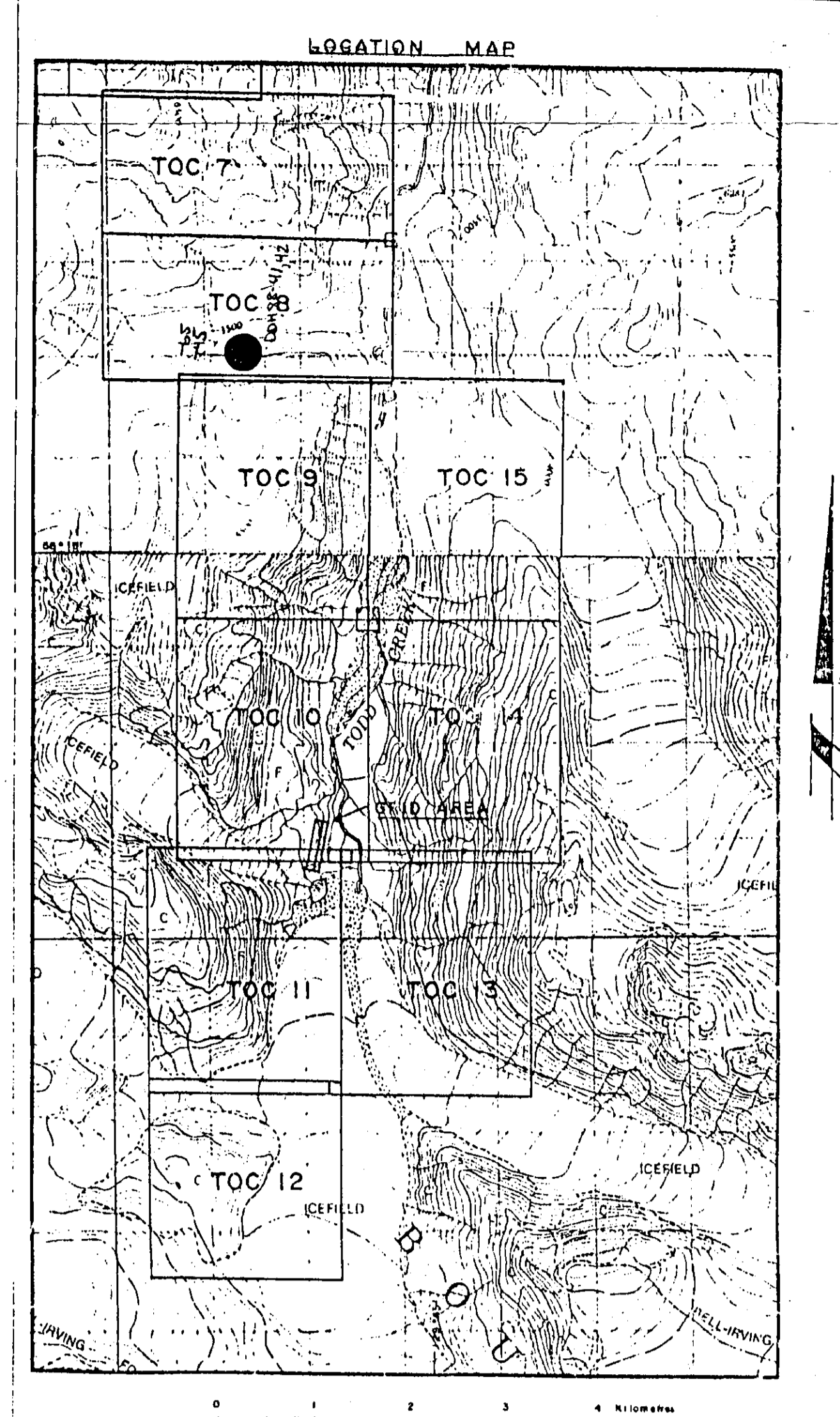
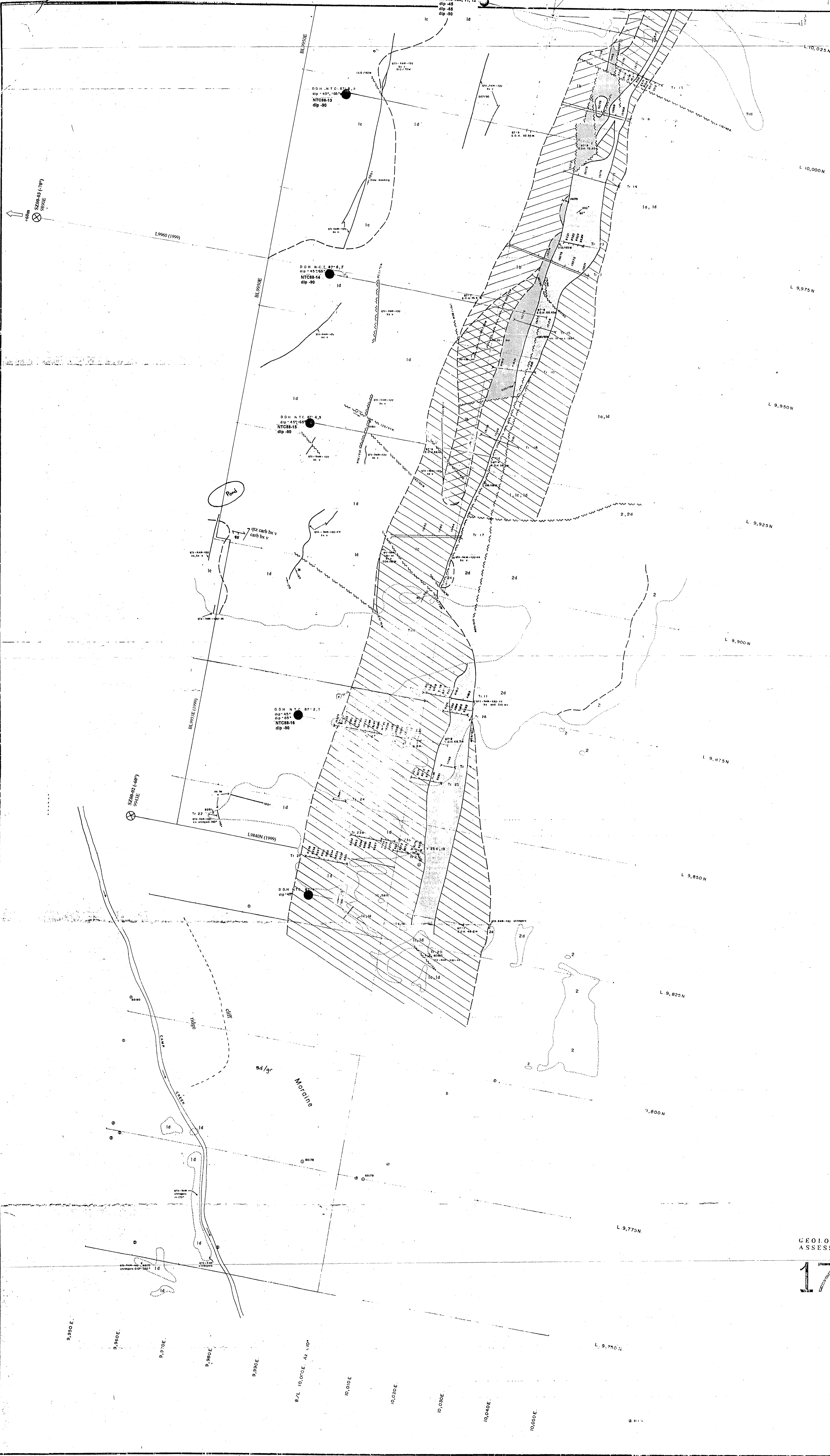


TODD CREEK PROPERTY  
MAP 2A  
TARGET AREAS & ALTERATION ZONES

- property outline
- ▨ alteration zones
- - - target area outline

Scale 1:25 000  
Geofine Exploration Consultants Ltd. November 1997  
Revised Nov. 1999

26,285



- ### LEGEND
- ROCK TYPES**
- 1a Hornblende-Pelagite Porphyry Volcanic  
1-b Hornblende Hornblende and Pelagite  
1-c Hornblende Pelagite  
1-d Hornblende Pelagite  
2a Andesite, subvolcanic Pelagite  
2b Andesite, subvolcanic Pelagite
  - 10 Quartz +/- pyrite altered, white to pale brown weathering.
  - 1b Sericite +/- quartz-pyrite altered, rusty to olive weathering.
  - 1c Chlorite +/- quartz-pyrite altered, white to pale green weathering.
  - 1d Carbonate +/- quartz-pyrite altered, pale to dark brown weathering.
  - 2 Andesite, subvolcanic Pelagite  
2a Andesite, subvolcanic Pelagite  
2b Andesite, subvolcanic Pelagite
  - 1 Quartz-hornblende-chalcopyrite +/- chlorite +/- calcite vein and/or intense stockwork.
  - 2 Quartz-hornblende-chalcopyrite +/- chlorite +/- calcite stringer zone, veins to 20cm wide.
  - Pyrite-sericite-chalcopyrite vein zone, massive veins to 20cm wide.
  - Pyrite-sericite-chalcopyrite stringer zone, veins to 5cm wide, widely spaced.
- SYMBOLS**
- low bending, strike and dip
  - fault
  - contact, inferred, defined
  - area of outcrop
  - vein
  - breccia
  - chip sample line
  - DDH location
  - Flint - quartz-hornblende-chalcopyrite
  - Flint - quartz-hornblende
  - Flint - pyrite-chalcopyrite
  - Flint - pyrite
  - Flint sample
  - Rock sample

#### 1986 TABLE OF ANALYSES

ALL VALUES IN PER CENT UNLESS NOTED

TEST NO.	ANALYST	DATE	TOC	SiO2	TiO2	Al2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOSS ON IGNITION
1010	1010	10/10	1010	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1011	1011	10/10	1011	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1012	1012	10/10	1012	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1013	1013	10/10	1013	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1014	1014	10/10	1014	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1015	1015	10/10	1015	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1016	1016	10/10	1016	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1017	1017	10/10	1017	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1018	1018	10/10	1018	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1019	1019	10/10	1019	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1020	1020	10/10	1020	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10

#### 1987 TABLE OF ANALYSES

ALL VALUES IN PER CENT UNLESS NOTED

TEST NO.	ANALYST	DATE	TOC	SiO2	TiO2	Al2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOSS ON IGNITION
1021	1021	10/10	1021	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1022	1022	10/10	1022	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1023	1023	10/10	1023	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1024	1024	10/10	1024	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1025	1025	10/10	1025	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1026	1026	10/10	1026	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1027	1027	10/10	1027	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1028	1028	10/10	1028	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1029	1029	10/10	1029	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10
1030	1030	10/10	1030	52.50	0.10	15.20	28.50	0.10	12.50	0.10	0.10	0.10	0.10	0.10

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17,423

MAP 3A  
PLAN OF SOUTH ZONE DEPOSIT  
TODD CREEK PROPERTY  
Base Lines @ 010 degrees

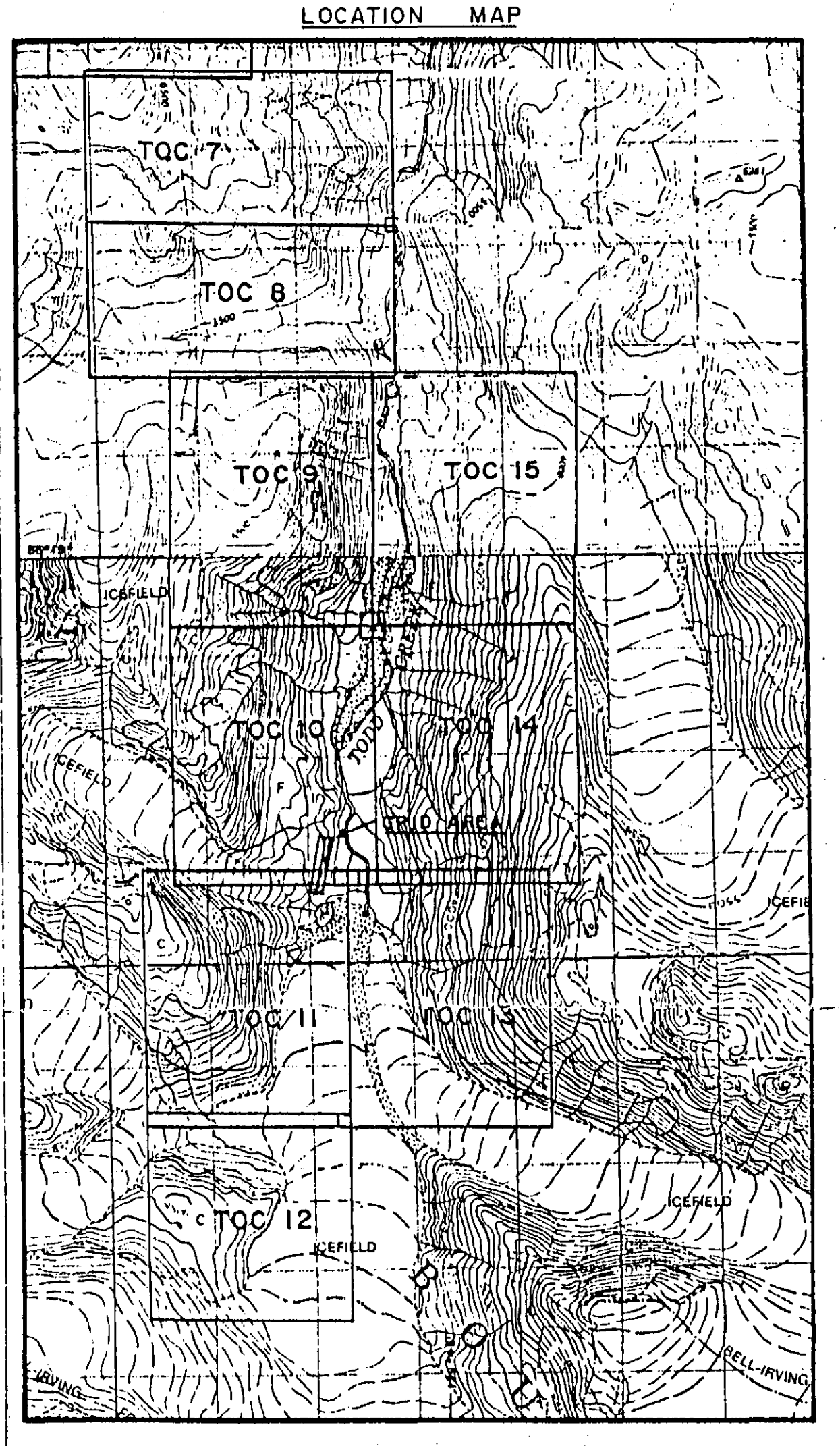
proposed 2000 DDH site  
Scale 1:250

26,285

Map 3A Index

Scale 1:250

CONTINUES TO 10375N



**LEGEND**

- ROCK TYPES**
- 1 Hornblende-epidote Porphyry Volcanic  
1-2 cm subhedral hornblende and calcic grains  
in a green to pale to medium brown aphanitic  
matrix. Local epidote and hornblende  
fragments, local sulfide inclusions.
  - 1a quartz +/- pyrite altered, white to pale  
brown weathering.
  - 1b sericite +/- quartz-pyrite altered, rusty  
yellow weathering.
  - 1c chlorite +/- quartz-epidote-pyrite altered,  
white to pale green weathering.
  - 1d carbonate +/- quartz-pyrite-epidote altered,  
pale to dark brown weathering.
  - 2 Andesite, anhedral feldspar grains in a matrix  
of dark gray matrix, 2-5% disseminated  
epidote hornblende grains, 1-2 cm pale  
gray fragments, minor carbonate.
  - 2a carbonate +/- pyrite altered, dark brown  
weathering.
  - Quartz-hornblende-chalcopyrite +/- chlorite  
/- calcite vein and/or intense stockwork.
  - Quartz-hornblende-chalcopyrite +/- chlorite  
/- calcite stringer zone, veins to 20cm wide.
  - Pyrite-sericite-chalcopyrite vein zone,  
massive veins to 20cm wide.
  - Pyrite-sericite-chalcopyrite stringer zone,  
veins to 5cm wide, widely spaced.
- SYMBOLS**
- flow banding, strike and dip
  - JOINT, strike and dip
  - fault
  - contact, inferred, defined
  - area of outcrop
  - vein
  - breccia
  - chip sample line
  - trench
  - DDH Location
  - Float - quartz-hornblende-chalcopyrite
  - Float - quartz-sericite
  - Float - pyrite-chalcopyrite
  - Float - pyrite
  - 85176 Float sample
  - 85177 Rock sample

