19 JUN 90 RAINBOW TUNNEL

AL AND I DRILLED A NINE FOOT ROUND.

AL IS TAKING HIS LONGHOLE DRILL HOME

SO I SET UP BOB HAUCK'S DRILL. IT

DRILLS GOOD BUT HAS NO STEEL HOLDER.

THAT MAKES COLLARING DIPPICULT.

DRILLED SOME SHORT TEST HOLES TOWARD

THE SOUTH. I WAS CHECKING FOR THE

PRESENCE OF A STOPE. DID NOT FIND ONE.

20 JUN 90 RAINBOW TUNNEL

LOADED AND FIRED, BROKEGOOD. AL

MUCKED OUT AND WE SET UP TWO

DRILLS.

AL AND I DRILLED A NINE FOOT ROUND IN THE CROSS CUT. HIT BLACK ORE AT THE END OF THE HOLES. FRED KIRK ADAPTED A STEEL HOLDER FROM AN OLD DRILL SO IT WOULD FIT ON THE LONG HOLE DRILL. PUT IN A SIX FOOT

ROCK BOLT OUTSIDE THE PORTAL SO FRED COULD ANCHOR A SQUARE SET TO THE WALL.

LONDED AND FIRED. LOOKED GOOD

BUT MUCKING REVEALED THAT THE

BOTTOM SEVEN HOLES BOOTED ABOUT

FIVE FEET. AL DRILLED A RELIEVER

AND WE RESHOT. BROKE GOOD, I

WENT TO TOO AND FIRED THREE STRIP

HOLES IN 1250 STOPE, SET UP A "53"

IN THE RAINBOW CROSS CUT AND

DRILLED FOUR TEST HOLES. WAS LOOKING FOR A STOPE, DID NOT FIND ONE.

THE CROSS CUT IS NOW INTO THE H/W

DF THE WEST VEIN WITH A GOOD

EXPOSURE OF BLACK ORE.

1020 KAISE TO THE DLD MACHZINE

# FEFFFFFFFFFFF

24 JUN 90 RAINBOW TUNNEL

DRILLED A NINE FOOT DRIFT ROUND.

THE FACE IS NOW 53' FROM EAST

RIB. THAT'S 25' A DVANCE THIS WEEK.

GOT \$300 FOR DRIFT WORK.

AL LOADED AND FIRED. BROKE GOOD.

AL MUCKED OUT AND WE SET UP TWO

DRILLS. I DRILLED TWO TEST HOLES.

DRILLED NINE FEET WEST AND FOUND

NO ORE. DRILLED SOUTH AND FOUND

NO STOPE.

26 JUN 90 RAINBOW TUNNEL

AL AND I DRILLED A 42 HOLE STRIP

ROUND IN THE SOUTH RIB OF THE

CROSS CUT.

EEE 111111111

27 JUN 90 1000 LEVEL

SET UP A "53" IN THE WEST VEIN
FOOTWALL DRIFT AND DRILLED TWO
STRIP HOLES IN THE FLUOBORITE AREA.
DRILLED ONE SHORT HOLE AND USED A
WEDGE PIN TO KNOCK OFF A NICE
SLAB. BROUGHT OUT A PAIL OF GOOD
STUFF. SAW THAT THE FILL IN
1020 STOPE BELOW THE LEVEL IS
SUBSIDING. THE HYDRAULIC FILL
ABOVE THE LEVEL IS HANGING OVER
THE HOLES. THE WATER IS ABOUT 30'
BELOW THE LEVEL. TRIED THE AIR
LIFTER. IT NOW BLOWS WATER UP
TO 700 LEVEL.

ALSO DRIELED BUDGE HOLES.

LOADED AND FIRED THE STRIP
ROUND IN THE CROSS CUT. DRILLED
EIGHT MORE HOLES TO WIDEN THE
AREA AND EXPOSE THE BROWN ORE
BETTER. FIRED AGAIN. IT BROKE
GOOD. ZINCITE SHOWED UP IN
THE BROWN ORE.

DRILLED A SIX HOLE STRIP IN

ONE CORNER OF THE CROSS CUT.

DRILLED TEST HOLES TO LOCATE ORE

AND AVOID STOPES. USED THE DRILL

TO KNOCK DOWN A LOT OF LOOSE.

