680519
Horsefly

CAN-LAKE EXPLORATIONS LTD.

DRILL RECORD—

Coord. _____

Elev. 920 M

Core Size 6" Hole

Length 83.5 M.

Azimuth _____

Dip -90°

Project HORSEFLY

Location Horsefly, British Columbia

Purpose _____

Hole No. M-3

Date Start Dec. 8/78 Completed Dec. 16/78

Logged by E. R. Kruchkowski

METER FROM	METER TO	ROCK TYPE	DESCRIPTION	SAMPLE NUMBER	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAY
0	2.43	Overburden	Clay					
2.43	42.6	Basalt	Vesicular, dark grey, fine grained volcanic rock, minor amygdaloids as in M-2. 19.3 - 24.9 - Clay with volcanic fragments (basalt) possibly eruptive event (pyroclastics).					
42.6	49.1	Quartz Gravels	White quartz gravels, quartz pebbles, 10 - 20 cm. in size up to 80 percent of gravel, minor muscovite schist, black chert and weathered bedrock? pebbles - 5 cm. in size - clay and sand approximately 10 - 15 percent - rare wood fragments.					
49.1	54.0	Blue Clay	Cohesive blue to green, dense clay.					
54.0	65.5	Basalt	Basalt as above.					
65.5	70.4	Blue Clay	Blue cohesive clay with minor basalt fragments.					
70.4	81.7	Volcanic to Quartz Gravel	72.0 - 82.4 - Predominantly volcanic, rounded pebbles, generally fine quartz vesicular, some with small feldspar phenocrysts approximately 20 percent white to clear quartz pebbles. 80.5 - 81.7 - Predominantly coarse well sorted sand, minor white to clear quartz pebbles.					
			End of Hole 81.7 Meters.					

CAN-LAKE EXPLORATIONS LTD.

DRILL RECORD

Coord. _____

Length 29.6 M Project HORSEFLY Hole No. M-1

Elev. 904 M Azimuth _____ Location Horsefly, British Columbia Date Start Dec. 5/78 Completed Dec. 8/78

Core Size 6" Hole Dip 90° Purpose _____ Logged by E. R. Kruchkowski

METER FROM	METER TO	ROCK TYPE	DESCRIPTION	SAMPLE NUMBER	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAY
0	22.9	Overburden	Predominantly brown clay, minor basalt boulders at top, approximately 20 percent quartz pebbles at base of overburden.					
22.9	29.0	Quartz Gravel	Poorly sorted tertiary gravels, 80 percent white quartz pebbles 1 - 10 cm. in size, 10 percent grey sericite schist pebbles, minor muscovite schist pebbles, 10 percent sand and clay.					
			End of Hole 29.0 Meters.					

CAN-LAKE EXPLORATIONS LTD.

DRILL RECORD

Coord. _____

Elev. 904 M

Core Size 6" Hole

Length 40.8 M.

Azimuth _____

Dip 90°

Project HORSEFLY

Location Horsefly, British Columbia

Purpose _____

Hole No. M-2

Date Start Dec. 6/78 Completed Dec. 10/78

Logged by E. R. Kruchkowski

METER FROM	METER TO	ROCK TYPE	DESCRIPTION	SAMPLE NUMBER	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAY
0	4.3	Overburden	Clay and sand.					
4.3	23.1	Basalt	Vesicular, dark grey, fine grained rock. Minor amygdaloids - zeolites, calcite and native copper (very minor). 19.3 - 23.1 - Volcanic fragments and blue clay, probably pyroclastic debris related to eruptive event.					
23.1	37.5	Quartz Gravels	White poorly sorted quartz gravels - quartz pebbles generally uniform in size - minor schist pebbles 2 - 5 cm., clay and sand up to 15 percent.					
37.5	39.9	Blue Clay	Very cohesive, dense blue clay, possibly weathered volcanac ash.					
			End of Hole 39.9 Meters.					

LABRADOR RESOURCES LTD. (1)

CARIBOO GOLD PROJECT – PROGRESS REPORT MARCH 12, 1992.

1. AREA

Generally, western half of 93A Quesnel Lake.
ie. 93A/3, 4, 5, 6, 11, 12, 13 and 14.

2. PROCEDURE

2.1. Computer print-out of MINFILE of all Placer occurrences in areas 93A, B, G, H.
ie. Quesnel Lake, Quesnel, Prince George, McBride.

2.2. Accumulation of all 'major' references to placers within the area from the MINFILE GSC.
(93A, B, G, H) MEMOIR BC.
PERIODICALS etc.
Including - 1:250,000 geology bedrock and surficial *
- 1:50,000 geology, where relevant to areas of specific interest eg. Quesnel Lake South area.

2.3 Acquisition of 1:50,000 claim maps, placer and mineral.

2.4 Preparation of base maps and overlays for the area of interest (1 above)

a) 1:500,000. Plot of all placer occurrences in area of interest (Shows distribution of known placers and areas of major activity) - Minfile source)

b) 1:100,000 - Geology plot (prepared from scan of 1:2,000,000 Terrain area - GSC geology)
- Plot of all placer occurrences (as i above)

e) 1:50,000 Working sheets – overlays on 1:50,000 topo bases, showing - individual placers / workings, derived from MINFILE capsule descriptions backed by data from government reports etc
- All buried channels mentioned in literature.
- Notes on key data - dimensions
grade
production.
- Type of placer - ie. particularly to differentiate between older Miocene gravel placers and younger Pleistocene deposits.

- Overlays showing relevant geology –
- distribution of Tertiary - Quaternary, particularly - Miocene / pre glacial deposits, younger basalts (cappings?)

- Plans showing all mineral and placer occurrences
- Plans showing all current mineral and placer claims.

2.5 Final presentation based on all the data compiled, identifying –
1. All known significant placers / operations
2. All known and potential or projected buried channels, especially White Gravel Miocene.

Presentation will include a listing of production data, dimensions, description of workings, surface and underground, drill holes, where this data is available. This information will be tabulated and displayed graphically on the key maps.
Recent placer and mineral claim status will also be displayed.

Progress

1. To date all the reference data, reports, maps have been accumulated, except for recent 1:50,000 geological maps for the northern part of the area of interest.
2. All current mineral claims and placer maps have been acquired.
3. 1:500,000 Index map (placer occurrences)
   1:100,000 Geology
   placer occurrences.
   1:50,000 - working bases, and plots

   All the above have been completed.

4. Current work - research of references, with particular attention to the south Quesnel Lake area and all known/potential buried channels, including areas capped by young basalts. Preliminary overlay plots are nearly completed, — more detailed study of target 'channel areas' to be started shortly.

Los Blois

~~Pit run gravel — 3000# / yd³~~

~~Sand~~

gravel loose & dry - 2565

Pit run. Gravel - 3240

Dry. gravel ¼"-2" - 2835 ✓ 2800

Wet gravel ½-2" - 3375

Average pit run. - 3000 ✓

Sand - dry loose - 2700

damp - 3240

Wet packed - 3510

LARANIDE RESOURCES LTD.
CARIBOO GOLD PROJECT — PROGRESS REPORT MAR 20, '92

1. WORK DONE

1.1. All significant publications and assessment reports have been acquired / studied.

1.2. All known / reported placer operations have been plotted on the 1:50,000 overlays for areas 93A 3-6, 11-14 (W½ of 93A) — also all MINFILE mineral occurrences

1.3. All production data, where available, have been recorded on the overlays in summary form ie. showing total production in ozs. and/or grade (ozs/cu yd.), and indicating the nature of the workings ('open pit' or underground) (Production figures are not wholly reliable, as much of the early production went unreported)

1.4 Selected geological information has been plotted in the selected area of interest — ie. the southern part of the Quesnel / Horsefly area 93A 3, 5 and 6, as follows -

a.) Selected geological data - areas underlain by

Units - Qal — Quaternary sediments
10 — Miocene basalts (cap rocks)
10A — Miocene 'basal' white quartz gravels
9A — Eocene glaciofluvial deposits, - which usually? host the (10A) white quartz gravel channels.

b.) All identified 'channels', both Pleistocene and Miocene.
White gravel Miocene channels are shown distinct from younger channels.

1.5 Claim maps have been acquired for the 'area of interest'

for both mineral and placer claims.
Ownership of 'current' placer claims has been determined.

1.6 Placer Reserve areas have been plotted.

1.7 All assessment reports in the southern area of interest have been plotted — both mineral and placer. Selected reports have been researched.

2. RESULTS

2.1 Targets/target areas.

A.) Miocene White Gravel occurrences / channels (Unit 10A)

1. Moffat Creek area
2. China Cabin Creek
3. Gravel Creek
4. Tripler / Starline Lakes area

1-4 - all occurrences along the edge of the Miocene Basalt (Unit 10), possibly related to a postulated 'Tertiary Gravel Channel'

5. Hobsons Hydraulic
6. Wards / Miocene (Harpers Camp.)

5&6 - part of 'Tertiary Gravel Channel' from Miocene north to Antoine Lake and west along Antoine Creek.

B.) Areas underlain by Eocene glaciofluvial deposits (Unit 9A) which may contain White gravel channel deposits (Unit 10A.)

1. Area containing targets 1-4 above along the basalt contact.
2. Edney - Hazelline Creek area, west of Mitchell Bay, Quesnel Lake.
3. Horsefly River valley, east of Horsefly.

(3.) Shell Target
100 MM Cu @ 0.2%

2.2 Assessment Report Research.

A.) Shell Resources – Hoban Horsefly Property. Sept. 1981.

Area centres on Hoban Hydraulic Pit, 46 claims (mineral) and extends south and west to cover buried channels of 'ancestral' Horsefly River.

Target - 100×10^6 m^3 orebody averaging $2/m^3 (400^{oo} US gold)

Programme -

a) Seismic lines - 7 kms.

b.) Sonic Drilling - 600 m. (9.2 cm diam.)
($20^{oo}/ft)

- Drill cores gravel by rapid (9000 cpm) downward vibrations – core then vibrated into clear plastic sleeves for logging.
- Core sampled at 1m intervals (8 litre.)
- Sampling by panning / amalgamating, Au measured by weight in sample (1m.)

c.) Geochemical Sampling

8 bulk gravel samples tested gravels at Tripler Lake } 5
Starlike " .
Antoine " 1
Hoban Pit 2
8

Sample size range 17 - 88 litres (28 - 146 kgs)
(Total 1.01 tonnes.)

All samples assayed trace or Nil.

RESULTS

Drilling based largely on seismic, but seismic interpretation complicated by complexity of sed's. and lack of contrast

between bedrock and cemented gravel.
Drilling indicates palaeochannel complex system of narrow steep walled channels.
Channel gravels occur as impersistent lenses at several different levels (see Shell sections)
Drill assays* — 12 holes.
- Values averaged range *0.02 – *0.72 /m³
- Best value *27.65/m³ over 1m length (17mg.)
  Hole averaged *0.72 /m³.

Shell discontinued programme — concluded
1. Unlikely that a 100 x 10⁶ m³ ore body exists in Hobson Bar area
2. Smaller ore body might exist, but too expensive to find
3. Gravels in Antoine Lake area too thin and too limited to host a large placer
4. Seismic will not provide accurate depth to bedrock, because of a) poor contrast between gravel and bedrock
   b.) presence of intra channel volcanics (ash/tuff)
5. Costly extraction and need to mine as opposed to extraction as a placer because area is a designated non-placer zone.

* most of gold is flour.

B.) Silver Acorn Malcolm 1 and Sam claims. Dec. 1978.
Area claims located on Moffat Ck. Palaeochannel

Programme.
3 (151 m/494') rotary and hammer drill holes 15".
Holes encountered two gravel units overlain and separated by basalt flows — did not reach 'basement'.

Holes gamma logged
'Significant' fine placer gold recovered from 1.2m of one hole (405 ppb Au)
No radioactivity.

3. LITERATURE RESEARCH - (Brief summary only)

GSC. - J. Clague - 91-A, 1991.
Best placer targets are 1. Bedrock floors of abandoned buried channels
2. Non-glacial unconformities within Quaternary sediments - ie. contacts between fluvial sediments and underlying glaciolacustrine deposits

MEMPR. - Panteleyex, Hancock Papers 1989-1.
1. Most, possibly all placer Au originally transported in Miocene white quartz channels (Unit 10A)
2. Most deposits are reworked - Pleistocene channels which have cut through Miocene gravels
3. Hobson and possibly some other Horsefly River deposits are basal cemented Miocene gravels
4. Source areas - Eureka Peak - Crooked Lake - Horsefly headwaters or even further east
5. Heavy cons. lack magnetite - mainly garnet and kyanite.
6. Notes Au-quartz-carbonate stockworks in units 9A/9B of Eocene along Hazeltine / Edney Creeks.

4 Proposed Work.

Propose discussions with Clague GSC and Pantylayer MEMPR.

Re:- White gravel channel deposits in Horsefly area

Further work to be dependent on these discussions

Yak Petroleum

Seismic on Moorehead Creek

Paleochannel.

