YMEP Exploration Final Report Fourth Right Limit Bench

YMEP Grant # 2020-107

NTS Map 115G/01

By: All-In Exploration Solutions Inc. Whitehorse, Yukon Lease # IW00657, IW00738

Whitehorse Mining District

Yukon Territory

Edward Long & Riley Gibson 01/31/2021

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Overview

The following is the final report on placer exploration work in October of 2020 on a three (3) mile and one (1) mile Placer Prospecting Lease and on the right limit of lower Fourth of July Creek, Yukon. This work program was a component in a multi-year regional program seeking to evaluate mineral and placer potential within the Jarvis River headwaters. Although significant quantities of gold have been withdrawn from the district throughout the past 120+ years the majority of the potential remains unexplored. Due to difficulties securing quality drilling contractors and safely mobilizing the resistivity crew the program completed was not as significant and detailed as originally proposed. This work was completed with assistance from the YMEP program.

<u>Location</u>

The Fourth of July Creek Bench placer project is located on and just below the confluence of Fourth of July Creek and the Jarvis valley (Figure 1). Fourth of July Creek is a tributary of the south-draining Jarvis River, in the Ruby Range of south-western Yukon. The Prospecting leases are located approximately 50 km northwest of the community of Haines Junction, situated in the area between Kluane Lake and Aishihik Lake. The lease is centered on a latitude of 61° 08' 45" N and longitude -138° 03' 13" W, in NTS Map Sheet 115G01.

<u>Access</u>

The Fourth of July Creek Bench lease can be accessed by following the Alaska Highway for 56 km northwest of Haines Junction, then traveling an additional 38 km by 4x4 along the Cultus Lake Road, east of Kluane Lake. There is 4x4 road access to the lease from previous placer mining operations up Fourth of July Creek. Alternative access is by helicopter, which is a ~60 km direct flight from Haines Junction (Figure 2).

Regional Geology

The region encompassing the placer lease is characterized by rocks of the Kluane Assemblage. The area in which the lease is situated consists of Kluane Schist (appears as a light to dark grey, fine-grained, quartz-muscovite schist, variably carbonaceous, and as a dark grey to black, fine-grained, quartz-biotite schist), and Eocene-aged Hayden Lake intrusive suite (a medium to coarse-grained salt and pepper, light and dark grey hornblende +/- biotite, diorite to quartz diorite). Thrust

faulting is present a short distance to the north, marking the contact between the Kluane schist and orthogneiss/paragneiss which are late Cretaceous and older in age. Large-scale faults surround the property especially to the south, and range from northeast-northwest to east-west in orientation. The Paleocene Ruby Range Batholith extends north of the property on the northern margin of the gneiss. See Figure 3 for Regional Geology.

Local Geology

The region south of Fourth of July creek is underlain with a light to dark grey, medium grained, quartz-muscovite schist, alternating into a dark grey to black, fine-grained, quartz-biotite schist. Several granitic dykes intrude the schist unit in the southern region of the claims. The alternating biotite/muscovite-rich schist has regions of intense shearing, several vuggy and limonitic with chlorite quartz veins and cross-cut foliation. The northern portion of Rabbit Creek is intruded by an Eocene-aged intrusive suite (the Hayden Lake suite), a medium to coarse-grained salt and pepper, light and dark grey hornblende +/- biotite, diorite to quartz diorite with common large garnets. Northwest and northeast-trending fault structures within the Kluane Schist are inferred, and are likely smaller parallel structures to nearby regional structures. However, these structures warrant further investigation. Structurally-controlled epithermal gold and arsenopyrite mineralization in quartz carbonate veins systems within the Kluane Schist (especially the biotite rich subunit) is the most prominent mineralization found in the surrounding area. The relationship between the Hayden Lake Suite intrusion and local mineralization within Kluane biotite Schist remains unclear.

<u>Surficial Geology</u>

Fourth of July Creek and its various tributaries occupy steep-walled, U-shaped depressions, smoothed by the effects of past glaciations which likely extended to the summits of tributaries on both sides of the creek. As a result, the width of the of Fourth of July Creek valley is lined with a glacial diamict, a "boulder-clay" layer of glacial deposits overlain by glacial silts, sands and gravels of considerable but variable thicknesses. However, at a few points along the creek, small schist outcrops occur along the sides above the present water level.

