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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3333 MAP

GEOCHEMISTRY AT BIRK CREEK
(FENNELL-SCHILLING PROPERTY)

DUCANEX RESOURCES LIMITED

by
J. R. Woodcock

North Vancouver, B. C. -- September 10, 1971

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GEOCHEMISTRY AT BIRK CREEK
(Fennell-Schilling Property)

SUMMARY

The 52 claims, under option by Ducanex Resources Limited, are along the south contact of the Barriere Batholith. The claims are underlain by schists; pyrite mineralization is widespread. Chalcopyrite and sphalerite also occur.

A geochemical soil survey was conducted over the claim group. This resulted in one good copper anomaly and one small, but high zinc anomaly. In addition there were broad areas of moderately anomalous zinc values and also areas that had scattered anomalous copper values. The northwest and western part of the grid area is devoid of anomalous values of either copper or zinc.

The geochemical values and the anomalies must be considered in the light of the widespread glacial till and soil which occurs over the property and which has great variations in depth.

GEOCHEMISTRY AT BIRK CREEK
(FENNEL-SCHILLING PROPERTY)

INTRODUCTION

The geochemical survey on this property was done under the direction of J. R. Woodcock. The linecutting and sampling program started on May 18, 1971 and was largely completed by June 12, 1971. Some additional linecutting and soil sampling were done subsequently in late June and July.

LOCATION AND ACCESS

The central part of the grid area lies two miles northwest of the west end of North Barriere Lake. Harper Creek is along the east side of the surveyed area and Birk Creek passes through the south part of the surveyed area. The area is mainly on a very steep, southerly-sloping hillside where drainage is southeasterly or southerly into Birk Creek and Harper Creek. Elevations vary from 2200 feet to 4200 feet.

Much of the area was burned over many years ago and is now covered by very dense growth of small hemlock, fir, and birch.

CLAIMS AND OWNERSHIP

The following 52 claims are under option by Ducanex Resources Limited:

| <u>CLAIM NAMES</u> | <u>RECORD NUMBERS</u> | <u>DATE STAKED</u> | <u>DATE RECORDED</u> |
|--------------------|---------------------------|---|---|
| Broken Ridge 1,2 | 37056(H)-37057(H) | July 5, 1961 | July 11, 1961 |
| Weasel 1,2 | 50796(H)-50797(H) | July 3, 1965 | July 6, 1965 |
| Weasel 3 | 50798(H) | July 3, 1965 | July 6, 1965 |
| Bear 1-3 incl. | 58080(H)-58082(H) | July 6, 1966 | July 8, 1966 |
| Bluenose | 37046(H) | July 5, 1961 | July 7, 1961 |
| Bluenose 1 | 37047(H) | July 5, 1961 | July 7, 1961 |
| Bluenose 2,3 | 37048(H)-37049(H) | July 5, 1961 | July 7, 1961 |
| Bear 4-6 incl. | 58083(H), 58319(H), 20(H) | July 6, 11, 1966 | July 8, 14, 1966 |
| Weasel 4 | 50799(H) | July 3, 1965 | July 6, 1965 |
| Bluenose 4,5 | 37275-37274 | July 5, 1961 | July 19, 1961 |
| Cougar | 15401(K) | Aug. 6, 1955 | Aug. 8, 1955 |
| Cougar 1-3 incl. | 15402(K)-15404(K) | Aug. 6, 1955 | Aug. 8, 1955 |
| Cougar 4-7 incl. | 47158(K)-47161(K) | Aug. 10, 1964 | Aug. 11, 1964 |
| Cub 1-6 Fr. incl. | 81117(G)-81122(G) | 1,2 June 11, 1969 3,4 June 12, 1969 5,6 June 13, 1969 | June 25, 1969 June 25, 1969 June 25, 1969 |
| Jackie 1-4 incl. | 50227(E)-50230(E) | May 13, 1965 | May 21, 1965 |
| Miko 1-8 incl. | 50231(E)-50238(E) | May 13, 1965 | May 21, 1965 |
| Rosalie 1-6 incl. | 50092(E)-50097(E) | 1,2 May 10, 1965 | May 20, 1965 |
| Rose 1,3 | 44580(N)-44581(N) | Sept. 17, 1965 | Oct. 11, 1965 |

Many of the claims overlap portions of one another and the total acreage contained within the claim group is considerably less than normally covered by such a large number of claims. The posts for most of these claims have been located and tied into the grid system.

GENERAL TECHNIQUES

A grid of lines at 400-foot spacing was cut on the entire claim group. Soil samples were taken at 200-foot spacing along these lines. The soil appears to be a good podsol with a well developed profile in most places. The B horizon, which was sampled throughout, was fairly easy to discern.

The soil samples were sent to Vangeochem Lab Ltd. where they were dried and sifted to -80 mesh. The -80 mesh portion was analyzed for total copper and total zinc using a perchloric acid digestion and atomic absorption detection. The procedures for the analytical work are outlined in the appendix.

