# ORO ALTO VENTURE

112

# PROSPECTING - GRUBSTAKE PROGRAM

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# YUKON MINING INCENTIVES PROGRAM PROJECT # 01-040

.

# MAIDEN, BRUIN, AND MICKEY CREEK AREAS

FORTYMILE DISTRICT

YUKON

NTS 116-C-7

A.WOODSEND

November 2001

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#### SUMMARY

Exploration in the Maiden, Mickey and Bruin Creek areas of the Fortymile District has been successful in indicating several hardrock and placer exploration targets.

Reconnaissance geochemical sampling, aerial photograph interpretation, preliminary surface prospecting, and the results from 29 auger drill holes (conducted as part of separate programs) have led to several realisations:

1) There is a Fortymile equivalent to the Klondike White Channel gravel which carries economically viable placer gold values;

2) These placer values do not appear to be purely detrital in origin but instead are likely to have been introduced into the basal Fortymile White Channel gravels hydrothermally;

3) The hydrothermal fluids responsible for mineralisation were generated by intrusive events which are thought to be guite recent in age;

4) Two granitic plutons are suspected, one under the Maiden Creek structure which has probably breached the surface, and the other under the mouth of Bruin Creek which remains hidden.

The proposed focus of 2002 hardrock exploration is geological mapping and continued geochemical sampling with an emphasis on the Maiden Creek structure. It would be particularly useful to obtain an age date for the intrusive event(s).

Ten placer targets have been chosen with an eye to accessibility and the likelyhood of economic viability, though given time and funding constraints it may not be possible to evaluate all these targets in 2002.

Exploration, both hard rock and placer, is in its very early stages and there are still many more questions than answers. Sensible choices must be made regarding the 2002 exploration programs so as to develop the various properties to greatest effect.

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#### INTRODUCTION

This is a report on the grass-roots exploration conducted by the Oro Alto Venture in the Maiden, Bruin and Mickey Creek areas of the Fortymile District of the Yukon (NTS 116-C-7) during 2001.

This work received funding from the Yukon Department of Economic Development under the Yukon Mining Incentives Program, project designation number 01-040, and this report is in compliance with the terms and conditions of the contribution agreement.

According to this agreement the contents of this report are to be kept confidential until 31 March 2007.

Appreciation is given to Mr. Roger Hulstein, geologist, for helpful technical advice.

#### LOCATION AND ACCESS

Figure 1 shows access routes into the area.

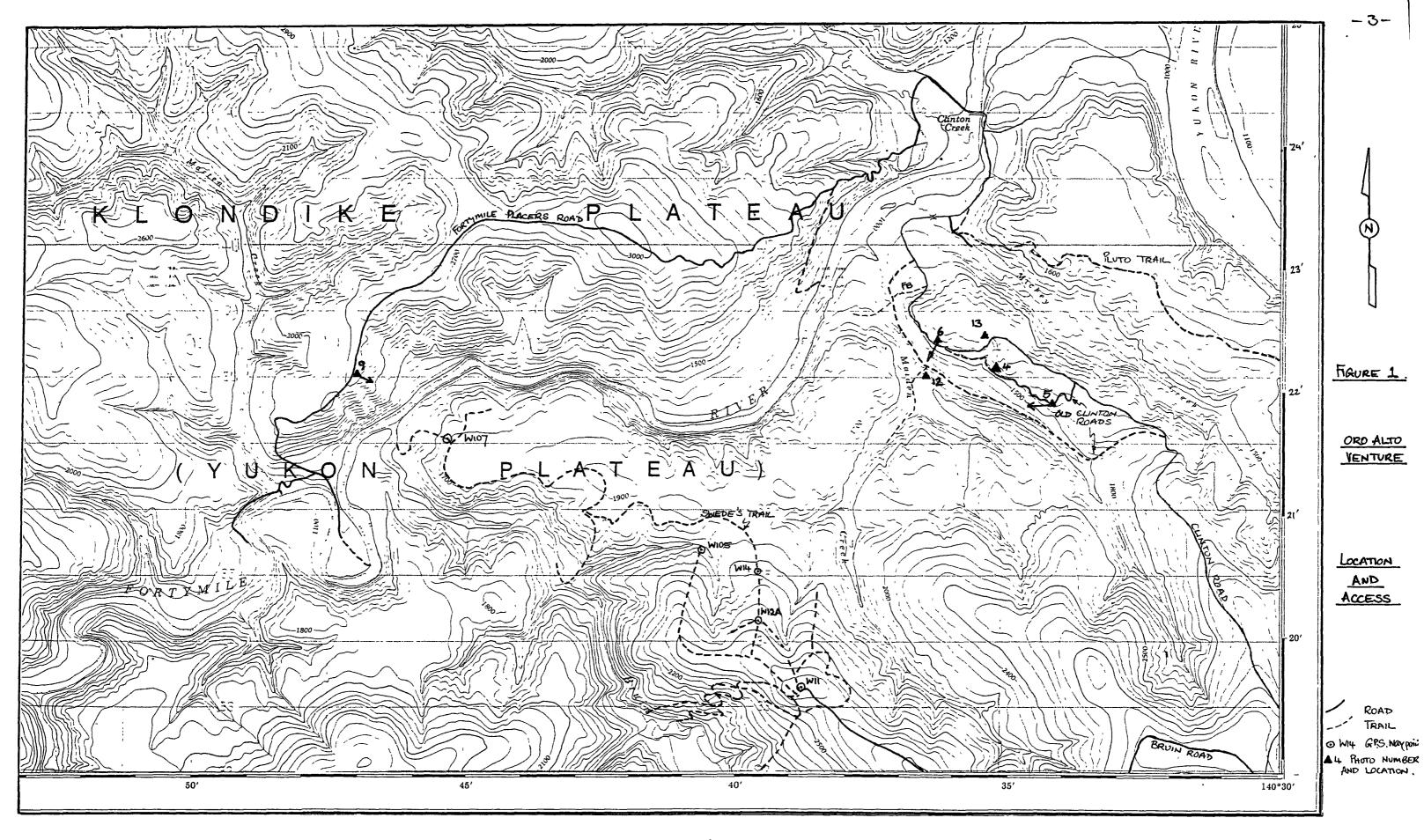
The Clinton road runs from the Top Of The World Highway to the old Clinton townsite and mine site. It is an all weather gravel road open from May to October.

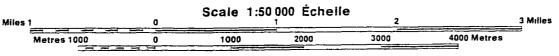
The Fortymile Placers road is a private road to the Fortymile Placers (W.Claxton and L.Chapman) base at the mouth of Marten Creek.

Two old Clinton roads are shown. One is a winter cat trail running the length of the lower half of the left fork of Maiden Creek, the other is a predecessor of part of the present Clinton road, most of which was rehabilitated by the Oro Alto Venture in 2001.

The trail marked FB is a firebreak crossing lower Maiden Creek, while the short trail up the right fork of Maiden is probably also related to fire fighting.

The Pluto trail was constructed in 1980 to explore a Mo-(W) prospect. It is presently blocked by windfall but could be rehabilitated with little surface disturbance.





Nov. 2001.

The Bruin Road is a summer road accessible with 4x4 vehicles in dry weather to GPS waypoint W11. Most of the trails beyond this point were constructed in attempts to gain access to lower Bruin Creek.

Oro Alto cleared ATV access to waypoints W12A and W105 in 2001. The saddle north of W12A is occupied by frozen muck, an impediment to road building.

A boat trip was made to the mouth of Bruin Creek and the trail up to waypoint W107 was walked. This route is very steep and also underlain by frozen muck.

The conclusion reached regarding future access possibilities onto the plateau between Bruin and Maiden Creeks is that the only realistic route for a summer road would be from W11 to W105, and across the Bruin right limit tributary at this point to link up with Swede's trail. Such an access road would require serious heavy equipment work.

#### HISTORY

Gold was discovered on Franklin Bar on the Fortymile in 1886 (Yeend, 1996). This was the first discovery of coarse gold in the Yukon River drainage. Though most of the early workings were upstream in Alaskan territory, the settlements built at the mouth of the Fortymile to support the miners were in Canadian territory. Since it took two days to travel from the mouth of the river to the workings a roadhouse was established just upstream from the mouth of Bruin Creek at the halfway point.

As more miners came into the country and the shallow bars were mined out prospectors spread into the surrounding country and discovered gold on Miller, Glacier and Big Gold Creek in the Canadian Sixtymile District in 1892, and on Birch Creek, Alaska, in 1893. Gold may have been discovered on Marten Creek in these early years, though no written record has been found.

Most of these creeks were abandoned during the rush to the newly discovered Klondike in 1896.

Two gold dredges operated briefly on the Canadian portion of the Fortymile River, but both sank during floods. The remains of one of them can still be seen at the mouth of Bruin Creek. Marten Creek was worked intermittently through to the 1930's, but overland access was always a problem in these early years.

The (re)discovery of asbestos in the Clinton Creek watershed in 1957 led to the construction of access trails and roads during mine development by Cassiar Asbestos in the early 1960's. The mine was closed in 1978.

Since then Fortymile Placers has mined placer gold on its various Fortymile River properties, and sporadic placer exploration has been conducted on Marten Creek and Bruin Creek.

There has been little hard rock exploration for minerals other than asbestos. Within the area covered by Fig.1 the only serious prospects appear to have been the Fortymile property (Yukon Minfile 116-C-7 #118, Au-Ag vein) and the Kink property (Yukon Minfile 116-C-7 #163 Au vein).

Placer exploration was re-invigorated by W.Claxton in 1999. Recognising the similarity between the gravels exposed in the Clinton road borrow pits and the Klondike White Channel gravels he had two shafts sunk into the exposed gravels. In 2000 he commissioned an auger drill program to evaluate this gravel deposit.

#### 2000 PLACER DRILL PROGRAM

The 2000 drill program was conducted using a Nodwell-mounted auger drill with Angus Woodsend as operator.

A line of holes was sunk through the lower gravels and into the underlying bedrock on the hillside on the northeast side of lower Maiden Creek. By the end of this program three important things were apparent.

1. The gravel deposit itself was so similar to the Klondike White Channel gravel that it was referred to as the Fortymile White Channel gravel.

2. The gravel deposit was essentially flat lying.

3. The gravel did indeed contain gold, sometimes in economic amounts, and some of the gold was coarse and crystalline.

As a result it was concluded that more drilling was necessary to delineate mineable placer reserves, and that an effort should be made to look for the hard rock source of the placer gold.

#### 2001 PLACER DRILL PROGRAM

Auger drilling in 2001 was funded in part by the Yukon Mining Incentives Program (Project 01-041), for which a separate report has been filed.

The old Clinton road was cleared out and a drill road was built around the hillside twenty to twenty five feet above the bedrock contact. It had been hoped that the drill line could be extended far enough to tie in to the 2000 drilling, but unstable ground conditions stopped the drill road short.

In general the 2001 drill results were less encouraging than those of the previous year, but more careful analysis of all the drill information to date revealed some very interesting patterns and correlations which can be summarised as follows:

1) The Fortymile White Channel gravels in the section drilled were flat lying with the gravel - bedrock contact following the 1635 ft contour.

2) Most of the gravels drilled carried only background, sub-economic amounts of placer gold as extremely fine particles with just a slight concentration near bedrock.

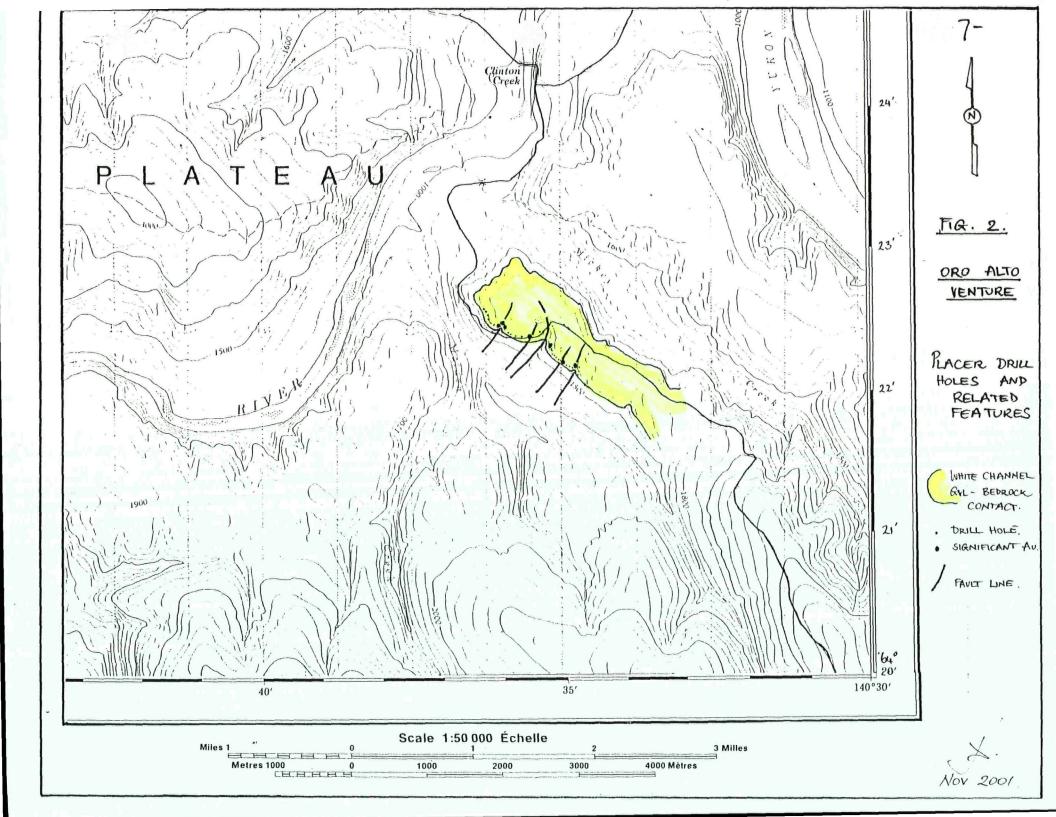
3) Economic concentrations of gold depended on the presence of significantly coarser particles, many of which were hackly or crystalline.

