

GEOCHEMICAL REPORT ON THE TANTE MINERAL CLAIMS

Clinton Mining Division

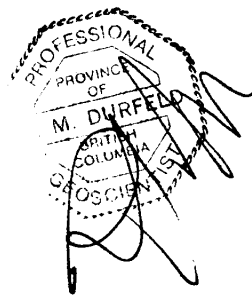
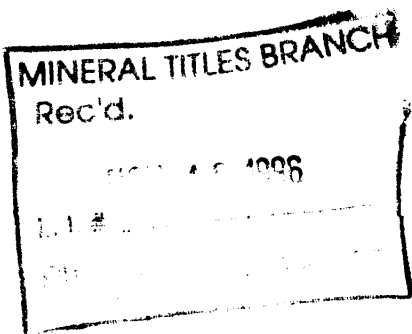
Latitude 51° 16' North Longitude 123° 15' West

N.T.S. 920/6

November 1996

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

24,830

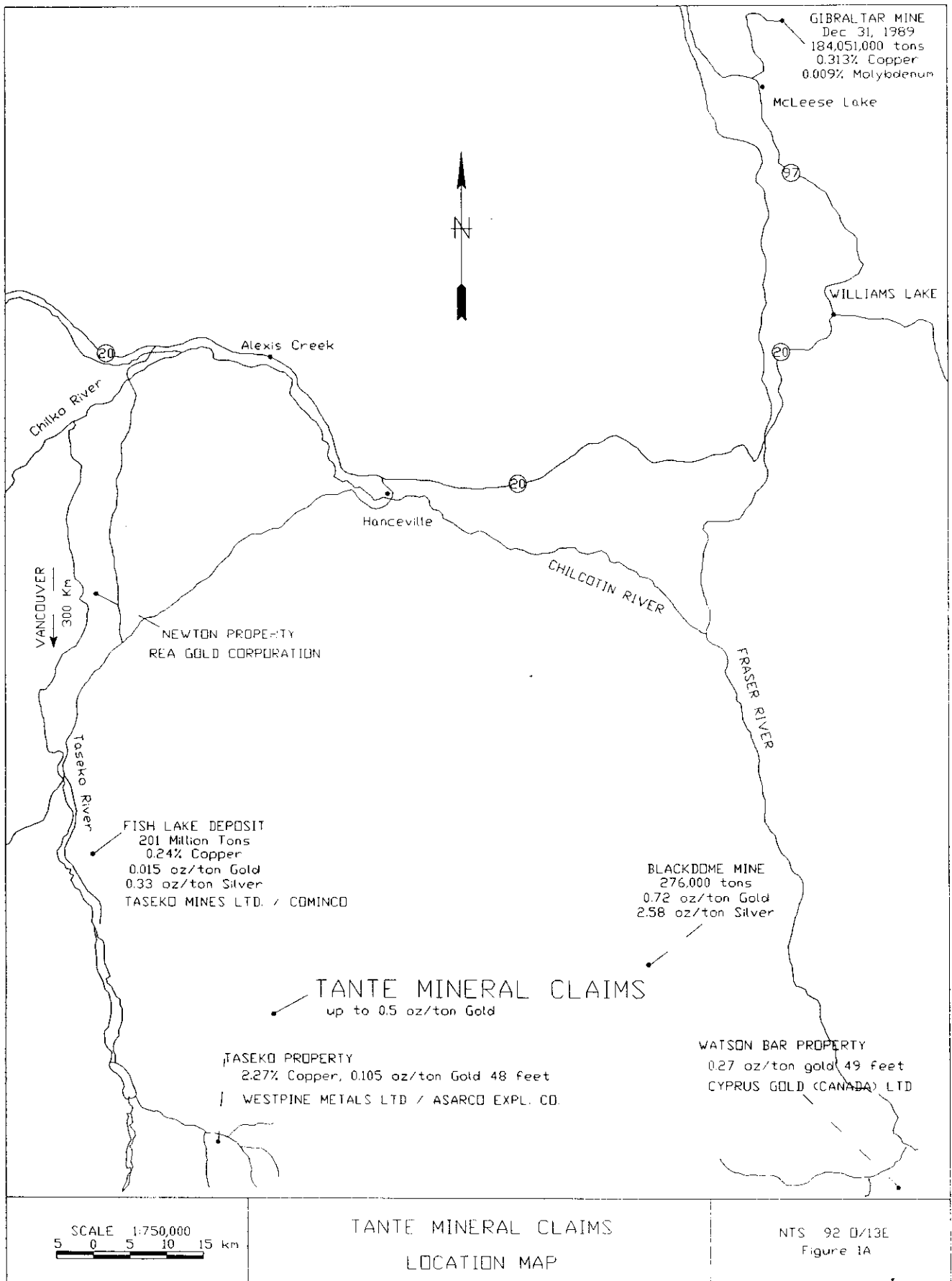


by
R.M. Durfeld, B.Sc., P. Geo

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INTRODUCTION

Location

The DIL property, comprised of the Tante 1 to 8 mineral claims, is located in the Clinton Mining Division approximately 120 kilometres southwest of the city of Williams Lake (Figure 1). More precisely, it is located at 51 degrees north latitude, and 123 degrees, 15 minutes west longitude (National Topographic System map 92O/6)

Access and Physiography

Access to the property is by helicopter from either Lillooet or Williams Lake. Road access exists to within 10 kilometres to the north and 20 kilometres to the southwest of the mineral claims.

The claims cover a northwest trending ridge to the north of a gently northeast sloping plateau. Elevation on the claims range from 1900 to 2350 metres. Vegetation on the claims consists of alpine grasses, lichen and mosses that at the lower elevation give way to scrubby alpine spruce and balsam.

