DIAMOND DRILLING REPORT

on

the

RUSTY SPRINGS PROPERTY

Yukon Territory
N.T.S. 116 K/8 and 116 K/9

Latitude 66° 30' N, Longitude 140° 25' W

prepared for

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and

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This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 77,650 .

M. B[illegible]

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

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INTRODUCTION

Despite many years of exploration and relatively limited success, the Rusty Springs prospect retains considerable potential for a large-tonnage deposit. The property lies within the east-vergent Taiga-Nahoni foldbelt, occurring in the core of a structural culmination exposing host Lower and Middle Devonian Ogilvie Formation dolostones. Mineralization occurs in stratabound and discordant zones along the contact with the overlying Devono-Mississippian Unnamed shale. Various deposit models, ranging from Mississippi Valley-type to epithermal vein-type have been employed. Poor exposure and relatively deep weathering resulting from the lack of Pleistocene glaciation account for the lack of consensus with regard to genesis, and accumulating evidence points to the potential for a high-temperature, carbonate-hosted massive sulphide deposit (manto-chimney complex). The great extent of mineralized and altered rocks, together with their stratabound nature, common significant thicknesses, local high grades, and potential for supergene enrichment suggest that Rusty Springs remains an attractive drill-oriented exploration target.

The Rusty Springs Property area has seen sporadic exploration since 1975, when rusty ground seeps were recognized during regional oil and gas exploration programs. Subsequent ground examination revealed silver-lead-zinc mineralization nearby. Staking of the area by Rio Alto Exploration followed, with systematic exploration programs carried out over the years by various operators.

High-grade mineralization was discovered in the Orma Hill area in 1978, and the focus of exploration efforts were concentrated in this area. Virtually all drilling was aimed at the Orma Vein since this time. Preliminary work, previous to the Orma discovery however, outlined anomalous soil geochemical values in the Mike Hill area. Limited drilling was carried out to define the nature of this mineralization, but met only limited success.

In 1992, the final core claims comprising the Rusty Springs Property were allowed to lapse. They were subsequently restaked, and optioned to Eagle Plains Resources, who now retain a 100% interest in the property.

Bulldozer trenching of the Mike Hill area in 1994 resulted in the discovery of high grade silver-lead-zinc mineralization within silicified carbonate material. Drilling carried out during 1995 was aimed at evaluating the mineralized zones exposed on the Mike Hill. Trenching and soil geochemical sampling was completed at the Big Onion area to follow-up geochemical work initiated during 1994.

In 1996, a 15 hole diamond drill program defined highly anomalous base metal values over significant widths within an apparently stratabound – stratiform horizon at the Ogilvie - Hart River contact. The 1997 program employed a reverse circulation drill in an attempt to improve penetration problems related to the highly abrasive cap rocks overlying the mineralized horizon. The drilling confirmed the presence of strata bound mineralization over a large area.

The 1998 program consisted of a combined shallow seismic and gravity geophysical survey. The survey defined a coincident positive Bouger gravity anomaly and seismic reflection profile interpreted to be related to a shallow sulphide body at the same stratigraphic horizon as sulphide mineralization defined in 1996 - 97.

Evaluation of the Rusty Springs Property continued in 1999 with a $273,001.81 diamond drilling and geological mapping program undertaken by the Eagle Plains Resources / CanAustra Resources joint venture. CanAustra has an option to earn a 60% interest in the Rusty Springs property by completing $2,000,000 in exploration expenditures, and making $70,000 in cash payments to Eagle Plains by 2003. Diamond drilling was directed toward testing geophysical anomalies defined by the 1998 combined seismic and gravity surveys and geological targets generated by 1999 mapping. A total of 616.9 meters (2024 feet) of diamond drilling was completed in three holes. None of the holes were completed to target depth due to drilling problems. One of the holes, RS9901, intersected significant base metal mineralization.

Charlie Greig, a noted structural geologist, was retained in 1999 to compile a detailed structural map of the Rusty Springs property and to define a regional framework for the Rusty Springs mineralization. His work forms the basis for much of this report and will be published in 2000 as part of the Yukon Exploration and Geology, 1999; Department of Indian and Northern Affairs.

Further work is recommended for the property and surrounding region. A $374,000.00, 1500m diamond drilling program utilizing a modified diamond drill designed to address the difficult drilling conditions encountered at Rusty Springs is recommended for 2000.

LOCATION AND ACCESS

The Rusty Springs Ag/Pb/Zn/Cu prospect is situated in the north-western part of the Yukon Territory at approximately 66° 30' North latitude and 140° 25' West longitude on N.T.S. mapsheet 116 K/8 and 116 K/9. The property is 8 km south of the Arctic Circle and 29 km east of the Alaska border, near the headwaters of the Salmon Fork of the Yukon River (see Figure 1; following). Relief in the Rusty Springs area is on the order of 1000 metres, with the highest point in the surrounding mountains at about 1500 metres. Summits and ridges are generally rounded and subdued, and the valleys are broad as the area lies in the part of the Yukon that was not glaciated during Pleistocene time.

Access to the property is via wheel or ski-equipped aircraft or by winter road. An all-weather, 600m (2000') airstrip was completed in 1996. Supply centres are located at Dawson City, Yukon (274km), Circle, Alaska (175km), or Fairbanks, Alaska (365km). Airstrip staging areas to Rusty Springs are available along the Dempster Highway at Eagle Plains (164kms), or from the "150 Mile" airstrip (137km).

Road access has been previously developed for winter haulage from Mile 123 (Ogilvie Crossing) on the Dempster Highway over a distance of 193 km. The Dempster Highway is a government-maintained all-weather road providing access from the south. The winter road access traverses gently sloping terrain without any major topographic obstacles.

EAGLE PLAINS RESOURCES
RUSTY SPRINGS PROJECT

LOCATION MAP

NTS Reference: 116K/8,116K/9	Rev. Date: Jan./98
TOKLAT RESOURCES INC.	Fig: 1

094065

PROPERTY TENURE

The total property area consists of 541 quartz-claims, staked in accordance with existing Yukon Quartz Mining Act regulations. Pertinent tenure is summarized below. Claim and post locations are shown on Figure 2 in pocket.

Claim Name	Record No.	Units	Location Date	Expiry Date
Eric 1	YB41182	1	July 29, 1992	Dec. 10, 2006
Eric 2	YB41183	1	July 29, 1992	Dec. 10, 2006
Eric 3	YB41184	1	July 29, 1992	Dec. 10, 2006
Eric 4	YB41185	1	July 29, 1992	Dec. 10, 2006
Eric 5	YB41186	1	July 29, 1992	Dec. 10, 2006
Eric 6	YB41187	1	July 29, 1992	Dec. 10, 2006
Eric 7	YB48768	1	June 10, 1994	Dec. 10, 2007
Eric 8	YB48769	1	June 10, 1994	Dec. 10, 2007
Jessica 1	YB41188	1	July 29, 1992	Dec. 10, 2006
Jessica 2	YB41189	1	July 29, 1992	Dec. 10, 2006
Jessica 3	YB41190	1	July 29, 1992	Dec. 10, 2006
Jessica 4	YB41191	1	July 29, 1992	Dec. 10, 2006
Jessica 5	YB41192	1	July 29, 1992	Dec. 10, 2006
Jessica 6	YB41193	1	July 29, 1992	Dec. 10, 2006
Jessica 7	YB48750	1	June 10, 1994	Dec. 10, 2007
Jessica 8	YB48751	1	June 10, 1994	Dec. 10, 2007
Shelly 1	YB48752	1	June 10, 1994	Dec. 10, 2007
Shelly 2	YB48753	1	June 10, 1994	Dec. 10, 2007
Shelly 3	YB48754	1	June 10, 1994	Dec. 10, 2007
Shelly 4	YB48755	1	June 10, 1994	Dec. 10, 2007
Shelly 5	YB48756	1	June 10, 1994	Dec. 10, 2007
Shelly 6	YB48757	1	June 10, 1994	Dec. 10, 2007
Shelly 7	YB48758	1	June 10, 1994	Dec. 10, 2007
Shelly 8	YB48759	1	June 10, 1994	Dec. 10, 2007
Shelly 9	YB48760	1	June 10, 1994	Dec. 10, 2007
Shelly 10	YB48761	1	June 10, 1994	Dec. 10, 2007
Shelly 11	YB48762	1	June 10, 1994	Dec. 10, 2007
Shelly 12	YB48763	1	June 10, 1994	Dec. 10, 2007
Shelly 13	YB48764	1	June 10, 1994	Dec. 10, 2007
Shelly 14	YB48765	1	June 10, 1994	Dec. 10, 2007
Shelly 15	YB48766	1	June 10, 1994	Dec. 10, 2007
Shelly 16	YB48767	1	June 10, 1994	Dec. 10, 2007
Joel 1	YB52722	1	Aug. 27, 1994	Dec. 10, 2003
Joel 2	YB52723	1	Aug. 27, 1994	Dec. 10, 2003
Joel 3	YB52724	1	Aug. 27, 1994	Dec. 10, 2003
Joel 4	YB52725	1	Aug. 27, 1994	Dec. 10, 2003
Joel 5	YB53897	1	July 2, 1995	Dec. 10, 2004
Joel 6	YB53898	1	July 2, 1995	Dec. 10, 2004
Joel 7	YB53899	1	July 2, 1995	Dec. 10, 2004
Joel 8	YB53900	1	July 2, 1995	Dec. 10, 2004
Glen	YB53901	1	July 2, 1995	Dec. 10, 2004
Calli	YB53902	1	July 2, 1995	Dec. 10, 2004
Marlo	YB53903	1	July 2, 1995	Dec. 10, 2004
Katie	YB53904	1	July 2, 1995	Dec. 10, 2004
Alecia	YB53905	1	July 2, 1995	Dec. 10, 2004
Kelsey	YB53906	1	July 2, 1995	Dec. 10, 2004
Lauren	YB53907	1	July 2, 1995	Dec. 10, 2004
Tyler	YB53908	1	July 2, 1995	Dec. 10, 2004

Claim Name	Record No.	Units	Location Date	Expiry Date
Casey	YB53909	1	July 2, 1995	Dec. 10, 2004
Lane	YB53910	1	July 2, 1995	Dec. 10, 2004
Kayla	YB53911	1	June 16, 1995	Dec. 10, 2004
Ben	YB53912	1	June 16, 1995	Dec. 10, 2004
Trevor	YB53913	1	June 16, 1995	Dec. 10, 2004
James	YB53914	1	June 16, 1995	Dec. 10, 2004
Connor 1	YB54257	1	Sept. 7, 1995	Sept. 7, 2000
Connor 2	YB54258	1	Sept. 7, 1995	Sept. 7, 2000
Connor 3	YB54259	1	Sept. 7, 1995	Sept. 7, 2000
Connor 4	YB54260	1	Sept. 7, 1995	Sept. 7, 2000
Connor 5	YB54261	1	Sept. 7, 1995	Sept. 7, 2000
Connor 6	YB54262	1	Sept. 7, 1995	Sept. 7, 2000
Connor 7	YB54263	1	Sept. 7, 1995	Sept. 7, 2000
Connor 8	YB54264	1	Sept. 7, 1995	Sept. 7, 2000
Connor 9	YB54265	1	Sept. 7, 1995	Sept. 7, 2000
Matt 1	YB54266	1	Sept. 7, 1995	Sept. 7, 2000
Matt 2	YB54267	1	Sept. 7, 1995	Sept. 7, 2000
Matt 3	YB54268	1	Sept. 7, 1995	Sept. 7, 2000
Matt 4	YB54269	1	Sept. 7, 1995	Sept. 7, 2000
Diduck 1	YB54270	1	Sept. 7, 1995	Sept. 7, 2000
Diduck 2	YB54271	1	Sept. 7, 1995	Sept. 7, 2000
Diduck 3	YB54272	1	Sept. 7, 1995	Sept. 7, 2000
Diduck 4	YB54273	1	Sept. 7, 1995	Sept. 7, 2000
KB –38	YB88155-92	38	July 29, 1996	Dec.10, 2000
Trog 1-432	YB88193-624	432	July 29, 1996	Dec. 10, 2000
		Total: 541 units		

HISTORY OF EXPLORATION (Table 1, Table 2; following)

The Rusty Springs property was first staked in 1975, after investigation of deep red-orange springs and seeps in the valley of Carrol Creek led to the discovery of nearby silver, lead, zinc, and copper mineralization; the rusty seeps were first noted during petroleum exploration in the area. Since the discovery, the property has been the focus for nearly $5,000,000.00 of exploration, including ten separate drill campaigns in two major phases (1975-83 and 1994-96) totaling over 10,000 metres of drilling in 123 holes (Table I).

Exploration has mainly targeted high-grade silver, lead, copper, and zinc mineralization within brecciated and quartz- and carbonate-cemented and veined dolomite, and has been based on several genetic models, developed in part by geology students employed on the property and working on Bachelors theses (e.g., Schoel 1978, Hansen 1979, Bankowski 1980a). At various stages of exploration, models used to help guide exploration include: Mississippi Valley-type (MVT); Irish Plains-type (carbonate-hosted exhalative, Bankowski 1980a); epithermal-type (veins and(or) hydrothermal replacement along a karsted surface, with supergene enrichment); and manto-chimney-type (high-temperature, carbonate-hosted massive sulphides). Direct targeting of drillholes utilized various techniques, including prospecting, geologic mapping, geochemistry and geophysics (see Table II). Many of the drill programs were plagued by drilling problems, such as poor recoveries in the strongly oxidized and leached mineralized intervals, or loss of water pressure in blocky brecciated zones with abundant open space. Drilling was often slow and costly in resistant siliceous 'chert' horizons that cap the mineralized stratigraphy. Trenching also met with varying success, mainly because of the deep permafrost and the deep, solifiucted overburden which predominates in unglaciated parts of the Yukon.

During the fall of 1975, while investigating an oolitic iron formation, a rusty spring-seep was observed by M.N. Chernoff. Upon investigation, the spring was found to be associated with high-grade silver, lead, zinc, and copper mineralization. A total of 92 quartz claims and 15 iron claims were staked during the fall and winter seasons.

During the 1976 summer season, a preliminary investigation of the property was conducted by Rio Alto Exploration Ltd., under the supervision of M.N. Chernoff. Exploration completed included helicopter-supported geological mapping, prospecting, sampling of mineralized float, and limited soil geochemical sampling. This work established the structural setting, confirmed the presence of high-grade silver values, and demonstrated the usefulness of soil geochemistry. The mineral occurrences were considered to be hydrothermal vein systems with supergene enrichment possibilities.

Based on encouraging results from this preliminary reconnaissance, a follow-up field program consisting of geological mapping, soil geochemical sampling, and 975 metres (3200 feet) of diamond drilling was conducted in 1977. Again, the results were considered positive, even though poor drill core recoveries were obtained. Additional ground was staked to give a total of 380 quartz claims and 15 iron claims.

A geological thesis by G. Schoel concluded that the mineralization was probably Mississippi Valley type.

During the winter of 1978, fuel, drill equipment, and supplies were ferried to the property by tractor train. That summer, two picket grids (totalling 67 line km) were established over the claims. Further geological mapping, soil geochemical

TABLE 1 : Summary of Exploration Work, Rusty Springs Property

Year	Work done	Company	Interpretations	Drilling	Significant results	Expenditure	Reference
1976	staking, prospecting, mapping, limited soil sampling, hand-pitting	Rio Alto Exploration Ltd.	intrusive-related hydrothermal vein systems with supergene enrichment possibilities		Chip samples of float from several localities with 30-40% Zn, 5-15% Cu, and variable Pb and Ag; grab samples commonly averaged 10-70 opt Ag	$150,000	Chernoff (1976)
1977	prospecting, mapping, grid soil sampling, diamond drilling, staking, metallurgical sampling	Rio Alto Exploration Ltd.	precious metal enriched Mississippi Valley type (MVT) model adopted	3,200 ft. (975 m) in 8 holes	High Ag and Pb values in one hole (123 ft. averaging 33.27 opt Ag, 4.72% Pb, 2.36% Cu) but with poor recoveries	$187,000	White (1978); Schoel (1978)
1978	extensive linecutting and soil geochemistry, prospecting, diamond drilling, mapping, construction of winter road and airstrip	Rio Alto Exploration Ltd.	mineralized zones on Orma hill follow low angle "fault"; MVT model still accepted	6035 ft. (1,840 m) in 30 holes	stratigraphic control noted on anomalous soil geochem zones following "chert"–dolomite contacts: Cu-Pb-Ag±Zn on Orma hill; Zn±Cu±Pb±Ag on Mike hill; poor recoveries in drilling	$555,000	Beck (1978)
1979	Induced Polarization and gravity surveys, linecutting, prospecting, mapping, soil sampling, hand pitting, trenching	Rio Alto Exploration Ltd.	MVT model still accepted		extent of upper Ogilvie Formation (mineralized showings or float found throughout) and contacts with overlying siliciclastic rocks established	$300,000	Hansen and Bankowski (1979), White (1979)
1980	diamond drilling, cat trenching, detailed mapping	E&B Explorations Inc. and Rio Alto Exploration Ltd. joint venture	mineralization considered to be of hydrothermal origin; Ogilvie-Hart River contact still considered a karsted horizon channeling mineralizing solutions	6,000 ft. (1829 m) in 27 holes	poor recoveries in upper parts of holes; numerous cm- to decimetre thick tetrahedrite-tennantite veins intersected and which commonly yielded high Ag, Pb, and Cu values; mineralization on Orma hill in part appears to be vein-related	$1,200,000	Bankowski (1980), Liedtke (1980)
1982	soil geochemistry, VLF-EM surveys, mapping, trenching, diamond drilling	Kenton Natural Resources Corporation	epithermal veins	1673 ft. (510 m) in 7 holes	common WNW, NW, and NNW trending EM conductors outlined; Orma hill vein systems defined	$116,000	Davis and Aussant (1982)
1983	fill-in soil geochemistry and VLF-EM surveys, diamond drilling	Kenton Natural Resources Corporation	epithermal veins	1600 ft. (488 m) in 2 holes	focused on Orma Hill vein systems	$350,000	Aussant (1983)
1986	diamond drilling	Kenton Natural Resources Inc.		1326 ft. (404m) in 2 holes	tested (unsuccessfully) IP anomalies between Orma and Mike hills	$96,000	Chamberlain (1986)
1992	restaking						