4) This coaser gold seemed to lie in basal gravels that were sticky, more clayey, and therefore more difficult to wash.

5) There also appeared to be a correlation between economic holes and small draws or gulches.

Figure 2 shows the location of the 2000 and 2001 drilling and the relationship between the better holes, the White Channel gravel - bedrock contact and small gulches and draws.

As mentioned, the drill road had to be stopped short before reaching the gulch immediately west of the last hole drilled due to unstable water saturated overburden. It seemed quite possible that the ground was in this condition because it lay directly on a fault plane, and it was this fault which determined the position of the gulch itself. Having reached this conclusion it was a short step to wonder whether the other draws on this hillside were also following fault lines.



#### BEDROCK GEOLOGY

The lower Fortymile is underlain by greenschist to lower amphibolite facies metamorphic rocks of the Yukon -Tanana Terrane ( Mortensen, 1988). Rocks in this terrahe are of quartzitic, pelitic, calcic, and mafic metasediments that have been intruded by granitic rocks. Locally these intrusives have been dated from 69.8 Ma (Swede Dome pluton) to 59.4 Ma (Pluto stock) (Mortensen, 1988).

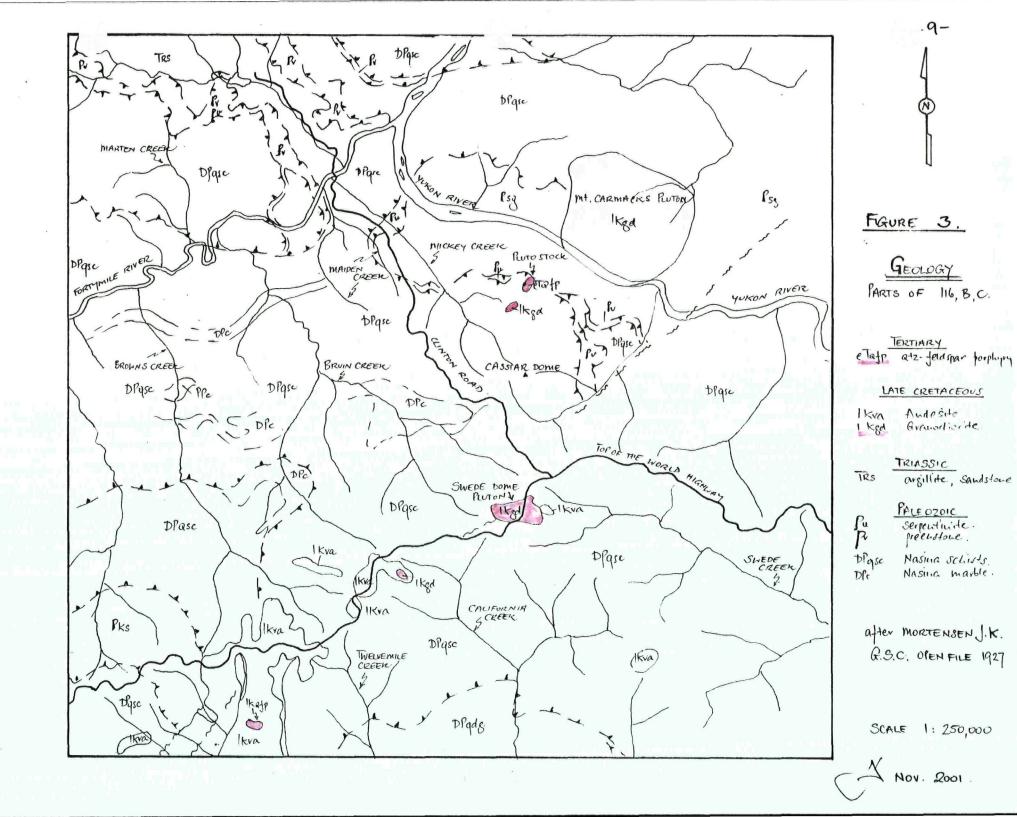
Figure 3 is a geology map of the general area taken from Mortensen (1988).

The Fortymile White Channel gravels were deposited within this terrane in a fault-bounded sedimentary basin which extended from the middle reaches of the present day Fortymile in Alaska to the present day Yukon valley just east of the study area. On the Maiden-Mickey divide this basin is 3.5 miles wide and the White Channel gravels themselves are more than 200 ft thick.

The somewhat restricted exposures of in-place gravel in the rehabilitated old Clinton road cut banks show a poorly sorted, poorly stratified pebbly quartzrich gravel with a predominately sandy matrix. Well rounded quartz clasts make up more than 80% of the gravel.

Figure 4 is a photograph of the White Channel gravel.

The absence of chert in the gravels indicates that they were not derived from the limestone country to the northeast, but rather that they were deposited by a precursor to the present Fortymile which ran gently through a flat-lying basin from west to east depositing quartz-rich gravels in a wandering braided stream environment. Poorly defined imbrication also indicates deposition in a west to east flowing drainage.



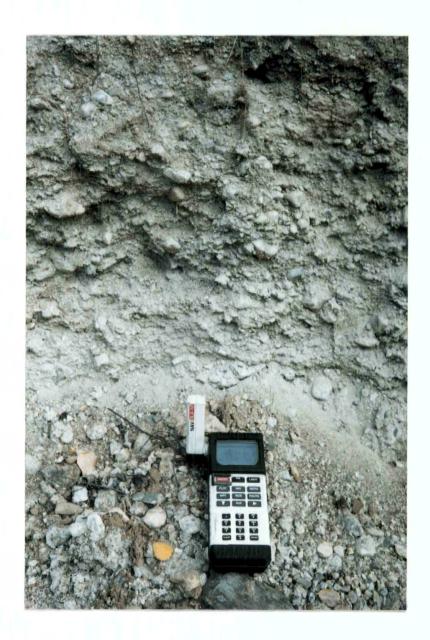


FIGURE 4. FORTYMILE WHITE CHANNEL GRAVEL

#### EXPLORATION FOR A HARDROCK SOURCE

#### INITIAL CONCEPT

By the end of the 2000 placer drill program it was known that there were economically viable placer gold concentrations in the basal levels of what was by then called the Fortymile White Channel gravel Terraces underlain by these gravels had been mapped upstream as far as the Alaskan border ( Duk-Rodkin, 1996)

The presence of coarse hackly crystalline gold suggested a nearby source, not one so far removed as to lie in Alaska The dredge that sank at the mouth of Bruin Creek was said to have been recovering coarse gold, and the nearest known heat source (intrusive) in this general upstream direction was the Late Cretaceous Swede Dome pluton (see Fig 3)

For these reasons several days were spent in June of 2001 assessing possible access routes onto the plateau between Bruin Creek and Maiden Creek By the end of the 2001 placer drill program, though, the suspicion was that the source of the placer gold was closer than that

#### INTERESTING STRUCTURES ON MAIDEN LEFT FORK

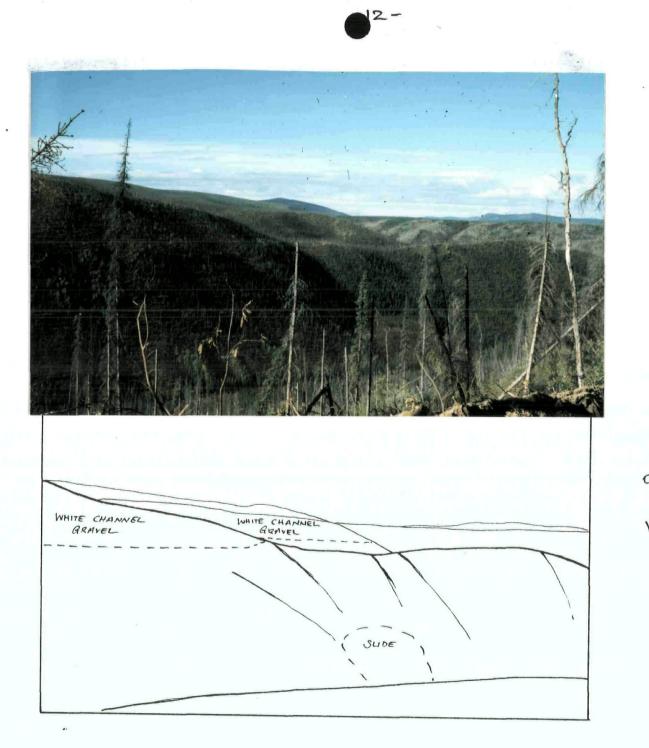
Looking west from the old Clinton road there are several clear views of the hillside opposite where a break in slope indicates the White Channel gravel bedrock contact

Figures 5 and 5A show this contact on the Maiden left fork slope and on the hillside beyond However on the saddle in the centre of the photograph the contact cannot be seen

From a point on the main Clinton road a little more than a mile to the northwest one gets another clear view to the west This is shown in Figures 6 and 6A

(The locations from which photographs were taken are shown on Fig 1 )

Referring to Figure 6, the White Channel gravel bedrock contact is seen in the distance on the far left of the photograph To the right of this is the low-lying saddle, and to the right again a higher ridge that should show the White Channel - bedrock contact, but does not





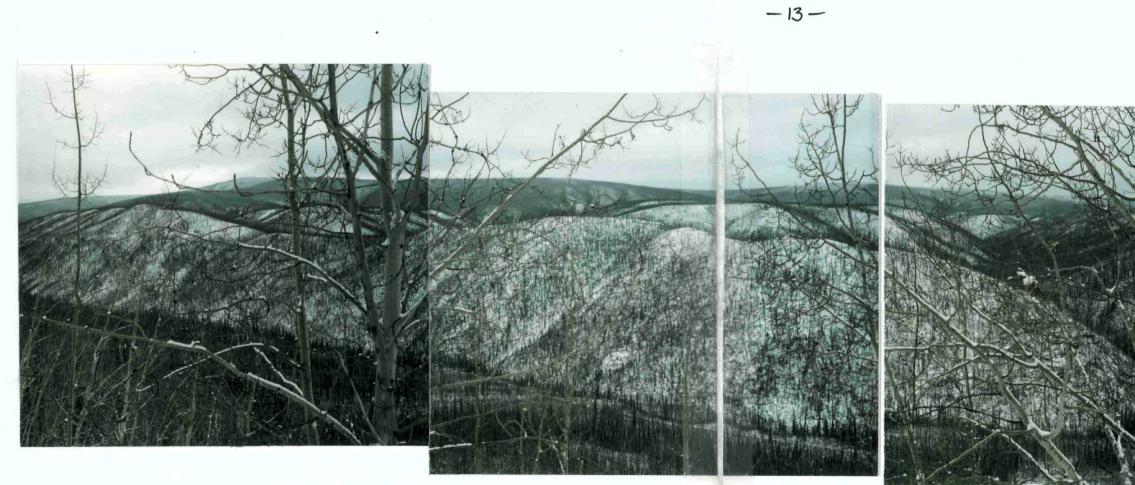
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FIG. SA ORO ALTO VENTURE

VIEW WEST FROM OLD CLINTON ROAD.