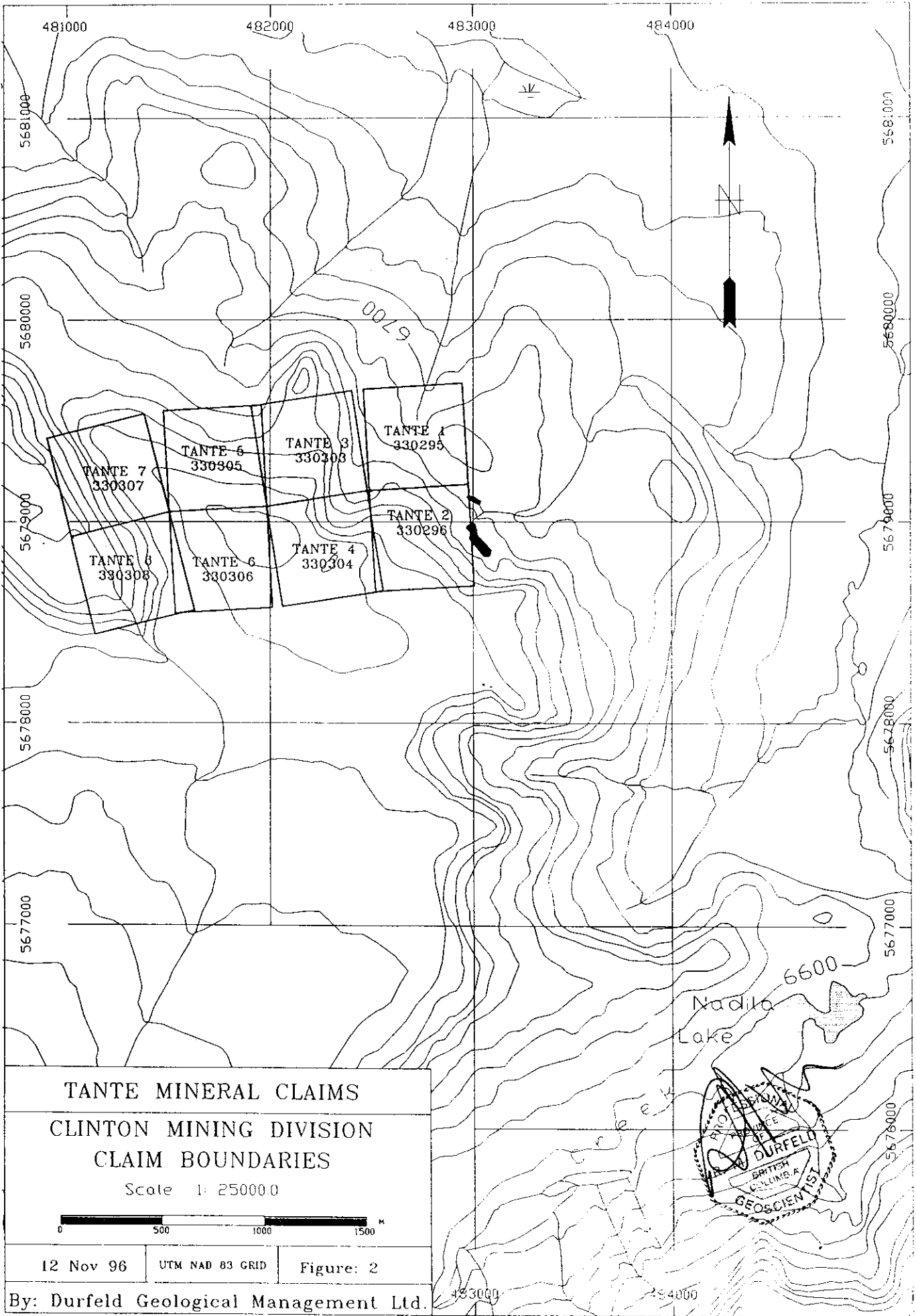
History

In 1980 Barrier Reef resources found auriferous quartz vein float while conducting geological mapping, limited rock sampling and soil sampling on a 200 by 500 metre grid. Soil sampling showed large areas to be anomalous for gold (>90 ppb) and rock sampling of quartz vein float obtained gold values in excess of 2,000 ppb.

From 1987 to 1990 the area was worked as the DIL mineral claims. This work by way of grid preparation, prospecting, rock sampling and geological mapping defined the quartz boulder trains with gold values of up to 19,320 ppb gold. The author in the 1990 recommended a program of excavator trenching with a small excavator to provide an evaluation of the source for the quartz boulders. In 1994 the author relocated the area of interest as the Tante 1 to 8 mineral claims.

1996 Program

The objective of the 1996 program was to re-establish the 1990 grid relative to the TANTE mineral claims and collect several preliminary lines of soil samples in the areas of known mineralized quartz vein float. The claim posts for the TANTE mineral claim



TANTE MINERAL CLAIMS
CLINTON MINING DIVISION
CLAIM BOUNDARIES
Scale 1: 250000

12 Nov 96 UTM NAD 83 GRID Figure: 2

By: Durfeld Geological Management Ltd.

and several grid points were located by differential GPS.

Ownership

The DIL property, owned by R.M. Durfeld, is comprised of the TANTE 1 to 8 two-post mineral claims. The status of the claims is given as:

CLAIM NAME	RECORD #	UNITS	RECORD DATE	EXPIRATION DATE
TANTE 1	330295	1	Aug 17, 1994	Aug 17, 2000
TANTE 2	330296	1	Aug 17, 1994	Aug 17, 2000
TANTE 3	330303	1	Aug 17, 1994	Aug 17, 2000
TANTE 4	330304	1	Aug 17, 1994	Aug 17, 2000
TANTE 5	330305	1	Aug 17, 1994	Aug 17, 2000
TANTE 6	330306	1	Aug 17, 1994	Aug 17, 2000
TANTE 7	330307	1	Aug 17, 1994	Aug 17, 2000
TANTE 8	330308	1	Aug 17, 1994	Aug 17, 2000

The expiration date reflects the work that was filed in Williams Lake on August 16, 1996 that is the subject of this report. The TANTE 1 to 8 mineral claims were grouped as the TANTE Group on August 16, 1996. The exact claim post locations, taken by differential GPS are given as Appendix III. The relative locations are plotted as the Claim Map (Figure 2) and the claim boundaries are also highlighted on the other project maps.

