COMSTATE RESOURCES LTD.

GEOCHEMICAL SURVEY

CAIRO TOWNSHIP

LARDER LAKE MINING DIVISION,

ONTARIO

May, 1985
Timmins, Ontario

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General Statement

During June, 1983, Comstate Resources Ltd. conducted a humus survey on a group of claims in Cairo Township. A total of 336 samples of the A^{o} (humus) horizon were collected over much of the property along previously cut and chained picket lines; 325 of these samples were subsequently found to contain humus material and were analyzed for gold (parts per billion) and arsenic (parts per million). The results are listed in Table I and are plotted on the accompanying maps.

Whole rock chemical analyses (Table 2) were done on six bedrock samples: two rhyolites, three basalts and one ultramafic intrusion. In addition to the major oxides, the samples were also analyzed for rubidium, strontium, zirconium and barium.

Thirty-nine bedrock samples were analyzed (Table 3) for gold, nickel, copper, zinc, arsenic, silver and antimony. The sample locations and results of the analyses are shown on the accompanying geology map.

TABLE I

HUMUS SAMPLE ANALYTICAL RESULTS

		Au (ppb)			
C8+63N-14W	--	6	--	--	--
C16W-10N	--	<1	--	--	--
C16W-9N	--	1	--	--	--
C16W-8N	--	4	--	--	--
C15+50W-9+50N	--	5	--	--	--
C15+50W-8+50N	--	8	--	--	--
C15W-10N	--	9	--	--	--
C15W-9N	--	2	--	--	--
C15W-8N	--	9	--	--	--
C14+50W-10+50N	--	10	--	--	--

SAMPLE	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
C14+50W-9+50N	--	6	--	--	--
C14+50W-8+50N	--	6	--	--	--
C14+50W-7+50N	--	8	--	--	--
C14W-10N	--	3	--	--	--
C14W-9N	--	7	--	--	--
C14W-8N	--	<1	--	--	--
C13+50W-10+50N	--	3	--	--	--
C13+50W-9+50N	--	7	--	--	--
C13+50W-8+50N	--	4	--	--	--
C13+50W-7+50N	--	3	--	--	--
C13W-10N	--	4	--	--	--
C13W-9N	--	4	--	--	--
C13W-8N	--	4	--	--	--
C12+50W-9+50N	--	3	--	--	--
C12+50W-8+50N	--	1	--	--	--
C12W-10N	--	3	--	--	--
C12W-9N	--	8	--	--	--
C12W-8N	--	5	--	--	--
CL12W-1S	--	NH	--	--	--
CL12W-2S	--	NH	--	--	--
CL12W-3S	--	NH	--	--	--
CL12W-4S	--	9	--	--	--
CL12W-5S	--	NH	--	--	--
CL12W-11S	--	9	--	--	--
CL12W-12S	--	4	--	--	--
CL12W-13S	--	4	--	--	--
CL12W-14S	--	5	--	--	--
CL12W-15S	--	2	--	--	--
CL12W-16S	--	7	--	--	--
CL12W-17S	--	4	--	--	--
CL12W-18S	--	7	--	--	--
CL12W-19S	--	6	--	--	--
CL12W-19+48S	--	6	--	--	--
CL10W-1S	--	3	--	--	--
CL10W-2S	--	1	--	--	--
CL10W-3S	--	5	--	--	--
CL10W-9S	--	10	--	--	--
CL10W-10S	--	10	--	--	--
CL10W-11S	--	10	--	--	--
CL8W-2S	--	62	--	--	--
CL8W-3S	--	3	--	--	--
CL8W-4S	--	NH	--	--	--
CL8W-9S	--	3	--	--	--
CL8W-10S	--	5	--	--	--
CL8W-11S	--	3	--	--	--
CL8W-12S	--	8	--	--	--
CL8W-13S	--	3	--	--	--
CL8W-14S	--	8	--	--	--
CL8W-14+43S	--	7	--	--	--
CL6W-2S	--	NH	--	--	--
CL6W-3S	--	NH	--	--	--
CL6W-6S	--	4	--	--	--
CL6W-8S	--	4	--	--	--
CL6W-9S	--	5	--	--	--
CL6W-10S	--	3	--	--	--
CL6W-11S	--	1	--	--	--

SAMPLE	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
CL6W-13S	--	2	--	--	--
CL6W-14S	--	5	--	--	--
CL6W-15S	--	9	--	--	--
CL6W-16+40S	--	9	--	--	--
CL4W-2S	--	4	--	--	--
CL4W-3S	--	NH	--	--	--
CL4W-10S	--	2	--	--	--
CL4W-13S	--	6	--	--	--
CL4W-14S	--	5	--	--	--
CL4W-15S	--	5	--	--	--
CL2W-2S	--	5	--	--	--
CL2W-3S	--	<1	--	--	--
CL2W-6S	--	5	--	--	--
CL2W-7S	--	3	--	--	--
CL2W-8S	--	1	--	--	--
CL2W-9S	--	3	--	--	--
CL2W-10S	--	2	--	--	--
CL2W-11S	--	1	--	--	--
CL2W-12S	--	<1	--	--	--
CL2W-14S	--	3	--	--	--
CL0-3S	--	4	--	--	--
CL0-6S	--	1	--	--	--
CL0-7S	--	1	--	--	--
CL0-8S	--	2	--	--	--
CL0-9S	--	3	--	--	--
CL0-10S	--	2	--	--	--
CL0-11S	--	3	--	--	--
CL0-12S	--	1	--	--	--
CL0-12+55S	--	1	--	--	--
CL2E-4N	--	<1	--	--	--
CL2E-3N	--	5	--	--	--
CL2E-2N	--	5	--	--	--
CL2E-1N	--	3	--	--	--
CL2E-BL	--	4	--	--	--
CL2E-1S	--	4	--	--	--
CL2E-2S	--	3	--	--	--
CL2E-3S	--	5	--	--	--
CL2E-6S	--	3	--	--	--
CL2E-7S	--	2	--	--	--
CL2E-8S	--	2	--	--	--
CL2E-9S	--	1	--	--	--
CL2E-9+85S	--	4	--	--	--
CL4E-5N	--	4	--	--	--
CL4E-4N	--	4	--	--	--
CL4E-3N	--	7	--	--	--
CL4E-2N	--	3	--	--	--
CL4E-1N	--	3	--	--	--
CL4E-BL	--	<1	--	--	--
CL4E-1S	--	4	--	--	--
CL4E-2S	--	<1	--	--	--
CL4E-3S	--	6	--	--	--
CL4E-6S	--	3	--	--	--
CL4E-7S	--	3	--	--	--
CL6E-7N	--	6	--	--	--
CL6E-6N	--	2	--	--	--
CL6E-5N	--	5	--	--	--