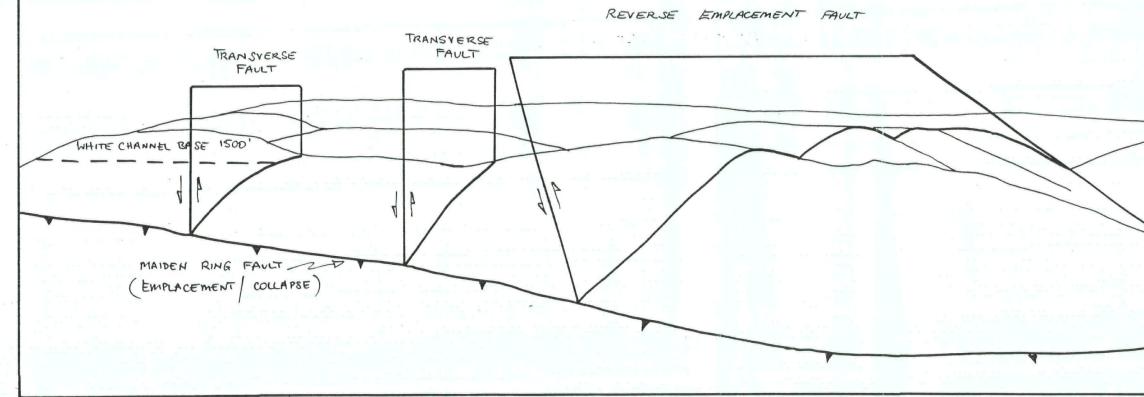
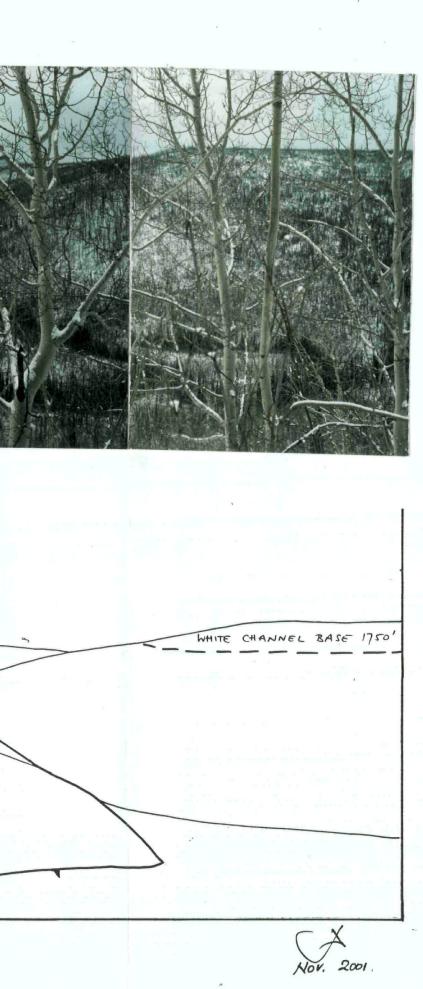


FIGURE 6 AND 6A. VIEW WEST FROM CLINTON ROAD.



One explanation for this interruption in the White Channel - bedrock contact line could be that this ridge represents an 'island' of higher ground which divided the flow of the paleo-Fortymile.

On the far right of Figure 6 the White Channel bedrock contact reappears, as if in support of the 'island' concept, except that the contact is now at a significantly higher elevation - more than 200 ft higher. One has to invoke post-depositional tectonics to account for such an elevation change.

Figure 6A is an interpretation of the structures causing these features.

If tectonic events such as faulting and differential uplift have played a hand here, what caused them, and when did they occur? Since the faults appear to have penetrated most (if not all) of the White Channel sequence, and the differential uplift has affected whole blocks of White Channel ground, these events must be younger than the gravels themselves. What, then, is the age of the White Channel gravel?

#### THE AGE OF THE KLONDIKE WHITE CHANNEL GRAVEL

Lowey (1998), and Froese and Hein (1996) describe the Klondike White Channel gravel as being deposited by a wandering braided river system running in broad valleys and basins during warmer wetter climate regimes. Gravel accumulation is thought to have started more than 5 million years ago in the Miocene, and ended with climatic cooling and the onset of pre-Reid glaciation.

The Klondike White Channel gravels are overlain by the Klondike gravels which are interpreted as being pre-Reid glaciofluvial deposits. On Mosquito Creek a tephra bed which penetrates some Klondike gravels has been dated at 1.2 Ma (Froese and Hein, 1996; Morison, 1985).

The conclusion follows that the Klondike White Channel gravel had stopped accumulating before the onset of pre-Reid glaciation, prior to 1.2 Ma.

Soon after this, differential uplift and the accumulation of ice barriers in the Tintina Trench forced a dramatic northward drainage reversal of the Yukon River to allow meltwaters to escape. Associated downcutting left the Klondike White Channel deposits high above present day creek levels (Duk-Rodkin, 1996; Templeton-Kluit, 1980).

#### THE AGE OF THE FORTYMILE WHITE CHANNEL GRAVELS

The Fortymile White Channel gravels are so similar to the Klondike White Channel gravels that, with Ockham's razor in mind\*, both should be considered to be of much the same age and the product of much the same processes.

Just as in the Klondike, the bedrock underlying the Fortymile gravels is often a highly weathered red to ochre-coloured clay reminiscent of saprolite, an indicator of a warmer and wetter climate. (Miners refer to such bedrock as 'gumbo'.)

The Fortymile deposits have also been abandoned by the present day drainages, left as flat-topped terraces hundreds of feet above the current creek levels. The same Yukon River reversal that left the Klondike White Channel deposits high and dry affected the Fortymile River as well, causing the rapid rejuvenation which cut the abrupt incised channels seen today.

In the Alaskan Fortymile Yeend (1996) describes high-level Fortymile terrace gravels derived from local rock types with schist and quartzite as the dominant clasts.

At Lost Chicken Creek a tephra bed overlies these terrace gravels. The tephra has been dated at 1.7 to 2.6 Ma. It seems likely then that these Alaskan high terrace gravels are equivalent to the Klondike gravels which puts the termination of the Fortymile White Channel sedimentation as much as 2.6 Ma ago.

\* William Ockham, 1285-1349(?); 'Entities are not to be multiplied beyond necessity'.

# ABRIAL PHOTOGRAPH INTERPRETATION

Figure 7 shows an airphoto interpretation. The aerial photographs used were A27619 24 to 26, and A27619 51 to 55.

Flgure 8 is a photocopy of airphoto A27619 - 52.

There are eight main elements to the airphoto interpretation:

1) The fault - bounded sedimentary basin within the schist terrane in which the White Channel gravels have accumulated. The present day Fortymile River runs along the north side of this basin.

2) An elliptical structure traced by the Maiden Creek right and left forks which is thought to indicate an underlying pluton.

3) A steeply north dipping reverse fault which runs across the north end of the pluton ellipse, apparently a transcordant ascent structure.

4) A steeply northeast dipping fault along Mickey Creek, being a concordant accommodation structure.

5) A series of vertical or near vertical northeast-southwest trending faults crossing Maiden left fork and Mickey Creek, being ascent/emplacement structures.

6) An elliptical structure at the mouth of Bruin Creek signaling a second more deeply buried pluton.

7) A dissected plateau underlain by the Fortymile White Channel gravels. Differential uplift and subsidence has left blocks of this ground at varying elevations;

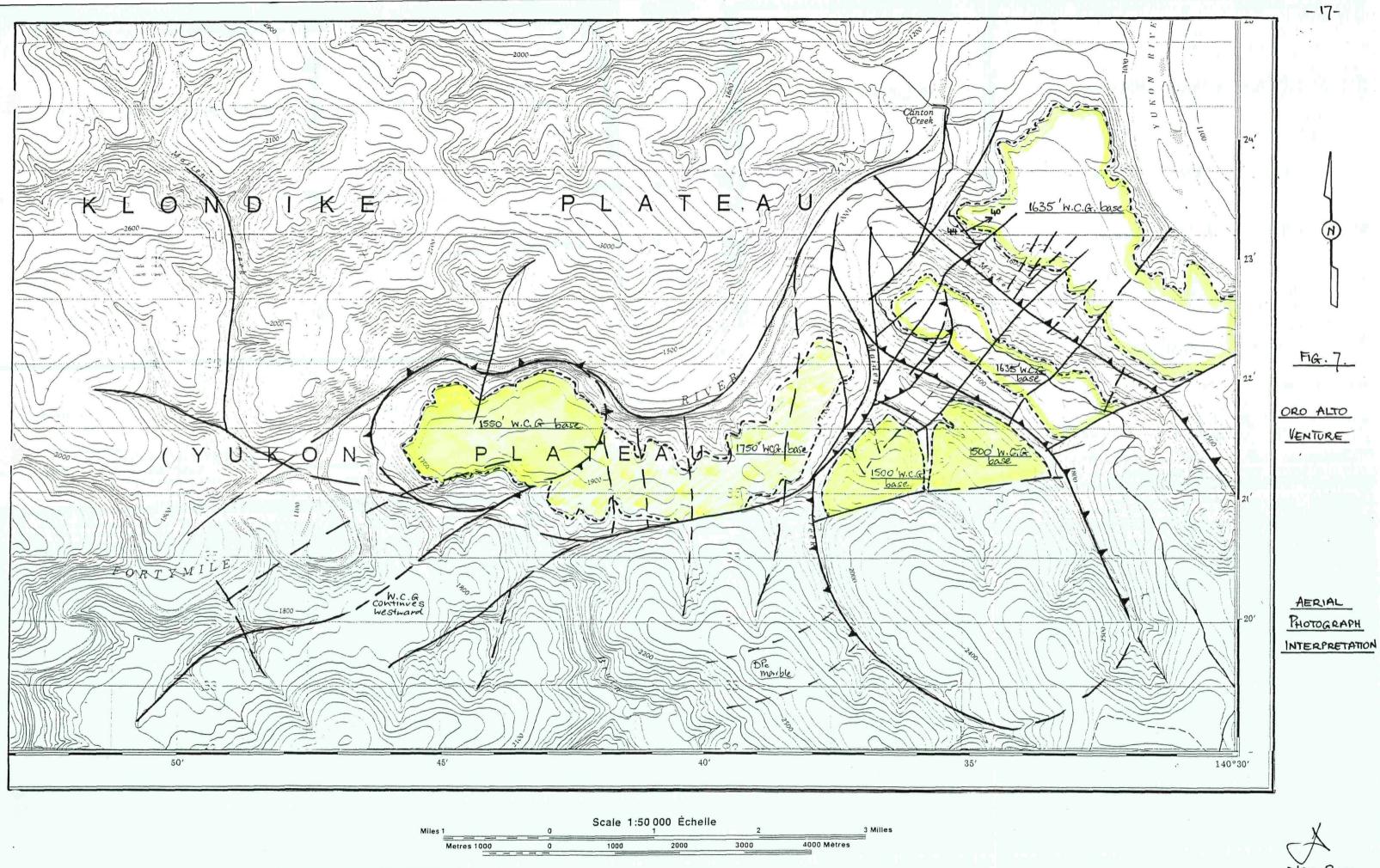
a) the lowest block with the White Channel base at 1500 ft overlies the collapsed north end of the Maiden pluton,

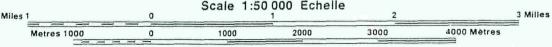
b) the next lowest block with a base at 1550 ft over the subsided Bruin pluton, (see Figures 9 & 9A);

c) two blocks separated by Mickey Creek with the White Channel base at 1635 ft considered to be the least disturbed ground; and

d) a block between the two plutons with the gravel base at 1750 ft, forced up by a reverse fault caused by pluton emplacement.

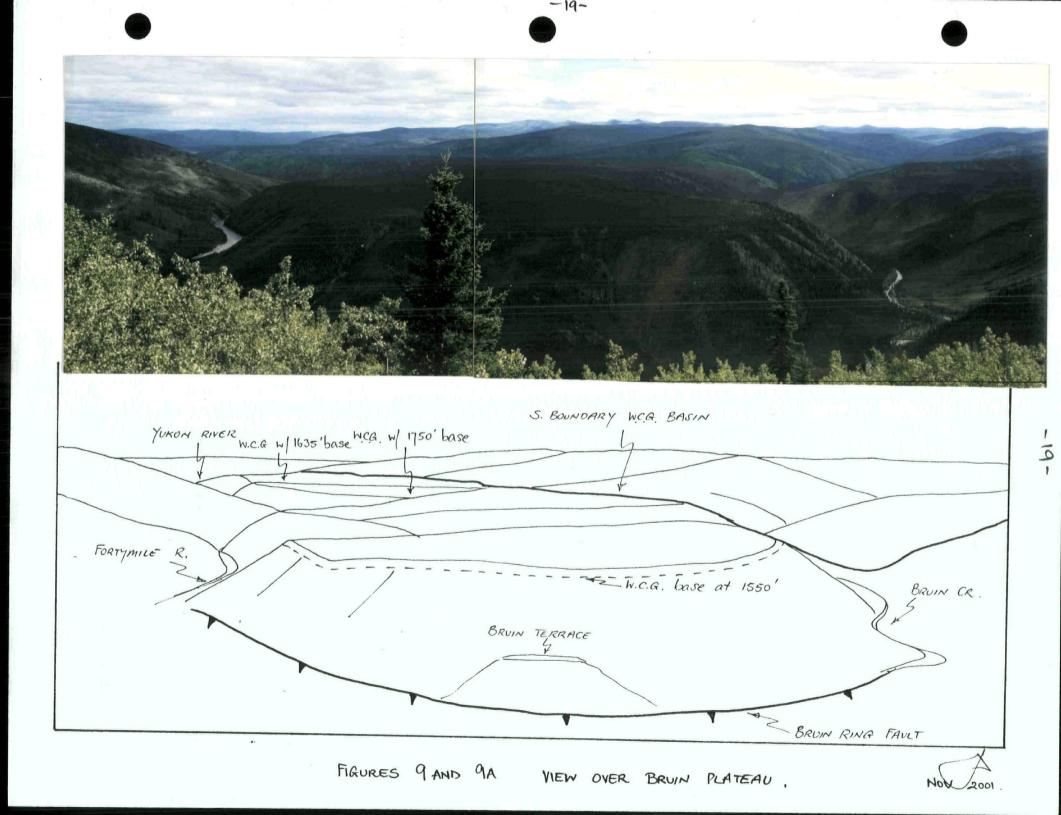
Figure 10 is a three dimentional representation of the Mickey-Maiden structures.





