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 1360 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.  1650 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 Level.
worked on fill crew.

10 APR 80  1180 U.P.  600 Level.
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 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 CARVO AND
HAND MUCKING. PUT IN 4 BOLTS BY
MANWAY. FIRED STRIP. SET UP TO
BOLT ON MUCKPILE. SAW A SMALL
AREA OF LOLINGITE IN BLACK ORE.
CHECKED 1060 U.P. GOT SOME
CHRYSCOPHRITE 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. 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 MICROTS FROM 935. ALSO FOUND RHODOCHROSITE BALLS AT SAME LOCATION. # 314 & 315

1 MAY 80  1360 STOPE 1630 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.
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 kraiisslite from 1060 v.p. The north end of 935 is beginning to show effects of the nason fault.
6 May 80  935 St. 500 Level - 1110 St. 900 Level.

Scoped Raise. Took tools, drills, and hoses to the station. Got some nice pieces from the copper alteration zone in 1060 Pillar.

1040 Stope South Rib

1060 U.P. Black Ore Red Ore Red Ore Zinbite Red Ore Lode MUD

1080 Stope North Rib Kraissl. Slips

Went to 1110 Stope and started south manway. 1110 is Huge!! In the south end of the stope in the footwall are some blobs of Zinbite 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.

* Chlorophoenite.

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' TD 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 LEVEL
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 LEVEL.
12 May 80  DDH 416 + 417  1680 Level


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 143'. All Rock.

16 May 80  DDH 417

Drilled from 143' to 175'. All Rock.

Calcite-Hematite Breccia around 165'.

Calcite-Serpentinite around 175'.

19 May 80  DDH 417

Drilled from 175' to 202'. All Rock.

Got a Hodgkinsonite and a Heterolite 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. *Chlorophoenicitte* 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 LEV.

DRILLED FROM 104' TO 132'. ALL GREEN ROCK. (ZINCRITE 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.

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-ZINCRITE 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 X-cut 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 X-cut.

6 Jun 80 DDH 419 -40° & DDH 420 -50° Drilled from 29' to 33' in 419. All rock. Svecz 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°) Put steels in 420. While waiting for drill water Svecz said abandon 420 and start 421. Set up and drilled from 0' to 26'. Ore 0'-1' & 24'-26'. Ground badly cracked. Loosening 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.w.)

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 Hetaerolite slip has closed up. 1620 pillar is an awful mess of loose rock.

17 Jun 80  DDH 421#2
Drilled from 110' to 136'. All ore except 121' to 122' green rock (Gahnite?). 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 1430 X-cut.

24 Jun 80 DDH 422
Drilled from 49' to 69'. All ore. Stopped for stench alarm at 2:30 PM. Scaled loose in 1020 Pillar (E.W.) looking for Yeatmanite.

25 Jun 80 DDH 422
Drilled from 69' to 84'. Rough going in bad ground. Went thru soft ground at 82' which collapsed when the steels were pulled out. Will have to ream that

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.
* X-RAY = ADELANTE

27 JUN 80 DDH 422
DRILLED FROM 95'-TO 109'. ORE. BAD GROUND.
GOT SOME WOLLASTONITE - GROSSULARITE - VESUVIANITE FROM 1140 X-CUT IN THE HANGING WALL OF 1020 STOPE (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 MICROPHARMACOLITE 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 1020 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. Development 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 magnumsonite.

9 JUL 80  DDH 423  1250 ST.  800 LEV

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 Frankliniter-Willemite (no zin cite) 113' to 123'. White rock 123' to 134'. Checked 1220 U.P. NADA.
16 Jul 80  DDH 423 & 424  1250 St. SooLev.
Drilled 134' to 142.5' in #423. All white rock. Reset drill from #423 to #424.
(4-10° 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 shipment were short lived.

20 Jul 80  DDH 424 & 425 (+45° 4)
Drilled from 118' to 120.5'. All white rock. Hit stopes at 120.5'. Moved
set-up back 2' and started DDH 425.
Drilled from 0' to 22' all rock. Saw some Smooreite on slips in 1110 stop e.
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 Stoper 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

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. 800 LEV.
Drilled from 46' to 81'. Lo-ore 46' to 47'. Ore w/zincite 47' to 60'.
Green rock (pyro & 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 X+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 38’ 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 Babcock.
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 13' 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'.

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.


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 crystals at @ 2700'N. 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. ORE. Walls and Roof are coated with 1" X-TALS of Calcite in parallel growth. X-TALS 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 X-TAL 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° 1450 P. 1750 LEV. Drilled from 12' to 45'. ORE first 6" and last 2". All the rest is green rock. Got more Calcite & Pyrite from 2700 N. START BACK ON OPPOSITE SIDE.