Album Fotográfico del Volcan PARICUTIN Estado de Michoacan

1943-1946

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Instituto de Geologia

Album Fotográfico del Volcan Parícutin Estado de Michoacán

220(334) Alz. v.1.

1943-1946 19 Parte

Donación hecha por la SOCIEDAD GEOLOGICA DE AMERICA

INSTITUTO DE GEOLOGIA

SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

1. 1936

AIRPLANE PHOTOGRAPH OF THE PRE-PARÍCUTIN VOLCANO TERRAIN.

THE FIELDS OF CUIYÚTZIRO AND QUITZOCHOXARE IN THE WHITE PATCH NEAR THE LOWER CENTER MARGIN OF THE AREA. JARÁTIRO HILL IS THE RIDGE BORDERING THEM ON THE NORTH. FROM S.W. TO N.E. ARE PARÍCUTIN, SAN JUAN PARANGARICUTIRO AND ANGAHUAN.

SCALE: 1:40,000

PHOTO: CIA. MEXICANA AEROFOTO, S. A.



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SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

2-3. FEB. 20, 1943

5 P.M. FROM THE OUTSKIRTS

OF PARANGARICUTIRO. THESE TWO

PHOTOS WERE TAKEN ONE-HALF HOUR

AFTER THE INITIAL OUTBREAK OF

PARÍCUTIN VOLCANO. THE LOCUS OF

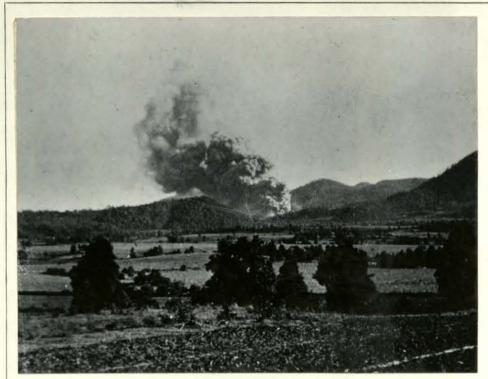
THE VENT IS IN THE SMALL VALLEY

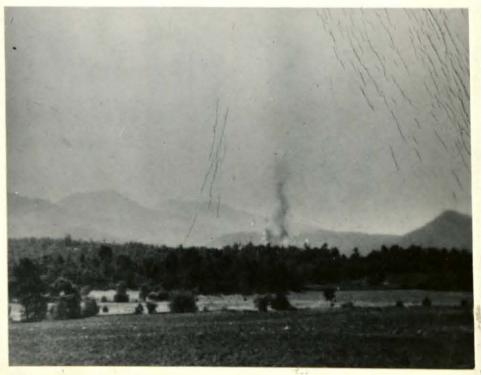
LYING BETWEEN JARÁTIRO HILL (RIDGE

IN LEFT) AND THE LOWER FLANKS OF

IT. TANCÍTARO (DISTANT HILLS).

LANICJUATA HILL ON THE RIGHT.





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NOTES

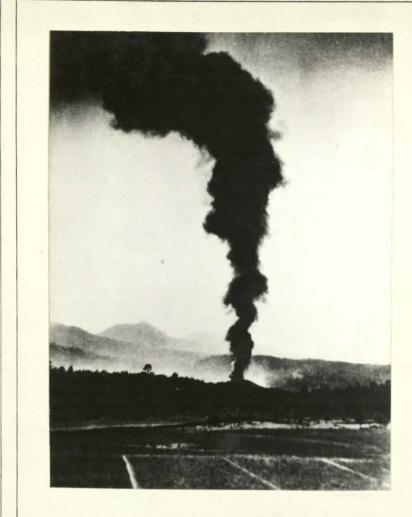
4. FEB. 21, 1943

FROM THE NORTHEAST. THE
SMALL CONE, ABOUT 30 METERS HIGH,
IS VISIBLE ABOVE THE TREE TOPS.
ALTHOUGH THE PHOTOGRAPH SHOWS
ONE ERUPTIVE COLUMN, THE CRATER
HAD THREE ACTIVE VENTS.

