

APPENDIX 5

Diamond Drilling Summary Logs.

DIAMOND DRILLING LOGS

APPENDIX 5

HOLE NO	FROM	TO	LITHOLOGY	CORE AXIS	ALTERATION	ANGLE	STRUCTURE	ORE MIN	COMMENTS	QTZ%
BCD8	0	2.5	SOIL/LATERITE						After Dolerite core loss	
BCD8	2.5	14.8	Pdz						Highly leached core loss 13 to 15m	
BCD8	14.8	29.8	Pcs	60					Siliceous tuff	
BCD8	29.8	31.5	Psc	55		25	S1		Siltstone with narrow cherty tuff beds S	
BCD8	31.5	33.6	Pcs	56						
BCD8	33.6	34.3	Psc	60						
BCD8	34.3	34.6	Pvt						Lappilli tuff ?	
BCD8	34.6	41.4	Psc							
BCD8	41.4	43	Pcs	41	aspy-py	20	S1		Still dipping 090	
BCD8	43	45	Psl		aspy-py				Massive	
BCD8	45	46.5	Pcs	40	aspy-py					
BCD8	46.5	46.8	Qtz	65	aspy-py				S0 parallel laminated	
BCD8	46.8	50.3	Pcs		Py, aspy				Small reverse fault alteration along fau	
BCD8	50.3	53.1	Psc	20	Py, aspy				S0 now dipping 270 qtz at 51 and 51.3 ve	
BCD8	53.1	54	Psh						Sulphidic py along S1	
BCD8	54	55	Psc	36						
BCD8	55	57	Psh						Tuffaceous	
BCD8	57	57.4	Pcs	36						
BCD8	57.4	58.6	Psh							
BCD8	58.6	59.6	Pm	35					parsitic folds	
BCD8		60.8	Psh-py							
BCD8	60.8	61.3	Pm	38						
BCD8	61.3	63.4	Psh-py							
BCD8	63.4	65	Psh-s		py				quartz stockwork numerous mm veins	30
BCD8	65	68.3	Psh-py							
BCD8	68.3	79.3	Psh-py-s						weakly developed qtz veining	5
BCD8	79.3	93.6	Psh-py			S0		36	weak qtz veining. S0 changes at 85-86 p	5
BCD8	93.6	94.2	Pdi	52	chl-py					
BCD8	94.2	99	psh-py			S0		45	minor S0 qtz veins	
BCD8	99	99.4	Psh-qtz		bleached				folded vein and alteration selvage	30
BCD8	99.4	101.5	Psh-py						minor qtz veining core broken	
BCD8	101.5	103.9	Psh-py-Fault						fault crush	
BCD8	103.9	104.5	Qtz-Psh					py	broken core	100
BCD8	104.5	108.8	Psh-s							30
BCD8	108.8	110.8	Qtz			40	Qtz lam		laminated qtz. Psh define laminae.	100
BCD8	110.8	111.3	Psh-s							30

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HOLE NO	FROM	TO	LITHOLOGY	CORE AXIS	ALTERATION	ANGLE	STRUCTURE	ORE MIN	COMMENTS	QTZ%
BCD8	111.3	111.7	Qtz	40						100
BCD8	111.7	112.1	Psh-s							30
BCD8	112.1	113.2	Qtz-lam							100
BCD8	113.2	118	Psh-s							30
BCD8	118	118.7	Qtz-lam	25						100
BCD8	118.7	119.2	Psh-s	10						30
BCD8	119.2	120.2	Qtz	40						100
BCD8	120.2	122	Psh-s	30						30
BCD8	122	123.4	Qtz-lam			10	lam			100
BCD8	123.4	132	Psh-s			25	Qtz			30
BCD8	132	132.6	Psh-Qtz							30
BCD8	132.6	133.7	Qtz-psh							100
BCD8	133.7	134.8	Psh							
BCD8	134.8	135.3	Psh-s							30
BCD8	135.3	135.9	Qtz-lam							100
BCD8	135.9	138	Psh						minor qtz	5
BCD8	138	145.6	Psh-s			35	Qtz-s			15
BCD8	145.6	145.8	Qtz							100
BCD8	145.8	149.5	Psh-s							30
BCD8	149.5	150.4	Psc-s			35	Qtz		tuffaceous	30
BCD8	150.4	153.7	Psh-s			36	Qtz			30
BCD8	153.7	155.8	Psc-s			30	S0		tuffaceous EOH	30
BCD9	0	1.2	Lt						After PdZ	
BCD9	1.2	24	Pdz-ox							
BCD9	24	35.8	Pdz							
BCD9	35.8	36	Pdz-Qtz							30
BCD9	36	37.1	Pcs						EOH	
BCD9A	45	57.5	Psc			38	S0			
BCD9A	57.5	58.8	Pvt			20	S1		S1 contains met mineral forming down dip	
BCD9A	58.8	63.4	Psc			45	S0			
BCD9A	63.4	64.3	Pvt		py	15	S1		S1 with met mineral. minor aspy	
BCD9A	64.3	71	Psc		minor aspy	45	S0		67m reverse fault on E-dipping S0	
BCD9A	71	73.8	Psc-s		aspy-py				fine qtz sulphide stockwork	15
BCD9A	73.8	79.8	Psh			76	S0		Tuffaceous. S0 flattened Fold 77m.	
BCD9A	79.8	81.3	Psc							
BCD9A	81.3	87.7	Psc-s		py-aspy	22	S0		fine qtz stockwork sheared. Small duplex	15

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HOLE NO	FROM	TO	LITHOLOGY	CORE AXIS	ALTERATION	ANGLE	STRUCTURE	ORE MIN	COMMENTS	QTZ%
BCD9A	87.7	94.2	Psh			20	S0		some muddy layers	
BCD9A	94.2	108	Psh-s						stockwork weakly developed	5
BCD9A	108	109.1	Pdi	40	py-aspy					
BCD9A	109.1	112.6	Psh-s						moderately developed	15
BCD9A	112.6	113.6	Pdi		py-aspy					
BCD9A	113.6	115.5	Psh-s						weakly developed	5
BCD9A	115.5	128.6	Psh						S0 variable 118-127	M-fold
BCD9A	128.6	135	Psh-s						weakly developed	5
BCD9A	135	155.5	Psh							
BCD9A	155.5	190	Psh-s						weak to 163, moderate to 173.4, weak to	15
BCD6	0	22	PDZ PDZ							
BCD6	22	27	PDZ/QTZ							30
BCD6	27	33	PDZ							
BCD6	33	37	PDI							
BCD6	37	38	PDZ							
BCD6	38	39	PDZ/QTZ							30
BCD6	39	42	PDZ							
BCD6	42	43	QTZ							80
BCD6	43	43.3	PDZ							
BCD6	43.3	48	PDZ/QTZ							30
BCD6	48	49	PDZ							
BCD6	49	50	PDZ/PCS							
BCD6	50	51	PSC							
BCD6	51	52	PVT							
BCD6	52	53	PSC							
BCD6	53	54	PVT							
BCD6	54	55	PSC							
BCD6	55	56	PVT							
BCD6	56	59	PSC							
BCD6	59	60.6	PVT							
BCD6	60.6	60.9	QTZ/VIS							80
BCD6	60.9	61	PVT							
BCD6	61	61.4	PM							
BCD6	61.4	61.6	QTZ							80
BCD6	61.6	62	PM							
BCD6	62	63	PSC							

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HOLE NO	FROM	TO	LITHOLOGY	CORE AXIS	ALTERATION	ANGLE	STRUCTURE	ORE MIN	COMMENTS	QTZ%
BCD6	63	64	PM							
BCD6	64	64.5	PSC							
BCD6	64.5	64.8	PSC/QTZ							30
BCD6	64.8	66	PSC							
BCD6	66	67	PVT							
BCD6	67	67.3	QTZ							80
BCD6	67.3	69	PSC							
BCD6	69	69.5	QTZ/GA/							80
BCD6	69.5	70	PM SHEA							
BCD6	70	70.5	QTZ/SHE							80
BCD6	70.5	72	PSC							
BCD6	72	72.8	QTZ/SHE							80
BCD6	72.8	74.5	SHEARED							
BCD6	74.5	79.5	PSHC							
BCD6	79.5	80	QTZ							80
BCD6	80	80.3	PSHC/QT							30
BCD6	80.3	82	QTZ							80
BCD6	82	82.2	LAM QTZ							80
BCD6	82.2	83	SHEARED							
BCD6	83	84	QTZ/SHE							80
BCD6	84	85	SHEARED							
BCD6	85	97	PSHC							
BCD6	97	97.7	SHEARED							
BCD6	97.7	98.5	QTZ/PY							80
BCD6	98.5	99	SHEARED							
BCD6	99	100.5	PSHC							
BCD7	0	1	SOIL							
BCD7	1	39	PSHC							
BCD7	39	39.6	QTZ VEI							80
BCD7	39.6	40	PDI							
BCD7	40	40.3	PDI+QTZ							30
BCD7	40.3	42.3	PDI							
BCD7	42.3	51	PSHC							
BCD7	51	51.8	QTZ							80
BCD7	51.8	52.3	PDI							
BCD7	52.3	52.6	QTZ							80

DIAMOND DRILLING LOGS

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HOLE NO	FROM	TO	LITHOLOGY	CORE AXIS	ALTERATION	ANGLE	STRUCTURE	ORE MIN	COMMENTS	QTZ%
BCD7	52.6	53.6	PDI							30
BCD7	53.6	53.9	PSHC+QT							
BCD7	53.9	54	PDI							
BCD7	54	54.7	PDI + P							
BCD7	54.7	55	PSHC							80
BCD7	55	55.2	QTZ							
BCD7	55.2	56	PSHC							
BCD7	56	57	PSHC							
BCD7	57	58	PDI							
BCD7	58	59.6	PSHC							80
BCD7	59.6	59.9	QTZ + B							
BCD7	59.9	60	PSHC							
BCD7	60	60.5	PM							30
BCD7	60.5	60.8	PM+QTZ							
BCD7	60.8	61	PM							80
BCD7	61	62	QTZ							
BCD7	62	66	PM							10
BCD7	66	66.6	PM STOC							
BCD7	66.6	80.3	PM							80
BCD7	80.3	80.6	QTZ							
BCD7	80.6	81	PSL							
BCD7	81	81.3	PSC							80
BCD7	81.3	82	QTZ							
BCD7	82	83	PSC							
BCD7	83	84	PVT							
BCD7	84	85	PSL							
BCD7	85	85.4	PSC							
BCD7	85.4	86	SILICIF							
BCD7	86	88	PCS							
BCD7	88	89	PVT							
BCD7	89	90	PCS							
BCD7	90	91	PVT							
BCD7	91	94	PCS							
BCD7	94	95	PDZ							
BCD7	95	99	PCS							
BCD7	99	121	PDZ							

HOLE	FROM	TO	DIP	DIPDIR	STRUCTURE	COMMENTS
BCD6	38.4	38.7	87	282	C1	
BCD6	38.4	38.7	32	276	Q	
BCD6	38.4	38.7	15	94	Q	
BCD6	53.75	54.05	73	283	S0	
BCD6	53.75	54.05	75	283	Q	
BCD6	53.75	54.05	72	147	Q	
BCD6	54.25	54.55	75	276	S0	
BCD6	54.25	54.55	73	276	Q	
BCD6	54.25	54.55	86	93	C1	
BCD6	55.8	56.1	73	274	S0	
BCD6	55.8	56.1	73	273	Q	
BCD6	55.8	56.1	74	272	Z1	
BCD6	55.8	56.1	87	273	Q	
BCD6	56.1	56.35	73	276	Q	
BCD6	56.1	56.35	74	272	S0	
BCD6	56.1	56.35	76	273	L1	
BCD6	56.1	56.35	67	61	Z1	
BCD6	56.8	56.9	82	9	FL1	
BCD6	56.8	56.9	12	124	L2	
BCD6	57.9	58	78	46	FL2	
BCD6	57.9	58	10	154	L2	
BCD6	58.8	58.9	74	263	S0	
BCD6	58.8	58.9	81	261	Z1	
BCD6	58.8	58.9	87	266	Q	
BCD6	64.3	64.6	71	272	S0	
BCD6	64.3	64.6	84	88	C1	
BCD6	64.3	64.6	86	89	Z1	
BCD6	64.3	64.6	72	273	L1	
BCD6	69.4	69.55	68	276	S0	
BCD6	69.4	69.55	78	273	Z1	
BCD7	55.3	55.6	38	97	Q	Pdi CONTACT
BCD7	55.3	55.6	44	84	S0	Pdi CONTACT
BCD7	55.3	55.6	37	94	S1	
BCD7	52.6	52.8	32	91	Q	Qtz in Pdi
BCD7	52.6	52.8	32	91	S1	
BCD7	54.85	55	36	95	Q	S0 II
BCD7	56.7	56.8	37	92	S0	
BCD7	56.7	56.8	62	280	Q	
BCD7	56.7	56.8	36	92	Q	
BCD7	58.5	58.6	88	276	Z	reverse cuts Q
BCD7	58.5	58.6	36	93	Q	
BCD7	68	68.2	62	94	S0	
BCD7	68	68.2	62	94	Q	
BCD7	79.6	79.7	67	277	S0	Folded
BCD8	31	31.2	76	103	S0	
BCD8	31	31.2	88	264	S1	
BCD8	41.8	42	82	106	S0	
BCD8	41.8	42	75	261	S1	
BCD8	47.7	48	80	102	S0	
BCD8	47.7	48	71	262	S1	shearing along S1 normal.
BCD8	49.1	49.2	5	263	S0	Parasitic fold S1/S0 87 degrees
BCD8	51.1	51.2	88	263	S0	
BCD8	51.1	51.2	12	263	Sz	minor shear reverse
BCD8	51.1	51.2	74	263	Qtz	parallel to S1 has parasitic fold limb o
BCD8	52.2	52.3	81	103	S1	
BCD8	52.2	52.3	78	266	S1	normal movement on S1
BCD8	58.5	58.8	88	102	S0	

HOLE	FROM	TO	DIP	DIPDIR	STRUCTURE	COMMENTS
BCD8	58.5	58.8	76	263	S1	
BCD8	58.5	58.8	88	101	Qtz	
BCD8	58.5	58.8	22	162	F1	parasitic fold verging west
BCD8	62	62.1	81	94	S0	
BCD8	62	62.1	74	258	S1	
BCD8	113.2	113.5	88	274	S1	
BCD8	113.2	113.5	88	274	Qtz	
BCD8	113.2	113.5	68	74	Qtz	link veins to main S0 parallel
BCD8	114	114.2	68	271	Qtz	boudinaged vein reverse movement
BCD8	114	114.2	68	74	spur vein	
BCD8	114	114.2	88	274	S1 parallel vein	
BCD8	123.2	123.6	88	271	Qtz	main vein dip parallel to lamina in vein
BCD8	130	131.1	78	89	Qtz	
BCD8	142	142.2	78	89	Qtz	
BCD8	154	154.2	81	272	S0	
BCD8	154	154.2	78	89	Qtz	
BCD9A	48	48.1	76	81	S0	
BCD9A	58.2	58.3	84	270	S1	
BCD9A	58.2	58.3	84	270	L1	mineral lineation in S1. Andalusite? sim
BCD9A	66	66.3	79	78	S0	
BCD9A	66	66.3	88	262	S1	
BCD9A	67	67.2	76	78	S0	
BCD9A	67	67.2	86	262	S1	
BCD9A	67	67.2	82	235	Sz	reverse
BCD9A	72.5	72.6	79	81	Qtz	
BCD9A	74.2	74.3	86	78	Qtz	
BCD9A	77	77.1	64	78	S0	
BCD9A	77.3	77.4	20	81	S0	
BCD9A	77.3	77.4	84	267	S1	small parasitic folds verge west
BCD9A	80	80.2	51	267	S0	
BCD9A	80	80.2	81	267	S1	
BCD9A	90	90.1	79	88	S0	
BCD9A	90	90.1	71	267	S1	movement on S1 mainly reverse, but few n
BCD9A	105.6	105.7	89	26	S0	
BCD9A	108.2	108.3	72	102	Contact	Pdi
BCD9A	109.1	109.2	66	102	Contact	Pdi
BCD9A	120	120.1	44	271	S0	
BCD9A	120	120.1	81	92	S1	S1 80 degrees to S0
BCD9A	146.7	146.8	61	271	S0	
BCD9A	158.9	159	66	270	Sz	Sz parallel to S1 reverse
BCD9A	165	165.1	76	271	Sz	as above
BCD9A	165	165.1	76	271	Lz	

APPENDIX 6

Check Assay Results.

SAMPLE	Au CHECK	Au ORIGINAL	
BC 13510	2.676	3.26	
BC 13539	1.75	0.79	
BC 13566	0.304	0.23	
BC 13615	3.54	3.7	
BC 13636	6.512	3.16	
BC 13662	8.36	2.81	
BC 13663	7.776	3.1	
BC 13664	1.858	0.72	
BC 13665	3.844	7.07	
BC 13666	9.465	3.17	
BC 13667	2.302	1.13	
BC 13737	1.6	2.44	
BC 13769	0.492	0.3	
BC 13777	0.156	0.89	
BC 13928	0.372	1.2	
BC 13951	5.63	3.37	
BC 13954	1.64	0.4	
BC 13955	3.2	1.3	
BC 13984	2.56	3.48	
BC 14273	10.794	4.1	
BC 14282	3.796	0.67	
BC 14297	2.208	1.47	
BC 14537	4.744	5.18	
BC 14594	2.422	4.5	
BC 14741	5.512	1.49	
BC 14764	0.578	0.33	
BC 14842	2.434	1.5	
BC 14890	2.326	1.29	
BC148101	1.706	0.68	
BC 15026	1.216	1.23	
BC 15043	0.4	0.59	
BC 15070	0.76	0.58	
BC 15172	0.51	0.92	
BC 15173	1.154	1.78	
BC 15177	1.098	1.8	
BC 15410	2.984	5.95	
BC 15413	0.62	1.9	
BC 15440	0.429	2.05	
BC 15448	1.186	1.7	
BC 15474	1.694	1.08	
HOLE NO	TO	AUAV	AUAVR
BCP 164	64	1.38	1.31
BCP 164	66	4.07	4.58
BCP 164	67	2.92	2.49
BCP 164	68	1.64	1.87
BCP 164	69	3.31	5.31
BCP 164	70	1.97	1.77
BCP 172	30	0.5	0.5
BCP 172	31	1.94	1.49
BCP 172	32	4.53	5.43
BCP 172	33	0.45	0.35
BCP 172	34	4.89	5.9
BCP 172	35	1.06	0.95

HOLE NO	TO	AUAV	AUAVR
BCP 186	22	0.39	0.34
BCP 186	23	1.31	1.21
BCP 186	24	13.8	10.01
BCP 186	25	1.47	2.08
BCP 186	26	2.02	2.16
BCP 186	27	1.11	1.35
BCP 191	60	1.63	2.32
BCP 191	61	2.4	2.62
BCP 191	62	1.86	1.98
BCP 191	63	1.26	1.74
BCP 191	64	6.39	14.3
BCP 191	65	2.65	2.78
BCP 196	46	0.2	0.25
BCP 196	47	3.45	5.21
BCP 196	48	4.21	5.71
BCP 196	49	4.81	5.45
BCP 196	50	2.55	1.92
BCP 197	30	20.7	26.55
BCP 197	31	37.5	31.45
BCP 197	32	7.89	6.41
BCP 197	33	1.07	3.29
BCP 197	34	0.53	0.72
BCP 197	35	0.24	0.34
BCP 203	85	0.76	0.61
BCP 203	86	1.97	1.39
BCP 203	87	1.72	1.88
BCP 203	88	2.11	2.32
BCP 203	89	2.02	3.07
BCP 203	90	1.77	1.69
BCP 212	93	2.34	1.69
BCP 212	94	8.22	6.22
BCP 212	95	2.44	2.87
BCP 212	96	11.1	8.68
BCP 212	97	2.31	2.06
BCP 212	98	0.36	0.4
BCP 221	5	0.69	0.49
BCP 221	6	0.66	0.69
BCP 221	7	2.34	3.37
BCP 221	8	1.33	1.59
BCP 221	9	0.44	0.63
BCP 221	10	0.92	1.41
BCP 229	85	0.34	0.32
BCP 229	86	0.65	0.26
BCP 229	87	1.39	1.16
BCP 229	88	1.55	1.76
BCP 229	89	2.1	1.91
BCP 229	90	3.17	2.21
BCP 232	55	1.35	0.85
BCP 232	56	1.13	1.41
BCP 232	57	1.22	1.18
BCP 232	58	0.86	1.19
BCP 232	59	0.85	0.84
BCP 232	60	0.19	0.04

APPENDIX 7

Base Metal Assays from BCP 136



ANALABS

A Division of Inchcape Inspection and
Testing Services Australia Pty. Ltd.

