

# HALLS OF THE METALLURGE

[A LEVEL DESIGN DOCUMENT BY P MICHAEL NORRIS]

## FEATURES

- FAST-PACED RAIL-BASED ACTION FOR THE IPHONE & IPAD
- EXPERIENCE A 360 FIELD OF VIEW VIA THE IOS GYROSCOPE
- INTERACT WITH ENVIRONMENTS WITH THE KICKASS FRINGE GUN
- PLOW THROUGH FIVE TYPES OF ENEMY AND ONE VERY PISSED-OFF BOSS
- SWITCH BETWEEN RAILS FOR A MORE INTENSE EXPERIENCE (REAL-TIME DIFFICULTY)

## LEVEL GUIDE

- OVERVIEW
- WALKTHROUGH
- WEAPON: "FRINGE GUN"
- ENEMY GUIDE



# LEVEL OVERVIEW

## A Bit of Back-Story:

Wastelander clansmen have been aggressively operating a mutant slave camp deep within an old copper mine ever since they discovered *aeonium* within.

## Aeonium “God-Metal”

The radiation from an impacted asteroid enriched the various minerals within the mine, melding them together while significantly adding to their atomic values. This newly formed element is being referred to as aeonium. Needless to say it wasn't long before wasteland slavers made the discovery and hastily opened up shop. By combining the aeonium with pre-cataclysmic tech the clan was able to create cutting edge machinery, with the *fringe gun* prototype at the forefront. The metal is extremely durable, but also heavily irradiated. The clansmen overseeing the mine camp believe the ore has been "blessed" by the asteroid, as it burns normal flesh on contact. Mutants are somehow immune to this affect, which has led to their usefulness in working the mine. Moreover, many of the mutants encountered throughout this level will be wearing armor or using weapons & ammo derived from this material.

## Level Props & Containers

Props are, for a lack of a better term any object that has functionality during gameplay. There are no good or evil props per se, though many of them are exclusive to either player or enemy use. Props and containers include:

- Mine cart (player)
- Mine cart (enemy)
- Rail switch
- Smelting furnace (enemy)
- Mineral vein (player)
- Mine cart (player)
- Computer terminal (player)

### Mine Cart (player)

Players are linked to the mine cart for the majority of the level, only venturing on foot for short periods before and after (including the boss battle). The cart has a level on the side that gives the player the option of slowing down. It comes in handy if/when he wants time enough to grab pickups while speeding by narrow passages. For game balancing, the cart's hull is composed of a thick metal that protects the player inside from fire-based attacks (like the incinerators flamethrower) if he ducks in time.

### Mine cart (enemy)

Similar in function to that of the player, this mine cart is more akin to the cliché of bad guys giving pursuit with nothing short of evil intent. We might want something to the effect of Red Dead's rear-view mechanic to add a bit of fairness when applying this to a mobile platform design.

### Rail switch

There are several instances where the player's cart track will separate left and right. Each divide is easily recognizable by a distinct lever, sometimes accompanied by a custodian. The switch can only be triggered via the fringe gun's G-pulse.

### Smelting furnace (enemy)

These giant drums are used by custodians for melting raw ore into a thick molten sludge. While some are inoperative many are active and can be swiveled upon a rotating base and directed onto the player's path causing burning damage as the cart rolls through. The sludge also slows the player's cart by half, making this hazard a particularly nasty one.

### Mineral vein Container (player)

Some of the rock columns contain aeonium ore and will have a certain look, color or shimmer to them depending upon art direction. The fringe gun's G-pulse can literally rip the ore from the vein, destroying the rock column in the process. Any mutants within a ten foot radius of this will take minor damage and be knocked back/down. Often these containers will be accompanied by collectors and the occasional custodian.

### Mine cart Container

Some mine carts are heaping with an infinite amount of raw ore, which can be used to power the fringe gun, or used as projectiles against mutants (see: Repo drone/Collector under enemies).

