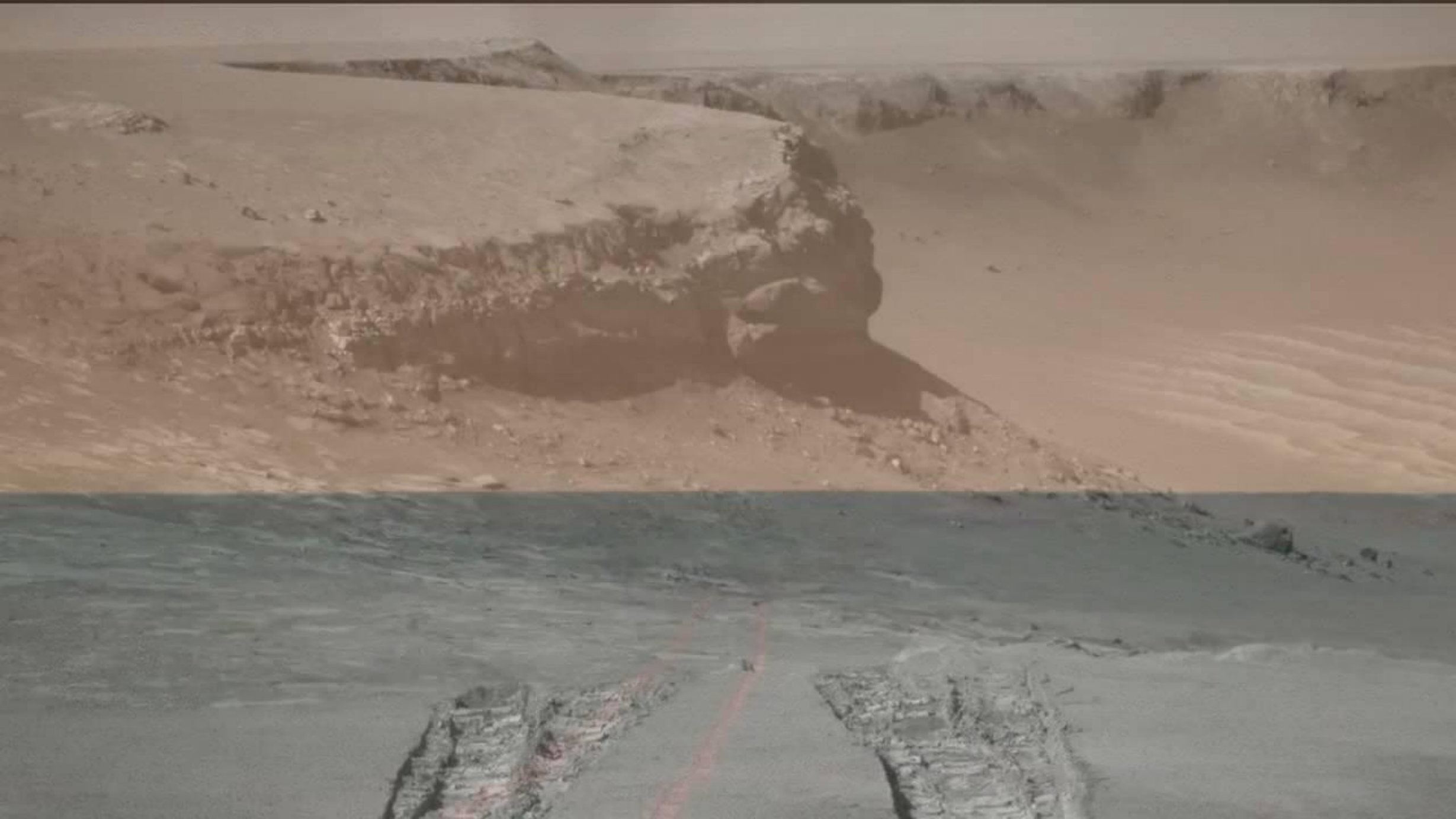

1
00:00:09,949 --> 00:00:07,539
so opportunities been wildly successful

2
00:00:12,320 --> 00:00:09,959
mission I don't think any of us ever

3
00:00:15,260 --> 00:00:12,330
guessed it would explore the myriad of

4
00:00:19,099 --> 00:00:15,270
different terrains and surprises that we

5
00:00:21,560 --> 00:00:19,109
found we landed right in Eagle crater

6
00:00:23,839 --> 00:00:21,570
that was most of our prime mission or

7
00:00:26,150 --> 00:00:23,849
good fraction of it we then drove over

8
00:00:30,679 --> 00:00:26,160
to endurance crater which was a slightly

9
00:00:31,970 --> 00:00:30,689
larger crater we then spent a better

10
00:00:33,470 --> 00:00:31,980
part of a couple years if I recall

11
00:00:35,810 --> 00:00:33,480
correctly driving down to Victoria

12
00:00:39,950 --> 00:00:35,820
crater and we explored that and that was

13
00:00:42,439 --> 00:00:39,960

yet even larger crater and now we're

14
00:00:43,970 --> 00:00:42,449
taking this this is real challenge to

15
00:00:45,560 --> 00:00:43,980
get to endeavour crater which is you

16
00:00:46,910 --> 00:00:45,570
know so much further than we ever

17
00:00:49,099 --> 00:00:46,920
thought the rover would be able to drive

18
00:00:51,650 --> 00:00:49,109
an endeavour crater is a very large

19
00:00:53,750 --> 00:00:51,660
impact crater that much older than any

20
00:00:56,209 --> 00:00:53,760
of those we've seen and so we still have

21
00:01:00,310 --> 00:00:56,219
approximately 12 to 14 kilometres to get

22
00:01:05,119 --> 00:01:03,140
we were simply driving along we looked

23
00:01:07,610 --> 00:01:05,129
at the images that we had acquired and

24
00:01:10,940 --> 00:01:07,620
we saw this dark spot out and we said

25
00:01:13,850 --> 00:01:10,950
well wow that's different let's go there

26
00:01:16,520 --> 00:01:13,860
and so we drive to it and investigated

27
00:01:18,290 --> 00:01:16,530
amazingly we found you know three or

28
00:01:19,850 --> 00:01:18,300
four of these meteorites you know

29
00:01:23,330 --> 00:01:19,860
gigantic chunks of iron to sitting on

30
00:01:25,160 --> 00:01:23,340
the surface of Mars two of them are

31
00:01:27,320 --> 00:01:25,170
almost they have but what we call a

32
00:01:29,570 --> 00:01:27,330
cavernous weathering where the interiors

33
00:01:31,790 --> 00:01:29,580
look like they've been eaten out which

34
00:01:34,670 --> 00:01:31,800
is quite common here on the earth when

35
00:01:38,180 --> 00:01:34,680
you have water that infuses and weathers

36