BC drill

Phone (089) 477755

Our Headquarters & Materaw St. Winnellie NT

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ANALYTICAL REPORT No. 10/95/11.20/54

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

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ELEMENT/METHOD

13649/13694

SD Pres 1

Cu, Pb, Zn, As, Ag - GA101

RESULTS

TO

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RESULTS

TO

RESULTS

TO

REMARKS

W. Turner

AUTHORISED OFFICER

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13/11/91

N 01074

1 OF 3

SAMPLE No.	SAMPLE No.	Cu	Zn	As	Ag	Pb				
1	13645	195	120	860	1.8	70				
2	13646	62	100	1010	1.5	45				
3	13647	627	90	580	3.1	35				
4	13648	640	110	600	3.0	110				
5	13649	243	30	470	1.7	20				
6	13650	112	30	450	1.9	5				
7	13651	318	35	170	1.2	25				
8	13652	202	65	470	1.9	30				
9	13653	969	70	220	6.1	45				
10	13654	287	50	270	2.2	25				
11	13655	399	50	360	3.4	25				
12	13656	419	40	240	3.7	20				
13	13657	299	150	450	3.7	70				
14	13658	806	35	240	3.6	25				
15	13659	973	140	810	4.0	35				
16	13660	567	210	480	3.5	45				
17	13661	495	500	810	3.0	150				
18	13662	733	4120	460	3.9	780				
19	13663	485	7620	380	4.4	1240				
20	13664	533	9970	180	3.3	1400				
21	13665	862	1650	360	3.9	400				
22	13666	1260	250	240	5.4	100				
23	13667	1120	110	770	4.7	35				
24	13668	1690	105	9900	6.0	60				
25	13669	1310	175	9700	5.1	70				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

— = element not determined

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

110/55.21.05759

13/11/91

N 01074

2 OF 3

TUBE No.	SAMPLE No.	Cu	Zn	As	Ag	Pb				
1	13670	1400	230	1500	4.0	55				
2	13671	903	5910	880	3.4	360				
3	13672	1087	600	3300	3.7	175				
4	13673	593	270	2000	2.3	65				
5	13674	253	130	1600	1.9	25				
6	13675	285	250	2300	2.7	105				
7	13676	125	304	280	2.0	115				
8	13677	107	190	110	1.8	40				
9	13678	57	190	<100	1.6	40				
10	13679	257	1810	380	1.8	205				
11	13680	540	215	3500	3.7	110				
12	13681	345	660	290	2.8	170				
13	13682	297	810	770	2.4	150				
14	13683	272	610	550	2.2	150				
15	13684	169	520	230	1.5	65				
16	13685	141	290	850	1.6	50				
17	13686	243	230	300	2.3	70				
18	13687	379	210	940	1.9	55				
19	13688	295	455	2800	1.7	115				
20	13689	194	140	970	0.9	40				
21	13690	195	95	1200	2.5	50				
22	13691	219	215	940	2.4	45				
23	13692	299	950	5000	2.3	150				
24	13693	85	240	1300	2.5	65				
25	13694	132	380	1600	1.7	50				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

— = element not determined

AUTHORISED Wayne S. Turner
OFFICER

ANALABS

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ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

110755.21.05757

13/11/91

N 01074

3 OF 3

TUBE No.	SAMPLE No.	Cu	Zn	As	Ag	Pb				
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	100	0.5	5				
24	UNITS	PPM	PPM	PPM	PPM	PPM				
25	METHOD	GA101	GA101	GA101	GA101	GA101				

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

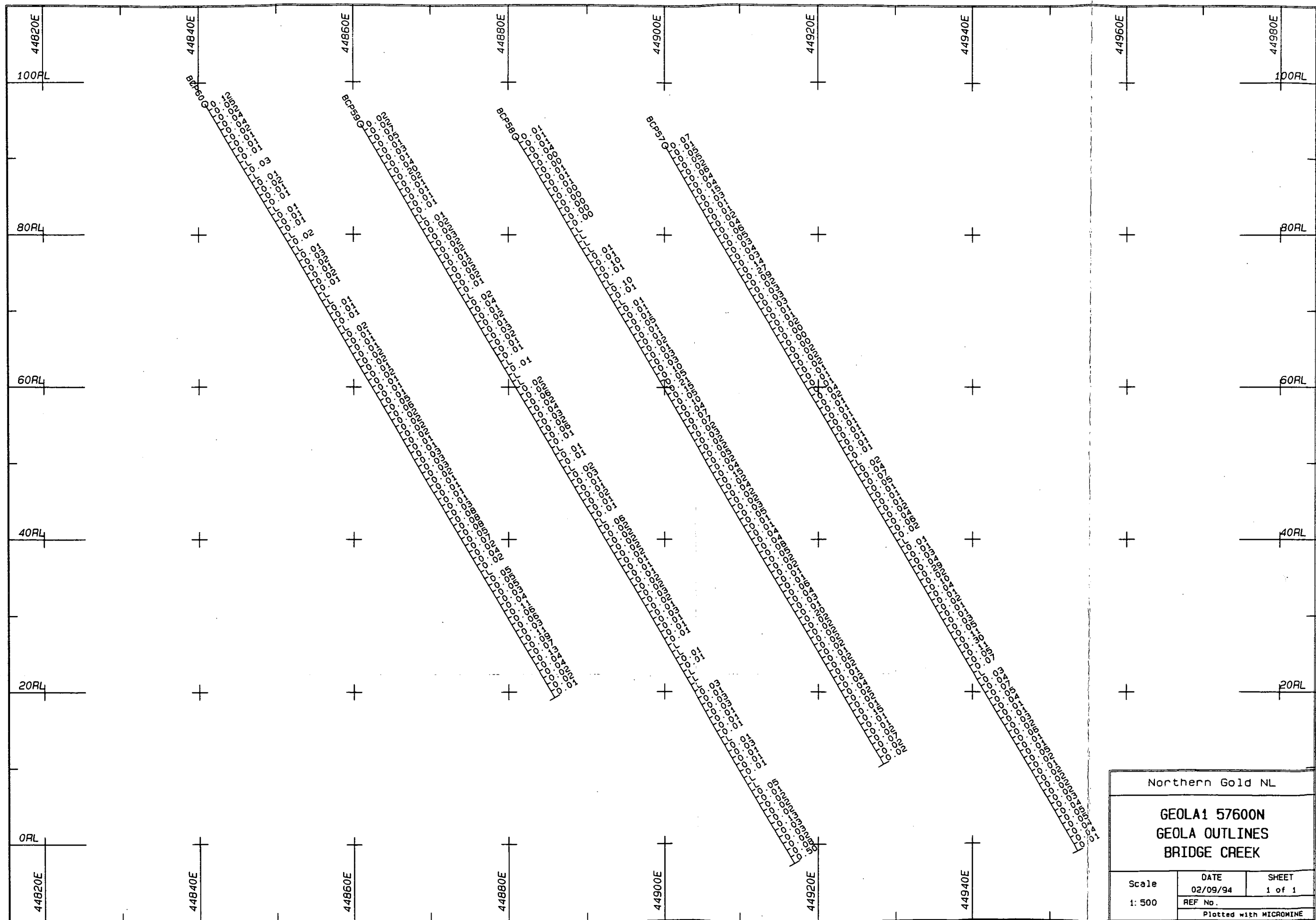
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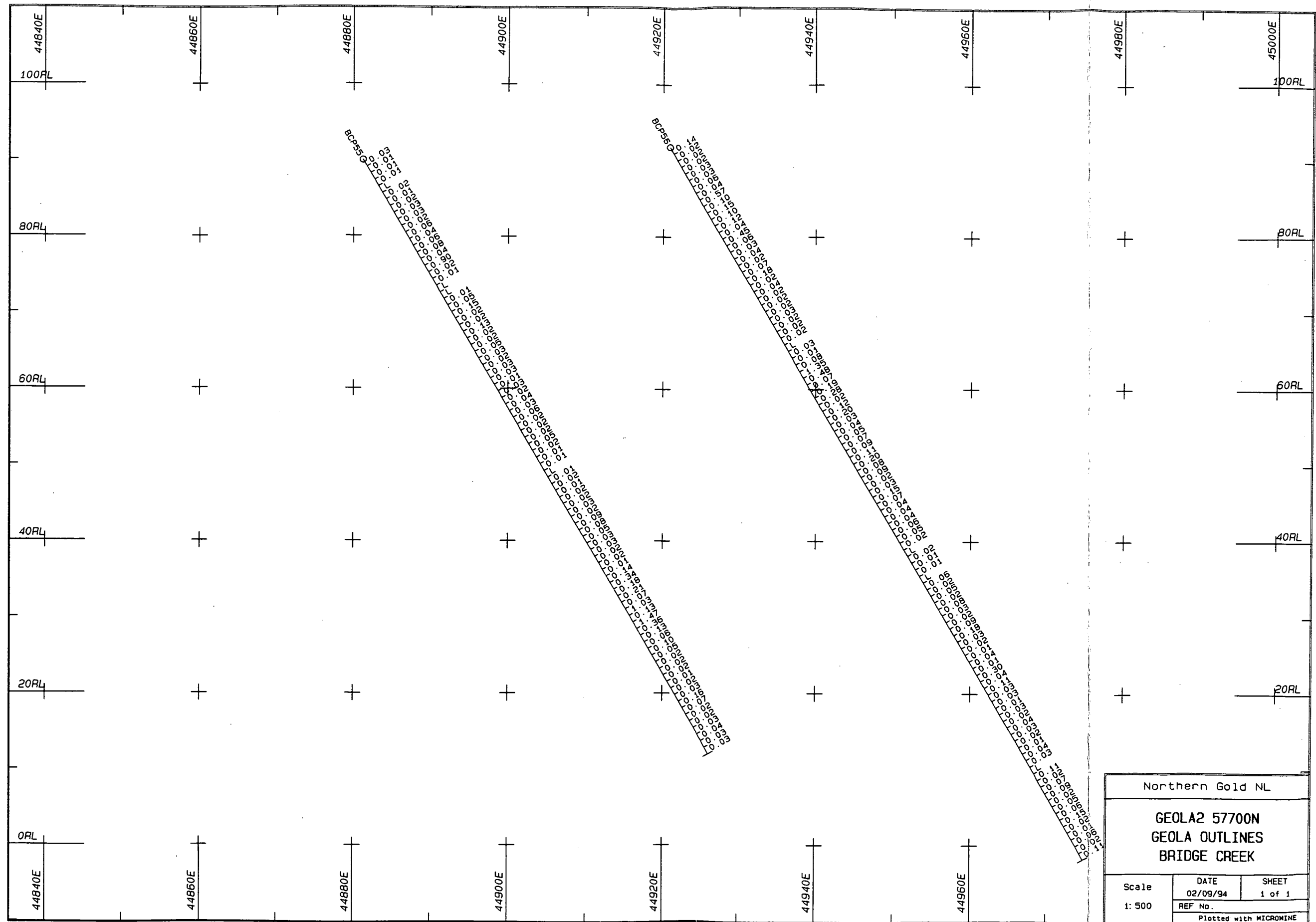
-- = element not determined

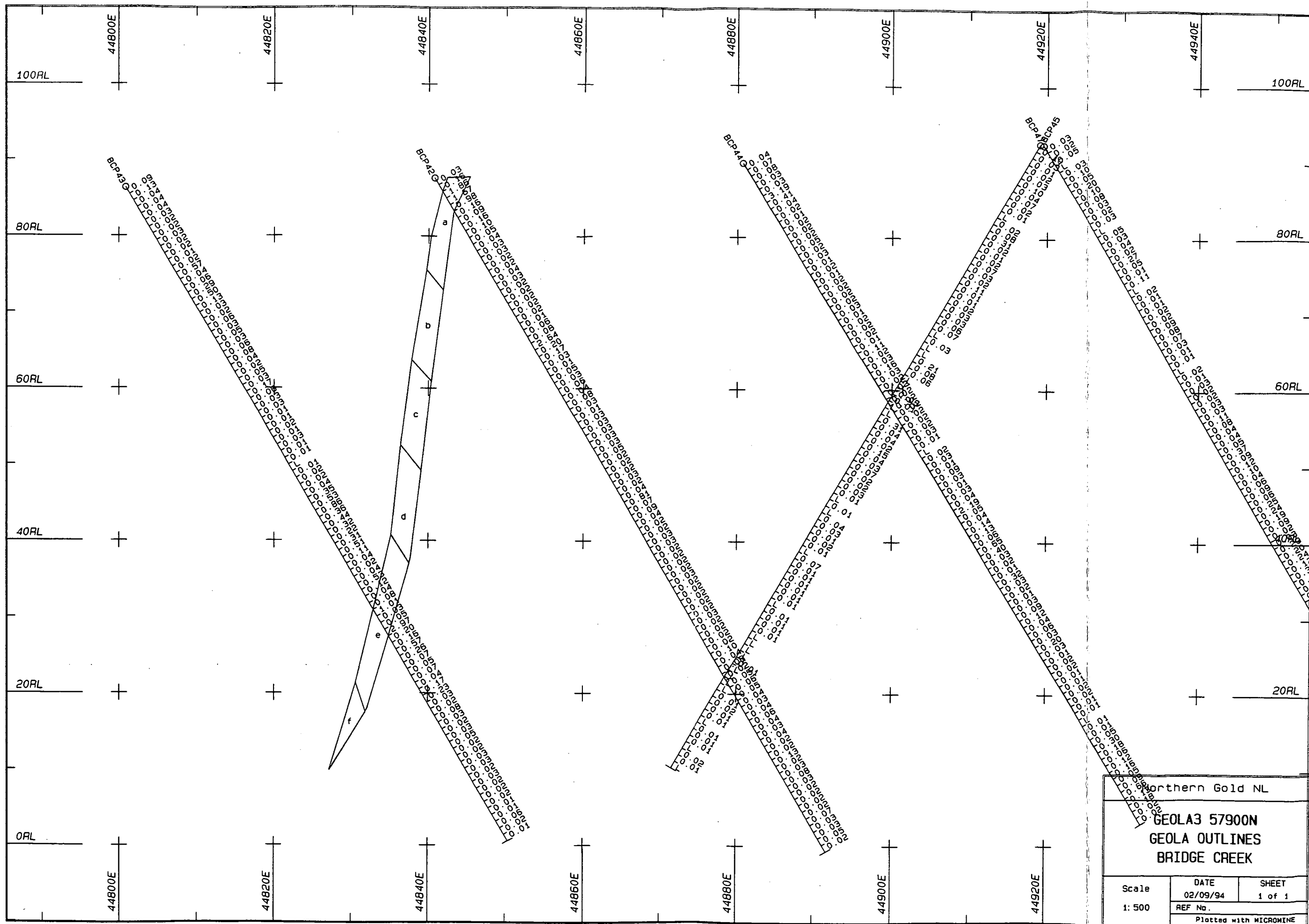
AUTHORISED OFFICER Wayne S. Turner

APPENDIX 8

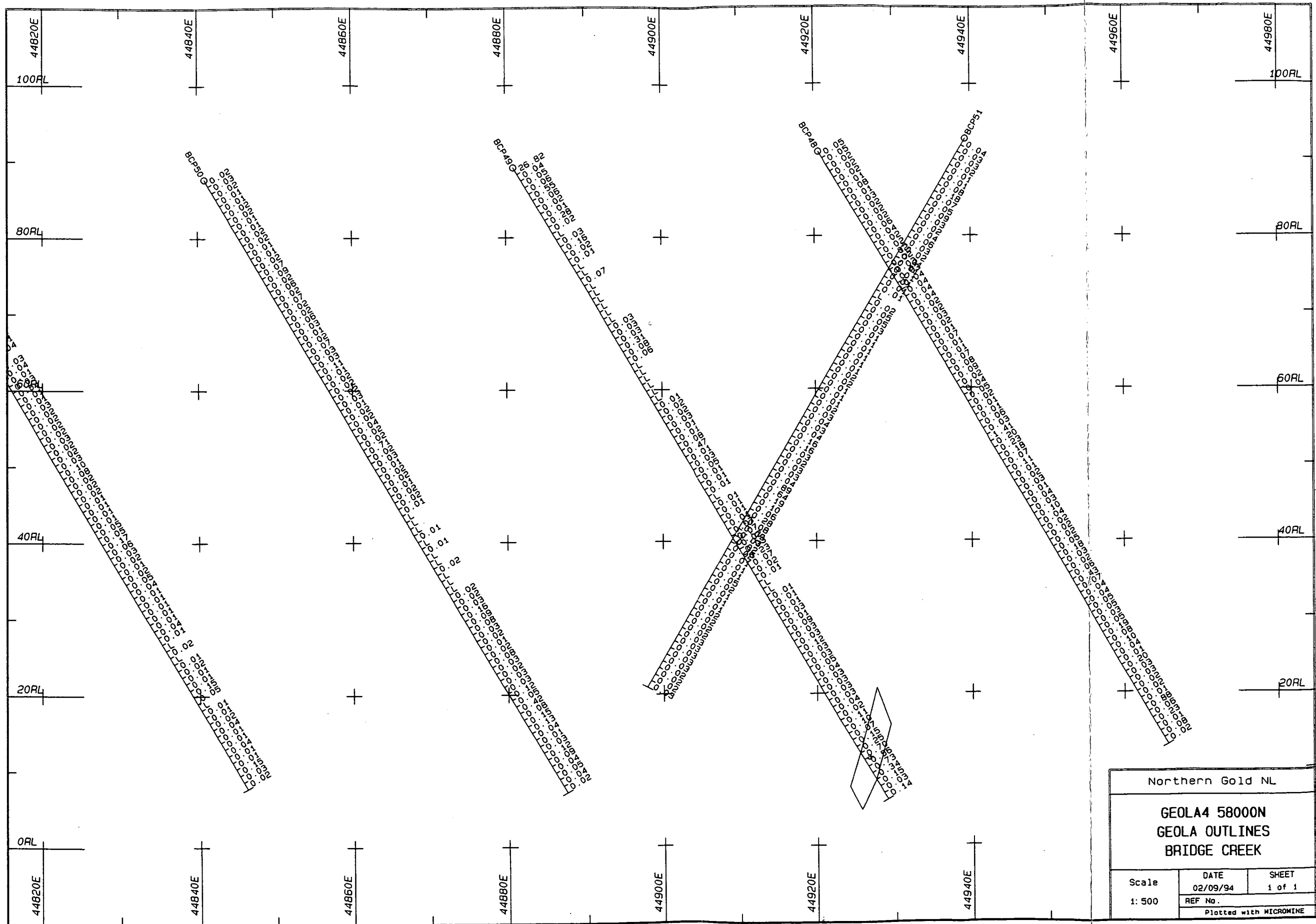
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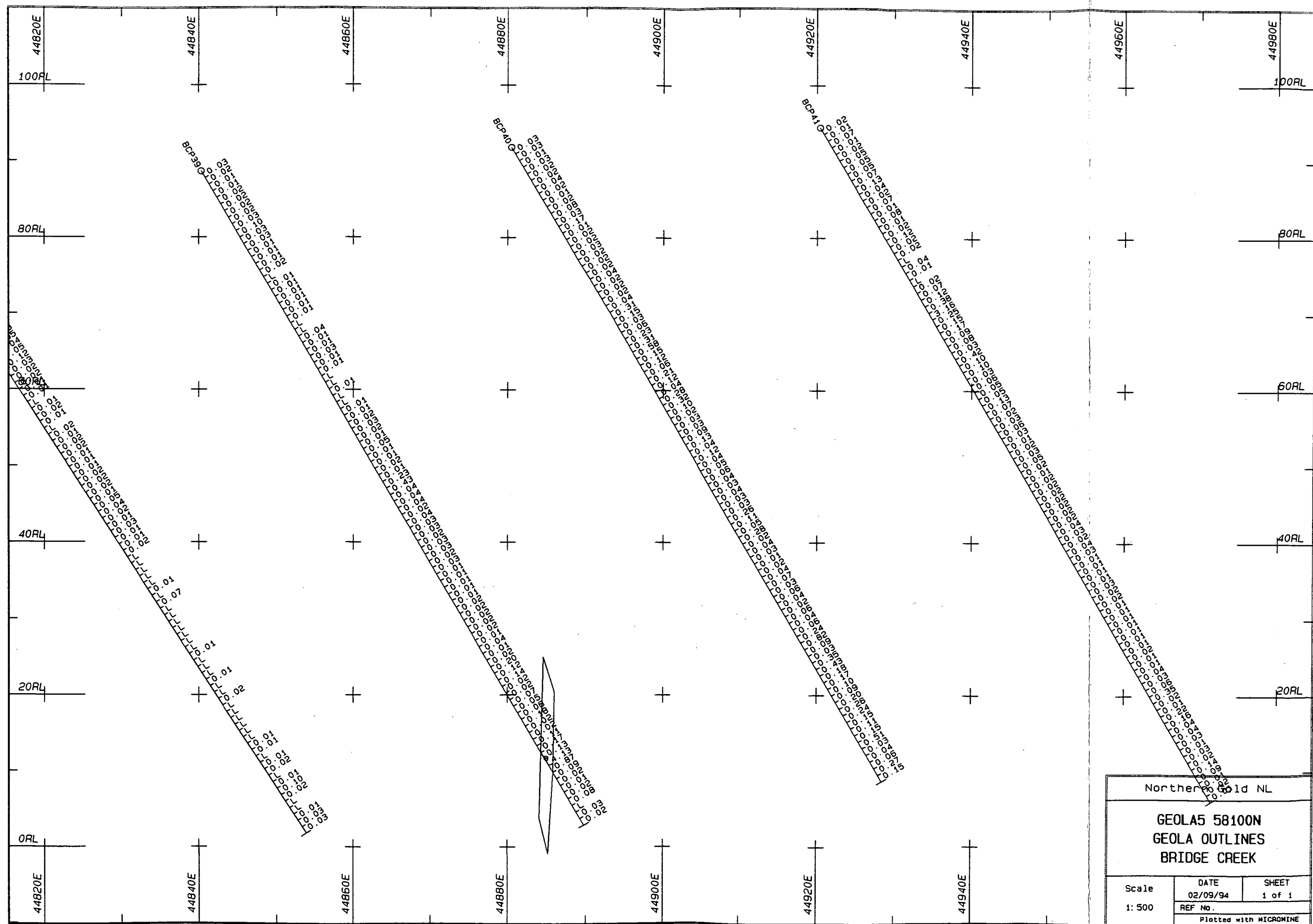




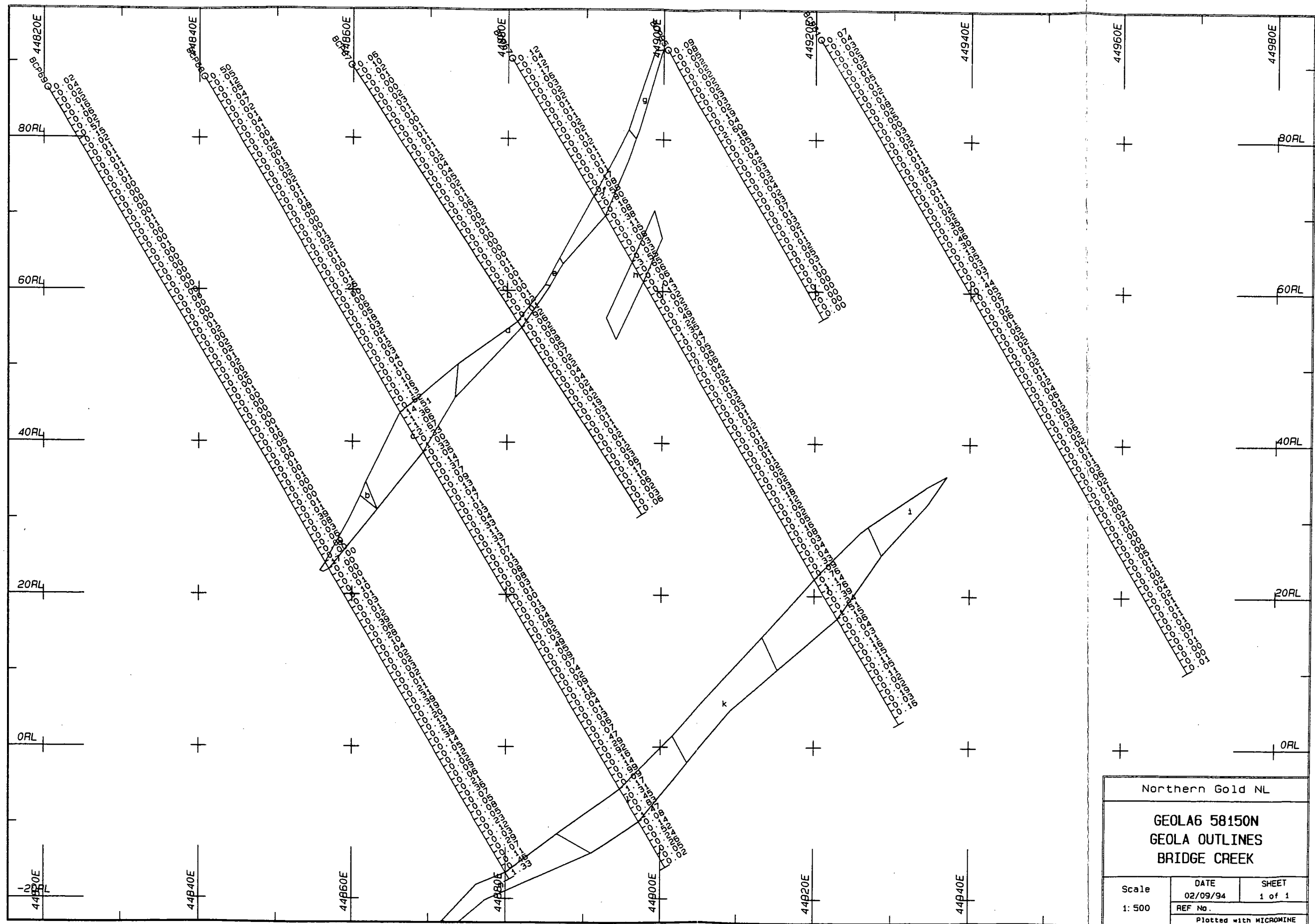
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GEOLA OUTLINES		
BRIDGE CREEK		
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	REF No.	
	Plotted with MICROMINE	