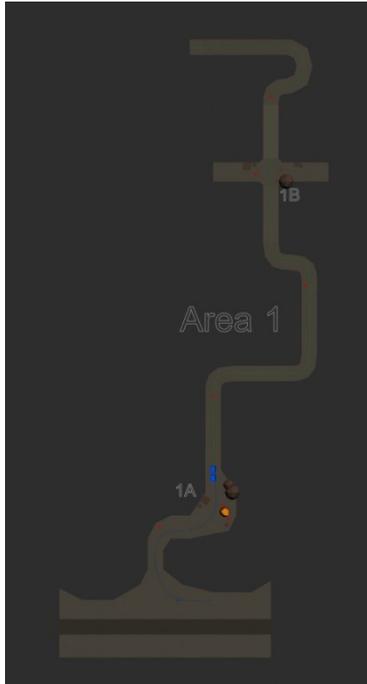
### Computer terminal Container (player)

A computer console within the boss's chamber houses the schematics for a fully-functional fringe gun. This console is locked however, and can only be unlocked using a key on the boss's body.

# LEVEL WALKTHROUGH

## AREA 1: INTO THE MINE

As soon as the player enters the mine he is encountered by a solitary carver. This encounter is more or less to get player's juices flowing.



### Area 1A

Two carvers are waiting in this small foyer, along with a pair of harmless collectors. This is a good opportunity to play with the G-pulse as the encounter isn't too challenging and the collector's can be used to fuel the gun or thrown at the carvers. A rock pillar at the center of the room contains embedded ore which can be extracted. A pair of linked mine carts await the player at the end of the room. Once inside, the mine cart moves continuously but can always be slowed via a lever. Just as the cart begins to move another carver appears, but does not react in time and can be run down if no other action is taken. A little farther down the track under a skylight sits another carver that attempts to pounce upon the player's cart as he approaches.

- Carver (4)
- Collector(2)
- Aeonium vein (1)
- Mine cart (pair)

### Area 1B

As the player comes around the bend his cart begins to descend toward an intersection. Just beyond the intersection stands a grenadier who draws his weapon once the player has been spotted. The intersection contains two collectors and a carver that jumps out as the player's cart begins to pass.

- Carver (1)
- Grenadier (1)
- Collector (2)

## AREA 2: THE DIGS

This is a large open area with two large pits and several skylights. A network of pulleys and conveyers carry ore and supplies from the pits to the large openings above. The track's default setting takes the player's cart to the right, but a custodian stationed there will attempt to redirect the cart left. Both tracks meet again at the end of area 2 where a grenadier patrols.

- Grenadier (1)
- Custodian (1)
- Rail switch (1)



### Area 2A

2A is the less difficult path of area 2. As the player passes the large pit (to his right) a carver will climb out and attempt to climb into the rear cart.

- Carver (2)
- Collector (2)
- Aeonium vein (1)

### Area 2B

2B is the more difficult of the two paths in area 2. A grenadier stands watch from a small clearing and begins to attack if/when the player's cart is redirected into 2B. A hidden carver will climb out of the pit (on player's left) and attempt to climb into the rear cart. As the player comes around the final bend an event is triggered. A carver hops into a mine cart on the platform at the center of the room. A nearby custodian then gives the cart a good push-off and the carver begins pursuit. The mine cart will continue to gain on the player's until close enough for the carver to pounce.

- Grenadier (1)
- Carver (2)
- Custodian (3)
- Collector (3)
- Aeonium vein (2)
- Enemy cart (1)

### AREA 3: TUNNELS

The tunnels are a network of long and winding corridors connected by large open areas.



#### Area 3A

3A is a small horseshoe-shaped chokepoint. Enemies include a pair of camping carvers, the first one hanging near the top of the central rock column. Two collectors and a single custodian are also here working the mine cart (prop). The cart contains a lode of raw ore that can be controlled via the fringe gun.

- Carver (2)
- Custodian (1)
- Collector (2)
- Aeonium cart (1)

#### Area 3B

A rail switch marks the beginning of 3A, but it is somewhat jammed. The fringe gun can only move this switch by half the first time around (player can loop as often as desired via switch in area 3D). Only after a second time around can the switch be triggered to take the player right (shortcut). Until then the only way is left. The long passage contains three skylights and three carvers, one of which is hiding above. The track eventually loops back around to the far side of the central chokepoint. The main area of 3B contains a platform with a smelting furnace and a custodian to direct it. The smelting custodian will only attempt to pour the furnace onto the track right of the rail switch. If/when he does the molten metal

will consume the custodian and collector working below. An incinerator also is stationed here, but does not react in time to attack the player as he first enters 3B. When the player loops back from the skylight passages the incinerator will be more than ready. It may be advisable for the player to use the two collectors that sit on either side of the room's large window when fighting the incinerator.

