### TARGET EVALUATION PROGRAM

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RE: TERAKTU CREEK PL 9564 FILE # 95-049 JOE McINROY

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# LOCATION AND ACCESS- TERAKTU CREEK NTS MAP SHEET #105-E-9 (BIG SALMON GOLD FIELDS)

74 air miles, or 150 kilometres of winter road, from Whitehorse. At this time, the airstrip, known as D'ABBIADE, is used. Then, a 4x4 road of 20 kilometres south, is used to get to Teraktu Creek.

#### TARGET EVALUATION PROGRAM

RE: TERAKTU PROSPECTING LEASE 9564 NTS MAP SHEET #105-E-9

March 15-- Equipment left Whitehorse enroute to Teraktu Creek. April  $P1_{i}$ -- brought equipment from Livingston to Terake<sup>4</sup> This entailed opening up 50 kilometres of winter trail, using a D-8 Caterpiller for assistance, and bringing through a backhoe, test plant, welder and water pump.

April 18-- equipment delivered to site. We then flew into Whitehorse for supplies and to arrange additional gear to commence program. (this included fuel and lube, groceries, parts, and misc.) May 1-- flew in fuel and men. Grubbed airstrip.

We drove an additional 13 kilometres from the airstrip to Terakty, using a Ford 4x4, powersaws, and men in order to have the road accessible. We then set up camp. We walked over and assessed areas to be tested for future development. Trenching and testing sites were cleared with the backhoe as prior prospectors had said the ground was frozen.

May 7-- we completed the preliminary work on the program and flew into town.

June 22-- Due to spring breakup conditions, we waited until this date to commence test program and development. We flew in three men, additional fuel and supplies, and arrived at the site at midnight.

June 23-- Test pits #1 and 2 were dug. Pump, test plant, and diversions were set up so that the discharge of water would not re-enter the creek. Modifications were made to the test plant.

#1-pit was dug approximately 70 feet from the creek, to a total of 8 feet in depth. In order to dig this and #2, it was necessary to clear off some moss and trees. We dug #2 approximately 40 feet from the creek, to a total of 8 feet in depth. June 24--We processed the materials from #1 and2(individually. Evaluation:

#1- carrying approximately \$5 per cubic yard of 200-30 mesh
gold, garnets, coarse and fine black sands.

#2- carrying approximately \$5 per cubic yard gold200-30 mesh, garnets, coarse and fine black sands.

June 25--we backfilled the test holes.

June 26--Move to new test site, approximately 2½ miles upstream, taking backhoe, testplant, and pump.

June 27-- Dug test pit #3, approximately 300 feet from the camp site. 2 feet sand, 5 feet assorted riverbed gravels, and reached water at a total of 8 feet in depth. Stockpiled three cubic yards of gravel.

June 28-- Processed materials from test #3. Evaluation:

#3- carrying approximately \$5 per cubic yard of gold, also garnets, coarse and fine black sands. We then moved to test site #4, dug the pit approximately 45 feet from the creek, to a total of 12 feet in depth. 2 feet sand, 2 feet boulder layer, 4 feet assorted riverbed gravels, before reaching water. Evaluation:

#4- as carrying approximately \$5 per cubic yard in flat flake gold, 80-200 mesh, garnets, coarse and fine black sands.

June 29-- moved to test #5, and dug approximately 45 feet from the crtet, and approximately 30 feet from test #4. We dug 5 feet sand, 5 feet assorted riverbed gravels, 3 feet rusty gravels and clayish material which was stockpiled and tested separately. Total 13 feet in depth. Evaluation:

#5- rusty gravels as carrying approximately \$5 per cubic yard in gold, clayish materials as carrying approximately \$5 per cubic yard in gold, flat flakes to 20 mesh, dust dust gold to 200 mesh, garnets, coarse and fine black sands.

June 30--Moved to test #6, dug approximately 75 feet from the creek, We dug 2 feet sand, 6 feet assorted riverbed gravels, 6 feet boulder and assorted riverbed gravels, boulders being up to 18 inches, for a total depth of 14 feet. 3 cubic yards stockpiled and processed. Evaluation:

#6-as carrying approximately \$5 per cubic yard in flat flakes of gold to 20 mesh, dust gold to 200 mesh, coarse and fine black sands.

July1-- moved to test #7, and dug approximately 20 feet from #6, and again 45 feet from the creek. We dug 4 feet sand, 4 feet assoted riverbed gravels, varying in size, 2 feet boulder layer, boulders being up to 12-14 inches, 5 feet assorted riverbed gravels, then water for a total 15 feet in depth. We stockpiled 1 cubic yard from the 5 feet of riverbed gravels, 1 yard from the 4 feet riverbed gravels, and one yard from the combined boulder and gravel layer. Tested separately. Evaluations:

#6- approximately \$10 in gold recovered, flat flakes to 20 mesh, dust gold to 200 mesh, coarse and fine black sands. July 2&3-- We cleared and built a trail to the new test site. July 4-- moved and set up the test equipment at test site numbers 8, 9, and 10. The reason for the interest in this area is an outcrop of rimrock, approximately 100 feet in length, favorable for finding bedrock nearby.

July 5-- we dug test #8 approximately 150 feet from exposed rimrock, to a depth of 10 feet. We dug 8 feet of black muck which was mixed with frozen timber (we believe it was an old beaver dam), broke through the frost, into 2 feet of assorted riverbed gravels, before reaching water. We stockpiled approximately 1 cubic yard of riverbed gravels. We then began to process the materials, but, due to Water Board regulations, we had to stop and move the test equipment to prevent water backup.

July 6-- Crew to Whitehorse.

July 13-- We flew in fuel, supplies, and parts to the airstrip, and drove into the campsite with the first load.

July 14-- Back to the airstrip for an additional load. July 15-- We dug test pit #9 approximately 100 feet from the exposed rimrock, 50 feet closer than test #8. We dug 10 feet of assorted gravels, 5 feet of assorted riverbed gravels, accompanied by boulders up to 18 inches, then clay mixed with gravels. We dug one foot into the clay, relinquishing when we hit water. Total 16 feet in depth. 2 cubic yards stockpiled. We dug test #10 approximately 50 feet from the rimrock, and 30 feet from the creek. We dug 10 feet of riverbed gravels, assorted in size, 5 feet of boulders mixed with gravels, boulders being up to 18 inches, then clay mixed with gravels. 2 cubic yards of riverbed gravels were stockpiled.

July 16-- we tested materials from pits #8, 9, and 10,

Evaluation:

#8- coarse and fine black sands, garnets, approximately \$5 per cubic yard of 100 mesh gold.

#9- coarse and fine black sands, garnets, approximately \$5 per cubic yard of 100 mesh gold.

#10- coarse and fine black sands, garnets, approximately \$5 per cubic yard of 100 mesh gold.

July 17-- Prior to digging test pits #8, **\$**, and 10, it was necessary to first build a road into the test site area. In the building of this road, we found what seemed to be riverbed gravels. It was decided that this area would be tested. Road conditions being poor for hauling materials back down to the test area, it was decided to move the test equipment back upstream for better access and availability of water. We moved everything approximately one mile upstream from tests #8, 9, and 10.