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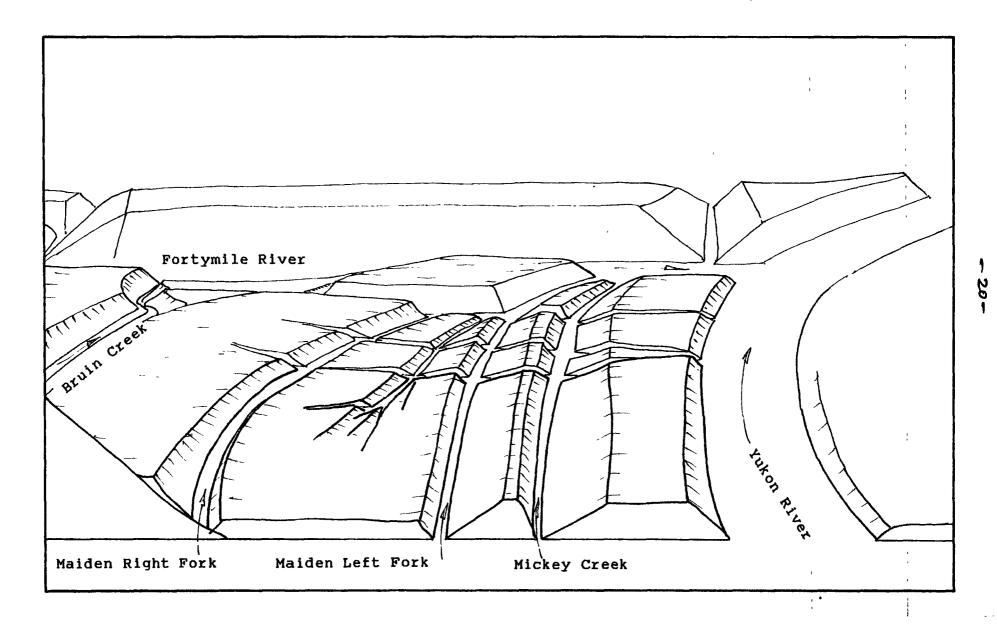


FIGURE 10. SCHEMATIC REPRESENTATION.

#### THE AGE OF THE INTRUSIVES AND RELATED FEATURES

At this stage we only have indirect indications of the age of pluton emplacement.

Though the faults which define the borders of the White Channel sedimentary basin must be relatively old, the majority of the faults in the study area cut and therefore post-date the White Channel deposits.

Starting perhaps 3 million years ago the Klondike-Fortymile districts saw a fairly rapid (in geological terms) sequence of interrelated events. Climate cooled, White Channel sedimentation halted, regional uplift and spreading glaciation caused the Yukon River to reverse its flow, and tributary creeks and rivers were suddenly rejuvenated. Where do the Maiden and Bruin intrusive events fit within this sequence?

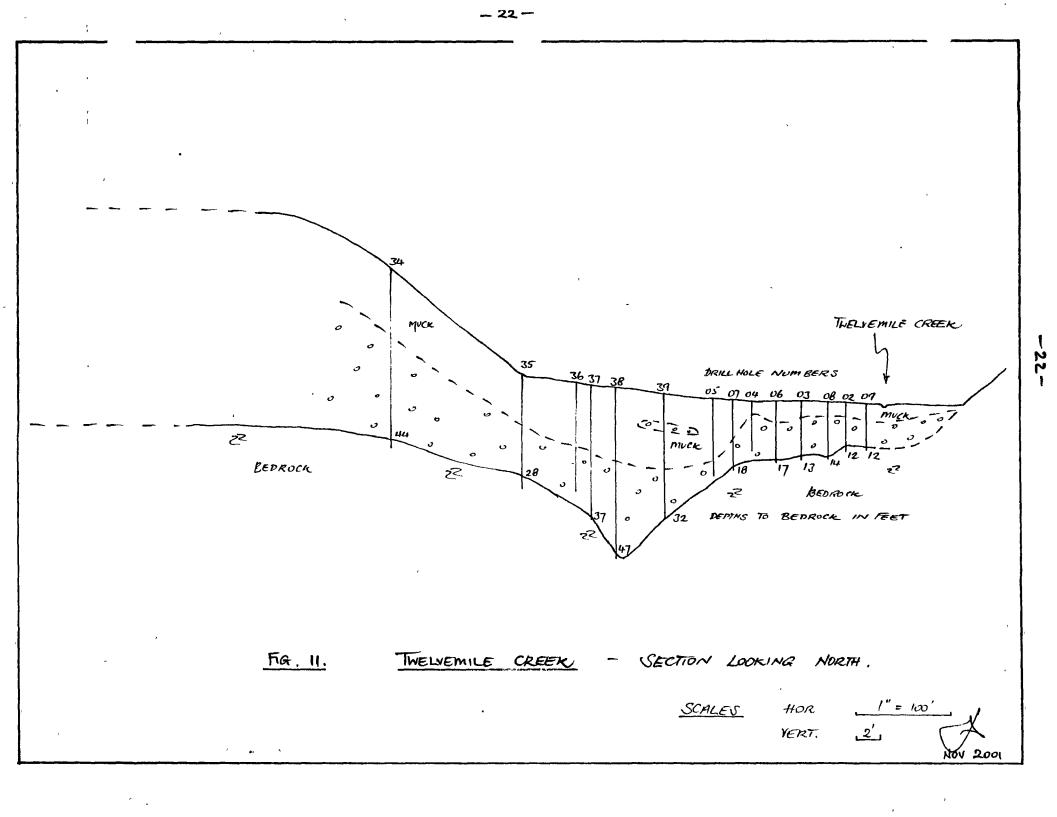
Surprisingly there are clues to this in the Twelvemile drainage twenty miles to the south, (see Fig.3).

The author spent four years exploring the Twelvemile from 1997 to 2000 and drilled ninety auger holes during this time. The conclusion reluctantly reached was that the Twelvemile was the most complicated, frustrating and illogical drainage in the Yukon. But now these new discoveries in the Fortymile may finally explain some of the Twelvemile's aberrations.

Figure 11 is a section across the Twelvemile about one mile up from its mouth.

On the surface there is no indication of anything out of the ordinary. Twelvemile creek runs in a 400 ft wide flat in an asymmetric valley with a steep eastern rim and a gentler western one. The first holes drilled in the valley flat reached bedrock at 12 to 18 feet, as was expected.

Later exploration found a large abandoned channel running down the western side of the Twelvemile valley. This paleochannel was some 800 ft wide and much of it was estimated to be more than 100 ft deep, quite out of proportion to the diminutive Twelvemile. The gravel in the paleochannel was tight (almost indurated), pebbly rather than cobbly, and well washed and sorted. In the section in Figure 11 hole 34 is on the eastern edge of this old channel.



East of hole 34 the bedrock drops away and drilling defined a narrow canyon-like scour channel filled with angular fragments of graphitic schist bedrock. Hole 38, in the centre, reached bedrock at 47 ft, almost 20 ft lower than the bedrock under the present day creek.

Further upstream in the Twelvemile a whole section of creek had an upside-down sequence with gravel on the surface, grading into silt with depth, the silt in turn grading into frozen muck that lay directly on bedrock.

Now, in the light of the Fortymile discoveries, there seems to be a logical explanation for the Twelvemile's oddities.

It is likely that at a time before the Fortymile rejuvenation, when the paleo-Fortymile still ran in the flat-lying White Channel basin, doming caused by the incoming Maiden and Bruin intrusions blocked the basin's drainage and forced the Fortymile to divert down the Twelvemile. This large volume of diverted water scoured out the Twelvemile and the uplift was such that a flood water channel was cut down below present day base levels.

As the intrusives cooled, the surface in the Twelvemile returned to its pre-intrusion level, and the diverted Fortymile established a stable channel on the west side of the Twelvemile valley. It must have remained here for some considerable time given the amount of accumulated gravel.

Eventually the intrusives cooled and shrank enough to allow the Fortymile to squeeze by the Bruin dome and re-establish a channel down the north side of the White Channel basin. (It is possible though that before returning to its own valley the Fortymile may have run down the west side of Califonia Creek, and later down Swede Creek.)

If the above scenario is correct, then the start of the Maiden-Bruin intrusive event predates any welldeveloped Fortymile River incision in the Bruin Creek area.

With regard to the Fortymile's tributaries the Bruin pluton interrupted Bruin Creek's relatively straight south to north course, forcing it to wrap around the west side of the pluton's dome. Figures 8 and 8A show a small Bruin terrace on the northwest side of the dome. However, there is other evidence that indicates younger tectonic actity.

The Mickey Creek fault caused rejuvenation on the upthrown western side of the Mickey Creek valley, and there is similar rejuvenation on the west side of the Maiden left fork. This suggests that the Mickey and Maiden faults were still active in relatively recent time.

Recent fault activity may also be the cause of a large slump feature on Maiden Creek, part of which is seen in the foreground in Figures 5 and 5A. The remains of this slump extend across the Maiden valley so that for a time it must have dammed the present day creek. Lemmings busily burrowing in the slump material have excavated small White Channel pebbles, indicating that the slide came from the faulted ridge above.

Prospecting around the Maiden fork nose encountered outcrops of hornfelsed graphitic schist and quartz mica schist. Figure 12 is a photograph of one of these outcrops. This contact metamorphism has produced competant resistant rocks which form the ridge at the nose of the Maiden structure.

Unfortunately there was not enough time to walk the draws cut into this structure, but intrusive rocks that are almost certainly from this structure have been found.

About 30 feet from the top of the main gravel pit on the Clinton road immediately east of the Maiden forks there are some well-rounded cobbles of intrusive rock. These cobbles are quite noticeable, being larger than the bulk of the gravel which is made up of the quartz-rich sand and small quartz pebbles typical of White Channel gravel. Lying next to them was an angular block of fractured hornfelsed country rock, a block which was far too brittle to have travelled far.

Figure 13 shows where these cobbles were found, and the location of the pit is shown on Figure 1.

The intrusive cobbles have a granitic composition (>10% quartz), are medium to fine grained, mostly evengrained (one has a quartz-feldspar porphyry lens), with biotite (partly chloritised) and small garnets as the visible mafic constituents.

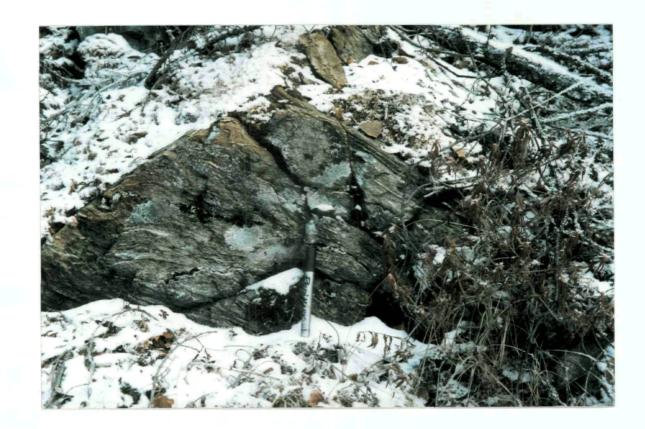


FIGURE 12. HORNFELSED COUNTRY ROCK, MAIDEN FORKS.

