

YMEP # 14 - 107
FINAL REPORT FOR TARGET EVALUATION
ON THE IEAE PLACER CLAIM GROUP (10 PLACER CLAIMS)

MAP SHEET: 115O14F
CLAIM GROUP CENTER: 592790 E, 7083130 N, UTM ZONE 7
COMMODITY TARGET: PLACER GOLD

DATE: JANUARY 27, 2015

BY
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EXECUTIVE SUMMARY

The IEAE placer claim group consists of 10 placer claims on the left fork of the right most tributary to Little Blanche Creek in the Dawson Mining District on NTS map sheet 115O14f. The claims are 100 percent owned by Iain Mitchell who is also the recipient of YMEP funding. The claims were staked from lease in 2013. Two small hand test pits to represent work on the lease were conducted by the owner of the claims. The sample pits showed trace gold (1 colour) from approximately 0.1 cubic yards of shallow (2-3 feet depth) material. The claims are readily accessed by road with repairs made under this YMEP grant.

The proposed work program under YMEP 14-107 included road work, 400 feet of auger drilling, and a test pit. Road work was completed for access to the site however the drilling and test pits were curtailed due to the presence of thick slide material that was recognized during drilling. The first hole encountered slide material below recent gravels and it continued to a depth of 38 feet, bedrock was not encountered. After this, the second hole, located across the creek from the first presumably away from the slide was drilled to a depth of 43 feet which also encountered slide material and did not reach bed rock.

With the slide recognized, the drill was moved upstream. At this location the hole 3 encountered similar material and was abandon at 35 feet. Hole 4 was moved even further upstream near the top of claims and was drilled to a depth of 29 feet and encountered slide material, muck, and sand before the hole was lost.

Drilling had been extremely slow (and costly) to this point and the owner made the decision to terminate the project as the depth of slide covering any possible pay gravels would have been prohibitive to economic recovery. The test pit was also not completed for this reason. (I did not want to waste money - mine or the YMEP grant).

All drilling samples were processed and results were, as expected, quite low with no hole containing more than 10 milligrams of gold. The claims are still held by Iain Mitchell.

PROJECT LOCATION

The IEAE placer claim group consists of 10 placer claims on the left fork of the right most tributary to Little Blanche Creek in the Dawson Mining District on NTS map sheet 115O14f. Figures 1 and 2 show the project location and claims and detailed claim information can be found in the below table:

TABLE OF IEA CLAIMS:

District	Grant No	Claim Name	#	Claim Owner	Recording Date	Staking Date	Claim Expiry Date	Status	Lease	NTS Map No
Dawson	P 515847	leae	1	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515848	leae	2	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515849	leae	3	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515850	leae	4	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515851	leae	5	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515852	leae	6	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515853	leae	7	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515854	leae	8	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515855	leae	9	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f
Dawson	P 515856	leae	10	Iain Mitchell - 100%	30/08/2013	29/08/2013	30/08/2014	Active	ID01122	115O14f

PROJECT ACCESS, LOGISTICS, AND TIME LINE

The project has road access via the Bonanza or Hunker road with a turn off south to the Queen Dome road located approximately 1 km east of the heritage trail access on upper Bonanza Road (~5 km west of King Solomon Dome). The Queen Dome road access roads can be seen in the detail location map (figure 2).

Project access was improved with road repairs made to access the site. These improvements included significant brushing (June 7, July 19 and 20) on the road on claims and Komatsu PC 75 midi excavator work from June 10 to 14, 2014 on the access road off IEAE claims which was partly conducted under separate YMEP Grant 14-106 which also required access. This aspect of the grant was successful and road access for further work was completed.

Road infrastructure was used to mobilise equipment to the site. Equipment mobilisation was conducted by Bonanza Sales and Van Every Trucking Ltd. The excavator for road work was mobilised on June 10 (and transferred to a different project on June 14) and the drill was on site from July 21 to 26.

Processing of samples was conducted intermittently from July 27 to September 6, 2014 and binocular microscopy and gold estimation of heavy mineral concentrates was conducted on January 22 and 23, 2015.

PERMITTING AND REMEDIATION

The Owner was allowed to complete all work on claims under schedule 1 of the Mining Land Use Regulations and Mining Lands officer was consulted in early June before work commenced on claims. Road work off IEAE claims was completed on separate placer claims (IEA) and not on crown land. This was a positive synergy between YMEP 14-107 and 14-106, which both required the same access road repaired. A Waste Deposit without a Licence permit was obtained from the Water Board by the owner and was in effect from June 9 through October 15, 2014, however with the samples being hand panned this was not necessary.

The impact of the drill was minimal and all sites were cleaned up as they were vacated. Drilling was conducted away from the small creek to respect riparian setbacks. Access cutting was limited to two locations and was less than 5 metres wide by 20 metres long to allow the drill to move from the road to drill locations along the creek.

