

800816  
Jodee

November 10<sup>th</sup>, 1964

Mr. H.D. Forman, P.Eng.  
Mining Consultant  
611-850 West Hastings Street  
Vancouver 1, B.C.

Dear Mr. Forman:

Progress Report No. 2, as follows, summarizes my October 28<sup>th</sup> through November 1<sup>st</sup> visit to Jodee Mines Ltd., Happy Valley, N. Granduc area, B.C.

Technical work accomplished consisted of the logging of drill cores obtained since my previous visit on October 11<sup>th</sup>-17<sup>th</sup>, 1964, and the sampling of selected sections of these cores.

In the interval between my visits, Granduc Mines Ltd. and Canex Aerial Explorations Ltd. engineers visited the property and logged and/or sampled D.D. holes Nos. 1 to 3. Closely following this a mud and rock slide in the vicinity of the first drill set-up caused the loss of some of the core from Nos. 2 and 3 holes.

Mr. J. McCue, geologist, Granduc Mines Ltd., has kindly provided the assay results of core samples on D.D.H. #3 which supplements those currently obtained by the writer.

Respectfully submitted,

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W.M. Sharp, P.Eng.

WMS/hb  
encl.

WEATHER and LIMITING FACTORS

This was mild to cool with intermittent snow flurries, clearing on November 1st. During possible future periods of mild, wet, windy weather additional rock slides may be expected at the present drill set-up. A light protective canopy was erected over the drill and gives some measure of protection. The crew have been advised to suspend work during periods of unfavourable weather.

Two to three feet of dry, drifting snow have accumulated. This has not impeded work to any marked extent.

Transportation and servicing by helicopter are presently restricted, by weather conditions, to very occasional clear periods.

No progress has been made on the current drill hole (#5) since about October 22nd, due to a break-down of the drill clutch. A new clutch plate assembly was ordered but the parts received would not fit. Since the writer's arrival the crew have been attempting to get the machine operative by combining parts of the new and old assemblies, but so far have not been completely successful. The correct parts have subsequently been taken in by Mr. Setter.

The 3000-foot drill contract would have been close to completion, as expected by Mr. Setter, two weeks ago, if the above delay had not occurred. Considering present job conditions, it is doubtful if the effort to complete the full contract this season should be made.

PROGRESS NOTES

- Sept. 10, 1964 - D.D.H. #1 completed to 360'
- Sept. 20-26 - D.D.H. #2 advanced to 255' and stopped short of completion by caving ground, mud, and sand seams.
- Sept. 26-30 - Construct trail to second (up-stream) drill set-up preparatory to moving drill following completion of D.D.H. #3.
- Oct. 1-7 - D.D.H. #3 completed to 540'.
- Oct. 8-14 - D.D.H. #4 completed to 550' (net).
- Oct. 15-17 - Moving drill and equipment to No. 2 set-up.
- Oct. 18-19 - Rock and mud slides dislodge cores of No's 2 and 3 holes at first set-up and result in loss of most of #2 drill core and a small part of #3 core. Sliding also causing difficulties at second drill station; lumber for drill canopy ordered.
- Oct. 19-22 - Protective canopy erected, etc. and D.D.H. #5 advanced to 71'.
- Oct. 22 - Nov. 1 - drill inoperative pending clutch repairs.
- Oct. 28 - W. Sharp arrives Stewart, B.C. and books transportation to Jodee job-site. Helicopter awaiting repairs.
- Oct. 29 - Arrive Jodee, "Happy Valley" job-site late afternoon. Walk up to No. 1 drill set-up and check location and quantity of drill core on hand. Also note drill inoperative with total advance on D.D.H. #5 only at 71 feet.
- Oct. 30 - Log and sample balance of core for D.D.H. #1; log and sample core D.D.H. #4.
- Oct. 31 - Gather available core boxes with core for D.D.H.'s #2, #3, and #5 assemble and mark-up in sequence and log same.
- Nov. 1 - Complete logging and sampling above. Helicopter pick-up scheduled for today.  
(Note: Core examination difficult under prevailing snowy-freezing weather conditions, and writer suggests all cores be re-examined during warmer weather or with better facilities). \*
- Nov. 2 - Return to Stewart on helicopter via extended bad-weather route and book return to Vancouver. Confer briefly with Mr. J. McCue on Jodee program and note his suggestions re storage of drill core at Granduc Camp.
- Nov. 3-4 - Return to Vancouver via Prince Rupert. Note direct daily Stewart-Vancouver flight planned by P.W.A.

