REPORT ON
BOSTOCK RANGE SILVER DISTRICT
PLATA PROJECT, ROGUE RIVER, Y.T.

N.T.S. 105-N-9

DYNASTY EXPLORATIONS LIMITED
By: A.E.Aho Sept. 1972

018136

REPORT ON

BOSTOCK RANGE SILVER DISTRICT

PLATA PROJECT, ROGUE RIVER, Y.T.

N.T.S. 105-N-9

By:

A. E. AHO

DYNASTY EXPLORATIONS LIMITED

September, 1972

TABLE OF CONTENTS

INTRODUCTION 1
LOCATION 2
TOPOGRAPHY 3
ACCESS 3
1972 PROGRAM 4
GENERAL GEOLOGY 6
MINERALIZATION 7
SUMMARY 16
RECOMMENDATIONS 17

NOTES ON ORIGIN OF PLACE NAMES NOT SHOWN ON TOPOGRAPHIC MAPS

In order to commemorate those who have worked in this remote area and, in order to identify localities, the writer has gathered old names and reported new ones as follows:

Bostock Range	In honour of Dr. Hugh S. Bostock of the Geological Survey of Canada, who mapped much of Yukon for over 20 years, first recognized its mineral potential and was an eloquent and great inspiration to many, including the writer.
Fango Lake	Spanish for swamp, for obvious reasons.
Fido Creek	Named after Norman Niddery's lead dog, name used by trappers for decades, mistakenly labelled Rogue River on Lansing Sheet 105-N.
Greg Creek	Greg Haineault, field assistant, who silt sampled it in 1969.
Huevon Gulch	Spanish for Fool's Gulch.
Johnny Creek	After George Johnny who silt sampled it in 1969.
Loner Mtn.	An isolated land mark, also named for the loners who first traversed this region.
Mt. Aho Elv.6866'	Named by M.E. (Tim) Coates, Hess Project party chief in 1968 after Aho's original prospecting of area. Aho carried monument to his parents, who died in 1968, to top of peak in 1969, and resumed project here in 1972.
Mt. Etzel	After Robert Etzel for his prospecting of this area in 1969 and 1972.
Mt. Skonseng Elv.6274'	After Thor Skonseng who trapped the area for many years, had a cabin at nearby Fango Lake and prospected in the vicinity in 1963, 1968-69 and 1972.
Narrow Lake	Name for nearest supply lake.

Oso Gulch	Named by Aho when charged by mother grizzly and cub August 9, 1972; John O'Neill later chased twice by grizzly - Spanish for bear.
West Lake	After Runer West, a Finn trapper who had a cabin there, went mad after a few years and disappeared in this region in the early 1950's.
Wilson Range	After Charles Wilson, a rangey Texan, who fled the law and hid out in this area in the 1920's, trapping for many years.

TELEPHONE 685-4331

DYNASTY EXPLORATIONS LIMITED

330 MARINE BUILDING
355 BURRARD STREET
VANCOUVER 1, B.C.

REPORT ON
BOSTOCK RANGE SILVER DISTRICT
PLATA PROJECT, ROGUE RIVER, Y.T.

INTRODUCTION

This report outlines developments to date on what could be an important new silver mining district in Yukon. Because of circumstances leading to the discoveries and their probable significance, more detail than usual is included.

This area is one of the last parts of the hinterland of Yukon to be prospected due to isolation, distances, and transportation difficulties. Until after world war II it appears that only a few trappers - Charles Wilson, Norman Niddery, Thor Skonseng, Runer West, and a few others - had entered lakes in the region by float plane, mainly from Mayo; the Hess and Rogue Rivers being difficult and impossible, respectively, to navigate due to falls and rapids. After world war II distance from the North Canol road and other localities still remained excessive.

In 1966 the writer initiated reconnaissance prospecting of the region under the Hess Project, first by private financing with associates and in conjunction with Atlas Explorations Limited, then by joint venture with U.S. Steel and Engelhard Industries. The work consisted of aerial reconnaissance followed by helicopter-supported geochemical sampling and prospecting from 1966 to 1969 inclusive.

