

LOG NO: 1221	RD.
ACTION:	
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FILE NO: 87-913-16657	

9/88

GEOPHYSICAL & GEOCHEMICAL REPORT

ON THE

TAS 11 CLAIM

**FILMED**

N.T.S. 93 K/16W

OMINECA MINING DIVISION

Situated at Co-ordinates: 55° 52' N 53'  
124° 15' W 17' 55"

*Owner/Operator:* NORANDA EXPLORATION COMPANY, LIMITED  
(NO PERSONAL LIABILITY)

By: Gordon Maxwell  
Lyndon Bradish

November, 1987

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,657**

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SUMMARY:

The TAS 11 claim was staked to cover the contact of a large dioritic intrusive with the Takla volcanics. Due to the limited amount of out crop in the area the ground was evaluated using magnetic and soil geochem surveys. A total of 9 kilometers of mag survey was completed along with the collection of 183 B-horizon soil samples, which were analyzed for Cu, Zn, Pb, Ag, As and Au.

Results of the magnetic survey indicate the majority of the gridded area is underlain by the diorite. Soil geochem failed to produce any substantial anomalies.

INTRODUCTION:

The TAS 11 claim was staked to cover the contact of a large dioritic intrusive near the Inzana Lake logging road. There is little or no outcrop in the area, therefore the ground is being evaluated by more indirect methods, including a magnetometer survey and soil geochemistry. The gridded portion of the claim is part of a larger grid on the main TAS property. A total of 183 B-horizon soil samples were collected and analyzed for Cu, Zn, Pb, Ag, As and Au.

LOCATION AND ACCESS:

The TAS 11 property is situated approximately 50 km north of the town of Fort St. James and 150 km northeast of Prince George. The property is bounded by the Inzana Lake access road to the north and Taslincheko Creek to the south.

Access to the property is via a series of active logging roads off the Inzana Lake access road. The property is directly accessible from numerous logging clear cuts.

CLAIM STATISTICS:

<u>Name</u>	<u># Units</u>	<u>Record #</u>	<u>Record Date</u>	<u>Owner</u>
TAS 11	20	7959	Sept 17/86	Noranda

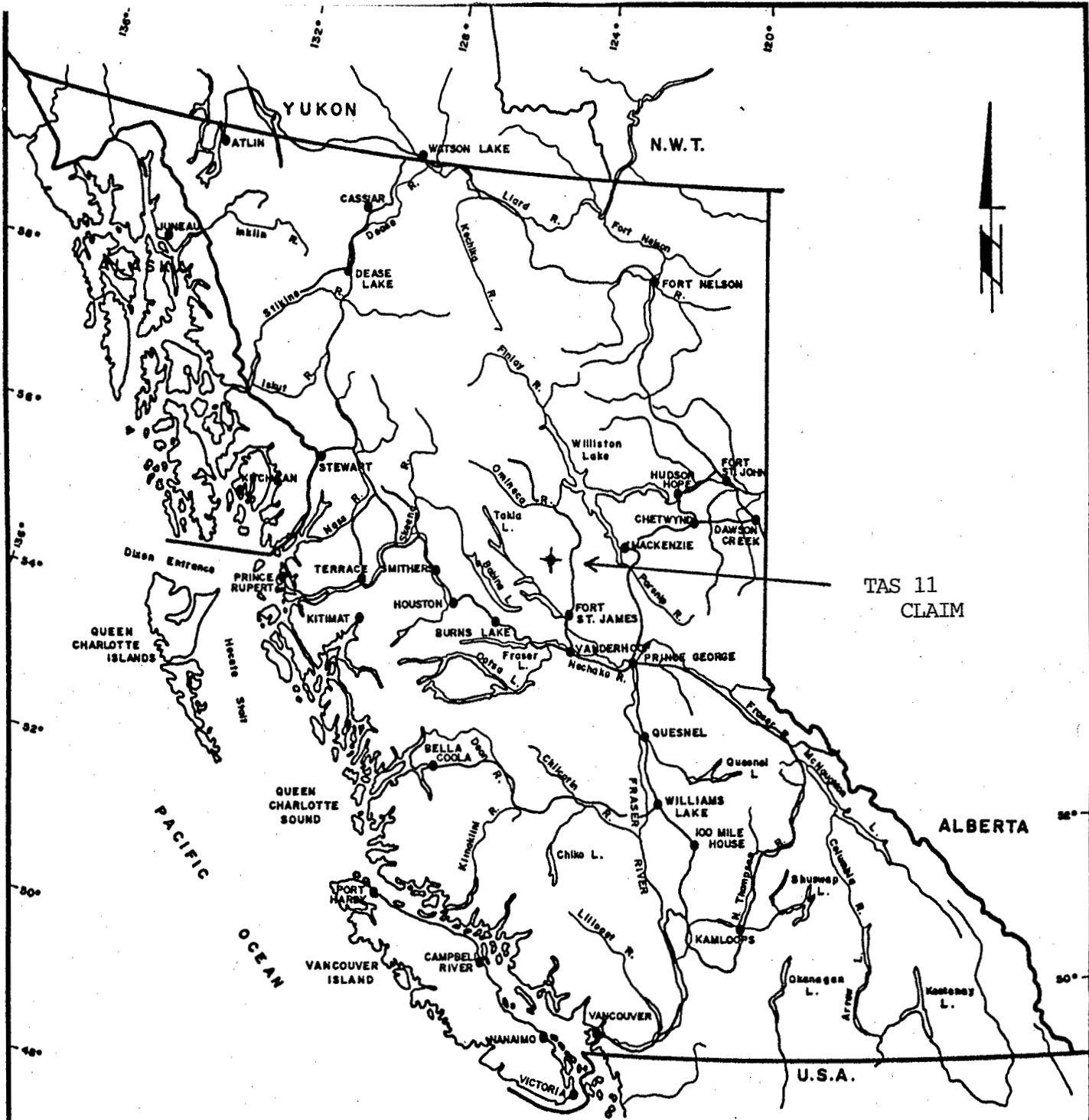
TOPOGRAPHY AND VEGETATION:

The area is characterized by pine flats and swampy areas. The flats areas include layered glacial debris, sandy plains and small eskers. The swampy areas are found around small creeks and low lying areas.

Vegetation consists of mature stands of spruce, pine and balsam, which is presently being logged off in some areas. Undergrowth is mainly alder with some devil's club.

REGIONAL GEOLOGY:

The TAS 11 claim lies in a broad northwest trending package of rocks known as the Quesnel Trough. These include Upper Triassic to Lower Jurassic volcanics and sediments which have been intruded by a series of felsic to mafic intrusives, ranging in age from Triassic to Cretaceous.



TAS 11 CLAIM

0 100 200 KILOMETRES  
SCALE 1:8,000,000

REVISED	TAS 11 CLAIM	
	LOCATION MAP	
PROJ. No. 271	SURVEY BY: GM	DATE: Nov 87
N.T.S. 93K/1	DRAWN BY: S.K.B.	SCALE: 1:8,000,000
DWG. No. 1	<b>NORANDA EXPLORATION</b>	
	OFFICE: PRINCE GEORGE, B.C.	

VANCAL 11627



GEOCHEMISTRY:

Method:

A total of 183 B-horizon soil samples were taken using a grub hoe from holes ranging from 15 to 35 cm in depth. The samples were collected by Noranda personnel over a two day period. The samples were placed in Kraft wet-strength paper bags, dried, then shipped to Noranda Labs in Vancouver, B. C. for analysis. (For analytical procedure, see Appendix III) Results are plotted on 1:2,500 scale maps located in pockets at rear of report.

Observations:

Gold - Values range from 10 to 100 ppb with only three values greater than 10 ppb. Single station anomalies occur at L11900E/8025N (50 ppb), L12100E/8875N (100 ppb), L11900E/8425N (90 ppb).

Copper - values range from 10 to 92 ppm, none are considered anomalous.

Zinc - values range from 44 to 280 ppm, where values greater than 200 ppm are considered weakly anomalous. Two single station anomalies and two anomalous areas have been outlined on the grid. These are listed as follows:

L11,200E/9000N  
L11,900E/8775N  
L12,100E/8450N - 8525N  
L12,100E/8900N - 8950N

Lead - values range from 1 to 4 ppm, none are considered anomalous.

Arsenic - values range from 1 to 12 ppm, no values are considered anomalous.

Silver - values range from the detection limit of 0.2 ppm to 1.0 ppm. No values are considered anomalous.

GEOPHYSICS:

Instrumentation:

The survey employed magnetometers manufactured by Scintrex Ltd. of Concord, Ontario. The MP-3 magnetometers are Proton Precession units with a usable field accuracy of 1 to 2 nT. All corrections have been applied to the data in particular the magnetic diurnal and day to day drift, which is accomplished by employing the companion base station. Readings were recorded at 12.5 meter intervals.