July 18-- We dug test pit #11, approximately 300 feet to the south of #8, and approximately 60 feet higher in elevation than the existing stream. We dug 2 feet of wet clay, 15 feet of riverbed gravels, for a total of 17 feet in depth. All gravels stockpiled, and hauled to test plant for processing. Evaluation:

#11- coarse and fine black sands, approximately \$5 per cubic yard in flat flake gold to 30 mesh, and 100-300 mesh fines. Because the higher elevated gravels carried gold, we decided to test even further south from the existing stream.

July 19-- made road into the new test sites.

July 20-- We dug test pit #12 approximately 300 feet south from the existing stream. We dug 2 inches of ash, 6 feet of sand, 11 feet of riverbed gravels assorted in size but rarely larger than 12 inches, also yellowish rounded quartz were very noticeable, accompanied by a conspicuous amount of the riverbed gravel which appeared to have undergone heat, pressure, or both. Total depth of 17 feet. Approximately 3 cubic yards of the old riverbed gravels (our estimation) were stockpiled. Processed. Evaluation:

#12- approximately 1 gram of 30 mesh, flat flake gold, 100-300
mesh fines, and considerably more coarse and fine black sands
than tests #1 through 10.

July 21-- We dug test pit #13, approximately 100 feet from test pit #12. 2 inches ash, 6 feet of sand, 11 feet of riverbed gravels, rarely larger than 12 inches, and again the rounded yellowish quartz and heat or pressured riverbed gravels. Total depth 17 feet and 2 inches. Processed. Evaluation:

#13- approximately 1 gram 30 mesh flat flake gold, 100-300 mesh
fines, coarse and fine black sands.

July 22-- we dug test pit #14 approximately 100 feet from test #13. 2 inches of ash, 6 feet of sand, 11 feet of riverbed gravels, again the rounded quartz accompanied by the heat or pressured riverbed gravels. 3 cubic yards stockpiled and processed. Evaluation:

#14- approximately 1 gram of flat flake, 30 mesh gold, 100-300
mesh fines, coarse and fine black sands.
July 23-- We dug test pit #15 approximately 100 feet from test #14.

We dug 2 inches of ash, 6 feet of sand, 11 feet of riverbed gravels, for a total depth of 17 feet, 2 inches. Again present were the rounded quartz and heat or pressured riverbed gravels. 3 cubic yards were stockpiled and processed. Evaluation:

#15- approximately 1 gram of flat flake, 30 mesh gold, 100-300
mesh fines, coarse and fine black sands.

July 24-26-- as bedrock was not reached in what appears to be a bench, it was decided to attempt greater depth, and a trench, measuring 10 feet wide, 100 feet long, and eight feet deep, was put into place.

July 7-- We dug test pit #16, in what seemed the beginning of bench gravels, approximately 70 feet south, and 25 feet higher in elevation than the test # 15. We had removed 6 feet of sand during the trenching, and we dug 10 feet of riverbed gravels, accompanied by boulders up to 2 feet . Stockpiled.

July 28-- we processed the materials from #16. Evaluation:

#16-approximately 1 gram of flat flake, 30 mesh gold, 100-300
mesh fines, coarse and fine black sands.

July 29-- we dug an additional 8 feet in #16, and processed the materials. Evaluation:

#16- approximately 1 gram of flat flake, 30 mesh gold, 100-300
mesh fines, coarse and fine black sands.

July 30-- We dug test pit #17 approximately an additional 150 feet south from test #16. We dug 6 feet of sand, and dug 2 feet of riverbed gravels, which we stockpiled. The reason for digging only 2 feet into the gravels was so that we might reveal a vertical profile. Processed.

### Evaluation:

#17- Coarse and fine black sands, 20 flakes of noticeable gold. July 31-- we reconnoitered the area, mapping out possible width and length of area to be mined the next season, settling facilities, airstrip, and starting points for future mining. We winterized the equipment.

August 1-- We closed up camp, moved the welder, miscellaneous gear, and personnel to Whitehorse.

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### FINAL SUMMARY

On 11 April, we left Livingstone enroute to Teraktu Creek, with a D-8 Caterpillar, backhoe, complete test plant, 2 pickup trucks, and a total of three men. It took us eight days to mobilize the equipment to the creek and return to Livingstone with support equipment, which included a D-8 and one pickup truck. Three men were flown in on 1 May. We made preliminary assessments on testing sites, and we cleared these areas using the backhoe, as the ground was said to be frozen.

We decided to start the test program at the lower end of the stream, continuing tests in an upstream direction, as results were encouraging and should possibly be as good, or better, as we progressed upstream. Results in all test pits averaged the same in approximate values. The overburden varied in all of the test pits. Gold was recovered from test pits where there was no overburden other than vegetation. We did not recover gold from the remaining pits until the overburden was removed, which consisted of vegetation, white ash, and sand. All test pits, once the overburden was removed, carried the same approximate values. All test pits were dug to the maximum depth of the reach of the backhoe, 17 feet, unless water was reached first. Approximately 3 cubic yards was stockpiled from every pit, which seemed the most economical pattern for each test. After each test, Nomad matting was thoroughly cleaned and the concentrates were then panned. The gold recovered from each test was evaluated to approximately \$5 per cubic yard of fine, flat flakes of gold, ranging from 30-400 mesh in size.

The gravels are definitely riverbed gravels, and not a glacial till deposit. Once through the overburden, the gravels lay in a horizontal position. There is very little silt, and all gravels are washed. Every pit test revealed at least one boulder layer, ranging in size from 10 inches, this most commonly, up to 2 feet in diameter. Bedrock was not reached in any pit test, which does not concern us at this time, as gold occured throughout the gravels.

The target evaluation program went reasonably well, other than greater expenses incurred in mobilization and chartered aircraft, nedded to make airdrops of parts for unexpected breakdowns.

SOUTH FORK PLACER DEVELOPMENT found all test results to prove viable for bringing into effect a large volume mining operation.