GEOLOGY

Previous mapping in the area has shown the oldest rocks on the claims as grey to black, thinly bedded siltstone, argillite and lesser greywacke of the Lower Cretaceous Taylor Creek Group (Unit Kt). These rocks are pyritic and hornfelsed where intruded by feldspar porphyry dykes. To the west and south the Taylor Creek Group is unconformably overlain by the Upper Cretaceous Kingsvale Group, consisting of a sedimentary to volcanoclastic assemblage.

The feldspar porphyry, mapped as Eocene Age (Unit Ep), occurs as dykes and irregular

masses up to 300 metres thick that occupy a 600 metre wide, northwesterly trending zone. The dykes cut the Taylor creek rocks at shallow angles to the bedding. The feldspar porphyries are light tan to gray coloured and range in texture from a sparse to crowded porphyry comprised of subhedral phenocrysts of feldspar, minor hornblende and, less commonly, rounded quartz eyes in a fine grained felsic mass. In areas the feldspar porphyry also contains distinct, hexagonal, porphyritic biotite grains. The feldspar porphyry is generally sericitized, chloritized and pyritized.

Immediately to the south of the property the older rocks are covered by flat lying columnar jointed, vesicular basalts of Miocene-Age (Unit Mc).

The dominant structure on the claims are west to northwest trending, steep-angle normal faults which down-drop the Miocene basalts against the older feldspar porphyry dykes and sediments. Weaker, vertical to steep dipping faults and joints were noted on northeasterly and northerly trends. The three quartz veined bedrock locations were controlled by this vertical northeasterly (50 to 60 degree) trend.

Mineralization

Of primary interest on the Tante claims is the quartz vein material that occurs as northeasterly trending veins and forms northeasterly trending boulder trains in areas of frost-heaved felsenmeer of feldspar porphyry and hornfelsed pyritic siltstone. The vein material is epithermal in nature, characterized by multiple banded, vuggy and/or chalcedonic nature. Quartz locally forms pseudomorphs after calcite, a characteristic common to an epithermal system.

Sulphides form less than 1% of the vein material and consist of fine pyrite, arsenopyrite, stibnite and chalcopyrite. Four prominent, northeasterly trending vein and/or quartz boulder trains were identified as the Spur, Western, Eastern and Stibnite zones. The relative abundance of sulphides in these vein zones is variable, while all four show epithermal characteristics as banding, chalcedonic and vuggy textures.

GEOCHEMICAL SURVEYS

The objective of the 1996 work was to evaluate the geochemical soil response in an area of auriferous quartz vein float and confirm strongly anomalous soil sites in an area of no known quartz veins identified by previous surveys.

To this end, the grid was rehabilitated and nineteen soil samples were collected at 25

metre intervals on three lines. This sampling tested a small area of the east zone as lines 48+50 and 49+00 north and the anomalous soil site as line 52+00 east. Soils were collected as fine poorly developed rusty B-horizon clays between rock fragments at an average depth of .3 metres using a grub hoe. The samples were placed in Kraft sample bags and sent to MIN-EN Laboratories in Vancouver for analysis. The results of this sampling is given as appendix II and plotted with the previous rock results for gold, arsenic, antimony and molybdenum as Figure 3 through 6.

Results

The limited sampling in the east zone shows many anomalous values, greater than 100 ppb gold and up to 319 ppb, in this area of mineralized quartz vein float. The highest gold value is on line 52+00 E where there was no quartz vein float noted. The plots for arsenic and antimony suggest elevated values with the higher gold values.

DISCUSSION

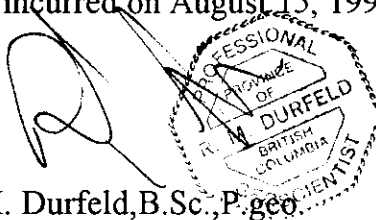
Previous work in the Tante claim area had shown anomalous gold mineralization in epithermal quartz veins as bedrock and float boulder trains. This limited soil sampling has shown anomalous gold in soil values related to the east zone boulder train. On line 52+00 E there is no obvious quartz vein rubble as source to the high gold values. An expanded soil sampling survey should be conducted and evaluated prior to a program of excavator trenching and /or diamond drilling.

APPENDIX I
- Itemized Cost Statement

Geochemical Analyses	\$345.61
Helicopter Charter	\$2,210.09
Field Consumables and Truck Rental	\$150.11
Geologist - R.M. Durfeld, B.Sc., P.Geo. (1.5 days)	\$600.00
GPS - Operator - Teresa Durfeld	\$250.00
- (Trimble Pathfinder Rental)	\$250.00
- (Post Processing)	\$240.00
Report Preparation and Drafting	\$700.00
TOTAL COST OF PROGRAM	\$4,745.81

The field costs of the program were incurred on August 15, 1996.

R.M. Durfeld, B.Sc., P. geo.



