

# Hawaiian Volcano Observatory Record Book 1936

This volume is one of a series of record books compiled by the Hawaiian Volcano Observatory (HVO) from 1912 through early 1966. The pages for this volume were transferred by HVO to the Bishop Museum, in Honolulu, Hawai'i, in 1972 and are held at that institution (accession number 1972.265). In 2010, HVO entered a cooperative agreement with Bishop Museum to scan many of the record books in their repository. The scanning was done by HVO volunteer Frances Wong using a flat-bed scanner at a resolution equivalent to 600 dpi. The raw scans were then delivered to HVO volunteer Ben Gaddis, who processed each of the scanned pages by cropping and by adjusting the exposure and contrast using a photo editing program. The scanned and photographed pages for this volume were then combined to form this digital version of the record book. Quality control and posting was done by Tim Orr of the U.S. Geological Survey Alaska Volcano Observatory.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

## Hawaiian Volcano Observatory

## JOURNAL

Day	Date	January 1, 1936
Wednesday		
Thursday	"	2, "
Saturday	"	4, "
Tuesday	"	7, "
Thursday	"	9, "
Tuesday	"	14, "

January 1  
9 a.m.

First inspection in some weeks. Everything unaltered & no sign of fresh slides. Blue fume from NW yellow solfatara. Rocks trickling WNW. Clear SW'ly.

Mauna Loa fume in sight blowing from SW at rift cones, and excessively slight from here. However it is abundant as seen from Humuula, but more vaporous than sulphury.

T.A.J.

January 2  
9:35 a.m.

Rocks trickling from N wall. Very slight fume this morning.

January 4  
8:37 a.m.

Rocks trickling from N wall.

H.Y.

January 7  
3:30 p.m.

Unusually dense smoke from Hal. seen by Mr. Craik. Also seen weaker Sunday 5th.

January 9  
2<sup>1</sup>/<sub>2</sub> p.m.

Pronounced avalanche Hal seen by Mrs. Wingate.

January 14  
12:30 p.m.

Fume at scarp cones. Faint.

T.A.J.

## PHOTOGRAPH RECORD

Day Wednesday

Date January 15, 1938

time	sta	subject	no	pl	scr	stop	ex	cam
<u>January 15</u>								
5:13 p.m.		Kilauea. Calm. Many steam jets. Sunset. Remarkable light		SS Pan		f/8	1/50	3A

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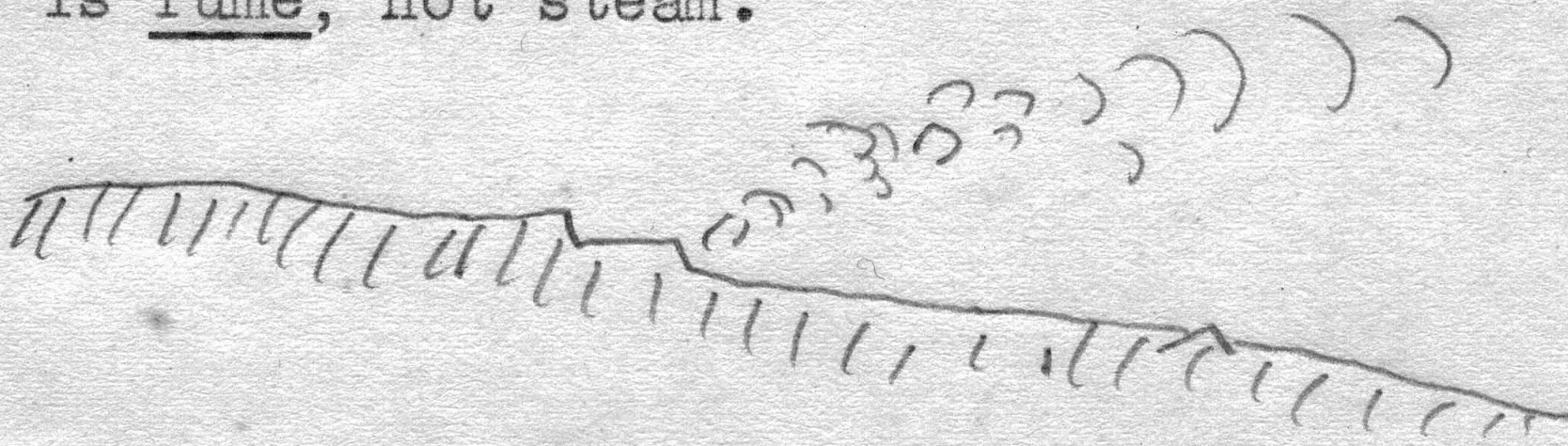
JOURNAL

Day	Thursday	Date	January 16, 1936
	Friday		" 17, "
	Saturday		" 18, "
	Tuesday		" 21, "

January 16                      Normal slide on W wall.  
9:32 a.m.

H.Y.

January 17                      Fume rising in thin dark column at M.L. rift rt of scarp cones.  
7:15 a.m.                      White rain cumulus low in Humuula valley. Calm. Cloudy. Fume puffs  
and is fume, not steam.



January 18                      Brown cloud M.L. above scarp cones. Quite dense.  
7:20 a.m.                      Fresh snow on summit cones M. Kea.

T.A.J.

9:50 a.m.                      What appears to be fume from large sulfur coloration at SE edge  
of Pit floor.

H.H.W.

January 21                      Hal very calm & sunny. Pit full of diffuse fume. Vapor at W & S  
8:25 a.m.                      talus & wall. Fume at yellow Solf NW and at sulph spot under Tourist  
Stand SE. Odor of spicy sulphur from pit. Sulph spot at N horn of  
1932 cone appears larger than 6 mos ago. Both horns appear to be ac-  
tively solfataric. No motion in Pit.

T.A.J.

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## JOURNAL

Day	Date	January 22-23, 1935
Wed-Thur		
Fri-Sat	"	24-25, "
Thursday	"	30 "
Friday	"	31, "

January 22-23 Halemaumau quiet with fume from all the usual spots.  
10 a.m.

