

26 MAR 80 1020 STOPE 1300 LEV.

PUT IN 23 BOLTS IN F.W. DRIFT
BY SOUTH CHUTE STRIP.

27 MAR 80 DDH 416 1360 ST 1680 LEV.

DIAMOND DRILL FINALLY REPAIRED.
MOUNT BOLT BROKE WHILE PUTTING
DRILL ON COLUMN. USED GRINDER IN
SHOP TO MAKE NEW BOLT. MOUNTED
DRILL AND PUT 168' OF STEEL IN HOLE.
THE DRILL WAS UNABLE TO TURN THE
STEEL TRAIN AGAINST A LOAD. REMOVED
STEELS AND TRIED STARTING A NEW HOLE
AS A TEST OF THE DRILL. IT SEEMED
TO RUN OK FOR TWO FEET, THEN THE
WATER SWIVEL BROKE. CHECKED OUT 1540
PILLAR AT LUNCH TIME. RAISE BORE PILOT
HOLE CAME OUT TOO CLOSE TO 1560 STOPE.
PUTTING ON THE 4' BIT WILL BE VERY
DIFFICULT.

28 MAR 80 DDH 416 1360 ST. 1680 LEV.

REPAIRED WATER SWIVEL. REAMED 50'
OF HOLE. DRILL STILL N.G. SENT UP
TO SHOP AFTER LUNCH. PUT UP CRIB AND
BURLAP IN 1360 STOPE.

31 MAR 80 1540 U.P. 1600 LEV.

WORKED ON SPILING OFF FILL COMING
OUT OF 1560 STOPE.

1 APR 80 1540 U.P. 1600 LEV.

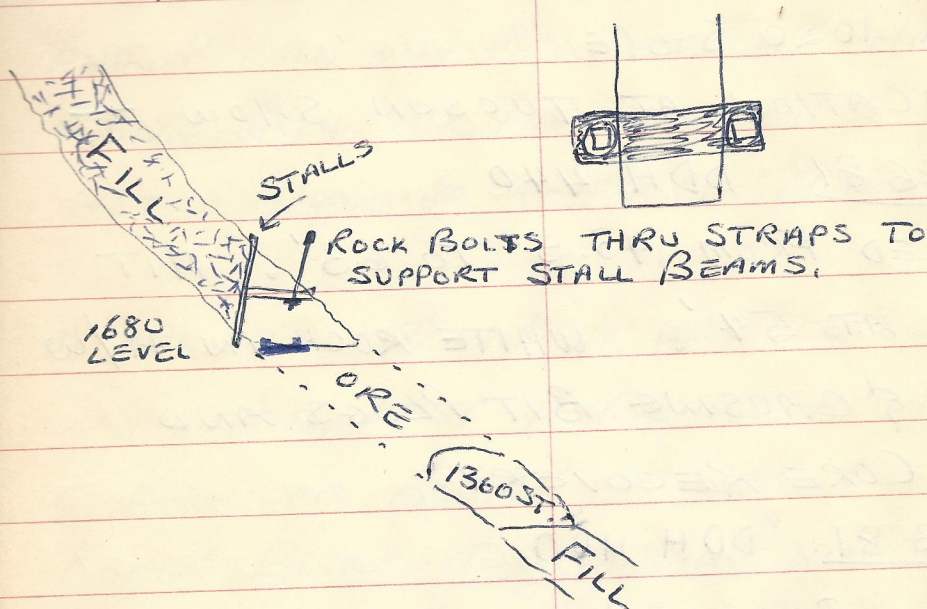
FINISHED SPILING JOB. CHECKED OLD
SHAFT AREA AT LUNCH TIME. SAW AN
INTERESTING CALCITE-GYPSUM
POCKET IN GNEISS ZONE.

2 APR 80 DDH 416 1360 ST. 1680 LEV.

GOT DIAMOND DRILL BACK. STILL NO
GOOD. SENT IT BACK TO SHOP. STARTED
BOLTING BEAMS IN THE DRIFT OVER
1360 STOPE.

3 APR 80 1360 STOPE 1680 LEVEL.

BOLTED UP 8 BEAMS AND PUT IN
13 REGULAR ROCK BOLTS.



WENT UP TIMBER SLIDE STAIRWAY AT LUNCH
TO WORK ON POCKET SEEN ON APR 1.

8 APR 80 1180 U.P. 600 LEVEL.

WORKED ON FILL CREW.

9 APR 80 1180 U.P. 600 LEV.

WORKED ON FILL CREW.

10 APR 80 1180 U.P. 600 LEV.

FILL CREW. Poured CAP.

11 APR 80 1360 ST. 1680 LEV.

TRIED DIAMOND DRILL AGAIN. THIS TIME IT RAN BACKWARDS. BOLTED UP 10 BEAMS AND PUT IN ONE REGULAR BOLT. HAD TO FIDDLE WITH AIR AND WATER PIPES TO GET A HOOK-UP AT NORTH MANWAY.