FIGURE 1 LOCATION MAP

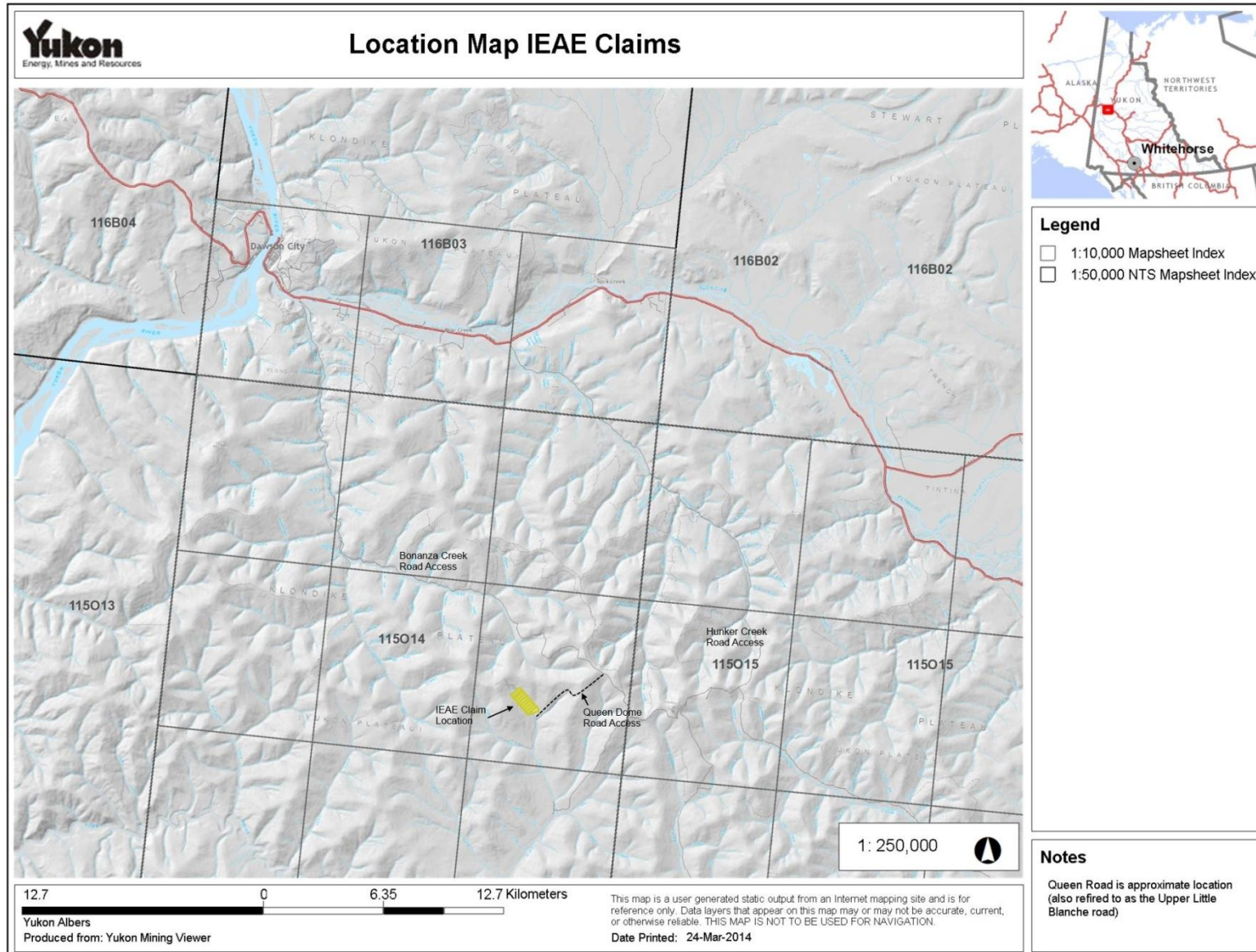
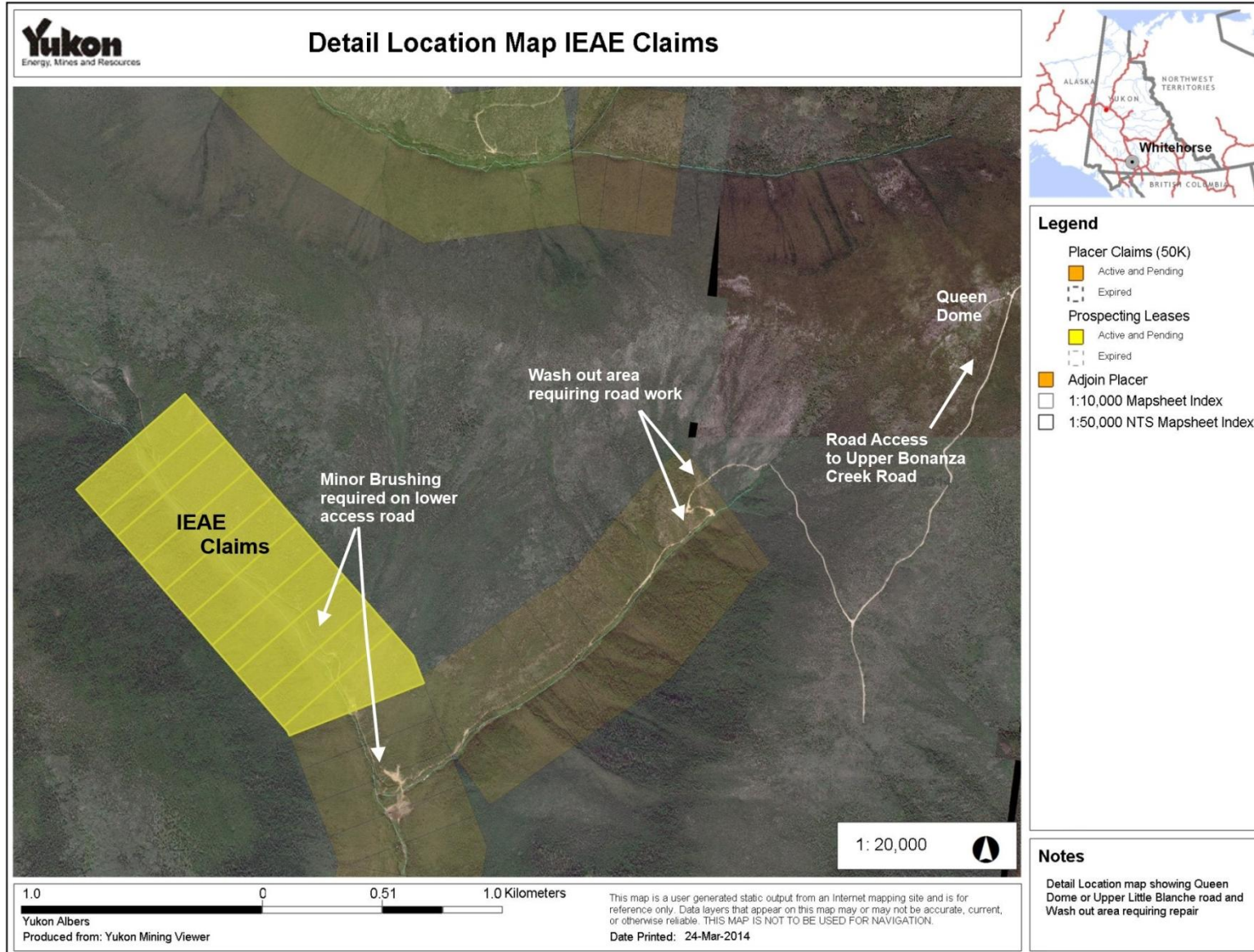


