16 Jan 84 1300 Chute 1200 Level
Shovelled up 3 cars of cement under the chute. Had to use a cement breaker to bust it up. Got some zincite-rich ore from 1570E, stope.

17 Jan 84 Jury Duty

18 Jan 84 Cageman

19 Jan 84 1300 X-Cut 1300 Level
Shovelled up 4 cars of cement. Used a cement breaker on it. Scaled loose in 940 pillar.

20 Jan 84 1380 U.C.P. 1300 Level
Wired up a primadet round. Built a fence and cover for the manway. Fired at 3:30 P.M. Shovelled 2 cars of cement in 1300 X-Cut.
23 JAN 84  1020  STOPE  1200 LEVEL
WORKED WITH DOUG ON THE JUMBO.  
CLEANED OUT A MUD DITCH ON 1300 
LEVEL IN PREPARATION FOR HYDRAULIC 
FILLING OF THE WEST VEIN. CHECKED 
OUT 1380 U.C.P. LOTS OF THIN FILMS 
OF MCGOVERNITE. NO SPECIMENS.

24 JAN 84  JURY DUTY

25 JAN 84  1300 X-CUT  1300 LEVEL
SHOVELLED UP ONE CAR OF FILL UNDER 
THE OVERSIZE RAISE ON 430 LEVEL. BROKE 
CEMENT IN 1300 X-CUT, 1300 LEVEL AND 
SHOVELLED UP FOUR CARS. GOT A PRETTY 
PIECE OF ORE FROM 1570 E. CHUTE.

26 JAN 84  WORKED WITH NORM FARLEY.  
CHANGED OVER AND BACK. HOOKED UP 4" PIPES 
ON 1850 LEVEL. THERE IS NOW AN LHD 911 
IN #1 SOUTH. THE SEISMOGRAPH STATION IS 
ALMOST COMPLETELY DISMANTLED. GOT A MAP 
AS A SOUVENIER. DID BRATTICE WORK ON 
1500 & 1600 LEVEL. GOT SOME MICROPHARMACOLITE 
FROM 1500 LEVEL.
27 JAN 84  1300 U.C.P.  1300 LEVEL
SLUSHED UNTIL LUNCH. TRAMMED ON
1400 LEVEL AFTER LUNCH. 30 CARS. HAD
TO FIRE THE CHUTE. GOT SOME MICROSF.

30 JAN 84  1300 X-CUT  1300 LEVEL
BROKE UP AND SHOVELLED 5 CARS OF
CEMENT. JOB DONE. DUG OUT AND TOOK
TO THE STATION AN AIR SHOVEL. HAD A
FIRE DRILL AT 2:30 PM.

31 JAN 84  1220 X-CUT  1100 LEVEL
CLEANED UP AFTER THE FILL CREW. TWO
CARS OF MUD. CHECKED OUT THE NEW X-CUT
DECLINE TO 1020 STOPE. FOUND AN EXTRA-
ORDINARY VEIN OF MAGNUSSONITE, ZINCITE
AND McGOVERNITE. CLEANED UP UNDER THE
OVERSIZE RAISE ON 430 LEVEL.

* X-RAY P. DUNN
1 FEB 84  430 LEVEL
CLEANED TWO CARS OF SOUPY MUD FROM A BULKHEAD DOOR AND ONE CAR OF FILL FROM UNDER THE OVSIZE RAISE. WENT TO 1300 LEVEL AFTER LUNCH AND TRAMMED ORE FROM 1570 E. CHUTE. 20 CARS.

2 FEB 84  430 LEVEL
CLEANED UP THREE CARS OF FILL FROM THE OVSIZE RAISE. USED A ROPE, TWO PULLEYS AND THE MOTOR TO HAUL A JUMBO DRILL OUT OF 1060 U.C.P.

