REMOTE VIEWING SESSION DATA

Remote Viewer : LB

Interviewer : PS

Observer(s) : _____

Date : 11/14/85

Starting time : 1448 hours, local

Site # : 0126

Acquisition by: (CRV) ERV PRV ARV BRV Other _____

Working mode : (ST) HEM Other _____

Feedback class: A B (C)

Ending time : 1546 hours, local

Notes : OpsTwo

Highest stage : III

Evaluation : +

Actual site : Nevado del Ruiz (Volcanic Explosion)

RV summary : _____

SG1J [redacted]

FT. MEADE
14 NOV 85

SG1J [redacted]

1448 HRS.

5° 10' N
74° 50' W

A: ACROSS
FLAT
ROUGH
HARD

B: LAND C

5° 10' N
74° 50'' W

A: ACROSS
CURVED
HARD

B: LAND

5° 10' N
74° 50' W

A: ACROSS
HARD
IRREG

B: CONF BRK

SOME OTHER FEEL-
ING THERE NOT
COMING THROUGH.

5° 10' N
74° 50' 10 W

A: ABOVE
STAND
INROW

CONF. BRK.
ALMOST A
MANMADE FEEL.
BOTH MANMADE
+ NATURAL FEEL.

AOL BRK.
SAND PITS.

ABOUT

5° 10' N
74° 50' W

A: RISING
HARD
ROUGH
UNEVEN
MANMADE
NATURAL ?PC

B: MONUMENT (54

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(3)

5° 10'N
74° 50'W — MISS BRK

5° 10'N
74° 50'W — MISS BRK

5° 10'N
74° 50'

A: ACNS
RISING
SMOOTH SD
HARD PC
B: LAND C

S2: SMOOTH FACOR
SOLID PC
HEAVY
THICK
LINES
GREY PC
BLACK "
GRANITE TASTE PC
MASONRY
LINES
BLOCKS
DUSTY SMELL PC
NOISES — C

(S4)

AOL BRK
CONSTRUCTION
NOISES.
AOL BRK
QUARRY.

(4)

S2: DUSTY C
PEOPLE NOISES PC
DRY CFD

AOL BRK. P
DRY W/POOLS,

SUNKEN C

BI - LEVELED

ROUGH
UNEVEN

~~AI~~ BRK
HUGE ROCKS. PC

AOL BRK
QUARRY FLOOR

BOUNDED CFD.

OPEN PC

AOL BRK.
OPEN IN UPWARD DIRECTION

"CRACKING" SOUND C

WIDE C
UNEVEN C

TALL PC
DEEP PC

GREY

~~AI BRK~~
AMA — EVERYTHING IS GREY, C

AI BRK.
AMAZEMENT AT ALL THE GREY.

S2! YELLOW

AOL DRIVE YELLOW AS IN HEAVY MACHINERY YELLOW

THIN PC

SMALL PC

ECHO SOUND POSS

VERTICAL C

STEEL ~~GREY~~ COLOR PC

WHITE/ PC

DUSTY C

POWDERY C

AOL BREAK POWDERY FINE, LIKE ASHES. C

(6)

SL: PATCHES
SPOTTY PC
PATCHY

AOC BLK.
LIKE A PATCH OF
POWDERY SPACE, AFFECT
OF CLOTH
(NOT EVENLY
DISTRIBUTED)

ROCK TASTE
SLIGHT BURNT SMELL PC
ROCK DUST SMELL

AOC DKG
WATER PIT.

SOUND AOC SLK
LIKE SLIDING
ROCKS / GRAVEL.
C

DUSTY TASTE
DIRTY FEEL C
COAL TASTE PC

AOC DKG
MINE.

(5)

S2: GRITTY FEELING C
GRAVEL SOUND PC
DRY PC
HOT C
CLOSE FEELING (S4)
SWEATY PC
STORMY C

FOR DRK.
GOLD MINES
IN S. AFRICA.

SOUNDS
HUMMING SOUND CFB
CRACKLING SOUND PC
NARROW PC
TALL
ROUGH PC
ANGLED
NARROW CFB
CIRCULAR C
ROUGH
SHARP CFB
PAIN (S4)

AC BRK.
PAINFULLY SHARP & HARD.