**1986 TABLE OF ANALYSES**

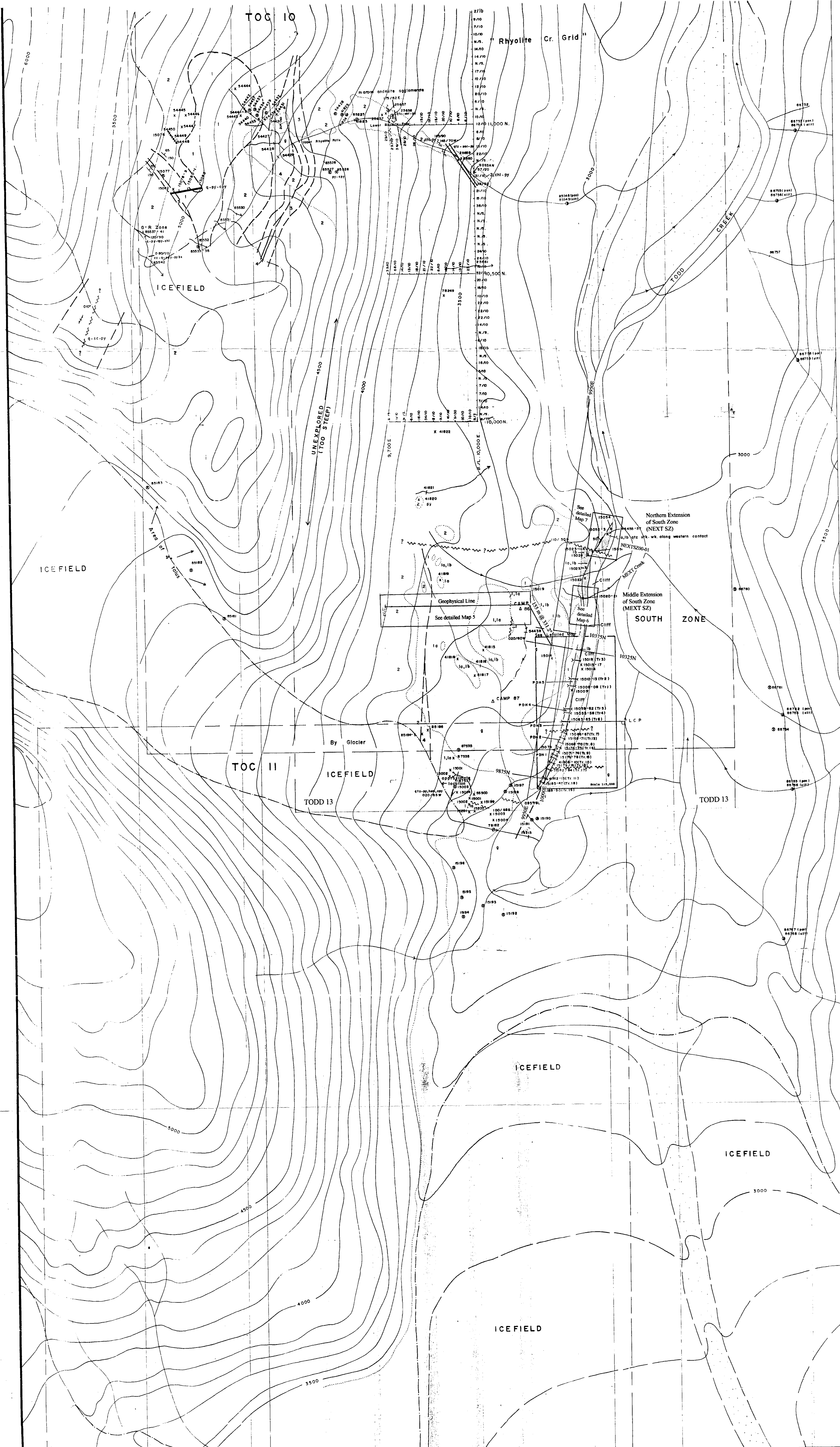
REGION	SAMPLE #	TYPE	No	ALL VALUES IN ppm UNLESS NOTED											
				Fe	Co	Ni	Cu	Zn	Pb	Ag	Au	As	Sb		
1	15004	rock	1	818	23	27	2.4	408	31	-	-	-	-	-	-
1	15007	rock	17	720	33	27	0.9	1,108	5	-	-	-	-	-	-
1	15008	rock	3	1,212	17	46	0.3	50	7	-	-	-	-	-	
1	15009	rock	7	78,145	35	83	3.1	874	1	-	-	-	-	-	
1	15010	rock	1	186	28	24	0.2	73	33	-	-	-	-	-	
1	15011	rock	5	1,245	28	41	0.4	144	10	-	-	-	-	-	
1	15012	rock	2	1,187	12	25	0.3	105	3	-	-	-	-	-	
1	15013	rock	1	1,048	5	11	0.2	40	5	-	-	-	-	-	
1	15014	rock	30	1,125	80	4	1.5	4,076	2	-	-	-	-	-	
1	15015	rock	1	703	6	16	0.1	25	3	-	-	-	-	-	
1	15016	rock	5	1,123	26	64	1.0	168	8	-	-	-	-	-	
1	15017	rock	6	1,220	37	58	1.4	216	8	-	-	-	-	-	
1	15018	rock	1	136	48	22	0.2	310	8	-	-	-	-	-	
1	15019	rock	17	11,936	68	58	0.4	1,005	7	-	-	-	-	-	
1	15020	rock	16	2,200	30	62	0.1	940	3	-	-	-	-	-	
1	15021	rock	23	2,348	106	83	1.2	2,455	7	-	-	-	-	-	
1	15022	rock	1	1,141	10	6.0	0.2	4	6	-	-	-	-	-	

**1987 TABLE OF ANALYSES**

REGION	SAMPLE #	TYPE	No	ALL VALUES IN ppm UNLESS NOTED											
				Fe	Co	Ni	Cu	Zn	Pb	Ag	Au	As	Sb		
1	9225	rock	2	3,057	28	83	0.3	134	1	-	-	-	-	-	-
1	9226	rock	2	2,772	18	48	0.2	20	7	-	-	-	-	-	-
1	9227	rock	2	949	18	31	0.1	19	1	-	-	-	-	-	-
1	9228	rock	1	1,200	5	6.2	0.2	12	1	-	-	-	-	-	-
1	9229	rock	1	1,000	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9230	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9231	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9232	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9233	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9234	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9235	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9236	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-
1	9237	rock	1	1,100	1	3.0	0.1	1	1	-	-	-	-	-	-

GEOLOGICAL BRANCH  
ASSESSMENT REPORT  
**17,423**

Map Sheet Index  
38  
GEOLOGICAL SURVEY BRANCH  
3A  
26,285  
MAP 38  
PLAN OF SOUTH ZONE DEPOSIT  
TODD CREEK PROPERTY  
Base Lines @ 010 degrees  
Scale 1:250  
proposed 2000 DDH site  
Revised  
Neranda Geology Map Aug 1987. Revised by Geotitles Engineering Oct 1999



**LEGEND**

- ROCK TYPES**
- 1 Feldspar Porphyry, pale brown, 10-quartz-pyrite altered, 10-quartz-sericite pyrite altered, 10-calcite altered, 10-iron-sulphate +/- quartz-sericite altered.
  - 2 Dark green, maroon, grey andesite flows, agglomerate tuff, breccia
  - 3 Light grey-green feldspar porphyry flows, dacite tuff and tuff breccia
  - 4 Rhyolite, massive, breccia, lapilli tuff, locally quartz-sericite-pyrite altered
  - 5 Dark green hornblende porphyry intrusives
  - Quartz-pyrite +/- sericite altered mineralized zone
- ba barite      q quartz  
bn barite      sc sericite  
ca calcite      sp spiliticite  
ch chlorite      st st. wk. stock work  
cp chlorophyllite      T talc  
g garnet  
gm hematite  
hm hematite  
ms muscovite  
py pyrite

- SYMBOLS**
- Outcrop area
  - Geologic contact defined, inferred
  - Mineralized vein
  - x, o Rock, float sample
  - Silt sample
  - Glacial fill
  - Icefield
  - Trench or camp-sample line
  - Strike and dip
  - Pan sample, Pan sample and silt sample
  - Soil sample
  - Fault
  - Helicopter landing site
  - Soil Geochem. Survey Camp. Alliphi

**TABLE OF ROCK AND SILT SAMPLE ANALYSIS (1986)**

ALL VALUES IN PPM EXCEPT WHERE NOTED

SAMPLE #	TYPE	Mo	Cu	Pb	Zn	As	Ag	Au	Sb	Au	Cu	Au
								(ppb)		(ppb)	(ppb)	(ppb)
41815	rock	3	43	7	8	0.1	16	1	10	8		
41816	silt	4	14	10	114	0.2	14	1	2	4		
41817	rock	4	80	11	15	0.1	17	1	9	24		
41818	rock	2	76	9	5	0.1	25	1	10	2		
41819	rock	2	287	27	78	0.4	36	1	2	13		
41820	rock	2	27	20	63	0.2	11	1	2	1		
41821	silt	1	10	9	104	0.1	5	1	2	8		
41822	rock	3	27	16	113	0.4	8	1	2	1		
41823	silt	3	25	16	148	0.1	19	1	2	1		
41824	rock	18	617	66	19	0.9	359	1	3	98		
41825	rock	1	5,200	73	15	1.9	647	1	1	21		
15001	rock	2	13	9	10	0.2	7	1	1	1		
15003	rock	4	1,341	43	10	0.2	133	1	2	1		
15004	rock	1	32	13	84	0.3	9	1	2	1		
15005	rock	2	19,707	19	57	0.5	256	2	6	21		
15019	silt	5	77	19	185	0.4	28	1	2	1		
15020	rock	2	108	24	23	2.1	24	1	24	10		
15021	rock	2	54	18	22	0.1	14	1	6	6		
15022	rock	2	26	11	13	0.1	21	1	5	1		
15023	rock	1	18	14	0.1	16	1	1	2	1		
15024	rock	1	14	10	5	0.1	18	1	4	1		
15025	rock	3	244	23	31	0.5	19	1	1	5		
15026	rock	2	11	19	14	0.1	3	1	5	2		
15052	rock	N81	1,820	67	22	4.2	230	1	10			.18 .005
15053	rock	21	756	33	36	1.3	187	1	7			.07 .001
15054	rock	16	11,054	41	82	1.6	152	2	4			1.17 .022
15076	rock	6	858	24	22	0.2	161	1	2	21		
15077	rock	23	650	92	45	0.1	192	1	1	1		
15078	rock	4	3,384	26	26	0.1	453	1	2	52		
15079	rock	5	1,768	27	23	0.2	237	1	2	66		
15080	rock	5	948	42	31	0.6	486	1	2	57		
15081	rock	6	331	14	15	0.1	117	1	2	13		
15082	rock	7	1,465	112	29	2.2	850	1	2	108		
15083	rock	3	67	75	77	0.8	561	1	2	24		
54425	rock	16	1,337	30	39	0.2	248	1	2	6		
54427	silt	7	59	23	59	0.2	248	1	2	2		
54428	silt	9	105	40	118	0.4	117	1	2	10		
54429	silt	58	24	48	0.3	29	1	1	1	4		
54430	rock	4	44	2	1	0.1	5	1	2	1		
54431	rock	8	28	12	1	0.2	10	1	2	4		
54432	rock	8	2,376	10	51	0.2	181	1	2	30		
54433	rock	92	5,376	24	69	1.4	185	1	2	50		
54434	rock	11	142	75	17	0.3	244	1	2	16		
54435	rock	10	192	33	16	0.4	250	1	5	55		
54436	rock	25	12,138	39	28	0.4	366	1	5	1,560		
54437	rock	3	54	18	20	0.3	31	1	2	4		
54438	silt	1	24	19	101	0.3	13	1	2	4		
54439	rock	8	186	29	8	1.3	228	1	2	210		
54440	rock	6	6,106	13	14	0.4	76	1	2	19		
54441	rock	11	460	33	19	0.9	180	1	2	31		
54442	rock	6	40	29	35	0.6	24	1	2	23		
54443	rock	4	9	15	25	0.4	30	1	2	7		
54444	rock	8	35	25	30	0.3	193	1	2	1		
54445	rock	5	593	31	61	0.5	129	1	2	1		
54446	rock	32	6,005	16	61	0.1	153	1	2	1		
54447	rock	1	105	61	36	0.6	235	2	49			
54448	rock	8	235	34	25	0.8	235	1	2	21		
54449	rock	11	16,438	103	69	5.9	260	2	2	25		
54450	rock	3	108	38	18	0.5	120	1	4	4		
55500	rock	2	207	6	2	0.1	8	1	2	5		
15100	rock	2	37	6	48	0.1	2	1	2	5		.01 .000
15101	rock	2	16	6	1	0.1	16	1	2	1		.01 .001
15102	rock	8	14	12	86	0.2	23	1	33	2		
15103	rock	2	12	14	2	0.2	2	1	3	1		
15104	rock	5	15	23	180	0.4	50	6	4	1		
15105	rock	1	8	2	0.1	2	1	1	1	1		
15106	rock	6	200	25	7	0.5	243	1	28	76		
15107	rock	25	3,847	39	27	0.6	1,425	1	4	3,140		
15108	rock	12	2,372	145	39	1.3	2,118	1	1	1,420		
15109	rock	57	23,514	145	246	4.8	2,490	7	19	290		
15400	rock	10	10,072	10	21	0.1	78	1	2	1		1.10 .001
15401	rock	13	15,453	11	50	0.1	22	2	2	2		1.86 .001
1523	silt	2	58	16	65	0.2	11	1	2	3		
15232	silt	2	61	16	93	0.2	11	1	2	3		
15233	silt	2	94	25	99	0.4	44	1	2	3		

ANALYTICAL RESULTS REFER TO: JANUARY 1989 REPORT

NOTE: Topography based on photocopy enlargement of N.T.S. 1:50,000 scale map 104A/4

SCALE 1:5000

REVISED: R.B. Oct., 1986; R.B. May, 1988; R.B. Oct., 1988

PROJECT: SOUTH ZONE GEOLOGY, TRENCH & 1999 INDEX MAP FOR GEOPHYSICAL LINE, MEXT & NEXT ZONES

PROJ. No. 540; SURVEY BY: R.B.; DATE: Aug., 1988; N.T.S. 104A/4; SCALE: 1:5000

DWG. No. 285; MAP 4

FIG. 4; OFFICE: PRINCE GEORGE, B.C.

18,800 Part 3 of 3

1999 ROCK SAMPLES COLLECTED ON GEOPHYSICAL LINE, SOUTH ZONE

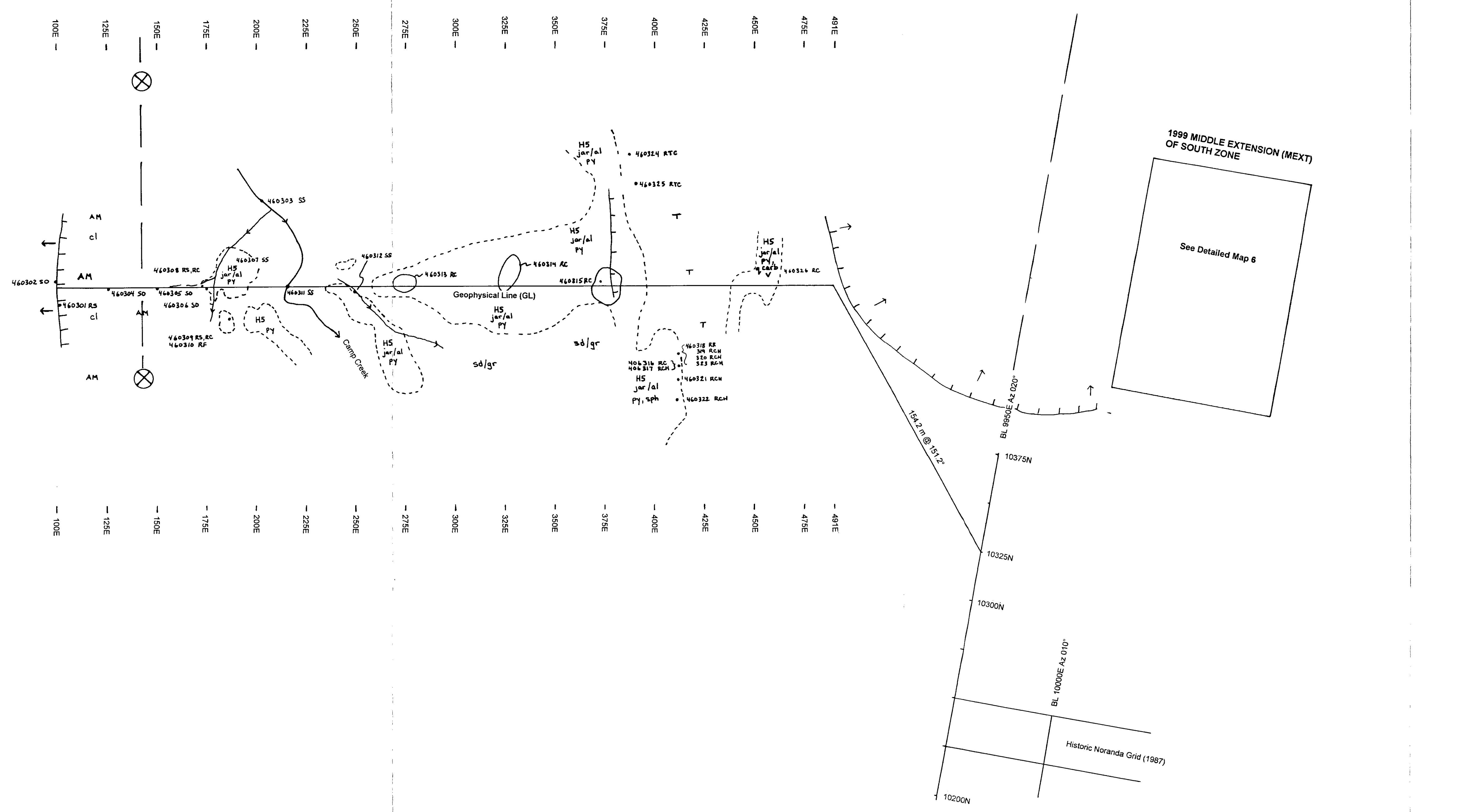
SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	SA	CD	HS	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
460301RS	<5	<2	17	<2	96	2	50	<0.5	<1	4	1
460306RS	<5	<2	46	2	8	8	120	<0.5	<1	<2	1
460306RS	<5	<2	17	8	48	6	80	<0.5	<1	2	3
460310RF	<5	<2	29	<2	90	<2	30	<0.5	<1	2	2
460313RC	<5	<2	28	6	14	14	120	<0.5	<1	<2	4
460314RC	<5	<2	5	10	6	8	90	<0.5	<1	<2	3
460315RC	5	<2	8	20	2	12	170	<0.5	<1	2	3
460316RC	<5	0.2	82	12	1720	30	90	17.5	<1	2	10
460317RCH	<5	1.2	181	22	32800	34	60	252	25	12	32
460318RF	<5	1	101	44	63200	54	50	463	19	18	6
460319RCH	<5	<0.2	101	12	4000	52	90	38.5	3	2	6
460320RCH	<5	<0.2	56	12	834	52	100	13	<1	2	6
460321RCH	<5	<0.2	8	18	48	18	120	<0.5	<1	<2	5
460322RCH	<5	<0.2	8	18	52	18	120	0.5	<1	2	13
460323RCH	<5	<0.2	26	14	270	14	90	4	<1	<2	5
460324RTIC	<5	<0.2	7	8	10	2	70	<0.5	<1	<2	4
460325RTIC	<5	<0.2	8	10	10	18	110	<0.5	<1	<2	10
460326RC	<5	0.4	15	12	4	8	90	<0.5	<1	<2	43

