QD01887

096701

GEOLOGICAL
ASSESSMENT REPORT

MQ 1 to 4

YE77547 to 77550

NTS 116-C-7

Centred on
64°22'40''
140°37'50''

Work performed in September and October 2013
Work performed on all claims.

Angus Woodsend

20 March 2014

SUMMARY

Small scale placer mining (bulk testing) on Maiden Creek has confirmed the presence of economically viable placer gold values. The provenance of the contained gold appears to be linked to post-Pliocene faulting and a quartz-diorite intrusive.

CONTENTS

CLAIMS

The property consists of four quartz claims:

MQ-1	YE77547
MQ-2	YE77548
MQ-3	YE77549
MQ-4	YE77550.

Claim locations are shown on Figure 1.
A Claim Status Report is attached.

ACCESS

Access to the area is via the Top of the World Highway and the Clinton Road. A 4x4 dirt road runs down from the Clinton Road to Maiden Creek. An ATV trail continues down the left limit of Maiden Creek to the placer workings, as shown on Figure 3.

HISTORY

Placer gold was discovered here by Andrew Maiden. He was one of a party of six prospectors who went up the Fortymile River in September 1886. Though the creek was later named after him, Maiden and his discovery were largely forgotten with time.

In 1957 an asbestos occurrence was staked on Clinton Creek. During its initial development a winter cat road was used to freight in supplies. This road ran down the Maiden Creek valley before going over to the mouth of Mickey Creek, crossing the Fortymile River, and running up the Clinton Creek valley. It was soon supplanted by an all-season road that followed the high ground between Maiden Creek and Mickey Creek. This beautifully built road is still in use today.
In 1993 (?) Yukon Forestry used bulldozers to make a firebreak on the west side of Maiden Creek. The cat skinners are said to have found gold colours when crossing the creek.
In 2002, 116 years after Andrew Maiden's initial discovery, the author, Angus Woodsend, came down the firebreak trail with a Nodwell-mounted auger drill and began prospecting the valley floor. He found some payable ground in 2003, but it was mined out by 2005, having produced 105 raw ounces. Subsequent auger drilling and test cuts were disappointing, until 2010 when a drill line across the valley floor encountered encouraging values. The best holes were 2010-06 and 07 with recovered gold weighing 84.9mg and 59.5mg respectively.