PRELIMINARY DRILL CORE LOGS AND SAMPLESD.D.H. #1

*Original hole layed  
out by Tony per memo  
data avail.*

Bearing 570° E.  
Inclination = 32°

Loc'n. No. 1 Set-up

Date: Sept. 9-20, 1964

Dist. Ft.	Description of Core	Angle Core - Bdg.	Mineralization
0-177	See log Sept. 21st report	55° C. 177'	per Sept. 21/64 report
177-205.5	Gray, hard siliceous quartz-feldspar granulite HCl (-); irreg. Frequent quartz gashes at 30° - 45°		Very sp.py. with very occasional small clots of cpy.
205.5-229	Med. to yellowish gray granulite and breccia. Strong siderite replacement of matrix; qz-sid. gashes @ 45° @ 205.5-215 HCl = .	--	Patches heavy py. replace w.occ. grains cpy. Note heavy sid.replacement with fine, sharp bx textures.
229-290	As above but with only occasional qz-sid. v.lts. Occasional HCl+ sections.	60° @ 262'	As above, less py. min'l'n.
290-332	Pale gray hard cherty granulite; occ.HCl+ matrix and fine v.lts.	--	Gen. considerable v.f. gr. py.w.tr.cpy. @ silic. sections; Note clot cpy @ 305'.
332-360 END	Pale gray to yellowish (sid.) f.gr.granulite w. occ.large breccia frags; Hard, cherty, HCl-; Note purplish (andesitic?) breccia frags. Gen.Heavy siderite replace., v.lts, and clots	gen. 45°	Gen. sparse to appreciable v.f.gr. py.

ASSAYS ("Shorts" of drill core)

<u>Sample No.</u>	<u>Interval</u>	<u>Cu. %</u>
4525	205.5 - 225.5	0.15
4526	225.5 - 245.5	0.20
4527	245.5 - 265.5	0.20

D.D.H. #2

Location: No. 1 Set-up  
Date: Sept. 20-26, 1964

Bearing <sup>N80E</sup>  
~~-578° E.~~  
Inclination - 32°

Only 4 part boxes of core remaining following mud slide on October 18-19.

Note: muddy, sandy, seamy ground stopped hole @ 255'. Drill D.D.H. #3 as substitute.

D.D.H. #3

Location: No. 1 Set-up  
Date: Oct. 1-7, 1964

Bearing N. 80° E.  
Inclination -40°

Dist. Ft.	Description of Core	Angle Core - Bdg.	Mineralization
0 - 50	Well-chloritized, patchily carbonatized brecc. tuffs; Gray, gray-green, black w. yellow sid. vlts. & impregns.; Fair foliation; all sp.HCl+ in tuff. matrix	50° @ 5' 45° @ 15' 45° @ 47'	Sparse v.f.gr. py. only
50 - 83	Fine to med.-grained 92-feld. granulite. Some very narrow calcite veinlets	--	Sp. f.gr. pyrite visible
83 - 104	Coarser-text. rather dark gray-green chlor.bx. -- granulite; rather sparse yellow sid. replacement	40° @ 100'	Sp.f.gr. dissem. py. w. occ. larger clots
104 - 109	As above, with sects. heavier sid. replacement; Note occasional red. frags.		Sp. f.gr.py.
109 - 113.5	Fine-grained black dyke	---	No min'l'n.
113.5-163	Gen. dark-, to med.-gray 92-feld.bx - granulite; Occ. hard, pale, silic.sects. Occ. 92 seams and clots		Sp. v.f.gr. pyrite only
163-183	Dark gray to black granulite-breccia; red & green (frags.) mottling, appreciable f.gr. sid. & chloritic replacement <i>rem Ag on this</i> * Sample 20' @ 0.53% Cu.	---	Gen.f.gr.py. w.sects. apprec.dissem. & veining cpy. Note alteration & penetrative mineralization
183 - 226	As above, less alteration	---	F.gr.py. w. sp. finer-gr. cpy. @ occ.sects.
226 - 252	Gen. med.-gray granulite, hard-silic.; loc.red-green mottling		sp.py. & tr. f.gr. cpy