00:01:41,930 --> 00:01:38,190
out the interior have they been buried

37
00:01:43,790 --> 00:01:41,940
and exhumed was there liquid water when

38
00:01:45,920 --> 00:01:43,800

it was buried or was there water at the

39
00:01:49,430 --> 00:01:45,930
surface and these are all the kinds of

40
00:01:51,080 --> 00:01:49,440
questions that we're asking then just

41
00:01:52,340 --> 00:01:51,090
recently we found another large rock

42
00:01:54,230 --> 00:01:52,350
that was completely different called

43
00:01:55,760 --> 00:01:54,240
Marquette Island we've gotten rid of the

44
00:01:58,639 --> 00:01:55,770
weathering rind and measured as

45
00:02:02,120 --> 00:01:58,649
composition and it's a very olivene rich

46
00:02:04,539 --> 00:02:02,130
basalt so it's a rock and it has big

47
00:02:09,050 --> 00:02:04,549
crystals so it probably cooled slowly

48
00:02:10,850 --> 00:02:09,060
from some site some depth and this was

49
00:02:13,580 --> 00:02:10,860
some some other piece of Mars that had

50
00:02:15,289 --> 00:02:13,590
probably gotten blasted off from a

51
00:02:17,539 --> 00:02:15,299
meteorite strike so you know here's a

52
00:02:19,220 --> 00:02:17,549
whole other piece of this the planet

53
00:02:21,110 --> 00:02:19,230
somewhere that they can analyze and try

54
00:02:25,680 --> 00:02:21,120
to figure out how it fits into the whole

55
00:02:29,940 --> 00:02:28,380
I think everybody's stunned that the

56
00:02:32,220 --> 00:02:29,950
Rovers are still going I mean you know

57
00:02:33,660 --> 00:02:32,230
it's it's been repeated if you know so

58
00:02:34,950 --> 00:02:33,670
many times well this was a 90-day

59
00:02:38,940 --> 00:02:34,960
mission that were six years into a

60
00:02:41,550 --> 00:02:38,950
90-day mission its exploration and its

61
00:02:43,530 --> 00:02:41,560
truest form you you know that's what's

62
00:02:45,810 --> 00:02:43,540
so wonderful about having a rover if you

63
00:02:49,350 --> 00:02:45,820

don't like where you are go out and go

64
00:02:52,070 --> 00:02:49,360
to someplace else it's just like if I

65
00:02:54,330 --> 00:02:52,080
was walking around somewhere on earth

66
00:02:56,400 --> 00:02:54,340
except everything tastes a little bit

67
00:02:58,230 --> 00:02:56,410
longer but but at the end of the drive

68
00:03:00,330 --> 00:02:58,240
you get images and you look and you say

69
00:03:02,550 --> 00:03:00,340
well what's the same what's different

70
00:03:04,710 --> 00:03:02,560
what have we discovered and what's

71
00:03:07,410 --> 00:03:04,720
better than having a rover that can do