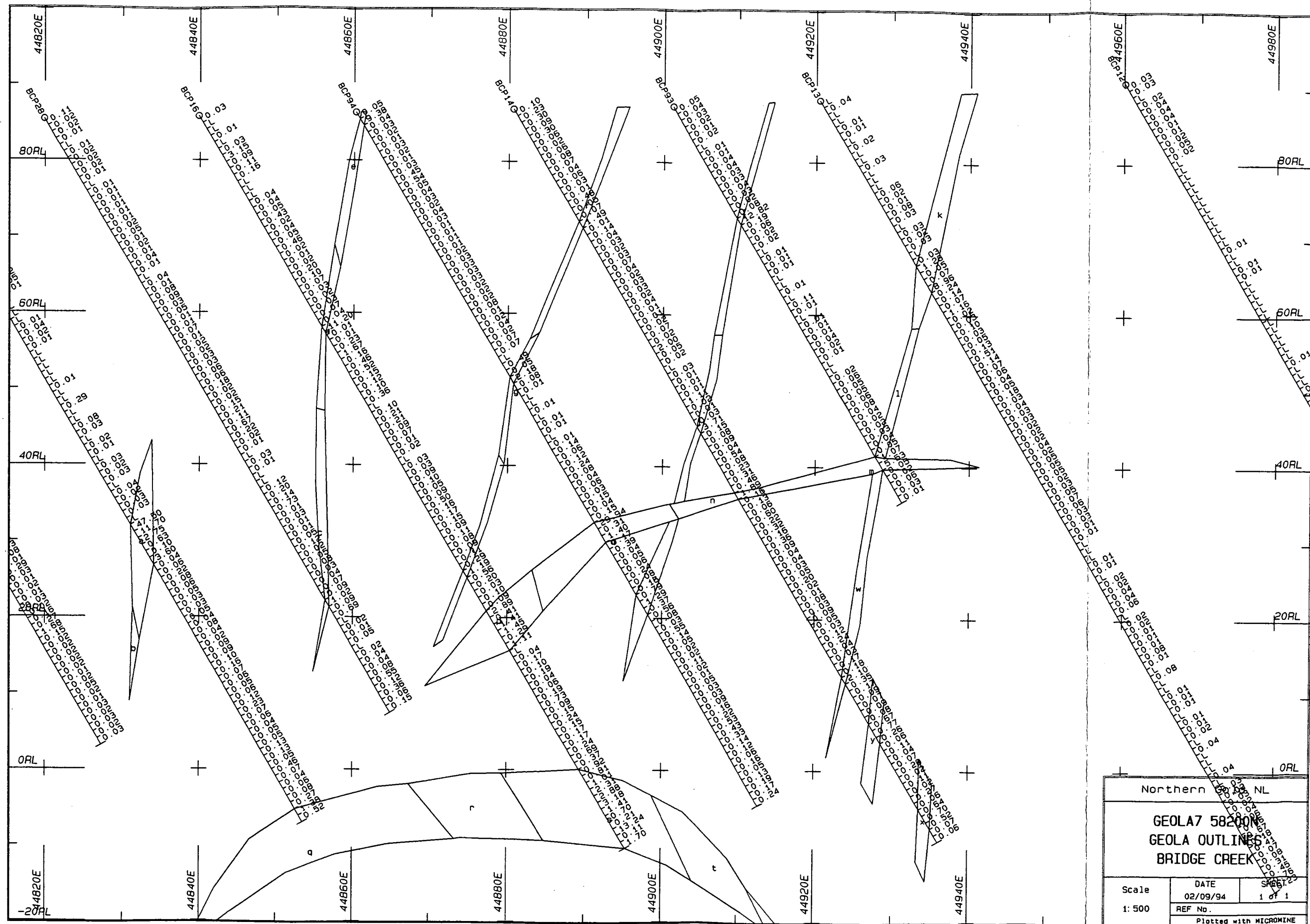


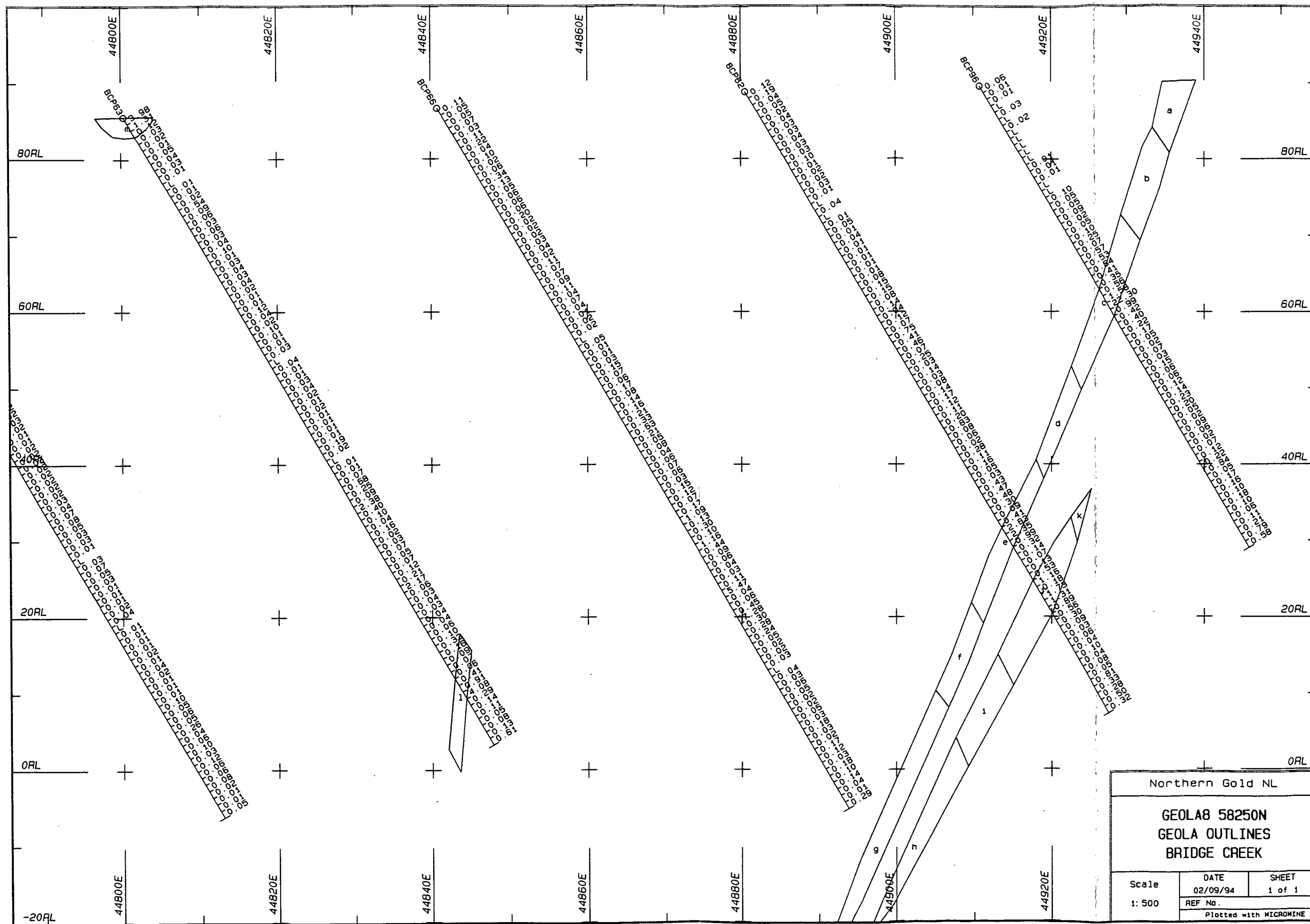
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	REF No. Plotted with MICROMINE	

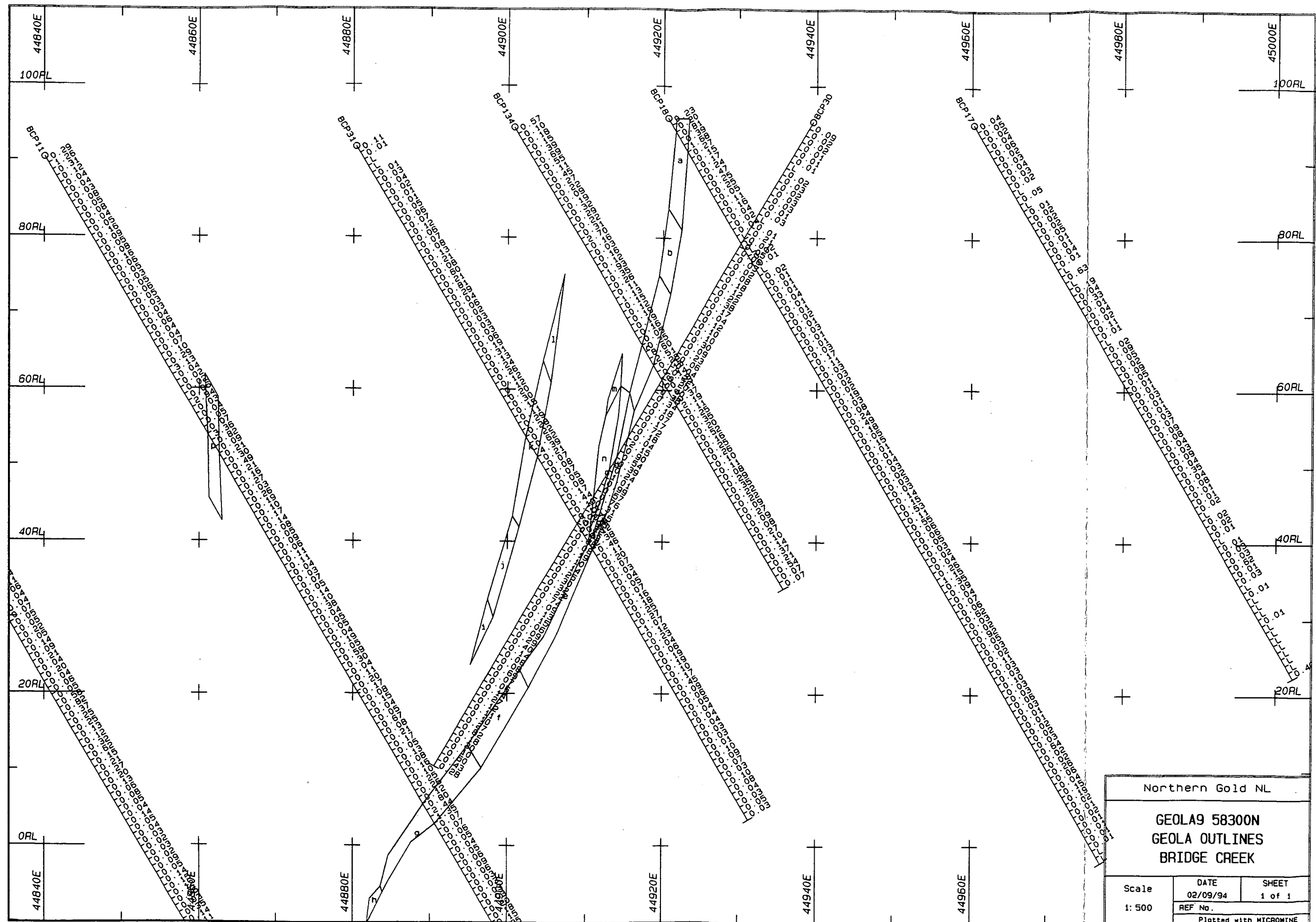


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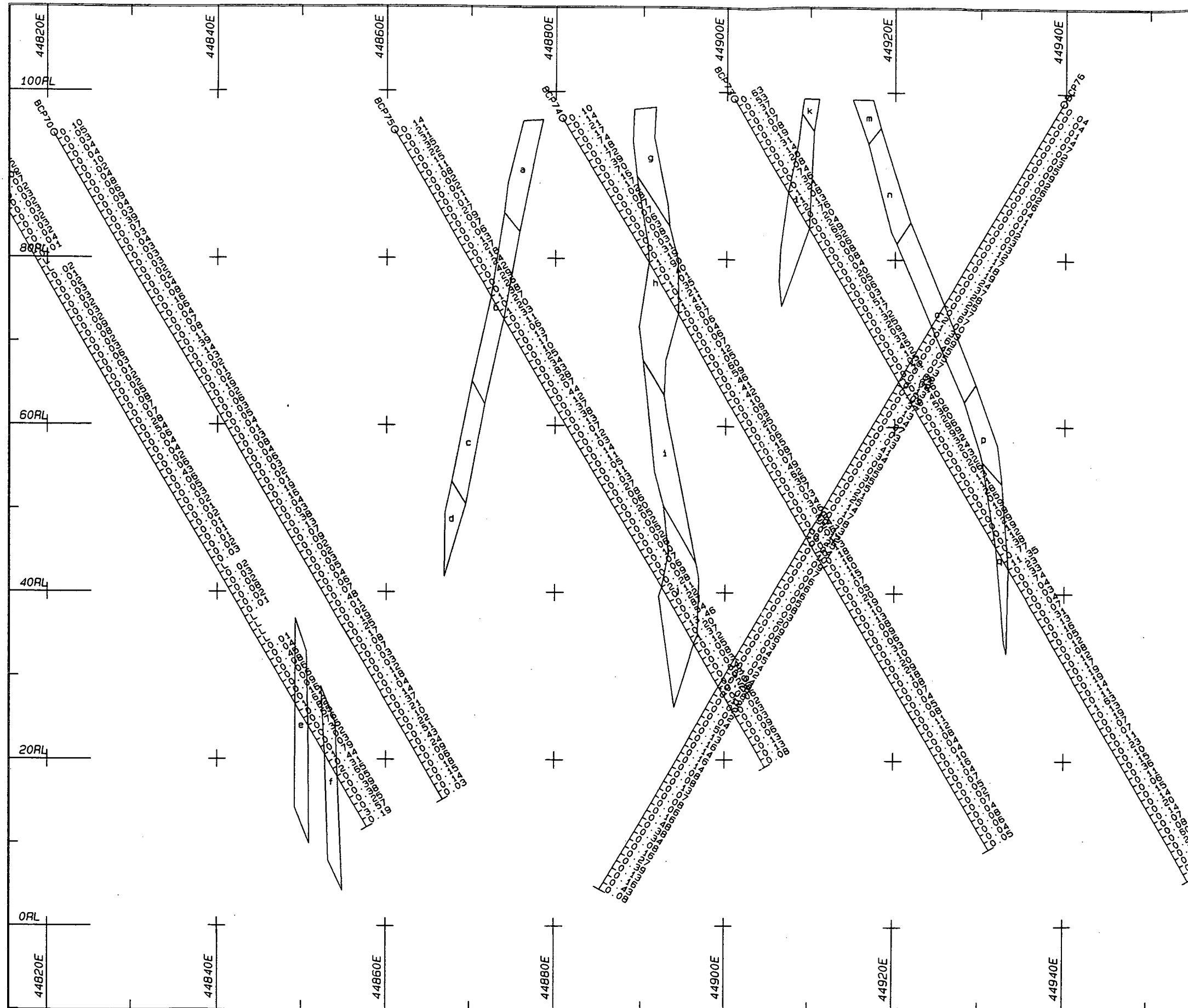




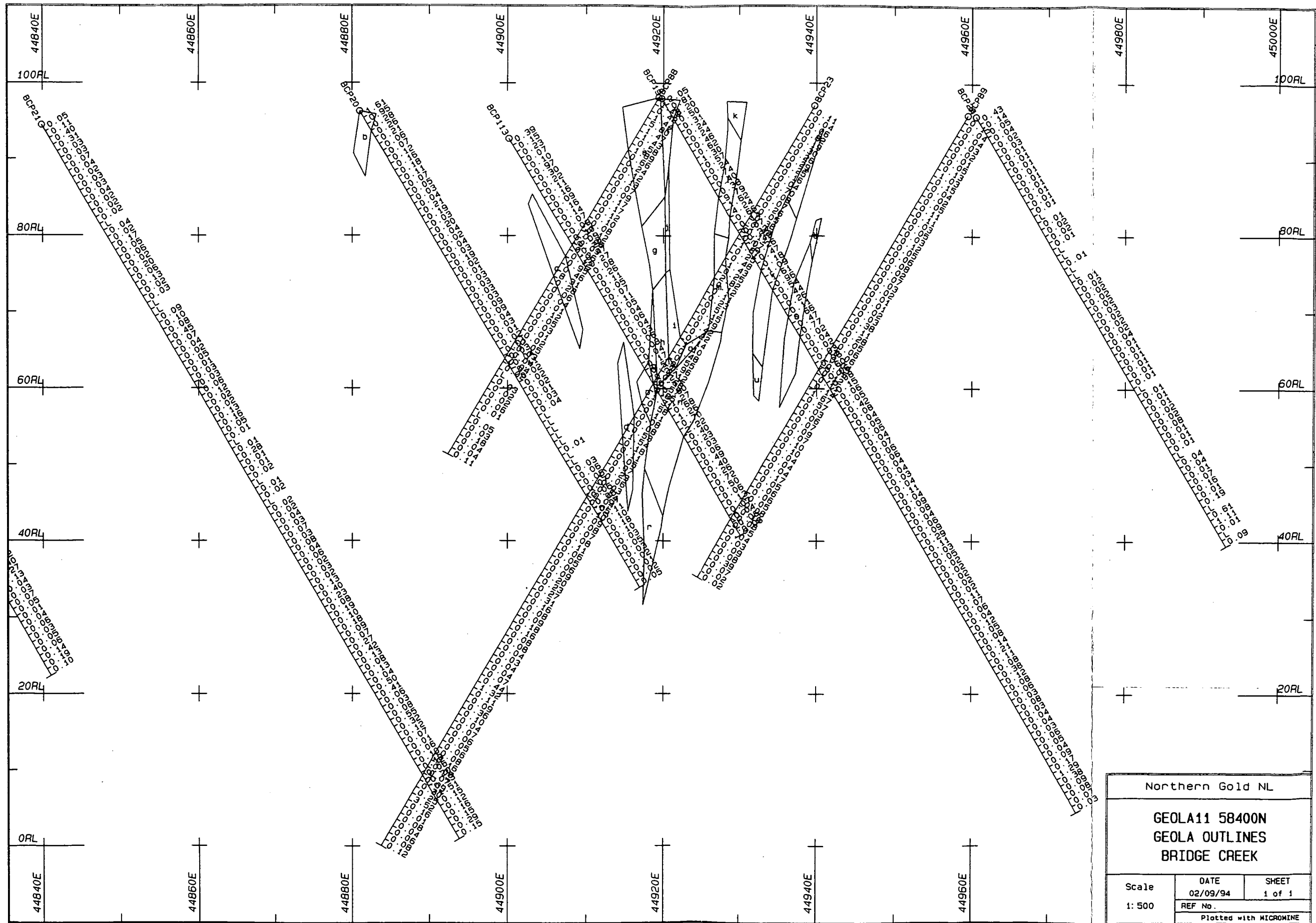


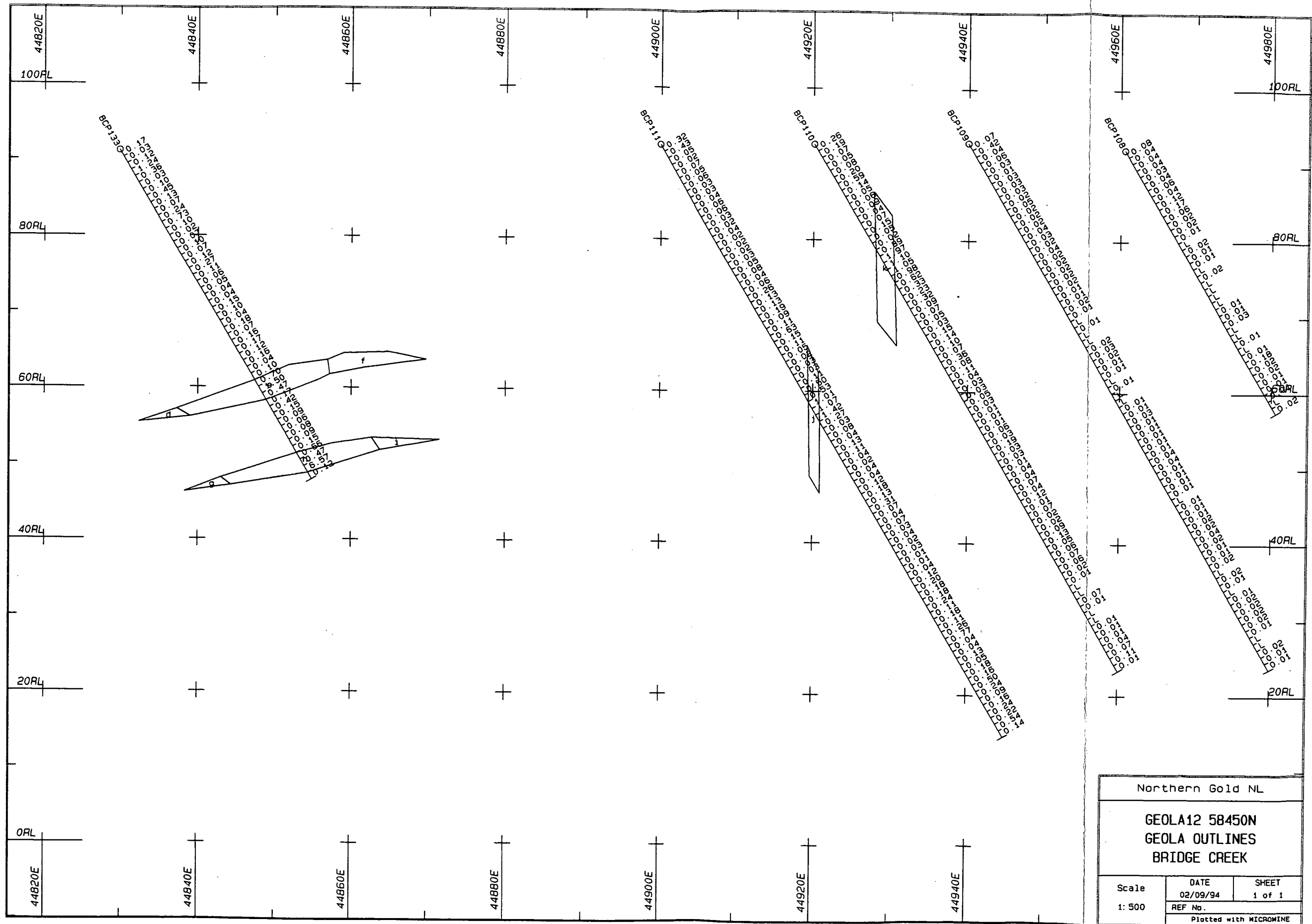


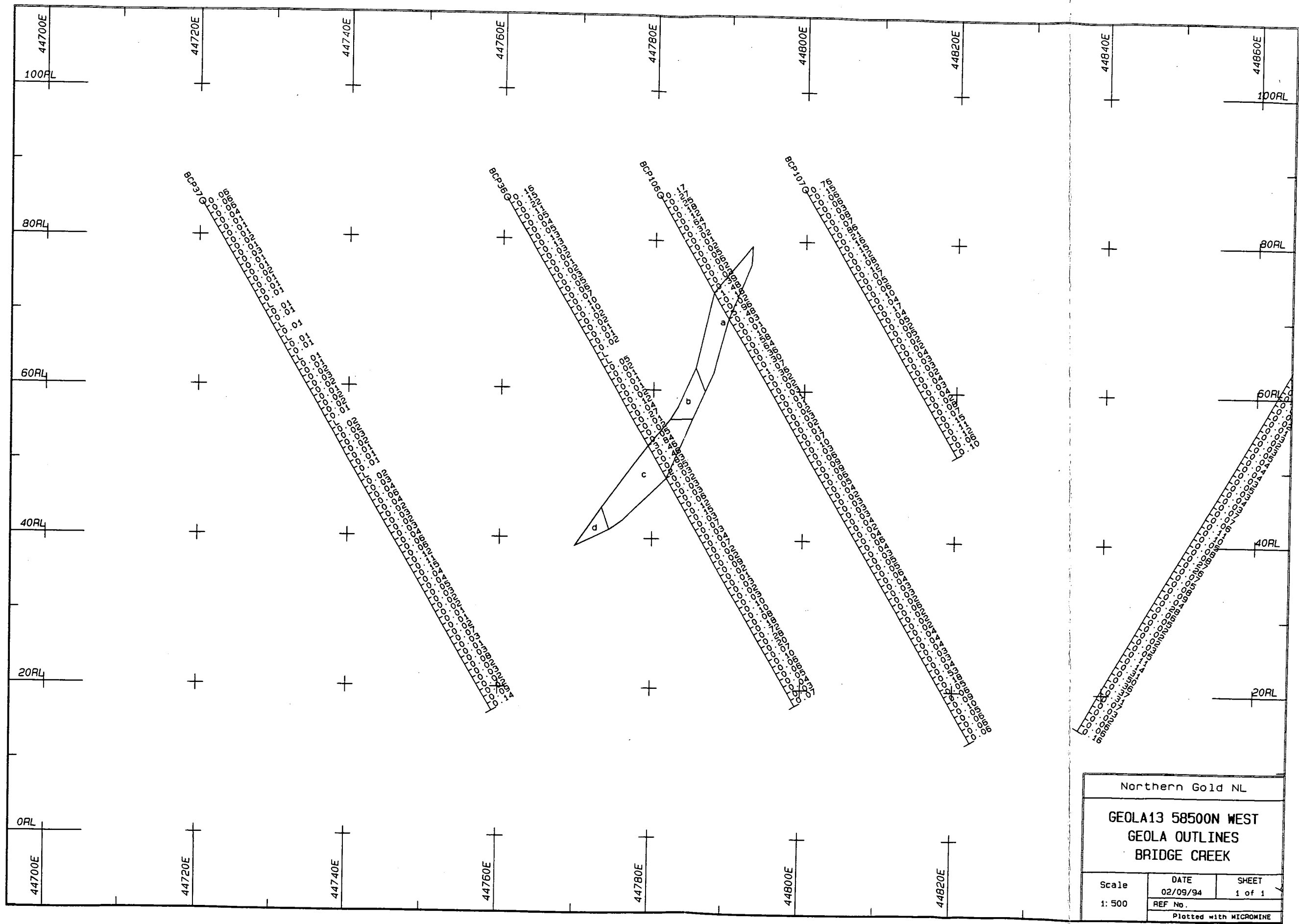
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	Plotted with MICROWINE	