Figure 14 is a photograph of the intrusives and the hornfels

This is strong, though indirect, evidence that an intrusive has breached the surface near the Maiden forks, and that this event pre-dated the establishment of the present Maiden drainage That later tectonics affected the development of the Mickey and Maiden valleys attests to the longevity of the system as a whole

The specific timing of intrusive emplacement, faulting, mineralisation, incision and erosion is very important in an economic sense though, particularly with regard to the development of placer deposits

If it is true that precipitation of placer gold has occurred on and just above the White Channel gravel contact, the absence of such a contact due to it's prior removal by downcutting in the Mickey and Maiden valleys will diminish the extent of placer deposits Conversely, if hydrothermal processes pre-date the removal of invalley White Channel deposits, subsequent reconcentration in the valley bottoms should be very beneficial

#### GEOCHEMISTRY

Figure 15 shows the geochemistry results to date

G S C Open File 2365 results (released in 1991) are shown as circles and squares There are fairly strongly anomalous gold values on upper Marten Creek and upper Mickey Creek There is a strong associated mercury anomaly on upper Mickey, but other elements are not particularly anomalous

Oro Alto's samples were analysed by ALS-Chemex, trace level gold by fire assay and AAS (code Au-AA23), and 47 additional elements at ultra-trace levels by 'four acid near total digestion' (code ME-MS61) PGMs and Hg were not included Results are shown as triangles on Figure 15

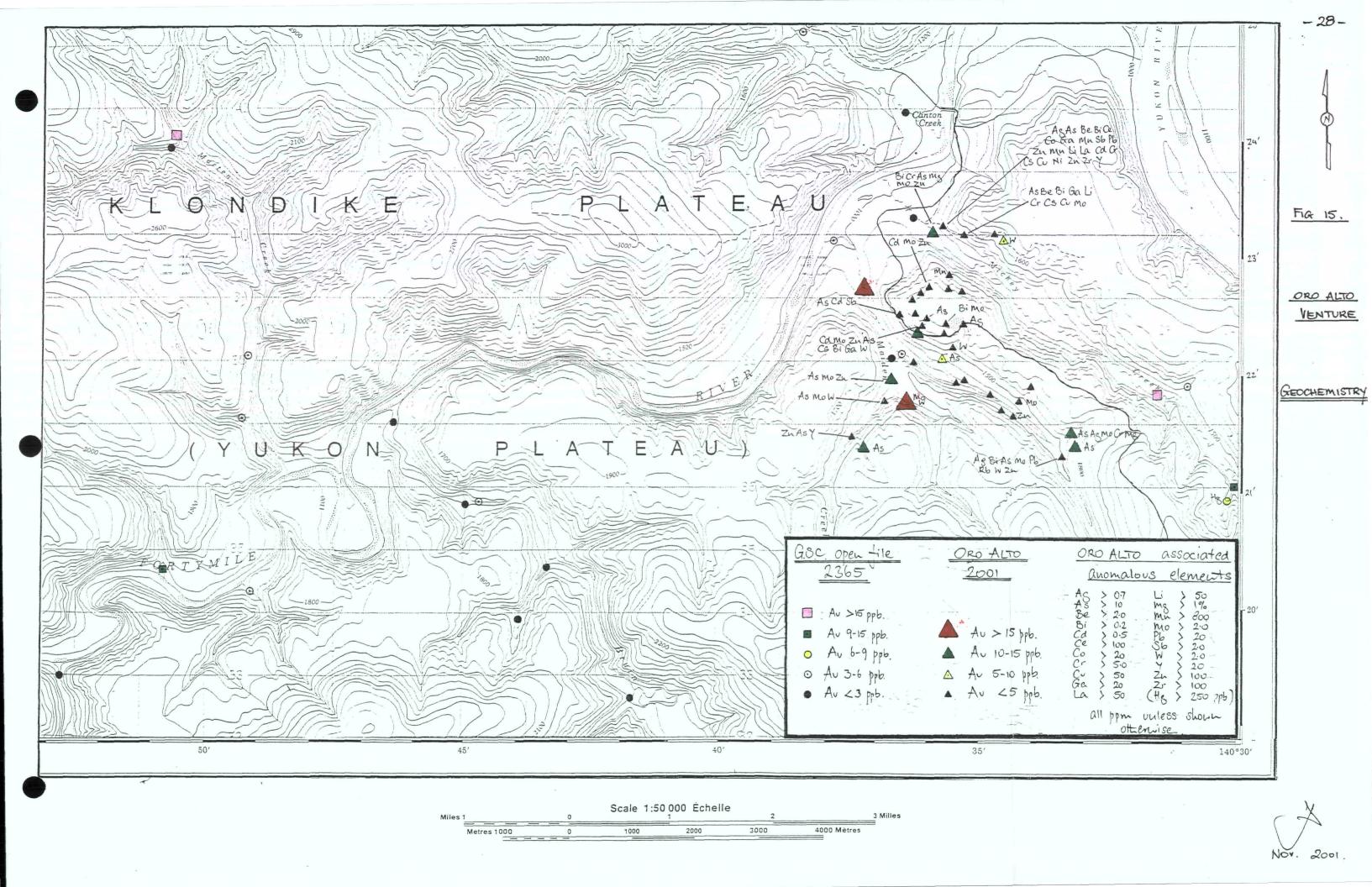
The overall levels are fairly weak, perhaps due to the youthfulness of the system



FIGURE 13. GRAVEL PIT WITH INTRUSIVE COBBLES.



FIGURE 14. STUDIO PHOTOGRAPH OF HORNFELSED SCHIST AND THREE INTRUSIVE COBBLES (BROKEN IN HALF).



Nonetheless good gold anomalies occur in the creeks draining the Maiden nose, on lower Maiden Creek itself, and on the Maiden left fork where the southern sedimentary basin fault crosses Weaker anomalies in the Maiden valley are in the gully downstream from the end of the 2001 drill line, and from the gully tested by holes 2006, 07 and 08

On Mickey Creek there is a moderate gold anomaly near the mouth and a weak gold anomaly on the White Channel gravel - bedrock contact on the Pluto trail

Anomalous associated elements are also shown in Figure 15 Interesting indications of As, Bi, Cd, Sb, Mo and W are found in both drainages, apparently peripheral to the higher temperature (?) gold values

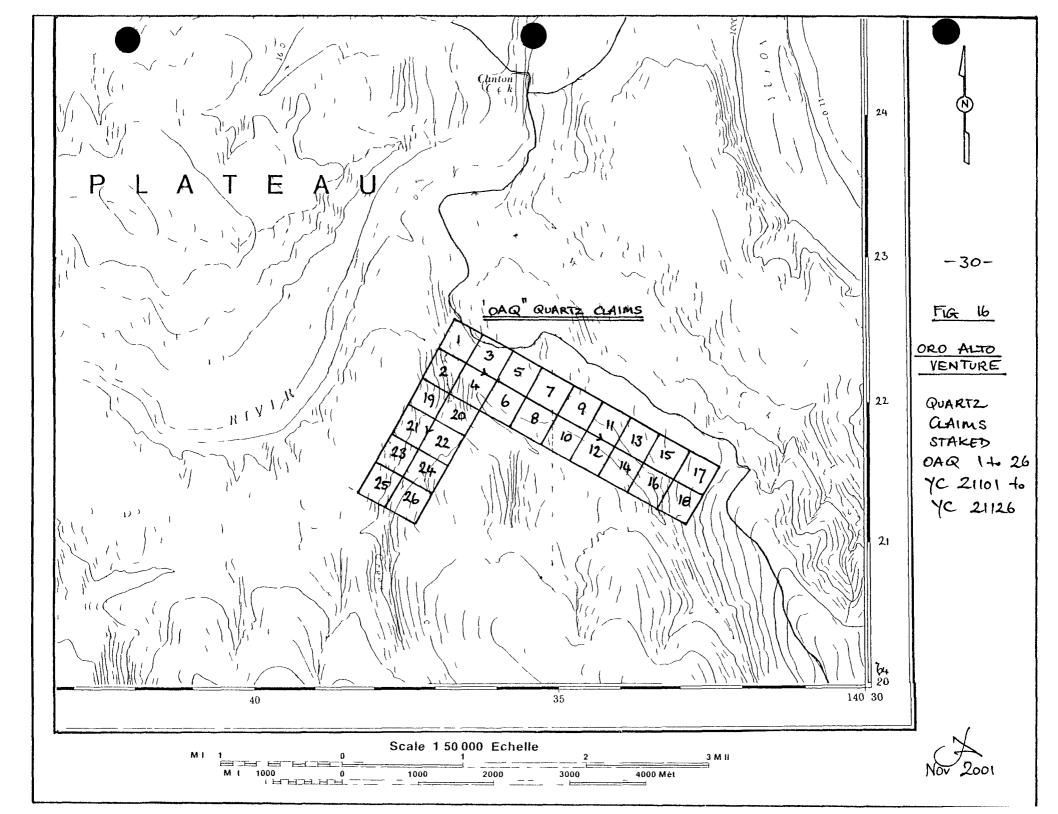
Two particularly intriguing samples were taken on the Pluto trail Though not anomalous in gold, both of these samples carry a remarkable range of other elements The samples are from a narrow (2 to 4 inches wide) shear zone exposed in the cut bank The attitude of this shear and lineations on the shear face are shown on Figure 7

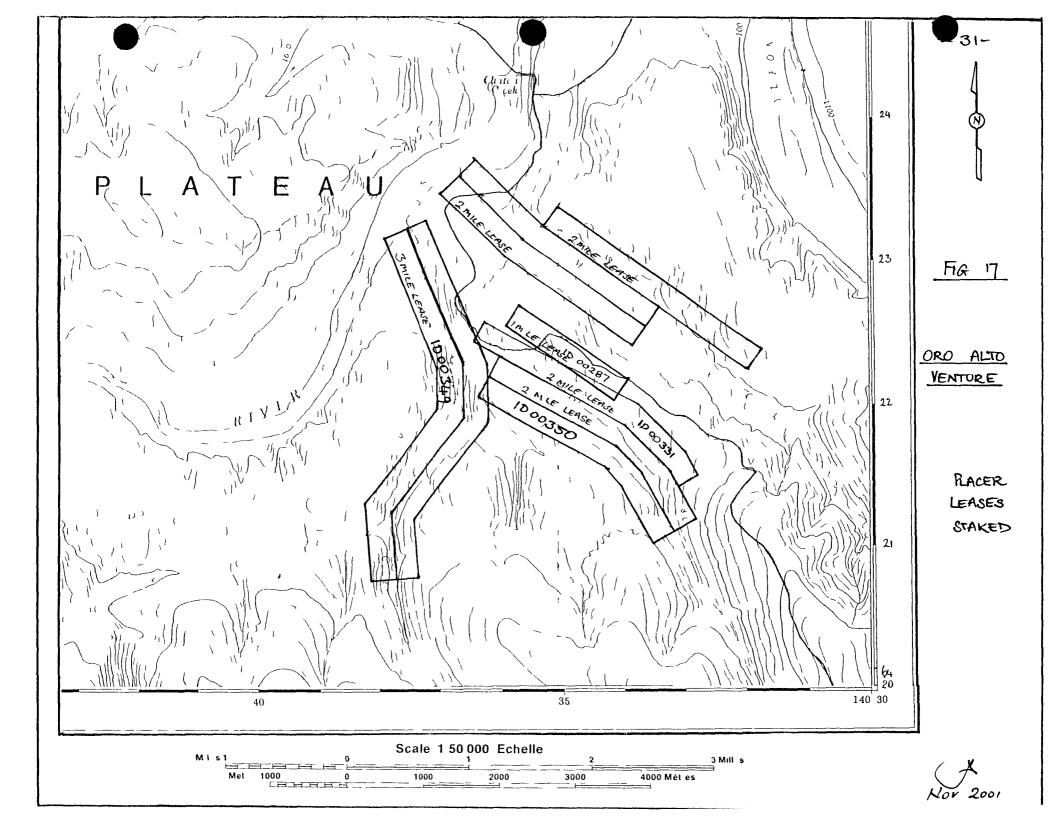
Is there a correlation between placer gold and geochemical values in the study area? In other parts of the Yukon, indeed in other parts of the world, this would be a question hardly worth addressing, but here placer deposits are likely to be so intimately related to hardrock processes, both in time and place, that it is a pertinent inquiry

Two of the three draws that have been shown to carry placer values by drilling are geochemically anomalous, (compare Figs 2 & 15) Though there is a good chance that there is a reliable link between geochemical values and placer values, at this time we have too little information to give any definite answer One more year's exploration, both placer and hardrock, should clarify the relationship

#### PROPERTIES STAKED TO DATE

Figure 16 and 17 show the quartz and placer properties staked to date





#### CONCLUSIONS AND RECOMMENDATIONS FOR 2002

Auger drilling on the eastern flank of the Maiden Creek valley has confirmed the presence of Fortymile White Channel gravels which contain economic placer gold concentrations