14 APR 80 1360 ST. 1680 LEVEL

BOLTED LAST 10 BEAMS AND PUT IN 5 REGULAR BOLTS. DRILLED OUT SOME LARGE BLACK TOURMALINE^{*} XTALS IN THE HANGING WALL. *# 313

15 APR 80 1660 U.P. 1680 LEVEL

FILL PREP. USED COME-ALONG TO RAISE SLUSHER BUCKET. SET UP RAMP TO RAISE SLUSHER.

16 APR 80 1660 U.P. 1680 LEVEL

HUNG SLUSHER AND STARTED CRIB, MOVED TOOLS INTO DRIFT.

17 APR 80 1660 U.P. 1680 LEV.

FINISHED CRIB. CLEANED UP
AROUND CHUTE ON 1750 LEV. WENT
TO 1850 LEV. AND STARTED TAKING
SLUSHER OUT OF 1450 SCRAM DRIFT.

18 APR 80 1450 SCRAM 1850 LEV.

REMOVED SLUSHER. LOWERED IT
THRU CHUTE WITH A COME ALONG.
WASTED 2 HOURS ON THE STATION
MOVING ORE CARS. CARS AND
MOTOR CAME OFF THE TRACK ON A
BAD SWITCH. SET UP SLUSHER
BUCKET FOR REMOVAL FROM SCRAM
DRIFT.

21 APR 80 1580 U.P. 1500 LEVEL

FINISHED CAPPING 1580 U.P. (FILL)

AND STARTED FILLING 1660 U.P.

FOUND A NICE PIECE OF 1500 U.P.

FLUORITE ^{#437} ON 1500 LEVEL STATION.

22 APR 80 1660 U.P. 1680 LEV.

CONTINUED FILLING 1660 U.P.
PAID \$ 11.79 BONUS.

24 APR 80 1500 U.P. 1400 LEV.

FILLED 1500 U.P. PAID \$ 10. BONUS.

25 APR 80 1220 U.P. 1100 LEV.

WORKED ON FILL PREP. PULLED 27
CARS AND BUILT DAMS FOR CHUTE.
CHECKED OUT OLD SHAFT STATION.

28 APR 80 1100 U.P. 500 LEV.

DRILLED AND FIRED 8 BLOCK HOLES,
OPENED MANWAY BY USE OF CAARO AND
HAND MUCKING. PUT IN 4 BOLTS BY
MANWAY. FIRED STRIP. SET UP TO
BOLT ON MUCK PILE. SAW A SMALL
AREA OF LOLLINGITE IN BLACK ORE.

CHECKED 1060 U.P. GOT SOME ~~DATA~~

CHRYSOCOLLA*
~~CHITE~~ FROM COPPER ALTERATION ZONE.

* # 316

29 APR 80 935 STOPE 500 LEVEL

DRILLED AND FIRED A STRIP IN THE FOOTWALL DRIFT. A RAISE WILL BE DRIVEN UP TO THE STOPE FOR A MANWAY. HAD TO STAY LATE TO HELP FIRE 1060 U.P.

BOB SVECZ GAVE ME A MICRO XTAL * SPECIMEN FROM 935. GOT ANOTHER ONE FROM THE STOPE AFTER LUNCH. ^{#485} SAW MANY MICA, FRANKLINITE, GARNET AND PYROXENE XTALS IN FOOTWALL DRIFT.
* ALLEGHANYITE.

30 APR 80 935 STOPE 500 LEV.

DRILLED AND LOADED 7' RAISE ROUND. NIGHT SHIFT WILL FIRE IT AT QUITTING TIME. GOT MORE PINK MICROS FROM 935. ALSO FOUND RHODOCHROSITE BALLS AT SAME LOCATION. #314 & 315

1 MAY 80 1360 STOPE 1680 LEV & 935 ST. 500 LEV.

MOVED DIAMOND DRILL STEELS & TOOLS AWAY FROM 1360 SOUTH MANWAY. BILL IS FIRING AGAIN. DRILLED AND FIRED 5' RAISE ROUND ON 500 LEVEL.

550
650

2 MAY 80 935 STOPE 500 LEVEL

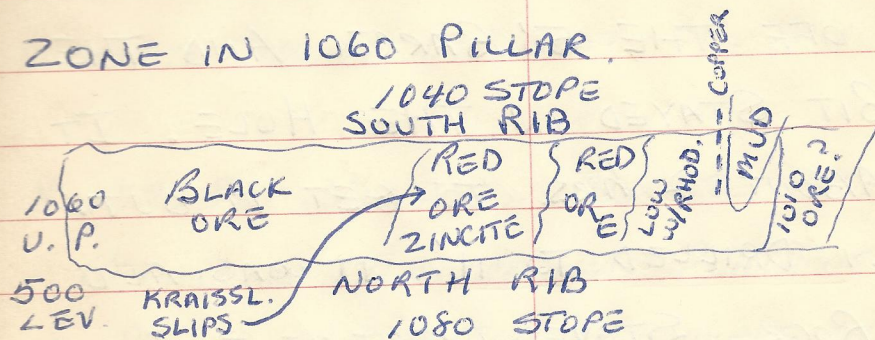
WENT UP TO THE SHOP AFTER SAFETY MEETING.
HAD TO CHECK DIAMOND DRILL FOR PROPER
OPERATION. IT HAS JUST BEEN OVERHAULED.
YESTERDAY'S RAISE ROUND BROKE PERFECTLY.
DRILLED TEST HOLE UP INTO STOPE. DRILLED
MOST OF A 7' ROUND TO BREAK INTO 935.
GOT TWO NICE WHITE WILLEMITE PIECES
FROM VEIN 20' SOUTH OF OLD SHAFT
PILLAR.

