29 Nov 90  700 - 800
Drilled two strip holes at the stilbite area of 740 x-cut (700).
Scaled down some wollastonite and carried a bag of it down 740 raise.
Tried the air lifter and it did not work. Went down to the water
(76 rungs down 800), cut the fill line and put an injector in it. Removed
air and water pipes in 1040 x-cut in preparation for blasting realgar.

1 Dec 90  700 - 800
Dismantled two inch pipe line north of 1230 pillar. Moved pipe
and connectors up to 600 level. Installed more ladders in 740
raise and added six feet to the water line.
4 DEC 90  180 - 340 - 700 - 800
Due to a heavy overnight rain I stopped on 180 and 340 to see what routes the storm water was taking. On 800 I removed air and water pipes from the East Branch F/W drift. Transferred them to 600. The blaster came in at 4:30 and we shot strip holes on 700 & 800.

5 DEC 90  700 - 800
6 DEC 90  ADIT
WENT IN AT 12:30 TO MEET THE
BLASTER. WE LOADED AND FIRED THE
DEMONSTRATION ROUND IN THE RAINBOW
TUNNEL. WE WILL BE DRIVING EAST TO
HIT THE CENTRAL ZINCITE ZONE. MUCKED
OUT WITH THE LHD.

7 DEC 90  ADIT
FINISHED MUCKING OUT DRIFT ROUND.
SET UP THE "53" AND DRILLED MOST OF A
DRIFT ROUND. DRILLED TWO CENTER HOLES
WITH THE LONG HOLE DRILL.

8 DEC 90  ADIT - 700 - 800
FINISHED THE DRIFT ROUND, WENT UP 740
RAISE AND CHECKED OUT THE LAST HOLE I
FIRED IN THE BARITE. GOT A FEW PIECES.
WENT TO 1250 STOPE WITH RON TIBBETTS.
WE GOT THE LHD RUNNING. DRAGGED A
BOULDER OF NICE ORE TO THE RAISE AND BEGAN
DISMANTLING THE LHD.
9 DEC 90  700 - 800
MUCKED OUT 1040 X-CUT. SENT UP
SOME LARGE PIECES AND THREE PAILS
OF REALGAR/ZINKENITE. MUCKED OUT
1220 X-CUT AND THE OLD SHAFT X-CUT.
WATER IS 58 RUNGS BELOW 800 LEVEL.
STEVE MISIK AND HELPERS WORKED ON
WOLLASTONITE IN 740 X-CUT (700). WE
SENT ABOUT 20 BAGS DOWN 740 RAISE.

10 DEC 90  ADIT- 500 - 700 - 800
LOADED AND FIRED A DRIFT ROUND. BROKE
GOOD. STEVE MUCKED OUT. I WENT
UNDERGROUND WITH FRED AND SHOT STRIP
HOLES IN 1020 X-CUT 500 LEV, 1250 STORE
700 LEV, BARITE 700 LEV, AND 1220 X-CUT
800 LEVEL.

11 DEC 90  ADIT
DRILLED MOST OF A NINE FOOT DRIFT
ROUND. DRILLED TWO 4" CENTER HOLES WITH
THE LONG HOLE MACHINE.
12 DEC 90  ADIT - 500 - 600 - 700 - 800

Finished the drift round and got ready for blasting. Went underground to check out strip rounds. 1020 x-cut (500) broke OK. 1020 chute (600) OK. 1250 stope (700) broke good. 1220 x-cut (800) produced some norbergite. Barite on 700 broke good and produced four buckets of prime stuff and a nice 20" x 15" slab. The barite vein is about 24" long and one inch thick. It breaks down the middle; producing flat slabs with good coverage. Scaled some nice pieces off the face, including a keeper for me.
13 Dec 90  ADIT - 700

Loaded and fired a nine foot drift round. Broke perfect. Went to the barite location on 700 and fired a strip hole. We timed it to go off at the same time as the drift. Bob and I went back after lunch and gathered two pails of barite. Steve mucked out the drift round. Set up a drill for tomorrow.