Except for vague reports of silver-lead near Swan Lake to the west and gold and tungsten up Rogue River and Fido Creek, nothing was known of any mineralization in this area. In the western part of the Bostock Range rust seepages with high zinc geochemistry were staked in October, 1967, as a result of work by the writer but further work did not reveal any mineralization.

In 1969 fill-in silt and soil sampling east of this area revealed highly anomalous lead-zinc and copper values which led to silver-lead discoveries by prospector Robert Etzel, staked as the Greg Group of 10 claims on July 24th and 25th, 1969. Reports on the mineralization were not sufficiently detailed or encouraging to stimulate further exploration, so the claims were allowed to lapse by 1971.

Attention became centred on several other discoveries in this region of some 3000 square miles and by 1971 the joint venture with U.S. Steel and Engelhard had been abandoned except for claims in good standing, including the Scot zinc property at Jake Lake, 35 miles E-SE of the present project. In July, 1972, the writer rejuvenated work east of this locality looking for replacement lead-zinc or tungsten, and worked back into it in August, resulting in the present discoveries and exploration program.

LOCATION

This new silver-lead district is located in the Bostock Range of Hess Mountains, between the Rogue and Hess Rivers in northeast Yukon. The "main showing" and base camp are at latitude 63°40'N, longitude 132°02' W. between Fido Creek on the southeast and Rogue River on the northwest, on N.T.S. Lansing 105-N and Niddery Lake 105-O, in the Mayo Mining District of Yukon. This locality lies 50 miles from the

Northwest Territories border, 115 miles due east of Mayo, 100 miles N-NE of Faro, 108 miles north and slightly east of Ross River, and 65 air miles northwest of the North Canol Road.

Significant mineralization has been found within a 4-mile radius of this locality but full extent of the mineral district has not yet been defined.

TOPOGRAPHY

The Bostock Range, 28 miles long and 6 to 12 miles wide, is mountainous, rising from 2500 foot elevations on Rogue River and 3000 feet on Fido Creek to numerous ridges above timberline (4000-5000 ft.), the highest and central peak being Mt. Aho, elevation 6866 feet. Climate is typical of northeast Yukon with average precipitation.

ACCESS

Present access to base camp is by float plane to Narrow Lake, elevation around 2800 ft., length 2500 ft., 1½ miles south of Fido Creek and thence by helicopter 7 miles due north to the "main showing" at about 4500 feet elevation. Alternative lakes for access to the area are Runer West Lake northwest of the range and Fango Lake at its northeast end.

Future access can be established first by an airstrip in the main valley somewhere near Narrow Lake, with connecting road and about 7 miles of tote road to the main showing area. An eventual all-weather road 75 miles long would give access to the North Canol Road with only one main crossing midway over Upper Hess River 3 miles south of Jake Lake.

1972 PROGRAM

The 1972 exploration program was started July 11, 1972, as a search for lead-zinc replacement, tungsten and high-grade silver-lead deposits in that order of priority, with Thor Skonseng and Robert Etzel as prospectors and the writer as geologist and prospector.

To date silt and soil sampling and prospecting has been carried out from seven fly-camps set out by helicopter, Fido Creek July 11 to 16, Pass to Johnny Creek July 16 - 22, Johnny Creek July 22 to 29, head of Greg Creek July 30 to August 11, the "main showing" area August 12 to 26, a pass to the west August 26 to September 1, and Mt. Aho September 2 to 4.

From the first camp, sampling and prospecting southest of Fido Creek to Old Cabin Creek yielded some high geochemistry and Skonseng discovered float of massive galena with tetrahedrite on July 13, 1½ miles north of the camp. From the next camp two lead-zinc float occurrences were found down Johnny Creek and lead-zinc, copper-cobalt, barite and pyritic alteration were found to the south and west, some of it on the northwest end of the original Greg claims. From the Johnny Creek camp tetrahedrite-galena mineralization was discovered in porphyry on the south bank of the creek.