It is likely that this gold is not purely detrital in origin but that it has been introduced into the basal gravels by hydrothermal fluids following fault lines. The faulting and hydrothermal events are directly linked to pluton emplacement that probably started less than 3 Ma years ago. Two plutons are indicated, one under Maiden Creek which broke the surface, and another under the mouth of Bruin Creek which probably remains buried

Orientation geochemical sampling in the lower Maiden and Mickey drainages indicates that mineralisation has produced a geochemical signature

Recommendations for further exploration are as follows

#### HARD ROCK EXPLORATION

1) Geological mapping throughout the study area, but with particular attention to the Maiden nose to locate outcropping intrusives, delineate alteration haloes and trace fault patterns

2) Reconnaissance mapping should also be conducted around the Bruin pluton and in areas that may be underlain by the Paleozoic Nasina marble, (see Fig 3)

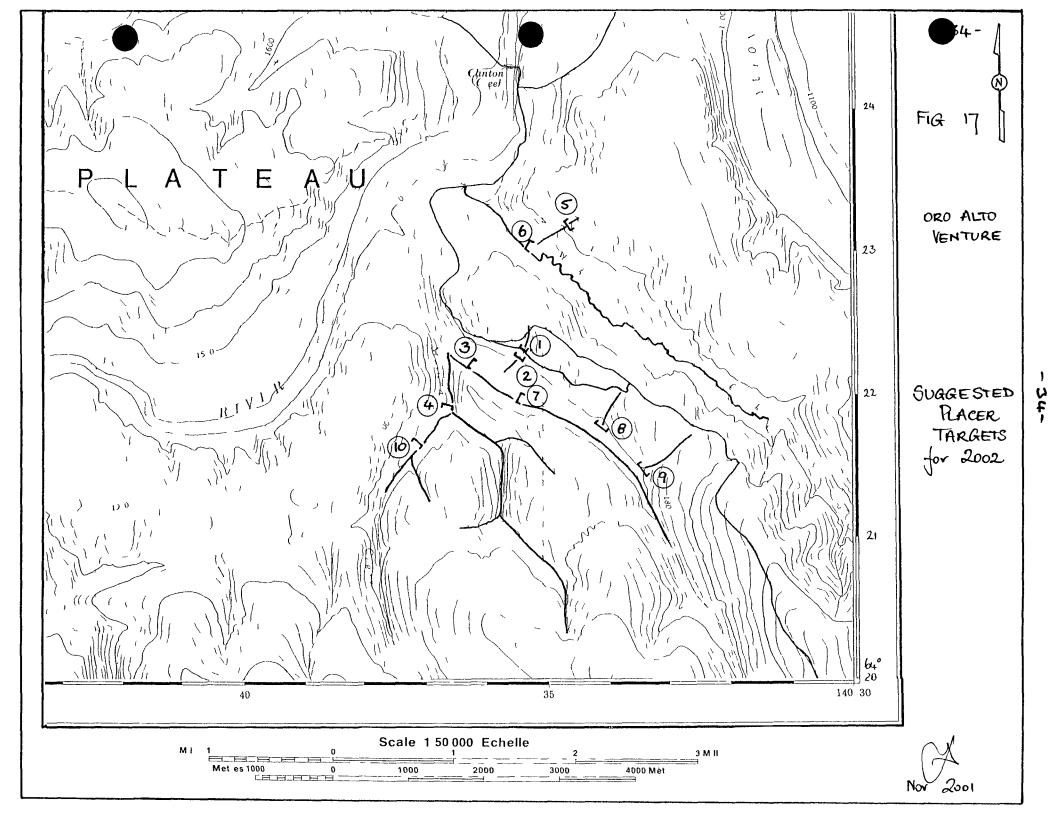
3) Geochemical sampling in the above areas and in all remaining unsampled drainages within the Mickey, Maiden, and lower Bruin catchments Due to financial constraints it may be necessary to restrict analyses to gold alone, samples to be retained for possible additional analyses at some later date

4) Samples of intrusives (and extrusives) should be collected for age dating

### PLACER EXPLORATION

1) The draw north of the last hole drilled in 2001 should be drilled and, given acceptable drill results, bulk sampled This should be possible with little surface disturbance and no water discharge to Maiden Creek Bedrock exposed during such work should be carefully mapped and sampled

2) There' are so many potential placer possibilities that some discipline will have to be exercised in the choice of targets Figure 17 shows ten suggested candidates for drilling in 2002 The targets have been chosen with regard to accessability and exploration potential



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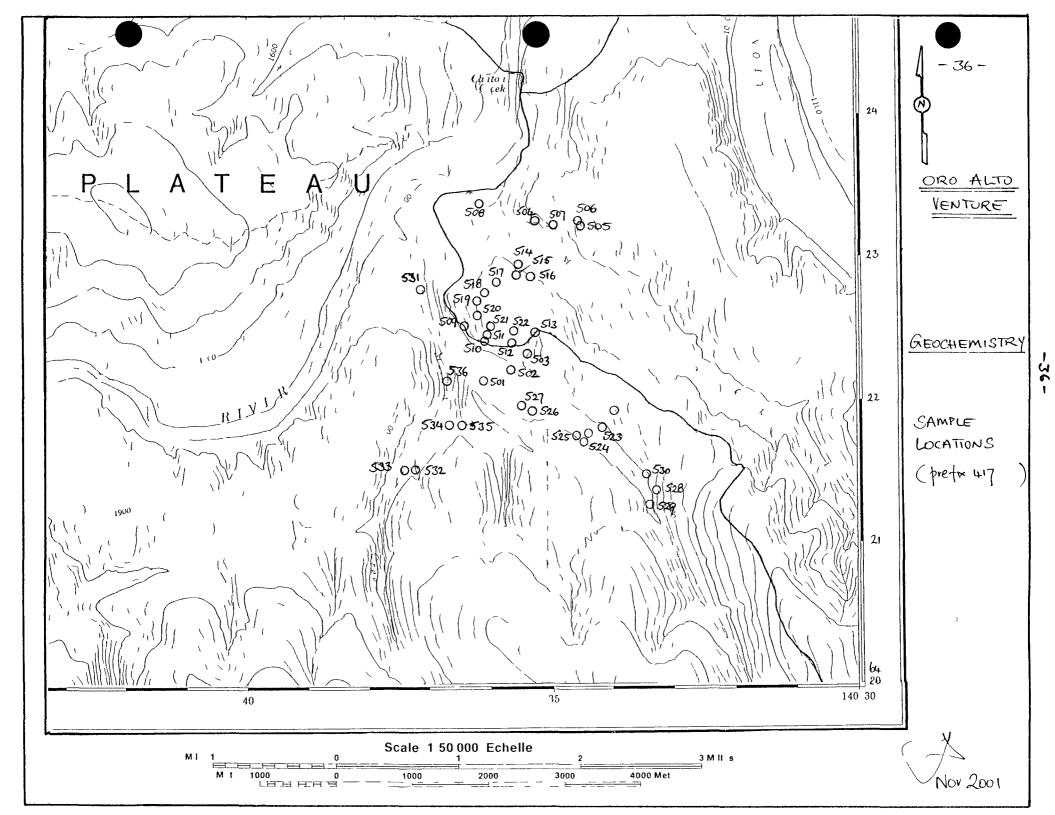
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# Chemex S

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ON CO	METHOD CODE	NUMBER		METHOD	DETECTION LIMIT	Upper Limit
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	As MS61 Ba MS61	27	As ppm ICP + ICP MS package	ICP MS/ICP ICP	02 05	10000
	Be MS61	27	Ba ppm ICP + ICP MS package Be ppm ICP + ICP MS package	ICP MS/ICP	0 05	10000 1000
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	Ca MS61	27	Ca % ICP + ICP MS package	ICP	0 01	25 0
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1	Cr MS61	27	Cr ppm ICP + ICP MS package	ICP	1	10000
N	Cs MS61	27	Cs ppm ICP + ICP MS package	ICP MS	0 05	500
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	Fe MS61	27	Fe % ICP + ICP MS package	ICP	0 01	25 0
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hout barcode	Hf MS61	27	Hf ppm ICP + ICP MS package	ICP MS/ICP	0 1	500
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Project P O #

Samples submitted to our lab in Vancouv This report was printed on 16 OCT-2001

SAMPLE PREPARATION										
METHOD CODE	NUMBER SAMPLES	DESCRIPTION								
SCR 42 SCR 01 LOG 22	27	180 micron screen Save Minus Screen Save Plus Charge Samples received without barcode								



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Samples submitted to our la This report was printed on

SA	MPLE	PREPARATION
METHOD CODE	NUMBER SAMPLES	DESCRIPTION
SCR 42 SCR 01 LOG-22	27	180 micron screen Save Minus Screen Save Plus Charge Samples received without barcode



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417523 417524	94069407 94069407		82 030 98 035		20 29	108 118	18 11	12 6 11 5	72 110	55 0 54 5		
417525	94069407		80 0 21		17	93	1 0	96	74	48 0		
417526 417527	94069407 94069407	0 65 0 05 0 60 < 0 05	8 2 0 3 8 2 0 3		25 15	99 106	09	10 1 8 6	74	54 0 53 0		

CERTIFICATION

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# ALS Chemex

Aurora Laboratory Services Ltd Analytical Chemists Geochemists Registered Assayers

212 Brooksbank Ave North Vancouver British Columbia Canada V7J 2C1 PHONE 604 984 0221 FAX 604 984 0218 To GROUNDEX GROUNDHOG EXPLORATION CO

BOX 566 DAWSON CITY YT Y0B 1G0 Page Number 1 A Total Pages 1 Certificate Date 16 NOV 2001 Invoice No I0128199 P O Number Account TDK

Project Comments ATTN ANGUS WOODSEND

# CERTIFICATE OF ANALYSIS A0128199

SAMPLE	PREP CODE		Au ppb FA+AA		Al % (ICP)		Bappm (ICP)		Bi ppm (ICP)	Ca % (ICP)			Coppm (ICP)		Cs ppm (ICP)				Ge ppm (ICP)	
417528 417529 417530 417531 417532	94069407 94069407 94069407 94069407 94069407	0 40 0 40 0 52 0 20	15 < 5 10 20 10	0 36 1 06 0 82 0 70 0 64	5 13 6 32 5 44 5 33 5 62	11 8 1 14 0 3 15 8 9 4 1 12 4	300 990 0 1060 0	1 35 1 55 1 50 1 15 1 20	0 13 0 21 0 14 0 12 0 16	1 85 0 67 1 55 1 40 1 40	0 36 0 48 0 30 0 22 0 22	73 6 61 9 76 9	12 3 16 9 14 7 11 7 10 0	92 78 111 89 69	2 00 4 45 2 05 2 45 2 30	24 4 35 8 26 4 22 0 24 2	3 62 3 28 2 87	12 55 16 75 12 65 12 55 12 85	0 30 0 35 0 30 0 40 0 30	18 18 18
417533 417534 417535 417536	94069407 94069407 94069407 94069407	0 42 0 28 0 34 0 40	< 5 < 5 25 10	0 66 0 62 0 60 0 58	6 22 5 51 6 15 5 78	10 8 1 11 2 9 6 11 8 1	930 0 990 0	1 40 1 50 1 55 1 55	0 18 0 17 0 16 0 19	1 15 1 30 1 45 0 79	0 22 0 22 0 22 0 24	69 1 66 9 92 0	13 5 13 7 12 5 14 5	77 83 94 83	3 35 3 15 3 05 4 15	38 8 32 2 26 6 29 2	3 31 3 03 2 95	14 70 14 35 14 35 15 60	0 35 0 35 0 45	1 6 1 6 2 4

CERTIFICATION \_

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# LS Chemex

Aurora Laboratory Services Ltd Analytical Chemists Geochemists Registered Assayers 212 Brooksbank Ave North Vancouver

212 Brooksbank Ave North Vancouver British Columbia Canada V7J 2C1 PHONE 604 984 0221 FAX 604 984 0218 To GROUNDEX GROUNDHOG EXPLORATION CO

BOX 566 DAWSON CITY YT Y0B 1G0 Page Number 1 B Total Pages 1 Certificate Date 16 NOV 2001 Invoice No I0128199 P O Number Account TDK