1994	regional reconnaissance; trenching, airstrip and road construction; clean-up	Eagle Plains Resources Ltd.	epithermal veins, MVT		vein mineralization on 040°trend discovered using soil geochem and trenching on Mike Hill; new showings discovered SW of Mike Hill	$190,000	Downie (1994)
1995	trenching, diamond drilling, soil geochemistry, staking, airstrip and road construction, GPS survey, claim staking	Eagle Plains Resources Ltd.	manto-chimney type carbonate hosted deposits	5440 ft. (1658 m) in 21 holes	15.1 oz/ton Ag, 3% Cu, and 1.3% Zn over 50 ft. (15.3 metres) on Mike Hill	$539,000	Termuende (1996)
1996	diamond drilling; airstrip extension, road construction, staking	Eagle Plains Resources Ltd.	carbonate-hosted manto type deposits; stratabound hydrothermal mineralization along Ogilvie-Hart River Formation contact	7610 ft (2320 m) in 15 holes	highly anomalous base metal values over significant widths along Ogilvie-Hart River Formation contact	$560,000	Termuende and Downie (1997)
1997	reverse-circulation drilling, surface mapping, prospecting, road and drill pad construction, improvments to airstrip	Eagle Plains Resources Ltd. and Canaustra Resources Ltd.	stratabound hydrothermal mineralization along Ogilvie-Hart River Formation contact	1351 feet (412 m) in 8 holes	two widely spaced holes drilled through Ogilvie-Hart River Formation contact, confirming presence of stratbound mineralization; affirmation of distribution of chert and shale, including in low-lying areas (may cap mineralization preserved beneath the water table)	$356,000	Termuende and Downie (1998), Hodder (1997)
1998	gravity and seismic reflection surveys, property reconnaissance prospecting and mapping	Eagle Plains Resources Ltd. and Canaustra Resources Ltd.	stratabound hydrothermal mineralization along Ogilvie-Hart River fm contact, below present and paleo-water tables		continuation of prospective stratigraphy at shallow depths northeast of Orma hill; coincident with gravity anomalies	$54,000	Power (1998)
1999	diamond drilling, property-scale mapping, regional reconnaissance mapping, prospecting, and sampling; clean-up	Eagle Plains Resources Ltd. and Canaustra Resources Ltd.	stratabound hydrothermal mineralization along Ogilvie-Hart River fm contact, below present and paleo-water tables	1040 ft. (317 m) in 3 holes	drillhole north of Orma Hill intersects disseminated sphalerite in Devono-Mississippian shale microbreccia overlying the Ogilvie Formation	$273,000	Downie and Greig this report
				total drill footage: 35,280 ft. (10,750 m) in 123 holes		total expenditures: $4,927,000	

TABLE 2 : Exploration Methods Employed on the Rusty Springs Property			
Method	**Aim of survey/application**	**Results and comments**	**Recommendations**
prospecting	locating mineralization	successful in locating silica-hosted vein-type mineralization	useful for following-up geochem
soil geochemistry	to locate potential mineralized zones and target trenches and drillholes	in spite of thick overburden and permafrost, effective in outlining near-surface mineralization	target top of Ogilvie Fm on remaining unsampled parts of property
stream geochemistry	location of new drill targets	creek sampling led to discovery of new showings local to property; geochemically anomalous drainages present in region	regional stream sediment sampling, targeting Ogilvie Fm. and overlying shale
trenching	to reach bedrock	mixed success with cat trenching: bedrock exposure not guaranteed; may require 2 seasons; environmental degradation problems	any further trenching may be more successful using an excavator
geophysics	targeting drillholes	most geophysical anomalies tested were coincident anomalies	
IP	targeting sulphides	resistivity anomalies outlined, but drill testing unsuccessful	not recommended without sound geologic framework
VLF-EM	targeting conductive sulphide horizons	many conductors outlined, but drill testing unsuccessful; may outline water-filled gougy fault zones	not recommended without sound geologic framework
magnetometer	??was this done??		not recommended without sound geologic framework
gravity	targeting more dense sulphides	anomalies outlined, but drill testing unsuccessful	several anomalies untested; not recommended without sound geologic framework
seismic	determining depth to favourable stratigraphic contact	unsuccessful, possibly imaged permafrost horizon	not recommended without sound geologic framework
drilling			
diamond drilling		reasonable drilling and recovery in oxidized mineralized zones using modern equipment and drilling techniques; drilling slow in resistant siliceous zones	recommended for future work; need high-powered rig, plenty of casing, mud, bits, core barrels, and patience
RC drilling		difficult drilling in oxidized mineralized zones; good drilling in resistant siliceous zones	not recommended

sampling, diamond drilling (1840 metres), and metallurgical sampling were also completed. Poor drill core recoveries once again hampered the effectiveness of the program.

A geological thesis was undertaken by D. Hansen, again emphasising a Mississippi Valley type model for the mineralization.

Exploration during the period 1975 to 1978 inclusive was funded by Rio Alto Exploration.

In 1979, detailed geological mapping, a soil geochemical survey, an Induced Polarization survey, and a gravity survey were completed. Joint funding of this work was by Rio Alto and E & B Explorations Ltd. of Calgary, Alberta.

A geological thesis by J. Bankowski indicated a hydrothermal exhalative nature.

In 1980, E & B Explorations Ltd. as operator, focused on the widespread mineralization discovered on the Orma Hill. Their program saw 1830 metres (6000 feet) of diamond drilling, bulldozer trenching, and some detailed geological mapping completed. Core recoveries were not significantly improved over previous years.

In 1982, Taiga Consultants Ltd. was contracted by Kenton Natural Resources to carry out a geological evaluation of the property and subsequently a comprehensive mineral exploration and diamond drilling program. During this period, 510 metres (1673 feet) of diamond drilling was completed, as well as a soil geochemical survey, a geophysical (VLF-EM) survey, detailed geological mapping of the property, and six trenches dug in order to define the style of mineralization.

The most recent research work, carried out by Jill Kirker (April 1982), strongly supports a hydrothermal origin for the mineralization.

In 1983, additional geophysical surveying and geochemical sampling were completed by Taiga Consultants Ltd. to detail geophysical conductors and geochemical zones previously outlined. During the fall of 1983, 488 metres (1600 feet) of diamond drilling were completed.

In 1986, Kenton Natural Resources Inc., as operator, drilled two holes in the valley bottom between the Mike and Orma Hills in order to test an I.P. anomaly delineated in 1979 by previous operators. This program consisted of 404m (1326') of drilling, and failed to intersect any significant mineralization. The drill was removed from the property following this short program.

The claims were gradually allowed to lapse, and in the spring of 1992, all claims comprising the property had expired. R.W. Termuende restaked the core area of the property on July 29th, 1992. 12 quartz claims were recorded, consisting of the Eric 1-6 and Jessica 1-6 claims.

A $190,000 exploration program was completed during the 1994 season. The focus of the two-stage program was to carry-out further systematic exploration in the Mike Hill area, as well as undertake initial reconnaissance work in the region surrounding the claim area. A total of 531 soil, 67 rock, and 36 silt samples were taken, over two separate control grids that were established on the property, covering the Mike Hill and Big Onion areas. Concurrent with the geological program, efforts were made to improve the infrastructure of the property, and included construction of a 530m (1800') airstrip, a 3.4km permanent road connecting the airstrip and camp areas, and 10km of drill-tote trails throughout the property. Environmental work was also undertaken in the Orma Hill area, with 8 man days spent collecting some 140 used fuel drums, refuse-burning, and general clean-up activities in areas of past development.

A two-phase trenching and diamond drilling program was carried out during 1995. Twenty-one drillholes totalling 1658 meters (5440 feet) were completed in the Mike and Orma hill areas, and a total of 400m of bulldozer trenching carried out in the Big Onion area. In addition, a 339-sample soil geochemistry survey was undertaken proximal to the Big Onion showing. A further 35 claim units were added to the existing property, bring the total area to 71 units. In addition, improvements were made to the airstrip, and an all-weather road network was completed to access all areas of the property. The total cost of the 1995 program was $539,000. The most impressive mineralized interval intersected in 1995 occurred in hole RS95-M7, where a 15.3m interval from a hole drilled on the Mike Hill assayed 15.1 oz/ton silver, 3% copper, and 1.3% zinc, from 28.6-43.9m.

A 15-hole, 7600' (2320m) diamond drilling program was carried out on the property in 1996 at a total cost of $560,000. The program was designed to test for the presence of deep-seated manto-type mineralization, which was interpreted to lie beneath high-grade "chimney" veins exposed on surface in the Mike and Orma Hill areas. In addition to geological work, significant improvements were made to property infrastructure, with three km of new roadwork completed, and the airstrip extended to 2000' (600m). Significant to the 1996 program was the discovery of stratabound mineralization, apparently over much of the property area, and beyond. As a result of the new interpretation, 478 quartz claim units were staked in the region, covering all favourable stratigraphy in the immediate area.

The $355,000 1997 program utilized a reverse circulation drill in an attempt to mitigate drilling problems associated with the highly abrasive cap rocks overlying the mineralized horizon. While the drill was performed better in the siliceous ground, there were problems with recovery and sample contamination within the mineralized zone. Two of the holes confirmed the presence of stratabound mineralization at the Hart River – Ogilvie Formation contact over a large area. During 1997, R.W. Hodder, Ph.D., P.Eng., visited the property and examined existing drill core, outcrop, trenches and technical data. He concluded that " *The limonitic interval at Rusty Springs is a resource of hundreds of millions of tons, but of very subeconomic amounts of base or precious metals... the limonitic interval and it's enclosed quartz veins and lamellae are however vital symptoms that ore forming processes existed for major deposits of silver-lead-zinc* and that *deposits of this type cluster in districts of enormous potential*". Hodder also recommended focusing on locating sulphides below the present and paleo water table.

The $54,000.00 1998 program involved a combined shallow seismic and gravity geophysical survey. The surveys were run from the northeast flank of the airstrip east across the low lying swampy area. The survey defined a coincident positive Bouger gravity anomaly and seismic reflection profile interpreted to be related to a shallow sulphide body at the same stratigraphic horizon as sulphide mineralization defined in 1996 - 97.

REGIONAL GEOLOGICAL SETTING

The area mapped lies within the northernmost part of the Cordilleran orogenic belt, known locally as the Taiga -Nahoni foldbelt, where Precambrian to Cretaceous predominantly sedimentary rocks of the eastward and northward tapering North American miogeocline were deformed in latest Cretaceous to Tertiary time (Norris 1996, Lane 1998). The area was first mapped by Norris (1981), who outlined a structural culmination, in part coincident with his Porcupine Anticline, cored by rocks of the Lower and Middle Devonian Ogilvie Formation. Norris (1981) shows stratigraphically lower rocks of Early Paleozoic, Cambrian, and Proterozoic age bounding the west side of the culmination and brought up by mainly west vergent contractional faults.

PROPERTY GEOLOGY (Fig.2, Fig.3)

Nine map units, ranging in age from Proterozoic to Cretaceous, correspond largely with those mapped by previous workers (e.g., Chernoff 1976, Kirker 1980a, Tempelman-Kluit 1981; Fig. 2). Ages of the map units were taken mainly from Norris (1981, 1996). Exposure is generally poor near the valley bottom and consequently the focus for property-scale geologic mapping was on the rocks underlying surrounding ridges. The geology in the immediate vicinity of the mineralized and altered zones at Rusty Springs, which crop out at lower elevations in the vicinity of two lower hills, named the Mike and Orma hills, was examined briefly.

Lower to Upper Proterozoic rocks

Rusty weathering fine-grained sandstone (quartzite), interbedded with maroon and local green siltstone and silty mudstone (siltite), occurs in a northerly trending belt in the southwesternmost corner of the area mapped. The siliciclastic rocks, which were only briefly examined, appear to be conformable with steeply east dipping Lower Paleozoic dolostone and quartz-rich sandstone to their east.

Lower Paleozoic rocks

Like the older rocks which they appear to overlie conformably, rocks of probable Late Cambrian through Early Devonian age occur in a northerly trending belt along the west margin of the map area. The Lower Paleozoic rocks consist of white weathering dolostone, rusty weathering quartz-rich sandstone (quartzite), and siliceous fine grained clastic rocks, including green and maroon siltstone and silty mudstone (siltite). Rocks of similar general appearance occur to the north, but were neither examined nor differentiated from the older siliciclastic rocks. The Lower Paleozoic rocks are inferred to be in thrust contact with younger Paleozoic and Mesozoic rocks to the west, although a down-to-the-east normal fault was mapped along trend to the south by Norris (1981). The presence of inferred thrust is supported by the marked easterly vergence of folds in the area.

Lower and Middle Devonian Ogilvie Formation

Pale grey weathering dark grey dolostone and subordinate limestone and argillaceous rocks of the Ogilvie Formation underlie the central part of the Rusty Springs property in the core of the Porcupine-Rusty Springs anticlinorium (Figs. 7, 8). They form common talus slopes on the flanks of Orma and Mike hills, but outcrop is scarce, even on roads and cat trails. Dolostone is fetid, and commonly brecciated, veined, and(or) vuggy. Breccia cements consist mainly of dolomite and sparry calcite with local quartz; vugs are commonly lined with calcite and quartz, and veinlets are of similar mineralogy. Another common constituent of Ogilvie Formation breccias is pyrobitumen–it is commonly intergrown with dolomite cements and always associated with quartz and(or) calcite spar (Kirker 1982); it also locally coats vugs. Dolomite crystals in dolostone are typically fine- to medium-grained and locally coarse-grained, with coarser-grained varieties typically weathering a paler grey colour. Locally, weakly dolomitized limestone contains recognizable brachiopods, ostracods, corals, and crinoids (Hansen 1979, Davis and Aussant 1982), although no diagnostic fossils have been reported. Float boulders and the few outcrops of the Ogilvie Formation suggest that it is not well stratified, but bedding is more apparent in diamond drill core, particularly where brecciation is less intense, and bedding to core axis angles typically suggest that the strata in the vicinity of Mike and Orma hills are gently dipping. Mainly on the basis of their contained fauna, Hansen (1979) interpreted the dolostones of the Ogilvie Formation as a shallow water "reefal" unit, while Kirker (1982) suggested a shallow water shelf environment. The base of the Ogilvie Formation at Rusty Springs is not exposed, but a drill hole between Mike and Orma hills penetrated about 210 metres (probable true thickness) of dolostone, with local interbedded shale and rare limestone and quartzite (Chamberlain 1986).

At the top of the Ogilvie Formation at Rusty Springs is the informally named "Katshat unit", a recessive, gossanous oxide- and clay-rich unit which corresponds to a significant degree with the mineralized zones on the property. In general the unit appears to be stratabound, separating the dolostone from overlying siliciclastic rocks, but in detail its contacts are highly irregular. The Katshat unit most likely represents altered and mineralized Ogilvie Formation limestone--it is discussed in more detail below.

Devono-Mississippian fine-grained siliciclastic rocks

Disconformably overlying the Ogilvie Formation are siliceous mudstone, slate, shale, siltstone, and rare limestone of probable Devono-Mississippian age. The rocks were assigned by Norris (1981) to the Hart River Formation (Early and Late Carboniferous age), but they are more likely correlative with fine grained clastic rocks, such as the Upper Devonian Canol Formation, the Unnamed shale, the Upper Devonian and Lower Carboniferous Ford Lake shale (Norris 1981, 1996), and the Kayak Formation (Richards et al. 1996), because the Hart River consists mainly of limestone (Norris 1981, 1996). Herein the rocks have been assigned to the Unnamed shale.

The lowermost rocks in the sequence, best exposed on Orma and Mike hills and referred to locally as black 'chert', are perhaps more accurately referred to as a silicified and(or) siliceous mudstone. Thin laminations and recrystallized radiolaria are locally preserved (Hansen 1979). The siliceous rocks are up to 40 metres thick (Hodder 1997) and are commonly veined and brecciated; veins and breccia matrices consist mainly of quartz, calcite, and dolomite. The brecciated siliceous rocks appear in most places to cap the mineralized Katshat unit of the uppermost Ogilvie Formation, and black siliceous(?) fragments are locally a common component of the dolostone breccias that commonly comprise upper Ogilvie Formation rocks beneath the Katshat unit.

Up-section from the siliceous rocks, and comprising the bulk of the rocks assigned to the Unnamed shale, are relatively recessive pyritic, carbonaceous shale, mudstone, silty mudstone, and local thin- to medium bedded, poorly sorted fine grained litharenite. They are generally thinly bedded, and typically siliceous, although local calcareous shale was also noted. Local true slate and rare dark grey, fetid and laminated algal limestone occur not far above its contact with the Ogilvie Formation. Erosion of this part of the unit, which is as much as 500 metres thick, has led to the broad and open drainage basin within which the Rusty Springs property sits.

The transition of the fine grained clastic sequence to the overlying mixed carbonate and clastic unit is commonly marked by the presence of thin to medium bedded siliceous fine sandy siltstone or fine grained sandstone. These rocks are typically pale grey and locally rusty weathering up close, but appear very dark from a distance because of a common covering of black lichen.

Upper Carboniferous and Permian(?) limestone and fine grained calcareous and siliceous clastic rocks

Medium bedded, pale grey weathering, medium to dark grey sandy and locally pebbly fetid limestone and rare dolostone characterize this unit. The limestone commonly contains irregular dark grey chert nodules and occurs in several(?) horizons of amalgamated beds that are up to several tens of metres thick. They form many of the better outcrops in the area and because of their resistant character, they underlie many of the ridges surrounding the broad upper drainage basin of Carrol Creek. The upper limit of the map unit is defined by presence of the uppermost continuous limestone sequence, while the transition from the underlying siliciclastic sequence is commonly marked by scattered float blocks of pebbly limestone. The pebbles are typically round to sub-round and are dominantly chert . Pebbly lithologies are more common to the southwest, whereas to the east, sandy limestone is more common and pebbly limestone occurs only locally. In addition, a limestone horizon containing abundant *in situ* corals was noted in the east but not to the south or southwest, and composite limestone horizons appear somewhat thicker (up to 50-60 metres) and may contain thicker-bedded to massive layers of up to 15 metres thickness. In spite of the predominance in outcrop of pebbly and cherty limestone, a significant portion of the map unit consists of relatively recessive, variably calcareous fine grained clastic rocks. They include dark weathering, thin bedded and laminated siliceous or calcareous silty mudstone, and calcareous to siliceous shale, as well as local fine grained siliceous sandstone and siltstone. The total thickness of the limestone and associated clastic units is about 550-700 metres.

The rocks of this sequence have been included previously in the Upper Carboniferous Ettrain Formation, but Pennsylvanian and Permian fossils have been reported from within the area mapped, and so it is probably longer-ranging and likely includes rocks mapped as Jungle Creek Formation by earlier workers. If so, it is difficult to distinguish Ettrain from Jungle Creek in the field.