Biggest production

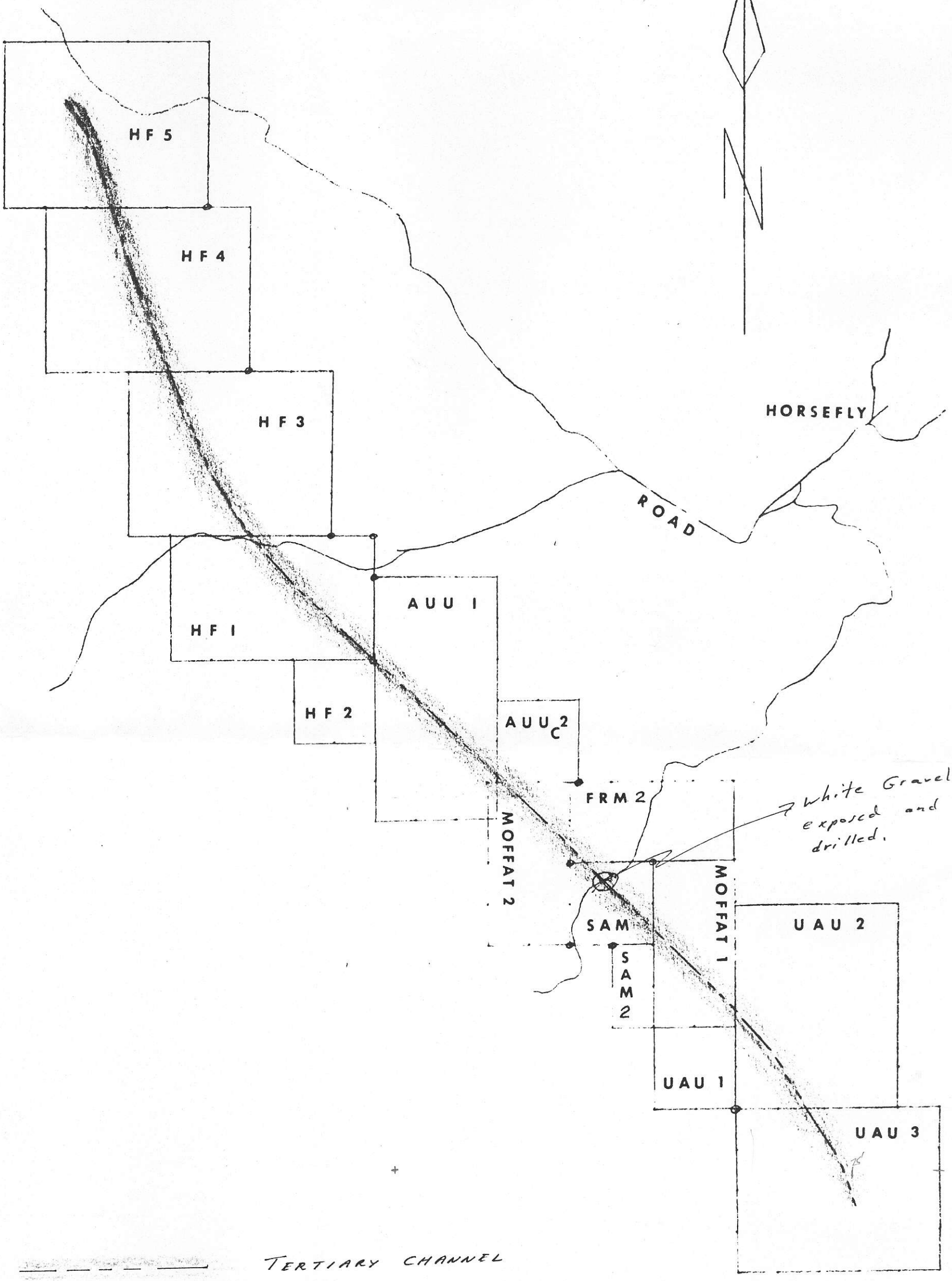
Bullion pit 120 000 g.

Harpers Camp 15,000 g

Cedar Creek - 38,000 g

Shell drilling - Sonic drill - 4" ϕ

BERT These are the claims I had in 1978.



1:50,000

I.M. WATSON & ASSOCIATES LTD.

March 30, 1992

MEMORANDUM

TO: BERT REEVE

FROM: IVOR WATSON, LES WESTERVELT

RE: CARIBOO GOLD PROJECT - MARCH 25TH MEETINGS WITH:
ANDRE PANTELEYEV - BC MEMPR
VIC LEVSON - BC MEMPR
JOHN CLAGUE - GSC, VANCOUVER

The purpose of the meetings was to discuss the placer gold deposits of the Cariboo-Quesnel-Horsefly area in general and the white gravel channels of the Horsefly area in particular.

Panteleyev (BC MEMPR) has just completed several years of mapping in the Quesnel-Horsefly area (Quesnel Project).

Levson (BC MEMPR) is involved in a study of gold placers in the Cariboo Mining District, instigated in 1989 following the expansion of the area open to placer mining. The objective of Levson's work is to establish criteria for recognising placer potential in undeveloped or poorly explored areas.

Clague (GSC), until two years ago, was with the Terrain Sciences Division, carrying out stratigraphic and sedimentological studies of the Fraser River Valley and the Quesnel and Cariboo river basins.

The following is a point summary of our discussions.

- Panteleyev, Levson, and Clague agree that the White Gravel deposits in the Horsefly-Moffat Creek area are part of a very broad braided channel system which was reworked over a long period of time.

- All agree that the preglacial history was complex and that Lay's 1931 interpretation of Tertiary gravel channels oversimplifies the picture - there are probably many white gravel channels at different depths across the width of the broad Horsefly channel. This is substantiated by the results of Shell's seismic drilling and sampling program at Hobson's Pit.

- Panteleyev's diagram of Tertiary drainage cartoons the width and complexity of the channels and the suspected source areas (see 1:250,000 topo overlay). It suggests that the white gravels below the Miocene basalts in the Moffat Creek area are on the western and southern edge of a broad meandering/braided Horsefly system.

- All agreed that the Miocene basalt capped gravels are an attractive target from the point of view that:
  a) they have not been explored,
  b) they have been preserved from glacial reworking, and
  c) basal gravels are in general a good host of placer gold.
  However, they point out that many of these gravels contain no significant gold.

- Panteleyev is doubtful that there are any gold sources south of the Miocene basalt contact - thinks it is unlikely that the white gravels in the Moffat Creek area originate from or contain gold from a southern source.

- Both Panteleyev and Levson believe that 'Cariboo gold', and possibly 'Horsefly gold' is derived from different sources. Concentrates from both areas (Panteleyev and Shell) contain much garnet and mica, indicating a source in the metamorphic terranes to the east (see Panteleyev diagram).

- Panteleyev has found coarse gold (nuggets) and large pyrite/marcasite crystals in the Bullion Pit indicating that the source area is closeby - the black phyllite hosted quartz-carbonate veins of Spanish Mountain.

- Old reports of platinum in the streams in the Western Cariboo/Quesnel area have been checked by Panteleyev - he has been unable to confirm Pt in any of the areas reported, and samples/specimens obtained from current claim owners had been mistakenly identified as platinum.

- Panteleyev mentioned a 1987 attempt by Mandrell Mining Equipment Ltd. to mine the cemented gravels in the Hobson Pit using a coal mining machine. This was not successful and the company abandoned the project and area and, according to Panteleyev, left local unpaid bills.

- Levson's approach to identifying potential gold-bearing channels involves detailed mapping and sedimentological and stratigraphic analysis of existing exposures. Most of his work has been done on known gold placer deposits, with the intention of identifying gold-bearing environments, which may then be projected into unmined areas, or recognised at other sites. So far Levson's work has not led to the recognition of new or potential new deposits.

- Levson recommends using former glacial meltwater channels as a means for prospecting for buried channels. These and present river drainages provide just about the only 'natural' exposures of the buried placers.

- High elevation buried-channel placers, such as Spanish Mountain, have thinner glacial cover and relatively good gold concentrations in their upper part. They are, theoretically, easier to explore for and are potentially more economically exploitable.

- Clague's Quaternary studies led to the recognition of a buried valley immediately east of the Cariboo River, 3kms south of Cariboo Lake. According to Clague, exploration of this buried valley has not been successful, to date.

- Clague identifies Drop Creek, at the south end of the Bullion Pit, and the Prior Lake valley to the west as possible continuations of the Bullion Pit placer. Unfortunately, the great thickness of fill is a major drawback.

GOLD PLACER GEOLOGICAL SETTINGS/EXPLORATION TARGETS

A. Levson has identified seven important settings, summarised as follows:

1. **Tertiary placer gravels**
   - usually deeply buried
   - underground mining only productive in a few Cariboo high-grade (8.5 g/t) situations.

2. **Preglacial and interglacial fluvial deposits**
   - largest volume placers
   - mined mainly where exposed by meltwater or post glacial fluvial erosion

3. **Buried valley systems (palaeochannels)**
   - potentially rich
   - usually heavy overburden
   - have little relation to current drainage
   - water drainage problems
   - require seismic, radar, magnetometer?, and drilling to find and evaluate, as well as detailed geological study to trace gold-bearing units

4. **Buried gulch systems (palaeogulches)**
   - smaller than buried valleys
   - usually higher gold concentrations (historically richest Cariboo producers)
   - difficult to mine (deeply buried) - most operations exploited gravels below or exposed by modern channels
   - best potential in high relief areas of Cariboo, e.g. headwaters of Lightning, Antler, and Cunningham Creeks

5. **Alluvial fan deposit**
   - large volume, low grade - but support two of largest Cariboo mines (Spanish Mtn., Ballarat)

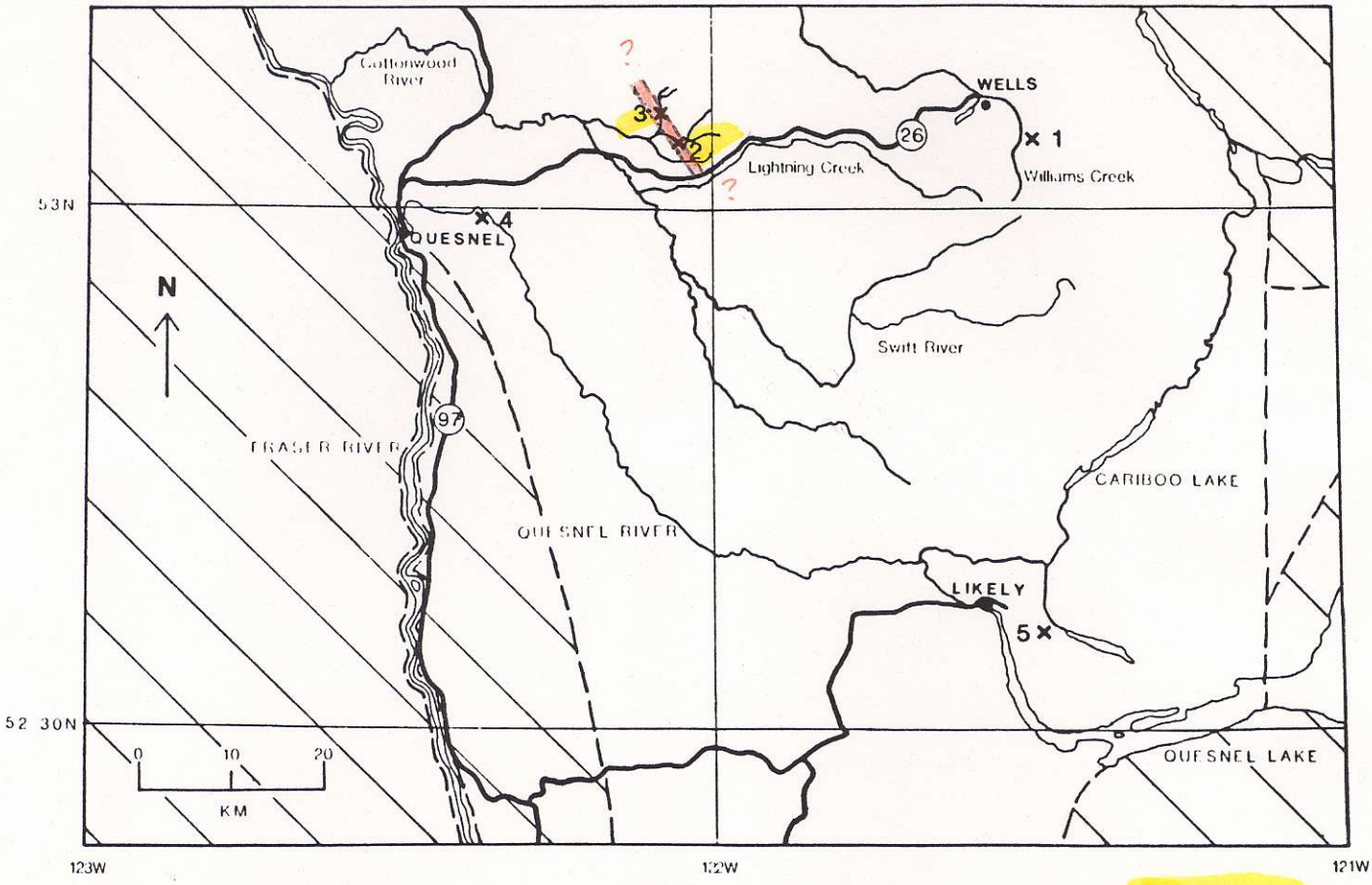


Figure 6-3-1. Location of the Cariboo placer mining area. Study sites discussed are numbered: (1) Ballarat mine, (2) Toop Nugget mine, (3) Alice Creek mine, (4) Quesnel Canyon, and (5) Spanish Mountain. Areas newly opened to placer mining are hachured.

6. **Glaciofluvial deposits (erosion of older Au gravels by glacial meltwaters)**
   - lower grade
   - near surface, cheaper mining costs

7. **Post-glacial terraces (a) high level; (b) low level**
   - high level typically large volume, low grade (braided stream deposits)
   - low level - mainly exploited

Levson believes that settings 2 and 5 (preglacial/interglacial fluvial and alluvial deposits) are the best targets.

Although Levson's work has led to recognition of favourable placer settings, his identification of specific target areas is limited to the immediate surroundings of existing placer operations. Of these, he mentions particularly buried channel deposits exposed at the Toop Nugget and Alice Creek mines by meltwater channels. Levson thinks that the same buried channel may be exposed at both locations and that there is potential both between and beyond the existing workings.

(The Toop deposit recently produced nuggets up to 100g in lower gravels, while coarse gold was found in 'upper' gravels, probably from a local source. The Alice Creek operation - from 1986 to 1988 - yielded 1,375 ozs Au from 11,000m^3 washed material, but that is from a total of 135,000m^3 of material moved.)

B. Clague's identification of targets is based on stratigraphic/age controls as well as the lithological considerations used by Levson.

Best placer gold targets are:
1. bedrock floors of former valleys
2. non-glacial (fluvial) unconformities within the Quaternary succession

EXPLORATION TECHNIQUES (comments)

1. Geological Mapping

Levson and Clague recommend detail mapping to identify potential gold placers - this, however, requires some familiarity with the stratigraphy and an understanding of glacio-fluvial deposition. Exposure is limited.

2. Geophysics

a) Seismic - recommended by Levson and Clague on paper, but in discussion Levson remarked that seismic has not been successful in detecting the potentially rich palaeogulch targets, which present too 'narrow' a target for seismic definition. Also the Shell work on the Hobson Pit failed to precisely define bedrock surface because of 'masking' by overlying gravel lenses at different levels.

b) Magnetics - limited applications - the non-magnetic nature of the placer 'cons' and the lack of precision do not make this an attractive method.

c) Ground penetrating radar - no data for the Cariboo-Horsefly area is available. According to Clague, depth penetration is limited to about 20+ metres and problems can arise due to water bearing silts/clays. However, Clague and Panteleyev provided names of contacts at SFU and in Calgary who would be worthwhile contacting for better technical information.