- Incinerator (1)
- Carver (3)
- Custodian (2)
- Collector (5)
- Smelting furnace (1)
- Rail switch (1)

#### Area 3C

The two rail paths in 3C are separated by a long narrow pit containing two carvers. Two collectors are also working the area, one of which is scaling a rock pillar containing aeonium. A grenadier guards the far end of the chamber under a skylight just before the tracks merge.

- Grenadier (1)
- Carver (2)
- Collector (2)
- Aeonium vein (1)

#### Area 3D

Area 3D provides players the opportunity to play through 3C again via the rail switch. Two collectors are also found here working the piles.

- Collector (2)
- Rail switch (1)

#### Area 3E

This small intersection features an enemy mine cart that is launched by a custodian just as the player passes. An adjacent grenadier jumps in as the cart as it descends the ramp and begins his pursuit.

- Grenadier (1)
- Custodian (1)
- Enemy cart (1)

## AREA 4: PROCESSING PIT

The processing pit is a huge open chamber with two prominent pits on either side. Heavy machinery dominates the center of the area below the opening in the ceiling. A rail switch manned by a custodian greets the player as his cart enters area 4 and is accompanied by a collector to the left. The rail defaults to right (4B).

- Custodian (1)
- Collector (1)
- Rail switch (1)



### Area 4A

The track in 4A takes players over a large black pit with a small lip along the far left wall. As the cart crosses a set of three carvers will spring up from the pit to attack the player. After the player crosses the pit he will encounter another cart containing a grenadier. The cart will continue to follow the player until the track ends at 4C. The grenadier keeps a safe distance away as to avoid his own splash damage. The end of 4A contains adjacent rock piles, three collectors and a mine cart filled with ore. The smelting furnace where the tracks from 4A and 4B merge is unmanned and inoperative.

- Grenadier (1)
- Carver (3)
- Custodian (2)
- Collector (3)
- Aeonium vein (1)
- Aeonium cart (1)

#### Area 4B

This track takes players between adjacent rock piles with three collectors and a rock pillar containing aeonium ore. The pit that dominates 4B hides two carvers that spring up to attack as the player passes. Next up is a smelting furnace manned by a custodian. He can easily flood the track with molten metal if he is not taken out ahead of time. A rock pile containing two collectors and a mineral vein are encountered passed before the player meets up with another incinerator. The incinerator attacks at about the same time the carver's spring up from the pit, possible shooting through them to get at the player. When the player's cart finally closes near the incinerator switches to his flamethrower. One last rock pile and collector lie around the bend before the two tracks again merge.

- Incinerator (1)
- Carver (2)
- Custodian (1)
- Collector (6)
- Smelting furnace (1)
- Aeonium vein (2)

#### Area 4C

4C is the rear staging area for the camp's mine carts. It has two collapsed corridors where grenadiers and carvers patrol. A pair of full mine carts sit at the entrance of the room along with some collectors. A large metallic gate dominates the wall to the right and requires the fringe gun to pass. The G-blast can be used to blast away each of the four iron hinges that hold the doors, while the G-pulse forces the loose doors into 5A. Once removed the player may continue into area 5 on foot.

- Grenadier (2)
- Carver (3)
- Collector (4)
- Aeonium cart (2)
- Metal gate (1)

## AREA 5: REFINERY

The refinery is a long, hazy corridor connected by several chokepoints. It is fairly dark, illuminated mostly by the orange glow of molten metal.



### Area 5A

The smelting furnace to the player's immediate left is manned by a custodian but all others remain inactive. The platforms that run along the left and right of the corridor are patrolled by three carvers and a single grenadier. An industrial conveyor straddles the center of the corridor and slowly pulls the player forward. A weak door at the rear of 5A and must be destroyed with the fringe gun before continuing to 5B.

- Grenadier (1)
- Carver (3)
- Custodian (1)
- Collector (3)
- Smelting furnace (1)
- Metal door (1)

#### Area 5B

Once the dust clears from blasting open the door the player confronts an incinerator. The custodians continue to toil mindlessly, but as always make great fringe gun fodder. If ammo runs low the mine cart to the player's right contains raw ore. The next room is identical, save for no incinerator and one less custodian. The last chamber is cluttered with scrap rock being scavenged for remnants of ore by four collectors. Another metal gate seals off the final chamber (boss).

