

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

DRILLED FROM 45' TO 72'. ALL ORE.  
GOT MORE CALCITE-PYRITE FROM  
2700 N. (E.V.)

5 SEP 80 DDH 431

DRILLED FROM 72' TO 97'. ORE TO 77'.  
77'-97' ROCK. CHECKED 1660 U. P.  
THEY JUST FIRED FOOTWALL - NADA.

8 SEP 80 DDH 432 +52° 1450 P. 1750 LEV

10° EAST OF SOUTH OVER SOUTH M/W.

SET UP DRILL. DRILLED 0'-6'. ALL ROCK.

STARTED STRIPPING ROCK IN FRONT OF DRILL.

9 SEP 80 DDH 432

DRILLED 6' TO 24'. ALL ROCK. FINISHED  
STRIPPING (WITH REAMER BIT). SET UP ROD  
PULLED. SCALED IN NORTHERN PART OF E.V.

10 SEP 80 DDH 432

DRILLED FROM 24' TO 52'. ALL PYROXENE ZONE

11 SEP 80 DDH 432

DRILLED FROM 52' TO 82'. PYROX. ZN-56'-GNEISS-  
73.5'-ORE. GOT MORE CALCITE-PYRITE FROM  
2700 N IN E.V.

12 SEP 80 DDH 432 +52° 1450P. 1750 LEV.

DRILLED FROM 82' TO 112'. LOW GRADE ORE TO 106'. HIGH GRADE (MASS. WILL) TO 112'.

THE COMPANY ANNOUNCED A PARTIAL LAY OFF AND REDUCTION IN OPERATIONS TODAY.

15 SEP 80 DDH 432

DRILLED 112' TO 132'. GOOD ORE TO 123', GREEN TO 128', ORE TO 132'.

16 SEP 80 DDH 432.

DRILLED 132' TO 150'. ORE TO 136'. GREEN AND WHITE ROCK TO 150'. THE MINE IS RIFE WITH RUMORS ABOUT THE REASONS FOR THE LAY-OFF AND WHAT WORKING CONDITION WILL BE LIKE FOR THE REDUCED CREW. SOME PEOPLE EXPECT VIOLENCE.

17 SEP 80 DDH 433 +40° 1450P. 1750 LEV.

65° SOUTH OF EAST OVER SOUTH M/W. SET DRILL FOR NEW HOLE. DRILLED 0' TO 11'. ALL ROCK. STRIPPED ROCK FROM WALL IN FRONT OF ROD PULLER.

18 SEP 80 DDH 433 1450 P. 1750 LEV.

DRILLED 11' TO 46'. ALL ROCK. HAVE NOT  
CROSSED FAULT YET. WAS TOLD TODAY  
THAT MY HELPER UNDER THE NEW REGIME  
WILL BE DUTCH WULFERS.

19 SEP 80 DDH 433

DRILLED FROM 46' TO 71'. 46' TO 56'  
PYROXENE AND GNEISS ZONES, 56' TO  
61' H/W TYPE MARBLE, 61' TO 71' ORE.

TODAY WAS THE LAST DAY OF OPERATION  
UNDER THE OLD TWO SHIFT HIGH PRODUCTION  
SYSTEM. MONDAY, THE LAY-OFF TAKES  
EFFECT AND ONE SHIFT WILL TRY TO  
PRODUCE 10,000 TONS PER MONTH. GOOD  
LUCK TO US.

22 SEP 80 DDH 433

DRILLED FROM 71' TO 96'. FIRST 2" ORE  
AND ALL THE REST WAS WHITE ROCK.

23 SEP 80 DDH 434 + 5° 1450 P. 1750 LEV.

DUE EAST. DRILLED 0'-22'. ORE 0'-5'.  
GREEN 5'-6'. WHITE 6'-14'. GREEN 14'-  
22'.

24 SEP 80 DDH 434 1450 P. 1750 LEV.

DRILLED FROM 22' TO 52'. GREEN TO 26'; WHITE TO 52'. TED GAVE US ALL A PEP TALK IN THE ADIT. DON GUNDERMAN IS SPENDING HIS LAST WEEK AS A BOSS SUPERVISING THE REMOVAL OF EQUIPMENT FROM SHUT-DOWN STOPES AND PILLARS.