Jurassic and Lower Cretaceous dark weathering siliciclastic rocks

Lying conformably above the sequence containing the resistant grey carbonates is a dark weathering package of shale, silty mudstone, and sandstone of approximately 600 metres thickness. Included in this map unit are rocks that Norris (1981) assigned to the Jurassic and Lower Cretaceous Kingak, Porcupine River, and Husky formations. The lower part in the Rusty Springs area consists of common pale to medium brown weathering silty mudstone with local buff-weathering carbonate layers, and dark brown weathering shale. Near the east-central part of the area mapped, near its base, the sequence includes a thick (up to 46 metres, Chernoff 1976) oolitic hematite-magnetite siliceous iron formation. Several kilometres along strike to the north, and at the same stratigraphic level, the base of the unit is marked by massive black carbonaceous and siliceous mudstone and silty mudstone. Similarly resistant siliceous rocks mark the upper part of the unit, which underlies many of the highest ridges in the south and east parts of the area mapped. They are very dark weathering and consist mainly of blocky weathering, medium grained feldspathic cherty quartz arenite and carbonaceous fine grained siliceous litharenite.

Lower Cretaceous shale, siltstone, and quartz arenite

The two units bounding the east side of the map area were taken from the mapping of Chernoff (1976), who shows numerous overturned beds within their bounds. He assigned the shale, siltstone, and quartz arenite comprising the units to the Cretaceous Marten Creek and Goodenough (*sic*) formations. Norris (1981) assigned them a Lower Cretaceous age, and included them in the his "KWC" unit and the Mount Goodenough Formation.

Structural geology

Folds are the dominant structural feature in the map area, and wavelengths of the typical east vergent open to tight and locally overturned folds are on the order of 1-5 kilometres. The folds occur across the crest of an approximately 20 kilometre wide, northerly trending and doubly-plunging anticlinorium centered on the mineralized showings at Rusty Springs. The east side of this domal feature corresponds to the Porcupine Anticline of Norris (1981). Brittle faults are common on the property, and have been intersected in drillholes and interpreted from geophysical surveys and surface features (such as linear stream patterns), but none of these faults appears to offset map units at the property scale. The plunge reversal that corresponds with the mineralized area and which has been interpreted by some (e.g., Chernoff 1976) to have been associated with a brittle fault, appears, from the map patterns, to be fold-related and the consequence of some deeper-level structure, such as a lateral ramp.

Several property-scale cross-sections have been prepared previously, beginning with that of Chernoff (1976), and followed by Kirker (1980) and Tempelman-Kluit (1981). Chernoff (1976) shows a large-scale easterly-overturned antiform which is centered on the Rusty Springs showings and which he interprets as being cored by intrusive rocks and floored by north-trending, east-directed thrust faults. In contrast, Kirker (1980) and Tempelman-Kluit show inferred, north-trending faults, but interpret them as west-vergent contractional faults. They also show related folds with generally open geometries (Kirker 1980, Tempelman-Kluit 1981). Our cross-sections, based on improved bedding control compiled in part from previous work and benefitting from drillhole control, suggests that the structural setting is somewhat more akin to that shown by Chernoff (1976), in that the transport direction across the anticlinorium is toward the east. An east-directed transport direction is also more in accord with the regional sense of vergence.

Speculatively, the area may be floored by a large-scale east-vergent contractional fault, in part as envisioned by Chernoff (1976). Key to this interpretation are the steeply dipping and overturned Cretaceous rocks along the east side of the area mapped by Chernoff (1976). They may represent the eastern, overturned limb of the northern Porcupine Anticline, and may be floored by an inferred southern continuation of an east vergent contractional fault shown by Norris (1981) as bounding a panel of Upper Proterozoic to Lower Paleozoic rocks on their east side about 15-20 kilometres to the north-northeast. If this is the case, the doubly plunging anticlinorium underlying the Rusty Springs area may reflect the influence of a deep-seated feature, such as a lateral ramp, along the inferred contractional fault.

Mineralization

Although exploration models utilized at Rusty Springs have tended to exclusively target either stratabound or discordant styles of mineralization (e.g., Mississippi Valley-type or Irish Plains-type for the former, hydrothermal veins for the latter), there appears to be good evidence for both styles on the property, and they appear to be genetically related. Both styles of mineralization are found almost exclusively in the upper Ogilvie Formation and in the vicinity of the Mike and Orma (Hansen and Bankowski 1979), and their spatial association, similar geochemical signatures, and their association with similar brecciated and dolomitized zones, suggests a genetic link. Potential rests mainly with the stratabound mineralization, which may have greater thickness, much greater continuity, and can be much more readily explored for.

Vein-type mineralization: the Orma zone

Mineralization at the Orma zone, on the northwest flank of Orma hill, has been the focus for the bulk of the exploration work at Rusty Springs. Up to the 1990's, virtually all of the drilling on the property occurred there. The zone has yielded many of the highest grades in grab samples, trenches, and drill core (e.g., DDH80-1: 583 gm/t Ag, 8.23 % Pb, 1.48 % Cu over 6.5 metres) and trenching and drilling have confirmed that it is a discontinuous vein and vein stockwork zone which trends northwest and dips steeply. Vein-type mineralization also appears to be present locally at Mike Hill, with the difference that relatively high Zn and trace Au values commonly accompany the Ag, Pb, and Cu common to mineralization at the Orma zone (Downie 1994; e.g., DDH95-07: 518 gm/t Ag, 0.77 % Pb, 3.0 % Cu, and 1.3% Zn over 15.3 metres).

Veins consist of massive galena-tetrahedrite (tennantite?, as is suggested by elevated As:Sb ratios in some assays, Liedtke (1980)), locally up to 1.0 m thick, which assay roughly 10-50 ounces per ton Ag. The veins are contained within a broader, commonly oxidized mineralized and altered zone (in part a vein stockwork) of up to 6 or 7 metres thickness. The altered zone typically assays 30 to 6o grams ounces per ton Ag (Davis and Aussant 1982). Alteration within Ogilvie Formation carbonates, as described by Bankowski (1980b), is characterized by silica replacement, dolomitization, local brecciation, sanding (silicic alteration?), and decomposition (supergene alteration), and is manifest in part as a darker grey colour of the host rocks. The margin of the altered zone has a northwest trend, subparallel to that of the mineralized zone, and it appears to terminate, or turn bedding-parallel, to the southeast at the contact with overlying siliciclastic rocks (Bankowski 1980b). Minerals identified from the oxidized zones include smithsonite, cerussite, malachite, azurite, aurichalcite, pyrolusite, hemimorphite, plumbojarosite, gibbsite, valentinite, and natroalunite (Hansen 1979, Kirker 1980b); sphalerite and pyrite are also preserved locally with galena and tetrahedrite in siliceous vein and vein-breccia material.

Stratabound mineralization: the Katshat unit

Near the end of the 1996 exploration program, stratabound mineralization along the contact between the Ogilvie Formation and overlying Devono-Mississippian siliciclastic rocks became the principal exploration target (Termuende and Downie 1997). Almost all holes drilled in footwall Ogilvie Formation dolostone had essentially been barren, and with relatively thick oxidized mineralization cored at the contact in several previous drillholes that were collared in hangingwall siliciclastic rocks, it was realized that substantial potential existed for stratabound mineralization. It was also recognized that the most extensive geochemical anomalies on the property coincided with the contact, and that many drillholes targeting them had been collared in the strongly oxidized mineralized material–these holes had been plagued by poor core recoveries.

The oxidized material common to the upper contact of the Ogilvie Formation was referred to locally as the Katshat unit. It consists of strongly leached, porous limonitic to kaolinitic material with an earthy, gougy consistency, and is similar in appearance to the oxidized material surrounding discordant mineralization. It is typically 20 to 40 metres thick, and although it appears stratabound at the property scale, in detail it is irregular and discordant. Many of the minerals noted above as occurring in the Orma zone are also common in the Katshat unit. X-ray diffraction studies indicate that much of the Katshat material consists of granular Fe, Mn, Ag, Pb, An, Cu, Ba, Al, P, and V oxide, carbonate, sulphate, and silicate mineral species, as well as quartz veinlets and laminae locally containing sulphides and sulphosalts like those in Orma zone veins and vein stockworks (Hodder, 1997). The Katshat unit is invariably overlain by brecciated and veined siliceous or silicified mudstone and chert of probable Devono-Mississippian age, which caps and in part has protected it from erosion. It is underlain by Ogilvie Formation dolostone, also typically brecciated and veined. The Katshat unit is strongly anomalous in Ag, Cu, Pb, and Zn over broad intervals and across a wide area (for e.g., 1.1 gm Ag, 881 ppm Cu, 139 ppm Pb, 3301 ppm Zn over 19.1 m in hole RS96-04 from the southwest part of Mike hill, and 1.6 gm Ag, 1475 ppm Cu, 1321 ppm Pb, and 2701 ppm Zn over 22.2m in hole RS96-14 from the south end of the airstrip on Orma hill;). Results such as these suggest the possibility of tremendous continuity and potential, but the oxidized nature of the mineralization and the subeconomic grades also suggest that the preferred target be unoxidized portions of the horizon below the present and(or) paleo- water table (Hodder 1997). Unoxidized Katshat unit was the target of the latest drill program, which attempted to test the upper Ogilvie Formation to the east and south of Orma hill (Fig..3) Results were mixed. Because of problems penetrating the very resistant siliceous and brecciated rocks which overlie the upper Ogilvie Formation and cap the Katshat horizon, the mineralized horizon was never reached. However, the presence of the siliceous rocks suggests that a strong stratabound mineralizing system existed well away from the surface exposures on Mike and Orma hills, and as such, the new information confirms that the Rusty Springs system is very large, and that it has significant potential remaining to be tested.

Timing of mineralization

The interpretation that Rusty Springs is a Mississippi Valley-type deposit related to karsting along the upper Ogilvie Formation contact suggests that the mineralizing event was likely bracketed by the ages of the Middle Devonian rocks below and the Upper Devonian to Mississippian rocks above. On the other hand, the discordant nature of mineralization and alteration at Rusty Springs indicates that it postdates deposition of the Lower to Middle Devonian Ogilvie Formation and at least the lowermost part of the overlying Devono-Mississippian section. In addition, one can argue that evidence such as the lack of obvious cleavage development in the Ogilvie Formation dolostones, which contrasts sharply with that common to most rocks across the property, including other carbonates, suggests that the mineralizing event may even have postdated much of the latest Cretaceous to Tertiary deformation affecting the area (alternatively, it is possible that this may reflect a contrast in competency between the more competent silica-altered and dolomitized rocks associated with mineralization and other less competent lithologies, or that a more subtle stylolitic cleavage exists in the dolostones–further study is needed). The parallelism of the Orma zone with structural trends (a fold axial plane?) and localization of Katshat-style mineralization in anticlinal hinge zones at Orma and Mike hills may also supports the hypothesis that mineralization post-dated deformation. A relatively young age is also supported by the rare occurrence of discordant metre-scale vein-breccia bodies of quartz or Fe-carbonate at higher stratigraphic levels (Carboniferous to Permian) in the area surrounding Rusty Springs, and by limited Pb isotope data suggesting which that approximate those of Cordilleran Ag vein deposits of Late Mesozoic age (Kirker 1982).

Genesis

As mentioned above, several deposit models, including those for MVT and hydrothermal replacement along a karsted surface, have been employed in an effort to aid exploration at Rusty Springs. Poor exposure and consequent lack of local bedding control has hindered the collection of evidence with which to evaluate the various models, as has leaching and oxidation of the mineralized zones and dolomitization of footwall rocks. However, discussion of some of the existing evidence is worthwhile so that some models may be critically evaluated and perhaps ruled out, and others put forward in the hope that they aid exploration.

Mississippi Valley-type

Few, if any, of the textural features distinctive of MVT type deposits (e.g., Leach and Sangster 1993) have been positively identified on the property. For example, although the breccias common on the property have been interpreted as solution collapse features (e.g., Hansen 1979, Hodder 1997), cements and infillings of carbonate and local quartz are either massive or encrusted symmetrically around breccia fragments (e.g., Kirker 1982). There is no evidence for infilling by internal sediment, which would be strongly suggestive of a karst environment. Stratigraphic evidence also appears to argue against a karst environment. No regolith or is preserved along the contact between the Ogilvie Formation and the overlying siliciclastic rocks that would indicate subaerial exposure, and even evidence for uplift, such as the presence of coarse grained clastic rocks, is lacking. According to Liedtke (1980), very little relief exists on the contact, and if anything, subsidence is indicated: the stratigraphic transition is from a shallow water environment in which platformal carbonate was deposited, to a deeper water environment in which basinal shales were deposited.

Differences from classic MVT deposits also exist in the geochemistry and mineralogy at Rusty Springs, as has been noted by many previous workers. The high copper and silver contents, as well as low Zn:Pb ratios are generally atypical of MVT deposits (Leach and Sangster 1993), as are locally very high As and Sb values and the high Al values occurring in the Katshat unit (Termuende and Downie 1997). A geochemical fingerprint such as this is more consistent with an epithermal origin for metals within the host unit. Similar arguments can be made on mineralogic grounds, with the siliceous character of alteration, particularly in the hangingwall, and the common presence of tetrahedrite and argentiferous galena, which are more diagnostic of vein rather than stratabound Ag-Pb-Zn deposits, in the mineralized zones. Fluid inclusion and sulphur isotope data from quartz, calcite, and sphalerite at Rusty Springs are also more comparable to those from epithermal deposits than from those of MVT (Kirker 1982).

Regionally, the evidence also argues against an MVT setting. As Hodder (1997) notes, it is significant that the Ogilvie Formation at Rusty Springs is comprised largely of dolostone in an area in which limestone generally predominates. Even within the Ogilvie Formation itself, the regional dolomitization common to MVT districts appears to be absent--Norris (1996) describes only local dolomite beds in the lower part of the Ogilvie Formation in measured sections farther south in the Ogilvie Mountains.

In spite of the arguments against the presence of MVT mineralization, it remains possible that the mineralization and alteration evident on the Rusty Springs property may simply be the distal expression of a more typical MVT system origins lie in a hydrothermal karst system rather than a meteoric or meteoric-hydrothermal one (c.f. Leach and Sangster 1993).

High-temperature, carbonate-hosted massive sulphides: manto-chimney complexes

The mineralizing system at Rusty Springs bears some of the features of high-temperature, carbonate-hosted massive sulphide deposits (Titley 1993), which are also commonly referred to as manto-chimney complexes, and are rich sources of base and precious metals. This type of deposit, although occurring in quite varied structural or stratigraphic settings, is typically wholly or partially stratabound, commonly contains abundant pyrite, and contains Pb and significant Ag. Copper and Au can be present but are less common than Ag-Pb-Zn, and enrichment in one or the other of Cu-Pb-Zn can be variable. The deposits are generally thought to occur by replacement processes, initiated by hot fluids and(or) gases, above or near centres of thermal activity, and so intrusions are commonly (though not always) spatially associated. Vein, skarn, and even porphyry copper deposits may be closely associated the manto-chimney ores, and it is generally accepted that all are genetically related to the associated intrusions (Titley 1993).

The potential for manto-chimney deposits at Rusty Springs was initially recognized by Termuende (1996). The few preserved hypogene ore minerals recognized at Rusty Springs, such as galena and tetrahedrite, are common in the manto-chimney class, and the silica alteration common on the property is also commonly peripheral to ore or in this deposit type, or at least to districts in which such deposits occur. In addition, dolomitization is known to play a role in the formation of many high-temperature, carbonate-hosted deposits, and breccia bodies are also common to these systems (Titley 1993). The apparent controls on mineralization at Rusty Springs, such as the overlying impermeable fine grained siliceous shale cap, and perhaps the anticlinal fold hinges at Mike and Orma hills, also bear similarities to some manto-chimney deposits (e.g., Tombstone, Arizona; Titley 1993). This factor of predictability is an important advantage in exploration for manto-chimney ores, since they are known to be difficult to explore for. One of the main arguments against the application of the manto-chimney model at Rusty Springs is the lack of direct evidence for intrusive rocks, either on the property or in the region, although Chernoff (1976) shows an inferred intrusion at depth below the domal core of the Rusty Springs antiform. The nearest known plutons to Rusty Springs are Devonian(?) in age and outcrop to the north in the vicinity of Old Crow (Woodsworth et al. 1991).

Other economic potential in the vicinity of Rusty Springs

Little in the way of significant mineralization has been found in the immediate area around Rusty Springs, but recent work and a reevaluation of work done previously indicates that some potential exists and that it should be tested. For example, in the most recent drilling, an interval approximately 40 metres thick within the Devono-Mississippian pyritic shales that overlie the Ogilvie Formation was highly anomalous in zinc; it included intersections of 7 and 15 metres which returned nearly 3000 ppm Zn. Although the hole did not reach its target, it is estimated that the Zn-rich zone lies approximately 100-150 metres up-section from the Ogilvie Formation, at about 250 metres depth. The zone occurs within a siliceous or weakly silicified carbonaceous pyritic mudstone, and sphalerite occurs as fine to medium grained honey brown disseminations, both within mudstone clasts, and within matrix host rocks to zones of quartz or quartz-carbonate microbreccia. The pyritic and locally zinc-rich shales may be the source for the gossanous springs near the base of the north end of Mike hill which lend their name to the Rusty Springs property and, in fact, sediment issuing from the springs themselves was highly anomalous in zinc (Chernoff 1976). This suggests further that the recessive shale package may have potential for hosting Zn deposits, either similar in character to Rusty Springs, or perhaps of the sedex type, much as rocks of similar age, character, and tectonic setting farther southward in the Cordillera do (e.g., Macmillan Pass area, Y.T.; Gataga district, B.C.; Dawson et al. 1991). One might begin to evaluate this potential immediately south-southeast of the area mapped, where rusty creeks and springs, similar in appearance to those at the Rusty Springs property, were noted in the drainage that lies in the recessive core of Norris' (1981) Porcupine Anticline. The springs likely emanate from rocks correlative with the recessive and pyritic Devono-Mississippian rocks that overlie the Ogilvie Formation in the area mapped.

With regard to other possibilities, rare iron carbonate breccia and siliceous veins and vein-breccias were noted in outcrop or float while mapping the surrounding ridges, but none bore visible sulphides, appeared extensive or was accompanied by significant alteration. About 40 kilometres farther south, however, at the Pama (Bern) occurrence, which lies just inside the western boundary of the proposed Fishing Branch Protected area, an impressive, steeply dipping, north-northwest trending quartz-carbonate breccia zone that is hosted by carbonates can be traced for greater than two kilometres. It is outlined by a broad and intense soil geochemical anomaly (O'Donnell 1974) and near its southern end it contains tetrahedrite, copper oxides, and zinc and lead sulphates that bear some similarities to mineralization at Rusty Springs. The Pama property has never been drill-tested, yet smithsonite-rich samples yield assays of up to 47.80% Zn. Although it is hosted in carbonates and has at least some mineralogic similarities to Rusty Springs, no truly convincing evidence was found at the Pama that was suggestive of a significant element of stratigraphic control to mineralization. The breccia zone is hosted by limestone that is probably correlative with the uppermost limestones in the vicinity of Rusty Springs (Upper Carboniferous and Permian(?); considerably younger than the Ogilvie Formation). The breccia appears to dip steeply to the east-northeast, and lies subparallel to the steeply dipping eastern limb of what appears to be a gently southerly plunging, asymmetric, east vergent antiform. The breccia appears to be hosted entirely within limestone, and the limestone is only very locally dolomitized, which is in sharp contrast to Rusty Springs, where the better part of the Ogilvie Formation is dolomitized. Overlying the limestone is a sequence of relatively recessive, fine grained black carbonaceous rocks that appear to be capped by more resistant siliceous sandy beds. The sequence is similar in appearance to the Jurassic and Lower Cretaceous rocks along the east margin of the area mapped at Rusty Springs.

