

W.M. Sharp

KAM-KOTIA - BURKAM JOINT VENTURE
New Denver, B.C.

801165

Summary of Exploration Meeting
held in New Denver August 24/72.
Present: G.W. Walkey, A.E. Buller,
W.M. Sharp, W. Hogg.

Following discussion of the results of the exploration program to date and, a review of alternative areas of exploration the following program in continuing exploration was agreed upon.

4625 adv. crew

- 1. Cut a diamond drill station at the face of 4625 #2 X-CUT (E) and suspend further advance pending drilling results.

4625 Adv. crew

- 2. Crews from the 4625 #2 X-CUT to advance 4625 West Lateral 185' on a bearing of $S80^{\circ}W$ for possible ore recovery down dip of the 4690 West series of stopes. - - *after $\pm 40'$ contin adv. @ $\pm 30^{\circ}L$ for drill pos'n.*

4625 Adv. crew

- 3. Upon completion of 2 above, extend ⁴⁶²⁵ East Lateral a minimum of 1000' to the east in the footwall of the lode and approximately 70 feet vertically below the lode. Advance of 4625 E. Lateral to be alternated with the probable advance of 4625 #2 X-CUT (E) & /or, the proposed advance of the 4625 #3 X-CUT (E) Centre-line of the #3 X-CUT is laid out at $S40^{\circ}E$ from the south wall of 4625 E. Lateral at co-ordinate 11,250 E.

4690 adv crew

- 4. Continue the 4690 #2 X-CUT on its due south bearing to co-ordinate 4360 North and cut diamond drill station. Defer further advance pending diamond drilling.
- 5. Further advance of 4690 W. Lateral to be deferred pending completion of diamond drilling from the face of this heading.

I.V. drill appn.

out for now

- 6. Provided a suitable drilling site can be located on Surface at a point approximately mid-way between the 4690 W. Lateral and the 5480 Level at an elevation of 5700-5750 feet:
 - a) Drill a short hole to the northwest to check for the lode at a shallow depth.
 - b) Drill a deep ($\pm 1400'$) hole to the southeast at $- 50^{\circ} (\pm)$ to intersect the lode at approximately the 4700' foot elevation.

(Cont'd)

(Cont'd)

When compressed -
 air level in get Jack Hackett
 to take back sketch & face.
 Require room
 for steep hole & X-CUT.

Extend K124 in
 4690 W. to
 250'

7. a) From the face of the Carnation 5480 X-CUT drill a hole at + N25°W to test the flat (North) Lode on the north side of the steep (60°) Carnation lode.
- b) Drill a steep hole at + S25°E to test the Carnation lode and, the possible continuation of the North lode on the south side of the Carnation lode down dip of the 5480 Level. Total drilling + 1300 feet.

1st hole in
 range -70° to -90°
 ± N25°W long.

On 4690 W lat. extend K124 by 50' (at 480' back of current face) - to check re poss. peeled-off
 on 4855 W lat (face) K141 should have been drilled to 200' per K139-K140
 Wm. Hogg
 look strand 5 of more
 mostly old holes.

HOLE #	WORKINGS	N	E	BRG.	INCLIN.	LENGTH	REMARKS
K141	4855 W. LAT.	5130.1	10,666.6	-	+90°	172'	* Extended to 200' per W. K139-K140
K143	4690 W. LAT.	4920.±	9,725.±	S.	+55°	209'	* Dr. off face, hole 300' via +15° strike
K144	4625 ² X-C.	4163.6	11,225.7	-	-90°	200'	Lode @ 74-81' - no index of a FW
K142	4855 W. LAT.		10,665	N.	+65°		* Abandoned - see note below
P322	4625 W. LAT.	4443	10,611	-	+90°		check X via 60° & W. hole.
P323	4625 W. LAT.	4431.5	10,565	550° W.	+70°		Weak lode intersected
P324	4625 E. LAT.	4652	11,440	-	+90°		* Fair intersection requires add'l holes
P325	4625 W. LAT. (Current face)	4432	10,525	N42-43 E	+45°-16'		* In index sub-sec. mine - no add'l holes
K145	4625 ² X-C	4168.6	11,224.2	N 9°-21' W.	-43°-22'	152'	* Lode @ 75.8-78.0 W. require N30E-580W holes - 40°, 120-150
K146	"	4163.10	11,221.01	588°-49' W	-43°-42'	115'	
K147	"	4164 N	11,233 E	F.	-45°	140'	
K148	4690 ² X-C	4380 N	11,307 E	N.	-45°	128'	
K149	4625 ² X-C	4162 N	11,233 E	555 E 566 E 581 E	-45°-49°	181"	
K150	4690 ² X-C	4380 N	11,312 E	N. 45° E.	-45°	150'	
K151	"	4377 N	11,312 E	N 75° E	-45°	Current Nov 2/72	
Carn 5480	Carnation 5480	face of X-C.		-	-90°	500' min	