5 MAY 80 935 RAISE 500 LEVEL

FINISHED RAISE ROUND. DRILLED A
STRIP AT THE BOTTOM OF THE RAISE.
BROUGHT AIR SHOVEL FROM THE SHAFT
STATION. FIRED RAISE AND STRIP.
GOT ANOTHER WILLEMITE SPECIMEN
FROM 935 AND A KRAISSLITE FROM
1060 U. P. THE NORTH END OF 935 IS
BEGINNING TO SHOW EFFECTS OF THE
NASON FAULT.

6 MAY 80 935 ST. 500 LEV - 1110 ST. 900 LEV.

SCALED RAISE. TOOK TOOLS, DRILLS, AND HOSES TO THE STATION. GOT SOME NICE PIECES FROM THE COPPER ALTERATION ZONE IN 1060 PILLAR.



WENT TO 1110 STOPE AND STARTED SOUTH MANWAY. 1110 IS HUGE!! IN THE SOUTH END OF THE STOPE IN THE FOOT WALL ARE SOME BLOBS OF ^{#322} ZINCITE IN CALCITE. THEY ARE PARTIALLY REPLACED BY PYROCHROITE AND OTHER THINGS.* THERE ARE NUMEROUS SMALL PYROCHROITE VEINLETS CUTTING THRU THE AREA. I GOT SOME NICE SPECIMENS.
* CHLOROPHOENICITE.

7 MAY 80 ORE PASS 900 LEVEL

HAD TO CLEAN ORE PASS BELOW 900 WITH A BLOW PIPE. WAITED UNTIL 11:00 AM FOR TIMBER AND TOOLS. ORE PASS

MUST BE CLEANED SO THAT 1100 CRUSHER
REPAIRS CAN BE DONE SAFELY. GOT
SOME WOLLASTONITE FROM THE CROSS-CUT
THRU THE 1120 ST. HANGING WALL. IT
OCCURS ABOUT 10' EAST OF THE H.W.

8 MAY 80 DDH 416 1360 ST. 1680 LEVEL

REPAIRED 1360 MANWAY PLATFORM. SET
UP COLUMN & DRILL. DRILL WORKS GOOD.

DRILLED FROM 155' TO 170'. ALL GREEN ROCK.

CHECKED OUT 1620 X-CUT, 1600 LEVEL, WHERE
RAISE FROM 1450 PILLAR BROKE THRU. MUCH
LOOSE AROUND TOP OF RAISE WHICH THEY HOPE
TO COLLAR WITH CONCRETE. GOT 2 SMALL
BRANDTITE SPECIMENS.

9 MAY 80 DDH 416 1360 ST. 1680 LEV.

DRILLED FROM 170' TO 202.5'. ALL ROCK
WITH SOME HEMATITE FROM 190 - 198. THE
BACK IN THE SOUTH END OF 1360 IS NOW
ONLY 6' BELOW 1680 LEV.

12 MAY 80 DDH 416 + 417 1680 LEVEL

FINISHED DDH 416. DRILLED FROM 202.5'
TO 220'. ALL ROCK. GREEN ROCK 219-220.
STARTED DDH 417. HOLE IS + 3° ON
SAME BEARING AS 415. DRILLED TO 10'.
ALL ROCK.

13 MAY 80 DDH 417 1360 ST. 1680 LEV.

DRILLED FROM 10' TO 60'. ALL ROCK.
TURNED IN TWO WORN OUT CORE BITS.

14 MAY 80 DDH 417 1360 ST 1680 LEV.

DRILLED FROM 60' TO 100'. 78' TO 100'
WAS HARD GREEN ROCK.

15 MAY 80 DDH 417

DRILLED FROM 100' TO 142'. ALL ROCK.

16 MAY 80 DDH 417

DRILLED FROM 142' TO 175'. ALL ROCK.

CALCITE - HEMATITE BRECCIA AROUND 165'.

CALCITE - SERPENTITE AROUND 175'.

19 MAY 80 DDH 417

DRILLED FROM 175' TO 202'. ALL ROCK.

GOT A HODGKINSONITE AND A HETAEROLITE

FROM 1660 U.P. ALSO VEIN RHODONITE FROM 1360 ST.

20 MAY 80 DDH 417+418 1360 ST. 1680 LEV.

DRILLED FROM 202' TO 220'. TURNED
MACHINE TO DDH 418 (+25° ↑). STRIPPED
MOUNT BOLTS. HAD TO GET NEW ONES
FROM THE SHOP. DRILLED FROM 0' TO 5'.
ALL ROCK. GOT 3 HETAEROLITES
FROM 1660 U.P.

21 MAY 80 DDH 418 1360 ST 1680 LEV

DRILLED FROM 5' - 34'. ALL ROCK. GARNET
SKARN FROM 14' - 31'. BROUGHT OUT A
RHODONITE VEIN SPECIMEN FROM 1360 ST
FOR POSSIBLE CUTTING MATERIAL.