1999 SOIL SAMPLES COLLECTED ON GEOPHYSICAL LINE, SOUTH ZONE

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	SA	CD	HS	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
460305SO	<5	<0.2	9	<2	22	2	640	1.5	<1	2	6
460304SO	<10	<0.2	5	<2	4	<2	110	<0.5	<1	<2	1
460305SO	<10	<0.2	4	<2	2	<2	140	0.5	3	<2	1
460306SO	<5	<0.2	17	8	26	8	610	0.5	1	2	3

1999 STREAM SEDIMENT SAMPLES COLLECTED ON GEOPHYSICAL LINE, SOUTH ZONE

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	SA	CD	HS	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
460303SS	<5	<0.2	11	10	44	10	210	<0.5	<1	<2	6
460307SS	10	<0.2	18	4	66	6	250	<0.5	<1	2	3
460311SS	<5	<0.2	22	8	68	10	210	<0.5	<1	2	6
460312SS	<5	<0.2	61	8	82	12	230	1.5	<1	2	3



**LEGEND**

**ROCK TYPES**

Q thick ore, coluvium, alluvium, till

**MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP**

S1 silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone

S2 arkasic volcanic lithofacies: turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkasic lithofacies with matrix silty mudstone

S3 pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose

S4 undifferentiated Bowser Lake Sediments

**HAZELTON GROUP - SALMON RIVER FORMATION**

S1 undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)

S2 undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)

**HAZELTON GROUP - LOWER AND MIDDLE JURASSIC**

H1 felsic tuff

H2 crystal tuff

H3 crystal tuff breccia, agglomerate

H4 ash tuff, ash tuff breccia, agglomerate

H5 undifferentiated pyroclastic rocks: tuff, breccia, agglomerate

H6 felsic volcanic rocks (hyalite)

H7 intermediate volcanic rocks (dacite)

H8 mafic volcanic rocks (basalt, pillowed basalt, andesite)

H9 undifferentiated, strongly altered rock

**INTRUSIVE ROCKS**

R1 felsic dykes

R2 hornblende diorite porphyry

R3 quartz feldspar porphyry

R4 mafic dyke

**ABBREVIATIONS**

ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	mat	material debris
ba	barite	Mn	manganese
bldr	boulder	ms	semi massive sulfides
bo	boronite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	q, v	quartz vein
cal	calcite	sb	scrap brush
carb	carbonized	sd/gr	sand/gravel
ch	chironized	set	setonized
czy	chalcopyrite	sil	silicified
epi	epidotted	sp	spice
gn	garnet	spc	spiculate
hem	hematite	sph	sphalerite
hol	hornblende	stnk	stockwork
jar/alu	jarositelamite	T	talus
		v	vein

**SYMBOLS**

BL 10000E historic Noranda Base Line (1987)

BL 9950E new South Zone Base Line (1999)

GL geophysical line

460301 sample location & number

○ outcrop area

○ area of composite rock sample

○ stream sediment sample

○ SS soil sample

○ RC rock composite sample

○ RCH rock chip sample

○ RF rock float sample

○ RS rock subrop sample

○ RT rock talus sample

○ RTC rock talus composite sample

○ helicopter landing site

○ interpreted fault

○ claim line

→ down slope

← up slope

→ stream and direction mineralized zone

○ 1994 weak EM anomaly

○ interpreted EM conductive trend

**MAP 5**

**GEOPHYSICAL LINE, SOUTH ZONE**

**TODD CREEK PROPERTY**

Scale 1:1000

Geofine Exploration Consultants Ltd. 1999

26,295

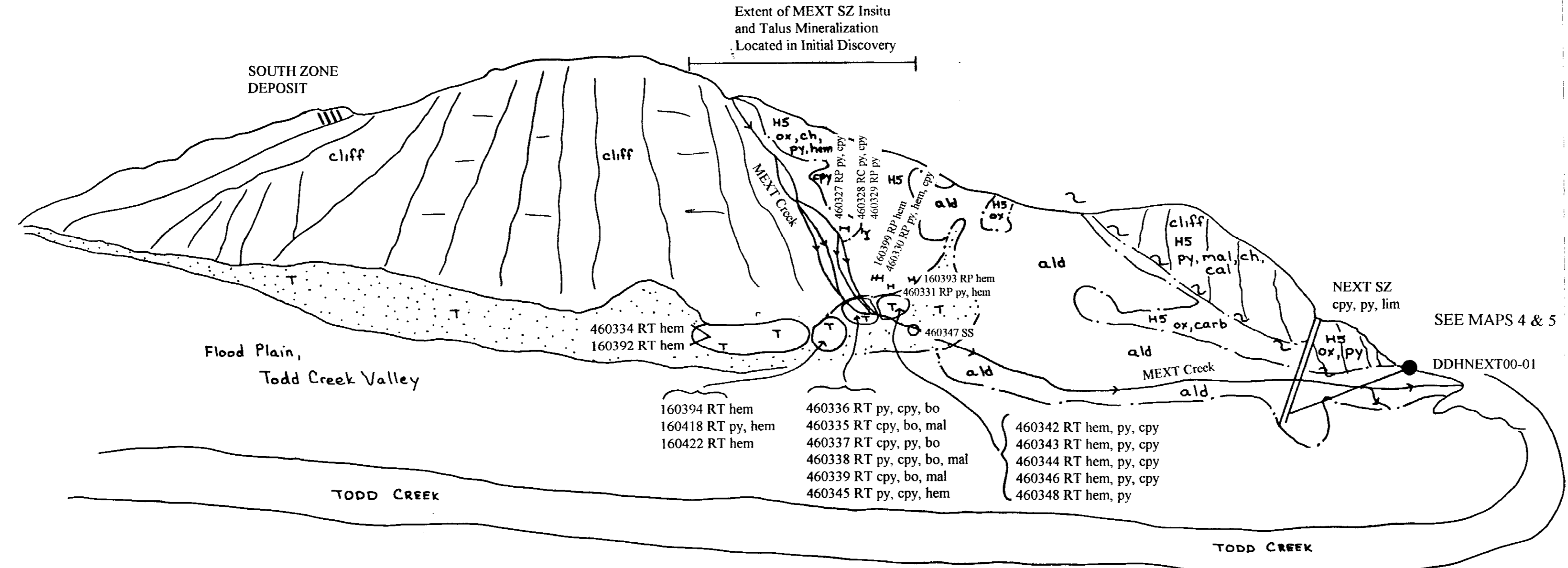


1999 ROCK SAMPLES COLLECTED ON MIDDLE EXTENSION OF SOUTH ZONE (MEXT SZ)

SAMPLE NUMBER	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
460327RP	565	2.8	2560	64	56	374	10	<0.5	<1	2	6
460328RC	665	5.8	738	184	152	1110	<10	2	<1	20	4
460329RP	125	0.6	914	22	62	142	40	<0.5	<1	4	11
460330RP	360	2.2	317	38	96	70	80	<0.5	<1	8	18
460331RP	25	0.6	156	12	44	50	90	<0.5	<1	4	12
460334RT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
460335RT	6290	1.8	25700	24	18	242	30	<0.5	<1	<2	13
460336RT	5720	1.2	21900	22	44	260	10	<0.5	<1	<2	8
460337RT	4830	1.4	18000	18	60	312	10	<0.5	<1	<2	7
460338RT	4740	1.2	19300	22	22	222	30	<0.5	<1	2	9
460339RT	7250	2	20600	22	44	242	20	0.5	<1	2	7
460342RT	2290	0.2	261	8	56	44	120	<0.5	<1	4	2
460343RT	640	<0.2	593	10	68	50	80	<0.5	<1	2	3
460344RT	1405	0.2	364	10	62	40	70	<0.5	<1	2	<1
460345RT	5690	1.6	19700	22	44	204	70	<0.5	<1	2	6
460346RT	5320	1	19900	20	40	250	10	<0.5	<1	<2	8
460348RT	1860	0.2	415	16	68	44	80	<0.5	<1	6	1
160392RT	3080	0.6	400	2	22	24	250	<0.5	<1	2	5
160393RP	7800	2.4	63	80	154	12	140	1.5	<1	<2	4
160394RT	2510	0.6	230	4	52	14	240	<0.5	<1	<2	4
160399RP	2200	0.6	295	8	48	40	100	<0.5	<1	2	3
160418RT	605	<0.2	22	<2	34	<2	1070	<0.5	<1	<2	5
160422RT	345	<0.2	31	6	36	<2	1620	<0.5	<1	<2	4



LEGEND	
<b>ROCK TYPES</b>	
Q	thick drift, coluvium, alluvium, till
<b>MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP</b>	
B1	silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone
B2	arkosic volcanic litharenite turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic litharenite with interbedded silty mudstone
B3	pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose
B4	undifferentiated Bowser Lake Sediments
<b>HAZELTON GROUP - SALMON RIVER FORMATION</b>	
S1	undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)
S2	undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)
<b>HAZELTON GROUP - LOWER AND MIDDLE JURASSIC</b>	
H1	ferrocrete
H2	crystal tuff
H3	crystal tuff breccia, agglomerate
H4	ash tuff, ash tuff breccia, agglomerate
H5	undifferentiated pyroclastic rocks: tuff, breccia, agglomerate
H6	felsic volcanic rocks (rhyolite)
H7	intermediate volcanic rocks (dacite)
H8	mafic volcanic rocks (basalt, pillowed basalt, andesite)
H9	undifferentiated, strongly altered rock
<b>INTRUSIVE ROCKS</b>	
R1	felsic dykes
R2	hornblende diorite porphyry
R3	quartz feldspar porphyry
R4	mafic dyke



ABBREVIATIONS			
ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	md	morainal debris
ba	barite	Mn	manganese
bidr	boulder	ms	semi massive sulfides
bo	bornite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	q vn	quartz vein
cal	calcite	sb	scrub brush
carb	carbonatized	sd/gr	sand/gravel
ch	chloritized	ser	sericitized
cpy	chalcopyrite	sil	silicified
epi	epidotized	sp	spruce
gn	garnet	spec	specularite
hem	hematized	sph	sphalerite
hbl	hornblende	shk	stockwork
jar/alu	jarosite/alunite	T	talus
		v	vein

SYMBOLS	
(T)	460336 Area of 1999 talus samples
H	460331 1999 panel or composite sample
○	460347 1999 stream sediment sample and location
SS	stream sediment sample
SO	soil sample
RC	rock composite sample
RCH	rock chip sample
RP	rock panel sample
RF	rock float sample
RS	rock subcrop sample
RT	rock talus sample
RTC	rock talus composite sample
~ ~	fault
TODD 2   TODD 3	claim line
●	dd hole spotted in 1999
→	stream and direction
- - -	extent of surficial feature

**MAP 6**

**VERTICAL PROFILE FROM PHOTO MOSAIC**  
(See Photo MEXT 1),  
**MIDDLE EXTENSION OF THE SOUTH ZONE**  
(MEXT SZ), TODD CREEK PROPERTY  
Looking approx. 280°

Horizontal & Vertical Scales Variable  
approx. 1 cm = 15 to +25 m

Geofine Exploration Oct 1999

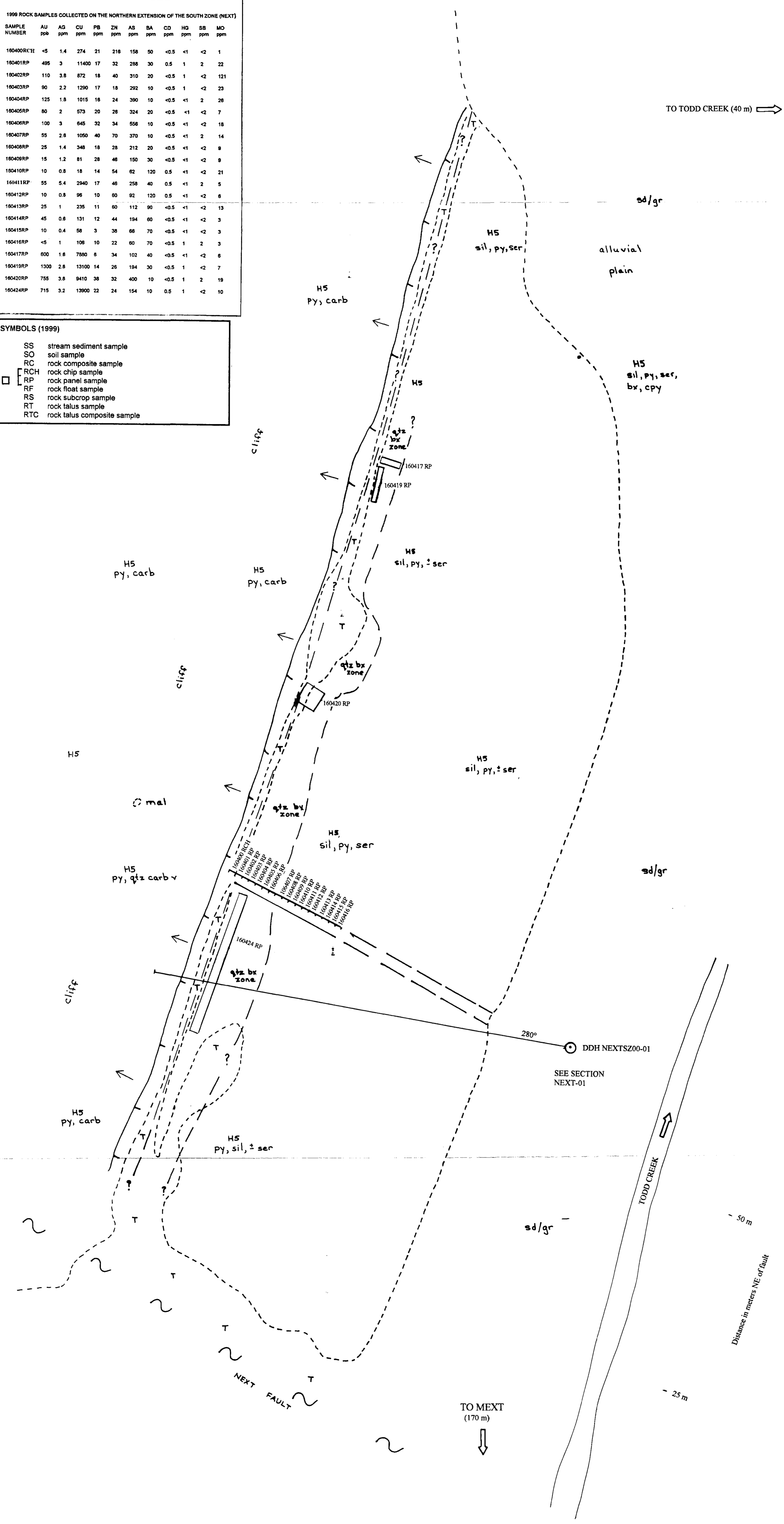
26, 2005

1999 ROCK SAMPLES COLLECTED ON THE NORTHERN EXTENSION OF THE SOUTH ZONE (NEXT)

SAMPLE NUMBER	AU ppm	AG ppm	CU ppm	PB ppm	ZH ppm	AS ppm	BA ppm	CD ppm	HS ppm	SB ppm	MO ppm
160400RCH	<5	1.4	274	21	216	158	50	<0.5	<1	<2	1
160401RP	495	3	11400	17	32	288	30	0.5	1	2	22
160402RP	110	3.8	872	18	40	310	20	<0.5	<1	<2	121
160403RP	90	2.2	1290	17	18	292	10	<0.5	<1	<2	23
160404RP	125	1.8	1015	18	24	390	10	<0.5	<1	2	28
160405RP	80	2	573	20	28	324	20	<0.5	<1	<2	7
160406RP	100	3	645	32	34	556	10	<0.5	<1	<2	18
160407RP	55	2.8	1050	40	70	370	10	<0.5	<1	2	14
160408RP	25	1.4	348	18	28	212	20	<0.5	<1	<2	9
160409RP	15	1.2	81	28	48	150	30	<0.5	<1	<2	9
160410RP	10	0.8	18	14	54	62	120	0.5	<1	<2	21
160411RP	55	5.4	2940	17	48	258	40	0.5	<1	2	5
160412RP	10	0.8	96	10	60	92	120	0.5	<1	<2	8
160413RP	25	1	235	11	60	112	90	<0.5	<1	<2	13
160414RP	45	0.8	131	12	44	194	60	<0.5	<1	<2	3
160415RP	10	0.4	56	3	38	68	70	<0.5	<1	<2	3
160416RP	<5	1	108	10	22	60	70	<0.5	<1	2	3
160417RP	800	1.8	7880	8	34	102	40	<0.5	<1	<2	6
160418RP	1300	2.8	13100	14	26	194	30	<0.5	<1	<2	7
160420RP	755	3.8	9410	38	32	400	10	<0.5	<1	2	19
160424RP	715	3.2	13900	22	24	154	10	0.5	1	<2	10