BLASTER CAME IN AT 3:30 P.M.

30 JUN 90 RAINBOW TUNNEL

SCALED AND BOLTED IN THE NEW

RAINBOW ROOM. 16 BOLTS. WEST

END OF ROOM IS 62' FROM EAST RIB

OF TUNNEL. GOT \$300 FOR DRIFT WORK.

EEEE111111111

LOADED AND FIRED. BROKE GOOD.

WE NOW HAVE A VERY NICE

EXPOSURE OF WEST VEIN ORE.

AFTER BOB MUCKED OUT I

SCALED AND BOLTED. 15 BOLTS.

WE SPREAD FILL MATERIAL ON

THE FLOOR TO LEVEL IT.

5 JUL 90 RAINBOU TUNNEL

DRILLED TWO 3/2" CENTER HOLES IN

A DEMONSTRATION DRIFT ROUND,

SCALED AND BOLTED IN AN AREA

WHERE MANY SLIPS CUT THE TUNNEL.

NINE BOLTS. CLEANED UP AN EIMCO

BUCKET OF MUCK THAT WAS SCALED

DOUIN.

#### Ekklidddddddddd

6 JUL 90 RAINBON TUNNEL
WITH THE ASSISTANCE OF CHET L.
I PUT IN 16 BOLTS OVER THE
NEW PORTAL. DRILLED EIGHT BURN
HOLES IN THE DEMONSTRATION
ROUND. WENT TO 700 TO LOOK FOR
FRANKLINITE AND SMYTHEITE(?).

RODE TO 1000 WITH THE LEVEL

CLEAN-OUT CREW. UNLOADED THE

EIMCO BUCKET AND CHANGED OVER

TO THE EIMCO CARRIER. UNLOADED

THE EIMCO - INSTALLED THE

BUCKET - STARTED MUCKING.

IMMEDIATELY HAD A FLAT TIRE.

WAITED FOR BOB TO SEND A

TIRE DOWN. FINISHED MUCKING.

WENT TO 970 STOPE. LOADED

MINING GEAR IN ONE CAR AND

FILLED TWO CARS WITH ORE. PUSHED

THEM TO THE STATION. SENT UP

### \$

MINING GEAR, 1.5 ORE CARS

AND 1.5 CARS OF ORE. I

WENT TO THE EAST VEIN

AND PULLED OUT TWO CAMEL

BACK CARS.

SENT UP ABOUT TWO TONS OF ORE
FROM 970 STOPE. SENT UP 5.5

ORE CARS INCLUDING A NICE OLD

END DUMP THAT WE DUG OUT

FROM A PILE OF FILL WAY UP

NORTH IN THE EAST VEIN. SENT

UP THE BATTERY CHARGER.

SET UP A DRILL IN THE MOTOR

SHANTY AND DRILLED TWO STRIP HOLES.

MOVED ALL DRILLING GEAR UP TO 900 LEVEL.

DISMANTLED AIR AND WATER PIPES AND

TOOK THE PIECES TO 900 LEVEL. BROUGHT

ROLLER CONVEYOR FROM MAGAZINE TO THE ADIT.

AND USED THEM TO MAKE A SMOOTH YOURD

FINISHED THE DEMONSTRATION DRIFT ROUND. THEN I DRAGGED THE DRILL UP THE DRIFT, USING IT TO KNOCK DOWN LOOSE ROCK. INSTALLED SEVEN BOLTS ARBUND THE BIGFAULT ZONE.

MADE CONNECTIONS AND ADDED WATER PIPES TO GET DRILL WATER TO THE 800 N. TO 900 N. AREA IN THE WEST VEIN FOOTWALL DRIFT, DRILLED A STRIP IN THE PHLOGOPITE - UVITE OCCURRANCE AT 900 N. STARTED A STRIP IN THE WEST VEIN PILLAR AT 800 N. RAN OUT OF DRILL WATER. CAME UP TO THE ADIT AND HOOKED CITY WATER UP TO THE SHAFT WATER PIPE, WENT DOWN INTO 1260 PILLAR AND SAW THE THE FILL IN 1280 STOPE HAS DROPPED BELOW THE HOLE IN THE NORTH RIB.

FINISHED THE STRIP IN THE PILLAR AT SON. MOVED GEAR OUT OF THAT AREA. MADE CONNECTIONS AND ADDED PIPES TO GET AIR AND WATER BACK TO 780 PILLAR IN THE KEEL.