Project Comments ATTN ANGUS WOODSEND

# CERTIFICATE OF ANALYSIS A0128199

SAMPLE	PREP CODE	In ppm		La ppm (ICP)	Li ppm (ICP)	Mg % (ICP)	Mn ppm 1 (ICP)		Na % (ICP)	Nb ppm 1 (ICP)	Nı ppm (ICP)		Pb ppm (ICP)		Re ppm		Sb ppm (ICP)	Se ppm		Sr ppm (ICP)
417528 417529 417530 417531 417532	94069407 94069407 94069407 94069407 94069407	0 040 0 055 0 045 0 040 0 045	1 22 2 20 1 19 1 29 1 15	32 5 39 5 34 0 42 0 27 5	17 6 27 8 17 8 20 6 18 2	0 96 0 93 1 21 0 90 0 80	635 720 680 600 455	1 60 2 35 2 70 1 85 1 95	1 32 0 71 1 23 1 10 1 21	10 4 10 4 11 7 9 9 8 5	34 0 37 4 40 4 34 6 27 0	810 790 840 720 630	95 260 100 110 105	107 0< 48 9< 56 9<	0 002 0 002 0 002 0 002 0 002 0 002	0 03 0 07 0 04 0 02 0 04	1 05 1 50 1 10 0 80 1 10	1 1 1 1	1 0	100 5 203 193 5
417533 417534 417535 417536	94069407 94069407 94069407 94069407 94069407	0 045 0 050 0 045 0 045	1 44 1 37 1 37 1 86	37 0 37 5 49 5 33 5	26 6 25 8 22 0 29 2	1 00 0 87 0 92 0 85	655 585 605 760	1 95 2 70 2 25 2 50	0 91 0 99 1 14 0 75	9 6 9 8 11 7 9 8	41 0 42 0 31 6 39 6	670 680 810 640	14 0 12 5 13 0 13 5	71 9< 66 5	0 002 0 002 0 002 0 002	0 03 0 04 0 02 0 01	1 35 1 05 0 95 1 00	1 1 1	14 12	170 5 180 5 220 125 5



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# S Chemex Δ

Aurora Laboratory Services Ltd Analytical Chemists Geochemists Registered Assayers 212 Brooksbank Ave North Vancouver British Columbia Canada V7J 2C1 PHONE 604 984 0221 FAX 604 984 0218

To GROUNDEX GROUNDHOG EXPLORATION CO

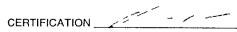
BOX 566 DAWSON CITY YT Y0B 1G0

Page Number1 CTotal Pages1Certificate Date16 NOV 2001Invoice No10128199P O NumberTDK

Project Comments ATTN ANGUS WOODSEND

## **CERTIFICATE OF ANALYSIS** A0128199

SAMPLE	PREP CODE	Ta ppm Te pp (ICP) (ICP				V ppm (ICP)				Zr ppm	
417529 417530 417531	94069407 94069407 94069407 94069407 94069407 94069407	1 15 < 0 0 1 15 < 0 0 0 95 < 0 0	5 130 5 90 5 112	0       43       0       32         0       34       0       54         0       39       0       34         0       44       0       32         0       36       0       34	29 35 26	118 133 126 107 106	2 0 3 9 1 8 1 8 1 7	16 8 15 7 17 9 18 3 14 0	88 126 82 86 86	56 0 65 0 59 5 61 5 56 0	
417534 417535	94069407 94069407 94069407 94069407 94069407	1 10 < 0 0	5 102 5 136	0 39 0 42 0 37 0 44 0 48 0 33 0 35 0 4	29 32	116 110 118 115	1 7 2 3 2 7 1 7	20 2 19 0 19 7 15 2	102 92 88 112	53 5 99 0 82 5 54 0	



This report was submitted in compliance with the Yukon Mining Incentives Program Project # 01-040

It describes reconnaissance exploration for hard rock gold sources in the Maiden, Bruin and Mickey Creek areas of the Fortymile District, NTS 116-C-7

As a result of this work 26 quartz claims (OAQ 1 to 26, YC21101 to YC 21126) were staked in October 2001

Those who worked on this project were

Bill Claxton of Dawson City, Yukon Leslie Chapman of Dawson City, Yukon Angus Woodsend of Dawson City, Yukon (summer), and Salt Spring Island, B C (winter)

The report was prepared by Angus Woodsend in November 2001

2001-040

# ORO ALTO VENTURE

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# COPY OF FIELD BOOK ENTRIES WITH SUMMARY

TO ACCOMPANY

# PROSPECTING - GRUBSTAKE PROGRAM REPORT

# YUKON MINING INCENTIVES PROGRAM

**PROJECT # 01-040** 

MAIDEN, BRUIN, AND MICKEY CREEK AREAS

FORTYMILE DISTRICT

YUKON

NTS 116-C-7

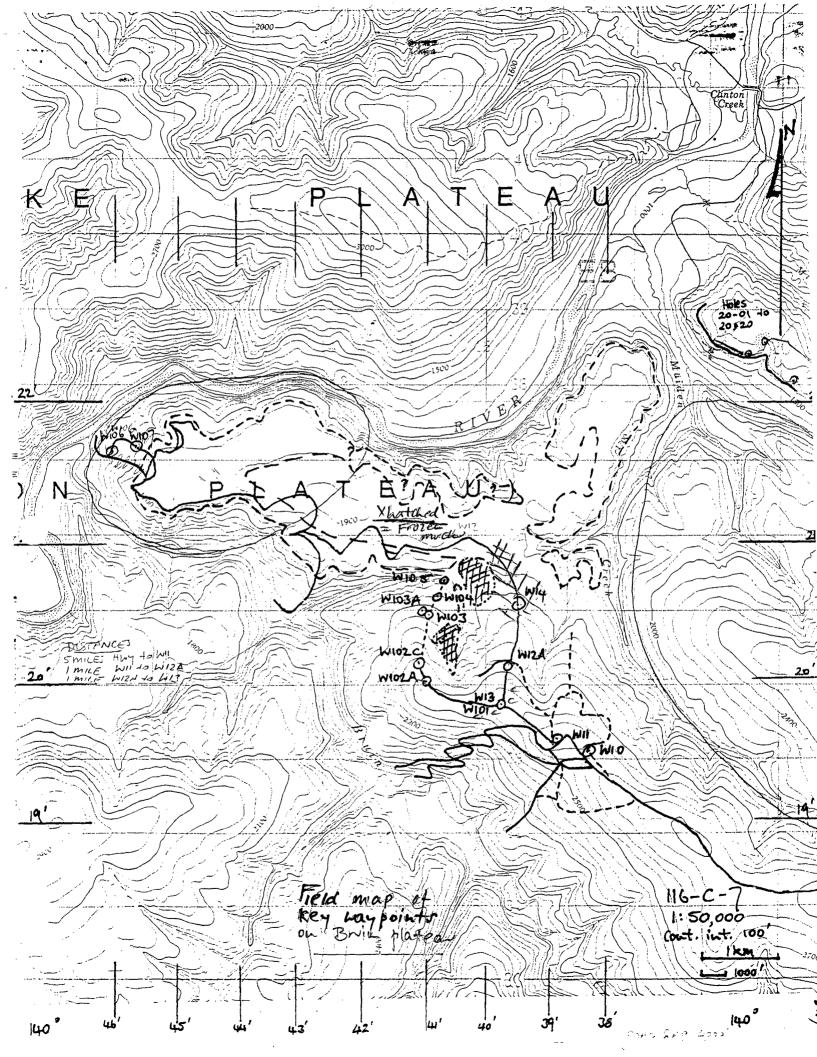
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## ORO ALTO VENTURE

### GRUBSTAKE - YMIP - 01-040

#### A.Woodsend diary 'summary

Fri June 8, BRUIN Move ATV to end Bruin rd, walk to trail gap on saddle, W13. Sun June 10, BRUIN ret to W13, walk slopes back on either side. Mon June 11, BRUIN ret to W13, find and walk Swede's rd. ret on W side. Fri June 15, BRUIN walk to W14, decide saddle not feasible for rd constrn. Sat June 16, BRUIN walk Swede's rd to W14, walk slopes to N. W and E. Fri June 22, BRUIN survey & prospect to W 104. Sat June 23, BRUIN walk prospt draw between W12A and W104. Sun June 24, BRUIN walk top of pup to first bend, ret via W14. Mon June 25, BRUIN ret to W104, cont to W105. Tue June 26, BRUIN ret W105, find WCG on rim, walk slope down to pup. Wed June 27, BRUIN ret W102A, walk slope to W, ret via W 104. Fri June 29, BRUIN ret W102A walk back to W11. Marble. Sun July 1, BRUIN with B.Claxton in boat to mouth Bruin, walk up to WCG rim. Mon Sept 17, MAIDEN collect stream seds and stake. Tue Sept 18, MAIDEN photo Maiden structure, walk firebreak rd. Wed Sept 19, MAIDEN-MICKEY walk Maiden cat rd, sample Mickey cr. Fri Sept 21, MAIDEN sample pups Cr7 to Cr10, I1. Mon Sept 24, Mail samples, telephone lab, photos in etc. Wed Oct 3, MAIDEN staking P8, P2A, walk Nodwell down old cat rd. Thur Oct 4, MAIDEN, staking & stream seds top Maiden, P9A, Str.seds. 528 to 530. Mon Oct 8, MAIDEN prospect & stake P10, S.Sed 531, qtz.cls OAQ 1-4. Wed Oct 10, MAIDEN stake P11 to 13. Thur Oct 11, MAIDEN stake P14, 15. Fri Oct 12 MAIDEN stake P16, 17. Tue Oct 16, MAIDEN prospect and stake L1, Cr11, P19, Rs1 & 2. Thur Oct 18, MAIDEN prospect Rs3 & 4, walk rim. Fri Oct 19, MICKEY P20, R6 mickey leases. Sat Oct 20, MICKEY line cut flag L1 P20 L2 end cr lease Sun Oct 21, MAIDEN Rt fork P21, 22, S sed 532 to 536, P23. Mon Oct 22, MICKEY cut flag bench lease line to P24. Tue Oct 23. MICKEY finish cr lease line, return Nodwell. Sun Nov 17 to Fri Nov 23 report & maps etc.



BRUIN FRI JUNE 8 Waypoint (W10) at Taylor's trailer WED JUNE B NO Time applicable, ( plu, supplies 64.19. 30N/ 140 38, 144 el 2845' am pd p deales the Ret De Spr. (WII) at old camp vite 164, 19, 35/140, 38, 53 Thur fuce the phy supplies. But ars loc "info. (M2) Cat 1) start 64,20, 12 / 140, 39, 35 to trailer more in No Time applicable. WITA end fley. trail on cat id 64, 20, 08 N / 140, 39, 37 W FRI, dure is The camp Ban ict 6:30 pm. (13) 64, 19, 50 / 140, 39, 40, All day prospect / flap of Anteeles + ch. vac. To Shears Rd. Walk +. 414 (WI4) 64,20, 34, /140, 39, 31 cl. 2130 fr. Cat (in 9 To. D.C. for meet re stating mid IDEN Swells to 10-15' buchbrud but becomes mody + Sloughed ; holes >20' deep , Not travible for Sur flore 10 BRUIN Simme no. Return to W13 walk slopes on enter ide BRUIN Char (he 16] Return (LIY) walk slopes to N+ Good rd. material, no int / 1st, subcop. set. WHE. No fearible monde Hange, ohly only ocraviolical sel float, thing cout. mile Mon line 11 Bruns (Hazer) Cover. Return to his this plant Sheves rd. , walk chedes is and retire on W. dide. Probable much, Suche 17 No applicable-line (map work flot elevation mailer, pm check 40mile away from saddle. level for BC. MAIDEN Wa due 2 marsar we be in B.C. crun 3H2020 64.22.13 / 140, 34, S. elev. 1665/76/94. MOL (well MAIDEN (NB) Scord Cover rin 12. 64, 22, 02/ 140, 34, 02, el 1840. Clear t. Decision re. Law use reasonent -first Drac, Princture 4 Electer, prin to D.C.