SYMBOLS (1999)

SS	stream sediment sample
SO	soil sample
RC	rock composite sample
RCH	rock chip sample
RP	rock panel sample
RF	rock float sample
RS	rock subcrop sample
RT	rock talus sample
RTC	rock talus composite sample



**LEGEND**

**ROCK TYPES**

Q thick drift, coluvium, alluvium, till

**MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP**

B1 silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone

B2 arkosic volcanic litharenite turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic litharenite with interbedded silty mudstone

B3 pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose

B4 undifferentiated Bowser Lake Sediments

**HAZELTON GROUP - SALMON RIVER FORMATION**

S1 undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)

S2 undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)

**HAZELTON GROUP - LOWER AND MIDDLE JURASSIC**

H1 ferrocretes

H2 crystal tuff

H3 crystal tuff breccia, agglomerate

H4 ash tuff, ash tuff breccia, agglomerate

H5 undifferentiated pyroclastic rocks: tuff, breccia, agglomerate

H6 felsic volcanic rocks (rhyolite)

H7 intermediate volcanic rocks (dacite)

H8 mafic volcanic rocks (basalt, pillowed basalt, andesite)

H9 undifferentiated, strongly altered rock

**INTRUSIVE ROCKS**

R1 felsic dykes

R2 hornblende diorite porphyry

R3 quartz feldspar porphyry

R4 mafic dyke

**ABBREVIATIONS**

ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	md	moraine debris
ba	barite	Mn	manganese
bidr	boulder	ms	semi massive sulfides
bo	boelite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	qvn	quartz vein
cal	calcite	sb	scrub brush
carb	carbonatized	sdgr	sand/gravel
ch	chloritized	ser	sericitized
cpy	chalcopyrite	sli	silicified
epi	epidotized	sp	spruce
gn	galena	spec	specularite
hem	hematized	sph	sphalerite
hbl	hornblende	stkw	stockwork
jar/alu	jarosite/alunite	T	talus
		v	vein

**SYMBOLS**

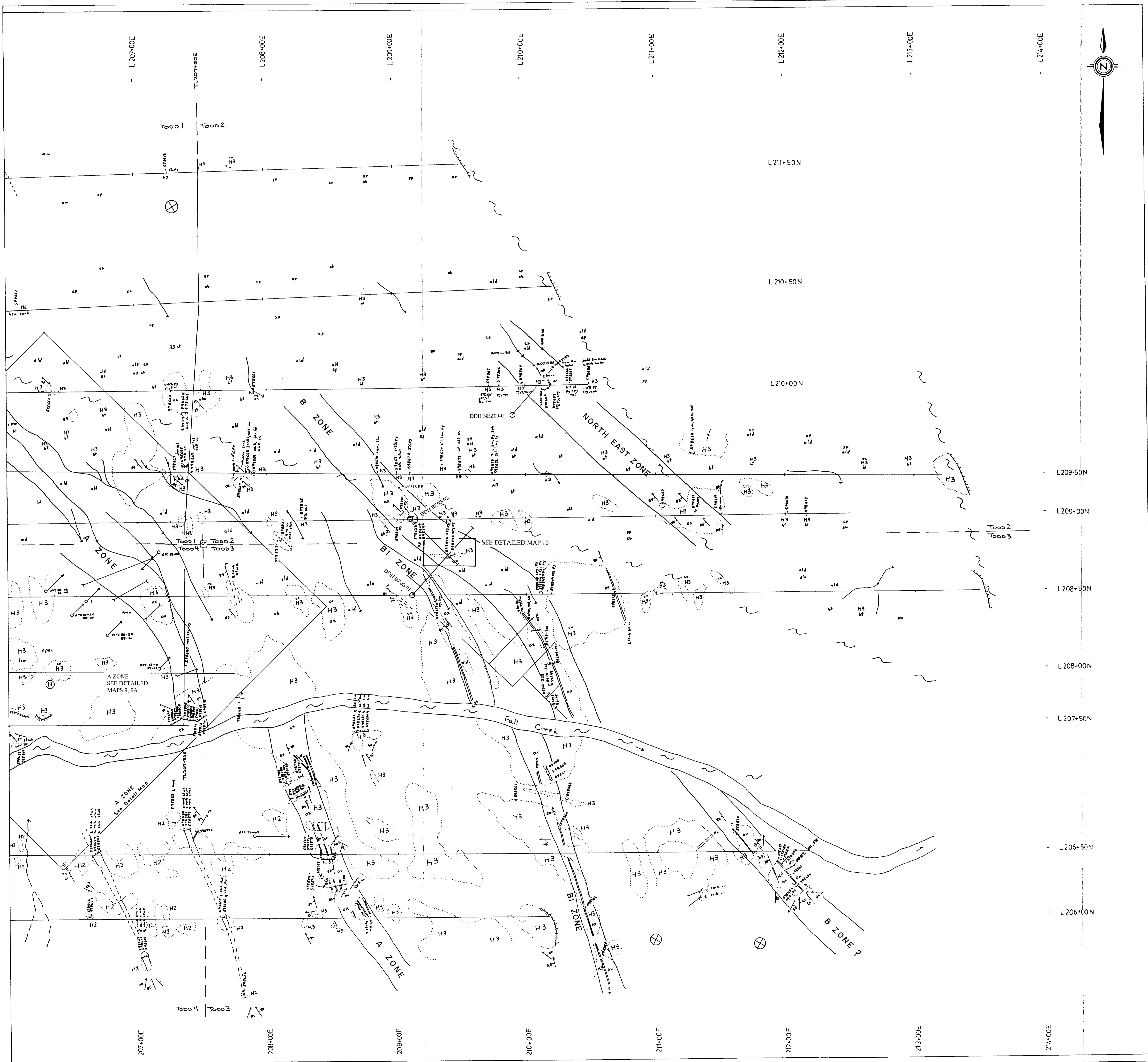
- 460401 sample location & number
- 460401 sample area & number
- outcrop area
- contact of H5 hanging wall & qtz bx zone
- interpreted fault
- claim line
- down slope
- up slope
- stream and direction
- proposed 2000 diamond drill hole

**MAP 7**

**PLAN OF NORTHERN EXTENSION OF SOUTH ZONE DEPOSIT TODD CREEK PROPERTY**

Scale 1:250

GeoLine Exploration Oct 1999



ROCK SAMPLES COLLECTED IN 1999 ON THE B ZONE, NORTH GRID

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
16047RP	10	0.2	11	18	34	10	80	<0.5	<1	<2	3
16047RP	25	0.6	148	40	214	24	80	2.5	<1	<2	5
16047RP	10	<0.2	9	8	20	10	100	<0.5	<1	<2	3
16048RP	260	4.4	6330	38	222	152	80	2	<1	<2	7
16048RP	25	0.4	239	20	132	26	90	0.5	<1	<2	7
16042RP	1060	11.8	12400	80	386	626	10	5.5	<1	<2	12
16043RP	580	7.2	5010	24	308	114	50	4.5	<1	<1	6
16044RP	10	0.2	26	14	24	8	100	<0.5	<1	<2	6
16045RP	10	0.2	32	10	58	8	110	<0.5	<1	<2	3
16046RP	5	<0.2	7	8	86	8	120	<0.5	<1	<2	3
16047RP	<5	<0.2	9	8	102	10	180	<0.5	<1	<2	2
16048RP	5	<0.2	13	20	156	16	80	<1	<1	<2	4
16049RP	15	<0.2	24	12	118	10	90	0.5	<1	<2	4
16049RP	10	<0.2	20	8	202	10	110	1.5	<1	<2	2
16049RP	1010	6.4	17300	64	352	654	<10	6	<1	<2	16
16042RP	1390	14.8	23500	72	164	1000	<10	3	<1	<2	4
16043RP	1115	18.8	35000	40	646	736	10	12.5	<1	<2	11
16051RP	140	7.4	1315	792	1740	254	20	23.5	<1	<2	43
16052RP	10	0.2	10	12	16	12	70	<0.5	<1	<2	3
16052RP	10	0.2	11	20	32	12	90	<0.5	<1	<2	2
16052RP	10	0.2	13	20	128	22	80	<1	<1	<2	2
16053RP	220	4.4	5810	44	552	166	40	8	<1	<1	8
16054RP	10	0.2	11	14	48	12	70	<0.5	<1	<2	7
160525S	830	9.8	18100	36	234	622	10	1.5	<1	<1	8

1999 STREAM SEDIMENT SAMPLES COLLECTED ON THE B ZONE, NORTH GRID

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
160595S	<5	<0.2	74	8	112	2	290	1.5	1	2	1

1999 ROCK SAMPLES COLLECTED ON THE NORTHEAST ZONE, NORTH GRID

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
160513S	20	0.2	12	18	16	40	100	<0.5	<1	2	4
160514S	125	3.4	1300	14	342	254	140	5	1	438	8
160517RCH	210	5	7200	18	204	92	30	<0.5	<1	12	6

1999 STREAM SEDIMENT SAMPLES COLLECTED ON THE NORTHEAST ZONE, NORTH GRID

SAMPLE NUMBER	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
1605155S	<5	0.2	435	10	54	4	560	2	4	8	1
1605165S	<5	<0.2	52	6	56	38	1060	1.6	2	6	4

- SYMBOLS (1999)**
- SS stream sediment sample
  - SO soil sample
  - RC rock composite sample
  - RCH rock chip sample
  - RP rock panel sample
  - RF rock float sample
  - RS rock subcrop sample
  - RT rock talus sample
  - RTC rock talus composite sample

- LEGEND**
- ROCK TYPES**
- B1 silty mudstone lithofacies: botryoidal silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone
  - B2 arkosic volcanic lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic lithofacies with interbedded silty mudstone
  - B3 pyritic silty mudstone lithofacies: pyritic silty mudstone, tuffaceous silty mudstone, fine to medium grained silty arkosic
  - B4 undifferentiated Bower Lake Sediments
- HAZELTON GROUP - SALMON RIVER FORMATION**
- S1 undifferentiated sediments (shale mudstone, dust limestone, conglomerate, tuffaceous sediments)
  - S2 undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)
- HAZELTON GROUP - LOWER AND MIDDLE JURASSIC**
- H1 tuffaceous
  - H2 crystal tuff
  - H3 crystal tuff breccia, agglomerate
  - H4 ash tuff, ash tuff breccia, agglomerate
  - H5 undifferentiated pyroclastic rocks, tuff breccia, agglomerate
  - H6 felsic volcanic rocks (rhyolite)
  - H7 intermediate volcanic rocks (dacite)
  - H8 mafic volcanic rocks (basalt, pillowed basalt, andesite)
  - H9 undifferentiated, strongly altered rock
- INTRUSIVE ROCKS**
- R1 felsic dikes
  - R2 hornblende diorite porphyry
  - R3 quartz felsic porphyry
  - R4 mafic dike

- ABBREVIATIONS**
- |      |                  |      |                  |
|------|------------------|------|------------------|
| ad   | alder            | lim  | limonite         |
| am   | alpine meadow    | mal  | malachite        |
| ank  | ankerite         | md   | moraine debris   |
| ba   | barite           | Mn   | manganese        |
| bdr  | boulder          | or   | oxidized         |
| bo   | boronite         | ms   | massive sulfides |
| br   | boulder terrain  | oz   | oxidized         |
| bx   | brecciated       | py   | pyritized        |
| ca   | calcite          | qv   | quartz vein      |
| carb | carbonatized     | sb   | scrub brush      |
| ch   | chloritized      | scf  | sericified       |
| cpy  | chlorophyll      | sd   | siderite         |
| co   | coarse           | sl   | siltified        |
| ep   | epitaxial        | spn  | sparganite       |
| gs   | galena           | str  | stringer         |
| hem  | hematite         | sulf | sulfidated       |
| hs   | hornblende       | swk  | stockwork        |
| jarr | jarosite/alunite | vm   | vein             |

- SYMBOLS**
- outcrop area (large)
  - outcrop area (small)
  - rock grab sample in situ
  - composite/chip of in situ rock
  - float sample
  - drill hole and inclination (historical)
  - trench (historical)
  - helicopter landing site
  - fault
  - interpreted fault
  - claim post and claim line
  - glacier
  - snow covered
  - stream
  - mineralized zone
  - strike and dip of zone
  - strike and dip of fracture
  - strike and dip of shearing
  - 1994 weak EM anomaly
  - interpreted EM conductive trend

TODD CREEK PROPERTY  
MAP 8A  
**NORTH ZONE C GRID - GEOLOGY & ROCK  
GEOCHEMICAL SURVEYS**  
Scale 1:1 000  
Gardner Exploration Consultants Ltd November 1997