22 MAY 80 DDH 418

DRILLED FROM 34' TO 69'. ALL ROCK.
RAN THRU CRACKS AT 30' & 65'. DRILL
WATER COMING OUT OF PREVIOUS HOLES.

GOT SOME NICE HETAEROLITES AND WHITE

SPRAYS* FROM 1660 U.P. * CHLOROPHOENICITE
X-RAY BY PETE.

23 MAY 80 DDH 418

DRILLED FROM 69' TO 104'. ALL GREEN ROCK.
GOT MORE HETAEROLITE, ETC. FROM 1660 U.P.

27 MAY 80 DDH 418 1360 ST. 1680 LEN.

DRILLED FROM 104' TO 132'. ALL GREEN ROCK.
(ZINCITE XTALS) # 317
GOT MORE HETAEROLITE & ETC. FROM 1660 U.P.

THERE ARE 3 OR 4 OPEN SHEARS STRIKING
EAST, DIPPING NORTH AT ABOUT 45°. SO FAR
THEY HAVE RUN THRU 3 OF STEVE'S FLAT
BENCHES. I HAVE NEVER SEEN SUCH LARGE
SURFACES COVERED WITH CRYSTALS. ED STOLL
GAVE ME SOME GREEN XTALS FROM 1340 U.P.
COPPER MINERAL
NOW ABOUT 25' ABOVE 1200 LEVEL.

28 MAY 80 DDH 418

DRILLED FROM 132' TO 159'. ALL ROCK.
POOR GROUND FOR CORING. BEARING BROKE
IN 10' CORE BARREL. GOT MORE
HETAEROLITE - ZINCITE FROM 1660 U.P.

29 MAY 80 DDH 418

DRILLED FROM 159' TO 174'. ALL ROCK.
HAD TO WAIT 2 HOURS WHILE BILL DRILLED
A STRIP UNDER THE MANWAY. MOVED
DRILL, PULLER, AND TOOLS AT QUITTING
TIME TO AVOID DAMAGE FROM 1360 FIRING.
GOT MORE HETAEROLITE, ETC FROM 1660 U.P.

30 MAY 80 DDH 418 1360 ST. 1680 LEV.

DRILLED FROM 174' TO 189'. ALL ROCK.
HAD BIT PLUGS AT 184', 186', 188', & 189'.
GOT MORE HETAEROLITE, ZINCITE, ETC FROM
1660 U.P.

2 JUNE 80 DDH 418

DRILLED FROM 189' TO 204'. ALL ROCK.
HAD A 2 HOUR SMOKE DELAY WHEN 1360
STOPE CREW FIRED BLOCK HOLES. GOT
MORE HETAEROLITE - ZINCITE FROM 1660 U.P.

3 JUN 80 DDH 418

DRILLED FROM 204' TO 214'. ALL ROCK.
HOLE FINISHED. MOVED ALL GEAR OUT
TO THE STATION. WILL MOVE UP TO 1500
LEVEL FOR NEXT HOLE. WENT DOWN TO
1750 LEVEL TO REPAIR BROKEN AIR
HOSE ON FILL CHUTE. GOT ONE MORE
HETAEROLITE - ZINCITE FROM 1660 U.P.

4 JUN 80 DDH 419 -40° 1540 U.P. 1500 LEV.

MOVED GEAR TO 1500 LEVEL. SET UP TO DRILL AFTER BIG JIM FINISHED BOLTING THE DRIFT. DRILLED FROM 0' TO 5'. ALL ORE.

CHECKED OUT 1420 XCUT AND 980 PILLAR.

5 JUN 80 DDH 419 -40°

DRILLED FROM 5' TO 29'. ALL LO ORE.

SPARSE FRANKLINITE AND A BROWN MINERAL (NOT WILLEMITE) IN MARBLE. SCALED IN 1420 XCUT.

6 JUN 80 DDH 419 -40° & DDH 420 -50°

DRILLED FROM 29' TO 33' IN 419. ALL ROCK.

SVE CZ SET US UP FOR DDH 420. DRILLED 0'-19'. 0'-6' ORE. 6'-19' LO-ORE?

SCALED IN TIMBER SLIDE AREA.

9 JUN 80 DDH 420 (-50°) & DDH 421 ($+10^{\circ}$)

PUT STEELS IN 420. WHILE WAITING FOR DRILL WATER

SVE CZ SAID ABANDON 420 AND START 421. SET

UP AND DRILLED FROM 0' TO 26'. ORE 0'-1' & 24'-26'.

GROUND BADLY CRACKED. LOOSING DRILL WATER INTO

NEXT DRIFT. SCALED LOOSE IN TIMBER SLIDE AREA.

10 JUN 80 DDH 421 (+10°) 1540 U.P. 1500 LEV.

DRILLED FROM 26' TO 38'. GROUND VERY BAD.
HOLE IS COLLAPSING. RAISED MACHINE 18" ON
COLUMN AND RESTARTED HOLE. DRILLED 9 FEET
WENT TO 1660 U.P. AT LUNCH TIME AND GOT
2 MORE ZINCITE SPECIMENS.