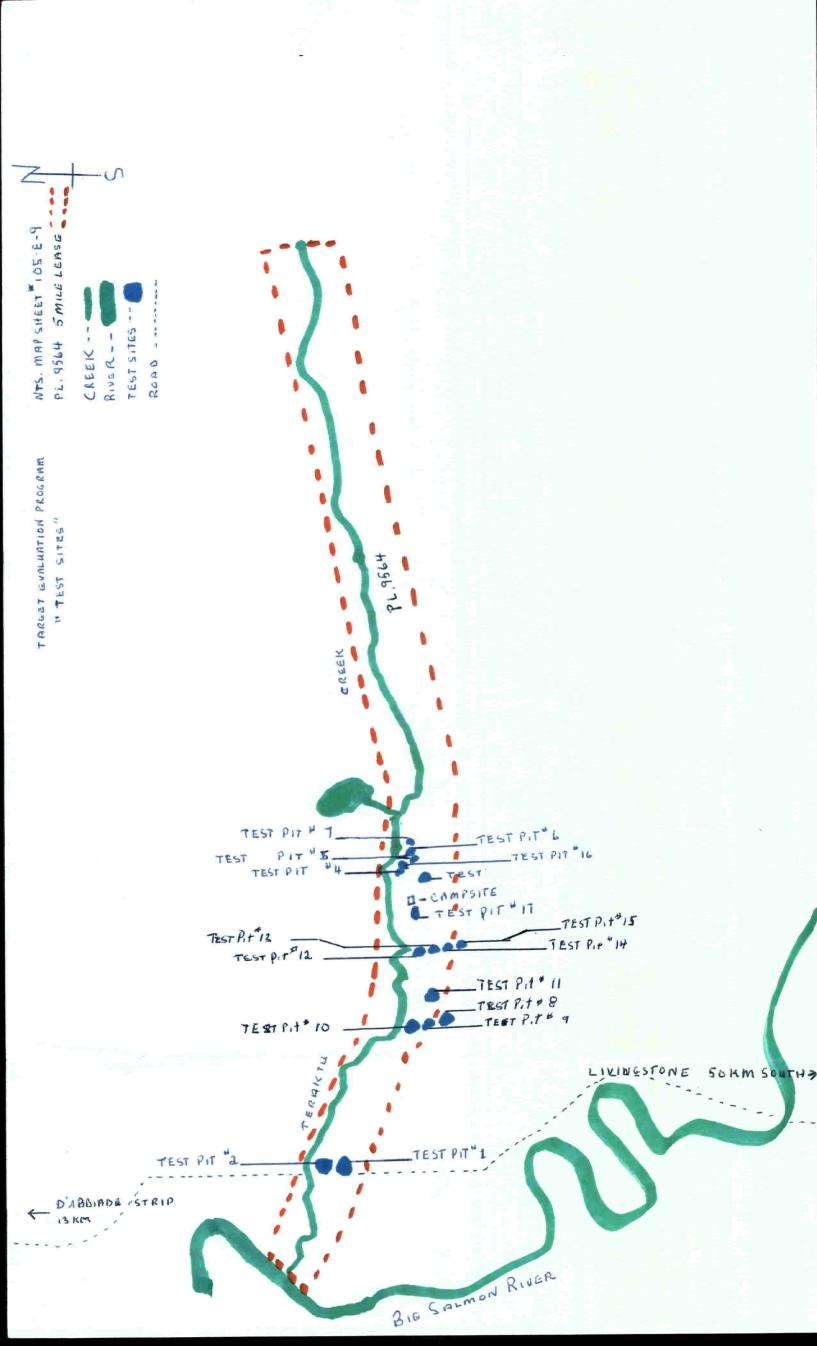
We tried to shedule local Yukon geologist, BILL LeBARGE, to be on site to assist in written geological data, to further the viability of the property. We were unsuccessful, however, in making contact with him due to his busy schedule. Five pits were left unfilled, as perhaps, later this fall, we may schedule both parties to a visit of the TERAKTU property.

It is greatly appreciated that YMIP is available to assist in projects such as this.

Sincerely,

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page 2 of 2



### RECOMMENDATIONS

The recommendation of SOUTH FORK PLACER DEVELOPMENT will be to put into place a reasonably large volume mining operation, on the TERAKTU placer property. The gold is fine and flat, ranging from 30-400 mesh, which will necessitate a fine gold recovery system for processing. The fine gold recovery system is to be decided, upon by JOE MCINROY, as to his liking or recommendation, from builders and or operators of fine gold recovery systems.



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PL 9564

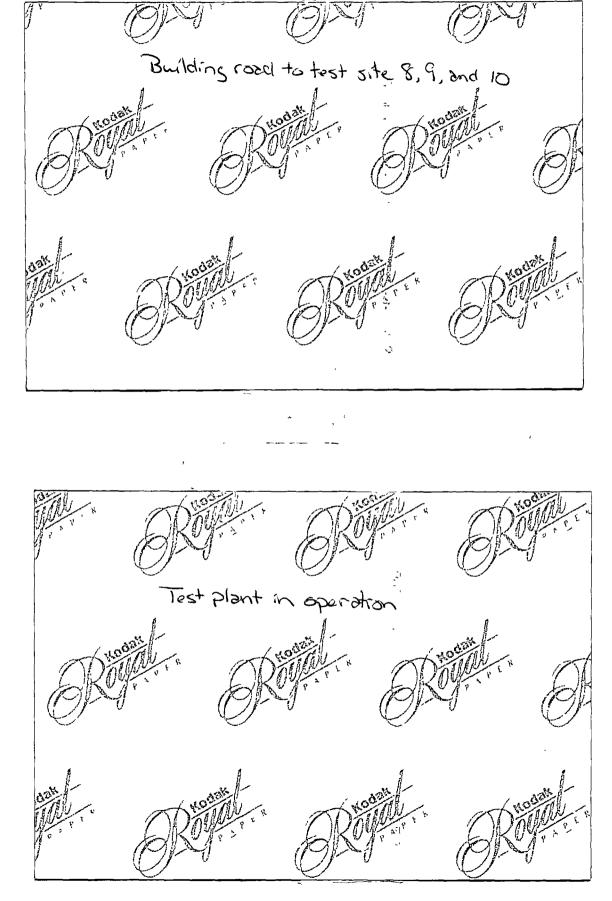
RECOMMENDED AREA TO COMMENCE 1996 MINING FROM TEST PITE AND CONTINUE UPSTREHM TO TEST PITE 16 BENCH BRAVELS OR UNDISTURBED RULE BED