1999 PROGRAM AND RESULTS

Mineral exploration at the Rusty Springs property continued in 1999 with a $273,000.00 field program. A three hole helicopter supported, diamond drill program to test for stratabound mineralization in the area of Orma Hill was carried out concurrently with a property and regional scale geologic mapping program.

Personnel and equipment mobilization to the Rusty Spring camp was initiated on July 01, 1999. The bulk of the supplies and equipment were trucked to the airstrip at 150 Mile on the Demster Highway. The Sky Van cargo plane, which was chartered to undertake the mobilization, crashed on the Rusty Springs strip on it's first landing. Back-up Twin Otter service out of Inuvik, NWT was arranged and the mobilization was completed on July 02. Camp demobilization was completed on July 20 using the Twin Otter. Fireweed Helicopters out of Dawson City were retained to move the diamond drill and set out field personnel as required using a Bell 206 Jet Ranger.

Yukon and Federal government geologists Daniele Heon, Grant Abbott, and Mike Burke spent several days based in the Rusty Springs camp examining prospects in the proposed Fishing Branch Protected Area.

As part of the 1999 program, reclamation was carried out in selected areas of past work. Trenches and diamond drill sites were reclaimed on both the Mike and Orma hills using the D7 Cat.

DIAMOND DRLLING

A total of 616.9 m (2024 feet) of diamond drilling in three holes was completed during the 1999 program. The drilling contract was let to Falcon Drilling Limited out of Prince George, B.C. using their F1000 fly drill and recovering BGM sized core. The drill operated 24 hours per day using four personnel split between two shifts. All of the drillholes were collared in the area of the Orma Hill to target stratabound mineralization associated with the Katshat horizon.

DDH RS9901 was collared in the low, swampy ground east of the airstrip. The target was a geophysical anomaly defined in 1998 by Amerok Geosciences Ltd. Data gathered through gravity and reflection seismic surveys defined a coincident anomaly approximately 700m north east of the airstrip. The gravity data suggested the presence of three high amplitude 500 – 600 microGal positive Bouger anomalies. These anomalies were interpreted to be caused by subsurface density contrasts possibly indicating the presence of shallow, massive sulphide mineralization. A seismic reflection profile obtained by the interpretation of seismic data indicated that the favorable Katshat unit occurred at a relatively shallow depth (150 –250m) in the area of the strongest of the three gravity anomalies. This coincident anomaly was the target of RS9901. The vertical hole was completed to a depth of hole 322.5m (1058 feet). The hole intersected a thick package of black, graphitic, pyritic shale and mudstone assigned to Charlie Greig's Devono – Mississippian unnamed shale package. The rock became increasingly silicified downhole. While no massive sulphide or Katshat horizon was intersected, a mineralized breccia zone was encountered between 229.2 and 264.9 meters. Mineralization consisted of finely disseminated to patchy orange – red sphalerite associated with fine quartz crackle breccia and coarser collapse type breccia. The host rock was silicified black mudstone. The best mineralized intervals were 226.8 to 233.4 meters which averaged 2819 ppm zinc over 6.6 meters, and 249.8 to 264.9 meters which averaged 3100 ppm zinc over 15.1 meters. The brecciation, strong silicification and mineralization are consistent with the nature of the cap rocks associated with the Katshat horizon elsewhere on the property. A number of fault and rubble zones were encountered in the hole which contributed to excessive torque on the drill string. The hole was shut down at 322.5 meters, the depth limit of the F1000 drill given the bad drilling conditions and well past the depth limit for the geophysical surveys. Casing was left in the hole. It is believed that the geophysical anomalies may be related to the presence of permafrost.

DDH RS9902, was collared at the base of the Orma Hill at an azimuth of 240 ° and a collar dip of –56°. The objective was to intercept stratabound mineralization associated with the Katshat horizon. The hole was completed to a total depth of 129.8 meters (426 feet). The hole intercepted a strongly fractured, black, carbonaceous weakly to moderately silicified Devono – Mississippian mudstone package. The bottom of the hole from 114.5 – 129.8 meters had weakly developed white quartz crackle breccia and collapse breccia overprint. A number of fault and rubble zones were encountered, including a black sand fault from 106.1 – 108.7 meters. The sand is believed to be associated with an aquifer that continuously recharged black sand into the drillhole, causing the drill string to bind and eventually break. A total of 150 feet of rods including the core barrel assembly was left in the hole. Casing was also left in the hole. No mineralization was encountered.

DDH RS9903 was collared south of the airstrip. The objective was to test for stratabound mineralization associated with the Katshat horizon. The hole was collared at an azimuth of 246° and a dip of –70°. The hole was completed to a total depth of 164.5 meters (540 feet) before being shut down due to extremely bad drilling conditions. The hole collared in silicified, bleached Airstrip argillite underlain by variably silicified black carbonaceous mudstone. Silicification increased downhole, with the hole terminating in a chert breccia unit. It is believed that this chert breccia is the same unit that caps the Katshat Horizon elsewhere on the property. Core recovery was generally poor and rubble and fault zones were noted throughout the hole. The hole was shut down due to excessive mechanical wear on the drillstring and core barrel assembly related to the highly abrasive nature of the cherty rubble.

CONCLUSIONS AND RECCOMMENDATIONS

In spite of many years of sound exploration work, the genesis of the Rusty Springs prospect remains incompletely understood, yet it's considerable potential for a large-tonnage Ag-Pb-Zn-Cu deposit remains inadequately tested. The extent of the mineralized and altered rocks at Rusty Springs suggests that the hydrothermal system is large and, in fact, limits to the altered and brecciated zones in the upper Ogilvie Formation have yet to be established, with the possible exception of on the northeast (Bankowski 1980b). The size of the mineralizing system, together with its apparent stratabound nature, its commonly significant but subeconomic thicknesses, its local high grades, and its potential for supergene enrichment, indicates that Rusty Springs remains an attractive exploration target. Future exploration should be drill-oriented and should target the uppermost Ogilvie Formation beneath Devono-Mississippian fine grained clastic rocks to the south and southeast of Mike and Orma hills.

Results from the 1999 diamond drilling program at the Rusty Springs property were largely inconclusive because none of the holes could be completed to target depth. The abrasive and generally fractured nature of the rocks overlying the mineralized Katshat horizon have been an obstacle to drill testing throughout the history of exploration on the property. The objective of the 2000 program is to complete the three holes drilled during 1999 using a specialized drill and specific hole conditioning techniques designed to optimize recovery and depth limits in abrasive and fractured ground. Hytech Drilling Limited, a drill contractor based in Smithers, B.C. has a heliportable customized hydraulic diamond drill that has been built specifically for diamond drilling in bad ground conditions. In concert with this drill, it is further recommended that cement should be used to stabilize the drillhole walls to prevent hole collapse. All holes should be collared using the maximum of combination of casing and large diameter (HQ2) drill pipe. After advancing through bad ground conditions (sand faults, rubble zones), the drill rods should be removed, the hole cemented, and then recored with smaller diameter drill rod (NQ2 or BQ2). The cement will form a stable wall and prevent the incursion of black sand and other rubble around the rods and drill string. Drilling tools designed for abrasive ground conditions should be used, including hexagonal core barrels.

A 1500 meter diamond drilling program is recommended for the Rusty Springs property. The three holes collared in 1999 should be redrilled and completed to projected Katshat Horizon target depths defined by past drill programs and the 1999 mapping results. The 1500 meter proposal includes footage to follow up stratabound massive sulphide mineralization with a single step out hole. A proposed budget for the recommended work follows :

PROPOSED BUDGET FOR 2000 RUSTY SPRINGS EXPLORATION PROGRAM

Diamond Drilling :1500m @ $100.00/m	$150,000.00
Personnel / Contractors	$35,000.00
Consultants	$10,000.00
Air Charter (Helicopter)	$20,000.00
Air Charter (Fixed Wing)	$45,000.00
Mob/Demob	$6,000.00
Airfare/Accommodation	$6,000.00
Analytical	$10,000.00
Meals/Grocery	$10,000.00
Truck/Equipment Rentals	$10,000.00
Fuel (Diesel, Gasoline, Propane)	$10,000.00
Field Supply/Camp Materials	$8,000.00
Communications	$3,000.00
Miscellaneous	$10,000.00
Report/Reproduction	$7,000.00
Sub-Total :	$340,000.00
10% Contingency :	$34,000.00
TOTAL:	$374,000.00

NOTE : all values in $CAN

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APPENDIX I

Certificates of Qualification

CERTIFICATE OF QUALIFICATION

I, Charles C. Downie of 122 13th Ave. S. in the city of Cranbrook in the Province of British Columbia hereby certify that:

1) I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (#20137).

2) I am a graduate of the University of Alberta (1988) with a B.Sc. degree and have practiced my profession as a geologist continuously since graduation.

3) This report is supported by data collected during fieldwork as well as information gathered through research.

4) I hold 125,000 shares of Eagle Plains Resources; I Hold an option to purchase a further 25,000 Common Shares of Eagle Plains at $0.25 per share.

Dated this 20th day of January, 2000 in Cranbrook, British Columbia.

Charles C. Downie, P.Geo.

CERTIFICATE OF QUALIFICATION

I, Charles J. Greig, of 250 Farrell St. in the city of Penticton in the Province of British Columbia hereby certify that:

2) I am a graduate of the University of British Columbia, with a B.Comm. (1981), a B.Sc. (Geology, 1985), and an M.Sc. (Geology, 1989). I have practiced my profession as a geologist continuously since graduation.

3) This report is supported by data collected during fieldwork as well as information gathered through research.

4) I do not have any direct interest in the Rusty Springs Property and I do not currently hold any shares of Eagle Plains Resources Ltd. or CanAustra Resources Ltd.

Dated this 8th day of January, 2000 in Penticton, British Columbia, Canada.

Charles J. Greig

APPENDIX II

Statement of Expenditures

STATEMENT OF EXPENDITURES : 1999 RUSTY SPRINGS EXPLORATION PROGRAM

The following expenses were incurred on the Rusty Springs property, Dawson Mining Division, for the purpose of mineral exploration between the dates of July 19th to November 30th, 1999.

Personnel:

Tim J. Termuende, P.Geo.: 37.0 days x $425.00/day	$15,725.00
Gary Smith, Geologist: 17.0 days x $300.00/day	$5,100.00
Marilyn Hannis, Cook: 20.0 days x $275.00/day	$5,500.00
Brad Robison, Technician: 25.0 days x $250.00/day	$6,250.00
Larry Smith: Technician:5.0 days x $250.00/day	$1,250.00

Equipment Rental:

4WD Vehicle; 1.0 month x $1500.00/month	$1,500.00
Mileage:9691 km x $.20/km	$1,938.20
Suzuki 4WD: 0.5 month x $1500.00/month	$750.00
Polaris 4WD ATV: 1.0 month x $1500.00/month	$1,500.00
Hand-held Radios (5): 1.0 month x $150.00/month	$750.00
Honda Generator: 1.0 month x $400.00/month	$400.00
5.0 kw Coleman generator: 1.0 month x $500.00/month	$500.00
Chainsaw: 1.0 month x $150.00/month	$150.00
5-ton double-axle trailer: 1.0 month x $1,000.00/month	$1,000.00
D-7 Bulldozer:20.0 hours x $75.00/hr	$1,500.00
3-Ton Truck Rental	$2,000.19

Other:

Meals/Accom:	$3,797.90
Fuel:	$5,358.74
Materials:	$7,697.14
Airfare:	$5,861.41
Consultants:	$17,921.68
Air Charter:	$55,424.81
Shipping:	$148.43
Coreboxes:	$1,712.52
Grocery:	$8,577.85
Telephone:	$436.42
Filing Fees:	$4,042.50
Satellite Phone:	$2,551.13
Maps/Photos:	$3,425.15
Diamond Drilling:	$83,625.35
Analytical (Eco-Tech Labs):	$1,438.68
Miscellaneous:	$245.40
Report (estimate):	$5,000.00
Handling Fees:	$20,426.53
TOTAL:	**$273,001.81**

APPENDIX III

Analytical Results

13-Aug-99

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada HWY
KAMLOOPS, B.C.
V2C 6T4

Phone: 250-573-5700
Fax : 250-573-4557

ICP CERTIFICATE OF ANALYSIS AK99-315

TOKLAT RESOURCES INC.
2720-17th STREET SOUTH
CRANBROOK, B.C.
V1C 4H4

ATTENTION: TIM TERMUENDE

No. of samples received:91
Sample Type:CORE
PROJECT #:RS99
SHIPMENT #:NONE GIVEN
Samples submitted by:TIM TERMUENDE

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	RS9901 164.0-165.3	5.0	0.63	75	25	10	0.53	1	18	39	90	4.74	<10	0.30	89	29	<0.01	171	390	166	10	<20	50	<0.01	<10	36	<10	12	158
2	RS9901 165.3-166.3	0.8	0.97	50	25	<5	1.79	2	17	39	63	5.95	<10	1.21	276	32	<0.01	136	340	52	5	<20	143	<0.01	<10	66	<10	10	175
3	RS9901 166.3-167.6	0.6	0.75	50	25	10	0.88	2	17	37	70	3.98	<10	0.64	156	26	<0.01	149	370	48	<5	<20	73	<0.01	<10	49	<10	14	171
4	RS9901 220.8-222.5	0.6	0.53	15	35	<5	0.06	4	10	60	53	1.65	<10	0.02	35	29	<0.01	88	340	64	<5	<20	55	<0.01	10	47	<10	10	176
5	RS9901 222.5-224.0	0.4	0.35	20	25	<5	0.07	3	12	72	52	2.02	<10	0.02	25	37	<0.01	110	350	232	<5	<20	31	<0.01	10	44	<10	14	260
6	RS9901 224.0-225.5	0.4	0.44	20	30	<5	0.07	5	12	88	37	1.98	<10	0.02	27	35	<0.01	105	390	160	<5	<20	44	<0.01	<10	52	<10	9	387
7	RS9901 225.5-226.8	0.4	0.40	20	25	<5	0.06	4	11	55	38	1.77	<10	0.02	34	28	<0.01	89	350	190	<5	<20	46	<0.01	<10	50	<10	13	175
8	RS9901 226.8-228.0	<0.2	0.37	15	30	<5	0.04	23	12	81	33	1.63	<10	0.01	22	29	<0.01	111	290	328	<5	<20	41	<0.01	<10	31	<10	7	3894
9	RS9901 228.0-229.5	<0.2	0.55	20	25	<5	0.27	11	12	83	28	1.90	<10	0.02	24	34	<0.01	124	470	392	<5	<20	25	<0.01	<10	49	<10	12	1904
10	RS9901 229.5-231.0	<0.2	0.68	15	25	<5	0.47	25	12	99	28	1.73	<10	0.01	53	29	<0.01	126	400	238	<5	<20	17	<0.01	<10	44	<10	12	5041
11	RS9901 231.0-232.3	<0.2	0.41	20	35	<5	0.67	6	15	71	35	2.29	<10	0.24	178	29	<0.01	114	240	382	<5	<20	15	<0.01	<10	65	<10	28	1227
12	RS9901 232.3-233.4	<0.2	0.34	20	25	<5	0.20	8	12	63	39	2.02	<10	0.07	53	31	<0.01	113	270	130	<5	<20	16	<0.01	<10	49	<10	17	1751
13	RS9901 233.4-234.5	0.4	0.39	20	30	<5	1.50	4	12	56	43	2.08	<10	0.71	251	29	<0.01	109	260	306	5	<20	18	<0.01	<10	55	<10	19	622
14	RS9901 234.5-235.6	0.6	0.32	15	55	<5	>10	<1	5	28	33	3.89	<10	7.34	1809	11	<0.01	31	340	110	35	<20	1155	<0.01	<10	79	<10	28	61
15	RS9901 235.6-236.7	0.4	0.33	25	30	<5	0.63	3	13	45	40	2.21	<10	0.29	103	35	<0.01	112	220	174	<5	<20	11	<0.01	<10	53	<10	12	626
16	RS9901 236.7-237.7	0.2	0.30	15	30	<5	0.28	1	11	38	34	1.75	<10	0.12	68	27	<0.01	85	300	132	<5	<20	16	<0.01	<10	60	<10	15	101
17	RS9901 237.7-239.2	0.2	0.26	20	25	<5	0.46	1	11	69	38	1.85	<10	0.06	90	31	<0.01	96	190	68	<5	<20	19	<0.01	<10	45	<10	15	166
18	RS9901 239.2-240.6	0.2	0.26	20	20	<5	0.20	2	11	49	44	1.96	<10	0.08	103	31	<0.01	91	310	100	<5	<20	17	<0.01	<10	38	<10	8	247
19	RS9901 240.6-242.1	0.4	0.33	20	25	<5	0.21	3	14	62	53	2.40	<10	0.03	56	40	<0.01	126	440	116	<5	<20	43	<0.01	<10	38	<10	18	381
20	RS9901 243.2-244.3	0.2	0.27	25	15	<5	0.59	3	14	77	49	2.53	<10	0.17	107	45	<0.01	141	430	208	<5	<20	29	<0.01	<10	31	<10	15	435