PHOTO: SALVADORY CEJA

5. SAME, SHOWING CULTIVATED FIELDS UPON WHICH THE VOLCANO GREW.

PHOTO: J. TRINIDAD





SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

6. FEB. 22, 1943

FROM THE NORTHEAST. GREAT QUANTITIES OF EJECTED BOMBS AND LAPILLI CAUSED THE CONE TO GROW RAPIDLY. VAPORS OF THE FIRST (QUITZOCHO) LAVA FLOW ABOUT THE BASE OF THE CONE.

PHOTO: RUFUS MORROW

7. FEB. 23, 1943

FROM THE NORTHEAST.

QUITZOCHO FLOW ABOUT BASE OF THE

CONE.

PHOTO: RAMIRO ROBLES RAMOS







SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

B. FEB. 24, 1943
FROM THE NORTHEAST.

PHOTO: EZEQUIEL ORDOÑEZ

9. FEB. 25, 1946

FROM THE NORTHEAST. THE

CONE IS HORSESHOE SHAPED, OPEN

TOWARD THE EAST. THE TREES ABOUT

THE BASE OF THE CONE DENUDED BY

FALLING BOMBS.

PHOTO: EZEQUIEL ORDONEZ





DATE ACCESSIONED

SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM THE NORTHEAST. THE
HORSESHOE SHAPED CONE IS 167
METERS HIGH. QUITZOCHO LAVA FLOW
WITH FUMAROLES IN MIDDLE GROUND.

FROM THE NORTHEAST. DUST
FROM FALLING BOMBS OBSCURES THE
CONE.

PHOTO: EZEQUIEL ORDONEZ

PHOTO: INSTITUTO DE GEOLOGIA





SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

12. FEB. 27, 1943

FROM THE NORTHEAST.

QUITZOCHO LAVA FLOW WITH ABUNDANT
FUMAROLES.

PHOTO: EZEQUIEL ORDOÑEZ

13. FEB. 28, 1943

FROM THE NORTHEAST.

QUITZOCHO LAVA FLOW ON LEFT;

LAPILLI COVERED FIELD IN FOREGROUND.

PHOTO: INSTITUTO DE GEOLOGIA





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM THE NORTHEAST. BLOCKY
FRONT OF THE QUITZOCHO LAVA FLOW
IN FOREGROUND.

PHOTO: INSTITUTO DE GEOLOGIA

FROM THE NORTHEAST. THE
SADDLE CREST OF THE CONE IS THE
RESULT OF SCOURING BY THE ERUPTIVE
COLUMN.

PHOTO: EZEQUIEL ORDOÑEZ





SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

FROM THE NORTHEAST.

ERUPTIONS FROM TWO CRATER VENTS.

PHOTO: INSTITUTO DE GEOLOGIA

FROM THE NORTHEAST. THE
HORSESHOE SHAPE OF THE CONE IS
THE RESULT OF THE RAFTING AWAY
OF THE EAST WALL BY FLOWING LAVA.
QUITZOCHO LAVA FLOW IN MIDDLE
ROUND.

PHOTO: INSTITUTO DE GEOLOGIA





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NOTES

.8. MAR. 4, 1943

FROM THE NORTHEAST.

RREGULAR SHAPE OF CRATER RIM DUE TO SHIFTING OF ERUPTIVE VENTS.

PHOTO: EZEQUIEL ORDONEZ

.9. MAR. 4, 1943

FROM THE NORTHEAST. LOOK-

'HOTO: INSTITUTO DE GEOLOGIA

NG INTO OPEN HORSESHOE CRATER.





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NOTES

AIRPLANE VIEW OF PARÍCUTIN

VOLCANO AND TERRAIN, SHOWING THE

QUITZOCHO LAVA FLOW AND THE

FUMAROLES ABOUT ITS EXPANDING

FRONT.

PHOTO: U. S. NAVY

FROM THE EAST. CONE OPEN FOWARD THE NORTHEAST.