LIVINGSTONE 50 KM SOUTH

SETTLING PONDS WOULD BE DOWNSTREAM OF TEST DIT "IL' INSPECTORS SCHEDULESS FOR 2ND WEEK IN AUGUST, 95

P'AGDINDE STEIP ISKM NORTH

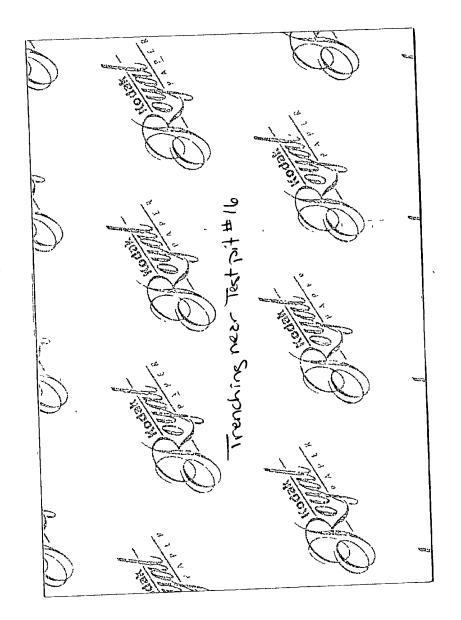


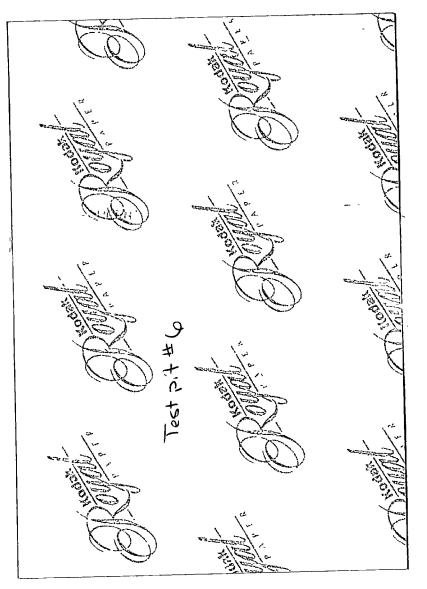


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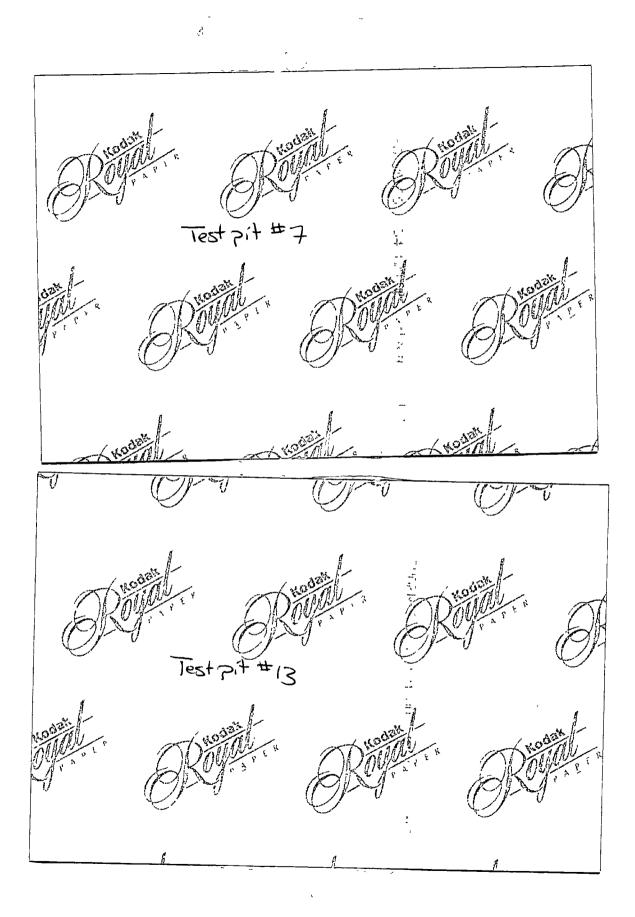
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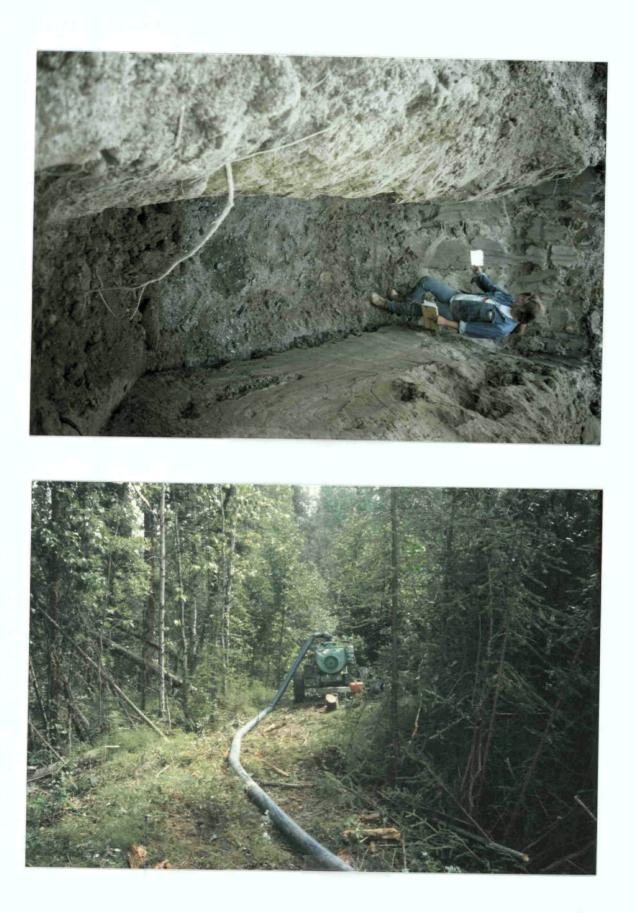