FIGURE 2 DETAIL LOCATION MAP



PROJECT AREA GEOLOGY, BACKGROUND, AND HISTORY

GEOLOGY OF THE CLAIMS

The project area geology is mapped regionally as Klondike schist (unit CPK1: Klondike Schist: tan to rusty and black weathering muscovitic and/or chloritic quartzite and quartz-muscovite-chlorite schist; quartz and/or feldspar augen-bearing quartz-muscovite (chlorite) schist; includes augen gneiss and amphibolite). Locally the roadbed on claims shows this unit is present (local float). There has been no bedrock found on the claims to date due to poor exposure.

PROJECT AREA HISTORY

Historical “old timer” workings are present below the claims. Tailing are present on claims IEAE 1 and part of IEAE 2, and immediately downstream of the claims as shown by significant previous disturbance., however work in this area is undocumented as no reference it was found in the literature and records search. It is noted that this location is listed as “4- high probability” in YGS Open File 2012-13 (Bond, 2012) with “5 - confirmed probability” just below it. The break in classification likely occurs at the contact where tailings are found on IEAE claim 2, although the scale of the map makes this inference questionable. The author was unable to find reference to further historical activity and the claims above IEAE 2 show no evidence of previous placer operations (no ground or vegetation disturbance) other than an existing road running up the northeast side of the creek. The claims are assumed to be virgin ground.

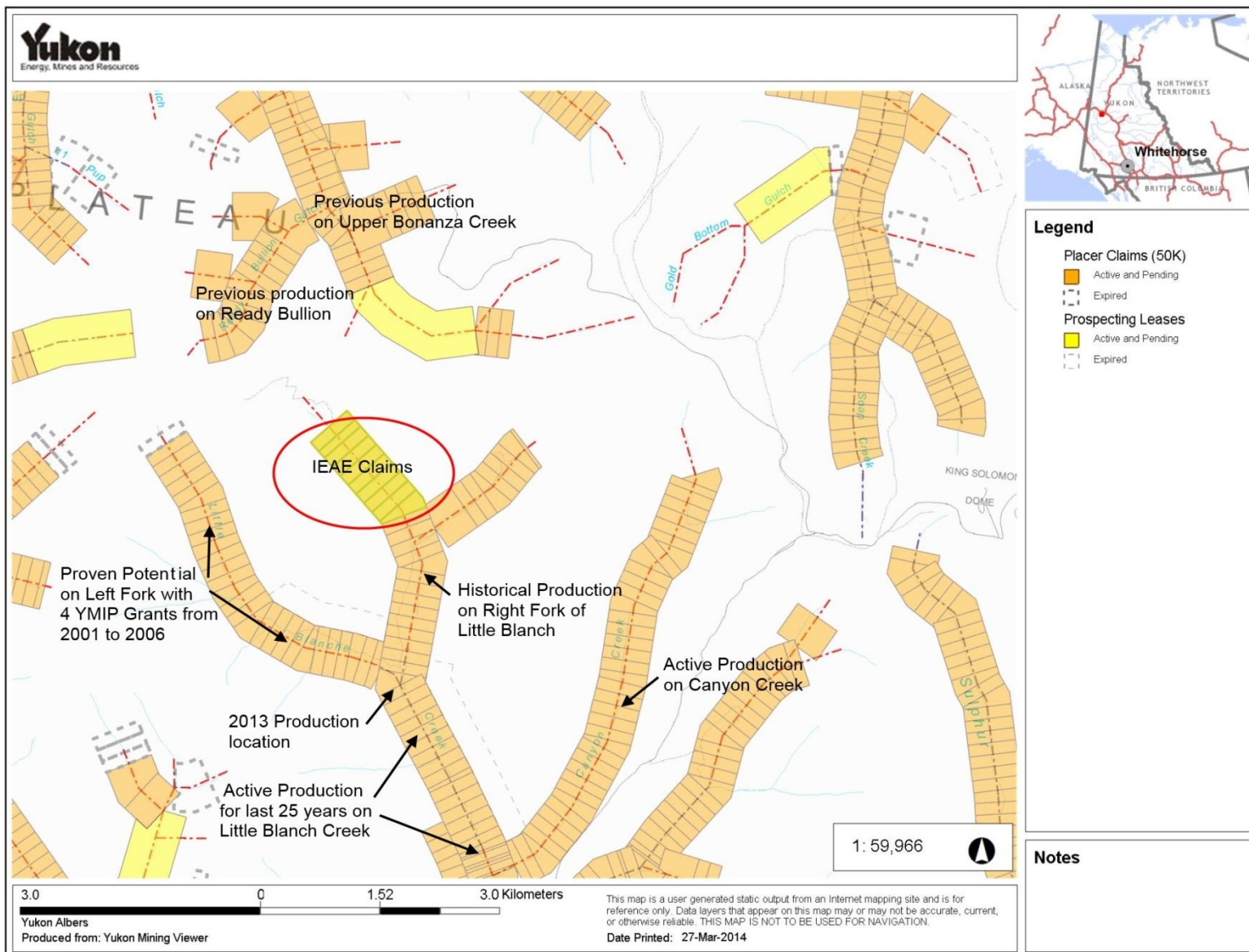
More recent activity downstream of IEAE claims are test sites of B. Coombs and D. Tainer in the area of the right and left fork confluence with the right tributary to Little Blanche Creek (Yukon Placer Industry 1998-2002 Report, Yukon Placer Mining Industry, 2003-2006). Results of B. Coombs and D. Tainer work are unknown however the applicant conducted 3 auger drill holes in 2013 near the upper most test site (400 m below the IEAE claims) and these did recover gold. The applicant performed 280 feet of auger drilling on the right fork of the tributary (NOT on IEAE claims) in 2013. The result of the 2013 drilling program was positive with gold present in many holes and depth to bedrock in several locations determined. Also in 2013 two small hand test pits to represent work on the lease were conducted by the owner of the claims. The sample pits showed trace gold (1 colour) from approximately 0.2 cubic yards of shallow material (2-3 feet depth).