PHOTO: INSTITUTO DE GEOLOGIA





SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM THE EAST, SHOWING THE OPEN CONE AND CRATER. BOMB
COVERED QUITZOCHO FLOW THROUGH
THE TREES.

PHOTO: EZEQUIEL ORDONEZ

FROM THE EAST. OPEN CONE
AND LAVA RIDGE OF THE QUITZOCHO
TLOW. NIGHT VIEW, WITH ABUNDANT
IN CANDESCENT BOMBS. TIME
EXPOSURE.

'HOTO: EL BORCEAUI





SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

NIGHT VIEW, SHOWING COLUMN
OF INCANDESCENT MATERIAL AND
ACCUMULATION OF BOMBS ON THE
SLOPE OF THE CONE. TIME
EXPOSURE.

PHOTO: CHAVEZ RUIZ

25. MAR. 20, 1943

FROM JARÁTIRO HILL. THE

MAXIMUM EXTENT OF THE QUITZOCHO

FLOW IS SHOWN.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM PARÍCUTIN VILLAGE.

BEGINNING OF HEAVY CINERITIC PHASE.

WESA DEL CORRAL FLOW IN MIDDLE

BROUND.

PHOTO: W. F. FOSHAG

LAVA FRONT OF QUITZOCHO FLOW
AT BASE OF JARÁTIRO HILL WITH MANY
FUMAROLES. ASH-COVERED TERRAIN
IN FOREGROUND.





SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

28. MAR. 24, 1943

RUGGED FRONT OF MESA DEL

CORRAL FLOW AT BASE OF JARÁTIRO
HILL, WITH ABUNDANT FUMAROLES.

PHOTO: W. F. FOSHAG

FROM JARÁTIRO HILL. HEAVY
CINERITIC PHASE. WHITE STREAKS
ON SLOPE OF CONE ARE DUST RAISED
BY ROLLING BOMBS.

PHOTO: ARNO BREHME





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SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

30. APR. 19, 1943

FROM THE NORTH. INNER CONE,
OR "UMBILICO." THIS INNER CONE
FORMED WITHIN THE CRATER AND LATER
MERGED WITH THE MAIN CONE. ASHCOVERED QUITZOCHO AND MESA DEL
CORRAL FLOWS IN FOREGROUND.
HEAVY CINERITIC PHASE.

PHOTO: L. C. GRATON



SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

FROM THE SOUTH. SHOWING THE

COLLAPSED SLOPE, PARTLY RESTORED.

THESE COLLAPSES ARE DUE TO RAFTING

OF THE SLOPE OF THE CONE BY A LAVA

FLOW. HEAVY CINERITIC PHASE.

PHOTO: L. C. GRATON

52. MAY 24, 1943

FROM JARÁTIRO HILL. HEAVY

CINERITIC PHASE.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

33-34. MAY 25, 1943

LIGHTNING FLASHES WERE

FREQUENT IN DENSE, SWIFTLY RISING

ERUPTIVE COLUMN.

PHOTO: RAFAEL GARCIA







SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM URUAPAN-PARÍCUTIN ROAD.

THE CINERITIC ERUPTIVE COLUMN
RISES OVER 6 KILOMETERS. HEAVY
ASH FALL TO THE LEFT.

PHOTO: W. F. FOSHAG

36. JUNE 9, 1943

FROM THE URUAPAN HIGHWAY.

DRIFTING ERUPTIVE CLOUD TO THE
SOUTH. THE FIRST VAPOR CLOUDS
FORM IN THE FALLING ASH.





SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

37. JUNE 10, 1943

SMALL LAVA FLOW AT BASE OF

CONE.

PHOTO: W. F. FOSHAG

BROKEN NORTH SLOPE OF CONE
AFTER COLLAPSE OF JUNE 9, WITH
JPPER COLLAPSE TERRACE TO RIGHT.
LAVA, BREAKING OUT AT THE BASE
OF THE CONE, CARRIED AWAY A
QUARTER SEGMENT.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

PARÍCUTIN LAVA FLOW APPROACHING PARÍCUTIN VILLAGE. THE LAVA
ADVANCES AS A MOVING WALL OF
RUBELE.