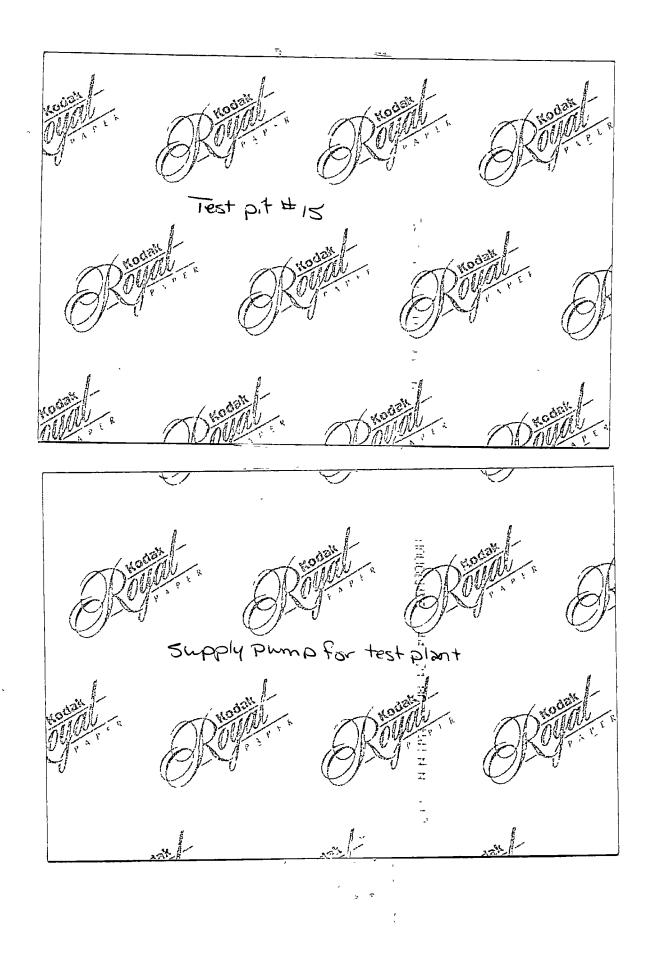




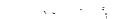


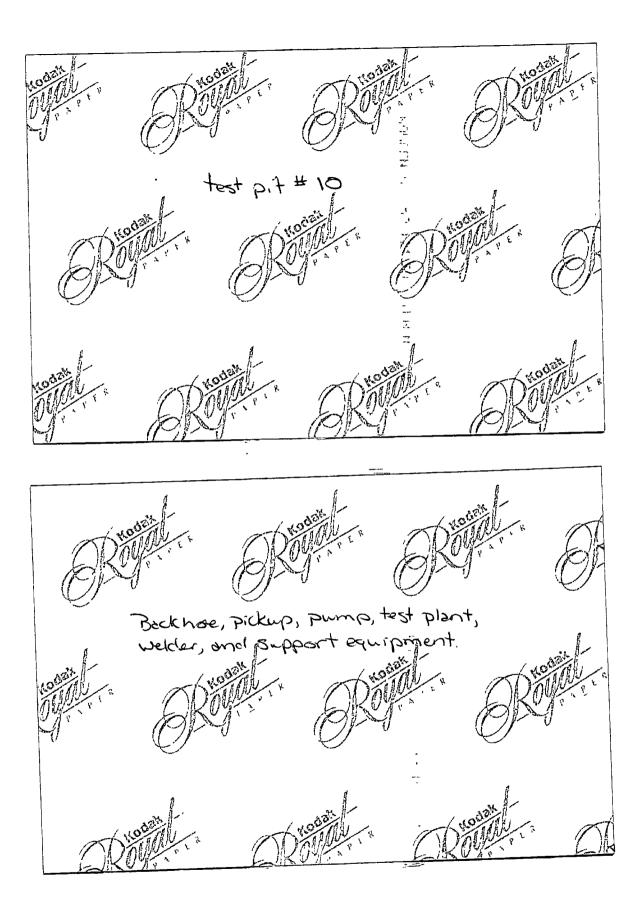


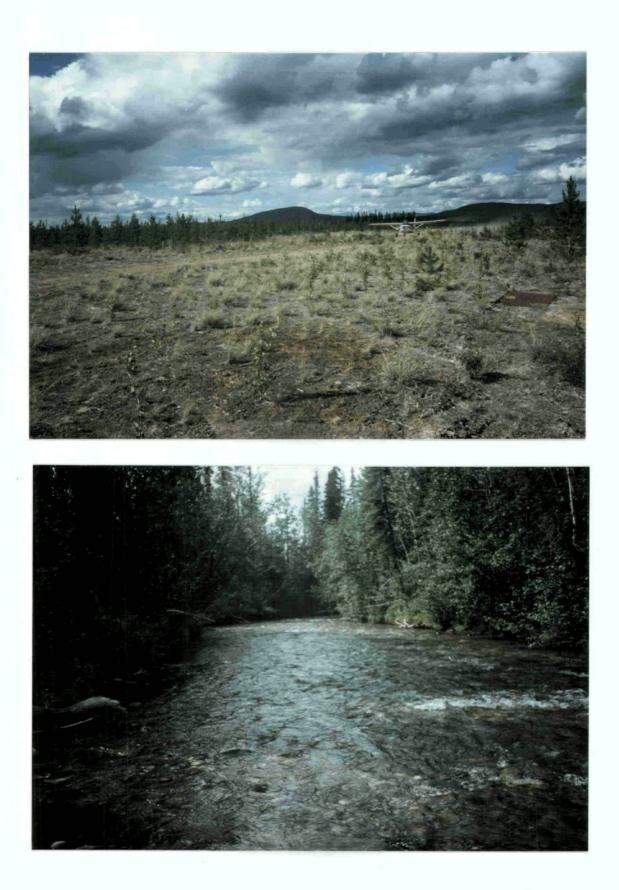


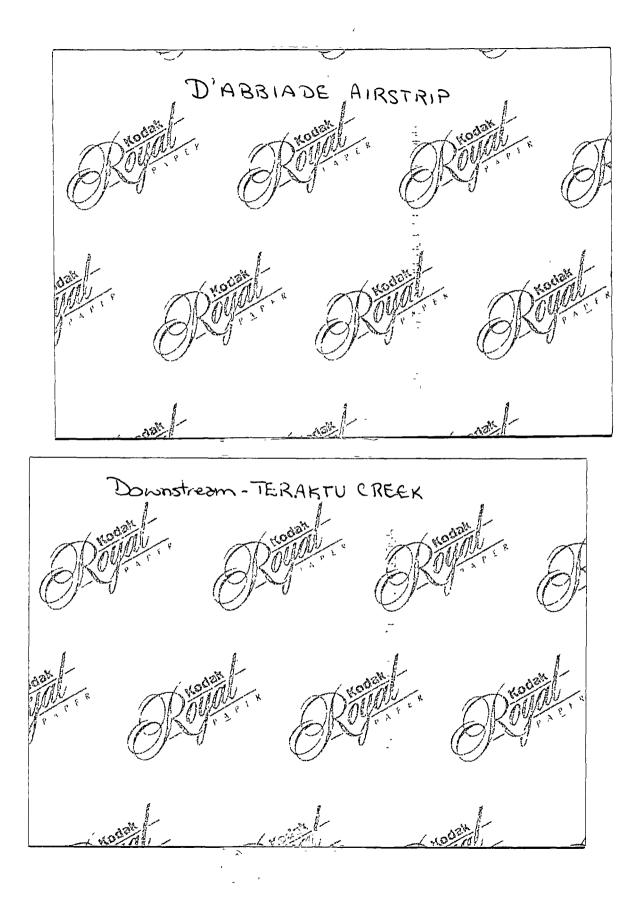