The first assays, available to the writer July 26th enroute to Vancouver, showed 498 oz/ton silver and 65.1% lead from the first discovery (Inca Showing) and values of 11.0, 22.36 and 67.08 oz/ton silver in samples from Upper Johnny Creek.

Upon return to the project on August 7, the writer found that on August 3 Skonseng had discovered several tons of massive galena-tetrahedrite float (Showing No. 6)at the northwest

end of the former Greg claims. On August 8, the writer examined Showings No's 1 and 6, sampling the latter, while Etzel also discovered coarse galena near Showing No. 3. On August 9 the writer examined Showing No. 3, sampled Etzel's nearby coarse galena, found silver-lead-antimony-arsenic float down Oso gulch, and examined Showing No. 4 ("main showing") for the first time.

With 498 oz/ton silver from the Inca discovery, similar appearance of No. 6 mineralization; 205 oz/ton silver from former sampling of No. 3; impressive length, width and presence of tetrahedrite and galena in No. 4; and the geologic environment, it became obvious that this district had more potential than previously recognized, and that the "main showing" should be drilled as soon as justified by trenching and sample results.

Accordingly, camp was moved to the west side of the main showing; August 12 to 18 were spent trenching, sampling and mapping, then the writer flew to Faro, telephoned Brock in Vancouver, sent samples for assay and returned August 21. Plata Nos. 1 to 32 claims were staked to cover the main mineral showing August 18, 19, 21 and 23, and further float discoveries were made on the claims in the course of staking. On August 25 John Brock and Gordon Davis arrived, along with John O'Neill for trenching, bringing assays from samples taken August 8 to 17. Diamond drilling of the main showing, linecutting and soil sampling to the south, geologic mapping, trenching and further general prospecting and soil and silt sampling were decided upon.

GENERAL GEOLOGY

Rocks in the district consist mainly of Devonian-Mississippian red brown grey and black slate, dark chert, chert-pebble conglomerate, quartzite and minor limestone, in that order of abundance. These rocks strike E-W to W-NW and dip 45 to 70 degrees southerly in the south half of the district. North of Johnny Creek, rocks consist of rusty-weathering quartzite, dolomite and lesser limestone intercalated with red, gree and grey slates, overlain by thicker red slates and chert-pebble conglomerate, dipping partly N-NE. Lithologic similarities suggest that these northern rocks may be of similar age rather than Proterozoic. They appear to be overlain by a patch of altered volcanics of presumed Permian age on Mt. Skonseng at the northeast end of the range.

The above rocks may be isoclinally folded or displaced by bedding-plane faults but, except for larger antiform structures around Johnny Pass, only folds of a few hundred feet amplitude are obvious. Some of this folding appears to be commonly late-stage, characterized by chevron crests, fractured or faulted.

The range is bounded and cut by northeast linears, at least two of which appear to be faults of unknown displacement with breccia cemented by quartz and minor carbonate and pyrite, giving rise to some rust seepages (e.g. S. Mt. Aho, Middle Greg Crk.), and the Inca showing lies on such a structure.

N-NW-trending zones of faulting with probable right lateral strike-slip displacement cut the range on the south flank of Jonny Creek, and on Mt. Etzel. The Plata fault zone strikes 150°, appears to dip 65° SW, is closely followed by a porphyry dike and contains quartz with manganiferous siderite, pyrite and arsenopyrite. Several mineral showings on the Plata claims follow this zone of faulting.

Minor N-S vertical fractures filled with quartz and carbonate sometimes faulted and also mineralized, occur in most of the area.

Bedding plane fractures with faulting and mineralization, like the main showing, occur subsidiary to the NW faults.

Small granitic stocks with minor pyrrhotite halos intrude the northwest side of Mt. Etzel, a locality to the west, and the south flank of Mt. Skonseng, all reflected by aeromagnetic anomalies. These are part of the general intrusive arc of the Mackenzie Mountains, extending from the McQuesten-Keno Hill district through this region and southeast past the Tom lead-zinc and Canada Tungsten deposits. Although tungsten is reported by the G.S.C. west of Mt. Brodell on the southeast side of Fido Creek valley, no significant mineralization has yet been found around these stocks in the Bostock Range.