Further downstream placer mining is active on Little Blanche Creek at the confluence of the right and left fork tributaries (1.5 km from IEAE Claims). Miles Carlson is the operator of this mine and the author visited the site several times in summer 2013 for friendly advice and to investigate his current placer cut.

Up the left fork tributary and proximal to the IEAE claims auger drilling and pitting as outlined in YMIP Reports 2001-47, 2002-11, 2004-33, and 2006-14 was conducted by B. Kreft. With the exception of 2006-14 in the upper portion of claims, these programs were successful in finding placer gold of economic grades on the proximal left fork tributary of Little Blanche Creek (2 km west of IEAE claims) and are an important factor when considering this proposal. Grades reported in the 2004-33 report were good and B. Kreft went so far as to identify a placer pay streak of economic significance. The poor results of the 2006-14 program questioned the suitability of placer terrain high in the tributary as there did not seem to be enough sorting of material by water to produce placer deposits. Both logistical and geological lessons learned from the reports of these programs were instructive in creating this YMEP application.

Placer mining has also occurred on proximal Ready Bullion Creek (1.5 km northwest of IEAE claims), on Bonanza Creek at the mouth of Ready Bullion Creek (3 km north of IEAE claims), and is active on Canyon Creek (4 km southeast of claims. Figure 3 shows placer occurrences proximal to the IEAE claims.

FIGURE 3: PLACER OCCURRENCES PROXIMAL TO THE IEAE CLAIMS



RESULTS OF YMEP 14-107

The YMEP application for the IEAE claims was designed to prove the presence of economic quantities of placer gold on the claims. To this end 400 feet of auger drilling was planned with a single follow up test pit at the most prospective and accessible location as found by auger drilling. The drill was a 6 inch Nodwell mounted unit provided by Bonanza sales. Drilling was conducted from July 21 to 25, 2014 by operator Bruce Duffy, helper and logger Katie Dodd (figure 4 and 5), with support in access cutting and direction from Iain Mitchell who was on site for the drilling. Drilling in general proceeded slowly with average daily footage at only 36 feet per day.