Note Oct 15: Require - N80E x 580W holes @ -40° to test strike extensions @ 100' E & W of 4625 X-C (holes 120-130')

Implications that K141 be extended to 200' as drill log notes a possible lode structure @ 170-172' - further comparison via holes K139 & K140 or same sect. If K141 made a significant X'n, then drilling of possible strike & dip extensions could be more quickly & econ. done from surf.
 OVER 1

Drill K - - - @ +15°, ≈ 300' South Sec 4690 (Lat. 9725'E)
 to define indicated change in lode trend to a S.W. strike.

(Cont'd)

- a) From the face of the Carnation J480 X-CUT drill a hole at + 825' N to test the (North) Lode on the north side of the steep (60°) Carnation lode.
- b) Drill a steep hole at + 825' E to test the Carnation lode and the possible continuation of the North lode on the south side of the Carnation lode down dip of the J480 level. Total drilling + 1300 feet.

Drill #	Working	Y	E	Pre	Inclin Length
K141	4825 W. 10'	2100	1000	-	115'
K142	4825 W. 10'	2100	1000	2'	202'
K143	4825 S. 4-C	1125	1125	-	200'
K144	4825 W. 10'	2100	1000	1'	155'
K145	4825 W. 10'	2100	1000	-	150'
K146	4825 W. 10'	2100	1000	250' W.	150'
K147	4825 W. 10'	2100	1000	-	150'
K148	4825 W. 10'	2100	1000	150' W.	150'
K149	4825 W. 10'	2100	1000	150' W.	150'
K150	4825 W. 10'	2100	1000	150' W.	150'
K151	4825 W. 10'	2100	1000	150' W.	150'
K152	4825 W. 10'	2100	1000	150' W.	150'
K153	4825 W. 10'	2100	1000	150' W.	150'
K154	4825 W. 10'	2100	1000	150' W.	150'
K155	4825 W. 10'	2100	1000	150' W.	150'
K156	4825 W. 10'	2100	1000	150' W.	150'
K157	4825 W. 10'	2100	1000	150' W.	150'
K158	4825 W. 10'	2100	1000	150' W.	150'
K159	4825 W. 10'	2100	1000	150' W.	150'
K160	4825 W. 10'	2100	1000	150' W.	150'
K161	4825 W. 10'	2100	1000	150' W.	150'
K162	4825 W. 10'	2100	1000	150' W.	150'
K163	4825 W. 10'	2100	1000	150' W.	150'
K164	4825 W. 10'	2100	1000	150' W.	150'
K165	4825 W. 10'	2100	1000	150' W.	150'
K166	4825 W. 10'	2100	1000	150' W.	150'
K167	4825 W. 10'	2100	1000	150' W.	150'
K168	4825 W. 10'	2100	1000	150' W.	150'
K169	4825 W. 10'	2100	1000	150' W.	150'
K170	4825 W. 10'	2100	1000	150' W.	150'
K171	4825 W. 10'	2100	1000	150' W.	150'
K172	4825 W. 10'	2100	1000	150' W.	150'
K173	4825 W. 10'	2100	1000	150' W.	150'
K174	4825 W. 10'	2100	1000	150' W.	150'
K175	4825 W. 10'	2100	1000	150' W.	150'
K176	4825 W. 10'	2100	1000	150' W.	150'
K177	4825 W. 10'	2100	1000	150' W.	150'
K178	4825 W. 10'	2100	1000	150' W.	150'
K179	4825 W. 10'	2100	1000	150' W.	150'
K180	4825 W. 10'	2100	1000	150' W.	150'
K181	4825 W. 10'	2100	1000	150' W.	150'
K182	4825 W. 10'	2100	1000	150' W.	150'
K183	4825 W. 10'	2100	1000	150' W.	150'
K184	4825 W. 10'	2100	1000	150' W.	150'
K185	4825 W. 10'	2100	1000	150' W.	150'
K186	4825 W. 10'	2100	1000	150' W.	150'
K187	4825 W. 10'	2100	1000	150' W.	150'
K188	4825 W. 10'	2100	1000	150' W.	150'
K189	4825 W. 10'	2100	1000	150' W.	150'
K190	4825 W. 10'	2100	1000	150' W.	150'
K191	4825 W. 10'	2100	1000	150' W.	150'
K192	4825 W. 10'	2100	1000	150' W.	150'
K193	4825 W. 10'	2100	1000	150' W.	150'
K194	4825 W. 10'	2100	1000	150' W.	150'
K195	4825 W. 10'	2100	1000	150' W.	150'
K196	4825 W. 10'	2100	1000	150' W.	150'
K197	4825 W. 10'	2100	1000	150' W.	150'
K198	4825 W. 10'	2100	1000	150' W.	150'
K199	4825 W. 10'	2100	1000	150' W.	150'
K200	4825 W. 10'	2100	1000	150' W.	150'