Quartz-muscovite porphyry or aplite occurs in several localities as dikes and sills (e.g. Plata zone and Johnny Creek). Along the Plata zone the porphyry is pyritized and cut by stringers of quartz, tetrahedrite, galena and sphalerite. It appears to be closely related in time and space with faulting and mineralization, but predating mineralization.

MINERALIZATION

Silver-lead-zinc mineralization has been found over an area 8 miles E-W by 4 to 6 miles N-S in the centre of the Bostock Range. Gradations of mineralization found to date include quartz-tetrahedrite veins, galena veins, galena-sphalerite-tetrahedrite veins, siderite-sphalerite-galena replacement in limy sections and arsenopyrite-pyrite-galena-boulangerite(?)-tetrahedrite veins. Chalcopyrite is a common minor constituent and some erythrite was also found. Nearly all of the former

occurrences sampled to date are characterized by galena and tetrahedrite carrying high silver values. Showings 3b and 2S, and veins in limy replacements have a lower silver content but still have about 1:1 silver/lead ratio (oz/ton Ag/% Pb).

Although high lead anomalies in silts and soils have been the chief guide to discoveries to date, some occurrences do not appear to cause high anomalies and silver-rich quartz-tetrahedrite mineralization or silver mineralization alone may cause only modest copper anomalies, if any at all. Therefore, antimony, arsenic and silver itself are being considered as possibly better indicators than lead, zinc and copper which are currently being used.

The various showings are described as follows:

No. 1 (1969) (Elev. est. 5300')

Partially exposed irregular siderite replacement lens about 50' presumed length, maximum width up to 20 feet plus, with minor quartz, irregular sphalerite, local galena with minor specks of tetrahedrite in one spot. Minor massive galena float at N. end of exposure. Appears to be replacement of hanging wall of limestone band 155°/0-30W overalin by a few feet to 20 feet of rusty quartz-veined quartzite. Vein float and fault gouge to south suggests faulting in vicinity of quartzite. Assays reported in 1969: 8.76 oz/ton Ag, 9.45% Pb; 35.6 oz/ton Ag, 36.92% Pb, 1.54% Zn (1:1). Grab samples by Skonseng in 1972 showed similar values.

Appears to be related to Plata fault zone.

No work recommended at present

No. 2NE, 2SW, 2S (Elev. est. 5500', 5700', 5000')

2NE - (not examined) - well exposed siderite replacement (?50' x 200'?) in limy section cut by N-NE faults. Grabs 5.8 oz/ton Ag, 9.8% Pb, 27.2% Zn; 68.7 oz/ton Ag, 63.7% Pb (1:1).

2SW - One oxidized vein fault which assayed 113.5 oz/ton Ag, 69.1% Pb, and second partly exposed from which galena-tetrahedrite float assayed 435.2 oz/ton Ag, 51.2% Pb.

2S - Vein zone reported 3' wide, forks at gulch S. of 2SW, grab of coarse galena in quartz 48.3 oz/ton Ag, 41.8% Pb.

These showings should be mapped and examined in detail and 2SW should be trenched.

No. 3a (1969) 3b, 3c, 3d (Elev. est. 5000')

3a - Coarse to fine-grained banded galena with tetrahedrite and minor sphalerite, some azurite and malachite in vein 2 to 12 inches wide exposed over 10 feet, localized in 160/65° SW fracture at contact of 200' by 50' quartzite lens 120/70 SW underlain by slates. Minor galena in fractures in the quartzite, vein appears to pinch out in slates with poorly mineralized quartz-carbonate float along strike to north. 1969 grab assays: 90.2 oz/ton Ag, 87.15% Pb, 0.41% Zn, 0.18% Cu; 205.9 oz/ton Ag, 70.20% Pb, 0.72% Cu. (3:1).

