

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS 105 G/13,14

093678

1996 ASSESSMENT REPORT

DOT PROPERTY

SOIL GEOCHEMISTRY

YUKON TERRITORY

PELLY MOUNTAINS

WORK PERIOD

JUNE 17, 1996



LATITUDE: 61°48'

MAY, 1997

LONGITUDE: 131°38'

TREVOR J. BOHAY

This report has been examined by
the Geological Evaluation Unit
Under Section 53 (A) Yukon Quartz
Act and is shown as
representative work in the amount
of \$ 1200.

for

M. P. Pata

Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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FIGURE 2 CLAIM MAP (1:31,500)

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1996 ASSESSMENT REPORT DOT PROPERTY, YUKON TERRITORY

1.0 SUMMARY

The DOT property, comprising 76 units, is located north of the Pelly River and Robert Campbell Highway on the Yukon Plateau, approximately 50 kms eastsoutheast of the town of Ross River, and 70 kms NW of Cominco's ABM deposit.

This property was staked to cover airborne geophysical targets identified during a Cominco survey conducted in 1994.

The rocks underlying this part of southeastern Yukon have been assigned to the Yukon-Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT). The YTT consists primarily of a layered sequence of metamorphosed rocks comprising a "lower unit" of pre-Devonian quartzite, pelitic schist and minor marble, a late Devonian to mid-Mississippian "middle unit" comprising carbonaceous phyllite and schist with interbanded mafic and, locally significant, felsic metavolcanics, and an "upper unit" of Pennsylvanian marbles and quartzite. Volcanism within the "middle unit" was accompanied by the intrusion of 2-3, late Devonian to Mississippian, mafic to felsic metaplutonic suites. Felsic volcanics of the "middle unit" are host to Cominco's ABM VHMS Deposit.

The DOT property is relatively well exposed and the rocks consist of a sequence of fissile, silvery grey muscovite phyllites with minor intercalated, Fe-carbonate altered/veined, chloritic schists and phyllites as well as blue-quartz-bearing wackes. A quartz-feldspar augened schist was mapped at the east end of the property.

Work completed on the DOT property in 1996 consisted of four person days of soil sampling along claim lines. Results from the geochemical sampling returned several samples with anomalous Cu, Pb and Zn as well as Cr values. Further geological mapping, prospecting, contour soil geochemistry and ground geophysics is recommended for this area.

2.0 LOCATION AND ACCESS

The DOT property is located north of the Pelly River and Robert Campbell Highway on the Yukon Plateau, approximately 50 kms eastsoutheast of the town of Ross River, and 70 kms NW of Cominco's ABM deposit. The highway comes within 10 km of the property, access is by helicopter.

3.0 PROPERTY AND OWNERSHIP

The DOT property, comprising 76 units, is 100% owned by Cominco Ltd. (Figure 2).