PHOTO: W. F. FOSHAG

FROM JARÁTIRO HILL. LAVA
FLOW AND ERUPTIVE ACTIVITY AT
NIGHT. LAVA ISSUES FROM A BREAK
IN THE CONE AND CASCADES DOWN THE
COLLAPSE TERRACES.





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SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

41. JUNE 18, 1943

FROM THE NORTHEAST. LAVA
ISSUES FROM THE BASE OF THE SMALL
STEAM COLUMN, FORMS A DARKER BAND
WHERE THE TERRACE JOINS THE CONE,
AND SPREADS OUT IN THE VALLEY
BELOW.

PHOTO: W. F. FOSHAG

42. JUNE 19, 1943

FROM JARÁTIRO HILL. NORTH
CRATER VENT AS A SMALL CHIMNEY;
SOUTH CRATER VENT BEHIND MEDIAN
RIDGE.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

43. JUNE 20, 1943

FROM THE NORTHEAST. LAVA
FLOW FROM HIGH VENT, MOVING DOWN
COLLAPSE TERRACE.

PHOTO: RAFAEL GARCIA

44. JUNE 28, 1943

FROM THE NORTHEAST. THE
COLLAPSED PORTION OF THE CONE
PARTLY RESTORED. LAVA FLOW FROM
HIGH VENT.

PHOTO: ARNO BREHME





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM JARÁTIRO HILL. ROCKY
PEAKS WERE A PART OF THE CONE
RAFTED AWAY BY LAVA FLOW TO FORM
THE QUITZOCHO RIDGE. COLLAPSE
SIMILAR TO THAT OF JUNE 9.

PHOTO: EZEQUIEL ORDONEZ

46. JULY 18, 1943

BLOCK LAVA FLOW. FIGURE AT
FOOT OF FLOW INDICATES SCALE.

PHOTO: CHAVEZ RUIZ





SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM THE NORTHEAST. A LAVA
FLOW HAS DAMMED THE VALLEY TO
FORM A SMALL POND.

PHOTO: W. F. FOSHAG

FROM JARÁTIRO HILL. GREAT
EXPLOSIONS FROM THE NORTH CRATER
VENT AND HEAVY EMISSIONS FROM THE
SOUTH VENT. LAVA FLOWS OF JULY
MOVING OVER ASH-COVERED LAVAS OF
MARCH.





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SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM JARÁTIRO HILL. BREAK
OF THE CONE OF MID JULY LARGELY
REPAIRED. MODERATE ERUPTIVE
COLUMN WITH LITTLE ASH BUT MANY
BOMBS.

PHOTO: W. F. FOSHAG

FROM PARÍCUTIN VILLAGE.

THE VILLAGE IS ABANDONED BECAUSE
OF THE HEAVY COVER OF ASH.





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PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

51. EARLY JULY, 1943, BEFORE THE
COLLAPSE OF THE CONE.
FROM JARÁTIRO HILL. ERUPTIVE
CHIMNEY ON THE NORTHEAST FLANK OF
THE CONE. LAVAS OF JUNE OVER ASHCOVERED LAVAS OF MARCH.

PHOTO: EZEQUIEL ORDONEZ

FROM JARÁTIRO HILL. NIGHT
VIEW SHOWING INCANDESCENT
ERUPTIVE COLUMN. THIS COLUMN
FREQUENTLY ROSE TO A HEIGHT OF
1-1/2 KILOMETERS.