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
21	RS9901 244.3-245.6	0.4	0.30	20	30	<5	0.23	5	12	101	42	2.11	<10	0.04	67	33	<0.01	108	370	238	<5	<20	20	<0.01	<10	36	<10	15	698
22	RS9901 245.6-246.8	<0.2	0.41	20	25	<5	0.19	2	12	42	42	2.02	<10	0.04	40	32	<0.01	103	680	104	<5	<20	41	<0.01	<10	75	<10	15	272
23	RS9901 246.8-248.0	0.4	0.30	25	25	<5	0.26	1	14	50	46	2.70	<10	0.03	48	36	<0.01	126	140	166	<5	<20	9	<0.01	<10	41	<10	15	168
24	RS9901 248.0-248.7	0.4	0.19	15	35	<5	0.83	3	9	77	32	1.64	<10	0.03	86	24	<0.01	84	270	286	<5	<20	25	<0.01	<10	30	<10	31	423
25	RS9901 248.7-249.8	0.4	0.29	25	30	<5	0.78	2	13	46	36	2.42	<10	0.04	88	29	<0.01	100	140	202	<5	<20	18	<0.01	<10	40	<10	25	335
26	RS9901 249.8-250.9	<0.2	0.31	25	30	<5	1.73	19	20	77	69	3.63	<10	0.24	337	37	<0.01	177	320	700	<5	<20	96	<0.01	<10	43	<10	31	4315
27	RS9901 250.9-251.4	<0.2	0.08	<5	70	<5	1.28	17	4	161	9	0.83	<10	0.56	248	11	<0.01	26	170	168	5	<20	6	<0.01	<10	22	<10	9	3651
28	RS9901 251.4-251.8	<0.2	0.20	15	70	<5	0.68	16	7	150	15	1.19	<10	0.31	176	20	<0.01	47	100	188	<5	<20	8	<0.01	<10	40	<10	8	3555
29	RS9901 251.8-252.7	<0.2	0.20	10	65	<5	1.06	23	8	138	21	1.38	<10	0.49	234	20	<0.01	287	220	544	<5	<20	12	<0.01	<10	38	<10	14	5007
30	RS9901 252.7-253.4	10.0	0.13	25	50	<5	0.29	8	6	204	47	1.14	<10	0.11	86	21	<0.01	39	60	286	25	<20	5	<0.01	<10	20	<10	5	2008
31	RS9901 253.4-254.8	<0.2	0.27	10	35	<5	0.46	28	13	151	43	1.94	<10	0.11	153	18	<0.01	86	470	974	<5	<20	21	<0.01	<10	51	<10	20	5897
32	RS9901 254.8-256.3	2.2	0.29	25	30	<5	0.41	3	11	129	45	2.28	<10	0.13	114	30	<0.01	82	530	530	<5	<20	29	<0.01	10	35	<10	9	614
33	RS9901 256.3-257.9	0.4	0.31	20	30	<5	1.81	5	17	103	49	3.06	<10	0.40	299	34	<0.01	163	550	592	<5	<20	102	<0.01	<10	40	<10	46	1095

34	RS9901 257.9-258.7	1.2	0.36	20	35	5	2.30	7	34	72	66	5.75	<10	0.66	655	54	<0.01	314	750	362	<5	<20	91	<0.01	<10	37	<10	94	1797
35	RS9901 258.7-259.6	<0.2	0.47	10	35	<5	0.39	32	21	73	39	3.02	<10	0.02	343	24	<0.01	152	530	278	<5	<20	50	<0.01	<10	42	<10	51	8240
36	RS9901 259.6-260.6	0.6	0.45	15	40	<5	0.22	5	11	107	44	1.84	<10	0.03	80	32	<0.01	86	360	140	<5	<20	25	<0.01	<10	50	<10	18	1199
37	RS9901 260.6-261.5	<0.2	0.46	20	20	<5	0.21	8	13	52	48	1.85	<10	0.02	36	30	<0.01	113	330	130	<5	<20	14	<0.01	<10	46	<10	11	1787
38	RS9901 261.5-262.7	<0.2	0.45	25	30	<5	0.05	13	13	89	27	1.90	<10	0.02	27	34	<0.01	108	330	100	<5	<20	13	<0.01	<10	41	<10	13	3390
39	RS9901 262.7-263.7	9.2	0.75	95	30	10	0.61	2	21	47	110	5.78	<10	0.35	107	33	<0.01	205	400	362	20	<20	56	<0.01	20	42	<10	14	207
40	RS9901 263.7-264.9	<0.2	0.35	20	30	<5	0.58	18	18	74	33	2.51	<10	0.11	171	30	<0.01	121	420	146	<5	<20	36	<0.01	<10	56	<10	32	4438
41	RS9901 264.9-266.4	0.4	0.40	20	40	5	2.30	2	26	60	48	4.19	<10	1.10	651	33	<0.01	162	260	156	<5	<20	42	<0.01	<10	64	<10	54	738
42	RS9901 266.4-267.9	<0.2	0.31	20	30	<5	0.39	<1	13	46	38	2.06	<10	0.16	82	35	<0.01	113	370	100	<5	<20	29	<0.01	<10	39	<10	14	182
43	RS9901 267.9-269.4	0.2	0.33	25	25	<5	0.09	2	15	43	48	2.25	<10	0.01	28	44	<0.01	132	340	110	<5	<20	28	<0.01	<10	37	<10	14	271
44	RS9901 269.4-270.9	0.6	0.26	20	25	<5	0.06	<1	12	52	38	2.00	<10	0.01	32	35	<0.01	112	280	86	<5	<20	20	<0.01	20	31	<10	8	110
45	RS9901 319.4-321.0	0.8	0.26	15	35	<5	0.17	<1	11	83	30	1.86	<10	0.03	69	37	<0.01	86	280	38	<5	<20	21	<0.01	10	18	<10	7	90
46	RS9901 321.0-322.5	0.2	0.19	15	40	<5	0.16	2	15	83	37	2.13	<10	0.02	64	29	<0.01	90	210	54	<5	<20	16	<0.01	<10	12	<10	7	135
47	RS9902 23.5-25.4	<0.2	0.23	10	235	<5	<0.01	<1	<1	75	20	0.56	<10	0.02	8	31	<0.01	3	70	18	<5	<20	<1	<0.01	<10	16	<10	<1	7
48	RS9902 25.4-26.5	0.2	0.26	10	220	<5	<0.01	<1	<1	72	27	0.82	<10	0.02	8	31	<0.01	5	140	18	<5	<20	<1	<0.01	<10	22	<10	<1	17
49	RS9902 26.5-28.8	0.8	0.27	10	185	<5	<0.01	<1	<1	67	41	0.99	<10	0.03	10	32	<0.01	3	160	22	<5	<20	14	<0.01	10	19	<10	3	<1
50	RS9902 28.8-29.0	<0.2	0.56	30	175	<5	<0.01	1	6	67	88	4.19	10	0.06	20	20	<0.01	59	830	30	<5	<20	6	<0.01	<10	73	<10	<1	181

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
51	RS9902 29.0-29.9	0.8	0.28	10	185	<5	<0.01	<1	<1	53	39	0.89	10	0.03	5	18	<0.01	2	110	26	<5	<20	<1	<0.01	20	12	<10	2	9
52	RS9902 29.9-30.6	0.2	0.36	5	225	<5	<0.01	<1	<1	66	41	0.83	10	0.03	7	30	<0.01	2	140	22	<5	<20	<1	<0.01	<10	15	<10	4	3
53	RS9902 30.6-31.6	0.4	0.33	10	195	<5	<0.01	<1	<1	81	41	0.62	10	0.04	7	35	<0.01	2	140	24	<5	<20	<1	<0.01	<10	13	<10	4	2
54	RS9902 31.6-32.6	0.2	0.44	50	185	<5	<0.01	<1	7	47	46	1.88	10	0.26	35	32	<0.01	29	320	22	<5	<20	12	<0.01	<10	21	<10	17	174
55	RS9902 32.6-33.2	0.6	1.11	60	110	<5	<0.01	<1	28	57	205	5.13	<10	1.04	214	18	<0.01	61	1500	30	<5	<20	9	<0.01	<10	52	<10	9	111
56	RS9902 33.2-34.3	0.4	0.45	15	185	<5	<0.01	<1	4	36	77	2.07	10	0.18	27	17	<0.01	17	290	26	<5	<20	27	<0.01	<10	17	<10	6	81
57	RS9902 39.0-40.0	0.4	0.31	15	110	<5	0.02	<1	2	40	13	1.07	10	0.05	8	36	<0.01	11	160	24	<5	<20	<1	<0.01	<10	13	<10	6	71
58	RS9902 40.0-40.1	<0.2	0.84	335	80	10	0.05	4	8	111	34	9.81	10	<0.01	11	116	0.01	22	10000	16	<5	<20	74	<0.01	20	81	<10	14	151
59	RS9902 40.0-41.1	0.4	0.30	10	135	<5	0.02	<1	<1	37	20	1.28	10	0.02	4	35	<0.01	2	260	42	<5	<20	3	<0.01	<10	11	<10	3	16
60	RS9902 48.7-49.7	0.2	0.27	25	105	<5	0.02	<1	1	102	73	0.68	10	0.02	14	92	<0.01	13	370	92	<5	<20	2	<0.01	<10	21	<10	7	18
61	RS9902 49.7-49.9	<0.2	0.64	135	125	<5	0.11	3	19	134	465	9.23	10	<0.01	72	133	<0.01	93	5800	60	<5	<20	79	<0.01	20	175	<10	34	450
62	RS9902 49.9-50.9	<0.2	0.23	<5	115	<5	<0.01	<1	<1	72	181	0.33	<10	0.02	9	28	<0.01	4	80	56	<5	<20	<1	<0.01	<10	24	<10	3	1
63	RS9902 121.0-122.5	1.6	0.19	90	30	<5	0.43	2	5	144	28	1.16	<10	0.20	35	52	<0.01	175	230	214	<5	<20	<1	<0.01	<10	33	<10	13	88
64	RS9902 122.5-124.0	<0.2	0.67	45	15	<5	0.32	4	5	182	15	0.96	<10	0.13	46	7	<0.01	122	410	66	<5	<20	<1	<0.01	<10	70	<10	13	124
65	RS9902 124.0-124.9	0.6	0.33	30	20	<5	1.74	6	3	128	32	0.70	<10	0.85	52	16	<0.01	74	430	52	10	<20	<1	<0.01	<10	30	<10	26	109
66	RS9902 124.9-125.0	<0.2	7.25	140	65	<5	C 25	3	8	295	709	1.60	<10	0.05	27	8	<0.01	271	3300	222	<5	<20	25	<0.01	30	226	<10	35	304
67	RS9902 125.0-125.3	<0.2	0.33	10	10	<5	0.02	5	1	167	43	0.37	<10	<0.01	45	14	<0.01	32	160	34	<5	<20	<1	<0.01	<10	22	<10	<1	10
68	RS9902 125.3-125.4	<0.2	7.36	95	115	<5	0.07	22	5	164	70	1.13	<10	<0.01	12	13	<0.01	316	2160	172	<5	<20	4	<0.01	20	241	<10	21	243
69	RS9902 125.4-126.9	<0.2	0.24	20	180	<5	0.04	7	3	181	40	0.46	<10	<0.01	38	10	<0.01	65	220	42	<5	<20	<1	<0.01	<10	20	<10	5	35
70	RS9902 126.9-127.8	<0.2	4.35	100	95	<5	0.17	40	34	94	240	2.11	20	<0.01	21	19	<0.01	448	2080	164	<5	<20	106	<0.01	10	221	<10	56	449
71	RS9902 127.8-128.8	0.4	0.28	40	80	<5	0.22	7	4	147	27	0.67	20	0.01	28	16	<0.01	71	1250	172	<5	<20	43	<0.01	<10	33	<10	39	58
72	RS9902 128.8-129.8	0.4	0.31	30	55	<5	0.24	6	3	148	11	0.68	20	<0.01	21	13	<0.01	72	1390	88	<5	<20	45	<0.01	<10	33	<10	36	32
73	RS9903 5.2-5.5	<0.2	0.40	45	190	<5	0.03	<1	<1	187	43	1.90	<10	<0.01	18	35	<0.01	11	1120	56	<5	<20	50	<0.01	10	93	<10	<1	7
74	RS9903 5.5-8.5	<0.2	0.18	10	220	<5	0.03	<1	<1	103	20	0.55	<10	0.01	17	16	<0.01	5	120	64	<5	<20	3	<0.01	<10	35	<10	2	17
75	RS9903 8.5-10.0	0.2	0.17	10	215	<5	<0.01	<1	<1	96	10	0.44	<10	0.01	13	23	<0.01	2	110	116	<5	<20	<1	<0.01	<10	27	<10	<1	<1
76	RS9903 10.0-11.6	0.2	0.19	<5	510	<5	<0.01	<1	<1	88	14	0.34	<10	0.02	15	12	<0.01	<1	10	36	<5	<20	<1	<0.01	<10	17	<10	<1	<1
77	RS9903 11.6-12.2	<0.2	0.21	<5	470	<5	<0.01	<1	<1	83	10	0.34	<10	0.02	11	19	<0.01	1	10	32	<5	<20	<1	<0.01	<10	16	<10	<1	<1
78	RS9903 12.2-14.3	<0.2	0.16	<5	280	<5	<0.01	<1	<1	68	12	0.22	<10	0.02	9	11	<0.01	<1	20	24	<5	<20	<1	<0.01	<10	13	<10	<1	<1
79	RS9903 14.3-15.2	<0.2	0.17	<5	260	<5	<0.01	<1	<1	95	11	0.45	<10	0.01	16	19	<0.01	1	50	42	<5	<20	3	<0.01	<10	19	<10	<1	<1
80	RS9903 15.2-17.7	0.6	0.18	5	235	<5	<0.01	<1	<1	93	15	0.57	<10	0.02	14	24	<0.01	3	80	116	<5	<20	5	<0.01	10	22	<10	2	<1

81	RS9903 17.7-19.2	<0.2	0.23	5	345	<5	<0.01	<1	<1	73	13	0.41	<10	<0.01	12	31	<0.01	1	30	70	<5	<20	15	<0.01	<10	15	<10	9	<1
82	RS9903 19.2-20.5	0.2	0.26	<5	235	<5	<0.01	<1	<1	51	12	0.82	<10	0.02	4	47	<0.01	<1	30	122	<5	<20	<1	<0.01	<10	21	<10	<1	<1
83	RS9903 20.5-21.9	<0.2	0.33	20	150	<5	0.02	<1	2	45	40	1.79	<10	0.04	10	27	<0.01	6	210	96	<5	<20	40	<0.01	<10	44	<10	<1	20
84	RS9903 21.9-22.6	<0.2	2.18	55	110	<5	0.62	4	45	63	357	6.74	<10	1.80	600	22	<0.01	131	1050	116	<5	<20	29	<0.01	<10	135	<10	74	478
85	RS9903 22.6-23.8	<0.2	0.79	50	155	<5	0.64	2	23	45	207	5.67	<10	0.12	125	16	<0.01	64	790	72	<5	<20	37	<0.01	<10	80	<10	11	189

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
86	RS9903 23.8-26.3	0.6	0.25	<5	205	<5	0.04	<1	<1	38	16	1.15	<10	0.02	6	12	<0.01	2	60	50	<5	<20	3	<0.01	<10	11	<10	<1	3
87	RS9903 26.3-28.3	0.2	0.29	5	200	<5	0.02	<1	<1	52	15	0.44	10	0.03	4	11	<0.01	2	70	28	<5	<20	4	<0.01	<10	20	<10	6	<1
88	RS9903 162.4-163.1	0.2	0.20	10	75	<5	0.03	<1	<1	236	24	0.44	<10	0.01	40	17	<0.01	17	340	14	<5	<20	8	<0.01	<10	31	<10	23	26
89	RS9903 163.1-163.7	0.4	0.12	5	60	<5	0.03	<1	<1	213	16	0.41	<10	<0.01	40	19	<0.01	11	230	14	<5	<20	6	<0.01	<10	24	<10	16	9
90	RS9903 163.7-164.3	0.8	0.17	5	65	<5	0.04	<1	<1	165	15	0.33	<10	0.01	41	14	<0.01	9	280	24	<5	<20	13	<0.01	<10	27	<10	27	7
91	RS9903 164.3-164.6	0.6	0.20	10	70	<5	0.03	<1	<1	178	17	0.37	<10	0.01	39	14	<0.01	11	210	24	<5	<20	7	<0.01	<10	20	<10	19	13
QC/DATA:																													
Resplit:																													
1	RS9901 164.0-165.3	5.4	0.56	80	<5	10	0.55	<1	20	41	95	5.14	<10	0.29	92	32	<0.01	182	400	172	10	<20	50	<0.01	<10	40	<10	13	173
36	RS9901 259.6-260.6	0.4	0.44	20	35	<5	0.22	5	12	93	47	1.90	<10	0.03	82	32	<0.01	90	390	138	<5	<20	20	<0.01	<10	50	<10	18	1113
71	RS9902 127.8-128.8	0.2	0.29	30	95	<5	0.21	7	5	169	22	0.70	20	0.01	33	17	<0.01	75	1190	150	<5	<20	34	<0.01	<10	33	<10	35	66
Repeat:																													
1	RS9901 164.0-165.3	5.2	0.68	85	20	<5	0.56	1	19	42	94	5.01	<10	0.31	93	30	<0.01	181	400	180	5	<20	50	<0.01	10	38	<10	13	164
10	RS9901 229.5-231.0	<0.2	0.67	15	35	<5	0.49	26	12	100	27	1.76	<10	0.01	55	29	<0.01	130	420	262	<5	<20	18	<0.01	<10	43	<10	15	5187
19	RS9901 240.6-242.1	0.6	0.31	20	25	<5	0.20	3	13	58	50	2.30	<10	0.03	52	39	<0.01	122	420	112	<5	<20	40	<0.01	<10	35	<10	15	368
36	RS9901 259.6-260.6	0.6	0.42	15	35	<5	0.21	5	11	102	42	1.80	<10	0.03	77	32	<0.01	83	360	138	<5	<20	22	<0.01	<10	47	<10	15	1191
45	RS9901 319.4-321.0	0.6	0.28	20	30	<5	0.19	1	12	89	33	2.00	<10	0.03	74	39	<0.01	92	300	38	<5	<20	23	<0.01	<10	19	<10	7	89
54	RS9902 31.6-32.6	0.6	0.45	55	190	<5	<0.01	<1	7	48	47	1.91	10	0.26	36	33	<0.01	29	320	24	<5	<20	15	<0.01	<10	21	<10	18	176
71	RS9902 127.8-128.8	0.2	0.27	35	70	<5	0.21	7	4	146	26	0.67	20	0.01	29	16	<0.01	72	1230	166	<5	<20	40	<0.01	<10	32	<10	38	53
80	RS9903 15.2-17.7	0.6	0.18	5	240	<5	<0.01	<1	<1	93	16	0.58	<10	0.01	16	24	<0.01	1	70	116	<5	<20	5	<0.01	<10	23	<10	<1	<1
Standard:																													
GEO '99		1.0	1.85	65	165	10	1.78	<1	20	69	86	3.94	<10	0.93	716	<1	0.03	22	760	20	5	<20	68	0.13	<10	84	<10	8	83
GEO '99		1.0	1.83	65	165	<5	1.76	<1	20	68	86	3.89	<10	0.98	707	<1	0.03	22	770	20	10	<20	68	0.13	<10	84	<10	10	84
GEO '99		1.2	1.80	60	165	<5	1.74	1	20	69	85	3.87	<10	0.98	703	<1	0.03	20	770	20	5	<20	66	0.12	<10	83	<10	8	79

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

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13-Aug-99

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ICP CERTIFICATE OF ANALYSIS AK99-313

TOKLAT RESOURCES INC.
2720-17th STREET SOUTH
CRANBROOK, B.C.
V1C 4H4

ATTENTION: TIM TERMUENDE

No. of samples received:7
Sample Type:SOIL
PROJECT #:RS99
SHIPMENT #: NONE GIVEN
Samples submitted by: TIM TERMUENDE