DRILLED FOUR STRIP HOLES.

WALKED DOWN TO 900. DRILLED TWO
STRIR HOLES IN 800 X-CUT. WENT TO
1000 LEVEL AND HELPED LOAD THE
EIMCO ON THE CARRIER. SENT IT UP
TO 900 LEVEL. THE BLASTER CAME
DOWN AND WE FIRED TWO STRIPS ON
1000 LEVEL (FLUOBORITE AREA AND
MOTOR SHANTY BRECCIA) AND THREE
STRIPS ON 900 LEVEL (ACTINOLITE
XLS IN 800 X CUT, WILLEMITE VEIN IN
780 PILLAR AND RED ORE IN 820 WEST

WALKED DOWN TO GOO. WASHED WALLS
IN 800 X-CUT. TOOK HOSES TO 820 W.
PILLAR
STOPE AND WASHED MUCK PILE. VERY
NICE ZINCHTE BAND. WENT TO 1000
AND CARRIED A CART FULL OF FLUOBORITE OUT TO THE STATION. A
WORK CREW CAME DOWN AFTER LUNCH
AND WE DID A FINAL CLEAN-OUT OF
THE LEVEL. WATER IS FIVE FEET
BELOW THE LEVEL. MOVED AIR LIFTER
SET-UP TO GOO LEVEL.

SET UP AIR SUPPLY FOR AIR LIFTER
ON 900 STATION. HAD TO SCROUNCE
A 4' SECTION OF AIR PIPE. WENT
TO 800 X- CUT, DRILLED HOLES AND
USED WEDGE PINS TO DETATCH A NICE
SLAB FROM THE ACTINOLITE OCCURRANCE.

18 JUL 90 900 LEVEL

DRILLED SHORT HOLES AND WEDGED

PIECES OFF IN 800 X-CUT. DRILLED

TWO NINE FOOT STRIP HOLES IN

780 PILLAR. CAME UP AT NOON.

MYCK FROM THE NEXT STRIP HOLE

DRILLED FOUR NINE FOOT STRIP
HOLES IN 800 X-CUT. DRILLED
SHORT HOLES AND WEDGED PIECES
OFF IN 800 X-CUT. WENT TO 1000
LEVEL AT 9 AM. THE WATER WAS
TWO INCHES DEEP ON THE SHAFT
STATION, CARRIED A WEDGE PIN AND
A 2" PIPE PATCH UP TO 900.

DRILLED FOUR NINE FOOT STRIP HOLES
IN 800 X-CUT, MOVED TOOLS, STEELS, ETC.
OUT OF THE WAY. DISMANTLED AND REMOVED
AIR & WATER LINES IN THE BLAST AREA
WASHED DRIFT WALLS IN THE OLD SHAFT AREA

SCALED LOOSE IN 1260 PILLAR. SAT IN

820 WEST STOPE AND LISTENED TO THE

ROCK CRACKING.

HELPED BOB GET A SLUSHER OUT

OF THE PILLAR BETWEEN 1110 AND 1250.

WASHED DRIFT WALLS. FOUND GOOD

REALGAR NEAR 1010 SOUTH CHUTE.

MUCK PILE ON ABO LEVELTIN PREPARA

#### 22 JUL 90 900 LEVEL

DRILLED FIVE NINE FOOT STRIP HOLES
IN 1/10 STOPE. THREE IN ZINCITE ORE
AND TWO IN FOOTWALL CALCUILICATE.

DRILLED TWO NINE FOOT STRIP HOLES AT
1050 N. X 900 W. THIS IS THE H.W. OF 1010

STOPE AND WILL EXPOSE WOLLASTONITE AND
REALGAR. DRILLED THREE NINE FOOT AND
TWO FIVE FOOT STRIP HOLES IN WEST VEIN.

THIS LOCATION APPEARS TO BE 820 PILLAR.
HAVING TROUBLE WITH OLD WATER HOSES. THEY
CAN'T TAKE THE PRESSURE. WALKED DOWN

TO 1000 LEVEL AT NOON. WATER IS

ABOUT TWO FEET ABOVE FLOOR OF

STATION. CAME UP A LITTLE LESS

THAN TWO FEET IN THREE DAYS.