January 24-25 Halemaumau quiet with fume very slight at NW fumarol so that at  
10 a.m. times none visible. Mod. NE wind.

H.H.W.

January 30 Rocks trickling from W wall all the time.  
9:55 a.m.

H.Y.

An Army officer reports a rather heavy slide in pit at 11:05 by my watch. I noticed dust from another at 11:25. He reports the slide coming down between the two large sulfur areas on the talus opposite from the rail.

Sam Lamb &amp; Murray

12 noon Large cloud of dust over Pit indicating slide from east? wall.

H.H.W.

Fume dense as ever at 1935 rift cone puffing up & brown.

T.A.J.

January 31 Slide at SE wall sometime between yesterday and this morning. Fresh  
9:34 a.m. rocks on floor.

H.Y.

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Day	Date	February 1, 1936
Saturday		
Thursday	" 6,	"
Sunday	" 9,	"
Monday	" 10,	"
Friday	" 14,	"

February 1 Small slide from about half-way up N wall of Pit.

H.H.W.

February 6 Fume at rift source M.L. seen at 12 noon.  
At 5 p.m. an opalescent fume cirrus, bluish with spectrum on edges, lay in a sheet west of the zenith in the upper atmosphere. This was seen also a few days ago.  
The seismographs have been recording long tremors and some felt shocks.

February 9 Large milky cloud over rift source M.L. Tinge of yellow. Stands 2:40 p.m. 900 feet above base. Covers right scarp cone. Puffs up at base where it is dense.  
Have not seen this for some days on account of clouds & snow on mts. Snow now thinning. M.K. has been white low down. M.L. for some dist below rest house. Calm veering E'ly here, has been Kona wind, & the steam cliffs are blowing from S.

February 10 Light fume cloud behind scarp cone on M.L.  
10 a.m.

T.A.J.

February 14 Slide from NE wall sometime between yesterday and this morning.  
9:55 a.m. Fresh rocks on floor. Some of the cracks on the floor seem to be getting bigger and bigger.

H.Y.

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## JOURNAL

Day	Friday	Date	February 14, 1936
	Saturday		" 15, "
	Sunday		" 16, "
	Tuesday		" 18, "
	Wednesday		" 19, "

February 14  
(cont'd)  
a.m.                      Brown fume visible at M L rift source. Kona wind. P.M. the same.

February 15  
7 a.m.                      The same. Tall slender brown column. SW wind here.

T.A.J.

February 16  
10:02 a.m.                Rocks trickling from W and NE walls. Slide yesterday from SE wall between yesterday and last night. The floor~~x~~ appears to have changed since yesterday morning.

H.Y.

4 p.m.                      From Hilo. Milky fume column.(M.L.)

T.A.J.

February 18  
9:58 a.m.                Rocks trickling from N wall which appears to be dry all over.

H.Y.

February 19  
7 a.m.                      Faint fume blowing to SW from M.L. Seen from Hilo.

T.A.J.

9:42 a.m. and 9:46        Small slides from N and NE walls. Small slides every morning. Floor appears to be changed.

H.Y.

February 25  
7 a.m.

Distinct brown column fume ML blowing to SW.

T.A.J.

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## JOURNAL

Day	Wednesday	Date	March 4, 1936
	Saturday	"	7, "
	Thursday	"	12, "
	Friday	"	13, "
	Tuesday	"	17, "

March 4  
9:46 a.m. Small slide on N wall. I think also slides from SE wall and NE wall between yesterday and this morning. Fresh dust and rocks on floor.

March 7  
9:58 a.m. Small slide from N wall. Second slide 10:35 a.m. from same place.

H.Y.

Fume this week seen M.L. but faint.

March 12  
4:56 p.m.  
4:58 p.m.

Felt quake.

Another  
Seis shows another an hour earlier.

T.A.J.

March 13  
9:48 a.m.

There must have been a big slide yesterday from the NE wall of Pit at the time of the quake. Fresh rocks on old slide and fresh dust on floor.

About 500 ft below the rim.

March 17  
10:13 a.m.

Normal slide from NE wall. Slide started about 200 ft below the rim. Rocks trickling here and there this morning. Fume is very slight.

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## JOURNAL

Day	Date
Wednesday	March 18, 1936
Thursday	" 19, "
Friday	" 20, "
Sunday	" 22, "

March 18 I was at **SE** Station and hear big noise and slide from the NE wall.  
Slides from NE wall.

9:56 a.m. Big slide  
10:06 a.m. Small slide  
10:09 a.m. Small slide  
10:10 a.m. Big slide  
10:14 a.m. Small slide

H.Y.

3-3:45 p.m. Large slide from NE wall of Pit at 3:20 p.m., a larger one at 3:32 p.m. from same locality leaving a large apse-like embayment about 2/3 way up wall of Pit. Continuous trickle interrupted by large sliding boulders from time to time.

H.H.W.

March 19 Rocks trickling from the NE wall all the time this morning.  
9:33 a.m.

March 20 Rocks trickling from the NE wall all the time still. Noise is  
9:58 a.m. loud enough to be heard as far as SE station.  
Fume from below tourist lookout very thick.

March 22 Small slide from NE wall of Pit.  
9:48 a.m. Crack No. 34 on NE edge went down sometime last week with big slide.

4:36 p.m. Slide at Pit . Light dust came up. Seen from HVO.

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## JOURNAL

Day	Monday	Date	March 23, 1936
	Wednesday		" 25, "
	Sunday		" 29, "
	Monday		" 30, "

March 23

9:57 a.m.

Rocks trickling from NE wall at the Pit.

10:05 a.m.

Light noise of rocks trickling from NW wall.

12:40 p.m.

Slide at Pit, making light dust come up. Looks as though from NE wall. Seen from Obs'y.

12:51 p.m.

Second slide. Dust was thicker than that of preceding slide.

March 25

9:39 a.m.

Normal slide from the NE wall of the Pit.

March 29

9:49 a.m.

Small slide from NE wall of the Pit. Fume very slight in Pit this morning, just a little showing at spot below tourist lookout.