FIGURES 4 AND 5: DRILLER B. DUFFY AND HELPER LOGGER K. DODD

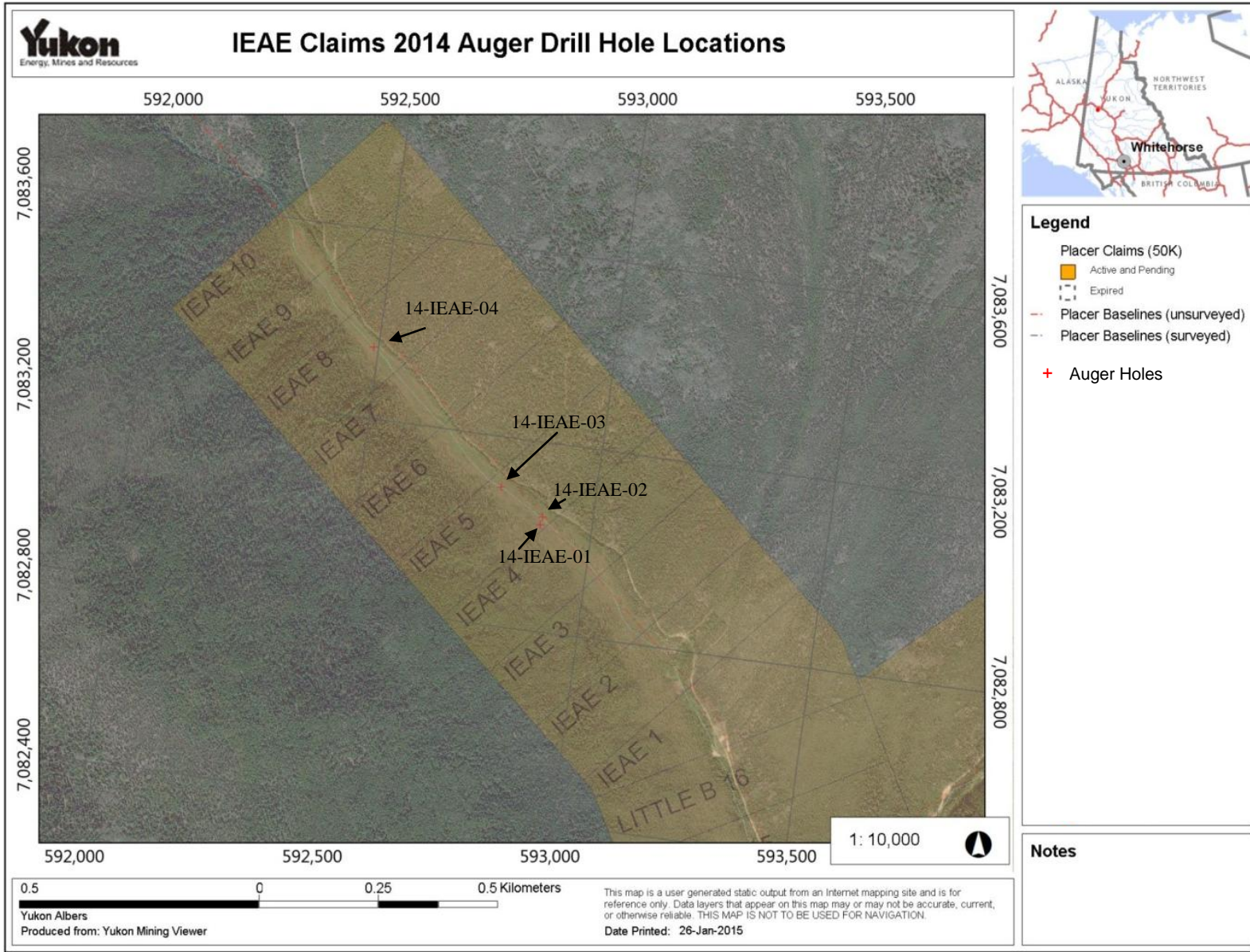


Drilling and test pits were curtailed due to the presence of thick slide material that was recognized during drilling. The first hole encountered slide material below recent gravels and it continued to a depth of 38 feet, bedrock was not encountered. Aerial photos were consulted and it was determined that the slide came from the slope to the southwest of hole 1. With this knowledge the second hole was located across the creek to the northeast of the first hole, it was drilled to a depth of 43 feet which also encountered slide material and did not reach bed rock.

With the slide recognized, the drill was moved 125 meters upstream to attempt to move above the slide area. At this location the hole 3 encountered similar material and was abandon at 35 feet. Hole 4 was moved approximately 500 meters upstream of the first hole to claim IEAE 8 and was drilled to a depth of 29 feet and encountered slide material, muck, and sand before the hole was lost.

Drilling had been extremely slow and costly due to the separated drilling and contractor rates (not just straight footage) to this point and the owner made the decision to stop the project as the depth of slide covering any possible pay gravels would have been prohibitive to economic recovery. In total 145 feet of drilling was completed. Figure 6 shows drill hole locations and drill logs and results are available in Appendix II.

FIGURE 6: 2014 AUGER DRILL HOLE LOCATIONS



All samples were processed from drilling with all recovered material sampled. Results were, as expected poor, with no hole containing over 10 milligrams of gold. Very fine gold, usually less than 1 milligram per 20 kilogram sample was common in recent gravels just below the surface and above grey silty clay slide material, the amount of gold in these shallow gravels was not of economic significance. Sporadic coarser gold (to 0.5 mm) was encountered lower in several holes. 14-IEAE-02 contained 5 milligrams of gold between 22 to 33 feet, 14-IEAE-03 from 17 to 22.5 contained 2 milligrams of gold, and IEAE-04 contained 4 milligrams of gold in a single color (0.5-1 mm) at 13 to 15 feet. None of these intersections are of economic significance. Garnet, magnetite, galena, pyrite (often weathered to “limonite”), and trace tourmaline were present in heavy mineral concentrates.

SAMPLE PROCESSING

Samples were processed by first washing and screening to 4 millimeters and then hand panning (figure 7 and 8). All samples from all holes were processed. Washing and screening was necessary as much of the material was clay and silt rich and was not amenable to direct panning. Sample recoveries were generally good and large samples were obtained. Screening and washing was labor intensive and slow. Several samples were double panned to confirm recovery, and gold was not present in any pans of the tailings.

Final gold determination was made under binocular microscope. An AWS Gemini-20 portable milligram scale was used for gold weights. This scale registers to 1 milligram however accuracy is to 5 milligrams so low gold weights recovered in this project may have significant error. This error would not affect the conclusions of this exploration project as results are at least an order of magnitude below economic grades for placer gold mining.

FIGURES 7 AND 8: WASHING AND PANNING



Screening and washing clay rich slide samples was a very time intensive affair with up to 2.5 hours expended per sample. Panning was equally disheartening with very little gold recovered.

DISCUSSION

Exploration of the IEAE claims showed that they have a low probability of hosting economic placer deposits due to the thickness of slide material covering any possible pay gravels below them. However, the creek bottom was not reached during testing. Perhaps these claims could be of interest for an operator with the means to adequately test and mine deeper deposits.

The surficial geology was elucidated by the drilling with a general profile of the claims having recent organics, post glacial gravel and sand stream deposits (top red to brown gravels in logs), below which is slide material.