24 JUL 90 800 LEVEL

WALKED DOWN TO 700, PICKED UP TWO
WATER HOSES AND TOOK THEM TO 800 LEVEL.
WASHED WALLS IN 740 X-CUT. NOTICED VEIN
OF MCGOVERNITE. FILL IN HANGING WALL
END OF 720 STOPE IS SUBSIDING. WALKED
BACK UP, SPENDING TIME ON EACH LEVEL.

TEM IN OR PHILE FROM THE EARLY

THE BLASTER CAME AND WE FIRED 22 STRIP HOLES ON GOO LEVEL. STARTED WASHING THE RESULTS AFTER LUNCH.

THE REALGAR IS GREAT. IT IS THE STUFF THAT PALACHE HAD, ONLY BETTER.

THE STRIP FARTHEST WEST IN 800 X-CUT REVEALED A LARGE POCKET LINED WITH STILBITE. THE STRIP IN 780 PILLAR

REVEALED A VEIN OF ONE INCH MCGOVERNITE ROSETTES. THIS IS THE SINGLE BEST SPECIMEN DAY I EVER HAD IN THE MINE.

WASHED STRIP MUCK IN 820 P. NICE

ORE BUT NO SPECIMENS. WASHED STRIP

MUCK AT UVITE LOCATION. NO XLS. SORTED

OUT MUCK AT REALGAR LOCATION. CARRIED

OUT THREE PAILS. WASHED STRIP MUCK IN

1190 STOPE. NERY NICE BANDED ZINCITE ORE.

GOT TWO MEDIOCRE SECONDARY WILLEMITES.

WASHED MUCK IN 780 PILLAR. SORTED OUT

# 530,529

MUCK. GOT SOME NICE MCGOVERNITES.

SCALED AND WEDGED DOWN LOOSE AND GOT

MORE MCGOVERNITE. TWO PAILS OF PIECES

CAME OUT. GOT TWO CHABAZITE SPECIMENS

FROM THE EASTERN MOST STRIP IN 800 X-CUT.

USED EIMCO TO CLEAN UP STRIP
MUCK AT THE REALGAR LOCATION;
WASHED MUCK AGAIN AND FOUND MORE
NICE PIECES. CLEANED UP MUCK
IN 1110 STOPE. GOT SOME APATITE
AND MICA XLS. CLEAED UP STRIP
MUCK IN 800X-CUT. SET UP DRILL
TO WORK ON STILBITE POCKET.
WILL NEED SOME SHORT STEELS.
BROUGHT OUT TWO PAILS OF MCGOVERNITE. THIS COULD BE THE ORIGINAL
FIND LOCATION. (NORTH DRIFT 900
LEVEL OF PALACHE)

WALKED DOWN TO 900 WITH GARY

GRENIER. WE WORKED ON THE STILBITE

POCKET IN 800 X-CUT. SLOW GOING

DUE TO HARDNESS OF THE ROCK.

CARRIED OUT RESEARCH PIECES FROM

GOT \$ 700

THE REALCAR LOCATION. MINERAL DIVIDEND.

30 JUL 90 900 LEVEL

WORKED ON STILBITE POCKET IN

800 X-CUT. GOT ONE PIECE. FOUND

ANOTHER NICE MCGOVERNITE IN

780 PILLAR.

31 JUL 90 900 LEVEL
WORKED ON STILBITE POCKETS IN
800 X-CUT. GOT THREE SMALL PIECES.
HAD THE ABLE HELP OF STEVE
SANFORD, PAUL MOORE CAME DOWN
AT LUNCH FOR A TOUR AND HE
COLLECTED TWO MCGOVERNITE
SAMPLES AND SOME ORE SAMPLES
FROM 780 PILLAR.

TO BE HEMMI BRIMTE A FEW

I AUG 90 - 900 LEVEL

WORKED ON STILBITE POCKETS IN 800

X-CUT. GOT ONE MAJOR PIECE AND MANY

SMALL PIECES. GOT ANOTHER PAIL OF

ARSENIDES. SAW THAT FILL IS DISAPPEARING

FROM 1240 STOPE ON 700 LEVEL.