March 30

9:16 a.m.

Light rocks trickle from W wall of Pit.

H.Y.

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## JOURNAL

Day	Saturday	Date	April 4, 1936
	Monday	"	6, "
	Friday	"	10, "
	Sunday	"	12, "
	Monday	"	13, "
	Tuesday	"	14, "

April 4 Fresh crack on the NE edge of Pit is about 300 ft long.

April 6 Small slide from E wall of Pit.  
10:02 a.m.

April 10 Small rocks trickling from NE wall of Pit.  
10:14 a.m.

April 12 Moderate slide at the Pit. Slide appeared to be from NE wall.  
12:40 p.m. Reported by Dr. Jaggar.

H.Y.

Smoke rising April 12 M.L. . Some cones plainly visible.

XX

April 13 Normal slide at the Pit.  
4:30 p.m.

April 14 Slight fume at pit this morning. Slide seen from HVO yesterday  
10:15 a.m. was from NE wall of Pit. Fresh dust on wall.

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Day	Wednesday	Date	April 15, 1936
	Tuesday		" 21, "
	Friday		" 24, "
	Saturday		" 25, "

April 15  
10:09 a.m.

Big quake this morning but fume at pit is slight.

Felt by Sato at Dr. Jaggar's office

Dismantled E-W. Rang #4.

1st motion S-W?  $\Delta$ ? 14 miles.

Felt at M. Camp

Felt by Park Naturalist Lamb

Felt by Shiotani 28 miles.

Felt at Honokaa Hotel.

9:08 a.m.

Mauna Loa fume can be seen very clearly.

April 21  
10:30 a.m.

Big noise and rocks trickle from NE wall.

April 24  
9:32 a.m.

Slide sometime between yesterday morning to this morning On NW wall of Pit. Fresh dust on floor.

April 25  
10:21 a.m.

Small slide on east wall at the Pit.  
On the E edge old cracks start to open.

T.A.J.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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## JOURNAL

Day	Date
Saturday	May 2, 1936
Sunday	" 10, "
Friday	" 15, "
Saturday	" 16, "
Friday	" 22, "
Thursday	" 28, "
Saturday	" 30, "

May 2  
10:25 a.m.

Trickle of small rocks from NE wall of Pit.

May 10

Strong wind at the crater all week. Nothing to report for Pit for the week.

May 15  
10:17 a.m.

Small rocks continue trickling from NE wall at the Pit. The walls of the Pit appears very dry. No change from last week. Fume about the same.

May 16  
10:37 a.m.

Normal slide from NE wall of the Pit.

May 22  
9:41 a.m.

Sometime between yesterday and this morning there must have been a large slide from the NE wall about 400 ft below the edge. Fresh looking scars on the wall and fresh rocks and dust on floor. Small rocks still trickling this morning.

9:48 a.m.

Small slide from same place.

2:15 p.m.

Saw a moderate slide from the Obs which looked as though it took place from NE wall. Must be same place as this morning.

H.Y.

May 28  
6:10 p.m.

A slide apparently quite heavy, visible from the porch of the Volcano House, occurred at 6:10 p.m. Happened to be on the NE side.

Lamb.

May 30  
4:40 p.m.

Dust indicating slide NE wall.

H.H.W.

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## JOURNAL

Day	Date
Wednesday	June 3, 1936
Thursday	" 4, "
Thursday	" 11, "
Tuesday	" 16, "
Thursday	" 18, "
Saturday	" 20, "
Monday	" 22, "

June 3                      Small slide from NE wall of Pit. Noise was loud but the slide  
9:37 a.m.                      was small. Walls of Pit look very dry.

H.Y.

June 4                      Slide, along with feeble earthquake.  
3:21 p.m.

H.H.W.

June 11                      Blue fume from SE Sulfur spot seemed stronger than usual. Day  
9:45 a.m.                      clear and quiet (no wind).

H.H.W.

June 16                      Fume was very slight yesterday, but this morning it became very  
9 a.m.                              strong. Mall rocks continued to trickle from NE wall of the Pit.

H.Y.

June 18                      Fume from vents at 12,000 on M.L. seen by transmitted light  
5 p.m.                              from later afternoon sun.

June 20                      Moderately strong fuming from SE sulfur spot at 9:30 a.m. Weather  
9:30 a.m.                      clear and windy.  
4:30 p.m.                      Same as on 18th at 4:30 p.m.

H.H.W.

June 22                      Small rocks continued trickling from NE wall of Pit.  
9:28 a.m.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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## JOURNAL

Day	Date
Thursday	June 25, 1936
Saturday	" 26, "
Monday	" 29, "
Tuesday	" 30, "

June 25  
9:18 a.m. Big slide from NE wall sometime between yesterday and this morning. Fresh rocks and dust on floor. Very slight fume this morning.

June 27  
10:15 a.m. 25. I think sliding has been going on from NE wall of pit since June 25. Every morning dust on floor is thicker. Scars about 200 ft below edge of NE wall seen this morning from the southern edge. This report is just out of crack #29. (?)

H.Y.

10:30 a.m. Rocks heard falling in crack #46 while measuring about 10:30 a.m.

June 29  
9:27 a.m. Slide from NE wall of Pit between this morning and yesterday. Yesterday morning, I saw that the old dust had been washed off but there was fresh dust this morning about 400 ft below the edge. Small rocks were still trickling and there was fresh dust on floor. Just out of crack #29.

H.Y.

12:45 p.m. Slide indicated by dust over Pit at 12:45 p.m.

H.H.W.

12:52 p.m. Slide at the Pit. Normal dust showing up. Looks as tho from NE wall. Dust rose for 5 minutes.

H.Y.

June 30  
3:50 p.m. Large dust cloud over NE side of Pit.

H.H.W.

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## JOURNAL

Day	Date
Wednesday	June 3, 1936
Thursday	" 4, "
Thursday	" 11, "
Tuesday	" 16, "
Thursday	" 18, "
Saturday	" 20, "
Monday	" 22, "

June 3                      Small slide from NE wall of Pit. Noise was loud but the slide  
9:37 a.m.                      was small. Walls of Pit look very dry.