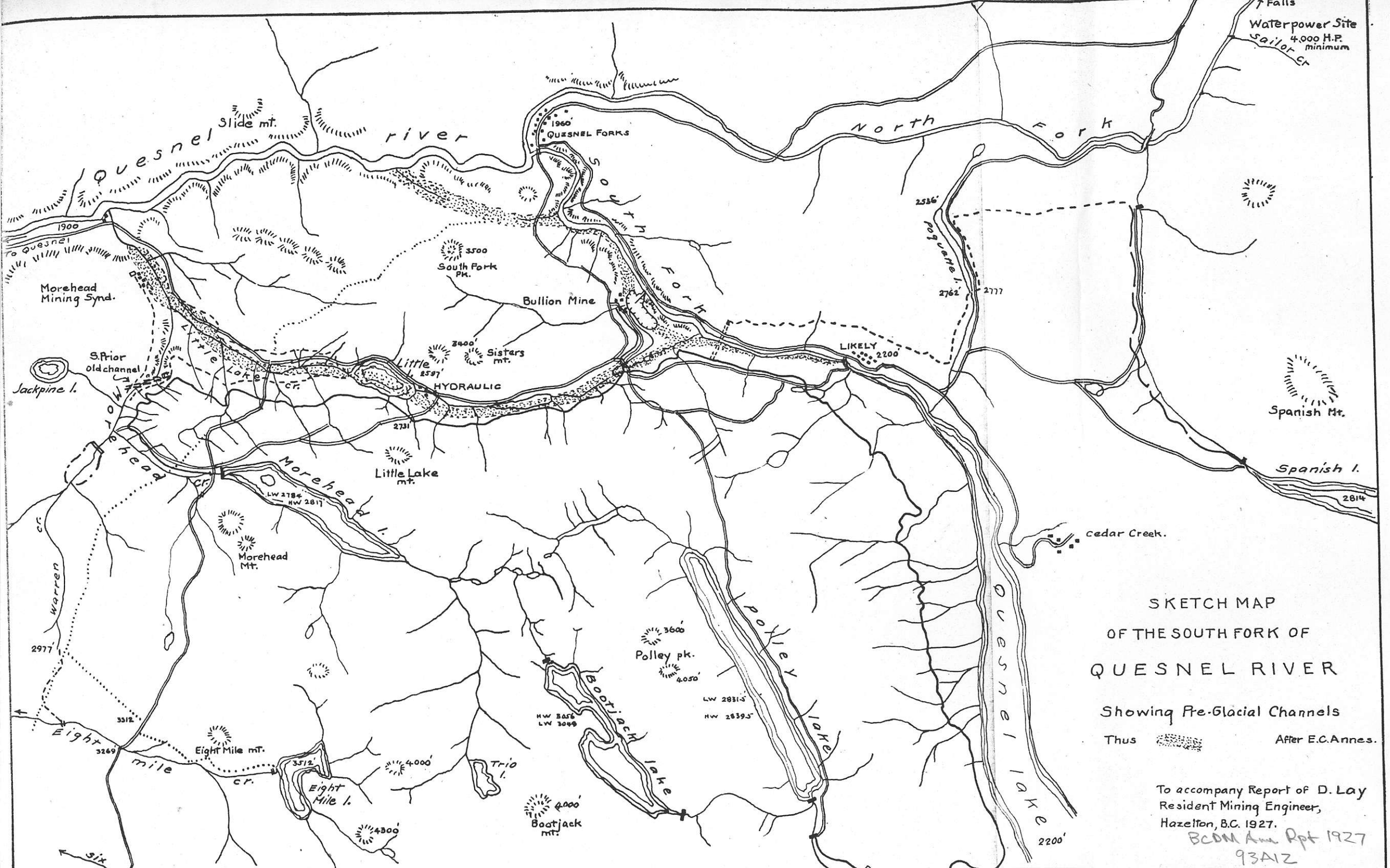
d) Drilling - the main and ever-present problem is the impossibility of obtaining a representative sample from drilling (i.e. too small). Sonic drilling provided the best, if not largest, sample, but is probably the most expensive ($20.00/ft., Shell 1981) of the drilling methods. A closely-defined target area must exist to justify the cost of drilling.

REMARKS

Additional observations:

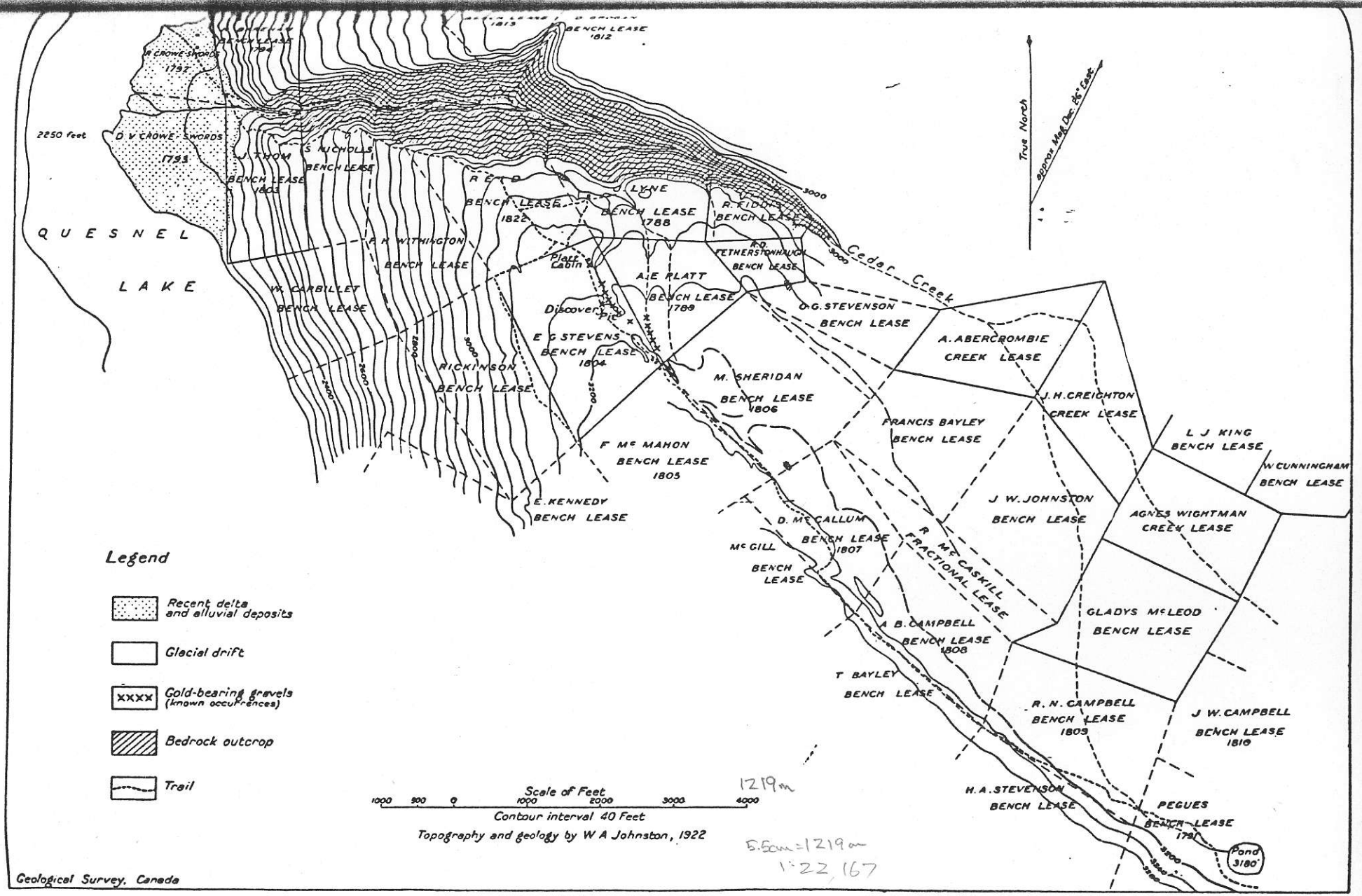
1. The Horsefly 'channel' in the Moffat Creek area appears to be quite distal from source (e.g. Eureka Peak area) - possibly richer, more confined deposits, containing coarser gold, may exist closer to source where palaeodrainage gradient becomes steeper. Unfortunately, there are no data we know of to support this theory.

2. A possible broad approach to identify targets is to plot known deposits and channels 'on section', i.e. to determine absolute elevations so that 'palaeotopography' might be recognised and predicted. This has the merit of being easily and quickly done, especially using a computer plot (e.g. Surfer) - the drawback is the great complexity of the drainage and glacial history and the consequent vertical and lateral discontinuities.



SKETCH MAP
OF THE SOUTH FORK OF
QUESNEL RIVER
Showing Pre-Glacial Channels
Thus
After E.C. Annes.

To accompany Report of D. Lay
Resident Mining Engineer,
Hazelton, B.C. 1927.



58617—*To face p. 72.*

FIGURE 7. Placer deposits, Cedar creek, Cariboo district, B.C.

GSC Summ. Rpt. 1922 A.A.
93A12/11

Moffat Creek

Bert I will have the report on the drilling by next week.

Hole drilled by Air 250 feet deep

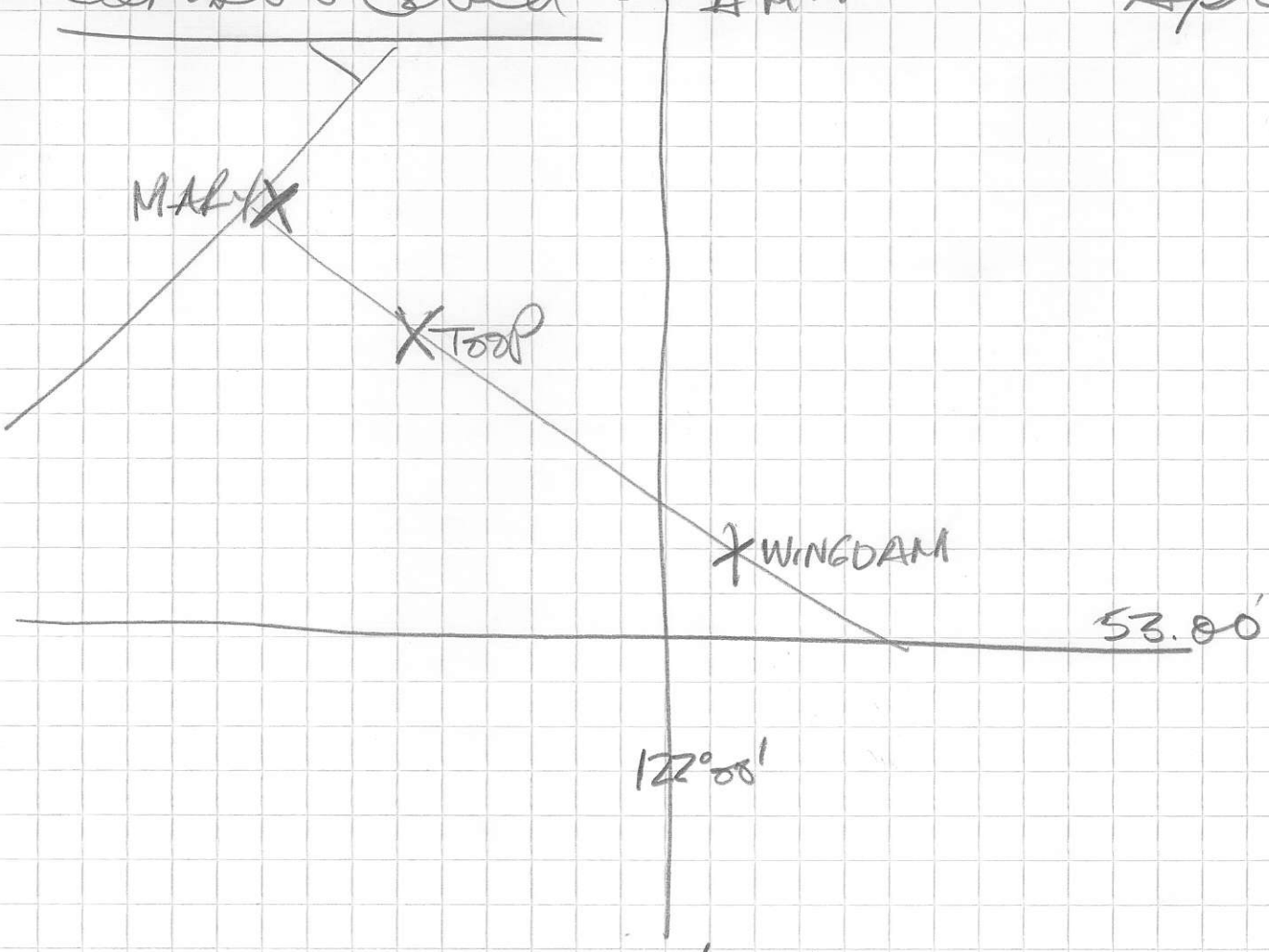
Log.

Basalt
Blue Clay
Volcanic and qtz pebble
Gold ← Qtz gravel weakly cement
Basalt
Blue Clay
Mixed qtz & vol. gravel
Qtz gravel Main Channel
did not reach bedrock.
due to water problems.