The slide was pervasive throughout drill holes and consisted of grey silty clay material with variable clasts. The slide was interlayer with black muck, and gravel and sand representing multiple slide events and deposition occurring during slide hiatuses. Some of these depositions contain gold as seen by results of the drilling. None of these gold occurrences appear to be of economic significance.

CONCLUSIONS

The 2014 results IEAE claims do not warrant further testing by the owner. That being said the rationale for this exploration project was sound and there is still the possibility of placer gold below slide material. Further testing and development of this property is beyond the financial means of the owner.

I would like to thank the support of the YMEP program and the YGS, especially Derek Torgerson for direction, support and flexibility. The YMEP process was a positive experience though exploration results were disappointing to the owner.

REFERENCES

Bond, J.D., 2012. Placer Gold Potential Map - Dawson Land Use Plan (NTS 115N, O and parts of 115P, 116B, C, F and G), Yukon (1:300000 scale). Yukon Geological Survey, Energy Mines and Resources, Government of Yukon, Open File 2012-13

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APPENDIX 1: STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

IAIN MITCHELL, B.Sc.

373 EAGLES NEST ROAD, BOWEN ISLAND, BC, V0N 1G1

1. I am a Graduate of The University of Waterloo, 2000, with a Bachelor of Science Degree from the Department of Earth Science in the specialty of Geology with Honors.
2. I am in the process of applying for professional status with the Association of Professional Engineers and Geoscientists of BC.
3. I have worked in the mineral exploration industry since 1994.
4. I devised, conducted, and supervised mineral exploration programs in the Yukon since 2012.
5. I supervised and completed work on the IEAE claims under YMEP 14-107.
6. I completed this YMEP final report.
7. I am the owner of the IEAE claims.

January 27, 2015



Iain Mitchell, B.Sc.

APPENDIX 2: IEAE CLAIMS DRILL HOLE RESULTS AND LOGS

IEAE Drilling Results

Hole	Bag	Gold	Notes
14-IEAE-1	1&2	0 mg	vfg micro
14-IEAE-1	3	nil	
14-IEAE-1	4	nil	
14-IEAE-1	5	nil	
14-IEAE-1	6	nil	
14-IEAE-1	7	nil	
14-IEAE-1	8	nil	
14-IEAE-1	9	nil	
14-IEAE-1	10	nil	
14-IEAE-2	1&2	2 mg	
14-IEAE-2	3	nil	
14-IEAE-2	4	nil	
14-IEAE-2	5	nil	
14-IEAE-2	6	nil	
14-IEAE-2	7	nil	
14-IEAE-2	8	2 mg	5 micros
14-IEAE-2	9	1 mg	3 micros
14-IEAE-2	10	2 mg	3 micros
14-IEAE-2	11	nil	common garnet and heavies
14-IEAE-2	12	nil	high heavies
14-IEAE-2	13	nil	
14-IEAE-2	14	nil	
14-IEAE-3	1	1 mg	4 micros
14-IEAE-3	2	nil	
14-IEAE-3	3	0 mg	vfg micro
14-IEAE-3	4	nil	
14-IEAE-3	5	nil	
14-IEAE-3	6	nil	
14-IEAE-3	7	2 mg	1 col, 2 mircos
14-IEAE-3	8	nil	
14-IEAE-3	9	nil	
14-IEAE-3	10	nil	
14-IEAE-4	1	nil	
14-IEAE-4	2	0 mg	2 vfg micros
14-IEAE-4	3	1 mg	5 micros
14-IEAE-4	4	1 mg	2 micros
14-IEAE-4	5	0 mg	1micro
14-IEAE-4	6	4 mg	1 col
14-IEAE-4	7	nil	
14-IEAE-4	8	nil	
14-IEAE-4	9	nil	