Discussion of Results:

The magnetometer survey consisted of approximately 12.150 Line Kilometers over 14 survey lines running in a North South direction. The 906 readings varied between 288.9 and 1059.2 nano-Teslas for a total relief of 1988.5 nT on an average background of 1059.2 nT. For the most part the magnetic field has recorded smooth variations reflecting a fairly homogeneous distribution of magnetic minerals. Variations within this Total Field are noted on Lines 10400E & 10600E, 11000E and 12300E where significant increases in the magnetic susceptibility are noted. The signature of these responses suggests that they are not caused by discrete and abrupt changes in the geology/susceptibility but rather a localized and gradational increase in the magnetic susceptibility. One deviation from this may be the north edge of the magnetic high on 12300E.

CONCLUSIONS:

The magnetic survey suggests almost the entire grid is underlain by a large dioritic intrusive. The sharp rise (>1125 nT) on the northwest part of the grid (lines 12500E and 12700E) marks the approximate contact of the diorite with the Takla volcanics.

The general lack of geochem anomalies reflects possibly one of two things:

1. the homogeneous nature of the intrusive, and
2. the fairly heavy overburden cover over the area.

The weak isolated anomalies may be attributed to local sources within the overburden.

RECOMMENDATIONS:

The grid and magnetometer survey should be extended to cover the entire TAS 11 claim to determine the extent of the diorite intrusive.



APPENDIX Ia

STATEMENT OF COSTS

GEOPHYSICAL & GEOCHEMICAL REPORT  
TAS 11

a. Wages:

Mag survey - 2 mandays @ \$125/day	\$ 250.00
Linecutting - 2 mandays @ \$100/day	200.00
Geochem - 2 mandays @ \$100/day	200.00

b. Meals, Accommodations, Transportation:

6 mandays @ \$50/day	\$ 300.00
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c. Geochemical Analysis:

183 samples @ \$15.00/sample	\$2,745.00
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d. Cost of Report Preparation:

Author	\$250	
Typing	\$ 50	
Drafting	\$100	\$ 400.00
		-----

Total	\$4,095.00
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APPENDIX 1b

STATEMENT OF COST  
COST BREAKDOWN

Mag Survey:

Tony Lippert (July 18, 19, 1987)	
2 mandays @ \$125/day	\$ 250.00
Food, Accommodation & Transportation	100.00
Report Preparation	200.00
	-----
	\$ 550.00

Geochem Survey:

Brad Gagnon (Sept 1, 2, 1987)	
2 mandays @ \$100/day	\$ 200.00
Food, Accommodation & Transportation	100.00
Geochem Analysis - 183 samples @ \$15/sample	2,745.00
Report Preparation	200.00
	-----
	\$3,245.00

Linecutting:

2 mandays @ \$100/day	\$ 200.00
Food, Accommodation & Transportation	100.00
	-----
	\$ 300.00

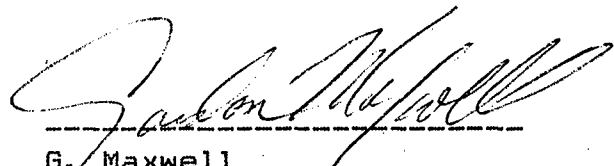
Total	\$4,095.00
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APPENDIX II

STATEMENT OF QUALIFICATIONS

I, Gordon Maxwell of Prince George, Province of British Columbia, do hereby certify that:

1. I am a Geologist residing at 5905 Rideau Street, Prince George, British Columbia.
2. I am a graduate of the University of Manitoba with an Hons. B. Sc. (geology).
3. I am a member in good standing of the Canadian Institute of Mining and the Prospector's and Developer's Association.
4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.



\_\_\_\_\_

G. Maxwell



## APPENDIX III

### ANALYTICAL PROCEDURES

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

#### PREPARATION OF SAMPLES

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation.

#### ANALYSIS OF SAMPLES

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighted out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition that that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

#### ELEMENTS REQUIRING SPECIFIC DECOMPOSITION METHOD

**Antimony - Sb:** 0.2 g sample is attached with 3.3 ml of 6% tartaric acid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the acid solution with an AA-475, equipped with electrodeless discharge lamp (EDL).