Ray

Cariboo Gold — AMW

Apr 21/92

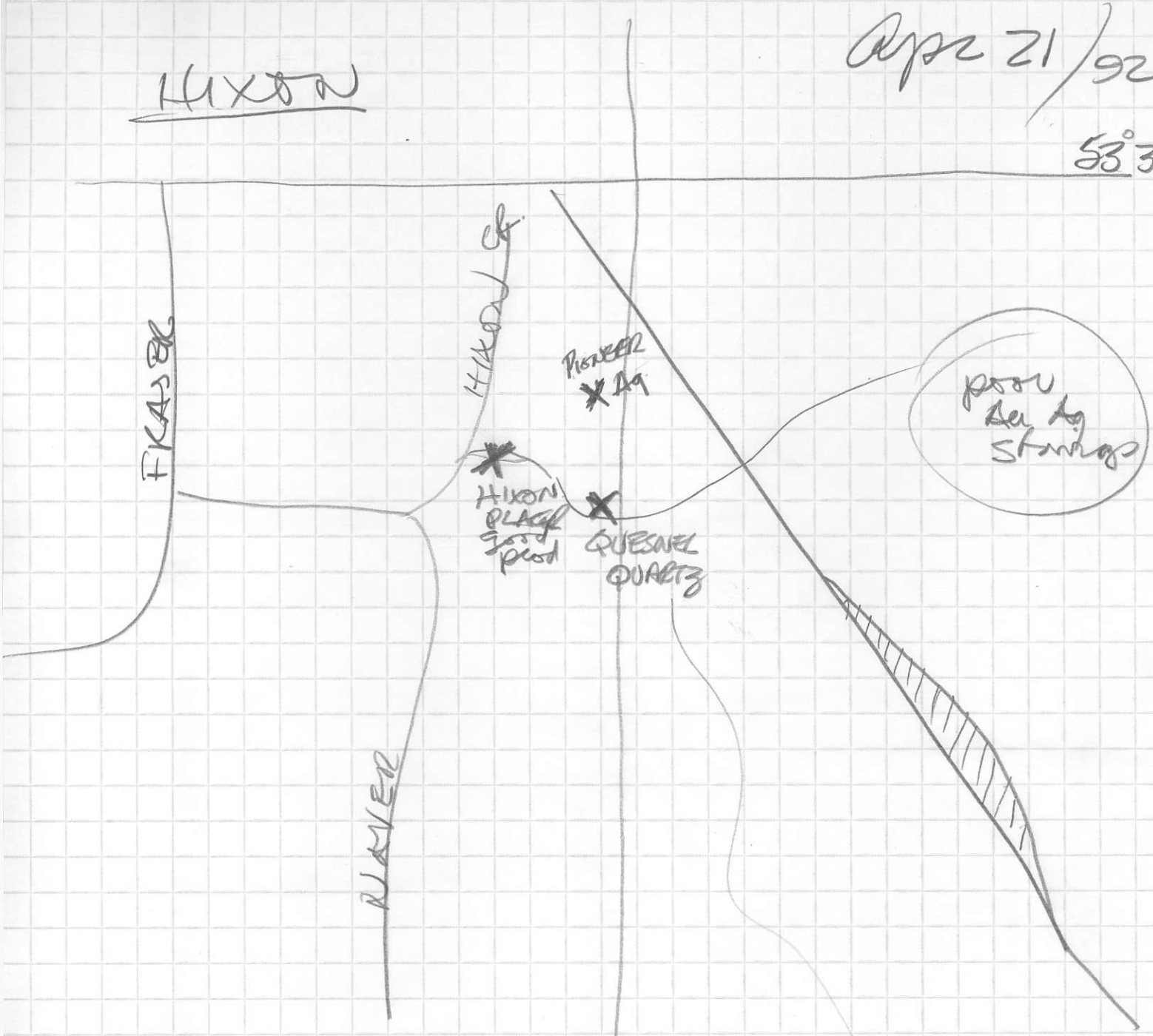


FIELD Map of Area

HIXON

Apr 21/92

53° 30'



APPIAN Res
HUGHES - LAN B.
STAKED EXTENSIVELY
ALONG THRUST

Low Grade

Py Chlo
ASP

SHIST, - GONSTN.
CONTACT.
NE CROSS VEINS
2048 T.m
6400 gm
2008

MILL
ARASTRA SHAFT.
207'
SOME
DRIFTING
ON
4 levels

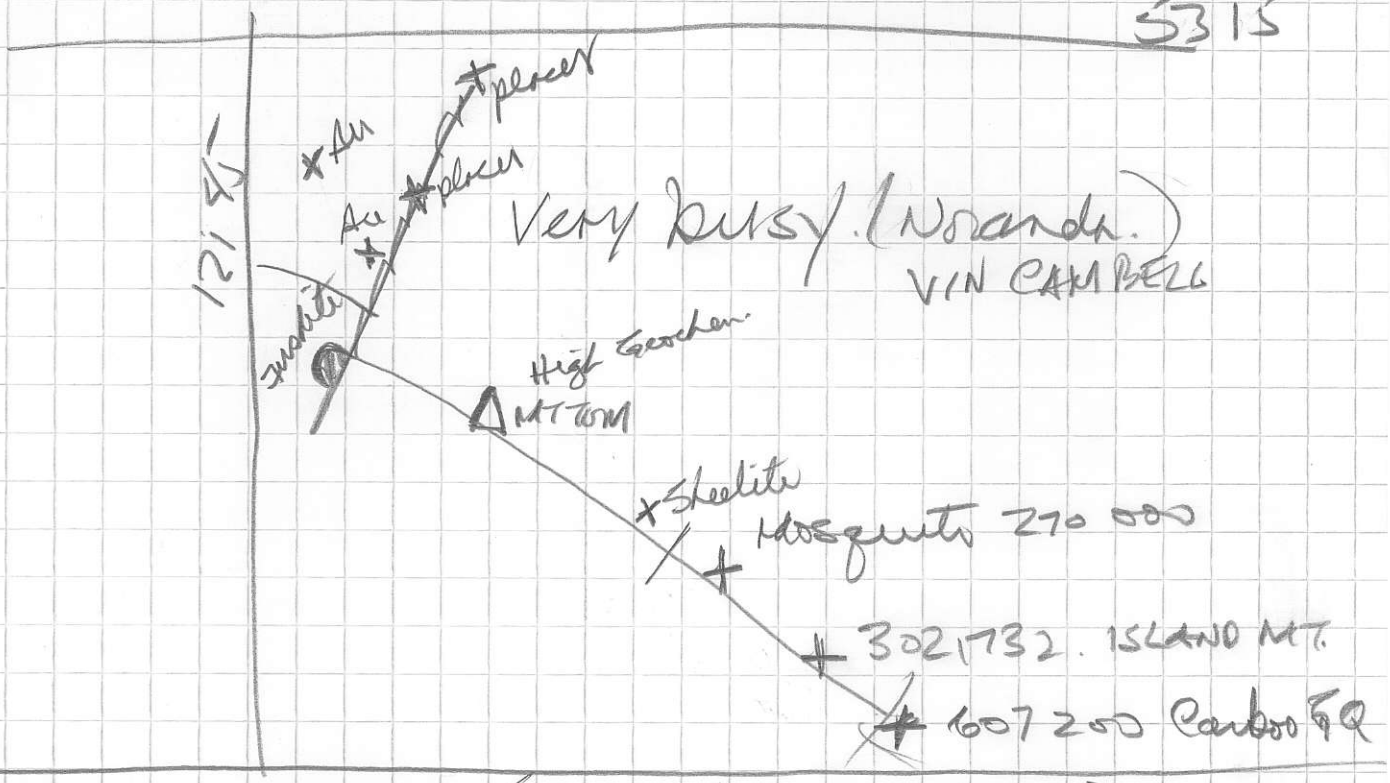
122° 30'

568' DRIFT
4TH LEVEL.

2m Wide max

Apr 23

SUGAR CREEK – MT TOM



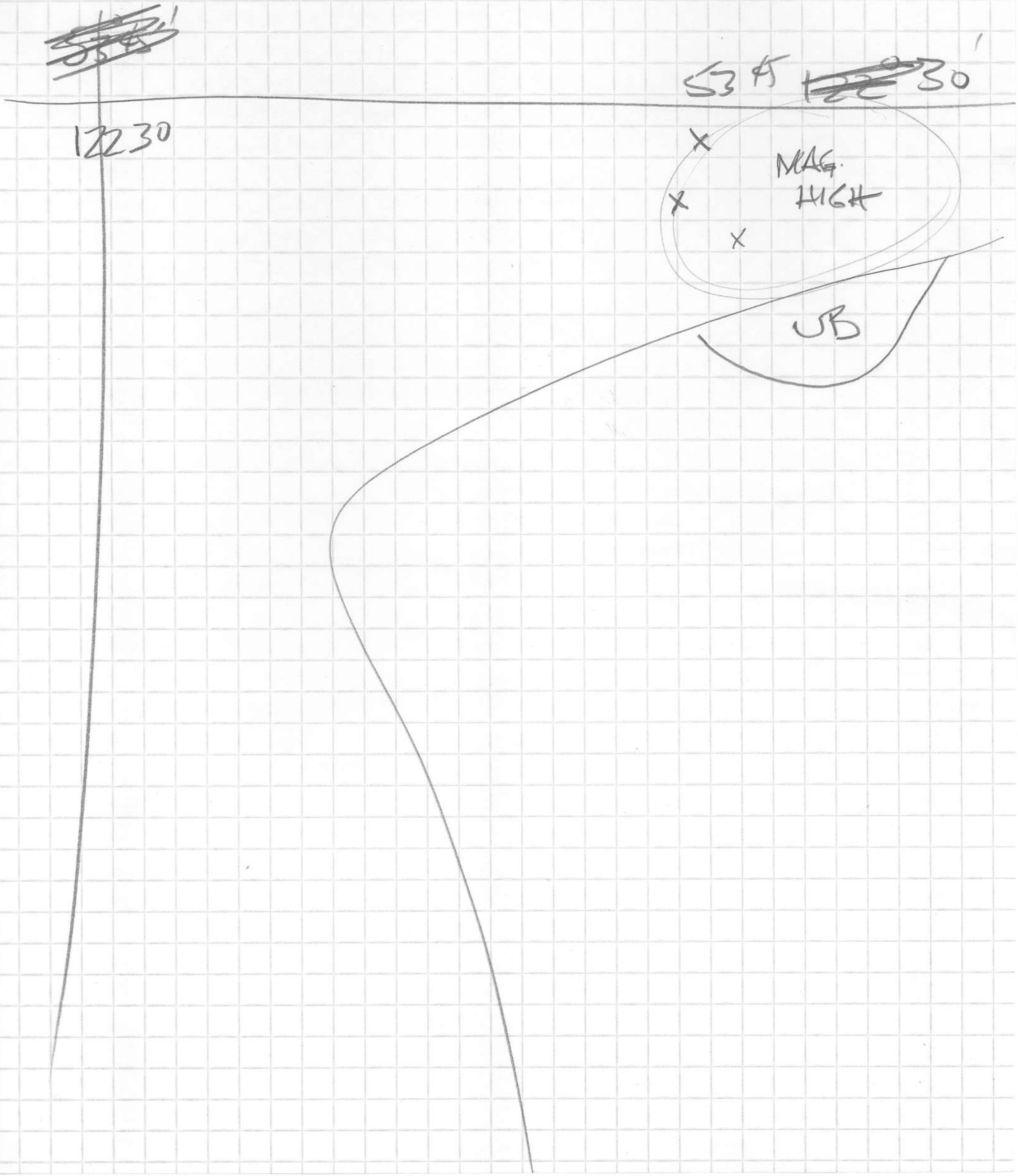
- Peter Delaney (Motherlode?)

BARKERVILLE

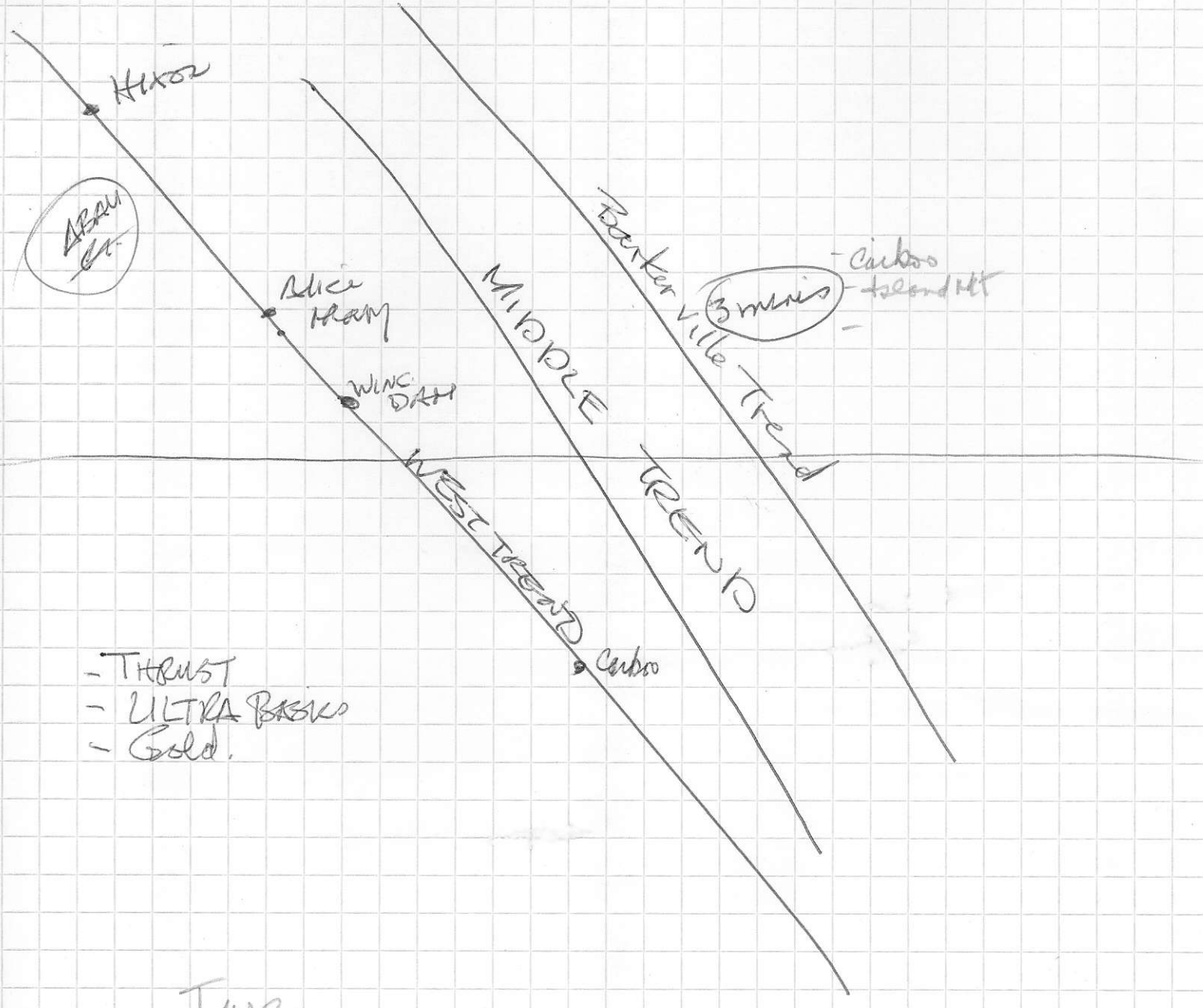
- Ash BCDM

-
  - Sugar Cr
  - Stoner Cr
  - Hixon
  - Wingdam

HEAD OF STONER CR



Apr 12/02.



- THRUST
- ULTRA BASICS
- Gold.

Thus.

Ophiolites

Cariboo gold. Apr 29

* GOLD ON ONE (FEW?) SIDE

pkg - UBasics (oph / Komatiites Au rich
- fayuis
- listwanites carbonate rich alt UB.

Recent recognition of listwanite just occurred.

Followed by felsic intrusions and gold bearing qv.