25 SEP 80 DDH 434

DRILLED FROM 52' TO 84'. ORE 59' TO 62'. ALL THE REST WAS MARBLE. THE ORE WAS SHEARED. POSSIBLY A FRAGMENT IN A SHEAR ZONE.

26 SEP 80 DDH 434

DRILLED FROM 84' TO 129'. ALL WHITE ROCK EXCEPT GRAY CUTTINGS 120'-120.5'.

29 SEP 80 DDH 434 E' 435 +20°

DRILLED FROM 129' TO 131'. HIT GRAY ROCK THAT WAS TOO HARD TO DRILL WITH THE WORN BITS I HAVE. RAISED DRILL TO 20° AND DRILLED 13'. ALL ROCK.

30 SEP 80

HAD BIRTHDAY OFF

1 OCT 80 1340 P. 1200 LEV.

SLUSHED AND HAND MUCKED.

FINISHED FINAL CLEAN-OUT. 1340 P

IS NOW ONLY MINING CZZ ON

FOOTWALL. FOUND SOME MICROS IN

A SLIP, RHODOCHROSITE - ALACTITE +  
BARITE - OPTICS BY PETE DUNN 30 OCT 80.

2 OCT 80 1340 P 1200 LEV

PULLED CHUTE. 25 CARS. HAD

TO FIRE CHUTE TWICE. WENT INTO

PILLAR AND MOVED TOOLS TO FOOTWALL

END. FLAT BENCH IN H/W HAS TO BE

FIRED. GOT 2 MORE RHODOCHROSITE

MICROS.

3 OCT 80

TOOK DAY OFF DUE TO SINUSITIS.

6 OCT 80 DDH 435 1450 P. 1750 LEV.

DRILLED 13' TO 58'. 17'-27' GREEN.

EVERYTHING ELSE WHITE.

7 OCT 80 1070 ST. 900 LEV.

SET UP SLUSHER. WENT TO 1000 LEV AND PULLED 39 CARS FROM CHUTE. MUCK PILE ARCHED OVER CRIB. HAD TO BACK SLUSH TO OPEN CRIB. CHECKED MUCK PILE UNDER 740 RAISE. SAW A FEW SMALL FLAKES OF MCGOVERN.

GOT 2 SPEC. OF BROWN SPERULES OF ? \*  
\* X-RAY BY P. DUNN = ALLEGHANYITE.  
8 OCT 80 1020 ST. 900 LEV.

GOT 100' OF CABLE FOR PULL ROPE. CLEANED AROUND CRIB AND PUT ON GRIZZLY RAIL. SLUSHED. AN ORE CAR TIPPED OVER ON 1000. HELPED RIKER SHOVEL UP. GOT 75 CARS TODAY. SAW A VEIN OF GEMMY GREEN WILLEMITE IN FOOTWALL MARBLE.

9 OCT 80 1020 ST. 900 LEV.

PUT 100' OF CABLE ON TAIL ROPE. SLUSHED AND TRAMMED 78 CARS. GOT SOME ZINCITE FROM THE FOOTWALL BAND. SAW THE TRANSVERSE SPHALERITE VEIN IN THE SOUTH END. NO GERSTMANNITE.

10 OCT 80 1020 ST. 900 LEV.

SLUSHED AND TRAMMED 42 CARS.

PUT IN 3 ROCK BOLTS IN NORTH  
END. DRILLED PIN HOLES AND BLOCK  
HOLED 2 BIG CHUNKS. GOT MORE OXIDE.

13 OCT 80 DDH 435 1450 P. 1750 LEV

DRILLED FROM 58' TO 88'. ORE FROM  
60' TO 63'. THE REST IS WHITE ROCK.

14 OCT 80 DDH 435

DRILLED FROM 88' TO 98'6". ALL WHITE  
ROCK. WATER PIPE BROKE IN MAIN

SHAFT AT 10 A.M. CLEANED UP 3

CARS OF MUD ON 1750 LEVEL. DID A  
FEW ODD CHORES IN 1620 U.P., 1680

LEVEL, TO TIDY UP AFTER FILL CREW.

FOUND A VEINLET IN 1520 PILLAR, 1600  
LEVEL, WITH FLUORITE, HETEAROLITE,

ZINCITE, ++?.