GEOLOGY

The property lies on the south side of the Barriere Batholith. It is underlain by Paleozoic strata which are now largely schists of sericite and/or chlorite with considerable graphite in places. Some limestones and some limy horizons are also present. This strata probably represent metamorphosed sediments including some tuffaceous or volcanic deposits. The schistosity and the bedding strike northwest and dip gently to the southwest. Dips in the eastern part of the property are about 30°, however the dips become more gentle (down to 10°) in the southwest part of the property.

Considerable sulphide mineralization occurs throughout the area. Bands or veins of pyrrhotite with pyrite, chalcopyrite, and sphalerite are common in the eastern part of the area. These strike parallel to the schistosity; some are vertical and some dip parallel to the schistosity. In addition there is considerable disseminated pyrite and, in places, this is associated with chalcopyrite and/or sphalerite.

GEOCHEMICAL RESULTS

Because of the widespread glacial till and the great variations in overburden depth, the geochemical results must be viewed with caution. Some of the horizons have widespread pyrite with traces of chalcopyrite and/or sphalerite and such mineralization can, if under good oxidizing conditions, create misleading high anomalies. In addition, the drainages and seepages can concentrate metals along their courses, especially zinc. For these reasons the geochemical maps have been coloured according to a scale with no attempt to contour the values or to calculate threshold values. The specific anomalous areas will be treated separately.

Copper in Soil

Only one continuous copper anomaly shows on the geochemical map and this lies immediately to the east of the northern part of the main base line (between cross-lines 32N and 60N). The anomaly is about 400 feet wide and has values up to 1950 ppm. If one considers the slope of the hill when contemplating the strike of the formations then it appears that this linear anomaly would follow the trace of the stratigraphic unit. The reason for the change in trend and the sudden termination of the anomaly at its south end is not apparent.

Scattered anomalous copper values (up to 455 ppm) occur in the northeastern part of the grid area. This is an area of known mineralization, generally in the form of scattered pyrrhotite lenses carrying chalcopyrite and sphalerite.

Anomalous copper values also occur near Birk Creek (southwest ends of lines 28N, 32N, 36N, and 40N). This is in an area of known sulphide mineralization -- generally pyrite with traces of chalcopyrite and sphalerite.

Scattered anomalous copper values also occur between the last mentioned area and the main linear copper anomaly (in the south central part of the grid area). These anomalous values are not persistent enough or continuous enough to establish any trends.

The northwest part of the grid area has no anomalous values. This is near the upper part of the hill where geochemistry should be fairly effective.

Zinc in Soil

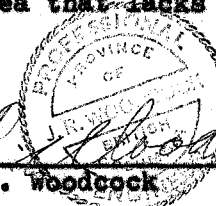
Zinc values are not highly anomalous in any part of the area. However there are some anomalous zones that merit discussion. To the northwest of the main copper anomaly (centred at line 56N 8+00W) is a broad (1500 feet in diameter) zinc anomaly which tails off to the south in a long linear anomaly that follows down Paul Creek. Some zinc mineralization has been found in outcrop and in float in the vicinity of this anomaly so at least part of the anomaly could reflect underlying sphalerite mineralization. However the topographically lower part (down Paul Creek) might be caused by some concentration along the drainage area.

In the eastern part of the grid area (northeast ends of line 32N and line 36N) are some anomalous zinc values (up to 1000 ppm). This is partially coextensive with scattered anomalous copper values and also in the area of known pyrite - chalcopyrite - sphalerite mineralization.

The best zinc geochemical anomaly is on lines 36N and 40N at 36+00W. This anomaly, approximately 800 feet long and 400 feet wide, has zinc values up to 6500 ppm. A large, broad area (about 2000 feet by 1500 feet) of slightly anomalous zinc (up to 1000 ppm) extends northward from this main zinc anomaly. The fact that known pyrite mineralization containing some disseminated chalcopyrite and/or sphalerite occurs in this general vicinity considerably enhances the good anomalous area in the south part of this large anomaly.

Scattered anomalous zinc values (up to 1050 ppm) occur along the north side of Birk Creek, 1600 feet west of the main zinc anomaly. These are in the general area of anomalous copper values and known pyrite - chalcopyrite - sphalerite mineralization.

The northwest and the western part of the grid area contain generally background values. This correlates with the area that lacks anomalous copper values.


J. R. Woodcock

Vancouver Geochemical Laboratories Ltd.

1521 PEMBERTON AVENUE NORTH VANCOUVER, B.C., CANADA TELEPHONE: 604-988-2171

J. R. WOODCOCK
CONWAY CHUN

TO: J. R. Woodcock Consultants Ltd.
1521 Pemberton Avenue
North Vancouver, B. C.

FROM: Mr. Laurie Nicol, Supervisor Chemist
Vancouver Geochemical Laboratories Ltd.
1521 Pemberton Avenue
North Vancouver, B.C.

SUBJECT: Analytical procedure used to process acid soluble
Cu and Zn in geochemical samples received from
J. R. Woodcock Consultants Ltd.