- Incinerator (1)
- Custodian (5)
- Collector (4)
- Mine cart (2)
- Metal Gate (1)

#### Area 5C

This octagonal work chamber houses the clan's prize weapon—The Metalurge. The beast is staged to the left as the player enters, connected to the wall by a series of thick cables and grimy machinery (think of a greasy old machine shop). When the player navigates onto the circle spline at the center of the room the battle sequence is initiated.

- The Metalurge (1)
- Custodian (4+)
- Smelting furnace (2)

# LEVEL-UNIQUE WEAPON: GRAVITON PULSE OSCILLATOR---AKA 'FRINGE GUN'

## Weapon Functions

- Primary Function (utility mode): G-pulse oscillator
- Secondary Function (attack mode): G-blast

Taking inspiration from Half Life 2's gravity gun, and Doom 3's grabber, the fringe gun uses concentrated graviton particles to manipulate elements of a high atomic value. The story behind this device is that it has been designed for mining operations in that it can locate (via X-ray), take hold of, and ultimately extract embedded ore. In this particular scenario the gun has been damaged, or possibly modified to only effect aonium -a newly discovered mineral. The one-of-a-kind gun was captured from a high ranking mutant near the mine's entrance and brought to the sheriff who in turn entrusted it to the protagonist. If the fringe gun were repaired its settings could be changed to affect a wider range of materials, which could then be put to use rebuilding settlements and possibly society. The secret to this technology is believed to lie somewhere deep within the mine and it is up to the protagonist to seek it out.

## G-Pulse

The fringe gun's most prominent feature is the three stabilizer veins used to guide the gravitons to their target(s). The veins are mounted on a rotating base that upon firing, spin while the emitter releases gravitons. The fringe gun can be aimed anywhere onscreen and includes a handy snapping function whenever contact is made with anything containing aonium. If the beam links up with this material, it will change visually from a wavy beam -like the charged particle beam from Ghostbusters; to a straight and narrow one more akin to UT 3's link gun (second function). Once the beam is locked onto aonium the player can guide the trapped matter anywhere onscreen. If the player triggers the secondary function while in primary mode he will "punch" the beam, launching its contents at high speed. Some of the objects affected by the G-pulse include raw and refined ore, carver armor, grenades, incinerator breastplate, collector bodies, machinist collars, some support beams/bolts, and The Metallurge's armored skin.

## G-Blast

The fringe gun's secondary function sends a concentrated beam of empty graviton particles along the laser guide. The effect of the G-blast is akin to Red Faction's rail driver, or UT3's shock rifle. Holding down on the trigger builds up a charge that maxes out at three seconds and can be released at any time of the player's choosing. The charge delivers increased damage for every second held; x1.5 after one second, x2 after two seconds, and x3 after three seconds.

## Ammo

The fringe gun is powered by graviton cells which also power the collector drones found throughout the mine. While collectors can be held and tossed about with the gun's primary utility, the G-blast rips them apart while the laser guide absorbs their graviton cells. Cells have a replenish value of 10%, but this is off the top of my head and would require some balancing measures to make it work in game.

## ENEMY GUIDE

The mine is overrun with mutant slaves of the clan. Each mutant fills a particular role dependent upon individual strength, size, intelligence and temperament.

- Carver
- Grenadier
- Incinerator
- Custodian
- Collector
- **The Metalurge—Boss Fight**

### **CARVER (MELEE MUTANT)**

Carvers are the lowest level of combat mutant in the mine and also the most commonly encountered. Carvers resemble typical Rage mutants save that their right hands have all been ritualistically severed and replaced with a crude aonium soldering iron. They are virtually naked save for a segmented armor sleeve that protects the entirety of their right arm and shoulder.

#### Combat

Carvers prefer to hide in darkened crevasses and under or behind sizable objects until the player comes within lunging distance. With a careful eye players can spot camping carvers by the orange glow of their soldering irons. Carvers can leap a distance of up to fifteen feet and attack upon landing. Their attack does more damage the further they leap, maxing out at x2 normal damage. Carver blades can also be used as a sort of climber's pick to scale vertical surfaces. From high altitudes carvers may drop into the player's cart, striking him from behind. Since navigation is limited with mobile devices the player should have a clear signal that they are about to be pounced upon. A distinctive screech or violent cart rumble upon a carver's landing would be ideal.

#### Tactical Analysis

The carver's namesake soldering iron is made from aonium and thus is susceptible to the fringe gun's primary function.