15 OCT 80

SEE OVER →

15 OCT 80 DDH 435 1450P. 1750 LEV.

DRILLED 98.5' TO 121.5'. ALL WHITE  
ROCK. DRILL JAMMED AT 121.5'.  
STARTED MOVING DRILL AND TOOLS  
OUT OF THE PILLAR. GOT MORE VEIN  
SPECIMENS FROM 1520 PILLAR, 1600 LEV.

16 OCT 80 DDH 406 1220 U.P. 1000 LEV.

MOVED GEAR OUT OF 1450 P., 1750 LEV  
AND TOOK IT TO 1000 LEVEL. TOOK  
OLD DRILL TO THE SHOP AND BROUGHT  
DOWN THE REBUILT SPARE. SET  
UP COLUMN, DRILL, AND ROD PULLER.

17 OCT 80 DDH 406 1220 U.P. 1000 LEV.

USED A REAMER BIT TO CUT A HITCH  
BEHIND THE DRILL FOR EXTRA ROOM TO  
CHANGE STEELS. DRILLED FROM 100' TO  
109'. BLACK ORE TO 106', WHITE WITH  
FLUORITE TO 109'.

20 OCT 80 DDH 406

DRILLED FROM 109' TO 133'. WHITE TO  
110.5'. BLACK ORE TO 133'. GOT OUT  
POWDER ORDER IN A.M. WELKER GAVE US  
THE WRONG ORDER. HAD TO PUT 15 BAGS BACK.



21 OCT 80 DDH 406 1220 U.P. 1000 LEV.

DRILLED FROM 133' TO 154'. ALL BLACK ORE.

22 OCT 80 DDH 406

DRILLED FROM 154' TO 174'. BLACK ORE TO 163'. WHITE ROCK TO 174'. HOLE DONE.

23 OCT 80 1015 STOPE 180 LEVEL

USED SICK AIR SLUSHER TO MOVE MUCK OFF THE TOP OF THE PILE.

TRYING TO EXPOSE SOUTH RIB WHICH NEEDS TO BE BOLTED. HELPED ED DUNN DRILL AND FIRE 40 BLOCK HOLES.

SAW LOTS OF MUD BUT NO 960 TYPE ARSENATES.

24 OCT 80 DDH 436 1300 U.P. 1000 LEV.

MOVED EQUIPMENT TO 1300 U.P. HANGING WALL DRIFT AND SET UP. DRILLED 0' TO 6'. ALL ROCK. THIS HOLE IS BEING DRILLED AT  $-20^{\circ}$  FROM THE HANGING WALL TO THE FOOTWALL. SECURED DRILL SITE FOR A VACATION WEEK.

3 NOV 80 1570 E. STOPE 1200 LEV.

STOPPED ON 900 LEV. TO PUT UP 2  
MANWAY PIPES IN 1020 ST. WALKED  
DOWN ~~2~~ TO 1000 LEV TO ACTIVATE  
PUMP UNDER 1020 CHUTE. WENT ~~2~~ TO  
1570 E TO DRILL UPPERS WITH "53" AND  
LONG LEG. DRILLED 100'. GOT SOME  
VEIN? ARSENOPYRITE? FROM 1020 ST.  
FOOTWALL. WENT TO 820 P. (EAST VEIN)  
AND GOT SOME YEATMANITE - TILASITE.

4 NOV 80 1570 E. STOPE 1200 LEV.

DRILLED UPPERS. 150'. THIS IS A REAL  
DRAG - LONG LEG, HIGH BACK, NO HELPER.  
GOT MORE 820 P. YEATMANITE - TILASITE.

5 NOV 80 1570 E. STOPE 1200 LEV.

DRILLED UPPERS. 170'. FINISHED UP  
HIGH DRILLING AND SWITCHED TO SHORT  
LEG. GOT MORE YEATMANITE - TILASITE  
FROM 820 PILLAR IN EAST VEIN.  
# 438, 346

6 NOV 80 1570 E. STOPE 1200 LEV.

PUT POWDER AWAY AT 8:30.

DRILLED UPPERS. 155'. GOT SOME GOOD RED & GREEN FROM THE OLD 1520 TRANSVERSE STOPE.