14-IEAE-01 592888 E 7083015 N UTM Zone 7 Nad 83

Date	Hole_ID	depth_ft	Notes
21/07/2014	14-IEAE-01	0-3.5	frozen muck. 0-1 ft NR. 1-3.5 ft. Muck
21/07/2014	14-IEAE-01	3.5-7	orange gravel. Frozen OX SCH
21/07/2014	14-IEAE-01	4.5	BFR. Bag 1-2. Grey material colour change from above. (slide)
21/07/2014	14-IEAE-01	7 ft.	High extra. Bag 3 Black muck from 3.5 -7 ft- same as bag 1-2
21/07/2014	14-IEAE-01	7-8 ft	NS - grey muck well rounded gravel with smashed qtz pieces. Cleaned bit several times. Piled material to the side. (Slide)
21/07/2014	14-IEAE-01	8.5-9.5 ft.	NS. GREY muck as above. Very few if any rock chips. Wood bits. (slide)
21/07/2014	14-IEAE-01	10 ft.	Bag 3. Cleaned bit - frozen black muck with rounded qtz gravel ~2%. Added to bag 3.
21/07/2014	14-IEAE-01	11.5ft	cleaned hole NS. gravel hit? Bit jumping a little. Wood bits.
21/07/2014	14-IEAE-01	12.5 ft.	Bag 4. Cleaned bit. Frozen black muck with wood bits and green chl
21/07/2014	14-IEAE-01	13ft.	Organic black muck with wood. NS
21/07/2014	14-IEAE-01	14-14.5 ft.	Organic black muck NS
21/07/2014	14-IEAE-01	14.5-15ft	drill started to jump - increased drill speed (rock also fell in hole)
21/07/2014	14-IEAE-01	15ft	pulled rod and cleaned bit - muck as above. Faster drilling, possibly gravel NS
21/07/2014	14-IEAE-01	15-17ft	Bag 5. Frozen grey muck, few organics. Lighter grey than above. Pebble 1-2mm, green chl SCH PIECES with 1mm qtz fragments. Rounded qtz ~1%? Clast total 5% (Slide)
21/07/2014	14-IEAE-01	17.5ft.	Bit jumps and sticks BFR
21/07/2014	14-IEAE-01	18-19ft	bag 5 grey muck with pebbles as at 17ft (Slide)
21/07/2014	14-IEAE-01	20ft	bedrock? (It was not bedrock) easier drilling 20-21ft then slower
21/07/2014	14-IEAE-01	19-23ft.	Bag6-7. Process together. Grey muck with schist, qtz pebbles 1-3mm. Didn't note qtz vs bedrock % Bag 6 - lower part of run. Bag 7 upper part. Process together. (Slide)
21/07/2014			IAM PROCESSED - Light sample, mostly clay. Very low heavies 4 pyr cubes. (Slide)
21/07/2014	14-IEAE-01	23-25ft	bag 8. As above chl SCH and well rounded qtz pebbles, 1mm in grey muck. (Slide)
21/07/2014	14-IEAE-01	25-29 ft.	Bag 8. Cold sandy material with angular qtz, 1-5mm and SCH pieces. Smaller qtz, more rounded. Mix of both angular and rounded. Slide material? Bag 8 lower part of run, bag 9 upper part. Process bag 8-9 together
21/07/2014	14-IEAE-01	31-32 ft	slow drilling - finding sound. Drill very jumpy at 33 ft.
21/07/2014	14-IEAE-01	34.5 ft.	Drill stopped bouncing. Thru sand or gravel? No.
21/07/2014	14-IEAE-01	29-38 ft.	BAG 10. As above. Sandy slide material. Did 10 ft run as less material was coming up and continuing to drill won over sampling. EOH 38 ft (Slide)
	14-IEAE-01	EOH 38 ft	

14-IEAE-02 592888 E 7083023 N UTM Zone 7 Nad 83

Date	Hole_ID	depth_ft	Notes
22/07/2014	14-IEAE-02	0-4ft	Bag 1 and Bag 2. Drilling through frozen brown organics - no lith. Changed out drill bits 3 times. Drill bits from hole 1 work best - no sample. Material was coming out of the top of the hole, depth was 5-7ft but it was a huge sample. Upper part of profile is in bag 2. Process bag 1 and 2 together.
22/07/2014	14-IEAE-02	5-7ft	Frozen grey sandy material with 1-6mm clasts, qtz and sch. Material coming out of hole, looks like deeper slide material from hole 1. Pebbles to cobbles, angular gravel with sand. Slight colour change, sand is browner.
22/07/2014	14-IEAE-02	8ft	Drill is jumping - gravel. Light brown sand with sub angular pebbles to cobbles coming out of the top of the hole.
22/07/2014	14-IEAE-02	7-10ft	Bag 3. Sandy frozen brown material with pebbles - cobbles, sub angular pieces of sch. Some of the sch is oxidized, some has musc/chl. Also 1-2mm rounded qtz pieces. Material continues to come out of the top of the hole.
22/07/2014	14-IEAE-02	12ft	Increased drill speed, might be finer material, sandier. (Slide?)
22/07/2014	14-IEAE-02	10-14ft	Bag 4- Bag 5. As above. Sandy brown with pebble to cobble clasts. Noted qtz ds pebble. 1-2mm rounded qtz and 5-7mm angular sch with qtz.
22/07/2014	14-IEAE-02	14ft	smoother drilling. Start of black muck.
22/07/2014	14-IEAE-02	14-15ft	Bag 6. Intermediate sample. Pulled rods to clear bit. Some black muck with tiny qtz and sch fragments. Material on bit was a bit sandy. Maybe getting through layer?
22/07/2014	14-IEAE-02	16-17ft	Very slow drilling. No sample. Black muck - wood and sticks stuck in bit - Painful!!
22/07/2014	14-IEAE-02	18ft	added another run - changed middle bullet on bit. Slightly better, still slow.
22/07/2014	14-IEAE-02	19ft	Difficulty turning bit, possible rock? Moving faster
22/07/2014	14-IEAE-02	22.5ft	Possible gravel? only muck out of hole so far had to ream at 22 ft. No muck material sampled from 15-22ft. No sample.
22/07/2014	14-IEAE-02	22-23ft	Bag 7 - Grey sandy frozen material with rounded and angular sch and qtz pieces. Possibly started at about 21-22ft. Material not sampled due to difficult drilling - still mixed with muck. (Slide)
22/07/2014	14-IEAE-02	23-25ft	Added new drill rod, through muck but still slow drilling. From reaming hole and clearing bit, looks like we are in grey sandy slide material. (Slide)
22/07/2014	14-IEAE-02	26.5ft	Slow steady drilling. Had to bck up drill to centre hole. Will sample at rod change. Material cleared from auger is slide. Drill jumping at bit (Slide)
22/07/2014	14-IEAE-02	26.5-27.5ft	Grinding on a rock and jumping. Increased drill speed :)