3 FEB 84  1180 U.C.P.  600 LEVEL
SET UP A "K" TUGGER AND STARTED REMOVELING A CARAVO FROM 1180 U.C.P. WASTED A LOT OF TIME GETTING ALL THE NECESSARY TOOLS TOGETHER.

13 FEB 84  CAGEMAN
14 FEB 84  JURY DUTY
15 FEB 84  CAGEMAN. CHECKED OUT 1015 STORE 180 LEVEL AT LUNCHTIME. NO SCORODITE.
16 Feb 84  Mine Rescue Training
Put on McCAAS and went to 1850 Level. Checked oxygen with Flame Lamp and explored in Strain Gage Area. Discussed what supplies would be needed to establish proper refuge chamber in Seismograph Station. The station has been cleaned out by Lamont.

17 Feb 84  Cage Man

21 Feb 84  Jury Duty

22 Feb 84  1300 U.C.P. 1200 Level
Trammed eight cars. Installed three special slusher block holders. Moved all of Nick Penuella's gear to the Station. Saw a large block of mixed silicates in the hanging wall of 1570 E. Stop. The ore contact curved around the block.
23 FEB 84  1020 STOPE  1200 LEVEL
DRILLED UP-HOLES WITH THE JUMBO.
700 FEET. THE EAST BRANCH WAS
JUST FIRED AND BROKE THRU- 1200 LEVEL
IN TWO PLACES. THE REST HAS TO BE
STRIPPED. GOT SOME ZN MG CO₂ FROM
THE WEST VEIN.

24 FEB 83  430 AND 1200 LEVELS
USED AN AIR SHOVEL TO CLEAN UP
TWELVE CARS OF FILL UNDER THE
OVERSIZE RAISE ON 430 LEVEL. GOT
SOME PIECES FROM THE ORE PASS AREA.
GREEN XLS IN CALCITE. WENT TO 1200
AND WORKED ON REMOVING TRACKS FROM
THE DRIFT WHERE 1020 STOPE WILL BE
BREAKING LEVEL.

27 FEB 84  1020 STOPE  1200 LEVEL
STARTED A DRIFT TO EXTEND THE NORTH
END OF THE WEST VEIN. ROY MILLER HURT
HIS ARM WHILE BOLTING AND WENT TO
THE HOSPITAL. I CAN'T WORK IN A STOPE
ALONE (FEDERAL LAW) SO I WORKED ON
Dismantling the tracks on 1200 Lev.

28 Feb 84 1020 Stope 1200 Level
Finished drilling the drift round. 60 feet. Loaded one box Atlas Powermax and fired. Put in two bolts and scaled loose in the east branch.

29 Feb 84 1020 Stope
Drilled and fired a 13' strip in the east branch. 50' and 35 pounds ANFO. Jumbo drilled west vein. 240'.

1 Mar 84 1020 Stope
Jumbo drilled 530'. Scaled loose in the east branch. The strip round broke good.

2 Mar 84 1020 Stope
Jumbo drilled 500'. Got to play with the cagesman after lunch.
5 MAR 84  1020 STOPE  1200 LEVEL
WORKED ON THE EAST BRANCH. DOUG
DRILLED UP-HOLES IN THE WEST VEIN.
PUT IN 7 BOLTS. DRILLED AND FIRED
ANOTHER STRIP. 40 FEET AND 30 POUNDS
OF ANFO. STARTED DRILLING A STRIP ON
THE FOOT WALL.

6 MAR 84  1020 STOPE
DRILLED A DRIFT ROUND IN THE NORTH
END OF THE WEST VEIN. 175 FEET. WILL
FIRE IT TOMORROW.

7 MAR 84  1020 STOPE
DRILLED A STRIP ON THE EAST BRANCH
FOOT WALL. BOLTED IN THE WEST VEIN FOOT
WALL DRIFT. 7 BOLTS. LOADED AND FIRED
THE STRIP AND THE DRIFT ROUND IN THE
WEST VEIN. 120 POUNDS ANFO.