SAMPL	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
CL6E-4N	--	2	--	--	--
CL6E-3N	--	9	--	--	--
CL6E-2N	--	3	--	--	--
CL6E-1N	--	8	--	--	--
CL6E-BL	--	4	--	--	--
CL6E-1S	--	6	--	--	--
CL6E-2S	--	7	--	--	--
CL6E-3S	--	3	--	--	--
CL6E-5+92S	--	3	--	--	--
CL8E-8N	--	4	--	--	--
CL8E-7N	--	4	--	--	--
CL8E-6N	--	5	--	--	--
CL8E-5N	--	10	--	--	--
CL8E-4N	--	7	--	--	--
CL8E-3N	--	3	--	--	--
CL8E-2N	--	6	--	--	--
CL8E-1N	--	9	--	--	--
CL8E-BL	--	8	--	--	--
CL8E-1S	--	8	--	--	--
CL8E-2S	--	3	--	--	--
CL8E-3S	--	2	--	--	--
CL10E-12N	--	4	--	--	--
CL10E-10N	--	2	--	--	--
CL10E-9N	--	2	--	--	--
CL10E-8N	--	5	--	--	--
CL10E-7N	--	1	--	--	--
CL10E-6N	--	2	--	--	--
CL10E-5N	--	6	--	--	--
CL10E-4N	--	2	--	--	--
CL10E-3N	--	1	--	--	--
CL10E-2N	--	5	--	--	--
CL10E-1N	--	5	--	--	--
CL10E-BL	--	4	--	--	--
CL10E-1S	--	4	--	--	--
CL10E-2S	--	3	--	--	--
CL12E-11N	--	5	--	--	--
CL12E-10N	--	3	--	--	--
CL12E-9N	--	5	--	--	--
CL12E-8N	--	1	--	--	--
CL12E-7N	--	5	--	--	--
CL12E-6N	--	<1	--	--	--
CL12E-5N	--	3	--	--	--
CL12E-4N	--	2	--	--	--
CL12E-3N	--	5	--	--	--
CL12E-2N	--	5	--	--	--
CL12E-1N	--	3	--	--	--
CL12E-BL	--	2	--	--	--
CL12E-1S	--	6	--	--	--
CL12E-2S	--	<1	--	--	--
CL14E-12N	--	5	--	--	--
CL14E-11N	--	7	--	--	--
CL14E-10N	--	5	--	--	--
CL14E-9N	--	1	--	--	--
CL14E-8N	--	6	--	--	--
CL14E-7N	--	4	--	--	--
CL14E-6N	--	2	--	--	--

SAMPL	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
CL14E-5N	--	1	--	--	--
CL14E-4N	--	3	--	--	--
CL14E-3N	--	5	--	--	--
CL14E-2N	--	5	--	--	--
CL14E-1N	--	3	--	--	--
CL14E-BL	--	7	--	--	--
CL14E-1S	--	3	--	--	--
CL14E-2S	--	3	--	--	--
CL14E-5S	--	<1	--	--	--
CL14E-6S	--	1	--	--	--
CL16E-13N	--	1	--	--	--
CL16E-12N	--	NH	--	--	--
CL16E-11N	--	5	--	--	--
CL16E-10N	--	130	--	--	--
CL16E-9N	--	47	--	--	--
CL16E-8N	--	8	--	--	--
CL16E-7N	--	4	--	--	--
CL16E-6N	--	3	--	--	--
CL16E-5N	--	7	--	--	--
CL16E-4N	--	2	--	--	--
CL16E-3N	--	5	--	--	--
CL16E-2N	--	4	--	--	--
CL16E-1N	--	5	--	--	--
CL16E-BL	--	4	--	--	--
CL16E-1S	--	11	--	--	--
CL16E-2S	--	3	--	--	--
CL16E-4S	--	2	--	--	--
CL16E-5S	--	1	--	--	--
CL16E-6S	--	3	--	--	--
CL18E-10N	--	4	--	--	--
CL18E-9N	--	6	--	--	--
CL18E-6N	--	4	--	--	--
CL18E-5N	--	6	--	--	--
CL18E-3N	--	3	--	--	--
CL18E-2N	--	2	--	--	--
CL18E-1N	--	2	--	--	--
CL18E-BL	--	5	--	--	--
CL18E-1S	--	6	--	--	--
CL18E-4S	--	3	--	--	--
CL18E-5S	--	3	--	--	--
CL18E-6S	--	<1	--	--	--
CL18E-7S	--	3	--	--	--
CL18E-8S	--	4	--	--	--
CL18E-8+80S	--	1	--	--	--
CL20E-14N	--	7	--	--	--
CL20E-13N	--	6	--	--	--
CL20E-12N	--	3	--	--	--
CL20E-9N	--	5	--	--	--
CL20E-7N	--	3	--	--	--
CL20E-6N	--	4	--	--	--
CL20E-5N	--	2	--	--	--
CL20E-4N	--	3	--	--	--
CL20E-3N	--	6	--	--	--
CL20E-2N	--	1	--	--	--
CL20E-1N	--	3	--	--	--
CL20E-BL	--	6	--	--	--

SAMPL	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
CL20E-3S	--	1	--	--	--
CL20E-4S	--	2	--	--	--
CL20E-5S	--	1	--	--	--
CL20E-6S	--	5	--	--	--
CL20E-7S	--	2	--	--	--
CL20E-8S	--	<1	--	--	--
CL20E-8+85S	--	2	--	--	--
CL22E-13N	--	6	--	--	--
CL22E-11N	--	4	--	--	--
CL22E-6N	--	1	--	--	--
CL22E-5N	--	2	--	--	--
CL22E-4N	--	<1	--	--	--
CL22E-3N	--	3	--	--	--
CL22E-2N	--	1	--	--	--
CL22E-1N	--	4	--	--	--
CL22E-3S	--	2	--	--	--
CL22E-4S	--	1	--	--	--
CL22E-5S	--	<1	--	--	--
CL22E-6S	--	<1	--	--	--
CL22E-7S	--	1	--	--	--
CL22E-8S	--	1	--	--	--
CL24E-14N	--	1	--	--	--
CL24E-12N	--	2	--	--	--
CL24E-8N	--	3	--	--	--
CL24E-7N	--	4	--	--	--
CL24E-6N	--	5	--	--	--
CL24E-5N	--	5	--	--	--
CL24E-4N	--	3	--	--	--
CL24E-2S	--	2	--	--	--
CL24E-7S	--	3	--	--	--
CL26E-15N	--	7	--	--	--
CL26E-14N	--	1	--	--	--
CL26E-8N	--	3	--	--	--
CL26E-7N	--	3	--	--	--
CL26E-6N	--	4	--	--	--
CL26E-5N	--	6	--	--	--
CL26E-4N	--	1	--	--	--
CL26E-3S	--	2	--	--	--
CL26E-4S	--	4	--	--	--
CL26E-5S	--	1	--	--	--
CL26E-6S	--	1	--	--	--
CL26E-7S	--	2	--	--	--
CL28E-9N	--	29	--	--	--
CL28E-6N	--	2	--	--	--
CL28E-3N	--	6	--	--	--
CL28E-3L	--	<1	--	--	--
CL28E-1S	--	<1	--	--	--
CL28E-2S	--	2	--	--	--
CL28E-3S	--	2	--	--	--
CL28E-4S	--	3	--	--	--
CL28E-5S	--	1	--	--	--
CL28E-6S	--	2	--	--	--
CL28E-7S	--	2	--	--	--
CL28E-8S	--	4	--	--	--
CL30E-19N	--	4	--	--	--
CL30E-10N	--	2	--	--	--