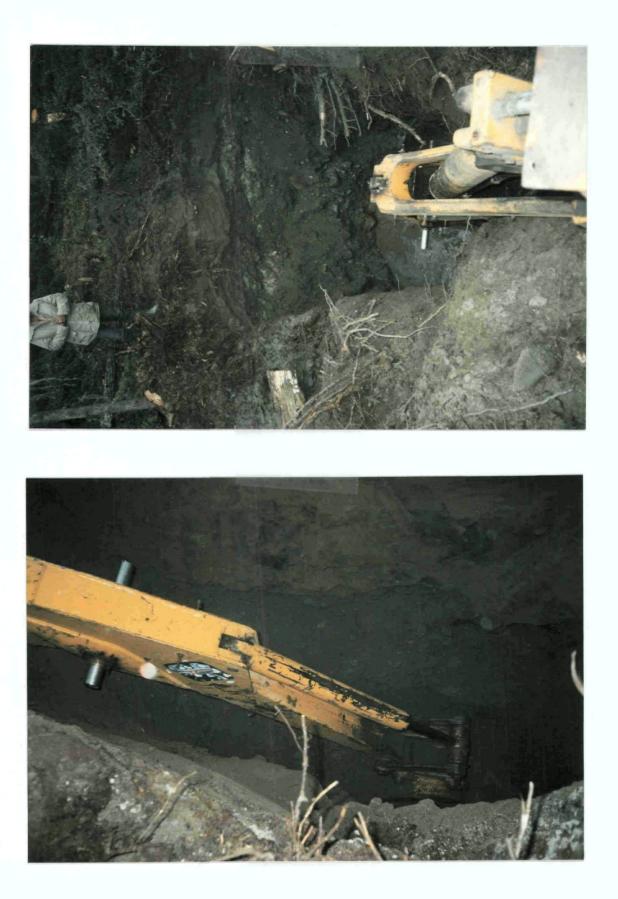


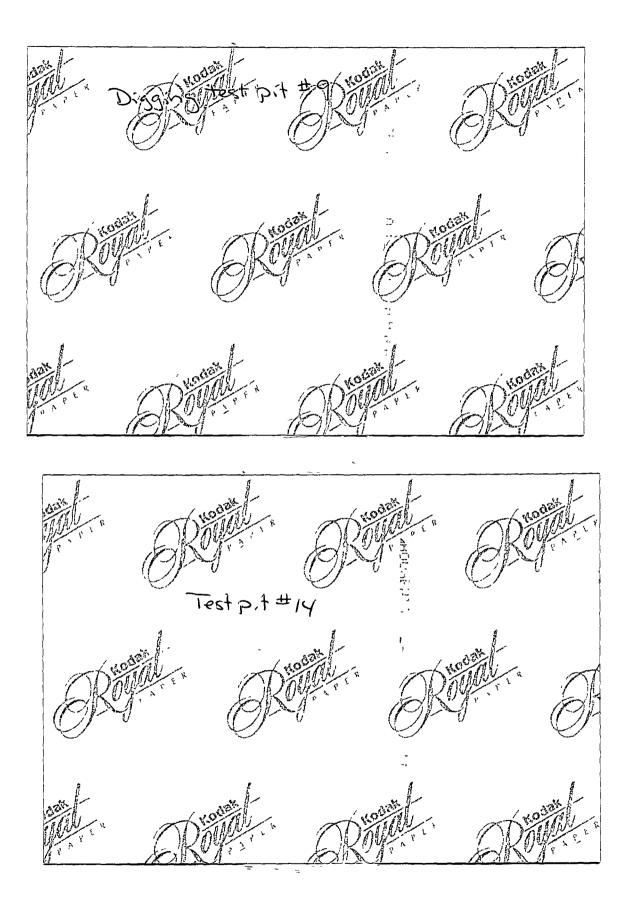


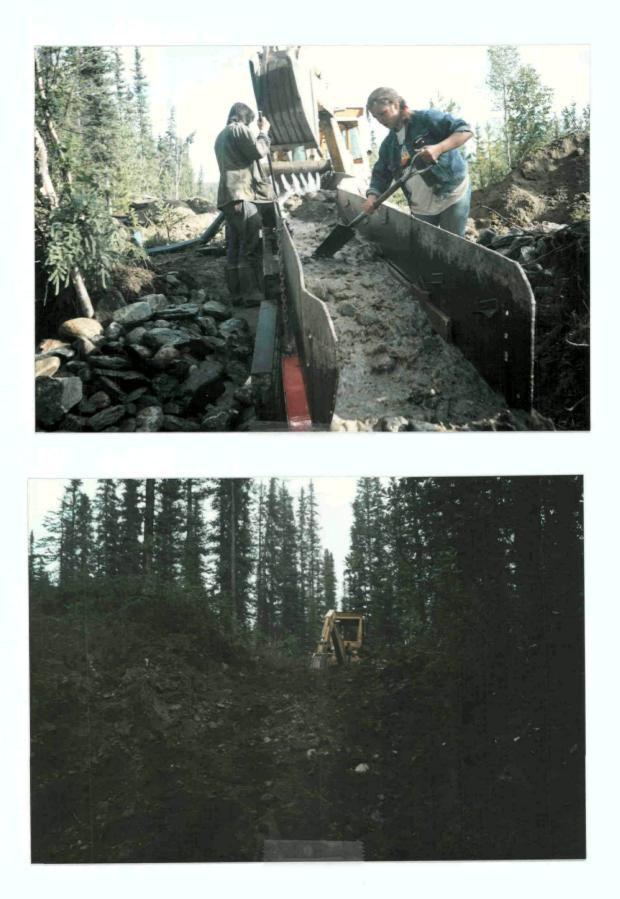


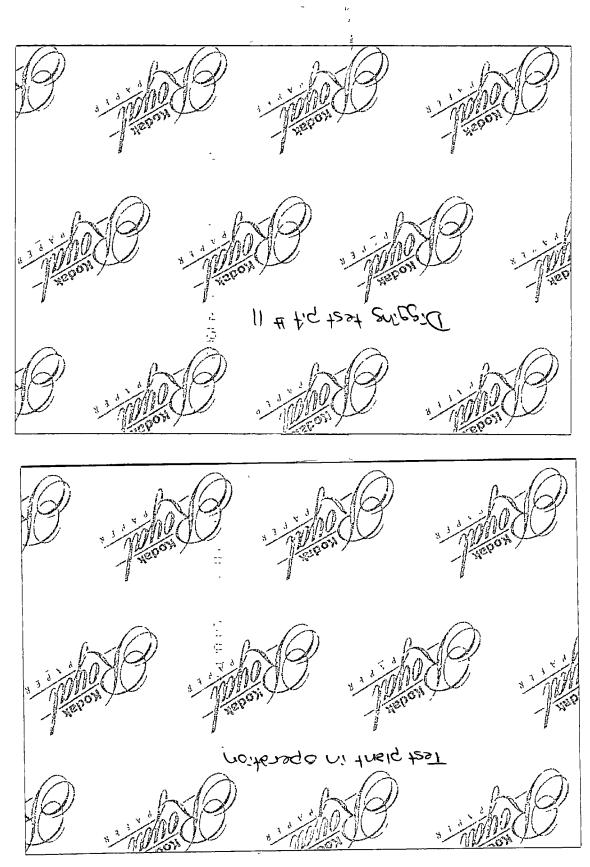






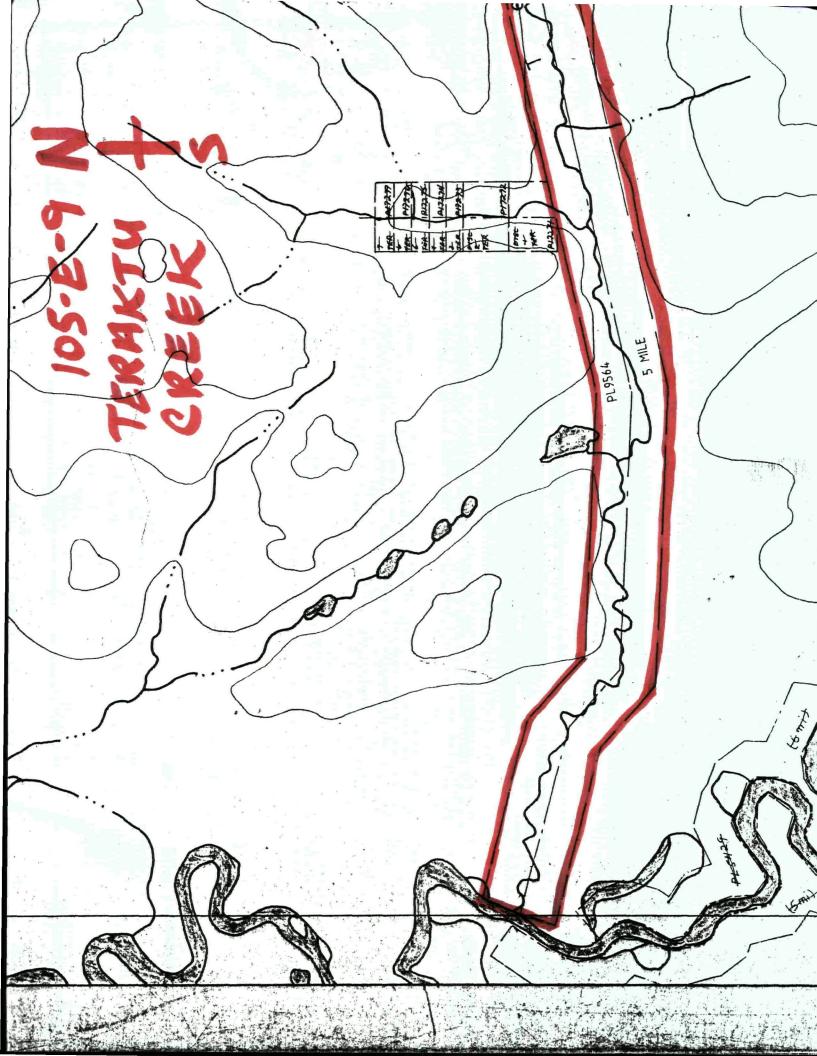