H.Y.

June 4                      Slide, along with feeble earthquake.  
3:21 p.m.

H.H.W.

June 11                      Blue fume from SE Sulfur spot seemed stronger than usual. Day  
9:45 a.m.                      clear and quiet (no wind).

H.H.W.

June 16                      Fume was very slight yesterday, but this morning it became very  
9 a.m.                              strong. Mall rocks continued to trickle from NE wall of the Pit.

H.Y.

June 18                      Fume from vents at 12,000 on M.L. seen by transmitted light  
5 p.m.                              from later afternoon sun.

June 20                      Moderately strong fuming from SE sulfur spot at 9:30 a.m. Weather  
9:30 a.m.                      clear and windy.  
4:30 p.m.                      Same as on 18th at 4:30 p.m.

H.H.W.

June 22                      Small rocks continued trickling from NE wall of Pit.  
9:28 a.m.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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## JOURNAL

Day	Date
Saturday	July 18, 1936
Monday	" 20, "
Tuesday	" 21, "

July 18  
9:58 a.m.

Big noise of rock-trickle 3 or 4 times below the tourist lookout of the Pit.

Old cracks by NE edge seem to be opening more and more every week. The area by crack #31 seems to be larger this morning than it was last week.

July 20  
9:41 a.m.

I think there was a slide from NE wall sometime this morning. There are fresh scars about 400 ft below the edge where crack #29 is. Fresh rocks and light dust show on floor. Small rocks continue to trickle.

H.Y.

July 21

Considerable dust was seen rising from Halemaumau between 2:50 and 3:05 p.m. July 20. It appeared to come from a slide from the north or northeast wall.

E.G.W.

9:28 a.m.

The big slide yesterday, the one which Mr. Wingate saw about 3 o'clock was from the NE wall. Some small rocks continue to trickle still this morning, and thick dust and fresh rocks are on the floor. Wind is very strong.

Very clear scars showing on wall about 400 feet below the edge where crack #29 is located.

H.Y.

This noon also heard youngsters outside yelling that there must be an eruption from all the "smoke" in evidence, so concluded there was a slide. Must have been about 12:10. Was in bed so couldn't say just the location.

C.W.

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Day	Date
Wednesday	July 22, 1936
Thursday	" 23, "
Friday	" 24, "

July 22  
 9:31 a.m. Big slide between yesterday morning to this morning on NE wall just out of crack #29. Scars show about 200 feet below the edge. Rocks still trickling. Must have been a bigger slide than day before.  
 9:37 a.m. Small slide from same place.  
 1:19 p.m. Big slide at pit. Looks as though from the same place.

3:43 p.m. Moderate slide at Pit. Looks as though from NE. Dust showing up same place that we saw after lunch. H.Y.

A.O.

Sliding from NE wall between 4:30-5 p.m.

H.H.W.

July 23  
 9:13 a.m. Moderate slide from NE wall of the Pit.  
 9:44 a.m. Area by crack #29. This edge slid off about 100 ft and rocks are still trickling this morning. I think more of the edge is going to slide off in a short while. Old cracks have opened very big.  
 9:52 a.m. Big slide from NE edge.  
 10:01 a.m. Moderate slide same place.  
 10:07 a.m. Small slide same place.  
 I think that from yesterday this NE wall has been sliding all the time.

July 24  
 9:41 a.m. Small slide this morning is from same place: NE wall of Pit.

H.Y.

Mrs. Wingate and I noticed a large slide this morning at approximately 8:15, appeared to be from the north wall.

C.W.

1:24 p.m. Moderate slide from NE wall of the Pit.

H.Y.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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## JOURNAL

Day	Date
Thursday	August 6, 1936
Sunday	" 9, "
Tuesday	" 18, "
Monday	" 31, "

August 6  
10 a.m.

Conditions at Pit quiet with about usual fuming from solfataras and no sliding in evidence. Dust on floor from slides however especially concentrated around cracks.

H.H.W.

August 9  
9:25 a.m.

Moderate slide from NE wall of the Pit. Looks like just out of crack #29.

August 18

Moderate slides from NE wall of the Pit 9:35 a.m., 9:42 a.m., and 10:42 a.m.; three times at same place just out of crack #29.

August 31

Big slide at the Pit this morning 8:03 a.m. Thick dust rose from NE side. Second smaller slide at 12:18 p.m. Looks as though it was from same place as this morning's. Report by Miyake.

9:33 a.m.

Looked at NE wall this morning near crack #29. Fresh scars on wall and thin dust on floor. I think this was due to this morning's slide.

Fume very slight.

H.Y.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

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## JOURNAL

Day	Date	September 7, 1936
Monday		
Wednesday		" 9, "
Thursday		" 10, "
Monday		" 14, "
Tuesday		" 15, "
Wednesday		" 16, "

September 7      Rocks trickled from NE wall of the Pit.  
9:12 a.m.

September 9      Moderate slide from E wall near crack #31.  
9:50 a.m.  
9:58 a.m.      Small rocks trickled from same wall.

September 10      Yesterday's quake felt by Mr. English of 28 miles at his home  
at 5:45 p.m. Felt two slight shocks.

September 14      There must have been a big slide on NE wall between yesterday  
9:27 a.m.      and this morning below crack #29. Fresh scars on wall about 150 feet  
below the edge and fresh dust and rocks on floor. Small rocks still  
trickling this morning.

H.Y.

September 15      Slide from NE rim reported by E. English.  
10:50 a.m.

September 16      Rocks trickling from wall? Reported by E. English.  
1:40 p.m.

## JOURNAL

Day	Date
Saturday	September 19, 1936
Friday	" 25, "
Saturday	" 26, "
Tuesday	" 29, "

September 19 Fume from SE solfatara rather strong at 10:30 a.m. NW solfatara fuming steadily.

Some trickling of rocks from time to time while measuring cracks, between 9:30 a.m. and 11 a.m. Apparently from NE wall.

Center part of NE talus much increased during week. Fresh scars on NE wall.