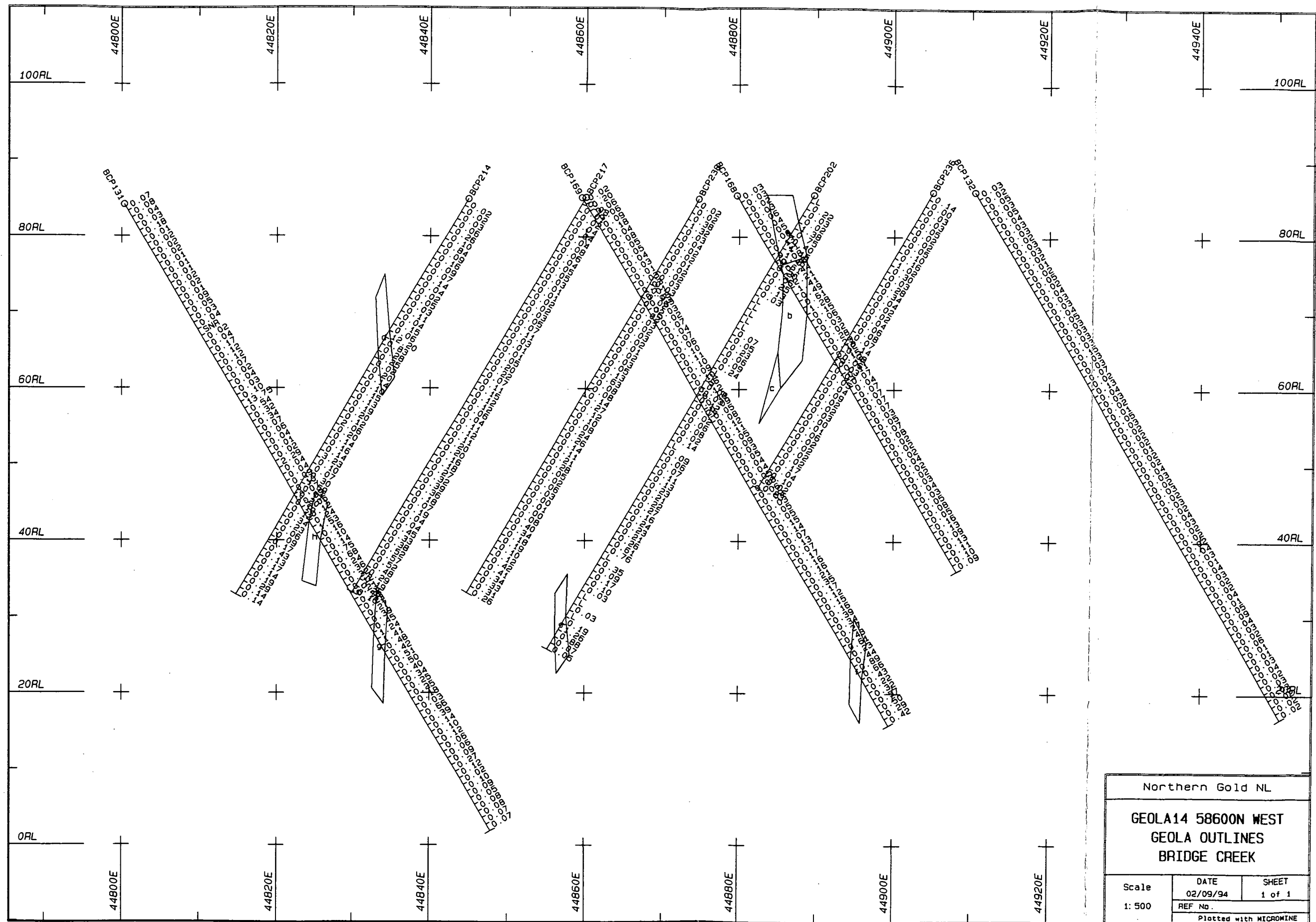
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GEOLA OUTLINES		
BRIDGE CREEK		
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REF No.		
Plotted with MICROMINE		



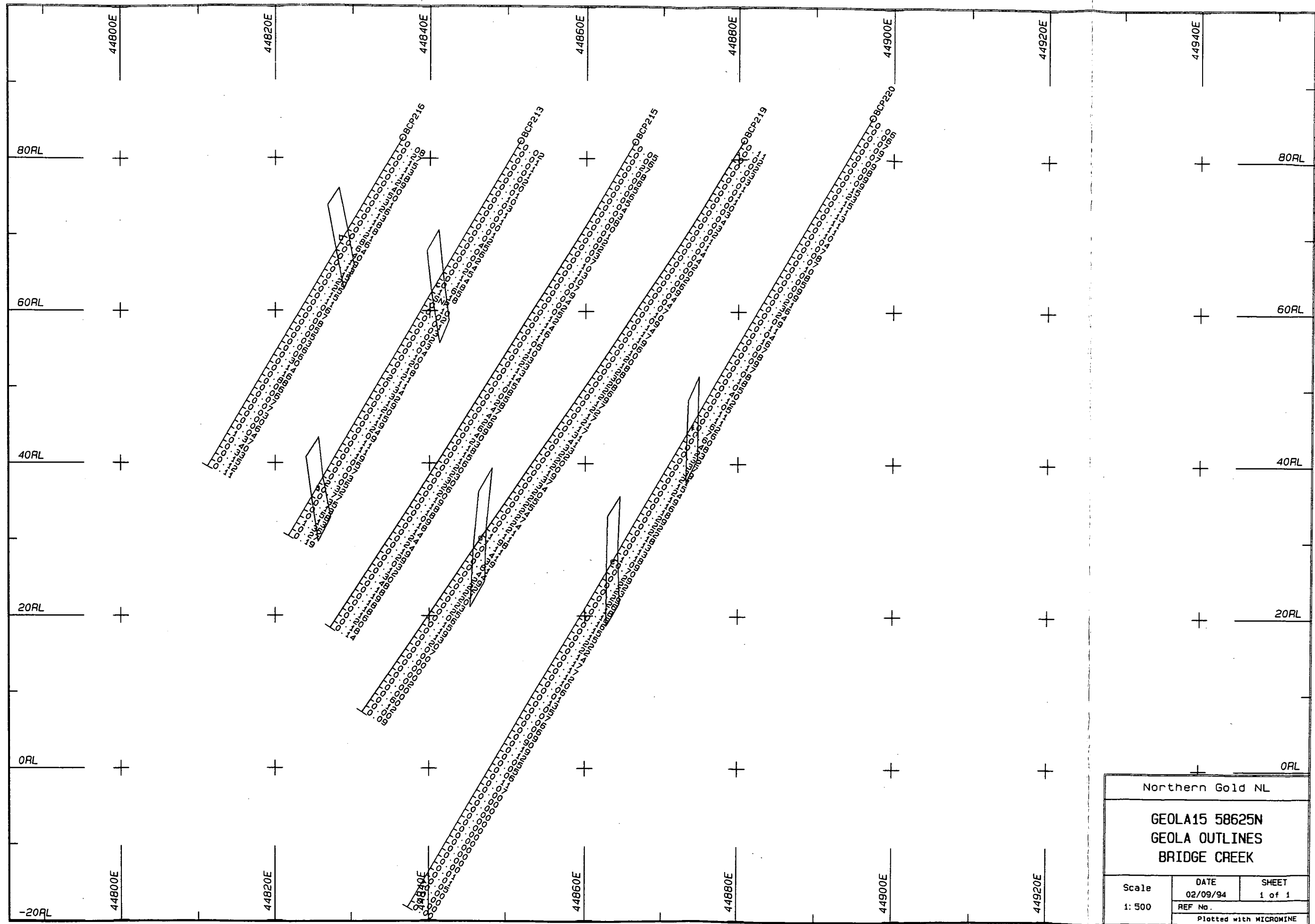


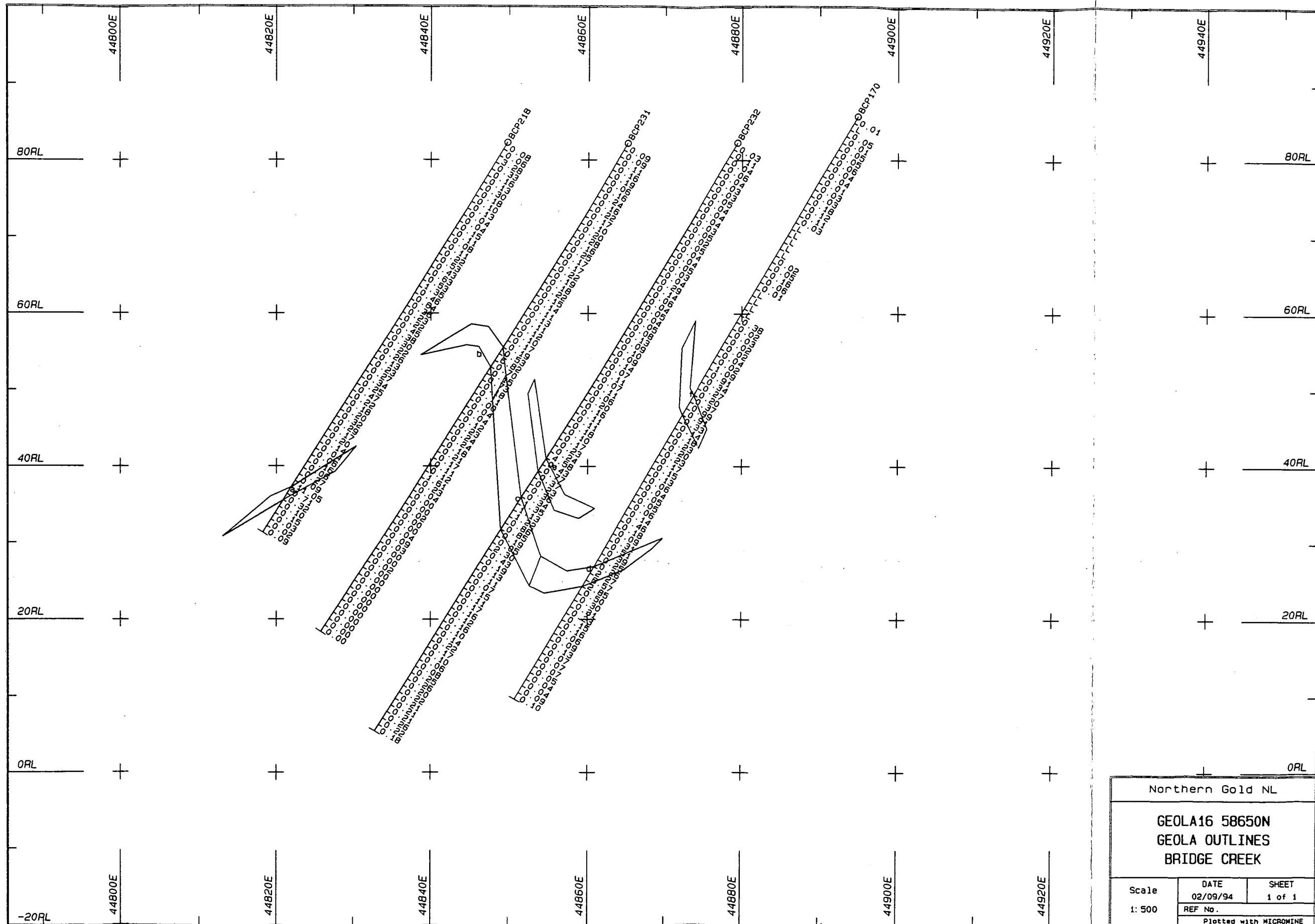


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	REF No.	
	Plotted with MICROMINE	

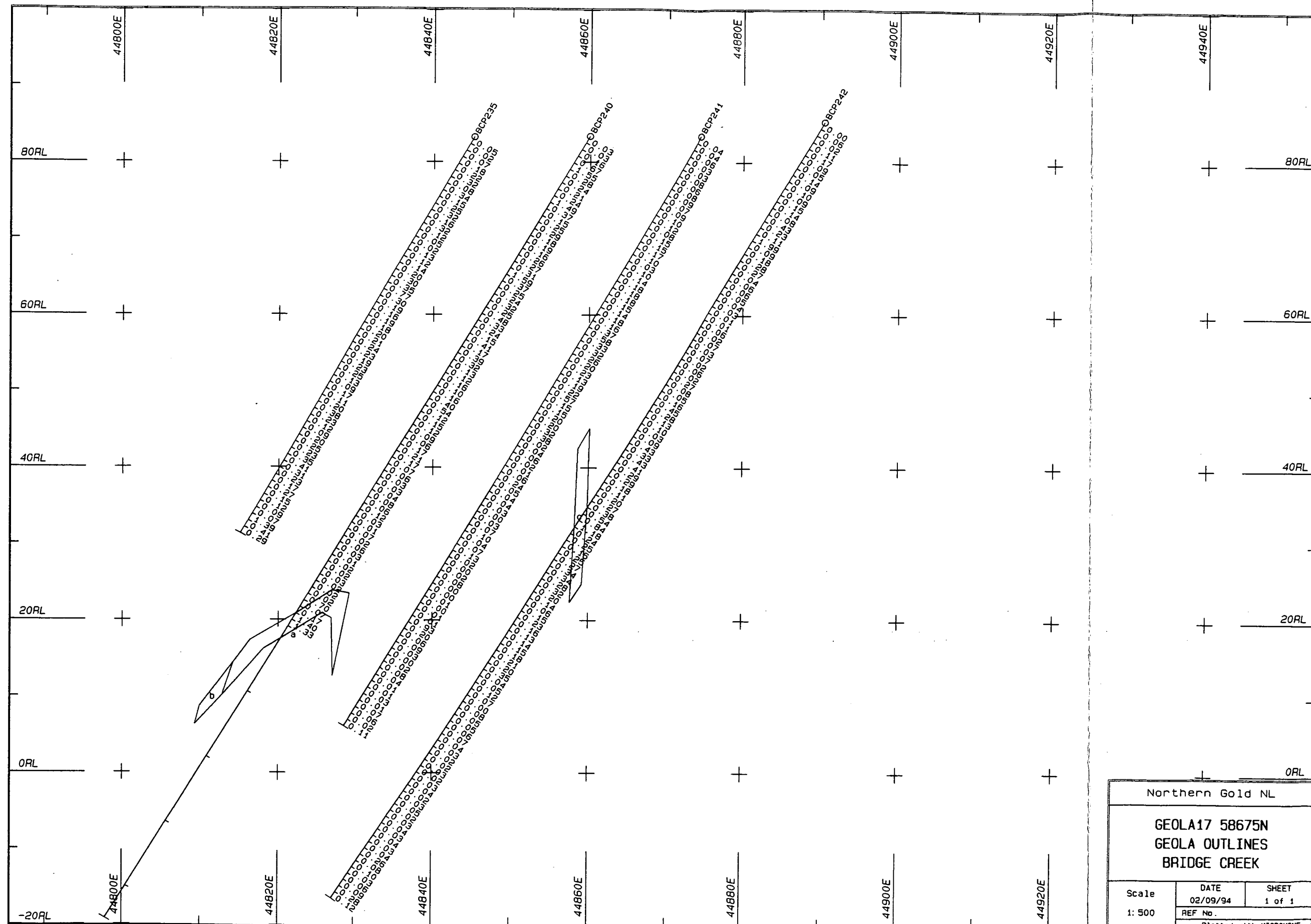


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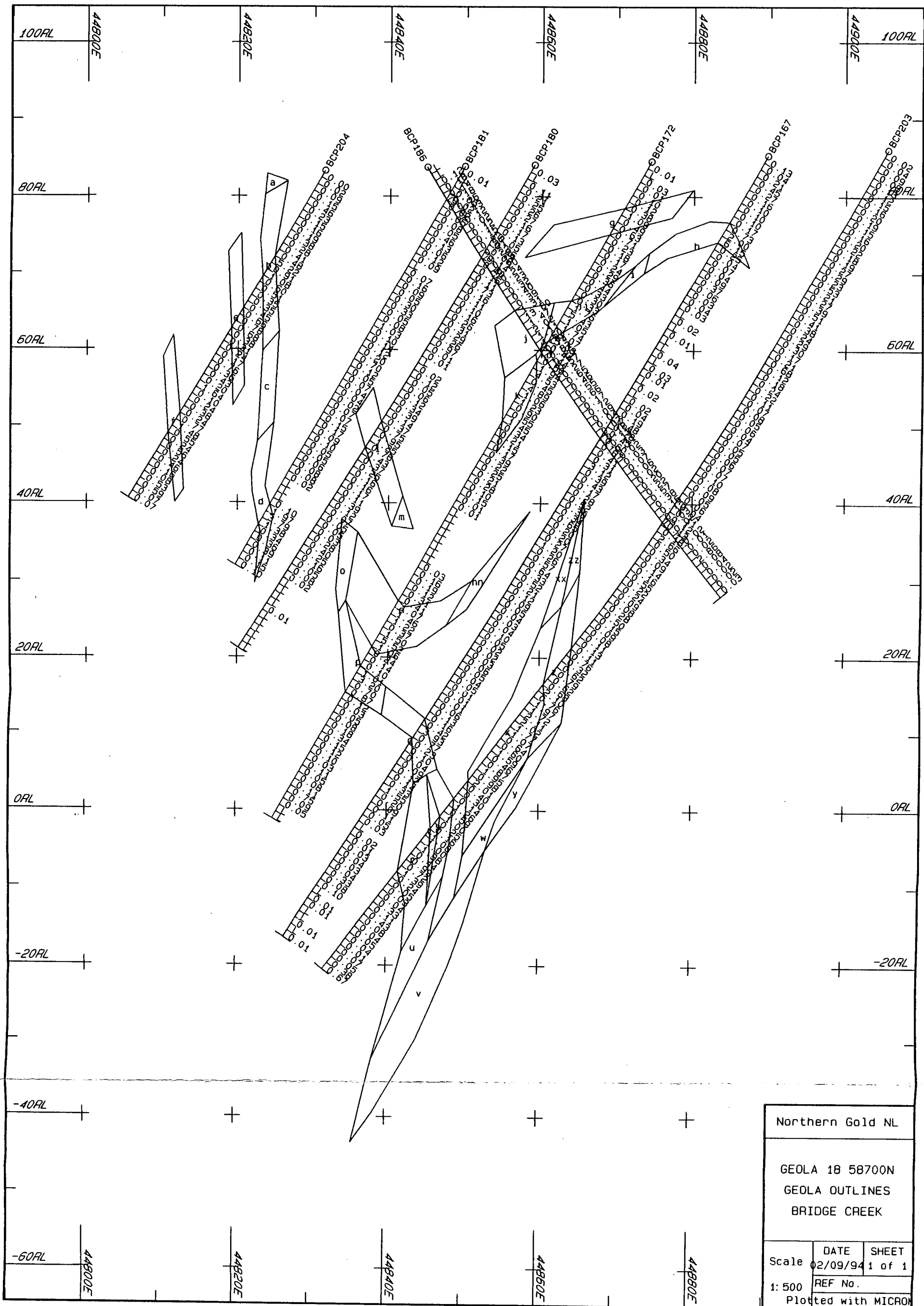