8

EVENT IN QUESTION
IS PERCEPTIBLE

EVENT IN QUESTION
IS PERCEPTIBLE

A: LOUD

NOT DUE
SUDDEN
SPONTANEOUS
EXPLOSION (?)

EVENT IN QUESTION
IS PERCEPTIBLE

A: (ACROSS
BACH
VENTILATOR
STAMP
NOTE) PC

B: FIRE C

ASK DUE
A BOMB.
BUT W/ FEELING
THAT DESTRUCTION
WAS MAIN PURPOSE

S2: WHITE PC
YELLOW
WIDE C
TIGHT C
SOFT C
POWDERY C
MOIST —

NOT. DUE
LOUD, INTENSE
MOIST.

(9)

S2:

ACL BKG
WHITE SANDS
PROVING GNDS.

VERTICAL C
OPEN PC
BLACK C
SLOPED C

ACL BKG.
TOWER

AOL BKG
ROCKET.

AOL BKG
FIRE AT
BOTTOM OF
TOWER.

SLOPED C
VERTICAL C
THIN CFD
SHARP "
POINTED "

AOL BKG
POINTED

SOLID
LARGE C
OPEN PC

AOL BKG
UNDERGND
NUKES.

10

52! HEAVY
LARGE C

THIN
WHITE
ROUNDED C

ABL DIFF.
THIN DENSITY.

ABL BRK.
CLOUD OF
POST C

WHITE
HOT
INTENSE E

AT BRK.
INTENSLY HOT!