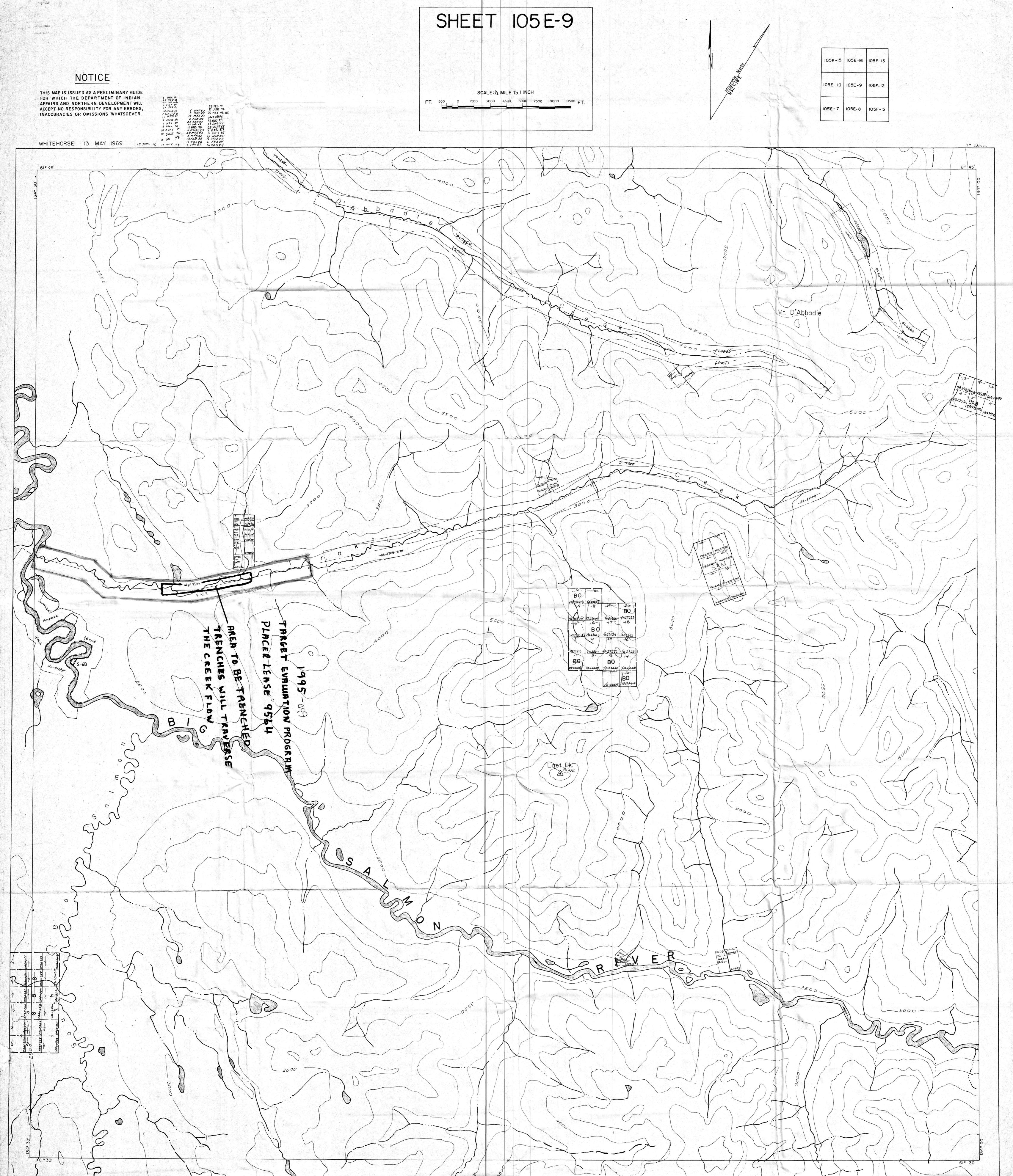




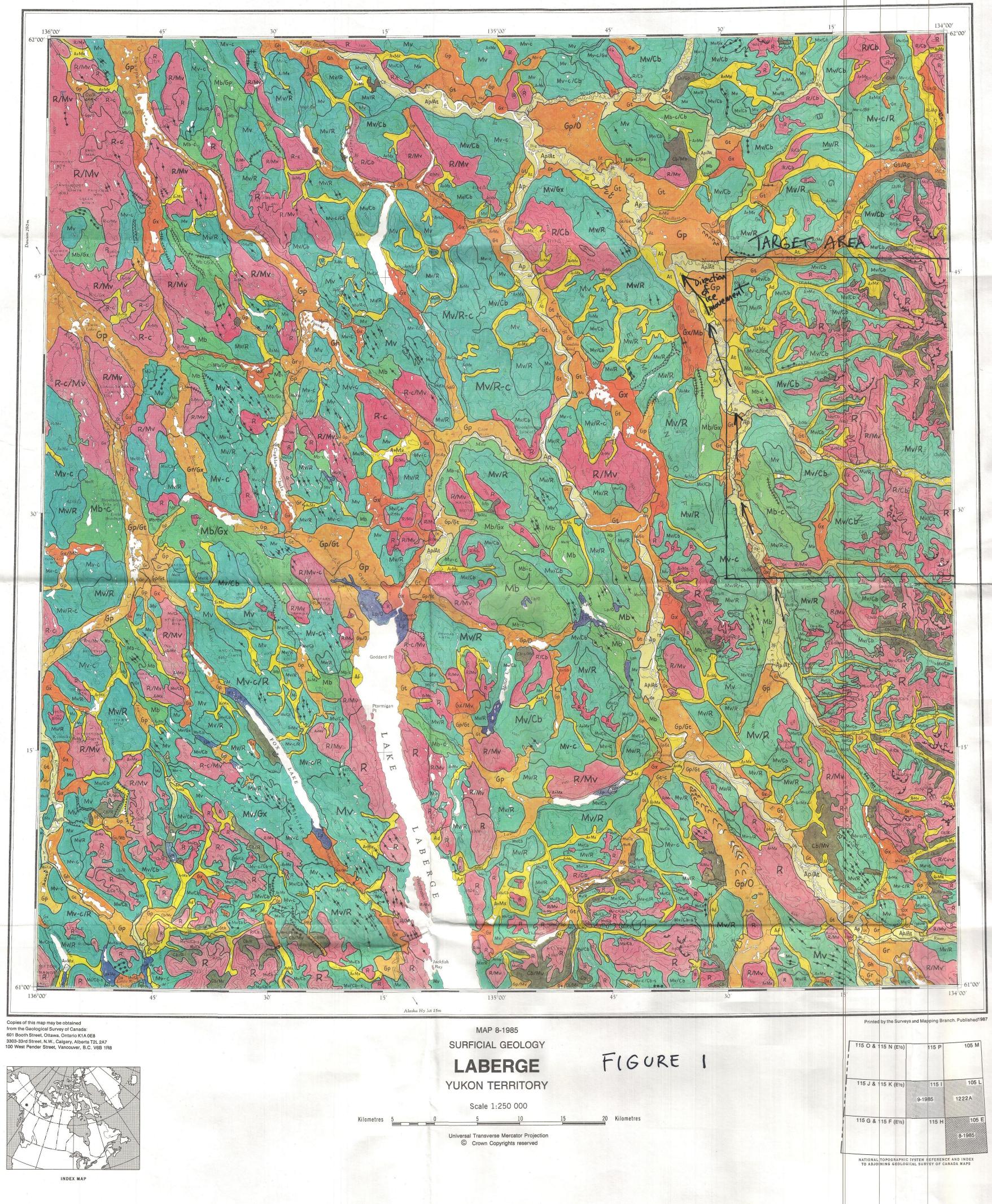
# GEOLOGY

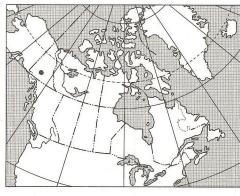
Please see summary(must see BILL LaBERGE, local Yukon geologist, in order to further report).