3b - Massive very coarse-grained galena (up to 6" crystals) in several blocks of float up to 8 x 12 x 18 inches, several hundred pounds total, appearing to originate in area of grey chert float amid grey slate. General chip sample of float (1972): 97.7 oz/ton Ag, 83.6% Pb. (1:1)

3c - (South of 3a) - Massive fine to coarse banded galena with tetrahedrite 0-2' wide attitude 150-170/70-V in slate, length not exposed. Abundant similar float down gulch,

including float concentration in creek near 0+00 on No. 4 baseline. (This may have another source, perhaps even an extension of No. 4). Assay of vein in place and associated float; 113.46 oz/ton Ag, 69.1% Pb.

3d - Float of yellowish-stained quartz with arsenopyrite, boulangerite(?), tetrahedrite, pyrite, galena, sphalerite and minor chalcopyrite identical to No. 4 mineralization. Some massive sulfides, mainly boulangerite(?) appears to be localized along 150° trending vein fault where it is overlain by No. 3 quartzite lens. Abundant similar float to maximum 12" width in gulch below; general assay: 0.54 oz/ton Au, 147.3 oz/ton Ag, 11.2% Pb (13:1).

The above showings appear to be localized along or adjacent to Plata vein faults which strike about 155-160° and dip 65° SW, also exposed in the west fork of Oso Gulch where slickensides pitch about 20° south and suggest right lateral movement. No. 3a appears to be on the hanging wall, 3d within, and 3b and 3c on the footwall side of a fault which carrie quartz and manganiferous carbonate to the north and south and produces a rust seepage in the gulch containing float from 3c.

Trenching should be done to expose Showing 3c and perhaps 3d for better examination and evaluation along with detailed mapping of the area to determine localization and controls. Efforts should also be continued to determine if other veins exist, or if No. 4 extends into this area. It is conceivable, considering the nearby occurrence of No. 4, that these showings could be leakage mineralization from a larger deposit at depth, although the overall homogeneity of incompetent rocks (slates) in the area do not appear to favour this. Sections of more competent rocks along the strike of the fault zones in the timbered valley of Greg Creek appear to be structurally more favourable.

No. 5

Bornite, covellite and malachite in quartz veins in a quartzite lens in red slates. Reported in 1969 as being of no economic significance.

No. 6 (Elev. over 5000' on exposed saddle)

Float concentration of several tons of massive banded to coarse galena with tetrahedrite, azureite and malachite, minor sphalerite mainly at toe of frost heaved hump of "black ozides". May extend easterly to area of manganiferous gossan on saddle next to main Plata fault; possible extensions in other directions covered by talus from N and S, but thought to strike west towards a fault. Yellow-green oxidized float similar to No. 4 float on NE side; arsenopyrite in quartz on spur to N; oxidized vein material and galena float to SE near porphyry dike and Plata fault. Fault extends 145° to SE, widens to 100' of black gouge (.38 oz/ton Ag) and continues as several sub-parallel faults through No. 3 showing area, followed by porphyry dike on footwall. To northwest, faults may split and continue into Johnny Creek along with porphyry dike, high geochem, rust seepages, pyritization and float occurrences. Assays: Skonseng's grab of float .02 oz/ton Au, 681.86 oz/ton Ag, 71.8% Pb, 3.23% Zn, 0.14% Cu; and 94.02 oz/ton Ag, 85.1% Pb; Aho's bulk sample of float .02 oz/ton Au, 326.2 oz/ton Ag, 73.2% Pb; Aho yellow-green float .02 oz/ton Au, 18.0 oz/ton Ag. A grab sample of manganiferous gossan gave 1.56 oz/ton silver, of galena in siderite to the southwest 11.44 oz/ton silver, 15.8% lead and 3.36 oz/ton silver, and of "black oxides" 16.8 oz/ton Ag, 1.65% Pb.