### **GRENADIER (RANGED MUTANT)**

Grenadiers are about ten percent larger than carvers, but have significantly less health. Each grenadier wears a rusty helmet with a narrow horizontal slit for the eyes, tattered trousers and thick metal boots. They prefer surprising the player from the safety of high ledges, behind large rocks, or from inside pits.

#### Combat Spec

As his name implies, the grenadier throws explosive projectiles either at the player, or in his direct path. Grenadiers carry a single launcher that fires two types of grenade—frag and smoke.

#### Frag Grenade

Frag grenades rely on splash damage and are arguably the most destructive weapon in game, second only to The Metalurge's rocket launcher. Frag grenades never explode on impact which allows the player up to four seconds to react if one lands nearby (or heaven forbid, in his cart). To throw a bit of amusement into the design pot, five percent of frag grenades launched by the grenadier explode within his weapon, killing him instantly.

### Smoke Grenade

Smoke grenades don't cause the player any damage, but can obscure his vision if caught inside its cloud. The grenadier will only fire smoke grenades as a tactical maneuver. For example, if a grenadier succeeds at firing a smoke grenade directly into the player's mine cart as he passes, that player is subject to its full effect and length. Such precision is uncommon however, as the grenade launcher is not very accurate. Most smoke grenades land on or near the track, resulting in a thick but fleeting cloud of black smoke.

### Tactical Analysis

Both grenade types have aeonium components and can thus be caught with the fringe gun's G-pulse. This can lead to some interesting tactics on the player's part; from catching a live grenade and throwing it back to chasing enemies with it as they attempt to flee.

Grenade	Cook time	Damage	Radius
Frag	4 sec	deadly	20' splash
Smoke	7 sec	nil	20' cloud

### **MUTANT 3— INCINERATOR (TANK MUTANT)**

Clad in thick rusted armor and towering at over eight feet tall the incinerator acts as warden/foreman to lesser mutants. Once the player comes within visual range the incinerator quickly signals any nearby mutants to advance, which is done by pointing and barking inaudibly through his gasmask. This audio/visual combination is a great indicator to the player that he may be flanked when approaching an incinerator.

### Combat Spec

Incinerators open fire as soon as they have a clear shot of the player. He has little regard for the safety of lesser mutants should one or two get in the way. His only weapon is a thermal revolver, though it has two distinct functions. Its primary function features six rotating barrels that launch flammable pellets in rapid succession. A small flame at the end of the gun ignites the pellets as they exit the barrels sending a chain of tiny fireballs toward the player. Though formidable, the gun chews through ammo like Sweet Tarts and must be reloaded after only five seconds of continuous use. The secondary function is a run-of-the-mill flamethrower that is reserved for once the player comes within of eight feet of the incinerator.

### Tactical Analysis

Despite his high health and heavy armor the incinerator has a couple of notable weaknesses. The almost comically sizable fuel tank strapped across his back leaks a thin but continuous trail of fuel. If the player manages to ignite this trail with the fringe gun's G-blast (at full charge) the trail will be ignited and the incinerator will explode. The explosion kills the incinerator instantly and will also cause damage to any creatures within a twenty foot radius. Their other weakness is ironically, their armor itself. The fringe gun's G-pulse has a particular taste for aeonium, which happens to be from what the incinerator's breastplate is made. The gun can lock onto this metal and pry it off without a hitch. Once this piece of armor has been removed the incinerator's chest is completely unprotected and the creature will receive full damage.

Function	RPS	Damage	Burn time
T-Rev	10	med	1 sec

Flamer	continuous	med-high	3 sec
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### **CUSTODIAN (UTILITY MUTANT)**

Custodians are the work force mutants of the camp and non-combative in the traditional sense. Instead of using melee or ranged tactics they serve only to sabotage the player by utilizing the hazards of their surrounding environment. Among their nasty surprises are:

- Redirecting smelting furnaces to be poured onto player or track
- Redirecting rail path at intersections, sending player's cart into a more difficult zone
- Taking out support beams & dropping debris onto track ahead.

#### Tactical Analysis

Custodians are the only mutants that wear collars, often chained to their stations. The collars are made from aeonium and can be manipulated by the G-pulse. A custodian caught by the beam can easily be torn free of the wall/floor to which he is chained, but breaking his neck in the process. Their limp, lifeless body has a nice ragdoll effect while trapped inside the beam. The chain (ten to fifteen feet) remains attached to the collar and acts like a heavy whip that can be used to knock other enemies around with great force.