SAMPL	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
CL30E-9N	--	3	--	--	--
CL30E-8N	--	1	--	--	--
CL30E-1N	--	NH	--	--	--
CL30E-BL	--	4	--	--	--
CL30E-1S	--	6	--	--	--
CL30E-2S	--	<1	--	--	--
CL30E-3S	--	2	--	--	--
CL30E-4S	--	<1	--	--	--
CL30E-5S	--	3	--	--	--
CL30E-6S	--	1	--	--	--
CL30E-7S	--	2	--	--	--
CL30E-9S	--	1	--	--	--
CL32E-18N	--	10	--	--	--
CL32E-17N	--	7	--	--	--
CL32E-16N	--	4	--	--	--
CL32E-15N	--	8	--	--	--
CL32E-14N	--	8	--	--	--
CL32E-13N	--	4	--	--	--
CL32E-12N	--	6	--	--	--
CL32E-11N	--	5	--	--	--
CL32E-10N	--	1	--	--	--
CL32E-7N	--	NH	--	--	--
CL32E-5N	--	<1	--	--	--
CL32E-3N	--	2	--	--	--
CL32E-2N	--	4	--	--	--
CL32E-1N	--	4	--	--	--
CL32E-BL	--	4	--	--	--
CL32E-1S	--	3	--	--	--
CL32E-2S	--	5	--	--	--
CL32E-3S	--	3	--	--	--
CL32E-4S	--	1	--	--	--
CL32E-5S	--	1	--	--	--
CL32E-6S	--	1	--	--	--
CL32E-7S	--	2	--	--	--
CL34E-4N	--	3	--	--	--
CL34E-3N	--	<1	--	--	--
CL34E-2N	--	4	--	--	--
CL34E-1N	--	1	--	--	--
CL34E-BL	--	2	--	--	--
CL34E-1S	--	5	--	--	--
CL34E-2S	--	4	--	--	--
CL34E-4S	--	4	--	--	--
CL34E-5S	--	1	--	--	--
CL34E-6S	--	<1	--	--	--
CL34E-7S	--	3	--	--	--
CL34E-8S	--	2	--	--	--

As (ppm)

Au (ppb)