8 MAR 84  1020 STOPE
DRILLED AND FIRED A STRIP ON THE EAST
BRANCH FOOT WALL. BOLTED IN THE DRIFT ABOVE
THE WEST VEIN. 15 BOLTS. HELPED DOUG
Load a small drift round in the north end of the west vein. He hit fill at 6 feet. Got some micro Franklinites in fluorite and gypsum.

9 Mar 84 1020 Stope 1200 Level
Bolted in the drift above the west vein. 4 bolts. Drilled one 13' hole on a strip in the west vein. Went down into the stope and drilled some strip holes around the drift that we fired yesterday. Drilled uppers with the jumbo. 200 feet. Got more Franklinite xls.

12 Mar 84 1020 Stope
Drilled uppers with jumbo. 270 feet. Bolted in west vein drift above the stope. 2 bolts. Drilled 30' on a strip. Helped Doug load the strip down in the stope. 100 pounds ANFO.
13 MAR 84  1020  STOPE  1200 LEVEL
TRAMMED ON 1300 LEVEL. 30 CARS. ADDED
TWO RINGS TO THE SOUTH CRIB. DRILLED
THE LAST 13' HOLE IN THE WEST VEIN STRIP
ON 1200 LEVEL. PUT IN 6 MORE BOLTS
IN THE WEST VEIN DRIFT ON 1200 LEVEL.

14 MAR 84  1020  STOPE
DRILLED TWO 13' HOLES IN A STRIP IN
THE EAST BRANCH ON 1200 LEVEL. TRAMMED
AND CLEANED OUT CRIB BOX ON 1300 LEVEL.
28 CARS. PUT UP 3 RINGS ON THE NORTH
CRIB. GOT ALL TOOLS HUNG UP IN PREP FOR
HYDRAULIC FILL. GOT SOME RHODONITE AND
WILLEMITE FROM 1380 U.C.P. 1300 LEVEL.

15 MAR 84  1020  STOPE
FINISHED FILL PREP. REMOVED TRACKS AND
OLD AIR PIPES FROM THE DRIFT OVER THE
STOPE. FINISHED THE EAST BRANCH STRIP AND
BOLTED IN THE EAST BRANCH DRIFT. GOT MORE
RHODONITE -WILLEMITE FROM 1380 U.C.P.
16 MAR 84 1300 X-CUT 1100 LEVEL
SLUSHED AND AIR SHOVELLED 10 CARS
OF ORE OUT OF THE X-CUT. DRILLED AND
FIRED A SEVEN FOOT ROUND. CHECKED
OUT 1020 ACCESS DRIFT. THE MAGNUS-
SONITE VEIN AWAITS, TANTALIZINGLY.

19 MAR 84 1220 U.C.P. 700 LEVEL
HELPED CLIFF GET STARTED MUCKING.
TRAMMED ON 900 LEVEL, 12 CARS. CLEANED
MUCK OFF THE FOOTWALL. IT WAS SATURATED
WITH CEMENT WHICH CAME FROM A FILL JOB
ON 600 LEVEL. HAD TO FIRE THE MUCK TO
BREAK IT LOOSE. 1220 PILLAR IS BREAK-
ING THRU 700 LEVEL. THIS WILL BE THE
LAST CONTRACT.

20 MAR 84 1020 STOPE 1200 LEVEL
LOADED SEVEN ROWS OF UP-HOLES IN THE
EAST BRANCH AND A FLAT BENCH ON THE
LEVEL. SEVEN BAGS OF ANFO. THE EAST
BRANCH IS NOW BROKEN THRU 1200 LEVEL
TO THE SOUTH RAISE BORE HOLE.
21 Mar 84 1220 U.C.P. 700 Level
Brought a motor up on the cage from 1750 level. Took a flat car load of timber back to the pillar and built a fill fence.