The Fourth of July Creek drainage was glaciated during the most recent glacial episode (Duk-Rodkin, 1999) and late Pleistocene deposits of glacial till, glaciolacustrine and glaciofluvial deposits blanket the slopes in the area. The centre of the valley contains a complex of recent alluvial valley deposits. 5 shows the surficial geology according to the digital files of the Yukon Geological Survey. The area of the claims includes alluvial terraces (At) deposits and glacialacustrine deposits mixed with till (unit Lb2/D).

<u>History</u>

On July 4th, 1903, the first discovery claim in the area was staked by Dawson Charlie on Fourth of July Creek upon the discovery of gold at a number of points. This initiated a large rush to the Kluane area which would last for several years to come. Dawson Charlie's find in 1903 was the first payable placer gold found in the Kluane district. A great number of placer claims were located following this in 1903 and 1904 and the majority of creeks in the district were staked. However, by 1914, only 96 placer claims remained in the entire Kluane district due to the majority of miners and prospectors being drawn to new placer camps in Alaska. Activity seems to have focused on shafting along both margins of the Fourth & Twelfth of July Creeks as well as Larose Creek. This activity can be confirmed by a brief survey walking the benches and spotting the location of 'old-timer' overburden piles, artifacts, cabins, and equipment including abandoned steamers. Shafting within the active creek margins was likely nearly impossible due to the fact that winter freezing only penetrated down 5-10', massive overflow/seep ice is common,' and timbering was not plausible as the water table within the active margin is high and the gravels saturated. Although gold was reported (McConnell, 1906) to be unevenly distributed within the entire drainage, hand miners were able to secure working wages ($\sim 1 \text{ oz/day/man}$) and sustained their operations for numerous seasons. McConnell also believed that the "bulk of the gold in the valley, as in the tributary depressions was undoubtedly originally concentrated in the old, preglacial channels" It seems likely that the old timers mined the benches as they were in fact richer than the valley bottom gravels. If the valley bottom surface gravels had been richer the hand miners would simply have mined these and could have avoided shafting altogether as it would have been unnecessary.

Ephemeral work (limited shafting and early 'cat-mining 'on lower Larose Creek) continued within the Fourth of July drainage until the early 1970's, when Larose Creek, Fourth of July and Twelfth of July Creeks were staked by Tom Churchill. Churchill mainly optioned the claims to other parties who mined a few stretches of Larose, Fourth of July and Twelfth of July Creeks (benches and active creek margins) during the 80's and early 90's, sometimes collecting as much as 2000 oz. in one month (T. Churchill, personal communication). The presence of economical gold within active creek margins as well as the benches (particularly in the vicinity of Alie Creek) is well known, with over 25,000 oz historically reported. According to notes from a 2002 site visit from Bill Laberge, Fischer Placers were mining a coarse gravel located under a glaciolacustrine sediment located on the right limit of Fourth of July Creek directly above the confluence with Twelfth of July Creek. Unfortunately mining in the region has never reached anywhere near its potential mostly due to the failure to secure and maintain a deal with Mr. Churchill; as a result only ~ two miles of claims have been mined (mined twice in fact thanks to poor recovery of the initial pass) using modern heavy equipment techniques.

Land Tenure

Placer Lease IW00738 is owned by Edward Long and Lease IW00657 is owned by Riley Gibson. (Yukon Mining Recorder 2020). Figure 6 shows the Placer Leases.

2020 Exploration Program

Personnel and Dates of Work- SAMPLING

Between the dates October 1, 2020- November 15, 2020 2 separate Test pit programs were completed and rehabilitated on Lease # IW00657 and IW00738 by All-In Exploration Solutions Inc. with a field crew consisting of Ed Long, Riley Gibson, Jared McGuire, and Donald Capot-Blanc. Sediment excavated was generally a rusty cobble-sized sandy gravel interbedded with lenses of sand, interpreted to be overbank deposits from post-glacial flooding events of the Cultus Creek. Test pits were located in convenient areas near past geophysics lines/targets completed in 2018. Depths of the Excavator test pits did not exceed 5 metres as the material became too wet, the result of a consistently shallow groundwater table below this point. Samples were excavated from the test pits using a Hitatchi EX150 Excavator on Lease IW00657 and by hand using pick, shovel, and hard work for the pits on Lease IW00738. Hand test pits did not exceed 3 m and material became wet and unworkable.