14 Dec 90  ADIT

Drilled another nine foot drift round. Cut two four inch center holes with the long-hole drill. Steve Misur is now doing some of the drilling. Had the pleasure of a visit by John Paua.
15 DEC 90  740 X-CUT (700)
WATER IS 48 RUNGS BELOW 800
LEVEL. USED THE "53" ON 700 TO
DRILL SOME SHORT HOLES AROUND A STIL-
BITE POCKET. USED THE "53" TO KNOCK
DOWN SOME LOOSE IN THE WOLLASTONITE
AREA. GOT TWO PAILS FULL AND THREE
BIG PIECES. TWO OF THEM ARE VERY NICE
YELLOW AND ORANGE. MOVED THE "53" TO
THE BAKITE AREA. DRILLED SOME SHORT
HOLES AND WEDGED OUT SOME NICE STUFF.
GOT A PAIL FULL AND ONE LARGE SLAB.
IT TOOK FOUR OF US TO CARRY THE SLAB
TO THE TOP OF 740 RAISE. IT IS 2' X 3'
AND VERY NICE. PICKED UP SIX PIECES
OF PIPE ON 600 LEVEL AND TOOK THEM TO
THE RAINBOW TUNNEL.
17 DEC 90  ADIT - 700
ADDED SIXTY FEET OF AIR & WATER PIPE TO THE LINES IN THE RAINBOW TUNNEL. LOADED AND FIRED A NINE FOOT ROUND. BROKE GOOD. FIRED FOUR HOLES IN 740 X-CUT (706) AT THE STILBITE OCCURANCE. NO GOOD. DRILLED A STRIP HOLE IN THE NORTH BAKRITE LENS. WE ADVANCED 25' LAST WEEK IN THE NEW TUNNEL. GOT $300 FOR DRIFT WORK. STEVE MUCKED OUT AND I SET UP THE "53" TO DRILL THE NEXT ROUND.

18 DEC 90  ADIT
DRILLED A NINE FOOT DRIFT ROUND. EVERY HOLE HIT A THICK BAND OF GRAPHITE. TURNED THE DRIFT SLIGHTLY NORTH, AS PER BOB VELOCO'S INSTRUCTIONS.
19 DEC 90  ADIT - 700 - 800
LOADED THE DRIFT ROUND. FRED WIRED IT AND FIRED IT. AT THE SAME TIME I WENT TO 700 AND FIRED A STRIP HOLE IN THE BARITE. AFTER LUNCH WE WENT TO 800 AND FIRED THREE STRIP HOLES IN 1040 X-CUT AT THE EAST VEIN FOOTWALL DRIFT. THE BARITE STRIP PRODUCED FOUR PAILS OF CHOICE SPECIMENS. 800 PRODUCED SOME UNUSUAL ORE BUT NO KEEPERS. STEVE MUCKED OUT THE DRIFT ROUND, THEN I SET UP THE DRILL FOR TOMORROW.

20 DEC 90  ADIT
DRILLED A NINE FOOT DRIFT ROUND IN THE NEW RAINBOW TUNNEL.
21 DEC 90 - ADIT -700

Loaded and fixed a drift round, broke perfect. We are in 51', that is 26' this week. On 700 we pulled the Eimco out of 1250 stope. Bob Hauck had broken it down and both halves came up easily. The fill in 1240 stope has subsided in the past month.

Today we discovered that 1220 pillar is collapsing into 1240 stope, leaving the tracks in 1220 x-cut hanging in mid air. This will complicate getting the Eimco out to the shaft. Steve mucked out the drift round and I set up the drill for the next round. We have red fluorescent calcite in the end of the drift.

22 DEC 90 - ADIT

Drilled another nine foot round in the east tunnel. Got $260 for drift work.
24 DEC 90 ADIT - 700
Loaded and fired a drift round. Broke perfect. Went to 700 level to examine 1220 pillar. Looks the same (bad). Steve mucked out the drift. Set up the "53" and drilled a thirteen foot test hole. No ore.