SUBJECT

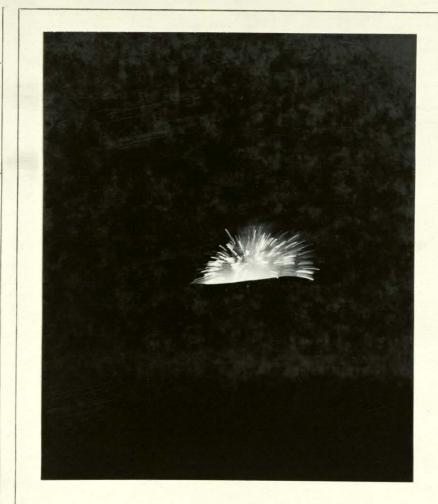
PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

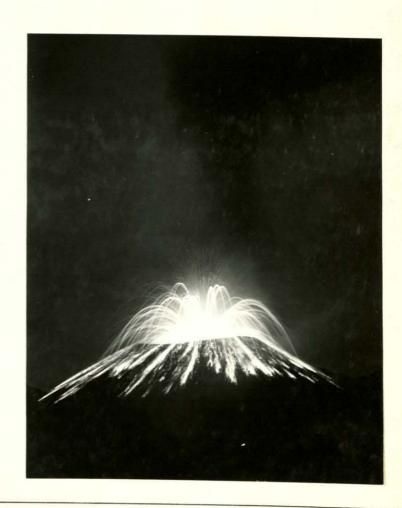
NOTES

BURSTING OF GREAT LAVA
BUBBLES IN CRATER, YIELDING HUGE
TATTERS OF VISCOUS LAVA.

PHOTO: W. F. FOSHAG

BURSTING OF HUGE LAVA
BUBBLES. THE EJECTED MASSES OF
VISCOUS LAVA FLOWED DOWN THE
SLOPE OF THE CONE. EXPOSURE
ABOUT 15 SECONDS.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM JARÁTIRO HILL. COLLAPSE
OF THE NORTH SIDE OF THE CONE,
DUE TO RAFTING BY OUTBREAK OF
LAVA FLOW FROM THE BASE. FROM
THE WEAKENED FLANK OF THE CONE
AROSE MIGRATING JETS OF ASH.
THE CONICAL PEAKS MOVED 485 METERS
IN 24 HOURS. PHOTOS TAKEN IMMEDI-

PHOTOS: W. F. FOSHAG

ATELY AFTER THE COLLAPSE.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

FROM JARÁTIRO HILL. BREAK
IN THE NORTH SIDE OF THE CONE,
COLLAPSE TERRACES, AND QUITZOCHO
RIDGE.

PHOTO: W. F. FOSHAG

58. AUG. 4, 1943

FROM JARÁTIRO HILL. NORTH CRATER VENT IN ERUPTION IN THE BREAK IN THE CONE; SOUTH CRATER VENT BEHIND THE MEDIAN RIDGE.





SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

EARLY STAGE IN GROWTH OF
QUITZOCHO RIDGE, BY FLOW OF LAVA
BENEATH THE ASH.

PHOTO: W. F. FOSHAG

LATE STAGE IN GROWTH OF
QUITZOCHO RIDGE. THE RIDGE IS
SLOWLY RISING DUE TO FURTHER
INCREMENT OF LAVA BELOW.
PHOTO: EZEQUIEL ORDONEZ





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NOTES

61. AUG. 25, 1943
THE QUITZOCHO RIDGE.

PHOTO: EZEQUIEL ORDONEZ

62. SEPT. 1943

ELEVATED BEDDED ASH CAPPING
QUITZOCHO RIDGE. THE ROUGH
LOWER SLOPES ARE THE INTRUDED
LAVA FLOW.

PHOTO: EZEQUIEL ORDONEZ





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

63. SEPT. 17, 1943

FROM JARÁTIRO HILL. LAZY

EMISSION OF ASH-LADENED ERUPTIVE

COLUMN.

PHOTO: W. F. FOSHAG

FROM JARÁTIRO HILL.

WHIRLWIND FORMED BY AIR CURRENT
ASCENDING SLOPE OF CONE TO MEET
DESCENDING ASH-LADENED CURRENT
FROM ERUPTIVE COLUMN.