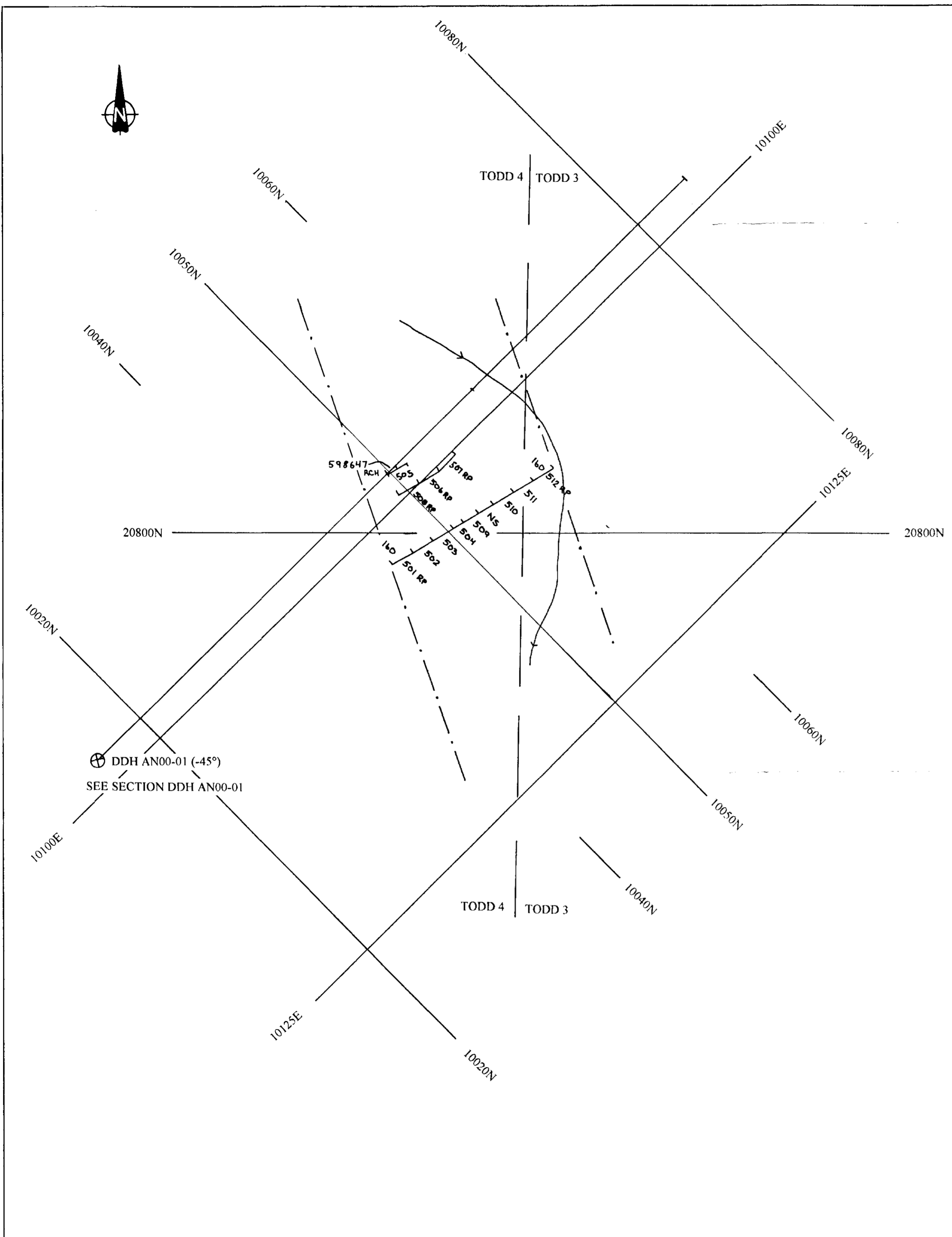
1997 ROCK SAMPLE ANALYSES											
SAMPLE	TYPE	As	Cd	Cu	Zn	Ag	As	Pb	Cd	Ba	...
DESCRIPTION	WT	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	...
589206	F	0.02	12	02	0.8	2410	16	05	200		
589207	F	<.005	10	26	0.8	100	22	<.5	80		
589208	F	<.005	19	144	0.2	18	28	15	180		
589209	F	<.005	4	2	1.2	6	18	<.5	90		
589210	F	<.005	5	7	0.2	10	14	0.5	100		
589211	F	<.005	7	52	0.2	10	14	0.5	100		
589212	F	<.005	6	50	0.2	28	20	<.5	100		
589213	F	<.005	18	190	0.2	84	14	0.5	280		
589214	F	<.005	5	35	<.1	10	30	<.5	180		
589215	F	0.04	60	40	<.1	70	30	<.5	180		
589216	F	0.09	150	100	<.1	40	45	<.5	420		
589217	F	0.48	3540	415	6	390	4900	20	120		
589218	F	0.215	10	10	<.1	10	10	<.5	100		
589219	F	0.175	20	80	<.1	<.1	10	<.5	100		
589220	F	0.015	5	30	<.1	10	15	<.5	180		
589221	F	0.04	5	30	<.1	10	15	<.5	180		
589222	F	0.105	105	10	1	30	50	<.5	180		
589223	F	0.025	100	100	0.2	30	30	<.5	180		
589224	F	0.065	175	115	1	50	45	<.5	180		
589225	F	0.01	1500	145	1	20	10	<.5	180		
589226	F	1.13	5230	235	4	390	45	<.5	340		
589227	F	0.18	6500	145	1	20	10	<.5	180		
589228	F	0.02	6500	105	3	430	340	<.5	240		
589229	F	0.06	120	<.1	<.1	10	5	<.5	240		
589230	F	0.53	2190	30	<.1	60	<.5	600			
589231	F	0.63	1170	155	0.8	50	38	5	80		
589232	F	0.02	1010	690	0.4	30	18	3.5	110		
589233	F	0.05	5800	960	4	290	115	5	420		
589234	F	0.08	1270	2210	2	1300	100	20	750		
589235	F	0.075	60	1300	0.2	80	10	30	300		
589236	F	0.015	34	148	0.2	78	12	<.5	130		
589237	F	0.01	50	840	0.2	84	18	<.5	230		
589238	F	0.03	12	70	<.2	40	14	<.5	20		
589239	F	0.01	11	70	<.2	40	14	<.5	20		
589240	F	0.01	7	62	<.2	16	10	<.5	20		
589241	F	0.01	7	62	<.2	16	10	<.5	20		
589242	F	0.01	7	62	<.2	16	10	<.5	20		
589243	F	0.05	1305	278	0.6	40	24	2	240		
589244	F	0.1	2920	348	1.8	<.2	10	<.5	120		
589245	F	0.055	5600	2100	5	40	170	20	4700		
589246	F	0.655	5980	1745	5	70	385	15	520		
589247	F	2.08	27400	610	16	210	235	6	520		
589248	F	0.05	112	22	<.2	10	14	<.5	180		
589249	F	0.03	157	108	0.4	100	20	<.5	180		
589250	F	0.36	2980	162	2	316	78	<.5	30		
589251	F	0.115	1445	144	1	62	20	<.5	170		
589252	F	0.07	2700	230	2	30	15	<.5	980		
589253	F	0.185	2400	4210	2.8	380	238	5	420		
589254	F	0.125	498	228	0.8	114	22	1.5	70		
589255	F	1.98	8100	710	3	390	130	5	320		
589256	F	0.07	153	120	0.4	48	34	<.5	50		
589257	F	0.015	123	182	0.2	70	14	<.5	60		
589258	F	<.005	4430	122	1.8	42	10	<.5	110		
589259	F	<.005	21	78	<.2	2	2	<.5	100		
589260	F	<.005	3	66	<.2	2	2	<.5	100		
589261	F	0.15	54	74	0.2	48	18	<.5	70		
589262	F	<.005	14	80	0.8	68	18	<.5	80		
589263	F	<.005	14	80	0.8	68	18	<.5	80		
589264	F	<.005	14	80	0.8	68	18	<.5	80		
589265	F	<.005	14	80	0.8	68	18	<.5	80		
589266	F	<.005	14	80	0.8	68	18	<.5	80		
589267	F	<.005	14	80	0.8	68	18	<.5	80		
589268	F	<.005	14	80	0.8	68	18	<.5	80		
589269	F	<.005	14	80	0.8	68	18	<.5	80		
589270	F	<.005	14	80	0.8	68	18	<.5	80		
589271	F	<.005	14	80	0.8	68	18	<.5	80		
589272	F	<.005	14	80	0.8	68	18	<.5	80		
589273	F	<.005	14	80	0.8	68	18	<.5	80		
589274	F	<.005	14	80	0.8	68	18	<.5	80		
589275	F	<.005	14	80	0.8	68	18	<.5	80		
589276	F	<.005	14	80	0.8	68	18	<.5	80		
589277	F	<.005	14	80	0.8	68	18	<.5	80		
589278	F	<.005	14	80	0.8	68	18	<.5	80		
589279	F	<.005	14	80	0.8	68	18	<.5	80		
589280	F	<.005	14	80	0.8	68	18	<.5	80		
589281	F	<.005	14	80	0.8	68	18	<.5	80		
589282	F	<.005	14	80	0.8	68	18	<.5	80		
589283	F	<.005	14	80	0.8	68	18	<.5	80		
589284	F	<.005	14	80	0.8	68	18	<.5	80		
589285	F	<.005	14	80	0.8	68	18	<.5	80		
589286	F	<.005	14	80	0.8	68	18	<.5	80		
589287	F	<.005	14	80	0.8	68	18	<.5	80		
589288	F	<.005	14	80	0.8	68	18	<.5	80		
589289	F	<.005	14	80	0.8	68	18	<.5	80		
589290	F	<.005	14	80	0.8	68	18	<.5	80		
589291	F	<.005	14	80	0.8	68	18	<.5	80		
589292	F	<.005	14	80	0.8	68	18	<.5	80		
589293	F	<.005	14	80	0.8	68	18	<.5	80		
589294	F	<.005	14	80	0.8	68	18	<.5	80		
589295	F	<.005	14	80	0.8	68	18	<.5	80		
589296	F	<.005	14	80	0.8	68	18	<.5	80		
589297	F	<.005	14	80	0.8	68	18	<.5	80		
589298	F	<.005	14	80	0.8	68	18	<.5	80		
589299	F	<.005	14	80	0.8	68	18	<.5	80		
589300	F	<.005	14	80	0.8	68	18	<.5	80		
589301	F	<.005	14	80	0.8	68	18	<.5	80		
589302	F	<.005	14	80	0.8	68	18	<.5	80		
589303	F	<.005	14	80	0.8	68	18	<.5	80		
589304	F	<.005	14	80	0.8	68	18	<.5	80		
589305	F	<.005	14	80	0.8	68	18	<.5	80		
589306	F	<.005	14	80	0.8	68	18	<.5	80		
589307	F	<.005	14	80	0.8	68	18	<.5	80		
589308	F	<.005	14	80	0.8	68	18	<.5	80		
589309	F	<.005	14	80	0.8	68	18	<.5	80		
589310	F	<.005	14	80	0.8	68	18	<.5	80		
589311	F	<.005	14	80	0.8	68	18	<.5	80		
589312	F	<.005	14	80	0.8	68	18	<.5	80		
589313	F	<.005	14	80	0.8	68	18	<.5	80		
589314	F	<.005	14	80	0.8	68	18	<.5	80		
589315	F	<.005	14	80	0.8	68	18	<.5	80		
589316	F	<.005	14	80	0.8	68	18	<.5	80		
589317	F	<.005	14	80	0.8	68	18	<.5	80		
589318	F	<.005	14	80	0.8	68	18	<.5	80		
589319	F	<.005	14	80	0.8	68	18	<.5	80		
589320	F	<.005	14	80	0.8	68	18	<.5	80		
589321	F	<.005	14	80	0.8	68	18	<.5	80		
589322	F	<.005	14	80	0.8	68	18	<.5	80		
589323	F	<.005	14	80	0.8	68	18	<.5	80		
589324	F	<.005	14	80	0.8	68	18	<.5	80		
589325	F	<.005	14	80	0.8	68	18	<.5	80		
589326	F	<.005	14	80	0.8	68	18	<.5	80		
589327	F	<.005	14	80	0.8	68	18	<.5	80		
589328	F	<.005	14	80	0.8	68	18	<.5	80		
589329	F	<.005	14	80	0.8	68	18	<.5	80		
589330	F	<.005	14	80	0.8	68	18	<.5	80		
589331	F	<.005	14	80	0.8	68	18	<.5	80		
589332	F	<.005	14	80	0.8	68	18	<.5	80		
589333	F	<.005	14	80	0.8	68	18	<.5	80		
589334	F	<.005	14	80	0.8	68	18	<.5	80		
589335	F	<.005	14	80	0.8	68	18	<.5	80		
589336	F	<.005	14	80	0.8	68	18	<.5	80		
589337	F	<.005	14	80	0.8	68	18	<.5	80		
589338	F	<.005	14	80	0.8	68	18	<.5	80		
589339	F	<.005	14	80	0.8	68	18	<.5	80		
58											





1999 ROCK SAMPLE ANALYSES

SAMPLE NUMBER	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
160501RP	45	0.4	62	30	110	18	90	0.5	<1	2	7
160502RP	35	0.4	75	18	642	14	120	8	<1	6	6
160503RP	90	0.6	304	20	238	8	90	4.5	<1	4	6
160504RP	265	1.4	1315	48	218	16	90	4.5	<1	4	4
160505RP	44180	8.4	33000	6	118	172	20	0.5	<1	8	16
160506RP	20140	3.4	4750	26	174	144	40	2.5	<1	8	38
160507RP	630	3.2	2790	32	294	108	20	5	<1	11	74
160508RP	1575	5.8	12000	24	318	280	40	7	<1	8	63
160509RP	40	0.6	257	28	160	22	210	0.5	<1	6	9
160510RP	265	5.4	2370	556	1300	58	40	13	<1	8	13
160511RP	25	1.0	65	58	264	58	80	1.5	<1	4	6
160512RP	245	4.6	1815	170	834	28	70	6.5	<1	8	15



**SYMBOLS**

└─ 598647	historic rock sample & location
└─ 160508	1999 rock sample & location
└─ 509	
SS	stream sediment sample
SO	soil sample
RC	rock composite sample
└─ RCH	rock chip sample
└─ RP	rock panel sample
└─ RF	rock float sample
└─ RS	rock subcrop sample
└─ RT	rock talus sample
└─ RTC	rock talus composite sample
~ ~	interpreted fault
TODD 4   TODD 3	claim line
⊕	dd hole spotted in 1999
→	stream and direction
— : —	mineralized zone

**MAP 9A**

**DETAILED PLAN OF 1999 FOLLOW-UP OF  
SAMPLE 598647 RCH, A ZONE, NORTH GRID;  
TODD CREEK PROPERTY, NORTH BRANCH  
TODD CREEK PROPERTY SURVEY BRANCH  
MINERAL REPORT**

Scale 1:250

Geofine Exploration Oct 1999

26,205

ROCK SAMPLES COLLECTED IN 1999 ON THE B ZONE, NORTH GRID

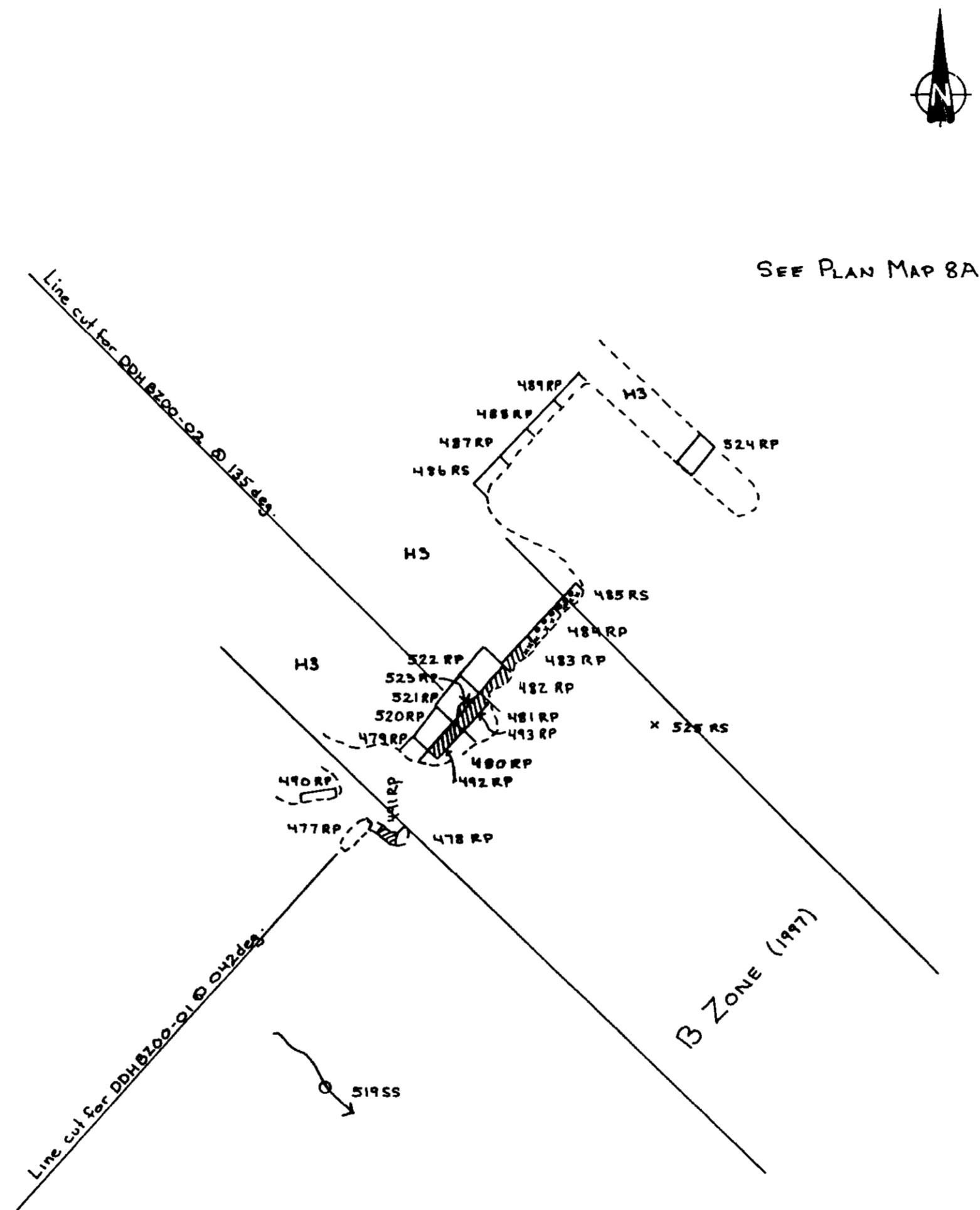
	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
160477RP	10	0.2	11	18	34	10	90	<0.5	<1	<2	3
160478RP	25	0.6	148	40	214	24	80	2.5	<1	<2	5
160479RP	10	<0.2	9	8	20	10	100	<0.5	<1	<2	3
160480RP	260	4.4	6330	38	222	152	80	2	<1	<2	7
160481RP	25	0.4	239	20	132	26	90	0.5	<1	<2	7
160482RP	1060	11.8	12400	80	398	626	10	5.5	<1	<2	12
160483RP	580	7.2	5010	24	308	114	50	4.5	<1	6	7
160484RP	10	0.2	26	14	24	8	100	<0.5	<1	2	6
160485RS	10	0.2	32	10	58	8	110	<0.5	<1	2	3
160486RS	5	<0.2	7	6	86	8	120	<0.5	<1	2	3
160487RP	<5	<0.2	9	8	102	10	180	<0.5	<1	2	2
160488RP	5	<0.2	13	20	156	16	80	1	<1	2	4
160489RP	15	<0.2	24	12	118	10	90	0.5	<1	2	4
160490RP	10	<0.2	20	8	202	10	110	1.5	<1	<2	2
160491RP	1010	6.4	17300	64	352	654	<10	6	<1	2	18
160492RP	1390	14.8	23900	72	164	1000	<10	3	<1	<2	4
160493RP	1155	18.6	35000	40	646	738	10	12.5	<1	2	11
160518RF	140	7.4	1315	792	1740	254	20	23.5	<1	6	43
160520RP	10	0.2	10	12	16	12	70	<0.5	<1	<2	3
160521RP	10	0.2	11	20	32	12	90	<0.5	<1	<2	2
160522RP	10	0.2	13	20	128	22	80	1	<1	<2	2
160523RP	220	4.4	5810	44	552	166	40	8	<1	8	6
160524RP	10	0.2	11	14	48	12	70	<0.5	<1	<2	7
160525RS	830	9.8	18100	36	234	622	10	1.5	<1	8	9

1999 STREAM SEDIMENT SAMPLES COLLECTED ON THE B ZONE, NORTH GRID

	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
160519SS	<5	<0.2	74	8	112	2	290	1.5	1	2	1

ROCK TYPES

LEGEND	
Q	thick drift, coluvium, alluvium, till
<b>MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP</b>	
B1	silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone
B2	arkosic volcanic litharenite turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic litharenite with interbedded silty mudstone
B3	pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose
B4	undifferentiated Bowser Lake Sediments
<b>HAZELTON GROUP - SALMON RIVER FORMATION</b>	
S1	undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)
S2	undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)
<b>HAZELTON GROUP - LOWER AND MIDDLE JURASSIC</b>	
H1	ferrocrete
H2	crystal tuff
H3	crystal tuff breccia, agglomerate
H4	ash tuff, ash tuff breccia, agglomerate
H5	undifferentiated pyroclastic rocks: tuff, breccia, agglomerate
H6	felsic volcanic rocks (rhyolite)
H7	intermediate volcanic rocks (dacite)
H8	mafic volcanic rocks (basalt, pillowed basalt, andesite)
H9	undifferentiated, strongly altered rock
<b>INTRUSIVE ROCKS</b>	
R1	felsic dykes
R2	hornblende diorite porphyry
R3	quartz feldspar porphyry
R4	mafic dyke