## D.D.H. #3 (cont'd)

Dist. Ft.	Description of Core	Angle Core - Bdg.	Mineralization
252-263	Pale gray & greenish fine-text. granulite; loc. conspicuous sid.veining & replace. of matrix	45° @ 256'	@ 256' note cpy. vits. ≠ parallel to core axis & tr.dissem.cpy. on fol'n.
263-308	Core missing (lost in slide)	---	---
308-314	Rather pale gray silic. granulite; thin-banded foliation	50° @ 310'	Sp. py. only
314-340	Thinly-foliated olive-green and blue-green tuffs with rather sparse lenticular qz-feld. frags	65° @ 315'	Sp. py. only
340-371	Gray, silic.bx. gray, green, red-brown mottling. Conspicuous gobs & vits. (1" - 2") creamy-pink qz-feld.	---	Sp. py. only
371-400	<u>Split core</u> ; dark to med. gray (red-mottled) silic. breccia w. qz-sid. vits. (sampled by Granduc)		Intermittent sects. Sp. to fair vits. - dissems. cpy.
400-476	Blue-green (alt'n?) silic. bx.; "rifling" obscures detail; Some red-frag'l. sects.; HCl-		V.sp. visible sulphides
476-481	<u>Split Core</u> ; rather coarse-text. gray granulite; hard-silic. Sampled by Granduc		V.sp. vis. cpy.
481-496	Pale gray (occ. greenish) silic. - tuff - granulite		Tr.vis. sulph.
496-519	Greenish, thinly-fol. tuff; loc. some bx.		Tr. vis. sulph.
519-(540)	Some core missing; as above with occ. strong qz-sid. masses & minor veinlets		Tr. vis. sulph.
END			

Remarks: from 496' hole appears to be in a more distinctly tuffaceous section.

D.D.H. #3 (cont'd)

ASSAYS

<u>Sample No.</u>	<u>Interval, ft.</u>	<u>Cu %</u>
(A) Granduc (split core)		
28451	476 - 481	0.04
- 52	410 - 415	0.04
- 53	381.5 - 386.5	0.13
- 54	386.5 - 391.5	0.14
- 55	391.5 - 396	0.14
- 56	396 - 400	0.15
- 57	371.5 - 381.5	0.15
- 60	276 - 281	0.17
- 61	281 - 286	0.13
- 62	286 - 291	0.19
Compos.	276 - 291	0.16
"	371 - 400	0.14

(B) Current: ("shorts" of drill core)

4530	163 - 183	0.53
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Ag? -

D.D.H. #4

Location: No. 1 Set-up

Bearing N.80° E.

Date: Oct. 8-14, 1964

Inclination 55°

<u>Dist.</u> <u>Ft.</u>	<u>Description of Core</u>	<u>Angle</u> <u>Core - Sdg.</u>	<u>Mineralization</u>
0- 55	Gray-green tuffac.bx. & paler green silic. granulite	30° - 45°	Sp. f.gr.py.
55- 74	Darker, greenish (chloritic) tuffs.-bx.; occ. qz-cct. vlt.		Sp. f.gr.py. to cpy.
74-131	Med.gray f.gr.granulite; occ. very small qz-vlts; HCl-	45°	F.gr.py. vis.
131-154	Darker greenish-gray granulite; Fairly abund.clots & dissems. siderite		F.gr.py. w. scant v.f.gr. cpy.
154-200	Med.gray barren qz-feld. granulite		ditto
200-245	Gray-green "gneissic" granu- lite w.loc. fair sideritic replacement	45° @ 245'	Loc.clots py. & specks cpy. assoc. w.sid.
245-294	Dark green - gray granulite w.fair sid.replace. HCl- Sects. w.red. frag'ls.	50°	Sp. py. only