~~R-12~~	--	--	--	--
~~R-13~~	--	--	--	--
~~R-14~~	--	--	--	--
~~R-15~~	--	--	--	--
~~R-16~~	--	--	--	--
C3+63N-14W	--	5	--	--
C16W-10N	--	3	--	--
C16W-9N	--	3	--	--
C16W-8N	--	4	--	--
C15+50W-9+50N	--	4	--	--
C15+50W-8+50N	--	4	--	--
C15W-10N	--	5	--	--
C15W-9N	--	3	--	--
C15W-8N	--	4	--	--
C14+50W-10+50N	--	7	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
C14+50W-9+50N	--	4	--	--
C14+50W-8+50N	--	3	--	--
C14+50W-7+50N	--	4	--	--
C14W-10N	--	3	--	--
C14W-9N	--	6	--	--
C14W-8N	--	2	--	--
C13+50W-10+50N	--	4	--	--
C13+50W-9+50N	--	4	--	--
C13+50W-8+50N	--	4	--	--
C13+50W-7+50N	--	3	--	--
C13W-10N	--	5	--	--
C13W-9N	--	4	--	--
C13W-8N	--	2	--	--
C12+50W-9+50N	--	7	--	--
C12+50W-8+50N	--	5	--	--
C12W-10N	--	6	--	--
C12W-9N	--	6	--	--
C12W-8N	--	4	--	--
CL12W-1S	--	NH	--	--
CL12W-2S	--	NH	--	--
CL12W-3S	--	NH	--	--
CL12W-4S	--	2	--	--
CL12W-5S	--	NH	--	--
CL12W-11S	--	30	--	--
CL12W-12S	--	9	--	--
CL12W-13S	--	3	--	--
CL12W-14S	--	4	--	--
CL12W-15S	--	4	--	--
CL12W-16S	--	4	--	--
CL12W-17S	--	5	--	--
CL12W-18S	--	8	--	--
CL12W-19S	--	8	--	--
CL12W-19+48S	--	5	--	--
CL10W-1S	--	6	--	--
CL10W-2S	--	2	--	--
CL10W-3S	--	3	--	--
CL10W-9S	--	11	--	--
CL10W-10S	--	10	--	--
CL10W-11S	--	7	--	--
CL8W-2S	--	13	--	--
CL8W-3S	--	3	--	--
CL8W-4S	--	NH	--	--
CL8W-9S	--	3	--	--
CL8W-10S	--	5	--	--
CL8W-11S	--	3	--	--
CL8W-12S	--	7	--	--
CL8W-13S	--	6	--	--
CL8W-14S	--	6	--	--
CL8W-14+43S	--	6	--	--
CL6W-2S	--	NH	--	--
CL6W-3S	--	NH	--	--
CL6W-6S	--	2	--	--
CL6W-8S	--	4	--	--
CL6W-9S	--	6	--	--
CL6W-10S	--	3	--	--
CL6W-11S	--	2	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
CL6W-13S	--	2	--	--
CL6W-14S	--	4	--	--
CL6W-15S	--	7	--	--
CL6W-16+40S	--	7	--	--
CL4W-2S	--	4	--	--
CL4W-3S	--	NH	--	--
CL4W-10S	--	4	--	--
CL4W-13S	--	6	--	--
CL4W-14S	--	6	--	--
CL4W-15S	--	4	--	--
CL2W-2S	--	4	--	--
CL2W-3S	--	2	--	--
CL2W-6S	--	4	--	--
CL2W-7S	--	2	--	--
CL2W-8S	--	1	--	--
CL2W-9S	--	1	--	--
CL2W-10S	--	2	--	--
CL2W-11S	--	1	--	--
CL2W-12S	--	1	--	--
CL2W-14S	--	2	--	--
CL0-3S	--	4	--	--
CL0-6S	--	1	--	--
CL0-7S	--	1	--	--
CL0-8S	--	2	--	--
CL0-9S	--	2	--	--
CL0-10S	--	1	--	--
CL0-11S	--	2	--	--
CL0-12S	--	2	--	--
CL0-12+35S	--	2	--	--
CL2E-4N	--	3	--	--
CL2E-3N	--	2	--	--
CL2E-2N	--	4	--	--
CL2E-1N	--	6	--	--
CL2E-BL	--	5	--	--
CL2E-1S	--	4	--	--
CL2E-2S	--	2	--	--
CL2E-3S	--	4	--	--
CL2E-6S	--	3	--	--
CL2E-7S	--	2	--	--
CL2E-8S	--	2	--	--
CL2E-9S	--	2	--	--
CL2E-9+85S	--	3	--	--
CL4E-5N	--	2	--	--
CL4E-4N	--	4	--	--
CL4E-3N	--	4	--	--
CL4E-2N	--	2	--	--
CL4E-1N	--	4	--	--
CL4E-BL	--	4	--	--
CL4E-1S	--	5	--	--
CL4E-2S	--	3	--	--
CL4E-3S	--	7	--	--
CL4E-6S	--	3	--	--
CL4E-7S	--	3	--	--
CL6E-7N	--	2	--	--
CL6E-6N	--	3	--	--
CL6E-5N	--	6	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
CL6E-4N	--	3	--	--
CL6E-3N	--	4	--	--
CL6E-2N	--	3	--	--
CL6E-1N	--	8	--	--
CL6E-BL	--	6	--	--
CL6E-1S	--	6	--	--
CL6E-2S	--	4	--	--
CL6E-3S	--	4	--	--
CL6E-5+92S	--	3	--	--
CL8E-8N	--	4	--	--
CL8E-7N	--	3	--	--
CL8E-6N	--	4	--	--
CL8E-5N	--	4	--	--
CL8E-4N	--	3	--	--
CL8E-3N	--	3	--	--
CL8E-2N	--	4	--	--
CL8E-1N	--	6	--	--
CL8E-BL	--	5	--	--
CL8E-1S	--	4	--	--
CL8E-2S	--	1	--	--
CL8E-3S	--	2	--	--
CL10E-12N	--	6	--	--
CL10E-10N	--	5	--	--
CL10E-9N	--	2	--	--
CL10E-8N	--	4	--	--
CL10E-7N	--	3	--	--
CL10E-6N	--	3	--	--
CL10E-5N	--	4	--	--
CL10E-4N	--	1	--	--
CL10E-3N	--	3	--	--
CL10E-2N	--	4	--	--
CL10E-1N	--	3	--	--
CL10E-BL	--	5	--	--
CL10E-1S	--	3	--	--
CL10E-2S	--	5	--	--
CL12E-11N	--	6	--	--
CL12E-10N	--	4	--	--
CL12E-9N	--	4	--	--
CL12E-8N	--	3	--	--
CL12E-7N	--	2	--	--
CL12E-6N	--	2	--	--
CL12E-5N	--	4	--	--
CL12E-4N	--	2	--	--
CL12E-3N	--	4	--	--
CL12E-2N	--	4	--	--
CL12E-1N	--	4	--	--
CL12E-BL	--	1	--	--
CL12E-1S	--	3	--	--
CL12E-2S	--	2	--	--
CL14E-12N	--	4	--	--
CL14E-11N	--	5	--	--
CL14E-10N	--	3	--	--
CL14E-9N	--	7	--	--
CL14E-8N	--	5	--	--
CL14E-7N	--	3	--	--
CL14E-6N	--	6	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
CL14E-5N	--	2	--	--
CL14E-4N	--	3	--	--
CL14E-3N	--	3	--	--
CL14E-2N	--	3	--	--
CL14E-1N	--	2	--	--
CL14E-BL	--	2	--	--
CL14E-1S	--	3	--	--
CL14E-2S	--	3	--	--
CL14E-5S	--	2	--	--
CL14E-6S	--	3	--	--
CL16E-13N	--	1	--	--
CL16E-12N	--	NH	--	--
CL16E-11N	--	5	--	--
CL16E-10N	--	4	--	--
CL16E-9N	--	4	--	--
CL16E-8N	--	5	--	--
CL16E-7N	--	6	--	--
CL16E-6N	--	5	--	--
CL16E-5N	--	4	--	--
CL16E-4N	--	3	--	--
CL16E-3N	--	3	--	--
CL16E-2N	--	3	--	--
CL16E-1N	--	4	--	--
CL16E-BL	--	3	--	--
CL16E-1S	--	6	--	--
CL16E-2S	--	2	--	--
CL16E-4S	--	4	--	--
CL16E-5S	--	2	--	--
CL16E-6S	--	1	--	--
CL18E-10N	--	4	--	--
CL18E-9N	--	2	--	--
CL18E-6N	--	3	--	--
CL18E-5N	--	5	--	--
CL18E-3N	--	4	--	--
CL18E-2N	--	2	--	--
CL18E-1N	--	3	--	--
CL18E-BL	--	3	--	--
CL18E-1S	--	4	--	--
CL18E-4S	--	4	--	--
CL18E-5S	--	2	--	--
CL18E-6S	--	2	--	--
CL18E-7S	--	3	--	--
CL18E-8S	--	5	--	--
CL18E-8+80S	--	1	--	--
CL20E-14N	--	4	--	--
CL20E-13N	--	5	--	--
CL20E-12N	--	3	--	--
CL20E-9N	--	5	--	--
CL20E-7N	--	3	--	--
CL20E-6N	--	4	--	--
CL20E-5N	--	4	--	--
CL20E-4N	--	4	--	--
CL20E-3N	--	4	--	--
CL20E-2N	--	3	--	--
CL20E-1N	--	3	--	--
CL20E-BL	--	7	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
CL20E-3S	--	1	--	--
CL20E-4S	--	1	--	--
CL20E-5S	--	1	--	--
CL20E-6S	--	3	--	--
CL20E-7S	--	3	--	--
CL20E-8S	--	2	--	--
CL20E-8+85S	--	4	--	--
CL22E-13N	--	5	--	--
CL22E-11N	--	3	--	--
CL22E-6N	--	1	--	--
CL22E-5N	--	3	--	--
CL22E-4N	--	2	--	--
CL22E-3N	--	3	--	--
CL22E-2N	--	2	--	--
CL22E-1N	--	2	--	--
CL22E-3S	--	2	--	--
CL22E-4S	--	2	--	--
CL22E-5S	--	2	--	--
CL22E-6S	--	2	--	--
CL22E-7S	--	2	--	--
CL22E-8S	--	2	--	--
CL24E-14N	--	2	--	--
CL24E-12N	--	2	--	--
CL24E-8N	--	5	--	--
CL24E-7N	--	3	--	--
CL24E-6N	--	4	--	--
CL24E-5N	--	2	--	--
CL24E-4N	--	2	--	--
CL24E-2S	--	3	--	--
CL24E-7S	--	2	--	--
CL26E-15N	--	4	--	--
CL26E-14N	--	4	--	--
CL26E-8N	--	3	--	--
CL26E-7N	--	2	--	--
CL26E-6N	--	4	--	--
CL26E-5N	--	4	--	--
CL26E-4N	--	4	--	--
CL26E-3S	--	3	--	--
CL26E-4S	--	4	--	--
CL26E-5S	--	1	--	--
CL26E-6S	--	3	--	--
CL26E-7S	--	3	--	--
CL28E-9N	--	4	--	--
CL28E-6N	--	4	--	--
CL28E-3N	--	6	--	--
CL28E-3L	--	2	--	--
CL28E-1S	--	2	--	--
CL28E-2S	--	3	--	--
CL28E-3S	--	2	--	--
CL28E-4S	--	3	--	--
CL28E-5S	--	2	--	--
CL28E-6S	--	2	--	--
CL28E-7S	--	3	--	--
CL28E-8S	--	2	--	--
CL30E-19N	--	4	--	--
CL30E-10N	--	2	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
CL30E-9N	--	3	--	--
CL30E-8N	--	1	--	--
CL30E-1N	--	NH	--	--
CL30E-8L	--	3	--	--
CL30E-1S	--	3	--	--
CL30E-2S	--	1	--	--
CL30E-3S	--	2	--	--
CL30E-4S	--	1	--	--
CL30E-5S	--	3	--	--
CL30E-6S	--	1	--	--
CL30E-7S	--	4	--	--
CL30E-9S	--	2	--	--
CL32E-18N	--	4	--	--
CL32E-17N	--	5	--	--
CL32E-16N	--	4	--	--
CL32E-15N	--	4	--	--
CL32E-14N	--	4	--	--
CL32E-13N	--	3	--	--
CL32E-12N	--	6	--	--
CL32E-11N	--	5	--	--
CL32E-10N	--	3	--	--
CL32E-7N	--	NH	--	--
CL32E-5N	--	3	--	--
CL32E-3N	--	1	--	--
CL32E-2N	--	2	--	--
CL32E-1N	--	2	--	--
CL32E-8L	--	1	--	--
CL32E-1S	--	3	--	--
CL32E-2S	--	2	--	--
CL32E-3S	--	1	--	--
CL32E-4S	--	1	--	--
CL32E-5S	--	1	--	--
CL32E-6S	--	1	--	--
CL32E-7S	--	1	--	--
CL34E-4N	--	4	--	--
CL34E-3N	--	1	--	--
CL34E-2N	--	<1	--	--
CL34E-1N	--	1	--	--
CL34E-8L	--	2	--	--
CL34E-1S	--	3	--	--
CL34E-2S	--	1	--	--
CL34E-4S	--	3	--	--
CL34E-5S	--	2	--	--
CL34E-6S	--	1	--	--
CL34E-7S	--	2	--	--
CL34E-8S	--	2	--	--