ABBREVIATIONS			
ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	md	morainal debris
ba	barite	Mn	manganese
bldr	boulder	ms	semi massive sulfides
bo	bornite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	q vn	quartz vein
cal	calcite	sb	scrub brush
carb	carbonatized	sd/gr	sand/gravel
ch	chloritized	ser	sericitized
cpy	chalcopyrite	sil	silicified
epi	epidotized	sp	spruce
gn	galena	spec	specularite
hem	hematized	sph	sphalerite
hbl	hornblende	stwk	stockwork
jar/alu	jarosite/alunite	T	talus
		v	vein

SYMBOLS	
523	sample number 160523 (all samples with prefix 160)
○	SS stream sediment sample
○	SO soil sample
□	RC rock composite sample
□	RCH rock chip sample
□ or [	RP rock panel sample
□	RF rock float sample
x	RS rock subcrop sample
□	RT rock talus sample
□	RTC rock talus composite sample
////	Semi massive sulfide zone
xxx	silicified
ooo	rubble
---	outcrop area
- - - -	fault
TODD 2   TODD 3	claim line
○	dd hole spotted in 1999
→	stream and direction

**MAP 10**

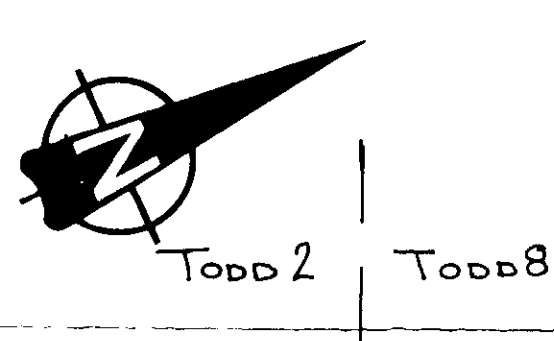
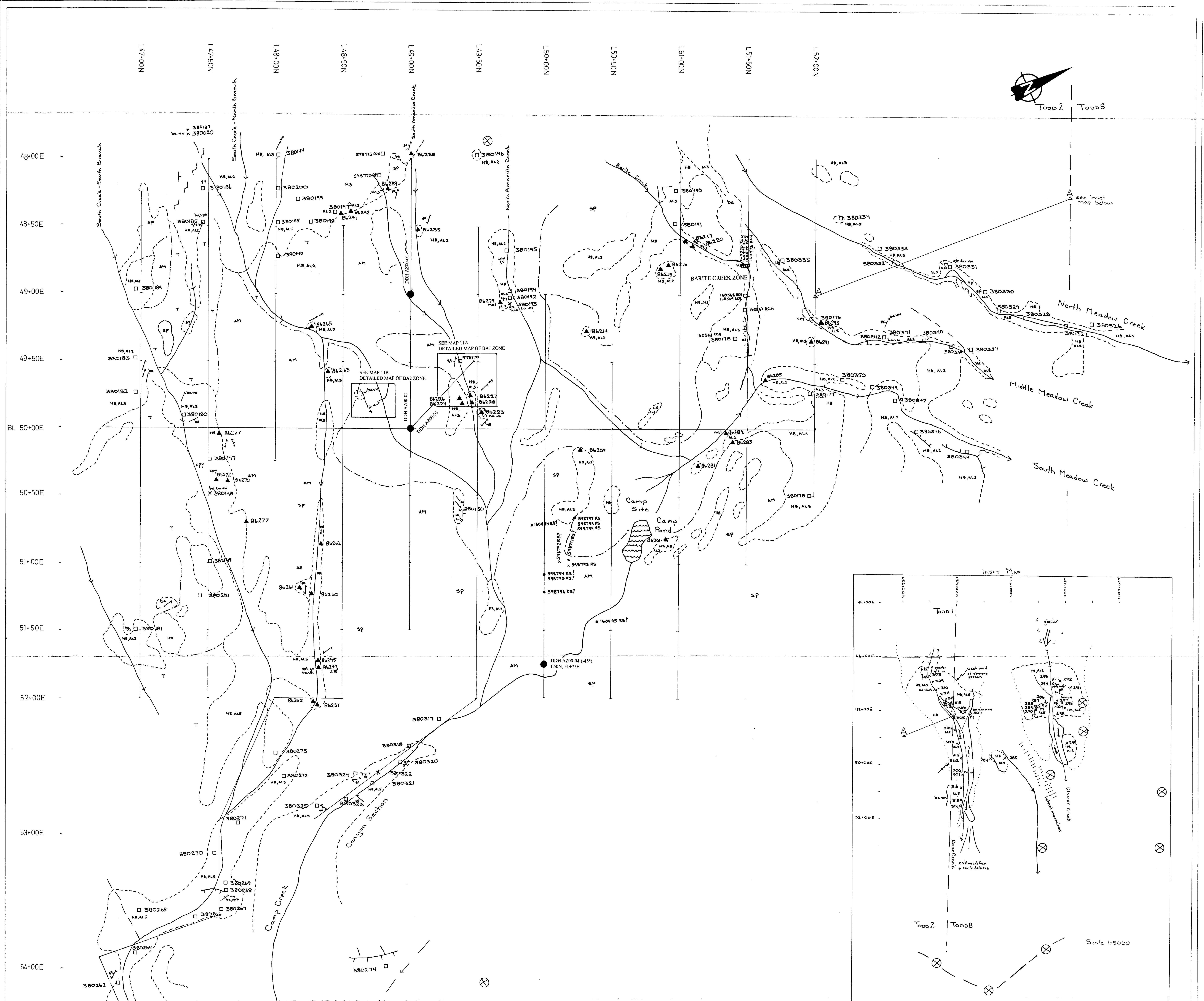
**DETAILED PLAN OF SEMI MASSIVE SULFIDE ZONE, B ZONE, NORTH GRID**

**TODD CREEK PROPERTY SURVEY BRANCH**

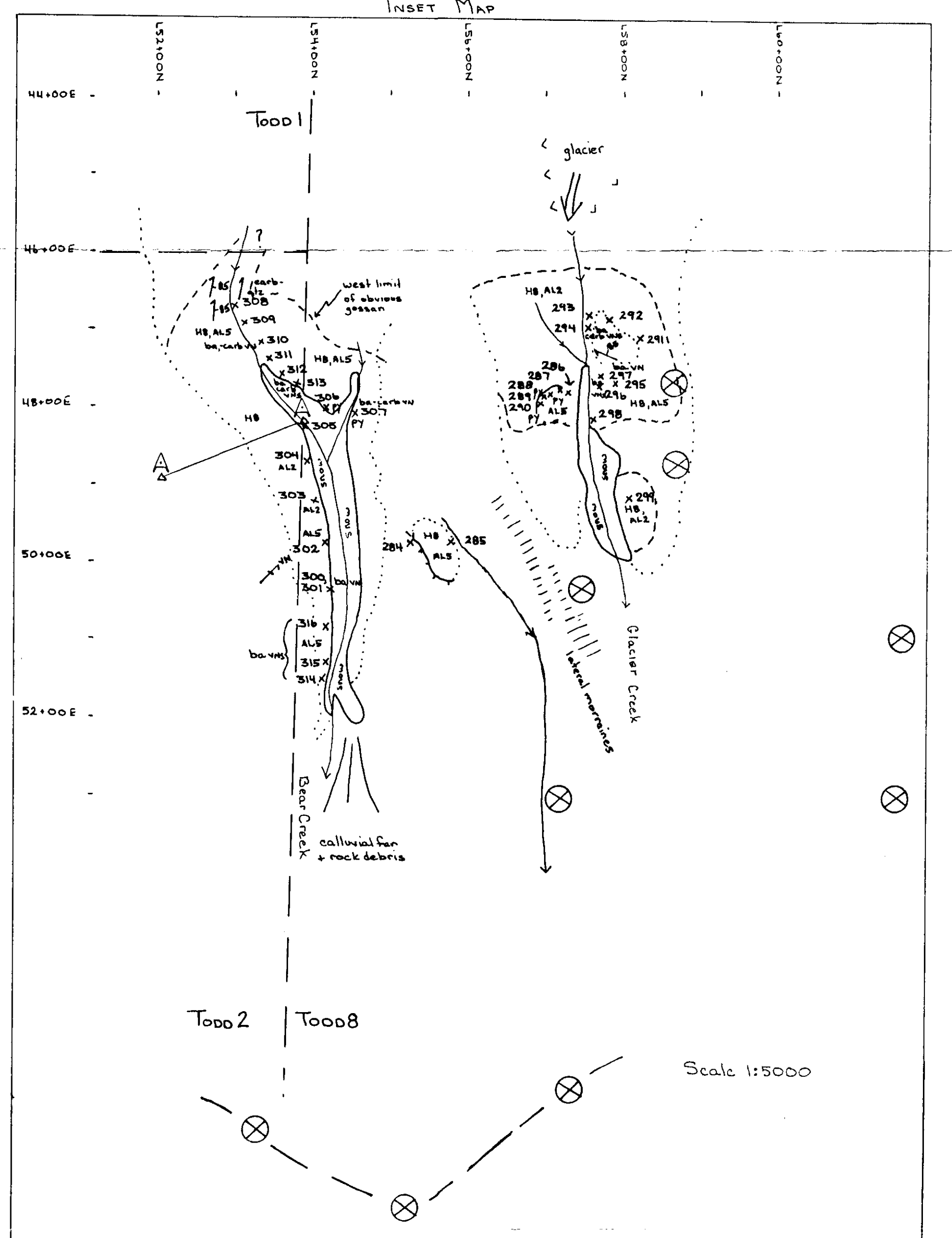
Scale 1:250

Geofine Exploration Oct 1999

26,205



see inset map below



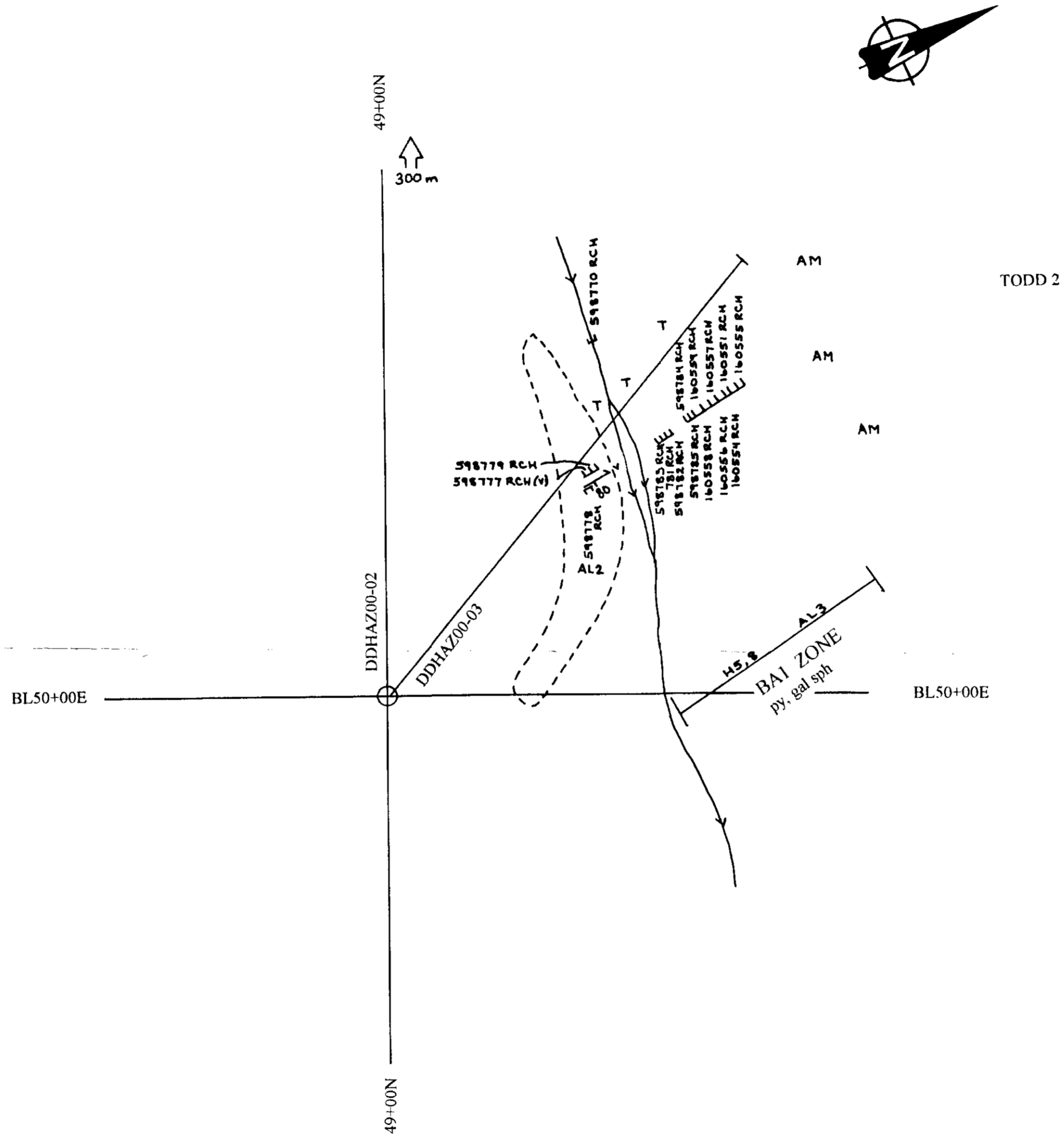
SAMPLE NO.	Au g/t	Ag ppm	Cd ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Mo ppm	Se ppm	Co ppm	Ni ppm	Mn ppm	Fe ppm	Ca ppm	Mg ppm	Al ppm	Si ppm	SS ppm
380200	0.13	20	10	2	2	166	12.0	0	0	0	0	0	0	0	0	0	0	0	0
380201	0.10	89	824	6.2	4.2	166	12.0	0	0	0	0	0	0	0	0	0	0	0	0
380202	0.015	18	16	0.8	5.2	28	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380203	0.010	23	294	3.2	3.2	248	5.0	0	0	0	0	0	0	0	0	0	0	0	0
380204	0.015	52	130	2.2	146	52	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380205	0.085	421	404	1.6	239	168	6.0	0	0	0	0	0	0	0	0	0	0	0	0
380206	0.025	10	80	2.0	178	52	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380207	0.02	32	152	1.1	22	20	1	0	0	0	0	0	0	0	0	0	0	0	0
380208	0.015	34	56	1.0	12	76	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380209	0.005	10	64	2.0	112	150	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380210	0.005	7	50	0.4	16	8	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380211	0.005	36	560	1.0	14	72	10.0	0	0	0	0	0	0	0	0	0	0	0	0
380212	0.005	71	65	2.4	54	68	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380213	0.010	21	470	3.4	54	202	13.5	0	0	0	0	0	0	0	0	0	0	0	0
380214	0.005	23	262	1.2	24	46	5.5	0	0	0	0	0	0	0	0	0	0	0	0
380215	0.025	2650	1694	3.2	122	176	17.5	0	0	0	0	0	0	0	0	0	0	0	0
380216	0.005	98	128	18.8	142	234	2.0	0	0	0	0	0	0	0	0	0	0	0	0
380217	0.005	19	200	3.2	28	84	3.5	0	0	0	0	0	0	0	0	0	0	0	0
380218	0.005	23	262	1.2	24	46	5.5	0	0	0	0	0	0	0	0	0	0	0	0
380219	0.005	8	102	2.2	42	78	2.0	0	0	0	0	0	0	0	0	0	0	0	0
380220	0.005	14	105	6.4	68	166	22.5	0	0	0	0	0	0	0	0	0	0	0	0
380221	0.005	73	296	8.4	176	162	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380222	0.005	23	262	1.2	24	46	5.5	0	0	0	0	0	0	0	0	0	0	0	0
380223	0.005	236	2750	21.4	146	796	67.0	0	0	0	0	0	0	0	0	0	0	0	0
380224	0.005	63	144	2.2	269	238	3.0	0	0	0	0	0	0	0	0	0	0	0	0
380225	0.005	11	24	1.0	56	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380226	0.020	123	166	1.6	106	162	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380227	0.005	26	82	1.0	32	34	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380228	0.11	123	818	6.8	436	660	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380229	0.005	23	296	4.2	8	22	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380230	0.005	76	128	0.2	22	24	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380231	0.005	7	228	0.8	14	36	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380232	0.010	17	154	0.6	18	14	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380233	0.005	145	1385	4.8	632	302	8.0	0	0	0	0	0	0	0	0	0	0	0	0
380234	0.005	13	618	0.8	162	100	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380235	0.005	10	156	1.4	130	54	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380236	0.005	13	126	0.8	162	205	6.5	0	0	0	0	0	0	0	0	0	0	0	0
380237	0.005	12	152	1.0	52	84	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380238	0.005	19	278	0.8	178	103	4.0	0	0	0	0	0	0	0	0	0	0	0	0
380239	0.005	13	190	0.8	12	70	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380240	0.005	11	24	1.0	56	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380241	0.020	123	166	1.6	106	162	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380242	0.005	26	82	1.0	32	34	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380243	0.11	123	818	6.8	436	660	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380244	0.005	23	296	4.2	8	22	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380245	0.005	76	128	0.2	22	24	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380246	0.005	7	228	0.8	14	36	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380247	0.010	17	154	0.6	18	14	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380248	0.005	145	1385	4.8	632	302	8.0	0	0	0	0	0	0	0	0	0	0	0	0
380249	0.005	13	618	0.8	162	100	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380250	0.005	10	156	1.4	130	54	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380251	0.005	13	126	0.8	162	205	6.5	0	0	0	0	0	0	0	0	0	0	0	0
380252	0.005	12	152	1.0	52	84	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380253	0.005	19	278	0.8	178	103	4.0	0	0	0	0	0	0	0	0	0	0	0	0
380254	0.005	13	190	0.8	12	70	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380255	0.005	11	24	1.0	56	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380256	0.020	123	166	1.6	106	162	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380257	0.005	26	82	1.0	32	34	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380258	0.11	123	818	6.8	436	660	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380259	0.005	23	296	4.2	8	22	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380260	0.005	76	128	0.2	22	24	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380261	0.005	7	228	0.8	14	36	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380262	0.010	17	154	0.6	18	14	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380263	0.005	145	1385	4.8	632	302	8.0	0	0	0	0	0	0	0	0	0	0	0	0
380264	0.005	13	618	0.8	162	100	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380265	0.005	10	156	1.4	130	54	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380266	0.005	13	126	0.8	162	205	6.5	0	0	0	0	0	0	0	0	0	0	0	0
380267	0.005	12	152	1.0	52	84	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380268	0.005	19	278	0.8	178	103	4.0	0	0	0	0	0	0	0	0	0	0	0	0
380269	0.005	13	190	0.8	12	70	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380270	0.005	11	24	1.0	56	36	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380271	0.020	123	166	1.6	106	162	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380272	0.005	26	82	1.0	32	34	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380273	0.11	123	818	6.8	436	660	1.5	0	0	0	0	0	0	0	0	0	0	0	0
380274	0.005	23	296	4.2	8	22	2.5	0	0	0	0	0	0	0	0	0	0	0	0
380275	0.005	76	128	0.2	22	24	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380276	0.005	7	228	0.8	14	36	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380277	0.010	17	154	0.6	18	14	4.5	0	0	0	0	0	0	0	0	0	0	0	0
380278	0.005	145	1385	4.8	632	302	8.0	0	0	0	0	0	0	0	0	0	0	0	0
380279	0.005	13	618	0.8	162	100	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380280	0.005	10	156	1.4	130	54	0.5	0	0	0	0	0	0	0	0	0	0	0	0
380281	0.005	13	126	0.8	162	205	6.5	0	0	0	0	0	0	0	0	0	0	0	0
380282	0.005	12	152	1.0	52	84	4.5	0	0</										