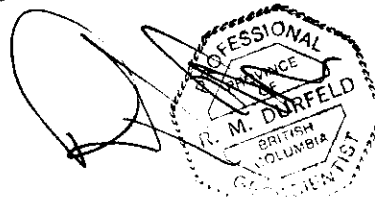
APPENDIX II

- Statement of Qualifications

I Rudolf M. Durfeld, do hereby certify:

- 1.) That I am a geologist with offices at 1725 Signal Point Road, Williams Lake, B.C.
- 2.) That I am a graduate of the University of British Columbia, B.Sc. Geology 1972, and have practised my profession with various mining and/or exploration companies and as an independent geological consultant since graduation.
- 3.) That I am registered as a Professional Geoscientist (P.Geo.) by the Association of Professional Engineers and Geoscientists of B.C. (No. 18,241)
- 4.) That this report is based on my personal knowledge of the property, compilation of the old data and supervision of the sampling and GPS surveys that were conducted on August 15, 1996 that are the subject of this report.

Dated at Williams Lake, British Columbia
this 12th day of November, 1996.



R.M. Durfeld, B.Sc., P.Geo.

APPENDIX III

- **GPS - Survey Procedure**
- **GPS - Survey Results**



DÜRFELD GEOLOGICAL
MANAGEMENT LTD.

GLOBAL POSITIONING SURVEY (GPS) PROCEDURES

EQUIPMENT

Trimble Pathfinder Pro-

- an eight channel (GPS) receiver.
- connected to an MC-V data logger.
- running Asset Surveyor software supplied by Trimble.

Portable Computer-

- AST 486 with colour monitor.
- with the Pathfinder Post Processing Software supplied by Trimble installed.

FIELD PROCEDURE

Trimble Pathfinder Pro

- was transported in a back-pack and the antennae was placed on a staff, or on a magnetic mount on a vehicle.
- to achieve acceptable accuracies the unit configuration was checked and set to the following settings:
 - elevation mask 13 degrees
 - SNR mask 6.0
 - PDOP MASK 6.0
 - PDOP switch 6.0
 - in point feature 1 second intervals
 - in line feature 3 to 10 second intervals
- Software
 - files were opened and using the Asset Surveyor software and data was stored as lines or nested points.
 - within the Asset Surveyor software labels were attached to these line and/or point features.
 - at the end of each survey day the data-logger was connected to the computer and the raw data (.ssf) down loaded. The completed traverses were displayed on the screen and areas of additional traversing planned.

POST PROCESSING

The post processing consisted of Data Correction and preparation of data files and plan maps.

- Differential Data Correction

- requires base data files for the hours of the survey. The base data files for this survey were purchased from a community base station located at Prince George operated by Forey Management Ltd.

SSF->ASCII V2.05 Wed Nov 13 11:27:06 1996

Input File : C:\PFPRO\DATA\DIL\DIL1581.COR

Output File : C:\PFPRO\DATA\DIL\DIL1581.AS2

Datum : NAD-83

Coordinate System : UTM [10U]