Movement noticeable in cracks especially as exhibited by fresh breaks on surface all along NE Pit rim.

Slumped material just below rim opposite crack 34, showed farther displacement into Pit.

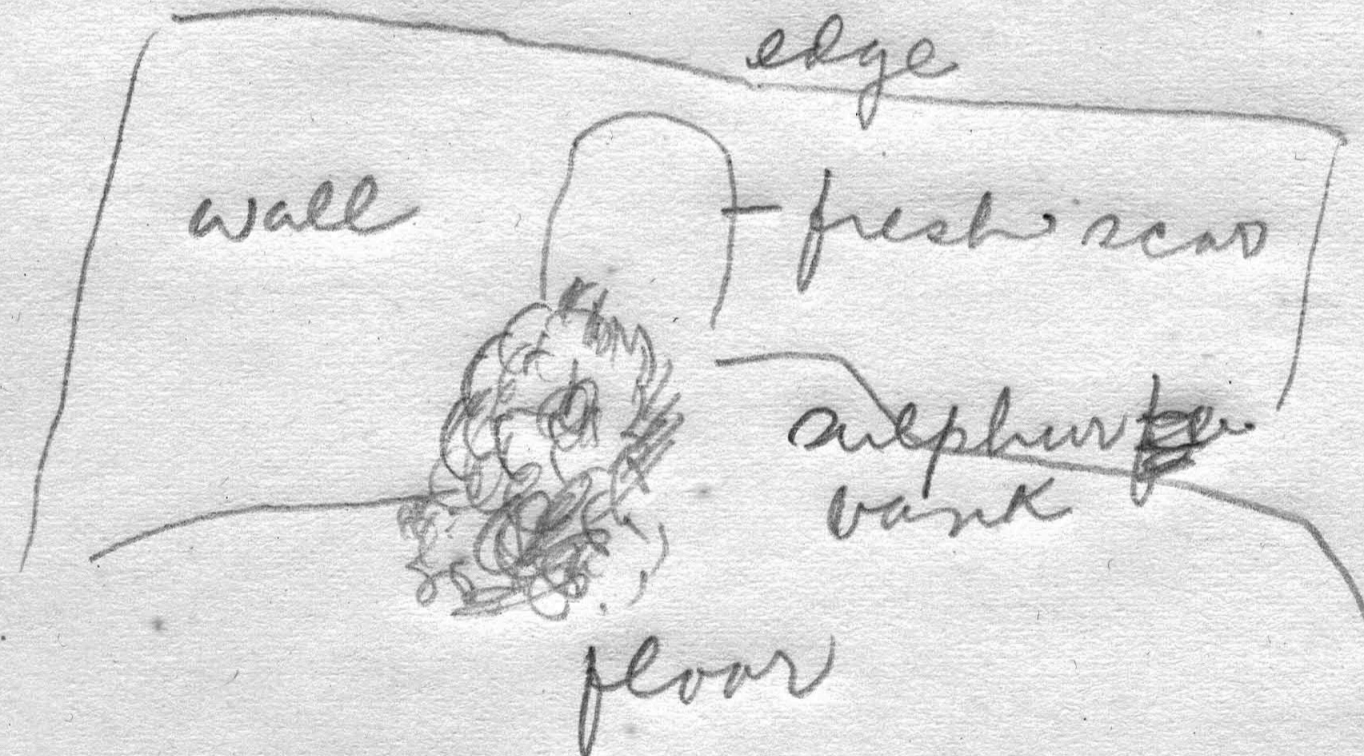
H.H.W.

September 25 Big slide sometime between yesterday and this morning, below 9:15 a.m. crack #29, on NE wall. Scars about 100 feet below the edge and rocks still trickling this morning.

9:42 a.m. Big slide at the pit. Must be from same place.

September 26 Small slide from E wall of Pit; first slide 10:04 a.m. second 10:24 a

September 29 Slide at NW wall sometime between last night & this morning. 9:40 a.m. Scars show 300 ft below the edge. Small rocks still trickling.



10:02 a.m. Rocks trickled from NE wall of the Pit.

H.Y.

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## JOURNAL

Day	Date	October 1, 1936
Thursday	October 1,	1936
Saturday	" 3,	"
Tuesday	" 6,	"
Wednesday	" 7,	"
Thursday	" 8,	"
Friday	" 9,	"

October 1  
2:20 p.m.

Large cloud of dust indicating big slide at NE or E rim of Pit.

October 3  
11 a.m.

Small slide NE rim of Halemaumau.

H.H.W.

October 6  
9:40 a.m.

Moderate slide from NE wall of the Pit below crack #29.

Sometime between yesterday and this morning there seems to have been a slide on NE wall below crack #31. Fresh scars on wall.

H.Y.

3 p.m.

Avalanches E observed by Mr. Elkinton.

T.A.J.

October 7  
7:56 a.m.

Continuous trickling of small rocks from NE wall below crack 31.

October 8  
9:11 a.m.

Big slide on NE wall below crack #29 sometime this morning. Scars show 150 feet below edge. Rocks still trickling. Fresh dust & rocks on floor.

H.Y.

October 9  
12:30 p.m.

Slide dust bserved.

T.A.J.

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## JOURNAL

Day	Saturday	Date	October 10, 1936
	Sunday		" 11, "
	Monday		" 12, "

October 10  
10:15 a.m.

Moderate slide on NE wall just below crack #34.

H.Y.

4:46 p.m.

Proceeding towards Halemaumau from the CCC Camp we noted a faint dust cloud. In a few minutes it grew to a fair-sized avalanche on the NE wall between the two major talus slides.

R.I.B.

October 11  
9:40 a.m.

Big slide on E wall just below crack #31. Must have been made by quake this morning between 3-4 a.m. Big scars show on wall and fresh rocks and sand on top of the old bay and fresh rocks & dust on floor. Rocks still trickling this morning when I looked in.

H.Y.

1:30 p.m.

Slide dust observed.

T.A.J.

1:40 p.m.

Moderate slide at Pit. Dust cloud rises from NE side.