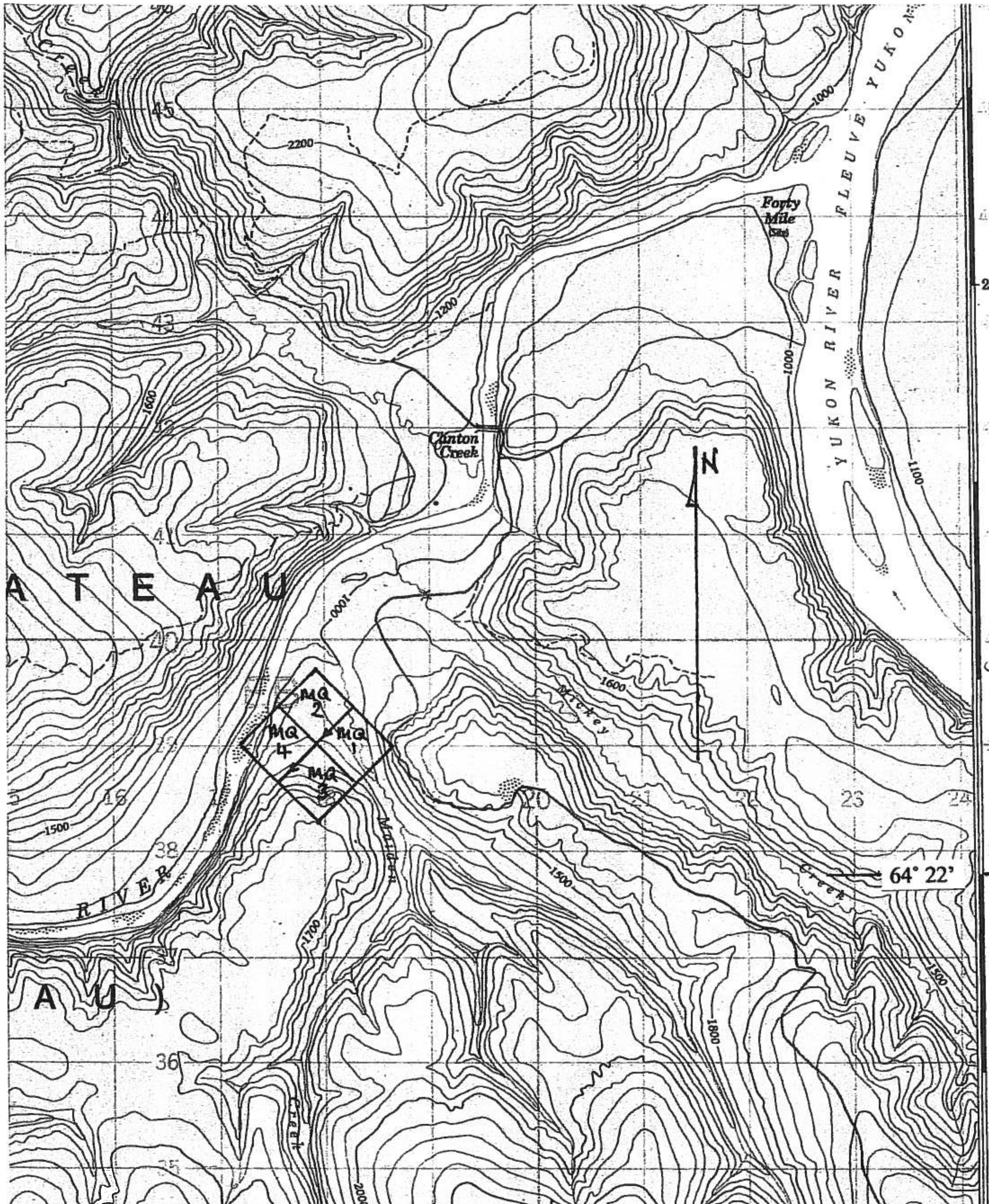


FIGURE 1 CLAIM MAP SCALE 1:50,000

MQ 1	YE77547
MQ2	YE77548
MQ3	YE77549
MQ4	YE77550

Yukon
Energy, Mines and Resources

Claim Status Report

30 September 2013

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS #'s
' MQ 1 - 4	YE77547 - YE77550	2014/04/12	Angus Woodsend	100.00	116C07

riteria(s) used for search:

LAIM DISTRICT: 1000002 CLAIM STATUS: ACTIVE & PENDING OWNER(S): WOODSEND ANGUS REGULATION
YPE: QUARTZ

Total claims selected : 4

ft column indicator legend:

R - Indicates the claim is on one or more pending renewal(s).
P - Indicates the claim is pending.

Right column indicator legend:

L - Indicates the Quartz Lease.
F - Indicates Full Quartz fraction (25+ acres)
P - Indicates Partial Quartz fraction (<25 acres)

D - Indicates Placer Discovery
C - Indicates Placer Codiscovery
B - Indicates Placer Fraction