Output features, no filter

Parameter	Columns	Units
Northing	[13 , 23]	metres
Easting	[1 , 11]	metres
Geoid Altitude	[25 , 35]	metres
Attributes	[49 , 61]	
Text	[37 , 47]	

```

488457.55 5687732.25 2104.49
481898.79 5678939.53 2348.80
481983.41 5679075.19 2318.70
481505.60 5679048.32 2299.22
480882.47 5678891.63 2112.28
481724.21 5678967.73 2326.42 Line
481903.43 5678938.72 2353.69
482487.85 5679154.01 2178.55
482975.95 5679184.86 2100.46 Line
488457.55 5687732.25 2104.49 BENCHMARK ON MT TOM
481898.79 5678939.53 2348.80 KNIGHT1 2 3 4
481983.41 5679075.19 2318.70 INT TANTE 3 4 5 6
481505.60 5679048.32 2299.22 FIN 5 6 INT 7 8
480882.47 5678891.63 2112.28 FIN TANTE 7 8
481724.21 5678967.73 2326.42 49+00N48+50E
481903.43 5678938.72 2353.69 LCP KNIGHT1 2 3 4
482487.85 5679154.01 2178.55 FIN TANTE3 4 INT TANTE1 2
482975.95 5679184.86 2100.46 BLUE RIBBON

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Comparison of Surveys -

BC Lands gives the location of the Mt. Tom benchmark in NAD 83 as:

51° 20' 26.77 1761" N	123° 09' 56.630868"W	2100.986 m
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converted to UTM NAD 83 gives the following co-ordinates:

5687733.948 N	488456.130 E	2100.986 m
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the differential corrected GPS location from this survey in UTM NAD 83 gives:

5687732.25 N	488457.55 E	2104.49 m
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giving the following differences.

+ 1.69 N	- 1.19 E	- 4.49 m
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APPENDIX IV

- **Geochemical Analytical Procedures**
- **Geochemical Soil Results**



**MINERAL
• ENVIRONMENTS
LABORATORIES**
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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VANCOUVER, B.C. CANADA V5X 4E8
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FAX (604) 327-3423

SMITHERS LAB:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TEL (604) 847-3004
FAX (604) 847-3005