7 NOV 80 1570 E. STOPE 1200 LEV.

DRILLED UPPERS. 185'. ED KEITH FIRED THE BREAKING RAISE. WENT TO 820 PILLAR AND GOT MORE YEATMANITE - TILASITE. A DRILL WOULD BE NEEDED TO GET ANY MORE.

10 NOV 80 DDH 436 1300 U.P. 1000 LEV

DRILLED 6' TO 34.5'. ALL ROCK. LOOKED AT 1260 U.P. SHEAR ZONE HAS MUCH FRIEDELITE & WILLEMITZ.

11 NOV 80 935 STOPE 500 LEVEL

PULLED CHUTE. 40 CARS. ONE CAR TIPPED AND DUMPED ON A CORNER. HAD TO SHOVEL UP. THE BACK IN 935 IS ABOUT 40' ABOVE 500 LEVEL. THE STOPE IS HUGE. THE NORTH END IS PINCHING OUT DUE TO THE NASON FAULT.

12 NOV 80 1540 U.P. 1400 LEVEL

SET UP TO DRILL A TEST HOLE WITH AN "83" AND EXTENSION STEELS. DRILLED 18' DUE EAST. APPEARS TO BE ROCK.

CHECKED THE 900 PILLAR AREA IN THE EAST VEIN. FOUND SOMETHING THAT LOOKS LIKE TILASITE OR ADELITE.

13 NOV 80 1540 U.P. 1400 LEVEL

FINISHED TEST HOLE. HIT FILL AT 43'. APPEARED TO BE ALL ROCK. CHECKED 1680 STOPE GREENOCKITE LOCATION. IT

IS NOW BURIED UNDER 20' OF FILL. TOO BAD! GOT SOME STRANGE WILLEMITE OR TEPHROITE FROM THE SOUTH END OF

1680 STOPE. MOVED TO 1000 LEVEL AND DRILLED 3.5' IN DDH 436. ALL ROCK.

14 NOV 80 DDH 436 1300 U.P. 1000 LEV.

~ GOT OUT POWDER ORDER IN A.M. DRILLED 38' TO 58'. ALL ROCK. HIT FILL AT 58'. GOT 2

KRAISSLITE AND ~~ONE~~ <sup>TWO</sup> APATITE SPECIMENS

FROM 1260 U.P. SAW A LENS OF RHODONITE IN ORE SIMILAR TO 1010 ST. SILVER AREA.

17 NOV 80 DDH 436 1300 U.P. 1000 LEV.

SURVEYORS GAVE US A PROPER CENTER LINE. RESTARTED HOLE AND DRILLED 33'. ALL ROCK. CHECKED 1260 U.P., NADA.

18 NOV 80 DDH 436

DRILLED 33' TO 73'. ORE 57' TO 73'. GOT A KRAISSLITE FROM 1260 U.P. SAW ARSENOPYRITE IN TWO PLACES IN THE 1320 STOPE AREA.

19 NOV 80 DDH 436

WORKED ON POWDER SHIPMENT UNTIL 9:20 AM. DRILLED FROM 73' TO 94.5'. ALL ORE. SAW LARGE PYROXENE XTALS AT 3 PLACES IN THE EAST VEIN F/W.

20 NOV 80 DDH 436

DELIVERED POWDER ORDERS, DRILLED FROM 94.5' TO 105'. ORE TO 100'. WHITE ROCK TO 105'. FOOTWALL BAND OF BLACK WILLEMITE AT 105'. HOLE FINISHED. MOVED GEAR TO STATION. GOT A STRANGE WILLEMITE SPECIMEN FROM 1260 U.P.

21 NOV 80 DDH 437 560 STOPE 500 LEV.

DELIVERED 50 BAGS OF ANFO TO VARIOUS LEVELS. MOVED GEAR TO 500 LEVEL. HAD TO GET PIPE AND FITTINGS TO FIX A 40' GAP IN AIR & WATER LINES. GOT SOME AZURITE - CHRYSOCOLLA IN RHODONITE FROM 1060 U.P.

24 NOV 80 DDH 437

GOT A STOPPER AND PUT IN 20 ROCK BOLTS. SCALED IN OLD MAGAZINE. FOUND TINY RHODONITE XTALS EMBEDDED IN SHEAR.