11 JUN 80 DDH 421

DRILLED FROM 9' TO 37.5'. ORE 21'-26.5'.
SCALED 980 PILLAR. HAD TO FIX A FILL DAM
UNDER 1160 C.P. CHUTE. WATER WAS RUNNING
PAST THE DAM AND TOWARDS THE ORE PASS.
MANAGEMENT IS VERY UNHAPPY WHEN WATER GETS
IN THE ORE PASS.

12 JUN 80 DDH 421

DRILLED FROM 37.5' TO 63.5'. ORE FROM
37.5' TO 46.5'. SCALED IN 1520 PILLAR (W.V.)

13 JUN 80 DDH 421

DRILLED FROM 63.5' TO 91'. ORE FROM 79'-91'.
SCALED IN 1420 X-CUT.

16 JUN 80 DDH 421#2 1540 P. 1500 LEVEL
DRILLED FROM 91' TO 110'. ALL ORE. HAVING
TROUBLE WITH DRY HOLE AND LOOSE ROCK AT
ABOUT 50'. CHECKED 1620 U.P. AND 1660 U.P.
THE 1660 METAEROLITE SLIP HAS CLOSED UP.
1620 PILLAR IS AN AWFUL MESS OF LOOSE.

17 JUN 80 DDH 421#2
DRILLED FROM 110' TO 136'. ALL ORE EXCEPT
121' TO 122' GREEN ROCK (GARNITE?). SCALED
IN 1420 X-CUT AND NEAR 1460 H.W. CHUTE.
GOT A PYROXENE XTAL NEAR 1460 CH. SAW SOME
APATITE XTALS BUT THEY BROKE.

18 JUN 80 DDH 421-2
DRILLED FROM 136' TO 156'. BLACK ORE TO
146'. BROWN ORE TO 156'. MOVED SLUSHER
BUCKET FROM 1500 X-CUT TO STATION. AM USING
10' CORE BARREL BUT HAVE NOT HAD A CLEAN
10' RUN YET. SCALED IN 1420 X-CUT.

19 JUN 80 DDH 421-2
ORE FROM 156' TO 170'. HIT FILL AT 170'. BOB
HAD SET THE SIGHTS BY KENTUCKY WINDAGE.
CHECKED 1660 U.P. NOTHING.

20 JUN 80 DDH 422 1500 P. 1500 Lev.

FIDDLED WITH FILL WATER FROM 1500 P.
FOR 2 HOURS. MOVED SET-UP TO 1500 X-CUT.
I AM SUPPOSED TO EXTEND AN OLD TEST
HOLE. IT WAS DRILLED WITH A "53". THE
10' CORE BARREL WOULD NOT GO IN THE
HOLE. TRIED REAMING THE HOLE BUT NO GO.
WILL TRY MONDAY WITH THE OLD 5' BARREL.

23 JUN 80 DDH 422

AM USING OLD 5' BARREL TO EXTEND
HAMMER DRILL TEST HOLE. SET DRILL TO PROPER
ANGLE AND DRILLED FROM 38.5' TO 49'.
ALL ORE (?). SCALED IN 1400 X-CUT.

24 JUN 80 DDH 422

DRILLED FROM 49' TO 69'. ALL ORE. STOPPED
FOR STENCH ALARM AT 2:PM. SCALED LOOSE
IN 1020 PILLAR (E.V.) LOOKING FOR YEATMANITE.

25 JUN 80 DDH 422

DRILLED FROM 69' TO 84' ^{ALL ORE (MASSIVE)} ROUGH GOING IN
BAD GROUND. WENT THRU SOFT GROUND ~~AT~~
AT 82' WHICH COLLAPSED WHEN THE STEELS
WERE PULLED OUT. WILL HAVE TO REAM THAT

PART OF THE HOLE. GOT MORE TILASITE-YEATMANITE? FROM 1020 P. (E.V.).

26 JUN 80 DDH 422 1500 U.P. 1500 LEVEL

DRILLED FROM 84' TO 95'. ALL ORE. VERY BAD GROUND. HAD SIX BIT PLUGS IN ELEVEN FEET. GOT MORE TILASITE*-YEATMANITE FROM 1020 P.

27 JUN 80 DDH 422

* X-RAY = ADELITE

DRILLED FROM 95' TO 109'. ORE. BAD GROUND. GOT SOME WOLLASTONITE - GROSSULARITE - VESUVIANITE FROM 1140 X-CUT IN THE HANGING WALL OF 1020 STOEPE (W.V.) THIS IS IDENTICAL TO THE 1680 LEVEL WOLLASTONITE OCCURRENCE.

30 JUN 80 DDH 422

DRILLED FROM 109' TO 124'. ALL ORE. MINOR KRAISSLITE SEEN ON SLIPS AT ABOUT 110' TO 112'. SOMETHING ABOUT THIS HOLE IS CAUSING RAPID BIT WEAR. GOT SOME PICROPHARMACOLITE FROM THE LATRINE CAN AREA NEXT TO THE MOTOR CHARGING STATION.