Sinvey - prospect Lo Lioy. Good w. meterial Sch. subcrop. No lit. Ret. Camp bpm. The fine 19 MAIDEN (W19) just past first Draw Mailer rin. D. Vat due 23 Bozun 64,22,07 / 143, 34, 12, elev. 1824 Walk prospect into From between W12-A and W104. (11) 4" Corter 64, 22, 03 / 140, 34, 19 et. 1779 (11) 2" draw 64, 22, 09, / 140, 34. 36 c/ 1664 Sch. floort / add. op. No Lt. No male. (112) J= draw 64. 12, 12, 140, 34, 55, 61?? - +12020 64.22, 13 / 140, 34. 50 el. 1658 (Sur Jue 24 BRVIN) Aile Hart 52466 end 52566, pr 1. BC. for 4 alceles True Walk pop down to first bend, return via 114 or Swedich strail, Accp., - hose much, ho LED Jue 20 MAIDEN rig. 11t., no A possiblities. 42022 recleck 64.22, 23/ 140, 35, 40 1. 1653 pm. Decisio- mare to jo for law use Pernit (mor dure 25 Breand W Cat etc all to work on application. Return W104, Court 1. W105 (Lisos) 64, 20, 45, / 140, 40, 46 eler 1831 This give 21 No applicable-time law use, hood is material, set recop, no ht rear. plu 4 Meeter time, maps (Lop.) + supplies there Qdz. a. popta - d. and use The luce 24 BRUN (Fri flue 22 Poruin) Rain (bios) time bec on vin licite Plape m) = (1,10) 64.19, 50/ 140, 39, 40 Down to pup, steep but any prob- wee usen, Liez 64, 19, 55 140, 41.00. Oh to suitchack rd. rotin camp 7pm. LIO3) 64, 20, 26/ 140, 40, 58 WIOI to 102 108 km 278 T, (Mou) 64,20, 36 149,40,47 el. 1996

( to ve 25 BRUIN Min (July 2 No applicable Time. 12 mile. Plu tipper deett + prop. cyls. hileage start 52732 bits, sold year, balance et more Togota Return Wold walk of spe to be and return out. Robert comp 6pm. Via. Loloy, Occasional Sel- Scharp, Nothing clic A interest. An Oh for ou material. Thur: June 76 No appirable time. The flying 3 No applicable Time more miles trailer to her vite i to 12 mile plu pasts tailer return proved pit the disse for propane, oxy, 40 mile + det op. Awaye - meet Be. -12 monte C. Sipplies Rain ph. (FRIDAY Vicy 1 BRUIN) LED 14 No applicable Time Design Noduct brace system + Inch To marine Cr. and 4/ boart + Be -1-Fran ban. Missay to De. change any. 641 most Brigh halle -1. W106 - W107. Photo WIDE No/ porribling w there but here in plu steel, ret. Camp /pt cast typis bes water where off' lock barr. Thur chy 5 No applicable Times For July 6 (FRIDAY due 29 BRINN) Vat Very? Return Work Walk Brin Flope Lock to Un, Vi- 1/04 8 map manufile of + Subarop. Looks r. Dry. Ocrice Noowell, construct brake syst., set Sign int. for alt - Redrieve 4 Wheelen I up welde, camp trailer ere, prepare for Lake In Marter Ceek. Rain most Sad fre 30) No applicable Time To De. for poplies. In pervice + more days 4 mbele to maile, top in D.

Sat 15' Sept The 18 Sept (Cold) Walk Norvell and of road, bring 7pm Ber. t. Early Long discussion 4 Meele back to whomile. All aspecto U.V. Afree the plan staking . No applicable time All Day prospectial Wed 19 Sept an to top of maile Rt. Tark Cat rol. Sur 16 Sent } MAIDEN In Sample Michey RL. Arveture and (129) More P6 Bo Suction, Check Ar. Cl. Inc. (ally's o- main anto- Rd. Stat B6 Flog Down to P6 \$ And Stake, RG 64, 23, 17 / 140, 35, 27. el 1902 Collect S. Seds. Rt PGB, CRS And 5. Mample 417504 + photo. All Day Stake / Somen 1 [man 17 san ] MAIDEN (A) 64, 23, 15 / 140, 34, 27. e1 1636, 1623 photo + J. Sed 417505 SH Side me Restate Rieft fort maider to 419506 Nin vide. P6B. Collect, P. sedu at P68, CRS and R3) 64. 23. 14 / 140. 35. 04 C+ 971? P7B. (an appraise Lesley of general photo mangarere on stea Heory ) HI day state / surrey 40 140' Soil 417507 (The 18 Spot am plot survey infor Fix -Inche (hearter Grb Mickey Cr. 64, 23, 21 / 140, 18, 13 1355 hover), Photo mailer structure . +/- 11 am Be art. S. Sed 417508 mect, show him structure, and explain theory. Afre to meet pr and decide o. Orz. stately. 12mon (R9) 64,22, 32 / 140, 36,24 el 1531 Check et Maider Firetorrate road, Um to De Soil in gully 417 509 for tood + Supplice Back to camps Spin, Officie maps the Hill bym.

(R10) Lie by 22, 24 / 143, 36 04 ... el 232? (CRI) Spring on white fault structure. Sail in Bring 417,555 Loc @ 64.22, 25/ 140; 35, 33 el 4022 str. Ned. 417526. 417511 top material hole 20-07 (includes wild) (I1) liturine ply, Albitino granodiorite RII) 64,22, 23 / 140, 35, 35 et 1702? and alle. freep in lemming exception -Loc. 64, 22, 01 / 140, 55, 27. er 1289 501 1. July 417572 C. Lover vample 417527. R12) 64, 22, 30 / 140, 35, 20 of 22.52? Photo of W.C.G. at road forther 64,22,10/140, 350 Sat 22 Peres To DC for Spilles, Helewsed -1. FRI 21 EPU MAIDEN? mail seed staniplus bit P.O. not spe-(W26) Loc 64, 21, 59 / 140, 34 13 or 1635 Sur 23 Sept Camp moving, No time photo loc. or / near wea/ bedrock and det. Lee 212 border and maple infor - cooled dearen (mon 24 Segue) To (be with a one samples. Selict first Mailed Hen, Called Chence 11. propane etc pro pry: pice-plan for diale undans. (CR7) Loc by, 21. 52/ 140, 34, 27 et 1440 they dope, hip of thead ett. Silt cample 417523. The estern to 12 mile. Do arress drilling de fin startals more Nodered (RB) Loc. 64.121, 50/ 140, 34, St. el. 1370 ost, I mon load from old camp. str. sed. 417524 (Rg) La bu, 21, 50/ 140, 34, 30 e1 1361! and the second Mailer Rt. Form L.L. E.H. cample intersos to Le a small Brew, Loc. flagged 417525

MAIDEN (3oct the 27 sept Redated claim on and first GPS V port 2 mile leave (Groupshy) -10 -100ay's Darc. De space : Of 100 2 augens - Gun horpected letrolive 1 which now approved to to a slide / slowp - farture. ticpsign Thisethan Thay ine [ anter cest Protector 28 Port mining Roc. Qte 40mile Loc. po at2 posts 115,16,17,18 Placent 12 miles. (18=) 64, 21, 27° 14 140, 32, 16 W Corp real. -lamie Drittman 1000729 Loc. Anna's lease top part news parisian Cr / 10 00 330. (P2A) 64, 21, 22° N 140, 33, 05 W 116-C+O Q42 du Trach do = Anale Carton hscription (Pr Post 2 Placer Leave Port 1 2 miles 29 Parti lo 12 mile: Walked Nodmell 23 Enstern. William Reage Clarken, POA way at to hyway. Anna Chapman Classion, Jure 6 2001, . Win Geo Clauton. 30 Sent Sun.) Theck up BC+LC. Ilam. Walk to Disc. Prp + look at was view. Discurs prog Have Noduce Donn -1- -lop Maidel' L. Fork " Im wate Notice to thing [12 Day Prospective] be alopped by trail washert. Flag Anna's look 1 Oct mine Toi DC Supplies + Dr. appt. Notine her back to original post 2. Walk or to de All DAY Staking 2 at The Trick Noducin -1, top maiden at vd. par to -bur don spokes [Notine]

Sun 7 Oct Thur 4 Oct All day statig maiDEN retrieve crashed trick at Clictor C. All day No time. In tow truck to be. - placed OAQ 15,16,17,18 (P8) pet pan + peocher results (As). Ret. Ramp reportioned Annair Jeave port (P2A) 750 pr / No Time Str. sed: sampled at cully at P2A = 528. Thom BOCH / MAIDEN Scoud pist Groudex 2 mile leave = (Pa) Loc = 64,21,05 N / 140,33 01 W these fical Pio ( first post Ails leave most Actual post of (PAA) 64,21,04/140, 33,06, mainer) 64, 23, 05/ 140, 37, 25. Str. sed Sample 529 Jun 7- 500 du from Papi GPS US So No fix. Post NI 5 mile Place Loan Post # 2 str. sed Damply 530 for most cat of pop. Smiles Upst. OL Right Fork, Boch 2001 A. Woodserd. pm Walk Nodrock out do Cimitor rd and Dorn -1-S. sed. sample 531 Maider at Firebreak, Camp. FRI SOUN Post 2 of OAR IAND 2 / BOLT. To DC for instructions the Olence and Port 1 of OAR JALDY supplies Reduce 5 pm - to camp. [No time ] All Day stating Sat bout de 12 nile, also tozimore Nodrell to start firebreak Rd, Load with The goot to be No Time! , can uny's etc. The day prop. filahard

12 FRI 12 OCH Fixed Wed by 2.00 pm. hird woor MAIDEN Pis 69 21. 51 / 140, 34, 34. an 10 Normell, Choinson chainsage size. (M6) 64, 21, 44 / 140, 34, 03 P11) X12 OAQ 1+2 (Pi) 64, 21 36 / 140, 33, 35 \*1 0AQ 314 64,22,16 N 140,36,26W 1173 d. 13.12 of 13+14 Port 1 of 14115 R. L bacer -lo camp 7pm Port Grander leave changes - In this 4 ar theoretical (Piz) 64,22 05 / 140,35,59. Piz A. 64,22,10 / 140,36,06 Sat 13 oct an Refuse - Inde, Redate dain DAI to 13 out, more 4 Macan bade to (P13) 64,22,01 / 140, JST 38 el, 1202 fiebreak ins), pr. To TX Notime! Sun 14 Oct clean out the miles Trailer, [Stating all day] have into my diailes, replace times etc The TOUR MADEN Canpone. No Time 64.21, 57 / 140, 35, 05 et 1309, ma issur take milies traile. I. be. Staking all DAy meet with BIL, upa J.V. account at CIRC, Widdley - Variator bust. Toke in , "2" + 9/16 suchets + extension + ratuck port milie trailer at Schmists. Return Radianto- flashight pail, 1'2" hore, Inglat ' Camp Tom (No Tine) hojes lop 10 1/12", + botton 1/2", 10 dutance ray top to bottom 26" engline to form outride 14 Widt aperix 22"

FUE 16 Oct MAIDEN had 700t -10 DC + Camp work , Rec ICP Reachen for Bac. / No Time Pii 1. Piz 124' Piz 1. Pis 125' The Boat Repair rasianor, at creek chorring. For Pil 1. P18 kcip 124 = 304". RS3) 64, 22, 13/ 140, 36 21 (RS4) 64, 22, 07/ 140, 36, 01 Flag Rtz cliline to tot of Lill := (LI) 64, 22, 20 / 140, 36, 44 (All day prosperitiv (PiB) Not done Need to rejug at line the statical Loc P2 (CR.11) = Crossing Rt Fork 64, 22,02 /140, 36:17 64.21.45 / 140. 36, 55 beauge, 1 Distance to Pir, 0290, 914 km. 240 m 034 CR11 +0 Pil 4900 2005. . (out , line 029 / 020' P10+0 P11 124 - 90 - 244 [IRI 1904] (Rg) = 64,22,03/140, 26,45 (RSI) = 64,22,09 / 140, 36, 31 prin pot in post #1, 2 mile P. Leake, . Michay Cr. "A.w. por for marter Creek Places cilicitied 2.12 chor - set. R52) + Mats 64,22,09/ 140, 26 35 put in post MI, 2 mile place los x. > metamonton > 12 houndleve ? Evers? michay beach Por for Leslie Particia Chapman Hole ? 21-30 0-10 silt, 10-20 day much froncabaria of 20 Loc. 64, 22, 01 / 140, 35 26 ed 1374 All day staking + pisspecture

SS\_\_\_\_S36 at CRIL. Nodwell broken down at start Rt. Fals how (Bat 20 Den ) MICKEY and up. Noduces to forthe maiser. Travers 'Vert' is slide, schirt - logs under tree nots tire No import. Lick back Sorrag II - houp il weg - are pebbles apper-lo have been wowed (red rocking) but no tray Michen L1 : leave live croring Clinton red. . fourd atter then atz + sel. (L1) 64 23, 29 /140, 36, 20 (P23) is love post AU. 3 mile I care. (P2) Post 1 2mile Loans michny create 64, 22, 59 / 140, +37; 14 64,23, 39 / 140, 36, 30 Roated 210ct 2001 and changes 193 Rile leave. (L2) 04 CIECK 64, 23, 20/ 140, 35, 50, (This 22 act Michay C. Good collidary bench loave line -10 P24), -Hand (Sin 210cr) MAIDEN Day! P21 7) = 64,21,50/ 140,36,59 er 1004 The out 23 michay C. ) But all flag S.S. 532 at RL draw ou Rt. fork mailer Greate lare live -1. P2. Needs more 5.5 533 Rt fork Maidel above 532 work, Reduce Norch -1. camp. (P22) Top post All 3 mile (pan ENDI 64, 21, 45 /-140, 36 56 SS \_\_\_\_ S34 R4 First maide above 535 SS \_\_\_\_\_ SJS R.L. PUP RI. Forle Wichde \_\_\_\_