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	GSRS 99 D01	<0.2	0.18	20	35	<5	>10	1	6	57	34	2.43	20	0.12	169	2	<0.01	55	1030	2	<5	<20	119	<0.01	<10	37	<10	140	163
2	GSRS 99 D02	<0.2	1.44	10	130	5	0.80	2	11	52	15	3.35	20	0.41	489	3	0.01	27	590	16	<5	<20	18	0.02	<10	63	<10	76	88
3	GSRS 99 D03	<0.2	0.99	15	120	5	2.01	2	9	86	16	3.92	20	0.75	574	3	<0.01	22	960	14	5	<20	26	<0.01	<10	85	<10	162	121
4	GSRS 99 D04	<0.2	0.37	15	55	<5	7.03	2	9	58	26	2.84	20	0.11	193	3	<0.01	51	1220	10	<5	<20	66	<0.01	<10	47	<10	155	119
5	GSRS 99 D05	<0.2	0.76	15	105	5	8.49	1	9	50	21	2.74	10	0.26	349	2	0.01	30	770	10	<5	<20	70	0.02	<10	48	<10	82	89
6	GSRS 99 D06	<0.2	0.92	15	100	<5	4.68	<1	9	35	18	2.45	10	0.29	246	4	0.01	40	1460	16	<5	<20	71	0.03	<10	42	<10	71	69
7	GSRS 99 D07	<0.2	1.31	20	130	5	1.15	<1	11	41	13	3.26	20	0.42	472	3	0.01	24	680	18	<5	<20	22	0.02	<10	55	<10	72	63
QC/DATA:																													
Repeat:																													
1	GSRS 99 D01	<0.2	0.18	20	30	<5	>10	1	6	55	38	2.35	20	0.11	163	2	<0.01	53	1000	<2	<5	<20	113	<0.01	<10	36	<10	138	160
Standard:																													
GEO '99		1.0	1.61	65	160	<5	1.86	2	18	64	84	3.80	<10	0.96	648	<1	0.02	24	690	22	5	<20	61	0.08	<10	72	<10	8	69

df/299
XLS/99Toklat
fax:250-426-6899

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

16-Aug-99

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada HWY
KAMLOOPS, B.C.
V2C 6T4

Phone: 250-573-5700
Fax : 250-573-4557

ICP CERTIFICATE OF ANALYSIS AK99-314R

TOKLAT RESOURCES INC.
2720-17th STREET SOUTH
CRANBROOK, B.C.
V1C 4H4

ATTENTION: TIM TERMUENDE

No. of samples received: 7
Sample Type: ROCK
PROJECT #: RS99
SHIPMENT #:NONE GIVEN
Samples submitted by: TIM TERMUENDE

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	CGRSR-99-01	0.4	0.08	<5	55	10	>10	<1	3	23	2	4.76	<10	8.84	2546	2	0.02	5	140	66	45	<20	77	<0.01	<10	14	<10	<1	17
2	CGRSR-99-02	<0.2	0.39	5	100	25	0.14	2	9	259	29	>10	<10	0.02	41	14	<0.01	27	3280	8	<5	<20	46	<0.01	10	296	<10	<1	263
3	TTRS 99 R01	<0.2	0.01	20	25	<5	>10	1	8	5	2	0.57	<10	>10	150	<1	0.02	56	80	<2	65	<20	67	<0.01	<10	9	<10	24	118
4	TTRS 99 R02	>30	0.10	6535	190	<5	0.15	19	46	10	>10000	0.50	70	0.07	1641	<1	<0.01	19	>10000	360	205	<20	<1	<0.01	<10	9	<10	479	3358
5	TTRS 99 R03	>30	<0.01	330	<5	<5	<0.01	8	<1	27	979	0.45	<10	<0.01	6	1	<0.01	3	<10	>10000	1340	<20	<1	<0.01	<10	<1	<10	<1	74
6	TTRS 99 R04	>30	0.02	>10000	5	<5	0.02	42	2	30	>10000	0.18	10	<0.01	9	<1	<0.01	3	<10	>10000	>10000	<20	6	<0.01	<10	<1	<10	11	1285
7	TTRS 99 R05	>30	0.03	>10000	100	<5	0.16	411	7	26	>10000	1.85	<10	<0.01	23	1	<0.01	4	>10000	>10000	>10000	<20	6	<0.01	<10	1	<10	<1	1187
QC/DATA:																													
Resplit:																													
1	CGRSR-99-01	0.8	0.07	<5	55	5	>10	<1	3	22	2	4.81	<10	8.92	2585	3	0.02	2	150	72	50	<20	76	<0.01	<10	14	<10	<1	16
Repeat:																													
1	CGRSR-99-01	0.6	0.08	5	55	10	>10	<1	3	23	2	4.76	<10	8.84	2546	2	0.02	5	140	70	50	<20	77	<0.01	<10	14	<10	<1	17
Standard:																													
	GEO '99	1.4	1.80	70	155	<5	1.84	<1	21	67	82	3.85	<10	0.97	668	<1	0.02	22	670	24	10	<20	62	0.09	<10	72	<10	8	64

ECO-TECH LABORATORIES LTD.
Frank J. Pezzotti, A.Sc.T.
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CERTIFICATE OF ASSAY AK 99-314

TOKLAT RESOURCES INC.
SS1, SITE 7-95
2720-17th STREET SOUTH
CRANBROOK, B.C.
V1C 4H4

16-Aug-99

ATTENTION: TIM TERMUENDE

No. of samples received: 7
Sample Type: Rock
PROJECT #: RS99
SHIPMENT #: None Given
Samples submitted by: TIM TERMUENDE

ET #.	Tag #	Ag (g/t)	Ag (oz/t)	As (%)	Cu (%)	Pb (%)	Sb (%)
4	TTRS 99 R02	39.4	1.15	-	38.80	-	-
5	TTRS 99 R03	902.0	26.31	-	-	51.00	-
6	TTRS 99 R04	952.2	27.77	1.33	1.04	43.00	4.32
7	TTRS 99 R05	2080.4	60.67	4.00	7.10	19.60	8.50

QC DATA:

	Ag (g/t)	Ag (oz/t)	As (%)	Cu (%)	Pb (%)	Sb (%)
Standard:						
CD-I	-	-	-	-	-	3.48
MPI-a	70.0	2.04	0.85	1.46	4.33	-

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ECO-TECH LABORATORIES LTD.
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APPENDIX IV

Diamond Drill Logs

Eagle Plains Resources
Drill Hole Log
Rusty Springs Project

Hole ID: RS9901

Location:	NE of airstrip		
Azimuth:		*Elevation:*	626m
Inclination:	-90.0	*Length:*	1058'/322.5m
UTM:	0530666E/7376746N	*Core Size:*	BTW
Started:	July 3, 1999		
Completed:	July 8, 1999		
Purpose:	to test accurracy of seismic profile and coincident gravity anomaly		
Core Recovery:			

SURVEYS			
Metreage	*Azimuth*	*Inclination*	*Corr. Inclin.*

Property:	Rusty Springs Project
Claim No.:	
Section:	
Logged by:	CCD
Date Logged:	
Drilling Co.:	Falcon
Assayed by:	

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
0.00	19.80	65' OVERBURDEN/CASING								
		return is black fine shale;								
19.80	27.60	CRUSH/SHALE/MUDSTONE								
		fine black graphitic shale crush; well to moderately								
		consolidated; top of interval has 10cm piece of punky,								
		rusty shale;								
27.60	322.50	BLACK GRAPHITIC PYRITIC SHALE-MUDSTONE								
		v. fine grained, generally soft (yields easily to steel								
		nail) black graphitic shale or mudstone; possible weakly								
		developed bedding @ 65-70 tca defined by pyritic								
		laminations & qtz stringers; rock is highly graphitic;								
		1-3% small chert nodules assoc. in part w. pyrite +/-								
		qtz; 3-5% fine grained pyrite +/- qtz in nodular								
		disseminations, in irregular shaped bands; possible tr								
		marcasite; pyrite also occurs on fractures w. rare rusty								
		weathering stain; @ 45.4m 2mm wide fine grained								
		pyrite band is assoc. with bright green acicular mineral-								
		apatite?; 1% white qtz in tension gashes & stringers								
		parallel to perceived bedding; v. rare calcite assoc. w.								
		pyrite								
		47.5-47.6/48.1-48.3/50.9-51.0 BRECCIA ZONES								
		medium to small angular to subangular black								
		graphitic shale fragments in matrix of f. grained white to								
		clear quartz +/- v. rare carbonate; contacts are sharp &								
		irregular and appear to be passive type breccia possibly								
		primary fracture w. secondary solution in fill;								
		49.2-51.2 FAULT								
		black graphitic shale rubble mixed with fine black shale								
		crush; appears to be low angle feature;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		62.1 bedding 55 tca;								
		67.4-67.6 FAULT								
		low angle fracture with fine shale gouge;								
		67.8								
		bedding? v. low angel tca - 15 tca; defined by micro								
		offseten echelon pyrite bands; local feature with bedding								
		50 tca at 75m;								
		72.5-73.1 BRECCIA								
		angular black graphitic shale fragments in matrix of								
		white to clear qtz;								
		73.1-74.4 FAULT								
		angular to subangular fragments of black graphitic shale								
		rubble mixed with fine shale crush;								
		78.1 bedding 50 tca;								
		93.0 bedding 43 tca;								
		95.1-96.9 RUBBLE/FAULT								
		angular to subangular fragments w. discs of black								
		graphitic shale/siltstone locally mixed w. shaley crush;								
		99.5 bedding 48 tca;								
		107.6 pyrite w. fine marcasite lamination 50 tca;								
		111.3 bedding 50 tca;								
		113.5-114.1 FAULT/RUBBLE								
		angular clasts of graphitic pyritic shale mixed with fine to								
		medium shaley crush; contact indistinct, possibly								
		bedding parallel;								
		120.4-128.6 FAULT/RUBBLE								
		strongly fractured fine to coarse angular to sub-angular								
		black graphitic shale fragments mixed with 20% fine to								
		medium shaley crush; recovery poor, drillers report void								
		at 121.3m; contacts indistinct-possibly low angle;								

Eagle Plains Resources
Drill Hole Log
Rusty Springs Project

Hole ID: RS9901
Page: 3 of 7

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		131.6-133.3 RUBBLE								
		strongly fractured med to large angular clasts of black								
		shale; fractures have distinct graphite coating-sheen; no								
		gouge or clay noted; contacts indistinct;								
		133.7-133.9								
		strongly carbonaceous interval; fine sand texture;								
		134.8-139.2 RUBBLE /FAULT								
		strongly fractured angular clasts of black graphitic,								
		carbonaceous siltstone-shale; minor fine shaley crush;								
		contacts low angle tca;								
		152.4								
		rock becomes more silicified & generally more								
		competent; bedding 50-55 tca defined by pyritic								
		laminations, mm qtz laminae; rock is v.f. gr. mudstone-								
		siltstone; fractures +/- graphitic; color is black to occ.								
		dark grey;								
		165.3	164.0	165.3	1.3	5.2	80.0	93	173	166
		4 cm width bedding p'll (50 tca) band of v. fine gr.	165.3	166.3	1.0	0.8	50.0	63	52	175
		pyrite flood;	166.3	167.6	1.3	0.6	50.0	70	48	171
			220.8	222.5	1.7	0.6	15.0	53	64	176
		200.0 bedding 55 tca;	222.5	224.0	1.5	0.4	20.0	52	232	260
			224.0	225.5	1.5	0.4	20.0	37	160	387
		220.1-229.2 FAULT/RUBBLE ZONE	225.5	226.8	1.3	0.4	20.0	38	190	175
		strongly fractured medium to coarse fragments-discs of	226.8	228.0	1.2	<0.2	15.0	33	328	3894
		carbonaceous black mod sil'd mudstone +/- fine to	228.0	229.5	1.5	<0.2	20.0	28	392	1904
		medium shaley crush; 30-40% of interval is more								
		competent quartz breccia w. internal angular clasts of								
		black carbonaceous mudstone; rubble zones typically								
		have graphite on fracture surfaces, in part w. weakly								
		developed slickensides; breccia zones have 30-65%								
		white quartz crackle veining w. fragments of dark grey								
		(lightly bleached?) mod sild mudstone-siltstone; v. rare								
		fine diss. of yellow-orange sphalerite assoc. w. crackle								
		veining;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		229.2-232.3 CRACKLE BRECCIA WITH SPHALERITE	229.5	231.0	1.5	<0.2	15.0	28	250	5114
		+/- CARBONATE	231.0	232.3	1.3	<0.2	20.0	35	382	1227
		fine qtz crackle breccia overprint on black,								
		carbonaceous, pyritic mudstone; crackle orientation								
		generally p'll-subp'll to 50-65° tca bedding ; 30% qtz								
		over interval; fractures have graphitic film +/- weakly								
		developed slickensides; sphalerite occurs as fine								
		yellow-orange-red disseminations within qtz veins, Zns								
		identified by distinct rotten egg smell w. addition of								
		10% dilute HCl, vitreous luster; carbonate occurs as								
		slightly recessive vugs within quartz veins; carbonate								
		is pale yellow to pale orange and is often altered to soft								
		clay? mineral; estimate 0.25-0.5% sphalerite over interval								
		232.3-234.5	232.3	233.4	1.1	<0.2	20.0	39	130	1751
		typical carbonaceous mudstone; mm scale qtz +/- CO3	233.4	234.5	1.1	0.4	20.0	43	306	622
		banding parallel to 70 tca bedding; 2% pyrite in fine								
		bedding p'll laminations; fine to coarse honey								
		sphalerite assoc. w. bedding p'll qtz bands @ 232.9m,								
		233.3m;								
		234.5-235.6 SILTY INTERVAL	234.5	235.6	1.1	0.6	15.0	33	110	61
		med to dark grey fine grained silt unit; contacts w. finer								
		grained mudstone sharp along bedding planes;								
		235.6								
		carbonaceous mudstone as from 232.5-234.5m								
		234.7 bedding 70 tca;								
		236.7 coarse honey sphalerite in 0.5 cm width 35 tca x	235.6	236.7	1.1	0.4	25.0	40	174	626
		cutting qtz vein;	236.7	237.7	1.0	0.2	15.0	34	132	101
			237.7	239.2	1.5	0.2	20.0	38	68	166
		238.5-238.6 BRECCIA								
		angular clasts of black mudstone in matrix of white qtz;								
		tr diss. honey sphalerite along breccia margins; feature	239.2	240.6	1.4	0.2	20.0	44	100	247
		is p'll-subp'll to bedding (65 tca);	240.6	242.1	1.5	0.5	20.0	52	114	375

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		242.1-248.7 BRECCIA/VEIN BRECCIA	243.2	244.3	1.1	0.2	25.0	49	208	435
		low angle (10-25 tca) white qtz veins w. angular clasts	244.3	245.6	1.3	0.4	20.0	42	238	698
		of black mudstone wallrock; 20-30% qtz over interval;	245.6	246.8	1.2	<0.2	20.0	42	104	272
		tr. finely diss honey sphalerite assoc. q. qtz; local weak	246.8	248.0	1.2	0.4	25.0	46	166	168
		carbonate +/- clay assoc. w. qtz; lower contact sharp @	248.0	248.7	0.7	0.4	15.0	32	286	423
		15 tca;								
		245.6-248.0								
		qtz barren interval; black carbonaceous mudstone with								
		3-4% f. diss. pyrite; 2% qtz in mm scale low angle veins/								
		fracture fill; mm qtz vein @ 246.1 has crse diss.								
		sphalerite;								
		248.7-250.9	248.7	249.8	1.1	0.4	25.0	36	202	335
		sim to above; 1-2% qtz in low angle fractures & veins;	249.8	250.9	1.1	<0.2	25.0	69	700	4315
		rock increasingly carbonaceous-graphitic toward								
		contact w. qtz breccia below;								
		250.9-251.4/251.8-252.1/252.7-253.4	250.9	251.4	0.5	<0.2	<5	9	168	3651
		QUARTZ BRECCIA								
		30-35% small to med angular to subangular fragments of								
		weakly to moderately silicified dark grey to black								
		mudstone in matrix of dominantly white to clear								
		generally coarse quartz; qtz carries 10% beige to pale								
		green, fine grained H 4.5, non calcareous mineral								
		occurring as alteration or replacement along lithoclast								
		fragments-zeolite? epidote?; quartz also carries 0.5%								
		to tr v. finely disseminated honey yellow jack type								
		sphalerite occurring within qtz matrix and rarely as								
		secondary? disseminations in mudstone lithoclasts;								
		occasional larger 3mm x 3mm sphalerite patches often								
		assoc. w. alteration mineral described above; best								
		interval is 251.8-252.1 with ~5% Zns; breccia textures								
		generally 15-30 tca; contact indistinct; from 251.4-								
		251.8, quartz breccia zones are separated by fault/								
		rubble zone; medium to fine fragments & discs of								
		carbonaceous to graphitic mudstone;								
		251.4-251.8 FAULT/RUBBLE ZONE	251.4	251.8	0.4	<0.2	15.0	15	188	3555

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		252.1-252.7 BRECCIA/FRACTURE ZONE	251.8	252.7	0.9	<0.2	10.0	21	544	5007
		less well developed than above; 20% quartz in mm-4mm								
		width veins & fracture fill; mudstone has weak breccia								
		texture; tr. diss sph. assoc. w. qtz;								
		253.4-254.8 FAULT/RUBBLE ZONE	252.7	253.4	0.7	10.0	25.0	47	286	2008
		as from 251.4-251.8m; 20% qtz bx fragments +/- fine	253.4	254.8	1.4	<0.2	10.0	43	974	5897
		shaley crush; str. graphitic fractures; qtz bx. frags								
		assoc. w. diss sph;								
		254.8-259.6 QUARTZ BRECCIA	254.8	256.3	1.5	2.2	25.0	45	530	614
		series of small quartz breccia features separated by	256.3	257.9	1.6	0.4	20.0	49	592	1095
		carbonaceous mudstone w. quartz banding; breccia	257.9	258.7	0.8	1.2	20.0	66	362	1797
		consists of subangular to subrounded black to grey	258.7	259.6	0.9	<0.2	10.0	39	278	8240
		fine grained mudstone clasts in matrix of white to blue								
		grey quartz; quartz is locally calcareous and has same								
		fine grained white to beige alteration mineral as from								
		252.7-253.4; fragments generally well preserved								
		without evidence of intense deformation; 30% qtz over								
		interval;								
		257.5-257.6								
		5% yellow to orange sphalerite as fracture fill with								
		quartz;								
		259.6-322.5								
		typically mudstone unit; black to dark grey	259.6	260.6	1.0	0.5	18.0	45	139	1152
		carbonaceous moderately silicified fine grained	260.6	261.5	0.9	<0.2	20.0	48	130	1787
		mudstone; fractures typically graphitic; top of section								
		has well defined 85 tca bedding; 3-4% pyrite in fine								
		bedding parallel laminations & diss; 3% qtz in mm-4mm								
		width bedding parallel bands & v. rare cross cutting mm								
		scale veins;								
		261.3-261.4								
		4 x mm bedding parallel sphalerite +/- quartz bands;	261.5	262.7	1.2	<0.2	25.0	27	100	3390
			262.7	263.7	1.0	9.2	95.0	110	362	207
		263.0-263.4								
		low angle (0-10 tca) gashes healed with diss. honey								
		sphalerite + qtz;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		264.7								
		5 cm width microbreccia healed w. sphalerite + qtz;	263.7	264.9	1.2	<0.2	20.0	33	146	4438
		small to medium subangular mudstone clasts in matrix	264.9	266.4	1.5	0.4	20.0	48	156	738
		of sphalerite + qtz; est 10% Zns over 5 cm interval;								
		266.5 bedding 65 tca;								
		276.0-278.3 FAULT/RUBBLE	266.4	267.9	1.5	<0.2	20.0	38	100	182
		strongly fractured mudstone; fractures p'll to bedding	267.9	269.4	1.5	0.2	25.0	48	110	271
		with rare fine to medium shaley crush;	269.4	270.9	1.5	0.6	20.0	38	86	110
		282.5 bedding 60 tca;								
		289.8-295.0 FAULT/RUBBLE								
		strongly fractured carbonaceous mudstone; medium to								
		fine fragments mixed w. 10-15% crse shaley crush;								
		contacts parallel to bedding;	319.4	321.0	1.6	0.7	18.0	32	38	89
			321.0	322.5	1.5	0.2	15.0	37	54	135
		315.7 bedding 50 tca;								
		EOH 322.5m/1058'								