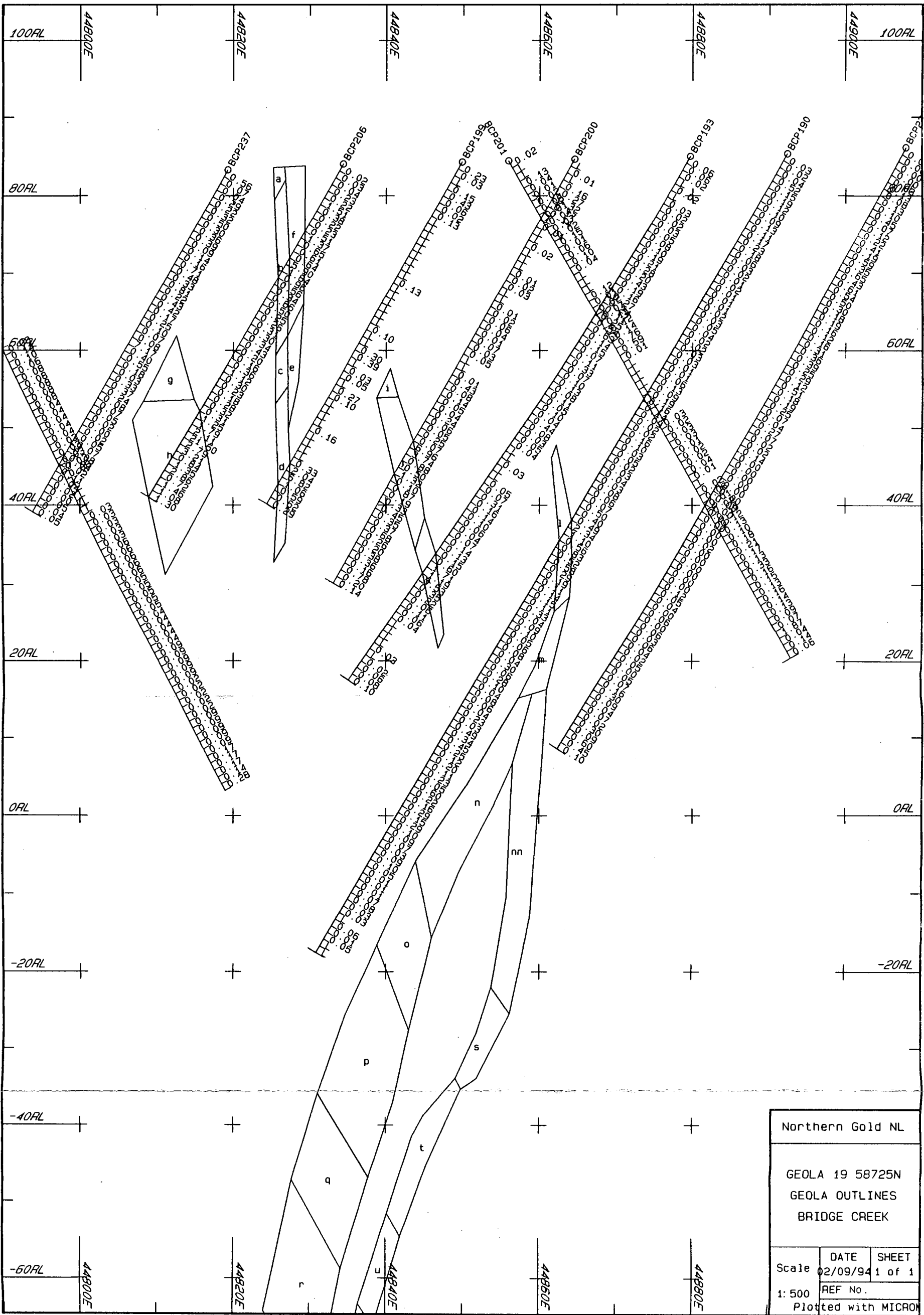


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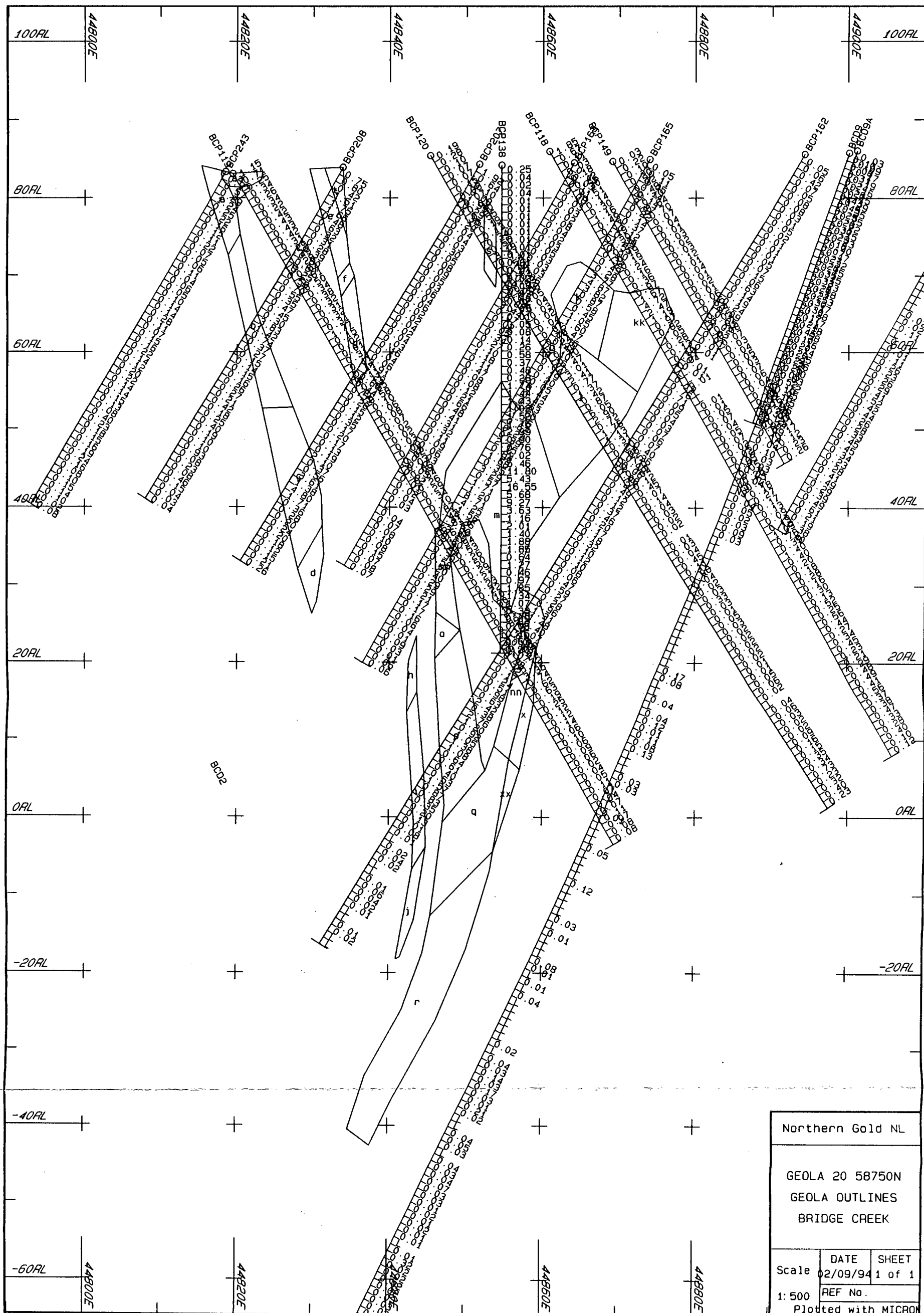


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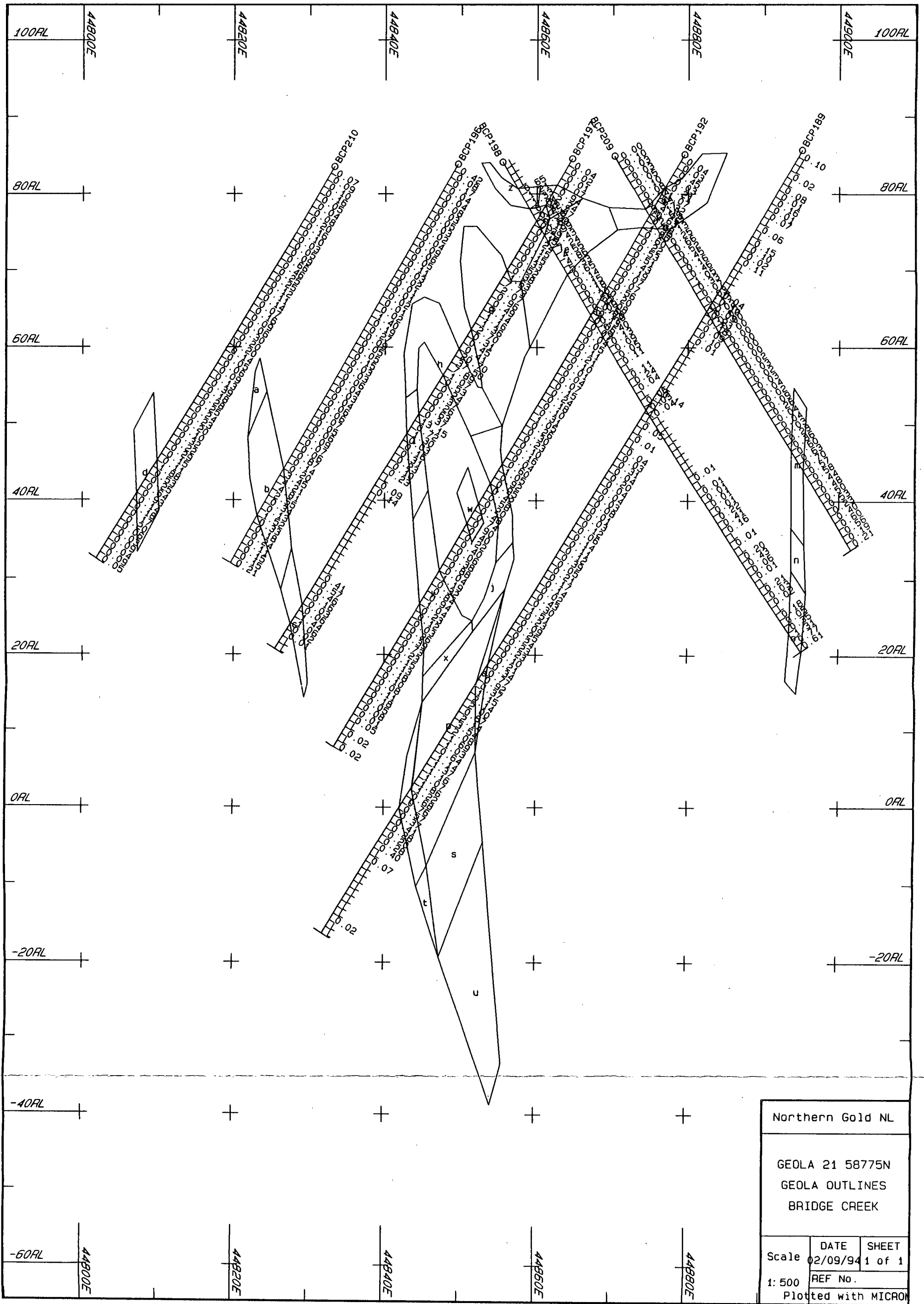


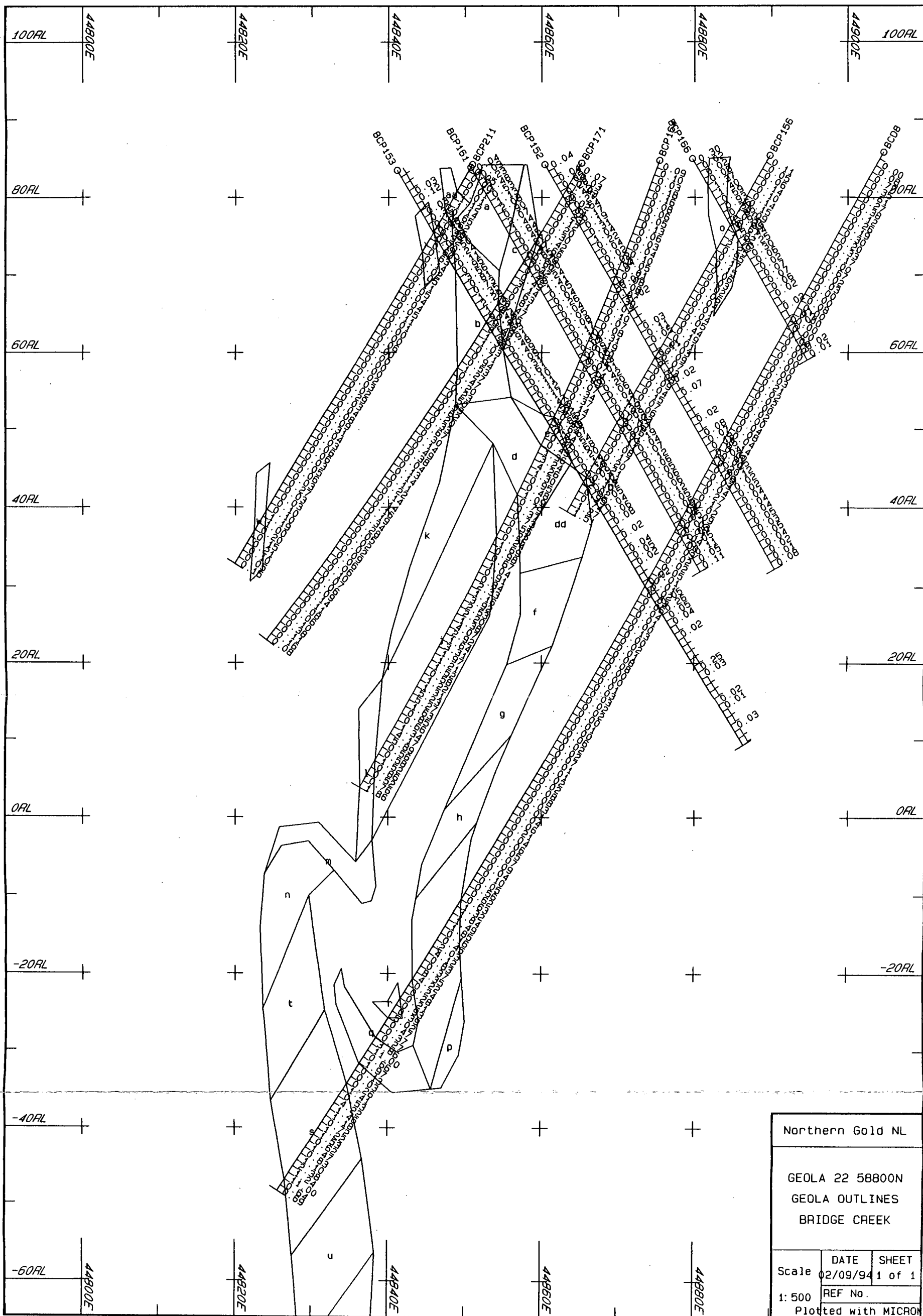


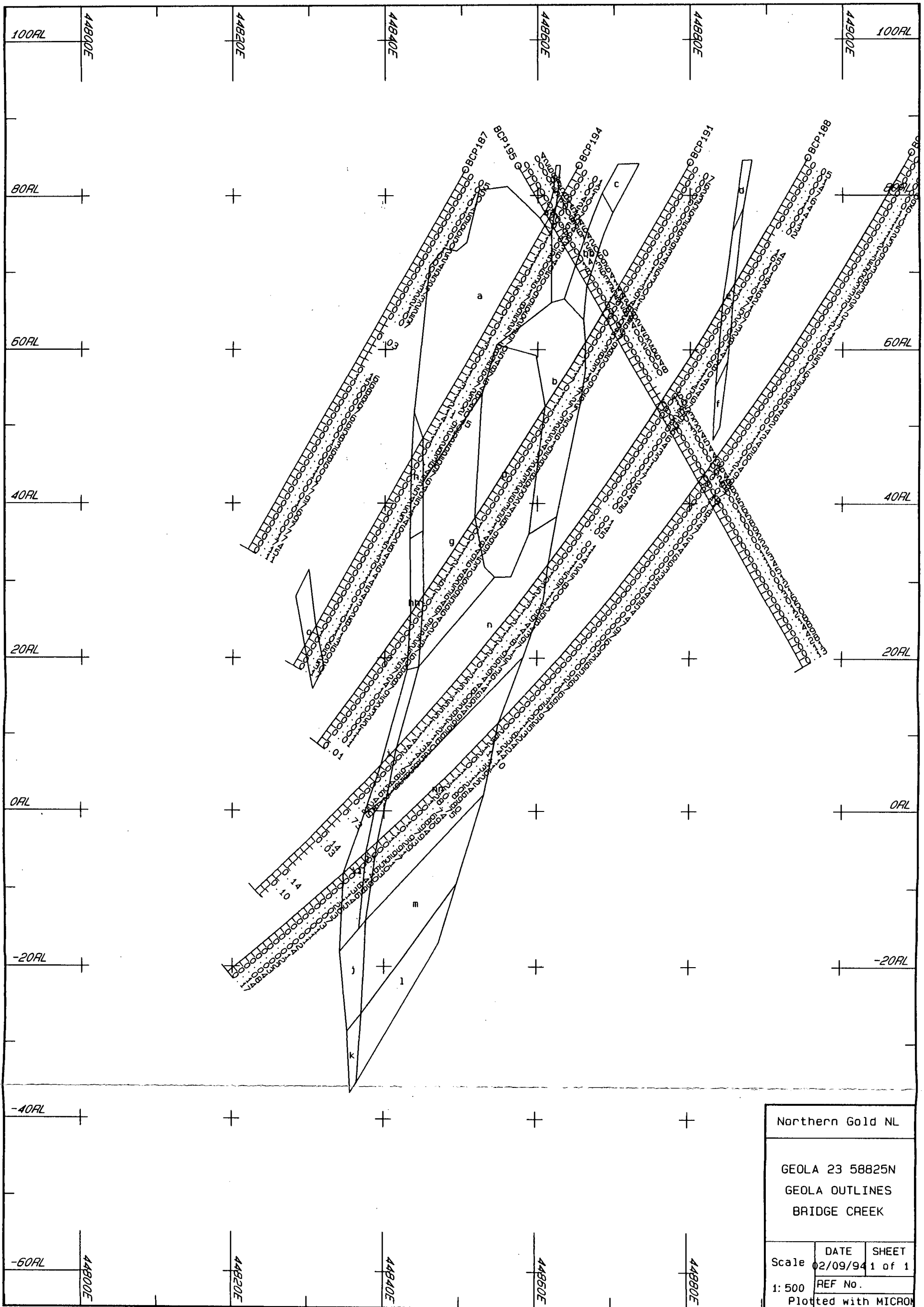
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	REF No. Plotted with MICRON	



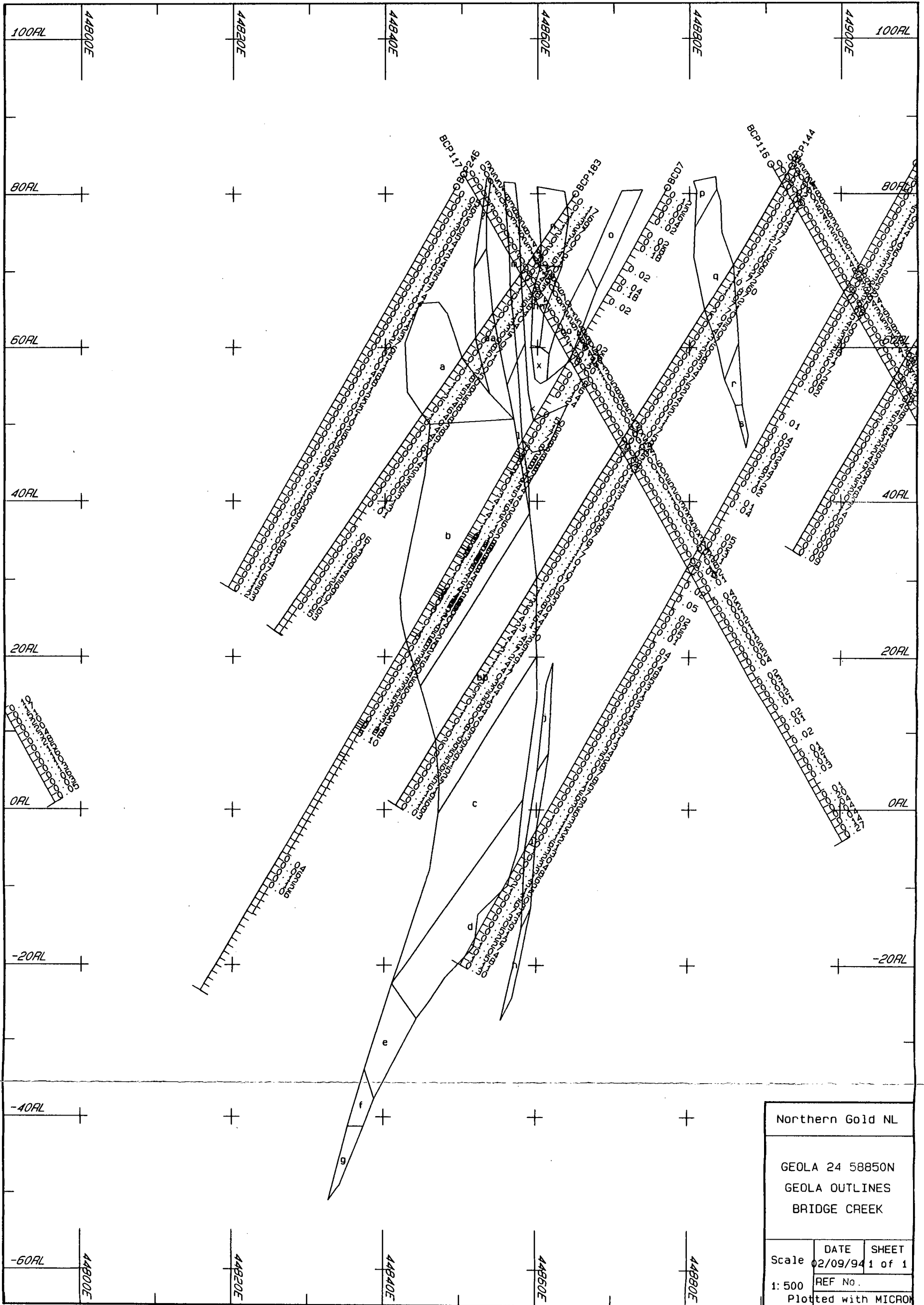
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GEOLA OUTLINES		
BRIDGE CREEK		
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Plotted with MICRON		