22 Mar 84 1220 U.C.P. 700 Level
Finished fill prep in the pillar and built dams under the chute on 900 level. Went to 1020 U.C.P. on 600 level to look over Cliff's next job. Checked out 1010 stope. Got some pieces from the mud zone in the hanging wall.

23 Mar 84 1020 U.C.P. 600 Level
Shovelled mud and cement in the drift to 1020 U.C.P. Two cars. Got a hemimorphite from the mud zone in the h/w of 1010 stope 600 level.

26 Mar 84 1350 U.C.P. 1300 Level
Moved a carload to the station and moved 4 manway pipes to the pillar. Got some kraiellite and chlorophoenicite.
27 MAR 84  DDH 469  EAST VEIN 1100 LEVEL
CORED FROM 5' TO 32'.  LOW ORE
5' TO 23', ORE W/ZINCITE FROM 23' TO 32'.  SLIKER GOT ME TWO NEW
PIPE WRENCHES.  GOT TWO PIECES FROM
A HETEARDOLITE - UNKNOWN #7 VEIN IN
1020 ACCESS DECLINE.

28 MAR 84  DDH 469
CORED FROM 32' TO 57'.  ORE W/ZINCITE
32' TO 55'.  WHITE ROCK 55' TO 57'.
THE ORE WAS VERY HARD AND CAUSED SLOW
DRILL OPERATION.  HAD TO FOLD AND ASSEMBLE
TWO OF THE NEW WAXED CARDBOARD CORE
BOXES.  A FRUSTRATING EXPERIENCE.
GOT MORE MAGNUSSONITE FROM 1020
ACCESS DECLINE.

29 MAR 84  DDH 469
DRILLED FROM 57' TO 86'.  ALL WHITE ROCK.
HOLE FINISHED.  HIT A SMALL FLOW OF
WATER AT 72'.  X +13° AZ.  N 48° E.
LEFT WORK EARLY DUE TO HEAVY SNOW.
30 MAR 84 1450 STOPE 1750 LEVEL
HAULED 13 BAGS OF ANFO UP THRU
THE CRIB. LOADED A MILISECOND
ROUND. FIRED AFTER EVERYONE ELSE WAS
OUT OF THE MINE. GOT SOME PIECES
FROM A LENS OF MIXED SULFIDES AT THE
NORTH END OF THE STOPE.

2 APR 84 DDH 470 EAST VEIN 1100 LEVEL
MOVED COLUMN AND SET UP FOR NEW HOLE.
SVECZ CAME DOWN WITH A TRANSIT AND
LINED UP THE DRILL. DRILLED PILOT HOLE,
REAMED IT, INSTALLED VALVE PIPE AND BOLTED
IT IN WITH 3' BOLTS. SET UP GROUTER.
TOOK AN AIR HOSE AND "53" TO 1020 ACCESS
DECLINE. DRILLED TWO HOLES NEAR THE
MAGNUSSONITE VEIN AND WEDGED OFF SOME
PIECES. ONE NICE PIECE SHOWS THE VEIN WITH
ORE ON BOTH SIDES (#497)

3 APR 84 JURY DUTY
4 APR 84  DDH 470  EAST VEIN  1100 lev.
GROUTED THE VALVE PIPE. GOT THE MOTOR OFF THE TRACK. HAD TO CALL FOR A TRACK JACK TO RE-RAIL IT. WEDGED MORE PIECES OFF THE MAGNUSSONITE VEIN IN 1020 ACCESS DECLINE. SOME ARE VERY NICE. WENT TO 1300 U.C.P., 1200 LEVEL AND MOVED TOOLS & PIPES OUT OF THE SCRAM DRIFT. WENT TO 1020 STOPE AND HELPED FRANCISCO LOAD A RAISE ROUND AND A STRIP. 4 BAGS OF ANFO.