- Tom Mt - Ag Pb Zn replacements, OB deney
- Stony
= Hixon
= Wingdam

---

(1) Mt Tom - best Assay 12 oz grab Au
- Ag Pb. sobs & veins
- Open pit
- To holes drilled by Nov & Posen

(2) Wingdam - Toop pits only
- 25 lifts from 30'
- bed rock assay from DDH 1988 122m deep 1.5m/.537 Au 68 m ob. *
- Rosie Hughes Lanay heard of veins in old workings

Troop Alice & Mary Murray Road
Mag. EM. IP. John Lane
DD RC Geol.
Looking for Troop Servicer.
- Has been busy but no Cherry
* Green conglomerate on road

Hixon
- Tiago geol recognized
Fuchsite some
Hg qv in shafts.

Last Visit

- Easy Access
- Open ground.

Stoner Creek Mag High no
placer close

DOG CREEK *

Yanks Peak - Coaldale

- Structural
- Metamorphic Greenschists
- Limestone - Downey group
- Easily represents source of placer

Best Caribou Hudson 38 08 07
-3.

Heads to Bakerville

1 - Mosquito Cr.
1 - Island Mt
1 - Caribou
1 - Pinnacle
1 - Williams Cr.

MICHAEL CASSIDY
CHARTERED ACCOUNTANT
P.O. BOX 548 - 270 DOGWOOD CRES. N.
100 MILE HOUSE, B.C. V0K 2E0
TEL: (604) 395-4534

To: BERT KREVE - FAX 1-688-0378

From: FAX 1-395-2037 (call 395-4534 to turn on fax)

Bert:

I'm transmitting the latest material and will mail you a photo of our tests last November if you are interested in investing. Units will cost around $1,300 of which $60 is payable before Feb. 29 and $300 in early March - pay by March 10. The balance of $180 is due April 20 and $262.50 on June 20. What follows is

1. Page 22 of Michael Wilson's Aug. 1988 report on his estimate of the upper gravels i.e. top 60% of total gravel
2. May Feb 11/92 report to our investors (at mine $14,000 in 1991 on this project)
3. May 4 page letter report to shareholders which ...

This concentrate was weighed for each sample. The average amount of black sand per cubic yard approximated 1.8 lbs.

6.0 PLACER GOLD RESERVES SUMMARY

The estimated gold reserves for the Bullion Project are best outlined in the report by Canadian Gravity Recovery (March 1988), however, will be summarized and updated in order of confidence of reserve classification.

A) Slough Gravels within Bullion Hydraulic Pit.

Left Limit Probable Reserves:

69,500 cu.m @ .427 g/cu.m	29,700 g
91,000 cu.yd @ .010 oz/cu.yd	954 oz

Right Limit Probable Reserves:

263,000 cu.m @ .467 g/cu.m	123,000 g
344,000 cu.yd @ .011 oz/cu.yd	3,950 oz

B) Pre-glacial Channel Gravels

Possible Reserves:

300,000 cu.m @ .830 g/cu.m	249,000 g
393,000 cu.yd @ .020 oz/cu.yd	7,860 oz

C) Boulder Till Unit

50,000 cu.m @ .830 g/cu.m	41,500 g
65,500 cu.yd @ .020 oz/cu.yd	1,310 oz

D) Bullion Tailings

155,000 cu.m @ .400 g/cu.m	62,000 g
205,000 cu.yd @ .010 oz/cu.yd	2,000 oz

Total Gold Reserves associated with Bullion Pit (all Categories)

837,500 cu.m @ .603 g/cu.m	505,000 g
1,100,000 cu.yd @ .015 oz/cu.yd	16,000 oz

× 400 = $6.4 MM

Other Exploration Targets

Currently, the owners son is setting up a simple bulk sampling plant in an area to the west of the Bullion Pit, adjacent to the Quesnel River. This area appears to be a higher older river channel which was mined by the Chinese in the late 1800's. Results of this bulk sampling program are pending late in September.

Opposite this location, on the other side of the Quesnel River, is a large area referred to as the China Farm. No exploration has been undertaker in this area, though the previous owner reported grades of .015 to .020 oz/cu.yd over a 5-12 foot mine section.

BULLION PIT RESOURCES INC.
Box 548
100 Mile House, B.C. V0K 2E0
Tel.604-395-4534

February 11, 1992

Dear Investors:

We are starting to ready ourselves for the 1992 mining season with meetings this Friday and Saturday (Feb. 14 and 15). The Saturday meeting will start at 10:00 A.M. and will continue to 4:00 P.M. We hope that we'll have completed our deliberations by 3:00 P.M. so that we could have an abbreviated open house (coffee and donuts?) from 3:00 P.M. to 4:00 P.M. and present our plans in summary form for local investors who might wish to stop by. Please give me a call at 395-4534 (395-2037 evenings) if you are coming or not coming so we can calculate numbers. We will have the 10 oz. nugget found in the Bullion Pit tunnel at this meeting.

Photographs of Tests

Two photographs are enclosed which show the tests done in November 1991 (Max von Hartmann took the photograph of George Williams, his son Ken, Joe Budinski and myself).

Significance of Tests -- Additional Reserves

About one year ago I based the financial results on the Michael Philpot report which showed estimated 1,100,000 cu.yd. of material containing an estimated 16,000 oz. of gold. At to-days prices that is approximately $5,000,000 of gold. However, these reserves were only for the depth of his tests -- to about 11 metres or 38 feet. The material below was left out of his reserve calculations.

Our November tests penetrated into the gold bearing gravels. The four tests (1 yard test fairly well separated) averaged $25 per yard. This test was at 20'-30' above bedrock and was about 10' deeper than Mr. Philpot's prior tests. We are pretty sure that bedrock gravels are several times richer (best indication is 8 times) than the gravels 10'-20' above bedrock.

My rough calculation is that there are an additional 1,000,000 cu.yd. of lower gravels. Maybe $25 per yd. is a reasonable figure to use -- if so, that means an additional $25,000,000 of gold -- at today's price of $355 U.S. per ounce.

I talked to Michael Philpot yesterday. He was pleased to hear of our results. He thinks the Bullion Pit is the best placer gold property in all of B.C.

Financing for 1992 Season

A V.S.E. listed publicly traded company will be offering our company $200,000 and 100,000 shares to buy a 25% stake in our operation. There will also be an option to buy a further 25% in one year's time. This offer will be presented to us on Saturday morning. If our company accepts the offer, an announcement will be made by the public company next Monday (Feb. 17). I consider this an exciting development --

BULLION PIT RESOURCES INC.
Box 548
100 Mile House, B.C. V0K 2E0
Tel 604-395-4534

M E M O R A N D U M

February 17, 1992

To: Shareholders of Bullion Pit Resources Inc.

From: M. L. Cassidy, President

Subject: Meetings held this past Friday, Saturday and Sunday re 1992 operations, start-up financing, and PMA Resources Inc.

MINE OPERATIONS - EQUIPMENT REQUIRED

On Friday afternoon six of us met (including 4 of 5 directors) at my home to consider in detail the digging of gold-bearing material, transportation to trommel, water supply, settling ponds, treatment of slurry, tailings, gold recovery in sluices, jigs and on gold table, and sale of gold. Suffice it to say, we have a mining/processing plan agreeable to all concerned.

In order to get started on a volume basis as early as possible, a further $200,000 operating capital is required; about 60% of this is for additional equipment - dragline, conveyors, sluice modifications, gold recovery trailer - as well as major maintenance/additions to our present equipment.

A May 1st production start date is our best guess at this time. Some movement of material could take place before then.

ADJUSTMENT OF ORIGINAL SETTEA GROUP SHARE POSITION

All four Settea partners were at 100 Mile House on Saturday/Sunday. Originally we had worked with a $300,000 50/50 split assumption on which George Williams felt he could sell his partners. Their original plan amongst themselves was to retain a 60% interest as well as a 10% royalty on regular material and a 15% royalty on higher grade (above 1 oz. per 50 yards). Further, they estimate the cash investment on their claims since 1987 to be around $450,000. Based on the preceding, both Max v.Hartmann and I felt that some adjustment was in order to correct what Settea suggested was an imbalance. Therefore, in the interest of harmony and equity, we agreed that the Settea partners should receive additional common shares to bring them from 43.4% to 50% of the issued common shares. However, the shareholders' loans are to remain as before (where the BPT shareholders have a little over $100,000 and the Settea shareholders have $292,500)

BULLION PIT RESOURCES INC.
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100 Mile House, B.C. V0K 2E0
Tel.604-395-4534

I also discussed this with Allen Booth (the third director from the original BPT group). He sees the reasonableness of this request and the fairness when one considers that their spending is higher than ours and occurred a few years earlier. I feel elimination of the royalty gains the BPT group an additional $1,000,000 over the life of the project.

VALUE OF PROJECT ?

We really don't know how much it is worth until we have completed mining. At the end of the 1992 mining season we will be able to present a more accurate estimate. However, if someone now asked me its' worth I would guess $30 million of gold (at current prices) less $10 million recovery cost - or $20 million. The letter of Feb. 11, 1992 shows how these figures were arrived at.

PMA RESOURCES INC.

We had successful negotiations with this VSE trading company on Saturday. The attached news release went out this morning to the VSE, across the country and possibly on to the NASDAQ in the U.S. This procedure is a way of going partially public and makes our investment much more liquid. PMA's only other asset is a large claim block on Mount Timothy near Lac La Hache, B.C. Although major mining companies are looking at these claims (some companies more intently than others), the driving upward force will be the Bullion Pit operation. Their $205,000 plus $100,000 shares buy-in is not a shareholders' loan, i.e. it will not be paid back except through 25% of the profits and gold inventory. Their 25% participation is best looked upon as an expense to ourselves.

a) PMA POOLED SHARES - In order to provide incentive to the "new group" (i.e. Bullion Pit shareholders), the "old" management group of PMA have pooled most of their stock. In this pool are remaining 700,000 shares which have to be purchased as follows:

200,000 @ 12¢ by February 28,1992
250,000 @ 24¢ by April 30, 1992
250,000 @ 35¢ by June 30, 1992

BULLION PIT RESOURCES INC.
Box 548
100 Mile House, B.C. V0K 2E0
Tel.604-395-4534

These shares have to be purchased shortly before the above dates if the pool is to hold. The stock was trading on Friday in the low 20¢ range. Today's news release (attached) should cause the stock to take a jump, but we'll have to see where it goes.

b) PRIVATE PLACEMENT - This will have to be done in early March to provide funds for start-up of the operation, including equipment purchases. My feeling is that the private placement will be made in the 40¢ to 50¢ range.

We will need to use the pool stock to market the private placement and accordingly the following "units" will be offered. Until we know the share price of the private placement, we cannot be specific on the total unit price. However, we want to make you aware of this opportunity as soon as possible so you can plan accordingly should you wish to purchase your allotment of units. To give you an example, if the private placement is at 40¢, the cost of a unit would be:

2,000	shares @ 40¢ =	$ 800.00	due early March/92
500	" @ 12¢ =	60.00	due February 28/92
750	" @ 24¢ =	180.00	due April 20/92
750	" @ 35¢ =	262.50	due June 20/92
4,000	shares for	$1,302.50	(an average price of 32.6¢ per share)

There is a 10-day lead on the April 30 and June 30 deadlines as the funds have to be in the lawyer's hands before that date.

Unless something happens at Mount Timothy, the expected increase in share price will be entirely dependent upon our performance at the Bullion Pit. If we do as well as we expect to do (processing a fair quantity of the deeper down gold-rich gavels), we would anticipate the stock to hit, perhaps, a dollar at the end of this year. There is a good probability that PMA may be offered an option for an additional buy-in later on in 1992.

BULLION PIT RESOURCES INC.
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c) ALLOTMENT OF PRIVATE PLACEMENT UNITS - PMA needs to raise $240,000 from the private placement and therefore has to sell 600,000 shares if the market dictates 40¢. Should the market demand 50¢, then 500,000 shares wouold be sold to raise $250,000. In this case the number of shares at 50¢ would be reduced so that slightly more than $800 per unit would be raised.

Therefore, I can say with some confidence that the unit price will be in the range of $1,300 to $1,350.

In order to raise the required capital and handle most of the pool stock offering, 300 units will have to be purchased. We feel that 200 of these units should first be offered to our current shareholders, leaving 100 units for some major investors who have expressed interest in our mine.

100 of these units are now being offered to the Bullion Pit/ Settea shareholder group and 100 to the original BPT Mining Joint Venture group. The total investment in the BPT-JV group is about $400,000. If your investment is $4,000 you would be entitled to one unit. The figures will be worked out so that one can take only part of a unit, if such is necessary.

This is enough for today. You now can watch with some interest the performance of "PMA Res" (trading symbol - PRY) on the Vancouver Stock Exchange.

Encl.

M. L. Cassidy - President

February 17, 1992

N E W S - R E L E A S E

P M A RESOURCES INC. is pleased to announce the signing of a letter of intent to acquire a 25% interest in the Bullion Pit placer gold project near Likely, B. C. The 25% interest includes all capital equipment and placer claims, valued at $750,000. Present reserves are estimated at 1,100,000 cu. yd., containing 16,000 oz. of gold, valued at approximately $5,000,000. PMA will pay $5,000 and issue 100,000 shares to BULLION PIT RESOURCES INC., as well as contribute $200,000 operating capital to the project.

BULLION PIT RESOURCES INC. conducted a 500 cu. yd./day test program during the 1991 mining season (including removal of 50% slough material, accumulated since 1942), producing enough gold to recover 80% of the capital set aside for testing.

Final testing in November 1991 at four well-spaced test sites, ten feet below previous testing, entered rich gold-bearing gravels and averaged $25 per cu. yd. This suggests a further deposit of 1,000,000 cu. yd. of very rich material to be located at 20 to 30 feet above bed rock.

BULLION PIT RESOURCES INC. is planning to operate two 1,000 cu. yd. shifts per day, commencing in early spring of 1992. The project is proceding into original, untouched gravels, approaching the old Moorehead/Bullion channel where coarse gold is anticipated. The largest nugget found so far weighs 10 oz.

The above aquisition is subject to regulatory approval.

PMA RESOURCES INC.