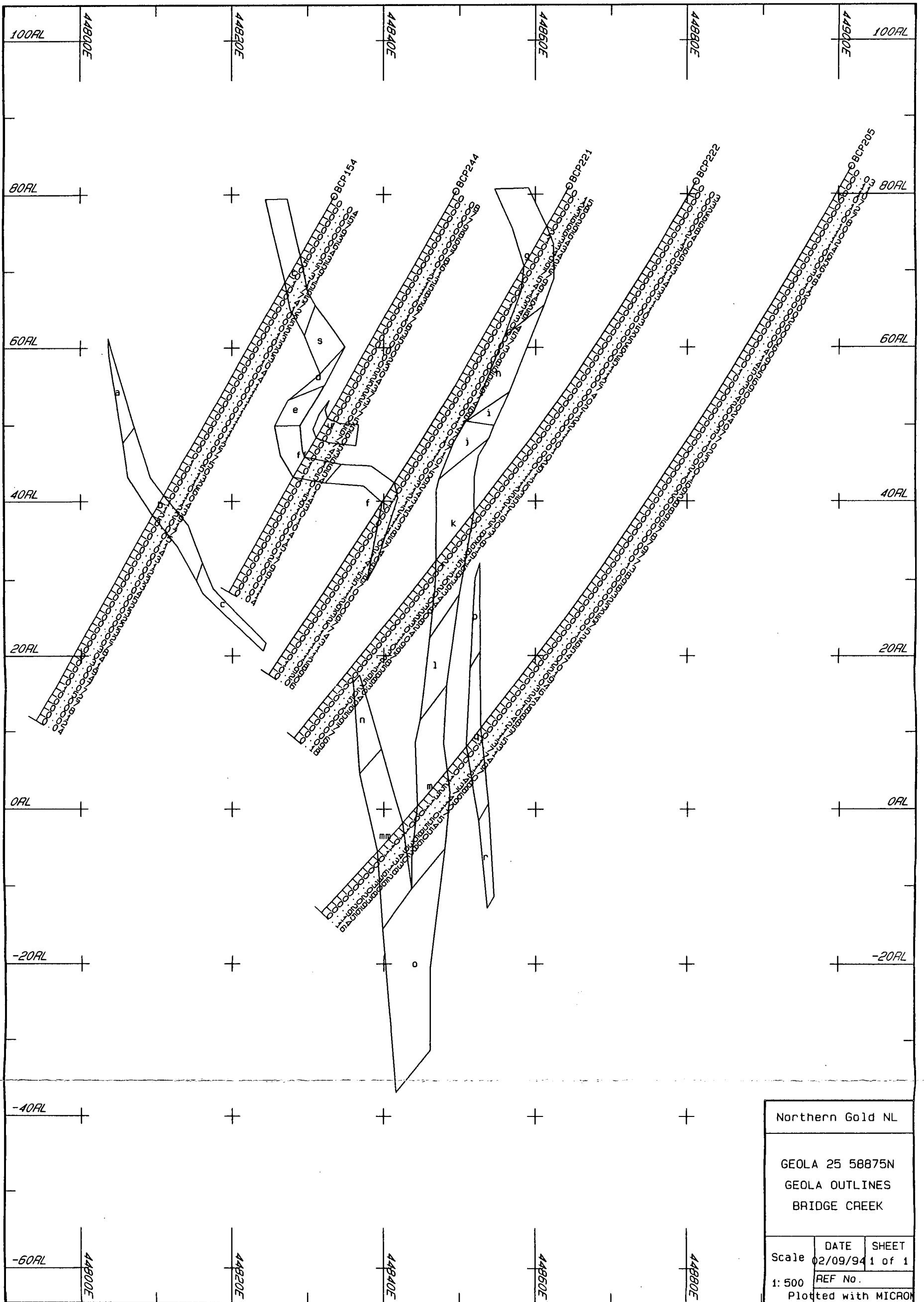




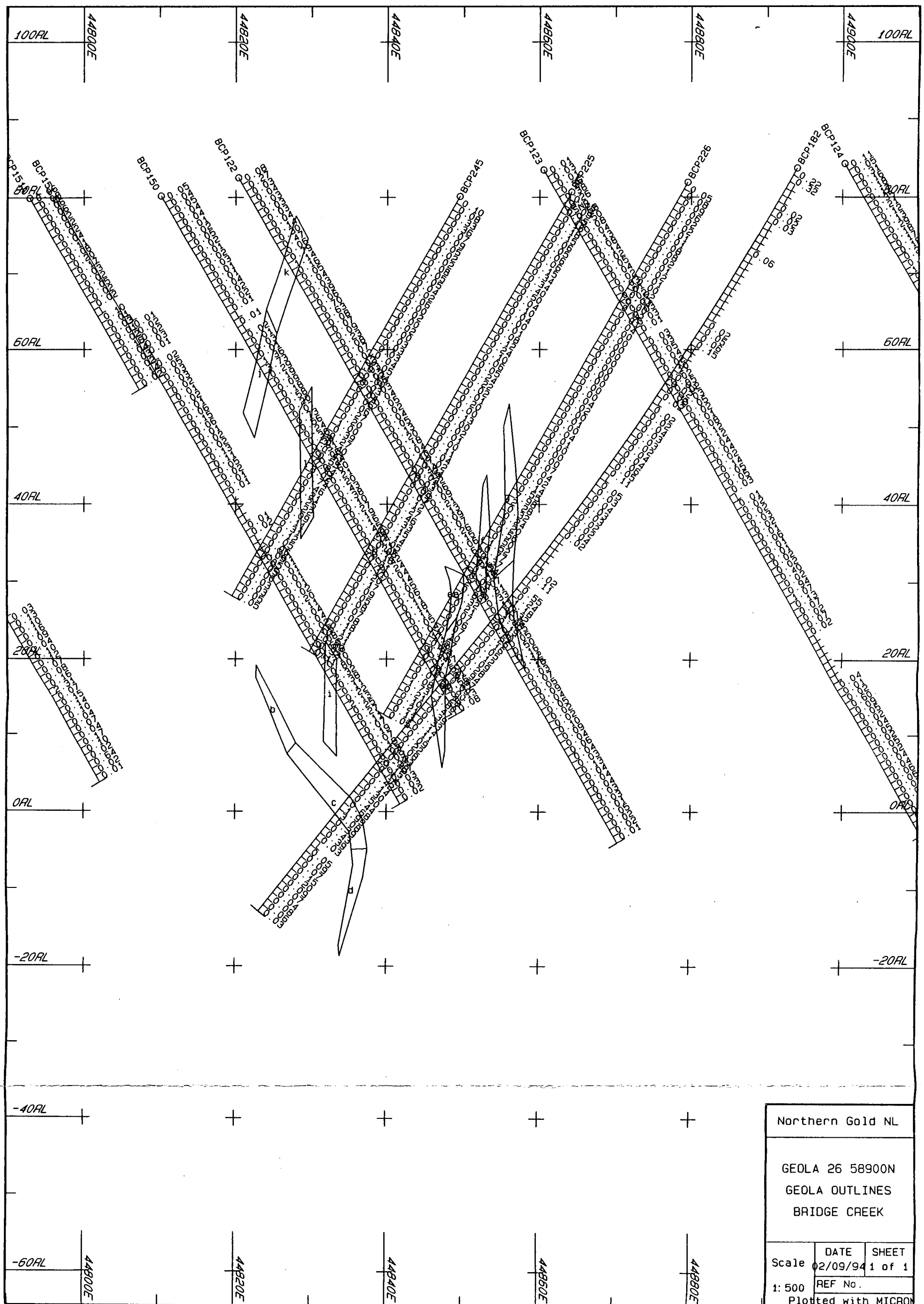


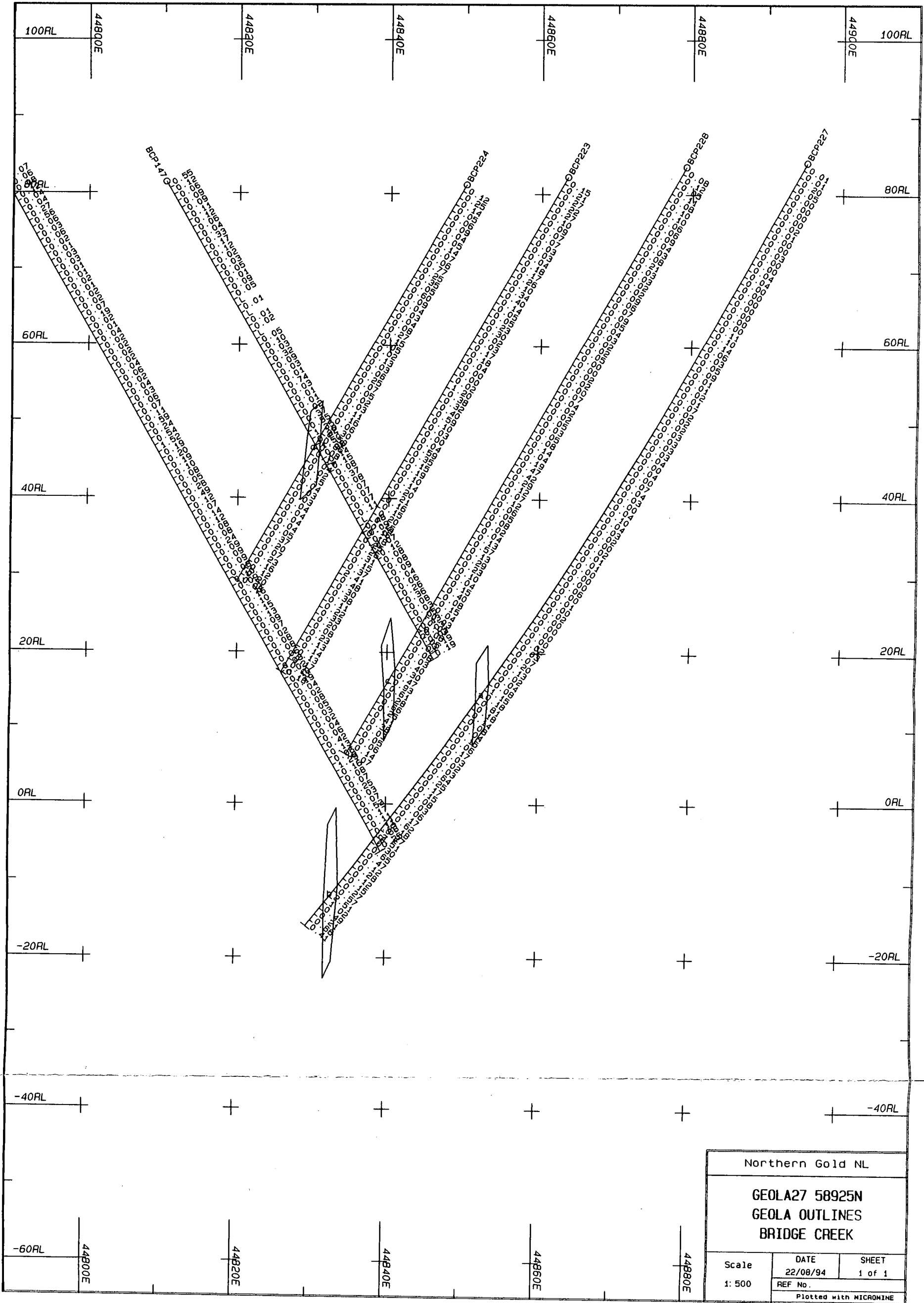
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GEOLA OUTLINES		
BRIDGE CREEK		
Scale	DATE	SHEET
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Plotted with MICRON		

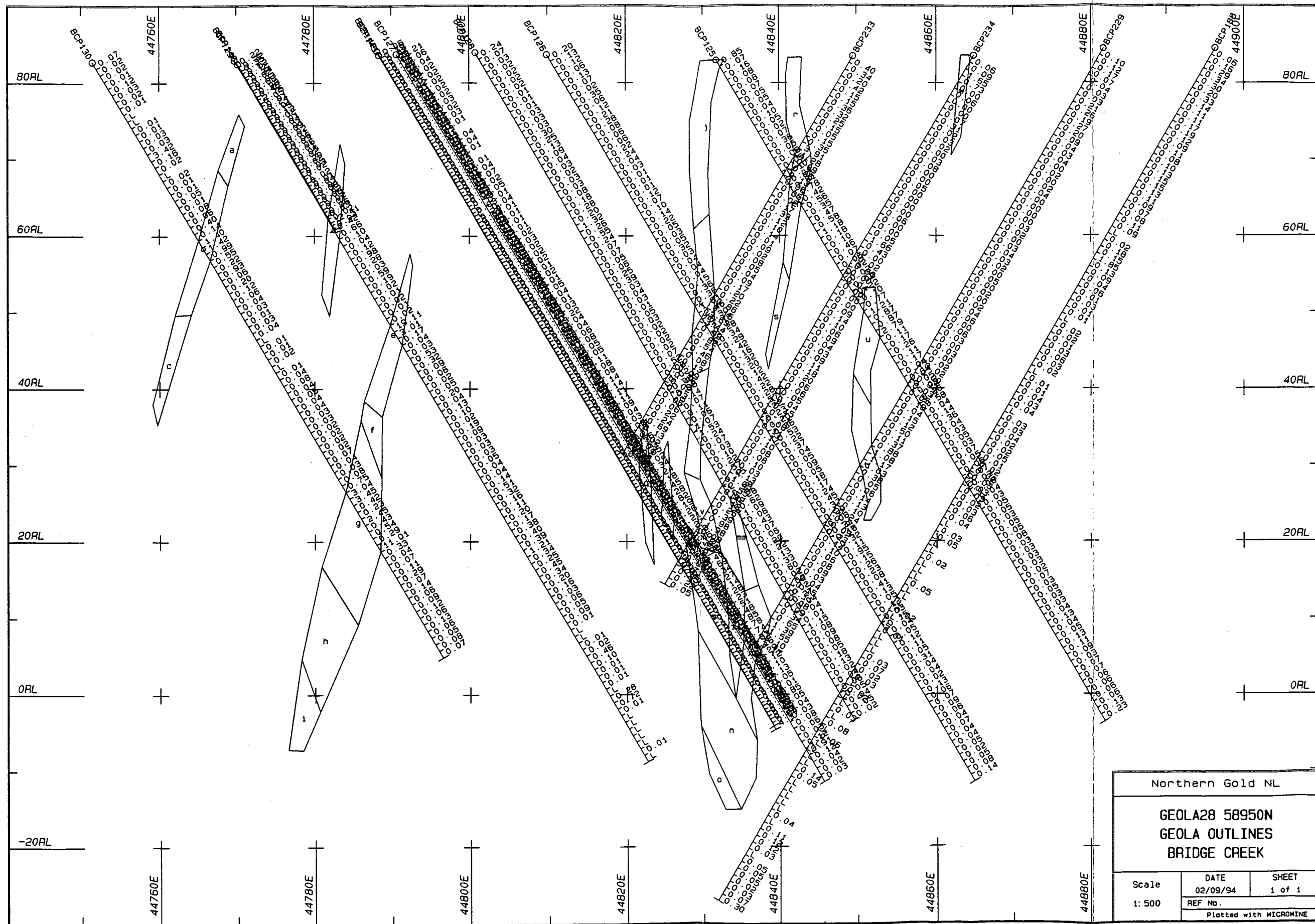


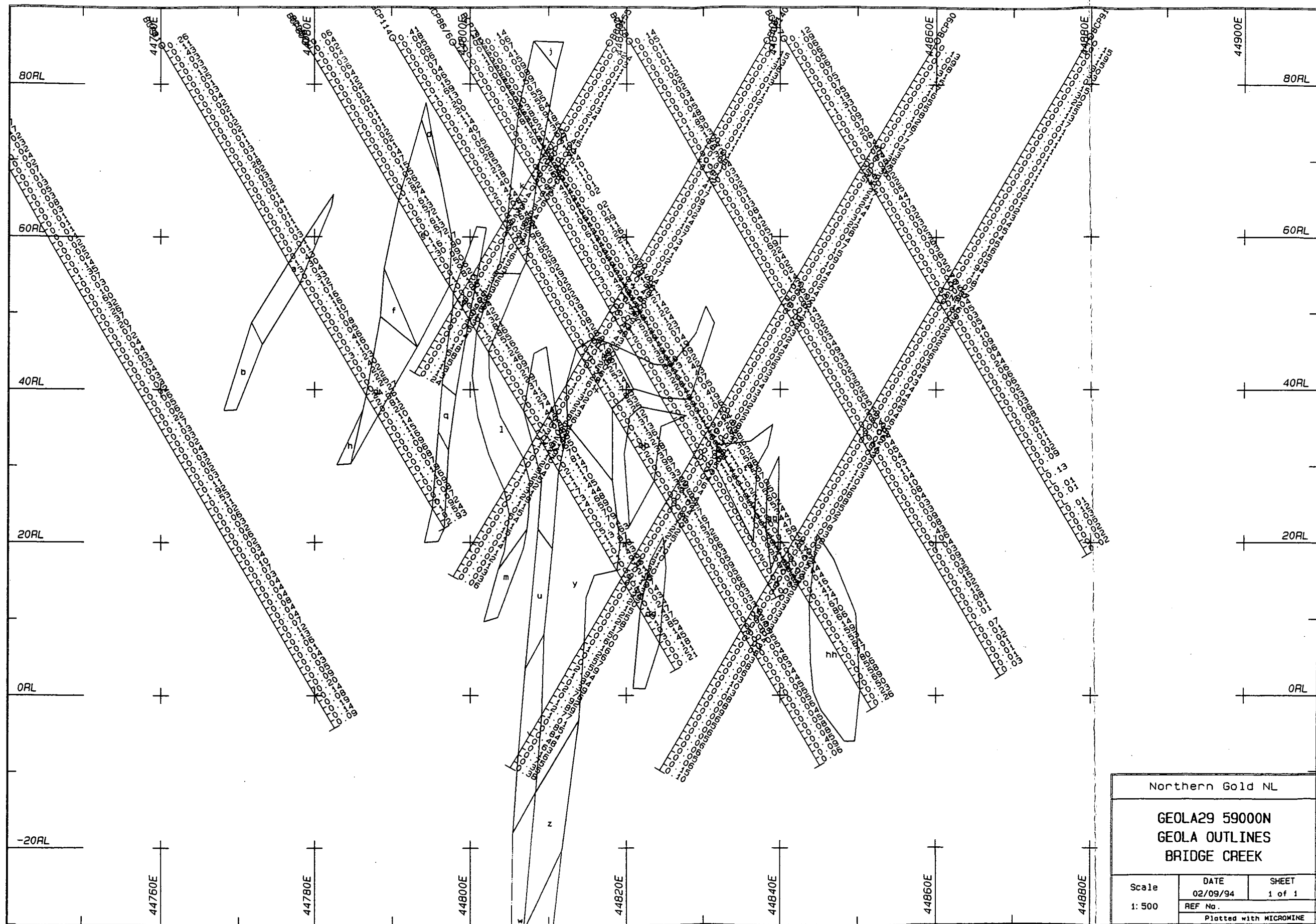


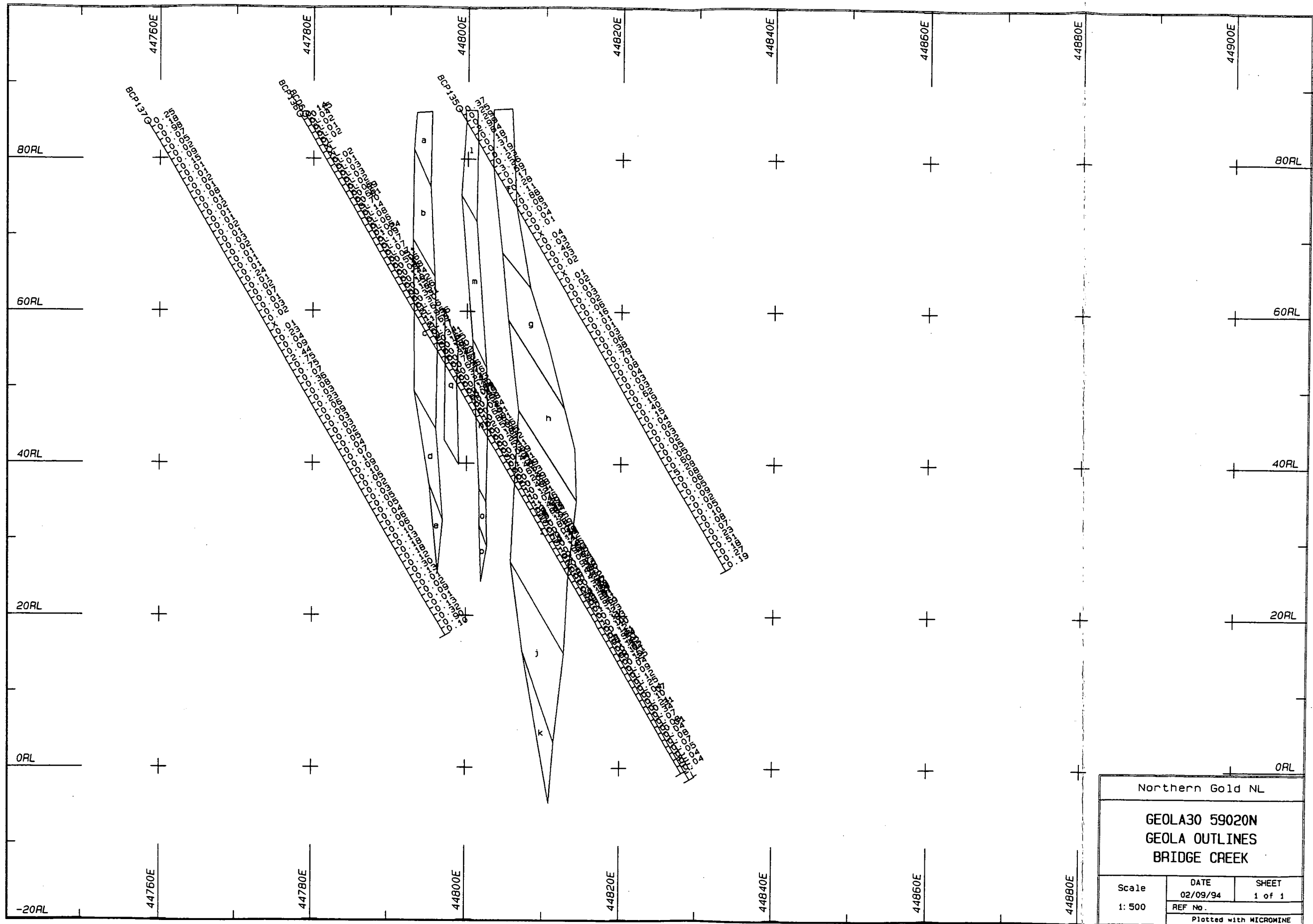
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GEOLA 25 58875N GEOLA OUTLINES BRIDGE CREEK		
Scale	DATE	SHEET
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Plotted with MICRON		