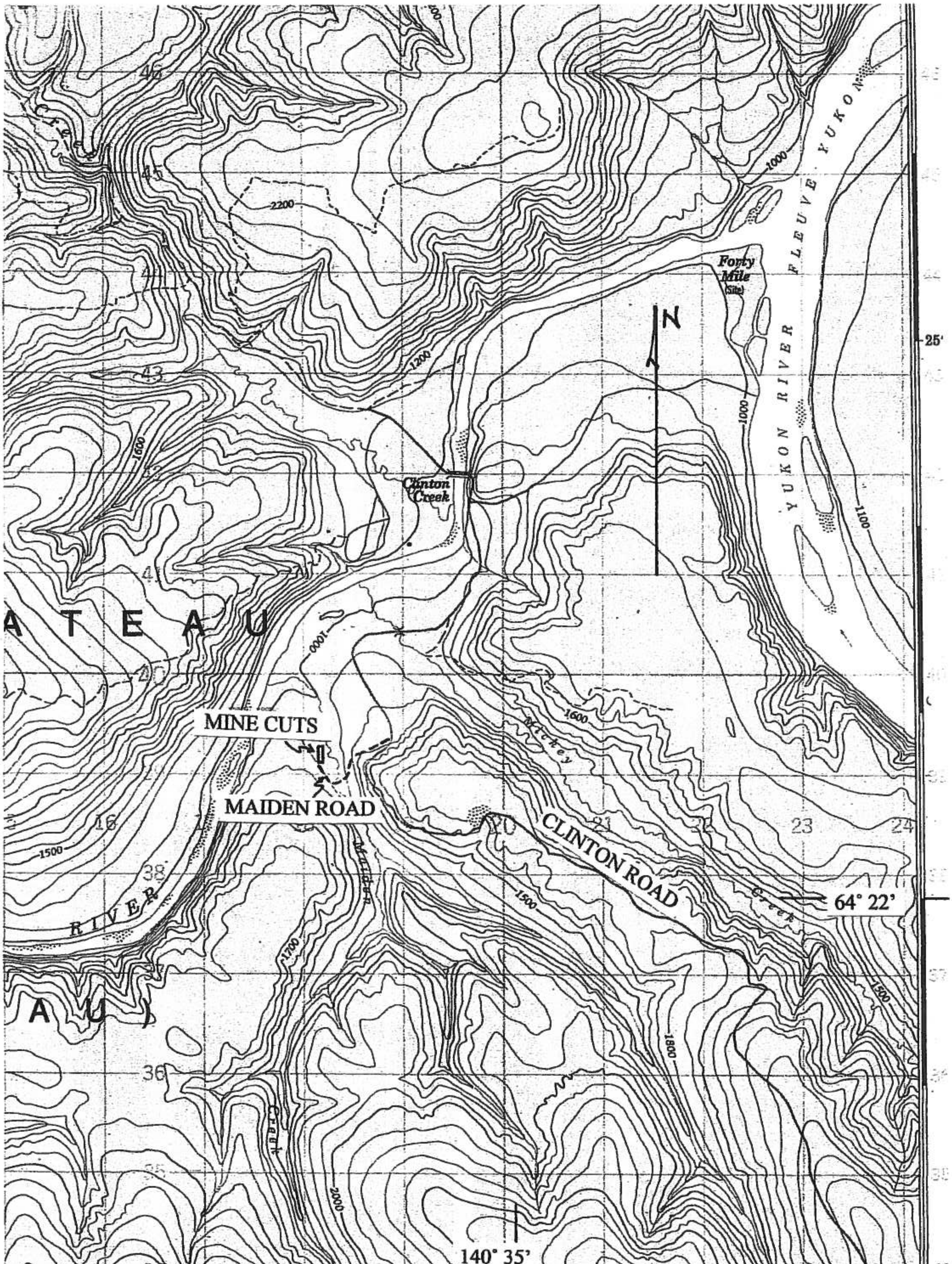


FIGURE 3 ACCESS ROADS AND PLACER MINE CUTS SCALE 1:50,000

600 feet downstream from the drill line there were old ditches and channels and a circular swampy pond with axe-cut tree stumps around it. These were Andrew Maiden's workings.

From 2010 to 2013 Groundhog Exploration (Angus Woodsend's company) mined from Maiden's old working toward the drill line, and in 2013 confirmed the drill values. The placer gold lies at the base of a thick succession of unconsolidated poorly washed gravels which, in the Alaskan Fortymile, are called high terrace gravels.