### **REPO DRONE/COLLECTOR**

Collectors are small, spider-like machines whose function is the retrieval of aeonium ore once extracted from mineral veins. They are blindly drawn to raw aeonium ore and if a vein is tapped and its ore extracted via the fringe gun the collectors will swarm to process it. They can be directed wherever the player wishes so long as he has the ore trapped within the fringe's G-pulse beam. The player can then "punch" the beam launching its contents at an enemy/mutant. The ore (now a projectile) will knock the mutant back causing only minor damage, but then the collectors come. They'll frantically swarm the mutant to process the ore, picking him apart until only gibs remain. This instance spawns two additional collectors from nearby shadows or rock piles. Upon the enemy's death the additional collectors retreat back to the locations from whence they came. This scenario lasts for about three seconds.

### **MUTANT BOSS - THE METALURGE**

*Be afraid, be very afraid...* The Metalurge is a heavily altered mutant tank infused with grafted aeonium plate skin. It is a secret project conducted by clan scientists to create a divine weapon using the irradiated metal of their demigod. Its name is derived from the fusion of two words: metal and demiurge. Its helmeted head features three beady eye holes and an opening at the bottom to reveal a mangled lipless mouth. In place of arms are large trapezoidal pods affixed to the creature's shoulders. The pods each house a thermal gatling—a substantially larger and more powerful variant of the incinerator's thermal revolver, and twin rocket launchers. Its half-body sits atop of a mechanical pod supported by six large cybernetic appendages. The boss is slow moving and seldom strays from the central part of the chamber, preferring instead to turn in place while keeping the player in its sights.

#### Combat Spec

The Metalurge's gatling chews through rounds quickly and has to reload every five seconds. During this break (another five seconds) it will fire off one or two rockets. The number of rockets fired per round is procedurally assigned to keep players on their toes. Fortunately for the player the rockets are shelled in aeonium and can be redirected via the G-pulse.

### Tactical Analysis—Boss Fight

The Metalurge's armor is resistant to the fringe gun's G-blast, but is vulnerable to its primary function when used properly. The metal plated armor can be torn free of the boss' body, revealing bare muscle and pumping organs respectively. The exposed tissue can then be fired upon by the weapon's primary attack for moderate to severe damage. Its appendages can also be dismembered using the gun's secondary function. Each leg removed reduces the boss's movement and turn speed by 20%. Less than three legs means that the boss can no longer move or strafe, and can only rotate/turn. If all legs are removed he is stationary and has a significant & vulnerable blind spot directly behind him. Taking out the boss's legs is purely optional and while advantageous in many ways, it is ultimately left for the player to decide how to fight.

Weapon	RPS	Damage	Burn time
T-Gatling	10	high	2 sec
R-Launcher	special	deadly	nil

### Puzzle during boss fight

At the rear left and right of the chamber sit two smelting furnaces each manned by a pair of custodians. The central play area is grated and hangs above a pool of molten metal. Every ten seconds one the furnaces will finish melting ore as the other, having been emptied in the previous round is again loaded. Once a furnace has melted its contents it will then be dumped into the pool. The two furnaces alternate in this task, raising the level of the pool a little each round. As the pool level rises steam begins to appear, making it difficult for the player to see (similar to smoke bomb). The custodians can of course be taken out of the equation via the fringe gun, but will respawn from behind their furnace again after thirty seconds. The fringe gun's G-pulse has a supplementary ability that dissipates any steam between the player and his target.

## **END OF LEVEL/QUEST REWARDS**

### Artifact: Heart of the beast

The Heart of The Metalurge is a pre-cataclysmic nanoreplicator the clansmen seized during a raid on a former private sector company. By their standards, the artifact is being put to good use powering their cybernetic beast, pumping organic nanoscale sludge throughout its body. Little else is known of the device.

### Fringe Gun Schematic

A console/kiosk at the rear of the boss's chamber contains the schematics for a fully-functional fringe gun. The player needs to collect this item to complete this quest.

## **LEVEL EXIT**

Once The Metalurge has been destroyed and the fringe gun document taken, the mine begins to collapse (unless this would be too much of a cliché). The player grabs hold of a pulley system hanging from the opening in the cavern ceiling and ascends to the surface. Have a cigar.