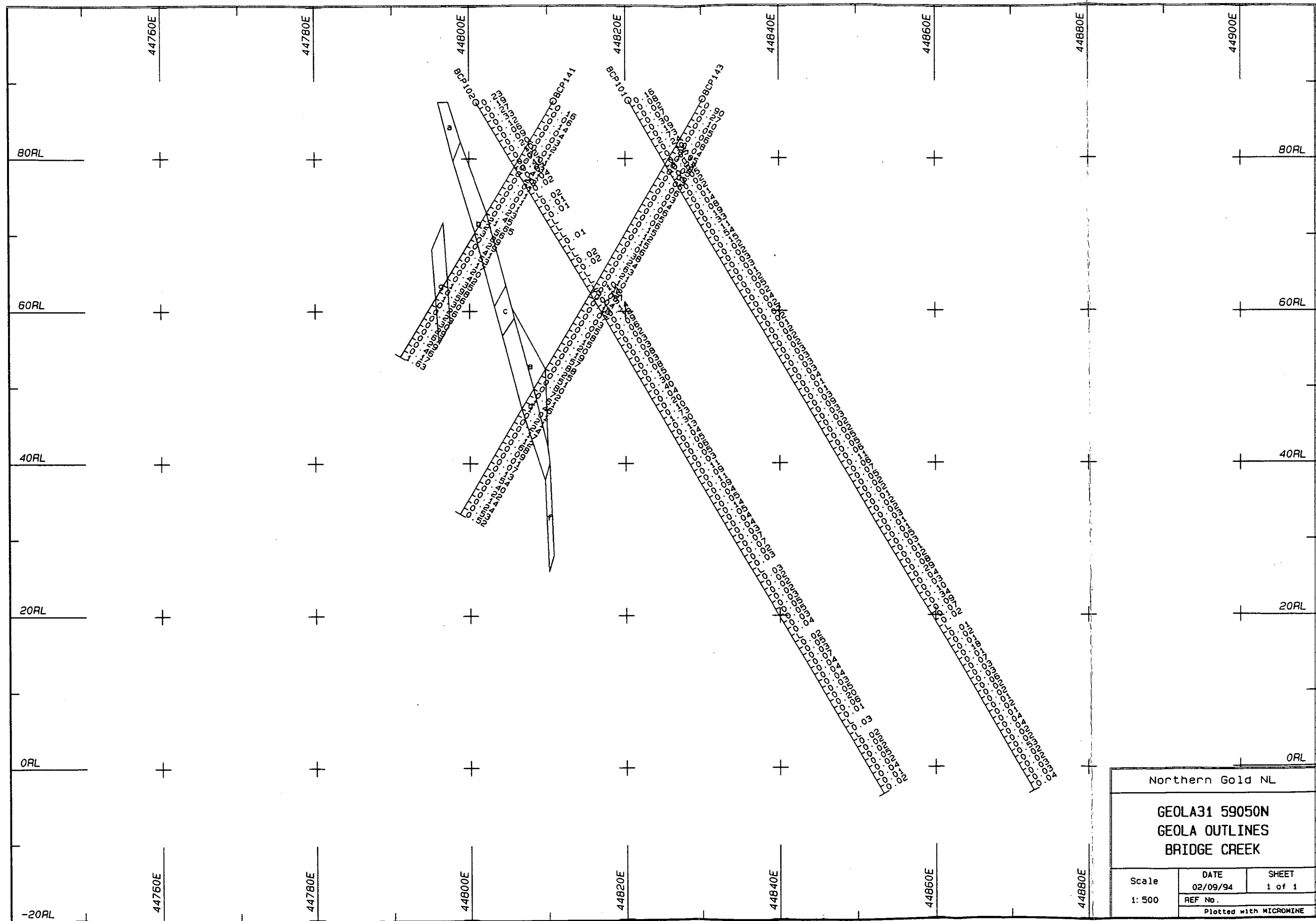


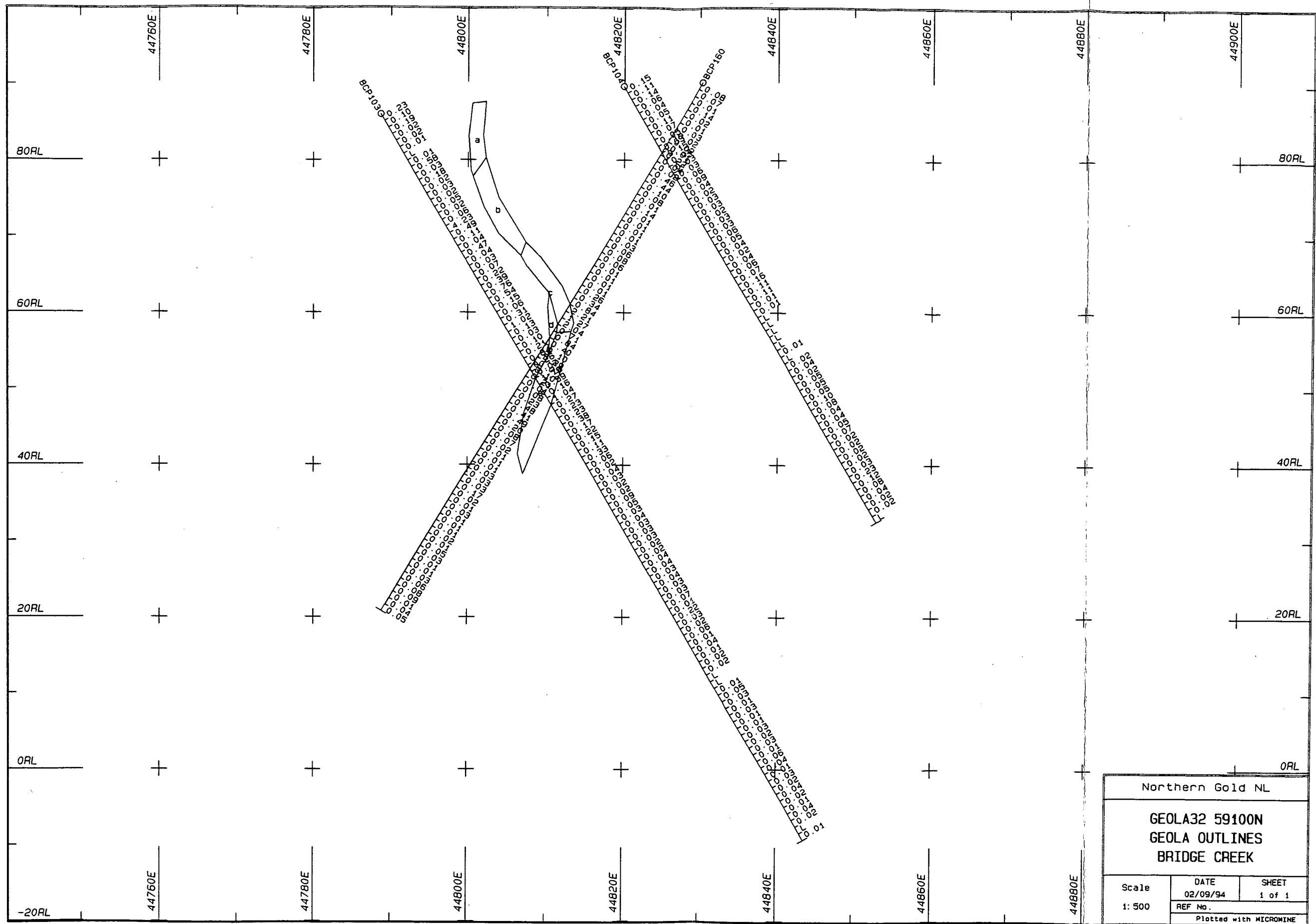


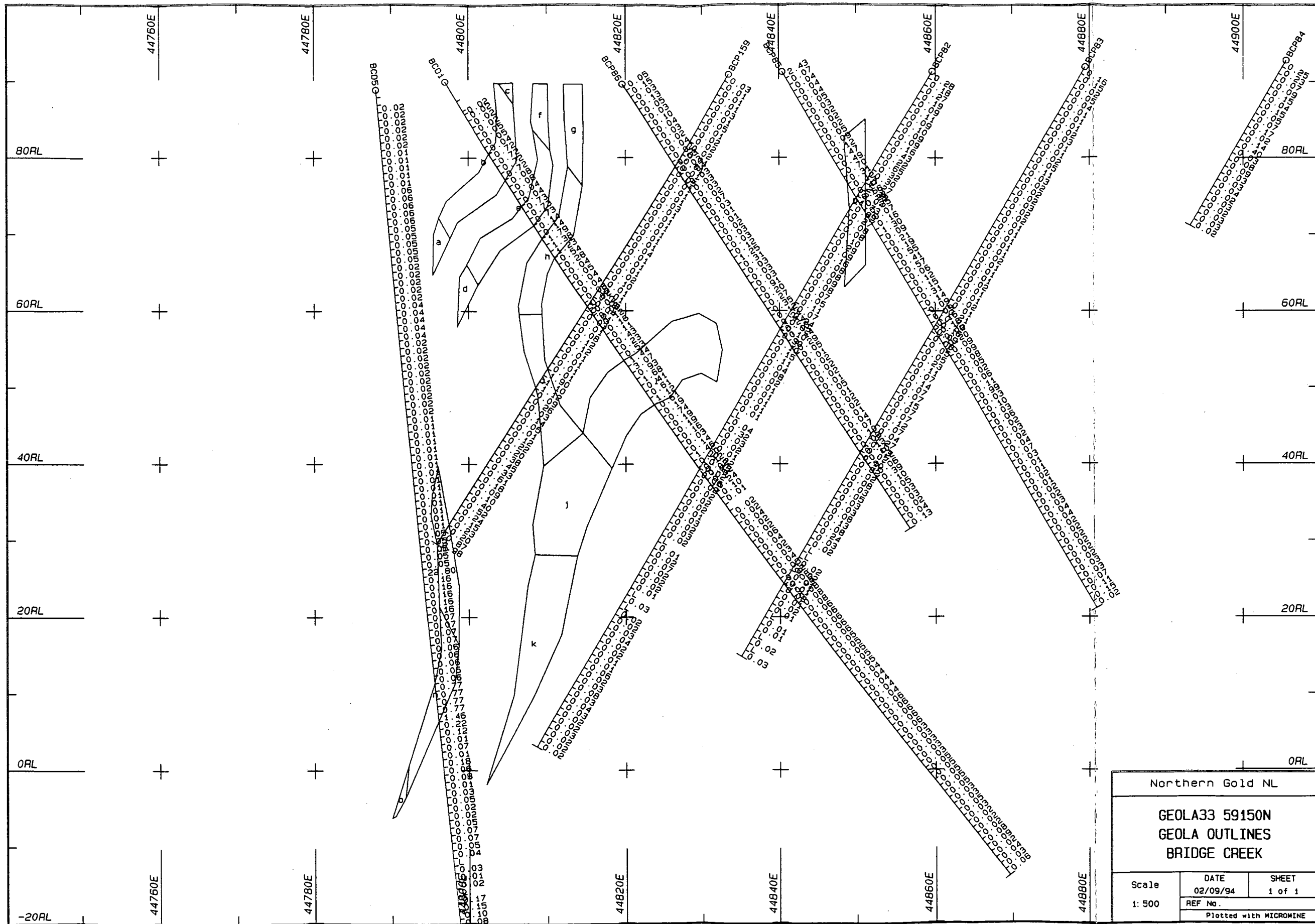


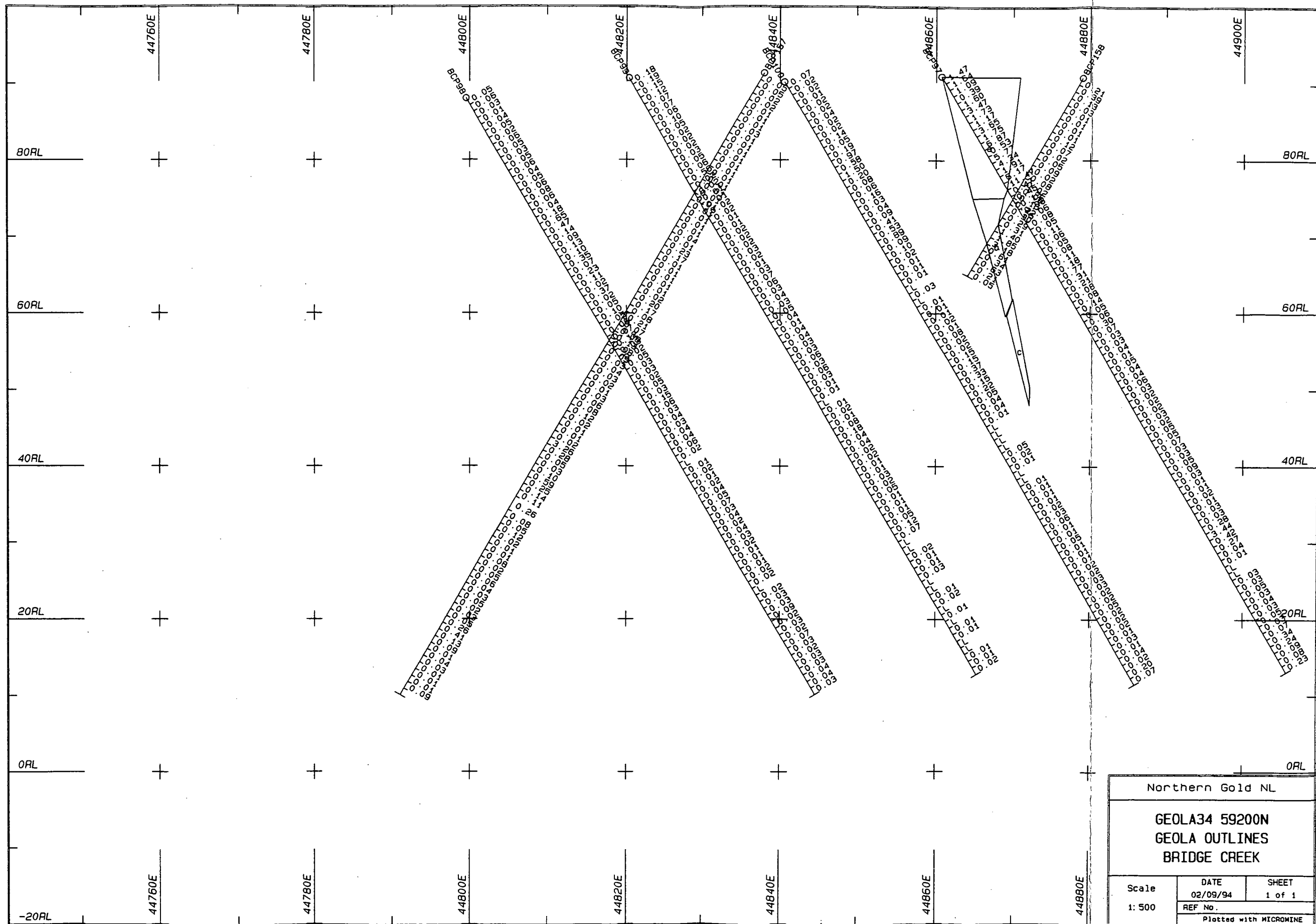












Northern Gold NL		
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Scale 1: 500	DATE 02/09/94	SHEET 1 of 1
	REF No.	
	Plotted with MICROMINE	

APPENDIX 9

Topographic Map.



MLN 1060 & MLN 766 TOPOGRAPHIC MAP

GRID DETAILS			
AMG	N 8513831	E 751208	
LOCAL	N 59300	E 45000	
SCALE = 1.000389 SWING = 0.32'26"			

SCALE 1:2500

MLN 1060 AND MLN 766
EXPLORATION REPORT 1994
Topographic Map
APPENDIX 9

APPENDIX 10

**Normet Report on Heap Leach Cyanidation and Gravity Cip Leach Tests on
Bridge Creek Ores.**



**HEAP LEACH CYANIDATION AND
GRAVITY CIP LEACH TESTS
ON BRIDGE CREEK ORES**

CLIENT: Northern Gold

JOB No.: 23/5932

DATE: 31 January 1994

Lincoln McCrabb

John Angove

Normet Laboratories Pty Ltd

12 Aitken Way Kewdale, PO Box 852 Cloverdale, Western Australia 6105

Telephone 61-9-353 3023 Facsimile 61-9-353 1028

ACN 060 739 835

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	SUMMARY	1
1	INTRODUCTION	3
2	SAMPLES / SAMPLE PREPARATION	4
3	TESTWORK PROCEDURE AND RESULTS	4
	3.1 Head Assays	5
	3.2 Mineralogy	5
	3.3 Large Cyanide Leach Tests	5
	3.4 Gravity Separation	7
	3.5 Cyanide Leach Tests (Gravity Tails)	8
4	DETAILED TEST DATA	9

Tables 1 - 10

SUMMARY

Heap leach cyanide leach tests and gravity CIP leach tests were conducted on oxide, transition and primary ores from the Bridge Creek Prospect in the Northern Territory.

Cyanide leach tests on RC chip material can be summarised as follows:

SAMPLE DESCRIPTION	REAGENTS		GOLD BALANCE			
	NaCN kg/t	Lime kg/t	Ext g/t	Res g/t	Calc Head g/t	Ext %
OCS	0.42	7.34	1.68	0.35	2.03	83.0
OCS (Dup)	0.48	7.21	1.69	0.20	1.89	89.7
TCS	1.70	3.89	0.84	1.82	2.66	31.6
TCS (Dup)	1.71	3.92	0.56	1.73	2.29	24.5
P	1.09	2.10	1.09	1.32	2.41	45.2
P (Dup)	1.06	2.35	1.31	1.84	3.15	41.6

The results show that the oxide ore could be amenable to heap leaching, further tests would be required on a bulk sample to investigate gold recovery versus crush size. The lime consumption for the oxide was high at 7 kg/t most likely caused by the presence of scorodite (an iron arsenate). The transition and sulphide ores would not be amenable to a heap leach process.

Gravity recovery at a grind size of p80 75 μ m can be summarised as follows:

SAMPLE DESCRIPTION	CONCENTRATE			TAILS		CALC HEAD Au g/t
	Wt %	Au g/t	% Dist.	Au g/t	% Dist.	
OCS	2.0	143.03	74.9	1.00	5.1	3.90
TCS	2.2	52.96	55.9	0.94	44.1	2.08
P	2.8	39.80	38.9	1.77	61.1	2.82

The results show a high proportion of gold reporting to the gravity concentrate in each sample, particularly for the oxide ore (74.9%).

The calculated head grade for the oxide ore varied significantly from the head assay result (1.64) which could most likely be contributed to the amount of gravity recoverable gold present. Free gold in the oxide sample was found in the size range of 50 to 150 μm .

The mineralogy results suggest that not all of the concentrate gold occurs as a free gold component and could be tied up with arsenopyrite or other sulphide forms.

Amalgamation tests should be conducted on the gravity concentrates to determine a free gold and sulphide gold component. Depending on these results an option for gravity processing could be to produce a bulk sulphide concentrate (i.e. Falcon concentrate) which could be re-ground and leached.

Cyanide leach tests on the gravity tails can be summarised as follows:

SAMPLE DESCRIPTION	REAGENTS		GOLD BALANCE			
	NaCN kg/t	Lime kg/t	Ext g/t	Res g/t	Calc Head g/t	Ext %
OCS	0.20	6.20	0.89	0.11	1.00	89.4
TCS	1.56	3.04	0.76	0.18	0.94	81.3
P	0.82	1.04	1.02	0.75	1.77	57.8

The results show that the oxide ore would be amenable to conventional gravity, CIP processing using a grind size of p80 75 μm . The grind could possibly be further optimised.

The transition ore, although showing a residue grade of 0.18 g/t gave a final recovery of 81.3%, with slow leaching kinetics being experienced. This could possibly be related to lower than typical cyanide levels at the start of the leach. An additional test would be recommended using high cyanide levels and also monitoring copper in solution, which would determine a cyanide soluble copper level. Native copper was detected in this sample. Cyanide consumption for the transition sample was the highest at 1.56 kg/t.

The primary sample showed a poor gold extraction of 57.8%. The mineralogical results would suggest that the remaining gold is tied up with arsenopyrite. Arsenopyrite was the abundant sulphide mineral with traces of covellite, chalcopyrite and pyrrhotite present. A series of finer grind leach tests should be conducted on the primary ore to determine at what grind size liberation takes place and if the ore is in fact refractory.

Concentration of a sulphide product should also be examined i.e. gravity or flotation options.

1 INTRODUCTION

Mr Barry Bolitho of Northern Gold requested Normet Laboratories Pty Ltd conduct metallurgical testwork on samples of Oxide, Transition and Primary ore from the Bridge Creek Prospect in the Northern Territory.

The aim of the testwork was to investigate the amenability of the ore to heap leaching in addition to gravity recovery and conventional cyanide recovery by grinding.

All assays were conducted by Australian Assay Laboratories of Balcatta, Western Australia using the following methods:

- Gold Solutions - Organic Extraction / AAS
- Gold Solids - Fire Assay / AAS
- Antimony - Vapour Hydride
- Sulphur - Leco Furnace
- Silver - Acid Digestion / AAS
- Copper - Acid Digestion / AAS
- Lead - Acid Digestion / AAS
- Zinc - Acid Digestion / AAS
- Arsenic - Vapour Hydride
- Bismuth - Vapour Hydride

Sample preparation of solid samples was conducted at Normet's sample preparation facility.

All tests were conducted in Perth tap water.

2 SAMPLES / SAMPLE PREPARATION

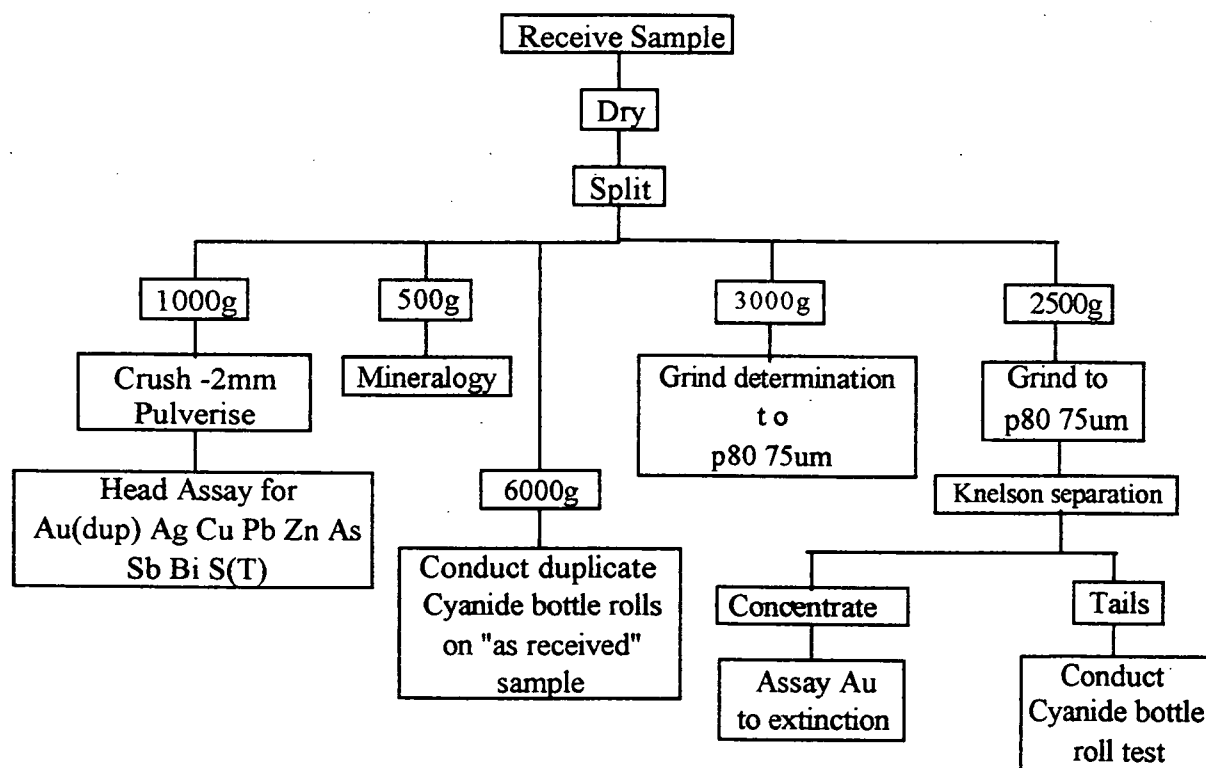
A box of three separate 14 kg samples of RC chips were delivered to Normet's laboratory during December 1993 in good condition.

The samples were labelled OCS, TCS and P designating Oxide, Transition and Primary.

Each sample was dried and split into representative sub-samples for the testwork program.

3 TESTWORK PROCEDURE AND RESULTS

The testwork procedure is outlined in the following flowsheet in the following flowsheet:



Each sample was treated identically and separately.

3.1 HEAD ASSAYS

A representative sub-sample of crushed - 2 mm ore was pulverised and assayed for a range of elements. The results were as follows:

SAMPLE DESCRIPTION	ASSAY										
	Au(1) ppm	Au(2) ppm	Average ppm	Sb ppm	S _T %	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Bi ppm
OCS	1.67	1.61	1.64	<0.5	0.26	4	4720	80	210	5220	11
TCS	2.48	2.13	2.30	<0.5	0.85	5	4830	84	130	2970	35
P	4.82	2.35	3.58	<0.5	3.76	4	5540	69	102	14400	19

The assays show increasing arsenic and sulphur levels from oxide to primary ore. The results in conjunction with mineralogy, show that arsenopyrite is present as a major sulphide in the transition and primary sample.

3.2 MINERALOGY

A representative head sample was sent to Central Mineralogical Services in Adelaide for mineralogical examination. The full report is presented in the Appendix to this report.

Some free gold was detected in all samples ranging from 20 to 200 μm in size. In all samples the amount of free gold falls short of the head assay. The main sulphide mineral being arsenopyrite and pyrite.

Graphite was detected in all samples. A preg-robbing test should be conducted to determine if the graphite is active.

3.3 LARGE CYANIDE LEACH TESTS

Duplicate cyanide leach tests were conducted on "as-received" ore to determine the potential heap leach amenability of the sample.

The following procedure was used:

1. A 3000 g sample was transferred to a bottle roll vessel and diluted to 50% solids using Perth tap water.
2. Additions of lime and cyanide were then made.
3. The following test conditions were used:
 - pH 10.0
 - NaCN (initial) 0.05%
(maintained) 0.03 - 0.05 %
4. The slurry was bottle rolled for a period of 120 hours with sub-sample being taken at 4, 72, 96 and 120 hours and monitored for pH, NaCN, DO and gold content.

Reagent additions were made when necessary.

5. On completion of the leach test the slurry was filtered, washed and dried, followed by the entire sample being crushed to 1 mm pulverised and assayed for Au.