VERTICAL

NON BRK.
ATOMIC BLAST

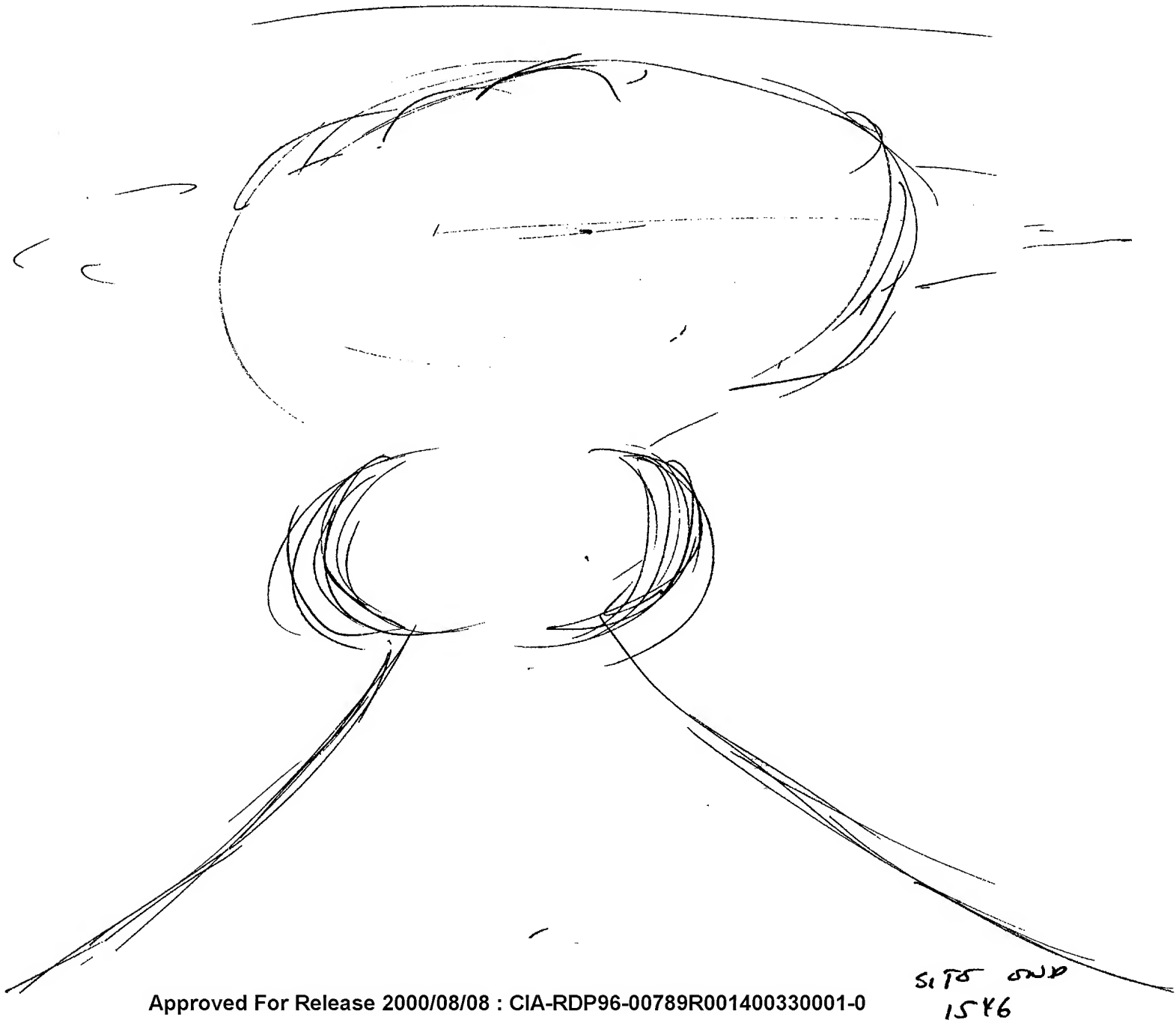
LIGHT PC

FLAT
ITAMS
SOLID
OPEN

(11)

MAP.

BIG CIRCULAR
LARGE ROUNDED
VERTICAL UNSEEN
SLOPED
FLAT
WIDE



SITE END
1546

THE ERUPTION OF THE NEVADA DEL RUIZ

Months of Volcanic Rumbling Warned of a Major Blow-Up

...rmonic Tremors, Mud Slides Preceded Colombian Blast

By Thomas O'Toole
Washington Post Staff Writer

Just as Washington's Mount St. Helens did five years ago, the Colombian volcano Nevado del Ruiz that erupted Wednesday night gave out numerous telltale signs in the last 11 months that it was building toward a major eruption.

As long ago as last December, seismographs began to pick up the rumblings of spasmodic earthquakes below the volcano that are the harbingers of worse things to come. In March of this year, there were several small steam and ash

"Everybody knew this was a volcano that hadn't suffered an eruption in 400 years."

— Dr. Robert Christiansen, USGS

explosions near the volcano's 17,400-foot summit that signified more violent activity, and then on

years, but everybody still knew it was a volcano."

Volcanoes erupt when the molten rock that normally lies far inside the mountain starts rising up, heating the rock above it and forcing it aside.

There were signs in recent weeks that a giant pool of molten rock (magma) as hot as 2,200 degrees Fahrenheit had begun to stir inside the mountain and had begun to move upward, pushing aside the tons of rock that lay in its way. The telltale signs of moving magma were the "harmonic tremors" in the earth near the volcano that apparently were picked up by seismic listening devices in the two months since the mud slide of Sept. 11.

Harmonic tremors are rhythmic motions in the earth that involve an almost continuous release of seismic energy. While earthquakes come in episodes and then stop, harmonic tremors go on for long periods at a steady frequency.