5 APR 84  DDH 470
CLEANED CEMENT OUT OF VALVE PIPE AND SET UP MACHINE TO START DRILLING. GROUT DID NOT SEEM SOLID ENOUGH SO I WONT DRILL TODAY. HELPED NORM FARLEY IN 1300 X-CUT. HE IS BUILDING A TIMBER SUPPORT FOR SOME BAD GROUND. GOT THE LAST BATCH OF MAGNUSSONITE. SEE NEXT PAGE. THE PURPOSE OF DDH 470 IS TO HIT THE END OF HDH #21 AND CHECK FOR GROUT OR WATER.
The South Wall of 1040 X-Cut, 1100 Level.

The Footwall Contact of the West Vein.

Shear on which the F/M is duplicated, apparently.

Marble

Massive ore

Zincite

Magnussomite

Disseminated ore

Disseminated
6 APR 84 DDH 470 EAST VEIN 1100 LEVEL.
AZIMUTH N 74°E X 0°
CORED FROM 4' TO 26'. ALL ORE;
5.5 TO 26 W/ZINCOITE. THE DRILL
GRADUALLY SLOWED DOWN AND FINALLY
STALLED. GOT A NEW CORE BIT FROM
SVEČZ AND RESUMED GOOD PROGRESS.
BITS SEEM TO HAVE SHORT LIFE SPAN
IN THIS ORE.

10 APR 84 JURY DUTY

11 APR 84 DDH 470
CORED FROM 26' TO 46'. ORE W/ZINCOITE
26' TO 41'. WHITE ROCK 41' TO 46'.
DID NOT SEE ANY GROUT. DID NOT FIND
THE SOURCE OF THE WATER THAT WAS IN
HDH # 21. THIS ORE IS VERY SIMILAR
TO THE ORE IN 820 P. 1200 LEVEL, WHICH
CONTAINED YEATMANNITE IN TILASITE.
12 APR 84  EAST VEIN  1100 LEVEL
SET UP THE GROUT PUMP AND GROUTED
THE LAST 3 HOLES. 3 BAGS CEMENT.
Packed up the drill and tools.
MOVED TO 1200 LEVEL.

13 APR 84  1060 X-CUT  1200 LEVEL
HELPED THE CAGERMAN MOVE A MOTOR
FROM 1400 TO 1700 LEVEL. MOVED THE
DRILL TO 1060 X-CUT. WILL TRY TO
FIND THE BOTTOM OF THE EAST VEIN.
HAD TO CARRY EVERYTHING 500' DUE TO
TRACKS BEING DISMANTLED OVER 1020 ST.

16 APR 84  DDH 471  1060X-CUT  1200 LEVEL
MOVED A LARGE POWDER SHIPMENT TO THE
MAGAZINE. CHANGED OVER AND SET UP THE
HOIST. DRILLED THE PILOT HOLE FOR THE
VALVE PIPE. DRILLED A STRIP IN FRONT OF
THE DIAMOND DRILL.

17 APR 84  JURY DUTY
18 APR 84 DDH 471 1200 LEVEL
TOKK FILL PIPE DOWN AND FIRED THE STRIP.
5 STICKS ATLAS. EXPOSED AN EAST-WEST
BAND OF CALCITE WITH MUCH GALENA.
REAMED PILOT HOLE. BOLTED VALVE PIPE
IN PLACE. GOT VALVES AND GROUTER
FROM 1100 LEVEL. SET UP GROUTER AND
GROUTED VALVE PIPE.

19 APR 84 MINE RESCUE TRAINING
PUT ON MCCAMS AND WENT TO 1850 LEV.
TOOK AN ELECTRIC WELDER BACK TO
THE REFUGE CHAMBER. SEALED HOLES IN
THE AIR LOCK. SET UP A SHELF FOR THE
CHEMOX RESCUERS.