H.Y.

1:45 p.m.

Slide S of cracks #46 at 1:45 p.m.

4:15 p.m.

Slide opposite crack #31.

H.Y.

October 12  
2 p.m.

Slide dust observed.

T.A.J.

3:50 p.m.

Dust from slide over E rim Halemaumau.

H.H.W.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

## Hawaiian Volcano Observatory

## JOURNAL

Day	Date
Thursday	October 15, 1936
Friday	" 16, "
Saturday	" 17, "
Sunday	" 18, "

October 15      Dust from large slide at 9:05 a.m. near crack #31.

H.H.W.

10:05 a.m.      There must have been a big slide at NE wall just below crack #29. Fresh scars show about 100 feet below the edge. There must also have been a big slide from E wall just below crack #31. The wall and the bay looks different from yesterday morning. Small rocks trickle continuously from both ~~sides~~ walls.

October 16      Moderate slide just below crack #29 at NE wall of pit. Slide started about 200 feet below the edge.

9:44 a.m.      Noise of rocks was so loud it must have been a big slide.

H.Y.

October 17      Heavy sliding with continuous fall of rocks between.  
One big avalanche at 10:25 a.m. and another at 11:55 a.m. Both at point opposite crack #46.

Fume seemed rather strong at 9:45 a.m.

H.H.W.

October 18      Moderate slide just below crack #31 on E wall of the pit. Slide started about 300 feet below the edge.

9:20 a.m.

## JOURNAL

Day Monday Date October 19, 1936  
 Tuesday " 20, "

October 19

Moderate slide just below crack #31 on east wall. First started at 9:26 a.m. and after that moderate and small slides every minute. Big scars showed on wall.

9:26 a.m. Small slide  
 9:27 a.m. Moderate slide  
 9:28 a.m. " "  
 9:30 a.m. Very big slide. Big noise. About 150 feet below edge.  
 9:31 a.m. Moderate slide. About 400 ft below edge.  
 9:32 a.m. Big slide. Same place as 9:30 a.m.  
 9:34 a.m. Moderate slide.  
 9:36 a.m. Small slide.  
 9:37 a.m. Moderate slide.  
 9:42 a.m. Small slide.

H.Y.

Slides at Pit. Some are noted in above.

9:20 a.m.  
 9:26 a.m.  
 9:27 a.m.  
 9:28 a.m.  
 9:30 a.m.  
 9:31 a.m.  
 9:32 a.m.  
 9:34 a.m.  
 9:35 a.m.  
 9:36 a.m.  
 9:37 a.m.  
 9:40 a.m.  
 9:49 a.m.

H.H.W.

9:40 a.m. Big noise of rock trickle from W wall just above SW bay.  
 9:49 a.m. Small slide from NE wall of Pit below crack #29.

H.Y.

October 20

Moderate slide at 2:40 p.m. and continuous trickle of rock from NE section of Pit wall about half-way down between 2 p.m. and 3:40 p.m.

H.H.W.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

## Hawaiian Volcano Observatory

## JOURNAL

Day	Thursday	Date	October 22, 1936
	Friday		" 23, "

October 22  
8:55 a.m.

Big slide NE wall of Pit.

H.Y.

Large slide from NE wall at	8:30 a.m.
	10:10 a.m.
	10:40 a.m.
	10:45 a.m.
	10:50 a.m.
	11:00 a.m.
Moderate slides.	11:03 a.m.
	11:05 a.m.
	11:18 a.m.
Lamb took pictures. Large	11:20 a.m.
Small	11:25 a.m.
	11:28 a.m.
	11:30 a.m.
	11:50 a.m.
	11:55 a.m.
Large cloud of dust.	2:05 p.m.
	2:10 p.m.
Moderate slide	2:45 p.m.
Large cloud of dust at	5:00 p.m.
filling whole Pit & lasted	
20 minutes. Continuous	
rock falls all day.	

October 23

Continuous rock fall with intermittent rock slides of moderate size from 8:30 a.m. to 1:00 p.m. while running levels. Same conditions of more moderate nature 5-6 p.m.

H.H.W.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

## Hawaiian Volcano Observatory

## JOURNAL

Day	Date
Monday	October 26, 1936
Tuesday	" 27, "
Wednesday	" 28, "

October 26

This morning first moderate slide start from 9:20 a.m. and after that slides from NE wall of Pit were continuous.

9:20 a.m.	Moderate slide
9:24 a.m.	Small "
9:47 a.m.	Big "
9:49 a.m.	" "
9:57 a.m.	Small "
10:00 a.m.	Moderate "
10:04 a.m.	" "
10:09 a.m.	Small "

H.Y.

Slide indicated by large cloud of dust over NE rim at 9:25 a.m.

H.M.W.

October 27

Moderate slide 9:23 a.m. Seen from below Uwekahuna. Rising dust cloud indicates NE wall of Pit. When I looked into the pit at 9:42 a.m., rocks were still trickling continuously from NE wall.

10:00 a.m.	Moderate slide.
10:03 a.m.	Small "
10:11 a.m.	" "
10:15 a.m.	" "

October 28

9:23 a.m. Moderate slide from NE wall of Pit. Thick dust cloud rose and rock trickle was continuous.

H.Y.

October 31

Large slide near dike in NE wall 200 feet<sup>±</sup> at 10:20 a.m.

T.A.J.

## Hawaiian Volcano Observatory

## JOURNAL

Day	Date
Sunday	November 1, 1936
Monday	" 2, "
Tuesday	" 10, "
Wednesday	" 11, "
Thursday	" 12, "

November 1 At 12:50 p.m. dust in Pit. The area crack across Volc Hse trail was roped off.