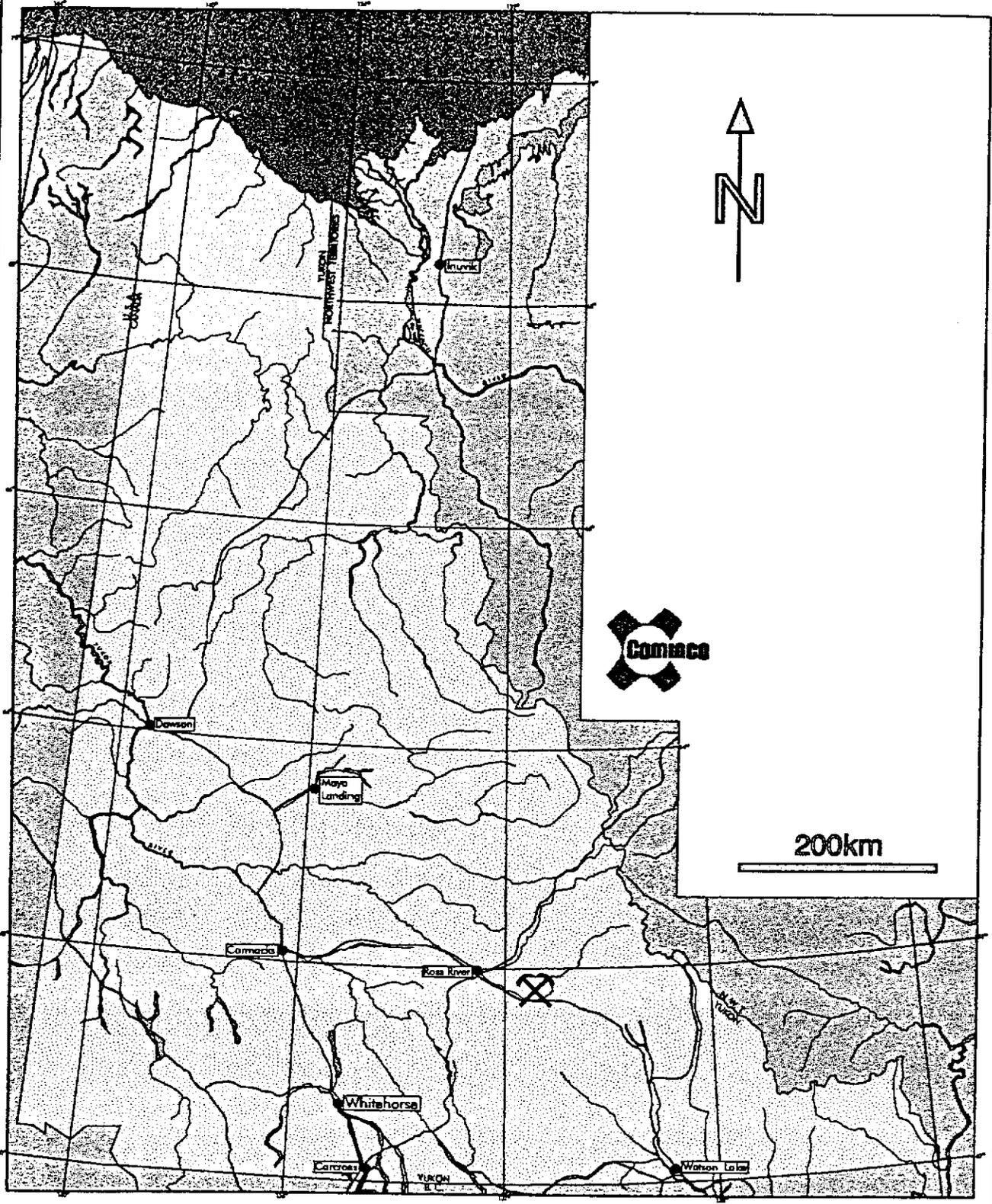
<u>NAME</u>	<u>UNITS</u>	<u>CLAIM NO.</u>	<u>DUE DATES</u>
DOT 3-34	32	YB49849-880	May 15/98
DOT 37-68	32	YB49883-914	May 15/98

4.0 PREVIOUS WORK

1:10000 scale mapping and prospecting were undertaken in 1994 as well as airborne geophysics. Sixty seven soil samples and two rock samples were also collected in 1994.

5.0 REGIONAL GEOLOGY

The rocks underlying this part of southeastern Yukon have been assigned to 2 terranes: the Yukon-Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT) (Mortensen, 1983a; Mortensen and Jilson, 1985).



Drawn by:		Traced by: a. m. a.	
Revised by:	Date:	Revised by:	Date:

**DOT
PROPERTY LOCATIONS**

105 G/13,14

Scale: As Shown

Date: April, 1995

Plate: 1

The YTT consists primarily of a layered sequence of metamorphosed rocks comprising a "lower unit" of pre-Devonian quartzite, pelitic schist and minor marble, a late Devonian to mid-Mississippian "middle unit" (3F)

unit" (3F) comprising carbonaceous phyllite and schist with interbanded mafic and, locally significant, felsic metavolcanics (3G), and an "upper unit" of Pennsylvanian marbles and quartzite. Volcanism within the "middle unit" was accompanied by the intrusion of 2-3, late Devonian to Mississippian, mafic to felsic metaplutonic suites (Simpson Range suite and augen and monzonitic orthogneisses). This sequence appears to reflect stable platformal or shelf sedimentation with an intervening period of mafic to felsic arc volcanism developed within a more reduced basinal setting. Felsic volcanoclastics of the "middle unit" are host to Cominco's ABM VHMS Deposit.

The late Devonian to Triassic SMT comprises a heterogenous package of mafic to ultramafic plutonic rocks, mafic volcanics, massive carbonate and chert. This sequence was structurally emplaced as thrust bounded klippen on YTT rocks or as thrust slices imbricated within YTT rocks during a period of crustal shortening (D2). The SMT is thought to represent a disrupted oceanic crust and volcanic arc assemblage thought to be located between the YTT and ancestral North America(?).