26 DEC 90 ADIT
Drilled another nine foot drift round in the east tunnel.

27 DEC 90 ADIT - 700-800
Fired a drift round in the new east tunnel. Went to 800 level and brought drill, hoses, etc. out to the station. Moved drill, hoses, etc. in 740 x-cut (700) to the top of 740 raise. Carried most of the hoses down the raise. Steve mucked out the drift round. Drilled a test hole - ore at six feet.
28 DEC 90  ADIT
DRILLED ANOTHER NINE FOOT ROUND
IN THE NEW EAST TUNNEL. THE
FACE IS NOW 68' FROM THE STARTING
POINT. GOT $170 FOR DRIFT WORK.

31 DEC 90  ADIT
LOADED AND FIRED A DRIFT ROUND.
EIGHT HOLES DID NOT BREAK. STEVE
MUCKED OUT. I BLEW OUT THE HOLES.
WE RE-LOADED AND FIRED AGAIN. END
RESULT WAS ABOUT AN EIGHT FOOT
BREAK. POSSIBLES CAUSES: MUD SEAM
AT EIGHT FEET OR NOT LOADING-
CLOSE ENOUGH TO THE COLLAR OF
THE HOLES. ROCK TYPE IS NOW BANDS
OF LEAN ORE IN FLUORESCENT CALCITE.
2 JAN 91  700 - 800
CARRIED THE DRILL 40' DOWN 740 RAISE AND DRILLED TWO STRIP HOLES IN A MCGOVERNITE ZONE. FINISHED CLEAN UP IN 740 X-CUT (700) AND GOT EVERYTHING DOWN TO 800 LEVEL. MOVED IT OUT TO THE SHAFT AND UP TO 700 STATION. THE WATER WAS 15 RUNGS BELOW 800 STATION AT LUNCH TIME.

3 JAN 91  700 - 800
USED THE EIMCO TO CARRY TWO MORE LOADS OF GEAR OUT TO THE STATION. PUT THE EIMCO CARRIER ON THE END OF THE ROPE AND MOVED THE EIMCO TO 700 LEVEL. MUCKED FILL OUT OF 1010 F/W DRIFT, FILLED IN THE BULKHEAD DOOR AND MOVED TWO ROCKER DUMP CARS TO THE STATION. MOVED TWO LOADS OF SMALL STUFF FROM 800 TO 700.
4 JAN 91  600-700-800
WATER IS ELEVENRUNGS BELOW 800
STATION. SHOWED STEVE SANFORD AROUND
700 AND 800 LEVELS. MOVED STATION
BRIDGE FROM 800 TO 600. RECOVERED AIR
AND WATER PIPES ON 800. SENT TWO
ROCKER DUMP CARS FROM 700 TO SURFACE.

5 JAN 91  700 LEVEL
REPAIRED TIMBER WORK IN 1120 X-CUT.
MAUGGED OUT SOME OF THE FILL THAT
IS BLOCKING THE DRIFT. BUILT DAMS
TO ROUTE THE WATER TO THE ORE PASS.

7 JAN 91  700-800
REMOVED LADDERS FROM 740 RAISE AND
SHOT THE STRIP HOLES DRILLED ON 2 JAN.
GOT SOME NICE MCGOVERNITE. SHOT TWO
HOLES ON 800 LEVEL AND GOT MORE
MCGOVERNITE. REMOVED WATER PIPES FROM
WEST VEIN F/W DRIFT. MOVED PART OF AIR
LIFTER FROM 800 TO 700 LEVEL.
8 JAN 91  700 - 800
EXTRACTED POWDER FROM A MISFIRE IN 740 X-CUT (800). MUCKED FILL OUT OF 1120 X-CUT. BOB CUT UP PIECES OF 3" PIPE AND WE USED IT TO REPLACE ROTTEN TIMBER IN THE SECOND STEEL SETS. SCALDED THE HANGING WALL IN THE SOUTH END OF 1250 STOPE. WAS LOOKING AT SULFIDE VEINS.