Detailed mapping should be done in this locality to establish geology and possible structural controls and the float area should be trenched to determine width and extent of source, potential of which is unknown. Float of shipping grade should be carefully staked aside from workings. As soon as sufficient

information is available to justify further work, it is suggested that a small prospect shaft be sunk on the best section (on a lease-development or participation basis?) for two reasons: (a) drilling may be extremely risky and costly for initial evaluation of what may prove to be irregular chimney-like shoots, whereas a shaft would give more information and pay for itself in ore extracted, (b) personal incentives should be considered to expedite work under such exposed conditions.

Upper Johnny Creek

Along the northwest strike of the Plata fault zone, Skonseng and Etzel found abundant barite in sediments, pyritized chert and quartzite, rust seepages, high lead and zinc geochems and oxidized float which assayed 22.36 oz/ton Ag and 22.3% Pb (1:1). Near the junction of the south fork of Johnny Creek, Etzel found float of quartz with galena and sphalerite assaying 11.0 oz/ton Ag, 14.7% Pb and 16.4% zinc. Small stringers of quartz with tetrahedrite occur in porphyry up the creek. Source of the above float and high geochems has not yet been found.

More detailed prospecting, soil sampling, mapping, and follow-up work is needed to explore this promising extension of the Plata mineralized zone. Proximity to quartzite, dolomite and limestone; presence of porphyry and intersection of the Plata faults with the Johnny Creek antiform structure; its section of both competent and chemically favourable rocks (dolomite, limestone); and presence of porphyry make this an especially attractive exploration bet.

Lower Johnny Creek

On the south bank of Johnny Creek, about 3 miles north of Mt. Aho, at about 2800' elevation, tetrahedrite, galena and minor sphalerite occur in quartz stringets up to 4 inches wide in a

30' wide slumped porphyry outcrop with a small associated rust seepage and high zinc geochems. An assay yielded .01oz/ton Au, 115.71 oz/ton Ag, 4.40% Pb, 3.30% Zn and 0.75% Cu

It is recommended that in 1972 Johnny Creek itself be sampled from the mouth upstream . Further prospecting and mapping of the area should be carried out with a view to staking, with grid soil and silt sampling in 1973 to provide a basis for judging what further exploration should be done on this potentially favourable geology.

Although this occurrence itself appears to have no economic potential it establishes the presence of high grade mineralization in this locality which is otherwise masked by glacial till, making geochemistry of doubtful value in the valley which is the main area of interest.

Inca Showing

About 2½ miles E-NE of No. 4 showing, massive float of galena with tetrahedrite occurs at about 4700' elevation at the foot of a chert talus slide with vein quartz and slickensided quartz-cemented breccia, with an accompanying rust seepage and high geochems down slope to the southwest and what appears to be black fault gouge to the east (the latter not examined). The float assayed a trace of gold, 498.0 oz/ton Ag and 65.1% Pb.

The main vein zone giving rise to the galena float and rust seepage appears to be strong but is not exposed. This locality needs further prospecting, examination, mapping and trenching to determine economic potential. Above the talus a brecciated chert outcrop is cut by quartz veining approximately N30^{o}E/V

No. 4 ("Main Showing")

This is a banded quartz-sulfide vein zone exposed for 700 feet strike length, 250 feet vertical, over 10 feet true width, striking about N80°E and dipping about 45°S, parallel or sub-parallel to wall rocks and their foliation. Total true width is unknown since the hanging wall is not exposed. Footwall rocks consist largely of black and brown slate with minor quartz-veined lenses of grey chert apparently striking about E-W and dipping moderately to steeply south. Float of galena-rich quartz and massive fine-grained galena originates from the footwall side of a more quartzose section of the vein which is exposed in several outcrops up to 10 feet true width. Below that there is no exposure of the remaining width of the vein zone but thousands of tons of mineralized float form a prominent yellowish-grey talus area 400 feet by about 300 feet in extent, visible for miles. Width of the mineralized zone could be in the order of several tens of feet. No hanging wall rocks are exposed but abundant rusty limy quartzite float suggests that such rocks, probably with slate interbedded, forms the hanging wall section.