A subhorizontal to moderately north to northeast dipping, penetrative ductile deformation fabric (S2) and associated middle greenschist facies (chlorite-biotite grade) metamorphism affects all YTT rocks. This fabric reflects the first, and most significant, deformational and metamorphic event (D1) perhaps related to a continent-arc collision during late Permian to early Triassic time.

Late Triassic immature clastics comprising micaceous argillite, siltstone and sandstone unconformably(?) overlie the deformed and metamorphosed YTT rocks. These sediments are often closely associated with SMT volcanics and are invariably in fault contact with YTT rocks.

The SMT, Late Triassic sediments and Late Triassic to Middle Jurassic plutons are all affected by a period of Middle Jurassic to Late Cretaceous thrust faulting (D2), during which the Finlayson Lake Fault Zone was formed. This complex fault zone contains both thrust and steep, transcurrent(?) faults and separates the YTT from autochthonous North America (Mortensen, 1983a; Mortensen and Jilson, 1985).

6.0 1996 FIELD WORK

6.1 GEOCHEMISTRY

Soil samples were collected along claim lines. The following table summarizes 1996 field work.

PROPERTY	GEOCHEMISTRY
DOT	June 17

7.0 DOT PROPERTY

7.1 GEOLOGY AND MINERALIZATION

The DOT property is underlain by late Devonian to mid-Mississippian "middle unit" mixed metasediments. The property is generally well exposed. The geology consists of a sequence of fissile, silvery grey muscovite bearing phyllites with minor intercalated Fe-carbonatized chloritic schists (mafic volcanics?) These units are strongly foliated, generally non-graphitic and are locally strongly folded and crenulated adjacent to faults. A south verging NE dipping thrust fault is exposed at one locality. A 3-4 metre wide muscovite, mariposite-Fe carbonate silica (listwanite?) shera zone (?) containing trace disseminated chalcopyrite is locally exposed.

An aeromagnetic anomaly appears to coincide with an equigranular, medium grained pyroxene feldspar intrusive containing disseminated fine-grained magnetite and trace pyrrhotite.

7.2 GEOCHEMISTRY

A total of 42 soil samples were collected from the DOT property in 1996. Soil samples were collected along claim lines.

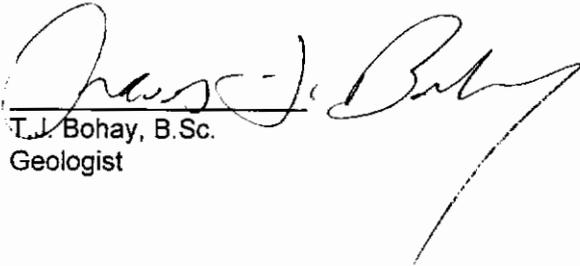
Results from the soil geochemistry returned elevated to anomalous values for Cu and Zn (130, 124ppm and 210 and 164ppm respectively), there is also a high Cr value coincident with high Cu, and Zn values.

8.0 CONCLUSIONS and RECOMMENDATIONS

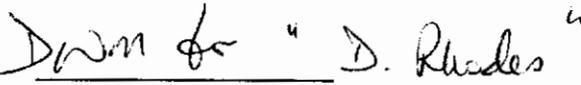
The DOT property is underlain by the late Devonian to mid-Mississippian "middle unit" of the Yukon Tanana Terrane, comprising sequences of mixed metasediments (siltstone, wacke) and intervals of felsic and mafic metavolcanics.

Results from the geochemical sampling returned a few samples with anomalous Cu and Zn values. Mapping/prospecting in 1994 also discovered several areas with promising geology. Further geological mapping, prospecting, contour soil geochemistry and ground geophysics is recommended for this area.

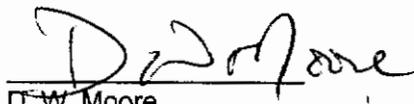
Report by:


 T.J. Bohay, B.Sc.
 Geologist

Endorsed by:


 D. Rhodes,
 Senior Geologist

Approved for
 Release by:


 D.W. Moore
 Manager, Exploration
 Western Canada

TJB/

DISTRIBUTION:

W.D. Files

Mining Recorder (2)

10.0 REFERENCES

PLINT, H. E., 1994. GEOLOGICAL MAPPING IN THE CAMPBELL RANGE, SOUTHEASTERN YUKON (PARTS OF 105 G/8, G/9 AND 105 H/5,H/12); Yukon Exploration and Geology 1994: Part C, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Canada, p. 47-58.