Figure 1: R.Gibson Observing test pit 20TP-3.



Figure 2: E.Long collecting sample at test pit 20TP-4.

Three yard samples excavated from the ten test pits using the Hitachi EX 150 Excavator were processed thru a recirculating Keene Engineering High Banker. Concentrate was cleaned in a hand pans and a RP-4 gravity shaker table. Samples from the test pits were hand panned to determine grade. Figure 7 outlines the relative location of each test pit while Table 1 provides a more accurate location.



Figure 3: Gold in Pan from Test Pit 20-Tp2

The lower pits conducted on the alluvial fan adjacent to Fourth of July and upper Jarvis Creeks sought to follow up on previous geophysics results and determine if a boulder clay was present, if it could be accessed, and whether any of the alluvial gravels at this confluence of the two valleys were in fact economic in a low grade high volume production model. This large alluvial fan as shown in **Picture 4** the drone imagery is sparsely covered by willow growth, knee high grass, and individual

White Spruce of various sizes, many of them standing dead from previous Spruce Beetle infestations. The site is well drained and topography is quite flat, punctuated by a series of three low 2-3m benches of a post-glacial Fourth of July Creek. The upper 1-2m metres of surface fan gravels excavated were generally a well washed (little interstitial material) cobble pebble grave that fined upwards. Clasts were dominantly round-subround granite and schist. Gold encountered was always smaller than 2mg specks accompanied by abundant garnet grains of all calibres, likely confirming a provenience in the intrusion rich Fourth of July Creek valley. This upper unit was interpreted as a overbank flood deposit and ~.8g gold was recovered from 3 coarse yds processed. An underlying coarser well washed cobble gravel from 2-3.5 m was consistently located across the pits excavated across the alluvial fan with the same meagre results of under 1g of recoverable gold. Below the coarse gravel layer was a layer of medium to coarse sand. This sand layer could not be penetrated and was at least 2-3 m thick at each test site. The sand was saturated with flowing groundwater water and the lower sand pit walls would quickly cave in followed by the now overhanging gravel burden lying above. No observable gold was recovered in these quick gold pan samples conducted from this sand layer and the pits were backfilled after reaching this depth.



Figure 4: Drone Image (looking North(of Alluvial Fan and Lease IW00657.



Figure 5:Drone Imagery overlooking Lease IW 00738 looking up 4th of July Creek

Samples from pits were panned but none of the samples recovered economic values. RC drilling or Sonic drilling with casing in highly recommended to test deeper gravels below water table. Figure 7 outlines the relative location of each test pit while Tables 1&2 provides a more accurate location and sample description.



Figure 6:Saturated Hand Test Pit 4th of July Bench.

On October 31, 2020 a site tour of the Fourth of July creek property was completed with YMEP geologist Derek Torgerson, led by All-In Exploration Solutions Inc. management.

Table 1 details the results of the excavator test pitting. Although alluvial gravels were encountered they occurred in shallow lenses (not the sought after "boulder clay") and did not contain economic placer deposits (<0.3 g/yd³). Successful excavator test pits would require a much larger excavator, and much larger and deeper holes, as well as a pump or drainage ditches for removal of groundwater. RC or Sonic drilling is recommended to test deeper gravels.

Table 1: Bulk Sample Results

Test Pit	Depth of Pit (meters)	Material	Economic Gold Yes or No	Easting (X)	Northing(Y)
20Tp-1	~3 m	Surface Gravel	No	659067 W	6780546 N
20Tp-2	~3 m	Surface Gravel	Borderline	659000 W	6780415 N
20Tp-3	~3 m	Surface Gravel	No	659008 W	6780088 N
20Tp-4	~3 m	Surface Gravel	No	658766 W	6785031 N
20Tp-5	~2m	Surface Gravel	No	658853 W	6780918 N
20Tp-6	~2.5 m	Surface Gravel	No	658812 W	6780926N
20Tp-7	~2 m	Surface Gravel	No	658826 W	6781062 N
20Tp-8	~3 m	Surface Gravel	No	658925 W	6781117 N
20Tp-9	~3 m	Surface Gravel	No	658885 W	6781178 N
20Tp-10	~2.5 m	Surface Gravel	No	658852 W	6781236 N