**Arsenic - As:** 0.2 - 0.4 g sample is digested with 1.5 ml of 70% perchloric acid and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

**Barium - Ba:** 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

**Bismuth - Bi:** 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

**Gold - Au:** 10.0 g sample sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

**Magnesium - Mg:** 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

**Tungsten - W:** 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

**Uranium - U:** An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

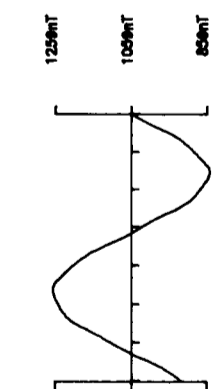
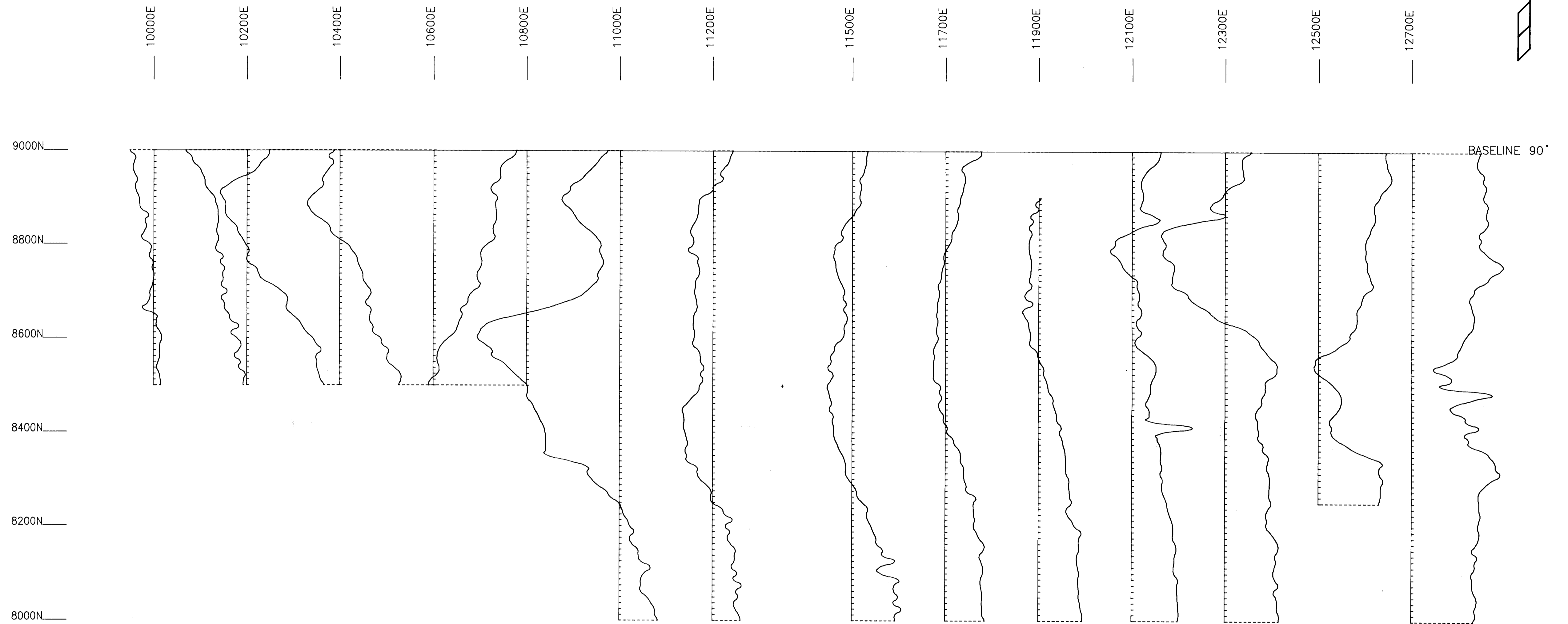
LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10 ppb)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