9 JAN 91  700 LEVEL
CONTINUED MUCKING FILL OUT OF 1120 X-CUT AND FINISHED REPAIRS ON STALLS UNDER 1120 STOPE. DUMPED MOST OF THE FILL INTO 1240 STOPE.
10 JAN 91 700 - 800

Showed Dick Bestwick and Earl Verbeck the mineral wonders which can be seen by climbing 740 raise to 700 level. Took a last walk around 800 level. The water was at the exact level of the old shaft station at 9:30 AM. Finished mucking out fill in 1120 X-cut (700). Bob did more work on the stalls there. Washed drift walls in 1120 X-cut, 1010 stope, and 1220 X-cut near the east vein. Scaled loose in 1250 stope. Got some vein sphalerite.

12 JAN 91 700 level

Washed drift walls in east vein area. Water is one foot deep on 800 shaft station.
13 Jan 91  700-600
Washed drift walls in East Vein area and 1120 X-Cut. On 600 Level, checked out part of the Franklinite zone looking for Barite. Found only a few specks. Walked down and back up.

14 Jan 91  ADIT
Drilled a nine foot round in the new East tunnel.

15 Jan 91  700 Level
Drilled strip holes in 1120 X-Cut and 1010 Stop. Washed drift walls in 1120 X-Cut. Installed a trolley cable in 1220 X-Cut.
16 JAN 91  700 - 800
DRILLED FOUR PIN HOLES IN 1220 X-CUT TO IMPROVE THE TROLLEY CABLE.
DRILLED SIX STRIP HOLES IN THE EAST VEIN AREA. DRILLED SEVEN STRIP HOLES IN 1250 STOPE. WENT DOWN 1250 NORTH MANWAY AND SAW ABOUT A FOOT OF WATER UNDER 1250 CHUTE.

17 JAN 91  700 LEVEL
DRILLED SEVEN STRIP HOLES IN THE EAST VEIN AND BROWN WILLEMITE AREA.
DRILLED OUT THE DAM IN 935 F/W DRIFT AT 1040 X-CUT. WASHED WALLS IN 1120 X-CUT.

20 JAN 91  700 LEVEL
WASHED DRIFT WALLS IN 1120 X-CUT AND THE EAST VEIN F/W DRIFT BETWEEN 1220 X-CUT AND 1040 X-CUT. ALSO IN THE BROWN WILLEMITE ZONE.
21 JAN 91  700 LEVEL
WASHED DRIFT WALLS IN SHAFT STATION AND SAFETY EXIT AREA. DRILLED SIX STRIP HOLES IN EAST VEIN F/W DRIFT AT 1040 X-CUT. DARRYL AND BRUCE RAN THE PUMP ON 500 LEVEL FOR TWO HOURS.

22 JAN 91  700 LEVEL
WASHED DRIFT WALLS IN THE SAFETY EXIT. SCALED LOOSE IN 1250 STORE AND REMOVED TWO ROCK BOLTS FROM THE HANGING WALL. SHOOTING THESE HOLES MIGHT LOosen UP SOME OF THE SULFIDE VEIN MATERIAL.

23 JAN 91  700 LEVEL
WASHED DRIFT WALLS IN 1220 X-CUT AREA.
24 JAN 91 500 LEVEL
USED BLOW PIPE TO CLEAN UP STRIP MUCK IN 1020 X-CUT. DRILLED SIX STRIP HOLES. HELPED BOB HANG PIPES FOR AIR LIFTER.

26 JAN 91 500 AND 700 LEVELS
HOOKED UP AIR SUPPLY ON 700 FOR AIR LIFTER. TESTED - INCONCLUSIVE.
SET UP DRILL IN 1120 X-CUT AND DRILLED SIX STRIP HOLES IN GNEISS ZONE. WENT TO 500 LEVEL AND CHECKED 700 X-CUT AND FRANKLINITE ZONE WITH BLACKLIGHT. FOUND MINOR WOLLASTONITE ZONE IN 700 X-CUT.