The leach results are detailed in Tables 1 to 6 of Section 4 and are summarised as follows:

SAMPLE DESCRIPTION	REAGENTS		GOLD BALANCE			
	NaCN kg/t	Lime kg/t	Ext g/t	Res g/t	Calc Head g/t	Ext %
OCS	0.42	7.34	1.68	0.35	2.03	83.0
OCS (Dup)	0.48	7.21	1.69	0.20	1.89	89.7
TCS	1.70	3.89	0.84	1.82	2.66	31.6
TCS (Dup)	1.71	3.92	0.56	1.73	2.29	24.5
P	1.09	2.10	1.09	1.32	2.41	45.2
P (Dup)	1.06	2.35	1.31	1.84	3.15	41.6

The results show that the oxide sample leaches well with a gold recovery of 80 to 90 percent. This result is positive for a heap leaching application.

The transition and primary samples show low gold recoveries.

3.4 GRAVITY SEPARATION

An approximate 3 kg sample was ground to a p80 of 75 μm and treated through a laboratory 3 inch Knelson concentrator.

A concentrate and tails fraction was collected, dried and weighed.

The concentrate was assayed to extinction for gold while the Knelson tails were used for a cyanide leach test.

The gravity results can be found in Table 7 of Section 4.

The results show a high proportion of gold recovered to the concentrate particularly for the oxide sample (75%).

The mineralogy results suggest that not all of the concentrate gold would occur as a free gold component. A large portion of the transition and primary concentrates would most likely consist of gold within arsenopyrite or other sulphide forms.

Amalgamation tests would need to be carried out in order to determine the amount of "free gold" present.

3.5 CYANIDE LEACH TESTS (GRAVITY TAILS)

A cyanide leach test was conducted on the entire gravity tails fraction, using the procedure outlined in section 3.3. The monitoring time used was 1, 4, 7 and 24 hours.

The leach results are detailed in Tables 8 to 10 of Section 4 and are summarised as follows:

SAMPLE DESCRIPTION	REAGENTS		GOLD BALANCE			
	NaCN kg/t	Lime kg/t	Ext g/t	Res g/t	Calc Head g/t	Ext %
OCS	0.20	6.20	0.89	0.11	1.00	89.4
TCS	1.56	3.04	0.76	0.18	0.94	81.3
P	0.82	1.04	1.02	0.75	1.77	57.8

f:\data\mithgold\5926\mith001rp.sam

4 DETAILED TEST DATA

Tables 1 - 10

TABLE 1

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - OCS as-received
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 1
 DATE: 19/1/94

TEST OBJECTIVE

To assess gold extraction.

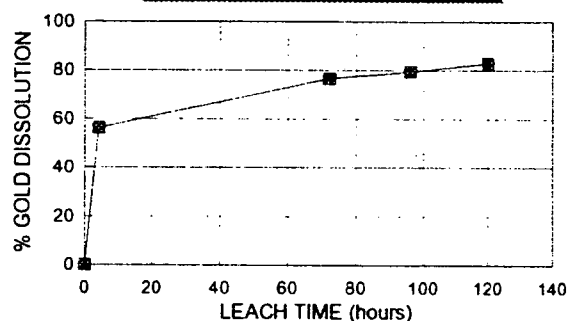
TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03-0.05
 % Solids (w/w) 50
 Crush Size As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	2943	2943	1.48	7.44		6.6	10.0	7.5			0.0
4			1.00	4.11	0.028	9.3	10.0	6.9	1.14	1.14	56.3
72				5.70	0.048	9.1	10.2	7.0	1.55	1.55	76.5
96				4.34	0.042	9.4	10.3	7.1	1.61	1.61	79.5
120					0.042	9.9	9.9	7.3	1.68	1.68	83.0

* 63% Available CaO SG of Liquor: (g/mL) 1.00

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade	Au g/t	1.68
Residue Grade	Au g/t	0.35
Calculated Head Grade	Au g/t	2.03
Assayed Head Grade	Au g/t	1.67, 1.61
Total Au Extraction	%	83.0
Residue Analysis	Au g/t	0.36
	Au g/t	0.33

REAGENTS

NaCN Consumption	kg/ t	0.42
Lime Addition	kg/ t	7.34

COMMENTS

Slurry appears viscous.

HEAD ASSAYS (ppm)

Au	Au dup	Sb	S (T) %	Ag	Cu	Pb	Zn	As	Bi
1.67	1.61	<0.5	0.26	4	4720	80	210	5220	11

F:\DATA\NORTHEM\926\CYAN01.WK4

TABLE 2

NORMET

CLIENT NAME:	Northern Gold
TEST DESCRIPTION:	Bottle Roll Leach - OCS as received (Duplicate)
JOB NUMBER:	23/5924
TEST NUMBER:	BR 2
DATE:	19/1/94

TEST OBJECTIVE

To assess gold extraction.

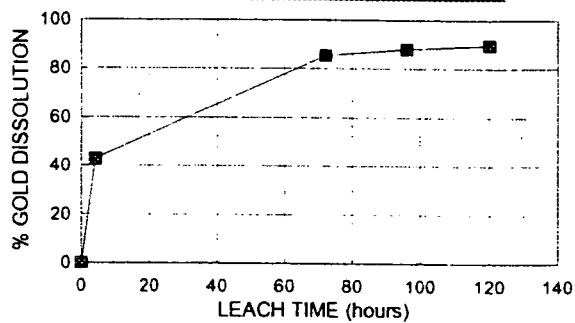
TEST PARAMETERS

pH	10.0
% NaCN (w/v)	- Initial 0.05
	- Maintained 0.03-0.05
% Solids (w/w)	50
Crush Size	As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	2965	2965	1.48	5.92		6.6	10.0	7.5			0.0
4			1.00	4.47	0.028	9.2	9.9	6.9	0.81	0.81	43.0
72			0.20	6.66	0.024	9.1	10.1	7.1	1.61	1.61	85.4
96				4.32	0.044	9.4	10.1	6.9	1.66	1.66	88.1
120					0.042	10.2	10.2	7.2	1.69	1.69	89.7

* 63% Available CaO SG of Liquor: (g/mL) 1.00

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade	Au g/t	1.69
Residue Grade	Au g/t	0.20
Calculated Head Grade	Au g/t	1.89
Assayed Head Grade	Au g/t	1.67, 1.61
Total Au Extraction	%	89.7
Residue Analysis	Au g/t	0.18
	Au g/t	0.21

REAGENTS

NaCN Consumption	kg/ t	0.48
Lime Addition	kg/ t	7.21

COMMENTS

Slurry appears viscous.

F:\DATA\NORTHERN\WMCY\NO2.WK4

TABLE 3

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - TCS as received
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 3
 DATE: 19/1/94

TEST OBJECTIVE

To assess gold extraction.

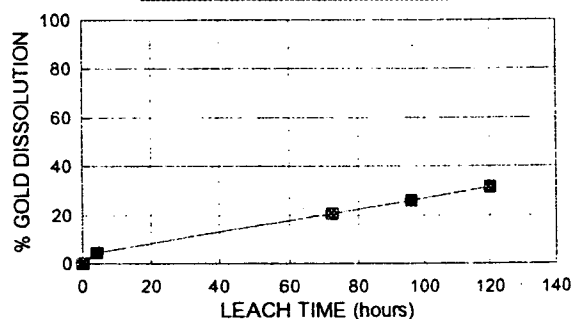
TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03 - 0.05
 % Solids (w/w) 50
 Crush Size As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	3034.0	3034.0	1.52	5.63		3.9	10.1	7.6			0.0
4			1.52	3.21	0.002	8.9	10.1	6.5	0.12	0.12	4.5
72			1.52	1.87	0.010	8.8	10.2	6.3	0.55	0.55	20.7
96			1.52	1.08	0.012	9.2	10.2	7.2	0.69	0.69	25.9
120					0.030	9.6	9.6	6.2	0.84	0.84	31.6
* 63% Available CaO SG of Liquor: (g/mL) 1.00											

RATE OF GOLD DISSOLUTION



GOLD BALANCE

Extracted Grade Au g/t 0.84
 Residue Grade Au g/t 1.82
 Calculated Head Grade Au g/t 2.66
 Assayed Head Grade Au g/t 2.48, 2.13

Total Au Extraction % 31.6

Residue Analysis Au g/t 1.99
 Au g/t 1.65

REAGENTS

NaCN Consumption kg/ t 1.70
 Lime Addition kg/ t 3.89

COMMENTS

HEAD ASSAYS (ppm)

Au	Au dup	Sb	S (T) %	Ag	Cu	Pb	Zn	As	Bi
2.48	2.13	<0.5	0.85	5	4830	84	130	2970	35

P:\DATA\NORTH\NORM\94\CYAN03.WK4

TABLE 4

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - TCS as received (Duplicate)
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 4
 DATE: 19/1/94

TEST OBJECTIVE

To assess gold extraction.

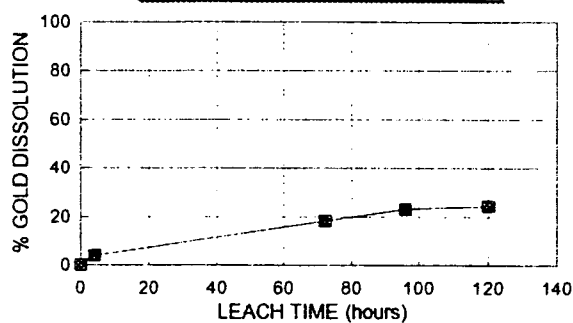
TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03 - 0.05
 % Solids (w/w) 50
 Crush Size As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	3030	3030	1.52	5.78		4.0	10.1	7.5			0.0
4			1.52	2.86	0.004	8.9	10.1	6.5	0.09	0.09	3.9
72			1.52	1.95	0.012	8.8	10.1	6.3	0.42	0.42	18.3
96			1.52	1.29	0.012	9.1	10.2	7.3	0.53	0.53	23.1
120					0.030	9.6	9.6	6.2	0.56	0.56	24.5
* 63% Available CaO					SG of Liquor: (g/mL)		1.00				

RATE OF GOLD DISSOLUTION



GOLD BALANCE

Extracted Grade	Au g/t	0.56
Residue Grade	Au g/t	1.73
Calculated Head Grade	Au g/t	2.29
Assayed Head Grade	Au g/t	2.48, 2.13
Total Au Extraction	%	24.5
Residue Analysis	Au g/t	1.70
	Au g/t	1.76

REAGENTS

NaCN Consumption	kg/ t	1.71
Lime Addition	kg/ t	3.92

COMMENTS

F:\DATA\NORTHERN\94\CYAN04.WK4

TABLE 5

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - P as received
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 5
 DATE: 19/1/94

TEST OBJECTIVE

To assess gold extraction.

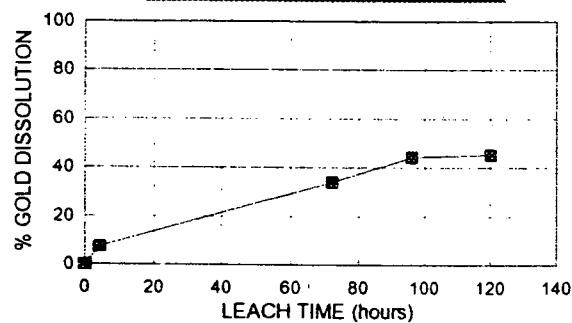
TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03 - 0.05
 % Solids (w/w) 50
 Crush Size As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	3280	3280	1.64	3.40		5.7	10.6	7.6			0.0
4			1.64	1.25	0.006	8.5	10.1	7.1	0.18	0.18	7.5
72			1.20	1.19	0.010	8.2	10.2	7.1	0.82	0.82	34.0
96			0.40	1.05	0.024	8.9	10.2	7.3	1.07	1.07	44.4
120					0.040	9.6	9.6	7.4	1.09	1.09	45.2

* 63% Available CaO SG of Liquor: (g/mL) 1.00

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade	Au g/t	1.09
Residue Grade	Au g/t	1.32
Calculated Head Grade	Au g/t	2.41
Assayed Head Grade	Au g/t	4.82, 2.35

Total Au Extraction	%	45.2
---------------------	---	------

Residue Analysis	Au g/t	1.38
	Au g/t	1.26

REAGENTS

NaCN Consumption	kg/ t	1.09
Lime Addition	kg/ t	2.10

COMMENTS**HEAD ASSAYS (ppm)**

Au	Au dup	Sb	S (T) %	Ag	Cu	Pb	Zn	As	Bi
4.82	2.35	<0.5	3.76	4	5540	69	102	14400	19

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TABLE 6

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - P as received (Duplicate)
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 6
 DATE: 19/1/94

TEST OBJECTIVE

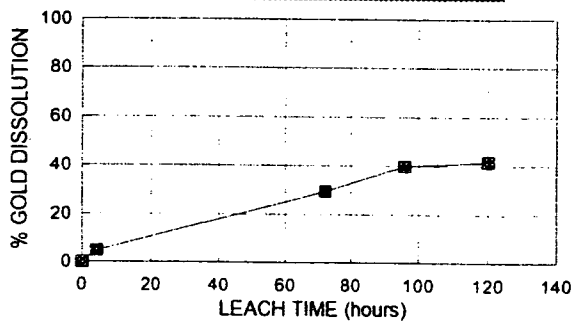
To assess gold extraction.

TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03-0.05
 % Solids (w/w) 50
 Crush Size As received

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	3287	3287	1.64	2.59		5.7	10.3	7.7			0.0
4			1.64	2.33	0.008	7.8	10.3	6.9	0.15	0.15	4.8
72			1.20	1.45	0.010	8.2	10.4	7.0	0.93	0.93	29.5
96			0.40	1.35	0.030	9.0	10.5	7.3	1.25	1.25	39.7
120					0.042	9.8	9.8	7.2	1.31	1.31	41.6
* 63% Available CaO SG of Liquor: (g/mL) 1.00											

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade Au g/t 1.31
 Residue Grade Au g/t 1.84
 Calculated Head Grade Au g/t 3.15
 Assayed Head Grade Au g/t 4.82, 2.35
 Total Au Extraction % 41.6

Residue Analysis Au g/t 1.75
 Au g/t 1.93

REAGENTS

NaCN Consumption kg/ t 1.06
 Lime Addition kg/ t 2.35

COMMENTS

P-DATA/NORTHERN/924/CYAN06.WK4

TABLE 7

NORMET

GRAVITY RECOVERY

CLIENT NAME:	Northern Gold
SAMPLE DESCRIPTION:	Knelson Gravity Separation
JOB NUMBER:	23/5924
TEST NUMBER:	Grv01
DATE:	21/01/94

KNELSON CONCENTRATION - Sample OCS (80% -75um)

Fraction	Weight		Gold	
	g	%	g/t	% Dist
Concentrate	59.9	2.0	143.03	74.9
Tails	2879.0	98.0	1.00	25.1
Total	2938.9	100.0	3.90	100.0

KNELSON CONCENTRATION - Sample TCS (80% -75um)

Fraction	Weight		Gold	
	g	%	g/t	% Dist
Concentrate	55.7	2.2	52.96	55.9
Tails	2479.0	97.8	0.94	44.1
Total	2534.7	100.0	2.08	100.0

KNELSON CONCENTRATION - Sample P (80% -75um)

Fraction	Weight		Gold	
	g	%	g/t	% Dist
Concentrate	76.4	2.8	39.80	38.9
Tails	2697.0	97.2	1.77	61.1
Total	2773.4	100.0	2.82	100.0

Tails grade obtained from bottle roll data.

TABLE 8

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - OCS Gravity Tail
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 7
 DATE: 24/1/94

TEST OBJECTIVE

To assess gold extraction.

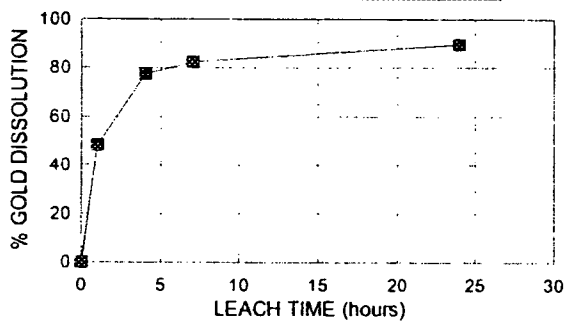
TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03-0.05
 % Solids (w/w) 50
 Grind Size p80 75um

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	2878	2878	1.24	7.69		7.6	10.0	7.5			0.0
1			0.20	5.02	0.024	9.5	10.1	8.5	0.48	0.48	48.2
4				2.30	0.032	9.5	10.1	8.6	0.77	0.77	77.4
7				2.84	0.032	9.6	10.1	8.6	0.82	0.82	82.4
24					0.030	9.7	9.7	8.3	0.89	0.89	89.4

* 63% Available CaO SG of Liquor: (g/mL) 1.00

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade Au g/t 0.89
 Residue Grade Au g/t 0.11
 Calculated Head Grade Au g/t 1.00
 Assayed Head Grade Au g/t
 Total Au Extraction % 89.4

Residue Analysis Au g/t 0.11
 Au g/t 0.10

REAGENTS

NaCN Consumption kg/ t 0.20
 Lime Addition kg/ t 6.20

COMMENTS

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TABLE 9

NORMET

CLIENT NAME:	Northern Gold
TEST DESCRIPTION:	Bottle Roll Leach - TCS Gravity Tail
JOB NUMBER:	23/5924
TEST NUMBER:	BR 8
DATE:	24/1/94

TEST OBJECTIVE

To assess gold extraction.

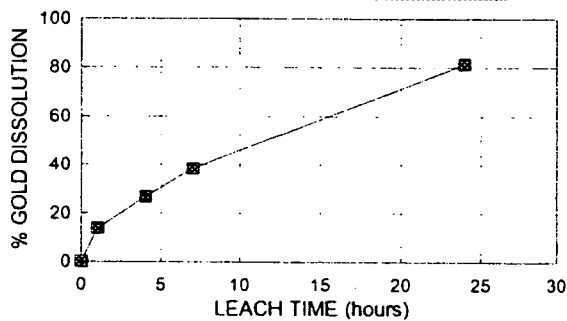
TEST PARAMETERS

pH	10.0
% NaCN (w/v)	- Initial 0.05
	- Maintained 0.03-0.05
% Solids (w/w)	50
Grind Size	p80 75um

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	2466	2466	1.44	5.60		5.1	10.2	5.0			0.0
1			1.00	1.09	0.008	9.6	10.3	7.9	0.13	0.13	13.9
4			1.00	0.47	0.010	9.8	10.2	7.5	0.25	0.25	26.7
7			1.40	0.33	0.020	10.0	10.2	7.2	0.36	0.36	38.5
24					0.040	10.0	10.0	7.6	0.76	0.76	81.3

* 63% Available CaO SG of Liquor: (g/mL) 1.00

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade	Au g/t	0.76
Residue Grade	Au g/t	0.18
Calculated Head Grade	Au g/t	0.94
Assayed Head Grade	Au g/t	
Total Au Extraction	%	81.3

Residue Analysis	Au g/t	0.18
	Au g/t	0.17

REAGENTS

NaCN Consumption	kg/ t	1.56
Lime Addition	kg/ t	3.04

COMMENTS

F:\DATA\NORMET\23-5924\NORMET.WK4

TABLE 10

NORMET

CLIENT NAME: Northern Gold
 TEST DESCRIPTION: Bottle Roll Leach - P Gravity Tail
 JOB NUMBER: 23/5924
 TEST NUMBER: BR 9
 DATE: 24/1/94

TEST OBJECTIVE

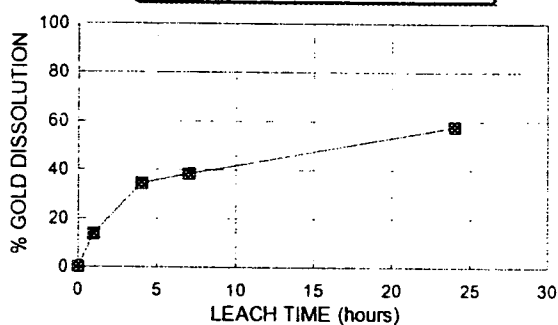
To assess gold extraction.

TEST PARAMETERS

pH 10.0
 % NaCN (w/v) - Initial 0.05
 - Maintained 0.03-0.05
 % Solids (w/w) 50
 Grind Size p80 75um

TEST DATA

TIME Hours	CONTENTS AND ADDITIONS				SOLUTIONS						Au Ext. %
	Solid g	Water g	NaCN g	Lime * g	NaCN %	pH Found	pH Left	D.O. ppm	Au ppm	Au g/t	
0	2588	2588	1.30	1.74		7.0	10.2	7.2			0.0
1			1.20	0.62	0.010	9.6	10.5	8.4	0.24	0.24	13.6
4					0.032	10.0	10.0	8.2	0.61	0.61	34.6
7			0.40	0.34	0.028	9.8	10.4	7.8	0.68	0.68	38.5
24					0.030	9.7	9.7	7.6	1.02	1.02	57.8
* 63% Available CaO SG of Liquor: (g/mL) 1.00											

RATE OF GOLD DISSOLUTION**GOLD BALANCE**

Extracted Grade	Au g/t	1.02
Residue Grade	Au g/t	0.75
Calculated Head Grade	Au g/t	1.77
Assayed Head Grade	Au g/t	
Total Au Extraction	%	57.8
Residue Analysis	Au g/t	0.79
	Au g/t	0.70

REAGENTS

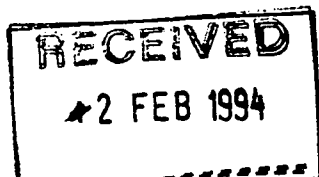
NaCN Consumption	kg/ t	0.82
Lime Addition	kg/ t	1.04

COMMENTS

FILE DATA NTRUGD/SC24/CYAN09 WK4

APPENDIX 1

MINERALOGY REPORT



Central Mineralogical Services

8 Bradshaw Avenue, Crafers, S.A. 5152
Telephone (08) 370 9779 Fax (08) 370 9788
International: Telephone + 618 370 9779 Fax + 618 370 9788

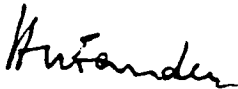


28 January 1994

Mr L. McCrabb
Normet Laboratories Pty. Ltd.
PO Box 852
CLOVERDALE WA 6105

REPORT CMS 94/1/5

<u>YOUR REFERENCE:</u>	P.O. 23204
<u>DATE RECEIVED:</u>	12 January 1994
<u>SAMPLE NO'S:</u>	6363-65
<u>SUBMITTED BY:</u>	L. McCrabb
<u>WORK REQUESTED:</u>	Mineralogy


H.W. Fander, M.Sc.

REPORT CMS 94/1/5

SAMPLES 6363 - 6365

Three samples of transition ore (NT) were received for mineralogical examination. 100g portions were Superpanned, and the concentrates produced were examined for free gold before being briquetted, polished and examined for included and composite gold.

6363

A few free grains of gold were detected, with clean surfaces and craggy, irregular shapes, ranging from 50 μ to 75x150 μ in size. The concentrate consisted of goethite, with ilmenite, magnetite, minor pyrite and arsenopyrite, rare galena, covellite and chalcopyrite. Other minerals present include graphite, malachite and scorodite (an Fe arsenate).

6364

A few free grains of gold were seen, ranging from 25 μ to 125 μ ; as in 6363, no composite or included gold was detected. The concentrate is dominantly composed of pyrite and arsenopyrite, with minor covellite and digenite, and traces of chalcopyrite and native copper. Graphite is present.

6365

Only three grains of gold were seen; two were 20 μ , and one was 100x200 μ with a (?partial) coating of quartz; the gold is pale, due to Ag. Arsenopyrite is abundant, with pyrite, small traces of covellite, chalcopyrite and pyrrhotite. Graphite was noted. No composite/included Au was seen.

The amount of gold seen falls short of the assays, especially in 6365; possibly much of the free gold is too fine to be recovered by gravity, or the gold may be in refractory form within, say, arsenopyrite - this is considered likely.