25 NOV 80 DDH 437.

PUT IN 5 ROCK BOLTS. SVECZ AND DOUMA USED TRANSITS TO SET UP THE DRILL. DRILLED 0' TO 10'. ORE TO 2'. F/W ROCK AFTER 2'. THIS HOLE HAS TO HIT THE DRIFT ON 430 LEV. TO DRAIN ANY WATER IN IT.

26 NOV 80 1540 U.P. 1500 LEV.

WATCHED HOMER SLUSH UNTIL WE FOUND  
A MISHOLE. FIRED MISS HOLE. WENT  
DOWN TO 1600 LEV. TO PULL CHUTE. GOT  
15 CARS BEFORE RAISE HUNG UP. WENT  
BACK UP TO 1500 LEV. AND RAN WATER  
INTO THE RAISE. HOMER FINISHED SLUSHING.  
MUCK WENT DOWN IN RAISE. EXTENDED  
AIR PIPE IN SUB-DRIFT. DOMINIC GAVE  
ME SOME APPARENT BRANDTITE FROM 1580 P.

1 DEC 80 DDH 437 560 ST. 500 LEV.

DRILLED 10' TO 39'. ORE 17' TO 28'  
AND 34' TO 39'. GOT A FRIEDELITE VEIN  
SPECIMEN FROM 560 STOPE AND SOME COPPER  
ALTERATIONS IN RHODONITE FROM 1060 U.P.

2 DEC 80 1540 U.P. 1500 LEV

HOMER IS DRIVING A RAISE TO 1400 LEV. THE  
RULE ABOUT NOT WORKING ALONE IS NOW  
BEING STRICTLY ENFORCED SO I'M WORKING  
WITH HIM WHILE HIS BUDDY IS OFF. I KEEP  
BUSY IN THE SUB-DRIFT WHILE HOMER  
DRILLS. TODAY I SLUSHED A LITTLE, PUT IN

4 ROCK BOLTS, DRILLED A 5' STRIP  
AND FIRED. GOT SOME APPARENT  
<sup>APATITE</sup>  
~~MANGAN PYROSMALITE~~ XTALS. THEY ARE IN  
A NARROW WEDGE OF GREEN ROCK FOLDED  
OR FAULTED INTO THE BLACK ORE FROM  
THE CONTACT (ORE-ROCK) JUST BELOW. SLIPS  
A FEW FEET AWAY SHOW A FINE GRAIN  
BROWN FILLING (LIKE FRIEDELITE).

3 DEC 80 1540 U.P. 1500 LEV

SLUSHED OUT MUCK FROM RAISE AND  
STRIP. PUT IN 5 BOLTS.

4 DEC 80 1540 U.P. 1500 LEV.

PUT IN 3 BOLTS. DRILLED AND FIRED  
A 5' STRIP ON EACH SIDE OF THE  
SUB-DRIFT. HOMER DRILLED AND FIRED IN RAISE.

5 DEC 80 1540 U.P. 1500 LEV.

SLUSHED OUT RAISE & STRIP MUCK. PUT IN  
4 BOLTS. GROUND IS BADLY CRACKED AND  
HARD TO BOLT.



8 DEC 80 1020 ST. 1300 LEV.

MUCKED WITH LHD. RILLED DOWN MUCK PILE AND PUT 7 BOLTS IN H.W. FIRED A HUGE BLOCK HOLE. GOT 2 KRAISSLITE SPECIMENS FROM EAST BRANCH. THIS IS THE FIRST KRAISSLITE I HAVE SEEN IN 1020 ST.

9 DEC 80 1020 ST. 1300 LEV.

PUT IN 25 BOLTS AND MUCKED OUT 24 CARS. FIRED STRIP ON FOOTWALL. DOUG TIPPED OVER THE MOTOR AND TWO ORE CARS AT THE ORE PASS.

10 DEC 80 1020 ST. 1300 LEV.

HELPED DOUG PUT MOTOR AND ORE CARS BACK TOGETHER. PUT IN 15 ROCK BOLTS. MUCKED OUT 15 CARS. FIRED A STRIP ON FOOTWALL. GOT A NICE KRAISSLITE.

11 DEC 80 1020 ST. 1300 LEV.

PUT IN 12 BOLTS, MUCKED 26 CARS. FIRED STRIP ON FOOTWALL. GOT SOME NICE KRAISSLITE. HAD TO JUMP START LHD WITH BATTERY FROM THE SHOP.