MACROBBIE, P.A., 1994 ASSESSMENT REPORT ON THE FIRE AND DOT PROPERTIES, COMINCO LTD.

MORTENSEN, J. K., 1983a. AGE AND EVOLUTION OF THE YUKON-TANANA TERRANE, SOUTHEASTERN YUKON TERRITORY [Ph.D. Thesis]; Santa Barbara, University of California, 155 p.

MORTENSEN, J. K. AND JILSON, G. A., 1985. EVOLUTION OF THE YUKON-TANANA TERRANE : EVIDENCE FROM SOUTHEASTERN YUKON TERRITORY; *Geology*, 13, p. 806-810.

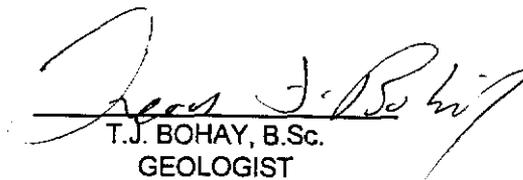
APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, TREVOR J. BOHAY, of 251 Bond Street North, in the city of Hamilton, in the province of Ontario hereby declare that I:

1. Graduated from the University of Saskatchewan in May 1994 with a B.Sc. in Geology.
2. Have been actively engaged in mineral exploration in Western Canada as a contract geologist with Cominco Ltd. from May 1996 to September 1996, and since April 1997.

Date: APRIL 1997



T.J. BOHAY, B.Sc.
GEOLOGIST

APPENDIX II

1996 GEOCHEMISTRY DATA

SOIL SAMPLES WERE ANALYSED BY ICP, Au BY AQUAREGIA DECOMPOSITION/AAS, Ba BY XRF.