1999 ROCK SAMPLES FROM BAI ZONE, AMARILLO ZONE

SAMPLE NUMBER	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
598777RCH	<5	13	12	7170	258	10	760	5.5	1	8	<1
598778RCH	<5	8	31	782	246	42	90	3.5	1	6	1
598779RCH	<5	5.2	22	64	146	184	100	1.5	<1	6	8
598781RCH	<5	3.2	57	30	116	106	50	2.5	<1	4	1
598782RCH	<5	5.6	68	122	222	194	50	4.5	<1	6	28
598783RCH	<5	4.4	67	46	168	68	50	3	<1	6	2
598784RCH	<5	6.6	46	6830	132	52	100	3	<1	8	1
598785RCH	10	12.4	48	14100	2050	44	100	42.5	6	8	50
160551RCH	15	9	100	2100	1315	548	50	33	1	10	6
160554RCH	10	1	22	70	168	12	2090	3	<1	<2	1
160555RCH	10	2.2	23	112	228	32	1520	6	<1	<2	<1
160556RCH	10	4.4	35	660	208	384	30	3	2	<2	5
160557RCH	10	3.2	35	528	222	198	120	2.5	<1	2	3
160558RCH	15	15	288	14000	328	72	230	5.5	3	18	<1
160559RCH	<5	2.6	26	62	142	48	350	1.5	<1	<2	1

LEGEND	
<b>ROCK TYPES</b>	
Q	thick drift, coluvium, alluvium, till
<b>MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP</b>	
B1	silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone
B2	arkosic volcanic litharenite turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic litharenite with interbedded silty mudstone
B3	pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose
B4	undifferentiated Bowser Lake Sediments
<b>HAZELTON GROUP - SALMON RIVER FORMATION</b>	
S1	undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)
S2	undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)
<b>HAZELTON GROUP - LOWER AND MIDDLE JURASSIC</b>	
H1	ferrocrite
H2	crystal tuff
H3	crystal tuff breccia, agglomerate
H4	ash tuff, ash tuff breccia, agglomerate
H5	undifferentiated pyroclastic rocks: tuff, breccia, agglomerate
H6	felsic volcanic rocks (rhyolite)
H7	intermediate volcanic rocks (dacite)
H8	mafic volcanic rocks (basalt, pillowed basalt, andesite)
H9	undifferentiated, strongly altered rock
<b>INTRUSIVE ROCKS</b>	
R1	felsic dykes
R2	hornblende diorite porphyry
R3	quartz feldspar porphyry
R4	mafic dyke



ABBREVIATIONS			
ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	md	morainal debris
ba	barite	Mn	manganese
bidr	boulder	ms	semi massive sulfides
bo	bornite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	q vn	quartz vein
cal	calcite	sb	scrub brush
carb	carbonatized	sd/gr	sand/gravel
ch	chloritized	ser	sericitized
cpy	chalcopyrite	sil	silicified
epi	epidolized	sp	spruce
gn	galena	spec	specularite
hem	hematized	sph	sphalerite
hbl	hornblende	stwk	stockwork
jar/talu	jarosite/taunite	T	talus
		v	vein

SYMBOLS	
598786	1999 sample number
SS	stream sediment sample
SO	soil sample
RC	rock composite sample
RCH	rock chip sample
RP	rock panel sample
RF	rock float sample
RS	rock subcrop sample
RT	rock talus sample
RTC	rock talus composite sample
(dotted line)	outcrop area
(dashed line)	fault
(solid line with 'TODD 2'/'TODD 3')	claim line
(circle with dot)	dd hole spotted in 1999
(arrow)	stream and direction
(dashed line with dots)	extent of surficial feature

**MAP 11A**

**DETAILED PLAN OF BAI ZONE,  
DDHAZ00-03 & OF DDHAZ00-02,  
AMARILLO ZONE, FRY BRANCH  
TODD CREEK PROPERTY LTD**

Scale 1:250

Geofine Exploration Oct 1999

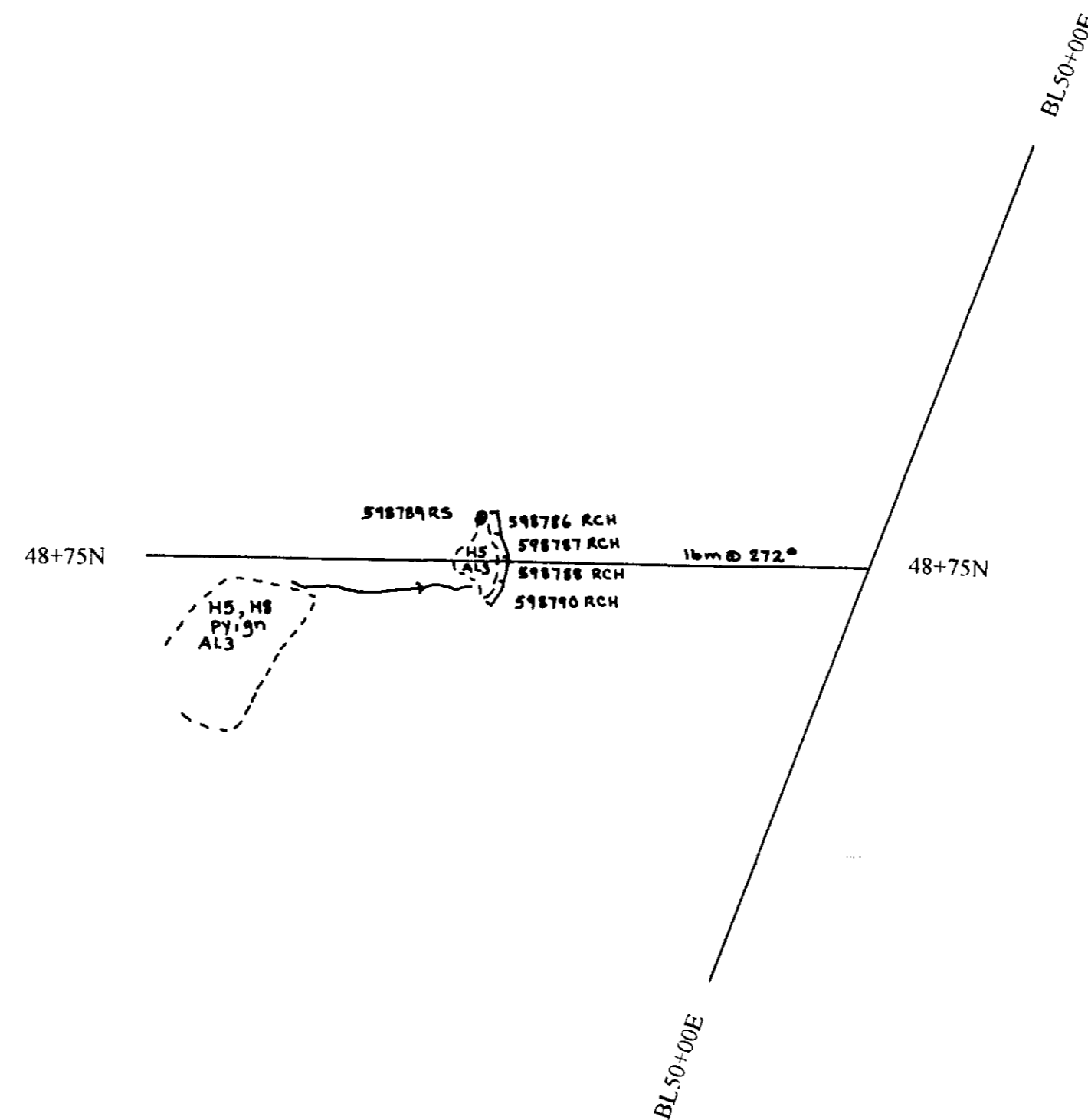
26,285

1999 ROCK SAMPLES COLLECTED ON THE BA2 ZONE, AMARILLO ZONE

SAMPLE NUMBER	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
598786RCH <5	71.8	80	56	152	8	1280	2.5	<1	2	8	2
598787RCH <5	25.4	115	350	194	8	1390	4	<1	8	2	2
598788RCH <5	53.6	134	108	176	20	1000	4.5	1	8	1	1
598789RS <5	115	183	310	114	14	310	2	1	10	<1	<1
598790RCH <5	2.6	134	34	60	52	60	0.5	<1	<2	5	5



TODD 2



LEGEND	
<b>ROCK TYPES</b>	
Q	thick drift, coluvium, alluvium, till
<b>MIDDLE (?) AND UPPER JURASSIC - BOWSER LAKE GROUP</b>	
B1	silty mudstone lithofacies: bioturbated silty mudstone with regularly interbedded, Fe-carbonate cemented fine grained sandstone
B2	arkosic volcanic litharenite turbidite lithofacies: thin and medium bedded, fine to medium grained, poorly sorted arkosic litharenite with interbedded silty mudstone
B3	pyritic silty mudstone lithofacies: pyritic, siliceous, tuffaceous silty mudstone, fine to medium grained lithic arkose
B4	undifferentiated Bowser Lake Sediments
<b>HAZELTON GROUP - SALMON RIVER FORMATION</b>	
S1	undifferentiated sediments (shale, mudstone, dust, limestone, conglomerate, tuffaceous sediments)
S2	undifferentiated volcanics (basalt, pillowed basalt, volcanic breccia)
<b>HAZELTON GROUP - LOWER AND MIDDLE JURASSIC</b>	
H1	ferrocrite
H2	crystal tuff
H3	crystal tuff breccia, agglomerate
H4	ash tuff, ash tuff breccia, agglomerate
H5	undifferentiated pyroclastic rocks: tuff, breccia, agglomerate
H6	felsic volcanic rocks (rhyolite)
H7	intermediate volcanic rocks (dacite)
H8	mafic volcanic rocks (basalt, pillowed basalt, andesite)
H9	undifferentiated, strongly altered rock
<b>INTRUSIVE ROCKS</b>	
R1	felsic dykes
R2	hornblende diorite porphyry
R3	quartz feldspar porphyry
R4	mafic dyke

ABBREVIATIONS			
ald	alder	lim	limonite
AM	alpine meadow	mal	malachite
ank	ankerite	md	morainal debris
ba	barite	Mn	manganese
bldr	boulder	ms	semi massive sulfides
bo	bornite	ox	oxidized
bt	boulder terrain	py	pyritized
bx	brecciated	q vn	quartz vein
cal	calcite	sb	scrub brush
carb	carbonatized	sd/gr	sand/gravel
ch	chloritized	ser	sericitized
cpy	chalcopyrite	sil	silicified
epi	epidotized	sp	spruce
gn	galena	spec	specularite
hem	hematized	sph	sphalerite
hbl	hornblende	stvk	stockwork
jar/alu	jarosite/alunite	T	talus
		v	vein

SYMBOLS	
598786	1999 sample number
SS	stream sediment sample
SO	soil sample
RC	rock composite sample
□ RCH	rock chip sample
□ RP	rock panel sample
□ RF	rock float sample
● RS	rock subcrop sample
□ RT	rock talus sample
□ RTC	rock talus composite sample
⋯	outcrop area
~	fault
TODD 2   TODD 3	claim line
○	dd hole spotted in 1999
→	stream and direction
---	extent of surficial feature