28 JAN 91 ADIT
SCALED LOOSE AND BOLTED IN THE RAINBOW TUNNEL AND NEW EAST TUNNEL. 25 BOLTS. BOB RAN THE 500 LEVEL PUMP FOR THREE HOURS.
30 JAN 91  180 LEVEL
EXPLORED NORTH AND SOUTH OF
THE OLD SHAFT IN THE EAST VEIN.
CLIMBED UP THE PIERCE SHAFT TO
THE CONCRETE RETAINING WALL AND
FOLLOWED IT TO ITS NORTH END.
PAST THAT FILL LIES RIGHT ON A
FLOOR PILLAR. TOOK AN ALUMINUM
LADDER UP TO THE LOG CABIN
SHAFT AREA. FOUND SOME OLD DRILL
HOLES, CLEANED THEM OUT AND
PUT IN STEEL PINS. NEEDS MORE
WORK.

31 JAN 91  180 LEVEL
CLIMBED TO THE TOP OF THE PILLAR SOUTH
OF THE LOG CABIN SHAFT. EXPLORED TO
THE NORTH FROM THERE. THIS MUST BE THE
TOP OF THE OLD PASSAIC MINE. THE BACK
SEEMS TO BE ABOUT TWENTY FEET BELOW THE
SURFACE. THE FILL JUST NORTH OF THE LC
SHAFT IS ABOUT 30’ BELOW THE BACK. IT
Slopes uphill towards the north and reaches the back at the foot of a raise. The raise is filled with old mill demolition material. About 30' south of the raise is a drift in the hanging wall. We had to get a ladder to get into it. It goes about 40' east and ends in a pile of marble rubble. The drill holes are short and triangle shaped. Pacing off this area on the surface seems to put the raise near the old shaft headframe.

2 Feb 91  180 Level

Made up a 50' string and dropped it thru a hole in the Log Cabin Shaft cap. It indicates a thickness of 25' to 30' of ore to the surface. Used a steel tape to measure the size of the stopes. The hanging wall drift is 180' north of the shaft and the raise is 53' north of that. Used the tape to
LAY IT OUT ON THE SURFACE.

PLAN OF SURFACE

- ROCK WALL
- MILL RUINS
- OLD SHAFT
- SLAB

PATH

LOG CABIN SHAFT

ORE

OPEN STOREY

PILLARS NORTH AND SOUTH OF SHAFT

FILL

DRIFT

30°

SLAB

FILLED RAISE

A

B

C

EAST NE

NORTH
5 FEB 91  180 - 430

Installed a safety chain in the Log Cabin Shaft above 180 level. Carried a "53" from 935 stope down to 430 level. Set up in the east vein north of the safety exit. The drill did not work. Got one from the adit. It did not work. I showed John under around the level while Bob got another drill from 700 level. Drilled four strip holes in a Franklinite location. Helped Bob get a whistle mount from the timber slide on 340 level.

6 FEB 91  /80 level

Took a pick and shovel up to the Log Cabin shaft area. Dug a trench past the filled raise at the north end of the old stope. I thought there might be more open space north of there but it is filled tight to the back.
7 FEB 91  180 LEVEL

DRILLED A PIN HOLE IN THE LOG CABIN SHAFT FOR THE PURPOSE OF HANGING LADDERS. I HELD THE STEEL WHILE JOHN OENDER AND BOB HAUCK TOOK TURNS SWINGING A SMALL SLEDGE. HUNG SEVEN LADDERS WITH LADDER HOOKS AND CHAINS. THIS WILL GIVE SAFER AND EASIER ACCESS TO THE AREA. WENT NORTH TO THE PIERCE SHAFT AND CHECKED OUT CONDITIONS ON 240 LEVEL.