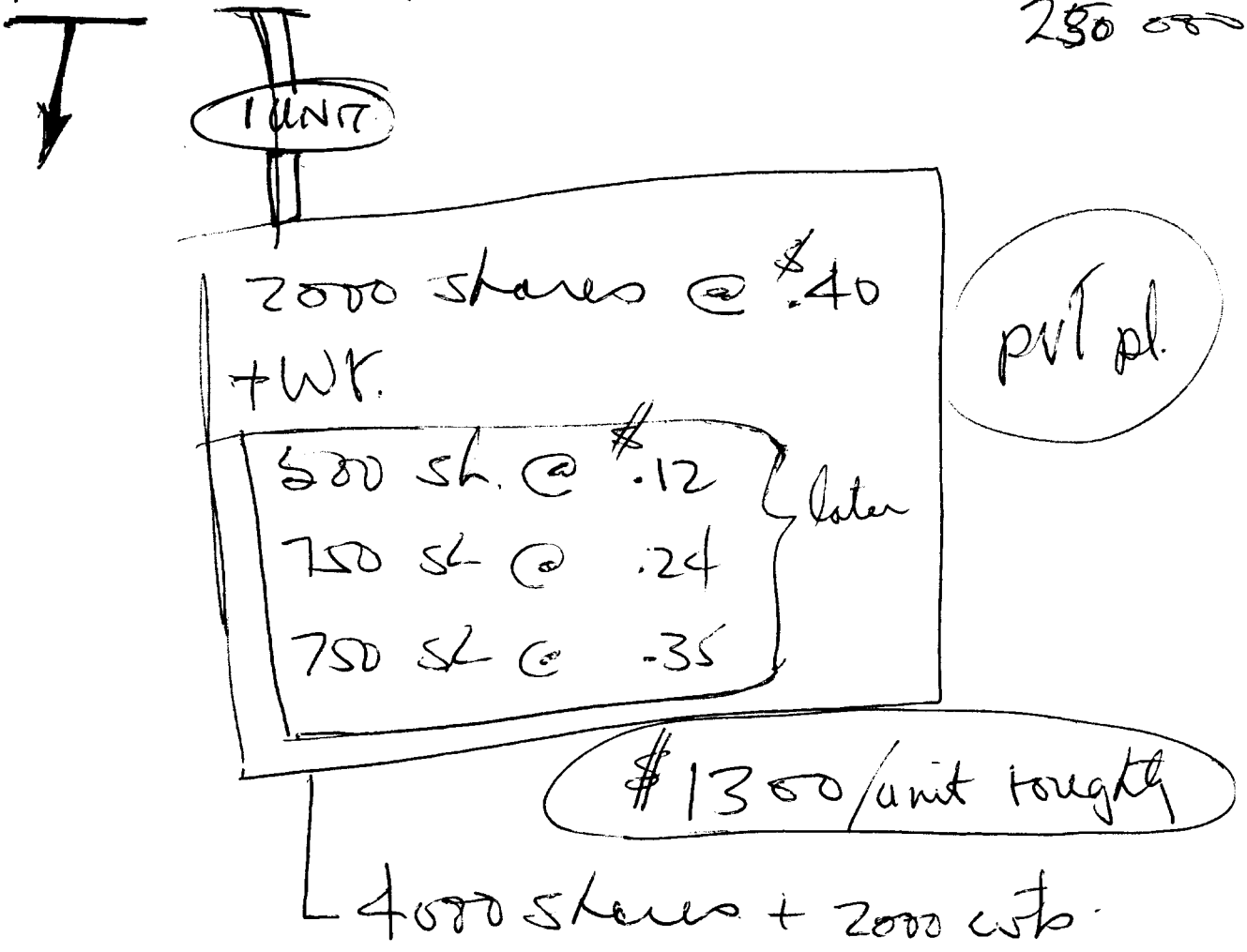
Peter J. Karlus,
President

The Vancouver Stock Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this news release.

PMA — MIKE CASSIDAY

100 UNIT BLOCKS

Raise 250 000



- EST. PRODUCTION 2,000,000
  5 000 oz

- BULLION PIT. RESOURCES pvt — FEB 19/92

- PMA gets 25% 1,250 oz

GOLDWAYS RESOURCES INC. (GWY-V)

ACQUISITION APPROVED - Gary Ciccozzi, president, reports Goldways Resources has received regulatory approval to acquire all outstanding shares of Clean Earth Technologies Inc., a Nevada company which has recently exercised an option to purchase 100% of the right, title and interest in and to a patented particle separation device called a "Centrifugal Flotation Cell".

The vendors of the Clean Earth shares are William P. Long, Rebecca Rae Long and Thomas Lee Long, all of Grass Valley, California. Total consideration to be paid or payable to the vendors by Goldways in exchange for the shares of Clean Earth is 500,000 Goldways shares issuable; 100,000 shares upon acceptance of agreement for filing; and, four additional blocks of 100,000 shares, each block to be issuable upon regulatory acceptance of audited financial statements evidencing

duction of the device is not expected in 1992 although worldwide expansion of production and development programs, directly and through distributors and licencees, will remain high on Goldways' list of priorities.

PMA RESOURCES INC. (PRY-V)

PLACER INTEREST ACQUIRED - Peter J. Karius, president, reports PMA Resources Inc. has signed a letter of intent to acquire a 25% interest in the Bullion Pit placer gold project located near Likely in central B.C. The interest includes all capital equipment and placer claims, valued at $750,000. Present reserves are estimated at 1,100,000 cubic yards containing 16,000 ounces of gold valued at about $5,000,000. PMA will pay $5,000 and issue 100,000 shares to Bullion Pit Resources Inc. and contribute $200,000 operating capital to the project.

Bullion Pit Resources conducted a 500 cubic yard per day test program last year, producing enough gold to recover 80% of the cost of the testing. Final testing in Nov/91 at four well-spaced test sites, 10 feet below previous testing, entered rich gold-bearing gravels and averaged $25/cu.yd. This suggests a further deposit of 1,000,000 cubic yards of rich material to be located at 20 to 30 feet above bed rock.

Bullion Pit Resources is planning to operate two 1,000 cubic yard shifts per day, starting in early spring 1992. The above transaction is subject to regulatory approval. (SEE GCNL No.16, 23Jan92, P.2 FOR OTHER PROJECT INFORMATION)

PACALTA RESOURCES LTD. (PAZ-V)

GAS WELL COMPLETED - M. Bruce Chernoff, vice president, reports Pacalta Resources Ltd. has completed a natural gas well at 5-20-60-21W4 in the

Klannerite at US 40¢/lb with the contract providing that Chemtech may buy another 500,000 lbs at US 45¢/lb. This totals US $425,000 in possible revenues.

Chemtech has also agreed to carry out a research and development program to develop new energy diffusive coatings using the relective characteristics of Klannerite. HeatShield expects this program could result in several patentable coatings. Once the patents are obtained, they will be assigned to the joint venture. HeatShield is continuing to negotiate with other major and industrial mineral distribution companies for the sale of Klannerite. Several large U.S.-based companies are continuing to test the various commercial applications of Klannerite. P.D.C.'s drilling program is planned to start within 30 days. (SEE GCNL No.18, 27Jan92, P.3 FOR PREVIOUS INFORMATION)

Hobsons Horsefly mine

Pre 1898 1200' tunnel
5400' "branching" tunnel

Total vol of development @ 5x7 = 190 cu T.

9900 tons milled ave $1.46 = .073

1898 Miocene Company (Rt Campbell) sends plan Langer's Luft.
400 ft shaft
Reports of "elevations"

1897 Miocene Gravel Mining Co Ltd
5 shaft "west of Harpers bar"
- 0-65 hard boulder clay
- 65-250 Auriferous gravel
water sand seam / 35 gpm.
- X cut Toward rim @ 180'
- Drain possible from Beaver Valley.

1896 Horsefly Hydraulic Mining Co.
- Cement bothers them
* talk of turning it into a drift mine. with a plant for crushing the cement.

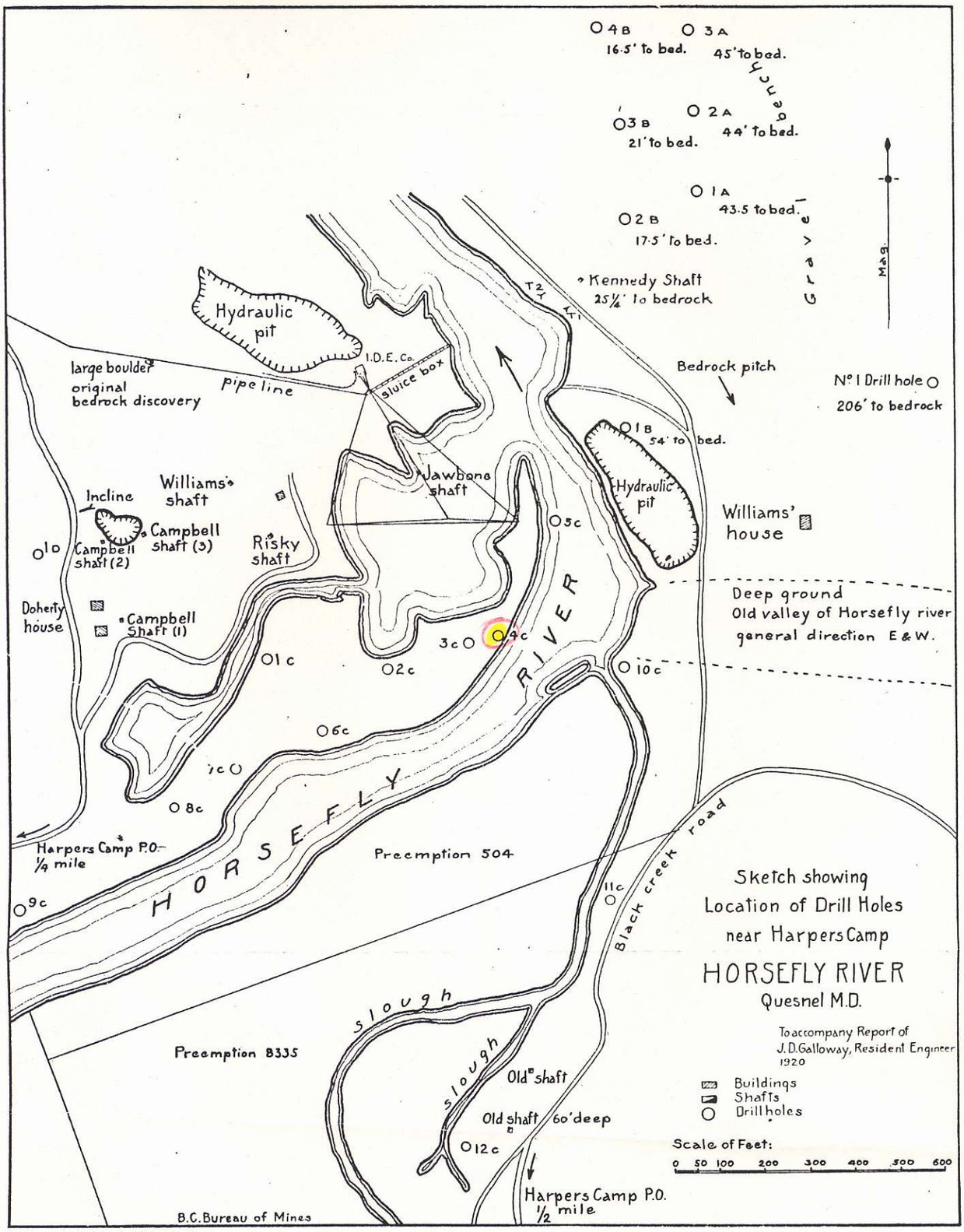
1918 - Harpers camp 3/4 mi Easterly from 150 mi

- Bend of Hassiffy. "10 acres good ground"
  R.T. Ward. hydraulic elevator pit

Miocene shaft (3 comp well timbered)
to bed rock at 500 ft. 1/3 mi south of roads pit.
100' "blue clay"
400' fine qtz gravel with some gold.

- In 1900 shaft sunk 50' further in bedrock.

SEE COPY


4B
16.5' to bed.
3A
45' to bed.
3B
21' to bed.
2A
44' to bed.
1A
43.5 to bed.
2B
17.5' to bed.
Kennedy Shaft
25¼' to bedrock
Grade
Mag.
Hydraulic pit
I.D.E.Co. sluice box
large boulder original bedrock discovery
pipe line
Bedrock pitch
No 1 Drill hole
206' to bedrock
1B
54' to bed.
Jawbone shaft
Hydraulic pit
Williams' house
Williams' shaft
Incline
Campbell shaft (3)
Campbell shaft (2)
Risky shaft
Doherty house
Campbell Shaft (1)
Deep ground
Old valley of Horsefly river
general direction E & W.
HORSEFLY RIVER
Harpers Camp P.O. ¼ mile
Preemption 504
Black creek road
slough
Preemption 8335
Old shaft
Old shaft 60' deep
Harpers Camp P.O. ½ mile
B.C. Bureau of Mines
Sketch showing
Location of Drill Holes
near Harpers Camp
HORSEFLY RIVER
Quesnel M.D.
To accompany Report of
J.D. Galloway, Resident Engineer
1920
Buildings
Shafts
Drill holes
Scale of Feet:
0 50 100 200 300 400 500 600

Cariboo White channell research.

1 Topography

2 placer workings ~~methods~~ (problems?) , claims* , Elevations (DEPTHS.)

3. Geology bedrock.

* 4 Pre glacial channels.

LAND!!! NO!

EVERYT.

CHANNEL characteristics

- grade
- AZMUTH

STRAT SEC.

- EL PASO — Early 70's drilled for copper for white gravel (old Mogul claim Cu in Barrels)

- 1978 - Silver Acorn opt from Mary (Assessment report 6965) (Sam claim)

- 1979 - Drill hole by Silver Acorn (E&B) private report on the way

DATA PROBE LOGGING LTD.

3133 DOVERVILLE CRESCENT S.E., CALGARY, ALBERTA T2B 1V1

COMPANY Can-Lake Explorations Ltd.