NH - NOT HUMUS

TABLE II

Whole Rock Analytical Results

X-RAY ASSAY LABORATORIES 26-JUL-83 REPORT 18334 REFERENCE FILE 13965 PAGE 1

	SAMPLE	SIO2	AL203	CAO	MGO	NA20	K20	FE203	MNO	TIO2	P205	CR203	LOI	SUM
0	R-40	37.3	2.61	0.81	37.4	0.13	0.01	8.49	0.06	0.12	0.01	0.31	12.9	100.2
2	R-42	70.3	13.7	0.64	1.92	4.15	1.56	5.60	0.04	0.65	0.12	<0.01	1.77	100.2
3	R-43	75.0	12.9	0.64	0.60	7.79	0.34	0.70	<0.01	0.66	0.12	0.01	0.70	99.5
4	R-44	55.5	14.4	7.44	4.84	3.83	0.27	8.58	0.25	0.81	0.07	0.19	4.28	100.5
5	R-45	53.5	13.4	8.16	4.77	5.65	0.32	9.27	0.26	0.62	0.04	0.18	3.77	100.0
6	R-46	50.0	13.6	6.14	5.40	3.62	0.97	15.3	0.32	1.51	0.16	0.01	2.70	99.9

	SAMPLE	RB	SR	ZR	BA
40	(R-40)	10	<10	<10	110
42	42	70	60	270	290
43	43	<10	60	230	100
44	44	<10	210	40	120
45	45	<10	90	30	70
46	46	30	370	110	350

TABLE III

Bedrock Assay Results

SAMPLE	AU PPB	AU PPB	NI PPM	CU PPM	ZN PPM
R-1	13	--	5	7.5	55.0
R-2	5	--	5	5.5	4.0
R-3	<2	--	24	1.5	43.0
R-4	26	--	16	14.0	74.0
R-5	2	--	4	3.0	17.0
R-7	15	--	810	130.	360.
R-8	6	--	580	120.	170.
R-9	14	--	350	19.0	73.0
R-10	7	--	17	21.0	27.0
R-11	4	--	530	98.0	97.0
R-12	<2	--	400	74.0	170.
R-13	5	--	49	32.0	<0.5
R-14	<2	--	6	6.5	10.0
R-15	<2	--	7	520.	23.0
R-16	<2	--	5	14.0	7.0
R-17	2	--	2300	2.0	12.0
R-18	<2	--	59	2.0	45.0
R-19	5	--	60	6.0	31.0
R-20	2	--	210	18.0	5.5
R-21	16	--	190	69.0	58.0
R-22	4	--	120	70.0	87.0
R-23	<2	--	6	12.0	8.5
R-24	23	--	29	29.0	61.0
R-25	<2	--	53	51.0	100.
R-26	14	--	37	7.0	11.0
R-27	23	--	14	11.0	8.5
R-28	21	--	180	160.	120.
R-29	4	--	470	6.0	110.
R-30	27	--	66	85.0	35.0
R-31	11	--	5	6.0	24.0
R-32	12	--	9	10.0	52.0
R-33	<2	--	460	100.	75.0
R-34	<2	--	440	130.	220.
R-35	3	--	1100	130.	57.0
R-36	11	--	140	150.	270.
R-37	41	--	160	150.	150.
R-38	6	--	260	160.	66.0
R-39	<2	--	770	110.	62.0
R-40	--	--	--	--	--
R-41	2	--	58	23.0	32.0
R-42	--	--	--	--	--
R-43	--	--	--	--	--
R-44	--	--	--	--	--
R-45	--	--	--	--	--
R-46	--	--	--	--	--

SAMPLE	AS PPM	AS PPM	AG PPM	SB PPM
R-1	14.0	--	<0.5	<0.1
R-2	4.7	--	<0.5	<0.1
R-3	2.1	--	<0.5	<0.1
R-4	5.2	--	<0.5	<0.1
R-5	2.4	--	<0.5	<0.1
R-7	88.0	--	0.5	<0.1
R-8	4.0	--	0.5	<0.1
R-9	19.0	--	0.5	<0.1
R-10	35.0	--	<0.5	0.2
R-11	13.0	--	0.5	0.3
R-12	10.0	--	0.5	0.1
R-13	33.0	--	<0.5	0.7
R-14	2.6	--	<0.5	<0.1
R-15	1.9	--	<0.5	<0.1
R-16	1.0	--	<0.5	<0.1
R-17	2.6	--	<0.5	<0.1
R-18	0.4	--	<0.5	<0.1
R-19	0.3	--	0.5	<0.1
R-20	1.4	--	1.0	<0.1
R-21	1.6	--	<0.5	<0.1
R-22	0.4	--	0.5	<0.1
R-23	1.2	--	2.0	0.1
R-24	0.5	--	<0.5	<0.1
R-25	0.7	--	<0.5	<0.1
R-26	0.6	--	<0.5	<0.1
R-27	0.7	--	<0.5	<0.1
R-28	3.1	--	1.0	0.1
R-29	2.1	--	0.5	<0.1
R-30	8.7	--	0.5	<0.1
R-31	0.2	--	<0.5	<0.1
R-32	0.5	--	<0.5	<0.1
R-33	1.9	--	0.5	<0.1
R-34	11.0	--	0.5	0.2
R-35	260.	--	<0.5	0.1
R-36	3.5	--	0.5	0.1
R-37	7.0	--	0.5	0.2
R-38	22.0	--	0.5	0.1
R-39	3.8	--	0.5	0.2
R-40	--	--	--	--
R-41	0.4	--	<0.5	<0.1
R-42	--	--	--	--
R-43	--	--	--	--
R-44	--	--	--	--
R-45	--	--	--	--
R-46	--	--	--	--

July 26 1983

XRAL

X-RAY ASSAY LABORATORIES
LIMITED

1885 LESLIE STREET • DON MILLS ONTARIO M3B 3J4 • (416) 445-5755

VOICE TO
D.R. PYKE & ASSOCIATES
ATTN. D.R. PYKE
P.O. BOX 1163
TIMMINS, ONTARIO
P4N 7H9

COPY TO
CAMPO

UBMITTED TO.
D.R. PYKE & ASSOCIATES
ATTN: D.R. PYKE
P.O. BOX 1163
TIMMINS, ONTARIO
P4N 7H9

CUSTOMER NO 754

INVOICE NO.	INVOICE DATE	WORK ORDER NO.	DATE SUBMITTED
18334	26-JUL-83	13965	5-JUL-83

TERMS
TERMS NET 30 DAYS
1.5% PER MONTH INTEREST ON ACCOUNT OVER 30 DAYS

LIENTS P.O. NO	CLIENT PROJECT NO.		TYPE OF SAMPLES SUBMITTED
			ROCK HUMUS

O. OF PKGS	SHIPPED VIA	WAY BILL NO	SHIPPED FROM
6 BOXES	SMALL FRT	44075	TIMMINS

	QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
1.	6	WHOLE ROCK C21	6, 0, 0, 0, 0	27.50	165.00
2.	39	AU FADCP	10, 7, 0, 0, 0	6.50	253.50
3.	325	AU PPB NA	20, 2, 0, 0, 0	6.50	2112.50
4.	325	AS PPM NA	20, 0, 0, 0, 0	1.00	325.00
5.	39	1ST ELEMENT CHARGE DCP	7, 0, 0, 0, 0	1.25	48.75
6.	39	NI PPM DCP	7, 0, 0, 0, 0	0.90	35.10
7.	39	CU PPM DCP	7, 0, 0, 0, 0	0.90	35.10
8.	39	ZN PPM DCP	7, 0, 0, 0, 0	0.90	35.10
9.	39	AG PPM DCP	7, 0, 0, 0, 0	0.90	35.10
10.	39	1ST ELEMENT CHARGE FAA	8, 0, 0, 0, 0	3.50	136.50
11.	39	AS PPM FAA	8, 0, 0, 0, 0	2.00	78.00
12.	39	SB PPM FAA	8, 0, 0, 0, 0	2.00	78.00
13.	6	BA PPM XRF	6, 0, 0, 0, 0	5.50	33.00
14.	45	PREPARATION ROCK	1, 0, 0, 0, 0	2.75	123.75
15.	336	PREPARATION HUMUS OR LEAVES	2, 0, 0, 0, 0	0.70	235.20

X-RAY ASSAY LABORATORIES LTD.
Paid in full
Accounts Receivable Dept.