1 JUL 80 DDH 422 1500 U.P. 1500 LEV,
DRILLED FROM 124' TO 131'. ALL ORE. HIT
FILL AT 131'. PACKED UP DRILL AND TOOLS
AND TOOK THEM TO THE STATION. WILL
MOVE TO 800 LEV TOMORROW. GOT SOME
YEATMANITE - TILASITE* FROM 1000 P. (E.V.).
* ADELITE

2 JUL 80 DDH 423 1250 STOPE 800 LEV.
MOVED GEAR TO 800 LEVEL. WILL HAVE TO
SCALE LOOSE AND BOLT SET-UP SITE.
DEVELOPEMENT MUCK FROM A CHUTE STRIP
ON 600 WHICH WAS SLUSHED DOWN THE
1250 RAISE BORE HOLE WILL HAVE TO BE
MOVED FIRST. HAD A FIRE ALARM AT
10 AM.

3 JUL 80 DDH 423
SLUSHED ROCK OUT OF THE E.V. DRIFT.
THE SLUSHER IS SICK SO IT TOOK ALL DAY.
LOOKED OVER 1110 STOPE AT LUNCH TIME. IT
IS HUGE! GOT SOME ZINCITE-PYROCHROITE-
CHLOROPHOENICITE FROM THE SOUTH END.

7 JUL 80 DDH 423 1250 ST. 800 LEV.

PUT IN 28 ROCK BOLTS IN OLD STOPE.
CHECKED OUT 1250 STOPE LUNCH TIME.
THE ORE HAS BEEN MOVED AROUND IN
A COMPLICATED FASHION BY AT LEAST
2 FAULTS.

8 JUL 80 1220 U.P. 800 LEV.

MY HELPER WAS OUT TODAY SO I
WORKED WITH NICK KINNEY. WE LOADED
7 BAGS OF NILITE AND 3 BOXES OF
POWDER. NIGHT SHIFT WILL FIRE THE
ROUND. GOT SOME MORE MAGNUSSONITE.

9 JUL 80 DDH 423 1250 ST. 800 LEV

INSTALLED 25 ROCK BOLTS IN AREA
OF DRILL SIGHT. STARTED SETTING UP
DIAMOND DRILL. CHECKED OUT 740 PILLAR
AND 720 STOPE AREA. NO YEATMANITE.
1220 U.P. BROKE GOOD.

10 JUL 80 DDH 423 -10°

SET UP AND DRILLED FROM 0' TO 24'.
ALL WHITE ROCK W/SALMON CALCITE 10' TO 14'.

11 JUL 80 DDH 423 1250 ST. 800 LEV.

DRILLED FROM 24' TO 64'. GREEN ROCK WITH MASSIVE QUARTZ 47' TO 51'. ALL THE REST WHITE ROCK. SCALED LOOSE IN BROWN WILLEMITE STOPE AND IN THE E.V. DRIFT NORTH OF 1250 STOPE. NO SPECIMENS.

14 JUL 80 DDH 423

DRILLED FROM 64' TO 109'. 64' TO 65' WHITE ROCK. 65' TO 70' WHITE ROCK WITH SMALL PYROXENE GRAINS. 70' TO 84.5' MASSIVE PYROXENE AND MICA.

84.5' TO 100' GOOD EAST VEIN ORE. SHEARS BEGINNING AT 100'. ORE LOOKS DIFFERENT AND INCLUDES GRAINS OF CALC SILICATE MINERALS.

15 JUL 80 DDH 423

DRILLED FROM 109' TO 134'. MEDIUM ORE 109' TO 113'. MASSIVE FRANKLINITE-WILLEMITE (NO ZINCITE) 113' TO 123'. WHITE ROCK 123' TO 134'. CHECKED 1220 U.P. NADA.

16 JUL 80 DDH 423 & 424 1250 ST. 800 LEV.

DRILLED 134' TO 142.5' IN #423. ALL WHITE
ROCK. RESET DRILL FROM #423 TO #424.

($4-10^{\circ}$ 30° N.) DRILLED FROM 0' TO 33'.

ALL ROCK. LOOKED AT 740 P. NADA.

GOT SOME TINY ZINCITE XLS FROM 1220 U.P.

17 JUL 80 DDH 424

DRILLED FROM 33' TO 83'. GREEN 33' TO
45'. WHITE 45' TO 67'. POSSIBLE ORE

67' TO 83'. GOT ANOTHER ZINCITE FROM
1220 U.P.

18 JUL 80 DDH 424

DRILLED FROM 83' TO 118'. LO-ORE 83'
TO 97'. ORE W/ZINCITE 97' TO 108'.

ALTERNATING ROCK & ORE TO 118'. CORE
BIT DULL. ALL BITS IN THE LAST SHIP-
MENT WERE SHORT LIVED.

21 JUL 80 DDH 424 & 425 (+ 45° 4)

DRILLED FROM 118' TO 120.5'. ALL WHITE
ROCK. HIT STOPE AT 120.5'. MOVED

SET-UP BACK 2' AND STARTED DDH 425.

DRILLED FROM 0' TO 22' ALL ROCK. SAW SOME
MOOREITE ON SLIPS IN 1110 STOPE.