REGIONAL GEOLOGY

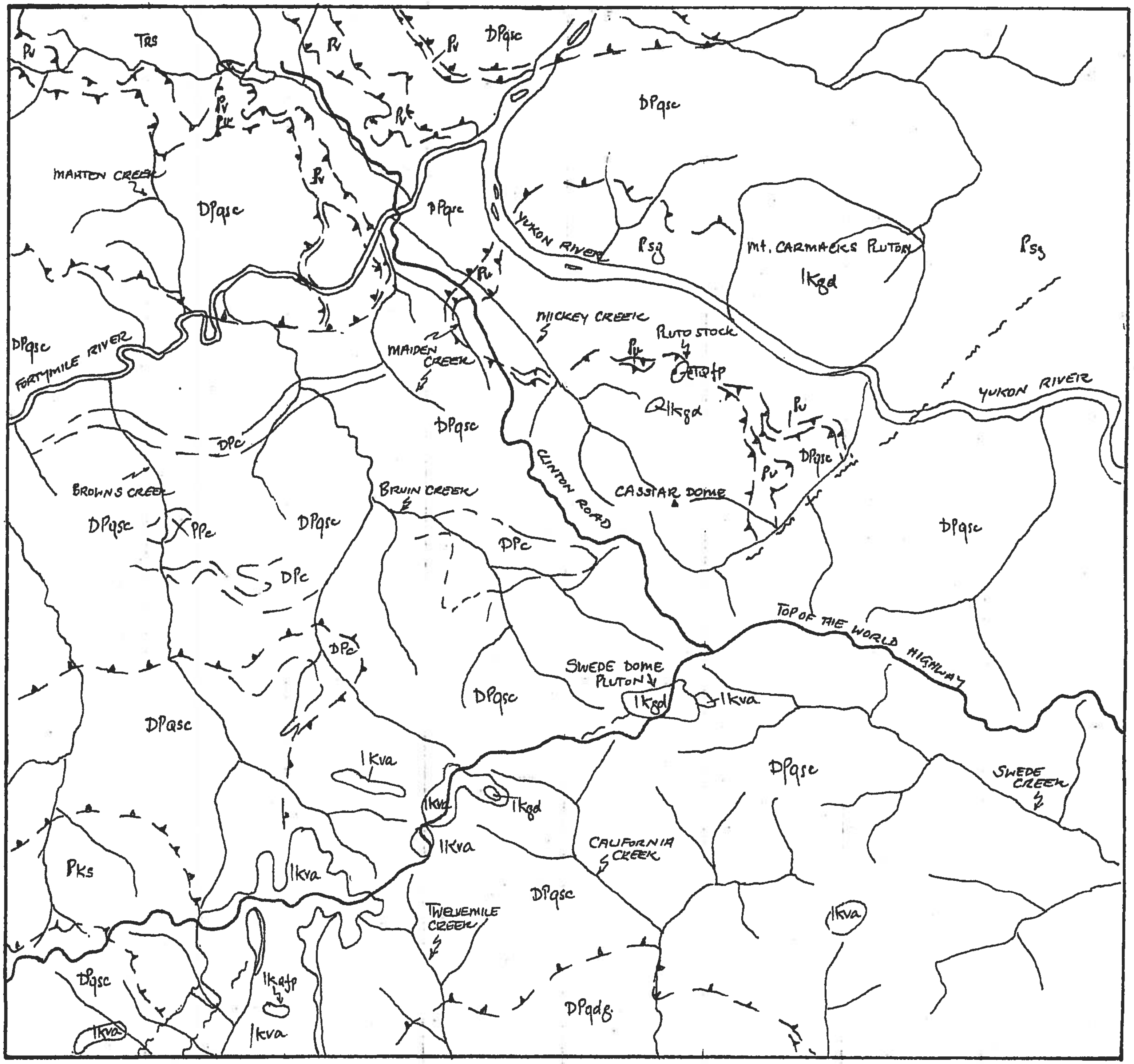
The area was mapped by Mortensen (GSC Open File 1927), who identified Devonian to Mississippian rocks of the Yukon-Tanana Terrane. To the south there are two granitic intrusives that have been dated from 69.8 Ma (Swede Dome pluton) to 59.4 Ma (Pluto stock). Figure 4 is a map of the regional geology taken from Mortensen (1988).