HOLE NUMBER OR NAME M-2

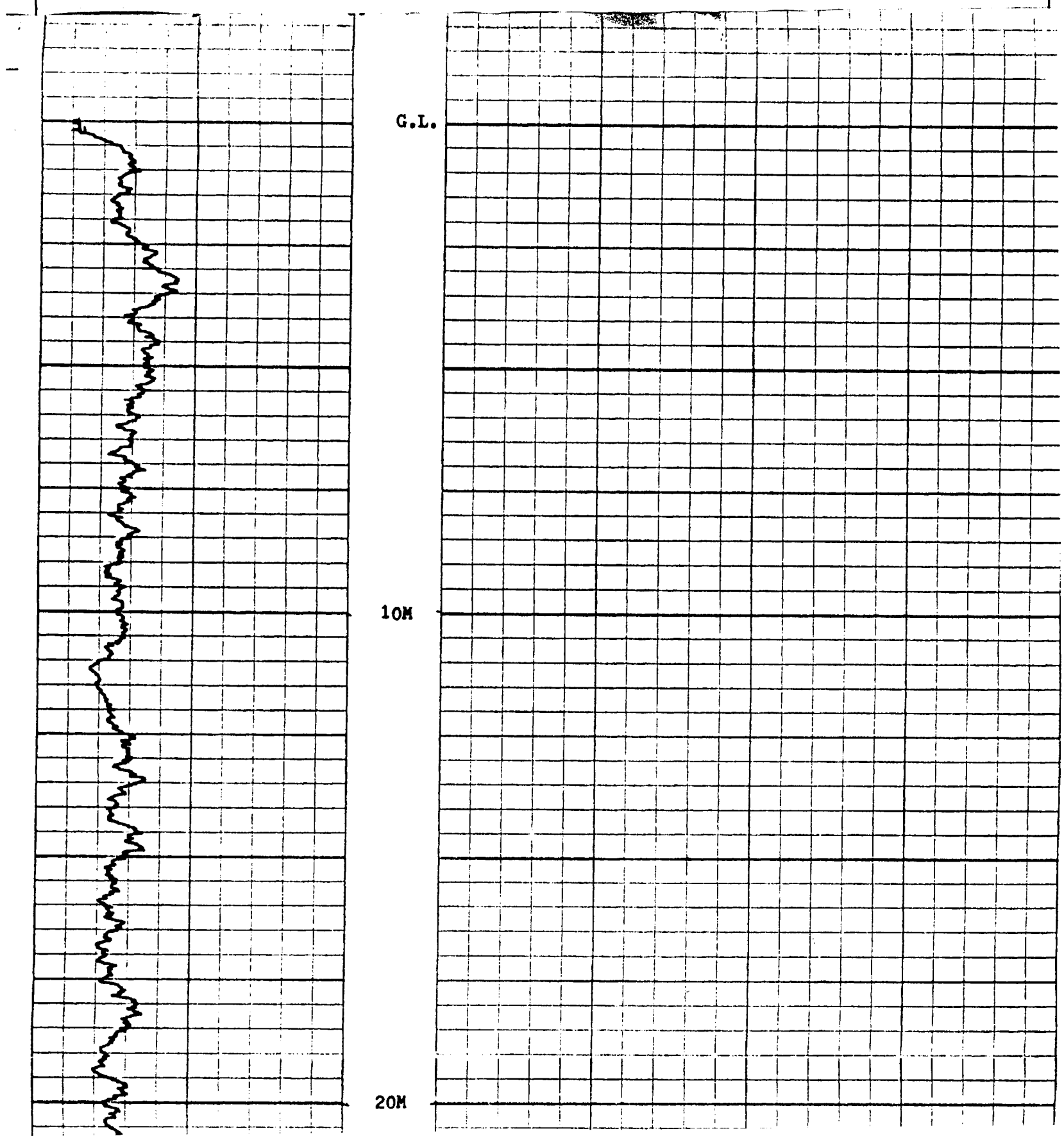
LOCATION Moffat Creek

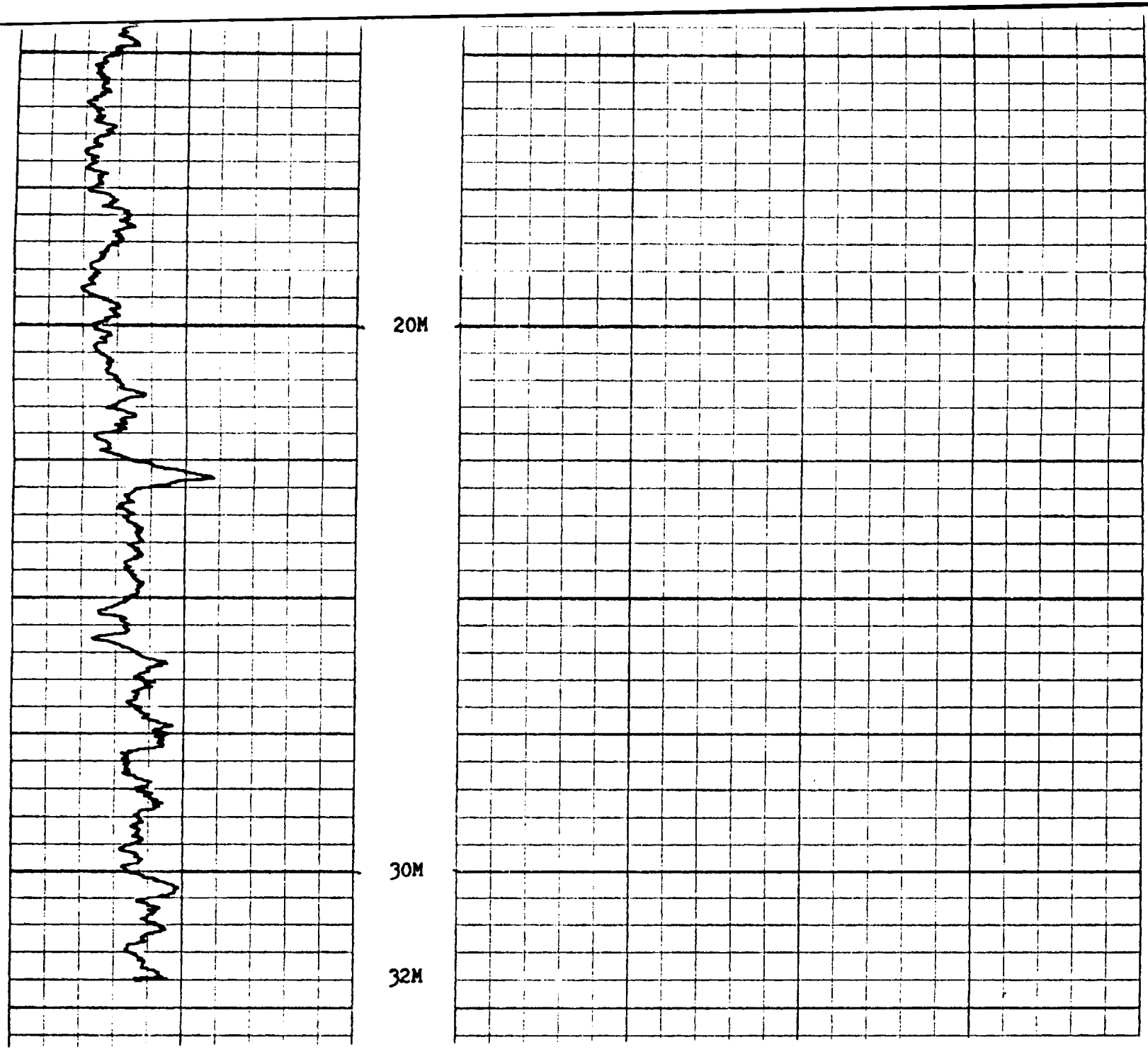
PROVINCE B.C. ELEVATION

LOG TYPE Natural Gamma

DATE	Dec.10 1978	TOOL MFG. & S/	Well Recon	SOURCE TYPE	
LOGGING UNIT NO.	6	TOOL DIAMETER	1 1/4	SOURCE STRENGTH	
RUN NO.	1	DETECTOR TYPE	Scint	SOURCE SPACING	
DRILLED DEPTH	40 M	DETECTOR SIZE	3/4 X 3"	RESISTIVITY TYPE	
LOGGED DEPTH	32 M	TIME CONSTANT, SECONDS	3	SCALE, OHMS/IN.	
ZERO DATUM	G.L.	RECORDER SCALE, C.P.S./IN.	30	S.P. SCALE, MV/IN.	
FLUID LEVEL		RECORDER ZERO	1m		
HOLE DIAMETER	5 1/2"	LOGGING SPEED, FT/MIN.	10	RECORDED BY	Davies
CASING LENGTH	nil	RECORDER DEPTH SCALE, F~~XXX~~	10	WITNESSED BY	Kauchowski
FLUID DENS.					

REMARKS:




20M
30M
32M

DATA PROBE LOGGING LTD.