SUBJECT

PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

FROM JARÁTIRO HILL. WELL
DEFINED BELT OF STEAMING ASH ON
THE CONE. SUCH BELTS OF STEAM
WERE FAIRLY FREQUENT.

PHOTO: ARNO BREHME



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SUBJECT

PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

BIRTH OF ZAPICHO, AN ADVENTITIOUS CONE AT THE N. E. FOOT

OF THE CONE. SEVEN VENTS
FOLLOWED A N. E. LINE FROM THE

CONE. ONE PERSISTED TO FORM

ZAPICHO.

PHOTO: ARNO BREHME

67. OCT. 21, 1943

ZAPICHO FROM THE EAST.

PHOTO: LYN STORM





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PARÍCUTIN VOLCANO. MICHOACAN, MEXICO

NOTES

68. OCT 21, 1943

FROM THE NORTH. AN ERUPTIVE CHIMNEY ON THE FLANK OF THE CONE.

ZAPICHO AT THE BASE OF THE CONE.

INFRA RED FILM.

PHOTO: LYN STORM

ZAPICHO FROM THE WEST. THE CREST LINE VARIED WITH THE GROWTH OF THE CONE.

PHOTO: EZEQUIEL ORDONEZ





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NOTES

70. NOV. 24, 1943

CRAGS OF ZAPICHO LAVA UPON
ASH-COVERED EARLIER FLOWS.

PHOTO: VILLA SEÑOR

71. NOV. 28, 1943

FRON JARÁTIRO HILL. LAZY

STEAM EMISSION FROM THE MAIN

CRATER. ZAPICHO IN ERUPTION AT

BASE OF THE CONE.





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PARÍCUTIN VOLCANO, MICHOACAN, MEXICO

NOTES

72. DEC. 5, 1943

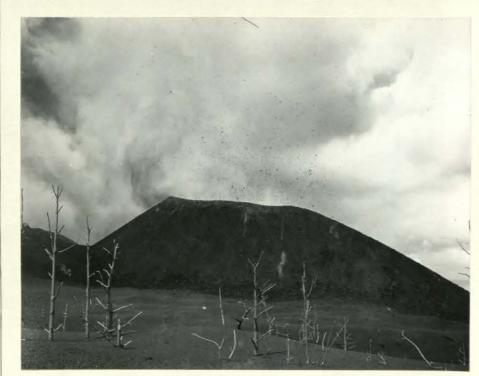
ZAPICHO FROM THE EAST. A CONSTANT COLUMN OF BOMBS AROSE FOR 2-1/2 MONTHS.

PHOTO: W. F. FOSHAG

73. JAN. 1944

EXTINCT ZAPICHO, SHOWING ITS
HORSESHOE SHAPE. ASH-COVERED
ZAPICHO LAVA IN FOREGROUND.
ZAPICHO BECAME EXTINCT ON JAN. 8,
1944, AND IS NOW BURIED UNDER
LAVA.

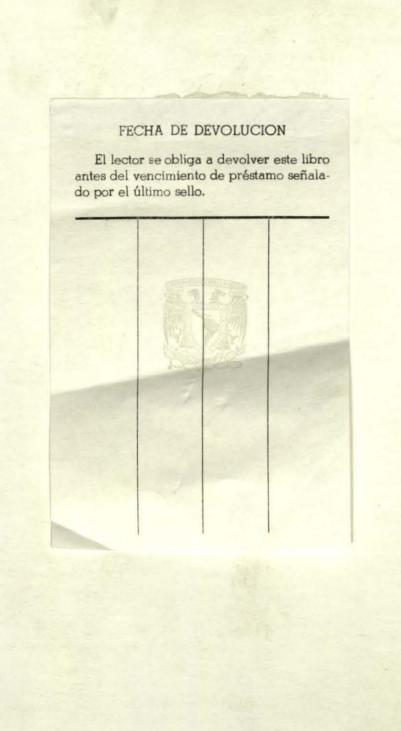
PHOTO: EZEQUIEL ORDONEZ







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