Possible extensions both east and west remain open. On the east the float area terminates in slate talus and overburden but lead and zinc anomalies in sidehill soils from both sides of Huevon Gulch about 800 feet to the east suggest possible continuation. On the west the zone can be traced downhill into gossan with steel galena float in deeper overburden at the present camp, and the zone is not exposed on the opposite side of Oso Gulch. Although similar mineralization occurs in Showing 3d this does not appear to be an extension. Soil samples now in for analysis may shed further light on possible extensions. Hand trenching has been attempted to more fully expose the mineralized zone in several localities, but only the footwall section could be dug out.

Mineralization consists of varying concentrations of quartz, arsenopyrite, pyrite, galena, tetrahedrite, boulangerite(?), sphalerite and minor native silver(?). Most of the major tonnage of float is well mineralized and all of the assays indicate a high silver-lead ratio, with some correlation between gold and silver content. Sampling results are as follows:

	Gold oz/ton	Silver oz/ton	Lead %	
Bulk, east float area	.21	52.5	1.50	
Bulk, west float area	.22	40.2	3.10	
West exposure 30' chip (10' true)	.16	58.5	14.8	
Float, footwall in area of 30' chip	.22	201.7	20.2	
Tetrahedrite rich float, 8+10E	.61	105.0	-	
Chip (5; true) W. trench	.24	7.64	1.25	
Massive fine-grained sulfides W. trench	.14	11.5	1.90	
Float in gossan above camp	.18	15.9	10.2	
Skonseng grab FW. near 30' chip	.20	155.68	11.5	2.16 Zn .73 Cu

If it is assumed that the mineralized zone extends down dip to camp elevation and is 10 feet wide, it would contain 200,000 tons. Greater widths or extensions on strike or down dip would obviously multiply this figure. Moreover, indicated values are within economic range, thus the zone is obviously an immediate drill target and a drill program has been laid out

to test the tonnage and grade potential. However, due to variability of the mineralization, drilling will give only an indication and, assuming reasonably favourable results, a follow-up underground program will be necessary for adequate evaluation.

With this in view, it is strongly recommended that with the first indications of favourable drill results, plans should be laid for constructing an airstrip and road to a suitable camp and portal site later this fall since access will not otherwise be possible until seasonal frost has disappeared from sidehills next summer, thus incurring loss of a season.

SUMMARY

The Plata Project area is a newly discovered silver-lead district with mine-making potential.

High silver content and variety of showings combined with favourable and varied geology increase the probability of existence of one or more economic deposits in spite of current remoteness from roads and facilities. Precious metal values up to 0.6 oz/ton gold and 682 oz/ton silver have been found. Some characteristics of the geology and mineralization resemble that of the Keno Hill district which lies in the same metallogenic belt.

No. 4 (Main Showing) is exposed for 700 feet length, 250 feet vertically and is in excess of 10 feet in width, open in strike and dip with indicated values in the range of 0.2 oz/ton gold, 40 oz/ton silver and perhaps 5-10% lead. Diamond drilling is being started.

No. 6 Showing consists of several tons of massive galena float averaging 326 oz/ton silver and 73% lead, dimensions and extent unknown, may extend westerly, trend similar to No. 4.

The Inca Showing, from which a grab sample of float gave 498 oz/ton silver and 65% lead, appears to be a strong structure.

Numerous other showings and localities of high lead, zinc or copper geochems suggest potential for other significant deposits, over an area of about 8 miles by 6 miles in extent.

A staking program has been laid out to cover all significant favourable localities known to date.

Further fill-in prospecting and geochemistry are being done to complete coverage of the area before end of September.

Geologic mapping of the most significant mineralized localities is to be done in conjunction with the drill program on the main showing.

Linecutting and grid soil sampling are to be completed in the main showing area.

RECOMMENDATIONS

1. Diamond drilling of No. 4 showing, now being started, should be directed toward quickly establishing justification for underground evaluation so that an airstrip and tote trail can be established later this fall for access early next season. Plans for this phase can be advanced now in order to expedite the work as soon as justified by drill results. Extensions should be sought by soil sampling and possibly geophysics.