SURFICIAL GEOLOGY

The property lies within a fault-bounded sedimentary basin which has been deeply incised by the Fortymile River and its tributaries. This period of rapid down-cutting was caused by the Yukon River drainage reversal in the middle Pleistocene, approximately 190,000 years ago. Prior to this the paleo-Fortymile River, running from west to east, drained a flat-lying basin and deposited a thick succession of unconsolidated poorly stratified gravels. These high terrace gravels have been well described by Yeend (USGS Bull 2125). They are thought to be of the same age as the Klondike White Channel gravels (3 to 5 million years, or Pliocene).

Due to the recent rejuvenation of the Fortymile the high terrace gravels are now some 550 feet above the current creek level, except where they have been down-faulted. This is the case in the area now being placer mined by Groundhog Exploration where the high terrace gravels have been brought down to the same level as present-day Maiden Creek by a stepped succession of east-west faults. These are shown on the attached air photo interpretation, Figure 5.

Six smaller east-west faults have been found during placer mining, and these are shown on the attached 1"=100' mine plan, Figure 6. These faults have been identified because of a change in bedrock elevation, or because they carry running water. One of them carries a minor amount of quartz-carbonate veining associated with a 2ft vertical movement.



GEOLOGY

PARTS OF 116, B, C.

TERTIARY

eTafp qtz-feldspar porphyry

LATE CRETACEOUS

lKva Andesite

lKgd Granodiorite

TRIASSIC

TRS argillite, sandstone

PALEOZOIC

Pu serpentinite.

Pv greenstone.

DPqsc Nasina schists.

DPc Nasina marble.