Let hole be
 very - 10' - 2-20'
 down by

Handwritten notes and scribbles on the right side of the page, including the word 'Lode' and various illegible markings.

Handwritten notes at the bottom of the page, including 'Mr. Hoag' and other illegible text.

WILLIAM M. SHARP, M.A.Sc., P.Eng.
CONSULTING GEOLOGICAL ENGINEER
171 W. ESPLANADE, NORTH VANCOUVER, B.C.

November 24, 1972

Mr. Wm. Hogg, Mine Manager
Kam-Kotia - Burkam Joint Venture
Box 1891
New Denver, B.C.

Dear Bill:

Thanks for your recent phone calls re. progress on current exploration in the mine and from the Carnation 5480 level. At the same time I mentioned that I would write you concerning some of the matters discussed by Art and me during his November 22nd visit, hence the following:

1. I think that it would be best to keep the crew on the 4625 East Footwall drive until we have at least reached the tentative site of the next AQ drill station - which appears to be about 90' beyond the point of advance recorded by Art. However, I remarked to Art that I did not think that the hanging wall (4625 E. Lat.-H.W.) exploration project was getting preference or priority over the complementary footwall project and that I am, in fact, concerned that the proposed hanging wall lateral will not have advanced sufficiently as to permit an adequate drill test of the ore shoot that is tentatively indicated by the K-147 intersection; also we agreed that the scope of the 4625 E-F.W. exploration is limited by the Carnegie boundary.
2. The suggestion was made by Art that as it would appear that ^{as} I am partly instrumental in re-directing exploration in such a way that more attention is being given to exploration for ore below the 4625 horizon than above it, my 'consulting relationship' to the project requires that I outline the possible consequences to the Management Committee. These consequences are, in effect, that the expense of developing a sub-4625 ore block may be beyond the financial capabilities of the Joint-Venture group.

In this regard, some of the factors I presently envisage are:

- (a) Both H.W. & F.W. laterals are required; however, the hanging wall lateral should be the more efficient of these as regards the search for ore down-rake of the existing stopes and mine porphyries and up-dip of the lode structure, mineralization, and porphyries indicated by the former exploration program at the 4000-horizon.
- (b) The "mean position" of a possible ore body or ore bodies could conceivably occur within a dip-range of 200' to 400' below the 4625 lode contour.

- (c) Some 30,000 tons of ore might be outlined by the hanging wall exploration, in that an ore block (or blocks) measuring 225'x225'x6' would yield this tonnage.
- (d) The main extra-normal cost of development would be for sinking 400' of winze, and that an adequately sized winze for access and service purposes would cost \$150.00 per foot - as a "rough geological estimate." The unit cost of this would be only \$2.00 per ton of ore mined, and that double this unit cost be acceptable if ore of mine - average grade and width is revealed.