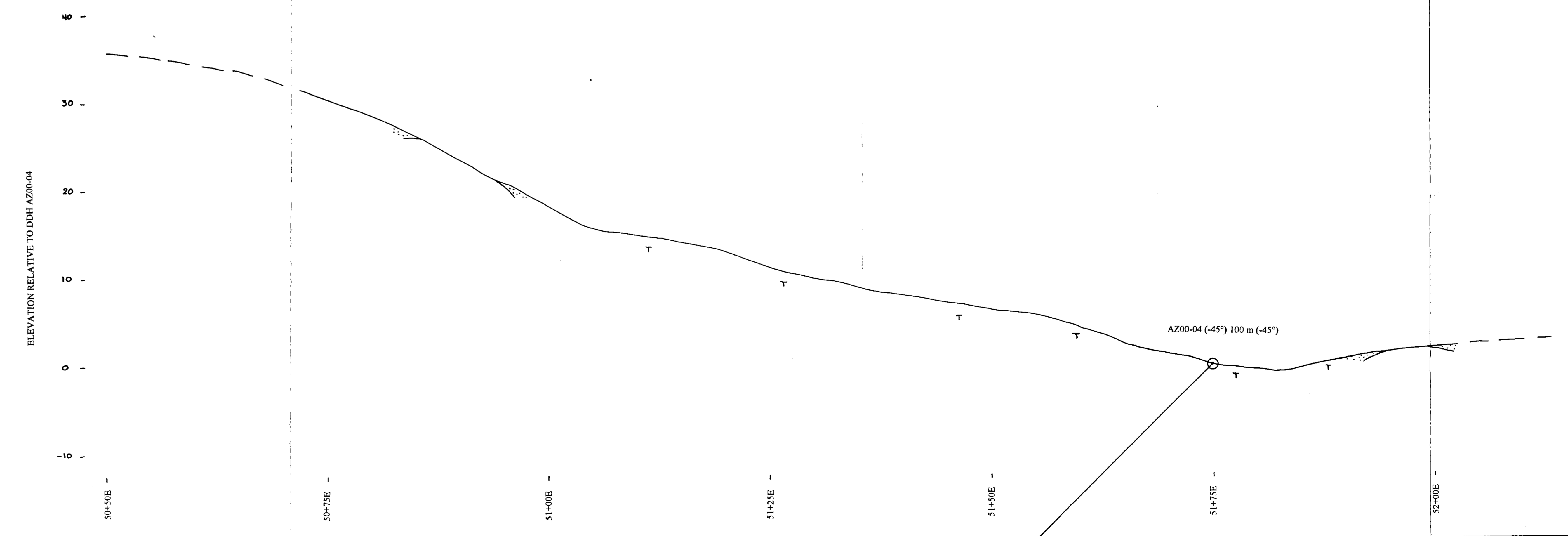
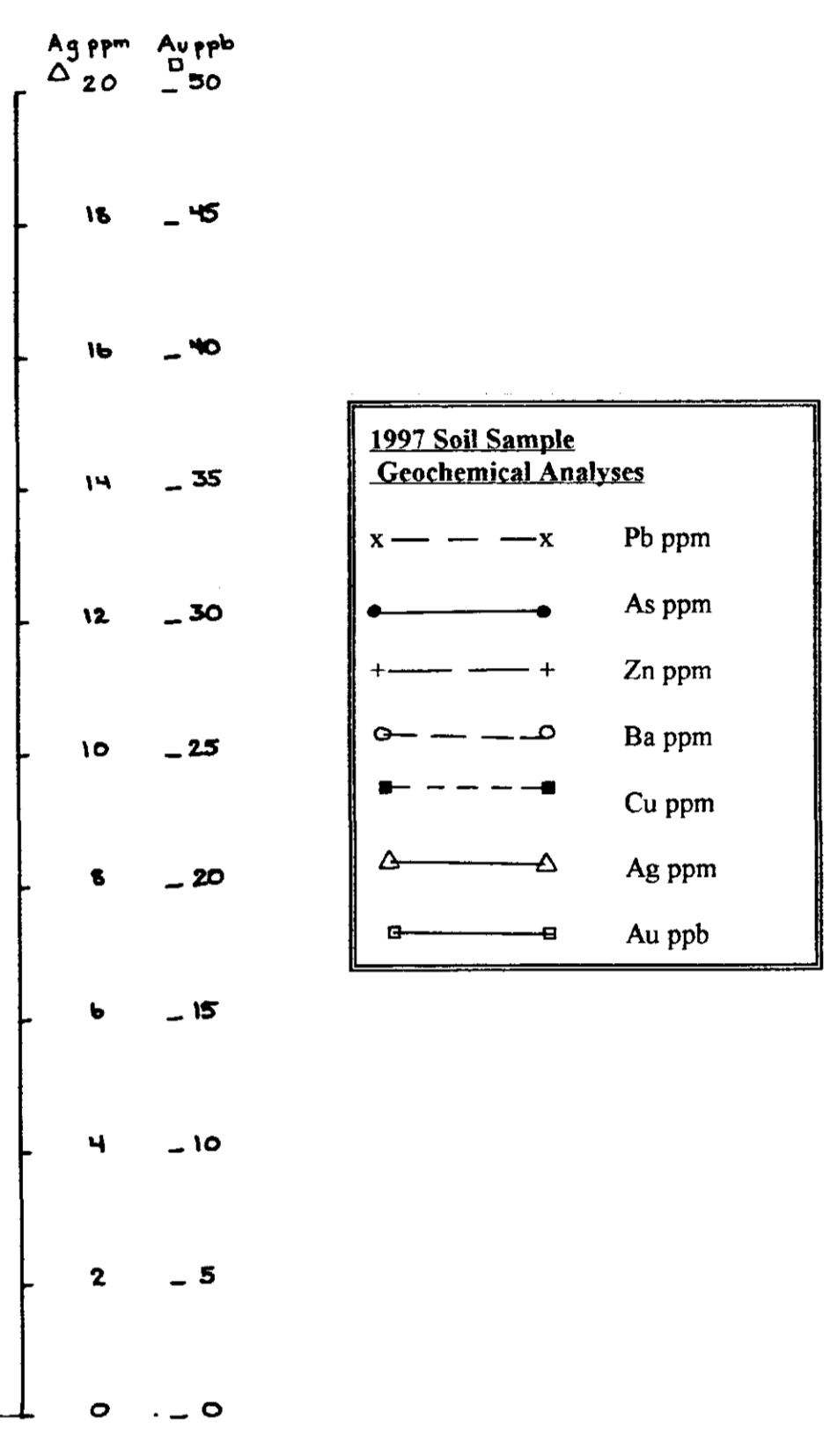
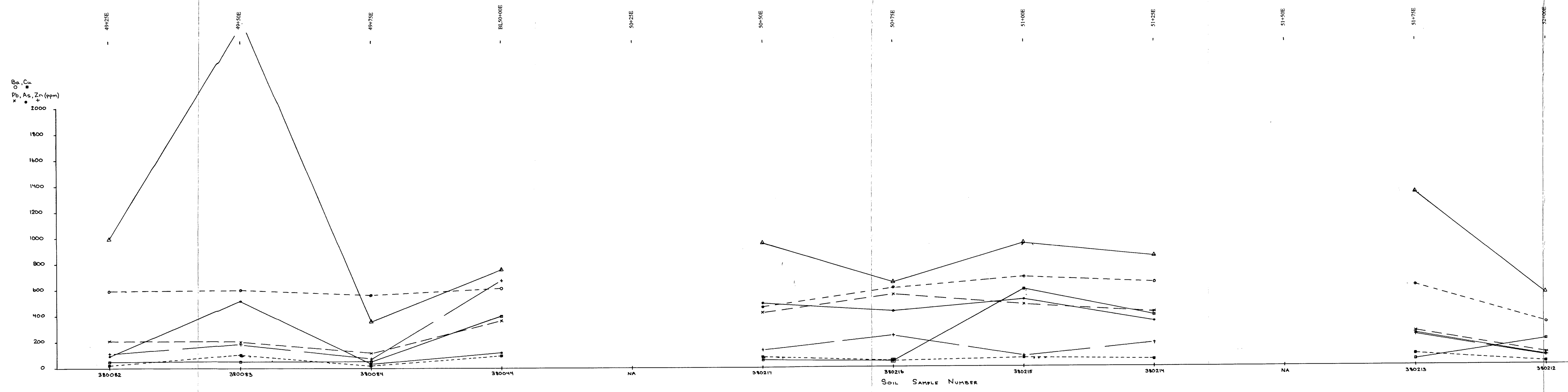
**MAP 11B**

**DETAILED PLAN OF BA2 ZONE,  
AMARILLO ZONE:  
TODD CREEK PROPERTY BRANCH**

Scale 1:500

Geofine Exploration Oct 1999

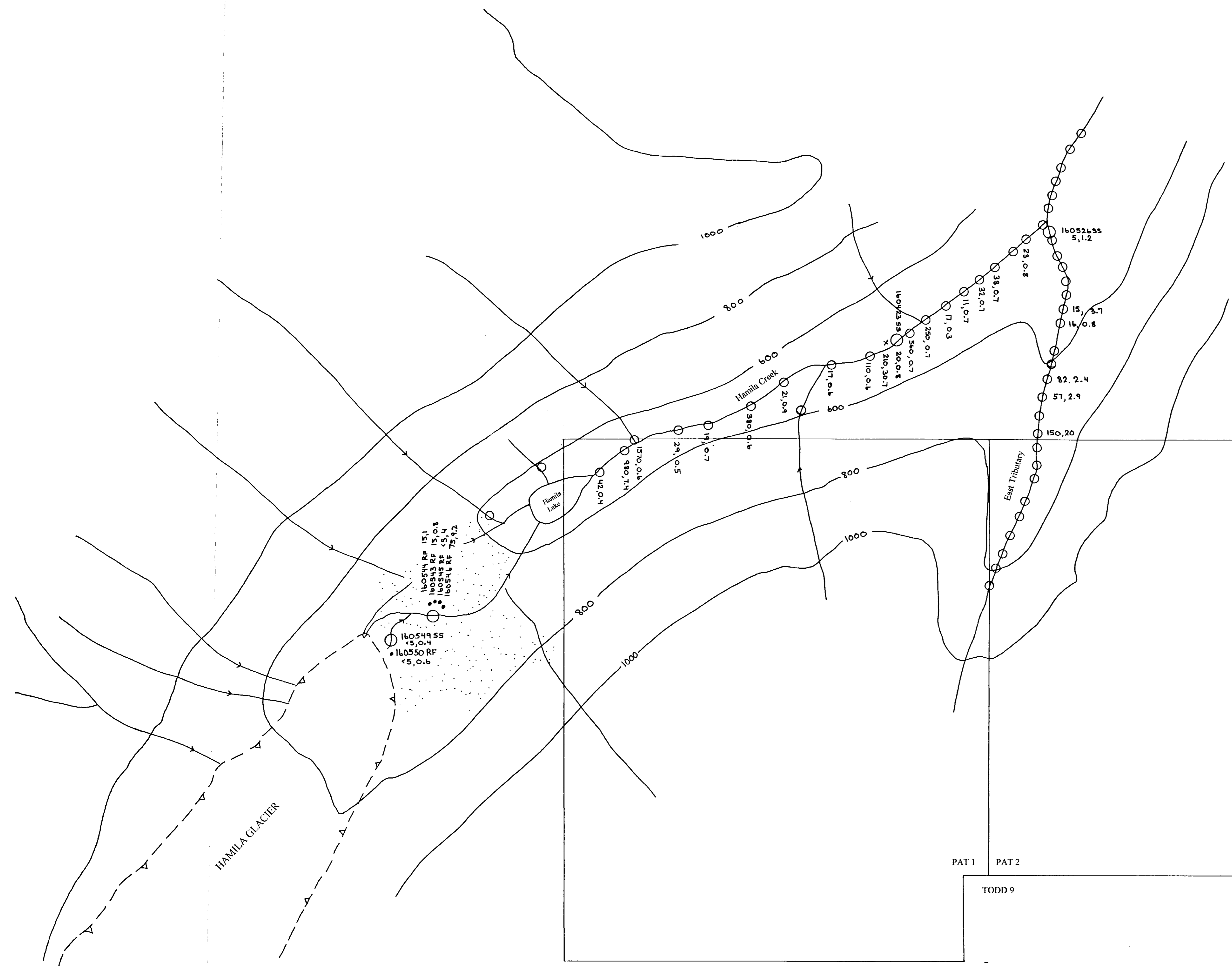
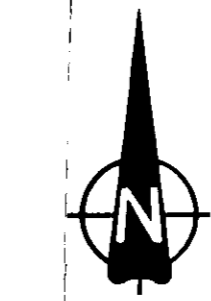
26205



**MAP 11C**  
**AMARILLO ZONE**  
 Soil Geochemical Analyses, Topography and  
 Proposed DDH AZ00-04 on Section 50+00N  
 Looking 022 deg.  
**TODD CREEK PROPERTY**  
 Proposed DDH AZ00-04  
 GEOLOGICAL SURVEY BRANCH  
 ASSESSMENT REPORT  
 Scale 1:250  
 Geotline Exploration Consultants Ltd. Nov 1999

26,285





ANALYTICAL RESULTS FROM RECONNAISSANCE SAMPLES:  
 a) NORTHWEST RECON TARGET - HAMILLA GLACIER AREA  
 b) ROCK SAMPLES

SAMPLE NUMBER	ANALYSES (AU FAIA; REMAINING ELEMENTS ICP)										
	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
160543RF	15	0.8	38	8	8	10	10	<0.5	<1	<2	5
160544RF	15	1	12	12	52	10	20	<0.5	<1	<2	4
160545RF	<5	4	2890	<2	94	<2	180	<0.5	<1	<2	<1
160546RF	75	9.2	3890	7390	2390	<2	230	<0.5	1	<2	<1
160548RF	15	6.6	15	39	20	<2	30	<0.5	<1	<2	4
160550RF	<5	0.6	25	18	64	20	10	2	4	<2	7

ANALYTICAL RESULTS FROM RECONNAISSANCE SAMPLES:  
 a) NORTHWEST RECON TARGET - HAMILLA GLACIER AREA  
 b) STREAM SEDIMENT SAMPLES

SAMPLE NUMBER	ANALYSES (AU FAIA; REMAINING ELEMENTS ICP)										
	AU	AG	CU	PB	ZN	AS	BA	CD	HG	SB	MO
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
160423SS	20	0.8	76	28	108	6	260	1	<1	<2	3
160528SS	5	1.2	29	48	196	14	380	2	<1	<2	3
160547SS	<5	0.2	31	10	62	2	200	0.5	<1	<2	3
160549SS	<5	0.4	44	12	88	6	80	<0.5	<1	<2	3

**SYMBOLS**

- 160525 SS 1999 stream sediment sample number & location with Au (ppb), Ag (ppm) values
- 160543 RF 1999 rock float sample number & location with Au (ppb), Ag (ppm) values
- 980, 7.4 Historic silt sample (samples of interest) with Au (ppb), Ag (ppm) values
- × 210, 30.7 Historic rock sample with Au (ppb), Ag (ppm) values
- stream and direction
- PAT 1 claim line and name
- ⊙ terminal moraine

**MAP 13A**  
 INITIAL FOLLOW-UP SURVEYS  
 NORTHWEST RECONNAISSANCE TARGET AREA  
 TODD CREEK PROPERTY  
 GEOLOGICAL SURVEY BRANCH  
 Scale 1:10 000 DATA REPORT  
 Geofine Exploration Consultants Ltd. October 1999

26,205

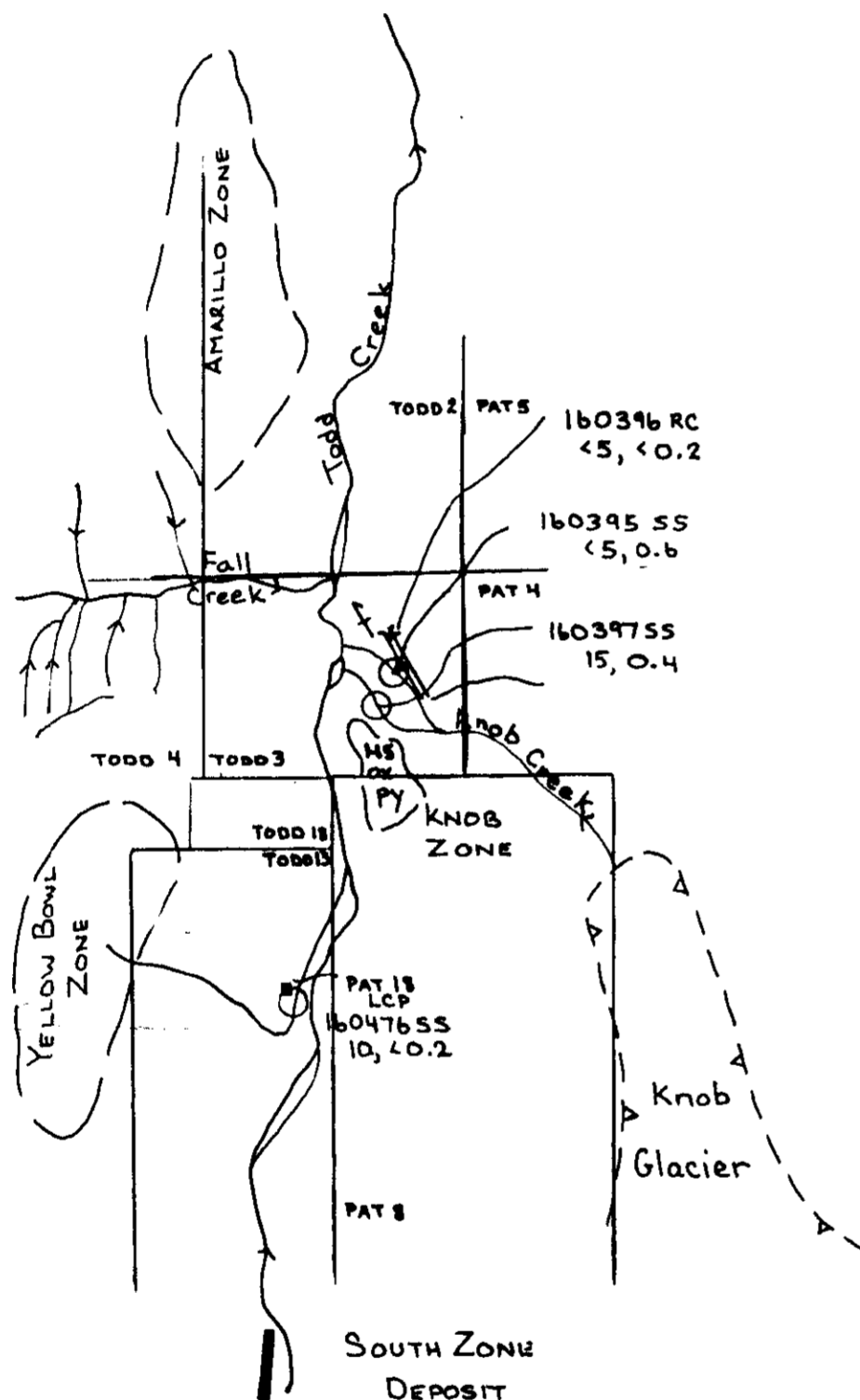


TABLE A9 ANALYTICAL RESULTS FROM RECONNAISSANCE SAMPLES:  
b) KNOB TARGET AREA:  
i) ROCK SAMPLES

SAMPLE NUMBER	ANALYSES (AU FA/AA; REMAINING ELEMENTS ICP)										
	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
160396RC	<5	<0.2	1	38	88	22	200	0.5	<1	<2	1

ANALYTICAL RESULTS FROM RECONNAISSANCE SAMPLES:  
b) KNOB TARGET AREA:  
ii) STREAM SEDIMENT SAMPLES

SAMPLE NUMBER	ANALYSES (AU FA/AA; REMAINING ELEMENTS ICP)										
	AU ppb	AG ppm	CU ppm	PB ppm	ZN ppm	AS ppm	BA ppm	CD ppm	HG ppm	SB ppm	MO ppm
160476SS	10	<0.2	61	38	74	50	200	0.5	<1	58	3
160395SS	<5	0.6	19	24	158	14	480	1	<1	6	3
160397SS	15	0.4	20	28	148	12	500	0.5	<1	4	3

**SYMBOLS**

- 160395 SS 1999 stream sediment sample number & location with Au (ppb), Ag (ppm) values
- 160396 RC 1999 rock composite sample number & location with Au (ppb), Ag (ppm) values
- stream and direction
- claim line and name
- South Zone
- Quartz Barite Vein
- strike and dip of vein
- Area of Interest

**MAP 13B**

**1999 TODD CREEK VALLEY  
RECONNAISSANCE ACTIVITIES  
KNOB ZONE**

**TODD CREEK PROPERTY SURVEY BRANCH  
MINUTE REPORT**

Scale 1:50 000

Geofine Exploration Consultants Ltd. October 1999

26,295