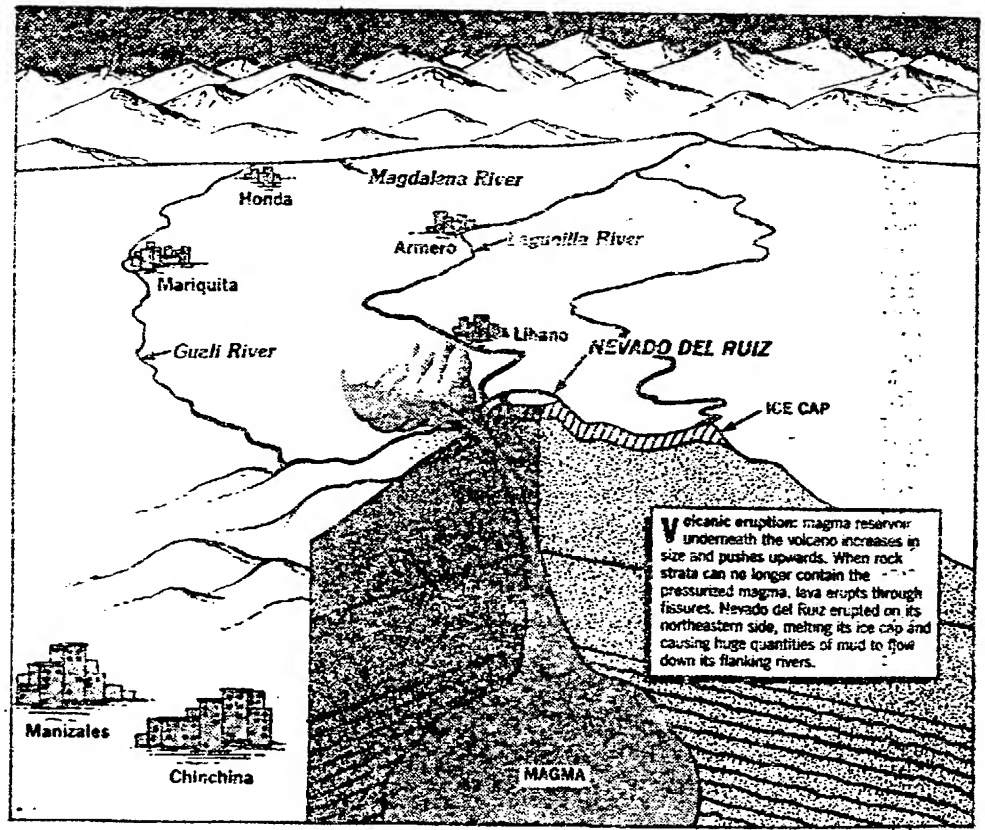
Christiansen said that harmonic tremors are always the result of moving magma and usually are the first signs of an impending major eruption. The U.S. Geological Survey said yesterday that Nevado del

sleeping towns in the valley was as deep as 15 to 20 feet.

A lesser mud flow on the western side of the mountain was still enough to create an artificial dam in the Quali River above the town of Mariquita, which Colombian officials were attempting to evacuate before the mud-filled dam broke apart on its own. Floods from melting snow and ice were reported in four rivers whose headwaters begin on the mountain.

The physical similarity between the eruption of Nevado del Ruiz and Mount St. Helens is striking. Both volcanoes slowly built to eruptions and both eruptions did most of their early damage with mud slides. The huge snow and ice pack on both mountains melted in the heat of eruption, cascading tons of water and mud down the flanks of the mountains into the river valleys below. But only 57 people died in the Mount St. Helens eruption, which occurred in a sparsely populated area.

Nevado del Ruiz is the largest and tallest of six volcanoes strung out in a line through central Colombia. The northernmost volcano in the Andes Mountains, Nevado del



largest mud slides in South American history. The USGS' Dr. Darrel G. Herd described it as a "wall of mud, trees and ice that went racing down the valley to the Rio Mag-

sen said. This means they retain their gases, allowing pressure to build, rather than venting them in a way that would relieve the pressure that builds up inside volcanoes, he

building in strength until it exceeds the weight of the rocks above that are holding it in. The result can be another eruption. The twin eruption of Nevado del Ruiz Wednesday

17,400-foot summit that signified more violent activity, and then on Sept. 11 of this year there was an eruption that melted enough snow and ice on the mountain peak to trigger a mud slide 20 miles long.

"It's not surprising, except for the violence of the eruptions that shook the mountain Wednesday night," Dr. Robert Christiansen of the U.S. Geological Survey (USGS) said by telephone from his office in Menlo Park, Calif. "Everybody knew this was a volcano that hadn't ...ed a major eruption in 400

eruption. The U.S. Geological Survey said yesterday that Nevado del Ruiz suffered "two catastrophic eruptions" Wednesday night between 11 p.m. and midnight.

The back-to-back eruptions on the northeast flank of the mountain melted enough ice and snow on the mountaintop to trigger what the USGS called "two catastrophic mud flows down the northeast flank," which were channeled directly into the Lagunillas River in the broad valley at the base of the mountain. Eyewitnesses said the mud in four

ria. The northernmost volcano in the Andes Mountains, Nevado del Ruiz has also been the most destructive of the six Colombian volcanoes, erupting in a "thunderous" explosion on March 12, 1595, and erupting again in 1828 and 1829. The volcano was "still smoking" in 1831 after its two 19th-century eruptions.