\$666444444444444444

3 AUG 90 900 LEVEL

WORKED ON STILBITE POCKETS IN 800

X-CUT. CLEANED THEM OUT. GOT SOME

NICE PIECES. (# 532) DRILLED SIX STRIP

HOLES TO SEE IF ANY MORE POCKETS ARE

ABOVE. DRILLED TWO STRIP HOLES WHERE

THE ACTINOLITE WAS. DRILLED FOUR STRIP

HOLES IN 780 PILLAR.

DRILLED TWO STRIP HOLES IN THE
REALGAR LOCATION. DRILLED A STRIP
HOLE FOR ERYTHRITE. DRILLED TWO
STRIP HOLES IN THE FLUORDRITE
LOCATION, WASHED THE RIBS IN 1040
X-CUT.

6 AUG 90 - 700 - 800 DRILLED THREE STRIP HOLES IN 1250 STOPE, WASHED WALLS IN 740 X-CUT, SOO LEVEL, CAME UP AT NOON

7 AUG 90 800 -900 LEVELS

WASHED WALLS IN WEST VEIN F/W DRIFT.

1040 X-CUT, AND EAST VEIN F/W DRIFT.

EXPOSED NORBERGITE AND PHLOGOPITE IN

WEST VEIN F/W AND REALGAR AND

WOLLASTONITE IN 1040 X-CUT. DRILLED

TWO STRIP HOLES IN 800 X-CUT ON 900

LEVEL. BOB WANTS SOME SALMON CALCITE.

GOT#550 MINERAL DIVIDEND.

FINISHED THREE STRIP HOLES IN

8 AUG 90 800 LEVEL

WASHED WALLS IN EAST VEIN F/W DRIFT AND

1220 X-CUT AND OLD SHAFT STATION,

WENT INTO 740 PILLAR EAST VEIN SECTION.

GOT SOME HOSE MENDING SUPPLIES. ZINCITE

IS STILL VISIBLE IN SOUTH END, CHECKED

OUT ABANDONED SOUTH END OF 1250 STOPE

JUST ABOVE SOOLEVEL. FOUND AN OXIDIZED

SULPHIDE VEIN IN THE H/W.

# FEFFAAAAAAAAAAAA

WASHED WALLS IN 1040 X-CUT ON 800 LEVELS FROM I PM TO 5 PM. THE BLASTER ARRIVED AT 7 PM WITH A BOX OF POWDER. WE FIRED STRIP HOLES IN 1250 STOPE ON 700 LEVEL, 780 PILLAR, 800 X-CUT, 1040 X-CUT AND WEST VEIN F/W DRIFT ON 900 LEVEL.

II AUG 90 700-900 LEVELS
WASHED STRIP MUCK. 1250 STOPE ON
700 NOT VERY EXCITING, WALKED
DOWN TO 900 LEVEL. FLUORORITE
LOCATION PRODUCED SOME NICE PIECES.
1040 X-CUT PRODUCED SOME NICE
ERYTHRITE AND EXCELLENT REALGAR
AND ARSENIC. GOT TWO PAILS. 800
X-CUT PRODUCED SOME ADDITIONAL
STILBITE AND ONE CHABAZITE. 780
PILLAR PRODUCED MORE MCGOVERNITE.

FEET 1111111111111111

COLLECTED A PAIL OF MCCOVERNITE
IN 780 PILLAR. SORTED OUT FOUR
PAILS OF REALGAR IN 1040 X-CUT
AND USED THE EIMCO TO TAKE BIGPIECES TO THE CAGE, CLEANED OUT
THE STRIP MUCK. SORTED OUT A
PAIL OF ERYTHRITE. BROUGHT IT ALL
UP ON THE CAGE.

15 AUG 90 800 - 900 LEVELS
WASHED WALLS IN 1040 X-CUT ON 800,
WENT TO 900 AND DRILLED OUT PIECES
AND DRILLED STRIP HOLES IN 780 ALLAR
AND 800 X-CUT,

17 AUG 90 800-900 LEVELS
WASHED WALLS IN THE ABANDONED
SOUTH END OF 1250 STOPE, JUST ABOVE
800 LEVEL. BROUGHT UP SOME COPPER
ALTERATION PIECES. MUCKED OUT
800 X-CUT ON 900 LEVEL. FIRED THE

dellititation.

STRIP HOLE IN 780 PILLAR.