**Canad**<sup>#</sup>

NATURE OF MATERIAL AND ESTIMATED THICKNESS	GENETIC DESCRIPTION	MORPHOLOGIC EXPRESSION	COMMENTS
peat and muck; 1 to 2 m thick	organic deposits	flat areas of bog and fen; distinctive features such as palsen and peat plateaus are rare	Bog and fen are of limited extent. Unmapped patches occur along the bottoms of some alpine valleys
mixtures of material derived from glacial deposits and bedrock; thickness is variable	landslide, earth flow, solifluction, and rock glacier deposits	irregular or hummocky surfaces	A few earth flows or landslides are mapped, but large distinctive features were not recognized; unmapped minor deposits are widespread in high mountainous terrain
rock rubble and/or reworked glacial deposits	colluvium consisting of material redeposited by downslope movement	surface reflects morphology of underlying material; commonly occurs on bedrock slopes in mountainous terrain	Colluvium is widespread over mountain slopes, particularly in the zone between the lower parts of the slopes and the extensive bedrock exposures in the upper parts
gravel, sand, and silt; 5 to 20 m thick	alluvial valley bottom deposits	gently irregular to nearly flat surfaces that include mostly floodplains of modern streams; small features such as stream terraces and alluvial fans may be present; abandoned channels and point bars are the most prominent features on these surfaces	Most of the deposits are mapped as compound units in valleys where modern streams are incised in older alluvium (At) or glaciofluvial deposits (Gt); aggregate source
gravel, sand, and silt; 5 to 20 m thick	alluvial terraces	gently irregular or nearly flat, low level terraces bordering alluvial plains	Most terraces were formed by modern stream activity; they are separated from older terraces of glaciofluvial origin (Gt) on the basis of their close association with modern streams and by the absence of pitted ice-contact features; aggregate source
gravel, sand, and silt; 5 to 20 m thick	alluvial deltas	gently irregular or nearly flat surfaces	Features mapped as deltas are not unlike alluvial fans, except for the relatively low gradients common to alluvial deltas; aggregate source
gravel, sand, and silt; 5 to 20 m thick	alluvial fans	gently irregular, channelled surface with marked slope towards valley bottom	Fans are common along the sides of steep-walled, glaciate valleys; most are small features and were not mapped; aggregate source
clay, silt, and sand; 5 to 10 m thick	glaciolacustrine deposits	gently irregular or nearly flat surfaces along the bottoms and lower slopes of large valleys	Local patches of glaciolacustrine deposits occur within larger valleys and may underlie units mapped as Gp and Gt
gravel, sand, and silt; 5 to 20 m thick	outwash plains	gently irregular or nearly flat terrain marked by shallow channel patterns or locally pitted surfaces	Extensive outwash occurs along the valleys of Yukon, Big Salmon, and Klusha rivers; some glaciolacustrine deposits may be included; aggregate source
silt, sand, and gravel; 5 to 50 m thick	terraces underlain by glaciofluvial and/or glaciolacustrine deposits	nearly flat to irregular, pitted surfaces	Terraces occur within abandoned meltwater channels or at higher levels along former meltwater channels occupied by modern streams; aggregate source
sand and gravel; 5 to 30 m thick	ice-contact glaciofluvial deposits	strongly irregular, ridged, and kettled terrain with local relief to 30 m	Surfaces consist mainly of prominent esker-like, anastomosing ridges; aggregate source.
silt, sand, and gravel; 5 to 30 m thick	ice-contact glaciofluvial deposits	strongly irregular, pitted, or hummocky terrain with local relief to 30 m	Mainly knob-and-kettle topography; aggregate source
gravel, sand, silt, and till; 1 to 20 m thick	meltwater channel and glaciofluvial complexes	gently irregular or hummocky glaciofluvial deposits along with minor patches of till and bedrock; surfaces are in part marked by braided channels	These complexes occur in broad valleys where meltwater activity resulted in closely spaced channels and depositional features too numerous and small to be mapped
till; silty to sandy matrix; 1 to 30 m thick	lodgment and ablation till	irregular to strongly irregular bedrock topography blanketed by till	Morainic blankets form a nearly continuous cover within some large valleys in mountainous terrain
till; silty to sandy matrix; bouldery; generally less than 1 m thick	ablation and lodgment till	bedrock terrain with a discontinuous cover of till	Morainic veneer forms a discontinuous cover where it is typically associated with colluvium and exposed bedrock
gravel, sand, silt, and till; thickness is variable	valley bottom complex of alluvial, colluvial, and glacial deposits	nearly flat to strongly irregular terrain with relief to 30 m	These complexes are mapped within mountain valleys when different units are not separated because of mapping scale or because they cannot be recognized on airphotos
bedrock and bedrock rubble	bedrock outcrop and shattered bedrock	mountainous terrain and low hills and ridges adjacent to mountain fronts or within broad mountain valleys	Rock rubble veneer is common on the slopes of the higher parts of mountainous terrain

Explanation of Letter Notation

A combination of letters is used to designate a map unit, e.g. Mv, or a component of a compound map unit, e.g. Mv/Cv. The upper case letter indicates the broad compositional-genetic class; the lower case letters indicate the morphology.

N

M

A + M

Occurrence of numerous erosional features within a map unit is indicated by the addition of a dash and a lower case letter, e.g. Mv-c, to the above letter designation designation.

Compound map units are used for areas of more than one component that could not be separated at the scale of mapping. The first component, which is the dominant one, is separated by a diagonal line from the second component, e.g. Mp/Mv.

 p - plain, floodplain
 h - hummocky t - terraced r - ridged d - delta b - blanket v - veneer x - complex

Geology by R.W. Klassen and S.R. Morison, 1978-1979.

Recommended citation: Klassen, R.W. and Morison, S.R. 1987: Surficial geology, Laberge, Yukon Territory; Geological Survey of Canada, Map 8-1985, scale 1:250 000

# LEGEND

Compositional-genetic category O - organic: peat and muck
C - colluvial: various materials
A - alluvial: gravel, sand, and silt
L - glaciolacustrine: clay, silt, and sand
G - glaciofluvial: silt, sand, and gravel
M - morainal: till
R - bedrock: various types

Morphologic category Other modifiers channelled soliflucted thermokarst Geological boundary. . m Cirque.... Drumlin, drumlinoid ridge, glacial fluting .... Minor moraine; crevasse filling ..... Esker . . Meltwater channel (major, minor). Dunes. . 

Thematic information on this map is reproduced directly from author's copy

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveys and Mapping Branch in 1958

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1986 30°02' East decreasing 14.5' annually. Readings vary from 29°29' in the SW corner to 30°37' in the NE corner of the map

Elevations in feet above mean sea level