Eagle Plains Resources
Drill Hole Log
Rusty Springs Project

Location:			
Azimuth:	240.0	*Elevation:*	
Inclination:	-60.0	*Length:*	129.8m/426'
UTM:	0530234E,7376468N	*Core Size:*	BGM
Started:	July 08,1999		
Completed:	July 11, 1999		
Purpose:	Test for mineralized Katshat Horizon beneath watertable between 9901 and 9605		
Core Recovery:			

SURVEYS

Metreage	*Azimuth*	*Inclination*	*Corr. Inclin.*

Property:	Rusty Springs Project
Claim No.:	
Section:	
Logged by:	CCD
Date Logged:	
Drilling Co.:	Falcon
Assayed by:	EcoTech

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
0.00	21.40	70' CASING								
21.40	38.40	BLACK,CARBONACEOUS TO GRAPHITIC								
		MUDSTONE/RUBBLE/FAULT?								
		black,fine grained soft strongly graphitic mudstone;								
		recovery is generally poor with core consisting of well								
		consolidated soft mud to fine mudstone crush; bedding								
		not well developed, but appears to be high angle	23.5	25.4	1.9	<0.2	10.0	20	18	7
		(80-90) tca; v.rare (<1%) qtz vein fragments; difficult	25.4	26.5	1.1	0.2	10.0	27	18	17
		to ascertain whether rubble zones are a tectonic or	26.5	28.8	2.3	0.8	10.0	41	22	<1
		weathering feature;	28.8	29.0	0.2	<0.2	30.0	88	30	181
			29.0	29.9	0.9	0.8	10.0	39	26	9
38.40	69.40	38.4-69.4	29.9	30.6	0.7	0.2	5.0	41	22	3
		black graphitic mudstone; more competent than above;	30.6	31.6	1.0	0.4	10.0	41	24	2
		rock has very high pin point porosity;	31.6	32.6	1.0	0.4	53.0	47	23	175
			32.6	33.2	0.6	0.6	60.0	205	30	111
		25.4-25.5/28.8-29.0/32.6-33.2/49.7-49.9	33.2	34.3	1.1	0.4	15.0	77	26	81
		STRONGLY OXIDIZED MUDSTONE	39.0	40.0	1.0	0.4	15.0	13	24	71
		fine grained mudstone with pervasive orange-yellow								
		weathering stain; oxidized intervals are harder than								
		surrounding rocks; non responsive to zinc zap or Cu test;								
		40.0-40.1 KATSHAT?	40.0	40.1	0.1	<0.2	335.0	34	16	151
		punky yellow-orange sand-floor; non responsive to	40.1	41.1	1.1	0.4	10.0	20	42	16
		zone zap or Cu test;	48.7	49.7	1.0	0.2	25.0	73	92	18
			49.7	49.9	0.2	<0.2	135.0	465	60	450
		51.7-59.1 RUBBLE ZONE/FAULT	49.9	50.9	1.0	<0.2	<5	181	56	1
		fine to medium graphitic mudstone crush; in planes								
		crush is mod sild mudstone fragments;								
		59.7 bedding 85 tca;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		64.6-66.5 RUBBLE ZONE/FAULT								
		fine to medium graphitic mudstone crush; rare white								
		oxide? on fractures;								
69.40	113.90	69.4-113.9								
		SILICIFIED MUDSTONE								
		dark to grey to black moderately to strongly silicified								
		fine grained mudstone; bedding defined by fractures &								
		rare mm width pyrite laminations @ 82-88 tca; rock is								
		strongly fractured into poker chip fragments; upper								
		contact appears to be along a fault with fine shaley crush								
		over 66.3-66.5m; fractures have graphite +/- white soft								
		clay alteration-talc? kaolinite? alonite?; local small								
		(10-20 cm length) qtz microbreccia features, generally								
		developed at low angle tca;								
		106.1-108.7 BLACK SAND/AQUIFER/FAULT								
		fine to medium black silicified carbonaceous mudstone-								
		shale sand; 5% of interval is coarse poker chip to								
		angular fragments of silicified mudstone as above; sand								
		is clean, homogenous; leaves stain on fingers when								
		rubbed; approximately 28 feet of sand was recovered								
		over the interval 348-356'; excess sand may be related								
		to recharge along an aquifer; contacts sharp possibly								
		parallel-sub-parallel to bedding;								
		109.3 bedding 85 tca;								
		113.9-114.5 BLACK SAND/FAULT?								
		clean black siliceous sand as above contacts not well								
		defined but appear to be p'll to bedding 85 tca;								
114.50	129.80	114.5-129.8 BRECCIA	121.0	122.5	1.5	1.6	90.0	28	214	88
		med to light grey strongly silicified fine grained	122.5	124.0	1.5	<0.2	45.0	15	66	124
		mudstone-shale w. 15% mm to rarely 0.5cm white qtz	124.0	124.9	0.9	0.6	30.0	32	52	109
		crackle overprint; in places small scale micro collapse								
		type breccias developed; qtz crackle veining								
		dominantly low angle tca; qtz crackle veining carries								
		trace f. diss. pyrite; strongly fractured @ 80-90 tca;								
		fractures have limonite stain in part;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		115.5-115.7 BLACK SAND								
		as above; contacts indistinct, appear to be 85 tca;								
		124.6-129.8 BOXWORK BRECCIA	124.9	125.0	0.1	<0.2	140.0	709	222	304
		well developed boxwork textures in mudstone breccia;	125.0	125.3	0.3	<0.2	10.0	43	34	10
		rock is strongly silicified & vuggy; vugs typically healed	125.3	125.4	0.1	<0.2	95.0	70	172	243
		with small clear quartz prisms; rock has mod to strong	125.4	126.9	1.5	<0.2	20.0	40	42	35
		selective-pervasive bleaching, especially in breccia	126.9	127.8	0.9	<0.2	100.0	240	164	449
		matrix; upper contact @ 124.6 is 2 cm wide quartz band	127.8	128.8	1.0	0.3	35.0	25	161	60
		@ 45 tca;	128.8	129.8	1.0	0.4	30.0	11	88	32
		124.9-125.0/125.3-125.4/127.0-127.1								
		rusty oxidized clay-katshat looking material, soft,								
		rubbly; orange to white; @127.1m contact is sharp @								
		30 tca;								
		EOH 426'/129.8m								
		HOLE SHUT DOWN AFTER ROD STRING SNAPS								
		AFTER BECOMING STUCK WHILE REAMING								

Eagle Plains Resources
Drill Hole Log
Rusty Springs Project

Hole ID: RS9903

Location:			
Azimuth:	-246.0	*Elevation:*	
Inclination:	-70.0	*Length:*	164.6m/540'
UTM:		*Core Size:*	BGM
Started:	July 12, 1999		
Completed:	July 19, 1999		
Purpose:	test core of anticline mapped by Charlie Greig south of airstrip		
Core Recovery:			

SURVEYS

Metreage	*Azimuth*	*Inclination*	*Corr. Inclin.*

Property:	Rusty Springs Project
Claim No.:	
Section:	
Logged by:	CCD
Date Logged:	July 12-19
Drilling Co.:	Falcon
Assayed by:	EcoTech

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
0.00	7.62	25' CASING								
2.40	23.80	SILICIFIED BLEACHED MUDSTONE/AIRSTRIP ARG?								
		medium grey; fine grained, moderately to strongly								
		silicified mudstone-argillite; core is strongly fractured								
		into med-cse subangular pebbles; recovery is								
		generally poor; no bedding preserved; fractures have								
		yellow oxide?-clay? weathering film; occ. small crush								
		zones from 14.9-17.7; selective tr. f. diss pyrite;	5.2	5.5	0.3	<0.2	45.0	43	56	7
		selective-perv-weak bleaching;	5.5	8.5	3.0	<0.2	10.0	20	64	17
			8.5	10.0	1.5	0.2	10.0	10	116	<1
		5.2-5.5 BRECCIA	10.0	11.6	1.6	0.2	<5	14	36	<1
		silicified mudstone with 10% fine white quartz crackle	11.6	12.2	0.6	<0.2	<5	10	32	<1
		breccia; orange oxide weathering stain assoc. w. qtz;	12.2	14.3	2.1	<0.2	<5	12	24	<1
			14.3	15.2	0.9	<0.2	<5	11	42	<1
		19.8-20.4 FAULT	15.2	17.7	2.5	0.6	5.0	16	116	<1
		fine black shaley crush mixed with black mud;	17.7	19.2	1.5	<0.2	5.0	13	70	<1
			19.2	20.5	1.3	0.2	<5	12	122	<1
		20.5-23.0								
		mudstone becomes softer, with stronger yellow to	20.5	21.9	1.4	<0.2	20.0	40	96	20
		rusty orange oxide stain on fractures; 40% of interval is	21.9	22.6	0.7	<0.2	55.0	357	116	478
		medium sized flat shale-mudstone rubble chips with	22.6	23.8	1.2	<0.2	50.0	207	72	189
		strong orange oxide stain;								
		21.6m bedding 65 tca;								
		23.3-23.8 FAULT?								
		transition between black carbonaceous mudstone and								
		silicified mudstone; mixed shale chips with rusty								
		weathering stain and soft well consolidated black								
		carbonaceous mudstone crush;								

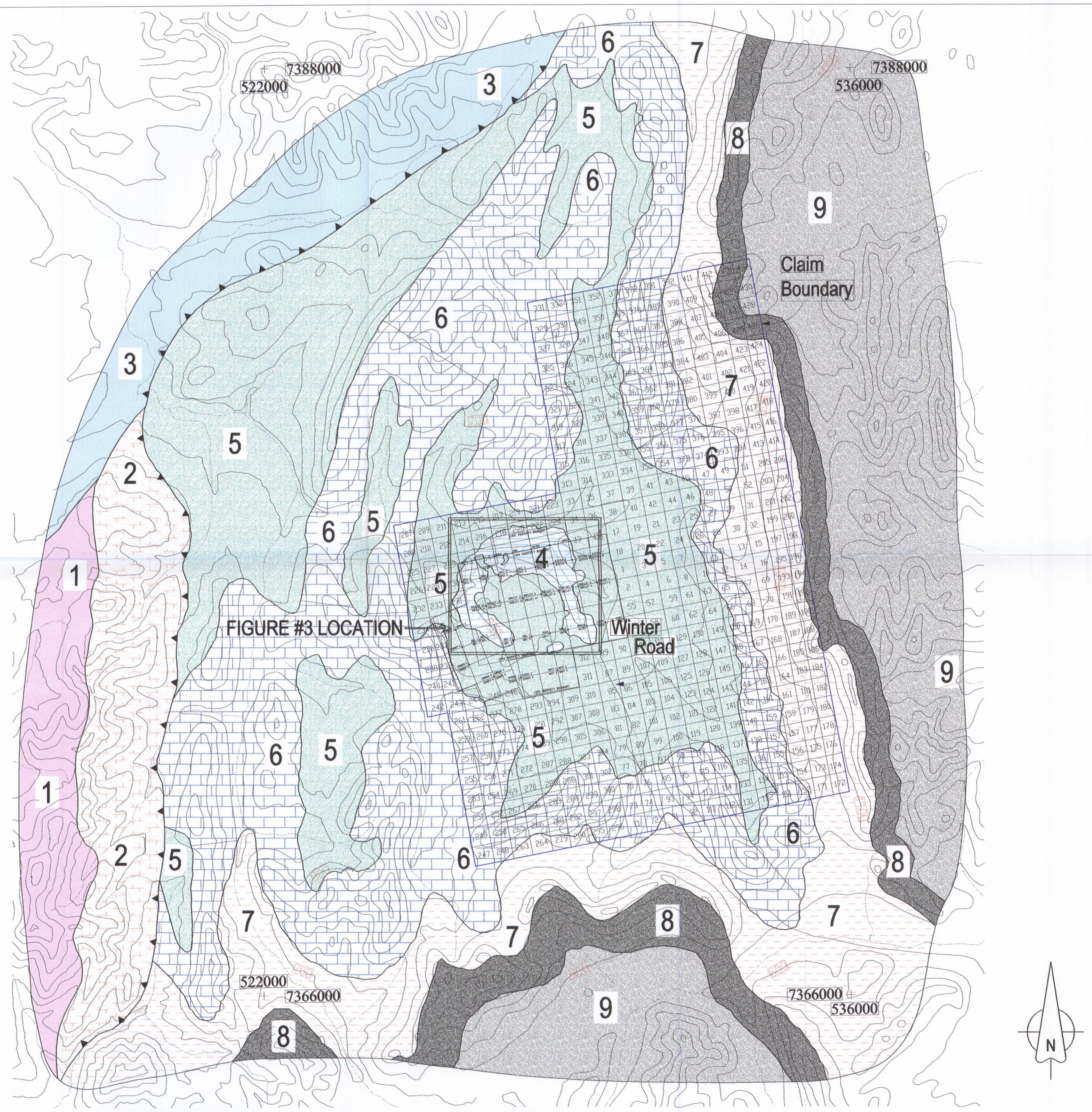
From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		23.8-45.1 BLACK CARBONACEOUS MUDSTONE/	23.8	26.3	2.5	0.6	<5	16	50	3
		BLACK SAND FAULT/AQUIFER	26.3	28.3	2.0	0.2	5.0	15	28	<1
		black, fine grained friable well consolidated								
		carbonaceous to graphitic mudstone; possible-probable								
		bedding 70-75 tca; rock is extremely porous with								
		texture like fine sand; probably black sand fault								
		equivalent; zone continues to produce abundant black								
		sand when drillers ream to bottom; contacts indistinct								
		possibly bedding p'll;								
		45.1 SILICIFIED MUDSTONE								
		dark grey-black fine grained mod to strongly silicified								
		mudstone; 2-3% f. diss pyrite +/- pyritic laminations;								
		interval is strongly fractured w. no core >4 cm length;								
		fractures generally p'll to bedding 55-60 tca; fractures								
		occ. have rusty oxide stain +/- limonite; v. rare (<1%) mm								
		qtz veining, generally @ low angle to tca;								
		48.2 bedding 55 tca;								
		57.0 bedding 55 tca;								
		64.1 bedding 58 tca;								
		57.7-57.9 BLACK SAND/FAULT?CAVE?								
		20 cm of fine black sand; possibly case, sitting at								
		marker block;								
		71.3-75.9 RUBBLE ZONE/STRONGLY FRACTURED								
		medium to coarse poker chip to angular-subangular								
		fragments of dark grey +/- silicified mudstone;								
		fractures p'll to bedding often graphitic;								
		82.6 INCREASE4 IN SILICIFICATION								
		dark to med grey fine grained mudstone; strongly								
		silicified-steel nail is left behind on core; under hand								
		lens 2-4% fine white qtz repl; 3% fine gr. pyrite in diss &								
		bedding parallel laminations; bedding 60 tca;								
		90.8								
		rare (<1%) low angle mm scale qtz microveins;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		91.4 MICROBRECCIA								
		5cm width mudstone microbreccia healed with white qtz								
		+/- carbonate;								
		101.1 bedding 60 tca;								
		107.2 MICROBRECCIA/CRACKLE BRECCIA								
		black, silicified mudstone with 10% fine white qtz								
		crackle breccia zones & 10% microbreccia zones;								
		microbreccia has 10% med to small sild black mudstone								
		fragments in fine grained silicified dark grey matrix,								
		possibly recemented fine mudstone crush; crackle								
		breccia & microbreccia generally grade into one another								
		without sharp contact; interval is generally strongly								
		fractured w. graphite films on fracture surfaces								
		common; fragments appear to have crackle bx overprint								
		prebrecciation; 0.5-2% f. diss. pyrite;								
		117.2-118.4 CRUSH								
		well consolidated -recemented black mudstone crush;								
		upper contact @ 70 tca in mudstone rubble zone; lower								
		contact @ low angle tca (10-30) with fractured 30 tca								
		1 cm width qtz vein @ 118.2m;								
		118.2								
		mudstone microbreccia/crackle breccia becomes								
		increasingly vuggy; 15% med to large generally elongate								
		to irregular shaped vugs; vugs generally clean, not								
		healed;								
		125.1								
		drillers report void, H2O loss;								
		124.3								
		vugs healed with white clay; also speck of red-yellow								
		mineral-siderite?								