THE HOLE IN 780 PILLAR WAS INEFFECTIVE. INSTALLED A WATER OUTLET IN THE LINE SOUTH OF 1110 STOPE. WASHED EAST VEIN DRIFT RIBS IN THAT AREA, SAW A FEW POSSIBILITIES. WORKED ON EXTENDING THE WATER PIPE NORTH FROM 1220 X-CUT IN THE EAST VEIN POOTWALL DRIFT.

21 AUG 90 900 LEVEL

EXTENDED THE WATER PIPE TO THE

NORTH END OF 1250 STOPE AND WASHED

WALLS IN THAT AREA. DRILLED A STRIP

IN THE EAST VEIN DRIFT SOUTH OF

1110 STOPE. BEGAN A STRIP IN

1110 STOPE. BROKE THE WATER

NEEDLE.

#### granddadadaaaacoo

WASHED WALLS IN BROWN WILLENS
ZONE AND EAST VEIN NORTH OF
1250 STOPE. REPAIRED THE WATER
NEEDLE ON MY "53". FINISHED STRIP
HOLES IN 1110 STOPE. SORTED OUT
TWO PAILS OF FLUOBORITE.
PICKED UP A FEW MCGOVERNITES
AND A FEW SCRAPS OF ARSENIC.
GOT A MINERAL DIVIDEND OF \$625.

24 AUG 90 800-900 LEVELS

WASHED WALLS IN 1250 STOPE. WASHED

RIBS NEAR 1250 NORTH CHUTE. THERE IS A

NICE RHODONITE VEIN HERE. SAW THAT

FILL IN 720 STOPE HAS REALLY GONE DOWN.

WATER IS NOW 74 RUNGS BELOW 900

STATION. CHECKED OUT 720 STOPE ON 900

LEVEL. SAND IS GONE BUT THERE ARE

HUGE BLOCKS HANGING AT THE LEVEL.

THE BLASTER ARRIVED AT 5: PM AND WE

FIRED THIRTEEN STRIP HOLES.

#### PRESISTATION OF

25 AUG 90 900 LEVEL

BLASTING. THE SOUTH CORNER OF IND

STOPE PRODUCED ZINCITE AND WILLEMITE.
THE DRIFT SOUTH OF IND STOPE PRODUCED

SOME GARNET XLS. THE HANGING WALL END

OF 800 X-CUT PRODUCED, AS EXPECTED,

SALMON CALCITE. A SURPRIZE WAS NICE

FLUORESCENT BARITE. (IN FRANKLINITE

ZONE) THE STILBITE AREA PRODUCED

MORE STILBITE, LOTS OF CHABAZITE, TWO

HEULANDITES? AND ONE NATROLITE?

780 PILLAR PRODUCED MORE MCGOVERNITE.

GOT #570 MINERAL DIVIDEN D.

26 AUG 90 900 LEVEL

CHECKED OUT 800 X-CUT AND GOT MORE

BARITE. ALSO GOT MORE CHARAZITE AND

STILBITE. SET UP THE DRILL IN 780 PILLAR

AND DRILLED SOME WEDGE PIN HOLES. MUCKED

OUT 800 X-CUT WITH THE EIMCO. NEED

A FINE FOOT STEEL. THE WATER IS 71

RUNGS BELOW THE STATION.

29 AUG 90 900 LEVEL

DRILLED THREE STRIP HOLES IN 780
PILLAR. DRILLED THREE HOLES IN
800 X-CUT FOR STILBITE. DRILLED
THREE HOLES FOR BARITE. WATER
18 66.5 RUNGS BELOW THE STATION.
GOT \$\$ 550 MINERAL DIVIDEND.

31 AUG 90 900 LEVEL CAME IN AT 4 PM TO WAIT FOR THE BLASTER. HE ARRIVED AT 6 PM AND WE FIRED STRIP HOLES ON 900 LEVEL.

1 SEP 90 900 LEVEL

CHECKED OUT RESULTS OF STRIP

HOLES. 1110 STOPE PRODUCED SOME

TYPICAL ORE. THE STILBITE POCKETS

PINCHED OUT. THE BARITE AREA PRO
DUCED THREE PAILS OF NICE PIECES.

780 PILLAR PRODUCED MORE MCGOV
ERNITE FROM THE SLIP THE I HAVE

BEEN CHASING. A VERTICAL SHEAR