SUB-TOTAL $ 3729.60

MISC. CHARGES	SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES	
	33.55				$ 33.55
	OTHER			SURCHARGE - RUSH SERVICE	

TOTAL IN CANADIAN FUNDS $ 3763.15

OFFICE COPY — ENTERED AUG 3 1983

TECHNICAL WORK BREAKDOWN

Humus Sampling - performed by Mr. Jim Bald, 153 Leighton St, South Porpupine, Ontario

8-hour days worked : 5

June 7, 8, 19, 20, 21, 1983

Drafting - performed by Jim Bald (address as above)

8 - hour days worked: 4

June 10, 23, July 4, 7, 1983

Total 8 - hour days technical worked: 9

Total assessment credits accumulated for technical days worked - 63

900

Mining Lands Section

File No 2.9273

Control Sheet

TYPE OF SURVEY

____ GEOPHYSICAL

____ GEOLOGICAL

✓ GEOCHEMICAL

✓ EXPENDITURE

MINING LANDS COMMENTS:

Denis K.

Signature of Assessor

July 28/86

Date

Copy I.D.

Ontario Ministry of Natural Resources

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

207/86 July
The Mining Act 2923219.

Instructions:
- If number of mining claims traversed exceeds space on this form, attach a list.
- Note: Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

Type of Survey: Geochemical (Expenditure)

Township or Area: Cairo

Claim Holder(s): Comstate Resources Ltd.

Prospector's Licence No.: T-1127

Address: P.O. Box 1142 Timmins Ontario P4N 7H9

Survey Company: Comstate Resources

Date of Survey (from & to): 6 06 83 (Day Mo. Yr.) 28 06 83 (Day Mo. Yr.)

Total Miles of line Cut: 21.8

Name and Address of Author (of Geo-Technical report): R. Bald, D. Pyke P.O. Box 1142 Timmins Ont. P4N 7H9

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions: For first survey: Enter 40 days. (This includes line cutting). For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days: Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	10.5
Airborne Credits: Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	650117	50.7
	650118	50.7
	650131	14.7
	650132	33.37
	757832	50.7
	757833	50.7

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
JUN 13 1986
MINING LANDS SECTION

Total number of mining claims covered by this report of work: 6

Expenditures (excludes power stripping)

Type of Work Performed: Humus + Bedrock (Analyses) Sec-77-1(3)

Performed on Claim(s): L561730, 650116, 650131, 650134, 650133, 650117, 650118, 757832, 757833

Calculation of Expenditure Days Credits

Total Expenditures: $ 3763.15 ÷ 15 = Total Days Credits: 250.87

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date: MAY 28/86 Recorded Holder or Agent (Signature): D.R. Pyke

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
313.87	MAY 30 1986	
	Date Approved as Recorded	Branch Director

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: D. R. Pyke, P.O. Box 1142 Timmins Ontario P4N 7H9

Date Certified: May 28/86 Certified by (Signature): D.R. Pyke

1362 (81/9)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey	Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	9	X	7	63	+		=	63	÷	6	=	10.5

Type of Survey	Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
		X	7		+ -		=		÷		=	

Type of Survey	Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
		X	7		+		=		÷		=	

Type of Survey	Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
		X	7		+		=		÷		=	

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geochemical (EXPENDITURE)
Township or Area Cairo
Claim Holder(s) Comstate Resources Ltd
Survey Company Comstate Resources
Author of Report R. Bald, D Pyke
Address of Author P.O. Box 1142 Timmins P4N 7H9
Covering Dates of Survey June 83 - May 85 (linecutting to office)
Total Miles of Line Cut 21.8

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim

Geophysical
--Electromagnetic _____
--Magnetometer _____
--Radiometric _____
--Other _____
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____ (enter days per claim)

DATE: May 11/85 SIGNATURE: W R Pyke (Author of Report or Agent)

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

L 650117
L 650118
L 650131
L 650132
L 757832
L 757833

If space insufficient, attach list

TOTAL CLAIMS 6

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

_____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency _____
(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

_____

Base station value and location _____

_____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken L561730, L650116, L650131, L650134, L650133, L650117, L650118, L751832, L751833

Total Number of Samples 330 - Humus 45 Bedrock

Type of Sample Humus); Bedrock chips
(Nature of Material)

Average Sample Weight Humus - 25grams Bedrock - 400-500grams

Method of Collection Humus - Grubbing Bedrock - 3lb sledge

Soil Horizon Sampled Ao

Horizon Development

Sample Depth

Terrain

Drainage Development low to good

Estimated Range of Overburden Thickness 0 - 10 feet

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis

General

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others

Field Analysis (____ tests)
Extraction Method
Analytical Method
Reagents Used

Field Laboratory Analysis
No. (____ tests)
Extraction Method
Analytical Method
Reagents Used

Commercial Laboratory (____ tests)
Name of Laboratory
Extraction Method
Analytical Method
Reagents Used

General

August 22, 1986

Your File 207/86
Our File 2.9273

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

RE: Notice of Intent dated August 1, 1986
Geochemical Survey and Data for Assaying
on Mining Claims L 561730, et al, in
Cairo Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

DK/mc
cc: Comstate Resources Ltd
P.O. Box 1142
Timmins, Ontario
P4N 7H9
Attention: D.R. Pyke

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Kirkland Lake, Ontario

Encl.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.9273

Date: August 1, 1986

Mining Recorder's Report of Work No.: 207/86

Recorded Holder: COMSTATE RESOURCES LTD

Township or Area: CAIRO TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical 15 days	L 650117-18 650131 757832-33
Man days ☐ Airborne ☐	
Special provision ☐ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ insufficient technical data filed

L 650132

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

Ontario

Ministry of
Northern Development
and Mines

aug 18/86

August 1, 1986

Your File: 207/86
Our File: 2.9273

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at (416) 965-4888.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

D.R. DK/mc
Encl.

cc: Comstate Resources Ltd
P.O. Box 1142
Timmins, Ontario
P4N 7H9
Attention: D.R. Pyke

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Ontario

Ministry of
Northern Development
and Mines

Notice of Intent
for Technical Reports

August 1, 1986

2.9273/207/86

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

July 22, 1986 Report of Work #207

Comstate Resources Ltd
P.O. Box 1142
Timmins, Ontario
P4N 7H9

Attention: D.R. Pyke

Dear Sir:

RE: Mining Claims L 650117, et al,
in Cairo Township

We have not received the Data and Maps (in duplicate) for the Analytical Survey on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on May 30, 1986 the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on July 29, 1986.

If the material is not submitted to this office by July 29, 1986 we will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

AB/mc
cc: Mining Recorder
Kirkland Lake, Ontario

Encl.