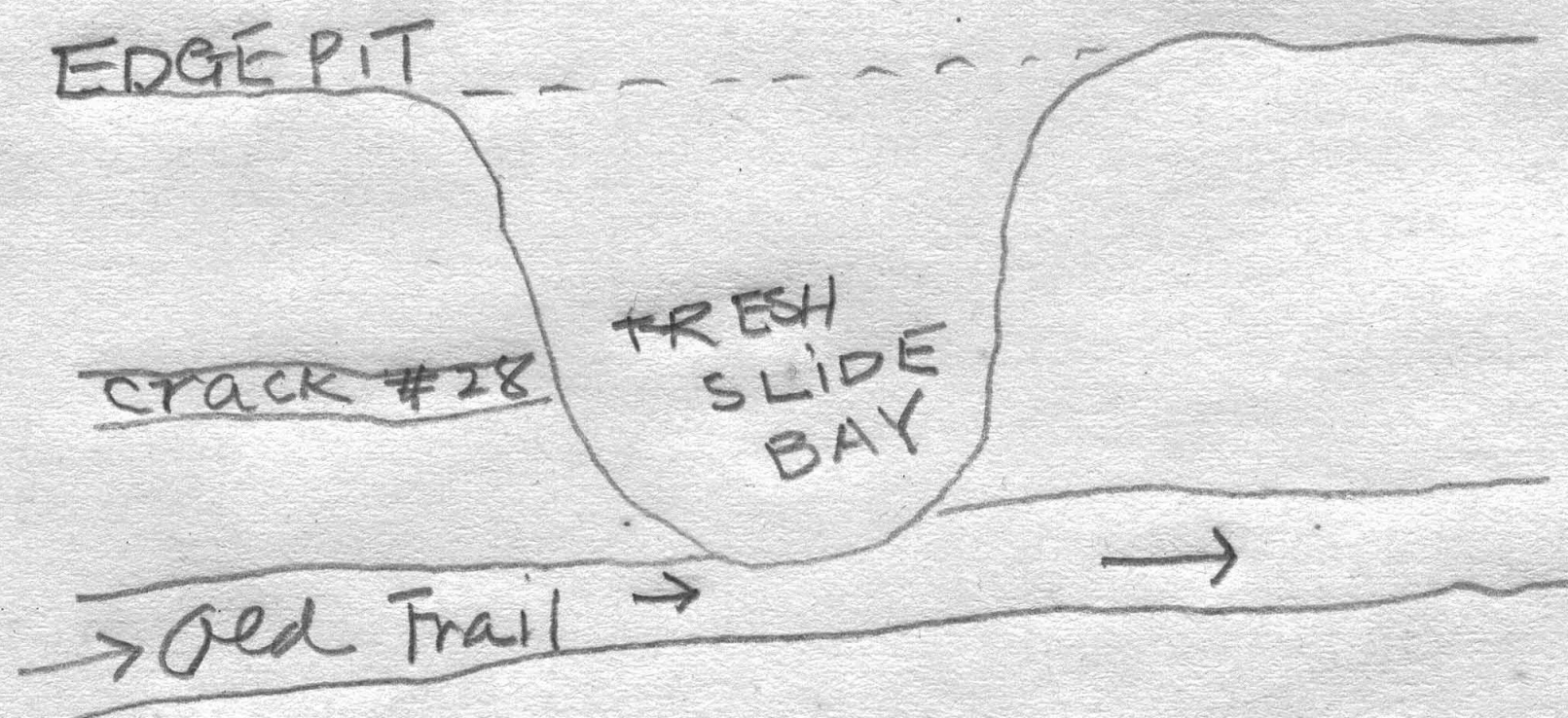
November 2 Much dust in pit.  
12-1:30 p.m.

T.A.J.

November 10 This morning before I went down to Pit, there was a big slide  
9:02 a.m. on NE wall just north of crack #28. Just below the edge I saw small  
rocks continue to trickle and light dust showing up, when I went there.  
9:37 a.m. Moderate slide from NE wall about 100 feet below the old crack  
#34.  
9:51 a.m. Big slide NE wall just below old crack #29.

November 11 Small slide from NE wall just below crack #28. Light dust rose.  
9:54 a.m.

Last night big slide NE edge of Pit., on N side of Crack #28. Old trail to Volcano House slide in about 100 feet and some of fresh cracks have started to open.



H.Y.

November 12 Continuous trickle of rocks at Pit from NE wall.  
10-11 a.m.

H.H.W.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date
Friday	November 13, 1936
Saturday	" 14, "
Sunday	" 15, "
Monday	" 16, "

November 13      Rock trickling continues all over NE walls of Pit. Fuming was very  
 8:50 a.m.      thick for short time to 9:40 a.m. No slides this morning.  
                  Moderate slide at Pit. Dust cloud indicates NE wall.  
 11:55 a.m.      First slide.  
 12:40 p.m.      Second slide.

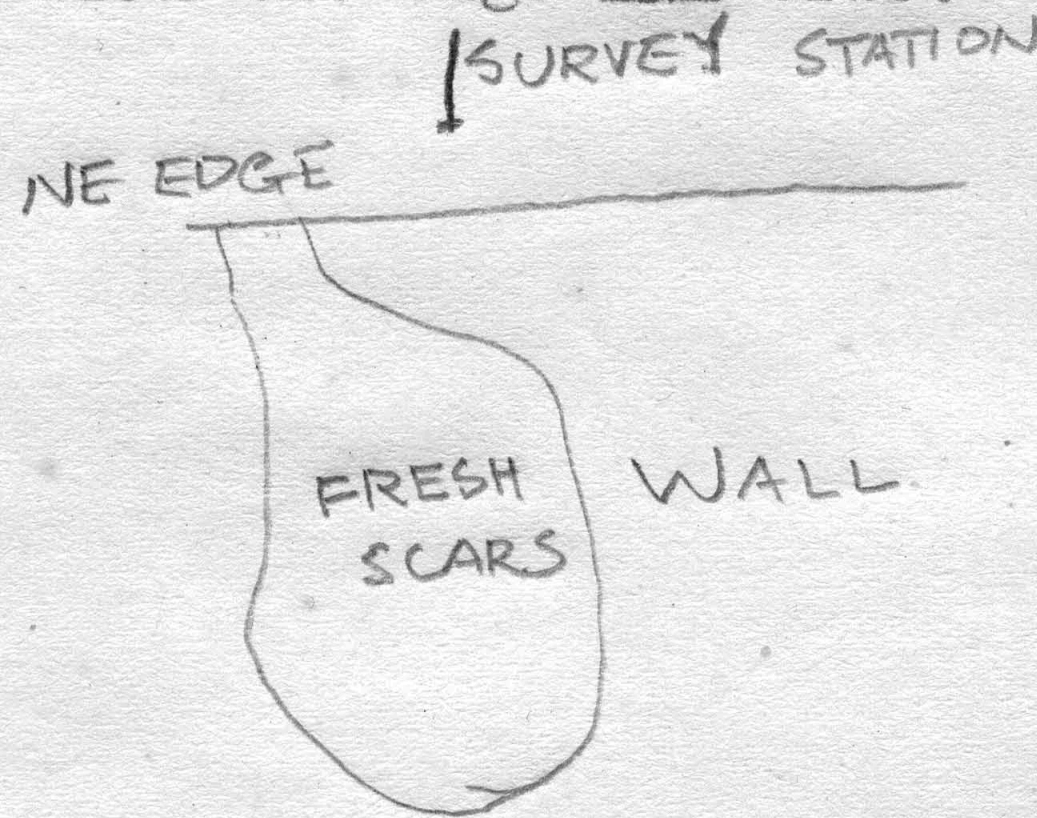
November 14      Big slide at Pit indicated by big noise. Rising dust cloud from  
 11:16 a.m.      NE wall.