3133 DOVERVILLE CRESCENT S.E., CALGARY, ALBERTA T2B 1V1

COMPANY CAN - LAKE EXPLORATION LIMITED

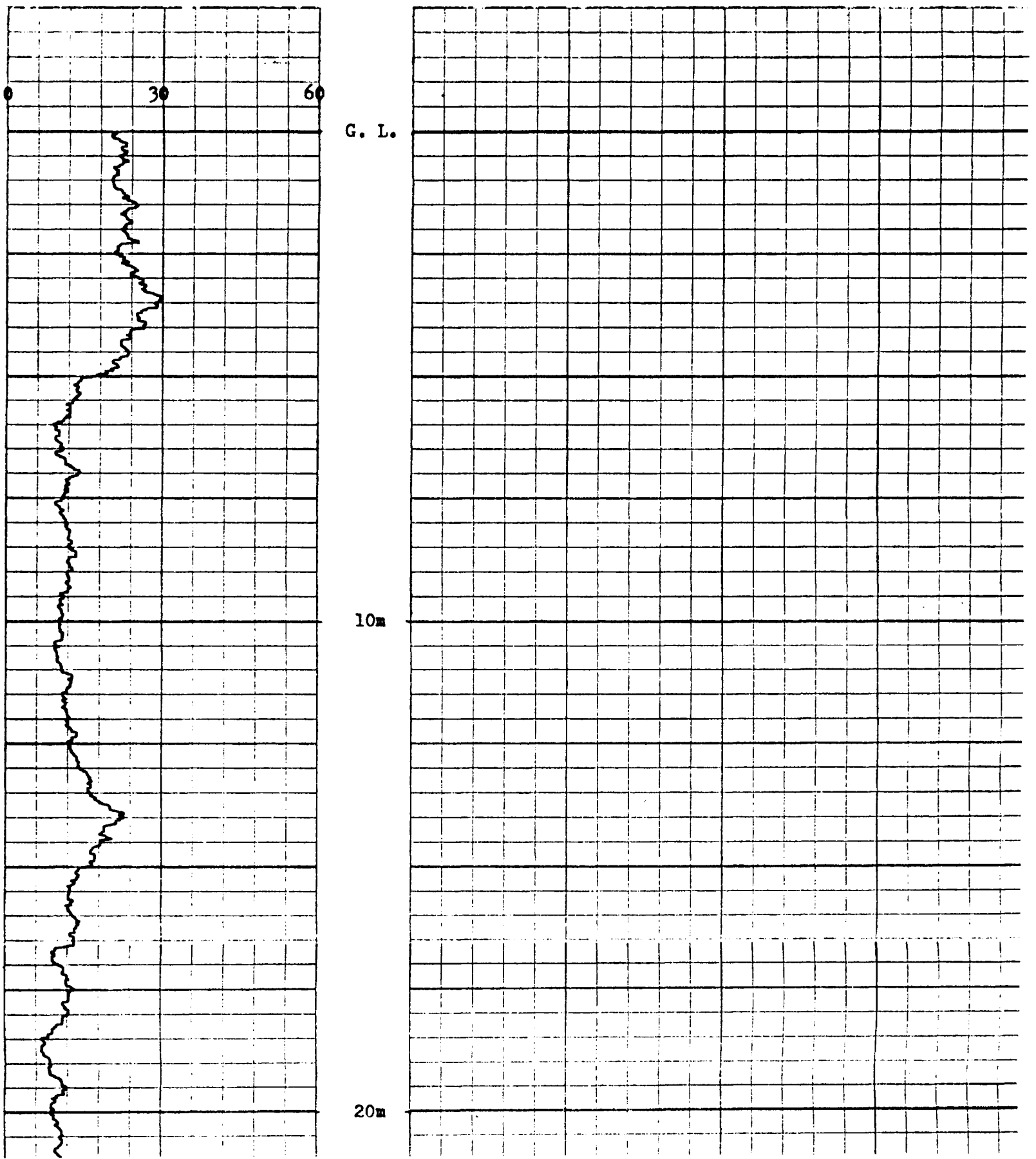
HOLE NUMBER OR NAME M - 3

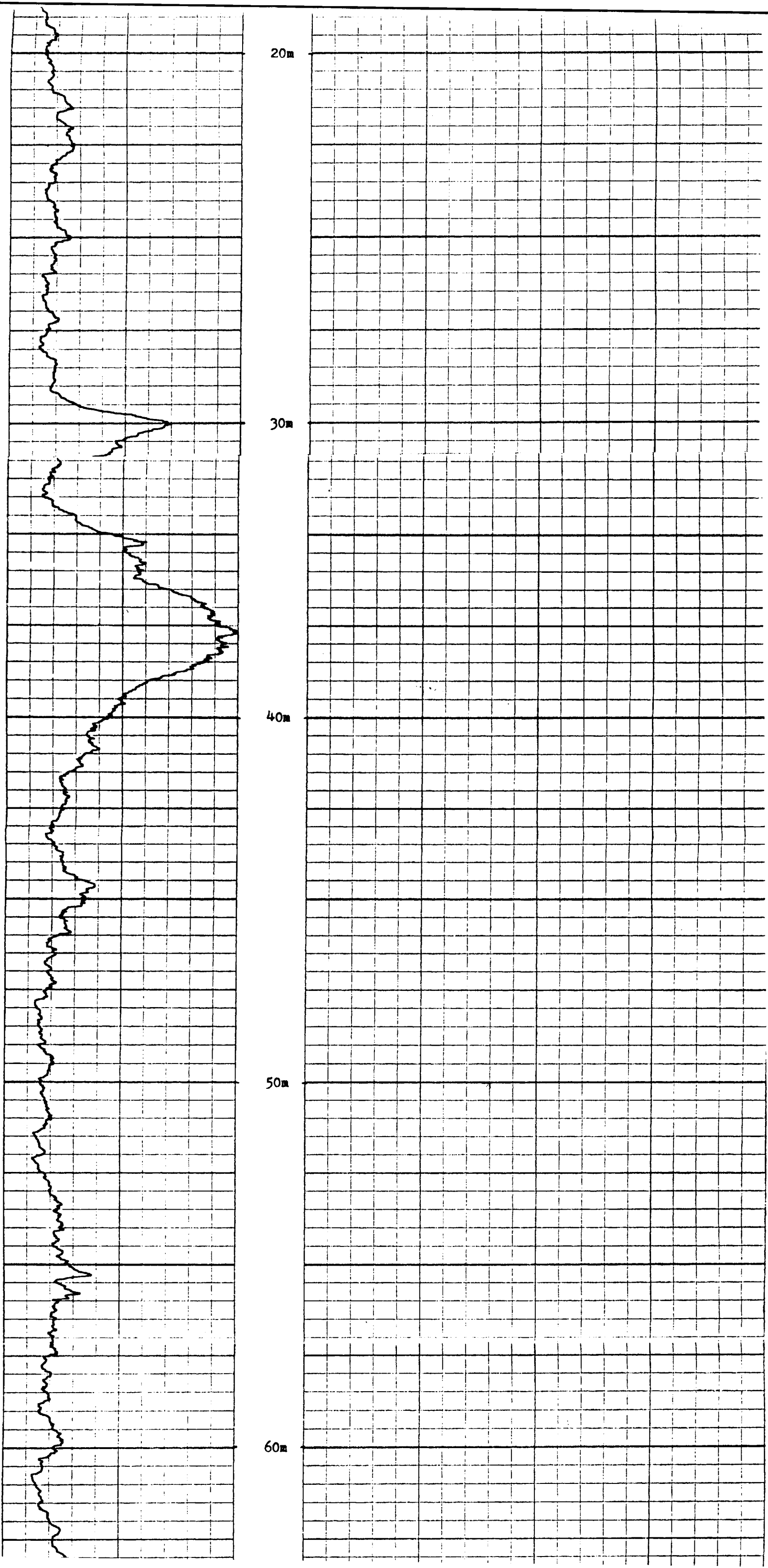
LOCATION Moffat Creek

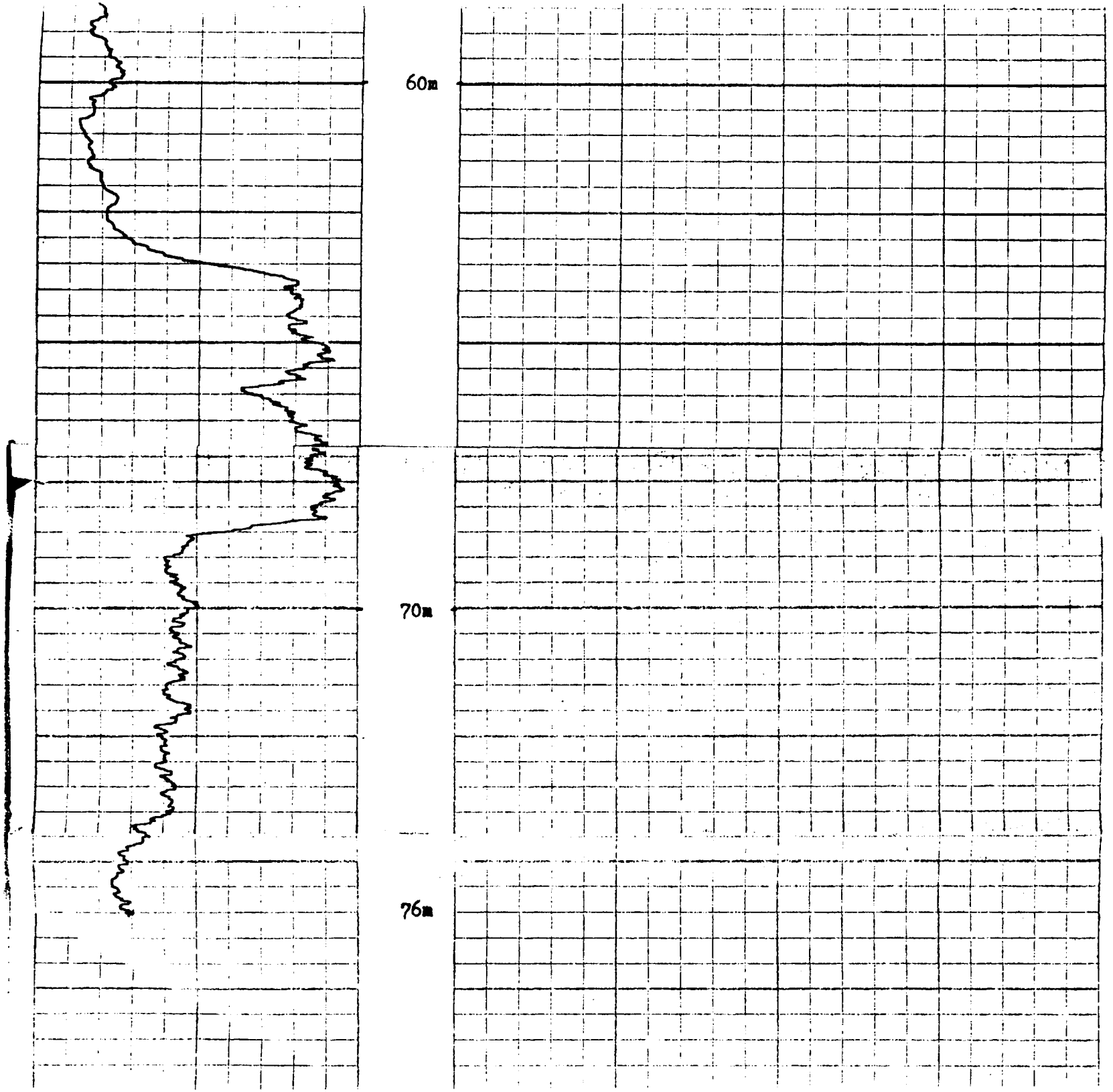
PROVINCE B. C. ELEVATION

LOG TYPE Natural Gamma

DATE	Dec. 16, 1978	TOOL MFG. & S/N	Well Recon.	SOURCE TYPE
LOGGING UNIT NO.	5	TOOL DIAMETER	32mm	SOURCE STRENGTH
RUN NO.	1	DETECTOR TYPE	Scint.	SOURCE SPACING
DRILLED DEPTH	82m	DETECTOR SIZE	75mm X 20mm	RESISTIVITY TYPE
LOGGED DEPTH	76m	TIME CONSTANT, SECONDS	3	SCALE, OHMS/IN.
ZERO DATUM	G. L.	RECORDER SCALE, C.P.S./IN.	As shown	S.P. SCALE, MV/IN.
FLUID LEVEL		RECORDER ZERO	As shown	
HOLE DIAMETER		LOGGING SPEED, FT/MIN.	10	RECORDED BY Davies
CASING LENGTH	52m	RECORDER DEPTH SCALE, FT/IN.		WITNESSED BY Krumchkowski
FLUID DENS.				




20m
30m
40m
50m
60m


60m
70m
76m

DATA PROBE LOGGING LTD.

3133 DOVERVILLE CRESCENT S.E., CALGARY, ALBERTA T2B 1V1

COMPANY Can-Lake Explorations Ltd.

HOLE NUMBER OR NAME M-1

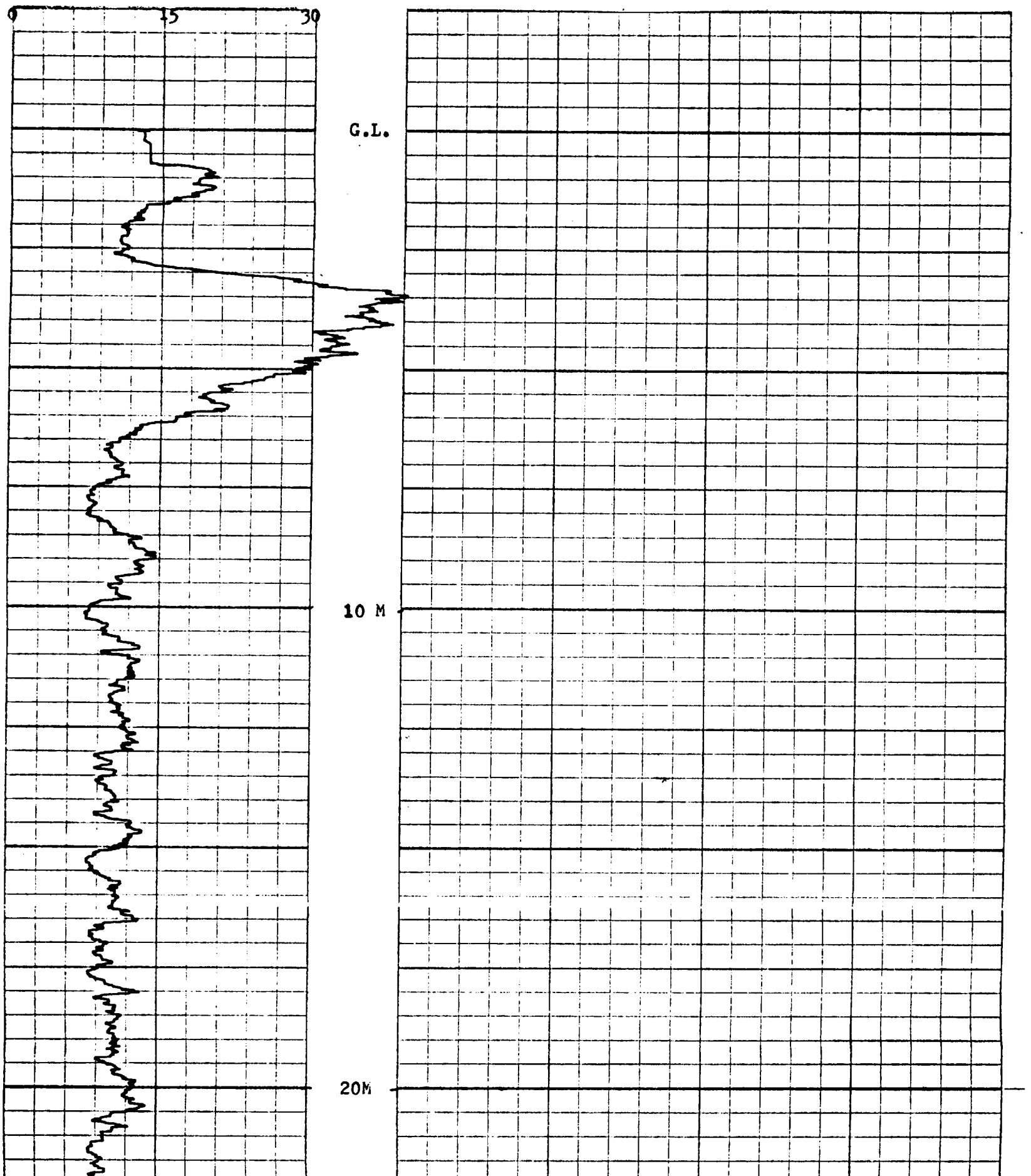
LOCATION Moffat Creak

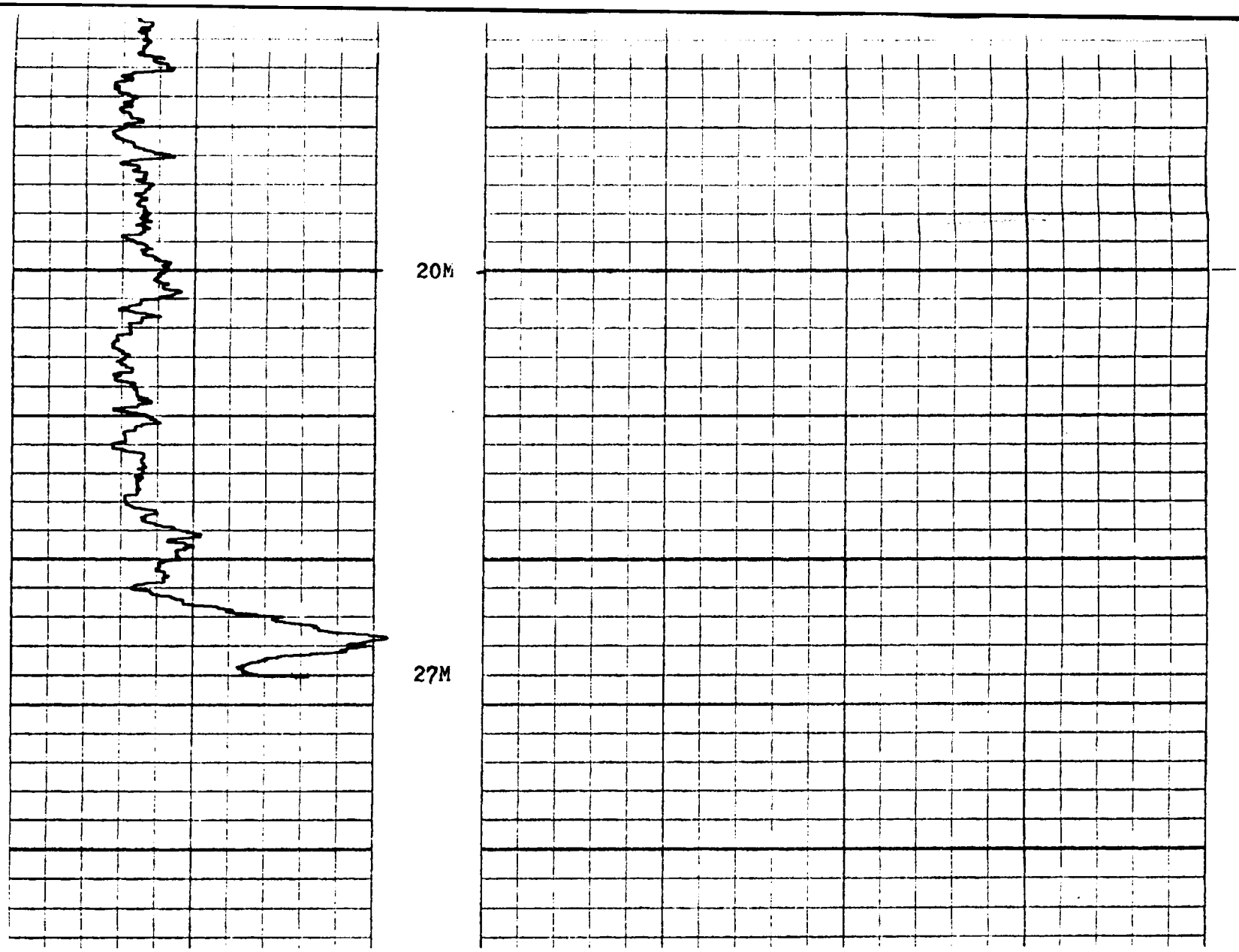
PROVINCE B.C. ELEVATION

LOG TYPE Natural Gamma

DATE	Dec. 7 1978	TOOL MFG. & S/N	Well Recon	SOURCE TYPE	
LOGGING UNIT NO.	6	TOOL DIAMETER	1 1/4	SOURCE STRENGTH	
RUN NO.	1	DETECTOR TYPE	Scint	SOURCE SPACING	
DRILLED DEPTH	29 M	DETECTOR SIZE	3/4 X 3"	RESISTIVITY TYPE	
LOGGED DEPTH	27 M	TIME CONSTANT, SECONDS	3	SCALE, OHMS/IN.	
ZERO DATUM	G.E.	RECORDER SCALE, C.P.S./IN.	15	S.P. SCALE, MV/IN.	
FLUID LEVEL		RECORDER ZERO	1m		
HOLE DIAMETER	6"	LOGGING SPEED, FT/MIN.	10	RECORDED BY	Davies
CASING LENGTH	T.D.	RECORDER DEPTH SCALE, FT/IN.		WITNESSED BY	Krutchkowski
FLUID DENS.					

REMARKS:




20M
27M