PROCEDURE FOR Au GEOCHEM FIRE ASSAY

Samples are dried @ 65 C and when dry the Rock & Core samples are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to 1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample. This sub-sample is then pulverized on a ring pulverizer to 95% - 150 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Soil and stream sediment samples are screened to - 80 mesh for analysis.

The samples are fluxed, a silver inquant added and mixed. The assays are fused in batches of 24 assays along with a natural standard and a blank. This batch of 26 assays is carried through the whole procedure as a set. After cupellation the precious metal beads are transferred into new glassware, dissolved with aqua regia solution, diluted to volume and mixed.

These resulting solutions are analyzed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed.

10% of all assay per page are rechecked, then reported in PPB. The detection limit is 1 PPB.



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SMITHERS, B.C. CANADA V0J 2N0
TEL (604) 847-3004
FAX (604) 847-3005

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:
PROCEDURE FOR TRACE ELEMENT ICP

Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, Li, Mg, Mn, Mo, Na, Ni, P,
Pb, Sb, Sn, Sr, Th, Ti, U, W, Zn

0.50 grams of the sample pulp is digested for 2 hours with an 1:3:4 HNO₃:HCl:H₂O mixture. After cooling, the sample is diluted to standard volume.

The solutions are analysed by computer operated Jarrell Ash 9000, Jarrell Ash 975 or Jobin Yvon 38, Inductively Coupled Plasma Spectrophotometers.

COMP: DURFELD GEOLOGICAL
 PROJ: DIL
 ATTN:

MIN-EN LABS — ICP REPORT
 8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
 TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0620-SJ1
 DATE: 96/09/11
 * SOIL * (ACT:F31)

DIL.

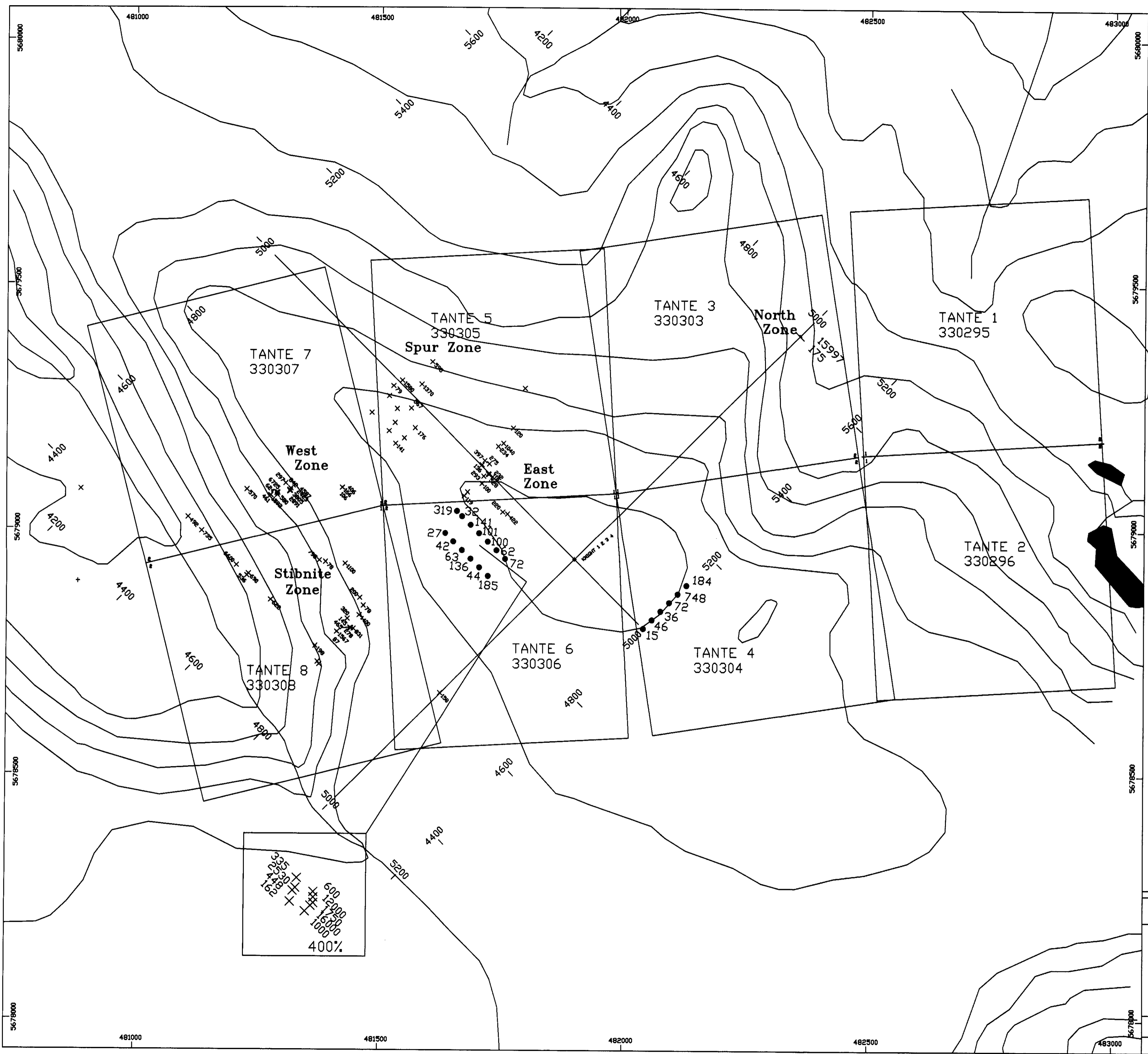
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48+50N 47+75E	.1	1.83	131	62	.1	1	.44	.1	19	37	93	3.92	1	.05	9	.82	663	12	.02	36	760	1	21	2	66	1	.06	178.3	1	55	27	