Eagle Plains Resources
Drill Hole Log
Rusty Springs Project

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses				
						Ag	As	Cu	Pb	Zn
		127.5 SILICIFIED BRECCIA								
		dominantly microbreccia over interval; med to large								
		angular to subangular clasts of black silicified mudstone;								
		mod siln to rare str siln characterized by conchoidal								
		fracture; matrix is dark grey v. fine grained mod sild								
		qtzite? sild arg? possibly fine tectonic crush; rock has								
		distinct vuggy texture as above w. 25-30% vugs; in								
		places vugs are healed with pale yellow-cream fine								
		grained botropical habit mineral-limonite; 2-4% f. diss								
		pyrite in matrix & in clasts, pyrite in clasts also appears								
		as remnant bedding laminations, rare qtz microbreccia;								
		140.9-141.1 PYRITE BAND/LOW ANGLE BEDDING								
		0.5cm width low angle (8 tca) pyrite band; appears to								
		define bedding possibly representing local small scale								
		deformation or large rotated clast;								
		141.1								
		rock becomes more qtz bx. dominated; 25% fine white								
		crackle overprint; in part quartz appears to replace fine								
		grained microbreccia matrix; 2-4% pyrite in fine to rare								
		coarse disseminations; rock is slightly less vuggy than								
		above section with rare pyrite cubes as healing; @ 140.9								
		soft xtalline yellow-brown xtals-barite? as vug healing;								
		also rare qtz xtals in vugs;								
		143.0								
		red-brown metallic-submetallic xtals assoc. with qtz								
		microbreccia-siderite?								
		143.3-164.6 RUBBLE ZONE								
		angular to subangular often mechanically ground pebbles								
		of str silicified dark grey to black crackle brecciated								
		mudstone as above; pieces of core >5cm length very								
		rare; rock is very hard & in places exhibits conchoidal								
		fracture; drillers report extremely abrasive pebbles								
		resulting in high wear on diamond tools & rods/core								
		barrels;								

From (m)	To (m)	Description	From (m)	To (m)	Length	Analyses Ag	As	Cu	Pb	Zn
		158.5	162.4	163.1	0.7	0.2	10.0	24	14	26
		fractures become rusty w. selective orange-brown	163.1	163.7	0.6	0.4	5.0	16	14	9
		weathering stain on fracture surfaces;	163.7	164.3	0.6	0.8	5.0	15	24	7
			164.3	164.6	0.3	0.6	10.0	17	24	13
		EOH 164.6m/540'								



Early Cretaceous

0 5 km

9	shale and siltstone
8	quartz arenite

Jurassic and Early Cretaceous

7	dark weathering siliclastic rocks: shale, silty mudstone, and sandstone

Late Carboniferous and Permian(?)

6	Ettrain and Jungle Creek formations; limestone and fine grained calcareous and siliceous clastic rocks

Devono-Mississippian fine-grained siliciclastic rocks

5	Unnamed shale; siliceous mudstone, slate, shale, siltstone; rare argillaceous limestone

Early and Middle Devonian

4	Ogilvie Formation; dolostone: fetid, vuggy, commonly brecciated; subordinate limestone and argillaceous rocks

Claim Boundary

Early Proterozoic to Early Paleozic

3	undivided dolomite and siliciclastic rocks

Late Cambrian to Early Devonian

2	dolomite, local quartz-rich sandstone (quartzite) and siliceous siltstone (siltite)

Early to Late Proterozoic

1	rusty weatheing siliclastic rocks: sandstone (quartzite), siltstone, and silty mudstone (siltite)

EAGLE PLAINS RESOURCES

CANAUSTRA RESOURCES INC.

RUSTY SPRINGS PROJECT

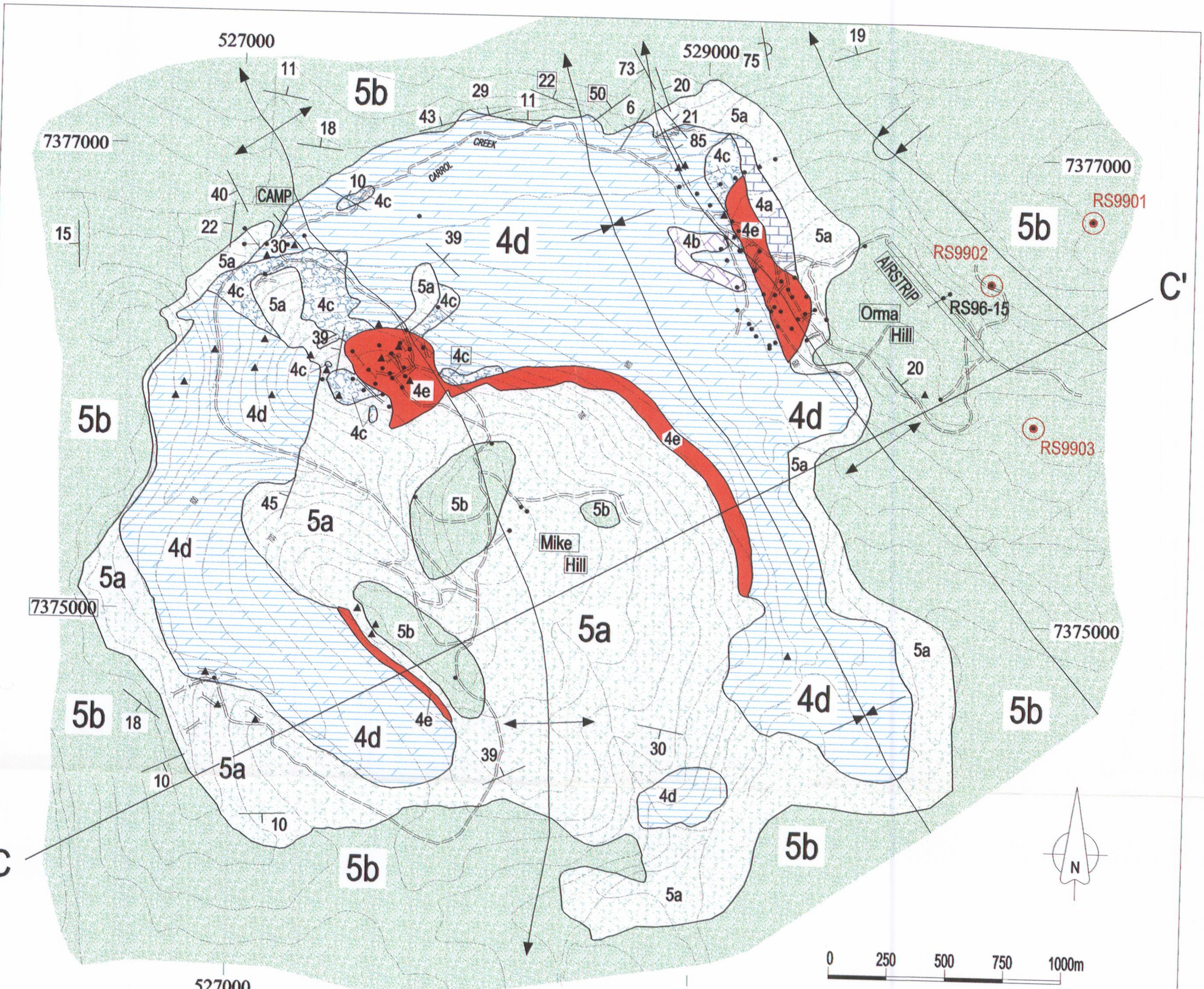
CLAIM LOCATION AND REGIONAL GEOLOGY OF THE RUSTY SPRINGS PROPERTY

GEOLOGY AFTER C. GREIG 1999

FIG. 2	DATE: January 2000	as shown

TOKLAT RESOURCES INC.

99toklat\rusty\rusty_geol-14.dwg



Devono-Mississippian fine-grained siliciclastic rocks

Unnamed shale

- **5b** shale, siltstone, siliceous mudstone, slate; rare argillaceous limestone
- **5a** brecciated black chert and siliceous mudstone, minor shale

Early and Middle Devonian

Ogilvie Formation

- **4e** Katshat unit: leached, mineralized and altered dolostone: porous limonitic to kaolinitic material containing quartz veinlets and laminae which locally contain sulphides and sulphosalts
- **4d** undifferentiated dolostone: fetid, vuggy, commonly brecciated; subordinate limestone and argillaceous rocks
- **4c** dolostone, brecciated, commonly siliceous
- **4b** dolostone, not brecciated
- **4a** limestone; locally fossiliferous

- road or cat trail
- mineral showing
- bulldozer trench
- vertical drillhole
- inclined drillhole
- inclined drillhole (>1)
- 1999 drillhole

- anticline
- syncline
- overturned syncline

094 065

EAGLE PLAINS RESOURCES

CANAUSTRA RESOURCES INC.

RUSTY SPRINGS PROJECT

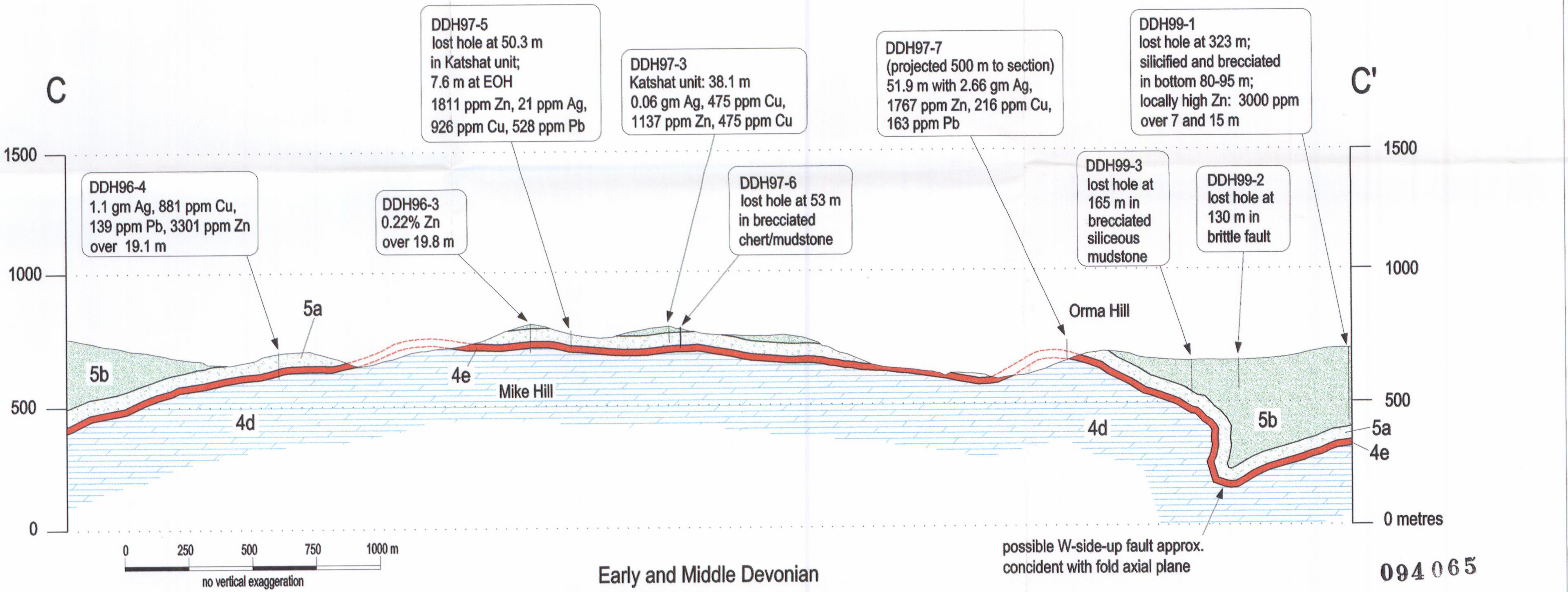
GEOLOGY OF THE RUSTY SPRINGS PROPERTY; 1999 DRILLHOLE LOCATIONS

PROPERTY GEOLOGY AFTER C. GREIG 1999

FIG. 3	DATE: January 2000	1: 15,000

TOKLAT RESOURCES INC.

99toklat\rusty\mike_orma_geol-14.dwg



094065

Devono-Mississippian fine-grained siliciclastic rocks

Unnamed shale

5b shale, siltstone, siliceous mudstone, slate; rare argillaceous limestone

5a brecciated black chert and siliceous mudstone, minor shale

Early and Middle Devonian

Ogilvie Formation

4e Katshat unit: leached, mineralized and altered dolostone: porous limonitic to kaolinitic material containing quartz veinlets and laminae that locally contain sulphides and sulphosalts

4d undifferentiated dolostone: fetid, vuggy, commonly brecciated; subordinate limestone and argillaceous rocks

EAGLE PLAINS RESOURCES

CANAUSTRA RESOURCES INC

RUSTY SPRINGS PROJECT

GEOLOGIC CROSS SECTION MIKE AND ORMA HILLS
C-C' LOCATION FIG. 3

PROPERTY GEOLOGY AFTER C. GREIG 1999

FIG. 4	DATE: January 2000	as shown

TOKLAT RESOURCES INC.

99toklat\rusty\mike_orma_sectn-14.dwg


240°
SW
060°
NE
700m
600m
500m
400m
300m
AIRSTRIP ARGILLITE
5b
5a
bedding 30 ° tca
bedding 30 °
bedding 85 ° tca
bedding 82 - 88 ° tca
BLACK SAND FAULT
RS96-15
Azimuth : 240 ° / Dip -45 °
EOH : 96.3m / 316 feet
0.0 - 21.4 OVERBURDEN
21.4 - 69.4 BLACK CARBONACEOUS TO GRAPHITIC MUDSTONE / FAULT / RUBBLE
black,fine grained soft strongly graphitic mudstone;recovery generally poor;v.rare qtz. vein fragments;becomes more competent from 38.4-69.4 with well developed incipient pin-point porosity; local strong oxidation;
69.4 - 133.9 SILICIFIED MUDSTONE
dark grey - black, fine grained, moderately to strongly silicified mudstone;bedding defined by fractures & rare mm width pyrite laminations @ 82-88 tca;rock is strongly fractured into poker chip fragments;fractures have graphite +/- white soft clay alteration-talc? kaolinite? alunite?; local small microbreccia features;
106.1-108.7 BLACK SAND / AQUIFER / FAULT
fine to medium black silicified carbonaceous mudstone-shale sand; 5% of interval is coarse poker chip to angular fragments of silicified mudstone as above; sand is clean, homogenous; leaves stain on fingers when rubbed; approximately 28 feet of sand was recovered over the interval 348-356'; excess sand may be related to recharge along an aquifer; contacts sharp possibly parallel-sub-parallel to bedding;
BLACK SAND FAULT / AQUIFER
DDH RS9902
Azimuth 240 ° / Dip -56 °
EOH 129.8m / 426 feet
114.5 -129.8 BRECCIA
med to light grey strongly silicified fine grained mudstone-shale w. 15% mm to rarely 0.5cm white qtz crackle overprint; in places small scale micro collapse type breccias developed; qtz crackle veining dominantly low angle tca; qtz crackle veining carries trace f. diss. pyrite; strongly fractured @ 80-90 tca; fractures have limonite stain in part; well developed boxwork type breccia from 124.6 - 129.8 healed with clear quartz prisms;local 10cm width rusty, oxidized clay material bands - Katshat?
5b
27.6 - 152.4 BLACK GRAPHITIC PYRITIC SHALE-MUDSTONE
v. fine grained, generally soft (yields easily to steel nail) black graphitic shale or mudstone; possible weakly developed bedding @ 65-70 tca defined by pyritic laminations & qtz stringers; rock is highly graphitic; 1-3% small chert nodules assoc. in part w. pyrite +/- qtz; 3 - 5% fine grained pyrite +/- qtz in nodular disseminations, in irregular shaped bands; possible tr. marcasite; pyrite also occurs on fractures w. rare rusty weathering stain; @ 45.4m 2mm wide fine grained pyrite band is assoc. with bright green acicular mineral-apatite?; 1% white qtz in tension gashes & stringers parallel to perceived bedding; v. rare calcite assoc. w. pyrite;
0.0 - 19.8 OVERBURDEN
19.8 - 27.6 CRUSH / SHALE / MUDSTONE
fine black graphitic shale crush; well to moderately consolidated; top of interval has 10cm piece of punky, rusty shale;
bedding 65 ° tca
bedding 55 ° tca
bedding 43 ° tca
bedding 50 - 55 ° tca
5b
152.4
rock becomes more silicified and competent; v. fine grained mudstone - siltstone, black to rarely dk. grey; fractures graphitic - carbonaceous;
229.2-232.3 CRACKLE BRECCIA WITH SPHALERITE +/- CARBONATE
fine qtz crackle breccia overprint on black, carbonaceous, pyritic mudstone; crackle orientation generally p'll-subp'll to 50-65 33/64 tca bedding ; 30% qtz over interval; sphalerite occurs as fine yellow-orange-red disseminations within qtz veins; estimate 0.25-0.5% sphalerite over interval; carbonate occurs as slightly recessive vugs within quartz veins; carbonate is pale yellow to pale orange and is often altered to soft clay? mineral;
226.8 - 233.4 : 6.6m @ 2819ppm Zn
220.1-229.2 FAULT / RUBBLE ZONE
strongly fractured medium to coarse fragments/discs of carbonaceous black mod sil'd mudstone +/- fine to medium shaley crush; 30-40% of interval is more competent quartz breccia w. internal angular clasts of black carbonaceous mudstone; rubble zones typically have graphite on fracture surfaces, in part w. weakly developed slickensides; breccia zones have 30-65% white quartz crackle veining w. fragments of dark grey (lightly bleached?) mod sild mudstone-siltstone; v. rare fine diss. of yellow-orange sphalerite assoc. w. crackle veining;
bedding 70 ° tca
5a
242.1 - 264.9 QUARTZ BRECCIA ZONES
30-35% small to med angular to subangular fragments of weakly to moderately silicified dark grey to black mudstone in matrix of dominantly white to clear generally coarse quartz; quartz carries 0.5% to tr v. finely disseminated honey yellow jack type sphalerite occurring within qtz matrix and rarely as secondary? disseminations in mudstone lithoclasts; sphalerite also occurs in low angle tension gashes;3% beige to pale green, fine grained H 4.5, non calcareous mineral occurring as alteration or replacement along lithoclast fragments-zeolite? epidote?
249.8 - 264.9 : 15.1m @ 3100ppm Zn
bedding 65 ° tca
DDH RS9901
DIP -90°
EOH 322.5m / 1058'
LEGEND
GEOLOGY
DEVONO-MISSISSIPPIAN FINE-GRAINED SILICICLASTIC ROCKS
UNNAMED SHALE
5b SHALE, SILTSTONE SILICEOUS MUDSTONE, SLATE; RARE ARGILLACEOUS LIMESTONE
5a BRECCIATED BLACK CHERT AND SILICEOUS MUDSTONE, MINOR SHALE
MINERALIZATION
BEDDING CONTACT : KNOWN - INFERRED
bedding 85° tca BEDDING ANGLE TO CORE AXIS
DIAMOND DRILL HOLE COLLAR
FAULT ZONE
OVERBURDEN
094065
EAGLE PLAINS RESOURCES
CANAUSTRA RESOURCES INC
RUSTY SPRINGS PROJECT
DIAMOND DRLL PROFILE RS9901, RS9902, RS96-15
PLANE OF SECTION : 240 ° / 060 °
FIG.5
DRAWN : CCD
DATE: January /00
Scale 1 : 1000
TOKLAT RESOURCES INC.
DIGITAL MAPPING BY:
INTERIOR REFORESTATION CO. LTD.
P.O. BOX 874 CRANBROOK B.C. V1C 4J6
PHONE NO. 426-5300 FAX NO. 426-5311
0m 10m 20m 30m 40m 50m
98TOK01\RUSTY\RS99-01-02.DGN

98TOK01\RUSTY\RS99-03.DGN