22 JUL 80 DDH 425 1250 STOPE 800 LEV
DRILLED FROM 22' TO 47'. ALL ROCK,
MOSTLY GREEN. SET UP ROD PULLER.
HAD TO USE STOPPER AND REAMER BIT
TO GOUGE HOLE IN FRONT OF THE
PULLER. CHECKED OUT 1250. NADA.

23 JUL 80 DDH 425
DRILLED FROM 47' TO 72'. ORE 47' TO 68'.
WHITE ROCK 68' TO 72'. CHECKED OUT
FRANKLINITE ZONE. SAW SOME LARGE
APATITE XLS.

24 JUL 80 DDH 425 & 426
DRILLED FROM 72' TO 77'. ALL WHITE
ROCK. 425 IS FINISHED. TURNED THE
DRILL 30° NORTH AND STARTED DDH 426.
DRILLED TO 21'. BLACK-WHITE-BLACK-
GREEN. CHECKED OUT 1250 STOPE. NADA.

25 JUL 80 DDH 426 + 45°
DRILLED FROM 21' TO 46'. ROCK 21' TO 43'.
LO-ORE 43' TO 46'. CHECKED 1220 U.P.
NADA.

28 JUL 80 DDH 426 1250 ST. 800LEV.

DRILLED FROM 46' TO 81'. LO-ORE 46'
TO 47'. ORE W/ZINCITE 47' TO 60'.
GREEN ROCK (PYROX & MICA) 60' TO 76'.
ORE (MASS. FRANK. WILL.) 76' TO 80'. WHITE
ROCK TO 81'.

29 JUL 80 DDH 426 +45°

DRILLED FROM 81' TO 91'. ALL WHITE ROCK.
CLIFF FIRED A STRIP IN 740 P. RAISE
LAST NIGHT. GOOD ORE AND A RUBY ZINC
VEIN. MOVED DRILL AND TOOLS TO 1750L.

30 JUL 80 1450 P. 1750 LEV

PULLED DRILL AND TOOLS UP INTO PILLAR
WITH A ROPE. FILL IS 30' ABOVE 1750.

SET UP COLUMN. GOT SOME SMALL
BRANDTITES FROM 1620 X-CUT, 1600 LEV.

31 JUL 80 DDH 427 ^{+50°} 1450 P. 1750 LEV

SET UP DRILL. DRILLED 0' TO 10'. SLOW
GOING IN HARD GREEN ROCK. CHECKED
1700 U.P. NADA.

1 AUG 80 DDH 427 +50° 1450 P. 1750 LEV.

DRILLED FROM 10' TO 33'. 10' GREEN 11' WHITE
12' HEMATITE 18' ORE. SET UP ROD PULLER.
GOT A BRAND NEW WATER SWIVEL.

CHECKED SOUTH END OF WEST VEIN. THE
LADDER ROAD TO 1680 IS STILL PASSABLE
BUT MUCH LOOSE HANGS OVER HEAD.

4 AUG 80 DDH 427 +50°

DRILLED FROM 33' TO 50'. ALL ORE.
FINISHED ROD PULLER SET-UP. DUG A
HOLE BEHIND THE DRILL TO MAKE POSSIBLE
REMOVING 10' STEEL SECTIONS THRU
THE DRILL. RAN INTO BIT PLUGGING
GROUND. SAW A PIECE OF MCGOVERNITE
FROM 740 P.

5 AUG 80 DDH 427 +50°

DRILLED FROM 50' TO 63.5'. ALL ORE. BAD
GROUND FOR CORING. WHILE SCALING LOOSE
IN 1620 X-CUT, 1600 LEV FOUND ANOTHER OPEN
SLIP WITH BRANDTITE. GOT A PIECE OF
740 P. MCGOVERNITE FROM ALAN BARCOCK.
#3822

6 AUG 80 DDH 427 +50° 1450 P. 1750 LEV.

DRILLED FROM 63.5' TO 81.5'. ALL ORE.

GOT MORE BRANDTITE FROM 1620 X-CUT,
 1600 LEV.

7 AUG 80 DDH 427 +50°

DRILLED FROM 81.5' TO 98'. ORE 83'
 WHITE 88.6' GREEN 98'. HOLE FINISHED.

BEGAN SETTING UP FOR THE NEXT HOLE.

HAVE TO SWITCH LADDERS, AIR PIPE
 AND WATER PIPE TO THE OTHER MANWAY.

WALKED NORTH IN THE EAST VEIN

DRIFT TO THE 2700 N. AREA. GOT A

SMALL CARBONATE XTAL POCKET.

8 AUG 80 DDH 428 +90° 1450 P. 1750 LEV.

SET UP DRILL OVER SOUTH MANWAY. SET UP
 ROD PULLER. HAD A VISIT FROM FED. MINE
 INSPECTOR. DRILLED 0' TO 3'. GREEN ROCK.

11 AUG 80 DDH 428 +90°

DRILLED FROM 3' TO 25'. GREEN 12' WHITE w/
 SPARSE FRANKLINITE 22' GREEN. GOT 2 MORE

BRANDTITES FROM 1620 X-CUT 1600 LEV.