- 336 Humus samples taken over 9 claims, or >37 samples/claim on average.

650117	✓
18	✓
131	3/4
32	0
757832	3/4
33	✓

PRORATE:
$(20 \times 5) \div (5 + 6/4) = \underline{15.4}$ days

(Under Special Provisions)

DK.

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.9273

Date: August 1, 1986

Mining Recorder's Report of Work No.: 207/86

Recorded Holder: COMSTATE RESOURCES LTD

Township or Area: CAIRO TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$3,763.15 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIMS:
Electromagnetic _____ days	L 561730
Magnetometer _____ days	650116 to 18 inclusive
Radiometric _____ days	650131
Induced polarization _____ days	650133-34
Other _____ days	757832-33
Section 77 (19) See "Mining Claims Assessed" column	250.87 ASSESSMENT WORK DAYS ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT.
Geological _____ days	FOR MINING RECORDER'S USE:
Geochemical _____ days	THE WORK ASSIGNMENT FOR EACH OF THE ABOVE LISTED CLAIMS IS 27.87 DAYS PER CLAIM.
Man days ☐ Airborne ☐	
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
Area west of West Montreal River	NRW 65/83	18/11/83	M+SR	

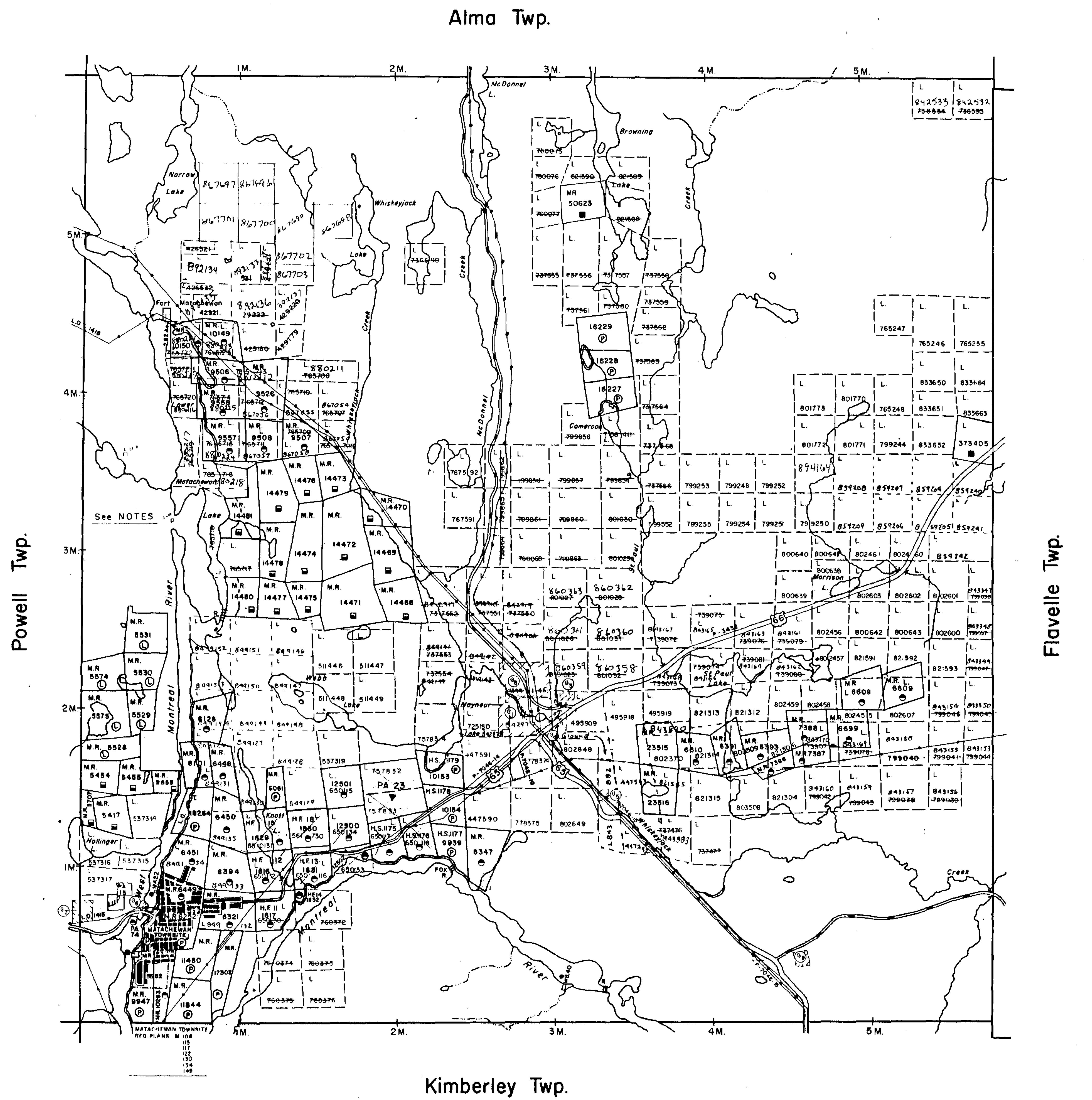
SAND and GRAVEL

M T C	Gravel	Pit 206
M T C	Gravel	Pit 1313
	Gravel	Pit 205
	Gravel	Pit 204, File 127307
	Gravel	Pit
M T C		Pit 3F 4, File 127307
M T C	Gravel	Pit 3F-21
M T C		Pit 3F-28

NOTES

AREA WEST OF WEST MONTREAL RIVER CLOSED TO STAKING SUBJECT TO SEC 38(f) OF THE MINING ACT, 20 SEPT, 1978.

~~Pending application under Public Lands Act~~



LEGEND

HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES:	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES:	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	Ⓟ or ●
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	Ⓛ or ■
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	L.O. or ▼
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	
SAND & GRAVEL	Ⓢ

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

CAIRO

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

TIMISKAMING

Ontario Ministry of Natural Resources — Land Management Branch

Date JANUARY 1985 — Number G-3209

JUL 7 1986

41P15NE8324 2.9273 CAIRO

200

LEGEND

- contact, observed, interpreted
- 76° strike of bedding, dip
- strike of foliation, dip
- outline of outcrop area
- outline of outcrop with steep sides
- drill hole 45°
- Q.V. quartz vein
- py pyrite
- trench in boulders
- tr trench in outcrop
- L650130 claim number
- claim line
- claim post
- survey post
- swamp
- outline of swampy area
- outline of high area
- stream, direction of flow
- H_2O standing water
- spring
- culvert
- g gravel pit
- mg metal garbage
- power line
- telephone line
- road
- trail
- top of beds in direction of arrow from graded bedding

L0 L2E L4E L6E L8E L10E L12E L14E L16E L18E L20E L22E L24E L26E L28E L30E L32E mag. astr.