2700	2750	1765	2740	2764	2784
2704	2754	1766	2744	2768	2788
2708	2758	1767	2748	2772	2792
2712	2762	1768	2752	2776	2796
2716	2766	1769	2756	2780	2800
2720	2770	1770	2760	2784	2804
2724	2774	1771	2764	2788	2808
2728	2778	1772	2768	2792	2812
2732	2782	1773	2772	2796	2816
2736	2786	1774	2776	2800	2820
2740	2790	1775	2780	2804	2824
2744	2794	1776	2784	2808	2828
2748	2798	1777	2788	2812	2832
2752	2802	1778	2792	2816	2836
2756	2806	1779	2796	2820	2840
2760	2810	1780	2800	2824	2844
2764	2814	1781	2804	2828	2848
2768	2818	1782	2808	2832	2852
2772	2822	1783	2812	2836	2856
2776	2826	1784	2816	2840	2860
2780	2830	1785	2820	2844	2864
2784	2834	1786	2824	2848	2868
2788	2838	1787	2828	2852	2872
2792	2842	1788	2832	2856	2876
2796	2846	1789	2836	2860	2880
2800	2850	1790	2840	2864	2884
2804	2854	1791	2844	2868	2888
2808	2858	1792	2848	2872	2892
2812	2862	1793	2852	2876	2896
2816	2866	1794	2856	2880	2900
2820	2870	1795	2860	2884	2904
2824	2874	1796	2864	2888	2908
2828	2878	1797	2868	2892	2912
2832	2882	1798	2872	2896	2916
2836	2886	1799	2876	2900	2920
2840	2890	1800	2880	2904	2924
2844	2894	1801	2884	2908	2928
2848	2898	1802	2888	2912	2932
2852	2902	1803	2892	2916	2936
2856	2906	1804	2896	2920	2940
2860	2910	1805	2900	2924	2944
2864	2914	1806	2904	2928	2948
2868	2918	1807	2908	2932	2952
2872	2922	1808	2912	2936	2956
2876	2926	1809	2916	2940	2960
2880	2930	1810	2920	2944	2964
2884	2934	1811	2924	2948	2968
2888	2938	1812	2928	2952	2972
2892	2942	1813	2932	2956	2976
2896	2946	1814	2936	2960	2980
2900	2950	1815	2940	2964	2984
2904	2954	1816	2944	2968	2988
2908	2958	1817	2948	2972	2992
2912	2962	1818	2952	2976	2996
2916	2966	1819	2956	2980	3000
2920	2970	1820	2960	2984	3004
2924	2974	1821	2964	2988	3008
2928	2978	1822	2968	2992	3012
2932	2982	1823	2972	2996	3016
2936	2986	1824	2976	3000	3020
2940	2990	1825	2980	3004	3024
2944	2994	1826	2984	3008	3028
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2964	3014	1831	3004	3028	3048
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2972	3022	1833	3012	3036	3056
2976	3026	1834	3016	3040	3060
2980	3030	1835	3020	3044	3064
2984	3034	1836	3024	3048	3068
2988	3038	1837	3028	3052	3072
2992	3042	1838	3032	3056	3076
2996	3046	1839	3036	3060	3080
3000	3050	1840	3040	3064	3084
3004	3054	1841	3044	3068	3088
3008	3058	1842	3048	3072	3092
3012	3062	1843	3052	3076	3096
3016	3066	1844	3056	3080	3100
3020	3070	1845	3060	3084	3104
3024	3074	1846	3064	3088	3108
3028	3078	1847	3068	3092	3112
3032	3082	1848	3072	3096	3116
3036	3086	1849	3076	3100	3120
3040	3090	1850	3080	3104	3124
3044	3094	1851	3084	3108	3128
3048	3098	1852	3088	3112	3132
3052	3102	1853	3092	3116	3136
3056	3106	1854	3096	3120	3140
3060	3110	1855	3100	3124	3144
3064	3114	1856	3104	3128	3148
3068	3118	1857	3108	3132	3152
3072	3122	1858	3112	3136	3156
3076	3126	1859	3116	3140	3160
3080	3130	1860	3120	3144	3164
3084	3134	1861	3124	3148	3168
3088	3138	1862	3128	3152	3172
3092	3142	1863	3132	3156	3176
3096	3146	1864	3136	3160	3180
3100	3150	1865	3140	3164	3184
3104	3154	1866	3144	3168	3188
3108	3158	1867	3148	3172	3192
3112	3162	1868	3152	3176	3196
3116	3166	1869	3156	3180	3200
3120	3170	1870	3160	3184	3204
3124	3174	1871	3164	3188	3208
3128	3178	1872	3168	3192	3212
3132	3182	1873	3172	3196	3216
3136	3186	1874	3176	3200	3220
3140	3190	1875	3180	3204	3224