## D.D.H. #4 (cont'd)

Dist. Ft.	Description of Core	Angle Core - Bdg.	Mineralization
294-339	Greenish-gray f.gr. granulite; sp. qz-sid.	50°	Apprec'l f.gr. py.
339-351	As above		Sp. dissem. py.
351-355	F.gr. black dyke		—
355-377	Thin-banded tuff. - bx.	60° - 70°	F. gr.py.
377-396	As above, w.more fine siderite impreg'n.; apprec'l f.gr. calcite (cct.)		F. gr.py.
396-424	Normal pale gray silic. granulite w.increasing sid.replace. through 400'-424' occ. qz-sid. vlts.	45° @ 390' - 398'	F. gr. py.
424-438	Gen.pale gray, hard, silic qz-feld. granulite - breccia. Freq. qz. gash-vlts.@ 20° HCl-		Sp. pyrite
438-446	Greenish to yellow-gray f.gr. (tuffac.) granulite		to f.gr. py.
446-545	Wide section of f.gr.med.-gray occ. greenish-granulites		" "
545-555	Greenish-gray tuffac.-, w.minor coarse frag'l sects.; freq. "thin-bdd." sects.	55° @ 549'	v.sp. f.gr. py. only
E N D			

ASSAYS ("Shorts" of drill core)

Sample No.	Interval	Cu %
4528	131 - 154	0.25
4529	176 - 200	0.25

## D.D.H. #5

Location: No. 2 Set-up  
 Date: Oct. 18 - current  
 Bearing East  
 Inclination 35°

Dist. Ft.	Description of Core	Angle Core - Bdg.	Mineralization
0-71'	Med. to fine-grained gray silic. tuff.-bx.; locally consid.frag'l (red,etc.) material	60° @ 45'	Intermittent sects. w.v.f. gr.py. only

NOTE: This hole to test possible easterly zone, and required to drill to 600' approx. for adequate prelim. test. Subsequent holes not recommended unless significant amounts of mineralization intersected by this hole.

SUMMARYD.D.H. #1

Approx. true width 50' @ indicated 0.15 - 0.20% Cu within 200'-300' core interval. Better mineralization within sideritic sections.

D.D.H. #2

Bulk of core lost in slide; Hole stopped short of scheduled depth due to sand-mud-caves, etc.; hole duplicated by D.D.H. #3.

D.D.H. #3

Approx. true widths of:

(a) 30' @ indicated 0.40% Cu over 163' - 203' interval.

(b) 90' @ indicated 0.15% Cu over 276' - 396' interval.

Better mineralization associate with chloritic-sideritic alteration of siliceous granulite with above-average content of red-green (andesitic) breccia fragments.

D.D.H. #4

Approx. true width 80' @ indicated 0.25% Cu over 131' - 245' interval. Better mineralization generally associated with sideritic veinlets and replacements.

D.D.H. #5

Total advance to 71'; planned length of 500' - 600' will test cpy. zone thru Sta. 15 and also an additional X-sec. width of 150' to S.S.E. of above.

COMPOSITE SAMPLE #4525/30 =  $\frac{Au}{0.02}$      $\frac{Ag}{1.05}$      $\frac{Cu}{0.26}$

INSTRUCTIONS TO DRILLERS

Drill DDH #5, -35° to 500' - 600'. A deeper hole @ -55° may be justified if DDH #5 contains well-mineralized sections.

Have any core with visible copper mineralization flown to Stewart *or*  
*Vancouver* if no engineer is likely to visit site to log and sample. Store at terminal.

Store remainder of core near glacier camp.

Pull off set-up during hazardous weather conditions.

CONCLUSIONS and RECOMMENDATIONS

1. Copper mineralization so far intersected is definitely sub-marginal, but is geologically significant with regard to host-rock textures, local extent of host-rock alteration, and penetrative character.

2. The best mineralization noted to date occurs in surface exposures near Brunton Sta. 15. Therefore DDH #5 is warranted to test strike extensions of this, together with a contiguous panel to the south of this. If DDH #5 is unsuccessful no further drilling should be considered until a comprehensive surface exploration program has been accomplished. This would include an approximate one square mile detailed geological-geochemical examination, to be followed by the "geological prospecting" procedures outlined in the Sept. 21, 1964 report.

For the above program, an appropriation of \$10,000 should be sufficient. Most of this could be provided, or reserved, by limiting the present contract to 1800 l.f.

3. In view of the near-complete core recoveries to date, EX-size drilling equipment may be adequate for, and would facilitate, any future drilling contemplated.

4. Re-examine all drill cores during warm weather next year, or with proper facilities.

Respectfully submitted

W.M. Sharp, P.Eng.

WMS/hb