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1
00:00:11,920 --> 00:00:09,549
in the search for life elsewhere in our

2
00:00:13,840 --> 00:00:11,930
solar system NASA is exploring the red

3
00:00:15,310 --> 00:00:13,850
planet Mars and is building the

4
00:00:18,640 --> 00:00:15,320
foundation to study Saturn's largest

5
00:00:20,170 --> 00:00:18,650
moon Titan some of the tools and

6
00:00:22,150 --> 00:00:20,180
techniques for this endeavor are being

7
00:00:24,189 --> 00:00:22,160
developed and tested on Laguna Negra a

8
00:00:26,290 --> 00:00:24,199
high-altitude lake in the central Andes

9
00:00:27,939 --> 00:00:26,300
of Chile by the scientists in charge of

10
00:00:30,460 --> 00:00:27,949
the planetary Lake Lander project

11
00:00:32,650 --> 00:00:30,470
Earth's high-altitude condition of

12
00:00:34,690 --> 00:00:32,660
strong ultraviolet radiation and harsh

13
00:00:37,450 --> 00:00:34,700

climate may be comparable to conditions

14

00:00:40,030 --> 00:00:37,460

on Mars in its distant past similarly

15

00:00:42,220 --> 00:00:40,040

Titan intrigued scientists it is a

16

00:00:44,290 --> 00:00:42,230

strange world where methane gas seeds

17

00:00:47,110 --> 00:00:44,300

the air lakes and rivers with the

18

00:00:49,210 --> 00:00:47,120

chemical building blocks of life Angela

19

00:00:51,040 --> 00:00:49,220

Detweiler is a lab specialist helping to

20

00:00:53,230 --> 00:00:51,050

calibrate the prototype sensors of the

21

00:00:54,790 --> 00:00:53,240

lake Lander so if we're looking for life

22

00:00:57,460 --> 00:00:54,800

and other planets you know what are we

23

00:01:00,850 --> 00:00:57,470

looking for one thing that we're looking

24

00:01:03,550 --> 00:01:00,860

for biosignatures and bio signatures are

25

00:01:06,880 --> 00:01:03,560

signs that were left by biological

26
00:01:10,590 --> 00:01:06,890
systems so gases would be an example on

27
00:01:13,120 --> 00:01:10,600
oxygen organic acids and so if those

28
00:01:14,950 --> 00:01:13,130
elements are able to survive that's a

29
00:01:17,680 --> 00:01:14,960
type of bio signature and we try to

30
00:01:18,850 --> 00:01:17,690
understand the earth first so that we

31
00:01:22,350 --> 00:01:18,860
can have a better understanding of what

32
00:01:26,790 --> 00:01:25,060
for more information on these topics go