H.Y.

10:15 a.m.      Moderate slide heard from trail near NE edge of Hale.

H.H.W.

November 15      Moderate slide from NE wall of Pit just beyond crack #45. Small  
 9:24 a.m.      slides continue 9:41 a.m.  
 9:55 a.m.      Moderate slide from same place.  
                  One of the slides which occurred sometime between yesterday and  
~~at~~ this morning was from the edge ENE side.



November 16      Big slide.  
 10:15 a.m.

9:35 a.m.      Continuous small slides from below NNE of NE wall of Pit.  
 9:49 a.m.      Moderate slide just below NE edge.  
 9:50 a.m.      Big slide just below NNE.  
                  Very big slide from edge NNE Pit. Most from wall., which show large  
 fresh scars.  
 10:15 a.m.      Small slides still continue.  
 10:19 a.m.      Moderate slide NE.

H.Y.

DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

JOURNAL

Day	Date
Monday	November 16, 1936
Tuesday	" 17, "
Thursday	" 19, "
Saturday	" 21, "

November 16  
(cont'd)  
10:15 a.m.

Heavy dust clouds over N and NE rims of Pit indicate slides.

Small slides from W and SW wall of Pit reported to have occurred between 1 and 2 p.m.

H.H.W.

November 17  
9:56 a.m.

Most of yesterday's slides were from NNE wall just beyond survey station. The wall shows big scars and rocks are still trickling this morning.



November 19  
10:12 a.m.

Small rocks trickling from NNE wall of Pit from yesterday to this morning. Looks as though there were no slides. Fuming very slight. NE wind very strong from two days ago.

H.Y.

Fresh slide SE corner of Hiaka.

K.J.W.

November 21  
9:25 a.m.

Dust over E rim of Pit indicating slide.

H.H.W.

9:46 a.m.  
9:54 a.m.  
10:17 a.m.

Continuous small slides from NNE wall of Pit.

Moderate slide from NE wall of Pit.

Moderate slide from NNE wall.

Crack #34 on NNE is gone. Fell in sometime this week. Survey station beside ~~of~~ the crack is just on the edge of the Pit.

Fume very slight last three days. Became moderate this morning.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

## Hawaiian Volcano Observatory

## JOURNAL

Day	Tuesday	Date	November 24, 1936
	Wednesday		" 25, "
	Friday		" 27, "

November 24

9:45 a.m. Moderate slide from NNE wall of Pit.  
 9:47 a.m. Second small slide.  
 10:15 a.m. Moderate slide from NNE wall just below survey station.  
 10:22 a.m. Big slide from same place. Made scars on wall.  
 All slides between NNE survey station and N pali.

H.Y.

9 a.m. Dust over NE Pit rim indicating slide.  
 9:50 a.m. Large cloud of dust, same locality.  
 10:15 a.m. Cloud E.  
 10:30 a.m. Large cloud N.  
 10:45 a.m. Large cloud N.  
 11:15 a.m. Large cloud ENE.  
 2:50 p.m.? Dust from slide NE station.  
 4:00 p.m. Moderate slide from point  $\pm$  400 feet W of NE BM at 4 p.m.  
 4:10 p.m. Large slide.  
 3-4 p.m. Continuous fall of rocks from 3 to 4 p.m. with practically none during hour following large slide.  
 Some reports duplicate with HY's report.

November 25

10:55 a.m. Moderate slide heard from Pit seis.  
 Continuous trickle of rocks from points up and down wall  $\pm$  300 feet W of NE BM station.

November 27

11:15 a.m. Slide (dust) NE rim.

H.H.W.

## DEPARTMENT OF THE INTERIOR, U. S. GEOLOGICAL SURVEY

Hawaiian Volcano Observatory

## JOURNAL

Day	Date
Sunday	December 6, 1936
Thursday	" 17, "
Sunday	" 27, "

December 6      Small dust clouds over E edge of Pit indicated some sliding.  
 4:10 p.m.  
 4-4:30 p.m.      Fume from N solfatara seemed comparatively strong.

H.H.W.

December 17      Probable small slide from NE wal l. Light dust noted. Very slight  
 10:02 a.m. fume during week.

H.Y.

11 a.m.      Dust indicating slide over NE edge of Pit.

H.H.W.

During the noon hour today, December 17, I noticed what appeared to be the dust of several small slides rising above the rim of Pit. Apparently, the sliding was from up the wall above the W end of the canoe sill.

E.G.W.

December 27      Slight trickle of rocks from NE wall of Pit.  
 4 p.m.

Fume from N solfatara seemed comparatively strong. Weather calm and P.C.

H.H.W.