The Colombian mountain was also the scene of a major earthquake on Feb. 19, 1845, that shook loose enough snow and ice on top of the mountain to trigger one of the

...ped, trees and ice that went racing down the valley to the Rio Magdalena, killing an estimated 1,000 people" then living in the valley.

Why did Nevado del Ruiz go almost 400 years without a major eruption? Geologists say they don't know, but many suspect it is in the makeup of the magma that lies below the volcanoes that formed the Andes Mountains.

"The magmas in the Andes are very viscous and stickier, let's say, than the magmas that lie beneath the Hawaiian volcanoes," Christian-

...way that would relieve the pressure that builds up inside volcanoes, he said. "Hawaiian volcanoes are always blowing off pressure, which might be one reason they don't erupt catastrophically."

Another reason lies with volcanoes themselves, among the most unpredictable phenomena of nature. Said Dr. Meyer Rubin of the USGS: "Volcanoes can go 1,000 years without an eruption. There's no way to predict their behavior."

The upward movement of magma can continue off and on for years,

...another eruption. The twin eruption of Nevado del Ruiz Wednesday night could thus signal the start of an eruptive period that could last another 10 years.

There is also the chance that Nevado del Ruiz will have an impact on the world's weather. Depending on how much sulfur dioxide gas it pumps into the upper atmosphere, the erupting volcano could send a cloud of gas and dust around the world blocking just enough sunlight from reaching the surface to cool the earth by a degree or two.

Volcano Kills Thousands In Colombia

VOLCANO, From A1

for medical supplies, potable water and transport equipment to help in a rescue effort hampered by the destruction of bridges and roads. Colombian radio and television advised people in the disaster zone not to drink from local water supplies, which were feared contaminated by sulfur.

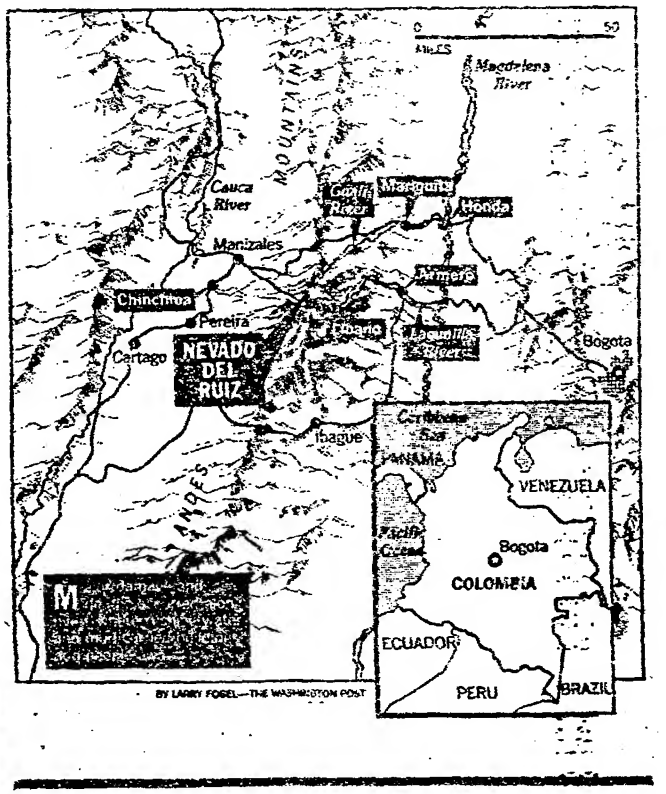
In Washington, the U.S. Agency for International Development said 12 helicopters were dispatched to the scene from a base in Panama, at the request of Colombia. A statement said AID relief expert Paul Bell and Darrell Herd of the U.S. Geological Survey in Reston, who has studied the volcano, were en route to offer assistance.

The the most seriously affected town was Armero, with a population of 25,000, about 18 miles east of the volcano. It was said by some residents to have been 90 percent submerged.

Several neighborhoods in the city

ASSOCIATED PRESS

Mud surrounds and partially buries Armero, as seen from a nearby hill. The town center is inundated at lower right.



BY LARRY FOGEL—THE WASHINGTON POST