1. Sample Preparation

- (a) Geochemical soil, silt and rock samples were received in the laboratory in wet-strength 3½ x 6½ Kraft paper bags.
- (b) The wet samples were dried in a ventilated oven.
- (c) The dried soil and silt samples were sifted, using an 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.
- (d) The dried rock samples were crushed and pulverized to minus 80-mesh. The pulverized sample was then put in a new bag for later analysis.

2. Methods of Digestion

- (a) 1.00 gram or 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.
- (b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively).

Continued

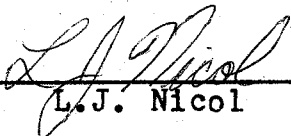
2. Methods of Digestion (Continued)

(c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis

Cu & Zn analyses were determined by using a Techtron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective hollow cathode lamp. The digested samples were aspirated directly into an air and acetylene flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit.

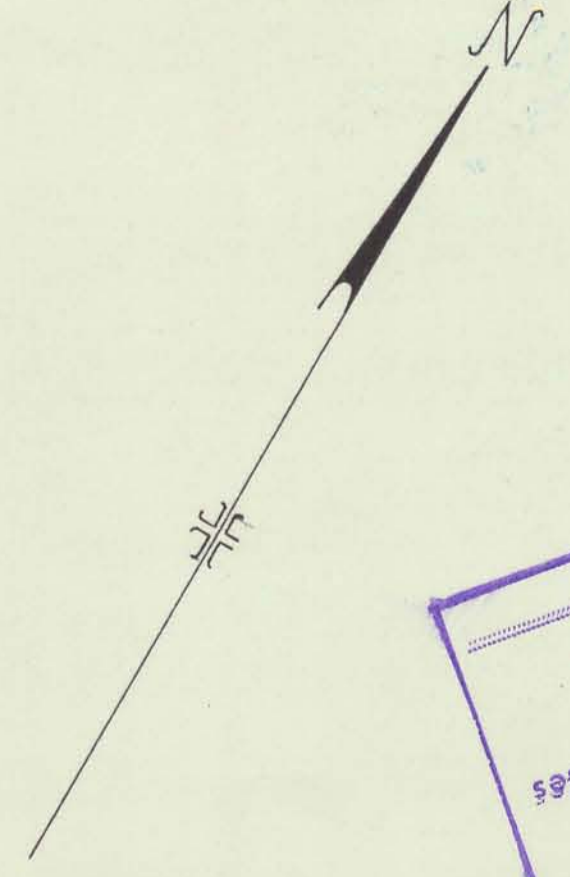
4. The analyses were supervised or determined by Mr. Conway Chun, or Mr. Laurie Nicol and their laboratory staff.


L.J. Nicol

VANCOUVER GEOCHEMICAL LABORATORIES LTD.

LJN/ati

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Mines and Petroleum Resources
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Map
NO. 3333



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| DUCANEX RESOURCES LTD. | | |
| J.R. WOODCOCK CONSULTANTS LTD. 1521 PEMBERTON AVENUE NORTH VANCOUVER, B.C. | | |
| TITLE: GEOCHEMICAL SOIL SURVEY COPPER IN SOIL NORTH GRID OF NORTH BARRIERE LAKE BARRIERE PROJECT | | |
| DRAWN: S.P. | To accompany report by M. Woodcock Sept 10/11 | DRWG. NO. B.P.(S) - 2 |
| DATE: JULY 5/11 | APPROVED: B. PRICE | Blair Ridge 1, 2, Wessell 1, 2, 3, 4, Blair 1, 2, 3; Blumens 1, 5; Blair 4-5 Cassidy 1, 2 + Cull 1-6 F.H. |
| SCALE: 1"=400' | Blumens, Canyon | Figure 1 |



MAY 1-6, 15, 16
KERN OPTION

ORIGINAL FENNEL-SCHILLING OPTION

ORIGINAL FENNEL-SCHILLING OPTION

LEGEND:

- ZN.
- 2 000 P.P.M.
- 1000 - 1999 P.P.M.
- 500 - 999 P.P.M.
- 300 - 499 P.P.M.
- 1 - 299 P.P.M.
- ⊕ EXISTING DRILL SITES
- △ MINERALIZED AREAS

* NOTE: REFER TO CLAIM MAP FOR DETAILED CLAIM INFORMATION

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3333 MAP #2

| | | | |
|---|--|---------------------|--|
| DUCANEX RESOURCES LIMITED | | | |
| J.R. WOODCOCK CONSULTANTS LTD. | | | |
| 1321 PEMBERTON AVENUE NORTH VANCOUVER, B.C. | | | |
| TITLE FENNEL-SCHILLING - KERN CLAIMS GEOCHEMICAL SOIL SURVEY - ZINC IN SOIL NORTH GRID OF NORTH BARRIERS LAKE BARRIERS PROJECT | | | |
| DRAWN: G.C.I. | <i>J. Woodcock</i> | DRWG. NO. B.P.(S)-1 | |
| DATE: JULY 3/71 | <i>J. Woodcock</i> | | |
| APPROVED: G. PRICE AUG 71 | <i>G. Price</i> | | |
| SCALE: 1" = 400' | <i>Bluebeard 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000</i> | | |