after MORTENSEN J.K.
G.S.C. OPEN FILE 1927

SCALE 1: 250,000

N

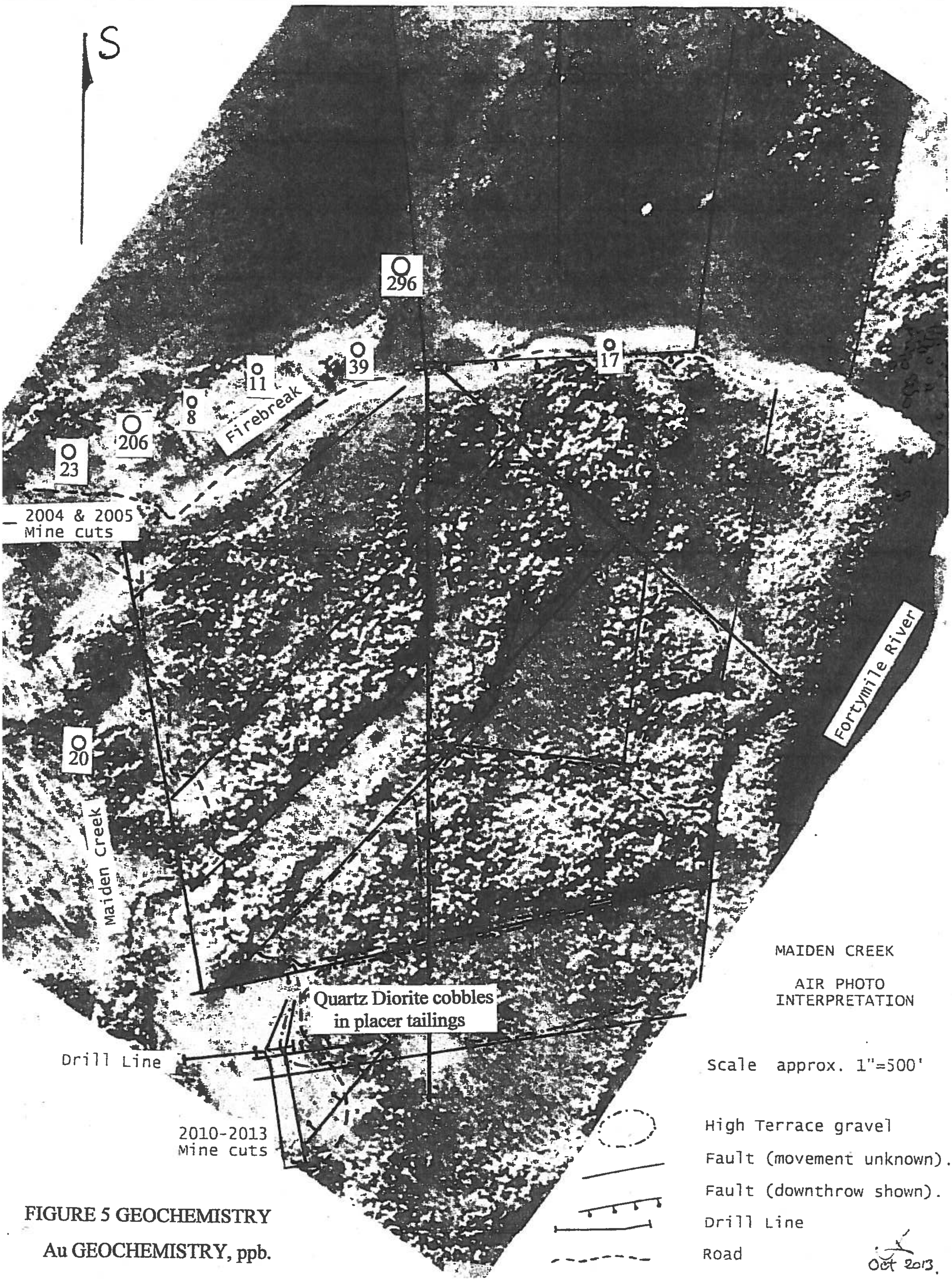
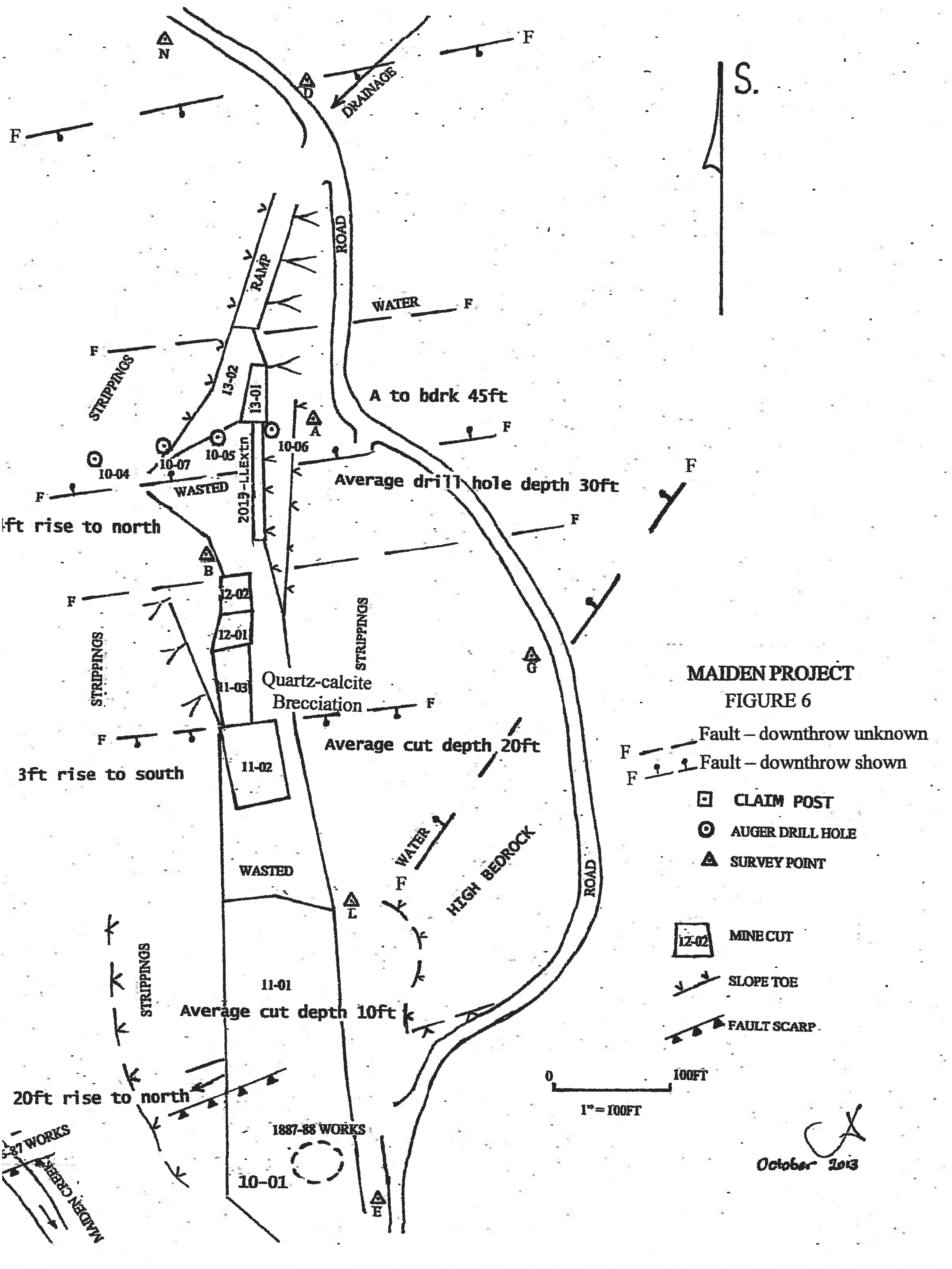