22/07/2014	14-IEAE-02	22-28ft	Bag 8 - Started in grey sandy material with sch fragments, 1-2mm, part way through run got colour change to brown sandy clay material with 1-2mm sub angular to rounded sch and qtz fragments. (Slide)
22/07/2014	14-IEAE-02	30ft	Drill sticking and jumping. Faster drilling than before, grinding rock.
22/07/2014	14-IEAE-02	32.5ft	Bruce noticed change in drill, possibly through layer of gravel?
22/07/2014	14-IEAE-02	28-33ft	Bag 9-10. Back to grey sandy material with 1-2mm lith - qtz and sch. Bit wore out, changed bit. Some very dark black muck with chl sch and qtz frags - dark like black muck, very clay rick. Bag 9, bottom of run, got material off bit, Bag 10, upper part of run. Process together. (Slide)
22/07/2014	14-IEAE-02	33ft	new bit
22/07/2014	14-IEAE-02	36.5ft	Different material, drilling steady and smoother.
22/07/2014	14-IEAE-02	33-38ft	Bag 11 - Black muck - clay with wood and a tiny bit of lith, > 1mm.
22/07/2014	14-IEAE-02	38ft	Drill change noted by Bruce - drill is jumping and grinding - steady drilling.
22/07/2014	14-IEAE-02	38-43ft	Bag 12-14. Foot started off in greyish clay/muck, got sandier during the run. End of run was green grey sandy gravel with 1-7mm subangular to subrounded clasts. Bag 12 - EOH. Bag 13 - start of sand. Bag 14 - end of muck. Process bags separately, but they are part of the same run.
	14-IEAE-02	EOH 43 ft	

14-IEAE-03 592796 E 7083099 N UTM Zone 7 Nad 83

Date	Hole_ID	depth_ft	Notes
25/07/2014	14-IEAE-03	0-3ft	Brown organic mud/soil - no sample
25/07/2014	14-IEAE-03	6ft	Grey mud and black organics out of the top of the hole. Small 2 mm fragments.
25/07/2014	14-IEAE-03	7ft	Drill grinding on rock, faster drilling than previous hole.
25/07/2014	14-IEAE-03	3-10ft	Bag 1-2. Grey sandy, then at 8ft brown sandy with 1-10mm angular to subangular clasts. Upper sample Bag 1, Lower part of run in Bag 2 - Samples got a bit mixed.
25/07/2014	14-IEAE-03	10-13ft	Bag 3 -Upper sample. Bag 4, lower sample. brown grey sandy clay material with 1-10mm subangular to subrounded clasts.
25/07/2014	14-IEAE-03	15.5ft	Muddy grey clay material, muck, coming out of hole. Drill jumping and grinding. Much wetter sample than before, less lith. (Slide)
25/07/2014	14-IEAE-03	17ft	lots of grinding, very steady fast drilling
25/07/2014	14-IEAE-03	13-17ft	Bag 5-6 - process together. Material as at 15.5ft
25/07/2014	14-IEAE-03	18ft	Drilling changed - smoother, no jumping.
25/07/2014	14-IEAE-03	20ft	Drill catching a bit
25/07/2014	14-IEAE-03	21.5ft	Slower smoother drilling as per yesterday.
25/07/2014	14-IEAE-03	17-22.5ft	Bag 7-8. Grey mucky clay with 1-2mm lith. Process together. (Slide)
25/07/2014	14-IEAE-03	22.5ft	Tried new bit, changed back to original one.
25/07/2014	14-IEAE-03	23ft	Green/yellow/orange material with 1-2mm angular sch clasts. Bruce says bedrock.
25/07/2014	14-IEAE-03	23-27.5ft	Bag 9 -Small sample off last 5ft of steel - grey muck above. Red brown sandy clay with 5-10mm angular clasts. Saw pieces of angular qtz at top of drill stem - might have been from top of hole. (Slide)
25/07/2014	14-IEAE-03	31ft	Big jump in drill speed
25/07/2014	14-IEAE-03	30-35ft	EOH. Bag 10 - Continued grey muck, like montmorillonite with organic pieces. Sampled last 5ft of drill steel. Small sample. (Slide)
	14-IEAE-03	EOH 35 ft	

14-IEAE-04 592490 E 7083357 N UTM Zone 7 Nad 83

Date	Hole_ID	depth_ft	Notes
25/07/2014	14-IEAE-04	0-1ft	Overburden and organics
25/07/2014	14-IEAE-04	1-4ft	Bag 1 - Red brown sandy clay soil with sub angular to subrounded pebbles to cobbles
25/07/2014	14-IEAE-04	6.5ft	BFR - drill jumping and horrid horrid noise
25/07/2014	14-IEAE-04	4-7.5ft	Bag 2 - Changing from red brown to green grey material. Mix of both in Bag 2, lith as above.
25/07/2014	14-IEAE-04	7.5-10ft	Bag 3 - Mix of green and brown clay with sand and pebble to cobble size sch. Angular, caught on a rock, cleared, widening of hole. Bag 3 has high extra. Also interlayered with fine black frozen muck.
25/07/2014	14-IEAE-04	10-13ft	Bag 4 - Clay - grey with sch lith and black muck balls. Steady drilling. (Slide)
25/07/2014	14-IEAE-04	13-15ft	Bag 5-6 - Grey clay with patches of sandier brown material. Increase in number of sch clasts. Most 1-4mm, angular fragments. Some 5-7mm pieces. Lots of high extra, process together.
25/07/2014	14-IEAE-04	15-19ft	Bag 7-8 - Black mucky clay with sch and qtz pieces. Angular 5-10mm with 3-8cm pieces occasionally
25/07/2014	14-IEAE-04	21.5ft	Drill speed increased. Added rod for 25-30ft. Didn't pull and sample at 25ft
25/07/2014	14-IEAE-04	19-29ft	mostly black muck - didn't sample all.
25/07/2014	14-IEAE-04	28ft	change in drill speed - gravel?
25/07/2014	14-IEAE-04	27-29ft	Bag 9 - Sandier grey material. Sampled material on last 5ft of drill steel. Got the transition from muck to sand.
	14-IEAE-04	EOH 29 ft	