Table 2: Hand Test Pits Sample Results

Test Pit	Depth of Pit	Material	Economic	Easting (X)	Northing(Y)
	(Gold		
(meters)			Yes or No		
20-HandTp-1	~3 m	Surface Gravel	No	658595 W	67801412 N
20-HandTp-2	~2 m	Surface Gravel	No	658668 W	6781427 N
20-HandTp-3	~2 m	Surface Gravel	No	658734 W	6781447 N

20-HandTp-4	~6 m	Surface Gravel	No	658754 W	6781458 N
20-HandTp-5	~6m	Surface Gravel	No	658767 W	6781461 N
20-HandTp-6	~6 m	Surface Gravel	No	658667 W	6781611N
20-HandTp-7	~6 m	Surface Gravel	No	658483 W	6781488 N
20-HandTp-8	~6 m	Surface Gravel	No	658474 W	6781500 N
20-HandTp-9	~6 m	Surface Gravel	No	658524 W	6781381 N
20-HandTp- 10	~6 m	Surface Gravel	No	658585 W	6781406 N

<u>Total Expenditures</u>

ltem	m Cost/day Days/Quantity		Total
Labour	\$400 64		\$25,600
Truck Cost(2 Trucks)	\$50/day/truck	14days/truck	\$1400
Truck Usage	\$0.65/km	2000 km	\$1300
Field Expenses	\$100	56	\$5600
2 Atv	\$40	28	\$1120
Excavator	\$15,000/Month	1	\$15,000
Drone	\$500	1	\$500
Generator	\$10/day	14	\$140
Report Writing	10% Total Expenses	1	\$5066

Total Cost			\$55,726
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Conclusion and Recommendations

Despite the use of a excavator and we were unable to reach our target depths in both excavator test pits and hand test pits. The use of a Sonic or RC drill with casing is highly recommended for testing deeper gravels below water table. The upper 5m of gravels on Lease IW00657 have proven to be sub-economic with grades consistently below 0.2 g/ bank yd. On Lease IW00738 test pits prove the geophysics targets outlined in the 2018 resistivity program is too deep and too wet to access with the available equipment and infrastructure (need drainage).

In conclusion, without further resistivity lines (to help outline solid drill targets) followed by thorough drill testing to groundtruth the geophysics and indicate rough gold economics the property remains sorely underexplored. The 2021 exploration program will focus on getting a placer testing drill on site and continuing further resistivity surveys on the Leases.

Statement of Qualifications

I, Adam Riley Gibson, Prospector, certify that:

- 1) I reside at 106 Titanium Way, Whitehorse, Yukon, Y1A 0E8.
- 2) I am Vice-President, part owner of, and employed by All-In Exploration Solutions Inc. of Whitehorse, Yukon.
- 3) I graduated from The University of Lethbridge in Lethbridge Alberta in 2012 with a Bachelor of Science Degree in Archaeology and Physical Geography.
- 4) I have spent time prospecting on and around the target area.

Dated this <u>28</u> day of <u>January</u> 2021, at Whitehorse, Yukon.

A.R. Gibson (Prospector)