FIGURE 5 GEOCHEMISTRY

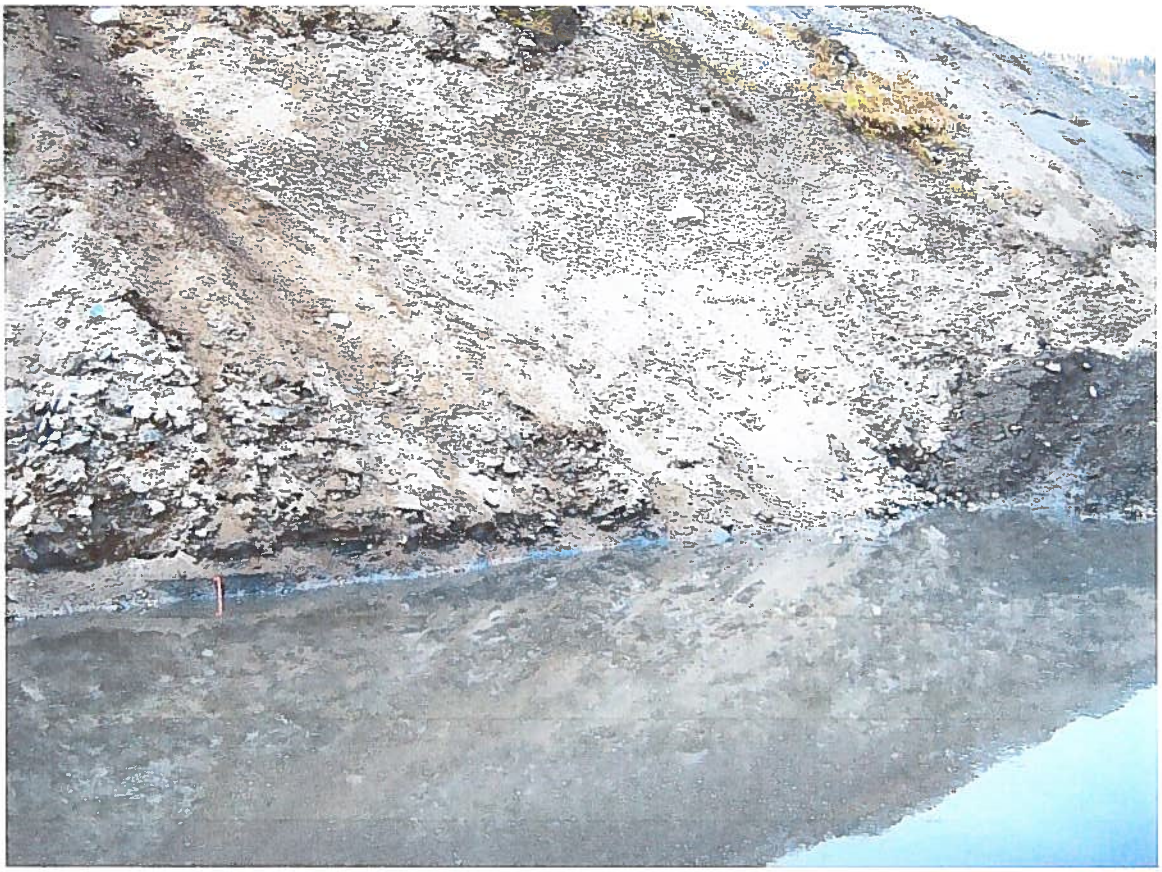
Au GEOCHEMISTRY, ppb.