DOT

LABNO	FIELDNO	UTME27	UTMN27	SAMP	MAT	ORI	SITE	CLR	SZ	ORG	WET	DPHT	W/S	F/H	CU	PB	ZN	AG	AS	BA_A	CD	CO	NI	FE	MO	CR	BI	SB	V	SN	W	SR	Y	LA	MN	MG	TI	AL	CA	NA	K	AU	WTAU	BA_B
S9612649	335501	364388	6858025	1	1	5	*	2B	34	2	2	15	2	B1	2	2	4	0.2	1	50	1	1	0.19	1	2	2	2	4	2	1	15	1	1	22	0.04	0.01	0.15	0.16	0.03	0.01	-1	-1		
S9612650	335502	364485	6858089	1	1	5	*	2B	24	1	1	20	1	B2	43	7	58	0.2	128	141	1	11	44	3.64	5	42	2	2	39	12	1	3	4	17	173	0.66	0.01	1.68	0.02	0.01	0.03	5	10	1345
S9612651	335503	364536	6858158	1	1	5	*	2B	45	1	1	15	2	B2	57	2	38	0.2	24	171	1	16	13	4.36	1	7	2	2	101	11	1	14	5	12	379	1.29	0.1	2.02	0.25	0.01	0.23	-1	-1	
S9612652	335504	364573	6858192	1	1	5	*	3K	45	2	2	20	2	B1	18	2	29	0.2	32	115	1	6	9	0.96	1	6	2	2	9	7	1	81	3	3	828	0.23	0.01	0.51	1.83	0.03	0.02	-1	-1	
S9612653	335505	364613	6858222	1	1	5	*	3K	45	2	2	20	3	B1	94	5	78	0.2	31	194	1	16	24	3.69	2	13	2	2	77	5	1	99	7	7	496	0.87	0.07	1.5	1.78	0.01	0.29	5	10	1135
S9612654	335507	364686	6858297	1	1	5	*	3K	45	2	2	20	3	B1	80	2	43	0.2	4	342	1	10	16	2.34	1	8	2	2	67	4	1	150	7	5	607	0.78	0.04	1	2.88	0.04	0.18	-1	-1	
S9612655	335508	364718	6858330	1	1	5	*	3B	45	1	3	20	3	B1	109	4	100	0.2	37	391	1	22	27	5.43	1	18	2	2	154	11	1	96	11	12	706	1.87	0.14	2.33	1.22	0.01	0.48	-1	-1	
S9612656	335509	364756	6858361	1	1	5	*	3B	45	1	1	20	1	B2	130	9	128	0.2	38	508	1	25	36	6.33	5	28	2	2	190	11	1	73	10	9	991	2.44	0.18	2.8	1.3	0.01	0.64	-1	-1	
S9612657	335510	364794	6858392	1	1	5	*	2B	24	1	1	30	4	B2	18	2	19	0.2	14	82	1	5	9	1.22	1	5	2	2	16	4	1	19	2	11	223	0.32	0.01	0.71	0.27	0.03	0.04	-1	-1	
S9612658	335511	364830	6858422	1	1	5	*	2G	45	2	1	20	4	B1	97	5	66	0.2	14	68	1	11	30	2.94	4	11	2	2	28	10	1	54	14	23	253	0.87	0.01	1.54	1.09	0.02	0.07	-1	-1	
S9612659	335512	364905	6858497	1	1	5	*	1G	45	2	2	15	1	B1	10	7	46	0.2	45	199	1	5	11	1.68	2	2	2	2	3	7	1	277	2	3	777	0.4	0.01	0.23	17.13	0.01	0.04	-1	-1	
S9612660	335513	364975	6858561	1	1	5	*	3B	45	1	1	25	3	B1	32	9	65	0.2	44	71	1	13	30	3.05	2	21	5	2	10	4	1	28	6	27	230	0.93	0.01	1.48	1.11	0.01	0.04	-1	-1	
S9612661	335514	364761	6858769	1	1	5	*	3B	4	1	1	20	3	B2	68	15	210	0.2	54	227	3	18	53	2.78	4	20	2	2	19	7	1	50	14	14	456	0.64	0.01	1.06	1.56	0.01	0.04	5	10	1427
S9612662	335515	364662	6858705	1	1	5	*	1G	45	1	1	25	3	B2	119	10	164	0.9	19	119	1	34	278	5.44	5	464	5	7	123	15	1	24	9	10	638	4.13	0.11	3.19	0.85	0.01	0.07	5	10	709
S9612663	335516	364609	6858632	1	1	5	*	2G	45	1	1	20	2	B2	55	24	150	0.2	64	88	1	17	52	3.66	2	33	2	2	18	9	1	48	12	21	865	0.58	0.01	0.79	1.31	0.03	0.08	5	10	1182
S9612664	335517	364572	6858597	1	1	5	*	3B	45	2	2	20	2	B1	47	4	46	0.2	32	94	1	3	11	0.67	1	2	2	2	7	6	1	142	3	2	223	0.32	0.01	0.53	2.69	0.05	0.03	-1	-1	
S9612665	335518	364538	6858564	1	1	5	*	3K	4	3	2	35	3	B1	57	7	80	0.2	36	96	1	3	13	0.64	1	2	2	2	8	5	1	190	3	2	209	0.38	0.01	0.33	3.55	0.04	0.03	-1	-1	
S9612666	335519	364500	6858530	1	1	5	*	3K	45	2	2	30	4	B1	88	15	93	0.2	130	135	1	18	28	3.09	1	17	2	2	43	10	1	140	10	8	483	0.94	0.01	1.21	2.9	0.03	0.12	5	10	816