11 FEB 91  180 LEVEL

WORKED ON DIGGING OUT A RAISE THAT COMES UP TO 180 LEVEL ABOUT 100' SOUTH OF THE OLD SHAFT. IT IS FILLED WITH CHUNKS OF ORE AND FINE STUFF. THE FILL SEEMS TO BE CEMENTED. TOUGH DIGGING. THE HOPE IS THAT THE RAISE LEADS TO A LEVEL JUST BELOW 180 THAT IS CONNECTED TO THE MARSHALL SHAFT. AIR FLOWS UP THE RAISE.
13 Feb 91
180 Level

Did more digging in the raise and got down into the sub-level below 180. Found it to be filled with shot rock right up to the back. A lot of the shot rock is ore. Dug a trench thru the fill going south. At about 50' broke thru into a large, open space. The south wall is a wide fill fence braced by fancy timberwork composed of large tree trunks. Some old drill steels and tools were found.

13 Feb 91
180 - 700

Checked keel area on 180 with blacklite. Found an insignificant barite occurrence and a million rats. Explored an old subdrift above 820X-cut and found some old tools. Went back into the sub-level below 180. Bob found an old powder box which said "Giant Powder" on the end. We also found fragments of wood discs which had
"Passaic Zinc Co" stamped into them.
Possibly Powder Keg lids. After lunch we went to 700 and used a come-along to tighten up the trolley cable over 1220 pillar. Went back up to 180 and showed Fred Kirk and John Onder the gravity tram, Old Shaft, Pierce Shaft and 240 Level.

14 Feb 91  180 - 340
820 x-cut on 180 level goes thru the mud zone. Part of it is supported by steel sets. One of the sets collapsed about 1972. A large rock came down thru the set. Today I dug a hole thru clay material under the rock. Looking thru the hole three good sets can be seen. Then there is another collapsed set. Will do more digging someday. Checked out the East Vein Drift.
On 340 South of the Marshall shaft with a Blacklite. Found two areas of Barite. Not real good stuff but Blasting might reveal something better. Climbed up the Marshall shaft above 340. At about 250' the shaft narrows and is blocked by a huge boulder. About 40' north is a raise. Most of the water coming down the shaft to 340 comes out of that raise.

15 FEB 91 ADIT - 700
the blaster finally got his insurance certificate. Loaded and fired a drift round in the new east tunnel. Broke good. Fired strip holes in both ends of 1250 stope on 700 level. Last paid at 68'.
16 FEB 91
700 LEVEL
MET THE BLASTER AT 3 PM.
WE FIRED STRIP HOLES IN
1010 STOPE, 1120 X-CUT, AND THE
EAST VEIN DRIFT.

17 FEB 91
ADIT
DRILLED A NINE FOOT ROUND IN
THE NEW EAST TUNNEL. THE FACE
IS NOW 84' FROM THE STARTING POINT.
GOT $160 FOR DRIFT WORK.

18 FEB 91
ADIT-430-500
FIRED THE DRIFT ROUND. BROKE
GOOD. REFIRED ONE HOLE. FIRED
STRIP HOLES ON 430 AND 500 LEVELS.
STEVE MUCKED OUT THE DRIFT. RON
TIBBETTS REPAIRED A BROKEN
HYDRAULIC HOSE ON THE EIMCO. SET
UP THE "53" TO DRILL THE NEXT DRIFT
ROUND. BOB SENT UP RHODONITE FROM
700 LEVEL.
19 Feb 91  Adit  
Drilled another nine foot round in the new east tunnel. An old miner came by and described how he built the concrete retaining wall above 180 level. This was about 1945. He said the wall is above three feet thick. They put a sand cushion on top of it. When the east vein h/w was stripped in the lower yard the muck was dumped in the hole. His name is Mike Smith from Ogdensburg.

20 Feb 91  Adit - 700  
Fired a drift round. Broke good. Steve mucked out. Fired strip holes on 700 level in 1120 x-cut and the east vein. Set up the drill in the new east tunnel and drilled five holes on the next round.