The enclosed sketch is traced from the one over which we discussed the 5480 drilling project. On the basis of the results which you described by phone today, a minus - 50° (bearing N 15 W) now appears to necessary for an evaluation of intersections (or lack of some) made by the current minus - 90 hole.

It is expected that the above noted matters relating to Art's recent visit will be reviewed at our projected December 10th meeting.

Best regards


W.M. Sharp

WMS/kck

CC's : MESSRS. G.W. WALKER,
A.E. BULLER.

Received Dec 22/72
mail

December 14, 1972

Summary of Meeting on Development & Exploration - Vancouver, B.C.
December 11, 1972

The Meeting was held in Mr. Sharp's office with Messrs Walkey, Buller, Sharp & Hogg in attendance. Progress of the program to date was reviewed and discussion on continuing the program set forth the following guide lines.

1. Change the bearing of 4625 #2 X-Cut to S73°E and advance to co-ordinate 4100 N, continue advance as a hanging wall lateral on a bearing of N80°E to reach co-ordinate 11,500E. Expedite diamond drilling by cutting drill station while heading is advancing.
2. Further advance on 4625 E Lateral held in abeyance. Company diamond drill to do required drilling from this heading as quickly as possible.
3. a) Abandon further drilling on Carnation 5480 Level because of unfavourable results in Holes C-1 & C-2.
b) Move contractors crews (2) to 4625 W. Lateral and continue testing the down dip extension of the lode to the east and west of the present location.
4. If diamond drill crews are available, increase contractors crew to four crews per day to get maximum drill information by January 31st. The additional crews would initially be used to complete drill information from the 4690 #2 X-Cut.
5. Extend production, even on an intermittent basis as long as possible to help defray development cost. Further test the areas where some potential tonnage is indicated.
6. Late in December prepare the following estimates:
 - a) Possible ore tonnage remaining
 - b) Operating costs for development and diamond drilling for the months of January and February 1973.

Every attempt to be made to complete this by Jan. 31/73

Wm. Hogg,
Manager

Additional per Dec. 11/72. notes

WmH/gm

c.c. - G.W. Walkey
A.E. Buller
W.M. Sharp
File

Revised Drilling - Designated order of priority -
WEST END:
From } end (X-C) of 4625 w. lateral. } 1500'-2000'
4690 #2 X-C.

(2) EAST END:
4625 E. W. Lat. - from drill site 11325-350 E.
from " " @ 11,500 E.

Received Jan 5/73

January 3, 1973

Mr. G. W. Walkey
Suite 416
25 Adelaide St. West
Toronto 1, Ont.

Dear Graham:

Advance of the 4625 H.W. Lateral will reach its projected position of 11,500 E and 4,100 N about January 15th. At the Vancouver meeting December 11th, further development advance was left open pending diamond drilling results from the 4625 West and the 4690 #2 X-Cut. At this time diamond drill information is not complete enough to recommend further advance of either the 4625 West or the 4690 #2 X-Cut.

If holes to W. of 4690 #2 X-Cut returned, then recomm a H.W. lateral in this area for an adequate local test

However, rather than defer development advance for even a short period of time, I would recommend that we continue advancing the 4625 H.W. Lateral, but on a bearing of N40E starting at co-ordinate 11500E. This new bearing matches the inferred swing in the strike of the Lode from N80E to + N40E as indicated in D.D. Holes K110 to K129 and thence to K156 just completed.

No - 65° - 75° Holes W & recomm hole to E Lode down - dep of K151

Upon completing Hole K160 in 4625 West, the drill will be moved to the 4625 H.W. Lateral where a D.D. station has been cut at co-ordinate 11350E. An additional 2 or 3 drill holes are considered necessary to complete the drilling from 4690 #2 X-Cut. The company diamond drill is now drilling a +45° hole at + S60E at the face of the 4625 E. Lateral.

bot hole - 40°

K162?

I enclose herewith a 20 scale plan of the drilling from 4625 W and 4690 #2 X-Cut which is right up to date. Similar copies will be forwarded to Buller and Sharp along with the D.D. logs to bring them up to date.

Yours truly,



Wm. Hogg,
Manager

c.c. - A.E. Buller
W.M. Sharp
File

Encl.

WmH/gm