12 AUG 80 DDH 428 +90° 1450 P. 1750 LEV.

DRILLED FROM 25' TO 50'. ALL GREEN AND WHITE ROCK. DUG AROUND BRANDTITE LOCATION 1620 X-CUT, 1600 LEV. NADA.

13 AUG 80 DDH 428 +90°

DRILLED FROM 50' TO 75'. WHITE 52' HEMATITIC MARBLE 64' PYROXENE ZN. 75'. DUG AROUND BRANDTITE LOCATION 1620 X-CUT 1600 LEVEL. SAW GRAPHITE IN BLACK ORE. NO KEEPERS.

14 AUG 80 DDH 428 +90°

DRILLED FROM 75' TO 95'. PYROXENE ZONE AND GNEISS. HOLE FINISHED.

15 AUG 80 DDH 429 +67° 1450 P. 1750 LEV

SET UP DRILL FOR NEW HOLE. DRILLED 0' TO 4'. GREEN ROCK.

18 AUG 80 DDH 429

DRILLED FROM 4' TO 32'. ALL ROCK

19 AUG 80 DDH 429

DRILLED FROM 32' TO 62'. ALL ROCK.

20 AUG 80 DDH 429.

DRILLED FROM 62' TO 82'. GOOD ORE AT 73'.

21 AUG 80 DDH 429 + 67° 1450 P. 1750 LEV.

USED A "53" AND REAMER BIT TO STRIP AWAY ROCK IN FRONT OF ROD PULLER. DRILLED FROM 82' TO 87'. ALL ORE. PART OF IT WAS JAMMED IN THE CORE BARREL. IT TOOK AN HOUR TO CLEAN OUT THE BARREL. HAD A VISIT FROM MSA.

22 AUG 80 DDH 429 + 67°

DRILLED FROM 87' TO 112'. 87' TO 98' ORE. HEMATITIC MARBLE AND ORE MIXED AFTER THAT.

25 AUG 80 DDH 429 + 67°

DRILLED FROM 112' TO 132'. GREEN TO 126 ORE TO 127.5 (THE ORE GRADES INTO ROCK ON BOTH SIDES) GREEN TO 130, WHITE TO 132'. HOLE FINISHED.

26 AUG 80 DDH 430 + 78° 55° S OF E. 1450 P.

MOVED DRILL AND COLUMN FOR NEW HOLE.

DRILLED 0' TO 9'. ALL ROCK.

27 AUG 80 DDH 430 DRILLED 9' TO 34'.

ALL ROCK. WALKED TO NORTH END OF EAST VEIN LUNCH TIME.

28 AUG 80 DDH 430 +78° 1450 P. 1750 LEV.

DRILLED 34' TO 64'. ALL ROCK. SCALED
IN NORTHERN EAST VEIN.

29 AUG 80 DDH 430

DRILLED 64' TO 89'. GREEN 74' LO-ORE
WITH NARROW BANDS (2) OF ORE 88 GREEN
(SHEARED). DISCOVERED AN OPEN POCKET* LINED
WITH CALCITE XTALS AT @ 2700N. IN EAST
VEIN DRIFT, POCKET IS IN THE F.W. ADJACENT
TO A NARROW OPEN CRACK CONTAINING
PYRITE. THE ORE VEIN IS HEAVILY LEACHED
BY THE CRACK AND HAS THE APPEARANCE
OF MUD WITH RECRYSTALLIZED CALCITE IN IT.
A SIMILAR CRACK CAN BE SEEN ON 1850 LEV
NEAR THE SEISMOGRAPH STATION.

* THE POCKET IS ABOUT 12" LONG BY 3"
IN DIAMETER.

2 SEP 80 DDH 431 +50° 1450 P. 1750 LEV.

10° WEST OF NORTH OVER SOUTH M/W. SET UP
DRILL AND ROD PULLER. DRILLED 0' TO 12'.
0' TO 10' 8" MARBLE W/ SPARSE FRANKLINITE.
ORE AT 10' 8". CONTACT IS A SHEAR. WORKED

ON CALCITE POCKET AT 2700 N. IN E.V. WALLS AND ROOF ARE COATED WITH 1" XTALS OF CALCITE IN PARALLEL GROWTH. XTALS ARE GROWING RIGHT ON MARBLE. BOTTOM OF POCKET IS COVERED WITH BRECCIA OF CHIPS FOLLOWED BY FINE LAYER OF CLAY FOLLOWED BY LAYER OF PYRITE SHOWING RADIATING STRUCTURE WITH XTAL FACES ON TOP. PYRITE IS PARTIALLY COVERED WITH FINE WHITE MINERAL. THE WHOLE THING IS LINED WITH HYDROZINCITE FLUORESCENCE. THIS IS THE ONLY ZINC MINERAL I HAVE FOUND WHICH MIGHT HAVE RESULTED FROM THE LEACHING IN THE E.V. ORE JUST ABOVE THE POCKET.

3 SEP 80 DDH 431 +50° 1450P. 1750LEV.
DRILLED FROM 12' TO 45'. ORE FIRST 6" AND
LAST 2". ALL THE REST IS GREEN ROCK.
GOT MORE CALCITE & PYRITE FROM 2700N.

START BACK ON OPPOSITE SIDE