S9612667	335520	364462	6858494	1	1	5	*	2B	24	1	1	20	4	B1	84	88	110	0.5	1009	105	1	23	36	4.18	4	24	2	2	48	17	1	51	10	14	392	1.31	0.03	1.63	1.09	0.02	0.17	5	10	1261
S9612668	335521	364421	6858463	1	1	5	*	1B	24	1	1	25	3	B1	20	2	50	0.2	44	130	1	10	21	2.55	1	20	2	2	38	7	1	47	4	19	401	1	0.04	1.13	0.96	0.02	0.17	-1	-1	
S9612669	335522	364387	6858426	1	1	5	*	3B	45	2	2	15	2	B1	24	2	22	0.2	7	115	1	4	7	1.13	1	5	7	2	26	8	1	60	1	3	142	0.36	0.02	0.69	1.26	0.04	0.05	-1	-1	
S9612670	335523	364349	6858395	1	1	5	*	3B	4	1	1	20	2	B1	38	2	30	0.2	12	169	1	6	12	1.54	1	6	2	2	37	11	1	93	2	3	201	0.53	0.02	0.9	2.02	0.03	0.07	-1	-1	
S9612671	335525	364238	6858293	1	1	5	*	3K	24	1	2	20	2	B1	26	5	67	0.2	19	178	1	7	18	1.84	1	12	2	2	23	8	1	99	4	4	558	0.69	0.03	0.97	1.87	0.03	0.16	-1	-1	
S9612672	335526	364168	6858228	1	1	5	*	1G	45	1	1	25	1	B1	5	2	4	0.2	9	24	1	1	1	0.26	1	2	2	2	7	8	1	15	1	1	42	0.07	0.01	0.23	0.24	0.03	0.02	-1	-1	
S9612673	335527	363612	6858503	1	1	5	*	1B	24	1	1	20	1	B2	56	21	69	0.2	86	240	1	16	49	3.94	5	44	2	2	28	10	1	13	27	34	459	0.96	0.01	1.68	0.22	0.01	0.03	5	10	1694
S9612674	335528	363667	6858600	1	1	5	*	2B	45	2	2	20	2	B2	15	6	48	0.2	17	98	1	5	14	2.12	4	11	2	2	12	8	1	33	3	11	160	0.27	0.01	0.66	0.76	0.03	0.04	-1	-1	
S9612675	335529	363755	6858665	1	1	5	*	2G	24	1	1	25	1	B2	35	11	47	0.2	19	102	1	10	33	3.48	1	14	2	2	12	3	1	30	12	26	156	0.42	0.01	1.04	2.62	0.01	0.03	-1	-1	
S9612676	335530	363798	6858701	1	1	5	*	2G	24	1	2	25	1	B2	53	10	27	0.2	3	190	1	16	41	3.46	1	10	2	2	7	11	1	67	19	17	818	0.56	0.01	0.71	2.79	0.01	0.03	-1	-1	
S9612677	335531	363830	6858734	1	1	5	*	3K	24	2	1	30	1	B2	28	13	62	0.6	25	106	1	3	21	1.81	5	12	5	2	47	8	1	12	4	9	86	0.16	0.01	0.71	0.24	0.03	0.02	-1	-1	
S9612678	335532	363667	6858767	1	1	5	*	3K	45	2	2	30	1	B1	21	2	10	0.2	3	269	1	1	9	0.52	1	2	2	2	5	5	1	116	4	3	17	0.18	0.01	0.56	2.63	0.03	0.01	-1	-1	
S9612679	335541	363791	6859108	1	1	5	*	2G	24	2	1	25	-12	B	4	2	4	0.2	1	39	1	1	2	0.19	1	2	9	2	4	1	1	18	1	1	39	0.02	0.01	0.21	0.47	0.02	0.01	-1	-1	
S9612680	335542	363718	6859041	1	1	5	*	3B	45	2	2	30	-12	B	19	2	25	0.2	1	115	1	4	11	1.09	1	9	2	2	6	1	1	46	6	9	263	0.27	0.01	0.81	1.8	0.01	0.01	-1	-1	
S9612681	335543	363684	6859003	1	1	5	*	3B	4	3	2	25	-11	B	18	4	30	0.2	1	111	1	4	12	0.61	4	10	2	5	4	1	1	63	4	5	178	0.18	0.01	0.74	2.31	0.01	0.03	-1	-1	
S9612682	335544	363644	6858973	1	1	5	*	2B	4	2	1	30	-12	B	29	7	61	0.2	10	134	1	11	26	2.25	2	16	2	2	10	1	1	30	9	14	468	0.57	0.01	1.11	1.18	0.01	0.02	-1	-1	
S9612683	335545	363608	6858936	1	1	5	*	2B	4	2	1	30	-12	B	13	5	27	0.2	2	123	1	6	9	1.84	2	2	2	2	4	1	1	25	3	4	243	0.09	0.01	0.42	0.57	0.02	0.02	-1	-1	
S9612684	335546	363571	6858896	1	1	5	*	3K	45	2	3	25	-11	B	22	5	47	0.2	20	175	1	6	14	1.67	2	13	2	6	12	1	1	30	4	7	480	0.27	0.01	0.74	0.88	0.01	0.03	-1	-1	
S9612685	335547	363535	6858868	1	1	5	*	2B	24	1	1	30	-12	B	34	10	50	0.6	49	276	1																							