S.
N
D
DRAINAGE
F
ROAD
RAMP
WATER
STRIPPINGS
13-02
13-01
A to bdrk 45ft
A
10-04
10-07
10-05
10-06
2013-LLExtn
WASTED
Average drill hole depth 30ft
ft rise to north
B
12-02
12-01
11-03
Quartz-calcite
Brecciation
G
Average cut depth 20ft
11-02
3ft rise to south
WATER
HIGH BEDROCK
WASTED
L
11-01
Average cut depth 10ft
20ft rise to north
1887-88 WORKS
-87 WORKS
MAIDEN CREEK
10-01
E
MAIDEN PROJECT
FIGURE 6
Fault – downthrow unknown
Fault – downthrow shown
CLAIM POST
AUGER DRILL HOLE
SURVEY POINT
MINE CUT
SLOPE TOE
FAULT SCARP
0
100FT
1" = 100FT
October 2013

Bedrock exposed in the mined area is a graphitic phyllite, and the only alteration seen to date is surficial oxidation on the gravel-bedrock interface.

Photograph 1 shows the gravel-bedrock contact in mine cut 2013-01.



Photograph 1. Unaltered graphitic phyllite bedrock in 2013 placer mine cut.

GEOCHEMISTRY

Between 2001 and 2005 Groundhog Exploration collected 75 stream sediment and soil samples from the lower Maiden Creek area. The samples most anomalous in gold are shown on the air photo interpretation. There appears to be a strong association between these samples and a north-south fault which can be traced for 1.5 miles to the south.

INTRUSIVE MATERIAL

As much as 30% of the coarse tailings (trommel screen oversize) from the 2013 placer mining are cobbles of diorite and quartz diorite. This material has not been present in the earlier mine cuts, which suggests it comes from a local source, rather than being a component of the general Fortymile wash. Because of the depth of overburden and the corresponding lack of outcrop, future exploration for this intrusive and its contacts will have to rely on drilling and on-going mining.

Photograph 2 shows samples of quartz-diorite cobles.

Photograph 2. Samples of diorite and quartz-diorite cobbles from placer mine cut 2013-01, Maiden Creek.

AUTHOR'S QUALIFICATIONS

This report was prepared by Angus Woodsend whose brief resume is as follows:

1990 to present. Groundhog Exploration, evaluating placer deposits, primarily in the Yukon, particularly using auger drilling.

1986 to 1990. Consultant completing projects in Western Canada, Western USA, Mexico, Ecuador, Venezuela and Zimbabwe.

1982 to 1986. Queenstake Resources. 'Engineer' on the Clear Creek dredge, manager of the Preido Hill placer project, and exploration geologist in Western North America.

1976 to 1982. Campbell Resources. Geologist exploring primarily for tin and tungsten in Western Canada and Alaska.

1971 to 1976. Messina (Tvl.) Development Co., Mine geologist and exploration geologist in South Africa and South West Africa.

1971, Graduated B.Sc.(Hons.), Geology, Southampton University, U.K.

Angus Woodsend also performed the field work.

Angus Woodsend
20 March 2014

REFERENCES

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STATEMENT OF EXPENDITURES

Fieldwork. 1 geologist day, mapping...............................$400.00

Reporting. 1 geologist day....................................... ....$400.00

TOTAL..$800.00

Angus Woodsend
20 March 2014