Figures & Appendices















YMEP FINAL SUBMISSION FORM

				Date submitted:		
submit by Jo	submit by January 31st to: YMEP- EMR/ YTG				0	
(winter placer projects may Mailing a submit at pre-approved date) Whiteho			address: 102-300 Main Street g address: Box 2703, K-102 horse, Yt, Y1A 2C6		YMEP@gov.y phone: 867-4 fax: 867-667-	′ <u>k .c</u> a 56-3828 3198
CONTACT IN	NFO			PROJECT INFO		
Name:	All-In Exploration Solu	tions Inc.		YMEP no:	2020-107	
Address:	106 Titanium Way, Wh	itehorse	YT, Y1A 0E8	Project name:	4th Bench	
				Project type:	Placer	
email	allinexploration@gmail	.com		Project module:	Target Evalu	ation
Phone:	332-4437					
Is the final r	eport enclosed?		yes 🖌	_hard copy _pdf copy _digital spreadshe	et of station lo	ocation data
Comment:						
PROJECT SU	IMMARY					
Total project	t expenditures:		\$55726			
Number of r	new claims since March 3	1st:				
Has an optic	on resulted since March 3	1?	yes	no	in neg	gotiation
Number of c	alendar field days:		14			-
Number of p	person-days of employme	ent:	64 paid	100	days of unpaid	d work
Total no. of	samples:	rocks	silts		soils	other
Total length,	/volume of trenching/ sha	afting:	10 hand pits,	10 excavator p	oits- 20 total	
Total numbe	er of line-km of geophysic	s	Drone aerial	al survey- photos		
Total meters	s drilled		diamond drill	RC drill	auger	/percussion drill
Other produ	cts (provide details):					
FINANCIALS	This is n	ot an expe	ense claim form. Ubmit a senarate	To request reimbu detailed expense	rsement of exp	penses, please
Total daily fi	eld allowance	\$5600		Total contractor	costs	55,726
Total field ai (helicopter/)	r transportation costs plane)			Total excavating/	heavy	15,000
Total truck/	mileage costs	\$2700		Total assav/analy	ses costs	-
Total wages	paid	\$25600		Total reclamation	i costs	included
Total light eo	quipment rental costs	\$2260		Total report writi	ng cost	5,066
Other (pleas	e specify) DJI Drone	- \$500/da	ау	Total staking cost	S	
Other (pleas	e specify)					

YMEP FINAL SUBMISSION FORM

Your feedback on any aspect of the program: Great program with a proven record of success.

The Department of Energy, Mines and Resources may verify all statements related to and made on this form, in any previously submitted reports, interim claims and in the Summary or Technical Report which accompanies it.

I certify that;

1. I am the person, or the representative of the company or partnership, named in the Application for Funding and in the Contribution Agreement under the Yukon Mining Incentives Program.

2. I am a person who is nineteen years of age or older, and I have complied with all the requirements of the said program.

3. I hereby apply for the final payment of a contribution under the Yukon Mineral Exploration Program (YMEP) and declare the information contained within the Summary or Technical Report and this form to be true and accurate.

Date

ite	Januar	V 31	,2020
t	Edward	Sor	201
			/

Signature of Applicant

Name (print) Edward Long



YMEP Expense Claim - Client Copy

YMEP no:	107	project name:	ourth Right	t Limit Bench	applicant A	II-In Exploration Solutions Inc
expense claim no:		program placer type:			program module: fo	cused regional
date submitted:	ate 31-Jan-21 332-44 ubmitted: phone:		1437	all email:	inexploration@gmail.com	
address:			106 Tita	nium Way, Whs	e, YT. Y1A 0E8	3
start/end dates of fieldwork for 1-Oct-20 this claim:			15-Nov-20	no. of field days/this	56	
eligible expenses item	Please re	fer to rate gu	idelines. Pro	vide photocopy c unit/days	of receipts.	total
daily field expenses	no person	s: 4	`	14	\$100/day	\$5,600.00
	Name (sup	ply statemen	t of qualificat	ions)		
		Ed Long		16 days	\$400	\$6,400.00
personnel		Riley Gibson		16 days	\$400	\$6,400.00
		Jared McGuire		16 days	\$400	\$6,400.00
Donald Capot-Blanc		lanc	16 days	\$400	\$6,400.00	
equipment (rental)			private or commercial	unit/days	rate	total
DJI DI	rone (Aerial	Survey)	private	1	\$500	\$500.00
ł	-litachi EX 1	50	private	1 month	\$15,000	\$15,000.00
1x 2	2000W Gene	erator	private	14 days	\$10	\$140.00
2 x	Honda 420	ATV	private	14 (2 ATVs)	80 (2 ATVs)	\$1,120.00
Т	ruck Usage	x 2	private	14 (2 trucks)	\$100 (2 trucks)	\$1,400.00
Truck	kilometers (2	2 trucks)	private	\$0.65/km	2000 km total	\$1,300.00
			private			
	*		private			
	8		private			
			private			
		-	private			
other			Please prov	ide details.		
YM	1EP Final Re	eport		10%	report complilation fee	\$5,066.00
				Тс	otal this claim:	\$55,726.00