2. No. 6 showing should be trenched as soon as possible to determine nature and extent of source. A prospect shaft might then be considered as an alternative to drilling because of the direct shipping grade of the mineralization.

3. The valley of Greg Creek should be soil sampled on a grid before end of this season in order to outline possible extensions of the main showing and other targets.

4. The Inca showing should be trenched if possible this season and the area prospected and examined in more detail to better evaluate it.

5. Showings 2SW, 3c and perhaps 3d should be trenched for further evaluation and structural data if possible this season.

6. In 1973 follow-up prospecting, grid sampling, geologic mapping and trenching and other physical exploration should be continued on several promising localities outlined by the end of this season.

A. E. Aho

September 13, 1972

GALENA FLOAT

ARSENOPYRITE, TETRAHEDRITE, JAMESONITE, GALENA IN QUARTZ

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00

BASELINE

GLACIAL COVER

PATCHES OF SLATE TALUS TO 0+00 @ CREEK

MASSIVE GALENA FLOAT

VEIN (FOOT WALL ZONE)

FLOAT

PM SPK FL. TALUS

5' TRUE WIDTH FROM WALL

FOOTWALL BLACK SLATE

SLICKED VEIN

X STEEL GALENA

GOSSAN

STRIKE OF GOSSAN AREA ?

(HANGING WALL) RUSTY QUARTZITE FLOAT

PROPOSED PORTAL TRENCH

VEIN TRACE

FOOT WALL VEIN TRACE (IF CONFORMABLE TO CLEAVAGE)

HANGING WALL VEIN TRACE (IF CONFORMABLE TO CLEAVAGE)

GALENA QTZ. ASPY. FLOAT

SCRUB BALSAM OVERBURDEN SURFACE SLOPE

Zn + Pb FLOAT

SLATE MINOR QUARTZ

+7' TRUE WIDTH OF F.W. EXPOSED

MINOR FLOAT

VEIN

VEIN FLOAT

STEEL GN. GN. T&T. ASPY. PY

8-10' TRUE WIDTH NO H.W. OR F.W. EXPOSED

FROST HEAVED VEIN

VEIN FLOAT

STRIKE OF VEIN

QTZ. QTZ.

MIN. QTZ.

RUSTY SL. TALUS

MIN. FL. PY ASPY GN.

QTZ. QTZ.

QUARTZ FL.

BROWN TO BLACK SLATE TALUS

RUSTY QUARTZITE

MINERALIZED FLOAT IN SLATE TALUS

GALENA FLOAT

FLOAT

(AREA OF WELL MINERALIZED BOULDERS OF GALENA AND LEAD OXIDES)

STRIKE OF VEIN AT TRENCH

TET. 20.7%

TETRAHEDRITE AND ARSENOPYRITE IN QUARTZ.

WELL MIN OXIDIZED FL. & H.W. FL.

X TCT. IN QTZ.

AREA OF MASSIVE BLOCKS VEIN FLOAT

DDH 1 -50°

DDH 2 -45°

DDH 3 -45°

DDH 4 -90°

DDH 5 -50°

inches 0 1 2

centimetres 0 1 2 3 4 5

This reference scale bar has been added to the original image. It will scale at the same ratio as the original therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

DYNASTY EXPLORATIONS LIMITED
YUKON 105-NB

PLATA MINERAL CLAIMS SHOWING NO. 4

SURFACE GEOLOGY

LEGEND

- MINERALIZATION IN PLACE ——— ×
- MINERALIZED FLOAT OCCURANCE ——— △
- OUTCROP LOCATION ——— ⬭
- PROJECTED CONTACTS ———
- HAND TRENCH ———
- PROPOSED DIAMOND DRILL SET-UP ——— ○ DDH 4

MAPPED BY : A.E. AHO DATE : AUGUST, 1972

SCALE : 1" = 50'