APPENDIX III
STATEMENTS OF EXPENDITURES

DOT PROPERTY

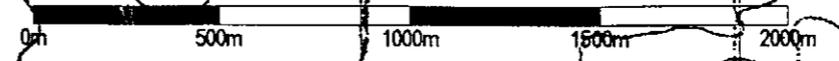
<u>EXPENDITURE ITEM</u>	<u>COST \$</u>
GEOCHEMISTRY STAFF COSTS	120
GEOCHEMICAL ANALYSES	759
DOMICILE	125
HELICOPTER	293
TOTAL	1,297

Dot Geochem Sample Locations (1:20,000)

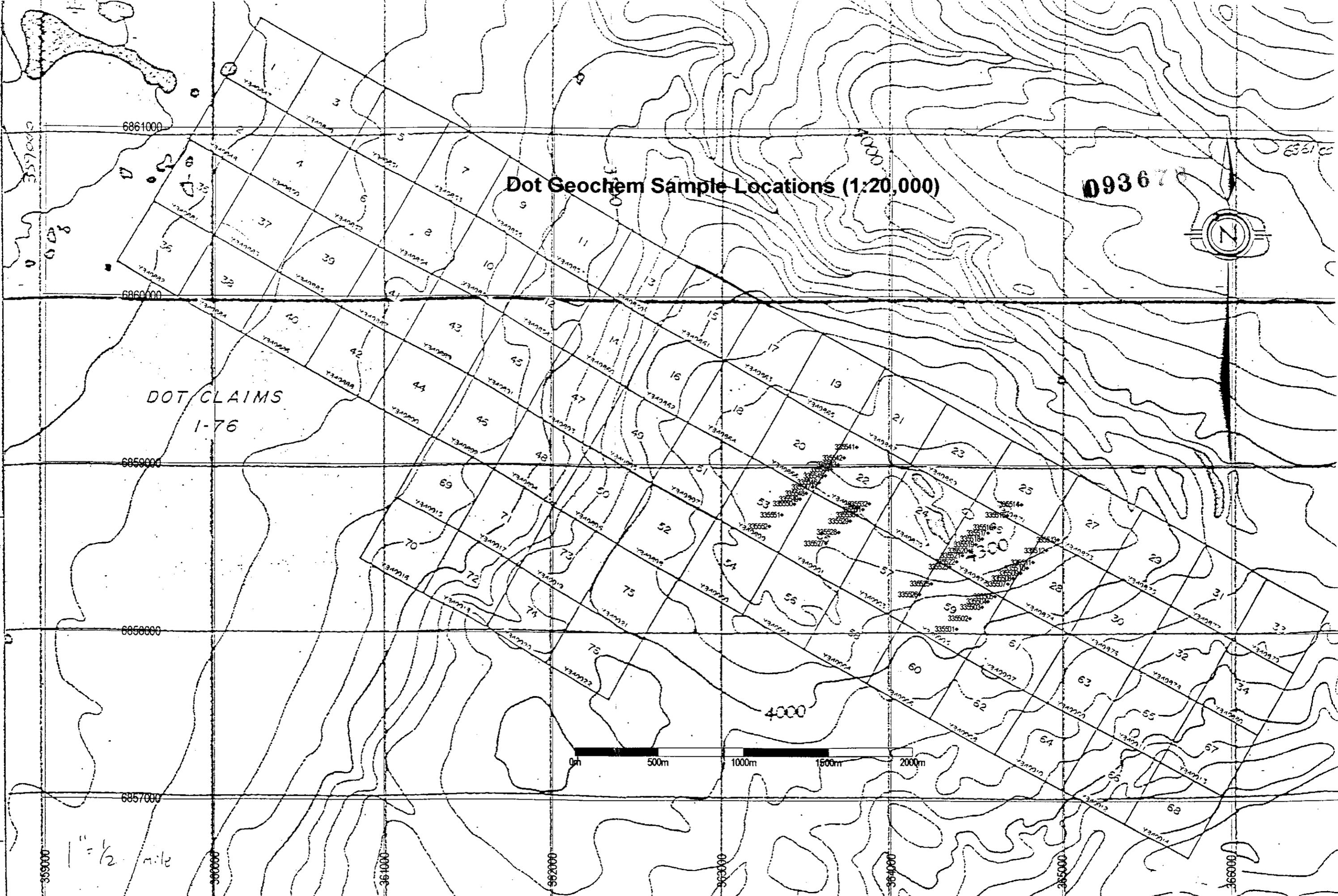
09367



DOT CLAIMS
1-76



1" = 1/2 mile



DOT CLAIMS
1-76

1" = 1/2 mile



359000

6861000

303678

3500

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