24 APR 84 DDH 471
SET UP DRILL. DRILLED GROUT OUT OF
VALVE PIPE. DRILLED TO 17'. GREEN CUTTINGS,
NEED A NEW PILOT BIT. HOLE IS AIMED A FEW
DEGREES NORTH OF DRIFT CENTER LINE IN
ORDER TO MISS A FILL RAISE. 7 + 40. Brought
HOME SOME GALENA AND 2 MICRO.
25 APR 84 DDH 471 1060 X CUT 1200 LEVEL
DRILLED 17' TO 30'. ALL GREEN ROCK AND
VERY HARD. SET UP ROD PULLER AND
REPAIRED BROKEN WATER FITTING. GOT
SOME MICRO AND A NICE RED & GREEN
FROM 1570 E. STOPE. WENT UP TO 1100
LEVEL AT 2:30 AND FIRED A RAISE
ROUND IN 1300 PILLAR.

26 APR 84 DDH 471
DRILLED FROM 30' TO 60'. GREEN ROCK
EXCEPT 43' TO 45' WHITE ROCK. GOT A
WOLLASTONITE FROM 1060 X CUT NEAR THE
1020 STOPE HANGING WALL. CHECKED OUT
THE OLD BROWN WILLEMITE ZONE STOPE IN
THE F/W OF 1570E. BLASTING IN 1570E
IS CAUSING SEVERE DETERIORATION IN
GROUND CONDITIONS.

27 APR 84 DDH 471
CORED FROM 60' TO 80'. ALL PYROXENE ZONE.
PPOOR GROUND FOR CORING. FREQUENT BIT PLUGS.
30 APR 84  DDH 471  1060 X CUT  1200 LEVEL
CORED FROM 80' TO 105'.  80' TO 95'
MOSTLY WHITE ROCK WITH FREQUENT SHEARS.
95' TO 105' HIGH GRADE ORE WITH MUCH
ZINCITE. BROUGHT HOME A WOLLASTONITE
FROM 1060 X CT NEAR 1020 STOPE. FIRED
J. GODBEY'S RAISE ROUND IN 1300 TSP ON
1100 LEVEL. ACCORDING TO THE PROJECTED
CONTACTS ON THE RESERVE SECTION MAPS
I SHOULD HAVE HIT ORE AT 60'.

1 MAY 84  JURY DUTY

2 MAY 84  DDH 471
CORED FROM 105' TO 125'.  105 TO 111
ORE W/ZINCITE; 111 TO 115 ORE; 115 TO 125
MARBLE. REPAIRED BROKEN FITTING ON
WATER SWIVEL.

3 MAY 84  DDH 471
DRILLED 125' TO 136'. HIT WATER AT 128'.
SEVEN GAL/ MIN. GOT SOME JOHNBAUMITE AND
A FRANKLINITE XL FROM 1570 E. STOPE. RESET
DRILL TO 27.5° FOR NEXT HOLE.
4 MAY 84  DDH 472  1100 LEVEL
DRILLED PILOT HOLE FOR VALVE PIPE.
REAMED IT TO 2 1/2 IN DIAMETER. BOLTED
VALVE PIPE IN AND GROUTED IT. GOT A
FRANKLINITE FROM 1570E.

7 MAY 84  DDH 472
SET UP THE DRILL AND DRILLED
GROUT OUT OF VALVE PIPE. DRILLED TO
23'. GREEN ROCK AND VERY HARD. BULL
BIT WOULD NOT CUT IT. HAD TO USE
CORE BIT. HAD THE FIRST HOUR OF
YEARLY MINE SAFETY REFRESHER
TRAINING IN THE ADIT AT 7 AM.

8 MAY 84  JURY DUTY

9 MAY 84  1100 LEVEL
HELPED RAISE MAN SET UP TO DRILL A ROUND
IN 1300 H/W RAISE. REPAIRED DOUBLE LUNG-
PUMP IN 1020 ACCESS DECLINE. SHOVELLED UP
A CAR OF MUD IN 1220 X-CUT. WENT TO 600
LEVEL AND HELPED GODBEY SET UP TO DRILL
IN 1010 RAISE. FIRED THE ROUND ON 1100 LEVEL.