48+50N 48+00E	.1	2.12	171	88	.1	1	.31	.1	21	33	94	3.78	1	.09	10	.77	1041	14	.02	45	1000	6	30	2	55	1	.02	162.2	1	69	42	
48+50N 48+25E	.1	2.13	127	81	.1	1	.25	.1	21	34	107	3.86	1	.05	8	.72	682	18	.02	45	720	1	19	2	48	1	.05	171.6	1	48	63	
48+50N 48+50E	.1	1.54	69	68	.1	1	.42	.1	21	34	79	4.01	1	.05	7	.70	672	15	.02	45	1040	1	11	2	56	1	.05	168.8	1	41	136	
48+50N 48+75E	.1	1.98	93	55	.1	1	.30	.1	16	35	68	3.69	1	.04	7	.81	535	14	.02	29	600	1	12	2	75	1	.05	171.9	1	54	44	
48+50N 49+00E	.1	1.93	103	71	.1	1	.32	.1	16	33	73	3.64	1	.03	7	.73	734	15	.02	34	1080	1	13	2	73	1	.04	165.5	1	51	185	
49+00N 47+60E	.1	2.71	258	91	.1	1	.27	.1	23	54	120	4.30	1	.07	10	.94	818	22	.02	51	800	4	96	2	53	1	.06	186.1	1	52	319	
49+00N 47+75E	.1	2.45	175	63	.1	1	.30	.1	21	41	74	3.45	1	.07	9	.78	909	13	.02	43	1320	1	28	2	64	1	.03	162.0	1	60	32	
49+00N 48+00E	.1	2.49	131	77	.1	1	.27	.1	17	40	160	3.38	1	.06	9	.86	459	12	.02	37	540	1	16	2	68	1	.06	171.2	1	41	141	
49+00N 48+25E	.1	2.22	146	88	.1	1	.28	.1	19	29	56	3.37	1	.05	10	.67	1026	13	.02	37	1790	1	25	2	71	1	.02	155.9	1	64	101	
49+00N 48+50E	.1	2.24	139	108	.1	1	.35	.1	23	33	112	4.00	1	.07	10	.78	1031	18	.02	49	1250	1	22	2	60	1	.04	166.3	1	61	100	
49+00N 48+75E	.1	2.22	160	79	.1	1	.27	.1	20	34	74	3.76	1	.08	10	.79	944	14	.02	42	1350	1	29	2	60	1	.03	165.3	1	69	62	
49+00N 49+00E	.1	2.34	101	54	.1	1	.37	.1	18	36	81	3.74	1	.05	10	.86	553	14	.02	36	1040	1	13	2	83	1	.05	174.6	1	52	72	
52+00E 50+00N	.1	1.52	32	49	.1	1	.40	.1	10	29	27	2.65	1	.03	7	.73	455	9	.02	22	560	1	4	1	50	1	.05	159.6	1	47	15	
52+00E 50+25N	.1	1.79	63	46	.1	1	.25	.1	14	26	38	2.58	1	.04	7	.69	697	10	.02	24	970	19	8	1	40	1	.03	156.4	1	51	46	
52+00E 50+50N	.1	1.52	33	55	.1	1	.43	.1	10	30	56	2.79	1	.03	7	.72	414	10	.02	23	620	1	4	1	53	1	.05	160.9	1	46	36	
52+00E 50+75N	.1	1.46	58	45	.1	1	.34	.1	9	28	40	2.66	1	.02	6	.67	319	9	.02	20	630	1	4	1	41	1	.04	159.4	1	40	72	