3144	3194	1876	3184	3208	3228
3148	3198	1877	3188	3212	3232
3152	3202	1878	3192	3216	3236
3156	3206	1879	3196	3220	3240
3160	3210	1880	3200	3224	3244
3164	3214	1881	3204	3228	3248
3168	3218	1882	3208	3232	3252
3172	3222	1883	3212	3236	3256
3176	3226	1884	3216	3240	3260
3180	3230	1885	3220	3244	3264
3184	3234	1886	3224	3248	3268
3188	3238	1887	3228	3252	3272
3192	3242	1888	3232	3256	3276
3196	3246	1889	3236	3260	3280
3200	3250	1890	3240	3264	3284
3204	3254	1891	3244	3268	3288
3208	3258	1892	3248	3272	3292
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3228	3278	1897	3268	3292	3312
3232	3282	1898	3272	3296	3316
3236	3286	1899	3276	3300	3320
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3244	3294	1901	3284	3308	3328
3248	3298	1902	3288	3312	3332
3252	3302	1903	3292	3316	3336
3256	3306	1904	3296	3320	3340
3260	3310	1905	3300	3324	3344
3264	3314	1906	3304	3328	3348
3268	3318	1907	3308	3332	3352
3272	3322	1908	3312	3336	3356
3276	3326	1909	3316	3340	3360
3280	3330	1910	3320	3344	3364
3284	3334	1911	3324	3348	3368
3288	3338	1912	3328	3352	3372
3292	3342	1913	3332	3356	3376
3296	3346	1914	3336	3360	3380
3300	3350	1915	3340	3364	3384
3304	3354	1916	3344	3368	3388
3308	3358	1917	3348	3372	3392
3312	3362	1918	3352	3376	3396
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3320	3370	1920	3360	3384	3404
3324	3374	1921	3364	3388	3408
3328	3378	1922	3368	3392	3412
3332	3382	1923	3372	3396	3416
3336	3386	1924	3376	3400	3420
3340	3390	1925	3380	3404	3424
3344	3394	1926	3384	3408	3428
3348	3398	1927	3388	3412	3432
3352	3402	1928	3392	3416	3436
3356	3406	1929	3396	3420	3440
3360	3410	1930	3400	3424	3444
3364	3414	1931	3404	3428	3448
3368	3418	1932	3408	3432	3452
3372	3422	1933	3412	3436	3456
3376	3426	1934	3416	3440	3460
3380	3430	1935	3420	3444	3464
3384	3434	1936	3424	3448	3468
3388	3438	1937	3428	3452	3472
3392	3442	1938	3432	3456	3476
3396	3446	1939	3436	3460	3480
3400	3450	1940	3440	3464	3484
3404	3454	1941	3444	3468	3488
3408	3458	1942	3448	3472	3492
3412	3462	1943	3452	3476	3496
3416	3466	1944	3456	3480	3500
3420	3470	1945	3460	3484	3504
3424	3474	1946	3464	3488	3508
3428	3478	1947	3468	3492	3512
3432	3482	1948	3472	3496	3516
3436	3486	1949	3476	3500	3520
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3452	3502	1953	3492	3516	3536
3456	3506	1954	3496	3520	3540
3460	3510	1955	3500	3524	3544
3464	3514	1956	3504	3528	3548
3468	3518	1957	3508	3532	3552
3472	3522	1958	3512	3536	3556
3476	3526	1959	3516	3540	3560
3480	3530	1960	3520	3544	3564
3484	3534	1961	3524	3548	3568
3488	3538	1962	3528	3552	3572
3492	3542	1963	3532	3556	3576
3496	3546	1964	3536	3560	3580
3500	3550	1965	3540	3564	3584
3504	3554	1966	3544	3568	3588
3508	3558	1967	3548	3572	3592
3512	3562	1968	3552	3576	3596
3516	3566	1969	3556	3580	3600
3520	3570	1970	3560	3584	3604
3524	3574	1971	3564	3588	3608
3528	3578	1972	3568	3592	3612
3532	3582	1973	3572	3596	3616
3536	3586</				







Instrument	: MP-3
Field	: TOTAL
Datum	: 57500.0 nT
Contour Interval	:
Profile Amplitude	: 200 nT / Cm
Conductor Axis	:



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,657

<b>TAS - 1 GRID</b>	
<b>MAGNETOMETER SURVEY</b>	
PROJECT: TAS OPTION PROJECT # : 271 BASELINE AZIMUTH : 90 Deg.	
SCALE = 1: 5000	DATE : 7/22/87
SURVEY BY : TL	NTS :
FILE: M271BETL	
<b>NORANDA EXPLORATION</b>	