L28W L26W L24W L22W L20W L18W L16W L14W L12W L10W L8W L6W L4W L2W

28N 26N 24N 22N 20N 18N 16N 14N 12N 10N 8N 6N 4N 2N BL0 2S 4S 6S 8S 10S 12S 14S 16S 18S 20S 22S 24S 26S 28S 30S

L650115 L650116 L650117 L650118 L650130 L650131 L650132 L650133 L650134 L561730 L757832 L757833

MOYNEUR LAKE OLD HWY HIGHWAY 66 KNOTT LAKE PARK sand MONTREAL RIVER

transformer station
1/4 mile to Matachewan

ASSAY RESULTS

SAMPLE	AU PPB	NI PPM	CU PPM	ZN PPM
R-1	13	5	7.5	55.0
R-2	5	5	5.5	4.0
R-3	<2	24	1.5	43.0
R-4	26	16	14.0	74.0
R-5	2	4	3.0	17.0
R-7	15	810	130.0	360.0
R-8	6	580	120.0	170.0
R-9	14	350	19.0	73.0
R-10	7	17	21.0	27.0
R-11	4	530	98.0	97.0
R-12	<2	400	74.0	170.0
R-13	5	49	32.0	<0.5
R-14	<2	6	6.5	10.0
R-15	<2	7	520.0	23.0
R-16	<2	5	14.0	7.0
R-17	2	2300	2.0	12.0
R-18	<2	59	2.0	45.0
R-19	5	60	6.0	31.0
R-20	2	210	18.0	5.5
R-21	16	190	59.0	58.0
R-22	4	120	70.0	87.0
R-23	<2	6	12.0	8.5
R-24	23	29	290	61.0
R-25	<2	53	51.0	100.0
R-26	14	37	7.0	11.0
R-27	23	14	11.0	8.5
R-28	21	180	160.0	120.0
R-29	4	470	6.0	110.0
R-30	27	66	85.0	35.0
R-31	11	5	6.0	24.0
R-32	12	8	10.0	52.0
R-33	<2	460	100.0	75.0
R-34	<2	440	130.0	220.0
R-35	3	1100	130.0	57.0
R-36	11	140	150.0	270.0
R-37	41	160	150.0	150.0
R-38	6	260	160.0	66.0
R-39	<2	770	110.0	62.0
R-41	2	58	23.0	32.0

ASSAY RESULTS

SAMPLE	AS PPM	AG PPM	SB PPM
R-1	14.0	<0.5	<0.1
R-2	4.7	<0.5	<0.1
R-3	2.1	<0.5	<0.1
R-4	5.2	<0.5	<0.1
R-5	2.4	<0.5	<0.1
R-7	88.0	0.5	<0.1
R-8	4.0	0.5	<0.1
R-9	19.0	0.5	<0.1
R-10	35.0	<0.5	0.2
R-11	13.0	0.5	0.3
R-12	10.0	0.5	0.1
R-13	38.0	<0.5	0.7
R-14	2.6	<0.5	<0.1
R-15	1.9	<0.5	<0.1
R-16	1.0	<0.5	<0.1
R-17	2.6	<0.5	<0.1
R-18	0.4	<0.5	<0.1
R-19	0.3	0.5	<0.1
R-20	1.4	1.0	<0.1
R-21	1.6	<0.5	<0.1
R-22	0.4	0.5	<0.1
R-23	1.2	2.0	0.1
R-24	0.5	<0.5	<0.1
R-25	0.7	<0.5	<0.1
R-26	0.6	<0.5	<0.1
R-27	0.7	<0.5	<0.1
R-28	3.1	1.0	0.1
R-29	2.1	0.5	<0.1
R-30	8.7	0.5	<0.1
R-31	0.2	<0.5	<0.1
R-32	0.5	<0.5	<0.1
R-33	1.9	0.5	<0.1
R-34	11.0	0.5	0.2
R-35	260.0	<0.5	0.1
R-36	8.5	0.5	0.1
R-37	7.0	0.5	0.2
R-38	22.0	0.5	0.1
R-39	3.8	0.5	0.2
R-41	0.4	<0.5	<0.1

LEGEND

7 Gowganda Formation (Cobalt)
- e argillaceous conglomerate
- d arkosic conglomerate
- c argillaceous quartzite
- b hematite-stained quartzite
- a argillite

6 Diabase (Matachewan)

5 Quartz-Feldspar Porphyry

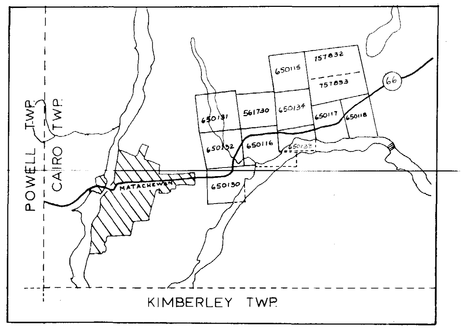
4 Ultramafic and Mafic Intrusive Rocks
- b serpentinite
- a gabbro

Volcanic Rocks (Keewatin)

3 Basalt
- c pillowed
- b variolitic, locally pillowed
- a massive flow

2 Iron Formation

1 Rhyolite
- b agglomerate
- a massive flow



29273

COMSTATE RESOURCES LTD.

Geological Map

CAIRO TOWNSHIP PROPERTY

MATACHEWAN AREA

Date: June 1983 | Drawn by: R.Bald, J.Bald

Scale 1"=200' 0 200' 400'

41P15NE8324 2.9273 CAIRO

210

N

L650115

L757832

L650134

L757833

L650131

L561730

L650117

L650118

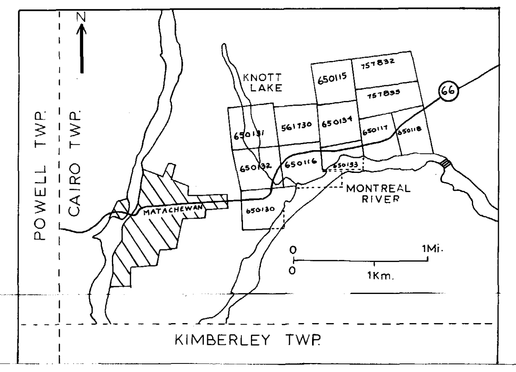
L650132

L650116

L650133

L650130

E-F



contour => 5ppm As = <5ppm As

'C'-Letter indicates humus anomoly

ARSENIC

29273

CONSTATE RESOURCES LTD.

GEOCHEMICAL SURVEY

HUMUS

CAIRO TWP.

PATACHEWAN AREA ONT.

Date August, 1963

Drawn by R Bald

J Bald

Scale 1"=200'

0 200' 400'

220

L4E L8E L12E L16E L20E L24E L28E L32E

L28W L24W L20W L16W L12W L8W L4W L0

24 N
20 N
16N
12 N
12N
8N
8 N
4N
4 N
BL O
BLO
4S
4 S
8S
8 S
12 S
16 S
20S
24 S
28S

N

L650115

L757832

L650134

L757833

L650131

L561730

L650117

L650118

L650132

L650116

L650133

L650130

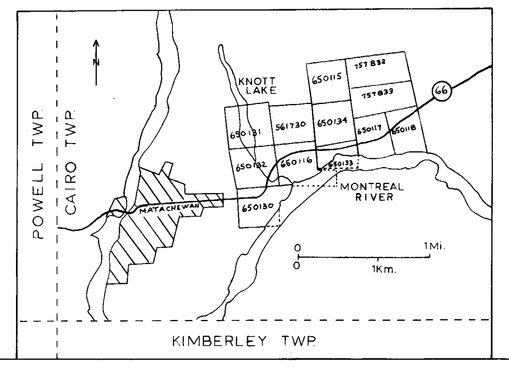
Knott Lake

Montreal River

HWY 66

HWY 66

A B C D E F G



NH= No Humus

Outer limit of municipal dump

contour = > 5ppb Au = <5ppb Au

'C'- Letter indicates humus anomoly

GOLD

29273

COMSTATE RESOURSES LTD.

GEOCHEMICAL SURVEY

HUMUS

CAIRO TWP.
MATACHEWAN AREA, ONT.

Date: August, 1983

Drawn by: R. Bald
J. Bald

Scale 1"=200' 0 200' 400'

230