52+00E 51+00N	.1	1.11	15	31	.1	1	.45	.1	10	32	34	3.01	1	.02	5	.59	302	10	.02	22	880	1	1	1	32	1	.08	176.9	1	39	748	
52+00E 51+25N	.1	1.85	110	53	.1	1	.25	.1	11	32	61	3.22	1	.03	9	.77	437	11	.02	26	320	1	4	2	42	1	.03	170.6	1	50	184	

SEP-11-1996 13:18

MIN-EN LABS

604 327 3423 , P.02

TOTAL P.02



Legend

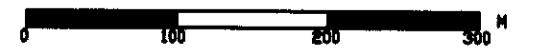
- X - Rock sample sites of previous surveys
(Au values under 70 ppb not shown)
- - Soil sample sites of 1996 survey

24,830
 GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT

Tante Mineral Claims

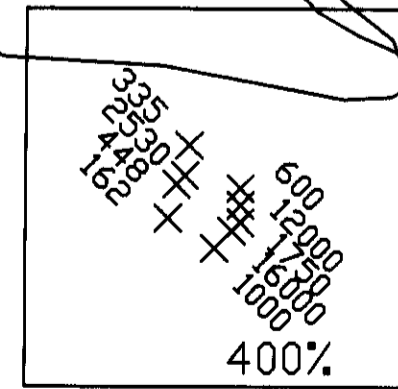
CLINTON MINING DIVISION
 GEOCHEMICAL PLAN
 GOLD (PPB)

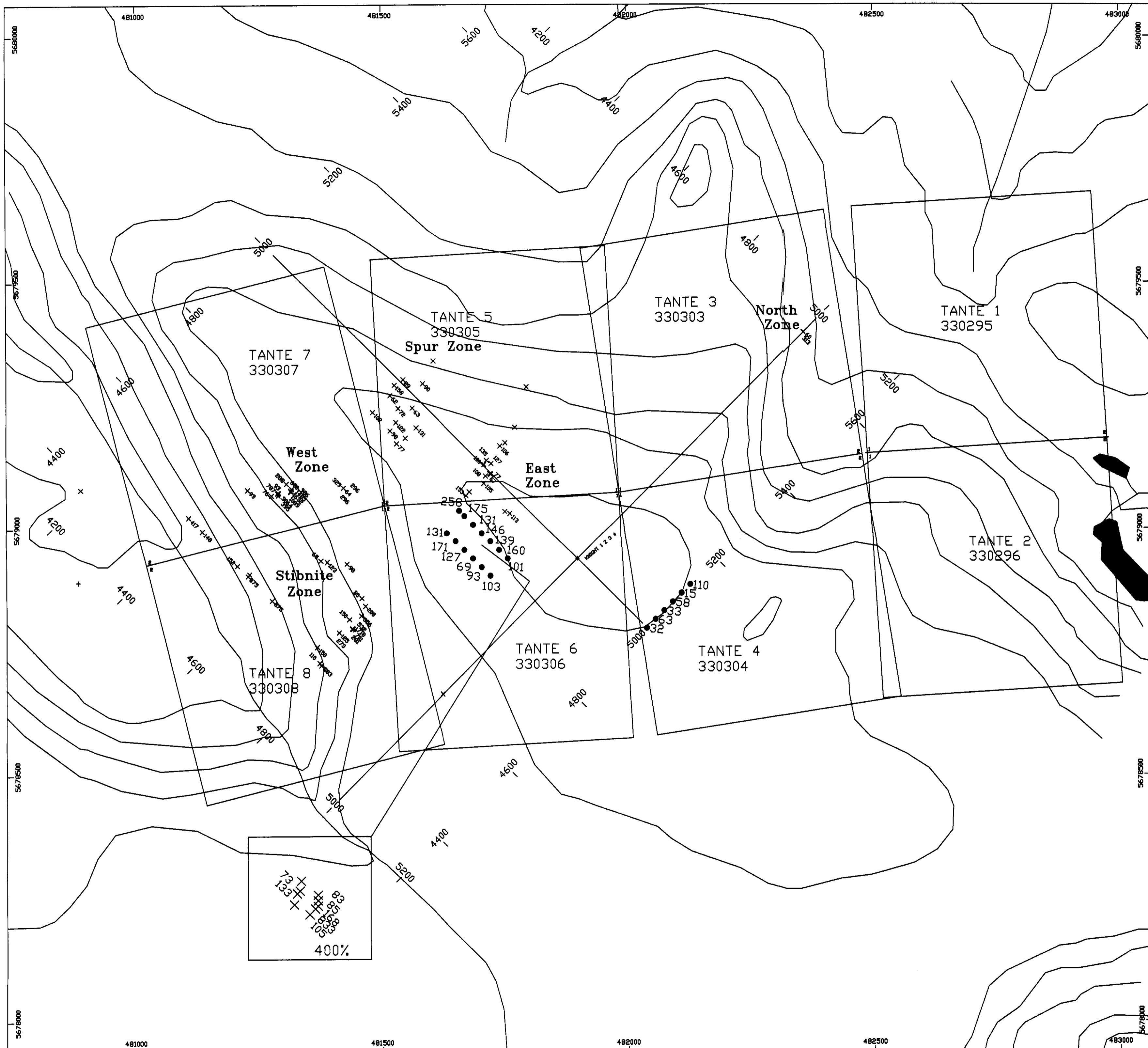
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12 NOV 96 Grid UTM Nad 83 Figure 3

Durfeld Geological Management Ltd.





Legend

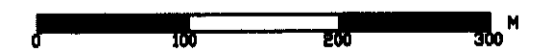
- x - Rock sample sites of previous surveys
(As values below 60 ppm not shown)
- - Soil sample sites of 1996 survey

24,830

GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT

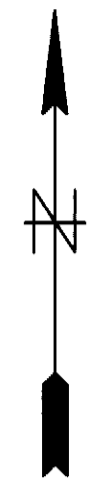
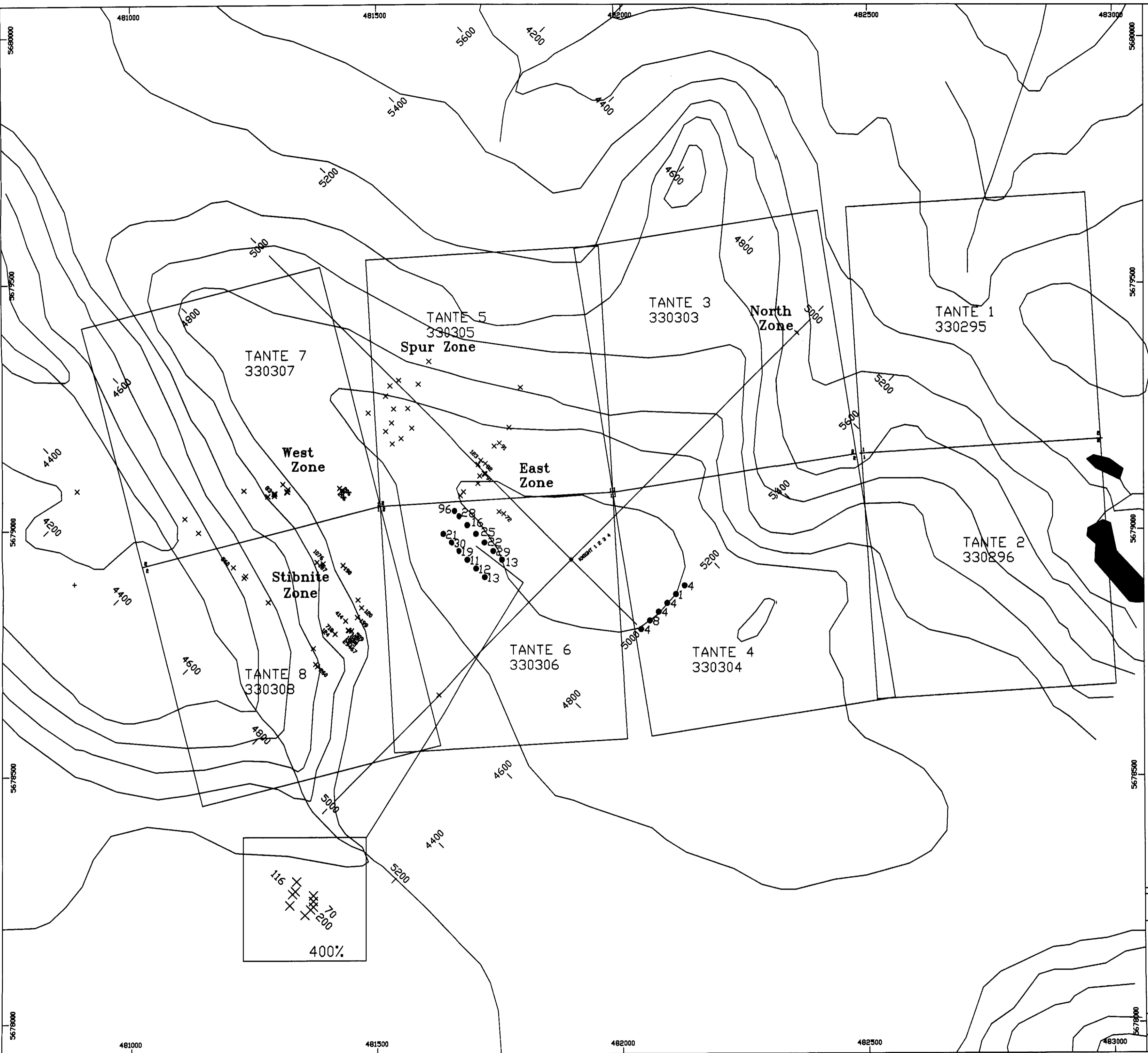
Tante Mineral Claims

CLINTON MINING DIVISION
 GEOCHEMICAL PLAN
 ARSENIC (PPM)
 Scale 1: 5000.0



12 NOV 96 Grid UTM Nad 83 Figure: 4

Durfeld Geological Management Ltd.



Legend

- x - Rock sample sites of previous surveys
(Sb values under 70 ppm not shown)
- - Soil sample sites of 1996 survey

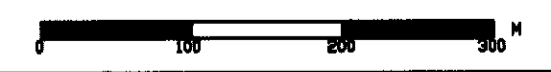
24,830

OF CANADIAN SURVEY BLANCE
 ANTIMONY (PPM)

Tante Mineral Claims

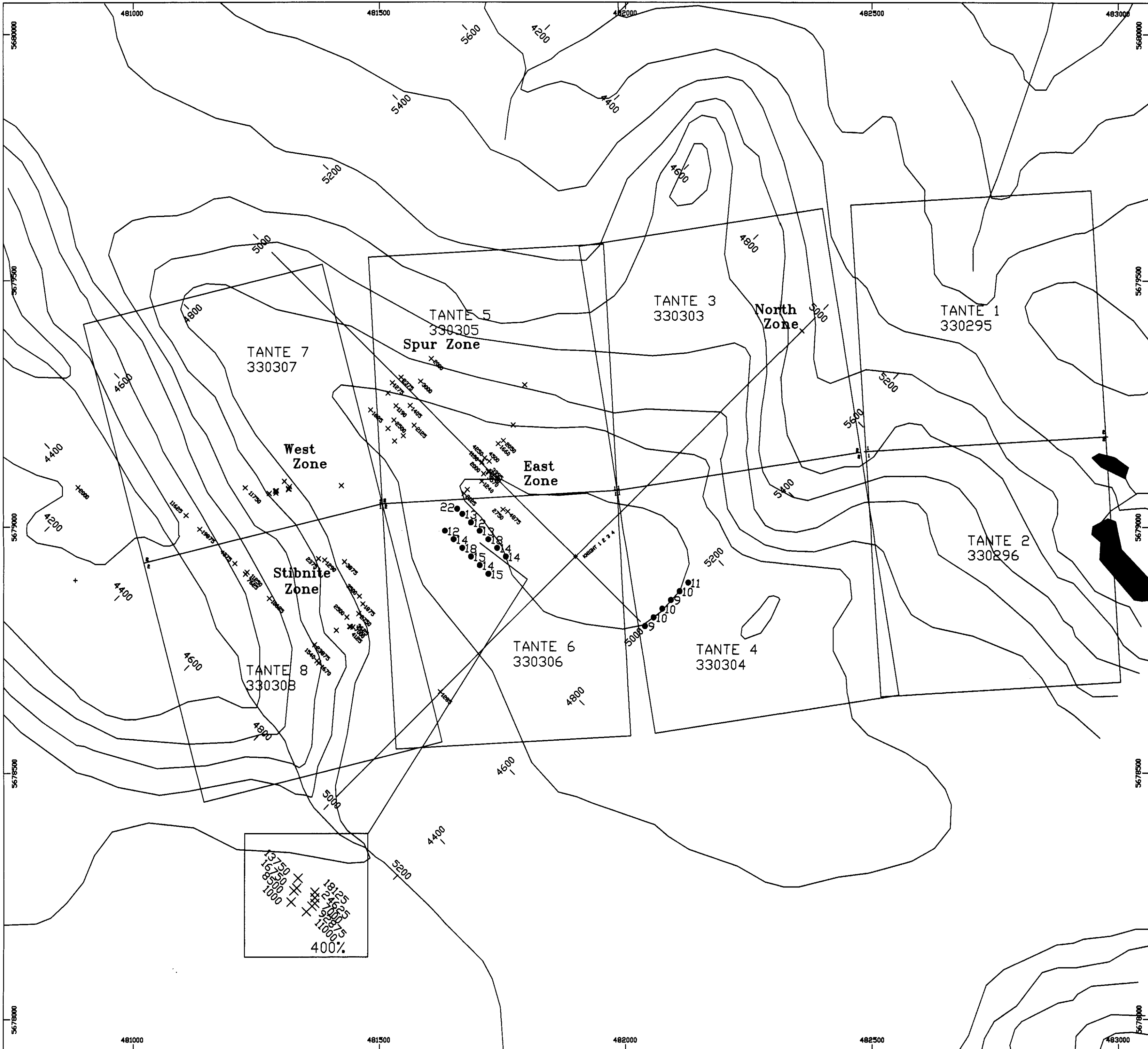
CLINTON MINING DIVISION
 GEOCHEMICAL PLAN
 ANTIMONY (PPM)

Scale 1: 5000.0



12 NOV 96 Grid UTM Nad 83 Figure 5

Durfeld Geological Management Ltd.



Legend

- x - Rock sample sites of previous surveys
(No values under 10 ppm not shown)
- - Soil sample sites of 1996 survey

GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT
24,830

Tante Mineral Claims

CLINTON MINING DIVISION
 GEOCHEMICAL PLAN
 MOLYBDENUM (PPM)
 Scale 1: 5000.0

